

Report to:



**PROPHECY PLATINUM CORP.**

**Technical Report and Resource Estimate on the  
Wellgreen Platinum-Palladium-Nickel-Copper Project,  
Yukon, Canada**

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# TECHNICAL REPORT AND RESOURCE ESTIMATE ON THE WELLGREEN PLATINUM-PALLADIUM- NICKEL-COPPER PROJECT, YUKON, CANADA

EFFECTIVE DATE: JULY 21, 2011

Prepared by Todd McCracken, P.Geo.

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## REVISION HISTORY

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## GLOSSARY

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### UNITS OF MEASURE

Above mean sea level.....	amsl
Acre .....	ac
Ampere .....	A
Annum (year) .....	a
Billion .....	B

Billion tonnes.....	Bt
Billion years ago.....	Ga
British thermal unit .....	BTU
Centimetre .....	cm
Cubic centimetre .....	cm <sup>3</sup>
Cubic feet per minute .....	cfm
Cubic feet per second .....	ft <sup>3</sup> /s
Cubic foot.....	ft <sup>3</sup>
Cubic inch .....	in <sup>3</sup>
Cubic metre.....	m <sup>3</sup>
Cubic yard.....	yd <sup>3</sup>
Coefficients of Variation .....	CVs
Day .....	d
Days per week .....	d/wk
Days per year (annum) .....	d/a
Dead weight tonnes .....	DWT
Decibel adjusted .....	dBa
Decibel.....	dB
Degree .....	°
Degrees Celsius.....	°C
Diameter .....	ø
Dollar (American) .....	US\$
Dollar (Canadian).....	Cdn\$
Dry metric ton.....	dmt
Foot.....	ft
Gallon .....	gal
Gallons per minute (US) .....	gpm
Gigajoule.....	GJ
Gigapascal .....	GPa
Gigawatt.....	GW
Gram .....	g
Grams per litre .....	g/L
Grams per tonne .....	g/t
Greater than.....	>
Hectare (10,000 m <sup>2</sup> ).....	ha
Hertz .....	Hz
Horsepower.....	hp
Hour .....	h
Hours per day .....	h/d
Hours per week .....	h/wk
Hours per year .....	h/a
Inch .....	"
Kilo (thousand).....	k
Kilogram.....	kg
Kilograms per cubic metre .....	kg/m <sup>3</sup>
Kilograms per hour.....	kg/h

Kilograms per square metre.....	kg/m <sup>2</sup>
Kilometre.....	km
Kilometres per hour.....	km/h
Kilopascal.....	kPa
Kilotonne.....	kt
Kilovolt.....	kV
Kilovolt-ampere.....	kVA
Kilovolts.....	kV
Kilowatt.....	kW
Kilowatt hour.....	kWh
Kilowatt hours per tonne (metric ton).....	kWh/t
Kilowatt hours per year.....	kWh/a
Less than.....	<
Litre.....	L
Litres per minute.....	L/m
Megabytes per second.....	Mb/s
Megapascal.....	MPa
Megavolt-ampere.....	MVA
Megawatt.....	MW
Metre.....	m
Metres above sea level.....	masl
Metres Baltic sea level.....	mbsl
Metres per minute.....	m/min
Metres per second.....	m/s
Metric ton (tonne).....	t
Microns.....	µm
Milligram.....	mg
Milligrams per litre.....	mg/L
Millilitre.....	mL
Millimetre.....	mm
Million.....	M
Million bank cubic metres.....	Mbm <sup>3</sup>
Million bank cubic metres per annum.....	Mbm <sup>3</sup> /a
Million tonnes.....	Mt
Minute (plane angle).....	'
Minute (time).....	min
Month.....	mo
Ounce.....	oz
Pascal.....	Pa
Centipoise.....	mPa·s
Parts per million.....	ppm
Parts per billion.....	ppb
Percent.....	%
Pound(s).....	lb
Pounds per square inch.....	psi
Revolutions per minute.....	rpm

Second (plane angle).....	"
Second (time).....	s
Specific gravity.....	SG
Square centimetre.....	cm <sup>2</sup>
Square foot.....	ft <sup>2</sup>
Square inch.....	in <sup>2</sup>
Square kilometre.....	km <sup>2</sup>
Square metre.....	m <sup>2</sup>
Thousand tonnes.....	kt
Three Dimensional.....	3D
Three Dimensional Model.....	3DM
Tonne (1,000 kg).....	t
Tonnes per day.....	t/d
Tonnes per hour.....	t/h
Tonnes per year.....	t/a
Tonnes seconds per hour metre cubed.....	ts/hm <sup>3</sup>
Volt.....	V
Week.....	wk
Weight/weight.....	w/w
Wet metric ton.....	wmt
Year (annum).....	a

## 1.0 SUMMARY

---

The Wellgreen Property (the Property) is a platinum group metal (PGM)-rich, nickel (Ni)-copper (Cu) project located in the south western Yukon Territory, approximately 317 km northwest of Whitehorse. The Property consists of two groups of claims; the Arch Joint Venture Claims and the Northern Platinum Claims. These total 22.1 km<sup>2</sup> located at approximate latitude: 61°28'N, longitude: 139°32'W. The claims are currently owned 100% by Prophecy Platinum Corp. (Prophecy Platinum). Prophecy Platinum was created through an agreement between Prophecy Resources Corp. (Prophecy Resources) and Pacific Coast Nickel Corp. (Pacific Coast), whereby Pacific Coast will acquire a 100% interest in the Wellgreen Property from Prophecy Resources and Pacific Coast was renamed Prophecy Platinum.

The Property saw historical production between 1972 and 1973 from an underground operation run by Hudson-Yukon Mining Company Ltd. (Hudson Yukon), a subsidiary of Hudson Bay Mining & Smelting Ltd. The Wellgreen mine produced a total of 171,652 tons assaying 2.23% Ni, 1.39% Cu, 0.065 oz platinum (Pt)/ton and 0.073% cobalt (Co).

Wardrop, a Tetra Tech Company, (Wardrop) has been commissioned to update an existing National Instrument 43-101 (NI 43-101) report with a new resource estimate, which was commissioned in June 2010 by Prophecy Platinum. This report has been prepared in accordance with NI 43-101, Form 43-101F1 and Companion Policy 43-101CP.

### 1.1 GEOLOGY

The Property is contained within the Kluane Ultramafic Belt, which is situated within the Wrangellia Terrane, a complex and variable terrane that extends from Vancouver Island to central Alaska. The Wrangellia Terrane is characterized by widespread exposure of Triassic flood basalts and complementary intrusive rocks. The ultramafic intrusives of the Wrangellia Terrane represents one of the largest tracts of Ni-Cu-PGE mineralization, second in size in North America to the Proterozoic Circum-Superior Belt (Thompson to Raglan)

The Wellgreen deposit occurs along the lower margin of an Upper Triassic ultramafic-mafic intrusion known as the Quill Creek Complex. The Quill Creek Complex is 20 km long and is thought to have intruded along the contact between the Station Creek and Hasen Creek formations. The Station Creek formation consists of light to medium green volcanic breccia, tuffs, and tuffaceous sandstones. The Hasen Creek formation consists of a range of metasediments, including greywacke, thinly-bedded siltstone turbidites and limestones, together with volcanoclastics and tuffs.



The main body of the Quill Creek Complex is 4.2 km long, up to 700 m wide, and is located on the Northern Platinum claim group of the Property. A smaller, similar intrusive is located along strike to the northwest and southeast. The Quill Creek Complex consists of a main intrusion and an associated group of upright to locally overturned, steeply south dipping sills. These associated sills may be remnants of the main intrusion separated from the main mass by folding and shearing. The intrusions are crudely layered, variably serpentized, and deformed. The sills locally have a lower gabbroic margin adjacent to a chilled contact with Paleozoic rocks. Mafic-rich skarns occur in the floor rocks adjacent to the marginal facies gabbro, particularly where the metasediment host includes limestone or calcareous rocks. The intrusives are zoned upwards away from the lower gabbroic zone through zones of clinopyroxenite, peridotite, and dunite.

Mineralization within the Quill Creek Complex has delineated into four zones of gabbro-hosted massive and disseminated mineralization known respectively as the East Zone, West Zone, Central Zone, and North Zone. Mineralization is typical of gabbro-associated nickel deposits such as Noril'sk, Russia; Stillwater, Montana; Duluth, Minnesota; and Sudbury, Ontario.

Numerous operators have worked on the Project since the initial discovery in 1952. Completed work includes 183 diamond surface drill holes, underground development and 519 holes underground diamond drill holes, together with mapping, trenching and geophysics. The majority of the work focused on the East Zone, which has underground development on six levels.

## 1.2 CONCLUSION

The Project database is relatively up to date, and includes the results of the 2010 drilling program. A previous owner, Coronation Minerals (Coronation), carried out the most recent twin-hole drilling program and this was generally successful in confirming historic results. As a result, Wardrop is of the opinion that using the historic drilling is appropriate for any future resource estimate, although some additional analysis would be required before a definitive conclusion could be reached.

The Prophecy Platinum drilling confirmed the presences of a substantial mineralized system located in the hanging wall of the semi-massive sulphide pods previously targeted as the Wellgreen Deposit, thus defining a anew geological target previously untested at Wellgreen.

The resource estimation at a 0.4% Nieq cut-off resulted in an Indicated Resource of 14.3 million tonnes at grades of 0.69% Ni, 0.62% Cu, and 2.25 g/t Pt+Pd+Au. An additional Inferred Resource of 289.3 million tonnes at grades of 0.38% Ni, 0.35% Cu, and 1.18 g/t Pt+Pd+Au. Table 1.1 summarizes the result of the resource estimate.

**Table 1.1 Wellgreen Resource Estimate Summary**

Nieq Cut-off	Category	Zone	Tonnes	Nieq%	Ni (%)	Cu (%)	Co (%)	Au (g/t)	Pt (g/t)	Pd (g/t)
0.40	Indicated	East	14,308,000	1.36	0.69	0.62	0.05	0.52	0.99	0.74
<b>Total</b>	<b>Indicated</b>		<b>14,308,000</b>	<b>1.36</b>	<b>0.69</b>	<b>0.62</b>	<b>0.05</b>	<b>0.52</b>	<b>0.99</b>	<b>0.74</b>
0.40	Inferred	East	219,327,000	0.76	0.39	0.34	0.03	0.26	0.54	0.45
0.40	Inferred	West	69,919,000	0.67	0.34	0.38	0.02	0.12	0.50	0.34
<b>Total</b>	<b>Inferred</b>		<b>289,246,000</b>	<b>0.74</b>	<b>0.38</b>	<b>0.35</b>	<b>0.03</b>	<b>0.23</b>	<b>0.53</b>	<b>0.42</b>

Previous mining operations and production have concentrated on the gabbroic footwall of the ultramafic body for semi-massive nickel sulphides. Recent exploration has concentrated on the evaluation of the potential of the Property to host larger, but lower grade, tonnages of PGM-enriched Ni-Cu mineralization for potential open pit extraction. Higher-grade pockets of semi-massive sulphides (>1% Cu and Ni and >2 g/t Pt), as historically mined by Hudson Yukon, are expected to continue to be located through exploration efforts. These higher grade pockets, although not continuous, could be targeted in a potential open pit operation in order to accelerate the project's pay back.

A large portion of the drill data set does not include Pt, Pd assay as well as the rhodium (Rh), ruthenium (Ru), rhenium (Re), iridium (Ir), and osmium (Os), which would potentially enhance any sort of economic evaluation of the Property.

Wardrop believes further exploration is warranted to advance the project towards a preliminary economic assessment (PEA).

### 1.3 RECOMMENDATIONS

Two separate programs are proposed to further exploration of the Project. These are independent of each other and can be run concurrently as the results of each program will not affect the work proposed, or decision to proceed with either.

#### 1.3.1 PHASE 1 - WELLGREEN EXPANSION

An aggressive program of diamond drilling is proposed for the Wellgreen deposit in order to expand the quantity of the mineral inventory.

The program would entail drilling 18 HQ diamond drill holes on thirteen 200 m to 400 m spaced fences, with each fence having one or two drill holes to cross the stratigraphy. This would make it possible to extend the strike of the Wellgreen deposit by an additional 2,200 m to the east as well as test the hanging wall environment.

The proposed budget to complete the expansion program is \$3.2 million.

### 1.3.2 PHASE 2 - QUILL CREEK DELINEATION

A large-scale reconnaissance drilling campaign is recommended to delineate the extent of the mineralization within the Quill Creek Ultramafic Complex on the Property, as outlined by the existing airborne magnetic survey.

Drill fences at 400 to 500 m-spacing should test the full width of the Quill Creek Complex both to the northwest and southeast along strike. The target is to delineate the mineralizing system in order to determine the overall size of the system. Down-hole geophysics in the form of Induced Polarization (IP) (good for disseminated sulphides) and Borehole Electromagnetic (BHEM) (designed for stringer to massive sulphides) should be conducted to provide information on the potential continuity of the mineralized system.

The collection of an additional 500 samples for re-analysis of Coronation and Northern Platinum drill pulps for Rh, Ir, Os and Ru in order to continue to build the database is recommended.

The proposed budget to complete the diamond drilling, geophysics, and re-assaying program is \$4.5 million.

## 2.0 INTRODUCTION

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The Property is a PGM-rich, Ni-Cu project located approximately 317 km northwest of Whitehorse in south western Yukon. The claims are currently owned 100% by Prophecy Platinum.

Prophecy Platinum has entered into an agreement with Pacific Coast, whereby Pacific Coast will acquire a 100% interest in the Wellgreen project from Prophecy Platinum. The Property is a well-known Ni-Cu camp within Yukon and the Wellgreen Mine produced a total of 171,652 tons assaying 2.23% Ni, 1.39% Cu, 0.065 oz Pt/ton and 0.073% Co between 1972 and 1973 by Hudson-Yukon, a subsidiary of Hudson Bay Mining & Smelting (HBM&S).

Two main zones of mineralization have been outlined on the Property, the East Zone and the West Zone. The highest grade mineralization in the East Zone occurs in massive sulphide pods and lenses along the base of the ultramafic body, whereas the best grades in the West Zone are found in inter-digitated gabbro and clinopyroxenite. The East and West Zones may in fact join in an area called the Central Zone, intersected by drill holes.

In June 2010, Wardrop was commissioned by Prophecy Platinum to complete a technical report on the Wellgreen project.

The object of the report is to:

- prepare a technical report on the project in accordance with NI 43-101, summarizing land tenures, exploration history, and drilling
- generate a resource estimate on the Wellgreen deposit
- provide recommendations and budget for additional work on the Property.

This report has been prepared in accordance with NI 43-101, Form 43-101F1 and Companion Policy 43-101CP.

All data reviewed for the report was provided by Prophecy Platinum in digital format, with access to paper reports and logs when requested. The work completed by Prophecy Platinum encompasses exploration, primarily diamond drilling. Historical work conducted in the region has been compiled by previous consultants and was available for review.

Todd McCracken, P. Geo., the author of this report, is a professional geologist with 19 years of experience in exploration and operations, including several years working in Ni-Cu sulphide deposits. Mr. McCracken visited the Property between June 28 and July 1, 2010 inclusive, during the 2010 drill program. Although the site visit was

completed sometime before the effective date of this report, Wardrop considers his site visit current, per NI 43-101CP, Section 6.2, on the basis that as no material work has been conducted on the Property since the date of the site visit. Wardrop has confirmed this opinion from the Companies directly, together with an examination of both Companies' continuous disclosure record. Work has been carried out on the Property since the end of the 2010 drill campaign.

## 3.0 RELIANCE ON OTHER EXPERTS

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Wardrop has reviewed and analyzed data and reports provided by Prophecy Platinum, together with publicly available data, drawing its own conclusions augmented by direct field examination.

Wardrop has relied on others for information in this report. Information from third party sources are quoted as a report or referenced.

Wardrop is not qualified to provide extensive comment on legal issues, including status of tenure associated with the Property referred to in this report. A description of the Property and ownership is provided for general information purpose only. Assessment of these aspects has relied on information provided by Prophecy Platinum, which has not been independently verified by Wardrop.

## 4.0 PROPERTY DESCRIPTION AND LOCATION

---

The Property is located approximately 317 km northwest of Whitehorse in south western Yukon, at approximate latitude: 61°28'N, longitude: 139°32'W (Figure 4.1) on NTS map sheet 115G/05 and 115G/06. Kluane National Park lies 25 km to the south and the Property lies within the Kluane Game Sanctuary.

The Property consists of two groups of claims (Figure 4.2); the Arch Joint Venture Claims and the Northern Platinum Claims.

The description below and the list of claims provided in Appendix A have been derived from records and information supplied by Prophecy Platinum.

The Property comprises a block of 91 claims, nominally 13.7 km<sup>2</sup>, which incorporates the known Wellgreen deposit. The claims were staked in 1952, 1953, and 1955 and each claim is a Quartz Mining Lease. The expiry date for these claims/leases is December 5, 2020. The claims are registered as 100% Northern Platinum, a wholly owned subsidiary of Prophecy Platinum.

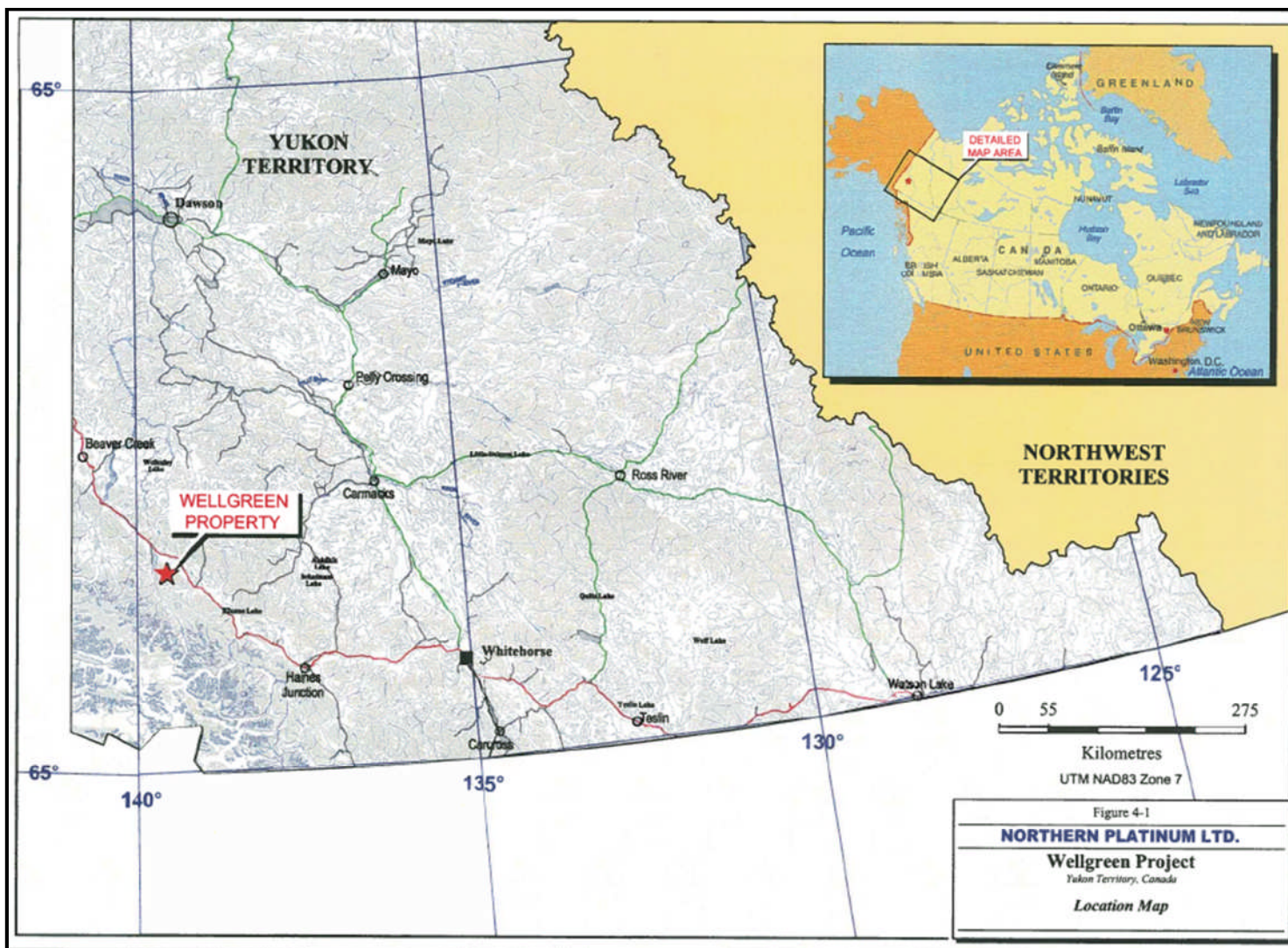
The Arch Joint Venture claims were staked in 1986 and 1987 and ownership is registered to 100% Arch Joint Venture. These 48 claims, 8.4 km<sup>2</sup>, cover the northwest extension of the Wellgreen stratigraphy. Expiry date for these claims is February 11, 2014. The Arch Joint Venture claims are reportedly owned by Northern Platinum.

In the Yukon, all hard rock mining claims (excluding coal) are administered through the Quartz Mining Act (QMA). A mining claim provides exclusive rights to the holder of the claim for the mines and minerals located within the area of that claim. The QMA also confirms that a claim holder has the following rights in relation to the minerals contained within the claim:

- the right to enter on and use and occupy the surface for the efficient and miner-like operation of mines and minerals
- the right to commercially produce a mineral and benefit from the sale of the mineral.

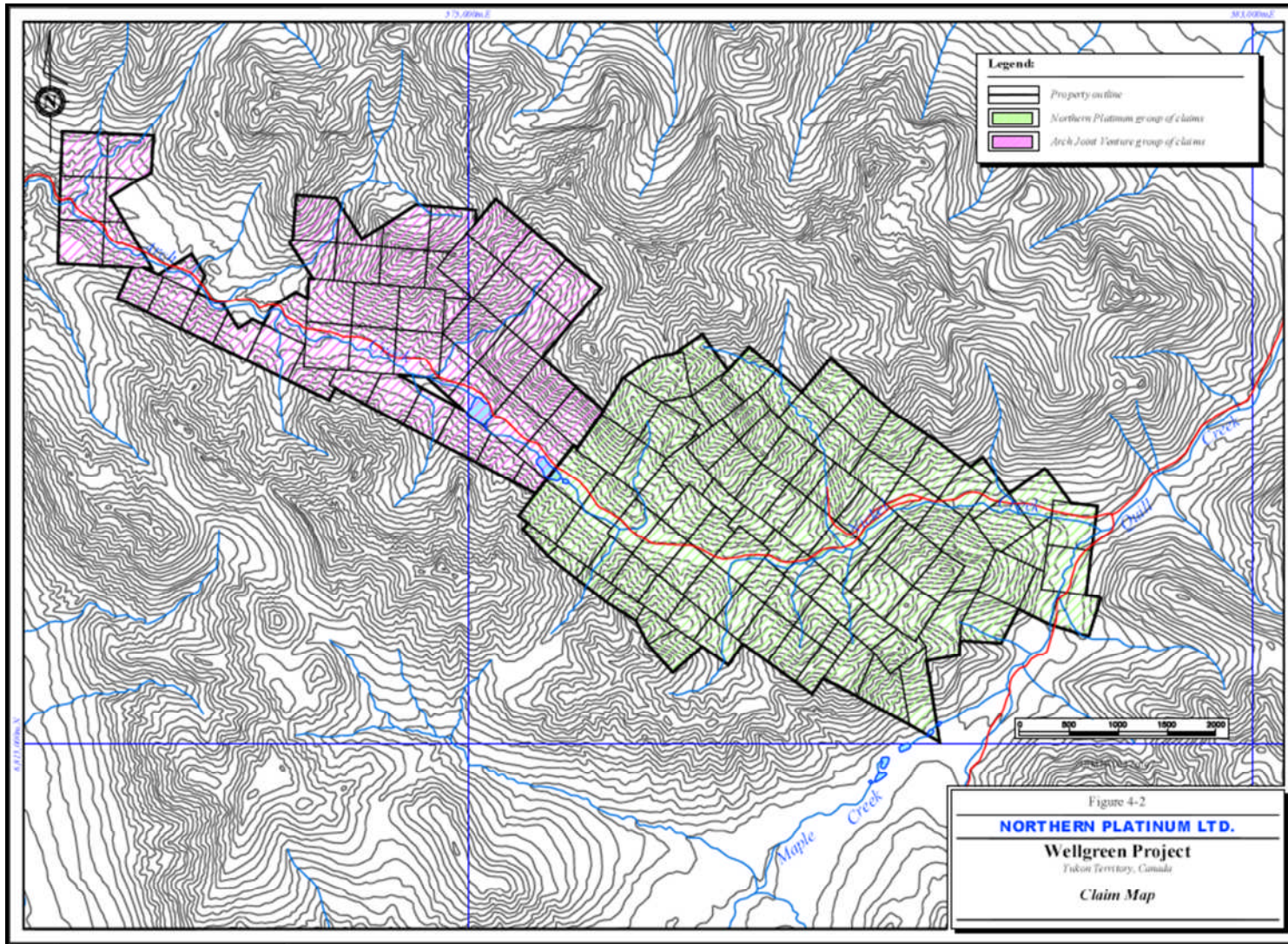


**Figure 4.1 Location Map**





**Figure 4.2 Claim Map**



The QMA does not provide any mining claim holder with exclusive right to use the surface of the land except for mining activity and it does not convey any tenure in the surface of the land. All work undertaken on the surface of claims and leases is regulated through the Quartz Mining Land Use Regulation which has been made under the QMA. Claims must be renewed on an annual basis by filing approved assessment work to a value of \$100 per claim. A Quartz Mining Lease provides to the holder of the lease the ability to hold claims for a longer period of time (21 years with renewal clause). To maintain a Quartz Mining Lease in good standing annual rental fees are required.

Northern Platinum is also the registered lease holder of parcels or tracts of land comprised of 62.56 ha near Kilometre 1788.6 Yukon Highway Number 1 known as the Wellgreen Mill site. The land is leased from Indian and Northern Affairs, a department of the Federal Government of Canada, for a period of 10 years and is renewable by written request by Northern Platinum at least 90 days prior to the expiry of the lease. The lease was last renewed November 21, 2001 and is set to expire on November 21, 2011.

Prophecy Platinum and Northern Platinum completed a business arrangement on September 22<sup>nd</sup> 2010, whereby Northern Platinum merged with Prophecy Platinum by the way of corporate merger or share exchange.

It is understood that in the 1994 agreement between Belleterre Quebec (J. P. Sheridan) and Northern Platinum, whereby Belleterre Quebec assigned all of its interest in the option agreement with All North to Northern Platinum. In return Northern Platinum granted Belleterre Quebec a back in right of 50% of Northern Platinum's interest for a period of time up to and including the completion of a positive feasibility study. On September 24<sup>th</sup>, 2010, Prophecy acquired the Belleterre Quebec back in option.

An underlying agreement dated April 27, 1999 between Kaieteur Resource Corporation (Kaieteur) (formerly International All-North Resources Ltd. (All-North)), Northern Platinum, and J. Patrick Sheridan concerns the Northern Platinum interest in the Arch Joint Venture. Northern Platinum agreed to purchase from Kaieteur all of its All-North Wellgreen interest, its interest in the Arch Joint Venture on an "as is" basis for a sum of \$62,500 to be paid in cash and shares. The agreement acknowledges that Northern Platinum had already earned a 20% interest in the project and by this agreement Northern Platinum was acquiring the remaining 80% interest. Kaieteur warrants it is the beneficial owner of the All-North Wellgreen interest but does not warrant the same for the Arch Joint Venture because documentation for underlying agreements is incomplete – hence the "as is" stipulation. The agreement further acknowledges that Hudson Bay Mining & Smelting Co. Ltd. is the holder of, and is entitled to be paid royalty interest equal to 1.5% of net smelter returns (NSR) from the Property.

On January 17<sup>th</sup>, 2011, Pacific Coast and Prophecy Platinum entered into a binding Letter of Agreement, whereby Pacific Coast would acquire all of Prophecy Platinum's

interest in Prophecy Platinum's nickel projects including the Wellgreen Property along with \$2 million in cash in consideration of the issuance of 450 million Pacific Coast shares, of which 225 million would be retained by Prophecy and held in accordance with the terms and conditions of a three year escrow agreement. The remaining 225 million shares would be distributed to registered Prophecy Platinum shareholders pro rata in accordance with their holdings of Prophecy Platinum shares.

Immediately following the completion of the acquisition, Pacific Coast will consolidate its shares on a 10 old for one new basis and change its name to Prophecy Platinum Corp. This was completed on June 13<sup>th</sup>, 2011.

The Property is not subject to any known environmental liabilities. It is understood that the environmental liabilities of the former Wellgreen Mill site are with the Yukon Government.

All permits and license to conduct exploration work on the Wellgreen project were in place.



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

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### 5.1 SITE TOPOGRAPHY, ELEVATION, AND VEGETATION

The Property is located in the Kluane Ranges, which are a continuous chain of foothills situated along the eastern flank of the St. Elias Mountains. The topography across the Property is relatively rugged. Slopes are usually in the 250 to 300 m range and the highest peaks exceed an elevation of 1,800 m.

The main mineralized zone on the Property lies between elevations 1,300 and 1,700 m on a moderate to steep un-glaciated south-facing slope. Permafrost is discontinuous and probably exceeds 30 m in depth from surface.

Drainage is mainly east and then north into the Kluane River system.

Vegetation consists of typical alpine grasses and wildflowers on the hill sides with a mixture of pine, spruce and poplar trees locating in the lower elevations and creek beds.

### 5.2 ACCESS

The Property is located approximately 311 km northwest of Whitehorse just west of the Yukon Highway 1 (Alaska Highway) at Kilometre 1788.6. The Alaska Highway is a paved all-weather highway maintained by the Yukon Government.

The Property may be reached from the Alaska Highway by a seasonal gravel road which runs south-west beside Quill Creek for a distance of 14 km. The mine access road requires annual maintenance due to the spring run-off from the mountains into Quill Creek and would require upgrading to be used as an all-weather.

An all-weather airstrip is located 30 km southeast of the Property at Burwash Landing. This airstrip is maintained by NAV CANADA. An all-season deep-sea port is located in Haines, Alaska, which lies 410 km to the southeast, accessible by good quality paved highway.

### 5.3 CLIMATE

The climate is alpine, but is tempered by the west coast influence. The area has a long winter but the temperatures are less extreme than further east. The closest weather station where long term records have been collected is at Burwash Landing,

elevation 806.8 m above sea level. The daily average temperature at Burwash Landing in January is -22°C, while in July the average daily temperature is 12.8°C. As the area lies in the rain shadow of the St. Elias Mountain, overall precipitation is generally light with only periodic short stretches of heavy precipitation. Average annual precipitation for Burwash Landing is 279.7 mm, of which 192 mm is rain and 106.4 mm is snow.

## 5.4 INFRASTRUCTURE

Adequate water supply is available for drilling operations, which is pumped from Arid Creek that flow down the mountain. Non-potable water was supplied for the camp from Nickel Creek, which flows past the portal to the underground workings. All these creeks freeze solid during the winter months. In order to maintain a year round camp or operation would require the drilling of water wells.

Currently, power on the Property is supplied by generators installed for the exploration programs. Haines Junction is the current limit of the southern grid of Yukon Energy Corporation.

The Yukon has a favourable mining tax law which encourages the investment in the mining sector. Skilled labour and equipment is available in the city of Whitehorse (population 24,500) and small village of Haines Junction (area population of approximately 800).

The villages of Burwash Landing and Destruction Bay, located 15 and 30 km southeast from the Wellgreen turn-off respectively from the Property, can provide basic food, fuel and lodgings if necessary.

## 6.0 HISTORY

The exploration and production history of the Property dates back to its discovery in 1952. Table 6.1 summarizes the history of the Property.

**Table 6.1 Wellgreen Historical Activities**

Year	Company	Activities
1952	Wellington Green, C. Aird, & C. Hankins	<ul style="list-style-type: none"> <li>Discovered surface showings.</li> </ul>
1952	Hudson Bay Exploration & Development (HBE&D)	<ul style="list-style-type: none"> <li>Property optioned from prospectors by subsidiary of Hudson Bay Mining and Smelting Co. (HBM&amp;S).</li> </ul>
1952	Yukon Mining	<ul style="list-style-type: none"> <li>Ownership transferred to HMB&amp;S subsidiary Yukon Mining Company from HBM&amp;S subsidiary HBE&amp;D.</li> </ul>
1952	Yukon Mining	<ul style="list-style-type: none"> <li>45,500 m of surface drilling completed.</li> </ul>
1953	Yukon Mining	<ul style="list-style-type: none"> <li>57,700 m of surface drilling completed.</li> </ul>
1954	Yukon Mining	<ul style="list-style-type: none"> <li>60,400 m of surface drilling completed.</li> </ul>
1955	Hudson Yukon Mining	<ul style="list-style-type: none"> <li>Ownership transferred to HMB&amp;S subsidiary Hudson Yukon Mining Company from HBM&amp;S subsidiary Yukon Mining Company.</li> </ul>
1955	Hudson Yukon Mining	<ul style="list-style-type: none"> <li>32,400 m of surface drilling completed.</li> </ul>
1953-1956	Yukon Mining/Hudson Yukon Mining	<ul style="list-style-type: none"> <li>4,267 m of underground development on seven levels and two internal shafts.</li> <li>Metallurgical test work including a pilot plant.</li> <li>Historical ore reserves estimated at 500,000 tons @ 1.34% Cu and 2.14% Ni.</li> </ul>
1956-1967	Hudson Yukon Mining	<ul style="list-style-type: none"> <li>Idle.</li> </ul>
1968	Hudson Yukon Mining	<ul style="list-style-type: none"> <li>Ground geophysics (magnetics and electromagnetics).</li> <li>Soil survey.</li> <li>762 m of surface drilling.</li> </ul>
1966-1970	Hudson Yukon Mining	<ul style="list-style-type: none"> <li>Metallurgical work completed at Lakefield Research, HBM&amp;S, Lurgi-Frankfurt, and Sumitomo.</li> </ul>

*table continues....*

Year	Company	Activities
1969	Hudson Yukon Mining	<ul style="list-style-type: none"> <li>Feasibility Study completed with historical "Proven Reserves" estimated at 669,150 tonnes @ 2.04% Cu, 1.42% Ni, 0.073% Co, 1.30 g/t Pt, 0.93 g/t Pd and 0.17 g/t Au.</li> </ul>
1970	Hudson Yukon Mining	<ul style="list-style-type: none"> <li>Property placed in production with concentrate to be shipped to Sumitomo in Japan.</li> <li>Development consisted of slashing out exploration drifts, development of sub-levels, construction of mine dry, powerhouse, and compressor facility.</li> <li>Mill with a 600 ton/day concentrator and town site established 11.5 km from mine adjacent to the Alaska Highway.</li> </ul>
1972	Hudson Yukon Mining	<ul style="list-style-type: none"> <li>Milling began on site.</li> </ul>
1973	Hudson Yukon Mining	<ul style="list-style-type: none"> <li>Milling suspended due to falling metal prices, excessive dilution, and unexpected erratic distribution of massive sulphide lenses.</li> <li>A total of 171,652 tonnes were milled to produce 33,853 tonnes of concentrate. Grades of the concentrate based on smelter returns was; 2.23% Ni, 1.39% Cu, 1,300 ppb Pt, 920 ppb Pd, 171 ppb Au, 400 ppb Rh, 420 ppb Ru, 250 ppb Ir, 200 ppb Os, and 200 ppb Re.</li> <li>Mine and mill dismantled and all equipment shipped to Snow Lake, Manitoba.</li> </ul>
1981	Foothills Pipelines	<ul style="list-style-type: none"> <li>Leased the mill site and town site.</li> </ul>
1986	All-North/Chevron	<ul style="list-style-type: none"> <li>Option to earn 50% interest of the Property from Hudson Yukon Mining Company.</li> </ul>
1987	Galactic Resources	<ul style="list-style-type: none"> <li>Purchased 100% interest in Hudson Yukon Mining Company from HBM&amp;S for \$6.8 million and 3% NSR on the Hudson Yukon Mining Company portion of base metal and precious metal produced from the Property.</li> <li>Acquired All-North Resources as a wholly owned subsidiary. Transfer title of the Hudson-Yukon Wellgreen to All-North. Resulting Wellgreen ownership All-North 75% - Chevron 25%</li> </ul>

*table continues...*

Year	Company	Activities
1987	All-North/Galactic	<ul style="list-style-type: none"> <li>Conducted 1:2500 geological mapping, 50 x 100 m spaced soil sampling, 100 x 20 m spaced VLF-electromagnetic and magnetic survey, 15 bulldozer trenching totalling 10,000 m<sup>3</sup>.</li> <li>4,932 m of diamond drilling in 45 holes.</li> </ul>
1987	Kluane JV	<ul style="list-style-type: none"> <li>Joint venture formed between All-North Resources, Chevron Minerals, Pak-Man Resources and Rockridge Mining to explore on the Arch Joint Venture claims. Operated by Archer Cathro.</li> <li>1:10,000 geological mapping and sampling, very-low frequency (VLF) and magnetic survey, 50 hour of bulldozer trenching.</li> </ul>
1988	Kluane JV	<ul style="list-style-type: none"> <li>Road construction and bulldozer trenching</li> <li>Three diamond drill holes totalling 173.5 m</li> </ul>
1988	All-North/Chevron	<ul style="list-style-type: none"> <li>4250 level was rehabilitated.</li> <li>5,500 m of diamond drilling in 34 holes was completed underground.</li> <li>6,073 m of diamond drilling in 37 holes completed on surface.</li> <li>Klohn Leonoff carried out preliminary engineering surveys to evaluate mill and tailings disposal sites.</li> <li>Norecol carried out preliminary environmental survey including water quality and wildlife study.</li> </ul>
1989	All-North	<ul style="list-style-type: none"> <li>All-North acquires Chevron Minerals interest in the Arch Joint Venture and the Wellgreen Property</li> </ul>
1989	All-North/Chevron	<ul style="list-style-type: none"> <li>Watts, Griffis and McQuat (WGM) complete a historical reserve estimate for both the East and West Zones.</li> <li>"Probable Reserve": 46,700,000 tons @ 0.34% Cu, 0.36% Ni, 0.015 opt* Pt, 0.010 opt Pd.</li> <li>"Possible Reserve": 8,500,000 tons @ 0.36% Cu, 0.035% Ni, 0.012 opt Pt, 0.009 opt Pd.</li> <li>Metallurgical studies conducted at Lakefield Research, Inco tech, and CANMET</li> <li>Pre-feasibility completed by WGM</li> </ul>
1993	Galactic Resources	<ul style="list-style-type: none"> <li>Files for bankruptcy in Canada</li> </ul>



Year	Company	Activities
1994	Northern Platinum	<ul style="list-style-type: none"> <li>Signs option agreement with All-North to earn 80% interest in the Property, with a 50% back in right to J.P. Sheridan.</li> </ul>
1996	Northern Platinum	<ul style="list-style-type: none"> <li>57 4.5 inch rotary percussion drill holes totalling 3,900 m.</li> </ul>
1999	Northern Platinum	<ul style="list-style-type: none"> <li>Agrees to purchase the remaining interest (20%) of the Property from All North</li> </ul>
2001	Northern Platinum	<ul style="list-style-type: none"> <li>Surface drill program discovers the North Shear Zone, located 500 m north of the Wellgreen deposit.</li> </ul>
2005	Coronation Minerals	<ul style="list-style-type: none"> <li>Entered option agreement with Northern Platinum to earn 100% of the Property for \$25 million.</li> </ul>
2006	Coronation Minerals	<ul style="list-style-type: none"> <li>Eleven diamond drill holes totalling 2,016 m</li> </ul>
2007	Coronation Minerals	<ul style="list-style-type: none"> <li>Three underground diamond drill holes totalling 577 m</li> </ul>
2008	Coronation Minerals	<ul style="list-style-type: none"> <li>Thirteen diamond drill holes totalling 4,654m.</li> <li>854 line km of Helicopter-borne aeromagnetic survey.</li> <li>NI43-101 report completed by WGM. (see section 17.0)</li> <li>Dropped option, returned the Property to Northern Platinum</li> </ul>
2009	Northern Platinum	<ul style="list-style-type: none"> <li>Ten diamond drill holes totalling 2,058 m</li> </ul>
2010	Northern Platinum	<ul style="list-style-type: none"> <li>Six diamond drillholes totalling 2,138 m</li> </ul>
2010	Prophecy Resources	<ul style="list-style-type: none"> <li>Acquires Northern Platinum</li> <li>Completed one diamond drill hole totalling 117 m</li> </ul>
2011	Prophecy Platinum	<ul style="list-style-type: none"> <li>New company created through the sale of Prophecy Resources nickel assets to Pacific Coast Nickel Corp.</li> </ul>

Historical estimates within the table above are considered relevant but not reliable. A qualified person has not done sufficient work to classify the historical estimate as a current mineral resource. Prophecy Platinum is not treating the historical estimates as current resources, and the historical estimates should not be relied upon.

Results of the Coronation Minerals, Northern Platinum, and Prophecy Platinum drilling are reported in Section 11 Drilling.

In 1988 and 1989, drill core rejects from the 1987 drilling program were tested at Lakefield Research, Inco Tech and CANMET to investigate the metallic behaviour and to obtain data on the mineralization. This test work is summarized in the Watts, Griffis and McOuat 1989 Prefeasibility report. Additional test work was done at CANMET in the 1990s and is summarized in Cabri, et al, 1993.

Preliminary metallurgical tests in early 1988 indicated that a bulk concentrate analyzing about 5% Cu and 4% Ni would achieve recoveries up to 95% of the copper, 85% of the nickel, 80% of the platinum and 80% of the palladium. This was produced from a feed whose analysis was 0.87% Cu, 0.65% Ni, 1.03 g/t Pt and 0.75 g/t Pd. Additional samples of material from the Wellgreen deposit were tested during the second half of 1988 at Lakefield. Included in these samples were lower grade materials which more closely approximate the material that would be anticipated from an open pit operation. The major improvement to the results was the inclusion of high speed conditioning prior to the cleaning step of the bulk concentrate. This resulted in good grade concentrates with an increase in recovery.

Results from the historical laboratory test work are summarized as follows:

- The Wellgreen ore is complex in composition and belongs to a group of finely disseminated semi-massive ores with relatively high pyrrhotite content and low nickel-copper and PGM content.
- The modified flow sheet, including high-speed conditioning, gave satisfactory recoveries and significantly improved concentrate grades.
- Pre-concentration of the Pt and Pd from the ore using gravity concentration was not successful, mainly due to liberation problems.
- In general, the flow sheet and reagent scheme developed for Wellgreen was effective and should accommodate variations in the ore characteristics.

## 7.0 GEOLOGICAL SETTING AND MINERALIZATION

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### 7.1 GEOLOGICAL SETTING

#### 7.1.1 REGIONAL GEOLOGY

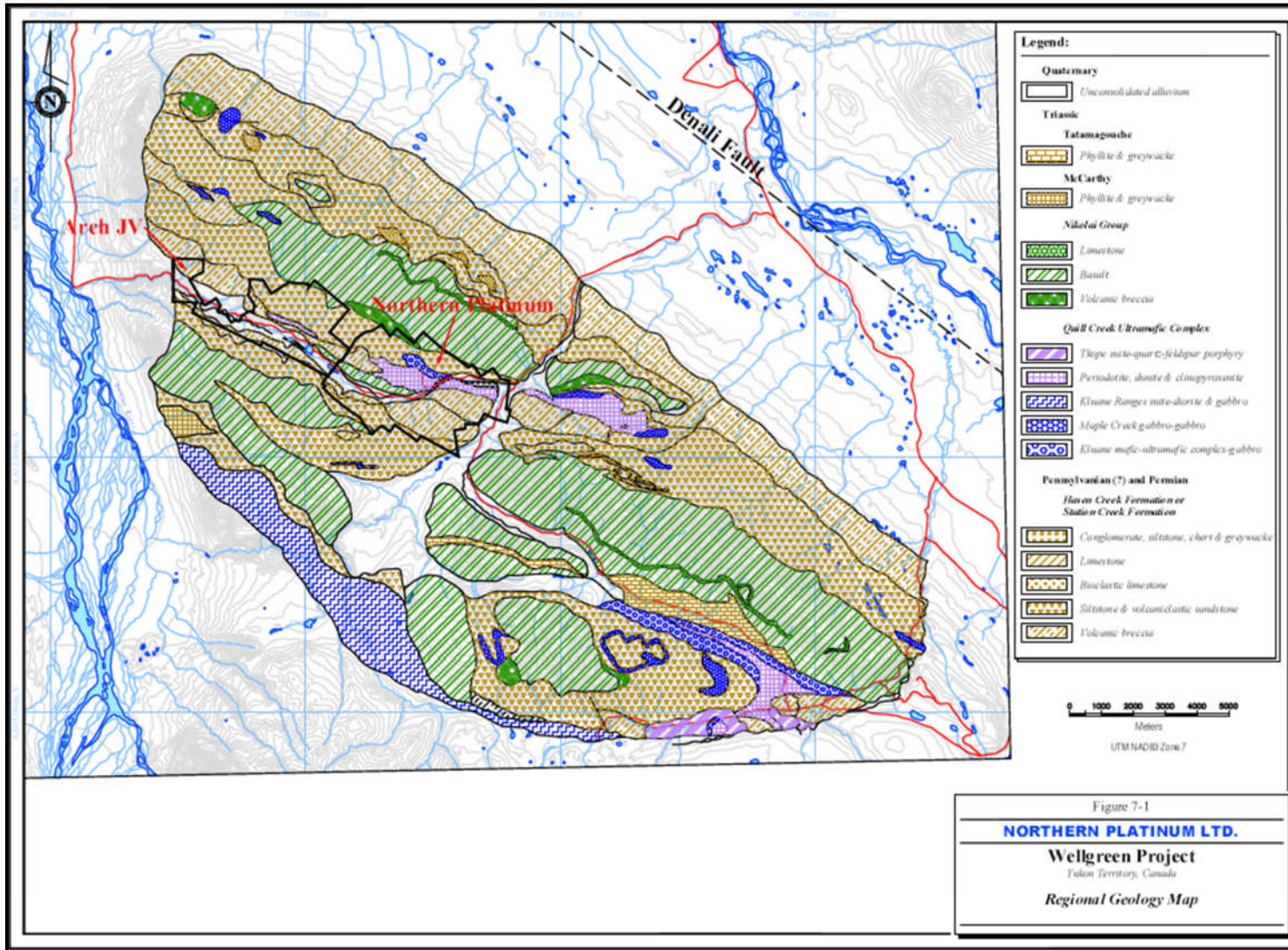
The Wellgreen Property is located within the Insular Superterrane. The Insular Superterrane is mainly composed of two older terranes (Wrangellia and Alexander) that were amalgamated about 320 million years. These terranes are composed of island arc and ocean floor volcanic rocks with thick assemblages of overlying oceanic sedimentary rocks that range in age from 400 to 220 million years old. Wrangellia, in particular, has a several-kilometre-thick package of platform-type limestones. The Insular Superterrane hosts a 230-million-year-old package of volcanic rocks (the Nicolai Group) that hosts Wellgreen Property, as well as the Windy Craggy copper-cobalt-gold deposit in northernmost British Columbia (Hart, undated).

The Wellgreen project is contained within the Kluane Ultramafic Belt. The Kluane Ultramafic Belt is situated within the Wrangellia Terrane, which is a complex and variable terrane that extends from Vancouver Island to central Alaska (Figure 7.1). This terrane is most commonly characterized by widespread exposure of Triassic flood basalts and complementary intrusive rocks. The ultramafic intrusives of the Wrangellia Terrane represents one of the largest tracts of Ni-Cu-PGE mineralization, second in size in North America to the Proterozoic Circum-Superior Belt (Thompson to Raglan) (Hulbert and Stone, 2006).

The exposed base of the Wrangellia is comprised of Pennsylvanian to Permian arc volcanic rocks and Permian sedimentary rocks of the Skolai Group and includes the Hasen Creek Formation and the Station Creek Formation. The Skolai Group is unconformably overlain by Middle and Late Triassic Nikolai Group consisting of basalt flows with minor intercalated limestone. Mafic and ultramafic intrusions are common throughout the area and mostly have been intruded near the contact between the Station Creek and Hasen Creek formations. These sills, which form the Kluane mafic-ultramafic complex, are thought to be part of a sub-volcanic system that fed the Nikolai Formation flood basalts (Israel, 2004). The intrusions commonly have associated magmatic sulphide concentrations of nickel-copper ±Platinum Group Elements + gold (Figure 7.2).

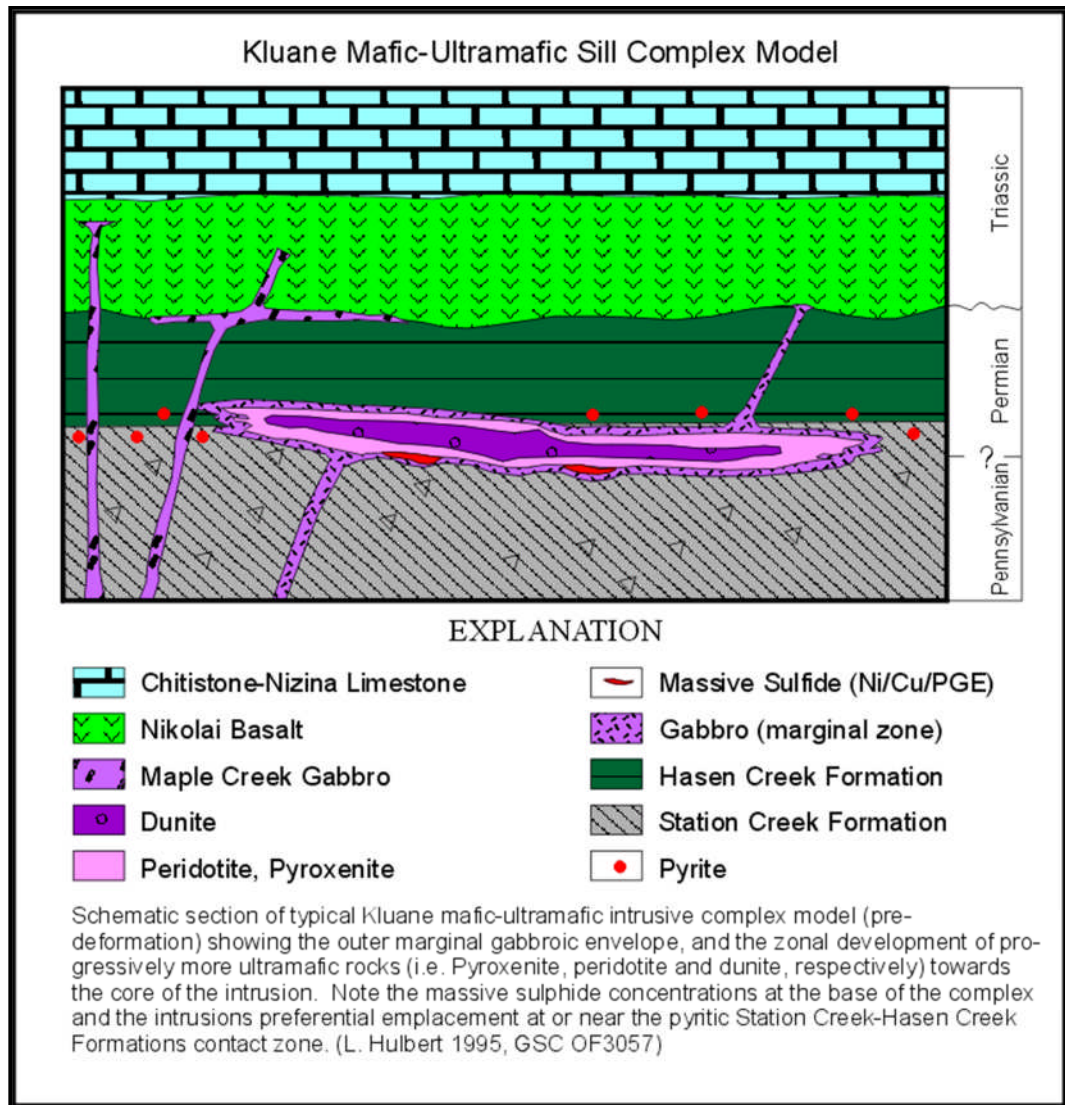
The Kluane Belt is bound on the northeast by the Shakhwax Fault, which is a major terrain boundary, with its latest movement being in a right-lateral sense.

**Figure 7.1 Regional Geology Map**





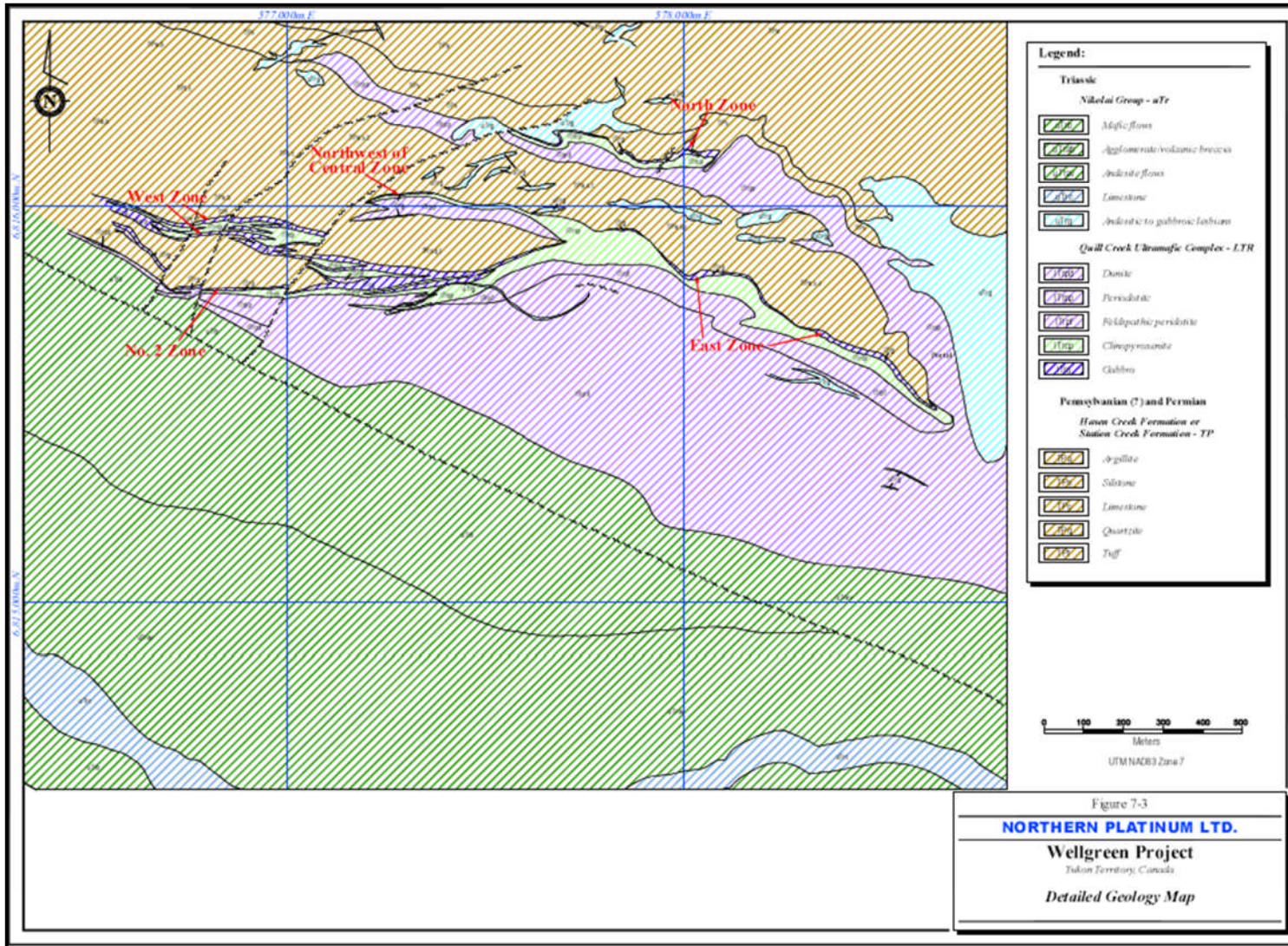
**Figure 7.2 Kluane Mafic-Ultramafic Sill Complex Model**



### 7.1.2 PROPERTY GEOLOGY

Israel and Zeyl, 2004 is the most recent geological mapping for the area of the Property (Table 7.3). Hulbert, 1997 also provides a description and discussion. Detailed geology and interpretation covering the Wellgreen deposit area is available from maps completed by Archer, Cathro and Associates, who compiled and reinterpreted exploration results for the Kluane JV programs carried out on behalf of All-North. These sources are not all consistent with respect to descriptions and classifications of the geological framework for the Property.

**Figure 7.3 Property Geology**





The oldest rocks on the Property are represented by the Pennsylvanian and/or Permian Station Creek Formation. The Station Creek Formation underlies significant portions of the Property. The formation consists of light to medium green volcanic breccia, tuffs and tuffaceous sandstones. It also contains a component of basalt. The Station Creek Formation is overlain conformably by the Pennsylvanian and/or Permian Hasen Creek Formation. The Hasen Creek Formation consists of a range of metasediments; greywacke, thin-bedded siltstone turbidites and limestones plus volcanoclastics and tuffs. These rocks are folded into a series of parallel, sometimes overturned, synclines and anticlines.

These older rocks are unconformably overlain by amygdaloidal flood basalt, volcanic breccias and metasediments of the Upper Triassic Nikolai Group. These rocks are also folded into a series of southeast-northwest trending anticlines and synclines.

The Wellgreen deposit occurs along the lower margin of an Upper Triassic ultramafic-mafic body, which is 20 km long and is known as the Quill Creek Complex, which intrudes along and close to the contact between the Station Creek and Hasen Creek formations. The main mass of this Quill Creek Complex, 4.2 km long and up to 700 m wide, is located on the Northern Platinum claim group of the Property. A smaller mass of similar intrusive is located along strike to the northwest and southeast. The Quill Creek Complex consists of a main intrusion and an associated group of upright to locally overturned, steeply south dipping sills. These associated sills may be remnants of the main intrusion separated from the main mass by folding and shearing. The intrusions are crudely layered, variably serpentinized, and deformed. The sills locally have a lower gabbroic margin adjacent to a chilled contact with Paleozoic rocks. Mafic-rich skarns occur in the floor rocks adjacent to the marginal facies gabbro, particularly where the metasediment host includes limestone or calcareous rocks. The intrusives are zoned upwards away from the lower gabbroic zone through zones of clinopyroxenite, peridotite and dunite.

In the Wellgreen deposit area, Nikolai Formation mafic volcanics underlie the area immediately south of the Quill Creek Complex. The volcanics are interpreted to be in fault contact with the upper part of the Quill Creek Complex and Station Creek Formation rocks (Israel and Zeyl, 2004).

A series of relatively small but abundant intrusions, mapped as andesitic to gabbroic dykes, probably correlative with the Nikolai Formation, or younger, intrude into Paleozoic metasediments and the Quill Creek Complex. Hulbert, 1997 describes these same rocks as felsic dykes. Many of these small intrusions are associated with the northeast-southwest oriented faults that cut the stratigraphic sequence and the Quill Creek Complex.

The youngest rocks on the Property are represented by the Cretaceous intermediate and mafic intrusive belonging to the Kluane Ranges suite.

Longitudinal faults and/ or shears are common in the ultramafic rocks. Some of these occur along lithological contacts. The most prominent of these is coincident with

Maple Creek. Hulbert, 1997 describes two western faults as west-dipping reverse faults.

## 7.2 MINERALIZATION

Mineralization on the Wellgreen Property occurs within a variably serpentinitized, ultramafic–gabbroic body, known as the Quill Creek Complex, which intrudes Permian sedimentary and volcanic rocks. Historic exploration and development programs defined three zones of gabbro-hosted massive and disseminated mineralization known as the East Zone West Zone and North Zone (Figure 7.4).

### 7.2.1 *EAST ZONE*

Of the two main (East and West) gabbro-hosted zones of mineralization, the East Zone has received the most detailed exploration, including 4,267 m of underground development on seven levels, three internal shafts and over 500 surface and underground diamond drill holes. The East Zone is gently west-plunging and moderately to steeply south-dipping and is in contact with Hansen Creek Formation calcareous sediments. At the base of this zone of mineralized peridotite in the marginal gabbro are discontinuous massive sulphide lenses as well as skarn zones in calcareous footwall. The mineralized portion of the East Zone has been outlined by surface and underground diamond drilling over a strike length of 1500 m and an average vertical extent of 700 m (Figure 7.5).

East of section 3500E, the peridotite unit thicken up considerably with an average of 400 m horizontal width. In around 3500E section, there is a repeated sequence of mineralized peridotite, footwall rocks of the Hansen Creek formation, and mineralized peridotite. This would indicate the potential for some form of thrust faulting. This is also evident in mineralized portion of the peridotite east of section 3500E where mineralized grade profiles in boreholes drop off and then increase. No significant faulting has been observed in the drill core to support this theory.

The East Zone was mined by Hudson-Yukon in 1972 and approximately 171,652 tonnes at 2.23% Ni and 1.39% Cu were extracted

### 7.2.2 *WEST ZONE*

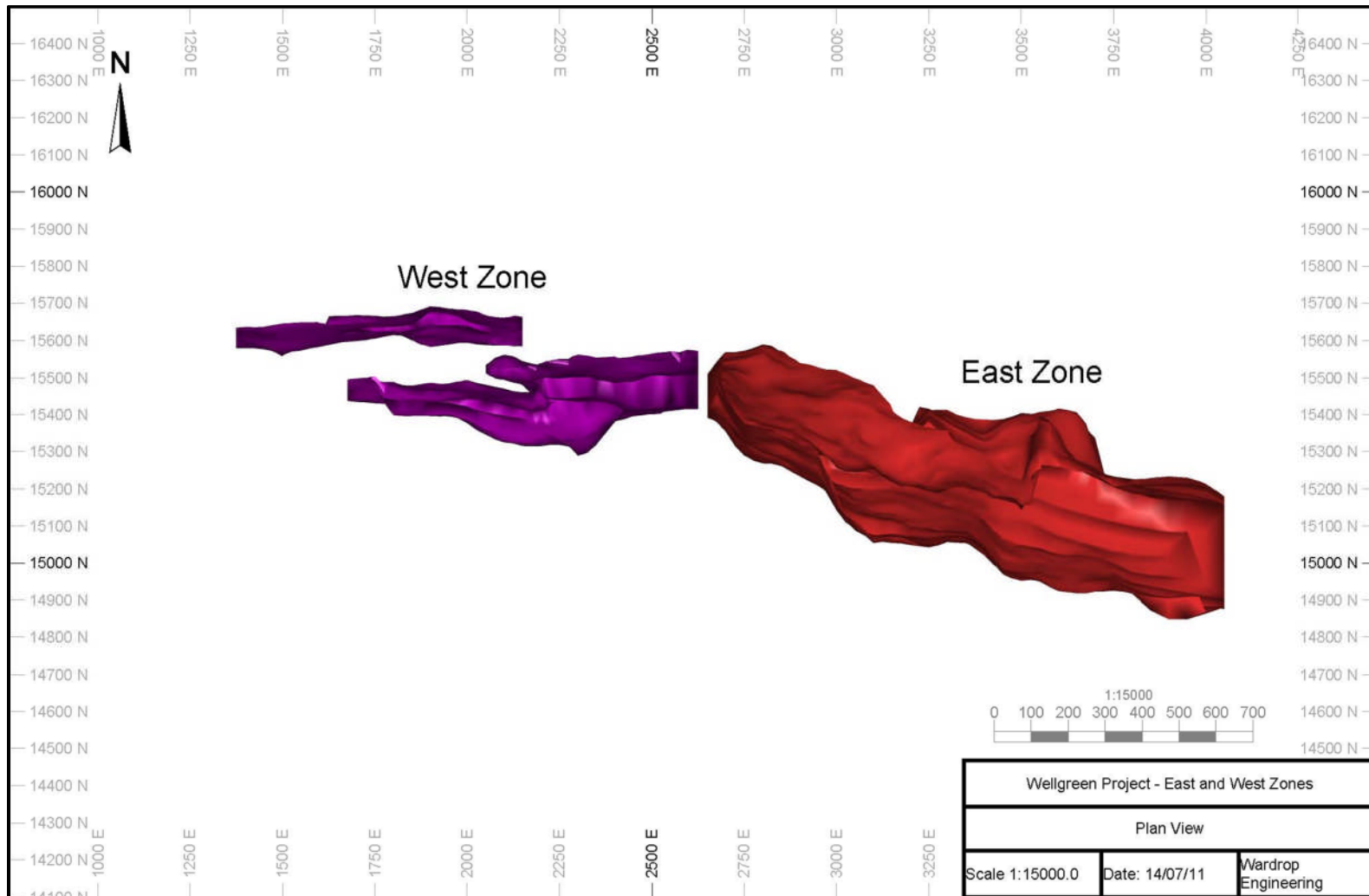
Hudson-Yukon discovered the West Zone and All-North's 1987 drilling program further outlined the zone, which extends over a strike length of 1,300 m and to a vertical depth of about 400 m. This area is along and above the base of the Quill Creek Complex where its trend changes from northwest-southeast to east-west. The majority of the mineralized zones occur in gabbro and in a blanket clinopyroxenite, as is the case in the East Zone; however, mineralization also occurs to a considerable extent in inter-digitated gabbro-clinopyroxenite units. The West Zone has only limited exposure by underground workings, and consists of multiple spatially separated mineralized units; the basal gabbro unit, the upper clinopyroxenite unit,



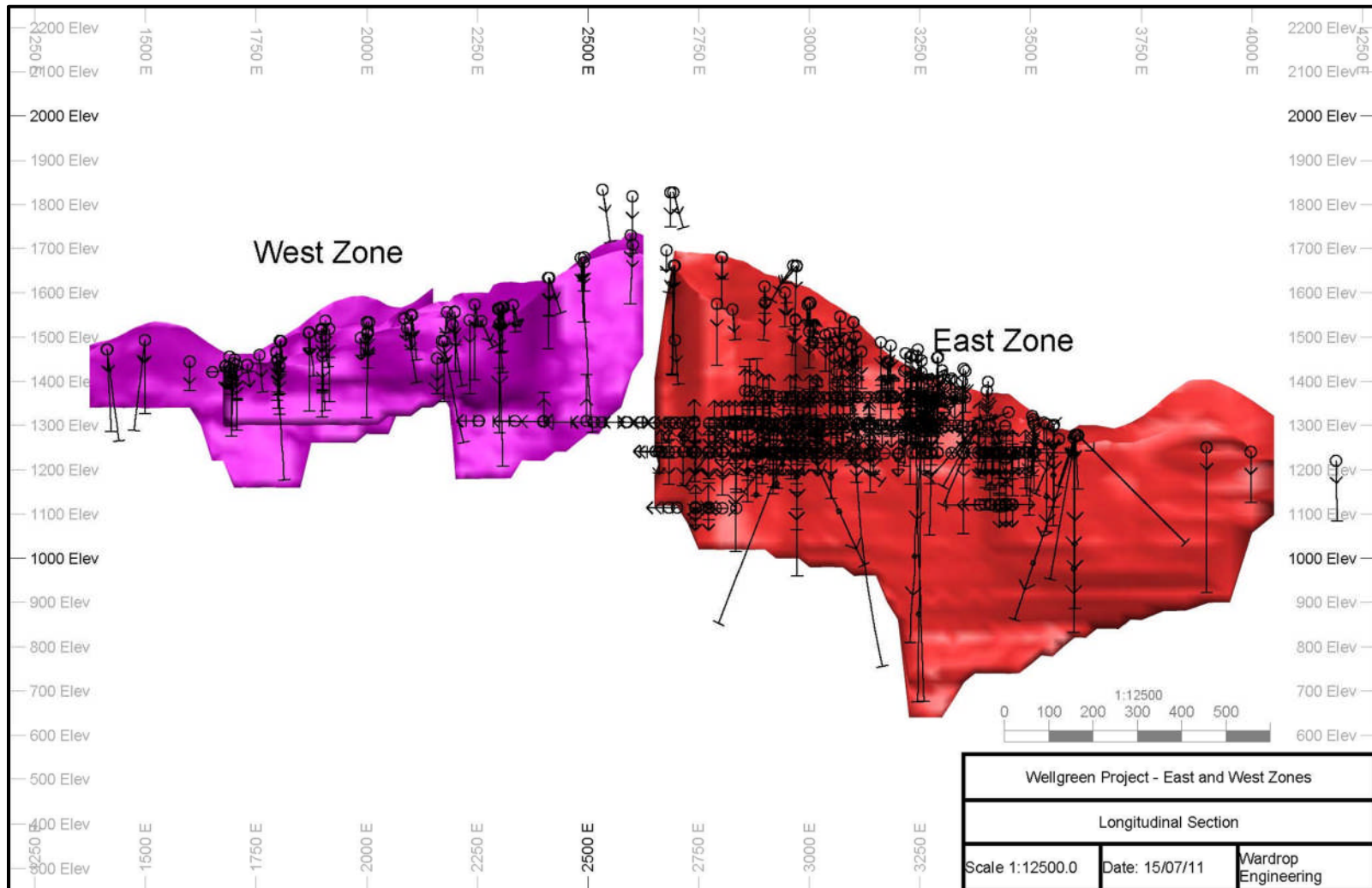
and a second basal unit which lies to the west of one of the several flatly westerly dipping north-easterly trending cross-faults.

The sill that hosts the West Mineralized Zone appears to have a gabbroic margin on both its north and south contacts. The marginal gabbro magmatic zones up to 110 m thick host the Ni-Cu massive sulphide mineralization that forms the higher grade portions of the various mineralized zones of the Wellgreen deposit. The clinopyroxene magmatic zones, which range up to 100 m in thickness, host disseminated Ni-Cu sulphides and minor net-textured and semi-massive sulphide lenses (Figure 7.5).

**Figure 7.4 Wellgreen Plan View**



**Figure 7.5** Wellgreen Long Section)



### 7.2.3 NORTH ZONE

The North Zone is located in the east-central portion of a narrow 1,200 m long sill positioned approximately 150 m below the main ultramafic unit and was discovered by Hudson-Yukon in the 1950s and explored by three drill holes in 1987 by All-North. All of these drill holes intersected mineralization, and the best reported intersection was 0.51% Cu, 2.01% Ni, 0.96 g/t Pt and 0.65 g/t Pd over a core length of 3.4 m. The geology of this zone is similar to both the East and West Zones. Mineralization consists of massive sulphide lenses, disseminations in gabbro and ultramafic rocks, and as fracture fillings in footwall quartzite. The North Zone was tested in 1988 by limited drilling and was determined to have a northerly dip, which will make it difficult to adequately explore from surface by drilling from the south, as has been done with the other zones on the Property. To-date, the North Zone appears to be a thin and discontinuous zone; however, it does represent an interesting area of Ni-Cu mineralization that warrants further work.

### 7.2.4 MINERALS

Table 7.1 to Table 7.3 after Cabri et al., 1993 list the opaque minerals and PGM and PGE-bearing minerals found in the deposit. The elevated presence of Rh, Ru, Ir, Re, and Os within the mineral suite provided additional pay metals if recoverable and could enhance the economics of an operation in the district.

Rhodium is present at Wellgreen in anomalous concentrations with comparable to the concentrations found in Noril'sk ores in Russia (Hulbert, 1997)

**Table 7.1 Opaque Minerals Observed in the Wellgreen Deposit**

Major Minerals*			
pyrrhotite	Fe <sub>1-x</sub> S	pyrite	FeS <sub>2</sub>
pentlandite	(Fe, Ni) <sub>9</sub> S <sub>8</sub>	magnetite	Fe <sub>2</sub> O <sub>4</sub>
chalcopyrite	CuFeS <sub>2</sub>	ilinenite	FeTiO <sub>3</sub>
Less Common to Rare Minerals*			
violarite	FeNi <sub>2</sub> S <sub>4</sub>	galena	PbS
sphalerite	(Zn,Fe)S	altaite	PbTe
chromite	FeCr <sub>2</sub> O <sub>4</sub>	nickeline	NiAs
cobaltite**	CoAsS/NiAsS	covellite	CuS
arsenopyrite	FeAsS	breithauptite	NiSb
ulimannite	NiSbS	barite	BaSO <sub>4</sub>
siegenite argentopentlandite	(Ni, Ag(Fe,Ni) <sub>8</sub> S <sub>8</sub>	titanite hessite	CaTiSiO <sub>2</sub> Ag <sub>2</sub> Te
gold/electrum	(Au,Ag)	matildite(?)	AgBiS <sub>2</sub>
melonite	NiTe <sub>2</sub>	undefined	Cu-Fe-Ba-S***
Bismuth tellurides	Bi-Te (?)		

**Notes:** \*ideal formula

\*\*unidentified mineral of the cobalt-gersdorffite series

\*\*\*probably a new copper-iron-barium

**Table 7.2 Platinum Group Metals in the Wellgreen Deposit**

sperrylite	PtAs <sub>2</sub>	undefined	(Pd,Ni) <sub>2</sub> (Te,Sb) <sub>3</sub>
sudburyite	PdSb	undefined	(Pd,Ni) <sub>3</sub> (Te,Sb) <sub>4</sub>
testibiopalladite	PdSbTe	undefined	Pd(Bi,Te)
merenskyite	PdTe <sub>2</sub>	undefined	Pd <sub>3</sub> Ni(Sb,Te,Bi) <sub>5</sub>
moncheite	PtTe <sub>2</sub>	laurite	RuS <sub>2</sub>
michenerite	PdBiTe	kotuskite	PdTe
stibiopajiadinite	Pd <sub>5</sub> Sb <sub>2</sub>	Pt-Fe alloy(s)	Pt <sub>3</sub> Fe or PtFe(?)
mertielite II	Pd <sub>8</sub> Sb <sub>3</sub>	undefined	Re>Ir>Os>Ru alloy
geversite	PtSb <sub>2</sub>	undefined	Pd-Hg
hollingworthite	RhAsS	iridium	Ir
froodite	PdBi <sub>2</sub>	undefined	Re sulphide (?)

**Table 7.3 PGE-Bearing Minerals in the Wellgreen Deposit**

melonite	(Ni,Pd,Pt)Te <sub>2</sub>	up to 15.1% Pd; up to 9.37% Pt
undefined	(Ni, Pd) <sub>2</sub> (Te,Sb) <sub>3</sub>	up to 22.8% Pd
undefined	(Ni,Pd) <sub>3</sub> (TeSb) <sub>4</sub>	up to 15.9% Pd
breithauptite	(Ni,Pd)Sb	up to 18.9% Pd
hexatestibio-panickelite	(Ni, Pd) <sub>2</sub> SbTe	up to 15.9% Pd
ullmannite	(Ni,Pd)SbS	up to 0.09% Pd
cobaltite	(Co,Rh)AsS	up to 2.7% Rh, in zones
pentlandite	(Pd,Rh,Ru)*	up to 34 Pd, 12 Rh, 13 Ru (ppm)
chalcopyrite	(RuRh,Pd)*	up to 10 Ru, 10 Rh, 9 Pd (ppm)
pyrrhotite	(Pd)*	up to 5.6 ppm Pd

**Note:** \*trace levels as determined by proton microprobe

## 8.0 DEPOSIT TYPES

The Wellgreen deposit is hosted in the Quill Creek Intrusion, one of a number of mafic-ultramafic sills that are enriched in Ni-Cu-PGE mineralization that outcrop within the Kluane Ultramafic Belt of the Wrangellia Terrane of the south-western Yukon. The sills which form the Kluane mafic-ultramafic complex are thought to be part of a sub-volcanic system that feed Nikolai Formation flood basalts and have been compared to the Noril'sk in Siberia.

At Noril'sk, the ultramafic complex intruded a bed of Gypsum/Anhydrite and followed this bed for several kilometres. Upon encountering this bed, massive Cu, Ni, PGM sulphides accumulated along the footwall due to sulphur contamination. Several kilometres along the direction of flow, the sulphides became semi-massive and further along the sulphides become disseminated then depleted. At this point the intrusion became depleted of copper and nickel and had become a feldspathic pyroxenite (McGoran, 2008).

Salient characteristics of the Wellgreen deposit model can be classified as:  
 Gabbroid-Associated Nickel, Copper, Platinum Group Elements, subtype 12.2.a:  
 Layered Intrusive, Nickel-Copper as summarized in Table 8.1, after Eckstrand, 1984.

**Table 8.1 Gabbro-Associated Nickel Deposit**

<b>Gabbroid-associated Nickel, Copper, Platinum Group Elements subtype 12.2.A: Layered Intrusive</b>	
Commodities	Ni, Cu, Platinum Group Elements (Co, Au, Ag, S, Fe),
Examples	Sudbury Deposits; Great Lakes Nickel; Ont-Duluth Complex, Minnesota; Stillwater Complex, Montana; Brady Glacier, Alaska; Noril'sk-Talnakh, Russia; Pikwe and Selebi Deposits, Botswana
Importance	Canada: the Sudbury deposits have, by a considerable margin, produced more nickel than any other district in the world, as well as substantial copper, precious metals and other by-products. World: this type is estimated to account for about 80% of the world's reserve of sulphide nickel and about half of current world production of Platinum Group Elements (PGE)
Typical Grade, Tonnage	Individual bodies may contain from a few hundred thousand tonnes to tens of millions of tonnes of ore, and each intrusive complex generally contains a number of ore bodies. Grades generally range from about 0.6 to 1.6% Ni, 0.2 to 1.3% Cu but large, lower grade deposits are known (e.g. Great Lakes Nickel, 0.20% Ni, 0.36% Cu). Combined PGE content (Pd and Pt mainly) is generally of the order of one g/tonne, but Stillwater, Merensky Reef and Talnakh deposits contain PGE in the 10-20 g/t range
Geological Setting	12.2.a), (12.2.b) Layered intrusions generally occur in a cratonic setting, in some cases associated with intracontinental rifts and flood basalts. Some occur in Archean greenstone belts. Sudbury deposits are related to a structure of probable meteoritic impact origin

*table continues...*

<b>Gabbroid-associated Nickel, Copper, Platinum Group Elements subtype 12.2.A: Layered Intrusive</b>	
Host Rock	Various mafic phases of intrusive complexes; includes norite, gabbro, troctolite, feldspathic pyroxenite, amphibolite, gabbro-diabase, picrite. The North Range deposits at Sudbury occur in pyroxenite, amphibolite, gabbro-diabase, picrite. The North Range deposits at Sudbury occur in brecciated leucocratic footwall rocks. The Merensky Reef is coarse grained feldspathic pyroxenite with associated thin chromitite layers
Associated Rocks	A variety of phases of the mafic intrusive complexes; includes diorite, peridotite, pyroxenite, anorthosite, gabbro, norite; wall rocks of the intrusive complexes
Form of Deposit	(12.2.a) Conformable layers or lenses, commonly located in a local depression or embayment at or near the base of the host layered intrusion. Ore consists of massive sulphides, sulphide-matrix breccia, interstitial sulphide network, and disseminated sulphide. In well preserved deposits, the rich ores lie nearest the base, and are overlain by leaner disseminated sulphide. Sulphide veins and disseminations commonly penetrate footwall rocks.
Principal Ore Minerals	Pentlandite, chalcopyrite, cubanite, millerite; various PGE minerals including sulphides, tellurides, arsenides and alloys
Associated Minerals	Pyrrhotite, pyrite, sphalerite, millerite, marcasite; plagioclase, hypersthene, augite, olivine, hornblende, biotite, quartz, and a variety of alteration minerals
Host Rock Age	Various ages; most are Precambrian (Sudbury, 1.85 Ga; Great Lakes Nickel and Duluth Complex, 1.1 Ga; Bushveld Complex, 2.1 Ga; Stillwater Complex, 2.7 Ga; Lynn Lake ) 1.8 Ga) but Noril'sk-Talnakh intrusions are Permo-Triassic, and other Paleozoic and Mesozoic examples are known
Genetic Model	Mafic magma (probably mantle-derived in most cases) was generally emplaced quiescently as multiple pulses in upper levels of the crust, in some cases apparently in a tensional environment associated with rifting. Early sulphur saturation of the magma produced flow- and gravity-segregations of Ni-Cu-bearing sulphides at the base of the intrusion. Contamination of the magma probably contributed importantly to sulphide saturation in many deposits either through addition of sulphur, or assimilation of siliceous material. Most of the sulphur in several large district (Noril'sk-Talnakh, Duluth Complex) was probably derived from underlying sedimentary rocks
Ore Control	The basal contacts (particularly embayments in the basal contacts) and immediate overlying zones (up to about 200 m) in layered intrusions are the most common sites of nickel-copper sulphide ores



## 9.0 EXPLORATION

Prophecy has not conducted any reconnaissance exploration on the Property prior to this technical report. The Prophecy drilling campaigns are described in Section 11.0 Drilling.

### 9.1 2007 NORTHERN PLATINUM

An underground sampling campaign unreported in previous reports was conducted in 2007. A total of 800 chip samples were taken at two meter intervals along the underground workings.

The samples were analyzed for platinum and palladium at ALS Chemex Labs in Vancouver, B.C. Of these, 174 samples exceeded 1 g/t platinum or palladium, were assayed for gold, rhodium, osmium, iridium, and ruthenium. The 2007 sampling program was overseen by Rory Calhoun, P. Geo., now an employee of Prophecy. Concentrations of rhodium, osmium, iridium, and ruthenium were present in all of the follow-up samples. Assays where rhodium exceeded 0.5 g/t are listed in Table 9.1.

**Table 9.1 Northern Platinum Underground Sampling**

Sample Number	Length (m)	Pt (g/t)	Pd (g/t)	Os (g/t)	Ru (g/t)	Ir (g/t)	Rh (g/t)	Au (g/t)	PGM+Au (g/t)
C509697	1.55	2.26	0.90	0.85	0.66	1.77	0.729	1.070	8.239
C509698	1.55	2.03	1.30	0.68	0.83	1.59	0.754	1.120	8.304
C509701	2.15	1.50	0.76	0.54	0.51	1.23	0.591	0.131	5.262
C509704	2.00	1.50	0.53	0.66	0.67	1.45	0.677	0.297	5.784
C509811	11.60	1.60	1.00	0.50	0.73	0.92	0.567	0.080	5.396
C509813	2.00	0.83	1.10	0.81	1.20	1.11	0.758	0.053	5.861
C509814	2.20	1.90	2.07	0.92	1.40	1.06	0.839	0.092	8.281
C509087	1.90	1.60	0.66	1.17	1.50	1.41	0.795	0.309	7.444
C509089	0.85	1.40	2.70	1.32	1.80	1.60	1.140	0.199	10.159
C509092	0.70	1.90	1.40	0.97	1.40	1.39	0.971	0.238	8.269
C509097	0.65	3.70	2.24	1.27	1.90	1.72	0.895	0.379	12.104
C509098	1.55	2.15	3.54	0.70	0.84	0.98	0.629	0.193	9.035
C509101	0.60	2.00	0.85	0.73	1.10	0.88	0.551	0.236	6.343
C509104	1.05	2.25	2.36	0.63	0.80	0.78	0.698	0.120	7.634
C509111	0.60	3.61	1.10	1.03	1.40	1.12	0.966	0.426	9.652
C509112	0.40	2.59	2.88	0.91	1.10	0.99	0.853	0.271	9.594
C509114	1.70	3.67	3.87	0.70	0.91	1.00	0.643	0.726	11.518
C509131	0.55	4.77	1.80	0.88	1.30	1.13	0.675	0.495	11.050
C509140	0.65	3.01	3.55	0.78	1.00	1.12	0.672	0.655	10.787

*table continues...*

Sample Number	Length (m)	Pt (g/t)	Pd (g/t)	Os (g/t)	Ru (g/t)	Ir (g/t)	Rh (g/t)	Au (g/t)	PGM+Au (g/t)
C509145	0.40	1.40	1.20	0.94	1.50	1.32	0.653	0.053	7.066
C509146	1.45	1.80	0.76	1.39	2.00	2.08	0.827	0.139	8.996
C509147	1.60	3.29	1.20	0.76	1.00	1.08	0.725	0.341	8.396
C509190	1.55	2.89	3.67	0.49	0.76	0.72	0.516	0.242	9.289

## 10.0 DRILLING

### 10.1 HISTORICAL DRILLING

Considerable surface and underground drilling was completed by Hudson–Yukon, operating subsidiary of HBM&S in the 1950s. More drilling was completed under the auspices of the Kluane Joint Venture (All-North, Chevron and Galactic) in the 1980s. Drill logs, assay summaries and assay certificates for some of these historic drill holes are available and can be compiled into a database to support any future Mineral Resource estimate. This historic work has not been completely documented.

### 10.2 CORONATION MINERALS DRILLING

The holes drilled on the Wellgreen Property by Coronation were for the purpose of validating the historical drilling done by the Kluane JV in 1986 and 1987. The program was designed by WGM with a total of 24 holes proposed.

Coronation engaged E. Caron Drilling of Whitehorse, Yukon, as the drill contractor. All of the surface drilling was HQ, were reduced to NQ as the depth increased. The underground drilling was all BTW. The drilling started in late July 2006 and a total of eleven were completed for a total of 2,016 m. Collars were surveyed using a total station system. Acid tests were completed downhole to determine hole inclination. Ten of the holes drilled in 2006 were drilled in order to “twin” historical holes drilled by the Kluane JV.

In 2007, three underground holes were completed totalling 577 m. Two of the holes were designed to “twin” historical holes.

In 2008, thirteen additional holes were drilled by Coronation.

In 2008, the Wellgreen Project database was updated with the results of the 2006 and 2008 drilling programs.

Table 10.1 provides highlights of the drill programs completed by Coronation. Core lengths provided in the table do not represent true widths.

**Table 10.1 Coronation Drill Results**

Borehole ID	From (m)	To (m)	Length (m)	Ni (%)	Cu (%)	Co (%)	Pt (g/t)	Pd (g/t)	Au (g/t)
WS-06-143	3.05	82.14	79.09	0.18	0.09	0.01	0.19	0.15	0.03
WS-06-144	45.97	84.68	38.71	0.27	0.64	0.02	0.85	0.41	0.27

*table continues...*

Borehole ID	From (m)	To (m)	Length (m)	Ni (%)	Cu (%)	Co (%)	Pt (g/t)	Pd (g/t)	Au (g/t)
WS-06-145	3.05	161.85	158.8	0.25	0.54	0.02	0.61	0.03	0.19
WS-06-146	10.59	89.00	78.41	0.17	0.26	0.02	0.4	0.22	0.11
WS-06-147	3.66	95.10	91.44	0.17	0.23	0.02	0.36	0.22	0.06
WS-06-148	27.88	168.35	140.47	0.2	0.15	0.02	0.32	0.26	0.06
WS-06-149	5.18	97.35	92.17	0.26	0.38	0.02	0.61	0.4	0.11
WS-06-150	1.52	107.36	105.84	0.29	0.17	0.02	0.28	0.31	0.04
WS-06-151	3.05	242.39	239.34	0.27	0.11	0.01	0.2	0.28	0.03
WS-06-152	16.76	146.30	129.54	0.25	0.08	0.01	0.18	0.23	0.02
WS-06-153	108.74	120.40	11.66	0.55	1.13	0.04	1.13	0.95	0.19
WU-07-517	77.72	156.97	79.25	0.48	0.37	0.02	0.43	0.35	0.06
WU-07-518	14.25	158.19	143.94	0.30	0.25	0.01	0.40	0.27	0.27
WU-07-519	179.53	258.78	79.25	0.33	0.14	0.02	0.28	0.38	0.27
WS-08-154	2.13	218.21	216.08	0.24	0.12	0.14	0.23	0.23	0.04
WS-08-154	356.92	625.75	268.83	0.27	0.23	0.12	0.38	0.30	0.07
WS-08-155	37.80	101.50	63.7	0.21	0.51	0.02	0.75	0.37	0.23
WS-08-156	0.00	96.93	96.93	0.24	0.11	0.01	0.25	0.25	0.04
WS-08-156	152.70	207.90	55.2	0.24	0.38	0.02	0.45	0.27	0.14
WS-08-157	0.00	80.62	80.62	0.44	0.52	0.03	0.66	0.66	0.15
WS-08-158	2.74	94.34	91.6	0.33	0.16	0.02	0.25	0.66	0.04
WS-08-159	0.00	285.75	285.75	0.24	0.21	0.01	0.32	0.66	0.05
WS-08-160	2.74	102.02	99.28	0.28	0.16	0.02	0.20	0.27	0.03
WS-08-160	356.00	714.76	358.76	0.31	0.32	0.02	0.54	0.35	0.13
WS-08-161	0.00	124.36	124.36	0.28	0.13	0.02	0.19	0.25	0.04
WS-08-162	0.00	101.80	101.8	0.27	0.10	0.01	0.20	0.28	0.02
WS-08-163	0.00	88.39	88.39	0.25	0.09	0.01	0.22	0.24	0.02
WS-08-164	2.44	170.08	167.64	0.27	0.12	0.01	0.48	0.23	0.03
WS-08-165	361.86	494.46	132.60	0.27	0.36	0.02	0.51	0.34	0.12
WS-08-166	4.88	96.62	91.74	0.24	0.02	0.01	0.08	0.13	0.01

### 10.3 NORTHERN PLATINUM DRILLING

The drilling conducted by Northern Platinum was designed to extend and expand the potential resource of the Wellgreen deposit by targeting up dip of the East zone and east along strike. Drilling was completed by E. Caron drilling of Whitehorse. A total of ten drill holes were completed during the 2009 drill program. All holes were drilled HQ and all drilling run were in five foot intervals (1.52 m).

The collars were initially spotted with a hand held GPS or compass and chain, with the final completed collars were again surveyed with a hand held GPS, compass and chain or a total station GPS. Down-hole surveys were completed using the ReflexIt® tool. Survey readings were collected approximately 9 m off the bottom of the hole and at approximately 152 m intervals up the hole. Erroneous directional readings

located within the mineralized zones were discarded due to the magnetic influence of the pyrrhotite. Inclination readings were not affected by the magnetic minerals.

Table 10.2 provides the collar information for the drill program completed by Northern Platinum. Table 10.3 provides the highlights of the drill program completed by Northern Platinum. Core lengths in the table do not represent true widths.

**Table 10.2 Northern Platinum 2009 Drill Collars**

Borehole ID	Easting*	Northing*	Elevation*	Depth (m)	Azimuth*	Dip
WS09-167	2791.6	15379.6	1574	177.4	0	-50
WS09-168	3349.6	15200.6	1426	127.4	0	-50
WS09-169	3241.6	15213.6	1474	127.4	0	-50
WS09-170	3243.6	15156.6	1457	165.2	9	-50
WS09-171	3105.6	15257.6	1502	188.1	0	-50
WS09-172	3217.6	15155.6	1463	163.7	0	-50
WS09-173	3065.0	14945.0	1409.7	166.6	0	-50
WS09-174	3897.7	14843.2	1249.8	463.0	0	-50
WS09-175	3998.5	14948.9	1239.3	131.7	0	-60
WS09-176	3608.6	15047.6	1276.6	347.4	90	-45

**Note:** \*mine grid coordinate system

**Table 10.3 Northern Platinum 2009 Drill Results**

Borehole ID	From (m)	To (m)	Length (m)	Ni (%)	Cu (%)	Co (%)	Pt (g/t)	Pd (g/t)	Au (g/t)
WS09-167	12.00	136.49	124.49	0.22	0.08	0.01	0.10	0.17	0.04
WS09-168	0.00	112.10	112.1	0.27	0.17	0.02	0.18	0.24	0.04
WS09-169	19.45	127.41	107.96	0.24	0.11	0.03	0.16	0.25	0.03
WS09-170	3.00	157.44	154.44	0.34	0.21	0.02	0.24	0.27	0.04
WS09-171	7.70	135.17	127.47	0.26	0.12	0.01	0.15	0.22	0.03
WS09-172	12.19	154.36	142.17	0.27	0.21	0.01	0.16	0.20	0.05
WS09-173	6.40	166.57	160.17	0.2	0.02	0.01	0.08	0.13	0.01
WS09-174	7.44	454.43	446.99	0.17	0.04	0.01	0.08	0.10	0.02
WS09-175	3.96	20.03	16.07	0.15	0.03	0.01	0.05	0.06	0.01
WS09-176	2.44	341.38	338.94	0.16	0.02	0.01	0.05	0.07	0.01

## 10.4 PROPHECY DRILLING

The drilling conducted by Prophecy was designed initially to extend and expand the potential resource of the Wellgreen deposit by targeting the East Zone along strike. The focus of the program evolved to test the hanging wall disseminated sulphides located in the ultramafic unit

Drilling was completed by E. Caron drilling of Whitehorse. A total of seven drill holes were completed during the 2010 drill program from June to October. All holes were drilled HQ and all drilling run were in five foot intervals (1.52 m). The first six holes were completed by Northern Platinum prior to the closing of the acquisition of Northern Platinum by Prophecy.

The collars were initially spotted with a hand held GPS or compass and chain, with the final completed collars were again surveyed with a hand held GPS, compass and chain or a total station GPS. Down-hole surveys were completed using the ReflexIt® tool. Survey readings were collected approximately 9 m off the bottom of the hole and at approximately 152 m intervals up the hole. Erroneous directional readings located within the mineralized zones were discarded due to the magnetic influence of the pyrrhotite. Inclination readings were not affected by the magnetic minerals.

Table 10.4 provides the collar information for the drill program completed by Prophecy. Table 10.5 provides the highlights of the drill program completed by Prophecy. Core lengths in the table do not represent true widths. Figure 10.1 shows the position of the 2010 drill holes relative to the rest of the surface holes completed on the project.

**Table 10.4 Prophecy 2010 Drill Collars**

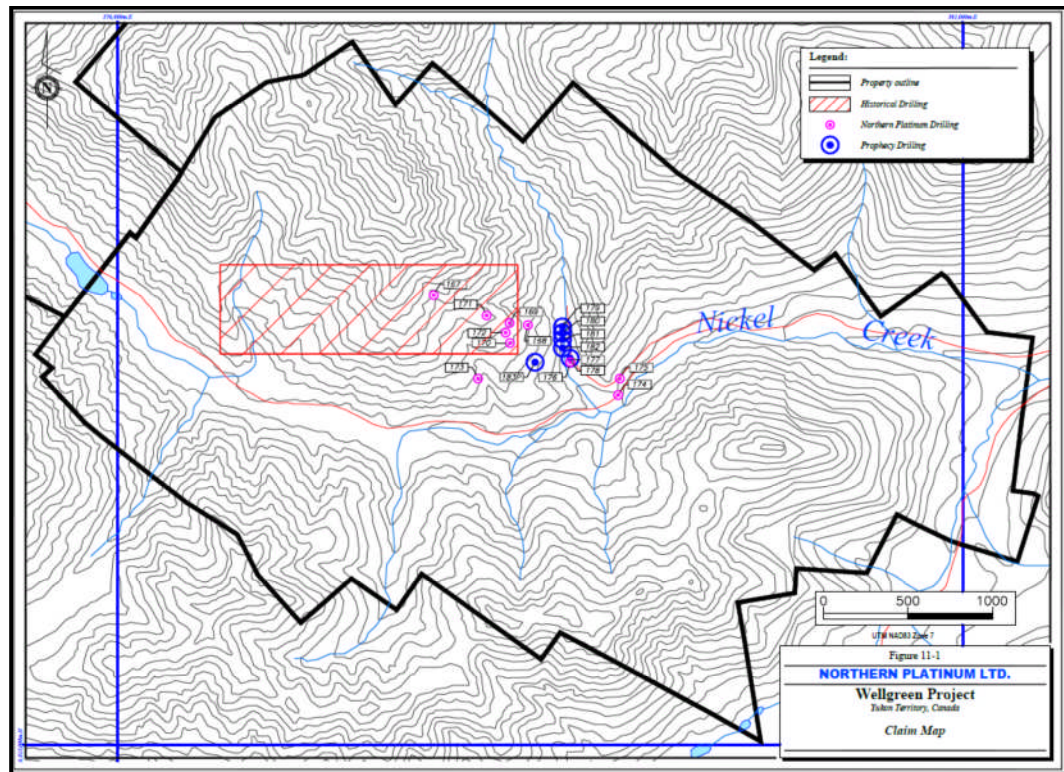
Borehole ID	Easting*	Northing*	Elevation*	Depth (m)	Azimuth*	Dip
WS10-177	3601.2	15063.8	1277.3	563.0	0	-45
WS10-178	3597.6	15015.5	1271.9	601.1	0	-45
WS10-179	3553.3	15249.8	1300.5	262.7	0	-45
WS10-180	3552.5	15198.4	1297.3	299.3	0	-45
WS10-181	3536.7	15153.2	1301.9	232.2	0	-45
WS10-182	3530.8	15102.3	1354.5	88.7	0	-45
WS10-183	3401.9	15050.0	1378.5	116.4	0	-50

**Table 10.5 Prophecy 2010 Drill Results**

Borehole ID	From (m)	To (m)	Length (m)	Ni (%)	Cu (%)	Co (%)	Pt (g/t)	Pd (g/t)	Au (g/t)
WS10-177	5.3	531.2	525.9	0.26	0.17	0.02	0.248	0.248	0.054
WS10-178	5.2	572.0	566.8	0.23	0.16	0.01	0.247	0.219	0.051
WS10-179	0.9	179.7	178.8	0.16	0.03	0.01	0.093	0.109	0.009
WS10-180	23.2	244.9	221.8	0.18	0.03	0.01	0.082	0.114	0.010
WS10-181	10.2	291.0	280.9	0.17	0.06	0.01	0.079	0.095	0.011
WS10-182	0.0	71.2	71.2	0.31	0.22	0.02	0.277	0.153	0.036
WS10-183	0.0	43.6	43.6	0.26	0.09	0.02	0.226	0.224	0.031
WS10-183	88.8	116.7	27.9	0.30	0.15	0.02	0.347	0.235	0.043



**Figure 10.1    Prophecy 2010 Drill Plan**



## 10.5 SAMPLING METHODS

### 10.5.1 HISTORICAL METHODS

Sampling details for historic programs have not been verified by Wardrop. No QA/QC programs were conducted at the time. Hudson Yukon assayed all core at their internal lab in Flin Flon, Manitoba.

Wardrop recommends that Northern Platinum continue to research the details of the historical programs by Hudson Yukon and the Kluane JV.

### 10.5.2 CORONATION METHOD AND APPROACH

The drill core was logged by the company geologist and assistants, at the facilities designed for that purpose at the Coronation base camp at site, under the direct supervision of Mr. Rory Calhoun, P.Geo. The geologist would record lithology, mineralization, structures, sample number, etc., and the assistants would record the geotechnical data (RQD, recovery).

Sample length would vary due to lithology and mineralization observed by the geologist and the core would be marked accordingly. Most sampled intervals were 1.52 m or 5 ft in length. The assistant would then take the core into the saw shack



and cut it in half using a core saw. After cutting, the core would be returned to the core tray and the geologist would sample it. Half of the split core would be placed in a plastic sample bag with the sample tag. The sample number was also written on the outside of each bag for easy identification. No sample tags were left in the core trays.

All of the data from logging the core was recorded on hand written logs and then transferred to MS Excel spreadsheets, for later import into a geological software package

### 10.5.3 *NORTHERN PLATINUM & PROPHECY METHOD AND APPROACH*

The following description of the sampling methodology was provided by Rory Calhoun, P. Geo.

- Drill core is delivered to the core shack by the diamond drill contractor.
- Core boxes are sorted and placed in groups of three.
- Group of boxes are photographed.
- Run markers and other marker blocks are checked for accuracy.
- Geologist collects RDQ and recovery data on a paper form, to be later transferred to a spreadsheet.
- Core is logged by the geologist on a paper form.
  - There are no lithological codes, as the logs are written long hand.
  - There is only one geologist logging the core for consistency.
- Minimum sample unit is 2 inches; maximum sample length is 5 feet (1.52 m).
- Samples do not cross lithological contacts.
- Sample marked on the box with the footage and sample number.
- Samples are taken to the core cutting facility for cutting by a technician.
  - Saw uses fresh water which drains into sump below the floor before decanting to the creek.
  - Core is cut and placed back into the core box.
  - Core box with cut core is returned to the core shack for sampling.
- Geologist and technician collect the cut core from the same side and place samples in clean plastic bags with a sample tag. The sample number is written on the outside of the sample bag.
- QA/QC samples are inserted into the sample stream at prescribed intervals. Full description of the QA/QC program is provided in Section 13 Sample Preparation, Analyses and Security.

- Five samples bags are placed in rice bags and a record is made of the sample number placed in each rice bag.
- Core is stored on core racks inside a secure building or shipping container on the Property which has a full time security guard living on site.
- The course rejects returned from the laboratory are stored in sealed plastic tubs inside a secure building on site.

**Figure 10.2     Core Shack**



**Figure 10.3     Core Saw Facility**





**Figure 10.4     Core Storage Facility**



**Figure 10.5 Shipping Container Storage**



## 11.0 SAMPLE PREPARATION, ANALYSES, AND SECURITY

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### 11.1 HISTORICAL PROGRAMS

Wardrop is not aware of the procedures and analytical methods used prior to the Coronation drilling programs.

### 11.2 CORONATION PROGRAMS

After the sample bags were sealed, company personnel would take the samples into the Coronation geological office. The samples would be stored there with only the geologist and camp manager having access. When enough samples had accumulated, company personnel would pack them in plastic containers, label, and take the containers to the shipper (Air North) in Whitehorse. Air North would deliver the samples to ALS-Chemex in Vancouver for assaying.

All samples, including field-inserted Standards and Blanks, were sent to ALS-Chemex in Vancouver, British Columbia, for assaying. ALS-Chemex has ISO/IEC 17025:2005 and ISO 9001:2000 certification.

Copper, nickel, cobalt, gold, platinum, and palladium were the elements assayed for. The following is a brief description of the sample preparation:

1. Samples are sorted into numerical order and then dried.
2. Once dried, the material was crushed using a jaw crusher.
3. The sample is then split to get a 250 g sample for pulverizing.
4. The total 250 g of split sample is pulverized to 85% passing 75 microns.

Gold, platinum, palladium were assayed by fire assay fusion of 30 g with an ICP finish. The resulting values were reported in parts per million.

Copper, nickel, and cobalt were assayed by "Four Acid "Near Total" Digestion" atomic absorption spectrometry. If any of the assays returned values above the detection limits, the sample would be re-assayed using a similar method (ICP-AES or AAS).

At no time was a Coronation employee or designate of the company involved in the preparation or analysis of the samples.



### 11.3 NORTHERN PLATINUM 2009 PROGRAMS

After the sample bags were sealed, company personnel would take the samples into the Northern Platinum geological office. The samples would be stored there with only the geologist and camp manager having access. When enough samples had accumulated, company personnel would pack them in plastic containers, label, and take the containers to the shipper (Air North) in Whitehorse. Air North would deliver the samples to Loring Laboratories in Calgary for assaying.

All samples, including field-inserted Standards and Blanks, were sent to Loring Laboratories in Calgary, AB. for assaying. Loring has ISO 9001:2000 certification.

A 30 element package, including copper, nickel and cobalt reported in parts per million is analyzed by Aqua Regia "partial digestion" followed by IPC analyses. Gold, Platinum, Palladium and Rhodium were analyzed by four acid digestion followed by a 30 g fire assay with AA finish.

At no time was a Northern Platinum employee or designate of the company involved in the preparation or analysis of the samples.

### 11.4 PROPHECY 2010 PROGRAM

After the sample bags were sealed, company personnel would take the samples into the Prophecy geological office. The samples would be stored there with only the geologist and camp manager having access. When enough samples had accumulated, company personnel would pack them into rice bags, label, and take the bags to the ALS Preparation facility in Whitehorse.

All samples, including field-inserted Standards and Blanks, were sent to ALS-Chemex in Vancouver, British Columbia, for assaying. ALS-Chemex has ISO/IEC 17025:2005 and ISO 9001:2000 certification.

Copper, nickel, cobalt, gold, platinum, and palladium were the elements assayed for. The following is a brief description of the sample preparation:

1. Samples are sorted into numerical order and then dried.
2. Once dried, the material was crushed using a jaw crusher.
3. The sample is then split to get a 250 g sample for pulverizing.
4. The total 250 g of split sample is pulverized to 85% passing 75 microns.

Gold, platinum, palladium were assayed by fire assay fusion of 30 g with an ICP finish. The resulting values were reported in parts per million.

Copper, nickel, and cobalt were assayed by "Four Acid "Near Total" Digestion" atomic absorption spectrometry. If any of the assays returned values above the detection limits, the sample would be re-assayed using a similar method (ICP-AES or AAS).

At no time was a Prophecy employee or designate of the company involved in the preparation or analysis of the samples.

## 11.5 QUALITY ASSURANCE/QUALITY CONTROL PROGRAM

The same quality assurance/quality control (QA/QC) program was in place for Coronation, Northern Platinum and Prophecy Platinum as described below.

Blanks, Standard Reference Material (SRM), and duplicates were inserted into the sample stream every 20th sample.

A duplicate sample, would be take every 20th sample of core. The selected sample is sawn in half and then would be sawn in half again. The quartered core was then placed into two different sample bags with different sample numbers and sealed.

The SRMs came from Natural Resources Canada and Analytical Solutions Limited. These were inserted into the sample stream immediately after the second duplicate. The SRMs used are WMS-1a, WPR-1 and WGB-1. The certificates for the SRMs are found in Appendix B.

Sample Blanks were obtained from two sources; granodiorite from a local road metal quarry, and garden marble from hardware stores in Whitehorse, Yukon. A Blank sample was inserted into the sample stream after the SRM.

Wardrop has not compiled or reviewed the results of the QA/QC programs for either the Coronation or Northern Platinum drilling programs and cannot comment on the validity of the result.

In addition to the field-inserted QA/QC program, the laboratories operate their own laboratory QA/QC system. The labs insert quality control materials, Blanks and duplicates on each analytical run.

No secondary laboratory check assaying was completed on the recent drilling programs.

Wardrop believes the sampling practices of Prophecy meets current industry standards. Wardrop provided Prophecy with recommendations on ways to improve the current QA/QC program to make it more effective. These recommendations include:

- The company geologist should review the results of the field-inserted QA/QC data and it is also good practice for the geologist to review the laboratory-internal QA/QC data.
- A selection of course rejects or pulps samples up to 10% of the data set should be sent to a second laboratory as part of the QA/QC program.
- Maintain the insertion rate of one blank, one duplicate and 1 SRM for every twenty samples.

## 12.0 DATA VERIFICATION

Todd McCracken, P.Geo., Principal Geologist with Wardrop visited the Property, from June 28 to July 1, 2010. Mr. McCracken was accompanied by Mr. Rory Calhoun, P.Geo., Project Geologist with Northern Platinum and Mr. Mel de Quadros, P. Eng., President of Northern Platinum. Mr. McCracken reviewed the project, toured underground and surface exposures, reviewed numerous geological logs and assays and core from the storage facility.

Wardrop was able to observe the core handling, logging and sampling procedures being done by Northern Platinum and concludes that the procedures meet industry standards.

Wardrop confirmed the locations of four surface boreholes collars during the site visit. Wardrop collected the collar locations using a Garmin GPSmap 60Cx handheld Global Positioning System (GPS) unit. Wardrop also observed the position of four underground boreholes, including two of the recently twinned holes drilled. All collar locations were located within the acceptable error limit of the GPS unit (Table 12.1).

**Table 12.1 Borehole Collar Validation**

Borehole ID	Northern Platinum			Wardrop		
	Easting	Northing	Elevation	Easting	Northing	Elevation
WS06-144			1490	576873	6815846	1492
WS06-145			1517	576968	6815846	1520
WS08-155			1510	576938	6815850	1512
WS09-170	578321	6815453	1457	578319	6815453	1444

Eight independent samples of mineralized split drill core (1/4 core) were collected for check assaying representing different styles of mineralization. The samples were bagged, sealed on site and transported personally by Mr. McCracken on the plane to Wardrop's Sudbury office. On arrival at the office, the bag was opened for verification purposes, re-sealed and personally delivered to the ALS-Chemex preparation facility in Sudbury, Ontario. The pulps are then sent by courier to the ALS-Chemex laboratory facility in Vancouver, British Columbia, which is accredited to ISO/IEC 17025, for independent assaying. The samples were analyzed for nickel, copper, cobalt, platinum, palladium and gold, using analysis packages PGM-ICP23 (30 g fire assay, with Induced Coupled Plasma (ICP) finish) for the precious metals and ME-OG62 (four acid digestion Induced Coupled Plasma-Atomic Emission Spectrometry (ICP-AES)) for nickel, copper and cobalt.

A NI-OG46 package was completed on the samples as well. This was to test for nickel in sulphides using a partial digestion (aqua regia). The partial digestion method will easily digest all the sulphides in the sample and only a minor amount of the silicate minerals may get digested. This will provide an idea as to the amount of nickel that is in the sulphides compared to how much nickel is in the silicate minerals such as olivine. The samples returned comparable results to the previous assays and indicate that over 90% of the nickel is likely found within the sulphides as showing in Table 12.2.

The borehole database was validated against the original drill logs and assay certificate. Between 10 and 155 of the data was validated. Numerous errors were identified and correct in the database and the corrections provided to Prophecy Platinum in order to correct their database. Table 12.3 summarizes the validation numbers.

**Table 12.2 Check Assays**

BHID	From (ft)	To (ft)	Prophecy							Wardrop							Partial Digestion
			Sample #	Ni (%)	Cu (%)	Co (%)	Pt (ppm)	Pd (ppm)	Au (ppm)	Sample #	Ni (%)	Cu (%)	Co (%)	Pt (ppm)	Pd (ppm)	Au (ppm)	Ni (%)
WS06-144	205	210	C505119	0.643	1.21	0.0385	1.635	0.693	0.313	40301	0.521	1.01	0.036	1.675	0.706	0.273	0.494
WS06-145	318.5	322	C505223	0.196	0.643	0.0195	0.800	0.408	0.258	40302	0.206	0.639	0.020	0.820	0.412	0.160	0.199
WS06-155	137	142	C509198	0.304	0.205	0.0206	0.630	0.326	0.039	40303	0.336	0.213	0.022	0.630	0.339	0.050	0.312
WS06-149	275	280	C505631	0.346	0.659	0.0266	1.375	0.732	0.310	40304	0.335	0.669	0.027	1.305	0.646	0.197	0.324
WS06-153	383.9	386	C506184	1.25	2.54	0.0778	1.750	2.290	0.365	40305	1.23	2.4	0.083	2.370	3.710	0.333	1.17
WS09-170	475.7	479	2107	2.83	1.53	0.145	1.328	0.925	0.142	40306	2.31	1.56	0.115	1.450	1.190	0.235	2.21
WS08-165	2159	2164	C508049	0.25	0.948	0.0202	1.260	0.716	0.380	40307	0.272	1.015	0.022	1.210	0.668	0.313	0.25
WS10-178	1823.3	1824.8								40308	0.223	0.409	0.020	0.419	0.224	0.115	0.211



**Table 12.3 Database Validation Summary**

			Comments
Header	Number of Records	701	
	Number of Records Validated	100	
	Validation Rate	14%	
	X coordinate Error Rate	33%	Only 2008 holes
	Y coordinate Error Rate	27%	Only 2008 holes
	Z coordinate Error Rate	20%	Only 2008 holes
	Hole Length Error Rate	0%	
Survey	Number of Records	400	
	Number of Records Validated	66	
	Validation Rate	17%	
	Distance Error Rate	42%	2007 holes only have start & end reading, although reading taken at intervals downhole
	Azimuth Error Rate	41%	2007 holes only have start & end reading, although reading taken at intervals downhole
	Dip Error Rate	44%	2007 holes only have start & end reading, although reading taken at intervals downhole
Litho	Number of Records	6887	
	Number of Records Validated	867	
	Validation Rate	13%	
	From Error Rate	0%	
	To Error Rate	0%	
	Rockcode Error Rate	35%	Need to understand why database has different codes compared to the logs.
Assay	Number of Records	7347	
	Number of Records Validated	965	
	Validation Rate	13%	
	From Error Rate	0.4%	
	To Error Rate	0.1%	
	Sample Number Error Rate	0.0%	
	Au Error Rate	9.9%	Primarily due to LA08-068 & LA08-069 containing no assay results in the Database
	Pt Error Rate	9.5%	Primarily due to LA08-068 & LA08-069 containing no assay results in the Database
	Pd Error Rate	9.9%	Primarily due to LA08-068 & LA08-069 containing no assay results in the Database
	Ag Error Rate	9.0%	Primarily due to LA08-068 & LA08-069 containing no assay results in the Database
	Co Error Rate	10.7%	Primarily due to LA08-068, LA08-069 & LA08-071 containing no assay results in the Database
	Cu Error Rate	10.6%	Primarily due to LA08-068, LA08-069 & LA08-071 containing no assay results in the Database
	Ni Error Rate	10.6%	Primarily due to LA08-068, LA08-069 & LA08-071 containing no assay results in the Database

## 13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

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Prophecy Platinum has not conducted any metallurgical testing on the Property. Results of historical mineral processing are found in Section 6.0 History.

## 14.0 MINERAL RESOURCE ESTIMATES

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### 14.1 CURRENT RESOURCE

#### 14.1.1 DATABASE

Prophecy Platinum maintains all borehole data in spreadsheet databases. Header, survey, assays, and lithology tables are saved on individual tabs in the spreadsheet. The Microsoft™ Excel spreadsheet provided to Wardrop was created on February 17, 2011.

The database contains 702 boreholes, of which 183 were drilled from surface and 519 drilling from various underground workings. There are a total of 13,532 assays records in the database. Table 14.1 summarizes the borehole database.

The resource estimation was conducted using Datamine™ Studio 3 version 3.19.3638.0.

**Table 14.1 Drill Data Set**

	No. of Holes		
	Surface	Underground	Total
West Zone	70	3	73
East Zone	80	516	596
<b>Total</b>	<b>183</b>	<b>519</b>	<b>702</b>

#### 14.1.2 SPECIFIC GRAVITY

There is currently no specific gravity (SG) data available on the project.

Wardrop used an SG of 3.22 for the resource estimate, which is the same number used in previous estimate. An SG of 3.22 is within the accepted range of a peridotite which typically has an SG value between 3.2 and 3.4.

Wardrop would recommend that Prophecy Platinum collect SG measurements from the various rocks types and grade distributions in order to build up the data set. At a minimum, 2% of the data set should have SG measurements.

### 14.1.3 EXPLORATORY DATA ANALYSIS

#### ASSAYS

The portion of the deposit included in the mineral resource was sampled by a total of 16,498 nickel assays. A lesser numbers of assays were collected from copper, cobalt, platinum, palladium and gold. Table 14.2 summarizes the basic statistics for the assays at Wellgreen as a whole and for the East and West Zones individually.

**Table 14.2 Borehole Assay Stats**

Zone	Field	N Samples	Minimum	Maximum	Mean	Standard Deviation
Wellgreen	Length	27682	0.00	339.83	1.91	6.19
	Pt	11421	0.00	54.85	0.65	1.56
	Pd	11335	0.00	91.53	0.55	1.94
	Au	7687	0.00	25.71	0.15	0.70
	Ni	16498	0.00	14.00	0.59	0.96
	Cu	16109	0.00	16.29	0.53	0.90
	Co	11720	0.00	2.59	0.02	0.05
West	Length	3687	0.00	30.32	1.44	1.63
	Pt	2267	0.00	13.71	0.49	0.76
	Pd	2202	0.00	3.91	0.30	0.33
	Au	1502	0.00	25.71	0.15	0.75
	Ni	3070	0.00	3.50	0.29	0.34
	Cu	3010	0.00	5.10	0.34	0.42
	Co	1841	0.00	0.70	0.02	0.02
East	Length	14630	0.00	74.88	1.18	1.88
	Pt	8161	0.00	54.85	0.45	0.89
	Pd	8168	0.00	91.53	0.37	0.85
	Au	5521	0.00	20.91	0.08	0.34
	Ni	12041	0.00	14.00	0.44	0.75
	Cu	11756	0.00	16.29	0.37	0.63
	Co	8961	0.00	2.59	0.02	0.04

#### GRADE CAPPING

Raw assay data for each zone was examined individually to assess the amount of metal that is at risk from high grade assays. The Datamine© Decile function was used to determine if grade capping was required on any of the elements in either the West or East Zones. Wardrop elected to apply a top cut to the grades that exceeded 40% metal content in the ninetieth (90<sup>th</sup>) decile.

Table 14.3 summarizes the grade capping that was applied to the various elements on the both the West and East Zones.

**Table 14.3 Grade Capping**

Zone	Element	No. of Sample	No. of Samples Capped	Grade Range Capped	Capping Value	% Capped
WZ	Au	1502	8	2.4 - 25.71	2.29	0.5%
EZ	Pt	8161	87	5.83 - 54.85	5.72	1.1%
EZ	Pd	8168	87	5.14 - 91.53	5.14	1.1%
EZ	Au	5521	39	2.40 - 15.08	2.05	0.7%
EZ	Cu	11756	136	4.15 - 16.29	4.14	1.2%

Table 14.4 summarizes the statistics of the borehole data after grade capping was completed. The table indicates that although capping has been applied to selected elements, the resulting change to the mean grade is not significant.

**Table 14.4 Borehole Capped Grade Statistics**

Zone	Field	N Samples	Minimum	Maximum	Mean	Standard Deviation
West	Length	3687	0.000	30.32	1.436	1.633
	Pt	2267	0.000	13.71	0.423	0.559
	Pd	2202	0.000	3.91	0.277	0.257
	Au	1502	0.000	25.71	0.122	0.450
	Aucap	1502	0.000	2.29	0.111	0.175
	Ni	3070	0.000	3.50	0.246	0.247
	Cu	3010	0.000	5.10	0.272	0.330
	Co	1841	0.000	0.70	0.017	0.014
East	Length	14630	0.000	74.88	1.182	1.876
	Pt	8161	0.000	54.85	0.453	0.891
	Ptcap	8161	0.000	5.72	0.441	0.652
	Pd	8168	0.000	91.53	0.371	0.846
	Pdcap	8168	0.000	5.14	0.359	0.505
	Au	5521	0.000	20.91	0.085	0.341
	Aucap	5521	0.000	2.05	0.078	0.180
	Ni	12041	0.000	14.00	0.444	0.750
	Cu	11756	0.000	16.29	0.373	0.633
	Cucap	11756	0.000	4.14	0.367	0.564
	Co	8961	0.000	2.59	0.018	0.035

## COMPOSITING

Compositing of all the assay data was completed on 2.5 m downhole intervals honouring the interpretation of the geological solids. A 2.5 m composite was

selected as it corresponds to approximately to a third the cell size to be used in the modelling process.

The backstitching process was used in the compositing routine to ensure all captured sample material was included. The backstitching routine adjusts the composite lengths for each individual borehole in order to compensate for the last sample interval. Composites were completed separately for the West Zone and East Zone. Table 14.5 summarizes the statistics for the boreholes after capping and compositing.

**Table 14.5 Borehole Capped and Composited Statistics**

Zone	Field	N Samples	Minimum	Maximum	Mean	Standard Deviation
West	Length	2118	1.520	3.716	2.497	0.055
	Pt	1514	0.000	7.343	0.471	0.488
	Pd	1452	0.000	2.906	0.317	0.223
	Au	876	0.001	25.710	0.160	0.931
	Aucap	876	0.001	2.290	0.122	0.199
	Ni	1955	0.000	3.192	0.254	0.235
	Cu	1943	0.000	3.605	0.277	0.316
	Co	1011	0.001	0.160	0.018	0.015
East	Length	6917	1.250	3.660	2.493	0.121
	Pt	4813	0.000	34.280	0.557	1.020
	Ptcap	4813	0.000	5.723	0.530	0.716
	Pd	4831	0.000	69.454	0.453	1.196
	Pdcap	4831	0.000	5.136	0.425	0.543
	Au	3213	0.001	16.454	0.146	0.612
	Aucap	3213	0.001	2.054	0.119	0.260
	Ni	6141	0.001	7.216	0.484	0.727
	Cu	5994	0.001	9.186	0.409	0.607
	Cucap	5994	0.001	4.139	0.400	0.553
	Co	3662	0.000	0.515	0.024	0.033

#### 14.1.4 GEOLOGICAL INTERPRETATION

Three-dimensional wireframe models of mineralization were developed for the West and East Zones based on a nickel equivalent grade of greater than 0.2%.

The Nieq value was assigned to all sample intervals to assist with the geological interpretation of the mineralization of both the West and East Zones. The Nieq value is based on a long range pricing index updated quarterly. At the time the resource models were completed, the following commodity prices were used.

- Nickel - \$US9.52 per pound



- Copper - \$US2.96 per pound
- Cobalt - \$US15.78 per pound
- Gold - \$US1085 per troy ounce
- Platinum - \$US1776 per troy ounce
- Palladium - \$US689 per troy ounce

The equation for the Nieq value is as follows;

$$\text{Nieq} = ((\text{Ni grade} \times \text{Ni price} \times 22.04622) + (\text{Cu grade} \times \text{Cu price} \times 22.04622) + (\text{Co grade} \times \text{Co price} \times 22.04622) + (\text{Au grade} \times \text{Au price} \times 0.02916) + (\text{Pt grade} \times \text{Pt price} \times 0.02916) + (\text{Pd grade} \times \text{Pd price} \times 0.02916)) / (\text{Ni price} \times 22.04622)$$

Recovery has been assumed to be 100% in-situ on all metals, as there has been no metallurgical recovery testing completed on the targeted material.

Sectional interpretations were digitized in Datamine™ Studio version 3.19.3638.0 software, and these interpretations were linked with tag strings and triangulated to build three dimensional solids. Table 14.6 tabulates the solids and associated volumes. The solids were validated in Datamine and no errors were found.

The zones of mineralization interpreted for each area were generally contiguous; however, due to the nature of the mineralization there are portions of the wireframe that have grades less than 0.2%, yet are still within the mineralizing trend.

The non-assayed intervals were assigned void (-) value. Wardrop believes that non-assayed material should not be assigned a zero value, as this does not reflect the true value of the material.

**Table 14.6 Wellgreen Wireframe Summary**

Zone	Wireframe Dimensions						Volume (m <sup>3</sup> )
	Minimum X	Maximum X	Minimum Y	Maximum Y	Minimum Z	Maximum Z	
West	1375	2625	15288	15692	1160	1736	21,905,348
East	2650	4050	14848	15590	639	1695	176,469,035

#### 14.1.5 SPATIAL ANALYSIS

Variography, using Datamine™ Studio version 3.19.3638.0 software, was completed for nickel, copper, cobalt, gold, platinum and palladium individually for each zone. Downhole variograms were used to determine nugget effect and then correlograms were modelled to determine spatial continuity in the zones.

Table 14.7 summarizes results of the variography.

**Table 14.7 Wellgreen Variogram Summary**

Zone	VDESC	VREFNUM	VANGLE1	VANGLE2	VANGLE3	VAXIS1	VAXIS2	VAXIS3	NUGGET	ST1	ST1PAR1	ST1PAR2	ST1PAR3	ST1PAR4	ST2	ST2PAR1	ST2PAR2	ST2PAR3	ST2PAR4
East	ez ni	1	0	0	0	3	2	1	0.12	1	10	61	6	0.033	1	22	103	22	0.847
	ez cu	2	-72	70	45	3	2	1	0.14	1	30	29	21	0.493	1	85	61	67	0.367
	ez co	1	18	0	65	3	2	1	0.1	1	33	72	30	0.037	1	50	149	59	0.863
	ez au	4	-72	70	45	3	2	1	0.2	1	20	25	41	0.16	1	81	60	60	0.64
	ez pt	5	-72	70	45	3	2	1	0.18	1	11	25	11	0.338	1	65	35	30	0.482
	ez pd	6	-72	70	135	3	2	1	0.2	1	12	22	21	0.411	1	72	40	52	0.389
West	wz_ni	1	0	0	0	3	2	1	0.3	1	75	22	41	0.221	1	161	40	61	0.479
	WZ Cu	2	0	-90	135	3	2	1	0.1	1	41	40	22	0.304	1	180	60	40	0.596
	WZ Co	3	0	-90	135	3	2	1	0.05	1	48	60	84	0.093	1	158	105	101	0.857
	WZ Au	4	0	-90	135	3	2	1	0.01	1	14	66	26	0.905	1	80	81	48	0.085
	WZ Pt	5	0	0	225	3	2	1	0.32	1	64	22	22	0.437	1	95	57	35	0.243
	WZ Pd	6	0	-90	135	3	2	1	0.05	1	7	31	13	0.372	1	81	60	24	0.578

#### 14.1.6 RESOURCE BLOCK MODEL

Individual block models were established in Datamine™ for both zones using one parent model as the origin. The model was not rotated.

Drillhole spacing varies with the majority of the surface drilling spaced at 50 to 100 m sections. The underground drilling on the East Zone is spaced at 15 to 20 m, yet only targeted the mineralization along the footwall. A block size of 20 x 10 x 20 m was selected in order to accommodate the nature of the mineralization and the open pit potential.

Sub-celling of the block model on a 1 x 1 x 1 pattern allows the parent block to be split once in each direction to more accurately fill the volume of the wireframes, thus more accurately estimate the tonnes in the resource.

Table 14.8 summarizes details of the parent block model.

**Table 14.8 Parent Block Model**

Origin			Cell Size			Number of Cells		
X Origin	Y Origin	Z Origin	XINC	YINC	ZINC	NX	NY	NZ
1000	14500	300	20	10	20	165	150	85

The interpolations of the two zones were completed using the estimation methods: nearest neighbour (NN), inverse distance squared (ID<sup>2</sup>) and ordinary kriging (OK). The estimations were designed for three passes. In each pass a minimum and maximum number of samples were required as well as a maximum number of samples from a borehole in order to satisfy the estimation criteria. Table 14.9 and Table 14.10 summarize the interpolation criteria for the two zones.

**Table 14.9 Estimation Criteria**

Zone	Edesc	EREFNUM	VALUE_IN	VALUE_OU	NUMSAM_F	SVOL_F	SREFNUM	IMETHOD	POWER	VREFNUM
East Zone	EstimaParam1	1	Ni	NiNN			1	1		
	EstimaParam2	2	Cucap	CuNN			2	1		
	EstimaParam3	3	Co	CoNN			3	1		
	EstimaParam4	4	Aucap	AuNN			4	1		
	EstimaParam5	5	Ptcap	PtNN			5	1		
	EstimaParam6	6	Pdcap	PdNN			6	1		
	EstimaParam7	7	Ni	NiID			1	2	2	
	EstimaParam8	8	Cucap	CuID			2	2	2	
	EstimaParam9	9	Co	CoID			3	2	2	
	EstimaParam10	10	Aucap	AuID			4	2	2	
	EstimaParam11	11	Ptcap	PtID			5	2	2	
	EstimaParam12	12	Pdcap	PdID			6	2	2	
	EstimaParam13	13	Ni	NiOK	NUMSAM	SVOL	1	3		1
	EstimaParam14	14	Cucap	CuOK			2	3		2
	EstimaParam15	15	Co	CoOK			3	3		3
	EstimaParam16	16	Aucap	AuOK			4	3		4
	EstimaParam17	17	Ptcap	PtOK			5	3		5
	EstimaParam18	18	Pdcap	PdOK			6	3		6
West Zone	EstimaParam1	1	Ni	NiNN			1	1		
	EstimaParam2	2	Cucap	CuNN			2	1		
	EstimaParam3	3	Co	CoNN			3	1		
	EstimaParam4	4	Aucap	AuNN			4	1		
	EstimaParam5	5	Ptcap	PtNN			5	1		
	EstimaParam6	6	Pdcap	PdNN			6	1		
	EstimaParam7	7	Ni	NiID			1	2	2	
	EstimaParam8	8	Cucap	CuID			2	2	2	
	EstimaParam9	9	Co	CoID			3	2	2	
	EstimaParam10	10	Aucap	AuID			4	2	2	

*table continues...*

Zone	Edesc	EREFNUM	VALUE_IN	VALUE_OU	NUMSAM_F	SVOL_F	SREFNUM	IMETHOD	POWER	VREFNUM
West Zone (continued)	EstimaParam11	11	Ptcap	PtID			5	2	2	
	EstimaParam12	12	Pdcap	PdID			6	2	2	
	EstimaParam13	13	Ni	NiOK	NUMSAM	SVOL	1	3		1
	EstimaParam14	14	Cucap	CuOK			2	3		2
	EstimaParam15	15	Co	CoOK			3	3		3
	EstimaParam16	16	Aucap	AuOK			4	3		4
	EstimaParam17	17	Ptcap	PtOK			5	3		5
	EstimaParam18	18	Pdcap	PdOK			6	3		6

**Table 14.10 Search Parameters**

Zone	SREFNUM	SMETHOD	SDIST1	SDIST2	SDIST3	SANGLE1	SAXIS1	SANGLE2	SAXIS2	SANGLE3	SAXIS3
East	1	2	100	20	20	18	3	-70	1	0	2
	2	2	85	60	60	18	3	-70	1	0	2
	3	2	150	50	60	18	3	-70	1	0	2
	4	2	80	60	60	18	3	-70	1	0	2
	5	2	60	30	35	18	3	-70	1	0	2
	6	2	70	40	50	18	3	-70	1	0	2
	SVOLFAC1	MINNUM1	MAXNUM1	SVOLFAC2	MINNUM2	MAXNUM2	SVOLFAC3	MINNUM3	MAXNUM3		
	1	8	15	2	5	15	4	2	10		
	OCTMETH	MINOCT	MINPEROC	MAXPEROC	MAXKEY						
	1	2	1	4	4						
Zone	SREFNUM	SMETHOD	SDIST1	SDIST2	SDIST3	SANGLE1	SAXIS1	SANGLE2	SAXIS2	SANGLE3	SAXIS3
West	1	2	160	40	60	-22	3	90	1	0	2
	2	2	180	60	40	-22	3	90	1	0	2
	3	2	160	100	100	-22	3	90	1	0	2
	4	2	80	80	50	-22	3	90	1	0	2
	5	2	100	60	40	-22	3	90	1	0	2
	6	2	80	60	25	-22	3	90	1	0	2
	SVOLFAC1	MINNUM1	MAXNUM1	SVOLFAC2	MINNUM2	MAXNUM2	SVOLFAC3	MINNUM3	MAXNUM3		
	1	8	15	2	5	15	5	2	10		
	OCTMETH	MINOCT	MINPEROC	MAXPEROC	MAXKEY						
	1	2	1	4	4						



### 14.1.7 RESOURCE CLASSIFICATION

Several factors are considered in the definition of a resource classification:

- NI 43-101 requirements
- Canadian Institute of Mining, Metallurgy and Petroleum guidelines
- authors experience with magmatic sulphide deposits
- spatial continuity based on variography of the assays within the drillholes
- the proportion of PGM assays to nickel and copper assays.

No environmental, permitting, legal, title, taxation, socio-economic, marketing or other relevant issues are known to Wardrop that may affect the estimate of mineral resources. Mineral reserves can only be estimated on the basis of an economic evaluation that is used in a Preliminary Feasibility Study or a Feasibility Study of a mineral project; thus, no reserves have been estimated. As per NI 43-101, mineral resources, which are not mineral reserves, do not have to demonstrate economic viability.

### 14.1.8 MINERAL RESOURCE TABULATION

The resource reported as of July 2011 has been tabulated in terms of a nickel equivalent cut-off grade. The mineral resources for the two zones at Wellgreen are tabulated in Table 14.11 to Table 14.13 for the Indicated and Inferred Resources respectively. The resources are tabulated using various cut-off grades up to an upper bound of greater than 1.0 % Nieq.

**Table 14.11 East Zone Indicated Resource Cut-off Table**

Nieq Cut-off	Tonnes	Nieq%	Ni (%)	Cu (%)	Co (%)	Au (g/t)	Pt (g/t)	Pd (g/t)
0.100	14,423,900	1.349	0.683	0.615	0.051	0.514	0.988	0.732
0.200	14,423,900	1.349	0.683	0.615	0.051	0.514	0.988	0.732
0.300	14,423,900	1.349	0.683	0.615	0.051	0.514	0.988	0.732
0.400	14,308,000	1.357	0.686	0.619	0.051	0.517	0.995	0.736
0.500	13,662,800	1.400	0.708	0.639	0.052	0.532	1.029	0.755
0.600	12,711,700	1.463	0.740	0.671	0.054	0.556	1.075	0.780
0.700	11,693,600	1.534	0.779	0.705	0.056	0.581	1.123	0.808
0.800	10,838,078	1.595	0.816	0.731	0.058	0.601	1.157	0.831
0.900	9,776,000	1.676	0.866	0.764	0.060	0.624	1.201	0.859
1.000	8,850,700	1.751	0.912	0.796	0.062	0.644	1.241	0.884

**Table 14.12 East Zone Inferred Resource Cut-off Table**

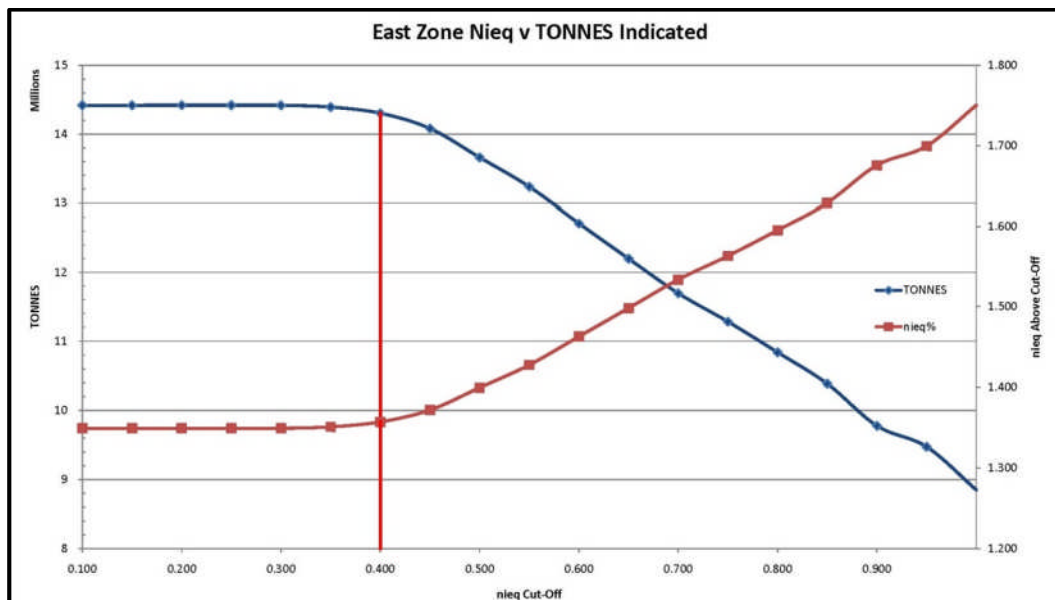
Nieq Cut-off	Tonnes	Nieq%	Ni (%)	Cu (%)	Co (%)	Au (g/t)	Pt (g/t)	Pd (g/t)
0.100	416,506,000	0.532	0.288	0.219	0.022	0.159	0.348	0.308
0.200	392,934,000	0.554	0.301	0.228	0.022	0.166	0.363	0.320
0.300	300,049,000	0.650	0.343	0.280	0.025	0.206	0.446	0.382
0.400	219,327,000	0.760	0.388	0.344	0.029	0.261	0.543	0.448
0.500	139,224,000	0.940	0.468	0.445	0.036	0.351	0.682	0.545
0.600	92,700,000	1.140	0.564	0.547	0.045	0.437	0.823	0.649
0.700	71,595,000	1.285	0.642	0.617	0.051	0.489	0.911	0.715
0.800	57,420,000	1.417	0.721	0.681	0.056	0.526	0.974	0.755
0.900	48,055,000	1.529	0.795	0.732	0.059	0.544	1.021	0.782
1.000	40,494,000	1.637	0.870	0.782	0.062	0.554	1.056	0.804

**Table 14.13 West Zone Inferred Resource Cut-off Table**

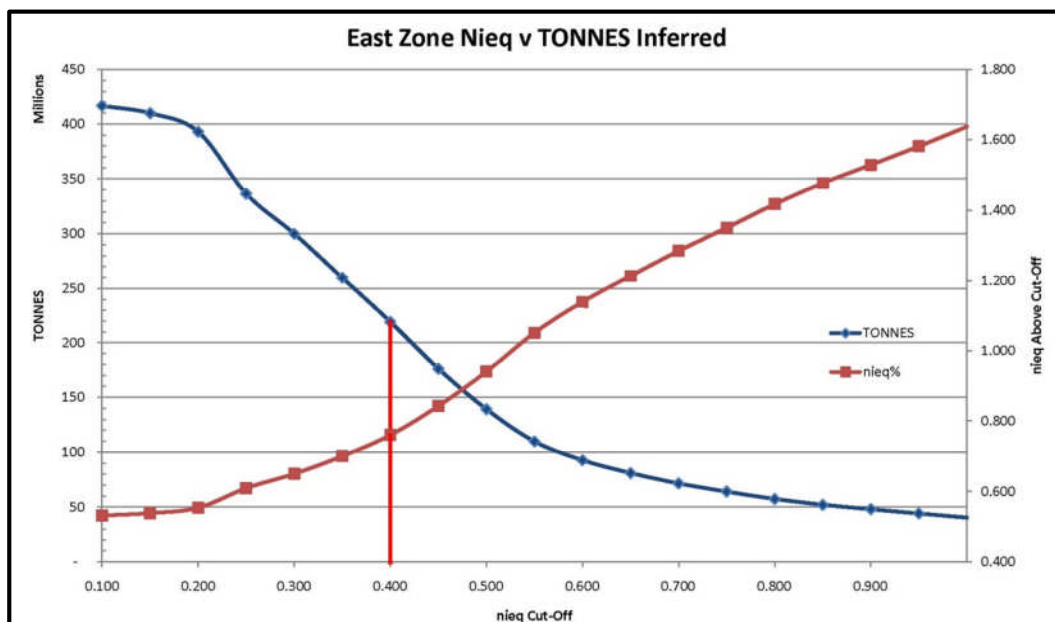
Nieq Cut-off	Tonnes	Nieq%	Ni (%)	Cu (%)	Co (%)	Au (g/t)	Pt (g/t)	Pd (g/t)
0.100	100,743,000	0.564	0.288	0.303	0.019	0.102	0.431	0.309
0.200	99,481,000	0.569	0.291	0.305	0.019	0.103	0.433	0.311
0.300	93,447,000	0.589	0.303	0.318	0.019	0.105	0.444	0.317
0.400	69,919,000	0.667	0.340	0.381	0.021	0.118	0.497	0.338
0.500	39,114,000	0.841	0.415	0.547	0.026	0.158	0.624	0.374
0.600	28,791,000	0.948	0.475	0.631	0.029	0.162	0.677	0.391
0.700	22,224,000	1.036	0.530	0.696	0.031	0.160	0.711	0.402
0.800	17,814,000	1.107	0.577	0.745	0.032	0.159	0.735	0.408
0.900	13,731,000	1.183	0.628	0.798	0.034	0.161	0.758	0.409
1.000	10,081,000	1.268	0.687	0.862	0.036	0.170	0.767	0.406

The corresponding grade–tonnage curves for the East and West Zones are displayed in Figure 14.1 to Figure 14.3.

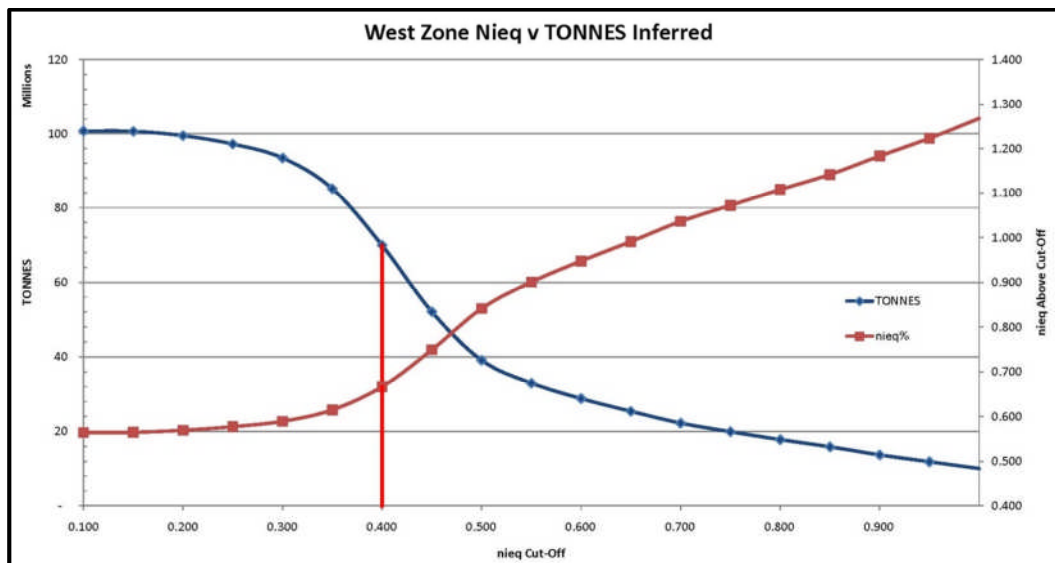
**Figure 14.1 East Zone Indicated Resource Grade-Tonnage Curve**



**Figure 14.2 East Zone Inferred Resource Grade-Tonnage Curve**



**Figure 14.3 West Zone Inferred Resource Grade-Tonnage Curve**



Based on the results of similar open pit nickel projects in Canada, a 0.4% Nieq cut-off was used to tabulate the total within the various categories. This based on the following parameters;

- 4:1 stripping ratio
- operating cost of \$42/tonnes at 30,000 t/d
- nickel of \$US9.523/lb
- recovery of 84%.

Table 14.14 summaries the resource estimate at the 0.4% Nieq cut-off.

**Table 14.14 Wellgreen Resource Estimation**

Nieq Cut-off	Category	Zone	Tonnes	Nieq%	Ni (%)	Cu (%)	Co (%)	Au (g/t)	Pt (g/t)	Pd (g/t)
0.40	Indicated	East	14,308,000	1.36	0.69	0.62	0.05	0.52	0.99	0.74
<b>Total</b>	<b>Indicated</b>		<b>14,308,000</b>	<b>1.36</b>	<b>0.69</b>	<b>0.62</b>	<b>0.05</b>	<b>0.52</b>	<b>0.99</b>	<b>0.74</b>
0.40	Inferred	East	219,327,000	0.76	0.39	0.34	0.03	0.26	0.54	0.45
0.40	Inferred	West	69,919,000	0.67	0.34	0.38	0.02	0.12	0.50	0.34
<b>Total</b>	<b>Inferred</b>		<b>289,246,000</b>	<b>0.74</b>	<b>0.38</b>	<b>0.35</b>	<b>0.03</b>	<b>0.23</b>	<b>0.53</b>	<b>0.42</b>

#### 14.1.9 VALIDATION

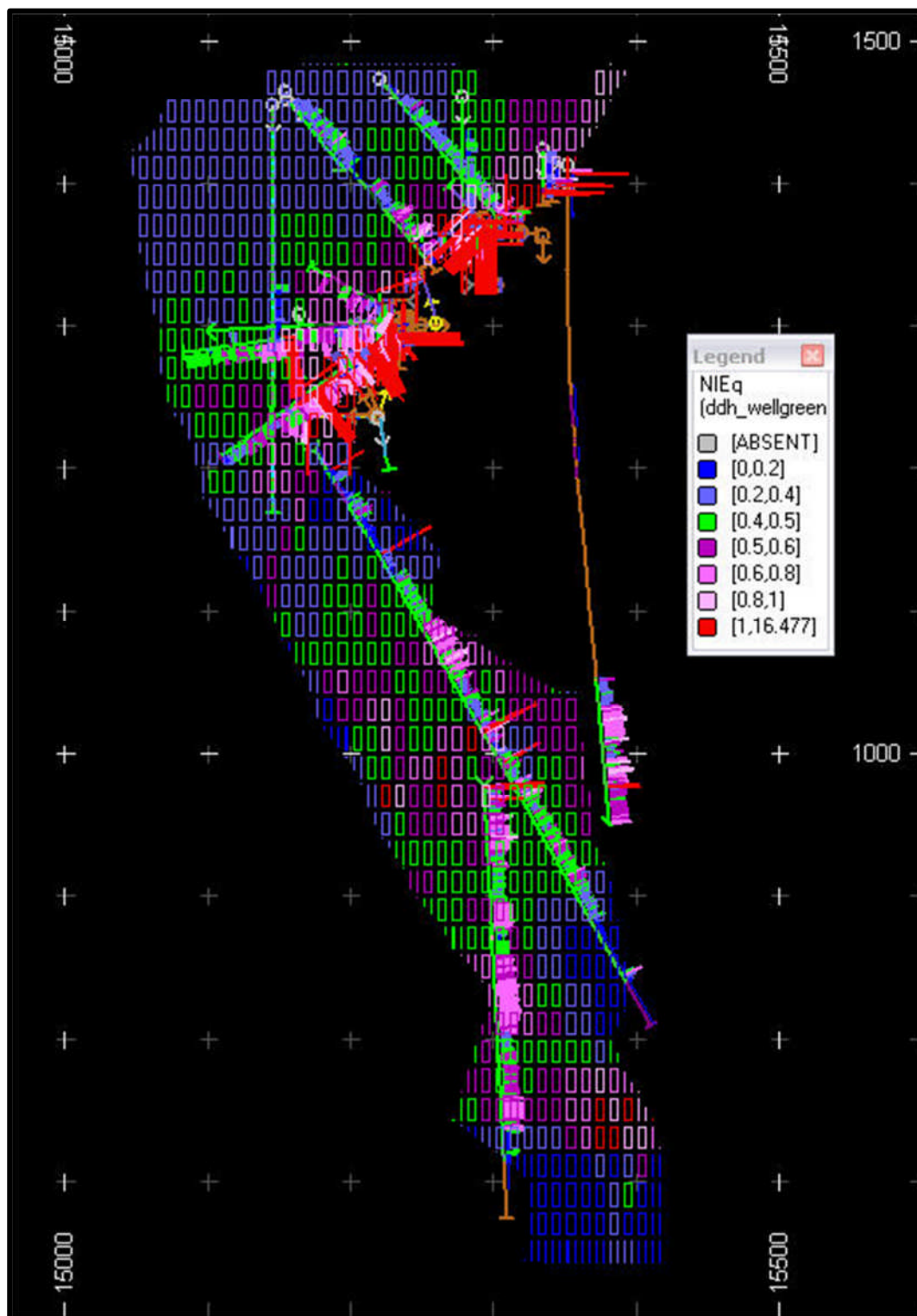
The Wellgreen models were validated by three methods:

- Visual comparison of colour-coded block model grades with composite grades on section and plan.
- Comparison of the global mean block grades for ordinary kriging, inverse distance squared, nearest neighbour and composites.
- Swath plots of the East and West Zones in both plan and section views.

### *Visual Comparison*

The visual comparisons of block model grades with composite grades for each of the two zones show a reasonable correlation between the values. No significant discrepancies were apparent from the sections and plans reviewed, yet grade smoothing is apparent (Figure 14.4 to Figure 14.7).

Figure 14.4 East Zone Cross Section at 3225E





**Figure 14.5 East Zone Plan View at 1150 elev**

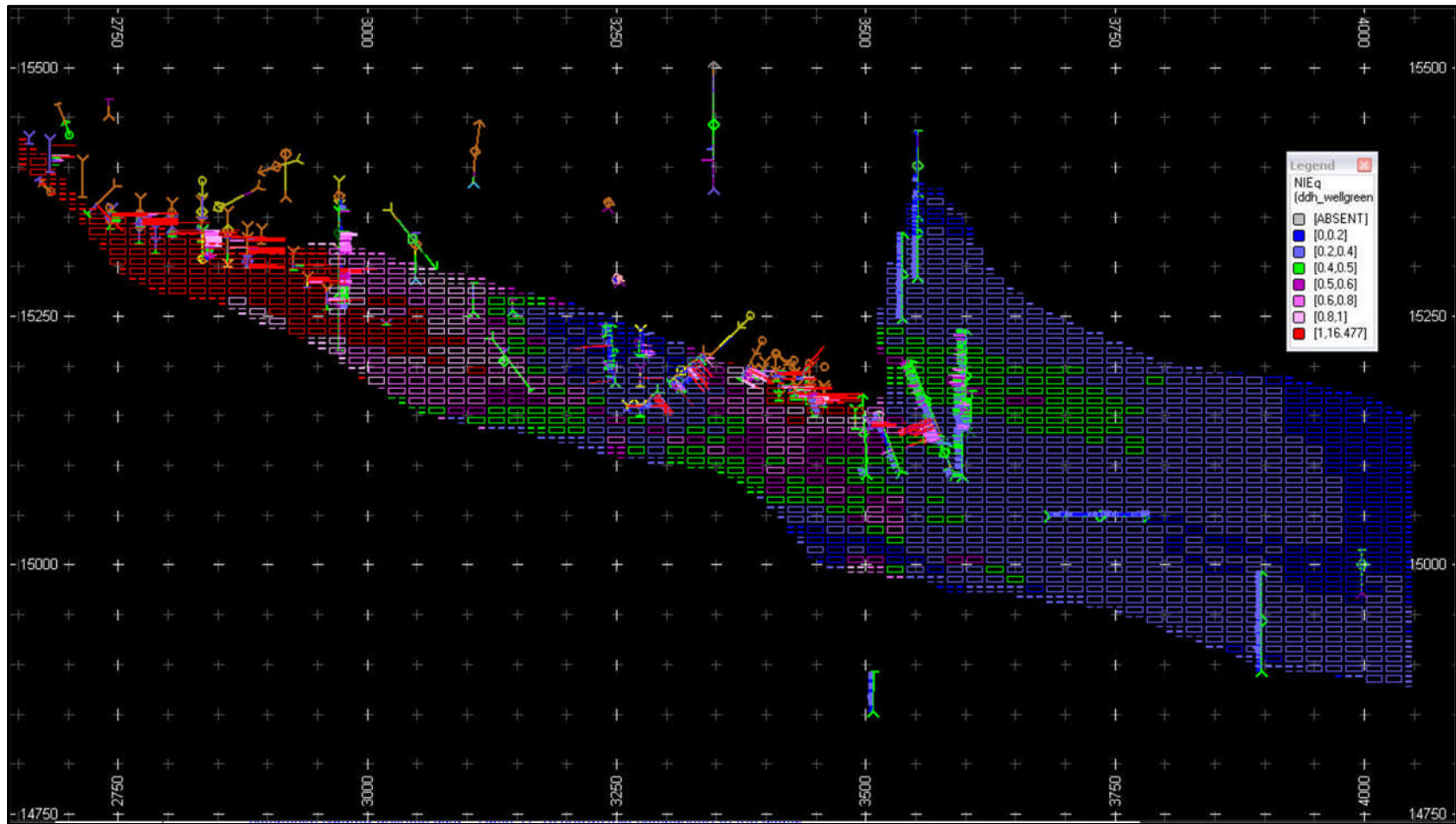
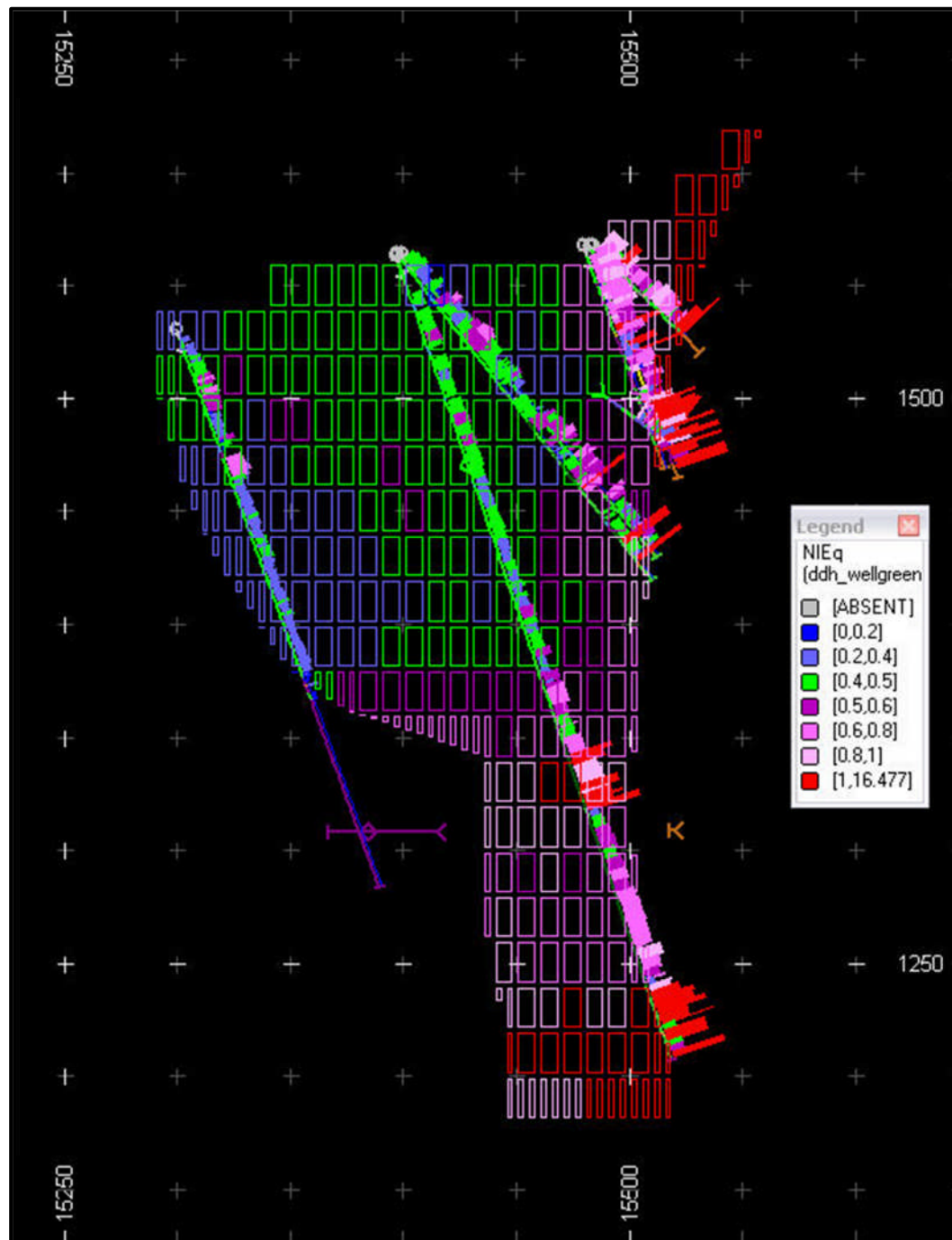
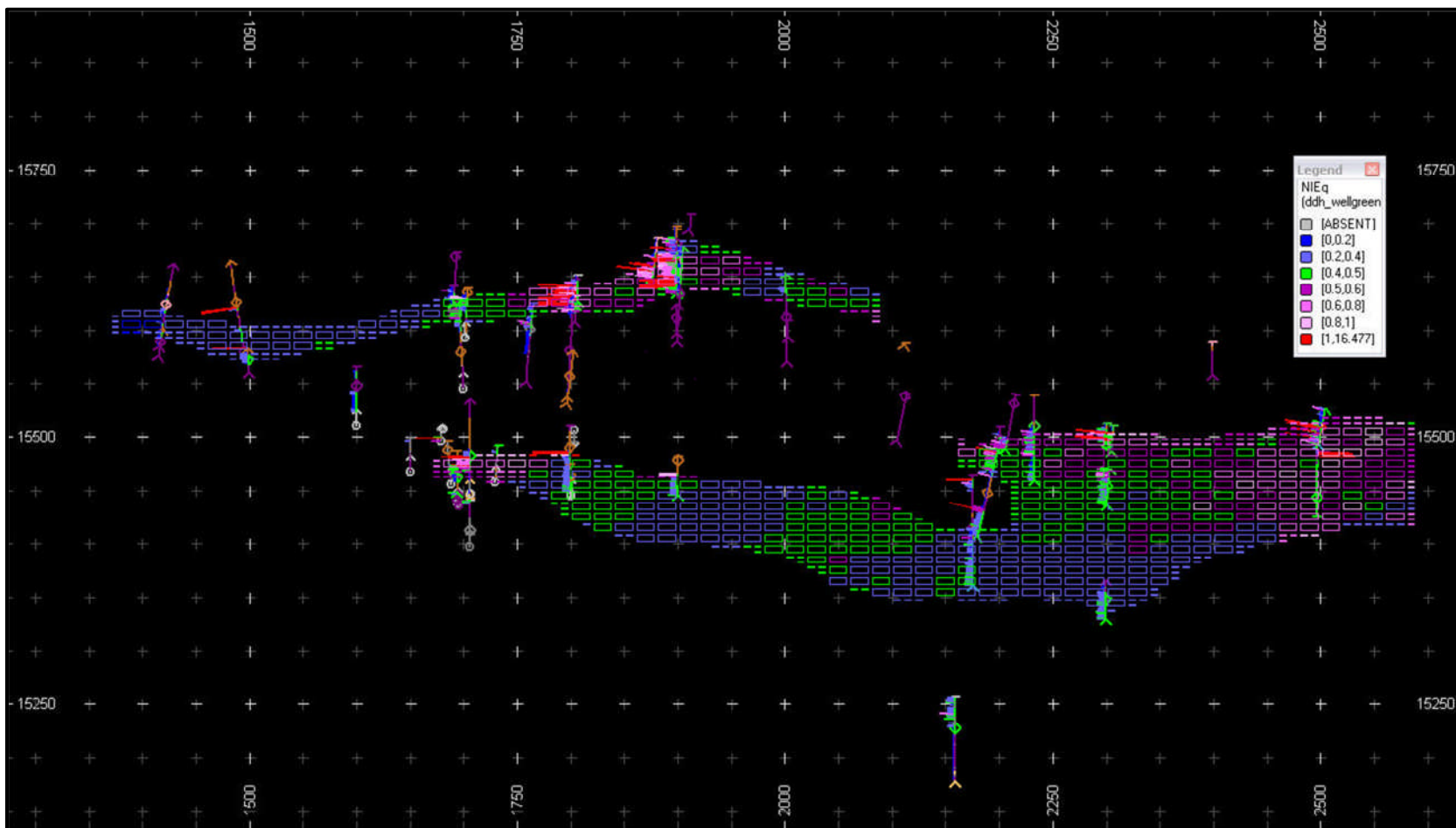


Figure 14.6 West Zone Cross Section at 2500E



**Figure 14.7 West Zone Plan View at 1400 elev**



### *Global Comparison*

The global block model statistics for the ordinary kriging model were compared to the global inverse distance squared and nearest neighbour model values as well as the composite capped drillhole data. Table 14.15 shows this comparison of the global estimates for the three estimation method calculations. In general, there is agreement between the OK model and ID<sup>2</sup> model and NN model. Larger discrepancies are reflected as a result of lower drill density in some portions of the model. There is a degree of smoothing apparent when compared to the diamond drill statistics. Comparisons were made using all blocks at a 0 % cut-off.

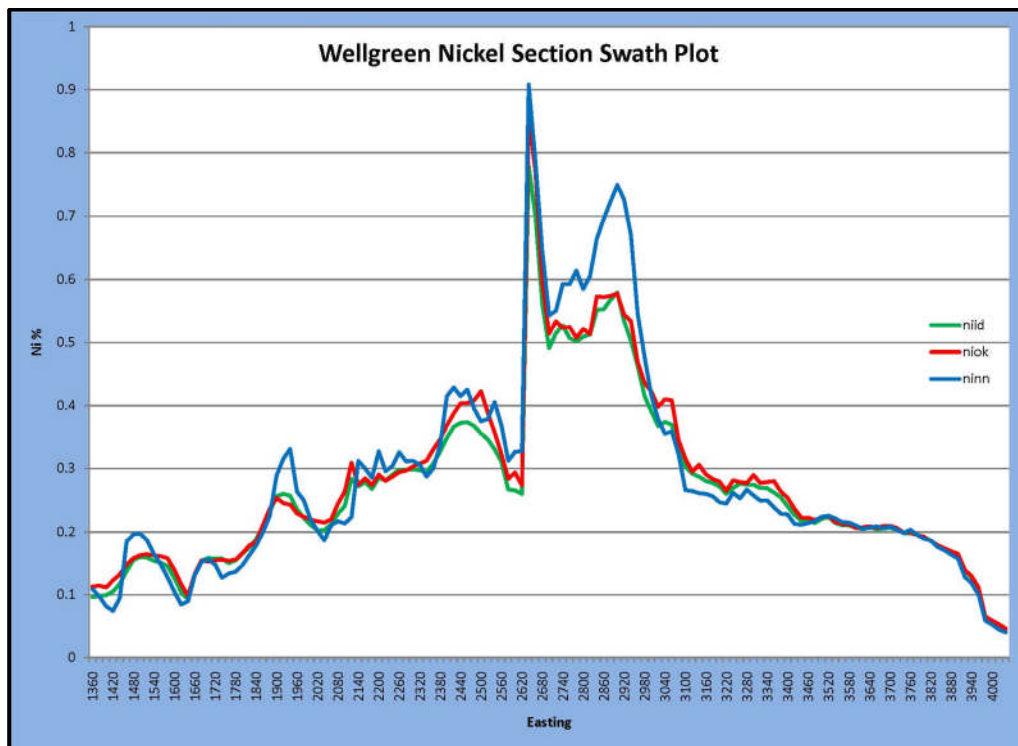
**Table 14.15 Global Comparison Statistics**

		<b>DDH Capped Composite</b>	<b>NN Grade</b>	<b>ID<sup>2</sup> Grade</b>	<b>OK Grade</b>
Ni	East	0.484	0.357	0.338	0.347
	West	0.254	0.281	0.266	0.282
Co	East	0.024	0.024	0.023	0.024
	West	0.018	0.018	0.018	0.019
Pt	East	0.530	0.449	0.413	0.428
	West	0.471	0.448	0.446	0.451
Cu	East	0.400	0.252	0.256	0.266
	West	0.277	0.331	0.288	0.310
Au	East	0.119	0.175	0.167	0.179
	West	0.122	0.134	0.104	0.111
Pd	East	0.453	0.355	0.339	0.347
	West	0.317	0.305	0.302	0.306

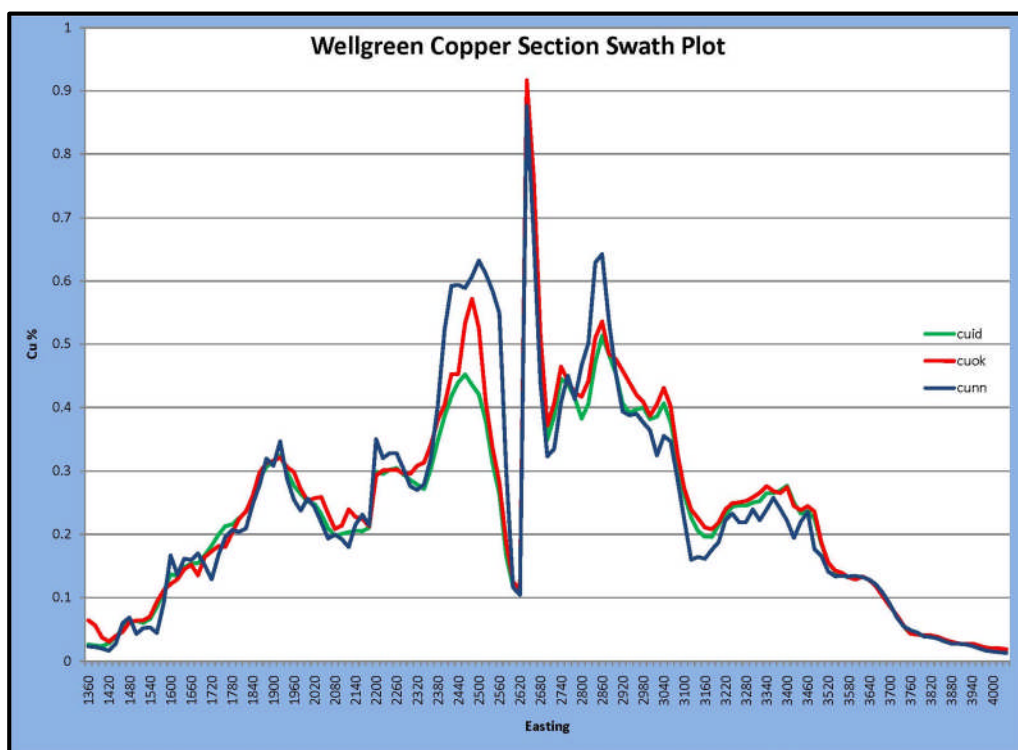
### *Swath Plots*

Swath plots were generated for nickel, copper, cobalt, gold, platinum and palladium for easting's and elevation's respectively, at 20 m intervals. These plots are comparing the OK estimates with the NN and ID<sup>2</sup> estimates, and they are illustrated below in Figure 14.8 to Figure 14.19.

**Figure 14.8 Wellgreen Nickel Section Swath Plot**

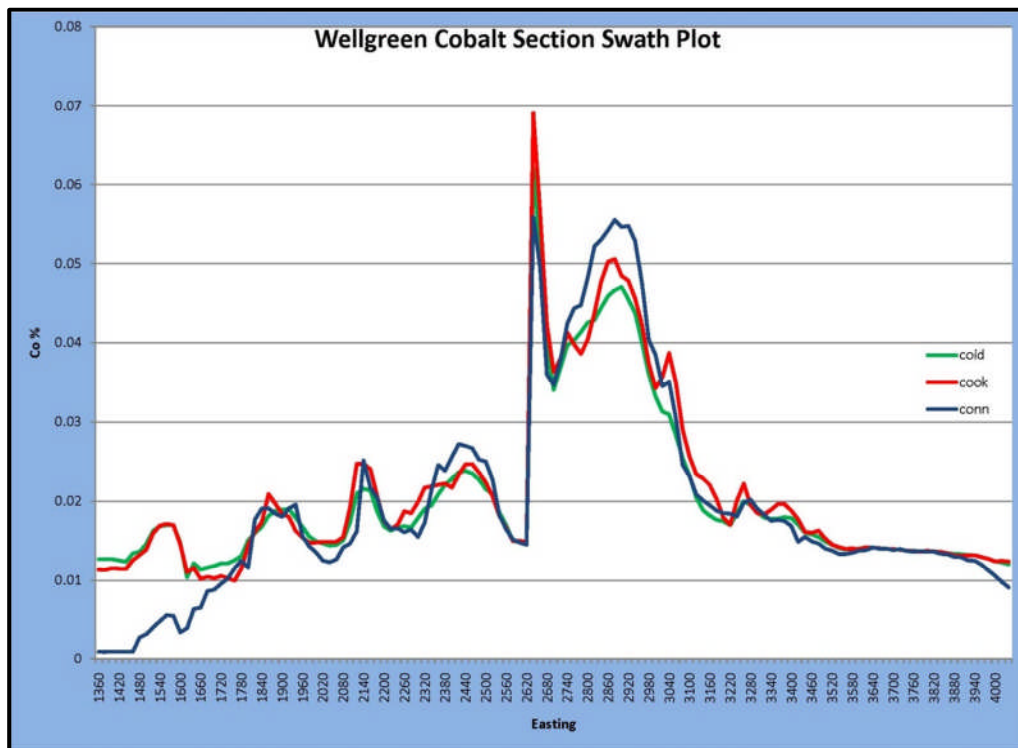


**Figure 14.9 Wellgreen Copper Section Swath Plot**

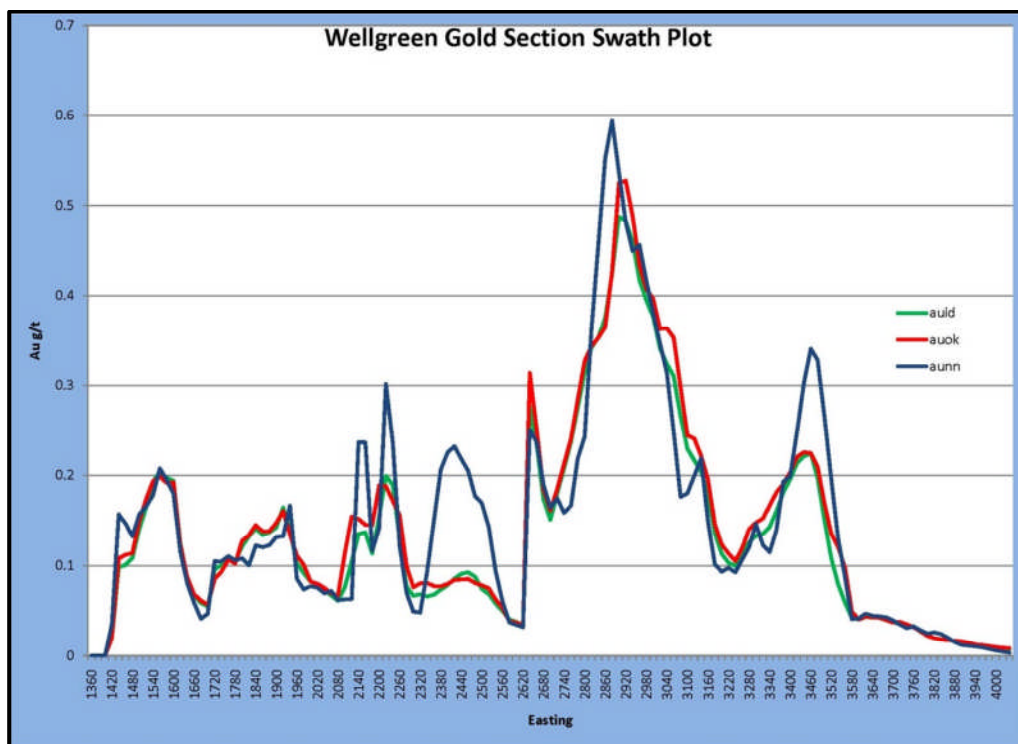




**Figure 14.10 Wellgreen Cobalt Section Swath Plot**

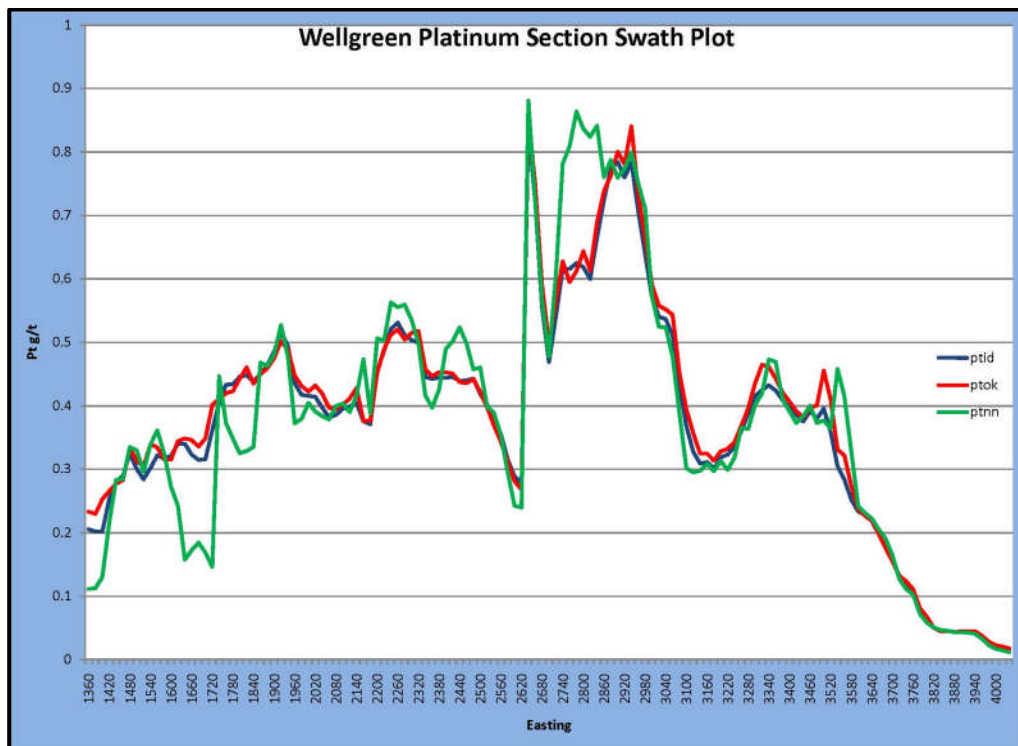


**Figure 14.11 Wellgreen Gold Section Swath Plot**

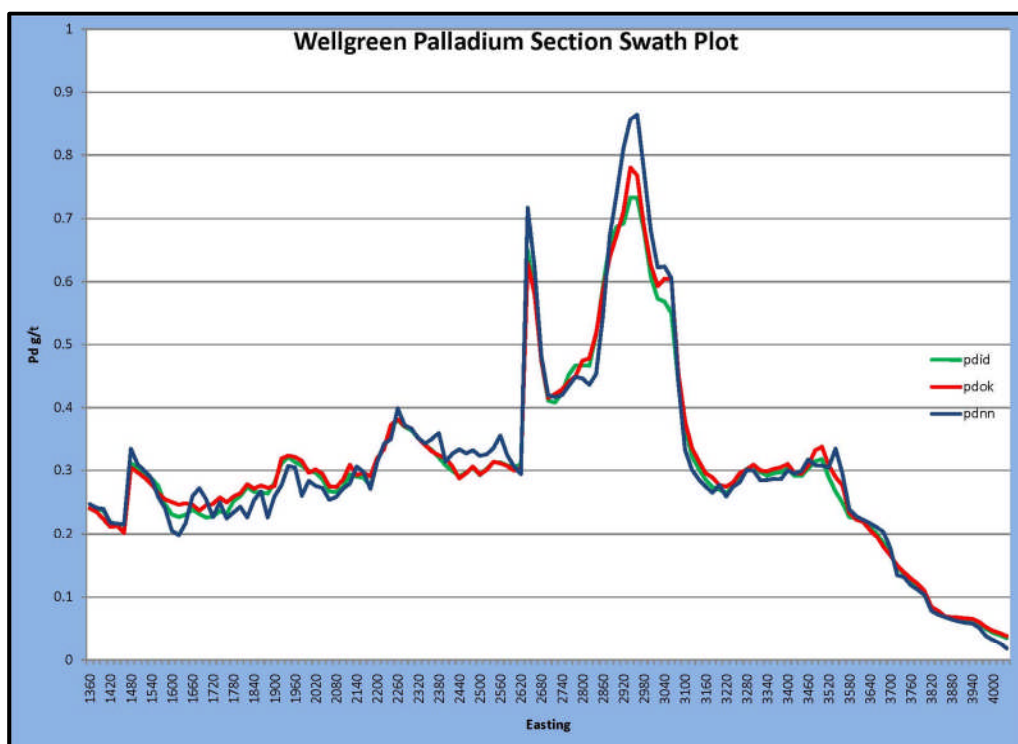




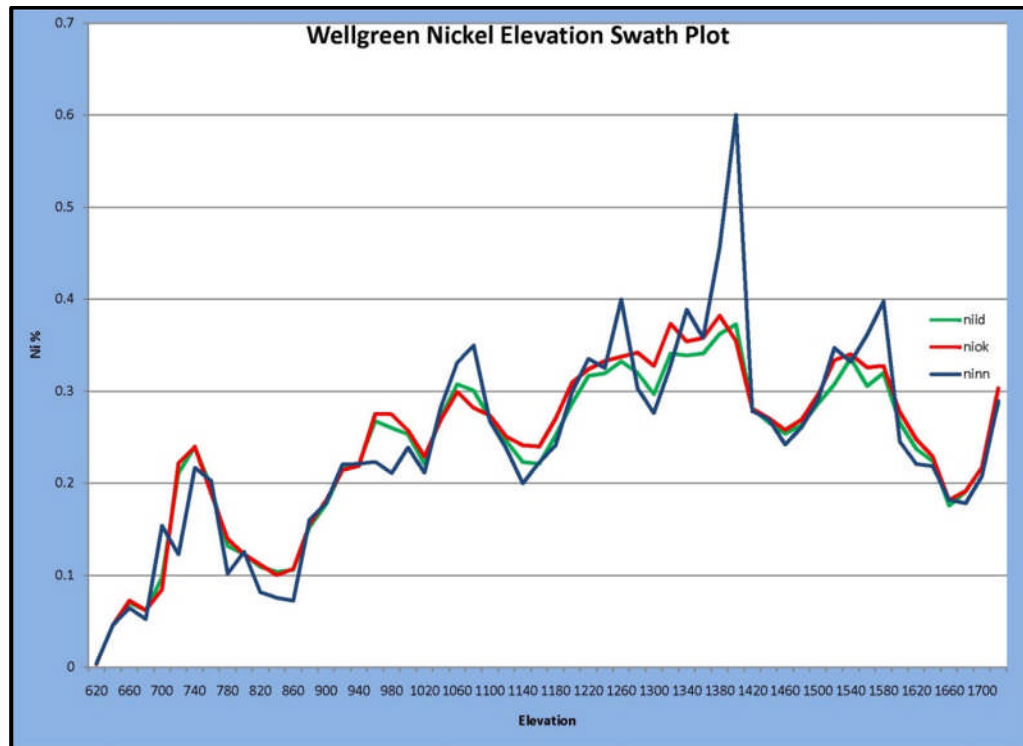
**Figure 14.12 Wellgreen Platinum Section Swath Plot**



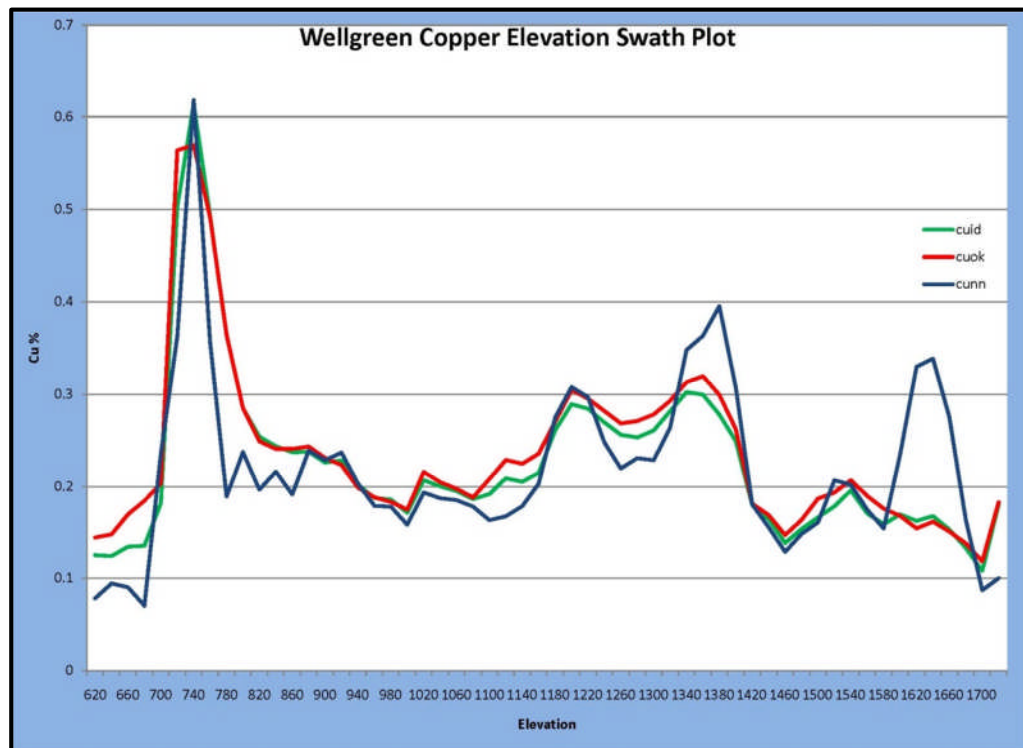
**Figure 14.13 Wellgreen Palladium Section Swath Plot**



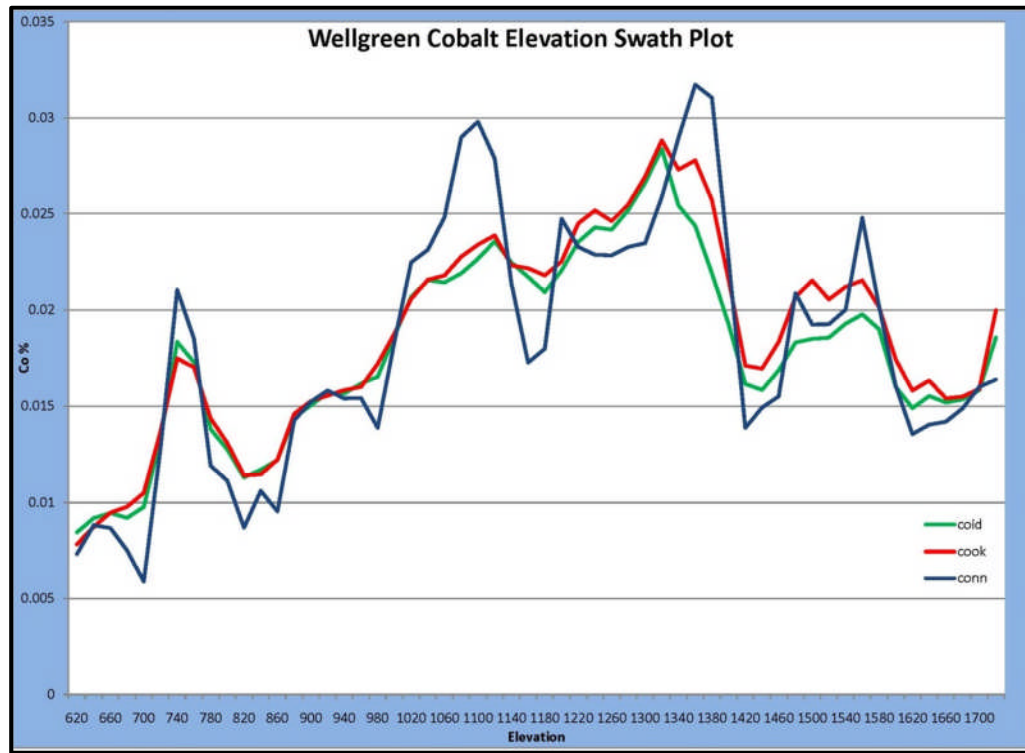
**Figure 14.14 Wellgreen Nickel Elevation Swath Plot**



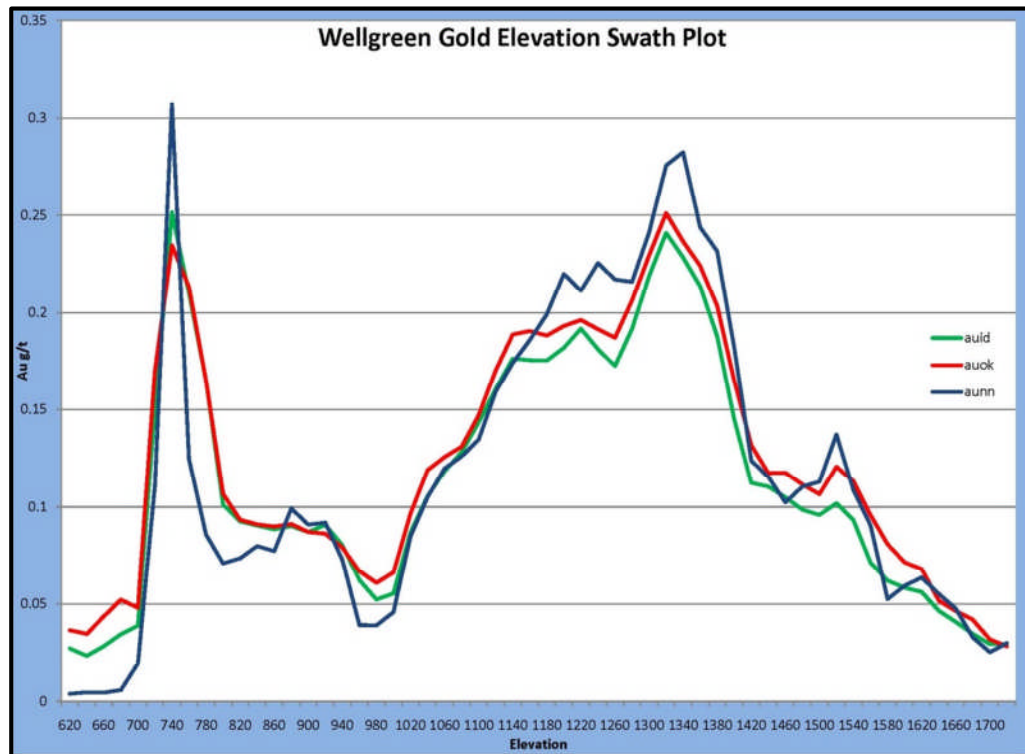
**Figure 14.15 Wellgreen Copper Elevation Swath Plot**



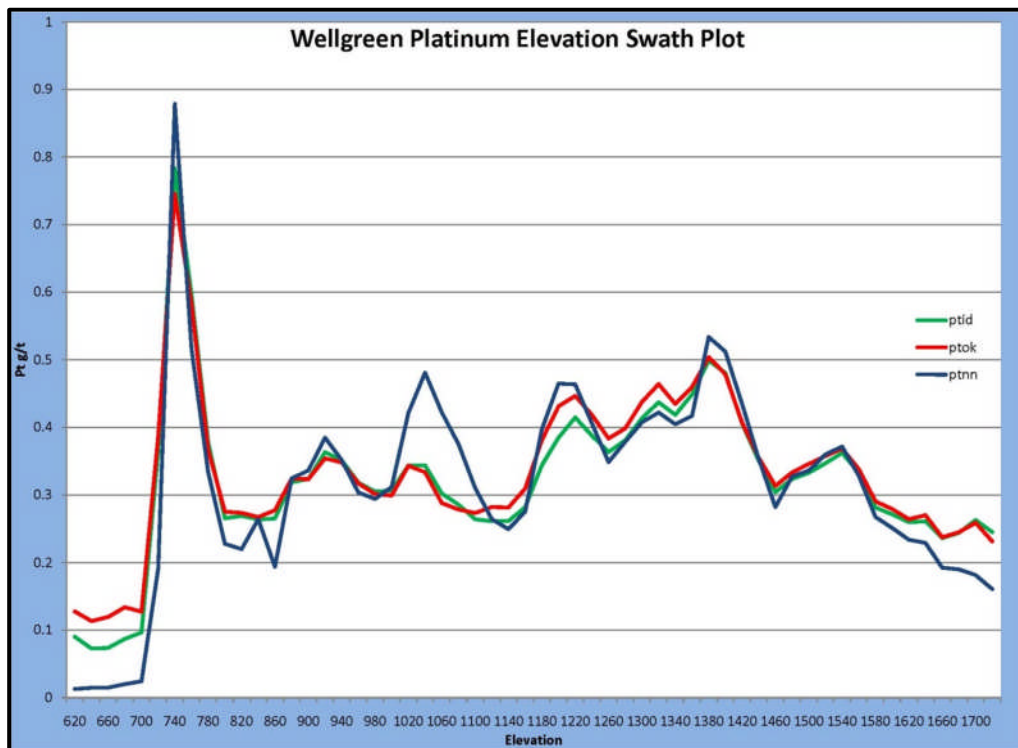
**Figure 14.16 Wellgreen Cobalt Elevation Swath Plot**



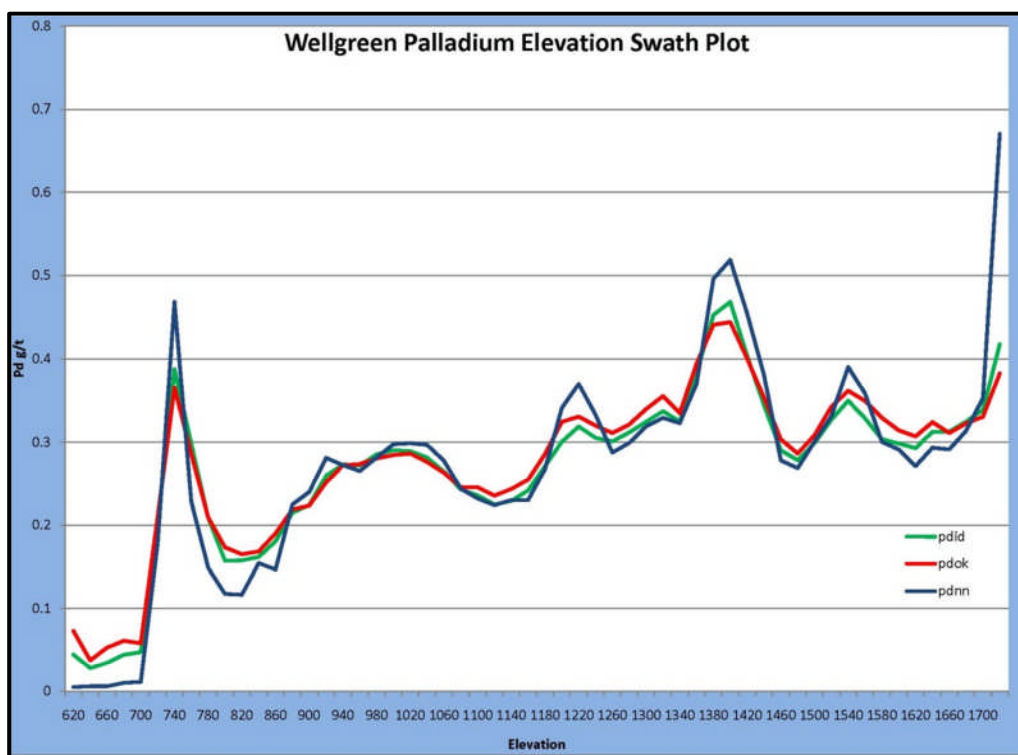
**Figure 14.17 Wellgreen Gold Elevation Swath Plot**



**Figure 14.18 Wellgreen Platinum Elevation Swath Plot**



**Figure 14.19 Wellgreen Palladium Elevation Swath Plot**



## 14.2 PREVIOUS ESTIMATES

Coronation commissioned WGM to complete a resource estimate on the Wellgreen Property in 2008. Wardrop is not able to verify the validity of the resource estimate and under NI 43-101 guidelines and considers the results to be historic. A copy of “Technical Report and Resources Estimate for the Wellgreen Ni-Cu Deposit, Yukon Territory, Canada” by Kociumbas and El-Rassi, July 15, 2008 is available on SEDAR by searching Guyana Precious Metals technical reports.

Wardrop considers the historical estimate reliable and relevant. It should be noted that the estimate was completed prior to adoption of the current standards embodied in NI 43-101 and therefore the results cannot be relied upon. The stated probable and possible reserves is likely similar to the current standards for Indicated and Inferred Resources respectively.

A Qualified Person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. The issuer is not treating the historical estimate as current mineral resources or mineral reserves as defined in sections 1.2 and 1.3 NI 43-101 and the historical estimate should not be relied upon.

Table 14.16 compares the basic parameters of the historic 2008 estimate with the current 2011 NI 43-101 compliant resource. Table 14.17 illustrated the differences in the historic resource estimate with the current NI 43-101 compliant resource.

**Table 14.16 Model Differences**

	<b>2011 Wardrop Model</b>	<b>2008 WGM Model</b>
Number of Drill Holes	702	672
Grade Capping	Parrish Analysis East Zone - 4.14% Cu 2.05 g/t Au 5.15 g/t Pd 5.72 g/t Pt West Zone - 2.29 g/t Au	mean + 3 standard deviations East Zone - 2.09% Cu 2.69% Ni West Zone - 1.33% Cu 0.99% Ni
Composite Length	East Zone - 2.5 m West Zone - 2.5 m	East Zone - 2.0 m West Zone - 2.0 m
Metal prices	\$US9.52/lb Ni \$US2.96/lb Cu \$US15.78/lb Co \$US1085/tr oz Au \$US1776/tr oz Pt \$US689/tr oz Pd	\$US10/lb Ni \$US2.25/lb Cu
Nieq formula	based on a metal pricing formula in section 17.1.4	based on a Ni:Cu ratio of 2.6:1.0
Cut-off Grade	0.4% Nieq	0.2% Nieq
Number of Mineral Zones	2	2

*table continues...*

	2011 Wardrop Model	2008 WGM Model
Block Size	20 x 10 x 20 (4000 m <sup>3</sup> )	15 x 15 x 10 (2250 m <sup>3</sup> )
Estimation Method	Ordinary Kriging with inverse distance and nearest neighbour validation	inverse distance with nearest neighbour validation

**Table 14.17 Model Comparisons**

	Tonnes	Ni (%)	Cu (%)	Co (%)	Au (g/t)	Pt (g/t)	Pd (g/t)
<b>2011 Wardrop OK Model</b>							
Indicated Resource @ 0.4% Nieq cut-off	14,308,000	0.69	0.62	0.05	0.52	0.99	0.74
Inferred Resources @ 0.4% Nieq cut-off	289,246,000	0.38	0.35	0.03	0.23	0.53	0.42
<b>2008 WGM ID Model</b>							
Indicated Resource @ 0.2% Nieq cut-off	6,400,000	0.43	0.45	-	-	0.309	0.377
Inferred Resources @ 0.2% Nieq cut-off	23,900,000	0.29	0.28	-	-	0.274	0.277



## 15.0 ADJACENT PROPERTIES

There are two active claim blocks in the vicinity of the Property (Figure 15.1). All information presented in Section 15.0 was gathered through searches of the Yukon Department of Energy, Mines and Resources Mine Recorder website, internet searches of publicly traded companies, and SEDAR postings. Wardrop is not able to verify the information gathered in this section.

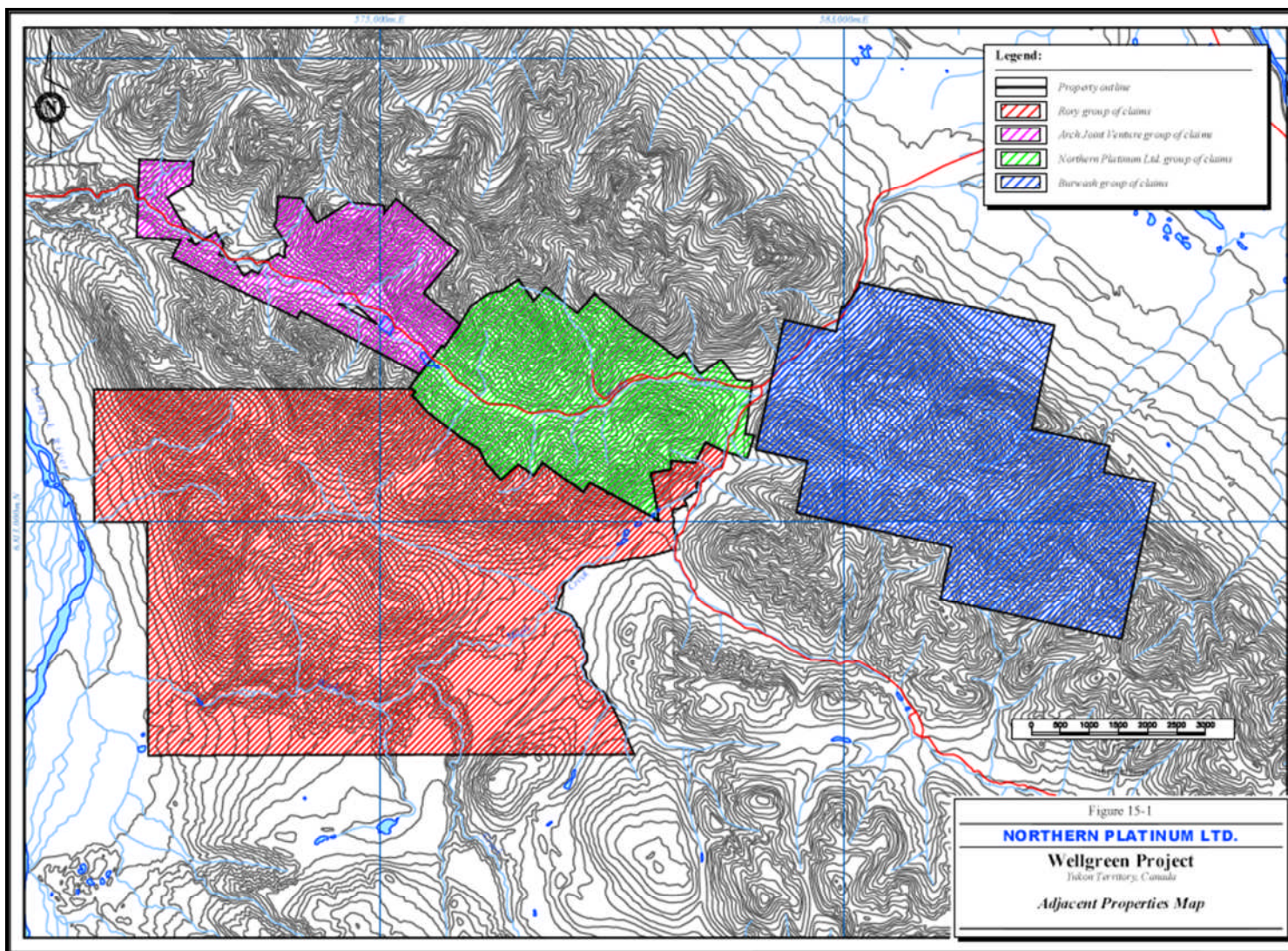
Coronation (renamed Guyana Precious Metals) is the current listed holder of the Rory claims, which are located immediately to the south of the Property. There has been no recorded assessment work filed by Coronation and the claims are active until October 3, 2013. Prophecy Platinum holds a 50% back in on the Rory claims if Coronation was to spend \$1 million in exploration on the Property. It is unknown if similar geological units or mineralization occurs on the Rory claims.

In 2008, Pacific Coast announced it had entered into an agreement to option the Burwash Property from Strategic Metals Ltd. (Strategic). The Burwash Property overlies the east half of the Quill Creek Mafic-Ultramafic Complex and adjoins Wellgreen Property on its southeast edge. Widespread Ni-Cu-PGE mineralization is known on the Burwash Property, with the first showings discovered in 1952 as part of work done on a larger Wellgreen Property. In late 2008, Pacific Coast announced results from a drilling program conducted by Strategic and their contractor Archer, Cathro and Associates. The results of the drilling are provided in Table 15.1. Pacific Coast has twice renegotiated the option agreement with Strategic, with the most recent renegotiation occurring March 8, 2010. In June 2011, Pacific Coast acquired the nickel assets of Prophecy Resources, including Wellgreen and formed a new company Prophecy Platinum.

**Table 15.1 Pacific Coast Nickel Drill Result on the Burwash Claim**

Hole	Target	From (m)	To (m)	Width (m)	Ni (%)	Cu (%)	Pt (g/t)	Pd (g/t)
08-03	Main Sill	4.37	49.94	42.57	0.16	0.12	0.170	0.075
		56.08	74.37	18.29	0.15	0.06	0.149	0.105
		75.40	83.52	8.12	0.14	0.03	0.135	0.108
08-05	Main Sill	4.57	15.24	10.67	0.23	0.06	0.151	0.252
		33.90	101.70	67.80	0.22	0.07	0.147	0.198
		108.45	111.45	3.00	0.25	0.17	0.360	0.130

**Figure 15.1 Adjacent Properties**



## 16.0 OTHER RELEVANT DATA AND INFORMATION

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There is no other relevant data or information on the project.



## 17.0 INTERPRETATION AND CONCLUSIONS

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The Property is ideally situated, hosting approximately 10 km of strike length and 22.1 km<sup>2</sup> of the Quill Creek Ultramafic intrusion. The Quill Creek Ultramafic intrusion is one of several ultramafic intrusions found within the Wrangellia terrane.

The Property is currently held 100% by Prophecy, which has entered into a business arrangement with Pacific Coast whereby Pacific Coast will acquire the Wellgreen property from Prophecy Platinum.

The Quill Creek Ultramafic intrusion has similar characteristics to the Noril'sk deposit in Russia, containing zones and layered mineralized of massive, semi-massive and disseminated nickel-copper sulphides with elevated PGE, associated with the sulphides.

Two main zones of mineralization have been drill outlined on the Property; the East Zone and the West Zone. The highest grade mineralization in the East Zone occurs in massive sulphide pods and lenses along the base of the ultramafic body, whereas the best grades in the West Zone are found in inter-digitated gabbro and clinopyroxenite. A total of 171,652 tons assaying 2.23% Ni, 1.39% Cu, 0.065 oz/ton Pt and 0.073% Co were mined and milled in 1972 and 1973 by Hudson-Yukon.

The Wellgreen property database is relatively up to date with the current results of the 2010 drilling program. In general, the twin hole drilling program completed by Coronation was successful in confirming past results, therefore, Wardrop is of the opinion that using the historic drilling is appropriate for any future resource estimate although some additional analysis would be required before a definitive conclusion can be reached.

The 2010 Prophecy drilling confirmed the presences of a substantial mineralized system located in the hanging wall of the semi-massive sulphide pods previously targeted as the Wellgreen deposit.

The resource estimation at a 0.4% Nieq cut-off resulted in an Indicated Resource of 14.3 million tonnes at grades of 0.69% Ni, 0.62% Cu and 2.25 g/t Pt+Pd+Au. An additional Inferred Resource of 289.3 million tonnes at grades of 0.38% Ni, 0.35% Cu and 1.18 g/t Pt+Pd+Au. Table 17.1 summarizes the result of the resource estimate.

**Table 17.1 Wellgreen Resource Estimate Summary**

Nieq Cut-off	Category	Zone	Tonnes	Nieq%	Ni (%)	Cu (%)	Co (%)	Au (g/t)	Pt (g/t)	Pd (g/t)
0.40	Indicated	East	14,308,000	1.36	0.69	0.62	0.05	0.52	0.99	0.74
<b>Total</b>	<b>Indicated</b>		<b>14,308,000</b>	<b>1.36</b>	<b>0.69</b>	<b>0.62</b>	<b>0.05</b>	<b>0.52</b>	<b>0.99</b>	<b>0.74</b>
0.40	Inferred	East	219,327,000	0.76	0.39	0.34	0.03	0.26	0.54	0.45
0.40	Inferred	West	69,919,000	0.67	0.34	0.38	0.02	0.12	0.50	0.34
<b>Total</b>	<b>Inferred</b>		<b>289,246,000</b>	<b>0.74</b>	<b>0.38</b>	<b>0.35</b>	<b>0.03</b>	<b>0.23</b>	<b>0.53</b>	<b>0.42</b>

There is good potential to expand the potential quantity and grade of mineralization on the Property to cover the entire Quill Creek Ultramafic intrusive. The Quill Creek intrusive has been outlined by an aeromagnetic survey and drilling on the adjacent Burwash claims held by Prophecy Platinum and indicates that the mineralizing system has the potential to continue along the entire strike length of the intrusion, which is in excess of 10 km of strike length.

Exploration to date has concentrated on the lower gabbroic section of the ultramafic body. Recent exploration has concentrated on the evaluation of the potential of the Property to host larger, but lower grade, tonnages of PGM enriched nickel-copper mineralization for potential open pit extraction. The occurrences of higher grade pockets of semi-massive sulphides (>1% Cu and Ni and >2 g/t Pt) as historically mined by Hudson Yukon are expected to continue to be located through exploration efforts. These higher grade pockets, although not continuous, could be targeted in a potential open pit operation in order to accelerate the project's pay back.

A large portion of the drill data set does not include platinum, palladium assay, as well as the rhodium, ruthenium, rhenium, iridium, and osmium, which would potential enhance any sort of economic evaluation of the Property.

Wardrop believes further exploration is warranted to advance the project towards a PEA.

## 18.0 RECOMMENDATIONS

### 18.1 EXPLORATION RECOMMENDATIONS

The nature of the geological environment and the data collected to date by the various operators using an assortment of exploration tools, warrant additional exploration expenditures to advance the project. Exploration on the project is proposed as two separate programs, which are independent of each other and can be run concurrently as the result of one program does not affect the work proposed in the second program.

#### 18.1.1 PHASE 1 - WELLGREEN EXPANSION

An aggressive program of diamond drilling is proposed for the Wellgreen deposit in order to expand the quantity of the mineral inventory.

The program would entail drilling 18 HQ diamond drill hole on thirteen 200 to 400 m spaced fences, with each fence having one or two drill holes to cross the stratigraphy. This would make it possible to extend the strike of the Wellgreen deposit by an additional 2,200 m to the east as well as test the hanging wall environment.

Table 18.1 summarizes the budget proposal for the diamond drill program on the Wellgreen deposit.

**Table 18.1 Wellgreen Expansion Budget**

Project	Activity	Rate	Units	Cost (Cdn\$)
Wellgreen	DD Drilling* (18 holes)	\$350/m	8,000	2,800,000
	Assays	\$45/m	4,500	202,500
Indirect Costs	Salaries	\$8000/month	12	96,000
	Fuel	\$2500/month	6	15,000
	Admin - Camp	\$3000/month	6	18,000
	Consumable			60,000
<b>Total</b>				<b>3,191,500</b>

**Note:** \*includes all drilling related charges, dozing, and support

#### 18.1.2 PHASE 2 - QUILL CREEK ULTRAMAFIC DELINEATION

A large scale reconnaissance drilling campaign should delineate the extent of the mineralization within the Quill Creek Ultramafic Complex on the Property as outlined by an airborne magnetic survey.



Drill fences at 400 to 500 m spacing should test the full width of the Quill Creek Complex both to the northwest and southeast along strike. The target is to delineate the mineralizing system in order to identify the potential overall size of the system. Down-hole geophysics in the form of IP (good for disseminated sulphides) and BHEM (designed for stringer to massive sulphides) should be conducted to provide information on the potential continuity of the mineralized system. A high resolution topographic survey should be conducted over the region with co-ordinates in both the UTM and local mine grid.

A continuation of the re-assaying program from the Coronation and Northern Platinum drilling campaigns for rhodium, ruthenium, rhenium, iridium and osmium is proposed.

Table 18.2 outline the proposed cost to complete the program.

**Table 18.2 Quill Creek Ultramafic Delineation Budget**

Project	Activity	Rate	Units	Cost (Cdn\$)
East Zone	DD Drilling (20 holes)*	\$400/m	10,000	4,000,000
	Downhole Geophysics	\$40/m	5,000	200,000
	High Resolution Topographic Survey	\$60000/survey	1	60,000
	Re-assay old pulps for Rh, Ru,, Ir, Os	\$175/sample	500	87,500
Indirect Costs	Salaries	\$8000/month	10	80,000
	Fuel	\$1500/month	8	12,000
	Admin - Camp	\$2500/month	8	20,000
	Consumable			50,000
<b>Total</b>				<b>4,509,500</b>

**Note:** \*includes all drilling related charges, sample analysis, dozing, and support)

## 18.2 OTHER RECOMMENDATIONS

Wardrop recommends that Prophecy Platinum compile more of the historic information in a comprehensive drill hole and assay database and validate as far as possible the historic collar locations through search and survey. The database should include, but not necessarily be limited to a program name for each drill hole record, drill hole start date, completion date, logger, downhole survey methods, collar survey comment, whether collar has been validated, where the samples were assayed, and the method of analysis (including digestion method), if this can be determined.

A review of the digital database should be undertaken to correct minor deficiencies in the data, primarily related to the From-To values. A constant imperial to metric conversion factor should be used to convert the historical imperial data into metric and the values rounded to the closes 0.01 m to reflect inaccuracy of the data.

In order to improve the potential economics of the project, additional assays should run for rhodium, ruthenium, rhenium, iridium and osmium. This would provide a dataset of sufficient size and quality to complete co-kriging. It is recommended to select 20-25% of the pulps or coarse rejects from the past drilling campaigns and all future drilling campaigns and run a PGE suite of analysis. The distribution of the sample selection should be from across the entire mineralized system and from various grade groups. If platinum and palladium assays do not exist in the selected samples, platinum and palladium analysis should be completed as well.

Routine SG measurements should be collected during all diamond drill programs. Currently a global SG value that is typical of a peridotite is being used in the resource estimation. Mineralized peridotite and semi-massive sulphide material likely has a higher SG value which would result in an increase in the tonnage of the material.

## 19.0 REFERENCES

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## 20.0 CERTIFICATE OF QUALIFIED PERSON

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I, Todd McCracken, P. Geo., of Sudbury, Ontario, do hereby certify:

- I am a Principal Geologist with Wardrop, a Tetra Tech Company with a business address at 101-957 Cambrian Heights, Sudbury, Ontario, P3C 5M6.
- This certificate applies to the technical report entitled Technical Report and Resource Estimate on the Wellgreen Pt-Pd-Ni-Cu Project, Yukon, Canada dated July 21, 2011 (the "Technical Report").
- I am a graduate of the University of Waterloo, (B.Sc. Honours, 1992). I am a member in good standing of the Association of Professional Engineers and Geoscientists of Ontario, License #0631. My relevant experience is 19 years of experience in exploration and operations, including several years working in Ni-Cu sulphide deposits. I am a "Qualified Person" for purposes of National Instrument 43-101 (the "Instrument").
- My most recent personal inspection of the Property was on June 28<sup>th</sup>, 2010 for 4 days.
- I am responsible for all sections of the Technical Report.
- I am independent of Prophecy Platinum Corp. as defined by Section 1.5 of the Instrument.
- I have authored two technical reports on the Property prior to this Technical Report:
  - "Technical Report on the Wellgreen Ni-Cu-Pt-Pd Project, Yukon, Canada" July 26, 2010
  - "Technical Report on the Wellgreen Ni-Cu-Pt-Pd Project, Yukon, Canada" April 14, 2011.
- I have read the Instrument and the technical report has been prepared in compliance with the Instrument.
- 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.

Signed and dated this 21<sup>st</sup> day of July, 2011 at Sudbury, Ontario.

*"Original document signed and sealed by  
Todd McCracken, P. Geo."*

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Todd McCracken, P. Geo.  
Principal Geologist

# APPENDIX A

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## CLAIMS LIST

District	GrantNumber	RegType	ClaimName	ClaimNbr	ClaimOwner	OperationRecordingDate	ClaimExpiryDate	Status	QuartzLease	NTS MapN	NonStdSize	Ops Number
Whitehorse	YA96005	Quartz	BARNY	10	Arch Joint Venture - 100%.	8/22/1986	2/11/2014	Active		115G05	Full Quartz fraction (25+ acres)	500067331
Whitehorse	YA97908	Quartz	BARNY	45	Arch Joint Venture - 100%.	6/23/1987	2/11/2014	Active		115G05		500069233
Whitehorse	YA96007	Quartz	BARNY	12	Arch Joint Venture - 100%.	8/22/1986	2/11/2014	Active		115G05	Full Quartz fraction (25+ acres)	500067333
Whitehorse	YA94966	Quartz	MUS	5	Arch Joint Venture - 100%.	6/12/1986	2/11/2014	Active		115G05		500066293
Whitehorse	YA96002	Quartz	BARNY	7	Arch Joint Venture - 100%.	8/22/1986	2/11/2014	Active		115G05	Full Quartz fraction (25+ acres)	500067328
Whitehorse	YA97898	Quartz	BARNY	35	Arch Joint Venture - 100%.	6/23/1987	2/11/2014	Active		115G05		500069223
Whitehorse	YA97904	Quartz	BARNY	41	Arch Joint Venture - 100%.	6/23/1987	2/11/2014	Active		115G05		500069229
Whitehorse	YA96006	Quartz	BARNY	11	Arch Joint Venture - 100%.	8/22/1986	2/11/2014	Active		115G05	Full Quartz fraction (25+ acres)	500067332
Whitehorse	YA94968	Quartz	BARNY	1	Arch Joint Venture - 100%.	6/12/1986	2/11/2014	Active		115G05		500066295
Whitehorse	YA96009	Quartz	BARNY	14	Arch Joint Venture - 100%.	8/22/1986	2/11/2014	Active		115G05	Full Quartz fraction (25+ acres)	500067335
Whitehorse	YA97896	Quartz	BARNY	33	Arch Joint Venture - 100%.	6/23/1987	2/11/2014	Active		115G05		500069221
Whitehorse	YA97899	Quartz	BARNY	36	Arch Joint Venture - 100%.	6/23/1987	2/11/2014	Active		115G05		500069224
Whitehorse	YA94969	Quartz	BARNY	2	Arch Joint Venture - 100%.	6/12/1986	2/11/2014	Active		115G05		500066296
Whitehorse	YA96017	Quartz	MUS	14	Arch Joint Venture - 100%.	8/22/1986	2/11/2014	Active		115G05		500067343
Whitehorse	YA96008	Quartz	BARNY	13	Arch Joint Venture - 100%.	8/22/1986	2/11/2014	Active		115G05	Full Quartz fraction (25+ acres)	500067334
Whitehorse	YA96872	Quartz	BARNY	24	Arch Joint Venture - 100%.	2/11/1987	2/11/2014	Active		115G05		500068198
Whitehorse	YA97906	Quartz	BARNY	43	Arch Joint Venture - 100%.	6/23/1987	2/11/2014	Active		115G05		500069231
Whitehorse	YA97900	Quartz	BARNY	37	Arch Joint Venture - 100%.	6/23/1987	2/11/2014	Active		115G05		500069225
Whitehorse	YA96879	Quartz	BARNY	31	Arch Joint Venture - 100%.	2/11/1987	2/11/2014	Active		115G05		500068205
Whitehorse	YA96003	Quartz	BARNY	8	Arch Joint Venture - 100%.	8/22/1986	2/11/2014	Active		115G05	Full Quartz fraction (25+ acres)	500067329
Whitehorse	YA96871	Quartz	BARNY	23	Arch Joint Venture - 100%.	2/11/1987	2/11/2014	Active		115G05		500068197
Whitehorse	YB08307	Quartz	BARNY	50	Arch Joint Venture - 100%.	10/2/1987	2/11/2014	Active		115G05	Full Quartz fraction (25+ acres)	500072229
Whitehorse	YA96015	Quartz	MUS	12	Arch Joint Venture - 100%.	8/22/1986	2/11/2014	Active		115G05		500067341
Whitehorse	YA94971	Quartz	BARNY	4	Arch Joint Venture - 100%.	6/12/1986	2/11/2014	Active		115G05		500066298
Whitehorse	YA94967	Quartz	MUS	6	Arch Joint Venture - 100%.	6/12/1986	2/11/2014	Active		115G05		500066294
Whitehorse	YA96875	Quartz	BARNY	27	Arch Joint Venture - 100%.	2/11/1987	2/11/2014	Active		115G05		500068201
Whitehorse	YA96867	Quartz	BARNY	19	Arch Joint Venture - 100%.	2/11/1987	2/11/2014	Active		115G05		500068193
Whitehorse	YA96004	Quartz	BARNY	9	Arch Joint Venture - 100%.	8/22/1986	2/11/2014	Active		115G05	Full Quartz fraction (25+ acres)	500067330
Whitehorse	YA96876	Quartz	BARNY	28	Arch Joint Venture - 100%.	2/11/1987	2/11/2014	Active		115G05		500068202
Whitehorse	YA96870	Quartz	BARNY	22	Arch Joint Venture - 100%.	2/11/1987	2/11/2014	Active		115G05		500068196
Whitehorse	YA97905	Quartz	BARNY	42	Arch Joint Venture - 100%.	6/23/1987	2/11/2014	Active		115G05		500069230
Whitehorse	YA96873	Quartz	BARNY	25	Arch Joint Venture - 100%.	2/11/1987	2/11/2014	Active		115G05		500068199
Whitehorse	YA96869	Quartz	BARNY	21	Arch Joint Venture - 100%.	2/11/1987	2/11/2014	Active		115G05		500068195
Whitehorse	YA96019	Quartz	MUS	16	Arch Joint Venture - 100%.	8/22/1986	2/11/2014	Active		115G05		500067345
Whitehorse	YA97911	Quartz	BARNY	48	Arch Joint Venture - 100%.	6/23/1987	2/11/2014	Active		115G05		500069236
Whitehorse	YA94970	Quartz	BARNY	3	Arch Joint Venture - 100%.	6/12/1986	2/11/2014	Active		115G05		500066297
Whitehorse	YA96874	Quartz	BARNY	26	Arch Joint Venture - 100%.	2/11/1987	2/11/2014	Active		115G05		500068200
Whitehorse	YA94972	Quartz	BARNY	5	Arch Joint Venture - 100%.	6/12/1986	2/11/2014	Active		115G05		500066299
Whitehorse	YA97912	Quartz	BARNY	49	Arch Joint Venture - 100%.	6/23/1987	2/11/2014	Active		115G05		500069237
Whitehorse	YA96877	Quartz	BARNY	29	Arch Joint Venture - 100%.	2/11/1987	2/11/2014	Active		115G05		500068203
Whitehorse	YA97910	Quartz	BARNY	47	Arch Joint Venture - 100%.	6/23/1987	2/11/2014	Active		115G05		500069235
Whitehorse	YA96878	Quartz	BARNY	30	Arch Joint Venture - 100%.	2/11/1987	2/11/2014	Active		115G05		500068204
Whitehorse	YA97901	Quartz	BARNY	38	Arch Joint Venture - 100%.	6/23/1987	2/11/2014	Active		115G05		500069226
Whitehorse	YA97897	Quartz	BARNY	34	Arch Joint Venture - 100%.	6/23/1987	2/11/2014	Active		115G05		500069222
Whitehorse	YA94973	Quartz	BARNY	6	Arch Joint Venture - 100%.	6/12/1986	2/11/2014	Active		115G05		500066300
Whitehorse	YA96868	Quartz	BARNY	20	Arch Joint Venture - 100%.	2/11/1987	2/11/2014	Active		115G05		500068194
Whitehorse	YA96880	Quartz	BARNY	32	Arch Joint Venture - 100%.	2/11/1987	2/11/2014	Active		115G05		500068206
Whitehorse	YA97902	Quartz	BARNY	39	Arch Joint Venture - 100%.	6/23/1987	2/11/2014	Active		115G05		500069227
Whitehorse	60772	Quartz	QUILL	6	Northern Platinum Ltd. - 100%.	7/2/1952	12/5/2020	Active	OW00086	115G05		500008893
Whitehorse	60787	Quartz	WAGONER	5	Northern Platinum Ltd. - 100%.	6/27/1952	12/5/2020	Active	OW00101	115G05		500008909
Whitehorse	63043	Quartz	RED	7	Northern Platinum Ltd. - 100%.	7/8/1952	12/5/2020	Active	OW00152	115G05		500009073
Whitehorse	60795	Quartz	RAM	5	Northern Platinum Ltd. - 100%.	7/2/1952	12/5/2020	Active	OW00109	115G05		500008918
Whitehorse	60785	Quartz	WAGONER	3	Northern Platinum Ltd. - 100%.	6/27/1952	12/5/2020	Active	OW00099	115G05		500008907
Whitehorse	63022	Quartz	MAC	2	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00131	115G05		500009052
Whitehorse	60789	Quartz	WAGONER	7	Northern Platinum Ltd. - 100%.	6/27/1952	12/5/2020	Active	OW00103	115G05		500008911
Whitehorse	60773	Quartz	QUILL	7	Northern Platinum Ltd. - 100%.	7/2/1952	12/5/2020	Active	OW00087	115G05		500008894
Whitehorse	63036	Quartz	BETTY	8	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00145	115G05		500009066
Whitehorse	63034	Quartz	BETTY	6	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00143	115G05		500009064
Whitehorse	63013	Quartz	SAM	1	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00122	115G05		500009043
Whitehorse	60769	Quartz	QUILL	3	Northern Platinum Ltd. - 100%.	7/2/1952	12/5/2020	Active	OW00083	115G05		500008890
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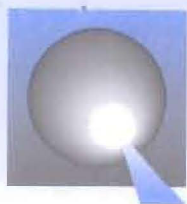
Whitehorse	64828	Quartz	JEEP	234	Northern Platinum Ltd. - 100%.	9/14/1952	12/5/2020	Active	OW00164	115G05		500009160
Whitehorse	70829	Quartz	QUILL		Northern Platinum Ltd. - 100%.	8/9/1955	12/5/2020	Active	OW00117	115G05	Full Quartz fraction (25+ acres)	500009545
Whitehorse	60780	Quartz	DISCOVERY	6	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00094	115G05		500008902
Whitehorse	63026	Quartz	MAC	6	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00135	115G05		500009056
Whitehorse	63023	Quartz	MAC	3	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00132	115G05		500009053
Whitehorse	63006	Quartz	IRISH	6	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00116	115G05		500009042
Whitehorse	60791	Quartz	RAM	1	Northern Platinum Ltd. - 100%.	7/2/1952	12/5/2020	Active	OW00105	115G05		500008914
Whitehorse	60774	Quartz	QUILL	8	Northern Platinum Ltd. - 100%.	7/2/1952	12/5/2020	Active	OW00088	115G05		500008895
Whitehorse	60784	Quartz	WAGONER	2	Northern Platinum Ltd. - 100%.	6/27/1952	12/5/2020	Active	OW00098	115G05		500008906
Whitehorse	60775	Quartz	DISCOVERY	1	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00089	115G05		500008896
Whitehorse	60793	Quartz	RAM	3	Northern Platinum Ltd. - 100%.	7/2/1952	12/5/2020	Active	OW00107	115G05		500008916
Whitehorse	64122	Quartz	JEEP	238	Northern Platinum Ltd. - 100%.	9/14/1952	12/5/2020	Active	OW00162	115G05		500009134
Whitehorse	63044	Quartz	RED	8	Northern Platinum Ltd. - 100%.	7/8/1952	12/5/2020	Active	OW00153	115G05		500009074
Whitehorse	63039	Quartz	RED	3	Northern Platinum Ltd. - 100%.	7/8/1952	12/5/2020	Active	OW00148	115G05		500009069
Whitehorse	63018	Quartz	SAM	6	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00127	115G05		500009048
Whitehorse	63002	Quartz	IRISH	2	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00114	115G05		500009040
Whitehorse	60798	Quartz	RAM	8	Northern Platinum Ltd. - 100%.	7/2/1952	12/5/2020	Active	OW00112	115G05		500008921
Whitehorse	60782	Quartz	DISCOVERY	8	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00096	115G05		500008904
Whitehorse	60781	Quartz	DISCOVERY	7	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00095	115G05		500008903
Whitehorse	60778	Quartz	DISCOVERY	4	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00092	115G05		500008899
Whitehorse	64830	Quartz	JEEP	236	Northern Platinum Ltd. - 100%.	9/14/1952	12/5/2020	Active	OW00165	115G05		500009162
Whitehorse	63038	Quartz	RED	2	Northern Platinum Ltd. - 100%.	7/8/1952	12/5/2020	Active	OW00147	115G05		500009068
Whitehorse	63003	Quartz	IRISH	3	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00115	115G05		500009041
Whitehorse	60794	Quartz	RAM	4	Northern Platinum Ltd. - 100%.	7/2/1952	12/5/2020	Active	OW00108	115G05		500008917
Whitehorse	60783	Quartz	WAGONER	1	Northern Platinum Ltd. - 100%.	6/27/1952	12/5/2020	Active	OW00097	115G05		500008905
Whitehorse	64834	Quartz	JEEP	242	Northern Platinum Ltd. - 100%.	9/14/1952	12/5/2020	Active	OW00167	115G05		500009164
Whitehorse	63027	Quartz	MAC	7	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00136	115G05		500009057
Whitehorse	60797	Quartz	RAM	7	Northern Platinum Ltd. - 100%.	7/2/1952	12/5/2020	Active	OW00111	115G05		500008920
Whitehorse	60790	Quartz	WAGONER	8	Northern Platinum Ltd. - 100%.	6/27/1952	12/5/2020	Active	OW00104	115G05		500008913
Whitehorse	64742	Quartz	JEEP	96	Northern Platinum Ltd. - 100%.	8/6/1952	12/5/2020	Active	OW00163	115G05		500009157
Whitehorse	63035	Quartz	BETTY	7	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00144	115G05		500009065
Whitehorse	63032	Quartz	BETTY	4	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00141	115G05		500009062
Whitehorse	63031	Quartz	BETTY	3	Northern Platinum Ltd. - 100%.	7/23/1952	12/5/2020	Active	OW00140	115G05		500009061
Whitehorse	63015	Quartz	SAM	3	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00124	115G05		500009045
Whitehorse	64836	Quartz	JEEP	244	Northern Platinum Ltd. - 100%.	9/14/1952	12/5/2020	Active	OW00168	115G05		500009165
Whitehorse	64085	Quartz	ROSS	95	Northern Platinum Ltd. - 100%.	7/16/1952	12/5/2020	Active	OW00160	115G05		500009129
Whitehorse	63020	Quartz	SAM	8	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00129	115G05		500009050
Whitehorse	63016	Quartz	SAM	4	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00125	115G05		500009046
Whitehorse	60788	Quartz	WAGONER	6	Northern Platinum Ltd. - 100%.	6/27/1952	12/5/2020	Active	OW00102	115G05		500008910
Whitehorse	60786	Quartz	WAGONER	4	Northern Platinum Ltd. - 100%.	6/27/1952	12/5/2020	Active	OW00100	115G05		500008908
Whitehorse	63029	Quartz	BETTY	1	Northern Platinum Ltd. - 100%.	7/23/1952	12/5/2020	Active	OW00138	115G05		500009059
Whitehorse	63019	Quartz	SAM	7	Northern Platinum Ltd. - 100%.	7/30/1952	12/5/2020	Active	OW00128	115G05		500009049
Whitehorse	63014	Quartz	SAM	2	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00123	115G05		500009044
Whitehorse	64084	Quartz	ROSS	94	Northern Platinum Ltd. - 100%.	7/16/1952	12/5/2020	Active	OW00159	115G05	Full Quartz fraction (25+ acres)	500009128
Whitehorse	63041	Quartz	RED	5	Northern Platinum Ltd. - 100%.	7/8/1952	12/5/2020	Active	OW00150	115G05		500009071
Whitehorse	63040	Quartz	RED	4	Northern Platinum Ltd. - 100%.	7/8/1952	12/5/2020	Active	OW00149	115G05		500009070
Whitehorse	60779	Quartz	DISCOVERY	5	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00093	115G05		500008900
Whitehorse	63042	Quartz	RED	6	Northern Platinum Ltd. - 100%.	7/8/1952	12/5/2020	Active	OW00151	115G05		500009072
Whitehorse	63033	Quartz	BETTY	5	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00142	115G05		500009063
Whitehorse	63030	Quartz	BETTY	2	Northern Platinum Ltd. - 100%.	7/23/1952	12/5/2020	Active	OW00139	115G05		500009060
Whitehorse	71433	Quartz	ROSS	2	Northern Platinum Ltd. - 100%.	10/12/1955	12/5/2020	Active	OW00119	115G05		500009570
Whitehorse	63017	Quartz	SAM	5	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00126	115G05		500009047
Whitehorse	63001	Quartz	IRISH	1	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00113	115G05		500009039
Whitehorse	60792	Quartz	RAM	2	Northern Platinum Ltd. - 100%.	7/2/1952	12/5/2020	Active	OW00106	115G05		500008915
Whitehorse	60777	Quartz	DISCOVERY	3	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00091	115G05		500008898
Whitehorse	60768	Quartz	QUILL	2	Northern Platinum Ltd. - 100%.	7/2/1952	12/5/2020	Active	OW00082	115G05		500008889
Whitehorse	60796	Quartz	RAM	6	Northern Platinum Ltd. - 100%.	7/2/1952	12/5/2020	Active	OW00110	115G05		500008919
Whitehorse	60776	Quartz	DISCOVERY	2	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00090	115G05		500008897
Whitehorse	60771	Quartz	QUILL	5	Northern Platinum Ltd. - 100%.	7/2/1952	12/5/2020	Active	OW00085	115G05		500008892
Whitehorse	63024	Quartz	MAC	4	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00133	115G05		500009054
Whitehorse	71432	Quartz	ROSS	1	Northern Platinum Ltd. - 100%.	10/12/1955	12/5/2020	Active	OW00118	115G05		500009569
Whitehorse	63021	Quartz	MAC	1	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00130	115G05		500009051

Whitehorse	60770	Quartz	QUILL	4	Northern Platinum Ltd. - 100%.	7/2/1953	12/5/2020	Active	OW00084	115G05		500008891
Whitehorse	63025	Quartz	MAC	5	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00134	115G05		500009055
Whitehorse	63028	Quartz	MAC	8	Northern Platinum Ltd. - 100%.	7/3/1952	12/5/2020	Active	OW00137	115G05		500009058
Whitehorse	64832	Quartz	JEEP	240	Northern Platinum Ltd. - 100%.	9/14/1952	12/5/2020	Active	OW00166	115G05		500009163

## APPENDIX B

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SRM CERTIFICATES



## CCRMP

Canadian Certified Reference Materials Project

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# Certificate of Analysis

First issued: 1994

Last revision: August 1997

## WGB-1

### Gabbro Rock PGE Reference Material

#### Certified Values and 95% Confidence Intervals

Constituent	Certified Value	95% C.I.
Au, ng/g	2.9	± 1.1
Pd, ng/g	13.9	± 2.1
Pt, ng/g	6.1	± 1.6
Fe <sub>2</sub> O <sub>3</sub> , %	6.71	± 0.14
K <sub>2</sub> O, %	0.94	± 0.04
MgO, %	9.40	± 0.19
Cr, µg/g	291	± 13

#### Provisional Values and 95% Confidence Intervals

Constituent	Provisional Value	95% C.I.
Ir, ng/g	0.33	0.17
Rh, ng/g	0.32	0.21
Ru, ng/g	0.3	---

Informational value



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Canada

### **Source**

WGB-1 was obtained from the Wellgreen Complex, Yukon Territory, Canada. WGB-1 was prepared and certified in cooperation with the Analytical Method Development Section of the Mineral Deposits Division of the Geological Survey of Canada (GSC).

### **Description**

The mineralogy of this gabbro rock consists of plagioclase feldspar, pyroxene, chlorite, prehnite and calcite. Sulphide mineralization in the sample is sparse and includes chalcopyrite, pyrrhotite, pentlandite and galena (intimately associated with the pyrrhotite). Other minerals identified include titanite, ilmenite and rutile.

### **Intended Use**

WGB-1 is intended for analysis of platinum-group elements in exploration samples and for other samples where very low concentrations of gold and PGEs are required. WGB-1 is also intended for general rock analysis for a gabbro-type rock.

### **Instructions for Use**

WGB-1 should be used "as is" without drying.

### **Method of Preparation**

The rock was hand-picked by a GSC geologist. The raw material was dried, comminuted and sieved to obtain a sub-74-micron (-200 mesh) product which was blended and bottled.

### **State of Homogeneity**

The homogeneity of the stock with respect to its gold, platinum and palladium contents was confirmed using bottles chosen according to a stratified random sampling scheme. The analytical method was a fire-assay preconcentration followed by an

inductively-coupled plasma - mass spectrometric (ICP-MS) finish performed at GSC. The homogeneity was also confirmed, at a commercial laboratory, for all major constituents by X-ray fluorescence.

### **Method of Certification**

WGB-1 was certified by an interlaboratory analysis program. Thirty-three university, commercial, and government laboratories from Canada, United States, Europe, Australia, Africa, and Japan participated in an interlaboratory certification program. Up to 80 elements were analyzed by methods of each laboratory's choice. A statistical analysis of the data yielded certified values for gold, palladium, platinum,  $\text{Fe}_2\text{O}_3$ ,  $\text{K}_2\text{O}$ ,  $\text{MgO}$ , and chromium. Provisional values were assigned for rhodium, iridium and thirty-two others. Informational values for ruthenium and other elements are also given.

### **Legal Notice**

The Canadian Certified Reference Materials Project has prepared this reference material and statistically evaluated the analytical data of the interlaboratory certification program to the best of its ability. The purchaser, by receipt hereof, releases and indemnifies the Canadian Certified Reference Materials Project from and against all liability and costs arising out of the use of this material and information.

### Reference


The preparation and certification procedures used for WGB-1, including values obtained by individual laboratories, are given in CANMET report *CCRMP 94-3E*. This report is available free of charge on application to:

Coordinator, CCRMP  
CANMET (NRCan)  
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### Certifying Officers

  
William S. Bowman

  
Maureen E. Leaver



Additional provisional values and 95% confidence limits

Provisional Constituents	Mean	95 % Conf. Limits
Al <sub>2</sub> O <sub>3</sub> , %	11.15	± 0.27
CaO, %	15.78	± 0.85
MnO, %	0.143	± 0.014
Na <sub>2</sub> O, %	2.15	± 0.08
P <sub>2</sub> O <sub>5</sub> , %	0.099	± 0.034
SiO <sub>2</sub> , %	49.1	± 0.8
TiO <sub>2</sub> , %	0.84	± 0.07
Ba, µg/g	851	± 61
Co, µg/g	29.8	± 1.7
Cs, µg/g	0.52	± 0.15
Cu, µg/g	106	± 9
Eu, µg/g	1.27	± 0.06
Hf, µg/g	1.5	± 0.2
Ho, µg/g	0.52	± 0.07
La, µg/g	8.7	± 1.1
Mo, µg/g	1.2	± 0.5

Provisional Constituents	Mean	95 % Conf. Limits
Nb, µg/g	8	± 4
Nd, µg/g	9.9	± 0.9
Ni, µg/g	76	± 7
Rb, µg/g	19.5	± 1.5
Sb, µg/g	2.0	± 0.4
Sc, µg/g	44	± 4
Sm, µg/g	2.8	± 0.3
Sr, µg/g	118	± 9
Tb, µg/g	0.5	± 0.1
Th, µg/g	1.0	± 0.1
U, µg/g	0.75	± 0.1
V, µg/g	222	± 17
Y, µg/g	14.6	± 2.7
Yb, µg/g	1.42	± 0.18
Zn, µg/g	31.5	± 8.5
Zr, µg/g	44	± 16

### Informational ranges

(these are not certified values - they are intended to be used as a guide only)

Informational Ranges	
H <sub>2</sub> O, %	0.16 - 0.21
LOI, %	3.6 - 4.0
S total, %	0.01 - 0.03
Ag, µg/g	0.1 - 1
As, µg/g	1.5 - 5
B, µg/g	250 - 280
Be, µg/g	0.2 - 0.8
Bi, µg/g	0.1 - 2
Cd, µg/g	0.1 - 0.4
Ce, µg/g	14 - 20
Dy, µg/g	2.5 - 3.5
Er, µg/g	1.2 - 1.8
Ga, µg/g	11 - 13

Informational Ranges	
Gd, µg/g	2.5 - 3.5
Ge, µg/g	0.2 - 7
Hg, µg/g	0.01
Li, µg/g	43 - 51
Lu, µg/g	0.20 - 0.36
Pb, µg/g	4 - 14
Pr, µg/g	2.3 - 2.6
Se, µg/g	0.1 - 0.8
Sn, µg/g	4.2 - 5.2
Ta, µg/g	0.3 - 1
Th, µg/g	1.0 - 1.6
Tm, µg/g	0.15 - 0.30
W, µg/g	1 - 3.5



**CCRMP**  
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# Certificate of Analysis

First issued: December 2007

Version: December 2007

## WMS-1a

Certified Reference Material for Massive Sulphide  
with Gold and Platinum Group Elements

**Table 1 – WMS-1a Certified Values**

Element	Units	Mean	Within-lab Standard Deviation	Between-labs Standard Deviation	95% Confidence Interval of Mean
Al	%	1.350	0.021	0.084	0.051
As	µg/g	30.9	2.9	4.8	2.9
Au	µg/g	0.300	0.043	0.040	0.018
Ca*	%	3.09	0.05	0.17	0.11
Cu**	%	1.396	0.014	0.045	0.021
Fe	%	45.4	0.5	1.2	0.6
Ni	%	3.02	0.05	0.15	0.07
Pd	µg/g	1.45	0.05	0.11	0.05
Pt	µg/g	1.91	0.07	0.10	0.05
Rh	µg/g	0.222	0.015	0.052	0.038
S	%	28.17	0.27	0.96	0.69

\* Certified value with digestions by two acids excluded as statistical outliers.

\*\* Certified value with digestions by two acids excluded as method outliers based on statistical tests.



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Canada

**Table 2 – WMS-1a Provisional Values**

Element	Units	Mean	Within-lab Standard Deviation	Between-labs Standard Deviation	95% Confidence Interval of Mean
Ag	µg/g	3.7	0.2	1.3	0.5
Co	%	0.145	0.002	0.017	0.008
Cr	µg/g	68	3	15	10
K	%	0.0991	0.0034	0.0094	0.0073
Ir*	µg/g	0.322	0.010	0.018	0.019
Mg	%	0.331	0.007	0.035	0.022
Mn	µg/g	600	10	120	70
Na	%	0.0329	0.0034	0.0074	0.0065
Ru*	µg/g	0.145	0.007	0.013	0.015
Sb	µg/g	6.92	1.01	0.98	0.96
Sr	µg/g	31.3	0.7	5.2	4.3
Ti	µg/g	840	20	120	80
V	µg/g	140	6	25	21
Zn	µg/g	130	4	19	8

\*Statistical analysis of the results for these elements warrants classification as Provisional, despite only 6 sets for ruthenium and 7 sets for iridium. Ruthenium value is based on nickel sulphide fire assay only.

**Table 3 – WMS-1a Informational Values**

Analyte	Units	Mean	Number of accepted laboratories / values
Ba	µg/g	70	7 / 35
Bi	µg/g	1.2	3 / 15
C	%	0.1	2 / 10
Cd	µg/g	1.4	4 / 20
Ce	µg/g	7.9	4 / 20
Cu (AD2)*	%	1.34	6 / 30
Cs	µg/g	0.6	4 / 20
Dy	µg/g	0.8	3 / 15
Er	µg/g	0.4	3 / 15
Eu	µg/g	0.2	4 / 20
Ga	µg/g	4	3 / 15
Gd	µg/g	0.8	3 / 15

Hf	µg/g	0.5	4 / 20
Ho	µg/g	0.2	3 / 15
In	µg/g	0.2	3 / 15
La	µg/g	4.3	5 / 30
Li	µg/g	3	4 / 20
H <sub>2</sub> O (105 – 110°C)	%	0.2	2 / 10
LOI **	%	11	2 / 10
Lu	µg/g	0.08	3 / 15
Mo	µg/g	3.0	7 / 35
Nb	µg/g	2.0	3 / 15
Nd	µg/g	4	3 / 15
Os	µg/g	0.15	3 / 12
P	%	0.018	7 / 35
Pb	µg/g	33	18 / 88
Pr	µg/g	1.0	3 / 15
Rb	µg/g	3	3 / 15
Sc	µg/g	3	4 / 25
Se	µg/g	87	7 / 40
Si	%	4.7	6 / 30
Sm	µg/g	0.8	4 / 25
Sn	µg/g	2.3	4 / 20
Ta	µg/g	0.1	3 / 15
Tb	µg/g	0.1	3 / 15
Th	µg/g	1.2	3 / 15
Tm	µg/g	0.08	3 / 15
U	µg/g	0.5	4 / 20
Y	µg/g	4	4 / 20
Yb	µg/g	0.5	4 / 20
Zr	µg/g	20	4 / 20

\* Copper by two acid digestion (AD2) only

\*\* Loss on ignition at 1000 – 1050°C

## SOURCE

The raw material used to prepare WMS-1a was obtained from the Wellgreen property, near Whitehorse, Yukon. The mine is owned by Northern Platinum Limited. WMS-1a was obtained from the same mine as its predecessor, WMS-1, which is no longer available.

## DESCRIPTION

Major species include pyrrhotite (59.7%), clinocllore (11.2%), mainly actinolite plus traces of sepiolite (9.1%), pentlandite (8.8%), clinopyroxene (6.0%), and chalcopyrite (4.1%). Minor species include mica (0.8%), magnetite (0.2%) and galena (0.1%).

## **INTENDED USE**

WMS-1a is suitable for the analysis of gold, platinum group elements and various other elements at major, minor and trace levels in minerals. Examples of intended use include quality control, method development, environmental assessment and the calibration of equipment.

## **INSTRUCTIONS FOR USE**

WMS-1a should be used "as is", without drying. The contents of the bottle should be thoroughly mixed before taking samples. The contents of the bottle should be exposed to air for the shortest time possible. Unused material should be stored under an inert gas in a desiccator, or in a new, heat-sealed laminated foil pouch. The values herein pertain to the date when issued. CANMET-MMSL is not responsible for changes occurring after shipment.

## **HANDLING INSTRUCTIONS**

Normal safety precautions for handling fine particulate matter are suggested, such as the use of safety glasses, breathing protection, gloves and a laboratory coat.

## **METHOD OF PREPARATION**

The raw material was crushed, ground, and sieved to remove the plus 74  $\mu\text{m}$  fraction. The product was blended, then bottled in 200-gram units. The yield was 83%. Each bottle was sealed under nitrogen in a laminated aluminum foil-mylar pouch to prevent oxidation.

## **HOMOGENEITY**

The homogeneity of the stock was investigated using twenty-two bottles chosen according to a stratified random sampling scheme. Two splits were analysed from each bottle. Lead fire assay pre-concentration was performed on 10 gram-samples, followed by determination of gold, platinum and palladium by both inductively coupled plasma - optical emission spectrometry and mass spectrometry. Additionally, samples of 0.25-gram were digested with hydrochloric, nitric, perchloric and hydrofluoric acids. Analyses for silver, copper and nickel were performed using inductively coupled plasma - optical emission spectrometry. Inductively coupled plasma - mass spectrometry was used for the determination of lead and zinc. In a third investigation, samples of 0.15-gram were used for the determination of sulphur by combustion.

Use of a smaller sub-sample than specified above will invalidate the use of the certified values and associated parameters. A one-way analysis of variance technique (ANOVA) was used to assess the homogeneity of these elements<sup>1</sup>. The ratio of the between-bottles to within-bottle mean squares was compared to the F statistic at the 95% level of probability. No evidence of inhomogeneity was observed for these elements.

## **CERTIFIED VALUES**

Thirty-three industrial, commercial, and government laboratories participated in an interlaboratory measurement program using methods of their own choosing. Fire assay, multi-acid digestions, combustion and fusions were used for the concentration step. Inductively coupled plasma – optical emission spectrometry, inductively coupled plasma - mass spectrometry, atomic absorption spectrometry, instrumental neutron activation, x-ray fluorescence, hydride generation, visible and ultraviolet spectrometry and gravimetric analysis were used for the determination step.

ANOVA was used to calculate the consensus values and other statistical parameters<sup>1</sup> from the interlaboratory measurement program. Values are deemed to be Certified if derived from 10 or more sets of data that meet CCRMP statistical criterion regarding the agreement of the results. Eleven elements were certified (see Table 1).

Full details of all work, including the statistical analyses, the methods and the names of the participating laboratories are contained in the Certification Report. For more details on how to use reference material data to



assess laboratory results, users are directed to ISO Guide 33:2000, pages 14-17, and the document, "Assessment of laboratory proficiency using CCRMP reference materials", at [www.ccrmp.ca](http://www.ccrmp.ca) under Publications, which is based on Guide 33:2000.

#### **UNCERTIFIED VALUES**

Fourteen provisional values (Table 2) were derived from 8 or 9 sets of data that fulfill the CCRMP statistical criterion regarding agreement; or alternatively, more than 8 sets of data that do not fulfill the CCRMP statistical criteria required for certification. Informational values for 41 elements, shown in Table 3, were derived from the means of a minimum of 2 sets.

#### **TRACEABILITY**

The values quoted herein are based on the consensus values derived from the statistical analysis of the data from the interlaboratory measurement program.

#### **CERTIFICATION HISTORY**

WMS-1a is a new material.

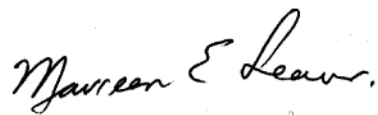
#### **PERIOD OF VALIDITY**

The certified values are valid until December 31, 2030. The stability of the material will be monitored every two years for the duration of the inventory. Updates will be made via the CCRMP web site.

#### **LEGAL NOTICE**

CANMET-MMSL has prepared this reference material and statistically evaluated the analytical data of the interlaboratory measurement program to the best of its ability. The purchaser, by receipt hereof, releases and indemnifies CANMET-MMSL from and against all liability and costs arising out of the use of this material and information.

#### **CERTIFYING OFFICERS**



Maureen E. Leaver – CCRMP Coordinator



Joseph Salley - Project Leader

#### **FOR FURTHER INFORMATION**

The WMS-1a Certification Report is available free of charge upon request to:

**CCRMP**  
**CANMET-MMSL (NRCan)**  
**555 Booth Street, room 433**  
**Ottawa, Ontario, Canada K1A 0G1**  
**Telephone: (613) 995-4738**  
**Facsimile: (613) 943-0573**  
**E-mail: [ccrmp@nrcan.gc.ca](mailto:ccrmp@nrcan.gc.ca)**

#### **REFERENCES**

1. Brownlee, K.A., Statistical Theory and Methodology in Science and Engineering; John-Wiley and Sons, Inc.; New York; 1960.



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# Certificate of Analysis

First issued: January 1994

Version: January 2010

## WPR-1

**Certified Reference Material for an Altered Peridotite with Gold  
and Platinum Group Elements**

**Table 1 – Certified Values**

Constituent	Unit	Mean	Within-Lab Standard Deviation	Between- Labs Standard Deviation	95% Confidence Limit
Au	ng/g	42.2	6.4	6.2	± 2.8
Cu	%	0.164	0.005	0.013	± 0.008
Fe <sub>2</sub> O <sub>3</sub>	%	14.6	0.4	0.5	± 0.3
Ir	ng/g	13.5	1.3	3.2	± 1.8
K <sub>2</sub> O	%	0.12	0.03	0.04	± 0.03
MnO	%	0.166	0.004	0.010	± 0.006
Pd	ng/g	235	21	21	± 9
Pt	ng/g	285	24	29	± 12
Rh	ng/g	13.4	1.6	1.5	± 0.9
Ru	ng/g	21.6	3.3	6.8	± 4.3
TiO <sub>2</sub>	%	0.29	0.02	0.03	± 0.02



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**Table 2 – Provisional Values**

<b>Constituent</b>	<b>Unit</b>	<b>Mean</b>	<b>Within-Lab Standard Deviation</b>	<b>Between- Labs Standard Deviation</b>	<b>95% Confidence Limit</b>
<b>Ag</b>	<b>ug/g</b>	<b>0.7</b>	<b>0.05</b>	<b>0.2</b>	<b>± 0.2</b>
<b>Al<sub>2</sub>O<sub>3</sub></b>	<b>%</b>	<b>2.95</b>	<b>0.09</b>	<b>0.22</b>	<b>± 0.15</b>
<b>As</b>	<b>ug/g</b>	<b>1.4</b>	<b>0.5</b>	<b>0.9</b>	<b>± 0.8</b>
<b>Ba</b>	<b>ug/g</b>	<b>22</b>	<b>2</b>	<b>7</b>	<b>± 4</b>
<b>Bi</b>	<b>ug/g</b>	<b>0.19</b>	<b>0.05</b>	<b>0.05</b>	<b>± 0.09</b>
<b>CaO</b>	<b>%</b>	<b>2.07</b>	<b>0.07</b>	<b>0.16</b>	<b>± 0.11</b>
<b>Cd</b>	<b>ug/g</b>	<b>0.43</b>	<b>0.16</b>	<b>0.13</b>	<b>± 0.17</b>
<b>Ce</b>	<b>ug/g</b>	<b>6</b>	<b>0.4</b>	<b>1</b>	<b>± 1</b>
<b>Co</b>	<b>ug/g</b>	<b>180</b>	<b>5</b>	<b>15</b>	<b>± 9</b>
<b>Cr</b>	<b>%</b>	<b>0.33</b>	<b>0.02</b>	<b>0.09</b>	<b>± 0.05</b>
<b>Cs</b>	<b>ug/g</b>	<b>0.73</b>	<b>0.09</b>	<b>0.06</b>	<b>± 0.06</b>
<b>Dy</b>	<b>ug/g</b>	<b>1.1</b>	<b>0.1</b>	<b>0.3</b>	<b>± 0.3</b>
<b>Er</b>	<b>ug/g</b>	<b>0.5</b>	<b>0.05</b>	<b>0.1</b>	<b>± 0.2</b>
<b>Eu</b>	<b>ug/g</b>	<b>0.31</b>	<b>0.04</b>	<b>0.06</b>	<b>± 0.06</b>
<b>Ga</b>	<b>ug/g</b>	<b>4.5</b>	<b>0.5</b>	<b>0.8</b>	<b>± 0.9</b>
<b>CaO</b>	<b>%</b>	<b>2.07</b>	<b>0.07</b>	<b>0.16</b>	<b>± 0.11</b>
<b>Gd</b>	<b>ug/g</b>	<b>0.9</b>	<b>0.1</b>	<b>0.3</b>	<b>± 0.4</b>
<b>Hf</b>	<b>ug/g</b>	<b>0.61</b>	<b>0.05</b>	<b>0.15</b>	<b>± 0.15</b>
<b>Ho</b>	<b>ug/g</b>	<b>0.18</b>	<b>0.03</b>	<b>0.05</b>	<b>± 0.09</b>
<b>La</b>	<b>ug/g</b>	<b>2.2</b>	<b>0.1</b>	<b>0.3</b>	<b>± 0.2</b>
<b>Li</b>	<b>ug/g</b>	<b>4.2</b>	<b>0.2</b>	<b>1.0</b>	<b>± 1.6</b>
<b>Lu</b>	<b>ug/g</b>	<b>0.07</b>	<b>0.008</b>	<b>0.03</b>	<b>± 0.03</b>
<b>MgO</b>	<b>%</b>	<b>31</b>	<b>1</b>	<b>3</b>	<b>± 2</b>
<b>LOI</b>	<b>%</b>	<b>10.2</b>	<b>0.1</b>	<b>0.2</b>	<b>± 0.3</b>
<b>Mo</b>	<b>ug/g</b>	<b>0.9</b>	<b>0.2</b>	<b>0.3</b>	<b>± 0.3</b>
<b>Na<sub>2</sub>O</b>	<b>%</b>	<b>0.041</b>	<b>0.008</b>	<b>0.023</b>	<b>± 0.016</b>
<b>Nb</b>	<b>ug/g</b>	<b>2.4</b>	<b>0.2</b>	<b>0.6</b>	<b>± 0.8</b>

**Table 2 – Provisional Values** (cont'd)

<b>Constituent</b>	<b>Unit</b>	<b>Mean</b>	<b>Within-Lab Standard Deviation</b>	<b>Between- Labs Standard Deviation</b>	<b>95% Confidence Limit</b>
<b>Nd</b>	<b>ug/g</b>	<b>3.5</b>	<b>0.3</b>	<b>0.7</b>	<b>± 0.7</b>
<b>Ni</b>	<b>%</b>	<b>0.29</b>	<b>0.01</b>	<b>0.04</b>	<b>± 0.02</b>
<b>Os</b>	<b>ng/g</b>	<b>13.3</b>	<b>1.6</b>	<b>1.6</b>	<b>± 2.1</b>
<b>P<sub>2</sub>O<sub>5</sub></b>	<b>%</b>	<b>0.037</b>	<b>0.002</b>	<b>0.011</b>	<b>± 0.012</b>
<b>Pb</b>	<b>ug/g</b>	<b>6</b>	<b>1</b>	<b>3</b>	<b>± 3</b>
<b>Pr</b>	<b>ug/g</b>	<b>0.7</b>	<b>0.05</b>	<b>0.2</b>	<b>± 0.3</b>
<b>Rb</b>	<b>ug/g</b>	<b>5</b>	<b>0.4</b>	<b>2</b>	<b>± 2</b>
<b>S</b>	<b>%</b>	<b>0.94</b>	<b>0.04</b>	<b>0.04</b>	<b>± 0.06</b>
<b>Sb</b>	<b>ug/g</b>	<b>0.9</b>	<b>0.08</b>	<b>0.48</b>	<b>± 0.35</b>
<b>Sc</b>	<b>ug/g</b>	<b>12</b>	<b>0.4</b>	<b>1</b>	<b>± 1</b>
<b>Se</b>	<b>ug/g</b>	<b>4</b>	<b>0.6</b>	<b>1</b>	<b>± 1</b>
<b>SiO<sub>2</sub></b>	<b>%</b>	<b>36.2</b>	<b>0.9</b>	<b>0.1</b>	<b>± 0.4</b>
<b>Sm</b>	<b>ug/g</b>	<b>0.9</b>	<b>0.06</b>	<b>0.21</b>	<b>± 0.2</b>
<b>Sn</b>	<b>ug/g</b>	<b>1.1</b>	<b>0.2</b>	<b>0.2</b>	<b>± 0.3</b>
<b>Sr</b>	<b>ug/g</b>	<b>7</b>	<b>1.0</b>	<b>2.0</b>	<b>± 2</b>
<b>Th</b>	<b>ug/g</b>	<b>0.4</b>	<b>0.06</b>	<b>0.2</b>	<b>± 0.2</b>
<b>Tm</b>	<b>ug/g</b>	<b>0.09</b>	<b>0.02</b>	<b>0.02</b>	<b>± 0.03</b>
<b>U</b>	<b>ug/g</b>	<b>0.2</b>	<b>0.05</b>	<b>0.10</b>	<b>± 0.1</b>
<b>V</b>	<b>ug/g</b>	<b>65</b>	<b>3</b>	<b>37</b>	<b>± 26</b>
<b>Y</b>	<b>ug/g</b>	<b>5</b>	<b>0.3</b>	<b>1</b>	<b>± 1</b>
<b>Yb</b>	<b>ug/g</b>	<b>0.48</b>	<b>0.05</b>	<b>0.13</b>	<b>± 0.14</b>
<b>Zn</b>	<b>ug/g</b>	<b>95</b>	<b>6</b>	<b>19</b>	<b>± 11</b>
<b>Zr</b>	<b>ug/g</b>	<b>18</b>	<b>3</b>	<b>3</b>	<b>± 3</b>

**Table 3 - Informational Values**

Constituent	Unit	Range
<b>B</b>	<b>ug/g</b>	<b>35-130</b>
<b>Be</b>	<b>ug/g</b>	<b>0.1-0.3</b>
<b>Cl</b>	<b>ug/g</b>	<b>100-300</b>
<b>Ge</b>	<b>ug/g</b>	<b>1-5</b>
<b>H<sub>2</sub>O<sup>-</sup></b>	<b>%</b>	<b>0.4-0.6</b>
<b>SO<sub>3</sub></b>	<b>%</b>	<b>0.5-2.5</b>
<b>Ta</b>	<b>ug/g</b>	<b>0.1-0.3</b>
<b>Tb</b>	<b>ug/g</b>	<b>0.1-0.2</b>
<b>Te</b>	<b>ug/g</b>	<b>0.1-0.7</b>
<b>Tl</b>	<b>ug/g</b>	<b>0.2-0.5</b>
<b>W</b>	<b>ug/g</b>	<b>0.1-3</b>

#### **DESCRIPTION**

The raw material for WPR-1 was obtained from the Wellgreen Complex, Yukon Territory, Canada. WPR-1 was prepared and certified in cooperation with the Geological Survey of Canada (GSC).

WPR-1 is an altered peridotite which contains essentially antigorite with small amounts of chlorite and accessory magnetite and chromite. The peridotite contains pyrrhotite, pentlandite and chalcopyrite all either enclosed, penetrated or intergrown with magnetite. Violarite occurs as inclusions in the pyrrhotite. Tellurides were observed which have been tentatively identified as platinum group element complexes.

The raw material was dried, crushed, ground, sieved, and blended to obtain a minus 74 micron (200 mesh) product. The yield was 80%. The material comes in glass bottles containing 400g each. This is the only size available.

#### **INTENDED USE**

WPR-1 is suitable for the analysis of gold, elements from the platinum group and other elements at major, minor and trace levels. Examples of intended use are for quality control in the analysis of samples of a similar type, method development, arbitration and the calibration of equipment.

#### **INSTRUCTIONS FOR USE**

The assigned values pertain to the date when issued. WPR-1 should be used "as is", without drying. The contents of the bottle should be thoroughly mixed before taking samples. The material can be stored at room temperature and pressure with no special precautions.

#### **HAZARDOUS SITUATION**

Normal safety precautions such as the use of safety glasses, breathing protection for fine particulate matter, gloves and a laboratory coat are suggested.

#### **LEVEL OF HOMOGENEITY**

The homogeneity of the stock with respect to its gold, platinum and palladium was investigated using twenty-two bottles chosen according to the bottling sequence and a stratified random sampling scheme. Two splits were analyzed from each bottle. The analyses for gold, platinum and palladium were

performed by GSC on 10g-samples using fire assay pre-concentration and followed by inductively coupled plasma mass spectrometry.

A one-way analysis of variance technique (ANOVA) was used to assess the homogeneity of these elements (1). The ratio of the between-bottles to within-bottle mean squares is compared to the F statistic at the 95% level of probability. No evidence of inhomogeneity was observed for all three elements. Use of a smaller mass than indicated will invalidate the use of the certified value and associated parameters.

### **CERTIFIED VALUES**

The first interlaboratory measurement program was held in 1992 for the certification of gold and the platinum group elements. Twelve university, government, industrial and commercial laboratories submitted results. In 1994, thirty-three individual laboratories participated in the interlaboratory measurement program in an attempt to certify other elements. Up to 80 elements were analyzed by methods of each laboratory's choice. For gold and the platinum group elements, fire assay, multi-acid digestion followed by solvent extraction, gravimetric, inductively coupled plasma –optical emission spectroscopy, inductively coupled plasma – mass spectroscopy, graphite furnace atomic absorption spectroscopy, direct current plasma spectroscopy, and neutron activation analysis were used. For the other elements, various acid digestions, fusions, gravimetric, combustion, x-ray fluorescence, hydride generation, inductively coupled plasma – optical emission spectroscopy, inductively coupled plasma – mass spectroscopy, graphite furnace atomic absorption spectroscopy, direct current plasma spectroscopy, and neutron activation analysis were used.

A one-way analysis of variance technique (ANOVA) was used to estimate the consensus value and other statistical parameters (1). The two criteria for certification involve the agreement of within- and between-laboratories standard deviations and the number of sets with acceptable agreement. Table 1 contains the means and associated statistical parameters for the fifteen certified elements. Full details of all phases of the work, including statistical analysis, the methods and the names of the participants are contained in certification report.

### **UNCERTIFIED VALUES**

Table 2 contains the provisional elements which did not meet either one or both of the two criteria for certification. Table 3 contains the informational values calculated from the mean of two or more sets of results which were considered to be in good agreement.

### **TRACEABILITY**

The certified values quoted herein are based on the consensus value derived from the statistical analysis of the data from the interlaboratory measurement program.

### **DATE OF CERTIFICATION**

WPR-1 was released in 1994. The 2004 version of this certificate was written in order to release new or upgraded values. The 2004 version of the certificate included five new certified values, forty-nine new provisional values and eleven new informational values. The 2004 version of the certificate was re-issued in January 2010 with no changes due to the expiration of the former.

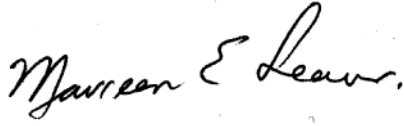
### **PERIOD OF VALIDITY**

These certified values are valid until January 31, 2032. The stability of the material will be monitored every two years. Updates will be published on the CCRMP web site.

### **LEGAL NOTICE**

CANMET - Mining and Mineral Sciences Laboratories (MMSL) has prepared this reference material and statistically evaluated the analytical data of the interlaboratory certification program to the best of its ability. The purchaser, by receipt hereof, releases and indemnifies CANMET - MMSL from and against all liability and costs arising out of the use of this material and information.

**CERTIFYING OFFICER**



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Maureen E. Leaver

**FOR FURTHER INFORMATION**

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**REFERENCE**

1. Brownlee, K.A., Statistical Theory and Methodology in Science and Engineering; John-Wiley and Sons, Inc.; New York; 1960.