# TECHNICAL REPORT AND RESOURCE ESTIMATE

# ON THE

# HAWK RIDGE PROJECT NORTHERN QUÉBEC

UTM 19V 463135 mE 6540228 mN LATITUDE 59° 0' 0" N LONGITUDE 69° 38' 30" W

# **FOR**

NICKEL NORTH EXPLORATION CORP.

NI 43-101 & 43-101F1 TECHNICAL REPORT

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**P&E Mining Consultants Inc. Report 282** 

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### 1.0 SUMMARY

This report was prepared by P&E Mining Consultants Inc. ("P&E") at the request of Mr. Phillip Mudry, President and CEO, Nickel North Exploration Corp. ("Nickel North"), a public company trading on the TSX Venture Exchange (TSXV) with the symbol NNX. The purpose of this report is to provide an independent, National Instrument ("NI") 43-101 Technical Report and Mineral Resource Estimate (the "Report") on the Falco7, Gamma, Hopes Advance Main and Hopes Advance North Zones on the Hawk Ridge Project in the Nunavik Region of Québec, Canada (the "Project" or the "Property").

The Hawk Ridge Project is located in northern Québec, approximately 1,550 km north-northeast of Montréal on the west coast of Ungava Bay. The project is in Nunavik Territory, situated in the northern third of Québec, and is the traditional homeland of the Inuit in the province where they hold certain ancestral rights and the mineral rights to certain lands. Inuit land claims have previously been settled in the Territory of Nunavik. There are fourteen villages within the territory that are mostly located along the coast of Hudson Bay on the west, Hudson Straight to the north and Ungava Bay to the east. The population of the territory is estimated to be 12,000, and Kuujjuaq is the principal village and administrative centre, 135 km south of the Hawk ridge Project.

The Project is located at longitude 69° 38' 30"W, latitude 59° 00' 00"N in NTS (National Topographic System) 24K/14, 24N/03 and 24N/06.

The Hawk Ridge Property comprises 713 contiguous mineral claims covering a total area of 30,657.25 ha and the claims extend over a total strike length of around 55 km. The claims are held 100% by Nickel North.

The majority of the Property is subject to a 3% net smelter return royalty ("NSR") and the Company has the option to purchase one third of the NSR (1%) at any time for \$1,000,000 and has a first right of refusal on the second 1%. As of the effective date of the Report, all of the Hawk Ridge claims are in good standing.

Primary access to the Hawk Ridge Project is by air from Montréal to Kuujjuaq; both Air Inuit and First Air have daily scheduled flights servicing Kuujjuaq. From Kuujjuaq, the project is typically accessed by Air Inuit daily scheduled flights to Aupaluk and then chartered helicopter to the property. Air Inuit also flies from Kuujjuaq to several other Inuit communities. Currently Aupaluk's hotel is used for accommodating the workers on the project. The center of the Project is approximately 124 km northwest of Kuujjuaq and 20 km south of Aupaluk. Coastal areas of the project on Hopes Advance Bay are also accessible by boat from Aupaluk.

The project area benefits from access to tide water. A deep-sea port has been proposed by Oceanic Iron Ore Corp., on the north shore of Hopes Advance Bay for a proposed iron mining operation 20-50 km west of Aupaluk. The shipping season at Aupaluk is usually from mid- to late June until late November. Electrical power is available in Aupaluk but additional facilities would be required for mining.

The Hawk Ridge Project is located in the New Québec Orogen at the contact between the Archean (approximately 2.7 Ga) Superior Province to the west and the Paleoproterozoic (approximately 1.9 Ga) Rae Subprovince of the Churchill Province to the east. The Superior Province forms a cratonic basement to the New Québec Orogen. It is exposed 5 to 20 km west of

the Project area (Beauchamp 2012), where the Superior Province consists of granitoid and granitic gneiss terranes with elongated supracrustal sequences of metavolcanic and metasedimentary rocks.

The New Québec Orogen, previously known as the Labrador Trough, is a Paleoproterozoic (ca. 1.88 Ga) north-south trending thrust belt that preserves the deformed northeastern margin of the Superior Province and southwest directed thrust sheets of Paleoproterozoic supracrustal rocks. The Paleoproterozoic supracrustal rocks of the New Québec Orogen transition from autochthonous shelf to foredeep sediments of the Wishart Quartzite, Sokoman Iron Formation in the east, to allochthonous gabbro sill-sediment complexes of the Montagnais Group in the west (Hoffman 1990).

In the Project area, the rocks of the New Quebec Orogen form 3 distinct lithostratigraphic assemblages that are in fault contact as a result of SW directed crustal shortening and thrust imbrication. The structurally lowest assemblage (assemblage 1) consists of autochthonous to para-autochthonous rocks of the Sokoman Iron Formation exposed on the west side of the New Quebec Orogen; this is structurally overlain by assemblage 2 consisting of allochthonous metasediments of the Aber, Harveng, Larch and Baby Formations, metavolcanic rocks of the Hallancourt Formation, gabbroic sills intrusive into the Larch and Baby Group, and gabbroic sills of the Montagnais Group; and an upper assemblage 3 consisting of metasediments of the Thevenet Formation. The majority of the Hawk Ridge Property is underlain by assemblage 2.

The majority of copper-nickel sulphide occurrences on the Hawk Ridge Property are hosted in gabbroic and plagioclase glomeroporphyritic gabbro of the Hellancourt Formation and the contemporaneous Montagnais Group Intrusions of assemblage 2. The deposits are in close proximity to contacts of gabbro with underlying metasediments and peridotite (Beauchamp 2012).

Mineral Resources have been estimated for the Falco7, Gamma, Hopes Advance Main and Hopes Advance North Zones. Metals included in the estimate are copper, nickel, cobalt, platinum, palladium and gold with reporting done by net smelter return (NSR) cut-off as appropriate for polymetallic deposits.

This resource estimate is based entirely on diamond drilling, core sampling and assaying. The exploration drill hole database for the property contains 394 diamond drill holes totalling 35,947.59 m of which 116 holes for 15,801.17 m have been used to delineate and sample the resources.

The Cu–Ni,  $\pm$ Co,  $\pm$ Pt,  $\pm$ Pd,  $\pm$ Au mineralization is generally low to intermediate grade, lies at or near surface and is amenable to open pit mining.

The New Québec Orogen is a part of the Paleoproterozoic Circum-Superior Belt, a geological environment well known for hosting copper, nickel and platinum group metal mineralization including the deposits of the Thompson Belt of Manitoba and the Raglan Deposits in the Cape Smith Belt of northern Québec.

The mineral deposits identified to date at the Hawk Ridge Project are copper, nickel and platinum group element deposits associated with massive to disseminated sulphides in mafic and ultramafic rocks. The Hawk Ridge mineralization belongs to the class of magmatic sulphide deposits.

The characteristics of mineralization at the Hawk Ridge Project are consistent with the rift and continental flood basalt associated nickel copper sulphide deposits (type 1b) of Eckstrand (1996). These magmatic sulphide deposits form when sulphur undersaturated mafic magma from the mantle becomes saturated in sulphides, usually as a result of interaction with sedimentary crustal rocks. Assimilation of crustal sulphur results in the formation of an immiscible sulphide liquid that segregates toward the base of the flow or sill. Assimilation and concentration may be enhanced by multiple pulses of magma in a conduit system. The mineralization typically forms lenses or tabular concentrations in the middle or lower parts of the gabbro intrusions. Examples of this type of mineralization include Proterozoic Duluth Complex in Minnesota and the Mesozoic Noril'sk Talnakh deposits of Russia.

In 2012, Nickel North undertook the first drilling at the Property in 15 years. The 2012 diamond drill program was designed to test extensions of known mineralization, as well as new targets identified by the 2,400 line-km Geotech VTEM airborne survey flown in 2012.

A total of seven NQ-diameter diamond drill holes (HR-2012-01 to HR-2012-07) over 1,055.07 m were completed over a period of five weeks, from August 19, 2012 to September 15, 2012. Holes ranged in depth from 110 m to 210 m.

In 2012, the Company also undertook a resampling program of the NQ-sized core drilled by previous operator, Troymin Resources Ltd., from 1996 to 1997 at the Property. Drill core from these years was stored onsite at the Property by the previous operators and the core was in good condition and well-marked.

Nickel North commenced its 2013 helicopter-supported drill program at the Property on June 26, 2013 with a single drill rig and added a second drill at the mid-season sealift. A total of 7,330 m of diamond drilling was completed over 38 drill holes (HR-2013-08 TO HR-2013-43) at the Hopes Advance Main Zone, the Gamma Zone, the newly discovered Falco7 Zone, as well as other regional exploration targets.

The main objective of the 2013 exploration program was to expand upon the known mineralization at the Property and complete a NI 43-101 resource estimation.

The core was transported daily from the drill site to the field camp by helicopter (Helicarrier Helicopters Inc., Québec City, Québec) where it was held in a secured core tent. Once the core was received in camp it was logged, photographed, sampled and cut in half using a diamond-bladed saw by local individuals employed by Nickel North.

Assays were taken along the entire length of the core, with more than 7,600 samples collected during the program.

A comprehensive Quality Assurance/Quality Control, ("QA/QC" or "QC") program was established for Hawk Ridge by Larry Hulbert, Ph.D., P.Geo., an independent consultant to the project, and included regular insertion of certified reference materials, blanks and duplicates.

The Hawk Ridge deposit was visited by Mr. Antoine Yassa, P.Geo. of P&E from August 28-31, 2013 for the purposes of completing a site visit and due diligence sampling. General data acquisition procedures, core logging procedures and QA/QC were discussed during the visit.

It is P&E's opinion that the sample preparation, security and analytical procedures used by Nickel North were satisfactory.

For the 2012 and 2013 diamond drilling, and the resampling program on the 1996-97 drill core, Nickel North used seven different certified reference materials prepared and certified by either Ore Research and Pty of Australia, CANMET of Ottawa, or CDN Labs of Langley, BC. With very few exceptions, performance for the standards was very good. There were three sources of blank material used on the project. One of the blanks was prepared and purchased from CDN Resource Labs in Langley, BC, the second material was a silica blank provided by TSL Labs, and the third blank was the in-house quality control blank inserted by TSL for their own purposes. Four hundred sixty two blanks were analyzed during the drill program, and results indicated that contamination was not an issue for the resource metals. There were 185 field duplicate pairs, comprised of a ¼ core split of the ½ core sent for analysis. Precision was satisfactory for this level of homogeneity.

The lab analyzed 213 pulp duplicate pairs as part of their internal quality control. Precision was excellent. Overall, it is P&E's opinion that the data are of good quality and appropriate for use in the current resource estimate.

The Gemcom database for this resource estimate was constructed by P&E from 394 diamond drill holes totalling 35,947.59 m of which 116 holes for 15,801.17 m have been used to delineate and sample the resources. Historic drilling spans 1961 to 1997 with most of the recent coring carried out in 2012 and 2013. The database was verified in Gemcom with minor corrections made to bring it to an error free status. The Cu–Ni, ±Co, ±Pt, ±Pd, ±Au mineralization is generally low to intermediate grade, lies at or near surface and is amenable to open pit mining. The mineral wireframes for the four zones were constructed based on host rock lithology, mineralization and at an open pit operating discard cut-off NSR of \$25/tonne as estimated by P&E. The NSR calculation was based on a three-year trailing average for metal prices, metal recoveries and smelter payable metal and treatment costs generalized from other P&E projects, and a US exchange rate at par. Assay composites, at 1 m lengths for the Falco7 zone and 3 m composites for the Hopes Advance and Gamma Zones, were generated from the assays captured by GEMS in the zones' wireframes.

The resource block models for the Hopes Advance area (North and Main Zones) and the Gamma area are oriented at  $063^{\circ}$  azimuth and have block dimensions at 10 m EW x 10 m NS x 10 m vertical. The Falco7 zone block model is EW (no rotation) and incorporates blocks at 5 m EW x 25 m NS x 5 m vertical consistent with the zone narrow widths and drill hole spacing on strike of  $\pm 200 \text{ m}$ . A down hole and preliminary 3D variography study was carried out for copper and nickel to guide the interpolation and search strategies. Inverse distance squared (ID<sup>2</sup>) interpolation was carried out using multiple search distances commensurate with the range in drill hole spacing zone by zone.

Water immersion specific gravity (SG) testing was carried out on 980 samples taken from 2013 series drill core. The data were reviewed by P&E and a positive correlation was noted between SG and grade. Consequently a regression formula was developed for SG versus Ni% + Cu% and used to populate assay intervals in the database. Grades for assay composites were length and SG weighted to ensure the proper representation of contained metal between low and high mass samples. A bulk density block model was created from the grade block models and employed to convert block model volumes to tonnes.

In P&E's opinion, the drilling, assaying and exploration work of the Falco7, Gamma, Hopes Advance Main and Hopes Advance North Zones supporting this resource estimate are sufficient to indicate reasonable potential for economic 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, level of assaying for the six metals, data quality and interpreted geologic continuity.

The grade and NSR block models were exported to Datamine Limited's NPV Scheduler<sup>TM</sup> for open pit design and the resulting optimized pit surfaces were used to report Mineral Resources from the GEMS block models. The total in-pit Inferred Mineral Resources for a \$25/tonne NSR discard cut-off are estimated at 19,636,000 million tonnes averaging 0.577% Cu, 0.215% Ni, 0.011% Co, 0.051 g/t Pt, 0.207 g/t Pd, and 0.105 g/t Au, (which equates to a 1.029% Cu Equivalent grade basis).

The mineral resource estimate is presented in Table 1.1.

TABLE 1.1 IN-PIT INFERRED RESOURCES BY ZONE AT VARIOUS NSR CUT-OFFS AS OF JANUARY 2014									
Cut-Off	Tonnes	Cu Eq	Cu	Ni	Со	Pt	Pd	Au	Bulk Density
NSR \$/t	(000)	%	%	%	%	g/t	g/t	g/t	t/m <sup>3</sup>
				Fal	co 7				
\$50	838	1.074	0.588	0.226	0.015	0.053	0.231	0.102	3.25
\$40	2,241	0.926	0.522	0.198	0.014	0.052	0.210	0.101	3.23
\$30	3,464	0.833	0.470	0.187	0.013	0.048	0.195	0.101	3.21
\$25	3,786	0.806	0.459	0.182	0.013	0.047	0.189	0.101	3.20
\$20	3,827	0.802	0.458	0.181	0.013	0.047	0.188	0.101	3.20
\$15	3,840	0.800	0.457	0.181	0.013	0.047	0.188	0.101	3.20
				Hopes A	Advance	•			
\$50	6,204	1.252	0.683	0.256	0.012	0.057	0.228	0.108	3.28
\$40	9,866	1.101	0.620	0.224	0.011	0.053	0.213	0.107	3.26
\$30	11,319	1.045	0.591	0.215	0.011	0.051	0.207	0.107	3.25
\$25	11,484	1.038	0.587	0.214	0.011	0.051	0.206	0.106	3.25
\$20	11,565	1.033	0.585	0.213	0.011	0.051	0.205	0.106	3.24
\$15	11,571	1.033	0.585	0.213	0.011	0.051	0.205	0.106	3.24
				Gar	nma				
\$50	2,774	1.414	0.755	0.288	0.013	0.058	0.237	0.107	3.31
\$40	4,192	1.219	0.662	0.252	0.012	0.056	0.228	0.107	3.27
\$30	4,364	1.198	0.653	0.248	0.012	0.055	0.226	0.106	3.27
\$25	4,366	1.198	0.653	0.248	0.012	0.055	0.226	0.106	3.27
\$20	4,366	1.198	0.653	0.248	0.012	0.055	0.226	0.106	3.27
\$15	4,366	1.198	0.653	0.248	0.012	0.055	0.226	0.106	3.27

#### Notes:

- (1) CIM definitions were followed for Mineral Resources.
- (2) Mineral Resources are estimated by conventional 3D block modelling based on wireframing at a \$25/tonne NSR cut-off and inverse distance squared grade interpolation.
- (3) Metal prices for the estimate are: US\$3.67/lb Cu, US\$8.51/lb Ni, US\$1,596/oz Pt, US\$702/oz Pd, US\$1,554/oz Au and US\$15.00/lb Co based on a three-year trailing average as of November 30, 2013.
- (4) A variable bulk density of 3.01 tonnes/m3 or higher based on density weighting has been applied for volume to tonnes conversion.
- (5) Open pit Mineral Resources are estimated from surface to pit floor depths of 90 m to 160 m.
- (6) Mineral Resources are classified Inferred based on drill hole spacing, geologic continuity and quality of data.

- (7) Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues. There is no certainty that all or any part of the Inferred Mineral Resource will be upgraded to an Indicated or Measured Mineral Resource as a result of continued exploration.
- (8) P&E recommends reporting open pit resources at the \$25/tonne NSR cut-off.

TABLE 1.2									
TOTAL IN	N-PIT INFE	RRED RE	SOURCE	S AT VA	RIOUS N	ISR Cu	Γ-OFFS A	As of JA	NUARY 2014
Cut-Off	Tonnes	Cu Eq	Cu	Ni	Co	Pt	Pd	Au	<b>Bulk Density</b>
NSR \$/t	(000)	%	%	%	%	g/t	g/t	g/t	t/m <sup>3</sup>
\$50	9,816	1.283	0.695	0.262	0.012	0.057	0.231	0.107	3.29
\$40	16,299	1.108	0.617	0.228	0.012	0.053	0.216	0.106	3.26
\$30	19,147	1.042	0.583	0.218	0.012	0.052	0.209	0.105	3.25
\$25	19,636	1.029	0.577	0.215	0.011	0.051	0.207	0.105	3.24
\$20	19,758	1.025	0.575	0.215	0.011	0.051	0.207	0.105	3.24
\$15	19,777	1.024	0.575	0.215	0.011	0.051	0.206	0.105	3.24

#### Notes:

- (1) CIM definitions were followed for Mineral Resources.
- (2) Mineral Resources are estimated by conventional 3D block modelling based on wireframing at a \$25/tonne NSR cut-off and inverse distance squared grade interpolation.
- (3) Metal prices for the estimate are: US\$3.67/lb Cu, US\$8.51/lb Ni, US\$1,596/oz Pt, US\$702/oz Pd, US\$1,554/oz Au and US\$15.00/lb Co based on a three-year trailing average as of November 30, 2013.
- (4) A variable bulk density of 3.01 tonnes/m³ or higher based on density weighting has been applied for volume to tonnes conversion.
- (5) Open pit Mineral Resources are estimated from surface to pit floor depths of 90 m to 160 m.
- (6) Mineral Resources are classified Inferred based on drill hole spacing, geologic continuity and quality of data.
- (7) Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues. There is no certainty that all or any part of the Inferred Mineral Resource will be upgraded to an Indicated or Measured Mineral Resource as a result of continued exploration.
- (8) P&E recommends reporting open pit resources at the \$25/tonne NSR cut-off.

The property contains an exploration target with a potential range of 80 million tonnes to 120 million tonnes at average grade ranges of 0.54%-0.56% Cu, 0.19%-0.20% Ni, 0.01-0.02% Co, 0.04-0.05 g/t Pt, 0.18-0.20 g/t Pd and 0.10-0.11 g/t Au (which equates to a 0.94% to 1.0% Cu Equivalent grade basis). The exploration target is based on the estimated strike length, depth and width of the known mineralization which is supported by intermittent drillholes, geophysics and observations of mineralized surface exposures. The potential quantities and grades of this exploration target are conceptual in nature. There has been insufficient work done by a Qualified Person to define these estimates as mineral resources. The Company is not treating these estimates as mineral resources, and readers should not place undue reliance on these estimates. Even with additional work, there is no guarantee that these estimates will be classified as mineral resources. In addition, there is no guarantee that these estimates will prove to be economically recoverable.

# **Conclusions and Recommendations**

P&E considers that the Hawk Ridge Property contains a sizeable Cu-Ni-Co-Pt-Pd-Au resource and merits further evaluation. P&E's recommendations include:

- A LiDAR survey (a remote sensing technology that measures distance by illuminating a target with a laser and analyzing the reflected light), be carried out with results imported to GEMS software;
- In-fill Drilling:
  - P&E recommends the following to upgrade Inferred Resources to Indicated Resources:
  - The zones should be drilled on 50 m sections with at least three holes per section to at least 25 m below the conceptual pit floors;
  - The massive sulphide lens in the Hopes Advance North Zone should be drilled at 25 m sections or closer to adequately define the zone geometry;
  - Old drill holes with no assays should be re-drilled, except for down dip holes, which should be eliminated from future resource estimation.
- Step-out Drilling:
  - P&E recommends step-out drilling to evaluate additional exploration targets with the objective of expanding the estimated resources;
  - The exploration target "at large" with the potential range of 80 to 120 million tonnes should be evaluated by very widely spaced grid drilling as deemed appropriate by the known strike lengths, geophysical indications and mineralized outcrops.
- Assaying:
  - There are a few non-assayed intervals within the resource drill hole intercepts for holes post-1995, that are explicitly treated as zero grade for the purpose of resource estimation. Explicit missing assays were dealt with by assigning regressed values, however core should be assayed for Co, PGE and Au where assays are lacking. The holes with very long assay intervals (>30 m) are 22647, 22678, 22737; all are old and would need redrilling;
  - Assaying should be done continuously down hole within the zones and hanging and footwalls for the six payable metals as well as for Fe and S.
- Mineralogy-Bulk Density:
  - A study is needed to identify Ni, Cu, Co and PGE mineralogy;
  - Pending a mineralogical study, systematic SG tests on disseminated and massive sulphides are needed to better characterize SG vs Ni grade and Cu grade relationships. Better clarification is needed of when and how S should be analyzed using a Leco sulphur analyzer. Going forward, Nickel North should continue with ICP-MS for S and when better control on the S analysis is necessary, the pulps can be re-run using the Leco analyzer;
  - If old core is available, the several drill holes where the entire zone is represented by a single assay, should be re-logged and re-assayed at ±1 m intervals consistent with the sampling protocol for other holes. Alternatively these holes should be re-drilled and sampled.
- Drill Hole Surveys:
  - The down hole surveys should be reviewed for excessive deviation and implausible readings removed where appropriate.
- Geotechnical Study:

- Pit slopes of 50° were employed for resource pit design, however no geotechnical study has been conducted to support this initial assumption. P&E recommends that a preliminary geotechnical study be undertaken to establish pit slopes. If steeper slopes are practicable, the stripping ratio can be improved and more in-pit resources accessed.
- Metallurgical Study:
  - The metal recoveries used for NSR calculation and pit design are taken from P&E's experience with Raglan area deposits, which are ultramafic rock hosted and serpentinized. Recoveries from less altered, gabbro hosted sulphide mineralization at the Hawk Ridge project may differ from the current assumptions. P&E understands that metallurgical and mineralogical studies are underway.

The estimated budget to complete the recommendations is approximately \$9.4M and is presented in Table 1.3.

TABLE 1.3 RECOMMENDED PROGRAM AND BUDGET							
Program Units (m) Unit Cost (\$/m) Budget							
In fill Diamond Drilling	5,000	\$500	\$2,500,000				
Step-out Diamond Drilling	5,000	\$500	\$2,500,000				
LiDAR survey			\$350,000				
Metallurgical Testwork			\$350,000				
Assaying			\$450,000				
Mineralogy-Bulk Density			\$250,000				
Geotechnical Study			\$300,000				
Personnel, office, support			\$1,500,000				
Contingency			\$1,230,000				
Total			\$9,430,000				

### 2.0 INTRODUCTION AND TERMS OF REFERENCE

#### 2.1 TERMS OF REFERENCE

The following report was prepared to provide a National Instrument ("NI") 43-101 Technical Report and Resource Estimate for nickel-copper and associated precious metal mineralization contained in the Hopes Advance Main Zone, Hopes Advance North Zone, Falco7 Zone, and Gamma Zone of the Hawk Ridge Project, Northern Québec, Canada. Nickel North Exploration Corp. has 100% control of the Hawk Ridge Project through an option agreement with Anthem Resources Inc.

This report was prepared by P&E Mining Consultants Inc. ("P&E") at the request of Mr. Phillip Mudry, President and CEO, Nickel North Exploration Corp. ("Nickel North"), a public company trading on the TSX Venture Exchange (TSXV) with the symbol NNX. Nickel North has its head office at:

Suite 3114, Four Bentall Centre 1055 Dunsmuir Street Vancouver, British Columbia, V7X 1G4

Tel: 604 609-6182 Fax: 604 899-1240

This report has an effective date of November 30, 2013.

Mr. Antoine Yassa, P.Geo. of P&E, a qualified person under the regulations of NI 43-101, conducted a site visit to the Property from August 28 to 31, 2013. An independent verification sampling program was conducted by Mr. Yassa at that time.

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

The present Technical Report is prepared in accordance with the requirements of NI 43-101F1 of the Ontario Securities Commission ("OSC") and the Canadian Securities Administrators ("CSA").

The Mineral Resources in the estimate are considered compliant with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions.

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

# 2.2 SOURCES OF INFORMATION

This Report is based, in part, on internal company technical reports, and maps, published government reports, company letters, memoranda, public disclosure and public information as

listed in the References at the conclusion of this Report. Sections from reports authored by other consultants have been directly quoted or summarized in this Report, and are so indicated where appropriate.

Parts of this report refer to the NI 43-101 Technical Report by Daniel Beauchamp on the Hawk Ridge Project that was previously filed in 2012 on SEDAR by Nickel North and its precursor companies.

Sections 2, 3, 5, 7, and 8 of this report were prepared by Richard Sutcliffe, P.Geo., under the supervision of Tracy Armstrong, P.Geo., who acting as a QP as defined by NI 43-101, takes responsibility for those sections of the report as outlined in the "Certificate of Author" attached to this report. Sections 4, 6, 9 and 10 of this report were prepared by Jarita Barry, B.Sc., under the supervision of Tracy Armstrong, P.Geo., who acting as a QP as defined by NI 43-101, takes responsibility for those sections of the report as outlined in the "Certificate of Author" attached to this report. Section 14 of this report was prepared by Rick Routledge, P.Geo. and Yungang Wu, P.Geo. under the supervision of Antoine Yassa, P.Geo., who acting as a QP as defined by NI 43-101, takes responsibility for those sections of the report as outlined in the "Certificate of Author" attached to this report.

# 2.3 UNITS AND CURRENCY

Unless otherwise stated all units used in this report are metric. Gold assay values (Au) are reported in grams of metal per tonne ("gm 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\$.

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

Abbreviation	Meaning
"Ag"	silver
"As"	arsenic
"Au"	gold
"BIF"	banded iron formation
"cm"	centimetre(s)
"Co"	cobalt
"Cu"	copper
"DDH"	diamond drill hole
"ft"	foot
"Ga"	billions of years
"g/t"	grams per tonne
"ha"	hectare(s)
"HLEM"	horizontal loop electromagnetic survey
"ICP/OES"	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

mining lease "ML"

"Ni" nickel

P&E Mining Consultants Inc "P&E" Preliminary Economic Assessment "PEA"

platinum group elements (herein collectively to mean Pt, Pd, Au, Ag) "PGE"

"ppb" parts per billion "ppm" parts per million

"Pt" platinum "Pd" palladium "t" metric tonne(s) metric tonne(s) "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 have carefully reviewed all of 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 selected copies of the tenure documents, operating licenses, permits, and work contracts were reviewed, an independent verification of land title and tenure was not performed. 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. Information on tenure and permits was obtained from Nickel North.

A draft copy of the report has been reviewed for factual errors by Nickel North. 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 PROPERTY LOCATION

The Hawk Ridge Project is located in northern Québec, approximately 1,550 km north-northeast of Montréal on the west coast of Ungava Bay (Figure 4.1). The project is in Nunavik Territory, situated in the northern third of Québec, and is the traditional homeland of the Inuit in the province where they hold certain ancestral rights and the mineral rights to certain lands. There are fourteen villages within the territory that are mostly located along the coast of Hudson Bay on the west, Hudson Straight to the north and Ungava Bay to the east. The population of the territory is estimated to be 12,000, and Kuujjuaq is the principal village and administrative centre. The majority of the residents of Kuujjuaq and the thirteen other villages are Inuit.

Hudson Strail Sallult Cape Smith Belt RAGLAN Abullivia Puvirnituk Ungava Kangirsuk Bay HAWK RIDGE PROJECT M Aupaluk angiqsualujjuaq Inukjuak Hudson Kuujjuaq Bay Umiujaq UEBEC LEGEND rozoic (2,1 Ga to 1,7 Ga) forngat Grogen (Labrador Trough Ga and 1.8 Ga) LABRADOR kilomètres

Figure 4.1 Location of Hawk Ridge Project

Source: Modified from Beauchamp (2013)

Kuujjuaq is located approximately 135 km southeast of the Project area (see Figure 4.1) and is host to approximately 2,375 residents. It is the main transportation centre of the region and has been the main supply centre for the Hawk Ridge Project in previous years. Floatplanes and

helicopter air transport can be obtained from the village and maritime shipping is also available from Montréal to Kuujjuaq. The village is host to an airport with two runways, a number of hotels, restaurants, stores and a bank.

The village of Aupaluk, population of around 195, is the closest community to the Hawk Ridge Project (see Figure 4.1). Aupaluk hosts basic port facilities where regular shipping to and from Montréal is available from about late June to late November.

Tasiujaq, another small community with population of around 300 people and a small aircraft runway, is located several kilometres southwest of the southern end of the Project area (see Figure 4.1).

The Project is located at longitude 69° 38' 30"W, latitude 59° 00' 00"N in NTS (National Topographic System) 24K/14, 24N/03 and 24N/06.

### 4.2 PROPERTY DESCRIPTION

The Hawk Ridge property comprises 713 contiguous mineral claims covering a total area of 30,657.25 ha and the claims extend over a total strike length of around 55 km. The claims are held 100% by Nickel North (see Table 4.1 and Figure 4.2).

All 713 claims that comprise the Property are in good standing as at the date of this report. The current status of the claims, including renewal dates, fees, required minimum work and excess credits, have been verified by P&E on the Province of Québec's Ministère des Ressources Naturelles et de la Faune (MRNF) on-line claim management system at https://gestim.mines.gouv.qc.ca/, and are summarized in Table 4.1. Nickel North has confirmed with P&E the accuracy of the Gestim claims list.

The Property's annual assessment work requirements amount to \$698,148, additional yearly fees total \$70,133 and credits from Nickel North's current exploration program, amount to a combined \$3,934,414.

The Property has not been legally surveyed since being acquired by Nickel North and the boundary of individual claims is defined by the MRNF Québec on-line claim management system at the above stated address.

TABLE 4.1 LIST OF CLAIMS								
Title No	Expiry Date	Area (Ha)	Excess Work (\$)	Required Work (\$)	Required Fees (\$)			
1013535	June 25 2015	44.25	0	2500	101			
1013536	June 25 2015	44.25	0	2500	101			
1013537	June 25 2015	44.25	0	2500	101			
1013538	June 25 2015	44.25	0	2500	101			
1013544	June 25 2015	44.24	0	2500	101			
1013545	June 25 2015	44.24	0	2500	101			
1013546	June 25 2015	44.24	0	2500	101			
1013547	June 25 2015	44.24	0	2500	101			
1013553	June 25 2015	43.02	0	2500	101			
1013554	June 25 2015	43.93	0	2500	101			
1013555	June 25 2015	44.23	0	2500	101			

TABLE 4.1 LIST OF CLAIMS								
Title No	Expiry Date	Area (Ha)	Excess Work (\$)	Required Work (\$)	Required Fees (\$)			
1013556	June 25 2015	44.23	0	2500	101			
1013572	June 25 2015	44.22	0	2500	101			
1013573	June 25 2015	44.22	0	2500	101			
1013574	June 25 2015	44.22	0	2500	101			
1013575	June 25 2015	43.99	0	2500	101			
1013576	June 25 2015	44.22	0	2500	101			
1013577	June 25 2015	44.21	0	2500	101			
1013578	June 25 2015	43.92	0	2500	101			
1013579	June 25 2015	14.35	0	1000	28			
1013581	June 25 2015	44.20	0	2500	101			
1013582	June 25 2015	44.20	0	2500	101			
1013583	June 25 2015	36.70	0	2500	101			
1013588	June 25 2015	44.19	0	2500	101			
1013589	June 25 2015	44.19	0	2500	101			
1013590	June 25 2015	44.19	0	2500	101			
1013591	June 25 2015	43.94	0	2500	101			
1013595	June 25 2015	44.18	0	2500	101			
1013596	June 25 2015	44.18	0	2500	101			
1013597	June 25 2015	44.18	0	2500	101			
1013598	June 25 2015	44.18	0	2500	101			
1013599	June 25 2015	44.18	0	2500	101			
1013601	June 25 2015	44.17	0	2500	101			
1013602	June 25 2015	44.17	0	2500	101			
1013603	June 25 2015	44.17	0	2500	101			
1013605	June 25 2015	44.17	0	2500	101			
1013606	June 25 2015	44.17	0	2500	101			
1013607	June 25 2015	44.17	0	2500	101			
1013608	June 25 2015	44.17	0	2500	101			
1013612	June 25 2015	44.17	0	2500	101			
1013613	June 25 2015	44.17	0	2500	101			
1013614	June 25 2015	44.17	0	2500	101			
1013615	June 25 2015	44.17	0	2500	101			
1013616	June 25 2015	44.16	0	2500	101			
1013617	June 25 2015	44.16	0	2500	101			
1013618	June 25 2015	44.16	0	2500	101			
1017823	July 17 2015	44.25	1024.13	2500	101			
1017824	July 17 2015	44.25	625.95	2500	101			
1017825	July 17 2015	44.25	0	2500	101			
1017826	July 17 2015	44.25	0	2500	101			
1017827	July 17 2015	44.25	132.05	2500	101			
1017828	July 17 2015	44.25	372.05	2500	101			
1017829	July 17 2015	44.24	1171.55	2500	101			
1017830	July 17 2015	44.24	1171.55	2500	101			
1017831	July 17 2015	44.24	874.84	2500	101			
1017832	July 17 2015	44.24	440.17	2500	101			
1017833	July 17 2015	44.24	363.85	2500	101			
1017834	July 17 2015	44.24	371.3	2500	101			
1017835	July 17 2015	44.24	0	2500	101			
1017836	July 17 2015	44.24	152.63	2500	101			
1017837	July 17 2015	44.23	769.8	2500	101			
1017838	July 17 2015	44.23	131.53	2500	101			
1017839	July 17 2015	44.23	1872.38	2500	101			
1017840	July 17 2015	44.23	469.47	2500	101			

TABLE 4.1 LIST OF CLAIMS							
	T	LIST	OF CLAIMS	T			
Title No	Expiry Date	Area (Ha)	Excess Work (\$)	Required Work (\$)	Required Fees (\$)		
1017841	July 17 2015	44.23	210.8	2500	101		
1017842	July 17 2015	44.23	210.8	2500	101		
1017843	July 17 2015	44.23	522.38	2500	101		
1017844	July 17 2015	44.02	387.17	2500	101		
1017845	July 17 2015	44.22	1547.24	2500	101		
1017846	July 17 2015	44.22	2411.21	2500	101		
1017847	July 17 2015	44.22	2769.81	2500	101		
1017848	July 17 2015	44.22	3019.14	2500	101		
1017849	July 17 2015	44.22	1164.84	2500	101		
1017850	July 17 2015	44.22	0	2500	101		
1017851	July 17 2015	44.22	539.55	2500	101		
1017852	July 17 2015	44.21	2250.07	2500	101		
1017853	July 17 2015	44.21	884.18	2500	101		
1017854	July 17 2015	44.21	795.68	2500	101		
1017855	July 17 2015	44.21	1690.25	2500	101		
1017856	July 17 2015	44.20	1545.5	2500	101		
1017857	July 17 2015	44.20	1363.18	2500	101		
1017858	July 17 2015	44.20	1546	2500	101		
1017859	July 17 2015	44.20	1498	2500	101		
1017860	July 17 2015	44.19	1848.32	2500	101		
1017861	July 17 2015	44.19	2689.8	2500	101		
1017862	July 17 2015	44.19	2505.14	2500	101		
1017863	July 17 2015	44.19	2816.39	2500	101		
1017864	July 17 2015	44.18	1791.14	2500	101		
1017865 1017866	July 17 2015 July 17 2015	44.18 44.18	2311.14 2551.14	2500 2500	101 101		
1017867	July 17 2015 July 17 2015	44.18	2151.14	2500	101		
1017868	July 17 2015 July 17 2015	44.18	2151.14	2500	101		
1017869	July 17 2015 July 17 2015	44.18	1671.14	2500	101		
1017870	July 17 2015	44.18	1391.14	2500	101		
1017942	July 17 2015	44.41	3476.85	2500	101		
1017943	July 17 2015	44.41	3476.85	2500	101		
1017944	July 17 2015	44.41	3476.85	2500	101		
1017945	July 17 2015	44.41	3476.85	2500	101		
1017946	July 17 2015	44.41	3476.85	2500	101		
1017947	July 17 2015	44.41	3476.85	2500	101		
1017948	July 17 2015	44.41	3476.85	2500	101		
1017949	July 17 2015	44.40	3476.61	2500	101		
1017950	July 17 2015	44.40	3476.61	2500	101		
1017951	July 17 2015	44.40	3476.61	2500	101		
1017952	July 17 2015	44.40	4579.92	2500	101		
1017953	July 17 2015	44.40	3476.61	2500	101		
1017954	July 17 2015	44.40	3476.61	2500	101		
1017955	July 17 2015	44.40	3476.61	2500	101		
1017956	July 17 2015	44.40	3476.61	2500	101		
1017957	July 17 2015	44.40	3476.61	2500	101		
1017958	July 17 2015	44.39	3476.36	2500	101		
1017959	July 17 2015	44.39	3476.36	2500	101		
1017960	July 17 2015	44.39	3476.36	2500	101		
1017961 1017962	July 17 2015	44.39 44.39	3476.36 3476.36	2500 2500	101 101		
1017962	July 17 2015 July 17 2015	44.39	3476.36	2500	101		
1017963	July 17 2015 July 17 2015	44.39	3476.36	2500	101		
101//07	0 WIJ 11 2013	11.07	2170.20	2300	101		

TABLE 4.1								
LIST OF CLAIMS								
Title No	Expiry Date	Area (Ha)	Excess Work (\$)	Required Work (\$)	Required Fees (\$)			
1017965	July 17 2015	44.39	3476.36	2500	101			
1017966	July 17 2015	44.39	3476.36	2500	101			
1017967	July 17 2015	44.38	3476.11	2500	101			
1017968	July 17 2015	44.38	3476.11	2500	101			
1017969	July 17 2015	44.38	3476.11	2500	101			
1017970	July 17 2015	44.38	3476.11	2500	101			
1017971	July 17 2015	44.38	3476.11	2500	101			
1017972	July 17 2015	44.38	3476.11	2500	101			
1017972	July 17 2015	44.38	3476.11	2500	101			
1017973	July 17 2015	44.37	3475.86	2500	101			
1017974	July 17 2015  July 17 2015	44.37		2500	101			
	July 17 2015 July 17 2015		3475.86					
1017976	2	44.37	3475.86	2500	101			
1017977	July 17 2015	44.37	3475.86	2500	101			
1017978	July 17 2015	44.37	3475.86	2500	101			
1017979	July 17 2015	44.37	3475.86	2500	101			
1017980	July 17 2015	44.36	3475.61	2500	101			
1017981	July 17 2015	44.36	3475.61	2500	101			
1017982	July 17 2015	44.36	3475.61	2500	101			
1017983	July 17 2015	44.36	3475.61	2500	101			
1017984	July 17 2015	44.36	50681.9	2500	101			
1017985	July 17 2015	44.36	50681.9	2500	101			
1017986	July 17 2015	44.36	50681.9	2500	101			
1017987	July 17 2015	44.36	3475.61	2500	101			
1017988	July 17 2015	44.36	3475.61	2500	101			
1017989	July 17 2015	44.35	3475.36	2500	101			
1017990	July 17 2015	44.35	3475.36	2500	101			
1017991	July 17 2015	44.35	3475.36	2500	101			
1017992	July 17 2015	44.35	112893.61	2500	101			
1017993	July 17 2015	44.35	181288.1	2500	101			
1017994	July 17 2015	44.35	177130.89	2500	101			
1017995	July 17 2015	44.35	50681.65	2500	101			
1017996	July 17 2015	44.35	3475.36	2500	101			
1017997	July 17 2015	44.34	3475.12	2500	101			
1017998	July 17 2015	44.34	3475.12	2500	101			
1017999	July 17 2015	44.34	3475.12	2500	101			
1018000	July 17 2015	44.34	112893.37	2500	101			
1018001	July 17 2015	44.34	218935.47	2500	101			
1018002	July 17 2015	44.34	50681.41	2500	101			
1018003	July 17 2015	44.34	3659.01	2500	101			
1018004	July 17 2015	44.33	3474.87	2500	101			
1018005	July 17 2015	44.33	3474.87	2500	101			
1018005	July 17 2015	44.33	3474.87	2500	101			
1018007	July 17 2015	44.33	3474.87	2500	101			
1018007	July 17 2015	44.33	3842.64	2500	101			
1018008	July 17 2015 July 17 2015	44.33	3474.87	2500	101			
1018010	July 17 2015 July 17 2015	44.33	3474.87	2500	101			
	·			2500	101			
1018011	July 17 2015	44.32	3474.62					
1018012	July 17 2015	44.32	3474.62	2500	101			
1018013	July 17 2015	44.32	3474.62	2500	101			
1018014	July 17 2015	44.32	3474.62	2500	101			
1018015	July 17 2015	44.32	3474.62	2500	101			
1018016	July 17 2015	44.32	3474.62	2500	101			
1018017	July 17 2015	44.32	3474.62	2500	101			

TABLE 4.1 LIST OF CLAIMS							
	T	LIST	OF CLAIMS	T			
Title No	Expiry Date	Area (Ha)	Excess Work (\$)	Required Work (\$)	Required Fees (\$)		
1018018	July 17 2015	44.31	3474.37	2500	101		
1018019	July 17 2015	44.31	3474.37	2500	101		
1018020	July 17 2015	44.31	3474.37	2500	101		
1018021	July 17 2015	44.31	3474.37	2500	101		
1018022	July 17 2015	44.31	3474.37	2500	101		
1018023	July 17 2015	44.30	3474.23	2500	101		
1018024	July 17 2015	44.30	3474.32	2500	101		
1018025	July 17 2015	44.50	3479.09	2500	101		
1018026	July 17 2015	44.50	4582.4	2500	101		
1018027	July 17 2015	44.50	3479.09	2500	101		
1018028	July 17 2015	44.50	3479.09	2500	101		
1018029	July 17 2015	44.50	3479.09	2500	101		
1018030	July 17 2015	44.49	3478.84	2500	101		
1018031	July 17 2015	44.49	3478.84	2500	101		
1018032	July 17 2015	44.49	3478.84	2500	101		
1018033	July 17 2015	44.49	3478.84	2500	101		
1018034	July 17 2015	44.49	3478.84	2500	101		
1018035	July 17 2015	44.48	3478.59	2500	101		
1018036	July 17 2015	44.48	3478.59	2500	101		
1018037	July 17 2015	44.48	3478.59	2500	101		
1018038	July 17 2015	44.48	3478.59	2500	101		
1018039	July 17 2015	44.48	3478.59	2500	101		
1018040	July 17 2015	44.48	3478.59	2500	101		
1018041	July 17 2015	44.46	3478.1	2500	101		
1018042	July 17 2015	44.46	3478.1	2500	101		
1018043	July 17 2015	44.46	3478.1	2500	101		
1018044	July 17 2015	44.46	3478.1	2500	101		
1018045	July 17 2015	44.46	3478.1	2500	101		
1018046	July 17 2015	44.46	3478.1	2500	101		
1018047	July 17 2015	44.46	3478.1	2500	101		
1018048	July 17 2015	44.45	3477.85	2500	101		
1018049	July 17 2015	44.45	3477.85	2500	101		
1018050	July 17 2015	44.45	3477.85	2500	101		
1018051	July 17 2015	44.45	3477.85	2500	101		
1018052	July 17 2015	44.45	3477.85	2500	101		
1018053	July 17 2015	44.45	3477.85	2500	101		
1018054	July 17 2015	44.45	3477.85	2500	101		
1018055	July 17 2015	44.44	3477.6	2500	101		
1018056	July 17 2015	44.44	3477.6	2500	101		
1018057	July 17 2015	44.44	3477.6	2500	101		
1018058	July 17 2015	44.44	3477.6	2500	101		
1018059	July 17 2015	44.44	3477.6	2500	101		
1018060	July 17 2015	44.44	3477.6	2500	101		
1018061	July 17 2015	44.43	3477.35	2500	101		
1018062	July 17 2015	44.43	3477.35	2500	101		
1018063	July 17 2015	44.43	3477.35	2500	101		
1018064	July 17 2015	44.43	3477.35	2500	101		
1019188	April 30 2015	44.21	145935.25	2500	101		
1019189	April 30 2015	44.21	302417.81	2500	101		
1019190	April 30 2015	44.21	137888.13	2500	101		
1019191	April 30 2015	44.20	200111.38	2500	101		
1019192	April 30 2015	44.20	222465.1	2500	101		
1019193	April 30 2015	44.20	199631.38	2500	101		

TABLE 4.1 List of Claims									
Title No	<b>Expiry Date</b>	Area (Ha)	Excess Work (\$)	Required Work (\$)	Required Fees (\$)				
1019194	April 30 2015	44.19	162621.48	2500	101				
1019195	April 30 2015	44.19	175755.54	2500	101				
1019198	June 4 2015	44.49	70556.63	2500	101				
1019199	June 4 2015	44.49	70556.63	2500	101				
1019200	June 4 2015	44.48	196295.56	2500	101				
1019201	June 4 2015	44.48	70538.12	2500	101				
1019202	June 4 2015	44.46	70501.1	2500	101				
1019203	June 4 2015	44.46	71420.53	2500	101				
1019204	June 4 2015	44.46	70501.1	2500	101				
1020521	July 29 2015	44.19	71383.81	2500	101				
1020522	July 29 2015	44.49	3478.84	2500	101				
1020523	July 29 2015	44.48	3478.59	2500	101				
1129215	June 25 2015	19.81	0	750	28				
1129217	June 25 2015	3.78	0	750	28				
1129218	June 25 2015	13.82	0	750	28				
1129219	June 25 2015	12.60	0	750	28				
1129221	June 25 2015	7.80	0	750	28				
1129222	June 25 2015	10.40	0	750	28				
2258726	November 3 2014	44.51	985.63	400	101				
2258727	November 3 2014	44.51	985.63	400	101				
2258728	November 3 2014	44.44	983.89	400	101				
2258729	November 3 2014	44.43	983.64	400	101				
2258730	November 3 2014	44.43	983.64	400	101				
2258731	November 3 2014	44.43	983.64	400	101				
2258732	November 3 2014	44.42	983.39	400	101				
2258733	November 3 2014	44.42	983.39	400	101				
2258734	November 3 2014	44.42	983.39	400	101				
2258735	November 3 2014	44.42	983.39	400	101				
2258736	November 3 2014	44.42	983.39	400	101				
2258737 2258738	November 3 2014	44.42	983.39	400	101				
	November 3 2014	44.41	983.14	400	101				
2258739	November 3 2014	44.41	983.14	400 400	101 101				
2258740	November 3 2014	44.29 44.29	980.16		101				
2258741 2258742	November 3 2014 November 3 2014	44.29	980.16 980.16	400 400	101				
2258743	November 3 2014  November 3 2014	44.29	980.16	400	101				
2258744	November 3 2014  November 3 2014	44.29	979.92	400	101				
2258745	November 3 2014  November 3 2014	44.28	979.92	400	101				
2258746	November 3 2014	44.28	979.92	400	101				
2258747	November 3 2014  November 3 2014	44.28	979.92	400	101				
2258748	November 3 2014	44.27	979.67	400	101				
2258749	November 3 2014	44.27	979.67	400	101				
2258750	November 3 2014	44.27	979.67	400	101				
2258751	November 3 2014	44.27	979.67	400	101				
2258752	November 3 2014	44.27	979.67	400	101				
2258753	November 3 2014	44.26	979.42	400	101				
2258754	November 3 2014	44.26	979.42	400	101				
2258755	November 3 2014	44.26	979.42	400	101				
2258756	November 3 2014	44.26	979.42	400	101				
2258757	November 3 2014	44.26	979.42	400	101				
2258758	November 3 2014	44.17	977.18	400	101				
2258759	November 3 2014	44.16	976.93	400	101				
2258760	November 3 2014	44.16	976.93	400	101				

TABLE 4.1 LIST OF CLAIMS								
Title No	Expiry Date	Area (Ha)	Excess Work (\$)	Required Work (\$)	Required Fees (\$)			
2258761	November 3 2014	44.16	976.93	400	101			
2258762	November 3 2014	44.16	976.93	400	101			
2258763	November 3 2014	44.14	976.44	400	101			
2258764	November 3 2014	44.14	976.44	400	101			
2258765	November 3 2014	44.14	976.44	400	101			
2258766	November 3 2014	44.14	976.44	400	101			
2258767	November 3 2014	44.13	976.19	400	101			
2258768	November 3 2014	44.13	976.19	400	101			
2258769	November 3 2014	44.13	976.19	400	101			
2258770	November 3 2014	44.12	975.94	400	101			
2258771	November 3 2014	44.12	975.94	400	101			
2258772	November 3 2014	44.12	975.94	400	101			
2258773	November 3 2014	44.11	975.69	400	101			
2258774	November 3 2014	44.11	975.69	400	101			
2258775	November 3 2014	44.11	975.69	400	101			
2258776	November 3 2014	44.10	975.44	400	101			
2258777	November 3 2014	44.10	975.44	400	101			
2258778	November 3 2014	44.10	975.44	400	101			
2258779	November 3 2014	44.09	975.2	400	101			
2258780	November 3 2014	44.09	975.2	400	101			
2258781	November 3 2014	44.09	975.2	400	101			
2258782	November 3 2014	44.09	975.2	400	101			
2258783	November 3 2014	44.09	975.2	400	101			
2258784	November 3 2014	44.08	974.95	400	101			
2258785	November 3 2014	44.08	974.95	400	101			
2258786	November 3 2014	44.08	974.95	400	101			
2258787	November 3 2014	44.08	974.95	400	101			
2258788	November 3 2014	44.08	974.95	400	101			
2258789	November 3 2014	44.08	974.95	400	101			
2258790	November 3 2014	44.08	974.95	400	101			
2258791	November 3 2014	44.08	974.95	400	101			
2258792 2258793	November 3 2014	44.08	974.95	400 400	101			
	November 3 2014	44.08	974.95		101			
2258794 2258795	November 3 2014 November 3 2014	44.08 44.07	974.95 974.7	400 400	101 101			
2258796	November 3 2014  November 3 2014	44.07	974.7	400	101			
2258797	November 3 2014  November 3 2014	44.07	974.7	400	101			
2258798	November 3 2014  November 3 2014	44.07	974.7	400	101			
2258799	November 3 2014	44.07	974.7	400	101			
2258800	November 3 2014	44.07	974.7	400	101			
2258801	November 3 2014	44.06	974.45	400	101			
2258802	November 3 2014	44.06	974.45	400	101			
2258803	November 3 2014	44.06	974.45	400	101			
2258804	November 3 2014	44.06	974.45	400	101			
2258805	November 3 2014	44.06	974.45	400	101			
2258806	November 3 2014	44.06	974.45	400	101			
2258807	November 3 2014	44.05	974.2	400	101			
2258808	November 3 2014	44.05	974.2	400	101			
2258809	November 3 2014	44.05	974.2	400	101			
2258810	November 3 2014	44.05	974.2	400	101			
2258811	November 3 2014	44.05	974.2	400	101			
2258812	November 3 2014	44.05	974.2	400	101			
2258813	November 3 2014	44.05	974.2	400	101			

TABLE 4.1								
LIST OF CLAIMS								
Title No	Expiry Date	Area (Ha)	Excess Work (\$)	Required Work (\$)	Required Fees (\$)			
2258814	November 3 2014	44.04	973.95	400	101			
2258815	November 3 2014	44.04	973.95	400	101			
2258816	November 3 2014	44.04	973.95	400	101			
2258817	November 3 2014	44.04	973.95	400	101			
2258818	November 3 2014	44.04	973.95	400	101			
2258819	November 3 2014	44.04	973.95	400	101			
2258820	November 3 2014	44.04	973.95	400	101			
2258821	November 3 2014	44.03	973.71	400	101			
2258822	November 3 2014	44.03	973.71	400	101			
2258823	November 3 2014	44.03	973.71	400	101			
2265617	December 20 2014	44.16	976.93	400	101			
2265618	December 20 2014	44.03	973.71	400	101			
2265619	December 20 2014	14.62	315.16	160	28			
2265620	December 20 2014	43.45	959.3	400	101			
2265621	December 20 2014	15.17	328.82	160	28			
2265622	December 20 2014	43.56	962.03	400	101			
2337938	March 25 2016	44.55	986.62	400	101			
2337939	March 25 2016	44.57	987.12	400	101			
2337940	March 25 2016	44.57	987.12	400	101			
2337941	March 25 2016	44.57	987.12	400	101			
2337942	March 25 2016	44.57	987.12	400	101			
2337943	March 25 2016	44.56	986.87	400	101			
2337944	March 25 2016	44.56	986.87	400	101			
2337945	March 25 2016	44.56	986.87	400	101			
2337946	March 25 2016	44.56	986.87	400	101			
2337947	March 25 2016	44.56	986.87	400	101			
2337948	March 25 2016	44.55	986.62	400	101			
2337949	March 25 2016	44.55	986.62	400	101			
2337950	March 25 2016	44.55	986.62	400	101			
2337951	March 25 2016	44.55	986.62	400	101			
2337952	March 25 2016	44.54	986.37	400	101			
2337953	March 25 2016	44.54	986.37	400	101			
2337954	March 25 2016	44.54	986.37	400	101			
2337955	March 25 2016	44.54	986.37	400	101			
2337956	March 25 2016	44.54	986.37	400	101			
2337957	March 25 2016	44.54	986.37	400	101			
2337958	March 25 2016	44.53	986.13	400	101			
2337959	March 25 2016	44.53	986.13	400	101			
2337960	March 25 2016	44.53	986.13	400	101			
2337961	March 25 2016	44.53	986.13	400	101			
2337962	March 25 2016	44.53	986.13	400	101			
2337963	March 25 2016	44.53	986.13	400	101			
2337964	March 25 2016	44.53	986.13	400	101			
2337965	March 25 2016	44.53	986.13	400	101			
2337966	March 25 2016	44.53	986.13	400	101			
2337967	March 25 2016	44.52	985.88	400	101			
2337968	March 25 2016	44.52	985.88	400	101			
2337969	March 25 2016	44.52	745.88	400	101			
2337970	March 25 2016	44.52	745.88	400	101			
2337971	March 25 2016	44.52	985.88	400	101			
2337972	March 25 2016	44.52	985.88	400	101			
2337973	March 25 2016	44.52	985.88	400	101			
2337974	March 25 2016	44.52	985.88	400	101			

TABLE 4.1								
LIST OF CLAIMS								
Title No	Expiry Date	Area (Ha)	Excess Work (\$)	Required Work (\$)	Required Fees (\$)			
2337975	March 25 2016	44.52	985.88	400	101			
2337976	March 25 2016	44.51	985.63	400	101			
2337977	March 25 2016	44.51	985.63	400	101			
2337978	March 25 2016	44.51	985.63	400	101			
2337979	March 25 2016	44.51	985.63	400	101			
2337980	March 25 2016	44.50	985.38	400	101			
2337981	March 25 2016	44.50	985.38	400	101			
2337982	March 25 2016	44.50	985.38	400	101			
2337983	March 25 2016	44.50	985.38	400	101			
2337984	March 25 2016	44.49	985.13	400	101			
2337985	March 25 2016	44.49	985.13	400	101			
2337986	March 25 2016	44.49	985.13	400	101			
2337987	March 25 2016	44.49	985.13	400	101			
2337988	March 25 2016	44.48	984.88	400	101			
2337989	March 25 2016	44.48	984.88	400	101			
2337999	March 25 2016	44.48	984.88	400	101			
2337990	March 25 2016	44.46	984.39	400	101			
2337991	1	44.46	984.39	400	101			
	March 25 2016			400				
2337993	March 25 2016	44.40	982.9		101			
2337994	March 25 2016	44.39	982.65	400	101			
2337995	March 25 2016	44.39	982.65	400	101			
2337996	March 25 2016	44.38	982.4	400	101			
2337997	March 25 2016	44.29	980.16	400	101			
2337998	March 25 2016	44.29	980.16	400	101			
2337999	March 25 2016	44.29	980.16	400	101			
2338000	March 25 2016	44.28	979.92	400	101			
2338001	March 25 2016	44.28	979.92	400	101			
2338002	March 25 2016	44.28	979.92	400	101			
2338003	March 25 2016	44.26	979.42	400	101			
2338004	March 25 2016	44.26	979.42	400	101			
2338005	March 25 2016	44.25	979.17	400	101			
2338006	March 25 2016	44.25	979.17	400	101			
2338007	March 25 2016	44.16	976.93	400	101			
2338008	March 25 2016	44.16	976.93	400	101			
2338009	March 25 2016	44.16	976.93	400	101			
2338010	March 25 2016	44.16	976.93	400	101			
2338011	March 25 2016	44.16	976.93	400	101			
2338012	March 25 2016	44.14	976.44	400	101			
2338013	March 25 2016	44.14	976.44	400	101			
2338014	March 25 2016	44.55	986.62	400	101			
2338015	March 25 2016	44.54	986.37	400	101			
2338016	March 25 2016	44.53	986.13	400	101			
2338017	March 25 2016	44.52	985.83	400	101			
2341758	April 23 2016	42.79	0	400	101			
2341759	April 23 2016	43.80	0	400	101			
2341760	April 23 2016	43.92	0	400	101			
2341761	April 23 2016	37.26	0	400	101			
2390443	Sep 12 2015	44.10	0	120	100			
2390444	Sep 12 2015	44.10	0	120	100			
2390445	Sep 12 2015	44.10	0	120	100			
2390446	Sep 12 2015	44.10	0	120	100			
2390447	Sep 12 2015	44.10	0	120	100			
2390448	Sep 12 2015	44.10	0	120	100			

	TABLE 4.1							
LIST OF CLAIMS								
Title No	Expiry Date	Area (Ha)	Excess Work (\$)	Required Work (\$)	Required Fees (\$)			
2390449	Sep 12 2015	44.10	0	120	100			
2390450	Sep 12 2015	44.10	0	120	100			
2390451	Sep 12 2015	44.10	0	120	100			
2390452	Sep 12 2015	44.10	0	120	100			
2390453	Sep 12 2015	44.10	0	120	100			
2390454	Sep 12 2015	44.10	0	120	100			
2390455	Sep 12 2015	44.09	0	120	100			
2390456	Sep 12 2015	44.09	0	120	100			
2390457	Sep 12 2015	44.09	0	120	100			
2390458	Sep 12 2015	44.09	0	120	100			
2390459	Sep 12 2015	44.09	0	120	100			
2390460	Sep 12 2015	44.09	0	120	100			
2390461	Sep 12 2015	44.09	0	120	100			
2390462	Sep 12 2015	44.09	0	120	100			
2390463	Sep 12 2015	44.09	0	120	100			
2390464	Sep 12 2015	44.09	0	120	100			
2390465	Sep 12 2015	44.09	0	120	100			
2390466	Sep 12 2015	44.08	0	120	100			
2390467	Sep 12 2015	44.08	0	120	100			
2390468	Sep 12 2015	44.08	0	120	100			
2390469	Sep 12 2015	44.08	0	120	100			
2390470	Sep 12 2015	44.08	0	120	100			
2390471	Sep 12 2015	44.07	0	120	100			
2390472	Sep 12 2015	44.07	0	120	100			
2390473	Sep 12 2015	44.07	0	120	100			
2390474	Sep 12 2015	44.07	0	120	100			
2390475	Sep 12 2015	44.07	0	120	100			
2390476	Sep 12 2015	44.07	0	120	100			
2390477	Sep 12 2015	44.06	0	120	100			
2390478	Sep 12 2015	44.06	0	120	100			
2390479	Sep 12 2015	44.06	0	120	100			
2390480	Sep 12 2015	44.06	0	120	100			
2390481	Sep 12 2015	44.06	0	120	100			
2390482	Sep 12 2015	44.06	0	120	100			
2390483	Sep 12 2015	44.05	0	120	100			
2390484	Sep 12 2015	44.05	0	120	100			
2390485	Sep 12 2015	44.05	0	120	100			
2390486	Sep 12 2015	44.05	0	120	100			
2390487	Sep 12 2015	44.55	0	120	100			
2390488	Sep 12 2015	44.55	0	120	100			
2390489	Sep 12 2015	44.55	0	120	100			
2390490	Sep 12 2015	44.54	0	120	100			
2390491	Sep 12 2015	44.54	0	120	100			
2390492	Sep 12 2015	44.54	0	120	100			
2390493	Sep 12 2015	44.54	0	120	100			
2390494	Sep 12 2015	44.53	0	120	100			
2390495	Sep 12 2015	44.52	0	120	100			
2390496	Sep 12 2015	44.51	0	120	100			
2390497	Sep 12 2015	44.46	0	120	100			
2390498	Sep 12 2015	40.23	0	120	100			
2390499	Sep 12 2015	44.45	0	120	100			
2390500	Sep 12 2015	44.45	0	120	100			
2390501	Sep 12 2015	41.57	0	120	100			
			1					

TABLE 4.1								
LIST OF CLAIMS								
Title No	Expiry Date	Area (Ha)	Excess Work (\$)	Required Work (\$)	Required Fees (\$)			
2390502	Sep 12 2015	44.44	0	120	100			
2390503	Sep 12 2015	44.44	0	120	100			
2390504	Sep 12 2015	44.44	0	120	100			
2390505	Sep 12 2015	43.37	0	120	100			
2390506	Sep 12 2015	44.43	0	120	100			
2390507	Sep 12 2015	44.43	0	120	100			
2390508	Sep 12 2015	44.43	0	120	100			
2390509	Sep 12 2015	44.43	0	120	100			
2390510	Sep 12 2015	44.29	0	120	100			
2390511	Sep 12 2015	44.42	0	120	100			
2390512	Sep 12 2015	44.42	0	120	100			
2390513	Sep 12 2015	44.42	0	120	100			
2390513	Sep 12 2015	44.42	0	120	100			
2390514	Sep 12 2015 Sep 12 2015	44.42	0	120	100			
2390515	Sep 12 2015 Sep 12 2015	44.41	0	120	100			
2390516	•	44.4	0	120	100			
2390517	Sep 12 2015 Sep 12 2015	44.39	0	120	100			
2390518			0	120	100			
	Sep 12 2015	44.38						
2390520	Sep 12 2015	44.37	0	120	100			
2390521	Sep 12 2015	44.37	0	120	100			
2390522	Sep 12 2015	44.37	0	120	100			
2390523	Sep 12 2015	44.17	0	120	100			
2390524	Sep 12 2015	44.17	0	120	100			
2390525	Sep 12 2015	44.16	0	120	100			
2390526	Sep 12 2015	44.16	0	120	100			
2390527	Sep 12 2015	44.16	0	120	100			
2390528	Sep 12 2015	44.14	0	120	100			
2390529	Sep 12 2015	44.14	0	120	100			
2390530	Sep 12 2015	44.14	0	120	100			
2390531	Sep 12 2015	44.14	0	120	100			
2390532	Sep 12 2015	44.14	0	120	100			
2390533	Sep 12 2015	44.13	0	120	100			
2390534	Sep 12 2015	44.13	0	120	100			
2390535	Sep 12 2015	44.13	0	120	100			
2390536	Sep 12 2015	44.13	0	120	100			
2390537	Sep 12 2015	44.13	0	120	100			
2390538	Sep 12 2015	44.13	0	120	100			
2390539	Sep 12 2015	44.13	0	120	100			
2390540	Sep 12 2015	44.13	0	120	100			
2390541	Sep 12 2015	44.13	0	120	100			
2390542	Sep 12 2015	44.13	0	120	100			
2390543	Sep 12 2015	44.12	0	120	100			
2390544	Sep 12 2015	44.12	0	120	100			
2390545	Sep 12 2015	44.12	0	120	100			
2390546	Sep 12 2015	44.12	0	120	100			
2390547	Sep 12 2015	44.12	0	120	100			
2390548	Sep 12 2015	44.12	0	120	100			
2390549	Sep 12 2015	44.12	0	120	100			
2390550	Sep 12 2015	44.12	0	120	100			
2390551	Sep 12 2015	44.12	0	120	100			
2390552	Sep 12 2015	44.12	0	120	100			
2390553	Sep 12 2015	44.12	0	120	100			
2390554	Sep 12 2015	44.11	0	120	100			

	TABLE 4.1							
LIST OF CLAIMS								
Title No	Expiry Date	Area (Ha)	Excess Work (\$)	Required Work (\$)	Required Fees (\$)			
2390555	Sep 12 2015	44.11	0	120	100			
2390556	Sep 12 2015	44.11	0	120	100			
2390557	Sep 12 2015	44.11	0	120	100			
2390558	Sep 12 2015	44.11	0	120	100			
2390559	Sep 12 2015	44.11	0	120	100			
2390560	Sep 12 2015	44.11	0	120	100			
2390561	Sep 12 2015	44.11	0	120	100			
2390562	Sep 12 2015	44.11	0	120	100			
2390563	Sep 12 2015	44.11	0	120	100			
2390564	Sep 12 2015	44.11	0	120	100			
2390565	Sep 12 2015	44.35	0	120	100			
2390566	Sep 12 2015	44.34	0	120	100			
2390567	Sep 12 2015	44.34	0	120	100			
2390568	Sep 12 2015	44.34	0	120	100			
2390569	Sep 12 2015	44.33	0	120	100			
2390570	Sep 12 2015	44.33	0	120	100			
2390571	Sep 12 2015	44.33	0	120	100			
2390571	Sep 12 2015	44.32	0	120	100			
2390572	Sep 12 2015	44.32	0	120	100			
2390574	Sep 12 2015	44.32	0	120	100			
2390574	Sep 12 2015	44.32	0	120	100			
2390576	Sep 12 2015	44.32	0	120	100			
2390577	Sep 12 2015 Sep 12 2015	44.31	0	120	100			
2390577	Sep 12 2015 Sep 12 2015	44.31	0	120	100			
2390578	Sep 12 2015 Sep 12 2015	44.31	0	120	100			
2390579	Sep 12 2015 Sep 12 2015	44.31	0	120	100			
2390581	Sep 12 2015	44.31	0	120	100			
2390581	Sep 12 2015 Sep 12 2015	44.31	0	120	100			
2390582	Sep 12 2015 Sep 12 2015	44.31	0	120	100			
2390583	Sep 12 2015 Sep 12 2015	44.29	0	120	100			
2390585	Sep 12 2015 Sep 12 2015	44.29	0	120	100			
2390586	Sep 12 2015	44.29	0	120	100			
2390580	Sep 12 2015	44.29	0	120	100			
2390588	Sep 12 2015	44.29	0	120	100			
2390589	Sep 12 2015	44.29	0	120	100			
2390599	Sep 12 2015 Sep 12 2015	44.29	0	120	100			
2390590	Sep 12 2015	44.29	0	120	100			
2390591	•	44.29	0	120	100			
2390592	Sep 12 2015 Sep 12 2015	44.28	0	120	100			
2390593	Sep 12 2015	44.28	0	120	100			
	Sep 12 2015 Sep 12 2015	44.28	0	120	100			
2390595	•	44.28	0					
2390596	Sep 12 2015		0	120 120	100			
2390597	Sep 12 2015	44.28 44.28	0	120	100			
2390598	Sep 12 2015		0	120	100			
2390599	Sep 12 2015	44.28		120	100			
2390600	Sep 12 2015	44.28	0					
2390601	Sep 12 2015	44.28		120	100			
2390602	Sep 12 2015	44.27	0	120	100			
2390603	Sep 12 2015	44.27	0	120	100			
2390604	Sep 12 2015	44.27	0	120	100			
2390605	Sep 12 2015	44.27	0	120	100			
2390606	Sep 12 2015	44.27	0	120	100			
2390607	Sep 12 2015	44.27	0	120	100			

TABLE 4.1								
LIST OF CLAIMS								
Title No	Expiry Date	Area (Ha)	Excess Work (\$)	Required Work (\$)	Required Fees (\$)			
2390608	Sep 12 2015	44.27	0	120	100			
2390609	Sep 12 2015	44.27	0	120	100			
2390610	Sep 12 2015	44.27	0	120	100			
2390611	Sep 12 2015	44.26	0	120	100			
2390612	Sep 12 2015	44.26	0	120	100			
2390613	Sep 12 2015	44.26	0	120	100			
2390614	Sep 12 2015	44.26	0	120	100			
2390615	Sep 12 2015	44.26	0	120	100			
2390616	Sep 12 2015	44.26	0	120	100			
2390617	Sep 12 2015	44.26	0	120	100			
2390618	Sep 12 2015	44.25	0	120	100			
2390619	Sep 12 2015	44.25	0	120	100			
2390620	Sep 12 2015	44.25	0	120	100			
2390621	Sep 12 2015	44.25	0	120	100			
2390622	Sep 12 2015	44.25	0	120	100			
2390623	Sep 12 2015	44.25	0	120	100			
2390624	Sep 12 2015	44.24	0	120	100			
2390625	Sep 12 2015	44.24	0	120	100			
2390626	Sep 12 2015	44.24	0	120	100			
2390627	Sep 12 2015	44.24	0	120	100			
2390628	Sep 12 2015	44.24	0	120	100			
2390629	Sep 12 2015	44.24	0	120	100			
2390630	Sep 12 2015	44.24	0	120	100			
2390631	Sep 12 2015	44.24	0	120	100			
2390632	Sep 12 2015	44.23	0	120	100			
2390633	Sep 12 2015	44.23	0	120	100			
2390634	Sep 12 2015	44.23	0	120	100			
2390635	Sep 12 2015	44.23	0	120	100			
2390636	Sep 12 2015	44.23	0	120	100			
2390637	Sep 12 2015	44.23	0	120	100			
2390638	Sep 12 2015	44.23	0	120	100			
2390639	Sep 12 2015	44.23	0	120	100			
2390640	Sep 12 2015	44.23	0	120	100			
2390641	Sep 12 2015	44.23	0	120	100			
2390642	Sep 12 2015	44.23	0	120	100			
2390643	Sep 12 2015	44.22	0	120	100			
2390644	Sep 12 2015	44.22	0	120	100			
2390645	Sep 12 2015	44.22	0	120	100			
2390646	Sep 12 2015	44.22	0	120	100			
2390647	Sep 12 2015	44.22	0	120	100			
2390648	Sep 12 2015	44.22	0	120	100			
2390649	Sep 12 2015	44.22	0	120	100			
2390650	Sep 12 2015	44.21	0	120	100			
2390651	Sep 12 2015	44.21	0	120	100			
2390652	Sep 12 2015	44.21	0	120	100			
2390653	Sep 12 2015	44.21	0	120	100			
2390654	Sep 12 2015	44.21	0	120	100			
2390655	Sep 12 2015	44.21	0	120	100			
2390656	Sep 12 2015	44.2	0	120	100			
2390657	Sep 12 2015	44.2	0	120	100			
2390658	Sep 12 2015	44.2	0	120	100			
2390659	Sep 12 2015	44.2	0	120	100			
2390660	Sep 12 2015	44.2	0	120	100			

TABLE 4.1								
LIST OF CLAIMS								
Title No	Expiry Date	Area (Ha)	Excess Work (\$)	Required Work (\$)	Required Fees (\$)			
2390661	Sep 12 2015	44.19	0	120	100			
2390662	Sep 12 2015	44.19	0	120	100			
2390663	Sep 12 2015	44.19	0	120	100			
2390664	Sep 12 2015	44.19	0	120	100			
2390665	Sep 12 2015	44.18	0	120	100			
2390666	Sep 12 2015	44.18	0	120	100			
2390667	Sep 12 2015	44.18	0	120	100			
2390668	Sep 12 2015	43.33	0	120	100			
2390669	Sep 12 2015	44.17	0	120	100			
2390670	Sep 12 2015	44.17	0	120	100			
2390671	Sep 12 2015	43.96	0	120	100			
2390672	Sep 12 2015	44.07	0	120	100			
2390673	Sep 12 2015	44.07	0	120	100			
2390674	Sep 12 2015	44.07	0	120	100			
2390675	Sep 12 2015	44.07	0	120	100			
2390676	Sep 12 2015	44.07	0	120	100			
2390677	Sep 12 2015	44.07	0	120	100			
2390678	Sep 12 2015	44.06	0	120	100			
2390679	Sep 12 2015	44.06	0	120	100			
2390680	Sep 12 2015	44.06	0	120	100			
2390681	Sep 12 2015	44.06	0	120	100			
2390682	Sep 12 2015	44.06	0	120	100			
2390683	Sep 12 2015	44.06	0	120	100			
2390684	Sep 12 2015	44.06	0	120	100			
2390685	Sep 12 2015	44.04	0	120	100			
2390686	Sep 12 2015	44.04	0	120	100			
2390687	Sep 12 2015	44.04	0	120	100			
2390942	Sept 19 2015	23.97	0	48	27.75			
2390943	Sept 19 2015	19.67	0	48	27.75			
2390944	Sept 19 2015	41.29	0	120	100			
2390945	Sept 19 2015	2.75	0	48	100			
2390946	Sept 19 2015	20.06	0	48	100			
2390947	Sept 19 2015	24.35	0	48	100			
2391580	Oct 8 2015	27.4	0	120	100			
2391581	Oct 8 2015	39.49	0	120	100			
2391582	Oct 8 2015	43.93	0	120	100			
2391583	Oct 8 2015	12.11	0	48	27.75			
2391584	Oct 8 2015	25.05	0	120	100			
2391585	Oct 8 2015	38.7	0	120	100			
2391586	Oct 8 2015	43.1	0	120	100			
2391587	Oct 8 2015	20.81	0	48	27.75			
2391588	Oct 8 2015	33.65	0	120	100			
2391589	Oct 8 2015	37.81	0	120	100			
2391590	Oct 8 2015	42.94	0	120	100			
2391591	Oct 8 2015	22.16	0	48	27.75			
2391592	Oct 8 2015	6.76	0	48	27.75			
2391593	Oct 8 2015	15.11	0	48	27.75			
2391594	Oct 8 2015	26.93	0	120	100			
2391595	Oct 8 2015	32.85	0	120	100			
2391596	Oct 8 2015	44.15	0	120	100			
2391590	Oct 8 2015	44.15	0	120	100			
2391598	Oct 8 2015	44.13	0	120	100			
2391600	Oct 8 2015	21.88	0	48	27.75			
2071000	001 0 2013	21.00		1 70	21.13			

TABLE 4.1 LIST OF CLAIMS					
Title No	Expiry Date	Area (Ha)	Excess Work (\$)	Required Work (\$)	Required Fees (\$)
2391601	Oct 8 2015	27.65	0	120	100
2391602	Oct 8 2015	32.67	0	120	100
2391603	Oct 8 2015	36.82	0	120	100
2391604	Oct 8 2015	8.9	0	48	27.75
2391605	Oct 8 2015	40.06	0	120	100
2391606	Oct 8 2015	42.41	0	120	100
2391607	Oct 8 2015	18.84	0	48	27.75
2391608	Oct 8 2015	43.84	0	120	100
2391609	Oct 8 2015	24.81	0	48	27.75
2391610	Oct 8 2015	44.35	0	120	100
2391611	Oct 8 2015	30.38	0	120	100
2393345	Oct 28 2015	20.45	0	48	27.75
2393346	Oct 28 2015	6.43	0	48	27.75
		30,657.25	\$3,934,414.10	\$698,148.00	\$70,132.75

### 4.3 AGREEMENTS

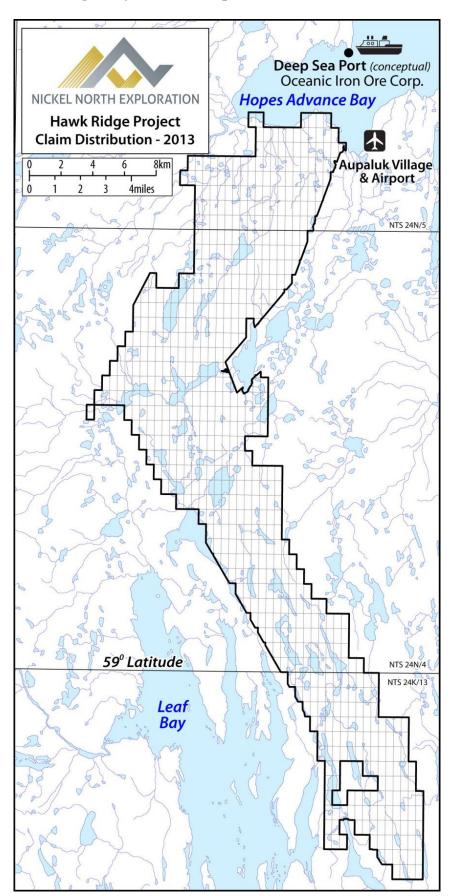
On March 29, 2012, the Company entered into a definitive option agreement (the "Original Agreement") with Anthem Resources Inc. ("Anthem") and its wholly-owned subsidiary (collectively the "Optionor") whereby the Optionor granted the Company an option to acquire a 100% interest in the Hawk Ridge property. Under the Original Agreement, the Company agreed to make staged payments totalling \$2,000,000 in cash and \$1,000,000 in common shares of the Company to Anthem by December 31, 2013.

On August 8, 2012, the Company obtained the TSX-V approval of the option agreement with Anthem as its Qualifying Transaction and graduated from being a Capital Pool Company to a Tier 2 mining issuer on the TSX-V.

In accordance with the Original Agreement, the Company has made the following staged payments:

- On August 2, 2012 the Company made its first option payment of \$500,000 in cash and issued 1,250,000 common shares of the Company to Anthem. In addition, the company issued a total of 2,302,032 non-flow-through units to Anthem for the total expenses of a geophysical survey conducted by Anthem in the amount of \$460,406; and
- On December 31, 2012 the Company made its second option payment to Anthem in the amount of \$500,000 cash and issued a further 1,250,000 common shares.

Figure 4.2 Hawk Ridge Project Claim Map



The option agreement was amended on February 15, 2013, (the "Second Amendment") and later amended again on April 17, 2013 (the "Third Amendment").

Under the Third Amendment, in lieu of paying \$1,000,000 in cash on or before December 31, 2013, the Company agreed to issue to the optionors the number of units (the "Conversion Units") equal to \$1,000,000 less such amount equal to 20% of the cost incurred by the optionors for the geophysical survey, which is estimated to be \$907,919, divided by \$0.25 per Conversion Unit. Each Conversion Unit will consist of one common share and one half of one common share purchase warrant with each whole warrant entitling the holder to acquire one additional common share for a period of two years, at an exercise price of \$0.35 per share in the first year and \$0.60 per share in the second year. In addition, the Company has agreed to issue the remaining common shares equal to \$500,000 divided by the greater of \$0.20 or a 10% discount to the 20 day moving average trading price of the Company for the 20 day period immediately preceding the date of issuance. The Company agreed to change the timing of the issuance of the Conversion Units and the remaining common shares from December 31, 2013 to within 10 business days of the receipt of approval from the TSX Venture Exchange for the Third Amendment.

On May 1, 2013 the Company acquired 100% ownership of the Project with 3,631,675 common shares and 1,815,838 warrants issued to Anthem upon conversion of the cash payment; the Company also issued 2,500,000 common shares pursuant to the Third Amendment.

The majority of the Property is subject to a 3% net smelter returns royalty ("NSR") and the Company has the option to purchase one third of the NSR (1%) at any time for \$1,000,000 and has a first right of refusal on the second 1%.

On November 5, 2012 the Company entered into a Cooperation Framework Agreement with Goldrock Resources Co., Ltd. ("Goldrock"), a subsidiary of Sinotech Minerals Exploration Co., Ltd. of Beijing, China ("Sinotech Minerals"). The agreement was signed at the China International Mining Conference 2012 in Tianjin and witnessed by the Premier of the Ministry of Land and Resources of China. The agreement sets in place a formal, growth-oriented framework to harness synergies and leverage the combined resources and core competencies of the two parties. Terms of the Cooperation Framework Agreement are not limited to, but include:

- Nickel North to table a detailed "Acquisition Strategy" for approval by both parties within 180 days of this Agreement;
- Goldrock to provide technical expertise, financial resources and its international and industry connections to source and fund projects of exceptional merit;
- Nickel North to become a specialized entity that evaluates, acquires and exploits Ni, Cu, PGE opportunities globally;
- Initial focus on advanced-stage exploration at "Hawk Ridge Ni-Cu-PGE Project"
- Goldrock or its nominee(s) to have first option to provide funding for the Hawk Ridge project, as well as other project acquisitions.

# 4.4 THE QUÉBEC MINING ACT AND CLAIMS

Claims are valid for a period of two-years at a time and convey mining rights only, with no surface rights applied. Claims must be renewed prior to their expiry date to maintain claims in good standing and each claim may be renewed indefinitely, provided the holder meets all the conditions set out in the Québec Mining Act, including carrying out and filing the minimum

work required on each claim 60 days prior to the anniversary date of the claim. Work performed in excess of the prescribed requirements may be applied to subsequent claim terms.

Total expenditure per claim varies according to the surface area of the claim in Québec, location (either north or south of 52° latitude) and the number of terms since its issuance, which escalates according to the following schedules outlined in Tables 4.2 and 4.3. Table 4.2 details the registration and renewal fees and 4.3 shows the amount of assessment work to be carried out during each term of a claim.

Table 4.2 North of 52° of Latitude Registration & Renewal Fees									
Surface Area of Claim	Registra	tion Fees	Renewal Fees						
	1-150 claims	> 150 claims	> 60 days to expiry	< 60 days to expiry					
< 25 ha	\$28	\$140	\$28	\$56					
25 – 45 ha	\$101	\$505	\$101	\$202					
45 – 50 ha	\$113	\$565	\$113	\$226					
> 50 ha	\$127	\$635	\$127	\$254					

TABLE 4.3 NORTH OF 52° OF LATITUDE ASSESSMENT WORK REQUIREMENTS									
Т	Su	ırface Area Of Cla	im						
Term	< 25 ha	25 – 45 ha	> 45 ha						
1	\$48	\$120	\$135						
2	\$160	\$400	\$450						
3	\$320	\$800	\$900						
4	\$480	\$1,200	\$1,350						
5	\$640	\$1,600	\$1,800						
6	\$750	\$1,800	\$1,800						
7 or more	\$1,000	\$2,500	\$2,500						

Assessment work credits from another claim may be applied to the claim to be renewed, provided the renewed claim lies within a radius of 4.5 km from the centre of the claim with the excess work credits. The claim holder may apply amounts spent on work carried out on a mining lease or concession towards the renewal of a claim, provided that the work was performed during the term of the claim and that the amount does not exceed one quarter of the required amount for renewal. If the required work was not performed or was insufficient to cover the renewal of the claim, then the claim holder may pay a sum equivalent to the minimum cost of the work that should have been performed.

The cost of renewing a claim depends on the surface area of the claim, its location, and the date the application is received. If the application for renewal and fees are received prior to 60 days before the anniversary of a claim, the following renewal fees apply for claims north of  $52^{\circ}$  latitude: less than 25 ha = \$28; 25 to 45 ha = \$101; 45 to 50 ha = \$113; over 50 ha = \$127. These renewal fees double if the application is received within 60 days or less of the anniversary date of the claim.

#### 4.5 MINING RESTRICTIONS

There are three types of staking restrictions and mining activity present near the Hawk Ridge property.

- Mineral exploration is prohibited to the east and southwest of the Project due to the proposed Baie-aux-Feuilles (Leaf Bay) provincial park over these areas. Claims cannot be staked in these areas and exploration programs would not be subject to approval.
- The Inuit have owned the mineral rights to a northeast-trending belt in the Aupaluk area to the North and on either side of the Project area since November 24, 1988. Exploration is permitted under specific conditions on Category I Lands, however an agreement is required with the Inuit for any work to be carried out on these lands. There is some overlap in the areas of the proposed park and Category I lands, particularly in the area to the northeast of the Hawk Ridge Project.
- Another area of Category I lands is located in the Tasiujaq area south of the Hawk Ridge Project area. This area also overlaps with the proposed Baie-aux-Feuilles Park.

#### 4.6 ENVIRONMENTAL REGULATIONS

The following description relating to Environmental Regulations has relied heavily on Beauchamp's 2012 Technical Report on the Property.

Falconbridge Ltd. and its partners carried out significant exploration programs in the area and later ran a mining operation at Lac Pio from 1961 to 1974. The company extended an adit and drifts at Lac Pio, several of which were opened to surface where they can be seen as pits.

When the company abruptly abandoned the mining site in the area in 1974 it left a significant amount of industrial waste, equipment, explosives and many fuel drums on the site.

When Troymin Resources, a predecessor company to Nickel North, acquired an exploration permit over the Property in late 1995 it contracted an environmental review of the Lac Pio area and recognized the potential safety risk of the explosives present in the area. It contracted the Sureté du Québec (SQ), the provincial police force, to access the Property in early 1996 and to destroy all explosive material in the area and to secure the site.

As a follow-up to a study completed in 2002 by Kativik Regional Administration, a local administrative agency in northern Québec, of 193 sites examined in all of Nunavik the Lac Pio site was determined to be one of the mining sites in greatest need for rehabilitation. In 2007 several mining companies based in Québec funded a project to clean up many of these sites. Over a three-week period in December 2009, 20 trips were made to move 15 large pieces of heavy equipment including a crane, tractor, crusher, generator motors etc. to Aupaluk along a temporary winter road on the tundra.

In 2010 additional cleanup work was completed on the site. Some of the material was shipped south to Montréal for disposal and several of the larger pieces were left in Aupaluk. As part of the rehabilitation program a total of 43.5 tonnes of metal and 440 kg of aluminum have been shipped south for recycling.

Ten additional trips were made from Lac Pio to Aupaluk in 2011 to remove other equipment. At the request of the community of Aupaluk the trailer was left on site so that it could be used as a shelter in case of emergency during the winter (Administration régionale Kativik, 2011).

Although the 2011 rehabilitation report completed by the Administration régionale Kativik quotes a water pH reading of 6.9, indicating that no acid rock drainage issues are present, the soils nevertheless indicated readings of copper, nickel and iron that were higher than those acceptable. The total area of contaminated soils at Lac Pio has been estimated at 115 m<sup>2</sup>.

Another site at the south end of Lac Laliberté has been identified as a site requiring an intermediate level of rehabilitation. Although this site is on the Hawk Ridge property this is not one that was used by the Company or by its predecessor companies. The site is recent and has many barrels of fuel, several of which are full, burnt aluminum metal, propane tanks and old beds.

In the field site inspection carried out in November 2011, a quick inventory of the company's 1996-1997 camp site on the east shore of Lac Déry revealed the core from the 1996-1997 drilling campaign was neatly cross-stacked and accounted for. The site was relatively clean and other than the core, an old wooden shack and one empty barrel are still on the site.

There are no other known or reported land improvements, mine workings or tailings ponds on the Hawk Ridge property. The Property is otherwise free of liens or pending legal actions, backin rights, payments or other encumbrances. There are no other known existing environmental liabilities to which the property is subject.

Owners of mineral claims do not have the rights to surficial materials such as sand or gravel. The Company is required to request permits from the provincial government and the Nunavik Government to establish camps and for the use of surficial materials. The Company would be further required to request permission from the Inuit communities if trails or roads were required to ferry equipment onto the property.

In 2002 the Government of Québec gave the responsibility for management activities and services, and for the protection and enhancement of the parks proposed in Nunavik to the Kativik Regional Government (KRG). The provincial park for Baie-aux-Feuilles was proposed at least 15 years ago. If mineral development or a mining operation were to be proposed on the Hawk Ridge property additional negotiations would be required with the Kativik Regional Government to mitigate any potential damage to the proposed park area.

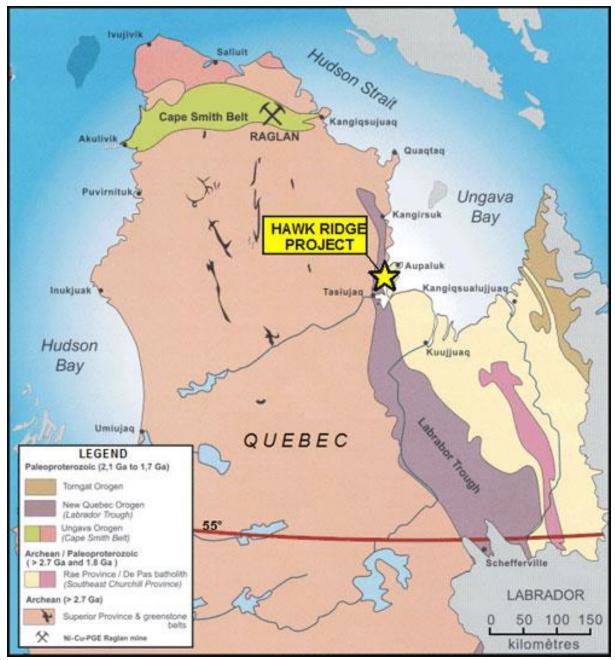
Since the project is located between two sections of land that are proposed as a park and near land that is owned by the Inuit in the region, there is a risk that any exploration or development of the Property could be delayed by the interests of the local population or by non-governmental organizations. The corridor of the Hawk Ridge Property however, is grandfathered for mining claims by the MRNQ, (personal communication P. Mudry).

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

#### 5.1 ACCESS

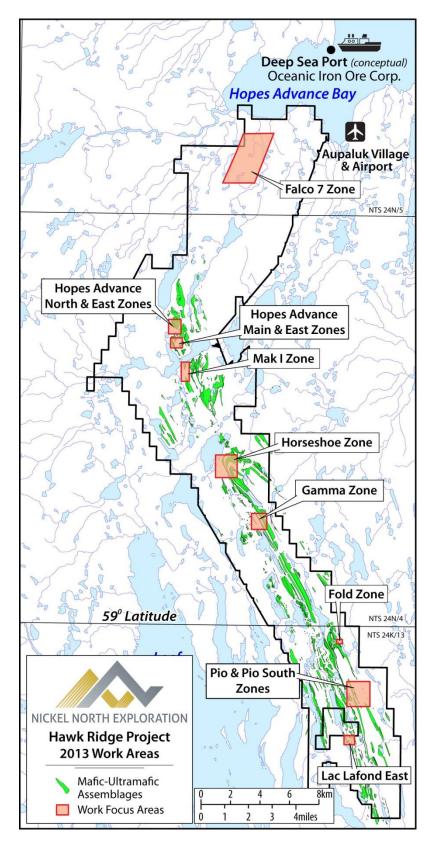
Primary access to the Hawk Ridge Project is by air from Montréal to Kuujjuaq; Air Inuit and First Air have daily scheduled flights servicing Kuujjuaq. Air Inuit also flies from Kuujjuaq to several other Inuit communities including Aupaluk. The center of the Project is approximately 124 km northwest of Kuujjuaq and 30 km south of Aupaluk, (Figures 5.1 and 5.2). From Kuujjuaq, the Project is typically accessed by chartered helicopter or float-equipped planes. Coastal areas of the project on Hopes Advance Bay are also accessible by boat from Aupaluk.

Figure 5.1 Regional Location Map



Source: Beauchamp, 2012

Figure 5.2 Property Location Map



#### 5.2 CLIMATE

The Hawk Ridge Project is located near the northern boundary of the Taiga Shield ecozone with the Southern Arctic ecozone. At the Hawk Ridge Project, the climate is Arctic to Subarctic with cold winters and short cool summers. Precipitation is light and generally concentrated in the warmer months. In Kuujjuaq the mean annual temperature is -5.4°C with July daily mean temperatures of 11.8°C and January daily mean temperature of -24.7°C. Average annual precipitation in Kuujjuaq is 541.6 mm, (data from Environment Canada.)

#### 5.3 LOCAL RESOURCES

With a population of 2,375 (2011 Census), Kuujjuaq is the regional centre for the area and the administrative capital of the Kativik regional government. Aupaluk has a population of 195 (2011 census). A limited number of unskilled and semi-skilled people could be hired in Kuujjuaq and Aupaluk. Fixed wing landing strips are present at Kuujjuaq, Aupaluk and Tasiujak. The airport at Kuujjuaq can accommodate jet aircraft including the Boeing 737. Basic food, supplies and equipment can be obtained from Kuujjuaq. Major equipment and supplies such as fuel and machinery must be shipped from Montréal to the project area. Nunavut Enterprise Arctic Shipping Inc., a business owned and operated by Inuit, operates a shipping service from Montréal to coastal communities in the Arctic including Kuujjuaq and Aupaluk.

# 5.4 INFRASTRUCTURE

The project area benefits from access to tide water. A deep-sea port has been proposed by Oceanic Iron Ore Corp. on the north shore of Hopes Advance Bay for a proposed iron mining operation 20-50 km west of Aupaluk. The shipping season at Aupaluk is usually from mid- to late June until late November. Electrical power is available in Aupaluk but additional facilities would be required for mining.

The nearest road access is the Trans-Taiga gravel road located 380 km south of Kuujjuaq. The Trans-Taiga road extends from Radisson east for 580 km following the electric generating stations operated by Hydro-Québec along the La Grande River and Caniapiscau River, part of the James Bay Project. Proposals have been made to extend the Trans-Taiga Road north to Kuujjuaq as part of the "Plan Nord", a program for the development of the northern part of the province of Québec. A railway from Sept-Iles was constructed to the north to service the iron mines in the Schefferville area, located about 370 km south of Kuujjuaq.

#### 5.5 PHYSIOGRAPHY

Geographically the property is located west of Ungava Bay and extends for 58 km from Hopes Advance Bay in the north to Baie-aux-feuilles in the South. The property is in the Arctic and is north of the tree line. Elevations range from sea level in the north at Hopes Advance Bay to locally over 150 m. Typically the project area is at least 50 m above sea level and several lakes are available as sources of water on the property.

The project area has very good outcrop exposure with limited soil development. The vegetation is represented mostly by minor grass and sedges in low-lying swampy areas with occasional dwarf shrubs.

# 6.0 HISTORY

The first claims were staked in 1961 for the Hawk Ridge property when the Sogemines-Falconbridge-Lone Star joint venture worked the Lac Pio area. Table 6.1 gives a historical perspective of the work carried out on and in the region of the Property.

	C	TABLE 6.1
Year	SUMMARY OF HISTOR Company/Person	EXPLORATION ON THE HAWK RIDGE PROPERTY  Exploration
1894	A.P. Low	The presence of iron in sedimentary rocks in the area west of Aupaluk and of Hopes Advance Bay reported.
1930s	Murray Watts	Watts was one of the first prospectors to venture in the Ungava Trough located about 350 km to the North of the present-day Property. To the South of the Project, in the Labrador Trough, activities were focused on sedimentary iron exploration (1929-1970).
1936		Earliest recorded rock sampling along north and south shores of Leaf Bay; results not available.
1951	Fenimore Iron Mines	Six lines of an aeromagnetic survey flown in N-S direction immediately N of Leaf Bay and 13 km SW of Property.
1952- 1954	Fenimore Iron Mines	Additional prospecting/mapping completed at base of Labrador Trough sedimentary sequence NW, W and SW of Project; iron formation identified.
1955	Fenimore Iron Mines	Prospecting/mapping on claims in S extension of Project near Leaf Bay; presence of sulphide zones in sedimentary and volcanic rocks reported.
1958	Ungava Iron Mines	Drilling carried out at Ford Lake property west of Hopes Advance Bay. Government also undertook several geological mapping programs at a scale of 1:63,360 in Project area (Freedman and Philpotts, 1958; Bérard, 1959; Gold, 1962).
1961- 1974	Sogemines-Falconbridge- Lone Star Mining	Extensive drilling and development at Lac Pio and southern part of Project area and Hopes Advance North Zone, as well as drilling, trenching and magnetic/electromagnetic surveys at Hopes Advance Main Zone. A pilot plant was established by Oceanic Iron Mines in 1962 to determine potential beneficiation of sedimentary iron at Hopes Advance Bay to the west of the Project where flotation and spiral tests were carried out in an Aerofall mill.
1971	Imperial Oil / Esso Minerals	Reconnaissance exploration and diamond drilling in central and northern part of Project area.
1971	Falconbridge Nickel Mines Ltd. / Premium Iron Ores Ltd.	Ground magnetometer and VLF-EM survey of Lac Pio area with follow up drilling.
1972	Lone Star Mining	Airborne EM, magnetometer and radiometric survey over areas to the W and SW of the Property in search of iron ore.
1973	Falconbridge Nickel Mines Ltd. / Premium Iron Ores Ltd.	Detailed geological mapping and ground EM and magnetic surveys of Lac Pio area and NE of Hopes Advance 6.
1973	Lone Star Mining	2.5×3 m adit driven to a length of 113 m at Lac Pio to reach the

	SUMMARY OF HISTOR	TABLE 6.1 RIC EXPLORATION ON THE HAWK RIDGE PROPERTY
Year	Company/Person	Exploration
1001	Company/1 crson	east and west veins about 17 m below surface. Approximately
		4,200 tonnes of sulphides mined from both veins and another
		1,200 tonnes mined from open pit. Historical resource estimate
		calculated for small zone of mineralization on Property;
		calculation is not compliant with NI 43-101 regulations and
		should not be relied upon. Number of holes drilled in Lac Pio
		area. Lakefield Research of Canada performed a study on the
		recovery of copper and nickel from Lac Pio.
		Adit extended at Lac Pio by 80 m. 9 trenches dug and ground
		magnetometer survey performed near Schindler Zone on ground
1074	T G M:	held by Falconbridge/Genstar. Pilot plant including crushing,
1974	Lone Star Mining	grinding, screening and concentration facilities capable of 20 tons
		per hour was set up at Lac Pio. The central part of the permit at
		the Schindler showing was mapped and 16 holes were drilled.
1074	Falconbridge Nickel	
1974	Mines Ltd.	reason unknown.
		Hopes Advance claims acquired from Ross Thoms; claims that
		had been worked in 1961-62 by Falconbridge and in 1973-74 by
1979	Esso Minerals Canada	Lone Star Mining. Geological mapping, ground EM and
		magnetometer surveys, trenching and drilling carried out at
		Hopes Advance North area.
1982-		Ten claims staked over the Hopes Advance Main and Hopes
1982-	Daniel Larkin	Advance North Zones in 1982 and magnetometer survey carried
1703		out over part of the claims in the following year.
1986	La Fosse Platinum Group	Mineral exploration company collected 45 rock samples from Lac
1700	Inc.	Pio area and recommended follow up work.
1987-	Riverton Resources	Acquired exploration permit of 75km <sup>2</sup> over the Lac Pio area and
1988	Corporation	carried out detailed mapping and rock sampling of the Lac Pio
1700	Corporation	region.
1988	Daniel Larkin	Claims staked and additional prospecting and soil sampling
		carried out at Hopes Advance Main Zone.
1992	Phelps Dodge Corporation	Geological mapping, prospecting and rock sampling undertaken
		at the Hopes Advance 5, 6 and 7 areas.
		11 claims held on Lac Pio mineralized zone. Work carried out on
		samples from Lac Pio Zone by CANMET (Ottawa), suggested
1992	Daniel Larkin	grinding and magnetic separation of sulphides to produce separate
		copper and nickel concentrates was preferred processing method
		due to limited tonnage. Direct shipping of mineralization also
<u> </u>		considered.
		Claims optioned from Daniel Larkin and acquired large
	Transia Deser	exploration permit including Pio Lake, Schindler, Hopes Advance
1995-	Troymin Resources and	Main and Hopes Advance North Zones. Work consisted of
1997	International Butec Industries	ground geophysical surveys, helicopter-borne magnetic and EM
	mausures	survey, geological mapping, trenching and 117 holes (5,765 m)
		drilled. In late 1997 Troymin commissioned a preliminary
		resource calculation on the Hopes Advance Main Zone using

		TABLE 6.1
<b>T</b> 7		RIC EXPLORATION ON THE HAWK RIDGE PROPERTY
Year	Company/Person	assay data from 14 drill holes from the 1996-1997 drilling campaign and from incomplete data in two holes drilled in 1962 and provided to a depth of about 500 m. This resource calculation is historical in nature and not NI 43-101 compliant and can therefore not be relied upon.
1999	Centre de Recherche Minérale ( City)	Study carried out to determine if possible to concentrate nickel and copper sulphides from Hopes Advance Main Zone by performing drop tests on core and rock samples. Study inconclusive.
2000	Behr (2000)	Bachelor of Applied Science thesis from University of Toronto studied rock samples from Hopes Advance North and calculated an average temperature of formation of 367° ±100° and pressure of 5.77 kbar from garnet and biotite pairs.
2001	Troymin Resources	Troymin Resources owned 100% of Property and contracted J. Mungall, of University of Toronto, to carry out a program to evaluate potential for platinum group elements (PGEs) at Hopes Advance North and to analyze core from previous drill holes for PGEs.
2001	Daniel A. Beauchamp	Report prepared documenting available data on PGEs of Property.
2002- 2003	Troymin Resources / Santoy Resources Ltd.	Troymin buys out International Butec's interest; 2003 merger of Troymin with Santoy Resources with company continued under Santoy Resources Ltd. name. Daniel A. Beauchamp carried out additional summary report for Santoy on Property.
2004	Santoy Resources Ltd.	Carried out brief sampling program at Property but little information available.
2009	Santoy Resources Ltd./Virginia Uranium Ltd. (Virginia Energy Resources Inc.)	Santoy Resources merged with Virginia Uranium Ltd. to form Virginia Energy Resources Inc. Continuous ownership of original claims and expansion of claim ownership. Performed extensive work including airborne and ground geophysical surveys, rock sampling, geological mapping and diamond drilling.
2010- 2012	Virginia Energy Resources Inc. (Orient Ventures Capital Inc.)	No exploration or drilling was carried out at the Property until August 2012.
2012	Orient Ventures Capital Inc. (Nickel North)	The Company, previously incorporated as Orient Ventures Capital Inc., changed its name to Nickel North on July 30, 2012.

#### 7.0 GEOLOGICAL SETTING AND MINERALIZATION

## 7.1 REGIONAL GEOLOGY

The Hawk Ridge Project is located in the New Québec Orogen at the contact between the Archean (approximately 2.7 Ga) Superior Province to the west and the Paleoproterozoic (approximately 1.9 Ga) Rae Subprovince of the Churchill Province to the east. The Superior Province forms a cratonic basement to the New Québec Orogen. It is exposed 5 to 20 km west of the Project area (Beauchamp 2012), where the Superior Province consists of granitoid and granitic gneiss terranes with elongated supracrustal sequences of metavolcanic and metasedimentary rocks.

72°W 70°W 64°W 68°W 66°W Torngat Orogen Hawk Ridge 60°N 57 Southeast Project Churchill Superior Province Province Ungava Bay 59°N Remobilized LABRADOR QUÉBEC Nain Mesoproterozoic 58°N Core Zone Sedimentary rocks **Plutons** 57°N Southeast Labrador Churchill Sea 56°N Makkovik Superior Archean and Archean Paleoproterozoic 55°N Schefferville 54°N Grenville

Figure 7.1 Regional Geology

Source: Beauchamp 2012, modified from d'Amours and Simard, 2012

The New Québec Orogen, previously known as the Labrador Trough, is a Paleoproterozoic (ca. 1.88 Ga) north-south trending thrust belt that preserves the deformed northeastern margin of the Superior Province and southwest directed thrust sheets of Paleoproterozoic supracrustal rocks. The Paleoproterozoic supracrustal rocks of the New Québec Orogen transition from autochthonous shelf to foredeep sediments of the Wishart Quartzite, Sokoman Iron Formation in

the east, to allochthonous gabbro sill-sediment complexes of the Montagnais Group in the west (Hoffman 1990).

# 7.2 LOCAL GEOLOGY

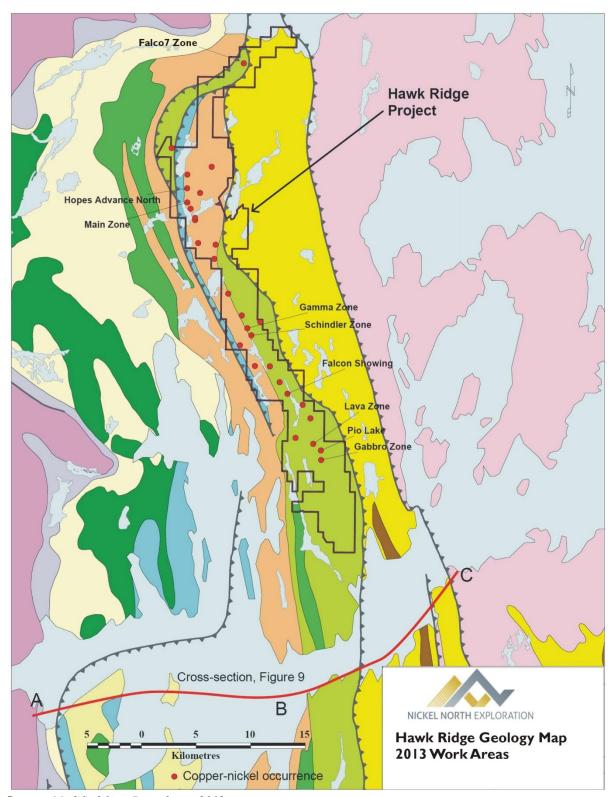
The Hawk Ridge Property (Figure 7.2, 7.3 and Table 7.1) is underlain by rocks of the New Québec Orogen (Labrador Trough). Descriptions of the local geology are largely summarized from Beauchamp (2012).

In the Project area, the rocks of the Labrador Trough form 3 distinct lithostratigraphic assemblages (termed Cycles by Beauchamp 2012) that are in fault contact:

- Assemblage 1 consists of autochthonous to para-autochthonous rocks of the Sokoman Iron Formation exposed on the west side of the New Québec Orogen;
- Assemblage 2 consists of allochthonous metasediments of the Aber, Harveng, Larch and Baby Formations, metavolcanic rocks of the Hallancourt Formation, gabbroic sills intrusive into the Larch and Baby Group, and gabbroic sills of the Montagnais Group;
- Assemblage 3 consists of metasediments of the Thevenet Formation.

Assemblage 2 rocks underlie the majority of the Hawk Ridge Property.

Figure 7.2 Property Geology



Source: Modified from Beauchamp 2012.

Figure 7.3 Geological Legend for Figure 7.2



Source: Beauchamp 2012

Simplii	TABLE 7.1 SIMPLIFIED TABLE OF FORMATIONS FOR THE HAWK RIDGE AREA									
Age	Formation	Rock Types								
Paleoproterozoic	Thevenet	Metasedimentary gneiss, calc- silicate, quarzite	Assemblage 3							
	Montagnais	Gabbro sills and dykes	Assemblage 2							
	Hellancourt	Massive and pillowed basalt,								
		hyaloclastite, graphitic schist								
	Larch and Baby	Sandstone, argillite, minor								
		dolostone, iron formation								
	Harveng	Dolomite, dolomitic sandstone,								
		argillaceous schist								
	Abner	Dolmite, dolomitic sandstone								
	Sokoman	Iron Formation	Assemblage 1							
Archean		Granitoid rocks, gneissic	Not present in							
		granitoids, metavolcanic rocks	project area							

<sup>\*</sup>Modified from Beauchamp 2012

On the Property, Abner Formation rocks at the base of Assemblage 2 consist of dolomite, stromatolitic dolomite and dolomitic sandstone and conglomerate. The Abner Formation is up to 3 m thick. The overlying Harveng Formation is up to 500 m thick and consists of dolomite, dolomitic sandstone, quartzite and argillite. The Larch and Baby Formations are in thrust contact with the Harveng Formation. The Baby Formation is a thick turbidite sequence of black argillite, silt, sandstone, and well sorted conglomerate. The Larch formation is an iron formation.

The Hellancourt Formation consists of basaltic flows and associated volcaniclastic rocks that are in thrust contact with underlying metasedimentary rocks. The Hellancourt Formation comprises two, east-facing volcanic cycles ranging from mafic to intermediate in composition and characterized by massive flows, pillowed flows and hyaloclastite with minor argillite. Two glomeroporphyritic marker horizons are located in the 1,500 m thick lower volcanic cycle. The upper glomeroporphyritic horizon has been dated at 1,874+/-3 Ma (Clark and Wares 2005). The second volcanic cycle is 600 m thick and is more mafic than the lower cycle (Beauchamp 2012).

The Montagnais Group consists of sills and lesser dykes of ultramafic to mafic composition that have intruded the Baby and Hellancourt Formations. Zircon dating of the gabbro sills has defined an age of 1,874 Ma, being the same age as the Hellancourt glomeroporphyritic horizon. The Montagnais Group sills are 200 to 300 m thick and composed of peridotite, pyroxenite, troctolite, gabbro, quartz gabbro and quartz diorite. Differentiated sills contain a basal peridotite grading upward to pyroxenite, gabbro and quartz diorite.

The Thevenet Formation consists of metasedimentary rocks including biotite and amphibolite schist, calculate paragness, quartite, sillimanite and garnet schist and iron formation. These may be higher grade metamorphic equivalents of the Baby and Hellancourt formations

#### 7.3 STRUCTURE

Wares and Goutier (1990) have described the tectonic fabric of the northern segment of the New Quebec Orogen as resulting from SW directed thrust transport of lithostratigraphic assemblages. In the foreland, west of the Hawk Ridge property, a basal decollement, low angle thrust faults

and bedding parallel sliding are important features of the deformational style. The Hawk Ridge property is within the hinterland portion of the orogen which records a more complex deformational history. The bulk of crustal shortening occurred during a late deformational phase of the orogeny and is characterized by large scale, high angle, out of sequence thrusts and folds.

Beauchamp (2012) describes the late deformational phase as being represented by recumbent folds plunging at 20° SE in the north part of the Hawk Ridge Property. The thrust faults along the Abner, Baby, Hellancourt and Thévenet formations were folded during D3 deformation.

#### 7.4 DEPOSIT GEOLOGY

The majority of copper-nickel sulphide occurrences on the Hawk Ridge Property are hosted in gabbroic and plagioclase glomeroporphyritic gabbro of the contemporaneous Montagnais Group Intrusions and Hellancourt Formation. The deposits are in close proximity to contacts of gabbro with underlying metasediments and peridotite (Beauchamp 2012). Mineral Resources have been estimated for the Falco7, Gamma, Hopes Advance Main and Hopes Advance North zones. Locations of the described zones are shown on Figure 7.2.

#### **7.4.1 Falco7 Zone**

The Falco7 Zone is a recently discovered zone of mineralization located at the north end of the property west of Aupaluk. The Falco7 Zone is north to north-north east striking over a length of 2.6 km, and is approximately 10 to 20 m wide with a shallow 20 to 45° easterly dip. Nickel North describes the zone as consisting of an upper interval with 3 to 5% disseminated sulphides in porphyritic gabbroic interval and an underlying massive sulphide interval at the basal contact of the gabbro.

# 7.4.2 Hopes Advance Main Zone

The Hopes Advance Main Zone is located in the northern part of the property near Lambda Lake. The north-northwest trending zone has been defined over a strike length of 750 m, dips 50 to 60° east and has a width of approximately 25 m. The mineralization is present as disseminations and veins of pyrrhotite and chalcopyrite near the base of a plagioclase glomeroporphyritic gabbro. On surface, the zone is associated with a gossan that is 800 m long and 30 m wide. Siliceous metasediments and graphitic schist underlie the glomeroporphyritic gabbro.

#### 7.4.3 Hopes Advance North Zone

The Hopes Advance North Zone is a smaller zone located 800 m north-northeast of the Hopes Advance Main Zone. Hopes Advance North has a strike length of 250 m, is 10 m wide and dips 45 to 70° east. Copper and nickel mineralization is present as massive and disseminated sulphides. The zone appears to be structurally complex and mineralization is associated with porphyritic gabbro, gabbro, peridotite and graphitic schist.

#### 7.4.4 Gamma Zone

The Gamma Zone is located in the central part of the Property. The northwest trending zone has a 1 km strike length and 10 to 15 m wide with a 60 to 75° east dip. Mineralization at the Gamma Zone consists of massive pyrrhotite, chalcopyrite and pentlandite at the base of a porphyritic

gabbro sill that is in contact with underlying metasedimentary units. Massive mineralization has been intersected for 60 m strike length, and 60 m down dip over widths of approximately 3.5 m. Associated disseminated mineralization occurs over widths of approximately 16 m within the porphyritic gabbro.

### 7.4.5 Lac Pio Zone (also referred to as Pio Lake)

In addition to the mineral resources estimated in this report, the Lac Pio Zone contains copper and nickel mineralization in two lenses in chloritized basalt flows of the Hellancourt Formation. The West lens is 3 m wide, strikes north-northwest, dips 60-85° E, and has a 60 m strike length. Mineralization consists of massive to disseminated pyrrhotite, chalcopyrite, and pentlandite. The East lens is 2 m wide, north-northwest striking, dips 60-85° E, and has a 46 m strike length. The East lens mineralization consists of disseminated and laminated chalcopyrite and pyrrhotite mineralization.

#### 7.5 MINERALIZATION

The Hawk Ridge Property hosts disseminated mineralization typically with 3 to 5% sulphide minerals, and subordinate lenses of massive sulphide that are hosted in porphyritic gabbro and olivine rich gabbro. The sulphide minerals are mainly pyrrhotite (FeS), chalcopyrite (CuFeS<sub>2</sub>), pentlandite ((Fe,Ni)S) with minor violarite (FeNi<sub>2</sub>S<sub>4</sub>) and cobaltite (CoAsS). Higher copper grades are associated with localized concentrations of massive sulphides in gabbro and in remobilized sulphide mineralization in footwall metasedimentary rocks.

A Canmet mineralogical study of samples of massive sulphide mineralization from the property by Lastra and Owens (1993) reported that the dominant sulphide mineral is pyrrhotite followed by chalcopyrite and pentlandite. Magnetite is also reported. Minor minerals included violarite, sphalerite, goethite, rutile and possibly cobaltite. No palladium or platinum group minerals were identified.

In the Canmet samples, pyrrhotite occurs as coarse-grained intergrowths with chalcopyrite, magnetite and pentlandite and as discontinuous veinlets in silicates. Chalcopyrite occurs mainly as coarse intergrowths with pyrrhotite and pentlandite and as disseminations in silicates. Pentlandite occurs as granular discrete grains with smaller amounts occurring as flame-like segregations in pyrrhotite.

#### 8.0 DEPOSIT TYPES

The New Quebec Orogen is a part of the Paleoproterozoic Circum-Superior Belt, a geological environment known for hosting copper, nickel and platinum group metal mineralization including the deposits of the Thompson Belt of Manitoba and the Raglan Deposits in the Cape Smith Belt of northern Quebec.

The mineral deposits identified to date in the Hawk Ridge Project are copper, nickel and platinum group element deposits associated with disseminated to massive sulphides in mafic and locally ultramafic rocks. The association of massive pyrrhotite, chalcopyrite and pentlandite mineralization overlain by disseminated sulphide mineralization near the base of gabbroic intrusions is characteristic of sulphide deposits that form in a magmatic environment from segregation of an immiscible sulphide liquid from a silicate melt.

The mineralization characteristics at the Hawk Ridge Project are consistent with the rift and continental flood basalt associated nickel copper sulphide deposits (type 1b) of Eckstrand (1996). These magmatic sulphide deposits form when sulphur undersaturated picritic (high magnesium) or tholeitic basalt magma from the mantle becomes saturated in sulphides, usually as a result of interaction with sedimentary crustal rocks. Assimilation of crustal sulphur results in the formation of an immiscible sulphide liquid that segregates toward the base of the flow or sill. Assimilation and concentration may be enhanced by multiple pulses of magma in a conduit system. The mineralization typically forms lenses or tabular concentrations in the middle or lower parts of the gabbro intrusions.

Examples of this type of mineralization include Proterozoic Duluth Complex in Minnesota and the Mesozoic Noril'sk Talnakh deposits of Russia.

#### 9.0 EXPLORATION

#### 9.1 2012 EXPLORATION PROGRAM

The 2012 Hawk Ridge exploration program was initiated on August 9, 2012 with exploration supplies including jet fuel and drill equipment delivered by barge in mid-July. The proposed program included mapping, sampling, splitting and sampling of historic diamond drill core, a 2,400 line km Geotech VTEM airborne survey and 1,000 m of diamond drilling (the Company's 2012 drill program is discussed in Section 10).

#### 9.2 MAPPING & SAMPLING PROGRAM

Geological consultants to Nickel North, Dr. Larry Hulbert and Dr. Quentin Gall, carried out a geological and structural mapping program at the Property, which included a detailed examination of the Pio, Gamma and Hopes Advance Zones. The program confirmed that magmatic sulphides are present in all zones, and confirmed extended strike lengths of certain zones (Nickel North News Release, dated September 19, 2012).

#### 9.3 HISTORICAL DRILL CORE RESAMPLING PROGRAM

The Company undertook a resampling program of the NQ-sized core drilled by previous operators, Troymin Resources Ltd., from 1996 to 1997 at the Property. Drill core from these years was stored onsite at the Property by the previous operators and the core was in good condition and well-marked.

The program had the following objectives:

- To check the historical drilling results for accuracy;
- To sample core that had not been previously sampled or analyzed for PGEs;
- To define and expand on the NI 43-101 non-compliant historical Ni-Cu resources.

A total of nine holes from the Hopes Advance Main, Hopes Advance North, Gamma and Schindler Zones were resampled, with a total of 988 samples taken over a length of 956 m. The holes were sampled along the total length of the core, except in some cases where the core was missing and the remaining half core was sampled. The Company's 2012 sampling protocol was employed for the resampling program, as is described in Section 11.

Samples were assayed for Pt and Pd by fire assay method, and Ni and Cu, along with an array of 41 other elements were analyzed using 4-acid digest with ICP finish.

Comparison of the historical drill core results and those results from Nickel North's 2012 resampling program were favourable, in that they validated the historical records. These results are further discussed in Section 12.

#### 9.4 GEOTECH VTEM AIRBORNE SURVEY

A Geotech VTEM airborne survey was flown over the entire length and width of the Property in 2012. The survey covered 2,195 km at close line spacing of 100 m.

The survey data were interpreted by Dr. Mark Shore (P.Geo.), of Magma Geosciences Inc., based in Ottawa, Ontario. The criteria used to establish and prioritize anomalies included the detailed analysis of high conductivity and associated magnetic responses, in comparison to the electromagnetic and magnetic characteristics of the known deposits and mineralized zones at Hawk Ridge, as well as to geophysical responses of deposits in other nickel belts. Proximity to favourable mapped mafic and ultramafic rock units and their geophysically-inferred extensions were used in the ranking of conductors.

The great majority of these new hybrid targets have not seen any modern or detailed exploration work in the past, and there is no record of them having been drilled by previous operators.

Dr. Shore concluded the following from the survey results:

- 35 new anomalous areas present encouraging geophysical responses for Ni, Cu, PGE mineralization;
- Over 500, near-surface high-conductivity anomalies exhibit signatures characteristic of magmatic sulphides;
- Previously identified copper-rich mineralization at the Property showed its own distinctive geophysical signatures;
- VTEM-PLUS data enabled stratigraphic/subsurface mapping within non-magnetic zones at Hawk Ridge;
- Coupling of VTEM data and geological data and comparison to the known deposits of the Property, helped to identify hybrid drill targets (Nickel North News Release, dated October 31, 2012).

#### 9.5 2013 EXPLORATION PROGRAM

Nickel North carried out a follow up helicopter-supported exploration program in 2013, which included field mapping and prospecting, as well as a ground geophysical program.

#### Mapping & Sampling Program

Nickel North undertook a field mapping and sampling program during a helicopter-supported drill program in 2013. During this program, the Falco 7 zone (identified as a result of the airborne VTEM survey) was confirmed with the discovery of surface exposures of mineralized boulders and outcrop. The zone was mapped and later drilled.

#### 9.6 GROUND GEOPHYSICS SURVEY

A CRONE Pulse EM and "Walkmag" Magnetometer survey was carried out during the 2013 exploration program. The geophysical program comprised five ground Pulse EM grids and two high-resolution ground magnetic surveys. Bore-Hole EM geophysics were also completed on all available drill holes.

The ground survey was successful in confirming the presence of a new zone of mineralization (the Falco 7 Zone), which had been previously identified earlier in the season through the interpretation of the 2012 airborne VTEM survey. Follow up groundwork led to the discovery of surface exposures of mineralized boulders and outcrop and the area was extensively drilled during the 2013 drill program (Nickel North News Release, dated September 10, 2013).

#### 10.0 DRILLING

#### 10.1 2012 DRILL PROGRAM

In 2012, Nickel North undertook the first drilling at the Property in 15 years. The 2012 diamond drill program was designed to test extensions of known mineralization, as well as new targets identified by the 2,400 line km Geotech VTEM airborne survey flown in 2012 (see Nickel North News Release dated August 14, 2012).

A total of seven NQ-diameter diamond drill holes (HR-2012-01 to HR-2012-07) over 1,055.07 m were completed over a period of five weeks, from August 19, 2012 to September 15, 2012. Holes ranged in depth from 110 m to 210 m (Table 10.1).

Drilling focused on three areas; namely the Gamma, Pio and Hopes Advance Main Zones. The aim of the drill program was to confirm results from historical drilling, as well as to expand on the known mineralization.

All drill holes intercepted sulphide mineralization, and confirmed results of the historical drilling. Numerous thick disseminated sections and high-grade semi-massive to massive zones of magmatic Ni-Cu-PGE contained within mafic to ultramafic sills were identified (see Nickel North News Release dated September 19, 2012).

Assays were taken along the entire length of the core.

	TABLE 10.1										
COLLAR DATA FOR THE 2012 DRILL PROGRAM AT HAWK RIDGE											
Hole #	UTM_E	UTM_N	Elev	Length	Incl	Azi (°)	Claim #	Zone			
	(m)	( <b>m</b> )	(m)	(m)	(°)	( )					
HR-2012-01	459118.5	6547748.0	126.3	161.0	-60.0	249.8	1018001	Gamma Zone			
HR-2012-02	459146.6	6547771.2	128.6	218.0	-75.0	230.0	1018001	Gamma Zone			
HR-2012-03	459390.0	6547230.0	139.6	116.0	-60.0	240.0	1017994	Gamma Zone			
HR-2012-04	459356.5	6547321.6	141.9	116.0	-65.0	240.0	1017993	Gamma Zone			
HR-2012-05	459240.4	6547530.4	132.3	110.0	-57.8	256.1	1017993	Gamma Zone			
HR-2012-06	465699.2	6535665.6	151.9	152.0	-42.6	77.5	1019200	Pio Grid			
HR-2012-07	453490.3	6559497.6	158.3	182.0	-60.0	249.8	1019189	Hopes Advance Main			

# 10.1.1 Gamma Zone

Nickel North completed a total of five drill holes at the Gamma Zone (HR-2012-01 to HR-2012-05) (see Figure 10.1) over a length of 721.1 m, as follow up to surface mapping carried out by Geological Consultant, Dr. Quentin Gall. Mineralization at the Gamma Zone was mapped for a length of greater than 800 m and with a minimum width of 10 m.

All five holes intersected sulphide mineralization and successfully confirmed and expanded upon the previously known Ni-Cu-PGE mineralization of the area. Drilling also identified intermediate-grade mineralization of large tonnage with open pit potential, as well as a high-grade Raglan-style mineralization (see Nickel North News Release dated September 19, 2012).

Table 10.2 details the highlights of the mineralization intersected during the 2012 drill program at the Gamma Zone.

Figure 10.1 Gamma Zone 2012-2013 Drill Hole Layout Map

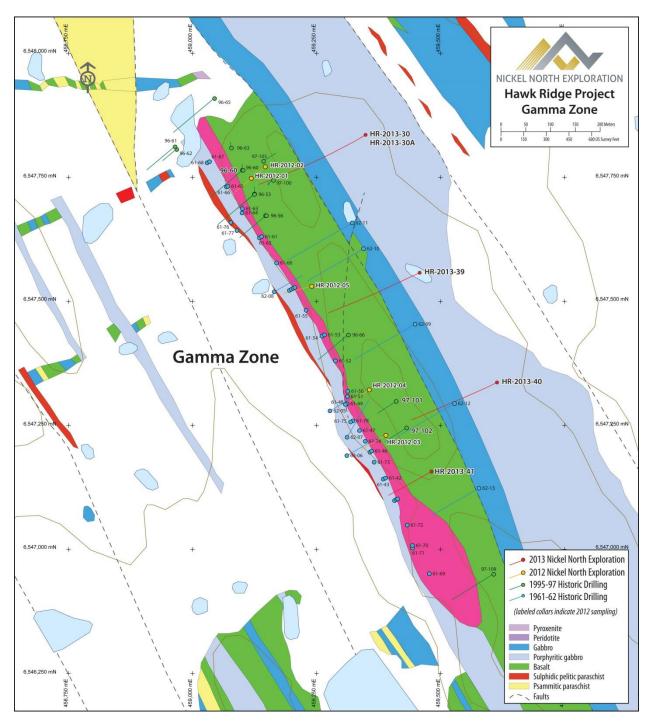


	TABLE 10.2 SIGNIFICANT MINERALIZED INTERCEPTS FOR GAMMA ZONE									
Hole # From (m) To (m) Width (m) Cu %			Ni %	Co %	Pd ppb	Pt ppb	Au ppb	Sulphide %		
HR-2012-01	72.4	108.0	35.6	0.52	0.22	0.01	290	60	40	2.6
incl.	98.0	108.0	10.0	0.66	0.30	0.01	320	70	40	4.1
and	150.1	152.8	2.8	2.19	1.15	0.05	650	80	290	19.9
HR-2012-02	129.5	163.0	33.5	0.45	0.18	0.01	240	50	40	2.0
incl.	142.8	157.3	14.5	0.59	0.24	0.01	290	60	50	3.3

	TABLE 10.2 SIGNIFICANT MINERALIZED INTERCEPTS FOR GAMMA ZONE											
Hole #	From (m)	To (m)	Width (m)	Cu %	Ni %	Co %	Pd ppb	Pt ppb	Au ppb	Sulphide %		
and	204.0	208.0	4.0	1.41	0.52	0.02	300	10	120	12.9		
incl.	205.6	208.3	2.4	1.70	0.63	0.02	360	10	170	15.1		
HR-2012-03	57.1	59.0	1.9	4.67	2.84	0.09	1210	100	0	22.8		
incl.	58.3	59.0	0.7	5.47	2.59	0.08	1890	220	0	19.2		
and	62.0	63.5	1.5	1.02	0.02	0.00	190	10	10	2.7		
HR-2012-04	52.2	69.0	16.8	0.54	0.14	0.01	130	40	60	2.4		
incl.	54.1	63.0	8.9	0.77	0.20	0.01	170	60	80	3.8		
incl.	57.0	58.0	1.0	2.29	0.20	0.01	180	90	380	6.9		
HR-2012-05	36.5	58.6	22.1	0.56	0.20	0.01	200	50	20	3.1		
incl.	36.5	54.0	17.5	0.60	0.24	0.01	210	50	20	3.6		
incl.	49.0	50.0	1.0	1.81	0.35	0.02	310	80	30	8.0		

#### **10.1.2 Pio Zone**

Nickel North completed one hole in total at the Pio zone (HR-2012-06) (see Figure 10.1) over a length of 152.0 m, identifying a similar high-grade semi-massive to massive mineralization and disseminated sulphides seen at the Gamma Zone.

Table 10.3 outlines the highlights of the mineralization intersected in drill hole HR-2012-06 of the Pio Zone.

	TABLE 10.3 SIGNIFICANT MINERALIZED INTERCEPTS FOR PIO ZONE										
Hole #	From (m)	To (m)	Width (m)	Cu %	Ni %	Co %	Pd ppb	Pt ppb	Au ppb	Sulphide %	
HR-2012- 06	46.0	53.0	7.0	0.34	0.15	0.01	70	20	20	3.5	
and	57.1	74.9	17.8	0.81	0.32	0.02	310	70	210	4.4	
incl.	61.0	62.0	1.0	1.09	0.39	0.02	480	90	30	5.6	
incl.	71.0	72.0	1.0	1.25	0.48	0.02	410	70	40	6.1	

# **10.1.3** Hopes Advance Main Zone

The Company drilled a single hole at the Hopes Advance Main Zone (HR-2012-07) (Figure 10.2) over a length of 182.0 m and encountered disseminated to net-textured mineralization of greater than 40 m thickness. Similar potential was recognized at the Hopes Advance Main Zone to that of the Gamma Zone with high-grade mineralization, as well as large tonnage intermediate-grade mineralization with open pit potential identified by drilling.

Table 10.4 outlines the highlights of the mineralization intersected in drill hole HR-2012-07 of the Hopes Advance Main Zone.

Figure 10.2 Hopes Advance Main Zone 2012-2013 Drill Hole Layout Map

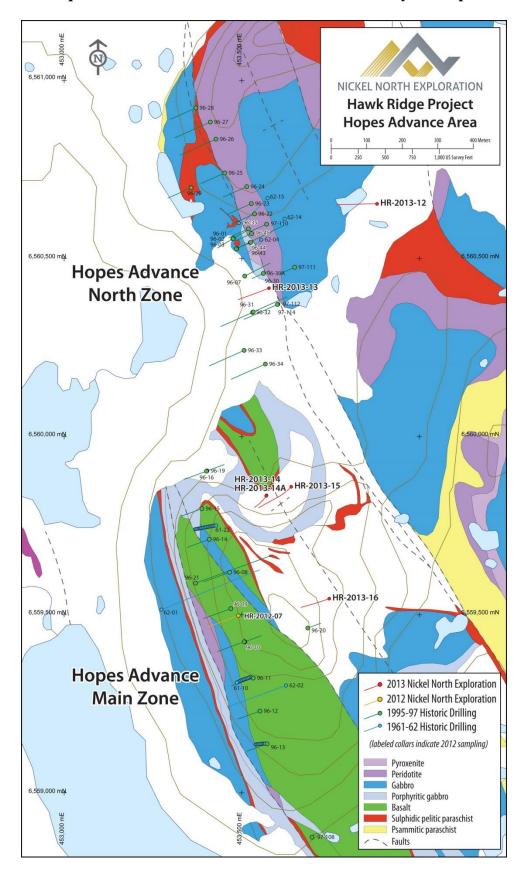


	TABLE 10.4 SIGNIFICANT MINERALIZED INTERCEPTS FOR HOPES ADVANCE MAIN ZONE									
SIGNIFIC	CANT MI	NERALI	ZED INTI	ERCEP'	TS FOF	R HOPI	ES ADV	ANCE	MAIN Z	LONE
Hole #	From	To	Width	Cu	Ni	Со	Pd	Pt	Au	Sulphide
Hole #	(m)	( <b>m</b> )	( <b>m</b> )	%	%	%	ppb	ppb	ppb	%
HR-2012-07	63.0	117.1	54.1	0.54	0.19	0.01	170	50	40	3.1
incl.	89.0	112.5	23.5	0.76	0.22	0.01	200	80	50	3.5
and	122.4	126.0	3.6	0.27	0.02	0.01	10	10	0	15.8

#### 10.2 2013 DRILL PROGRAM

The Company commenced its 2013 helicopter-supported drill program at the Property on June 26, 2013 with a single drill rig and added a second drill at the mid-season sealift. A total of 7,330 m of diamond drilling was completed over 38 drill holes (HR-2013-08 TO HR-2013-43) at the Hopes Advance Main Zone, the Gamma Zone, the newly discovered Falco 7 Zone, as well as other regional exploration targets (Table 10.5).

Resource drilling was carried out at the Hopes Advance Main, Gamma and Falco 7 Zones and reconnaissance drilling at numerous new targets estimated from the 2012 VTEM Airborne Survey. The main objective of the 2013 exploration program was to expand upon the known mineralization at the Property and complete a NI 43-101 resource calculation.

Assays were taken along the entire length of the core, with more than 7,600 samples collected during the program.

	TABLE 10.5 COLLAR DATA FOR THE 2013 DRILL PROGRAM AT HAWK RIDGE									
Hole #	UTME (m)	UTMN (m)	Elev (m)	Length (m)	Incl (°)	Azi	Claim #	Zone		
HR-2013-08	464712.3	6539169.9	127.2	191.0	-67.0	267.0	1018059	Fold Grid		
HR-2013-09	466154.9	6535327.3	164.9	145.6	-54.5	244.0	1019199	Pio Grid		
HR-2013-10	466154.5	6535269.5	167.6	119.0	-57.2	90.5	1019199	Pio South		
HR-2013-11	457365.0	6550965.0	163.3	116.0	-53.0	274.5	1018019	Horseshoe Grid		
HR-2013-12	453880.9	6560653.9	83.8	192.0	-54.8	271.0	1019193	Hopes Advance Northeast		
HR-2013-13	453576.6	6560417.1	87.6	149.0	-52.2	248.3	1019193	Hopes Advance North		
HR-2013-14	453569.6	6559835.2	118.3	326.0	-80.5	227.7	1019192	Hopes Advance Main		
HR-2013-14A	453569.0	6559834.0	118.3	34.3	-85.0	240.0	1019192	Hopes Advance Main		
HR-2013-15	453639.3	6559859.5	115.4	476.0	-53.5	270.0	1019192	Hopes Advance Main		
HR-2013-16	453746.3	6559545.3	147.1	517.5	-85.4	250.0	1019189	Hopes Advance Main		
HR-2013-17	458890.7	6572361.7	26.3	218.0	-48.8	271.1	2258804	Falco 7		
HR-2013-18	458747.7	6571758.4	33.9	92.0	-73.2	269.2	2258799	Falco 7		
HR-2013-19	458497.8	6571456.0	44.1	56.0	-67.9	270.0	2258798	Falco 7		
HR-2013-20	458740.5	6571362.1	55.0	158.0	-73.7	269.1	2258799	Falco 7		
HR-2013-21	458977.0	6572654.5	24.6	113.1	-74.0	270.3	2258804	Falco 7		
HR-2013-22	458991.1	6572959.5	24.4	107.0	-73.3	269.5	2258808	Falco 7		
HR-2013-23	458893.0	6573362.4	23.6	107.0	-48.2	268.5	2258808	Falco 7		
HR-2013-24	457116.5	6570850.3	44.6	225.0	-58.0	320.0	2258789	Falco 7		
HR-2013-25	458187.8	6571333.5	41.6	89.0	-74.3	0.0	2258797	Falco 7		
HR-2013-26	458925.4	6571443.3	45.1	208.2	-74.3	318.0	2258799	Falco 7		
HR-2013-27	458977.6	6571757.5	35.0	182.1	-77.9	270.2	2258799	Falco 7		
HR-2013-28	458559.3	6571247.0	57.0	191.1	-79.3	319.5	2258804	Falco 7		
HR-2013-29	458984.1	6571947.8	30.2	133.8	-78.6	269.0	2258804	Falco 7		
HR-2013-30	459349.0	6547835.7	118.4	32.0	-65.0	240.0	1018001	Gamma Zone		

TABLE 10.5 COLLAR DATA FOR THE 2013 DRILL PROGRAM AT HAWK RIDGE									
Hole #	UTME (m)	UTMN (m)	Elev (m)	Length (m)	Incl (°)	Azi (°)	Claim#	Zone	
HR-2013-30A	459349.0	6547835.7	118.4	437.0	-63.6	238.5	1018001	Gamma Zone	
HR-2013-31	459177.4	6571756.6	32.2	206.0	-78.7	272.0	2258800	Falco 7	
HR-2013-32	459143.3	6571441.4	36.7	239.0	-79.0	270.5	2258799	Falco 7	
HR-2013-33	458896.3	6572125.0	27.2	80.0	-79.3	269.1	2258804	Falco 7	
HR-2013-34	459110.6	6572125.0	28.3	146.0	-79.1	272.5	2258804	Falco 7	
HR-2013-35	459106.9	6572361.8	26.5	143.0	-77.9	270.2	2258804	Falco 7	
HR-2013-36	459165.3	6572553.7	24.0	164.0	-80.0	270.0	2258804	Falco 7	
HR-2013-37	459182.6	6571950.8	28.5	173.0	-80.9	273.5	2258805	Falco 7	
HR-2013-38	458229.5	6571058.7	53.5	221.0	-79.4	330.0	2258798	Falco 7	
HR-2013-39	459458.0	6547557.7	126.4	407.0	-63.4	245.5	1017994	Gamma Zone	
HR-2013-40	459613.9	6547336.5	119.9	398.0	-64.0	244.2	1017994	Gamma Zone	
HR-2013-41	459481.8	6547157.0	137.5	152.0	-50.3	240.0	1017994	Gamma Zone	
HR-2013-42	465405.2	6532662.9	115.4	251.0	-44.3	271.5	2337969	Pio South	
HR-2013-43	454259.4	6557886.3	65.3	137.0	-53.5	270.0	1017839	Mac I	

# 10.2.1 Hopes Advance Main Zone

The Company completed a total of four drill holes at the Hopes Advance Main Zone (HR-2013-14 TO HR-2013-16) for a total of 1353.9 m. Drilling confirmed the continuity of mineralization (HR-2013-16) for an additional 430 m down dip from HR-2012-07 and at least 495 m from surface, (see Nickel North News Release dated November 12, 2013).

Table 10.6 details the highlights of the mineralization intersected during the 2013 drill program at the Hopes Advance Main Zone and Figure 10.3 illustrates a typical cross-section along the zone.

TABLE 10.6									
SIGNIFICANT 2013 MINERALIZED INTERCEPTS FOR HOPES ADVANCE MAIN ZONE									
Hole #	From (m)	To (m)	Width (m)	Cu %	Ni %	Pd+Pt+Au	Sulphide		
Tiole #	Trom (m)	10 (111)	vviatii (iii)	Cu /0	111 /0	(g/t)	%		
HR-2013-16	417.50	453.35	35.85	0.55	0.22	0.29	5.0		
incl.	433.40	452.35	18.95	0.77	0.28	0.34	7.7		

200mRL Gabbro Basalt no outcrop 96-09 HR-2013-16 HR-2012-07 Porphyritic gabbro Peridotite Gabbro Sulphidic pelitic paraschist 100mRL 0mRL Zone of Mineralization -100mRL -200mRL Ni Histograms Cu Histograms on right side on left side (all assay displays capped @ 2500) -300mRL NICKEL NORTH EXPLORATION Cu & Ni Geochem **Hawk Ridge Project** > 2500 2000 to 2500 **Hopes Advance Zone** 1000 to 2000 500 to 1000 Section 1 < 500 -400mRL

Figure 10.3 Cross-section of Hopes Advance Main Zone

# **10.2.2** Hopes Advance North Zone

Nickel North also drilled one hole over 192.0 m at the Hopes Advance North Zone, which lies approximately 800 m north of the Hopes Advance Main Zone (see Figure 10.2). Both areas have a similar mineralization style, however the northern zone is structurally more complex and is separated from the Main Zone by a northeast-trending dextral fault.

Step-out drill hole HR-2013-13 expanded the Hopes Advance North Zone by intersecting 11.65 m of disseminated mineralization, similar to the mineralized gabbro overlying semi-massive sulphides in hole 97-112, 55 m to the south (Figure 10.2). Follow up geophysical surveying and drilling is planned in 2014 to trace the thicker higher-grade mineralized interval seen in 97-112 (see Nickel North News Release dated November 12, 2013).

Table 10.7 details the highlights of the mineralization intersected during the 2013 drill program at the Hopes Advance North Zone.

TABLE 10.7 SIGNIFICANT 2013 MINERALIZED INTERCEPTS FOR HOPES ADVANCE NORTH ZONE									
Hole #	Hole # From (m) To (m) Width (m) Cu % Ni % Pd+Pt+Au (g/t) Sulphide %								
HR-2013-13	29.35	41.00	11.65	0.61	0.25	0.31	3.8		
incl.	30.00	40.00	10.00	0.68	0.28	0.34	4.2		

#### 10.2.3 Gamma Zone

The Company drilled a total of five drill holes over 1,240 m at the Gamma Zone. Three of the five holes intersected significant mineralization and extended the mineralized zone from surface to 325 m down-dip.

Table 10.8 details the highlights of the mineralization intersected during the 2013 drill program at the Gamma Zone.

TABLE 10.8									
SIGNIFICANT 2013 MINERALIZED INTERCEPTS FOR GAMMA ZONE									
Hole #	From (m)	To (m)	Width (m)	Cu %	Ni %	Pd+Pt+Au (g/t)	Sulphide %		
HR-2013-30A	330.50	359.00	28.50	0.53	0.22	0.23	3.2		
incl.	335.00	349.25	14.25	0.62	0.26	0.28	3.7		
incl.	353.25	358.00	4.75	0.69	0.31	0.23	4.5		
HR-2013-30A	400.08	401.63	1.55	1.10	0.35	0.45	22.5		
incl.	401.02	401.20	0.18	0.18	1.02	1.56	89.1		
incl.	401.20	401.50	0.30	0.26	0.58	0.81	24.8		
incl.	401.50	401.63	0.13	0.26	0.52	0.68	22.7		
HR-2013-39	258.50	302.25	43.75	0.58	0.24	0.33	3.6		
incl.	282.25	286.75	4.50	0.82	0.32	0.39	5.6		
incl.	289.25	291.75	2.50	0.86	0.34	0.36	5.8		
incl.	298.25	302.25	4.00	1.11	0.38	0.35	6.4		
incl.	300.25	300.75	0.50	1.12	0.61	0.55	11.7		
incl.	301.25	301.75	0.50	1.26	0.70	0.44	7.7		
HR-2013-40	298.50	320.50	22.00	0.39	0.15	0.18	2.2		
incl.	304.50	312.50	8.00	0.51	0.19	0.19	3		
HR-2013-41	96.50	109.30	12.80	0.46	0.17	0.23	2.6		
incl.	99.30	100.80	1.50	0.62	0.21	0.23	3.8		
incl.	101.80	103.80	2.00	0.76	0.28	0.32	4.5		

#### **10.2.4** Falco 7 Zone

Nickel North completed 21 drill holes over a distance of 3,430 m in the newly discovered Falco 7 Zone, located in the northern portion of the Hawk Ridge Ni-Cu-PGE Belt less than 3 km from tide water (see Figure 10.4). Drilling has delineated a North-South-striking zone of mineralization with a strike-length of at least 1.2 km and a width of over 600 m that dips gently towards the east at 18° and is near-surface from between 0 m to 150 m below surface. Mineralization is open along-strike and to depth down-dip.

The Falco 7 Zone was identified early in the season through the interpretation of the 2012 airborne VTEM survey, which was later confirmed with follow up ground work and the discovery of mineralized boulders and outcrop at surface (Nickel North news release, dated September 10, 2013)

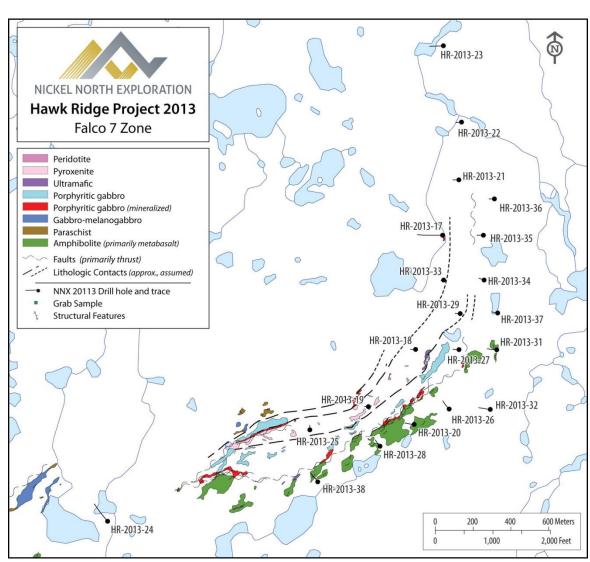


Figure 10.4 Falco 7 Zone 2013 Drill Hole Layout Map

Table 10.9 details the highlights of the mineralization intersected during the 2013 drill program at the Falco 7 Zone and Figure 10.5 illustrates a typical cross-section along the zone.

TABLE 10.9								
	SIGNIFICANT 2013 MINERALIZED INTERCEPTS FOR FALCO 7 ZONE							
Hole #	From (m)	To (m)	Width (m)	Cu %	Ni %	Pd+Pt+Au (g/t)	Sulphide %	
HR-2013-17	6.00	12.65	6.65	0.26	0.06	0.06	10.2	
and	29.35	38.30	8.95	0.38	0.08	0.04	45	
HR-2013-18	8.20	27.70	19.50	0.45	0.16	0.24	3.9	
incl.	22.75	27.70	4.95	0.69	0.19	0.32	5.7	
HR-2013-18	37.75	41.40	3.65	0.37	0.09	0.05	53.6	
incl.	39.20	41.40	2.20	0.52	0.13	0.06	76.8	
HR-2013-19	25.80	38.25	12.45	0.33	0.12	0.13	3.6	
incl.	34.30	38.25	3.95	0.62	0.21	0.16	6.6	
HR-2013-19	45.65	48.15	2.50	0.50	0.15	0.06	76.2	
HR-2013-20		130.15	13.35	0.47	0.14	0.27	3.5	
incl.	127.15	130.15	3.00	0.91	0.19	0.41	6	
HR-2013-20		146.80	7.95	0.34	0.10	0.05	43.2	
incl.	142.15	145.55	3.40	0.56	0.17	0.05	87.3	
HR-2013-21	42.00	47.50	5.50	0.41	0.10	0.17	7.6	
HR-2013-22	75.85	78.90	3.05	0.30	0.13	0.22	4.1	
HR-2013-23	89.15	92.70	3.55	0.53	0.11	0.32	4	
incl. HR-2013-25	91.10 25.60	92.50 42.30	1.40 16.70	0.87	0.09	0.39 0.18	4.8 3.7	
incl.	36.45	40.40	3.95	0.55	0.14	0.18	6.6	
HR-2013-25	53.91	54.53	0.62	0.53	0.20	0.19	26.7	
HR-2013-26	130.00	151.00	21.00	0.35	0.19	0.03	3.5	
incl.	141.00	149.00	8.00	0.52	0.17	0.33	5.4	
HR-2013-27	80.00	100.00	20.00	0.32	0.23	0.19	3.5	
incl.	92.00	98.00	6.00	0.55	0.13	0.15	5.3	
HR-2013-27	115.58	117.85	2.27	0.32	0.10	0.03	17.2	
HR-2013-28	130.75	144.00	13.25	0.30	0.13	0.19	3.3	
incl.	137.00	143.00	6.00	0.39	0.17	0.23	4.6	
HR-2013-29		68.50	25.50	0.37	0.16	0.22	5.3	
incl.	57.50	63.50	6.00	0.60	0.29	0.32	8.1	
HR-2013-29	80.00	81.95	1.95	0.46	0.02	0.03	5.9	
HR-2013-31	91.10	95.25	4.15	0.43	0.14	0.08	8	
HR-2013-33	12.00	22.00	10.00	0.23	0.08	0.10	8.1	
HR-2013-33	40.80	41.00	0.20	0.30	0.08	0.05	24.5	
HR-2013-34	95.20	113.50	18.30	0.34	0.11	0.10	10.3	
incl.	107.20	108.77	1.57	0.85	0.07	0.04	12.5	
HR-2013-35	108.50	112.00	3.50	0.31	0.09	0.07	14.8	
HR-2013-36	120.00	122.50	2.50	0.24	0.10	0.15	6.9	
HR-2013-36		129.00	0.58	1.01	0.07	0.03	17.2	
HR-2013-37	125.50	140.50	15.00	0.42	0.12	0.17	6.6	
incl.	132.00	135.00	3.00	1.06	0.21	0.28	8.1	
HR-2013-38	146.00	162.00	16.00	0.38	0.11	0.20	3.9	
HR-2013-38		168.00	2.00	0.39	0.15	0.06	8.8	
HR-2013-38	189.65	191.30	1.65	0.81	0.18	0.06	94.7	

HR-2013-38 TD: 221.01m HR-2013-25 TD:89.01m 16.7m - 0.77% CuEq, Zone of Mineralization **0.62m - 1.08% CuEq,** 0.58% Cu, 0.19% Ni, 0.05gpt Pt+Pd+Au 16m - 0.76% CuEq, 0.38% Cu, 0.11% Ni, 0.2qpt Pt+Pd+A 0.87% Cu, 0.12% Ni, 0.32gpt PGE+Au 1.65m - 1.29% CuEq, -200mRL NICKEL NORTH EXPLORATION Cu Eq % Hawk Ridge Project > 1.5 0.75 to 1.5 Falco 7 Zone HR-2013-25, 63-15, HR-2013-38 section azimuth 172° 0.25 to 0.5

Figure 10.5 Cross-section of Falco 7 Zone

Nickel North completed eight regional exploration drill holes over a total distance of 1,300 m. Several holes tested several airborne VTEM survey conductors proximal to ultramafic and mafic intrusions in the Fold, Pio, Horseshoe, Hopes Advance Main-east, and Hopes Advance East zones (HR-2013-08, 09, 10, 11, 12, 14, and 15). All holes intersected semi-massive to massive sulphide mineralization; however, assay results indicated that the associated sulphides are low in Cu, Ni, Pt, Pd and Au (Nickel North News Release dated November 12, 2013).

#### 10.3 REGIONAL EXPLORATION

#### 11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

The following procedures have largely been taken from the February 25, 2013 Quality Assurance/Quality Control report authored by Larry Hulbert, Ph.D. Dr. Hulbert was retained by Nickel North as a consultant to the Hawk Ridge Project. The report is titled, "Report on Assessment of the QA-QC Program for the 2012 Drilling and Re-Assaying Campaigns". It is to be noted that the procedures for the 2012 and 2013 drill campaigns were the same.

Diamond drilling at Hawk Ridge was conducted by Vital Drilling of Val Caron, Ontario, using a Boyles 37 diamond drill.

The core was transported daily from the drill site to the field camp by helicopter (Helicarrier Helicopters Inc., Québec City, Québec) where it was held in a secured core tent. Once the core was received in camp it was logged, photographed, sampled and cut in half using a diamond-bladed saw by local individuals employed by Nickel North.

A comprehensive Quality Assurance/Quality Control, ("QA/QC" or "QC") program was established for Hawk Ridge by Larry Hulbert, Ph.D, an independent consultant to the project.

Below is a summary of the QA/QC protocol established prior to the drill program:

- All drill hole samples were comprised of half of the NQ core (60.3 mm) and varied in length from 0.5 m in mineralogically (sulphide) interesting zones, to 1 m in zones of weaker to moderate mineralization;
- All samples were packaged in 14" x 18" polypropylene bags with tags and labels and further grouped into rice bags bound with security tags to ensure a secure chain of custody;
- All samples were crushed and pulverized by TSL in Saskatoon;
- All samples were analyzed for Au, Pd and Pt by TSL;
- Pulps weighing 90 grams were forwarded to Acme in Vancouver, BC for a 41 element, 4-acid digest with ICP-ES or ICP-MS finish (Acme code 1 EX);
- Rejects and remaining pulp were stored at TSL in Saskatoon;
- TSL and Acme laboratories are fully accredited to ISO 9001;
- Every 25-30 m along the hole, specific gravity, ("SG") was determined in the camp SG laboratory. Due to the homogenous nature of the various lithologies, this was considered a practical interval. In some cases more detailed measurements were taken at 1 to 2 m intervals;
- Within a batch of 40 samples a blank (CDN-BL-10; granite), a certified reference material "standard" (WPR-1), and a field duplicate (1/2 of sampled core (1/4 of core) was inserted; Sample 10 was denoted as the blank, sample 20 as the standard and sample 30 as the field duplicate.

#### 11.1 SAMPLING PROTOCOL

Two sampling and analytical programs were conducted during the 2012 Hawk Ridge exploration program. The first program was designed to sample and analyze the core from the 2012 drill program, and the second was designed to re-sample and assay the old 1996 & 1997 Troymin Resources drill core stored on the property at Lac Déry. Due to the rather homogenous nature of the mineralized zones and the associated lithology, continuous 1.0 to 1.5 m sample intervals were employed to help define the extent of the mineralized zones, chemical trends leading up to

the zones, lateral variations, and to provide geochemical vectors for the discovery of new mineralization.

The 2012 drill program sampling consisted of 706 samples from drill holes HR-2012-1 to HR-2012-07. A total of 1033.11 meters of core was sampled. The sample interval was routinely 1.0 to 1.5 meters in length. The computed average interval length was 1.46 m, with the shortest interval being 0.32 m and the longest 3.0 m. The sampled material represented one-half of a designated interval of NQ diamond drill core.

The 2012 re-sampling and assaying of the old Troymin Resources drill core from 1996 & 97 consisted of collecting 987 samples from drill holes 96-09, 10, 35, 44, 45, 53, 55, 60 and 97-101. A total of 956.5m of core was sampled. The sample interval was routinely taken at 1.0 m and 0.5 m lengths. The average interval length was calculated to be 0.96m, with the shortest interval being 0.20 m. The sampled material was the remaining half of the BQ core in the boxes. Due to the smaller core diameter relative to the 2012 NQ core, the broken and split rather than cut nature of the remaining core, potential future vandalism of the core, time constraints and the weather it was decided to sample the entire remaining portion of the core for analysis.

Specific Gravity measurements were determined routinely every 25-30 m in the drill core. The homogenous nature of the different lithologies and disseminated mineralization justified this spacing interval. However, in areas of more intense or variable mineralization or changes in rock type, 1 to 2 m intervals were used. A total of 153 SG measurements were taken, most of which were taken on the new and unbroken 2012 NQ drill core (141 readings) whereas only 12 readings were taken on the older broken 1996 and 1997 BQ core.

Nickel North carried out water immersion specific gravity (SG) tests on 980 samples of drill core from the 2013 series holes. Duplicate tests were performed for 107 of the above samples and pycnometer tests on six duplicate sample pulps by TSL Laboratories. Results for the duplicates confirmed the accuracy of the Nickel North tests.

#### 11.2 SAMPLE PREPARATION

Samples are received at TSL Laboratories Inc. ("TSL"), opened, sorted and dried prior to preparation. Core and rock samples are crushed using a primary jaw crusher to a minimum 70% passing -10 mesh. Equipment is cleaned between each sample with compressed air and brushes. In order to verify compliance with QC specifications, the lab performs a screen test at a minimum of, 1) start of each group, 2) change of operator, 3) change of machine or environmental conditions or 4) nature of sample appears different. All screen data are recorded in a QC book, and this book is open for examination at the request of the Client.

A representative split sample is obtained by passing the entire reject sample through a riffle splitter, and by alternating catch pans before taking the final split. The final pulp size is 250 grams. The remaining reject material is returned to a labeled bag and stored. The sub-sample thus obtained is pulverized to a minimum 95% passing -150 mesh. The QC screen tests performed are the same as for the crushing stage.

TSL Laboratories Inc. ("TSL") is based in Saskatoon, SK and has been in continuous operation since 1981. The TSL quality system conforms to requirements of ISO/IEC Standard 17025 guidelines, and participates in the Proficiency Testing program sponsored by the Canadian

Certified Reference Materials Project. The lab has qualified for the Certificates of Laboratory Proficiency since the program's inception in 1997.

Sample pulps are then shipped by commercial air freight directly to ACME Labs, ("ACME") in Vancouver, BC for analysis of a 41 element suite.

ACME operates 19 offices in 11 countries. At each lab, a quality system compliant with the International Standards Organization (ISO) 9001 Model for Quality Assurance and ISO/IEC 17025 General Requirements for the Competence of Testing and Calibration Laboratories is implemented. The Vancouver laboratory received formal approval of its ISO/IEC 17025:2005 accreditation from the Standards Council of Canada for the tests listed in the approved scope of accreditation.

# 11.2.1 Nickel and Copper Determination

Nickel and copper are determined by a 4-acid digest using HNO–HClO–HF on a 0.25 gram sample, and the residue is dissolved in HCL. Detection limit for Ni, Cu and Co is 0.1 ppm.

If copper or nickel (or any other of the 41 elements) exceeds 10000 ppm (1%), a 0.50 gram sample is digested with HNO3-HF-HClO4-HCl. The solution is diluted and analyzed by Atomic Absorption Spectrometry.

#### 11.2.2 Gold, Palladium and Platinum Determination

The precious metals are determined by lead-collection fire assay on a 30 g aliquot with ICP finish. An upper limit of 3000 ppb is set, above which the samples are rerun using a gravimetric finish.

In P&E's opinion, the procedures prepared by Larry Hulbert, Ph.D. and adopted by Nickel North for sample handling and preparation, security and analyses are appropriate for the Hawk Ridge Project.

#### 12.0 **DATA VERIFICATION**

**Figure 12.1** 

#### 12.1 SITE VISIT AND INDEPENDENT SAMPLING

The Hawk Ridge deposit was visited by Mr. Antoine Yassa, P.Geo. of P&E from August 28-31, 2013 for the purposes of completing a site visit and due diligence sampling. General data acquisition procedures, core logging procedures and quality assurance/quality control (QA/QC) were discussed during the visit.

Mr. Yassa collected 35 samples from nine diamond drill holes. Samples were collected by taking a ¼ split of the half core remaining in the core box. Once the samples were ¼ sawn they were placed in a large bag and taken by Mr. Yassa to Dicom Express courier in Rouyn-Noranda, QC. From there they were sent to AGAT Labs, ("AGAT") in Mississauga, ON for analysis.

Samples at AGAT were analyzed for copper and nickel by four-acid digest-AAS.

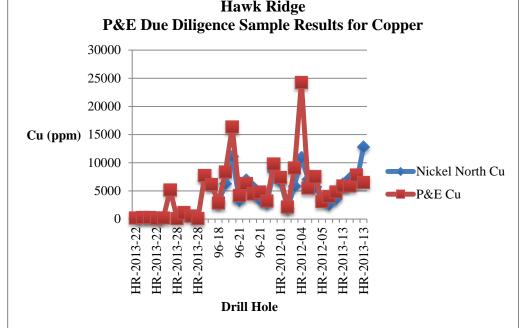
AGAT has developed and implemented at each of its locations a Quality Management System (QMS) designed to ensure the production of consistently reliable data. The system covers all laboratory activities and takes into consideration the requirements of ISO standards.

AGAT maintains ISO registrations and accreditations. ISO registration and accreditation 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.

Results of the Hawk Ridge site visit samples are presented in Figures 12.1 and 12.2.

Hawk Ridge Due Diligence Samples for Copper





Hawk Ridge **P&E Due Diligence Sample Results for Nickel** 7000 6000 5000 4000 Ni (ppm) 3000 2000 Nickel North Ni 1000 ►P&E Ni 96-18 96-18 HR-2013-28 96-21 HR-2012-05 HR-2012-04 96-21 96-21 HR-2012-01 **Drill Hole** 

Figure 12.2 Hawk Ridge Due Diligence Samples for Nickel

# 12.2 QUALITY ASSURANCE/QUALITY CONTROL PROGRAM

The two following paragraphs are taken directly from the "Report on Assessment of the QA-QC Program for the 2012 Drilling and Re-Assaying Campaigns", by L. Hulbert, Ph.D. The 2013 QA-QC program continued from the protocols set up in 2012.

"The QA-QC procedures employed are industry standard and included collection of drill core field duplicate samples, insertion of certified reference standards and blanks, and systematic laboratory inserted certified reference standards, pulp duplicates and client specified sample pulp repeats.

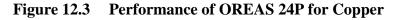
The QA-QC program for the Hawk Ridge 2012 exploration project was set up in advance of the drill program to ensure the program was compliant to the standards of industry, and provide the accuracy and precision of the sampling and analytical processes to an acceptable level."

### 12.2.1 Performance of Certified Reference Materials

The 2012 QC program evaluated data from the 2012 drilling campaign, as well as data from a resampling program completed on 1996-97 drill core. The 2013 drill program continued with the protocols set up in 2012. The protocols included the insertion of seven certified reference materials, three of which were prepared and certified by Ore Research and Pty of Australia, two were prepared and certified by CANMET of Ottawa, and the remaining two were prepared and certified by CDN Labs of Langley, BC. One of the standards was certified for Au, Pd and Pt only, and the remaining six were certified for Cu and Ni.

Performance was generally satisfactory, as defined by warning limits of +/- two standard deviations from the mean of the between-lab round robin characterization, and tolerance limits of +/- three standard deviations from the mean. Values should remain between +/- two standard deviations nine times out of ten. Any values falling outside the tolerance limits are failures and must be examined on a case-by-case basis.

Graphs of the performances of five of the standards are presented in Figures 12.3 through 12.12.



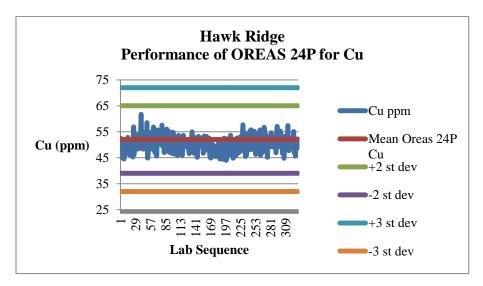


Figure 12.4 Performance of OREAS 24P for Nickel

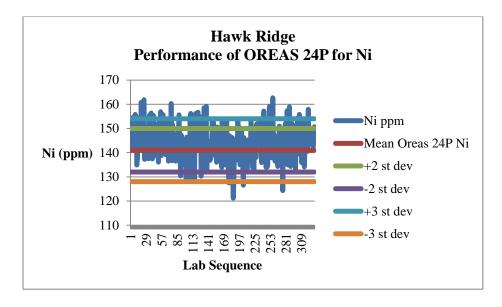


Figure 12.5 Performance of OREAS 45C for Copper

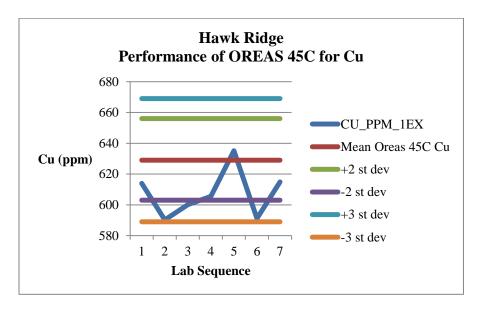


Figure 12.6 Performance of OREAS 45C for Nickel

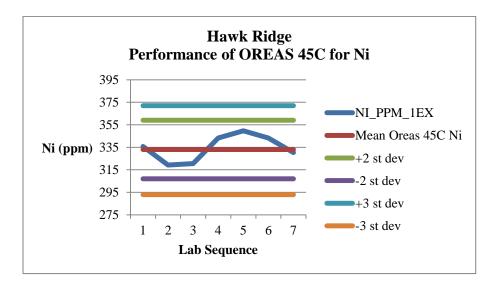


Figure 12.7 Performance of OREAS 45E for Copper

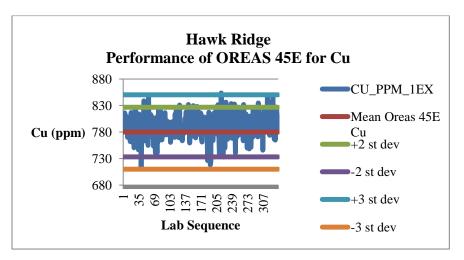


Figure 12.8 Performance of OREAS 45E for Nickel

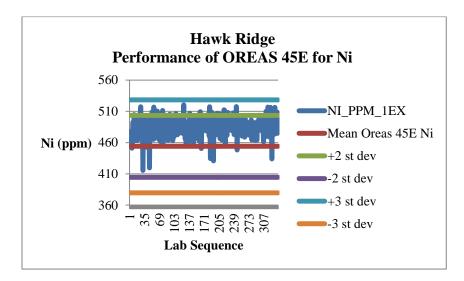


Figure 12.9 Performance of WPR1 for Copper

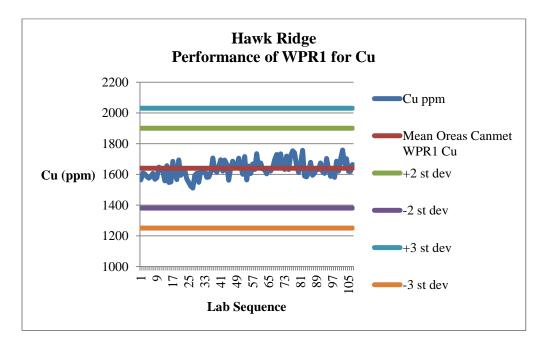


Figure 12.10 Performance of WPR1 for Nickel

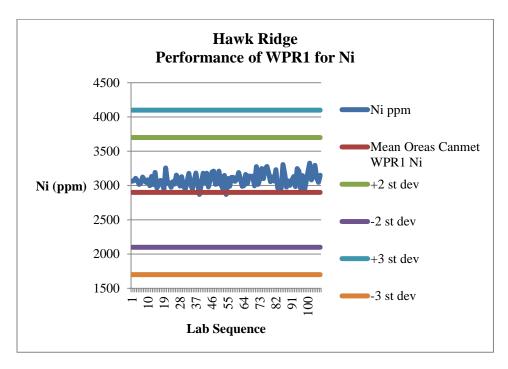


Figure 12.11 Performance of BTM for Copper

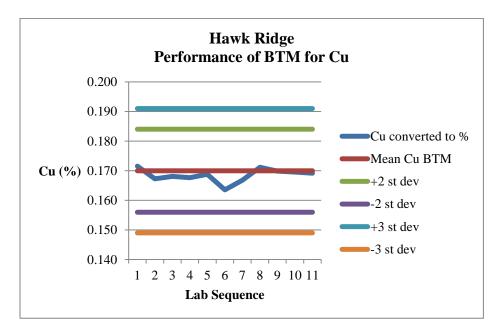
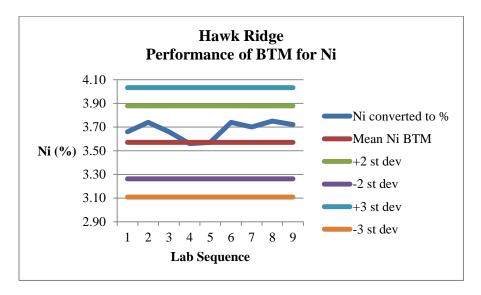


Figure 12.12 Performance of BTM for Nickel



The standard named WMG1 was certified for Au, Pd and Pt. This standard performed perfectly and results are presented in Figures 12.13, 12.14 and 12.15.

Figure 12.13 Performance of WMG1 for Gold

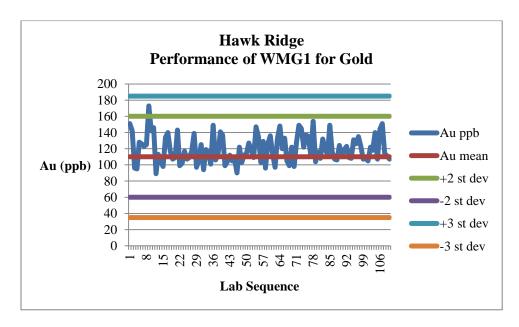


Figure 12.14 Performance of WMG1 for Palladium

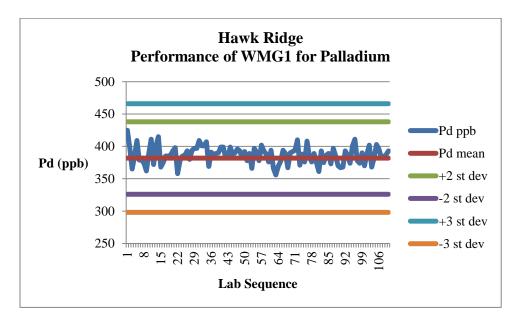
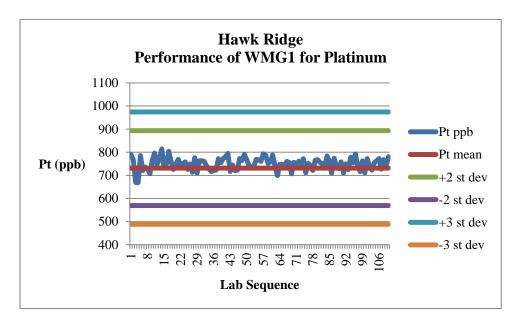


Figure 12.15 Performance of WMG1 for Platinum



# 12.2.2 Performance of Blank Material

There were three sources of blank material used on the project. One of the blanks was prepared and purchased from CDN Resource Labs in Langley, BC, the second material was a silica blank provided by TSL Labs, and the third blank was the in-house quality control blank inserted by TSL for their own purposes. The CDN Labs blank, named BL-10 was certified sterile for Au, Pd and Pt only, and as such, had background values for Cu of approximately 40 ppm and for Ni of approximately 70 ppm. The TSL blank was sterile for Cu and Ni, with background values for Cu and Ni of generally less than 10 ppm. The third blank, denoted as blank 2013, had detection limit values for Cu and Ni. All blanks were pre-pulverized and as such did not pass through all stages of the sample prep. Four hundred sixty two blanks were analyzed during the drill program, and results indicated that contamination was not an issue for Cu, Ni, Au, Pd and Pt.

# 12.2.3 Performance of Duplicates

There were 185 field duplicate pairs, comprised of a ¼ core split of the ½ core sent for analysis. Precision was satisfactory for this level of homogeneity.

The lab analyzed 213 pulp duplicate pairs as part of their internal quality control. Precision was excellent, and graphs are presented in Figures 12.16 and 12.17 for copper and nickel. There were no duplicate results for Au, Pd or Pt.

Figure 12.16 Hawk Ridge Pulp Duplicate Pairs for Copper

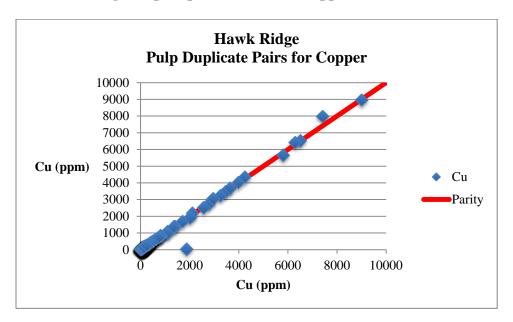
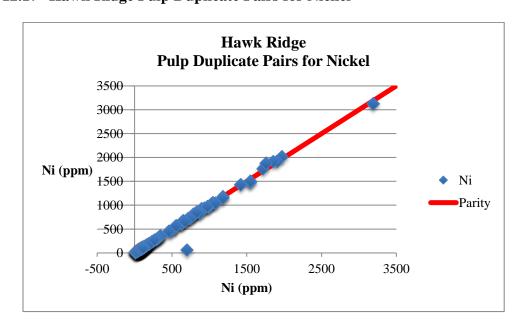


Figure 12.17 Hawk Ridge Pulp Duplicate Pairs for Nickel



P&E considers that the data have been collected using industry best practices, and results of the quality assurance/quality control program indicate that the data are of good quality and suitable for use in the current resource estimate.

# 13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

A mineralogical and metallurgical study is currently underway with XPS Consulting and Testwork Services, and is expected to be completed by the end of April 2014.

#### 14.0 MINERAL RESOURCE ESTIMATES

#### 14.1 SUMMARY

The Mineral Resources for the Falco7, Hopes Advance North, Hopes Advance Main and Gamma zones in the Hawk Ridge Project area were estimated by conventional 3D computer block modelling using GEOVIA GEMS™ 6.4 mining software (GEMS) by Dassault Systèmes S.A. Three block models were created due to the distance between the Falco7, Hopes Advance and Gamma areas.

Mineral Resources have been estimated for copper, nickel, cobalt, platinum, palladium and gold with reporting done by net smelter return (NSR) cut-off as appropriate for polymetallic deposits.

This resource estimate is based entirely on diamond drilling, core sampling and assaying. The exploration drill hole database for the property contains 394 diamond drill holes totalling 35,947.59 m of which 116 holes for 15,801.17 m have been used to delineate and sample the resources. Historic drilling spans 1961 to 1997 with most the recent coring carried out in 2012 and 2013. Assays for pre 1997 holes are generally lacking results for Co, Pt, Pd and Au. In order to evaluate the economic potential of the project, values for the latter metals were generated in the database based on polynomial regression of these metals on Cu or Ni from a full suite of assay data available in recent drilling.

The Cu–Ni, ±Co, ±Pt, ±Pd, ±Au mineralization is generally low to intermediate grade, lies at or near surface and is amenable to open pit mining. The mineral wireframes for the four zones were constructed based on host rocks lithology, mineralization and at an open pit operating discard cut-off NSR of \$25/tonne as estimated by P&E. The NSR calculation was based on a three-year trailing average for metal prices, metal recoveries and smelter payable metal and treatment costs generalized from other P&E projects and a US exchange rate at par. Assay composites, at 1 m lengths for the Falco7 zone and 3 m composites for the Hopes Advance and Gamma zones, were generated from the assays captured by GEMS in the zones' wireframes.

The resource block models for the Hopes Advance area (North and Main zones) and the Gamma area are oriented at  $063^{\circ}$  azimuth and have block dimensions at 10 m EW x 10 m NS x 10 m vertical. The Falco7D zone block model is EW (no rotation) and incorporates blocks at 5 m EW x 25 m NS x 5 m vertical consistent with the zone narrow widths and drill hole spacing on strike of  $\pm 200 \text{ m}$ . Down hole and preliminary 3D variography study was carried out for copper and nickel to guide the interpolation and search strategies. Inverse distance squared (ID2) interpolation was carried out using multiple search distances commensurate with the range in drill hole spacing zone by zone.

Water immersion specific gravity (SG) testing was carried out for 980 samples taken from 2013 series drill core. The data were reviewed by P&E and a positive correlation noted between SG and grade. Consequently a regression formula was developed for SG versus Ni% + Cu% and used to populate assay intervals in the database. Grades for assay composites were length and SG weighted to ensure the proper representation of contained metal between low and high mass samples. A bulk density block model was created from the grade block models and employed to convert block model volumes to tonnes.

Mineral Resources were all classified as Inferred based on the wide drill hole spacing, level of assaying and geologic confidence in grade continuity.

The grade and NSR block models were exported to Datamine Limited's NPV Scheduler<sup>™</sup> for open pit design and the resulting optimized pit surfaces were used to report Mineral Resources from the GEMS block models. The total in-pit Inferred Mineral Resources for a \$25/tonne NSR discard cut-off are estimated at 19,636,000 million tonnes averaging 0.577% Cu, 0.215% Ni, 0.011% Co, 0.051 g/t Pt, 0.207 g/t Pd, and 0.105 g/t Au.

Validation of the grade interpolation and the block 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 nearest neighbour (NN) interpolations, and review of the volumetrics of wireframes versus reported resources.

### 14.2 DIAMOND DRILL HOLE DATABASE

The diamond drill hole database is summarized in Table 14.1.

TABLE 14.1								
	SUMMARY OF HAWK RIDGE DIAMOND DRILLING							
Campaign	DDH D	<u>atabase</u>	<u> </u>	Resource	Databa	ise	Resourc	e Non Assayed
Year	Holes	Leng (m		Holes	Leng (m)		Holes	Length (m)
1961	79	377.	45	22	138.8	30	22	138.80
1962	15	2,629	.53	11	1,778.	.83	-	-
1963	11	994.	87	8	785.7	77	8	785.77
1971	62	3,148	3.22	1	-		-	-
1973	65	4,690	.55	-	_		-	-
1995	4	198.	30	1	-		-	-
1996	98	12,829	9.60	37	5,855.	.70	-	-
1997	15	2,691	.00	7	1,490.	.00	-	-
2012	7	1,055	5.07	6	903.0	)6	-	-
2013	38	7,333	00.	25	4,451.	.00	-	-
Total	394	35,947	7.59	116	15,801	.17	30	924.57
Zone	Resource Holes			Length (m) Drill Section Spacin		n Spacing (m)		
Falco7	19			2,788.41		100-200		
North	15			1,840.38		50-75		0-75
North MS	4		561.00			-		-
Main	17		3,796.61				100	
Gamma	31		5,890.20			50-100		
Total	86			14,876.60	)			<del></del>

Plans of drill hole locations for the Falco7, Hopes Advance and Gamma areas are shown in Figures 14.1 to 14.3.

Figure 14.1 Drill Hole Location Plan and Surface Projection of the Falco7 Zone

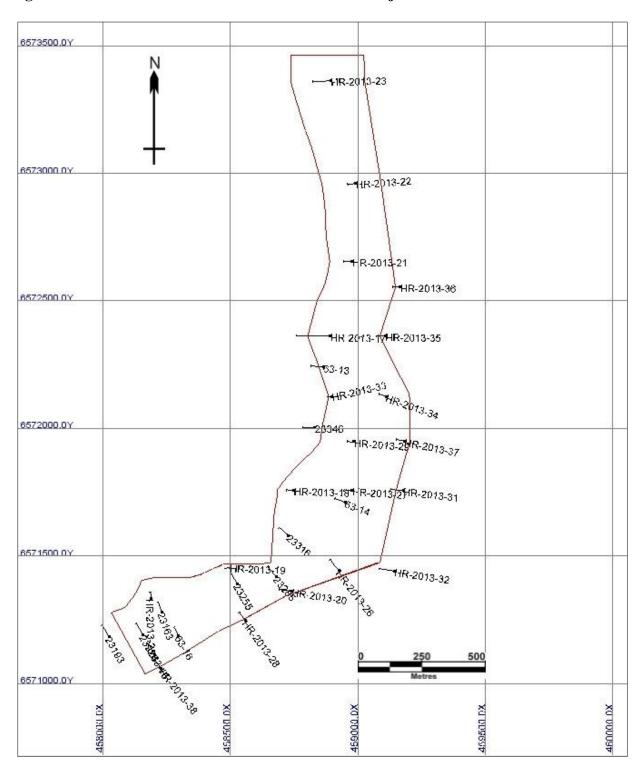
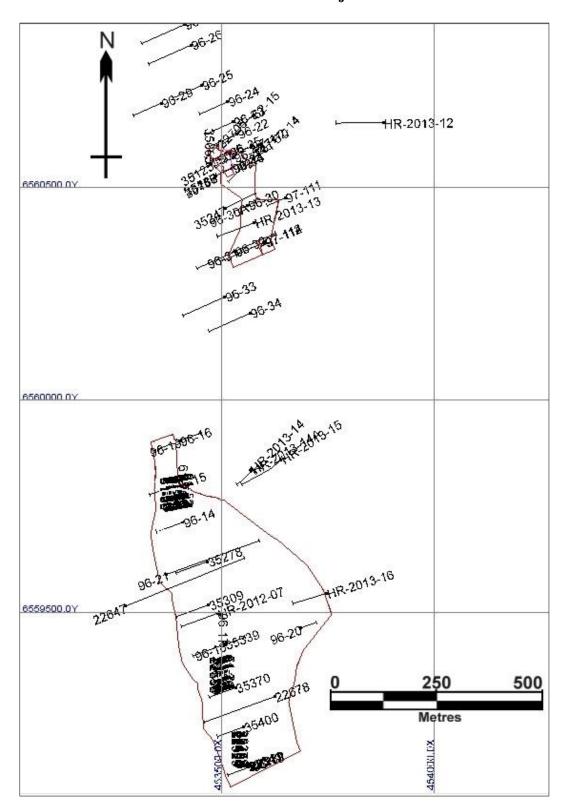


Figure 14.2 Drill Hole Location Plan and Surface Projection of the North and Main Zones



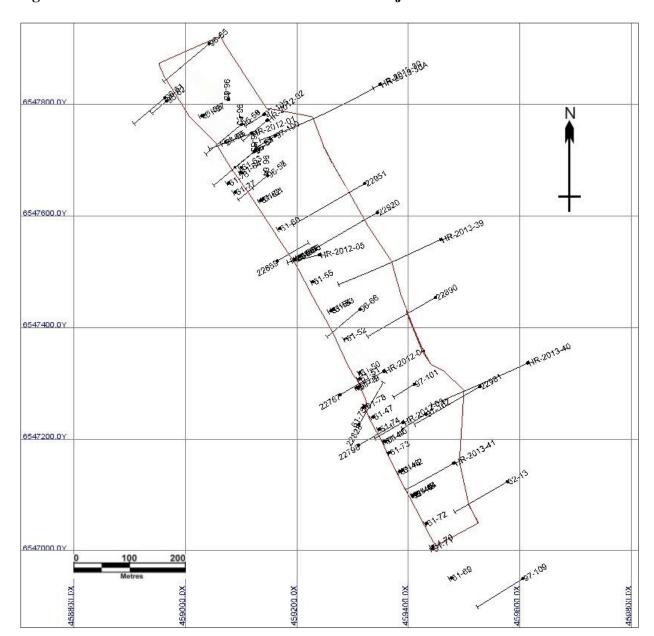


Figure 14.3 Drill Hole Location Plan and Surface Projection of the Gamma Zone

#### 14.3 DRILL HOLE SURVEYS

Collars for the 2012-2013 series holes were surveyed by differential GPS and down-hole surveyed by gyroscopic instrumentation. Additionally, in 2012 and 2013, highly accurate GPS positions were taken on any old holes found in the Gamma, Hopes Advance and Falco 7 Zones, thus recording accurate positions for the majority of the holes in the resource zones. 2012-2013 core is NQ (47.6 mm) diameter.

Beauchamp (2012) reports that no core or samples, or description of sampling procedures are available and core sizes were not recorded in reports for drilling prior to 1995. Collar surveys were likely pace and compass, or chained into grids and down hole surveys likely done by acid dip or tropari.

Topographic and survey data for the project are in UTM (Zone 19) coordinates based on the NAD83 geodetic reference system.

# 14.3.1 Down Hole Surveys

P&E reviewed the down hole survey data recorded for the holes utilized for resource estimation and found as follows:

- Number of holes in survey file: 116
- Number of records: 1,097
- Total length drilled: 15,801.17 m
- Number of unsurveyed holes: 37
- Total length of unsurveyed holes: 1,991.64 m
- Percent of unsurveyed holes: 32%
- Percent by length of unsurveyed holes: 13%
- Hole deviation analysis for threshold deviation: 5°/ 30 m
- Number of excessive azimuth deviations/m1: 13
- Number of excessive dip deviations/m: 6
- Minimum azimuth deviation °/m: -2.9
- Maximum azimuth deviation °/m: 1.54
- Minimum dip deviation °/m: 0
- Maximum dip deviation %m: 0.25
- Number of holes with no azimuth change: 1
- Number of holes with no dip change: 17
- Number of holes with excessive deviation: 11
- Seven first reading discrepancies (down hole surveys not tied into collar or overburden/bedrock transition)
- Eighteen excessive deviations are in ten 2013 series holes
- Hole deviation analysis for threshold deviation: 10°/30 m
- Number of excessive azimuth deviations/m1: 1
- Number of excessive dip deviations/m: 0
- Number of holes with excessive deviation: 1
- Excessive deviation is in HR-2013-25

Note: 1) Excludes azimuths for holes dipping steeper than -75°

Verification of drill hole survey data also included checks for:

- Implausible drill hole collar locations
- Implausible drill hole traces on screen in 3D, Excel graphs

P&E recommends checking the problematic deviation readings with available survey records and discarding implausible readings where practicable.

### 14.3.2 Assay/Analytical Database

P&E carried out assay verification in mid-December 2013. 8,550 samples or 80% of a database of 10,712 assay records were checked against laboratory certificates. Cu and Ni assays, and Co, Pt, Pd and Au where available, were verified and very minor discrepancies were noted. The specific gravity data from Nickel North immersion testing were reviewed and ten tests rejected as implausible.

P&E uses GEMS routines to validate the drill hole database using software routines that trap errors and potential problems such as:

- Intervals exceeding the hole length (from-to problem).
- Negative or zero length intervals (from-to problem).
- Inconsistent down hole survey records or lack of zero depth entry at collar as needed by GEMS.
- Duplicate samples or out of sequence and overlapping intervals (from-to problem; additional sampling/check sampling included in table).
- No interval defined within analyzed sequences (not sampled or implicit missing samples/results).

P&E identified six historic drill holes with out of sequence or zero length samples in the assay database. Most of these were caused by averaged intervals inserted into the sequence; few were typographic/entry errors. Ten historic holes had out of sequence errors in the lithology database mostly caused by casing overlaps with rock units logging. P&E corrected these errors in the database.

QAQC for Nickel North assaying in 2012-2013 and for Troymin resampling and assaying of 1996-1997 core indicates that the assaying is acceptable for resource estimation. QAQC was not reviewed for assaying of the 11 drill holes of the 1962 series used for resource estimation since no information is available. These holes represent 13%, or 12% by length, of the resource database. In P&E's opinion the assay database is acceptable for the estimation of Inferred Resources.

The Hawk Ridge project assay database contains 10,712 records for 12,979.46 m representing 36% of the total metres drilled. Copper and nickel assaying is lacking for 2% of the records (explicit missing assays) but assays are missing at higher percentages for Co at 12%, and 20% for Pt, Pd and Au. In terms of total lengths recorded, missing assays account for 4% for Cu and Ni, 18% for Co and 30% for the precious metals. This does not include drill holes for which no assays are available.

The assays contained in the resource wireframes and used for resource estimation total 1,536 over 2,065.12 m. Cu and Ni were analyzed for all samples but Co assays are lacking for 16% of the samples or 25% by length, Pt and Pd are lacking for 45% or 65% respectively and Au for 48% and 67% respectively.

P&E notes that the accessory metals Co, Pt, Pd and Au may account for approximately 26% of the NSR value of the mineralization and thus have an impact on project economics. Accordingly P&E reviewed the correlation between the accessory metals and primary metals Cu and Ni in the zone assays having a complete suite of analyses and developed regression formulae in order to assign values to the assay records that are missing the analyses (Appendix 1). The assayed and assigned values were employed for resource estimation. The polynomial formulae employed are:

- $Co\% = 0.0035Ni\%^2 + 0.0088Ni\% + 0.0103$
- Pt ppm = 0.0091Ni%<sup>2</sup> + 0.1168Ni% + 0.0251
- Pd ppm = -0.0792Ni%<sup>2</sup> + 0.6223Ni% + 0.0833
- Au g/t = 0.002Cu%<sup>2</sup> + 0.0034Cu% + 0.1045

### 14.3.3 Topographic and Bedrock Surfaces

Nickel North Exploration provided XYZ elevation data derived from the VTEM geophysical survey radar altimeter data that cover the Hawk Ridge property. These data are at 25 m x 25 m grid spacing. P&E generated a topographic surface from these data and compared it to the localized topographic surfaces generated from drill hole collar survey elevations. The latter were generated by nearest neighbour grid cells and LaPlace transform smoothing for each block model area, Falco7, Hopes Advance and Gamma. The fit between the property scale and localized surfaces is reasonable with only minor differences of several metres or less noted. Consequently the drill hole derived surfaces were integrated with the property wide topographic surface. The topographic surface was used for air and waste rock modelling and for open pit design. The project going forward, P&E recommends that detailed digital topographic data be acquired, preferably by undertaking a LiDAR survey.

The drill casing bottom elevations from the core logging/lithology data, as well as collar elevations where no casing was reported, were merged and employed to generate a localized bedrock surface for each zone area. The bedrock surface was used to clip the mineral wireframes.

#### 14.4 WIREFRAMES

Conventional 3D mineral wireframes were constructed for the four zones at a NSR cut-off of \$25/tonne guided by lithology for zone correlation. The NSR calculation was applied to individual assays and those meeting cut-off were contoured in 3D space with largely the margins of the wireframe being affected by NSR cut-off. The calculation was based on metal recoveries and generalized milling/smelting costs from the Raglan area and 3-year trailing average metal prices as of November 30, 2013 with US exchange at par. The NSR formula for wireframing is:

NSR (C\$/tonne) = (Cu% x \$67.12) + (Ni% x \$113.02) + (Co% x \$66.14) + (Au g/t x \$12.37) + (Pt g/t x \$24.78) + (Pd g/t x \$10.77) - \$13.25/tonne.

For the Hopes Advance and Gamma zones, vertical cross sections at 063° azimuth were generated at 50 m intervals in GEMS consistent with the nominal drill hole section spacing. The wireframe was developed on these sections from polylines enclosing assays having NSRs ≥\$25/tonne, the open pit discard cut-off covering estimated processing and G&A costs. The lithology and contacts in historic holes lacking assays also guided the positioning of the wireframes. At the limits of drilling, wireframe boundaries were projected past the drill hole intercept a distance equivalent to four times the width of the zone. Internally, the wireframes were extended ½ the drill hole spacing. The wireframe polylines were snapped to drill hole assay limits in 3D graphical space. The polylines were connected by tie lines and the wireframes generated and validated. For the Hopes Advance North zone, a lens of massive sulphides carrying elevated grades was wireframed separately from the principal North Zone wireframe. Cross sections were generated at 12.5 m intervals for this work. This massive sulphide lens lies at or within the footwall of the North Zone mineral wireframe.

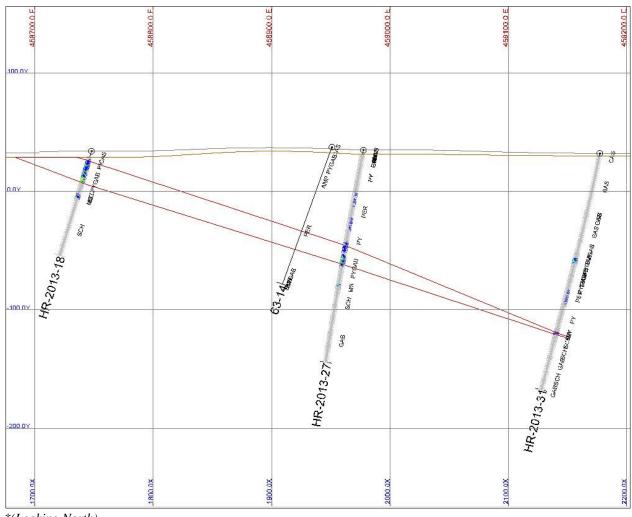
East-west vertical cross sections were generated at 200 m intervals for the north-south trending Falco7 zone. An overlapping set of 200 m vertical cross sections were also generated at 150° at the south end of the zone to cover the area where it swings to the southwest. Wireframing followed the same criteria as for the Hopes Advance and Gamma zones. All wireframes, except

the Hopes Advance North Zone massive sulphide lens, reach the surface over much of their strike lengths. Table 14.2 provides details on the mineral wireframes.

	TABLE 14.2 WIREFRAME GEOLOGY SOLIDS VOLUMETRICS								
Se	Solid Name Block Model Volume Strike Dip Length Width Depth± Rock Code (m³ x 1000) Az(°) (°) m m m								Depth± m
Falco7	Valid	Clipped	100	6,171	360	-19 to -44	2,625	7	205
HA North	Clipped	Clipped	200	382	347	-38 to -73	255	10	185
HAM S lens	HA North	Clipped	250	11	333	-62	63	2	117
HA Main	Clipped	Revised	300	7,873	347	-51 to - 59	672	25	525
Gamma	Clipped	Revised	400	4,466	329	-62 to -74	992	15	390

The wireframes are reasonably continuous at the \$25/tonne NSR cut-off; some waste material (at zero grade) being incorporated locally as internal dilution, especially where down dip holes move in and out of narrow portions of the zones. Figures 14.4 to 14.11 illustrate the wireframes, copper assay and NSR distributions for multi-hole drill cross sections for each of the four zones.

Figure 14.4 Falco7 Zone Cross Section 6571757N Showing the Mineral Wireframe and Copper Assays\*

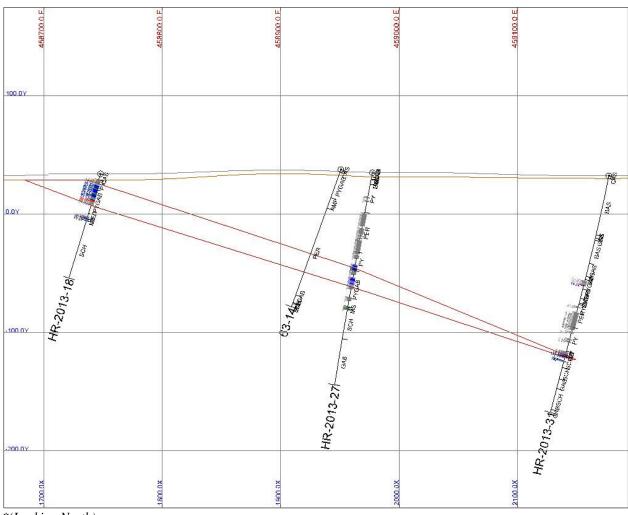


\*(Looking North)

Legend Cu Assays (%)

>= Lower Bound	< Upper Bound	
0.00001	0.20000	
0.20000	0.40000	
0.40000	0.60000	
0.60000	0.80000	
0.80000	1.00000	
1.00000	2.00000	
2.00000	5.00000	
5.00000	10.00000	
10.00000	100.0000	

Figure 14.5 Falco7 Zone Cross Section 6571757N Showing the Mineral Wireframe and NSRs\*

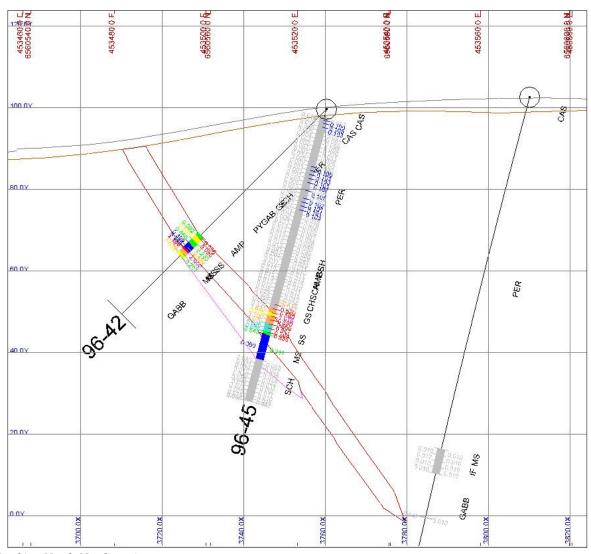


\*(Looking North)

Legend NSR (\$/t)

>= Lower Bound	< Upper Bound	
0.00001	25.00000	
25.00000	35.00000	
35.00000	45.00000	
45.00000	55.00000	
55.00000	65.00000	
65.00000	75.00000	
75.00000	85.00000	
85.00000	95.00000	
95.00000	100.00000	
100.0000	10,000.000	

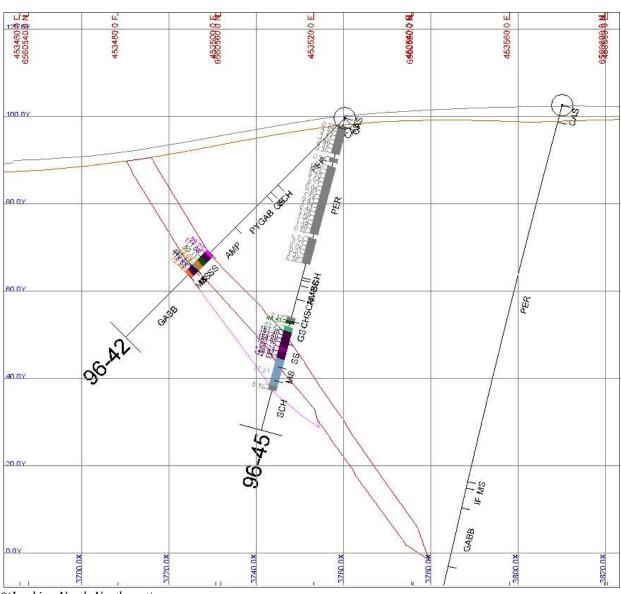
Figure 14.6 North Zone Cross Section 591.25N Showing the Mineral Wireframe and Copper Assays\*



Legend Cu Assays (%)

	• • •	
>= Lower Bound	< Upper Bound	
0.00001	0.20000	
0.20000	0.40000	
0.40000	0.60000	
0.60000	0.80000	
0.80000	1.00000	
1.00000	2.00000	
2.00000	5.00000	
5.00000	10.00000	
10.00000	100.0000	

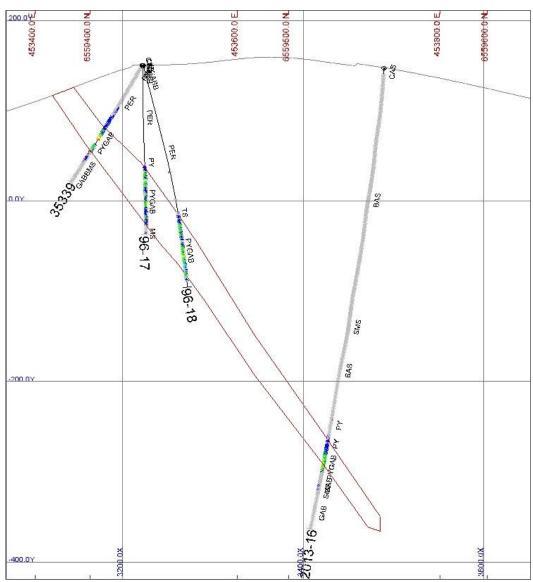
Figure 14.7 North Zone Cross Section 591.25N Showing the Mineral Wireframe and NSRs\*  $\,$ 



Legend NSR (\$/t)

>= Lower Bound	< Upper Bound	
0.00001	25.00000	
25.00000	35.00000	
35.00000	45.00000	
45.00000	55.00000	
55.00000	65.00000	
65.00000	75.00000	
75.00000	85.00000	
85.00000	95.00000	
95.00000	100.00000	
100.0000	10,000.000	

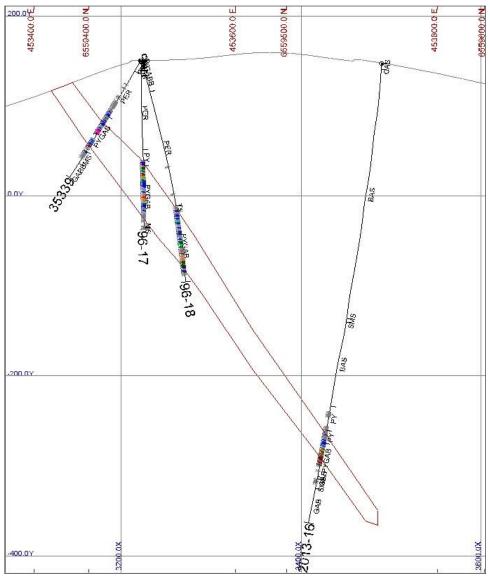
Figure 14.8 Main Zone Cross Section 571N Showing the Mineral Wireframe and Copper Assays\*



Legend Cu Assays (%)

>= Lower Bound	< Upper Bound	
0.00001	0.20000	
0.20000	0.40000	
0.40000	0.60000	
0.60000	0.80000	
0.80000	1.00000	
1.00000	2.00000	
2.00000	5.00000	
5.00000	10.00000	
10.00000	100.0000	

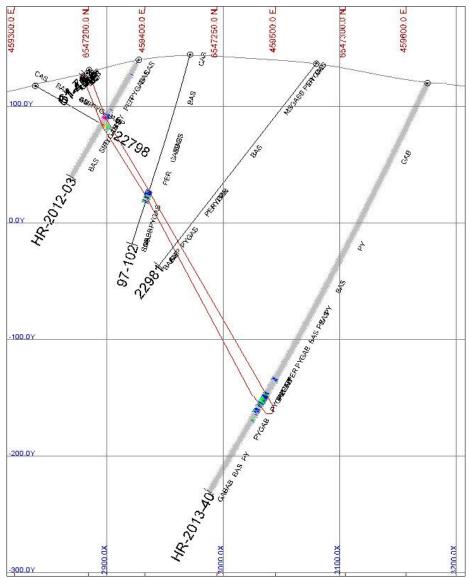
Figure 14.9 Main Zone Cross Section 571N Showing the Mineral Wireframe and NSRs\*



Legend NSR (\$/t)

	· · · · · · · · · · · · · · · · · · ·	
>= Lower Bound	< Upper Bound	
0.00001	25.00000	
25.00000	35.00000	
35.00000	45.00000	
45.00000	55.00000	
55.00000	65.00000	
65.00000	75.00000	
75.00000	85.00000	
85.00000	95.00000	
95.00000	100.00000	
100.0000	10,000.000	

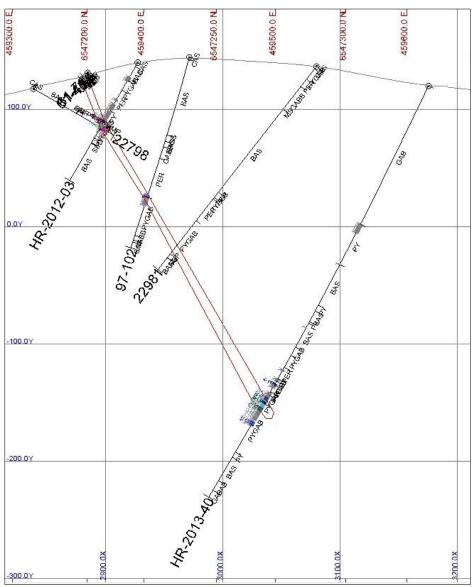
Figure 14.10 Gamma Zone Cross Section 300N Showing the Mineral Wireframe and Copper Assays\*



Legend Cu Assays (%)

Legena Carissays (70)					
>= Lower Bound	< Upper Bound				
0.00001	0.20000				
0.20000	0.40000				
0.40000	0.60000				
0.60000	0.80000				
0.80000	1.00000				
1.00000	2.00000				
2.00000	5.00000				
5.00000	10.00000				
10.00000	100.0000				

Figure 14.11 Gamma Zone Cross Section 300N Showing the Mineral Wireframe and NSRs



Legend NSR (\$/t)

Legena Hor (ψ/t)					
>= Lower Bound	< Upper Bound				
0.00001	25.00000				
25.00000	35.00000				
35.00000	45.00000				
45.00000	55.00000				
55.00000	65.00000				
65.00000	75.00000				
75.00000	85.00000				
85.00000	95.00000				
95.00000	100.00000				
100.0000	10,000.000				

#### 14.5 ASSAYS AND GRADE DISTRIBUTIONS

Histograms, (Appendix 2), log-probability and box and whisker plots (Figure 14.12) were prepared to examine assay grade distributions for copper and nickel assays within the resource wireframes. The distributions show positive skew and are bi-modal to multi modal. P&E notes that the coefficient of variations for copper and nickel are moderate to low. Review of the spatial distribution of high grades (>1% Cu) shows some clustering related to the occurrence of a massive sulphide unit in the Hopes Advance North Zone and variously to rock units other than the principal host porphyritic gabbro such as schist and metasediment that appear to host the mineralization at the footwall of the gabbro and adjacent to the massive sulphides. The schist and metasediments are weakly to strongly sulphidized, pointing to favourable rock type for metal-bearing solutions to be attracted to. The metasediments return the highest values on the Property, as seen at the Lac Pio deposit.

This highlights some uncertainty in the correlation of the zones across rock types and the question of remobilized sulphides in highly strained to sheared units that differ from the stratabound disseminated or massive sulphides. The higher-grade massive sulphide unit was accordingly modelled separately from the North Zone. There are otherwise few apparent outliers in the grade distribution as indicated by histograms and no grade capping was carried out.

Figure 14.12 Distribution of Cu Grade by Zone Hosts Rocks

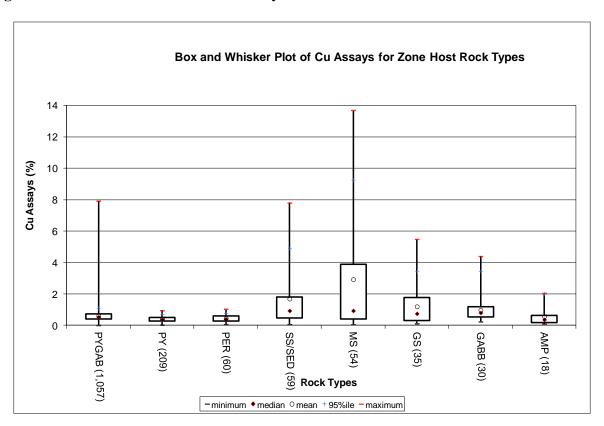
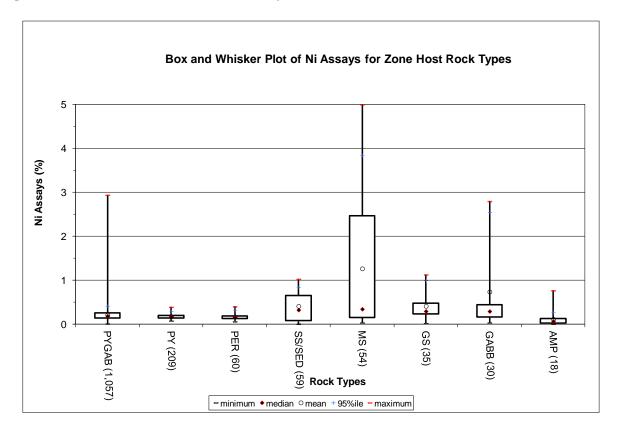


Figure 14.13 Distribution of Ni Grade by Zone Hosts Rocks



### 14.6 BULK DENSITY

Nickel North Exploration carried out water immersion specific gravity (SG) tests on 980 samples of drill core from the 2013 series holes. Some 449 of these tests were done for core lengths ≥ 3 m and are of limited use for direct reference to specific assays. Results for some eight samples exceeded the maximum SG for the sulphides minerals recognized at Hawk Ridge and these were discarded together with two implausibly low values. Duplicate tests were performed for 107 of the above samples and pycnometer tests on six duplicate sample pulps by TSL Laboratories. Results for the duplicates confirm the accuracy of the Nickel North tests. Some 474 SG values were cross referenced to assays and entered in the assay database. P&E reviewed the data and noted a positive correlation between SG and grade. Consequently a polynomial regression formula was developed for SG versus Ni% + Cu% and used to populate assay intervals in the database. The SG values were capped at 4.98.

$$SG = (-0.0104 * (Ni+Cu)^2) + (0.3027 * (Ni+Cu)) + 3.0127$$

P&E extracted SGs for 431 intervals lying outside the wireframes and representing waste rock. Rock types are predominantly porphyritic gabbro/gabbro, basalt and ultramafic. P&E assigned the average SG of these intervals as a waste rock bulk density of 3.027 tonnes/m<sup>3</sup>.

Assay composites were length and SG weighted to ensure the proper representation of grade between low and high mass samples. A bulk density block model was created from the grade block models and employed to convert block model volumes to tonnes. P&E notes from the scatter of SG versus Cu and Ni grades that there are likely Ni  $\pm$  Cu mineral species changes between massive and disseminated sulphides and SG cannot be calculated with certainty from Cu and Ni grades alone. In P&E's experience, Fe and S contents need to be determined to P age 93 of 162

reasonably reflect the sulphide content and discriminate the SGs between the disseminated and massive sulphides. P&E recommends reviewing the ICP multi element data acquired in 2012-2013 for potential to improve the SG versus grade/Fe/S model and that Fe and S be determined in future core assaying and for any available old core from 1995 and later that represents the resource zones.

### 14.7 SAMPLE LENGTHS AND ASSAY COMPOSITING

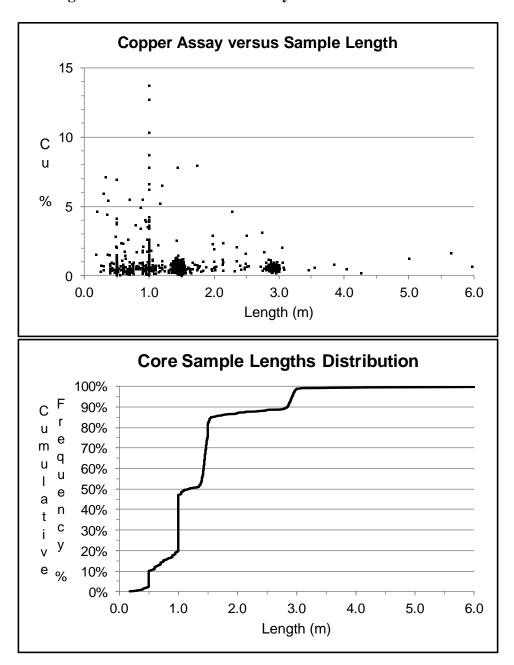
Copper assay grades do not appear to be significantly correlated to sample length, at least for lengths ≤3 m. Some 28% of the assaying was done at 1.0 m intervals and represents the Falco7D drilling for which virtually all assays were done over one metre. 98.7% of the lengths in the resource hole sampling were 3 m or less (Figure 14.13). The lengths for three samples range from 33 m to 61.57 m, the latter being maximum length. In order to regularize the sampling for grade interpolation, assay compositing to 3 m lengths was carried out down hole within the drill hole intercepts of the Hopes Advance North and Main wireframes and the Gamma wireframe, and at 1 m length for the Falco7 wireframe. Assay grades were length and SG weighted for compositing. There were a few non-assayed intervals within the resource drill hole intercepts for holes post-1995, that were explicitly treated as zero grade for the purpose of resource estimation. Explicit missing assays were dealt with by assigning regressed values, under the assumption that any visible base metal mineralization would have been logged and assayed.

Eighteen composites with lengths less than 0.75 m (i.e. ¼ composite length) were discarded from resource estimation for Hopes Advance and Gamma zones after P&E review confirmed the negligible impact on overall grade after discarding them. One small fraction of a metre composite was rejected from the Falco7 estimate as being an artifact of wireframe intersection by GEMS. Appendix 3 provides grade statistics for resource assays and composites zone by zone.

### 14.8 VARIOGRAPHY

Preliminary variography was carried out on composites to guide grade interpolation and search strategy. Linear semi-variograms (variogram) of the 3 m resource composites were prepared down hole for copper and nickel to assess the nugget effect, which was found to be low to negligible. Three-dimensional variography was carried out on strike and dip. Owing to the widely spaced and limited amount of drilling and low number of composites, reasonable variograms could be constructed only for the Main Zone strike (168°/0°) that showed ranges up to 120 m for copper and 237 m for nickel. 3D variograms were based on 50 m lags, 45° to 90° spread angle, and 50 m bounding limits.

Figure 14.14 Length Statistics for Resource Assays



### 14.9 BLOCK MODEL

The resource block models for the Hopes Advance area (North and Main zones) and the Gamma area are oriented at  $063^{\circ}$  azimuth and have block dimensions at 10 m EW x 10 m NS x 10 m vertical. The Falco7 zone block model is EW (no rotation) and incorporates blocks at 5 m EW x 25 m NS x 5 m vertical consistent with the zone narrow widths and drill hole spacing on strike of  $\pm 200 \text{ m}$ .

Block model parameters are shown in Table 14.3.

TABLE 14.3							
BLOCK MODEL PARAMETERS							
Falco7BM		UTM					
Model	Axis	Origin	Block	No.	End	Distance	
Column (m)	X	457,675	5	420	459,775	2,100	
Row (m)	Y	6,570,640	25	127	6,573,815	3,175	
Level (m)	Z	200	5	80	-200	400	
No. Blocks	4,267,200						
Volume m <sup>3</sup>	2,667,000,000						
Rotation	0						
		Hopes Adv	ance				
Column (m)	X	453,400	10	150	454,900	1,500	
Row (m)	Y	6,558,525	10	225	6,560,775	2,250	
Level (m)	Z	200	10	64	-440	640	
No. Blocks	2,160,000						
Volume m <sup>3</sup>	2,160,000,000						
Rotation1	27°						
		GammaI	3M				
Column (m)	X	459,210	10	125	460,460	1,250	
Row (m)	Y	6,546,500	10	175	6,548,250	1,750	
Level (m)	Z	200	10	60	-400	600	
No. Blocks	1,312,500						
Volume m <sup>3</sup>	1,312,500,000						
Rotation1	27°						

Notes:

(1) Positive rotation of X-axis is counter clockwise

### 14.10 BLOCK MODEL GRADE INTERPOLATION

## **14.10.1** Search Strategy and Grade Interpolation

Search ellipses were designed on screen to enable capture of samples from two to three drill cross sections and at least two drill holes on dip. Variography results also guided the interpolation search strategy. The search ellipse axes were oriented by "ZYZ" rotation with respect to the block model axes and take into account the average strike and dip of the zones (Table 14.4). ID2 interpolations were carried out in three passes for Falco7D and in four passes for the other zones (Table 14.5). The selection of a minimum number of composites and a maximum number of composites per hole was used to ensure sampling of a least two holes occurred in the first and second passes. The last pass was designed to fill the wireframe. Grades were interpolated for all blocks in the wireframes. For the Hopes Advance North Zone interpolation, composites with grades exceeding the 95th percentile of composites grade distribution for each of the six metals, were restricted by a smaller ellipse of X 20 m, Y 20 m, Z 5 m to control the influence of higher grades related to uncertain correlation of schist in the zone.

TABLE 14.4 SEARCH ELLIPSE ROTATIONS						
Ellipse Rotation						
Zone	<b>Z</b> 1	<b>Y2</b>	Z			
Falco7D North	1°	25°	0			
Falco 7D South	-77°	25°	0			
Hopes Advance North & MS	-9°	60°	0			
Hopes Advance Main	-14°	55°	0			
Gamma	6°	65°	0			

#### Notes:

- (1) Positive rotation counter clockwise around Z-axis
- (2) Rotation around X-axis, positive from Z to Y (dip)

The number of blocks interpolated varied in each pass with 79% to 97% populated after two passes.

Interpolated grades were saved in their respective grade attributes models together with estimation criteria such as number of composites and holes used for the estimate, distance from the nearest composite to the block centroid, and interpolation pass number. Figures 14.15 to 14.18 show block model results for copper and composites for the four zones.

#### 14.11 RESOURCE CLASSIFICATION

In P&E's opinion, the level of drilling, assaying and exploration work completed to 2013 is sufficient to show that the Hawk Ridge zones subject to this report have the size and grades to indicate reasonable potential for economic open pit extraction and thus qualify them as Mineral Resources under CIM definition standards. P&E classified the resources as Inferred Mineral Resources based on the wide drill hole spacing, level of assaying for the six metals, data quality and interpreted geologic continuity.

TABLE 1						
INTERPOLATION PARAMETERS AND SEARCH DISTANCES						
Parameter	Pass 1	Pass 2	Pass 3	Pass 4		
Falco7D Zone North						
Minimum Composites	4	4	1	-		
Maximum Composites	12	12	12	-		
Maximum Composites from One Hole	3	3	-	-		
Ellipse Search Distance X (m)	150	300	300	-		
Ellipse Search Distance Y (m)	250	500	500	-		
Ellipse Search Distance Z (m)	20	50	50	-		
Falco7D Zon	e South					
Minimum Composites	4	4	1	-		
Maximum Composites	12	12	12	-		
Maximum Composites from One Hole	3	3	-	-		
Ellipse Search Distance X (m)	150	300	500	-		
Ellipse Search Distance Y (m)	250	500	500	-		
Ellipse Search Distance Z (m)	20	50	50	-		
Hopes Advance North Zone						
Minimum Composites	4	4	2	1		

TABLE 14.5					
Interpolation Parameters and Search Distances					
Parameter	Pass 1	Pass 2	Pass 3	Pass 4	
Maximum Composites	12	12	12	12	
Maximum Composites from One Hole	3	3	-	-	
Ellipse Search Distance X (m)	50	100	100	200	
Ellipse Search Distance Y (m)	50	100	100	200	
Ellipse Search Distance Z (m)	10	20	20	50	
Hopes Advance North Massive Sulphide Zone					
Minimum Composites	4	4	2	1	
Maximum Composites	12	12	12	12	
Maximum Composites from One Hole	3	3	-	-	
Ellipse Search Distance X (m)	50	100	100	200	
Ellipse Search Distance Y (m)	50	100	100	200	
Ellipse Search Distance Z (m)	5	10	10	25	
Hopes Advance	Main Zo	ne			
Minimum Composites	4	4	2	1	
Maximum Composites	12	12	12	12	
Maximum Composites from One Hole	3	3	-	-	
Ellipse Search Distance X (m)	100	200	200	300	
Ellipse Search Distance Y (m)	100	200	200	300	
Ellipse Search Distance Z (m)	10	20	20	50	
Gamma Zone					
Minimum Composites	4	4	2	1	
Maximum Composites	12	12	12	12	
Maximum Composites from One Hole	3	3	-	-	
Ellipse Search Distance X (m)	50	100	100	200	
Ellipse Search Distance Y (m)	100	200	200	200	
Ellipse Search Distance Z (m)	10	20	20	50	

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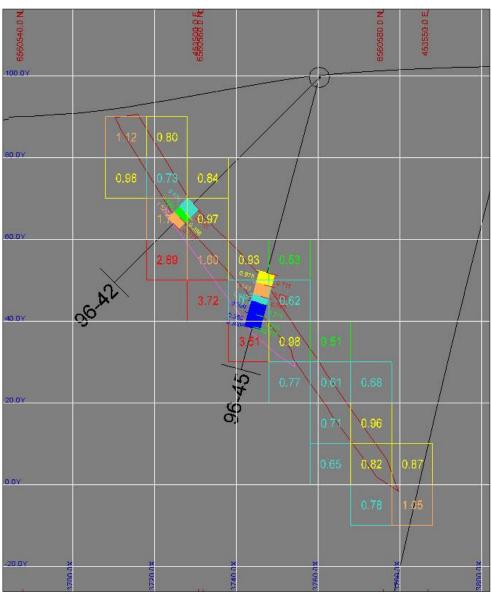
Figure 14.15 Falco7 Zone Block Model Cross Section 6571757N\*

\*(Looking North)

Legend Cu (%)

>= Lower Bound	< Upper Bound	
0.00001	0.20000	
0.20000	0.40000	
0.40000	0.60000	
0.60000	0.80000	
0.80000	1.00000	
1.00000	2.00000	
2.00000	5.00000	
5.00000	10.00000	
10.00000	100.0000	

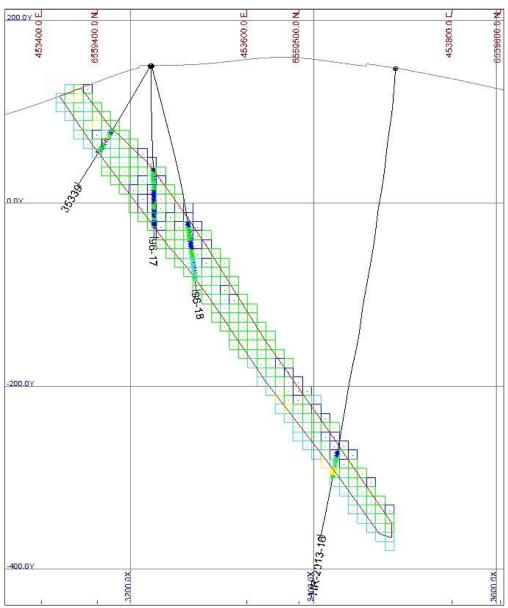
Figure 14.16 North Zone Block Model Cross Section 591.25N



Legend Cu (%)

>= Lower Bound	< Upper Bound	
0.00001	0.20000	
0.20000	0.40000	
0.40000	0.60000	
0.60000	0.80000	
0.80000	1.00000	
1.00000	2.00000	
2.00000	5.00000	
5.00000	10.00000	
10.00000	100.0000	

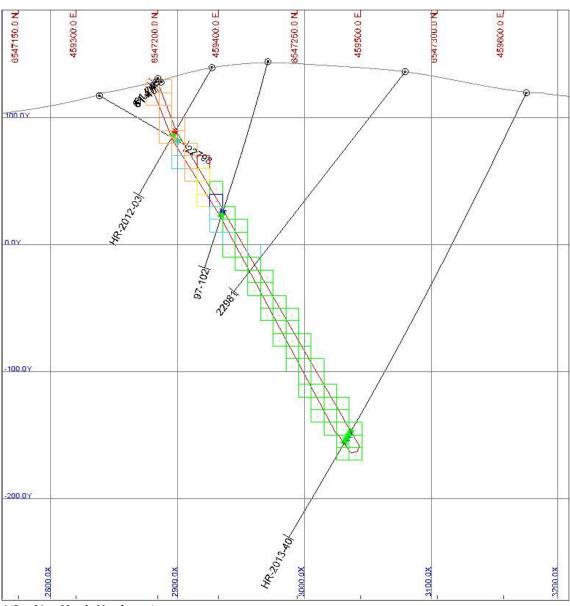
Figure 14.17 Main Zone Block Model Cross Section 571N



Legend Cu (%)

<u> </u>		
>= Lower Bound	< Upper Bound	
0.00001	0.20000	
0.20000	0.40000	
0.40000	0.60000	
0.60000	0.80000	
0.80000	1.00000	
1.00000	2.00000	
2.00000	5.00000	
5.00000	10.00000	
10.00000	100.0000	

Figure 14.18 Gamma Zone Block Model Cross Section 300N



Legend Cu (%)

8 7						
>= Lower Bound	< Upper Bound					
0.00001	0.20000					
0.20000	0.40000					
0.40000	0.60000					
0.60000	0.80000					
0.80000	1.00000					
1.00000	2.00000					
2.00000	5.00000					
5.00000	10.00000					
10.00000	100.0000					

#### 14.12 BLOCK MODEL SENSITIVITY

For the purpose of block model and resource reporting by NSR cut-off, a NSR block model was created from the grade block model based on the three-year trailing average for metal prices as of November 30, 2013 with US exchange rate at par. The criteria used for the NSR calculation are the same as listed for open pit design described below. The NSR formula, as stated earlier in this report, is:

NSR ( $\frac{13.02}{\text{Cu}} + \frac{57.12}{\text{Co}} + \frac{567.12}{\text{Co}} + \frac{566.14}{\text{Co}} + \frac{566.14}{\text{Co}} + \frac{512.37}{\text{Co}} + \frac{513.25}{\text{Co}} + \frac{513.25$ 

Block model sensitivity by NSR cut-offs for the Falco7, Hopes Advance North and Main combined models, and the Gamma model is demonstrated in Tables 14.6 through 14.8.

	TABLE 14.6 FALCO7 BLOCK MODEL SENSITIVITY										
Cut-Off	Tonnes	Cu Eq	Cu	Ni	Co	Pt	Pd	Au	<b>Bulk Density</b>		
NSR \$/t	(000)	%	%	%	%	g/t	g/t	g/t	t/m <sup>3</sup>		
	Falco 7										
\$50	838	1.074	0.588	0.226	0.015	0.053	0.231	0.102	3.25		
\$40	2,241	0.926	0.522	0.198	0.014	0.052	0.210	0.101	3.23		
\$30	3,464	0.833	0.470	0.187	0.013	0.048	0.195	0.101	3.21		
\$25	3,786	0.806	0.459	0.182	0.013	0.047	0.189	0.101	3.20		
\$20	3,827	0.802	0.458	0.181	0.013	0.047	0.188	0.101	3.20		
\$15	3,840	0.800	0.457	0.181	0.013	0.047	0.188	0.101	3.20		

	TABLE 14.7 HOPES ADVANCE BLOCK MODEL SENSITIVITY										
Cut-Off	Tonnes	Cu Eq	Cu	Ni	Co	Pt	Pd	Au	<b>Bulk Density</b>		
NSR \$/t	(000)	%	%	%	%	g/t	g/t	g/t	t/m <sup>3</sup>		
	Hopes Advance										
\$50	6,204	1.252	0.683	0.256	0.012	0.057	0.228	0.108	3.28		
\$40	9,866	1.101	0.620	0.224	0.011	0.053	0.213	0.107	3.26		
\$30	11,319	1.045	0.591	0.215	0.011	0.051	0.207	0.107	3.25		
\$25	11,484	1.038	0.587	0.214	0.011	0.051	0.206	0.106	3.25		
\$20	11,565	1.033	0.585	0.213	0.011	0.051	0.205	0.106	3.24		
\$15	11,571	1.033	0.585	0.213	0.011	0.051	0.205	0.106	3.24		

	TABLE 14.8 GAMMA BLOCK MODEL SENSITIVITY										
Cut-Off	Tonnes	Cu Eq	Cu	Ni	Co	Pt	Pd	Au	<b>Bulk Density</b>		
NSR \$/t	(000)	%	<b>%</b>	%	<b>%</b>	g/t	g/t	g/t	t/m <sup>3</sup>		
	Gamma										
\$50	2,774	1.414	0.755	0.288	0.013	0.058	0.237	0.107	3.31		
\$40	4,192	1.219	0.662	0.252	0.012	0.056	0.228	0.107	3.27		
\$30	4,364	1.198	0.653	0.248	0.012	0.055	0.226	0.106	3.27		
\$25	4,366	1.198	0.653	0.248	0.012	0.055	0.226	0.106	3.27		
\$20	4,366	1.198	0.653	0.248	0.012	0.055	0.226	0.106	3.27		
\$15	4,366	1.198	0.653	0.248	0.012	0.055	0.226	0.106	3.27		

#### 14.13 RESOURCE REPORTING

The Hawk Ridge deposits are low to intermediate grade and are at, or near, surface making them amenable to open pit mining. As such, the grade and NSR block models developed in GEMS were imported to Datamine NPV Scheduler for open pit design. The resulting pits were employed to report resources. Pit design parameters and inputs are:

- Metal prices: US\$3.67/lb Cu, US\$8.51/lb Ni, US\$15.00/lb Co, US\$1,596/oz Pt, US\$702/oz Pd, and US\$1,554/oz Au
- US\$:C\$ Exchange: 1:1
- Bench height 10 m
- Slope angle 50°
- Overburden stripping cost: \$3/tonne
- Average mining cost: \$4.00/tonne of waste and mineralized rock
- Processing cost: \$18.00/tonne of mineralized rock
- G&A: \$7/tonne of mineralized rock
- Process recovery Ni concentrate: 5% Cu, 80% Ni, 50% Co, 50% Pt, 50% Pd, 10% Au
- Smelter payable Ni Concentrate: 65% Cu, 80% Ni, 50% Co, 65% Pt, 65% Pd, 50% Au
- Process recovery Cu concentrate: 85% Cu, 0% Ni, 0% Co, 25% Pt, 25% Pd, 40% Au
- Smelter payable Cu Concentrate: 96.5% Cu, 0% Ni, 0% Co, 65% Pt, 65% Pd, 50% Au
- Refining charge per lb or oz: \$0.10 Cu, \$0.50 Ni, \$3.00 Co, \$15 Pt, \$15 Pd, \$15 Au
- Concentrate transport/handling: \$30/tonne
- Concentrate ocean freight/handling: \$50/tonne
- Smelter treatment: \$150/tonne Ni concentrate; \$100/tonne copper concentrate
- Concentrate moisture: 8%

The NPV Scheduler pit shell was imported to GEMS and used to report in-pit resources. Table 14.9 summarizes the in-pit Inferred Resources by NSR cut-off by zone. Total in-pit resources are presented in Table 14.10. P&E recommends that the Mineral Resources at \$25/tonne NSR cut-off be used for public release and further economic evaluation.

	TABLE 14.9										
In-Pit Inferred Resources by Zone at Various NSR Cut-Offs As of January 2014											
Cut-Off	Tonnes	Cu Eq	Cu	Ni	Co	Pt	Pd	Au	<b>Bulk Density</b>		
NSR \$/t	(000)	%	%	%	%	g/t	g/t	g/t	t/m <sup>3</sup>		
	Falco 7										
\$50	838	1.074	0.588	0.226	0.015	0.053	0.231	0.102	3.25		
\$40	2,241	0.926	0.522	0.198	0.014	0.052	0.210	0.101	3.23		
\$30	3,464	0.833	0.470	0.187	0.013	0.048	0.195	0.101	3.21		
\$25	3,786	0.806	0.459	0.182	0.013	0.047	0.189	0.101	3.20		
\$20	3,827	0.802	0.458	0.181	0.013	0.047	0.188	0.101	3.20		
\$15	3,840	0.800	0.457	0.181	0.013	0.047	0.188	0.101	3.20		
				Hopes A	Advance						
\$50	6,204	1.252	0.683	0.256	0.012	0.057	0.228	0.108	3.28		
\$40	9,866	1.101	0.620	0.224	0.011	0.053	0.213	0.107	3.26		
\$30	11,319	1.045	0.591	0.215	0.011	0.051	0.207	0.107	3.25		
\$25	11,484	1.038	0.587	0.214	0.011	0.051	0.206	0.106	3.25		
\$20	11,565	1.033	0.585	0.213	0.011	0.051	0.205	0.106	3.24		
\$15	11,571	1.033	0.585	0.213	0.011	0.051	0.205	0.106	3.24		
				Gar	nma						
\$50	2,774	1.414	0.755	0.288	0.013	0.058	0.237	0.107	3.31		
\$40	4,192	1.219	0.662	0.252	0.012	0.056	0.228	0.107	3.27		
\$30	4,364	1.198	0.653	0.248	0.012	0.055	0.226	0.106	3.27		
\$25	4,366	1.198	0.653	0.248	0.012	0.055	0.226	0.106	3.27		
\$20	4,366	1.198	0.653	0.248	0.012	0.055	0.226	0.106	3.27		
\$15	4,366	1.198	0.653	0.248	0.012	0.055	0.226	0.106	3.27		

#### Notes:

- (1) CIM definitions were followed for Mineral Resources.
- (2) Mineral Resources are estimated by conventional 3D block modelling based on wireframing at a \$25/tonne NSR cut-off and inverse distance squared grade interpolation.
- (3) Metal prices for the estimate are: US\$3.67/lb Cu, US\$8.51/lb Ni, US\$1,596/oz Pt, US\$702/oz Pd, US\$1,554/oz Au and US\$15.00/lb Co based on a three-year trailing average as of November 30, 2013.
- (4) A variable bulk density of 3.01 tonnes/m3 or higher based on density weighting has been applied for volume to tonnes conversion.
- (5) Open pit Mineral Resources are estimated from surface to pit floor depths of 90 m to 160 m.
- (6) Mineral Resources are classified Inferred based on drill hole spacing, geologic continuity and quality of data.
- (7) Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues. There is no certainty that all or any part of the Inferred Mineral Resource will be upgraded to an Indicated or Measured Mineral Resource as a result of continued exploration.
- (8) P&E recommends reporting open pit resources at the \$25/tonne NSR cut-off.

TOTAL IN	TABLE 14.10 TOTAL IN-PIT INFERRED RESOURCES AT VARIOUS NSR CUT-OFFS AS OF JANUARY 2014										
Cut-Off	Tonnes	Cu Eq	Cu	Ni	Co	Pt	Pd	Au	Bulk Density Density		
NSR \$/t	(000)	%	%	%	%	g/t	g/t	g/t	t/m3		
\$50	9,816	1.283	0.695	0.262	0.012	0.057	0.231	0.107	3.29		
\$40	16,299	1.108	0.617	0.228	0.012	0.053	0.216	0.106	3.26		
\$30	19,147	1.042	0.583	0.218	0.012	0.052	0.209	0.105	3.25		
\$25	19,636	1.029	0.577	0.215	0.011	0.051	0.207	0.105	3.24		
\$20	19,758	1.025	0.575	0.215	0.011	0.051	0.207	0.105	3.24		
\$15	19,777	1.024	0.575	0.215	0.011	0.051	0.206	0.105	3.24		

#### Notes:

- (1) CIM definitions were followed for Mineral Resources.
- (2) Mineral Resources are estimated by conventional 3D block modelling based on wireframing at a \$25/tonne NSR cut-off and inverse distance squared grade interpolation.
- (3) Metal prices for the estimate are: US\$3.67/lb Cu, US\$8.51/lb Ni, US\$1,596/oz Pt, US\$702/oz Pd, US\$1,554/oz Au and US\$15.00/lb Co based on a three-year trailing average as of November 30, 2013.
- (4) A variable bulk density of 3.01 tonnes/m3 or higher based on density weighting has been applied for volume to tonnes conversion.
- (5) Open pit Mineral Resources are estimated from surface to pit floor depths of 90 m to 160 m.
- (6) Mineral Resources are classified Inferred based on drill hole spacing, geologic continuity and quality of data.
- (7) Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues. There is no certainty that all or any part of the Inferred Mineral Resource will be upgraded to an Indicated or Measured Mineral Resource as a result of continued exploration.
- (8) P&E recommends reporting open pit resources at the \$25/tonne NSR cut-off.

Figures 14.19 to 14.26 show the dipper pits in 3D perspectives, plans and cross sections.

Figure 14.19 3D Perspective Views of the Pits and Zones

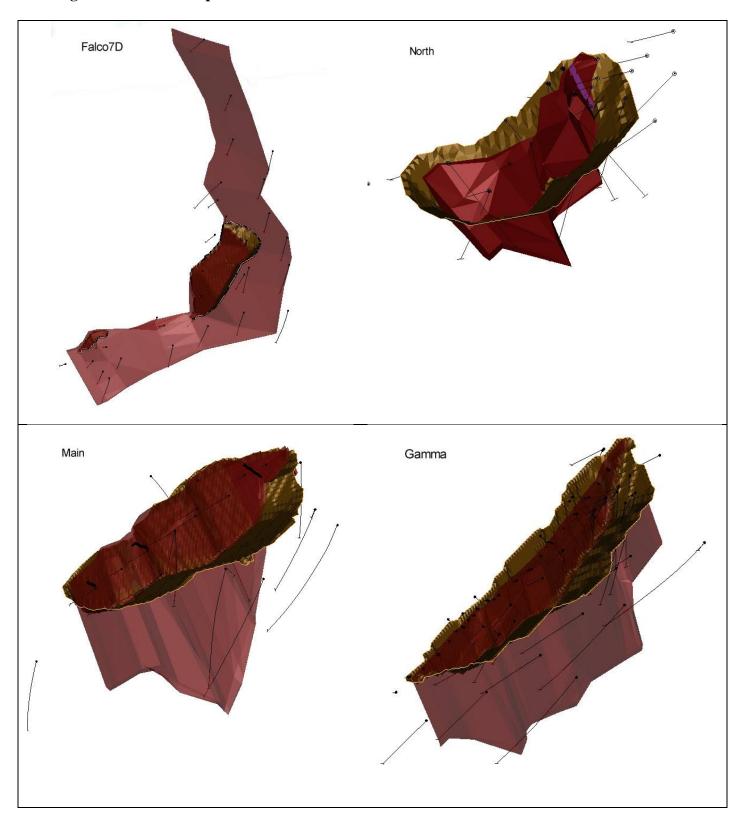


Figure 14.20 Plan View of Falco7 Pit Crests and Zone Projection

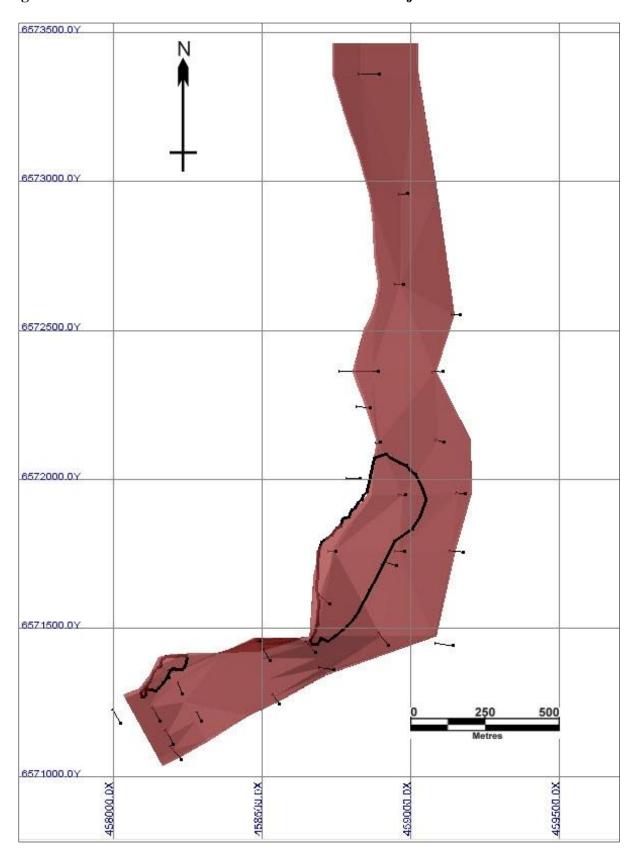


Figure 14.21 Plan View of Hopes Advance North and Main Pit Crests and Zone Projections

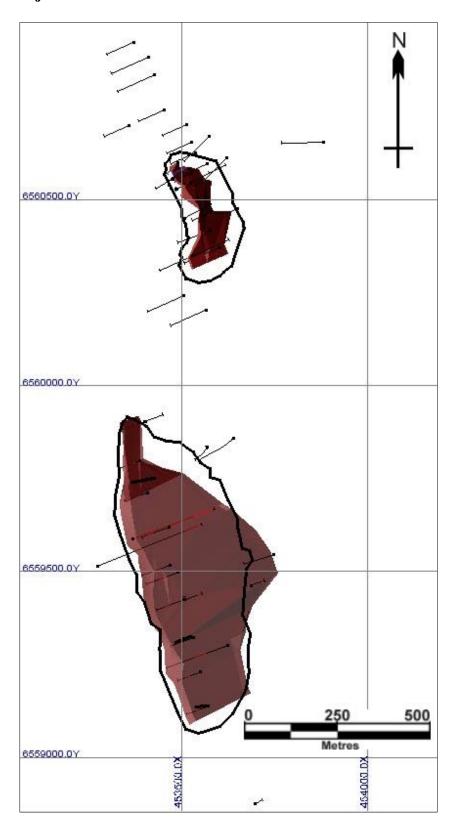
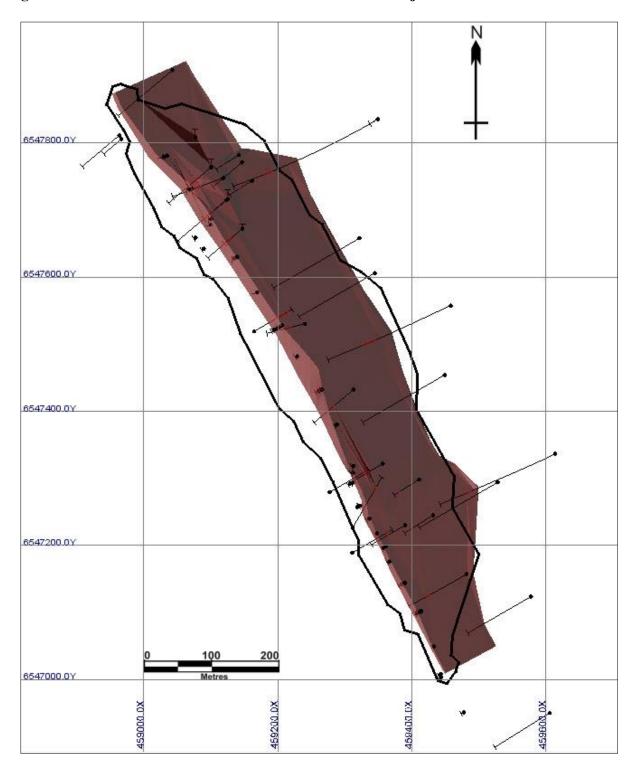


Figure 14.22 Plan View of Gamma Pit Crest and Zone Projection



We 2013-27

Figure 14.23 Falco7 Block Model and Dipper Pit Cross Section 6571757N

\*(Looking North)

Legend NSR (\$/t)

>= Lower Bound	< Upper Bound	
0.00001	25.00000	
25.00000	35.00000	-
35.00000	45.00000	
45.00000	55.00000	
55.00000	65.00000	
65,00000	75.00000	
75.00000	85.00000	
85.00000	95.00000	
95.00000	100.00000	
100.0000	10,000.000	

30.0V

100.0V

Figure 14.24 North Zone Block Model and Dipper Pit Cross Section 591.25N

Legend NSR (\$/t)

	· · /	
>= Lower Bound	< Upper Bound	
0.00001	25.00000	
25.00000	35.00000	
35.00000	45.00000	
45.00000	55.00000	
55.00000	65.00000	
65.00000	75.00000	
75.00000	85.00000	
85.00000	95.00000	
95.00000	100.00000	
100.0000	10,000.000	

Figure 14.25 Main Zone Block Model and Dipper Pit Cross Section 571N

## Legend NSR (\$/t)

>= Lower Bound	< Upper Bound	
0.00001	25.00000	
25.00000	35.00000	
35.00000	45.00000	
45.00000	55.00000	
55.00000	65.00000	
65.00000	75.00000	
75.00000	85.00000	
85.00000	95.00000	
95.00000	100.00000	
100.0000	10,000.000	

3547260.0 N 6547180.D N 159400.0 E 459450.0 E 150 0Y 100 0Y 50 0Y 0.09

Figure 14.26 Gamma Zone Block Model and Dipper Pit Cross Section 300N

Legend NSR (\$/t)

8 (1)						
>= Lower Bound	< Upper Bound					
0.00001	25.00000					
25,00000	35.00000					
35,00000	45.00000					
45,00000	55.00000					
55.00000	65.00000					
65,00000	75.00000					
75.00000	85.00000					
85.00000	95.00000					
95.00000	100.00000					
100.0000	10,000.000					

## 14.14 BLOCK MODEL VALIDATION

There has been no development or previous mining on the Falco7, Hopes Advance or Gamma zones, 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 passes used to estimate grade.

Wireframe and reported resource volumes were verified by comparing the percent models or solids models in the GEMS resource report. In the latter method, the solids are ranked by precedence, and where blocks overlap wireframe solids, only the grade and percent of the ranking solid is considered. As part of validation, the global estimates for percent model and solids models were compared and found to differ by less than 1%.

Table 14.11 presents a comparison of the  ${\rm ID}^2$  model with the NN model for copper on a global basis. The  ${\rm ID}^2$  and NN estimates agree reasonably well.

TABLE 14.11 COMPARISON OF ID <sup>2</sup> MODEL WITH NN MODEL FOR COPPER									
Model ID <sup>2</sup> Cu% NN Cu% Variance Variance%									
Falco7D	0.451	0.473	-0.022	-5%					
Gamma	0.616	0.610	0.006	1%					
Hopes Advance	0.567	0.555	0.012	2%					

Table 14.12 presents a comparison of mean grades between assays, composites, and model blocks. Typically, the mean grades decreased somewhat from assays to blocks and variance/coefficient of variations decreased as well, showing volume-variance effect and expected smoothing of grade. The largest grade from composites to block model decrease occurs for the small Hopes Advance massive sulphide zone which is characterized by few composites (25), a relatively larger range in Cu and Ni grades and higher coefficient of variation than for composites in the other models. Spatial distribution of samples and smoothing have a proportionately higher impact on average grade in this situation.

TABLE 14.12 COMPARISON OF GRADES FOR ASSAYS, COMPOSITES AND GLOBAL BLOCK MODELS							
FALCO7							
Assays	Cu%	Ni%					
Weighted Mean	0.469	0.155					
Composites	Cu%	Ni%					
Weighted Mean	0.469	0.155					
Block Model	Cu%	Ni%					
Wireframe	0.451	0.156					

TABLE 14.12 COMPARISON OF GRADES FOR ASSAYS, COMPOSITES AND GLOBAL BLOCK MODELS				
Variance: Block M		LOCK WIODELS		
Variance Variance	-0.018	0.001		
% Variance	-4%	1%		
Variance: Block Mod				
Variance	-0.018	0.001		
%Variance	-4%	1%		
Gam	ıma	_		
Assays	Cu%	Ni%		
Weighted Mean	0.634	0.258		
Composites	Cu%	Ni%		
Weighted Mean Average	0.638	0.260		
Block Model	Cu%	Ni%		
Wireframe	0.616	0.241		
Variance: Block M	•	0.04=		
Variance	-0.018	-0.017		
% Variance	-3%	-7%		
Variance: Block Mod		0.010		
Variance	-0.022	-0.019		
% Variance	-3%	-7.3%		
Homos A dev	an an Mareth			
Hopes Adva	Cu%	Ni%		
Assays Weighted Mean	0.862	0.422		
Composites	Cu%	Ni%		
Weighted Mean	0.859	0.423		
Block Model	Cu%	Ni%		
Wireframe	0.792	0.331		
Variance: Block M		0.331		
Variance Variance	-0.070	-0.092		
% Variance	-8%	-22%		
Variance: Block Mod				
Variance	-0.067	-0.092		
% Variance	-8%	-22%		
Hopes Advance N	Massive Sulphide			
Assays	Cu%	Ni%		
Weighted Mean	3.351	0.856		
Composites	Cu%	Ni%		
Weighted Mean	3.371	0.864		
Block Model	Cu%	Ni%		
Wireframe	2.535	0.644		
Variance: Block M				
Variance	-0.0816	-0.212		
% Variance	-24%	-25%		

TABLE 14.12				
COMPARISON OF GRADES FOR ASSAYS, COMPOSITES AND GLOBAL BLOCK MODELS				
Variance: Block Model versus Composites				
Variance	-0.836	-0.220		
% Variance	-25%	-25%		
Hopes Advance Main				
Assays	Cu%	Ni%		
Weighted Mean	0.563	0.197		
Composites	Cu%	Ni%		
Weighted Mean	0.563	0.196		
Block Model	Cu%	Ni%		
Wireframe	0.552	0.195		
Variance: Block Model versus Assays				
Variance	-0.011	-0.002		
% Variance	-2%	-1%		
Variance: Block Model versus Composites				
Variance	-0.011	-0.001		
% Variance	-2%	-1%		

#### 14.15 INTERPRETATION AND CONCLUSIONS

The Hawk Ridge Cu-Ni-Co-Pt-Pd-Au bearing zones, Falco7, Hopes Advance North and Main, and Gamma for which resource estimates were undertaken in this report, lie on a 26.5 km long trend. They are respectively 2.5 km, 285 m, 820 m and 995 m in length with horizontal widths of individual zones up to 30 m. The zones have been drill intersected at depth from the 138 m to 300 elevations (approximately surface to 450 m depth) by widely spaced drilling on 50 m to 200 m sections, with some having only a single hole and with some having less than optimum down dip holes. Host rocks for the disseminated and lesser amounts of massive sulphide mineralization are largely Proterozoic porphyritic gabbro to olivine rich melagabbro (ultramafic) that have intruded the metasedimentary rocks in the northern part of the Labrador Trough. Sulphide mineralization consists of pyrrhotite, chalcopyrite, pentlandite and minor amounts of violarite and cobaltite. Exploration drilling was carried out by Nickel North in 2012 and 2013 and historically by others from 1961 to 1997, resulting in a drill hole database for the Hawk Ridge project of 394 holes totalling 35,947.59 m of which 116 holes for 15,801.17 m were used for resource estimation.

The geological interpretation by Nickel North is based on surface geologic mapping, magnetic and electromagnetic geophysical surveys and diamond drilling. The Mineral Resource estimate is based entirely on the diamond drill holes and assaying database. Core sampling intervals mostly at  $\leq$ 3 m are appropriate to the deposit scale and mineralization, however, the drill hole sectional spacing at 50 m to 200 m and limited holes per section are inadequate to allow estimation of resources at higher classification than Inferred.

P&E has the following conclusions and opinions:

- The resource reporting, methodology and estimate have been designed to support preliminary open pit design and to guide definition drilling in the pit areas.
- The geological interpretations are reasonable.

- The drill hole and assay databases are acceptable for estimation of Inferred Resources but will need some review of down hole surveys going forward.
- The resource wireframe NSR cut-off at \$25/t is reasonable for the mineralization grades and shows reasonable continuity.
- The interpolation domains are reasonable.
- Grade capping was not required at this stage but could be necessary in future when additional drilling information is acquired.
- The specific gravity testing is reasonable for Inferred Resources but more testing on an assay by assay basis should be implemented for future work to upgrade resources.
- Composites at one and three metre lengths weighted by density are reasonable.
- The ID<sup>2</sup> interpolation approach is reasonable.
- The Inferred Resource classification based on mineralization/grade continuity, drill hole density and assaying is reasonable.
- The block model validation results are reasonable.

#### 14.16 RESOURCE RECOMMENDATIONS

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

## Topographic Surfaces

A topographic surface for the project was generated based on VTEM geophysical survey elevation data and drill hole collar elevations and is reasonable for the estimation of open pit Inferred Resources. Assuming the project goes forward, it is recommended that a LiDAR survey be carried out with results imported to GEMS software.

### Drilling

Pending analysis of potential project economics and reserve target thresholds, the resources will need to be upgraded to allow the future estimation of reserves, which are based on Indicated and Measured resources. P&E recommends the following to upgrade Inferred Resources to Indicated Resources.

## In fill Drilling

- The zones should be drilled on 50 m sections with at least three holes per section to at least 25 m below the conceptual pit floors.
- The massive sulphide lens in the Hopes Advance North Zone should be drilled at 25 m sections or closer to adequately define the zone geometry.
- Old drill holes with no assays should be re-drilled, except for down dip holes, which should be eliminated from future resource estimation.

## Step-out Drilling

- P&E recommends step-out drilling to evaluate additional exploration targets with the objective of expanding the estimated resources;
- The exploration target "at large" with the potential range of 80 to 120 million tonnes should be evaluated by very widely spaced grid drilling as deemed appropriate by the known strike lengths, geophysical indications and mineralized outcrops.

### Assaying

- There are a few non-assayed intervals within the resource drill hole intercepts for holes post-1995, that are explicitly treated as zero grade for the purpose of resource estimation. Explicit missing assays were dealt with by assigning regressed values, however core should be assayed for Co, PGE and Au where assays are lacking. The holes with very long assay intervals (>30 m) are 22647, 22678, 22737; all are old and would need redrilling;
- Assaying should be done continuously down hole within the zones and hanging and footwalls for the six payable metals as well as for Fe and S.

## Mineralogy-Bulk Density

- A study is needed to identify Ni, Cu, Co and PGE mineralogy. It is noted from the scatter in graphs of SG versus Ni grades and Co versus Ni grades that there may be mineral mode changes for Ni (or cobalt) suggesting oxidation or a different sulphide species (millerite?) is present locally.
  - Pending mineralogy study, systematic SG tests on disseminated and massive sulphides are needed to better characterize SG vs Ni grade and Cu grade relationships. Better clarification is needed of when and how S should be analyzed using a Leco sulphur analyzer. Going forward, Nickel North should continue with ICP-MS for S and when it is felt a better control on the S analysis is necessary, the pulps can be re-run using the Leco;
- If old core is available, the several drill holes, where the entire zone is represented by a single assay, should be re-logged and re-assayed at  $\pm 1$  m intervals consistent with the sampling protocol for other holes. Alternatively these holes should be re-drilled and sampled.

#### **Drill Hole Surveys**

• The down hole surveys should be reviewed for excessive deviation and implausible readings removed where practicable.

#### Geotechnical Study

• Pit slopes of 50° were employed for resource pit design, however, no geotechnical study has been conducted to support this initial assumption. P&E recommends that preliminary geotechnical study be undertaken to establish pit slopes. If steeper slopes are practicable, the stripping ratio can be improved and more in-pit resources accessed.

## Metallurgical Study

• The metal recoveries used for NSR calculation and pit design are taken from P&E's experience with Raglan area deposits, which are ultramafic rock hosted

and serpentinized. Recoveries from less altered, gabbro hosted sulphide mineralization at the Hawk Ridge project may differ from the current assumptions. A mineralogical and metallurgical study is currently underway with XPS Consulting and Testwork Services, and is expected to be completed at the end of April, 2014.

# 15.0 MINERAL RESERVE ESTIMATES

# 16.0 MINING METHODS

# 17.0 RECOVERY METHODS

# 18.0 PROJECT INFRASTRUCTURE

There is no infrastructure on the Property apart from the camp facilities.				

# 19.0 MARKET STUDIES AND CONTRACTS

# 20.0 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

In November 2013, Nickel North received a report titled, "Environmental and Social Scan Report" completed by Consult 5 Inc. of North Vancouver, BC. The report was a confidential internal company document, which covered environmental, socio-cultural and economic guidelines, and specific goals to aid in understanding the required steps to be taken with any potential development of the Hawk Ridge Property. The intent of the report was to ensure that the potential risks were identified and that adequate measures could be built into the scoping and baseline studies to ensure that they are managed properly.

# 21.0 CAPITAL AND OPERATING COSTS

# 22.0 ECONOMIC ANALYSIS

#### 23.0 ADJACENT PROPERTIES

Focus Graphite owns 100% of 13 properties covering some 668 square km running north-south from the Lemming property in southwestern Ungava Bay to Fox, some 75 kilometers east of Schefferville. The Lemming, Diana Nord and Diana Sud Properties are in close proximity to the Hawk Ridge Project, and the Romer Property lies south of Diana Sud, (see Figures 23.1 and 23.2).

Positive assay results for gold, silver and copper from earlier work conducted in 2009 confirmed historical showings and identified several new mineralized zones on the Romer Property. Significant gold values included 8.54 g/t Au on the Lac Plissé Showing and 2.03 g/t Au from a pyritic boulder.

Field results on the Romer Property also highlighted a new area of interest for platinum and palladium exploration located in the south central part of the property where a slightly mineralized gabbro returned 0.67 g/t Pt and 0.58 g/t Pd, as well as 1.30 g/t Pd and 1.12 g/t Pd. In the eastern part of the property, new base metals mineralization was discovered and two samples returned 2.38% Cu and 0.93% Cu.

Oceanic Iron Ore Corporation ("Oceanic") holds a large number of claims contiguous to the west on NTS sheet 24N/04. Oceanic is focused on the development of the Ungava Bay iron properties. These properties comprise 3,703 claims over three project areas, namely Hopes Advance, Morgan Lake and Roberts Lake, which are located over 1,568 km² along the northern extension of the Labrador Trough. The projects cover over 300 km of iron formation and all the deposits are located within 20 – 50 km of tidewater. The Hopes Advance project is contiguous to Hawk Ridge, (see Figure 23.3).

In September 2012, the Company announced the results of a Pre-Feasibility Study ("PFS") prepared by Micon International Limited in respect of the Hopes Advance project. The PFS was completed using the NI 43-101 Mineral Resource estimate published in April 2012, which the PFS has converted to a mineral reserve within engineered pit designs.

The base case in the PFS for the Hopes Advance project assumes initial production of 10 million tonnes of concentrate per annum commencing in 2017 utilizing self-generated power, expanding to production of 20 million tonnes of concentrate per annum using hydroelectric power from 2027, following connection to the Hydro Québec grid in 2025 and construction to support the expansion in 2025 and 2026.

This resource is not located on the Hawk Ridge Property and there is no indication to date that this type of mineralization is present on the Hawk Ridge property.

All information for this section of the report has been procured from the Focus Graphite and Oceanic websites. P&E cannot guarantee the accuracy of information on these companies websites, and cautions that the type and tenor of mineralization present on the adjacent properties is not necessarily indicative of the mineralization at Hawk Ridge.

Figure 23.1 Focus Graphite Diana Nord Property Map

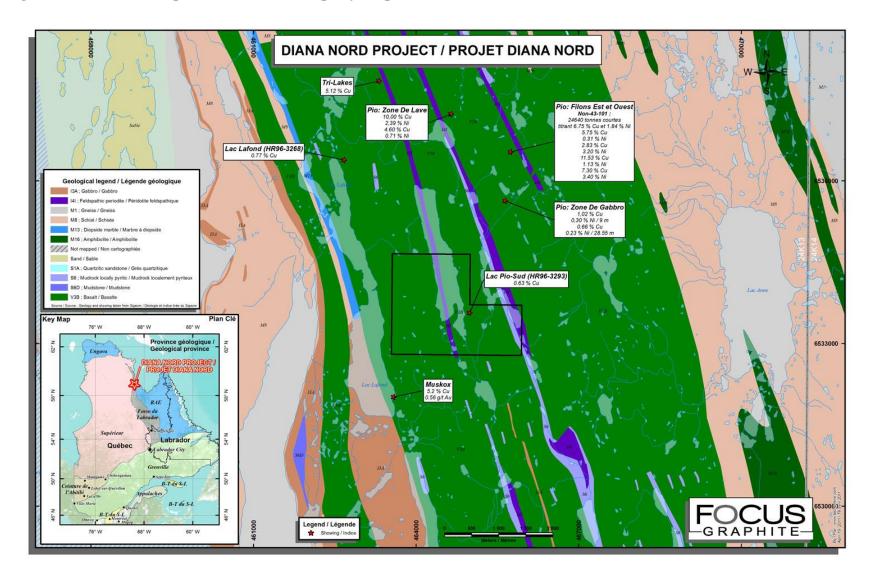


Figure 23.2 Focus Graphite Lemming Property Geology Map

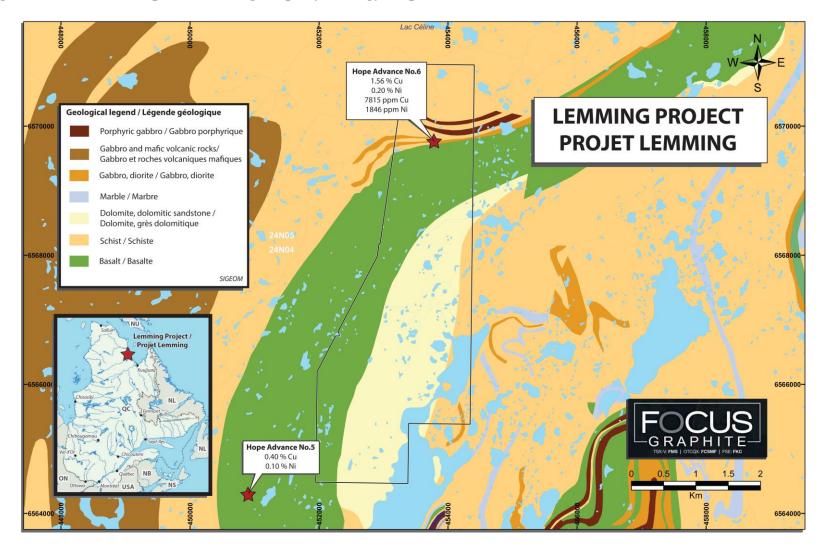
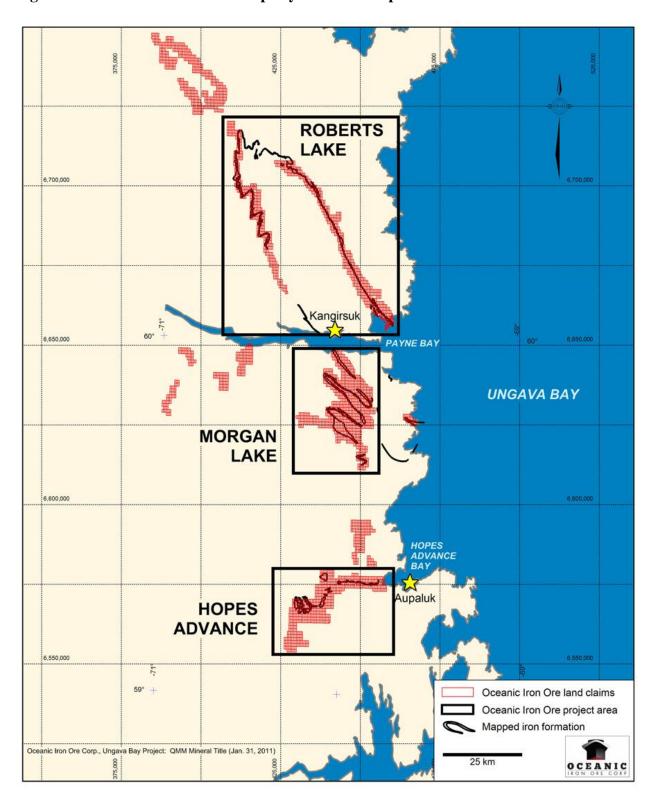


Figure 23.3 Oceanic Iron Ore Property Location Map



#### 24.0 OTHER RELEVANT DATA AND INFORMATION

Beauchamp (2012) reports that there are restrictions on staking and mining activity in certain areas surrounding the Hawk Ridge Property. East and southwest of the Project mineral exploration is prohibited as a result of the proposed Baie-aux-Feuilles (Leaf Bay) Provincial Park.

In the northern part of the area, on both the east and west sides of the Hawk Ridge Project, exploration is permitted under specific conditions on Category 1 lands owned by the Inuit. An agreement with the Inuit is required for work on these lands.

To the best of P&E's knowledge there are no other relevant data, additional information or explanations necessary to make the Report understandable and not misleading.

#### 25.0 INTERPRETATION AND CONCLUSIONS

Nickel North's 100% owned Hawk Ridge Property is located in northern Québec, approximately 1550 km north-northeast of Montréal on the west coast of Ungava Bay. The project is in Nunavik Territory, situated in the northern third of Québec, and is the traditional homeland of the Inuit in the province where they hold certain ancestral rights and the mineral rights to certain lands. Inuit land claims have previously been settled in the Territory of Nunavik. There are fourteen villages within the territory that are mostly located along the coast of Hudson Bay on the west, Hudson Straight to the north and Ungava Bay to the east. The population of the territory is estimated to be 12,000, and Kuujjuaq is the principal village and administrative centre.

P&E has evaluated drilling procedures, sample preparation, analyses and security and is of the opinion that the core logging procedures employed, and the sampling methods used were thorough and have provided sufficient geological and analytical information. The authors consider the data to be of good quality and satisfactory for use in a resource estimate. P&E compared independent sample verification results versus the original assay results for Cu and Ni and the P&E results demonstrate that the results obtained and reported by Nickel North were reproducible.

Mineral Resources have been estimated for the Falco7, Gamma, Hopes Advance Main and Hopes Advance North zones. Minerals included in the estimate are copper, nickel, cobalt, platinum, palladium and gold with reporting done by net smelter return (NSR) cut-off as appropriate for polymetallic deposits.

This resource estimate is based entirely on diamond drilling, core sampling and assaying. The exploration drill hole database for the property contains 394 diamond drill holes totalling 35,947.59 m of which 116 holes for 15,801.17 m have been used to delineate and sample the resources.

The Cu–Ni,  $\pm$ Co,  $\pm$ Pt,  $\pm$ Pd,  $\pm$ Au mineralization is generally low to intermediate grade, lies at or near surface and is amenable to open pit mining.

In P&E's opinion, the drilling, assaying and exploration work completed on the four zones at the Hawk Ridge Project supporting this resource estimate are sufficient to indicate reasonable potential for economic extraction and thus qualify it as a Mineral Resource under CIM definition standards. The grade and NSR block models were exported to Datamine Limited's NPV Scheduler<sup>TM</sup> for open pit design and the resulting optimized pit surfaces were used to report Mineral Resources from the GEMS block models. The total in-pit Inferred Mineral Resources for a \$25/tonne NSR discard cut-off are estimated at 19,636,000 million tonnes averaging 0.577% Cu, 0.215% Ni, 0.011% Co, 0.051 g/t Pt, 0.207 g/t Pd, and 0.105 g/t Au, (which equates to a 1.029% Cu Equivalent grade basis).

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. 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.

The property contains an exploration target with a potential range of 80 million tonnes to 120 million tonnes at average grade ranges of 0.54%-0.56% Cu, 0.19%-0.20% Ni, 0.01%-0.02% Co, 0.04-0.05 g/t Pt, 0.18-0.20 g/t Pd and 0.10-0.11 g/t Au (which equates to a 0.94% to 1.0% Cu Equivalent grade basis). The exploration target is based on the estimated strike length, depth and width of the known mineralization which is supported by intermittent drillholes, geophysics and observations of mineralized surface exposures. The potential quantities and grades of this exploration target are conceptual in nature. There has been insufficient work done by a Qualified Person to define these estimates as mineral resources. The Company is not treating these estimates as mineral resources, and readers should not place undue reliance on these estimates. Even with additional work, there is no guarantee that these estimates will be classified as mineral resources. In addition, there is no guarantee that these estimates will prove to be economically recoverable.

#### 26.0 RECOMMENDATIONS

P&E considers that the Hawk Ridge Property contains a sizeable Cu-Ni-Co-Pt-Pd-Au resource and merits further evaluation. P&E's recommendations include:

- A LiDAR survey (a remote sensing technology that measures distance by illuminating a target with a laser and analyzing the reflected light), be carried out with results imported to GEMS software;
- In-fill Drilling:
  - P&E recommends the following to upgrade Inferred Resources to Indicated Resources:
  - The zones should be drilled on 50 m sections with at least three holes per section to at least 25 m below the conceptual pit floors;
  - The massive sulphide lens in the Hopes Advance North Zone should be drilled at 25 m sections or closer to adequately define the zone geometry;
  - Old drill holes with no assays should be re-drilled, except for down dip holes, which should be eliminated from future resource estimation.
- Step-out Drilling:
  - P&E recommends step-out drilling to evaluate additional exploration targets with the objective of expanding the estimated resources;
  - The exploration target "at large" with the potential range of 80 to 120 million tonnes should be evaluated by very widely spaced grid drilling as deemed appropriate by the known strike lengths, geophysical indications and mineralized outcrops.
- Assaying:
  - There are some non-assayed intervals within the resource drill hole intercepts that are explicitly treated as zero grade for the purpose of resource estimation. These intervals should be reviewed and assayed (assuming core is available);
  - Assaying should be done continuously down hole within the zones and hanging and footwalls for the six payable metals as well as for Fe and S.
- Mineralogy-Bulk Density:
  - A study is needed to identify Ni, Cu, Co and PGE mineralogy;
  - Pending mineralogy study, systematic SG tests on disseminated and massive sulphides are needed to better characterize SG vs Ni grade and Cu grade relationships. Better clarification is needed of when and how S should be analyzed using a Leco sulphur analyzer. Going forward, Nickel North should continue with ICP-MS for S and when better control on the S analysis is necessary, the pulps can be re-run using the Leco analyzer;
  - If old core is available, the several drill holes where the entire zone is represented by a single assay, should be re-logged and re-assayed at  $\pm 1$  m intervals consistent with the sampling protocol for other holes. Alternatively these holes should be re-drilled and sampled.
- Drill Hole Surveys:
  - The down hole surveys should be reviewed for excessive deviation and implausible readings removed where appropriate.

- Geotechnical Study:
  - Pit slopes of 50° were employed for resource pit design, however no geotechnical study has been conducted to support this initial assumption. P&E recommends that a preliminary geotechnical study be undertaken to establish pit slopes. If steeper slopes are practicable, the stripping ratio can be improved and more in-pit resources accessed.
- Metallurgical Study:
  - The metal recoveries used for NSR calculation and pit design are taken from P&E's experience with Raglan area deposits, which are ultramafic rock hosted and serpentinized. Recoveries from less altered, gabbro hosted sulphide mineralization at the Hawk Ridge project may differ from the current assumptions. A mineralogical and metallurgical study is currently underway with XPS Consulting and Testwork Services, and is expected to be completed at the end of April, 2014.

The estimated budget to complete the recommendations is approximately \$9.4M and is presented in Table 26.1.

TABLE 26.1				
RECOMMENDED PROGRAM AND BUDGET				
Program	Units (m)	Unit Cost (\$/m)	Budget	
In fill Diamond Drilling	5,000	\$500	\$2,500,000	
Step-out Drilling	5,000	\$500	\$2,500,000	
LiDAR survey			\$350,000	
Metallurgical Testwork			\$350,000	
Assaying			\$450,000	
Mineralogy-Bulk Density			\$250,000	
Geotechncial Study			\$300,000	
Personnel, office, support			\$1,500,000	
Contingency			\$1,230,000	
Total			\$9,430,000	

### 27.0 REFERENCES

Beauchamp, Daniel A., 2012: Technical Report and Proposed Exploration Program for the Hawk Ridge Project, Quebec, prepared for Virginia Energy Resources Inc, Vancouver BC and Orient Venture Capital Inc., April 2012.

Consult 5 Inc., 2013: Nickel North Exploration: Hawk Ridge Project Environmental and Social Scan Report. Confidential Internal Company Document.

Eckstrand, O.R. 1996: Nickel-copper sulphides in: Geology of Canadian mineral deposit types, (ed.) O.R. Eckstrand, W.D. Sinclair, and R.I Thorpe; Geological Survey of Canada, Geology of Canada no. 8, p. 584-605.

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Hoffman, P.F., 1990: Dynamics of the tectonic assembly of northeast Laurentia in geon 18 (1.9-1.8 Ga), Geoscience Canada, Vol. 17, No. 4, pp. 222-226.

Lastra, R. and Owens, D., 1993: Mineralogical study of three rock fragments of a massive sulphide ore, Confidential report for Hawk Ridge Mineral Enterprises, CANMET project 30.40.99, Mineral Sciences Laboratories Division Report MSL 93-12 (CR), 21 p.

Oceanic Iron Ore website, 2014: http://www.oceanicironore.com

Wares, R.P., and Goutier, J. 1990: Deformational style in the foreland of the northern New Quebec Orogen, Geoscience Canada, vol. 17, no. 4, pp. 244-249.

### 28.0 CERTIFICATES

### CERTIFICATE of AUTHOR

### TRACY J. ARMSTRONG, P.GEO.

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

- 1. I am an independent geological consultant contracted by P&E Mining Consultants Inc. and have worked as a geologist continuously since my graduation from university in 1982.
- 2. This certificate applies to the technical report titled "Technical Report and Resource Estimate on the Hawk Ridge Project Northern Québec" (the "Technical Report"), with an effective date of November 30, 2013.
- 3. I am a graduate of Queen's University at Kingston, Ontario with a B.Sc. (HONS) in Geological Sciences (1982). I am a geological consultant currently licensed by the Order of Geologists of Québec (License 566), the Association of Professional Geoscientists of Ontario (License 1204) and the Association of Professional Engineers and Geoscientists of British Columbia, (Licence No. 34720).

I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101. This report is based on my personal review of information provided by the Issuer and on discussions with the Issuer's representatives. My relevant experience for the purpose of the Technical Report is:

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

- 4. I have not visited the Property that is the subject of this Technical Report.
- 5. I am responsible for authoring Sections 2-11, 13 and 15-27 as well as co-authoring Section 12 of this Technical Report along with those sections of the Summary pertaining thereto.
- 6. I am independent of issuer applying the test in Section 1.5 of NI 43-101.
- 7. I have had no prior involvement with the Property that is the subject of this Technical Report.
- 8. I have read NI 43-101 and Form 43-101F1 and the Technical Report has been prepared in compliance therewith.
- 9. As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: November 30, 2013 Signed Date: April 10, 2014

{SIGNED AND SEALED} [Tracy J. Armstrong]

Tracy J. Armstrong, P. Geo.

### CERTIFICATE OF QUALIFIED PERSON

### ANTOINE R. YASSA, P.GEO.

I, Antoine R. Yassa, P.Geo. residing at 3602 Rang des Cavaliers Rouyn-Noranda, Qc. J0Z 1Y2, do hereby certify that:

- 1. I am an independent geological consultant contracted by P&E Mining Consultants Inc.
- 2. This certificate applies to the technical report titled "Technical Report and Resource Estimate on the Hawk Ridge Project Northern Québec" (the "Technical Report"), with an effective date of November 30, 2013.
- 3. I am a graduate of Ottawa University at Ottawa, Ontario with a B.Sc (HONS) in Geological Sciences (1977) with more than 33 years of experience as a geologist. I am a geological consultant currently licensed by the Order of Geologists of Québec (License No 224) and by the Association of Professional Geoscientist of Ontario (License No 1890).

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

- My relevant experience for the purpose of the Technical Report is:
- Minex Geologist (Val d'Or), 3D Modeling (Timmins), Placer Dome ......1993-1995;

- Database Manager, Gemcom modeling and Resources Evaluation (Kiena Mine) .......2001-2003;
- Database Manager and Resources Evaluation at Julietta Mine, Bema Gold Corp......2003-2006;
- 4. I visited the Property that is the subject of that report on August 28-31, 2013.
- 5. I am responsible for authoring Sections 14, and co-authoring Section 12 along with those sections of the Summary pertaining thereto.
- 6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
- 7. I have had no prior involvement with the Property that is the subject of this Technical Report.
- 8. I have read NI 43-101 and Form 43-101F1 and 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: November 30, 2013 Signed Date: April 10, 2014

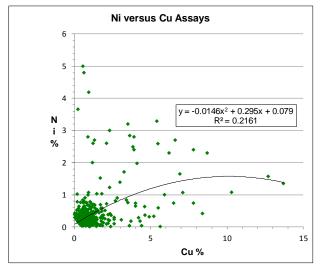
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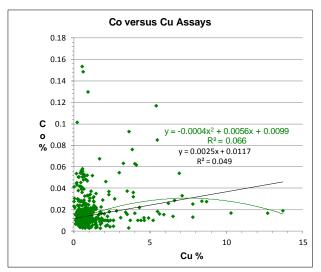
[Antoine Yassa]

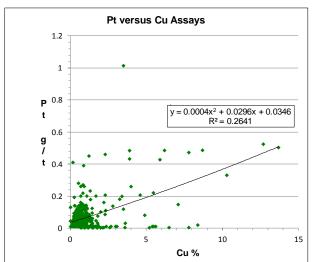
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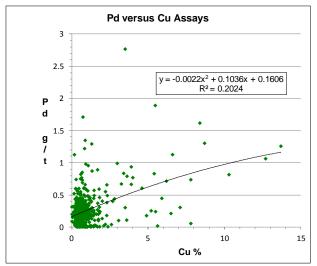
# APPENDIX I. METAL REGRESSIONS FOR ASSAYS WITH NSR $\geq$ \$25/TONNE

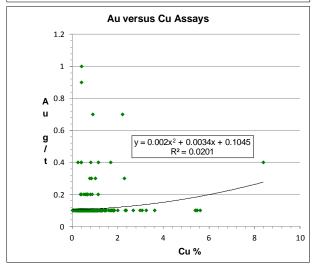
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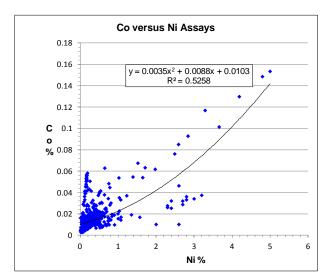


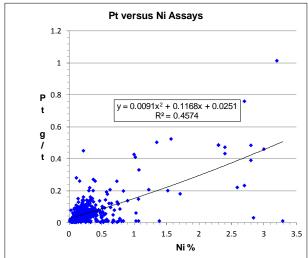


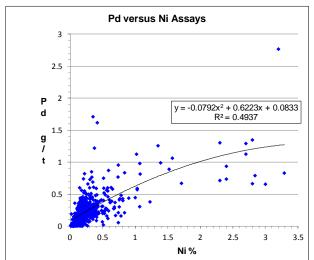


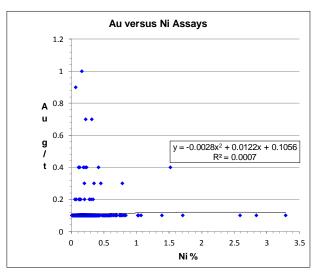




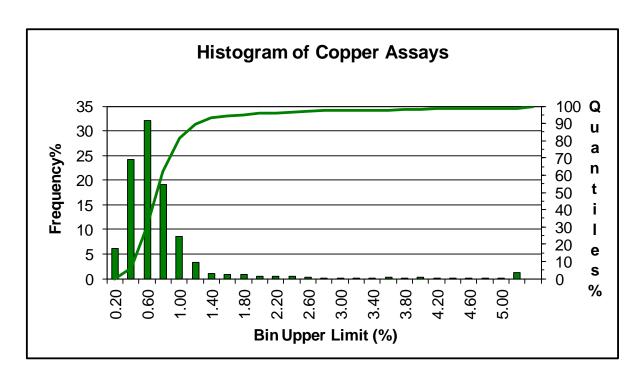


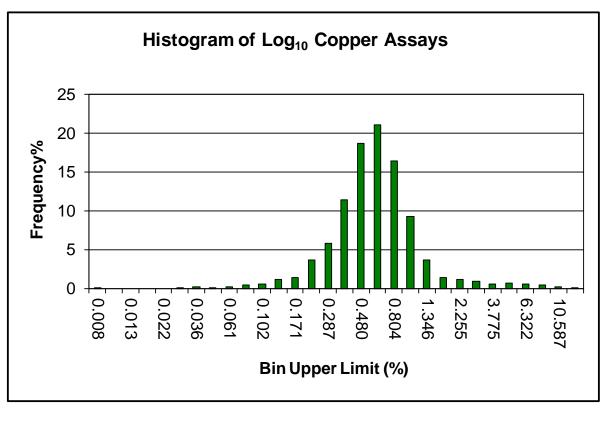






# APPENDIX II. HISTOGRAMS OF COPPER ASSAYS FOR ALL ZONES





Assays

for

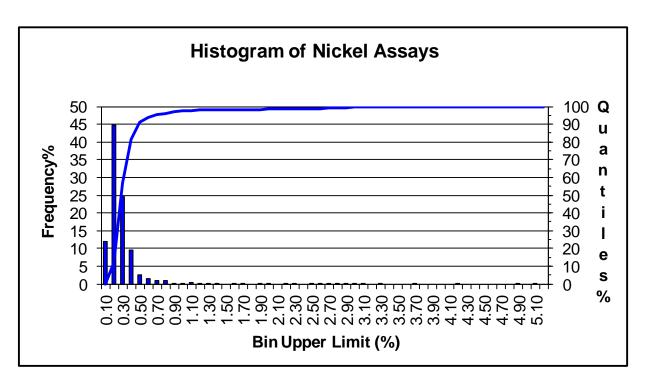
of

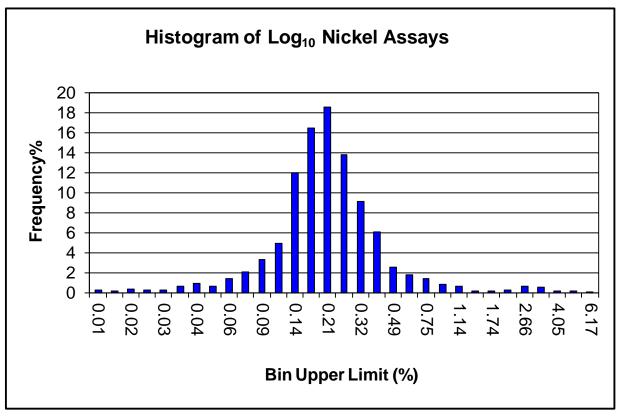
Nickel

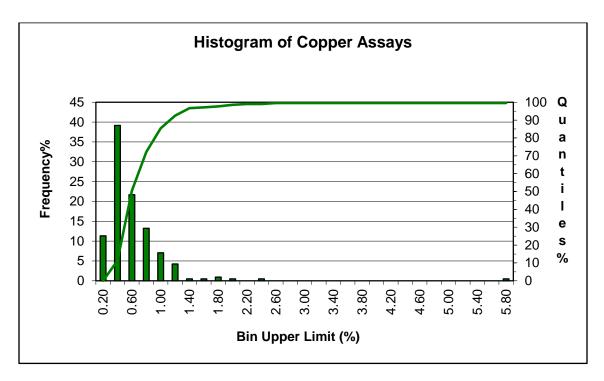
Histograms

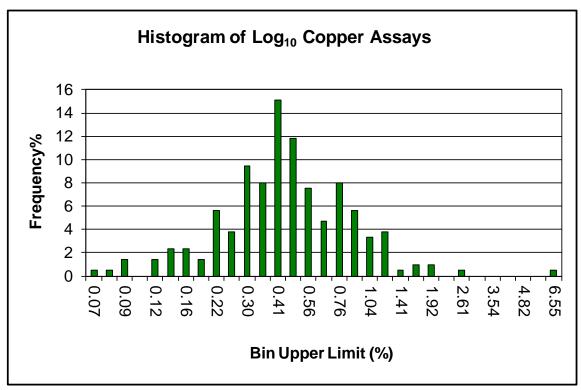
Zones

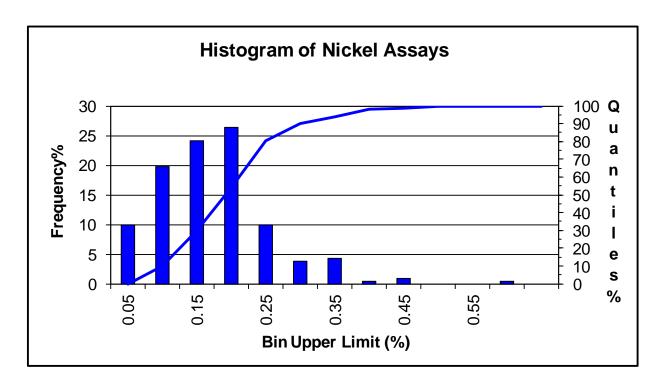
All

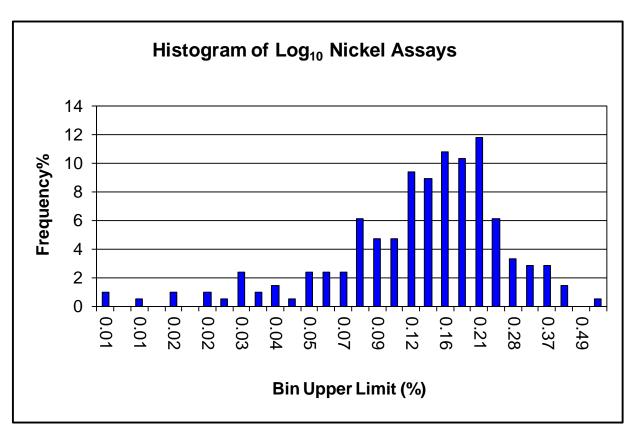




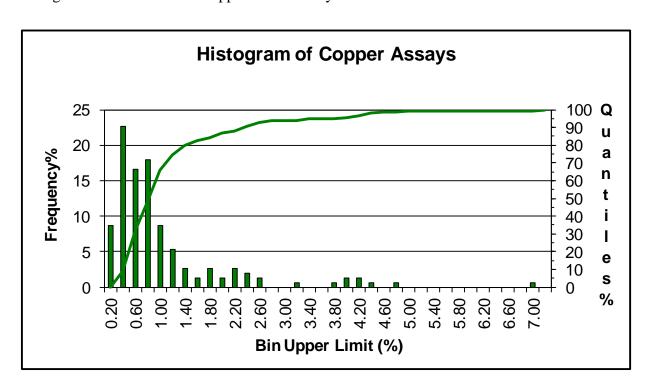


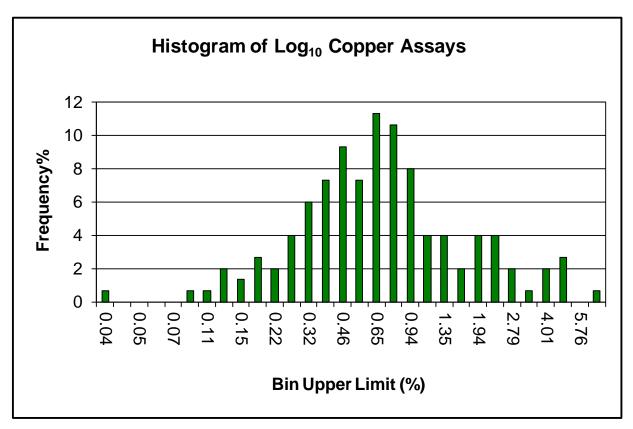




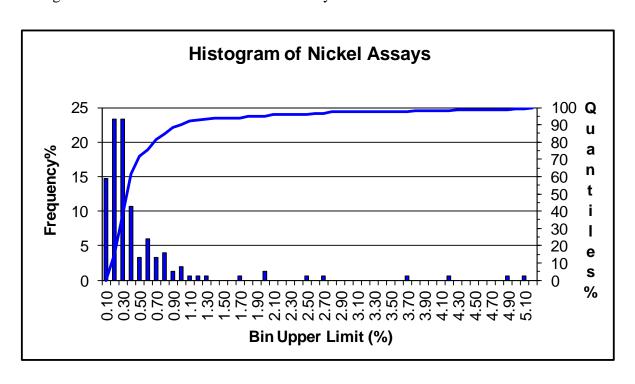


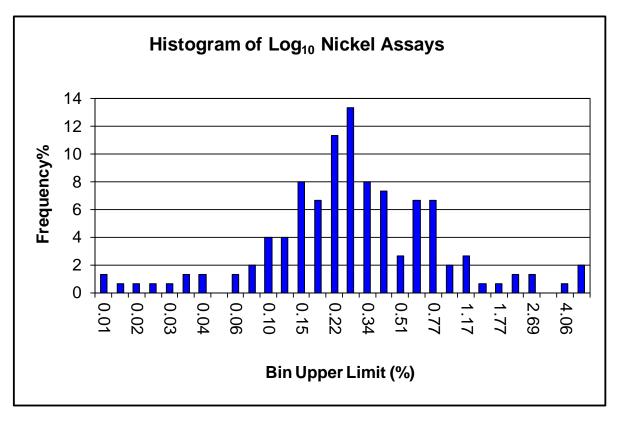
Histograms of Copper Assays for HA North Zone



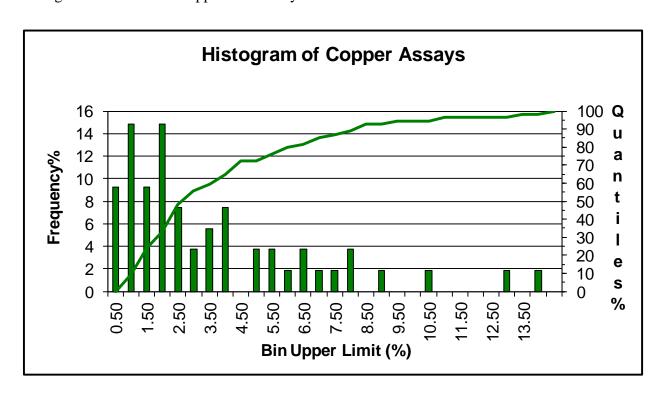


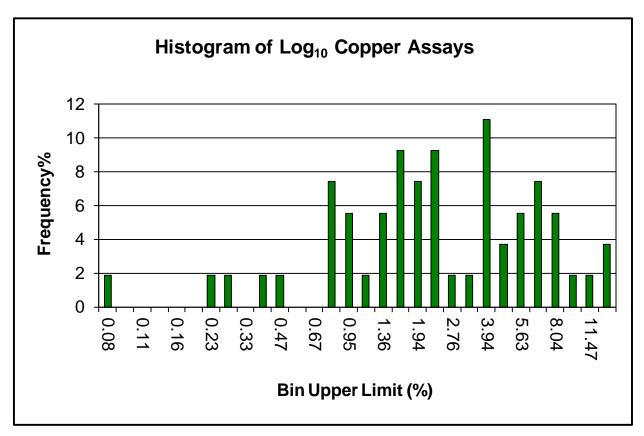
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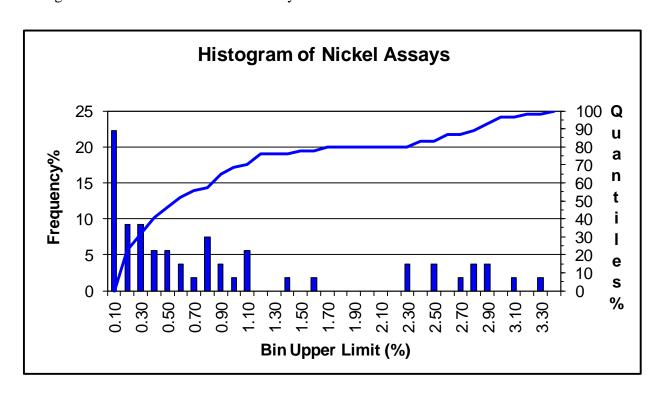


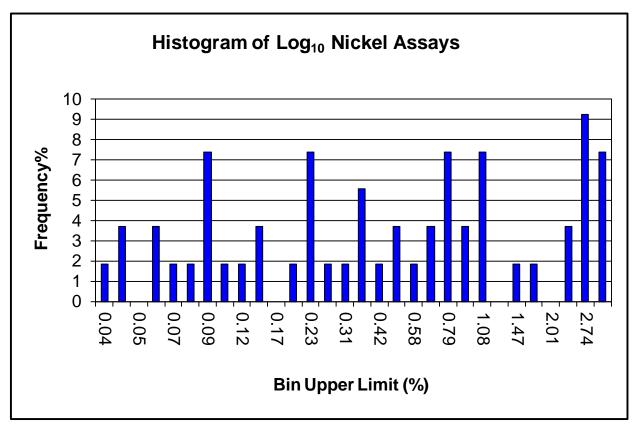
Histograms of Copper Assays for HA North Massive Zone



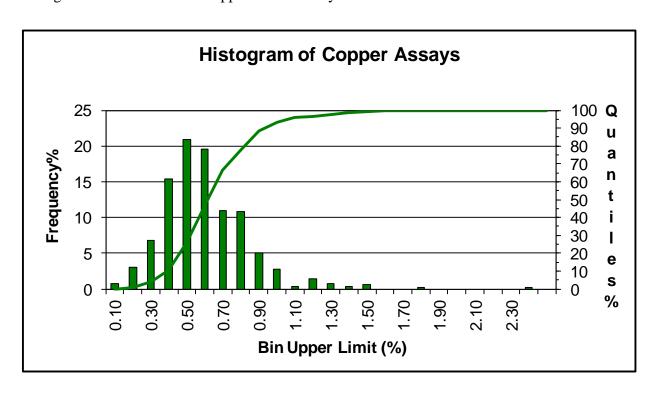


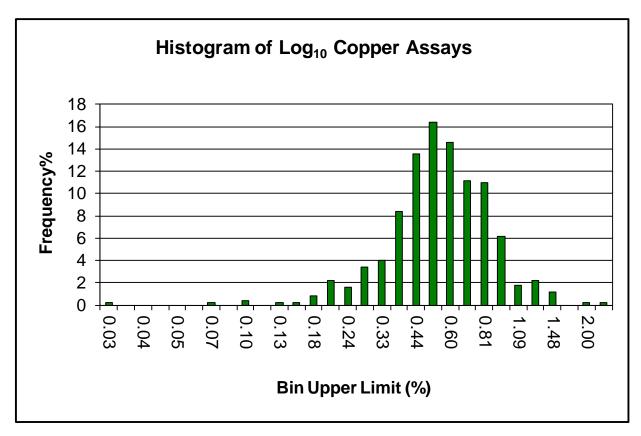
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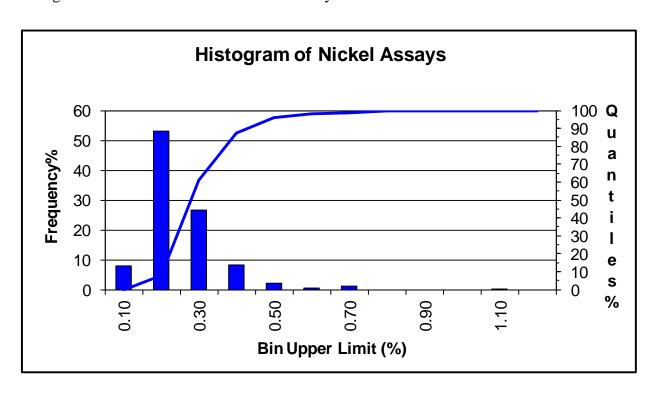


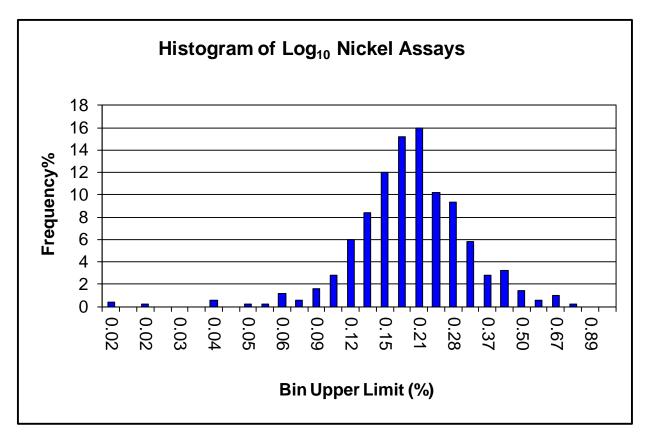
Histograms of Copper Assays for HA Main Zone



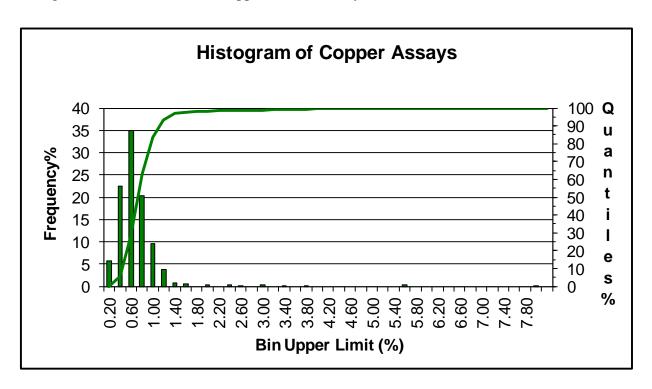


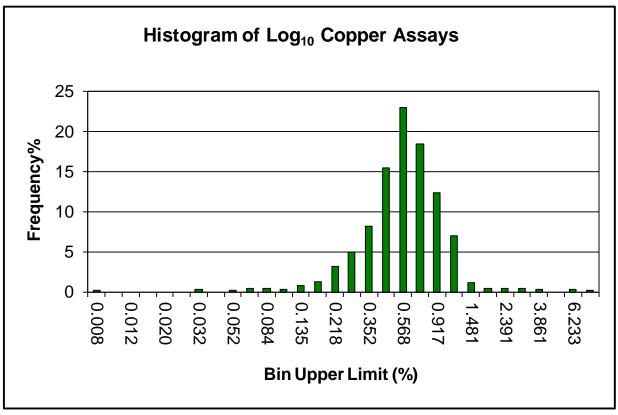
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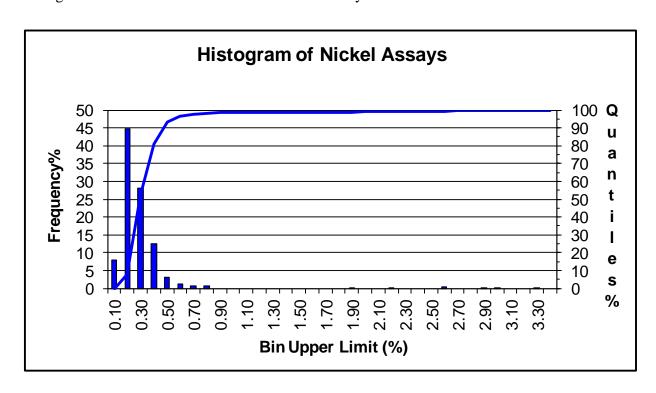


Histograms of Copper Assays for Gamma Zone





Histograms of Nickel Assays for Gamma Zone



# APPENDIX III. ASSAY STATISTICS

Falco7D Zone Resource Assay Statistics and 1 m Composite Statistics

Zone Assays Statistics	Length (m)	Cu%	Ni%	Co%	Pt ppm	Pd ppm	Au ppm
Count	212	212	212	212	212	212	212
Sum	141.33	-	-	-	-	-	-
Minimum	0.10	0.056	0.009	0.0029	0.0100	0.0050	0.1000
25th Percentile	0.50	0.289	0.087	0.0087	0.0160	0.0633	0.1000
Median	0.55	0.397	0.141	0.0128	0.0340	0.1295	0.1000
75th Percentile	1.00	0.645	0.194	0.0160	0.0515	0.1860	0.1000
Maximum	1.00	5.620	0.560	0.0530	0.2180	0.7660	0.4000
Average	0.67	0.515	0.149	0.0148	0.0383	0.1332	0.1061
Weighted Mean	-	0.469	0.155	0.0135	0.0405	0.1422	0.1072
Variance	0.09	0.231	0.007	0.000	0.001	0.010	0.001
Standard Deviation	0.29	0.480	0.085	0.0099	0.0279	0.1013	0.0352
Coefficient of Variation	0.44	0.932	0.568	0.6693	0.7294	0.7605	0.3313
Skewness	-0.09	6.299	1.113	2.1395	2.1003	1.6651	6.7927
Kurtosis	-1.36	60.682	2.629	4.5163	8.6116	7.3014	49.8117
97th Percentile	1.00	1.060	0.313	0.0404	0.0822	0.3014	0.1000
98th Percentile	1.00	1.586	0.349	0.0496	0.1083	0.3360	0.2000
99th Percentile	1.00	1.827	0.409	0.0505	0.1378	0.3699	0.2890
99.5th Percentile	1.00	2.340	0.421	0.0519	0.1418	0.5524	0.3945

Composite Statistics	Length (m)	Cu%	Ni%	Co%	Pt ppm	Pd ppm	Au ppm
Count	148	148	148	148	148	148	148
Sum	141.28	-	-	-	-	-	-
Minimum	0.30	0.081	0.026	0.0043	0.0100	0.0050	0.1000
25th Percentile	1.00	0.302	0.099	0.0091	0.0240	0.0886	0.1000
Median	1.00	0.407	0.150	0.0123	0.0383	0.1327	0.1000
75th Percentile	1.00	0.591	0.187	0.0150	0.0515	0.1865	0.1000
Maximum	1.00	1.442	0.493	0.0514	0.1312	0.4653	0.4000
Average	0.95	0.473	0.153	0.0136	0.0405	0.1401	0.1072
Weighted Mean	-	0.469	0.155	0.0135	0.0405	0.1422	0.1072
Variance	0.02	0.055	0.005	0.0001	0.0005	0.0066	0.0015
Standard Deviation	0.15	0.235	0.072	0.0074	0.0229	0.0813	0.0393
Coefficient of Variation	0.16	0.50	0.47	0.5479	0.5654	0.5803	0.3668
Skewness	-3.2	1.4	1.3	2.6125	1.1417	0.5329	6.3191
Kurtosis	8.9	2.6	3.4	8.8726	2.0508	0.9219	41.3784
97th Percentile	1.00	0.910	0.280	0.0265	0.0850	0.2833	0.1095
98th Percentile	1.00	1.076	0.338	0.0410	0.1062	0.3098	0.2060
99th Percentile	1.00	1.258	0.373	0.0457	0.1128	0.3319	0.3475
99.5th Percentile	1.00	1.383	0.421	0.0475	0.1201	0.3717	0.3923

Hopes Advance North Zone Resource Assay Statistics and 3 m Composite Statistics

Zone Assays Statistics	Length (m)	Cu%	Ni%	Co%	Pt ppm	Pd ppm	Au ppm
Count	150	150	150	150	150	150	150
Sum	209.26	-	-	-	-	-	-
Minimum	0.20	0.030	0.010	0.0044	0.0020	0.0200	0.1000
25th Percentile	0.60	0.371	0.142	0.0100	0.0359	0.1637	0.1048
Median	1.00	0.619	0.245	0.0100	0.0481	0.2279	0.1062
75th Percentile	1.50	1.000	0.483	0.0119	0.0639	0.3088	0.1093
Maximum	33.22	6.910	5.000	0.1535	0.8366	1.3003	0.2235
Average	1.40	0.944	0.479	0.0160	0.0778	0.3040	0.1103
Weighted Mean (LxSG)	-	0.862	0.422	0.0138	0.0727	0.2890	0.1097
Variance	7.30	1.084	0.602	0.000	0.015	0.064	0.000
Standard Deviation	2.70	1.041	0.776	0.0218	0.1223	0.2526	0.0165
Coefficient of Variation	1.94	1.102	1.620	1.3648	1.5713	0.8310	0.1498
Skewness	11.03	2.751	4.039	4.8474	4.4787	2.4830	4.0695
Kurtosis	129.71	9.186	18.008	24.6782	21.8379	6.1210	20.5448
97th Percentile	2.35	3.430	1.827	0.0462	0.2692	0.9929	0.1458
98th Percentile	4.04	4.204	3.671	0.1020	0.5765	1.2154	0.1583
99th Percentile	4.65	4.512	4.501	0.1394	0.7361	1.2733	0.1818
99.5th Percentile	12.20	5.204	4.851	0.1498	0.8059	1.3001	0.2060

Composite Statistics	Length (m) <sup>1</sup>	Cu%	Ni%	Co%	Pt ppm	Pd ppm	Au ppm
Count	79	79	79	79	79	79	79
Sum	222.57	-	-	-	-	-	-
Minimum	1.00	0.000	0.000	0.0000	0.0000	0.0000	0.0000
25th Percentile	3.00	0.420	0.110	0.0100	0.0381	0.1508	0.1057
Median	3.00	0.603	0.194	0.0103	0.0461	0.1971	0.1065
75th Percentile	3.00	0.933	0.387	0.0115	0.0637	0.2853	0.1097
Maximum	3.00	4.400	3.418	0.1043	0.5548	1.1640	0.1582
Average	2.82	0.843	0.365	0.0127	0.0647	0.2639	0.1070
Weighted Mean (LxSG)	-	0.859	0.423	0.0138	0.0730	0.2897	0.1097
Variance	0.22	0.606	0.269	0.0001	0.0060	0.0393	0.0004
Standard Deviation	0.47	0.779	0.518	0.0113	0.0772	0.1982	0.0197
Coefficient of Variation	0.17	0.92	1.42	0.8890	1.1944	0.7510	0.1838
Skewness	-2.7	2.3	4.0	7.0075	4.5538	2.5820	-3.7374
Kurtosis	6.6	6.2	18.8	55.9338	24.0086	8.2052	21.4415
97th Percentile	3.00	2.305	0.844	0.0193	0.1316	0.5767	0.1265
98th Percentile	3.00	3.184	2.191	0.0311	0.3317	0.9653	0.1390
99th Percentile	3.00	3.535	2.776	0.0498	0.4260	1.0940	0.1480
99.5th Percentile	3.00	3.968	3.097	0.0770	0.4904	1.1290	0.1531

Notes: 1) Composites total length exceeds assays total length due to incorporation of implicit missing assay intervals (dilution) not accounted for in the assay table.

Hopes Advance Massive Sulphide Zone Resource Assay Statistics and 3 m Composite Statistics

Zone Assays Statistics	Length (m)	Cu%	Ni%	Co%	Pt ppm	Pd ppm	Au ppm
Count	54	54	54	54	54	54	54
Sum	62.21	-	-	-	-	-	-
Minimum	0.30	0.066	0.030	0.0027	0.0020	0.0130	0.1000
25th Percentile	0.91	1.143	0.131	0.0062	0.0030	0.0683	0.1091
Median	1.00	2.100	0.463	0.0122	0.0475	0.2565	0.1205
75th Percentile	1.00	4.825	1.074	0.0190	0.3123	0.7015	0.1675
Maximum	6.40	13.700	3.200	0.0462	1.0140	2.7670	0.5265
Average	1.15	3.358	0.884	0.0152	0.1696	0.4471	0.1608
Weighted Mean (LxSG)	-	3.351	0.856	0.0145	0.1598	0.4339	0.1591
Variance	1.00	9.667	0.942	0.000	0.052	0.264	0.008
Standard Deviation	1.00	3.109	0.971	0.0107	0.2279	0.5140	0.0913
Coefficient of Variation	0.87	0.926	1.098	0.7054	1.3439	1.1495	0.5680
Skewness	4.44	1.517	1.149	0.9912	1.5731	2.0827	2.4854
Kurtosis	20.50	2.157	-	0.1521	2.3811	6.2660	6.2846
97th Percentile	1.93	9.260	2.800	0.0347	0.5104	1.2959	0.3686
98th Percentile	5.45	12.556	2.988	0.0372	0.7458	1.3453	0.4661
99th Percentile	6.00	13.170	3.094	0.0415	0.8794	2.0149	0.4967
99.5th Percentile	6.20	13.435	3.147	0.0438	0.9467	2.3910	0.5116

Composite Statistics	Length (m)1	Cu%	Ni%	Co%	Pt ppm	Pd ppm	Au ppm
Count	25	25	25	25	25	25	25
Sum	63.04	-	-	-	-	-	-
Minimum	0.40	0.325	0.047	0.0034	0.0030	0.0250	0.1000
25th Percentile	2.41	1.522	0.211	0.0062	0.0100	0.0639	0.1058
Median	3.00	1.915	0.440	0.0104	0.0147	0.2115	0.1205
75th Percentile	3.00	3.732	0.763	0.0182	0.1359	0.4887	0.1607
Maximum	3.00	11.423	2.781	0.0338	0.5732	1.6787	0.4173
Average	2.52	2.865	0.725	0.0131	0.1268	0.3654	0.1473
Weighted Mean (LxSG)	-	3.371	0.864	0.0146	0.1601	0.4358	0.1592
Variance	0.73	6.777	0.578	0.0001	0.0329	0.1594	0.0048
Standard Deviation	0.86	2.603	0.760	0.0081	0.1813	0.3993	0.0694
Coefficient of Variation	0.34	0.91	1.05	0.6153	1.4302	1.0929	0.4708
Skewness	-1.6	1.8	1.7	1.0816	1.6089	1.7841	2.7375
Kurtosis	1.0	3.8	2.2	0.7906	1.2425	3.4339	8.7032
97th Percentile	3.00	7.903	2.553	0.0303	0.5217	1.0643	0.2635
98th Percentile	3.00	9.997	2.735	0.0329	0.5514	1.3893	0.3518
99th Percentile	3.00	10.710	2.758	0.0334	0.5623	1.5340	0.3845
99.5th Percentile	3.00	11.066	2.769	0.0336	0.5677	1.6064	0.4009

Notes: 1) Composites total length exceeds assays total length due to incorporation of implicit missing assay intervals (dilution) not accounted for in the assay table.

Hopes Advance Main Zone Resource Assay Statistics and 3 m Composite Statistics

Zone Assays Statistics	Length (m)	Cu%	Ni%	Co%	Pt ppm	Pd ppm	Au ppm
Count	501	501	501	501	501	501	501
Sum	951.09	-	-	-	-	-	-
Minimum	0.26	0.025	0.013	0.0026	0.0100	0.0050	0.1000
25th Percentile	1.00	0.397	0.138	0.0100	0.0402	0.1641	0.1000
Median	1.44	0.509	0.181	0.0100	0.0462	0.1916	0.1063
75th Percentile	2.84	0.672	0.238	0.0109	0.0550	0.2276	0.1071
Maximum	61.57	2.330	1.030	0.0377	0.4500	0.6600	0.7000
Average	1.90	0.550	0.202	0.0106	0.0508	0.2029	0.1060
Weighted Mean (LxSG)	-	0.563	0.197	0.0107	0.0494	0.2009	0.1066
Variance	12.00	0.061	0.011	0.000	0.001	0.005	0.001
Standard Deviation	3.46	0.246	0.105	0.0035	0.0294	0.0713	0.0268
Coefficient of Variation	1.82	0.448	0.521	0.3330	0.5789	0.3512	0.2527
Skewness	14.83	1.686	2.372	2.5250	7.6331	1.9175	21.8430
Kurtosis	235.62	6.928	10.725	15.1267	84.3513	8.5467	484.9454
97th Percentile	2.97	0.945	0.379	0.0162	0.0839	0.3111	0.1087
98th Percentile	3.00	1.230	0.487	0.0192	0.1000	0.3900	0.1097
99th Percentile	3.07	1.330	0.639	0.0202	0.1400	0.4512	0.1107
99.5th Percentile	4.92	1.450	0.648	0.0290	0.2600	0.5750	0.1117

Composite Statistics	Length (m)1	Cu%	Ni%	Co%	Pt ppm	Pd ppm	Au ppm
Count	323	323	323	323	323	323	323
Sum	953.44	-	-	-	-	-	-
Minimum	0.76	0.000	0.000	0.0000	0.0000	0.0000	0.0000
25th Percentile	3.00	0.436	0.150	0.0100	0.0427	0.1741	0.1060
Median	3.00	0.560	0.177	0.0100	0.0462	0.1918	0.1069
75th Percentile	3.00	0.670	0.221	0.0117	0.0518	0.2175	0.1075
Maximum	3.00	1.305	0.581	0.0217	0.2643	0.4484	0.2990
Average	2.95	0.557	0.194	0.0106	0.0491	0.1994	0.1062
Weighted Mean (LxSG)	-	0.562	0.196	0.0107	0.0494	0.2008	0.1066
Variance	0.07	0.030	0.006	0.0000	0.0003	0.0025	0.0002
Standard Deviation	0.27	0.174	0.077	0.0023	0.0179	0.0497	0.0125
Coefficient of Variation	0.09	0.31	0.40	0.2132	0.3656	0.2491	0.1181
Skewness	-6.2	0.4	1.5	0.2825	6.5103	0.9579	9.3743
Kurtosis	40.0	0.9	3.8	5.0163	69.7032	4.5563	188.2901
97th Percentile	3.00	0.870	0.346	0.0149	0.0677	0.2891	0.1086
98th Percentile	3.00	0.950	0.426	0.0166	0.0829	0.3388	0.1095
99th Percentile	3.00	1.010	0.466	0.0175	0.0942	0.3621	0.1100
99.5th Percentile	3.00	1.028	0.484	0.0186	0.1386	0.3833	0.1111

Notes: 1) Composites total length exceeds assays total length due to incorporation of implicit missing assay intervals (dilution) not accounted for in the assay table.

Gamma Zone Resource Assay Statistics and 3 m Composite Statistics

Zone Assays Statistics	Length (m)	Cu%	Ni%	Co%	Pt ppm	Pd ppm	Au ppm
Count	638	638	638	638	638	638	638
Sum	721.47	-	-	-	-	-	-
Minimum	0.18	0.006	0.020	0.0024	0.0100	0.0100	0.1000
25th Percentile	1.00	0.385	0.146	0.0097	0.0400	0.1600	0.1000
Median	1.00	0.522	0.195	0.0119	0.0490	0.2018	0.1000
75th Percentile	1.45	0.695	0.265	0.0129	0.0615	0.2700	0.1066
Maximum	3.55	7.920	3.290	0.1169	0.4471	1.8900	0.4000
Average	1.13	0.602	0.243	0.0120	0.0555	0.2387	0.1050
Weighted Mean (LxSG)	-	0.634	0.258	0.0125	0.0576	0.2442	0.1061
Variance	0.19	0.284	0.076	0.0001	0.0013	0.0282	0.0005
Standard Deviation	0.43	0.533	0.276	0.0077	0.0359	0.1678	0.0219
Coefficient of Variation	0.38	0.884	1.132	0.641	0.647	0.703	0.209
Skewness	1.00	7.407	7.640	8.293	5.093	4.443	10.676
Kurtosis	3.65	79.496	68.571	91.584	40.449	30.327	125.497
97th Percentile	1.55	1.082	0.426	0.0161	0.1010	0.4558	0.1095
98th Percentile	2.14	1.518	0.688	0.0197	0.1400	0.7604	0.1126
99th Percentile	2.50	2.727	1.451	0.0397	0.2000	0.9588	0.1775
99.5th Percentile	2.95	3.579	2.573	0.064	0.271	1.206	0.292

Composite Statistics	Length (m)1	Cu%	Ni%	Co%	Pt ppm	Pd ppm	Au ppm
Count	250	250	250	0.0000	250	250	250
Sum	724.28	-	-	0.0110	-	-	-
Minimum	0.80	0.000	0.000	0.0121	0.0000	0.0000	0.0000
25th Percentile	3.00	0.424	0.157	0.0130	0.0430	0.1733	0.1000
Median	3.00	0.532	0.202	0.0683	0.0493	0.2067	0.1056
75th Percentile	3.00	0.697	0.268	0.0122	0.0633	0.2698	0.1072
Maximum	3.00	5.833	2.482	0.0000	0.3723	1.1282	0.2421
Average	2.90	0.611	0.247	0.0110	0.0561	0.2370	0.1045
Weighted Mean (LxSG)	-	0.638	0.260	0.0125	0.0578	0.2451	0.1061
Variance	0.14	0.227	0.057	0.0000	0.0010	0.0151	0.0003
Standard Deviation	0.38	0.477	0.239	0.0058	0.0316	0.1229	0.0183
Coefficient of Variation	0.13	0.779	0.967	0.4772	0.5639	0.5186	0.1750
Skewness	-4.0	6.704	6.194	5.5689	5.5024	2.9921	1.1367
Kurtosis	16.2	63.150	46.929	46.7115	45.9387	14.9669	32.1582
97th Percentile	3.00	1.033	0.418	0.0153	0.0883	0.4445	0.1105
98th Percentile	3.00	1.572	0.693	0.0246	0.1143	0.6313	0.1309
99th Percentile	3.00	2.561	1.413	0.0350	0.1961	0.7225	0.1888
99.5th Percentile	3.00	3.224	1.906	0.0501	0.2306	0.8315	0.2088

Notes: 1) Composites total length exceeds assays total length due to incorporation of implicit missing assay intervals (dilution) not accounted for in the assay table.