NI 43-101 Technical Report
Preliminary Economic Assessment
The Beta Hunt Mine
Kambalda, Western Australia

Report Prepared for
Royal Nickel Corporation

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Beta Hunt Mine administrative buildings looking south

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1 Summary

1.1 Introduction

On February 1, 2016, Royal Nickel Corporation (RNC) announced it had agreed to acquire a 67% interest in Salt Lake Mining Pty Ltd. (SLM). SLM is a private company whose main asset is a 100% interest in the Beta Hunt Mine, a low-cost nickel and gold producer located in the prolific Kambalda mining district of Australia. The SLM interest will be acquired in two stages:

- On February 1, 2016, RNC invested C$2.5 million in cash in exchange for 20% of SLM.
- RNC plans to acquire a further 47% of SLM from its current shareholders in exchange for 32.5 million RNC common shares. This transaction, which is expected to close in March, remains subject to regulatory approval, a shareholder pre-emption process and other customary closing conditions.

The Beta Hunt Mine is located near Kambalda, Western Australia and hosts economic deposits of both nickel and gold. Originally developed and operated by Western Mining Corporation (WMC) in the 1970's the mine was sold to Gold Fields in 2001. In 2003, Reliance Mining acquired the nickel rights and resumed production. Consolidated Minerals acquired Reliance Mining in 2005 and invested in both increasing resources and expanding production. The mine operated continuously until the end of 2008, when it was placed on care and maintenance due to the financial crisis and associated collapse in metal prices. Transactions during the period 2001 - 2003 resulted in the separation of nickel rights from the gold rights. SLM subsequently acquired the property in 2013 and succeeded in re-combining the nickel and gold rights. Nickel operations were re-started in 2014. Initial gold production occurred in June to July, 2014 and recommenced at the end of 2015.

RNC retained the authors to prepare an independent NI 43-101 compliant technical report on the Beta Hunt Mine. The purpose of this technical report is to support disclosure of results of a Preliminary Economic Assessment (PEA). This technical report conforms to NI 43-101 Standards of Disclosure for Mineral Projects.

1.2 Property Description and Ownership

The Beta Hunt Mine is located 600 km east of Perth in Kambalda, Western Australia. SLM acquired the Beta Hunt mine from Consolidated Nickel Kambalda Operations Pty Ltd. (CNKO) in December 2013 and operates the Beta Hunt mine under a sub-lease agreement with St Ives Gold Mining Company Pty Ltd. (SIGMC). SIGMC is a wholly owned subsidiary of Gold Fields Limited. The mining tenements on which the Beta Hunt Mine is located are held by SIGMC. Beta Hunt has been operating continuously since SLM re-started nickel operations in April 2014.

1.3 Geology and Mineralization

Beta Hunt is situated within the central portion of the Norseman-Wiluna greenstone belt in a sequence of mafic/ultramafic and felsic rocks on the southwest flank of the Kambalda Dome. Nickel mineralization is hosted mainly by talc-carbonate and serpentine altered ultramafic rocks. The primary sulphide minerals are typically pyrrhotite > pentlandite > pyrite with trace chalcopyrite. Gold mineralization occurs mainly in the Lunnon Basalt, which is the footwall to the nickel-bearing ultramafics, and is characterized by intense albite, carbonate and chlorite alteration, with a halo of biotite/pyrite alteration.

1.4 Mineral Resource Estimates

The nickel mineral resource estimate for the Beta Hunt is presented in Table 1.1 and the gold mineral resource estimate follows in Table 1.2.

Table 1.1: Beta Hunt Nickel Mineral Resources as at February 1, 2016[1,2,3,5]

Nickel	Classification	Inventory (kt)	Grade Ni %	Contained Metal Nickel Tonnes (NiTs)
>=1% Ni	Measured	96	4.6	4,460
	Indicated	283	4.0	11,380
	Total	**379**	**4.2**	**15,840**
	Inferred	216	3.4	7,400

Table 1.2: Beta Hunt Gold Mineral Resources as at February 1, 2016[1,2,4,5]

Gold	Classification	Inventory (kt)	Grade Au g/t	Contained Metal (Ounces)
>=1.8 g/t Au	Measured	0	0.0	0
	Indicated	815	3.5	92,000
	Total	**815**	**3.5**	**92,000**
	Inferred	2,910	3.4	321,000

1. *Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the Mineral Resources estimated will be converted into Mineral Reserves.*
2. *The Mineral Resource estimates include Inferred Mineral Resources that are normally considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as Mineral Reserves. There is also no certainty that Inferred Mineral Resources will be converted to Measured and Indicated categories through further drilling, or into Mineral Reserves once economic considerations are applied. Mineral resource tonnage and contained metal have been rounded to reflect the accuracy of the estimate, and numbers may not add due to rounding*
3. *Nickel Mineral Resources are reported using a 1% Ni cut-off grade*
4. *Gold Mineral Resources are reported using a 1.8 g/t Au cut-off grade*
5. *Mineral Resources described here has been prepared by Elizabeth Haren, MAusIMM CPGeo, of Haren Consulting Pty Ltd.*

1.5 Operations and Development

SLM initially employed a contractor who used the same mechanized methods as previous owners to mine the nickel resource. However, this resulted in low productivity and significant dilution for the high grade, narrow vein and relatively flat-lying deposit. At the start of 2015, SLM transitioned to owner-operations using conventional methods and since experienced considerably improved results. The steady-state production rate of 450 t/d was achieved by the second half of 2015.

Gold mineralization occurs in wider and more steeply dipping veins that are amenable to mechanized methods. Production restarted in Q4 2015 and is expected to reach a steady state rate of 1,600 t/d by the end of 2016.

There is limited requirement for site infrastructure as processing of both nickel and gold mineralization is conducted off-site, by third parties under separate tolling contracts. Nickel mineralization is trucked

by private road 5 km to the BHP Billiton Ltd. (BHPB) Kambalda Nickel Concentrator (KNC) with the resultant concentrate treated at the BHPB Kalgoorlie Nickel Smelter (KNS). Gold mineralization is trucked by private road 15 km to the SIGMC Lefroy Mill.

Cautionary Statement: The decision by SLM to produce at the Beta Hunt mine was not based on a feasibility study of mineral reserves, demonstrating economic and technical viability. As a result, there may be an increased uncertainty of achieving any particular level of recovery of minerals or the cost of such recovery, including increased risks associated with developing a commercially mineable deposit. Historically, such projects have a much higher risk of economic and technical failure. There is no guarantee that the anticipated production costs will be achieved. Failure to achieve the anticipated production costs would have a material adverse impact on SLM's cash flow and future profitability. It is further cautioned that the PEA is preliminary in nature. No mining feasibility study has been completed on Beta Hunt. Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that the PEA will be realized.

1.6 Environmental Studies, Permitting, and Social or Community Impact

Beta Hunt is an operating mine and in possession of all required permits. As it is a high grade, low tonnage underground operation with no processing plant or tailings impoundment facility on site, impact on the environment is limited. Beta Hunt benefits the local communities of Kambalda and Kalgoorlie by providing direct employment to approximately 120 persons. The region hosts a number of operating mines and local communities are strongly supportive of the mining industry.

The region is located in the state of Western Australia, which was ranked as the top jurisdiction in the world for mining investment by the Fraser Institute in their 2015 survey.

1.7 Capital and Operating Costs

Beta Hunt is an operating mine with all necessary infrastructure already in place and primary development to the various mining areas already established. Capacity of the existing mining fleet is in excess of current production rates and only limited additional units will be required as the gold operation ramps up to full production. Table 1.3 summarizes life of mine capital requirements for the Base Case mine plan that depletes current Measured, Indicated and Inferred (MII) Resources.

Table 1.3: Beta Hunt Capital Cost Estimate

Item	Units	Base Case
Capitalized Development	A$ 000s	22,638
Mining Fleet	A$ 000s	4,223
Sustaining	A$ 000s	19,094
Total Capital	**A$ 000s**	**45,955**

The nickel and gold mining operations share common infrastructure and overhead costs, resulting in low costs for the combined operation, as summarized in Table 1.4.

Table 1.4: Beta Hunt Nickel Operating Cost Estimate

		Base Case		
Item	**Units**	**Nickel**	**Gold**	**Total**
Mineralization Mined	kt	572	2,924	3,496
Development	A$/t			2.95
Nickel Mining[1]	A$/t	137.69		22.53
Gold Mining[1]	A$/t		68.42	57.24
Central Services	A$/t			8.22
G & A	A$/t			3.71
Total Operating Costs	**A$/t**			**94.65**
Total Operating Costs	**A$ 000s**			**330,899**

1. Direct costs include mining, transportation and processing

1.8 Economic Evaluation

The economic analysis contained in this report is based, in part, on Inferred Resources, and is preliminary in nature. Inferred Resources are considered too geologically speculative to have mining and economic considerations applied to them to be categorized as Mineral Reserves. There is no certainty that economic forecasts on which this PEA is based will be realized. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

Table 1.5 summarizes key evaluation metrics for the Base Case. Key assumptions used in the evaluation include:

- Nickel prices ramping up from current levels to US$6.50/lb by 2018,
- Flat long term gold price of US$1150/oz,
- Flat long term A$ rate of exchange of US$0.72, which is equal to the weighted average exchange rate since H2 2015.

Table 1.5 reports C1 Cash Costs and All In Sustaining Costs (AISC) on both a net and co-product basis. These have been calculated in the industry standard manner as follows:

- C1 Cash Costs include operating costs associated with mining and processing and associated on-site administration.
- AISC include C1 cash costs, royalties and sustaining capital.
- Net Costs incorporate all costs, including those incurred as a result of by-product metal site production and downstream realization. The revenues associated with by-product production are subtracted to arrive at the net cost which is then divided by production of only the reported metal. In cases where the revenue from by-product metals exceeds the total cost of production, the net cost is negative.

- Co-product costs allocate all costs to one or other of the production streams, so that the sum of Ni and Au co-product costs is equal to total costs. Where overhead costs are shared between the two streams, they are divided and allocated based on the share of gross revenue for each metal.

Table 1.5: Beta Hunt Summary Economic Metrics

Area	Item	Units	Base Case
Production	Mineralization Mined	kt	3,496
	Nickel[1]	Mlbs	27
	Gold[2]	000 oz	270
Opex	Revenue / tonne[3]	US$/t	$116
	Total Operating Costs	US$ / t	$68
	Ni Net C1 Costs	US$/lb Ni[1]	($2.70)
	Au Net C1 Costs	US$/oz Au[2]	$529
Capex & Total Costs	Total Capital Investment[4]	US$ M	$33
	Ni Net AISC[5]	US$/lb Ni[1]	$0.28
	Au Net AISC[5]	US$/oz Au[2]	$825
	Ni Co-Product AISC[5]	US$/lb Ni[1]	$2.87
	Au Co-Product AISC[5]	US$/oz Au[2]	$893
Valuation[6]	**NPV5%**	**US $M**	**$70**
	NPV8%	**US$ M**	**$65**

1. *Nickel recovered to concentrate*
2. *Recovered gold*
3. *Revenue includes deductions for payability*
4. *Capital investment includes closure costs*
5. *AISC: All-in sustaining cost includes site costs, off-site costs, royalties, and sustaining capital*
6. *NPV includes operating cash flow and investment, excludes financing*

In the event that key macro-economic assumptions vary from the base case assumptions, returns are most sensitive to variation in gold prices and less sensitive to variations in nickel prices and exchange rate (Table 1.6).

Table 1.6: Beta Hunt Economic Sensitivity Metrics

Metric	units	Variation from Base Case			Base Case	Variation from Base Case		
		Nickel - $1.00/lb	Gold - $100/oz	A$ f/x - US$0.01		Nickel + $1.00/lb	Gold + $100/oz	A$ f/x + US$0.01
Net Ni C1 Cash Cost	US$/lb Ni	$0.00	$1.01	($0.12)	($2.70)	$0.00	($1.01)	$0.12
Net Au C1 Cash Cost	US$/oz Au	$64	$0	($12)	$529	($65)	$0	$12
Net Ni AISC	US$/lb Ni	($0.09)	$0.91	($0.14)	$0.28	$0.08	($0.91)	$0.14
Net Au AISC	US$/oz Au	$55	($10)	($14)	$825	($57)	$10	$14
Co-Product Ni AISC	US$/lb Ni	($0.16)	$0.02	($0.03)	$2.87	$0.16	($0.01)	$0.03
Co-Product Au AISC	US$/oz Au	$7	($11)	($11)	$893	($7)	$11	$11
NPV 5%	US$ M	($10)	($15)	$2	$70	$11	$15	($2)
NPV 8%	US$ M	($10)	($14)	$2	$65	$10	$14	($2)

1.9 Conclusion and Recommendations

The PEA demonstrates that Beta Hunt is a robust operation that is able to generate positive cash flows in the current low metal price environment. The costs for the program are included in the Base Case evaluation presented in this report.

Key recommendations include:

- Infilling drilling of existing Inferred Resources should be performed in order to confirm resource estimates and upgrade these resources to Indicated or Measured categories. The recommended program could be completed from stations in existing workings and entails 26,000 metres of drilling at an estimated cost of A$2.6M.

- Infill drilling should be followed by a pre-feasibility study (PFS) to identify the economically viable portion of Measured and Indicated Resources that can be classified as reserves. It is expected this study would be initiated before the end of 2016, with a total estimated cost of A$1.0M. This study will include test work on Beta Hunt mineralization to validate the suitability of concentrate for roasting.

- Subsequent to infill drilling and in parallel with the engineering study, step-out drilling of exploration targets should be conducted in order to define new resources that would permit mine life to be extended. An initial program of 21,500 metres, including 16,500m planned to target gold and the remaining 5,000m to target nickel, would cost an estimated A$2.2M. The exact split between gold and nickel targets in step out drilling, as well as any further drilling, would be contingent on the results of the initial program.

- A key feature of Beta Hunt is the separate but adjacent nickel and gold deposits and associated ability to modulate production in response to market conditions. Accordingly, and given current market turbulence, short-term plans should include sufficient flexibility to allow prioritization of whichever metal allows free cash flow to be maximized at the time.

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2 Introduction and Terms of Reference

2.1 Introduction

RNC is a Toronto headquartered mineral resource company focused primarily on the exploration, development and acquisition of base and precious metals properties. On February 1, 2016, Royal Nickel Corporation (RNC) announced it had agreed to acquire a 67% interest in Salt Lake Mining Pty Ltd. (SLM). SLM is a private company whose main asset is a 100% interest in the Beta Hunt Mine, a low-cost nickel and gold producer located in the prolific Kambalda mining district of Australia. The SLM interest will be acquired in two stages:

- On February 1, 2016, RNC invested C$2.5 million in cash in exchange for 20% of SLM.
- RNC plans to acquire a further 47% of SLM from its current shareholders in exchange for 32.5 million RNC common shares. This transaction, which is expected to close in March, remains subject to regulatory approval, a shareholder pre-emption process and other customary closing conditions.

The Beta deposits are interpreted as the extensions of the Hunt and Lunnon deposits, which have been offset by the northeast striking Alpha Island Fault. These were mined by WMC Resources (WMC) commencing in 1974 until cessation of mining in December 1998. Subsequent to WMC and prior to acquisition by SLM, Beta Hunt was operated intermittently by other companies and produced lesser amounts of both nickel and gold. SLM has operated the nickel mine continuously since April 2014. Initial gold production occurred in June to July, 2014 and recommenced at the end of 2015. Beta Hunt currently hosts in excess of 15 kt nickel and 90 koz gold in separate Measured and Indicated Resources. Despite a long history of successful operation, there is not a current pre-feasibility study (PFS) that can be used to justify conversion of the M&I Resources to Mineral Reserves.

In addition to the M&I Resources, Beta Hunt also hosts in excess of 7 kt nickel and 320 koz gold in separate Inferred Resources. Inclusion of this material in the production plan will benefit in two ways:

- The additional revenue-generating payable production.
- The additional feed will allow the operation to operate at steady-state levels for longer and enjoy the associated cost benefits from economies of scale.

A Preliminary Economic Assessment (PEA) was completed in order to generate an indicative value for the operation and as well to lay the foundation for a future Pre-Feasibility Study.

This technical report is to support disclosure of the results of the PEA and has been prepared in compliance with the disclosure and reporting requirements set forth in the Canadian Securities Administrators' National Instrument 43-101 (NI 43-101), Companion Policy 43-101CP, and Form 43-101F1.

It should be noted that the economic analysis contained in this report is based, in part, on Inferred Resources, and is preliminary in nature. Inferred Resources are considered too geologically speculative to have mining and economic considerations applied to them to be categorized as

Mineral Reserves. There is no certainty that economic forecasts on which this PEA is based will be realized. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

2.2 Qualified Persons

The QP responsibilities are summarized in Table 2.1. Dates that QPs visited the property are as follows:

- David Penswick (DP) visited the property on September 22-23, 2015 and February 2-5, 2016.
- Elizabeth Haren (EH) visited the property October 22-23, 2014, January 27-29, 2015 and July 7-8, 2015.

Table 2.1: Qualified Person Responsibilities

Section	Description	Qualified Person
1	Executive Summary	DP
2	Introduction	DP
3	Reliance on Experts	DP
4	Property Description and Location	DP
5	Accessibility, Climate, Local Resources, Infrastructure and Physiography	DP
6	History	DP
7	Geological Setting and Mineralization	EH
8	Deposit Types	EH
9	Exploration	EH
10	Drilling	EH
11	Sampling Preparation, Analyses and Security	EH
12	Data Verification	EH
13	Mineral Processing and Metallurgical Testing	DP
14	Mineral Resource Estimates	EH
15	Mineral Reserve Estimates	DP
16	Mining Methods	DP
17	Recovery Methods	DP
18	Project Infrastructure	DP
19	Market Studies and Contracts	DP
20	Environmental Studies, Permitting and Social, or Community Impact	DP
21	Capital and Operating Costs	DP

Section	Description	Qualified Person
22	Economic Analysis	DP
23	Adjacent Properties	DP
24	Other Relevant Data and Information	DP
25	Interpretation and Conclusions	DP
26	Recommendations	DP
27	References	DP

2.3 Basis of Technical Report

This report is based on information collected by the authors during site visits and on additional information provided by SLM throughout the course of the authors' discussions and technical reviews. The authors have no reason to doubt the reliability of the information provided by SLM. Other information was obtained from non-published past producer reports, internal technical memos and other public domain sources. Cost assumptions used in this PEA are primarily based on actual costs reported by Beta Hunt during 2015.

2.4 Work Performed

The mineral resource statement reported herein is a collaborative effort between SLM and Haren Consulting personnel. The exploration database was compiled and maintained by past producers and SLM and was audited by Haren Consulting. The geological model and envelopes for the nickel and gold mineralization were constructed and updated by SLM from three-dimensional geological interpretations provided by past producers. In the opinion of Haren Consulting, the geological model is a reasonable representation of the distribution of the targeted mineralization at the current level of sampling. The geostatistical analysis, variography and grade models were either validated, updated or completed by SLM during the months since resuming operations in 2014 and audited and verified by Haren Consulting. The mineral resource statement reported herein has been depleted to the end of January 2016 to take account of mining activities and are presented with an effective date of February 1, 2016.

The Mineral Resource estimates set out in this report have been prepared using accepted industry practice and classified in accordance with the JORC Code, 2012 Edition. Elizabeth Haren, MAusIMM CPGeo, of Haren Consulting Pty Ltd accepts responsibility as Qualified Person for the Mineral Resource estimates. The "JORC Code" means the Australasian Code for Reporting of Mineral Resources and Ore Reserves prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Mineral Council of Australia. There are no material differences between the definitions of Mineral Resources under the applicable definitions adopted by the Canadian Institute of Mining, Metallurgy and Petroleum (the "CIM Definition Standards") and the corresponding equivalent definitions in the JORC Code for Mineral Resources. This technical report was prepared following the guidelines of the Canadian Securities Administrators' National Instrument 43-101 and Form 43-101F1.

2.5 Frequently Used Acronyms, Abbreviations, Definitions, Units of Measure

All currency amounts are stated in either Australian dollars (A$), Canadian dollars (C$) or US dollars (US$). The choice of currency reflects the underlying currency for an item, for example:

- Capital and operating costs are expressed in A$ as this is the currency in use at site. Moreover, the size of the Australian economy is such that these costs are relatively insensitive to variation in the A$ - US$ exchange rate.

- As is the common global practice, commodity prices in this report are generally expressed in US$. Nickel prices are also reported in A$ as this is the contractual basis for one of the royalties.

- Valuations are expressed in US$ to reflect both the global nature of the investment community and the linkage between valuation and commodity price.

Quantities are generally stated using the Système International d'Unités (SI) or metric units, the standard Canadian and international practice, including metric tonnes (t), kilograms (kg) or grams (g) for weight, kilometres (km) or metres (m) for distance and hectares (ha) for area. Wherever applicable, imperial units have been converted to SI units for reporting consistency.

Frequently used acronyms and abbreviations are listed below.

Aboriginal Heritage Act 1972 (WA)	AHA
Annum (year)	a
All-in sustaining cost	AISC
BHP Billiton	BHPB
Cemented rock fill	CRF
Centimetre	cm
Consolidated Nickel Kambalda Operations Pty Ltd.	CNKO
Cubic metre	m^3
Concentration by weight	Cw
Degree	°
Degrees Celsius	°C
Department of Environment Regulation	DER
Department of Mines and Petroleum	DMP
Department of Water	DoW
Earnings before interest, taxation, depreciation & amortization	EBITDA
Environmental Protection Act 1986	EP Act
Full time equivalent employee	FTE
Gram	g
Grams per litre	g/L
Grams per tonne	g/t
Greater than	>
Gold	Au
Hectare (10,000 m^2)	ha
Hour	h
Joint Ore Reserves Committee	JORC
Inverse distance	ID
Kambalda Nickel Concentrator	KNC

Kalgoorlie Nickel Smelter	KNS
Kilogram	kg
Kilometre	km
Kilovolts	kV
Kilowatt hour	kWh
Kilowatt	kW
Less than	<
Litre	L
Life of mine	LOM
Litres per second	L/sec
Metre	m
Metres above sea level	masl
Micrometre (micron)	µm
Millimetre	mm
Million troy ounces	M oz
Million pounds	Mlbs
Million pounds per annum	Mlbs/a
Million tonnes per annum	Mt/a
Million	M
Million years	Ma
Mineable shape optimizer	MSO
Minute (plane angle)	'
Minute	min
Net present value	NPV
Net smelter return	NSR
Net smelter return per tonne	NSR/t
Nickel	Ni
Nickel Pig Iron	NPI
Operating cash flow	OCF
Ordinary Kriging	OK
Ore Research and Exploration Pty Limited	OREAS
Parts per billion	ppb
Parts per million	ppm
Percent	%
Preliminary economic assessment	PEA
Pre-feasibility study	PFS
Pound(s)	lb(s)
Quality Assurance and Quality Control	QA/QC
Reliance Mining Limited	RML
Return air pass	RAP
Royal Nickel Corporation	RNC
Run of mine	ROM
Salt Lake Mining Pty Limited	SLM
Second (plane angle)	"
Square kilometre	km^2
Square metre	m^2
St Ives Gold Mining Company Pty Limited	SIGMC
Tonne (1,000 kg)	t
Thousand tonne	kt
Thousand tonne per day	kt/d
Thousand troy ounces	koz
Tonnes per day	t/d

Tonnes per hour	t/h
Tonnes per year	t/a
Troy ounce (31.10348 grams)	oz
Uncemented rock fill	URF
Western Mining Corporation	WMC

2.6 Acknowledgement

The authors would like to acknowledge the support and collaboration provided by SLM personnel for this assignment. Their collaboration was greatly appreciated and instrumental to the success of this project.

2.7 Declaration

The authors' opinion contained herein and effective **February 1, 2016** is based on information collected throughout the course of the authors investigations. The information in turn reflects various technical and economic conditions at the time of writing this report. Given the nature of the mining business, these conditions can change significantly over relatively short periods of time. Consequently, actual results may be significantly more or less favourable.

This report may include technical information that requires subsequent calculations to derive subtotals, totals, and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, the authors do not consider them to be material.

Each of the authors is independent of the issuer as defined in Section 1.5 of National Instrument 43- 101. None of the authors is a shareholder, insider, associate or affiliate of RNC. The results of the technical review by the authors are not dependent on any prior agreements concerning the conclusions to be reached, nor are there any undisclosed understandings concerning any future business dealings.

Except for the purposes legislated under provincial securities laws, any use of this report by a third party is at that party's sole risk.

3 Reliance on Other Experts

In preparing this report, the authors have relied on input from SLM and RNC and a number of well-qualified, independent consulting groups.

The authors are not experts in legal, land tenure, or environmental matters. The authors have relied on data and information provided by SLM and on previously completed internal reports and technical memos (refer to section 27 for details). Although the authors have reviewed the available data and visited the site, these activities serve to validate only a portion of the entire data set. Therefore, the authors have made judgments about the general reliability of the underlying data; where deemed either inadequate or unreliable, the data were either not used or procedures were modified to account for the lack of confidence in that specific information. While exercising all reasonable diligence in checking, confirming and testing it, the authors have relied upon SLM's presentation of its project data and that of previous operators of the Beta Hunt Mine, in formulating their opinion.

The authors have relied upon RNC's legal counsel for legal input for Sections 4.2, 4.3 and 4.6.

The various agreements under which SLM holds title to the mineral claims for this project have not been reviewed and the authors offer no legal opinion as to the validity of the mineral title claimed. A description of the property, and ownership thereof, is provided for general information purposes only. Comments on the state of environmental conditions, liability, and estimated costs of closure and remediation have been made where required by NI 43-101. In this regard, the authors have relied on the work of Martinick Bosch Sell Pty Ltd and other experts it understands to be appropriately qualified, and the authors offer no opinions on the state of the environment on the property. The statements are provided for information purposes only.

The descriptions of geology, mineralization and exploration used in this report are taken from reports prepared by various companies or their contracted consultants. The conclusions of this report rely on data available in published and unpublished reports supplied by the various companies which have conducted exploration on the property, and information supplied by SLM. The information provided to SLM was supplied by reputable companies or government agencies and the authors have no reason to doubt its validity.

Design criteria specifically relating to rock mechanics and ground control (section 16) was provided by Pravin Kumar, SLM's Geotechnical Engineer.

General mine design criteria and costing data (sections 16, 17 and 21) was provided by Kabir Osman, Chief Operating Officer at SLM.

Financial information, including that relating to payment of taxes, royalties and other obligations, was provided by Christian Ridley, Finance Manager at SLM.

The authors were informed by SLM that there are no known litigations potentially affecting the Beta Hunt Mine.

4 Property Description and Location

4.1 Location

Beta Hunt is an underground mine located 2 km southeast of Kambalda and 60 km south of Kalgoorlie in Western Australia (Figure 4.1). The mine portal is located on the northern edge of Lake Lefroy at latitude 31°13'6"S and longitude 121°40'50"E. Kambalda has been a nickel mining centre since the discovery of nickel sulphides by WMC in 1966.

The project consists of the underground mine and related surface facilities to support underground operations. There are no processing facilities on site with run of mine nickel and gold production being trucked to processing facilities within the district.

4.2 Mineral Tenure

SLM advises that mining rights for the Beta Hunt Mine are held by SLM through a sub-lease agreement with SIGMC which gives SLM the right to explore for and mine nickel and gold within the Beta Hunt sub-lease. Mineral tenure information is provided in Table 4.1. The Beta Hunt Sub-Lease covers partial mineral leases for a total area of 960.43 ha as defined in Table 4.2 and Figure 4.2. Identifying numbers as well as other ownership details for the principal mineral leases are given in Table 4.2 and claim locations with respect to the sub-lease boundary are shown in Figure 4.2. SLM's rights within the sub-lease boundary only extend below a given elevation (the "Exploitable Area"). These elevations are given in Table 4.3.

SIGMC is the registered holder of the mineral leases that are all situated on vacant Crown Land.

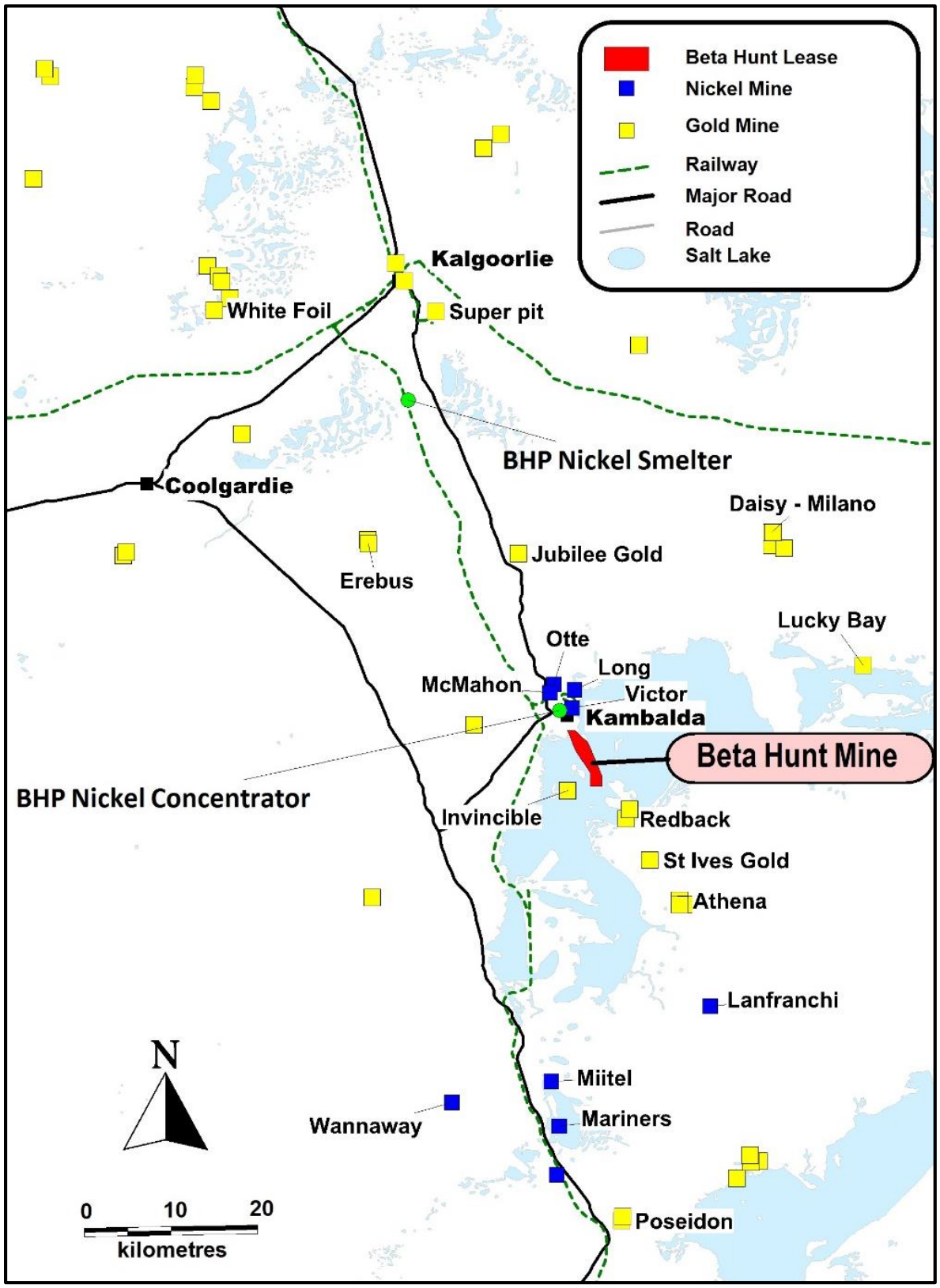
The main components of the existing surface infrastructure are situated on mineral leases M 15/1529 and M 15/1531.

The existing underground infrastructure for the Beta Hunt Mine is located within mineral leases M 15/1529, M 15/1531, M 15/1512, M 15/1516, M 15/1517, M 15/1526, M 15/1518, M 15/1527, M 15/1705, M 15/1702, and M 15/1628.

The gold mineral resource is located on mineral leases M 15/1529, M 15/1531, M 15/1512, M 15/1516, M 15/1517, M 15/1518, and M 15/1702 (Figure 4.3).

The nickel mineral resource is located on mineral leases M 15/1516, M 15/1517, M 15/1526, M 15/1518, M 15/1527, M 15/1702, and M 15/1628 (Figure 4.3).

Figure 4.1: Beta Hunt Location Map



Source: RNC

Table 4.1: Beta Hunt Mineral Tenure Information

Mineral Lease	Holder	Area	Unit	Rent[1]	Commitment[1]	Grant Date	Expiry Date
M 15/1512	SIGMC	121.35	ha	$2,013	$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1513	SIGMC	121.20	ha	$2,013	$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1516	SIGMC	121.35	ha	$2,013	$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1517	SIGMC	121.45	ha	$2,013	$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1518	SIGMC	121.35	ha	$2,013	$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1526	SIGMC	121.45	ha	$2,013	$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1527	SIGMC	121.35	ha	$2,013	$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1529	SIGMC	121.40	ha	$2,013	$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1531	SIGMC	121.35	ha	$2,013	$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1628	SIGMC	121.35	ha	$2,013	$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1629	SIGMC	121.35	ha	$2,013	$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1691	SIGMC	108.15	ha	$1,799	$10,900	Dec 24, 2004	Dec 23, 2025
M 15/1694	SIGMC	110.85	ha	$1,832	$11,100	Dec 24, 2004	Dec 23, 2025
M 15/1698	SIGMC	7.74	ha	$132	$10,000	Dec 24, 2004	Dec 23, 2025
M 15/1699	SIGMC	110.95	ha	$1,832	$11,100	Dec 24, 2004	Dec 23, 2025
M 15/1702	SIGMC	110.40	ha	$1,832	$11,100	Dec 24, 2004	Dec 23, 2025
M 15/1705	SIGMC	42.39	ha	$710	$10,000	Dec 24, 2004	Dec 23, 2025

1 Rent and commitment are for 2015/2016 and are given on 100% basis. SLM share of rent is 20%.

Table 4.2: Beta Hunt Sub-Lease Boundary Coordinates

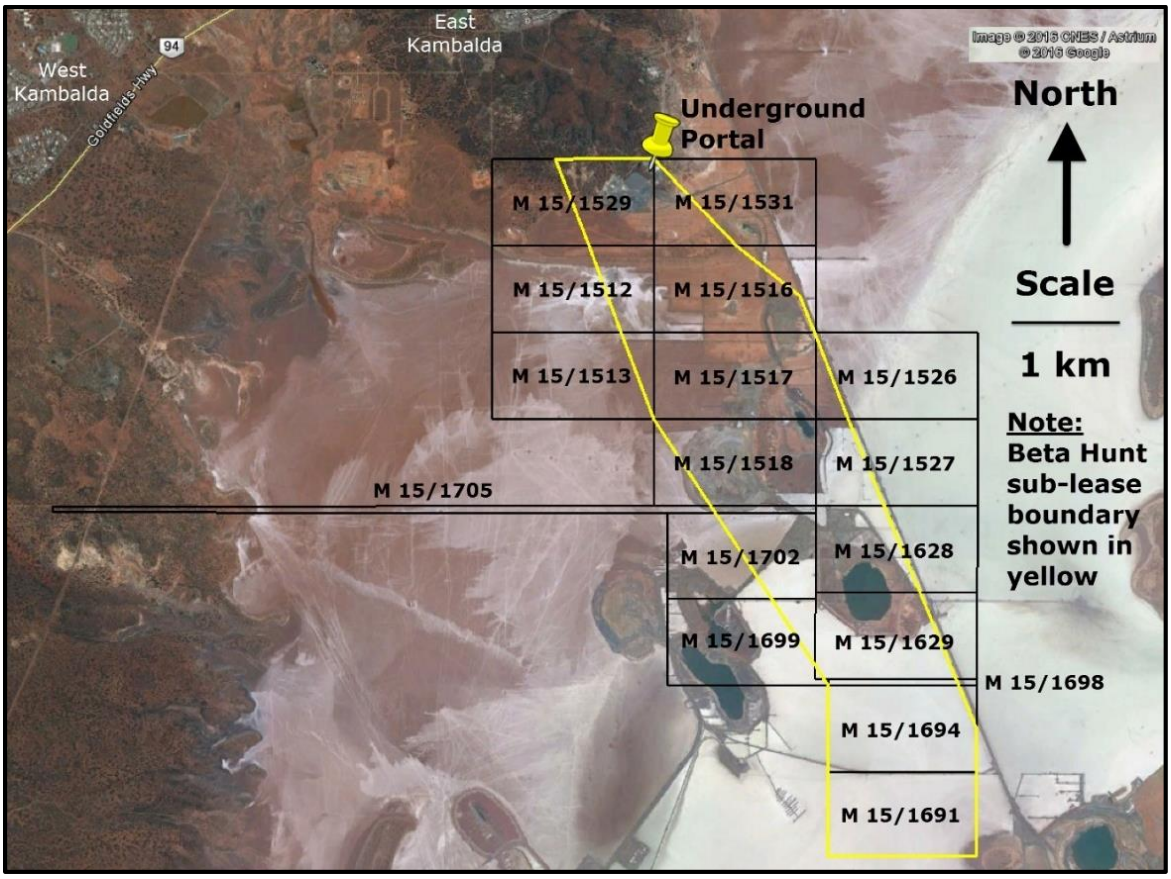
Point	MGA[1] Easting	MGA[1] Northing	Description
1	373444.00	6545542.58	Northwest corner of the Beta Hunt tenements
2	374362.31	6545554.50	Proceeding clockwise
3	375140.42	6544759.86	
4	375140.42	6544759.86	
5	375734.91	6544302.81	
6	375878.32	6543963.21	
7	376198.45	6543164.84	
8	376198.45	6543164.84	
9	377430.80	6540304.10	
10	377444.19	6539128.98	
11	376062.00	6539112.39	
12	376043.00	6540694.35	
13	374389.63	6543141.00	
14	374389.63	6543141.00	
15	374073.73	6543941.59	
16	373767.27	6544742.02	
17	373767.27	6544742.02	
18	373444.00	6545542.58	Northwest corner of the Beta Hunt tenements

1 Map Grid of Australia, Zone 51, GDA94 Datum

Table 4.3: Beta Hunt Sub-Lease Exploitable Area

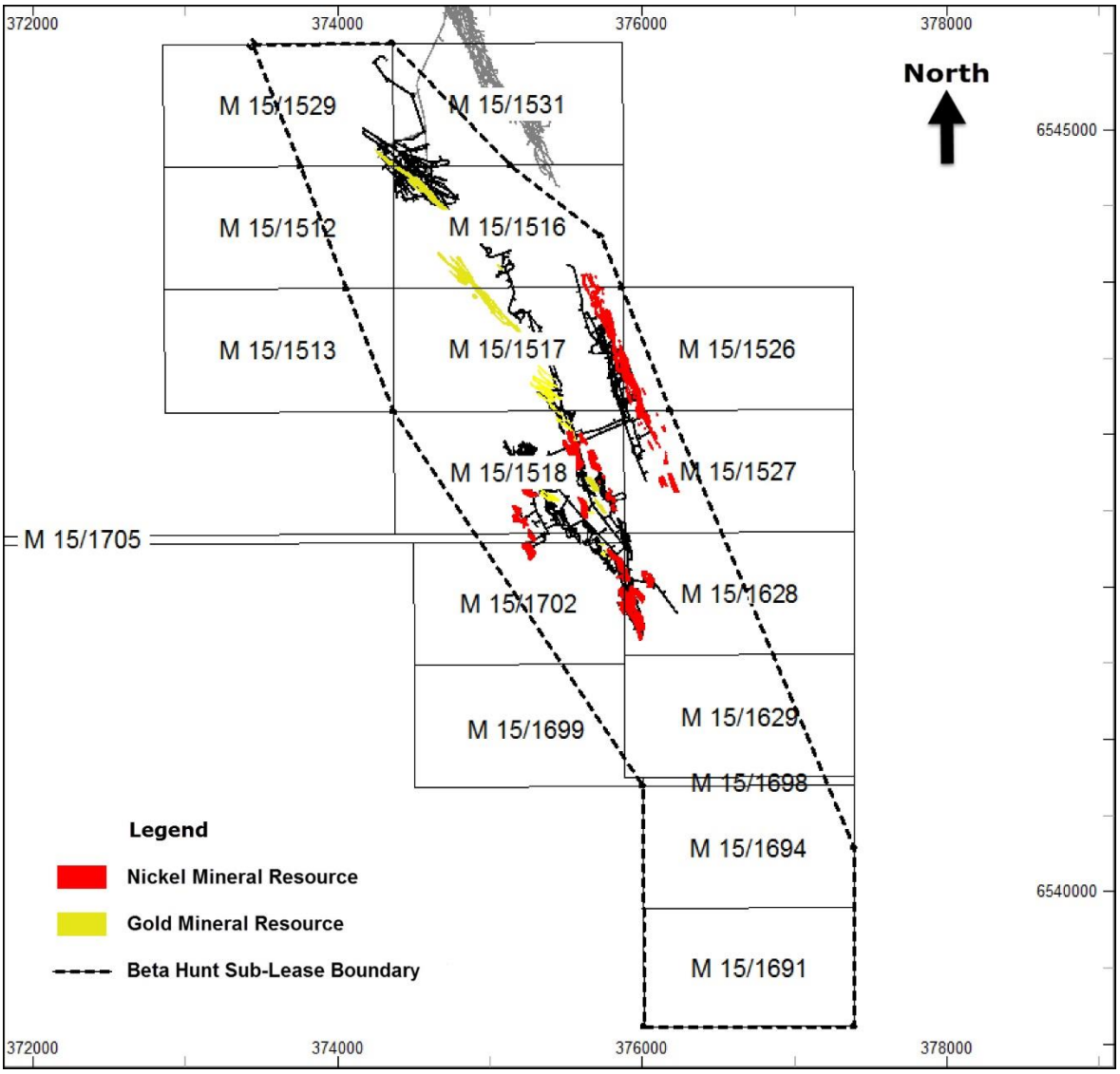
Mineral Lease	**Exploitable Area** (begins below elevation Australian Height Datum metres)
M 15/1512	Linear decrease from northern limit of the tenement to southern limit of the tenement, being from 200 to zero
M 15/1513	0
M 15/1516	Linear decrease from northern limit of the tenement to southern limit of the tenement, being from 200 to zero
M 15/1517	0
M 15/1518	-100
M 15/1526	0
M 15/1527	-100
M 15/1529	At and below surface
M 15/1531	At and below surface
M 15/1628	-100
M 15/1629	-100
M 15/1691	-100
M 15/1694	-100
M 15/1698	-100
M 15/1699	-100
M 15/1702	-100
M 15/1705	-100

Figure 4.2: Land Tenure Map



Source: RNC

Figure 4.3: Beta Hunt Sub-Lease Boundary, Mineral Leases and Mineral Resources



Source: RNC

4.3 Underlying Agreements

4.3.1 Beta Hunt Sub-Lease

SLM operate the Beta Hunt mine through a sub-lease agreement with SIGMC. The sub-lease grants SLM the right to exploit nickel and gold mineralization on the property free from encumbrances other than the royalties discussed below and certain other permitted encumbrances.

SLM purchased the Beta Hunt Sub-Lease from Consolidated Minerals in 2013.

The gold rights to the sub-lease were acquired separately from SIGMC in 2014.

On an annual basis SLM must pay to SIGMC 20% of:

- all rent payable by SIGMC in respect of each tenement,
- all local government rates and,
- all land or property taxes.

4.3.2 Royalties

SLM pays the following royalties on nickel production:

- A state royalty equal to 2.5% of recovered nickel,
- A royalty to Consolidated Minerals capped at A$16,000,000 and equal to 3% of payable nickel when prices are less than A$17,500/t nickel and 5% when prices are great than or equal to A$17,500/t,
- A royalty to Resource Income Fund LP equal to 0.5% of payable nickel less allowable deductions, and
- A royalty to SIGMC equal to 1.0% of payable nickel less the cost of transportation and processing.

SLM pays the following royalties on gold production:

- A state royalty equal to 2.5% of recovered gold,
- A royalty to Resource Income Fund LP equal to 1.5% of recovered gold less allowable deductions, and
- A royalty to SIGMC equal to 6.0% of recovered gold.

4.3.3 LRC Pre-Payment

SLM has in place a senior secured metal prepay agreement with LRC-SLM L.P., a wholly owned special purpose vehicle of Lascaux Resource Capital Fund I L.P. Under this agreement, as of Feb 1 2016, SLM is required to deliver 1,284 tonnes of nickel and 4,800 ounces of gold. These deliveries have been scheduled over the term of the agreement, which extends until February 2019. Among other terms and conditions, SLM is also required to deliver to LRC-SLM L.P. 3% of all gold produced from the property during the term (this obligation is extinguished on expiry or other termination of the agreement). Subject to its terms, the agreement expires in February 2019. There is no penalty for early repayment of the nickel.

RNC cannot obtain any dividends from its interest in SLM until the agreement is fully repaid or replaced.

4.4 Permits and Authorization

Operating permits for the Mine have been granted and the following permits are currently in force:

- Government of Western Australia, Department of Environment Regulation, A license under the Environmental Protection Act 1986 – Licence for Prescribed Premises – License No. L8893/2015/1,
- Government of Western Australia, Department of Mines and Petroleum – Explosives Storage License ETS002668,
- Government of Western Australia, Department of Commerce – In House Electrical Installing Work License No. IH050755, and
- Australian Government, Australian Communications and Media Authority Communications Licenses, No. 1622564, No.1143363/1, No.1189842.

4.5 Environmental Considerations

SLM is responsible for satisfying all rehabilitation obligations arising on or after 25 July 2013 on the Beta Hunt Sub-Lease that have arisen as a result of the activities of SLM and Consolidated Minerals. However, SLM is not required to restore or rehabilitate the area to a condition that is better than that existing on July 25, 2003 as determined by the environmental audit conducted at that time. SIGMC is responsible for all other rehabilitation obligations. A 2015 internal audit, based on a 2008 independent audit undertaken by Consolidated Minerals, estimated the current rehabilitation liability accruing to SLM for the Beta Hunt Sub-Lease at A$308,000.

SLM advises that there are no other outstanding significant environmental issues.

Additional detail on environmental considerations is provided in section 20.

4.6 Mining Rights in Western Australia

4.6.1 Mining Tenements

Under section 9 of the *Mining Act 1978* (WA) ("Mining Act") all gold, silver, other precious metals and other minerals are generally the property of the Crown. In Western Australia, a mining lease is considered to be the primary approval required for major mineral development projects as it authorises the holder to mine for, and dispose of, minerals on the land over which the lease is granted.

The mining tenements subject to the Beta Hunt Sub-Lease are Mining Leases in good standing held by SIGMC (Table 4.1).

The term of a mining lease is 21 years and may be renewed for further terms.

The lessee of a mining lease may work and mine the land, take and remove minerals and undertake all things necessary to effectually carry out mining operations in, on or under the land, subject to conditions of the mining lease and certain other exceptions under the Mining Act.

4.6.2 Native Title Act

In 1992, the High Court of Australia determined in Mabo v Queensland (No. 2) that the common law of Australia recognised certain proprietary rights and interests of Aboriginal and Torres Strait Islander people in relation to their traditional lands and waters. In response to the Mabo decision, the Native Title Act 1993 (Cth) ("NTA") was enacted. 'Native title' is recognised where persons claiming to hold that title can establish they have maintained a continuous connection with the land in accordance with traditional laws and customs since settlement and where those rights have not been lawfully extinguished.

The NTA codifies much of the common law in relation to native title. The doing of acts after 1 January 1994 that may affect native title (known as 'future acts'), including the grant of mining tenements, are validated subject to certain procedural rights (including the 'right to negotiate') afforded to persons claiming to hold native title and whose claim has passed a 'registration test' administered by the National Native Title Tribunal (which assesses the claim against certain baseline requirements).

Effect of Native Title on Beta-Hunt Mining Tenements

SIGMC is a party to proceedings commenced in the Federal Court of Australia by the Ngadju people seeking determination of its claim for native title in respect of certain lands located in Western Australia (the "Current Proceedings"). Those proceedings were substantively concluded in 2014 when the group obtained recognition of their native title rights. SIGMC, together with BHP Billiton Nickel West, have appealed one aspect of the decision, which relates to the validity of a number of tenements within and beyond the determined claim area (including the Beta Hunt tenements), as against the Ngadju group's native title rights.

Whilst no formal determination of native title has yet been made over the Beta Hunt tenements, which sit outside of the determined claim area due to an overlap with a (now) dismissed alternative claim, in the event native title is determined to exist, and the current finding of invalidity is upheld on appeal to the Federal Court (decision currently reserved), SLM will be liable for its pro rata share (as determined under the Beta Hunt Sublease) of any compensation payable in respect of the Ngadju claim to the extent relating to the Beta Hunt tenements.

SIGMC is an Australian subsidiary of Gold Fields Limited ("Gold Fields"), a public company listed on the New York and Johannesburg stock exchanges. Gold Fields made disclosures, regarding the Current Proceedings in its Form 20-F Annual Report for the year ended 31 December 2014 (filed on April 27, 2015 with the Unites States Securities and Exchange Commission), including the following excerpt

Gold Fields Disclosure:

"Native claim
Gold Fields' subsidiary, St Ives Gold Mining Company Pty Ltd ("St Ives"), which owns the St Ives Gold Mine in Western Australia, had been joined as a respondent, alongside the State of Western Australia (the "State") and another mining company, in proceedings commenced in the Federal Court of Australia by the Ngadju People, seeking determination of its claim for native title over a

parcel of land in the Goldfields region of Western Australia. "Native title" refers to the rights and interests held by Aboriginal people in Australia under traditional laws and customs, in relation to land and water to which those Aboriginal people have a connection, that are recognised under the common law of Australia. In the course of these proceedings, the Ngadju People alleged that a number of mining tenements held by St Ives (being tenements that were originally granted to WMC Resources by the State under the terms of a State Agreement, and subsequently acquired in 2001 by St Ives) are invalid to the extent that they affect the Ngadju People's native title rights. The process for obtaining the re-grant of those tenements (in 2014) under the provisions of the Mining Act 1978 (WA) was carefully considered and followed by Gold Fields at the time, acting in conjunction with the State. In a decision handed down by a single judge of the Federal Court of Australia on 3 July 2014, the court accepted the submissions of the Ngadju People that the re-grant of these tenements by the State was not compliant with the correct processes in the Native Title Act 1993 (Cth), and as such, the re-granted tenements are invalid to the extent that they affect native title. This means that to the extent that there is inconsistency between the rights of St Ives as tenement holder and the Ngadju People's native title rights (such as the right to conduct ceremonies or to hunt), the rights of the Ngadju People will prevail. This decision was confirmed by a Determination of native title made by the Federal Court in November 2014. The practical effect of such a finding has never been tested under Australian law. However, it may mean the Ngadju People could seek to prevent the further exercise of rights by St Ives on the tenements in a manner that is inconsistent with the free exercise of their native title rights and/or seek damages for historical interference with their native title rights. The fact that the Ngadju People have only non-exclusive native title rights (and not the higher category of exclusive possession rights) may reduce the extent to which the two sets of rights are found to be inconsistent.

Importantly, the decision does not affect the grant of mining tenure to St Ives under the Mining Act 1978 (WA). St Ives still validly holds all of the tenements which underpin its mining operations at St Ives, and as these proceedings are not an action against St Ives for failure to take certain steps, the court has no ability to impose any sort of penalty against St Ives. Gold Fields remains strongly of the view that it has at all times complied with its obligations under the Native Title Act 1993 (Cth) in respect of its dealings with these tenements. Gold Fields, together with another major resources company, filed an appeal in respect of aspects of the Federal Court's decision. The appeal (before the Full Court of the Federal Court of Australia (three Judges)) has been listed to take place in May 2015. Gold Fields retains the ability to seek leave to further appeal to the High Court of Australia, if necessary. Gold Fields will also take all steps necessary to ensure that the St Ives operations are unaffected whilst this matter is resolved through the relevant court processes. Accordingly, no adjustment for any effects on the Company that may result from the proceedings, if any, has been made in the consolidated financial statements."

As of the date of this report, Gold Fields has made no subsequent public disclosures since the above noted Form 20-F regarding the status of the Current Proceedings.

4.6.3 Aboriginal Heritage Act 1972

The Aboriginal Heritage Act 1972 (WA) (AHA) protects places and objects that are of significance to Aboriginal and Torres Strait Islander people in accordance with their traditional laws and customs (Aboriginal Sites). The AHA provides that it is an offence, for a person to damage or in any way alter an Aboriginal Site.

Compliance with the AHA is an express condition of all mining tenements in Western Australia. Accordingly, commission of an offence under the AHA may mean that the mining tenement is

vulnerable to an order for forfeiture. The Western Australian Department of Aboriginal Affairs maintains a register of sites that have been registered under the AHA.

The Department of Aboriginal Affairs database shows no registered heritage sites on the four tenements (M15/1512, M15/1516, M15/1529 and M15/1531) where SLM is likely to do any surface disturbance.

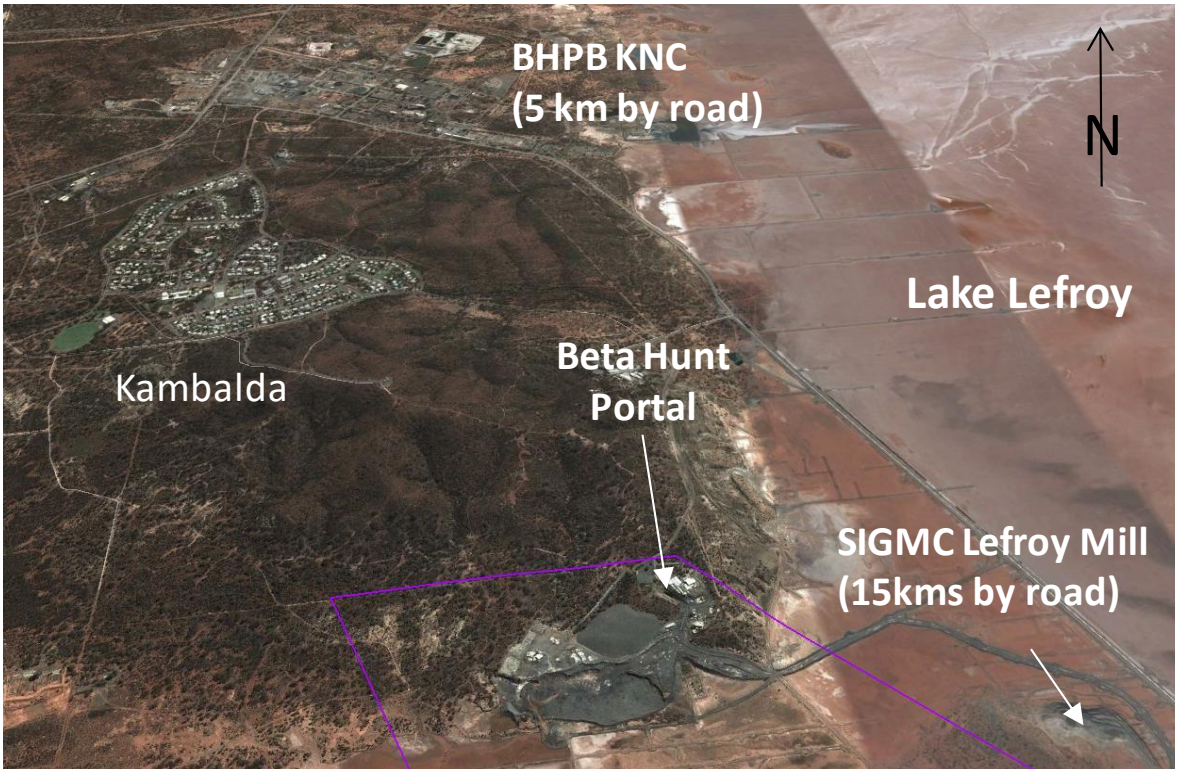
5 Accessibility, Local Resources, Infrastructure, Climate and Physiography

5.1 Accessibility

The Beta Hunt mine is located 2 km south of the town centre of Kambalda East at the northern end of the Lake Lefroy Causeway. Kambalda is readily accessible from Kalgoorlie-Boulder along the sealed Goldfields Highway (60 km) and from Perth along the sealed Great Eastern Highway (630 km).

Figure 5.1 shows the roads connecting the Beta Hunt mine site to the BHPB Kambalda nickel concentrator to the north (5 km) and to the SIGMC gold mill across the Lake Lefroy causeway to the south (15 km).

Figure 5.1: Mine Access – Oblique Aerial View



Source: SLM

5.2 Local Resources and Infrastructure

Kambalda has been a major nickel mining centres since the discovery of nickel sulphides by WMC in 1966. Kambalda has a population of 2,701 (2011 Census) and is serviced from the regional hub of Kalgoorlie-Boulder, which has a population of 31,107 (2011 Census). There is a long history of mining in the district with a large pool of experienced mining personnel living and working in the

region. The majority of the current Beta Hunt workforce of approximately 120 persons resides locally within these two towns.

The Kalgoorlie-Boulder Airport provides daily commercial flights to the state capital of Perth. Perth is a major centre with a population in excess of 2 million and an international airport.

The closest port to the mine is at Esperance, 350 km south of Kambalda.

5.3 Climate

Kambalda and the project site experience a semi-arid climate with hot dry summers and cool winters. Temperatures in the peak of summer typically range from a mean minimum temperature of 15° C to a mean maximum of 34° C. Temperatures during winter range from a mean minimum temperature of 6° C to a mean maximum of only 17° C, with occasional frosts.

Kambalda receives a mean annual rainfall of approximately 260 mm, although this is highly variable with records indicating 'dry' years receiving only half that rainfall and 'wet' years receiving up to twice the mean annual rainfall. The region experiences its driest period of the year from spring to early summer, and the wettest period of the year in autumn and winter.

The region experiences a very high annual evaporation rate, of some 2,700 mm in Kalgoorlie and 1,780 mm in Norseman.

5.4 Physiography

The Project is situated within the Salina Physiographic Division. The most prominent geomorphological feature in the region is Lake Lefroy - a medium size salt lake lying within the Lefroy Palaeodrainage. The surface area of Lake Lefroy is estimated to be approximately 55,400 ha, while the catchment area is over eight times larger at an estimated 452,800 ha. The lake is typically dry (Figure 5.2) though subject to occasional and variable levels of inundation from rainfall and surface runoff.

The northern and western shoreline of Lake Lefroy is flanked by differentially weathered greenstone units which has resulted in the development of low stony ridges with a local relief of up to 80 m and slopes ranging between 48-17°. Erosional processes dominate the northern and western shorelines of the lake system. Narrow colluvial flats occur in between the rises, which broaden out to form low relief plains.

The Project is situated adjacent to the northwestern lakeshore fringe on the lower slopes of Red Hill several metres above the level of the surface of Lake Lefroy. The Project is located at the foot-slopes of the Red Hill land system, characterised by basalt hills and ridges with open acacia shrub lands and patchy eucalyptus woodland (Figure 5.3).

Figure 5.2: Typical view of Lake Lefroy



Figure 5.3: Local Physiography and the 1966 WMC Discovery Hole Monument



6 History

6.1 Kambalda Nickel Camp

WMC first intersected nickel sulphide mineralization at Red Hill in January 1966 after drilling to test a gossan outcrop grading 1% Ni and 0.3% Cu. This discovery led to delineation of the Kambalda Nickel Field where WMC identified 24 deposits hosted in structures that include the Kambalda Dome, Widgiemooltha Dome and Golden Ridge Greenstone Belt. The deposits extend 90 km from Blair in the north to Redross in the south and over an east-west distance of 30 km, from Helmut to Wannaway. A single concentrator to treat ore from the various mines is centrally located, in Kambalda.

6.2 Beta Hunt Discovery

The Hunt nickel deposit was discovered by WMC in March 1970, during routine traverse drilling over the south end of the Kambalda Dome. The discovery hole, KD 262, intersected 2.0 m grading 6.98% nickel. Portal excavation for a decline access began in June 1973. While the decline was being developed, the Hunt orebody was accessed from the neighbouring Silver Lake mine, via a 1.15 km cross-cut on 700 level. As discussed in Section 18, the 700 level access is now used to provide service water to Beta Hunt. The first ore was hauled up the decline in October 1974.

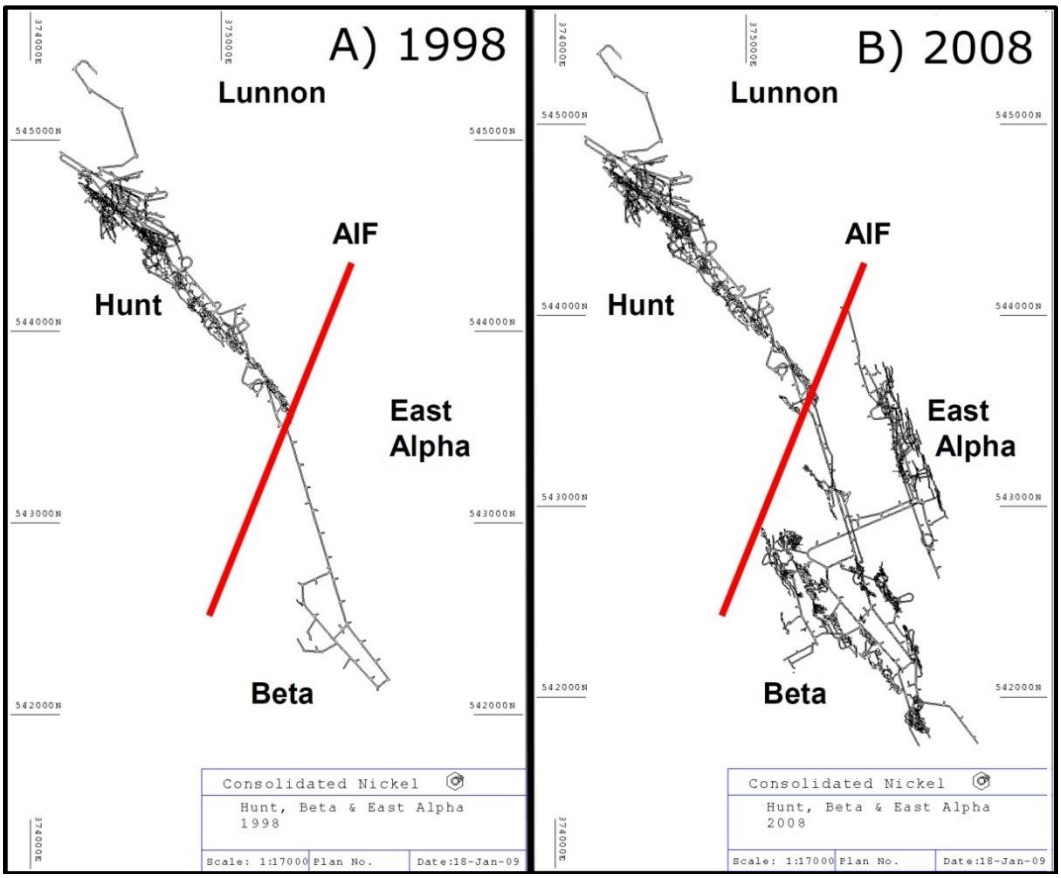
6.3 1974 – 1998 WMC Operation

The first ore production from the decline occurred in October 1974. Over the following 14 years, WMC operated the mine periodically and extended the decline south through the Alpha Island Fault (AIF) to access the Beta nickel deposit. By the time production was halted in 1998 due to the Asian crisis and associated collapse in Ni prices, the Beta decline and return airway had been established. Figure 6.1A shows the mine development at the completion of the WMC operation in 1998.

Although patches of gold have been found at Hunt since nickel mining began, it was not until 1978-1979, when decline development reached the 10 and 11 levels of A Zone and the 9 and 10 levels of D Zone deeps that the presence of a major gold mineralized system was confirmed in the footwall basalt. From 1979 to 1984, development and mining of the A Zone gold orebody took place on 4 levels using both airlegs and jumbos, with long-hole stopes being mined. Between 1979 and 1984, gold was also mined as specimen stone or in conjunction with nickel stoping operations.

As part of the divestment of non-core assets by WMC in late 2001, the tenements covering the current Beta Hunt Sub-Lease and all surface and underground infrastructure became the property of SIGMC, which is now part of Gold Fields Limited. SIGMC did not operate the Beta Hunt Mine.

Figure 6.1: Plan view of the Hunt, Beta and East Alpha mine development over time



Source: Consolidated Nickel Kambalda Operations (2008a)

6.4 2003 – 2008 Reliance / CNKO Operation

Reliance Mining Limited acquired rights to mine nickel on the Beta Hunt Sub-lease from SIGMC in 2003 and began production in November of that year. In 2005 Reliance was taken over by Consolidated Minerals and the operating company was renamed Consolidated Nickel Kambalda Operations (CNKO). The new owners invested heavily in infrastructure to access the deeper mineralization and increase the production rate, spending A$15M on the Return Air Pass (RAP) and associated fans that are discussed in more detail in section 16.

It is important to note that the Beta Hunt Sub-lease did not include gold rights, which remained with SIGMC. Consequently, no effort was made by CNKO to delineate gold resources and there was no follow-up of gold mineralization intersected while drilling for nickel.

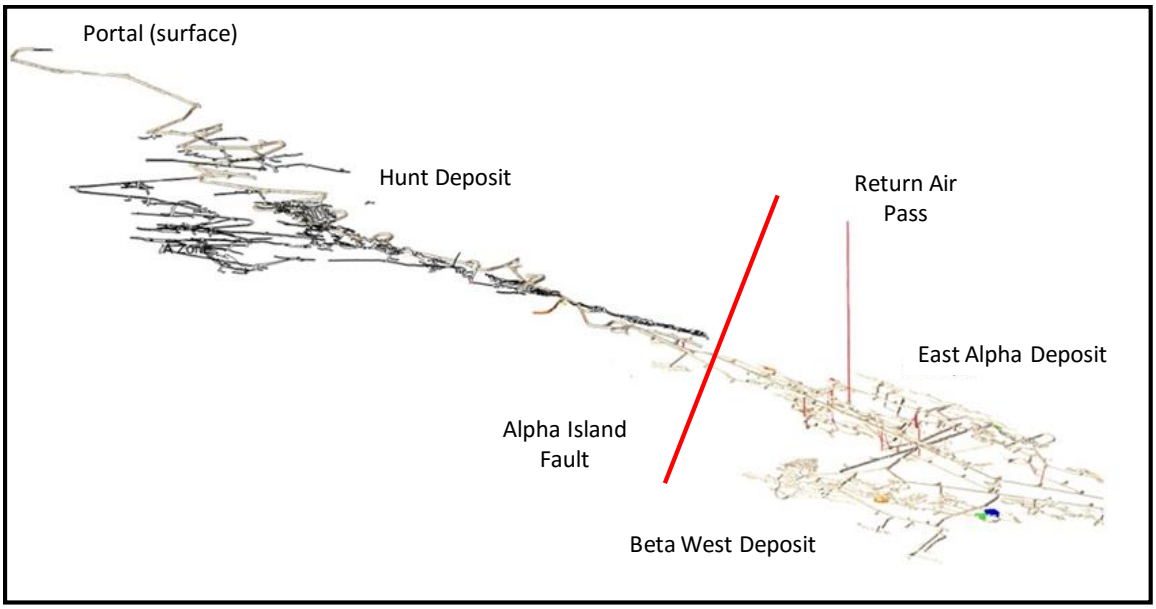
CNKO conducted significant drilling to expand the resource base, resulting in discovery of the East Alpha nickel deposit. The first ore was mined from East Alpha in March 2006. Major exploration drilling programs were undertaken at Beta and East Alpha to extend the life of these mines. Despite the success of these programs, the financial crisis and associated collapse in nickel price resulted in CNKO placing the Beta Hunt mine on care and maintenance on November 13, 2008.

Total reconciled production for Beta and East Alpha for the period 2003 to 2008 is 652 kt grading 2.43% Ni for approximately 16 kt nickel contained in ore.

Plan views of the Hunt, Beta and East Alpha mine at the time the mine was placed on care and maintenance in 2008 are shown in Figure 6.1B.

Figure 6.2 presents an isometric schematic of the decline system and various historic zones of activity. At its deepest point, the existing decline is approximately 800 m below the portal elevation.

Figure 6.2: Isometric View of Historical Workings



Source: SLM

At the time that CNKO suspended mining activities in 2008, resources were updated using all available drilling results. This historical resource estimate is presented in Table 6.1 as shown in the internal document by Consolidated Nickel Kambalda Operations (2008b).

Table 6.1: Historical Beta Hunt Mineral Resources as at 31 December 2008[1],[2]

	DECEMBER 2008		
Category	**Tonnes ('000)**	**Ni%**	**Ni Tonnes ('000)**
Measured	123	4.9	6,0
Indicated	328	4.5	14.8
Inferred	416	3.7	15.4
Total	**877**	**4.2**	**36.5**

1. *Mineral Resources reported above 1% Ni cut off*
2. *Rounding to significant figures was applied*

The discussions related to the resource in this section refer to historical estimates. The historical estimates may have been prepared according to the accepted standards for the mining industry for the period to which they refer; however, they do not comply with the current CIM standards and definitions for estimating resources and reserves as required by NI 43-101 guidelines. A qualified

person has not done sufficient work to classify the historical estimates as a current resource estimate and the issuer is not treating the historical estimates as a current resource estimate. As a result, historical estimates should not be relied upon unless they have been validated and restated to comply with the latest CIM standards and definitions.

6.5 2013-Present Salt Lake Mining Operation

The Beta Hunt Sub-lease was taken over from CNKO by SLM in 2013.Gold mining rights for the Sub-lease were also secured from Gold Fields Limited in 2013. This consolidation of gold and nickel rights put SLM in a position to exploit the synergies of adjacent but separate nickel and gold deposits that are accessible from common mine infrastructure. The mine began producing nickel and gold in the second quarter of 2014, with gold production being temporarily halted in the third quarter before restarting in the fourth quarter of 2015.

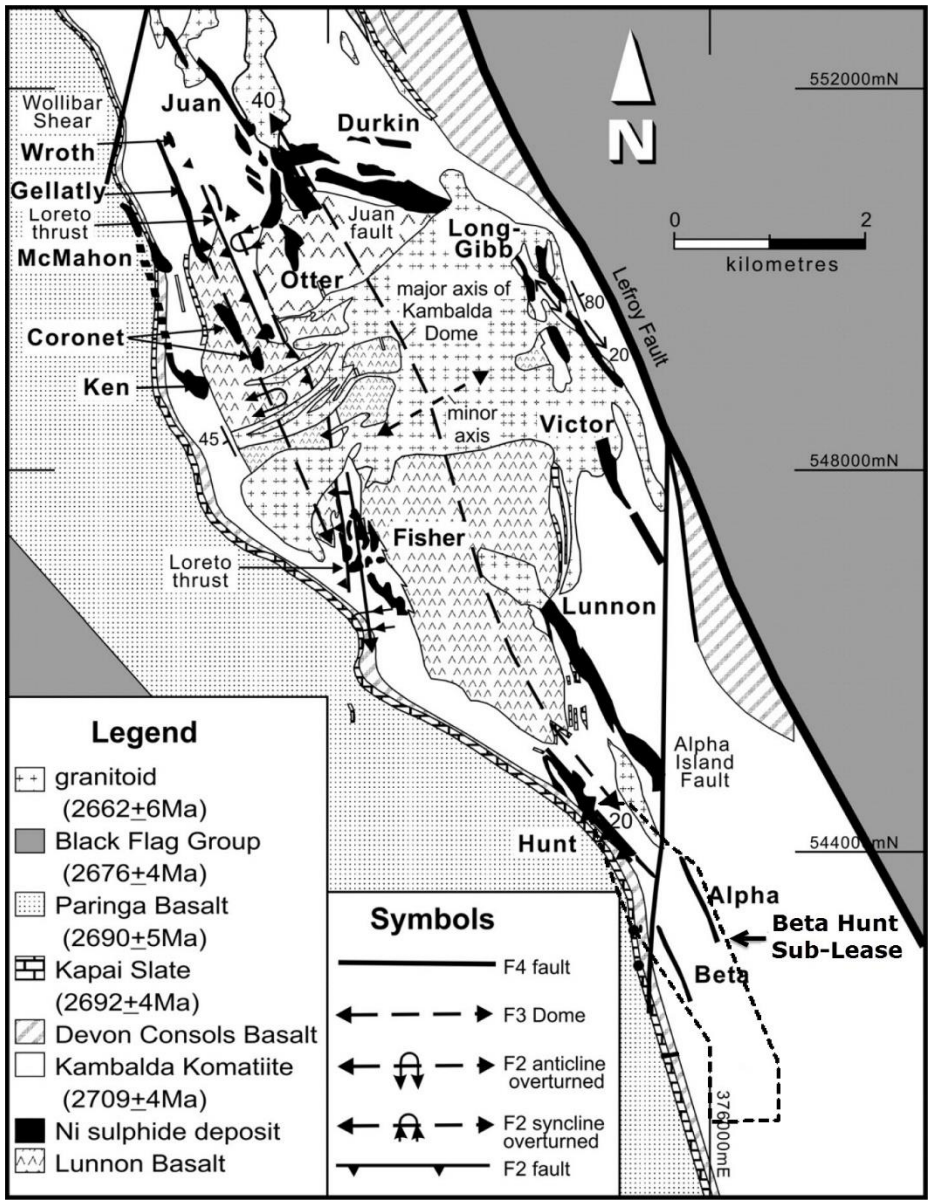
To February 1, 2016 SLM has produced 221 kt of nickel ore at an average grade of 3.5 %Ni (7.7 kt contained nickel) and 62 kt of gold ore at average grade of 2.8 g/t Au (5.5 koz contained gold).

7 Geological Setting and Mineralization

7.1 Regional Geology

The Kambalda–St Ives region forms part of the Norseman–Wiluna greenstone belt which comprises regionally extensive volcano-sedimentary packages. These were extruded and deposited in an extensional environment at about 2700–2660 Ma. The mining district is underlain by the north-northwest trending corridor of basalt and komatiite rocks termed the Kambalda Dome (Figure 7.1). The iron-nickel mineralization is normally accumulated within the thick Silver Lake Member of the Kambalda Komatiite Formation above, or on the contact with the dome structured Lunnon Basalt.

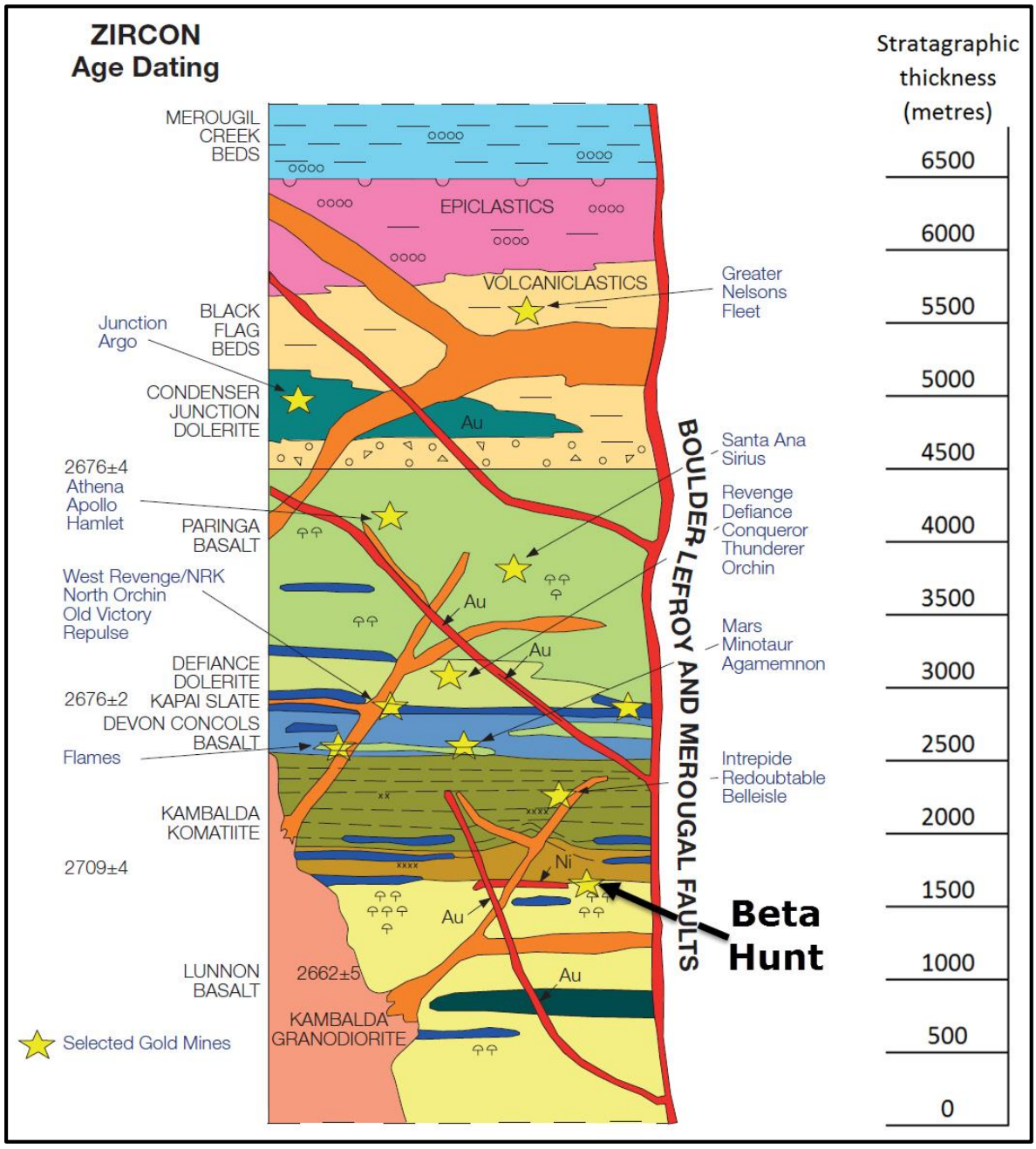
Figure 7.1: Regional geological map of the Kambalda Dome showing nickel sulphide deposits



Source: RNC modified from Stone and Archibald (2004)

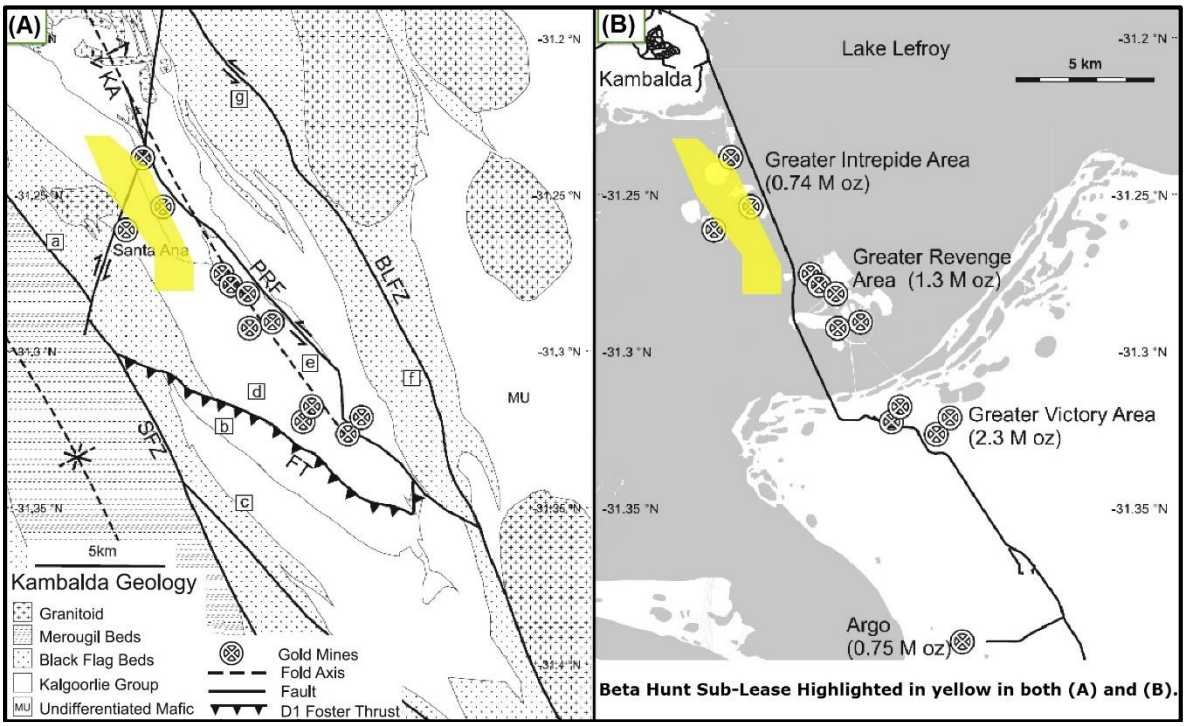
The following geological descriptions are summarized from Phillips and Groves (1982) and Banasik and Crameri (2006). The local stratigraphy is summarized in Figure 7.2.

Figure 7.2: Stratigraphic relationships in the St Ives area, based on the Kambalda-Tramways stratigraphy



Source: Modified from SIGMC (2012)

Figure 7.3: Regional geological map of the Kambalda Dome showing gold deposits



Source: RNC modified from Prendergrast (2007); Production numbers to August 2005.

7.1.1 Lunnon Basalt

The footwall Lunnon Basalt is the lowermost unit in the stratigraphy at Hunt and is the host to the majority of gold mineralization. The Lunnon Basalt typically comprises in excess of a 1 km thickness of tholeiitic basaltic flows with persistent pillowed layers, flow top breccias and sediment bands.

Compositionally the Lunnon Basalt at Beta Hunt is similar to many of the other gold bearing mafic rocks of the Eastern Goldfields. The Lunnon Basalt is composed of hornblende, actinolite, chlorite, andesine, magnetite, ilmenite, calcite and quartz with minor biotite and epidote. The amphibole occurs as small grains 0.2 to 0.4 mm that vary in colour from pale yellow to blue green and make up approximately 50% of the basalt. Chlorite forms usually less than 10% of the assemblage in the form of fine green grains intermixed with the amphibole. Calcite forms discrete grains and combined with narrow 1 - 5 mm carbonate stringers accounts for 5% of the groundmass.

Generally, the gold occurs in a broad steeply dipping north-northwest striking quartz vein system within sheared biotite-rich, pyritic basalt. There is typically intense albite, carbonate and chlorite alteration associated with the shear system.

7.1.2 Kambalda Komatiite

The Kambalda Komatiite is a sequence of high-MgO ultramafic flows between 50 to 1000 m thick. It is divided into two members: the lower Silver Lake Member, and upper Tripod Hill Member. The Silver Lake Member comprises one or more komatiite flows (10 - 100 m thick) that are subdivided into a lower cumulate zone and an upper spinifex textured zone. The Tripod Hill

Member consists of numerous thin (<0.5 – 10 m) komatiite flows. Lateral and vertical variations in composition of each flow as well as distribution of interflow sulphidic sediments define channel flow and sheet flow facies. In the near nickel resources, the stratigraphic contact is highly irregular and structurally disturbed. Numerous mafic, felsic and intermediate intrusions intersect the sequence. The nickel sulphide resources occur at the base of the Silver Lake Member on the contact with the Lunnon Basalt.

7.1.3 Interflow sediments

Thin (< 5 m) interflow sedimentary rocks are common on the contact between the Lunnon Basalt and Kambalda Komatiite and within the komatiite lavas, particularly in the less differentiated Silver Lake Member. Sediments are dominated by pale cherty and dark carbonaceous varieties, which comprise quartz + albite with minor tremolite, chlorite, calcite and talc and sulphidic bands of pyrrhotite, pyrite, and minor sphalerite and chalcopyrite. Chloritic or amphibole-rich varieties are less common.

7.1.4 Intrusions

The units that host the nickel sulphide mineralization are intruded by granitoids, dykes and sills of mafic, intermediate and felsic composition. Felsic intrusives of sodic rhyolite composition are coarse grained, porphyritic and quartz-rich, and commonly occur throughout the sequence as dykes and sills. Intermediate intrusives (typically dacitic composition) are more variable in texture and composition, but porphyritic types are common and contain feldspar phenocrysts in a biotite-amphibole matrix. Mafic intrusives of basaltic composition are less common but are known to occur in the Lunnon Shoot. The Kambalda Granodiorite in the core of the Kambalda dome is trondhjemitic in composition and has associated felsic dykes.

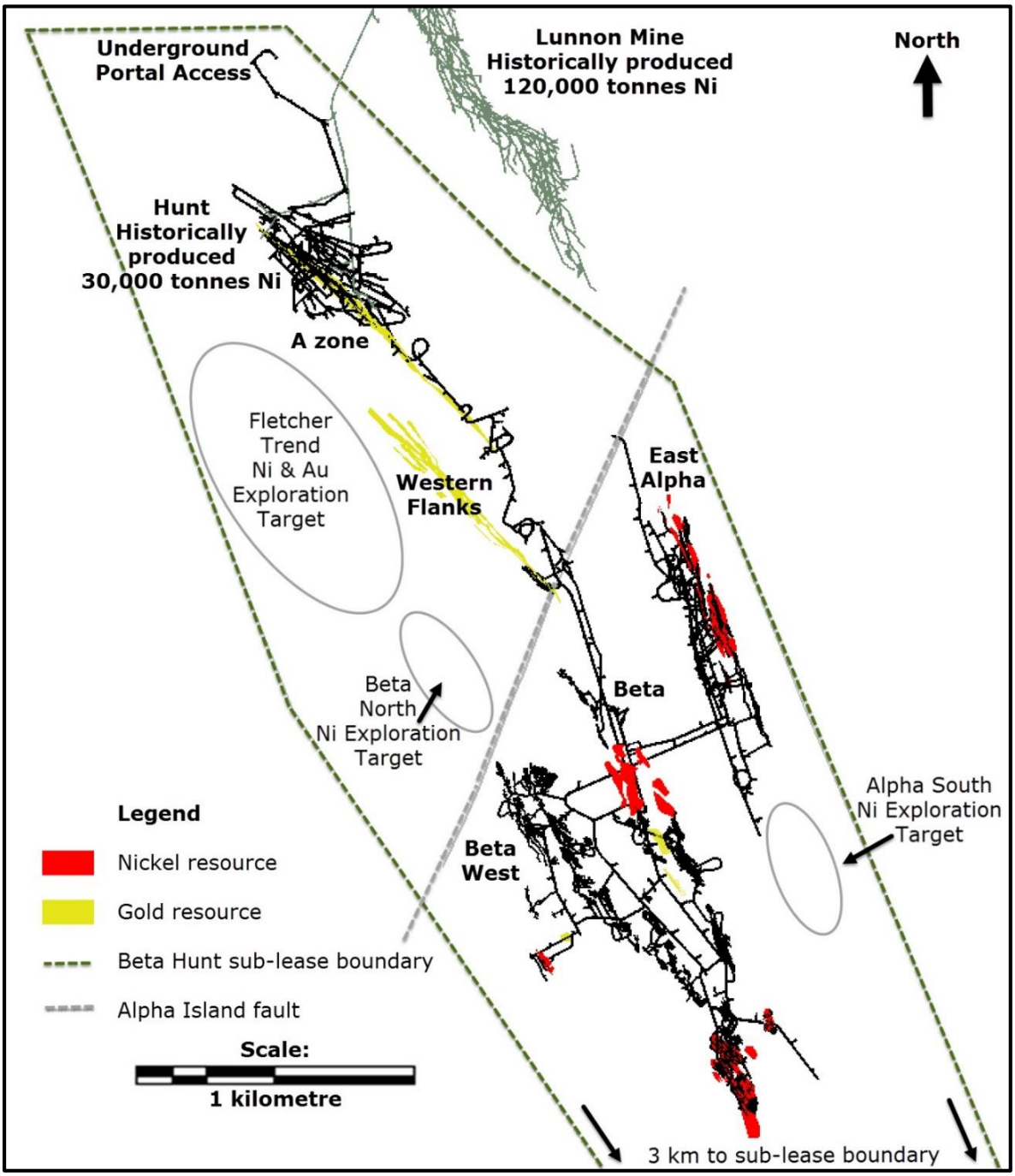
These dykes vary in size and composition but are all thought to have been emplaced post D2 deformation and pre D4 gold mineralization. As a result, gold mineralization is not greatly disrupted by the presence of the porphyry intrusives and mineralization is often enhanced at their contacts with the contrasting lithologies acting as a preferred zone of deposition.

7.2 Property Geology

The mine comprises a number of nickel surfaces in contact, flanking and hangingwall positions within a series of north-northwest striking mafic troughs that occur on the southern margin of the Kambalda Dome. The footwall unit is the Lunnon Basalt, overlain by the Silver Lake and Tripod Hill members of the Kambalda Komatiite.

The Hunt and Lunnon shoots are separated from the Beta and East Alpha deposits by the Alpha Island Fault. Hunt and Beta both occur on the moderately dipping western limb of the Kambalda dome and are thought to be analogous. Similarly, Lunnon and East Alpha occur on the steeply dipping eastern limb of the dome and also have similar characteristics (Figure 7.4).

Figure 7.4: Beta Hunt Mine Schematic – Plan view



Source: RNC

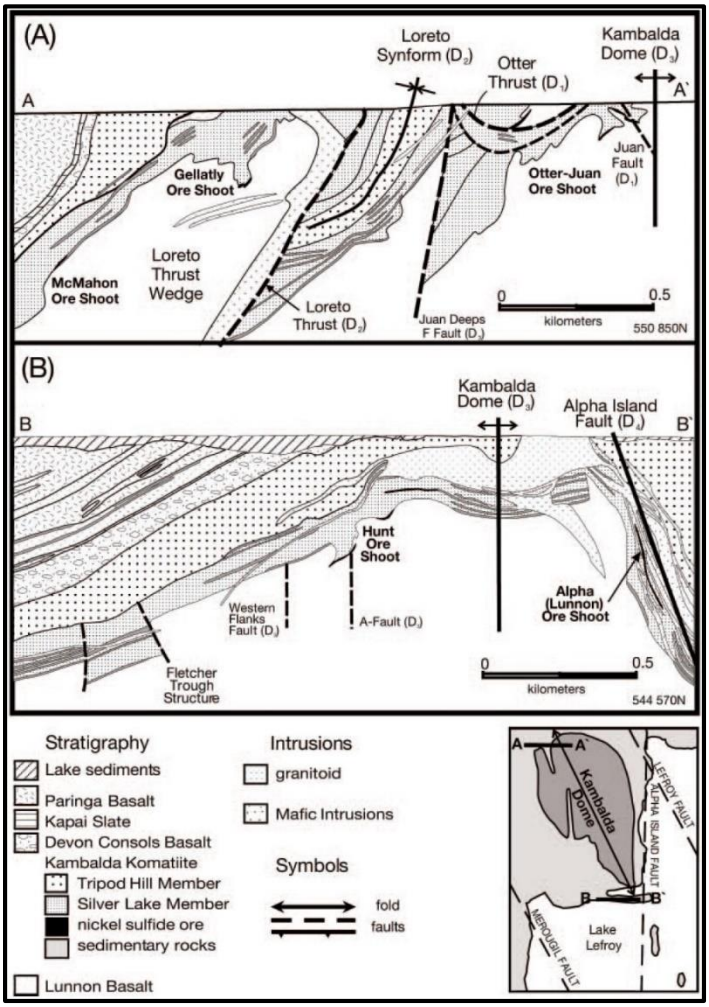
7.2.1 Nickel Mineralization

Nickel mineralization is hosted by talc-carbonate and serpentine altered ultramafic rocks. The deposits are ribbon-like bodies of massive, matrix and disseminated sulphides varying from 0.5 - 4.0 m in true thickness but averaging between 1.0 - 2.0 m. Down dip widths range from 40 - 100 m and the grade of nickel ranges from below 1 to 20%. Major minerals in the massive and disseminated ores are pyrrhotite, pentlandite, pyrite, chalcopyrite, magnetite, and chromite, with

rare millerite and heazlewoodite generally confined to disseminated mineralization. The hangingwall mineralization tends to be higher tenor than the contact material. The range of massive ore grades in the hangingwall is between 10 and 20% nickel while the range for contact ore is between 9 and 12% nickel. The hangingwall mineralogy varies between an antigorite / chlorite to a talc/magnesite assemblage. The basalt mineralogy appears to conform to the amphibole, chlorite, plagioclase plus or minus biotite.

Unlike other orebodies on the Kambalda dome, the Beta Hunt system displays complex contact morphologies, which leads to irregular ore positions. The overall plunge of the orebodies is shallow in a southeast direction, with an overall plunge length in excess of 1 km. The individual ore positions have a strike length averaging 40 m and a dip extent averaging 10 m. The geometry of these ore positions vary in dip from ten degrees to the west to 80 degrees to the east. The mineralization within these ore positions is highly variable ranging from a completely barren contact to zones where the mineralization is in excess of 10 m in true thickness.

Figure 7.5: Schematic cross section through the Kambalda Dome looking north



Cross sections of the Kambalda dome. (A). Cross section of the northwest flank of the dome at 550 850 N (mine grid) across the McMahon, Gellatly, and Otter-Juan ore shoots. West-dipping reverse faults have formed a series of wedges of the Lunnon Basalt footwall. (B). Cross section of the south part of the dome at across the Hunt and East Alpha ore shoots on opposing flanks of the dome. The Alpha shoot is the Lunnon ore shoot offset on the east side of the Alpha Island fault. The thickness of the ore shoots, sedimentary units, and felsic intrusions is exaggerated for clarity.

Source: Stone et al. (2005)

7.2.2 Gold Mineralization

All known gold mineralization is confined to the Lunnon Basalt below the ultramafic contact, with the vein systems terminating abruptly at this contact. Gold mineralization occurs in three broad, steeply dipping, north-northwest striking quartz vein systems within a sheared biotite-rich, pyritic zone of the Lunnon Basalt (Figure 7.5). A Zone and the Western Flanks both occur to the north of a major north-northeast trending structure (Alpha Island Fault) and the Beta mineralization is located to the south of the fault. The A Zone and Western Flanks shears are interpreted to be the channelways for rising ore fluids, with the basalt/ultramafic contact acting as a fluid trap. The subsequent increase in pore fluid pressure induced preferential hydraulic fracturing of the brittle mafic and felsic rocks to form the quartz veining, with the migrating ore fluids causing the wall-rock alteration.

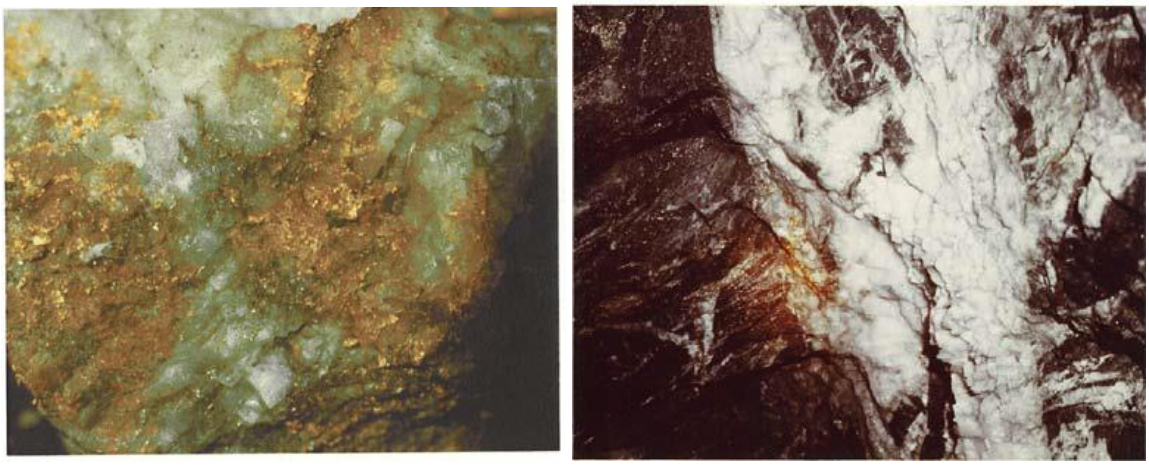
Each of these gold mineralization zones exhibits subtle differences. These are briefly summarized below.

A Zone

Gold mineralization in A Zone is located below the A Zone nickel surface and is composed of a large brecciated quartz vein that has a near vertical dip striking at 320°. A Zone varies in thickness from 2 - 20 m wide with a low to medium grade distribution. The A Zone shear is mineralized over approximately 800 m of strike length with the northern portion containing the higher grade and greater thickness. Sub-parallel mineralized structures are found in both the hangingwall and footwall to the main A Zone shear. These structures appear to be of a similar nature to the main mineralized zone and are considered to be splays within a major anastomosing shear system.

High-grade zones with abundant visible gold are commonly found at the contact between the basalt and ultramafic (Figure 7.6). It is these areas which have been mined for specimen stone in the past.

Figure 7.6: Visible gold located at the basalt/ultramafic contact

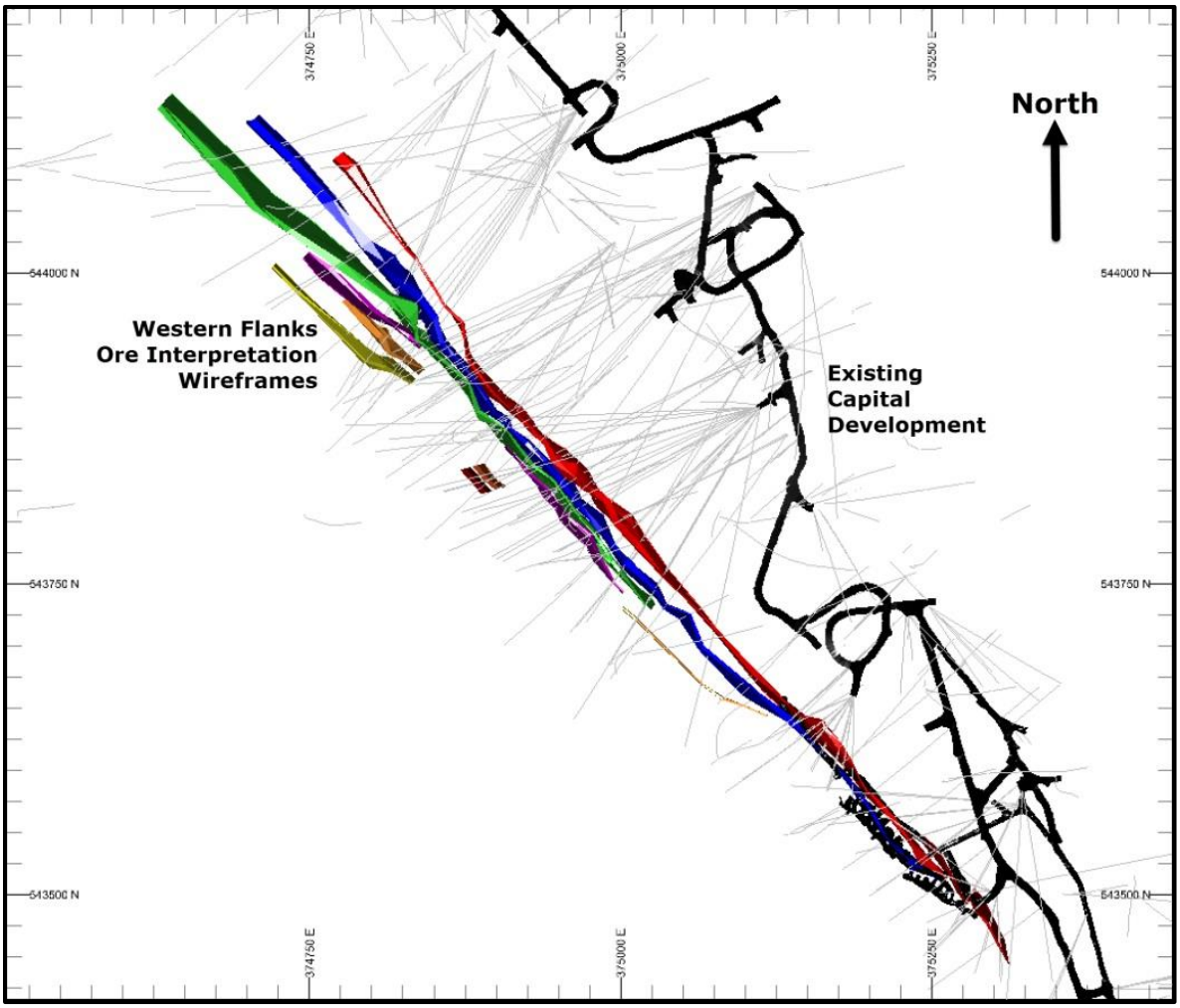


Source: WMC (1985)

Western Flanks

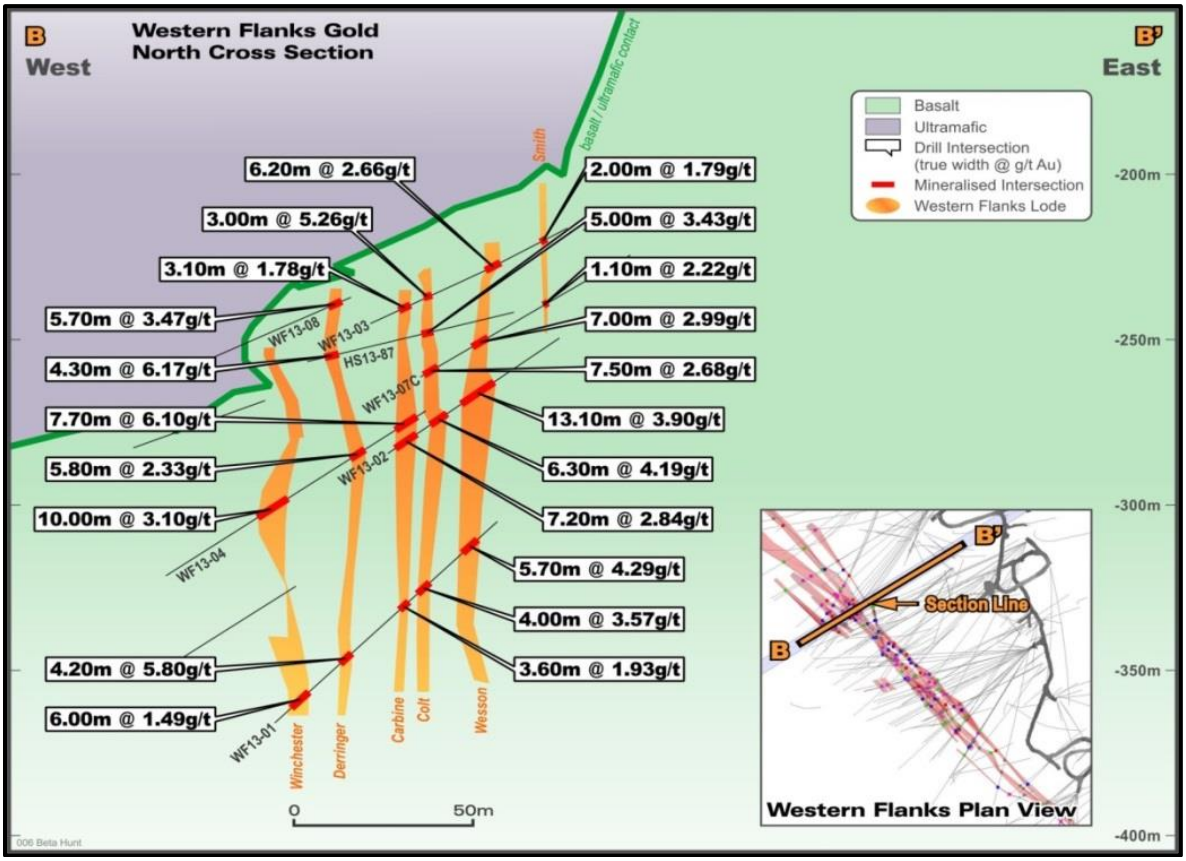
The interpreted Western Flanks gold zone consists of 12 sub-parallel lodes striking at approximately 320° over varying strike lengths from 30 - 800 m. The total Western Flanks gold zone has a vertical extent of 120 - 200 m and dips approximately vertically. Lodes vary in thickness from 1 - 14 m thick with an average thickness of 4 m. Figure 7.7 and Figure 7.8 illustrate the Western Flanks orebody interpretation. The style of mineralization in the Western Flanks shear is very similar to that seen at A Zone, with massive brecciated veins hosted within a pyritic altered basalt.

Figure 7.7: Gold mineralization interpretation wireframes in plan view



Source: RNC

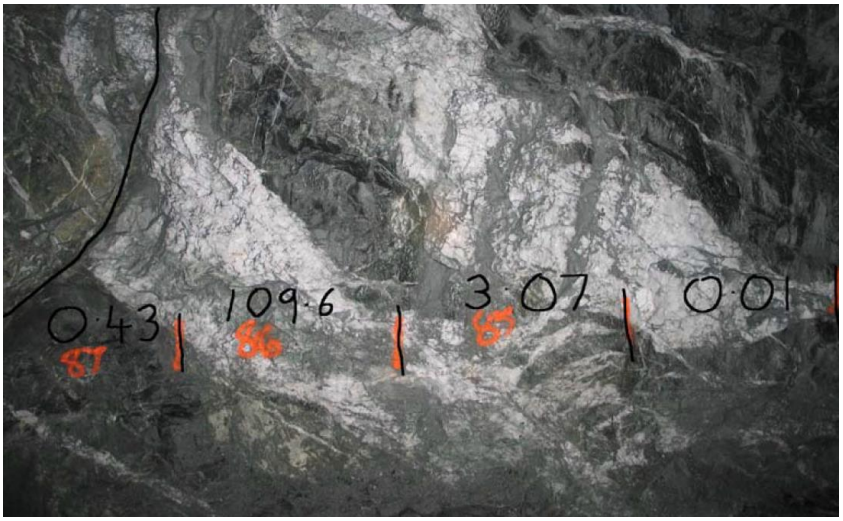
Figure 7.8: Cross section of gold interpretation wireframes showing Western Flanks lodes looking northwest



Source: SLM

Figure 7.9 shows Lode 12 exposed in the 1710 access, with wall chip samples assays marked. These samples defined a mineralized zone 10 m wide at a grade of 12.5g/t.

Figure 7.9: Wall samples collected from Western Flanks Lode 12 in 1710 access (gold grades g/t in black)



Source: Consolidated Minerals Ltd. (2005)

Overall grade at the Western Flanks is slightly higher than that of A Zone with patches of higher grade >10 g/t mineralization evident along the lodes. These high-grade areas appear to show some correlation to zones of dilation. Three lodes are continuous over the entire length of Western Flanks and it is these lodes that contain the majority of the resource tonnes and ounces.

The presence of high-grade visible gold similar to A Zone has not been identified in drilling at Western Flanks, however due the wide spaced drilling pattern and the lack of development in the favourable locations it is still very probable that this style of mineralization will also exist at Western Flanks.

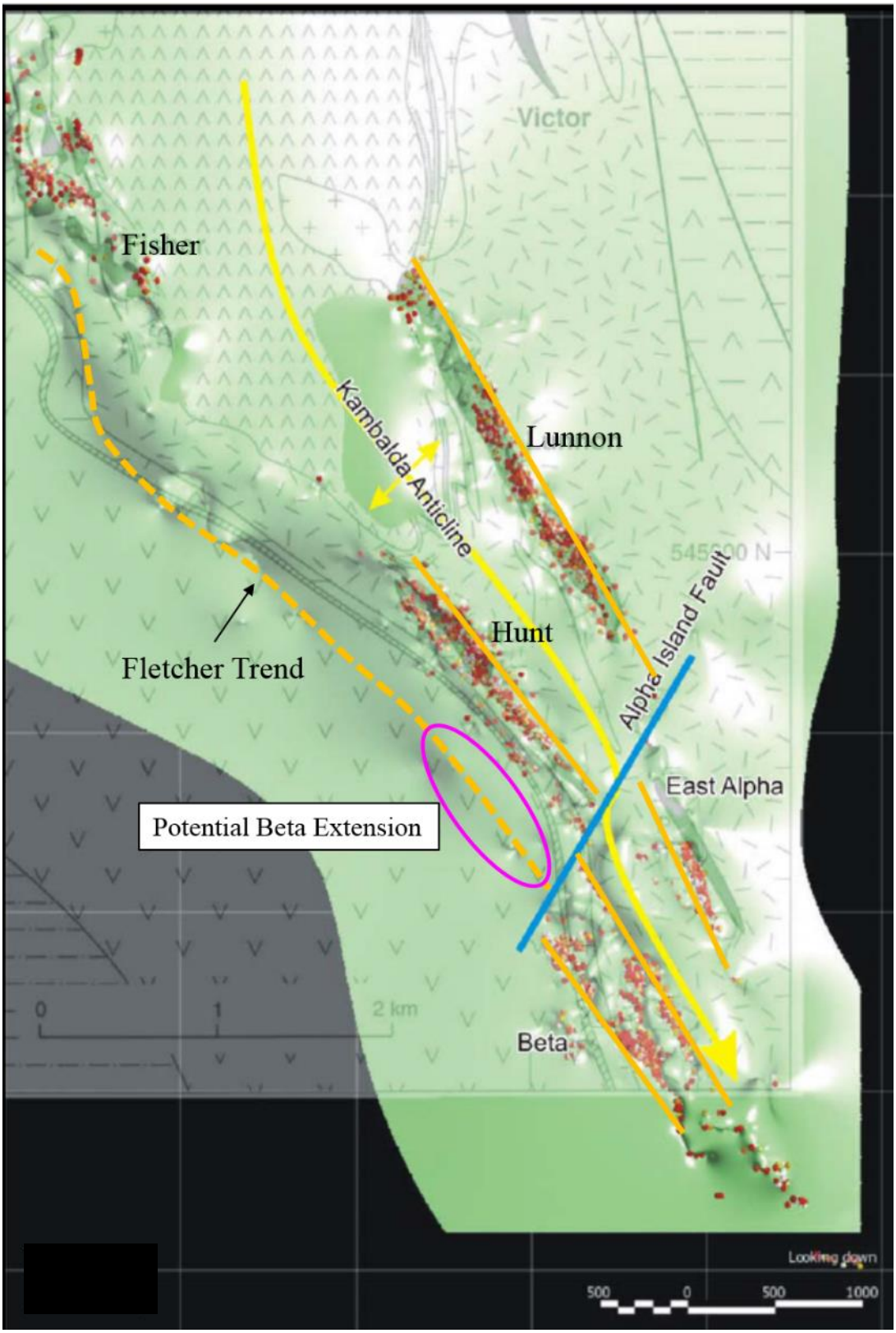
Beta

The Beta mineralization is interpreted to be an offset extension to the Western Flanks and A Zone mineralization, with a dextral offset of between 100 - 150 m (Figure 7.4). Beta is again characterized by a series of sub vertical quartz veins within a sheared basalt. Mineralization at Beta has a more disjointed and erratic form, with narrow discontinuous lodes that have a strike extent of 20 - 100 m. Lodes vary in thickness from 1 - 5 m wide commonly with high grades being present on the contacts of porphyries and ultramafic.

Fletcher Trend – Beta North

The Fletcher Trend (Figure 7.3 and Figure 7.10) is interpreted to be a parallel structural analogue to the Western Flanks and A Zone gold deposits occurring approximately 500 m west of the Western Flanks trend. The Fletcher trend may represent the offset continuation of the Beta Deposit across the Alpha Island Fault. (Figure 7.10). The Fletcher Trend is inferred from gold mineralization intersected in surface hole KD 1237W1 (1.0 m @ 11.3g.t Au and 12.0 m @ 1.4 g/t Au) and KD1019 (6.5 m @2.2 g/t Au including 1 m @ 6.1 g/t Au, and 2.5 m @ 2.7 g/t Au including 1 m @ 5.2 g/t Au). This exploration target requires further investigation as discussed in section 24.

Figure 7.10: Offset relationship of deposits across Alpha Island Fault



Source: SLM

7.2.3 Structural Controls On Mineralization

The structural controls on mineralization at the Beta Hunt deposit are related to the complex polyphase deformation exhibited throughout the Kambalda Dome (Figure 7.5). There are four recognised regional deformation events. The events are described in greater detail below where there is supportive evidence at Beta Hunt (Banasik and Crameri, 2006).

D1

The D1 deformation event was a widespread, broadly layer-parallel compressional event that resulted in imbricate stacking of the stratigraphy during S to N thrusting. Evidence of the D1 deformation event at Beta Hunt is the development of a S1 fabric in some massive nickel ores and adjacent host rocks. S1 fabrics in massive ores occur as pyrrhotite-pentlandite banding, which is parallel or subparallel to the ore contacts.

D2

The D2 deformation event produced shallow to moderate dipping NNW striking faults, resulting in a thrust stacking from SSW to NNE. This event occurs throughout the contact nickel orebodies forming the ore constraining/trough defining pinch outs, as well as intra-trough folds. The NNW strike of the faults is parallel to the strike of the 40C trough. The result of the D2 deformation at Beta is the formation of 'sawtooths' over the width of the trough, especially in the 40C trough.

D3

The D3 deformation event formed the Kambalda Dome with open, upright domal folds. Associated with D3 are oblique NNW striking normal faults, which not only disrupt the basalt/ultramafic contact but are the main gold bearing structures at Beta Hunt.

D4

The final deformation event is characterised by oblique NNW faulting and NNE strike – slip faults. Evidence of D4 deformation at Beta Hunt is the Alpha Island Fault, which separates the Hunt shoot from the Beta Shoot. The Alpha Island Fault is a sinistral D4 regional strike slip fault, with some vertical normal displacement that strikes 025 and dips at 65 degrees to the north, observed from exposures in the Beta decline and Beta return airway.

8 Deposit Types

The nickel deposits on the Beta Hunt Sub-lease are type examples of the Kambalda style komatiite hosted nickel sulphide deposits. The characteristics of the Western Flanks and A Zone gold deposits are consistent with the greenstone-hosted quartz-carbonate vein (mesothermal) gold deposit model. Exploration for extensions of these deposits and new deposits within the Beta Hunt Sub-lease are therefore based on these models as described below.

8.1 Kambalda Style Komatiite-hosted Nickel Sulphide Deposits

Kambalda style nickel sulphide deposits are typical of the greenstone belt hosted komatiitic volcanic flow- and sill-associated subtype of magmatic Ni-Cu-Pt group elements deposits (Eckstrand and Hulbert, 2007).

8.1.1 Komatiitic Volcanic Flow- and Sill-associated Subtype of Magmatic Ni-Cu-Pt group elements

Komatiitic Ni-Cu deposits are widely distributed in the world, mainly in Neoarchean and Paleoproterozoic terranes. Major Ni-Cu producing camps and other prominent deposits are found in Australia, Canada, Brazil, Zimbabwe, and Finland. The komatiitic subtype of Ni-Cu sulphide deposits occurs for the most part in two different settings. One setting is as komatiitic volcanic flows and sills in mostly Neoarchean greenstone belts. Greenstone belts are typical terranes found in many Archean cratons, and may represent intracratonic rift zones. They are generally composed of strongly folded, basaltic/andesitic volcanics and related sills, siliciclastic sediments, and granitoid intrusions. They have been metamorphosed to greenschist and amphibolite facies, and typically adjoin tonalitic gneiss terranes. Komatiitic rocks form an integral part of some of these greenstone belts. Examples are the Kambalda camp and the Mt. Keith deposit, respectively, from two greenstone belts in Western Australia.

The second setting is as Paleoproterozoic komatiitic sills associated with rifting at cratonic margins. Prime examples are the Raglan horizon in the Cape Smith-Wakeham Bay belt of Ungava, Quebec, and the Thompson camp of the Thompson nickel belt, northern Manitoba. The komatiitic rocks are set in a sequence of volcano-sedimentary strata unconformably resting on Archean basement, and moderately (Raglan) to intensely (Thompson) folded and deformed.

Ultramafic komatiitic rocks are magnesium-rich (18-32% MgO), and therefore the precursor magmas are very hot and fluid. Because of their primitive (high Mg, Ni) composition, the Ni:Cu ratio of the associated sulphide ores is high, in many cases 10:1 or more. The sulphur in the sulphide ores has been derived in significant proportion by contamination from sulphidic wallrocks. The commonly observed close spatial association of these deposits and their hosts with sulphidic sedimentary footwall rocks, and the similarity of sulphur isotopes and other chemical parameters of the magmatic and sedimentary sulphides strongly suggest that the sulphur in these deposits was derived locally from the sediments. This contrasts to some degree with deposits like Noril'sk and Voisey's Bay where, while it is clear that sulphur came from an extraneous source, that source was not likely so near at hand.

Two types of Ni-Cu sulphide ores characterize these deposits. Sulphide-rich ores comprising massive, breccia and matrix-textured ores consisting of pyrrhotite, pentlandite and chalcopyrite occur at the basal contact of the hosting ultramafic flows and sills. These deposits are generally

small, in the order of a few million tonnes, and the grades are in the 1.5 to 4 % range. The second type, sulphide-poor disseminated ore forms internal lens-like zones of sparsely dispersed sulphide blebs, which consist mainly of pentlandite. Deposits of this type also occur in both sills and flows but the largest deposits are in sills, with ore tonnages of 10s to 100s of millions, though grades are a modest 0.6 to 0.9 % Ni.

8.1.2 Komatiitic Ores in Greenstone Belt Setting – Kambalda Camp

Ni sulphide ores of the Kambalda camp are typical of the basal contact deposits associated with ultramafic flows in greenstone belts. They occur in the Kambalda Komatiite, which is a package of ultramafic flows (2710 Ma) that has been folded into an elongate doubly plunging anticlinal dome structure about 8 km by 3 km (Fig. 7.1). The underlying member of this succession is the Lunnon Basalt, and the overlying units are a sequence of basalts, slates and greywackes (2710 to 2670 Ma). The core of the dome is intruded by a granitoid stock (2662 Ma) whose dykes crosscut the komatiitic hosts and ores.

The Kambalda Komatiite is made up of a pile of thinner, more extensive "sheet flows" and thicker "channel flows" which have created channels by thermal erosion of the underlying substrate. The flows that contain ore are channel flows, which may be up to15 km long and 100 m thick, and occupy channels in the underlying basalt. Flows in the pile are commonly interspersed with interflow sediment, typically sulphidic.

Most of the ore bodies are at the basal contact of the lowermost channel flows (accounting for 80% of reserves), though some do occur in overlying flows in the lower part of the flow sequence. The ore bodies typically form long tabular or lenticular bodies up to 3 km long and 5 m thick. The ores generally consist of massive and breccia sulphides at the base, overlain successively by matrix-textured sulphides, and disseminated sulphides. The sediment that underlies the flow sequence is generally absent beneath the lowermost ore-bearing channel flow, due to thermal erosion by the flow.

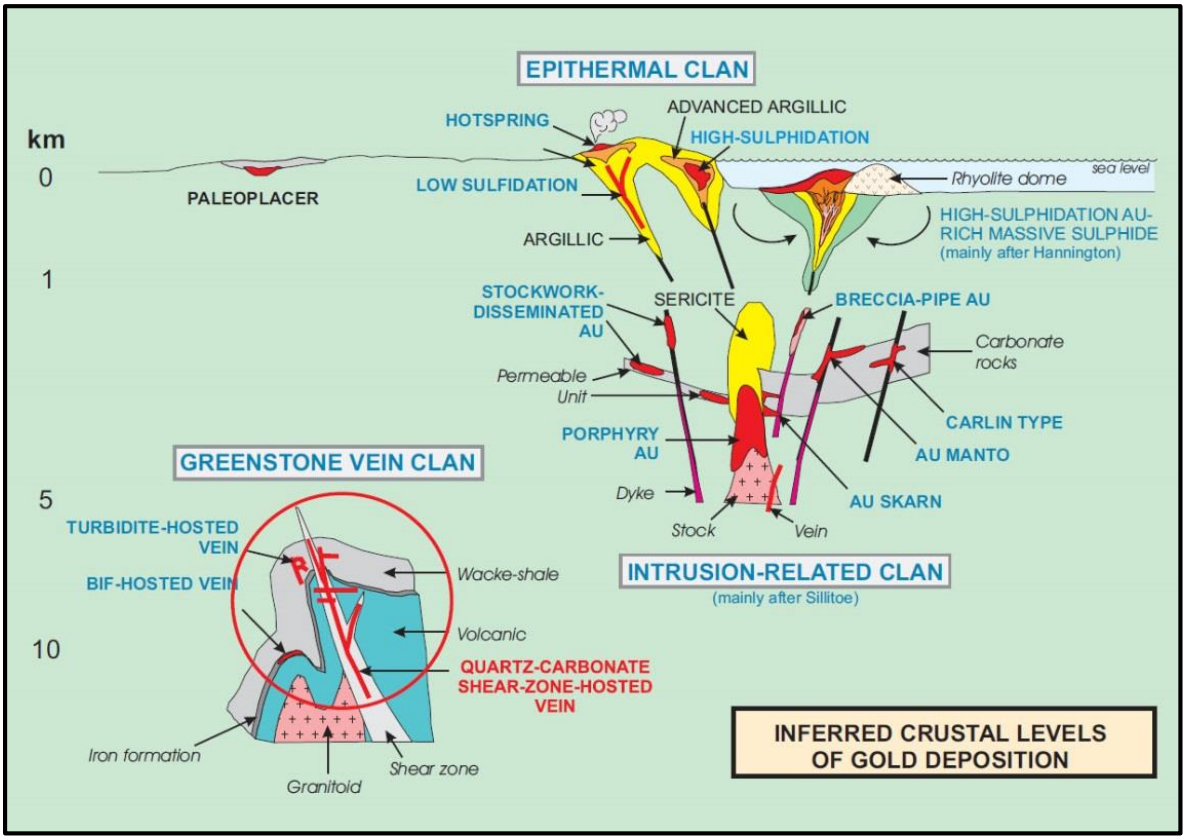
Structural deformation renders the shape and continuity of ores more complicated in many instances. Because of their weaker competency compared to their wallrocks, sulphide zones are in many cases strung out along, or cut off by faults and shear zones.

8.2 Greenstone-Hosted Quartz-Carbonate Vein (Mesothermal) Gold Deposits

Greenstone-hosted quartz-carbonate vein deposits (GQC) are a sub-type of lode gold deposits (Poulsen et al., 2000) (Fig. 8.1). They are also known as mesothermal, orogenic, lode gold, shear-zone-related quartz-carbonate or gold-only deposits (Dubé and Gosselin, 2007).

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Figure 8.1: Inferred crustal levels of gold deposition showing the different types of gold deposits and the inferred deposit clan



Source: Dubé and Gosselin 2007, modified after Poulsen et al., 2000

They correspond to structurally controlled complex epigenetic deposits hosted in deformed metamorphosed terranes. They consist of simple to complex networks of goldbearing, laminated quartz-carbonate fault-fill veins in moderately to steeply dipping, compressional brittle-ductile shear zones and faults with locally associated shallow-dipping extensional veins and hydrothermal breccias. They are hosted by greenschist to locally amphibolite facies metamorphic rocks of dominantly mafic composition and formed at intermediate depth in the crust (5-10km).

They are typically associated with iron-carbonate alteration. The mineralization is syn- to late-deformation and typically post-peak greenschist facies or syn-peak amphibolite facies metamorphism. They are genetically associated with a low salinity, CO_2- H_2O-rich hydrothermal fluid thought to also contain CH_4, N_2, K and S. Gold is largely confined to the quartz-carbonate vein network but may also be present in significant amounts within iron-rich sulphidized wallrock selvages or silicified and arsenopyrite-rich replacement zones. They are distributed along major compressional to transtensional crustal-scale fault zones in deformed greenstone terranes of all ages, but are more abundant and significant, in terms of total gold content, in Archean terranes.

However, a significant number of world-class deposits are also found in Proterozoic and Paleozoic terranes. International examples of this sub-type of gold-deposits include Mother Lode-Grass Valley (U.S.A.), Mt. Charlotte, Norseman and Victory (Australia), Dome, Kerr Addison and Giant (Canada).

Diagnostic Features

The diagnostic features of the greenstone-hosted quartz-carbonate vein type gold deposits are arrays and networks of fault- and shear-zone-related quartz-carbonate laminated fault-fill and extensional veins in associated carbonatized metamorphosed greenstone rocks. The deposits are typically associated with largescale (crustal) compressional faults. They have a very significant vertical extent (</= 2km), with a very limited metallic zonation.

Grade and tonnage characteristics

The greenstone-hosted quartz-carbonate vein deposits are one of the most significant sources of gold and account for 13.1% of all the world gold content (production and reserves). They are second only to the Witwatersrand paleoplacers of South Africa. The largest GQC deposit in terms of total gold content is the Golden Mile complex in Kalgoorlie, Australia with 1821 tonnes Au. The Hollinger-McIntyre deposit in Timmins, Ontario, is the second largest deposit ever found with 987 tonnes of gold. The average grade of the deposits varies from 5 to 15 g/t Au, whereas the tonnage is highly variable from a few thousand tonnes to 10 million tonnes of ore, although more typically there are only a few million tonnes of ore.

9 Exploration

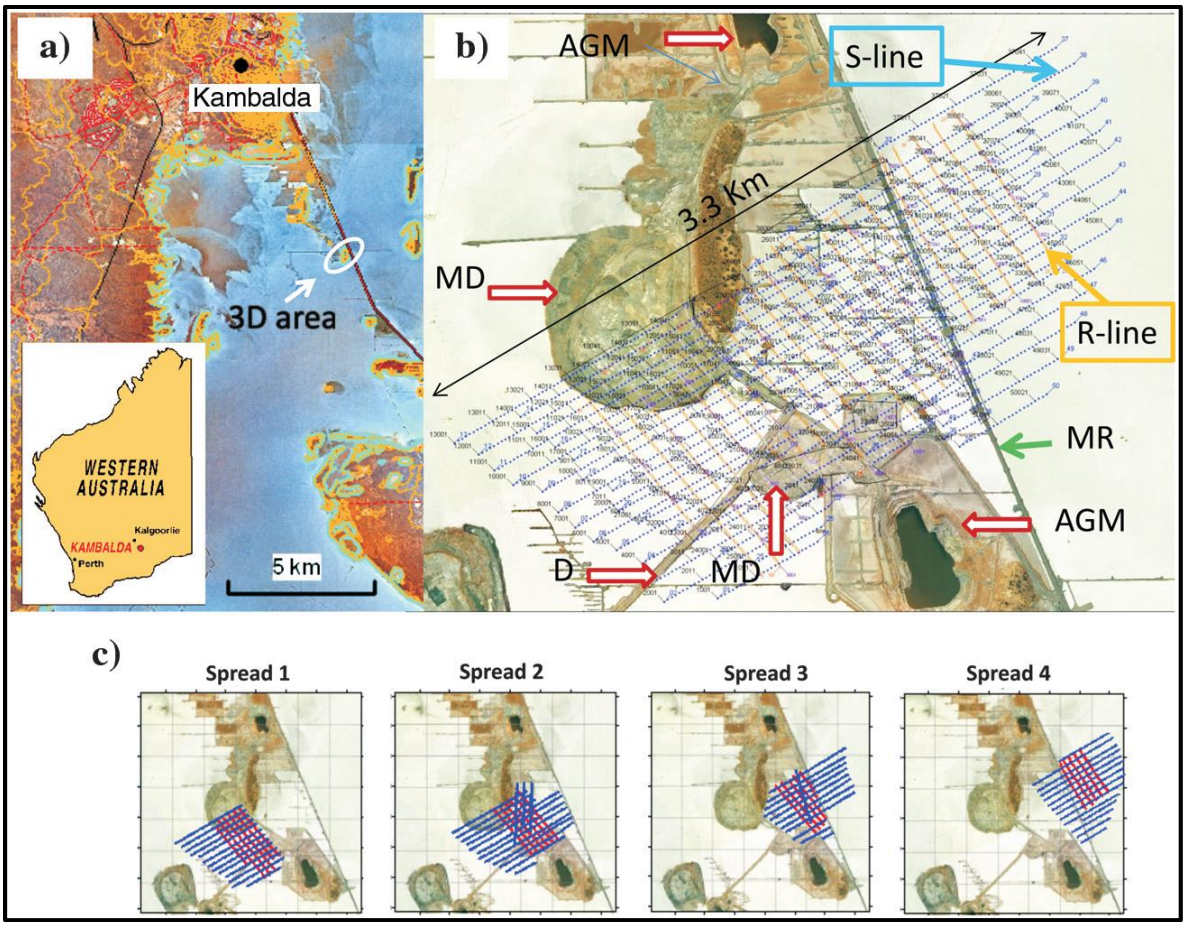
Exploration for nickel and gold mineralization on the Beta Hunt Sub-Lease has been completed primarily by drilling which is described in sections 10 and 11. Since the sale of the asset by WMC in 2001, limited non-drilling exploration has been completed on the property. Exploration programs relevant to ongoing resource definition and exploration work are described below.

9.1 Geophysics

9.1.1 Seismic

A three dimensional seismic survey was conducted in 2007 by Geoforce Pty Ltd during CNKO tenure. Three-dimensional design and logistics were provided by the Department of Exploration Geophysics, Curtin University. Data was acquired above Beta Hunt nickel mine on Lake Lefroy as shown in Figure 9.1. The survey methodology, processing and interpretation are detailed in Urosovic et al. (2012).

Figure 9.1: 3D seismic experimental survey carried out over Beta Hunt



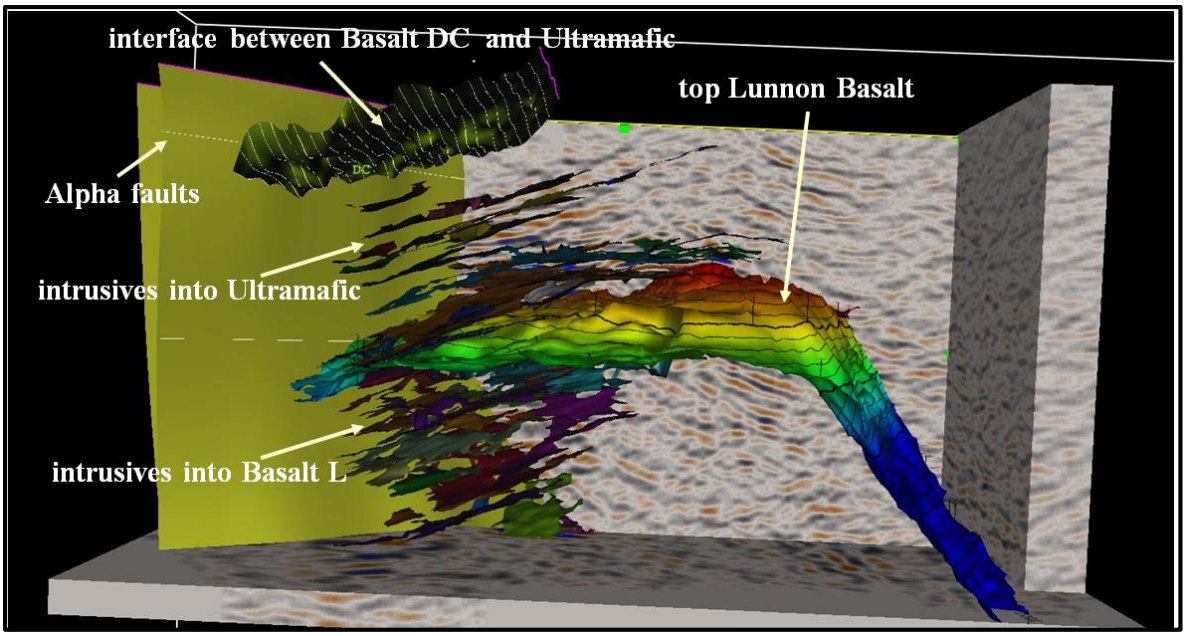
Aerial photo shown in (a). Salt lake is shown in blue (flooded at the time). Brown is the elevated regolith surface. Most of the 3D area was located on the salt lake (Lake Lefroy) and as shown in (b) it is surrounded by: Abandoned gold mines (AGM), Mine dumps (MD), dikes (D), main causeway, or mine road (MR). Receiver and source lines are labelled as R-line and S-line, respectively. Four overlapping patches were used for this survey, as shown in (c).
Source: Urosovic et al. (2012)

The total area covered by the shot/receiver lines was approximately 3.5 km^2. The shot-line separation varied from a nominal separation of 100 m to 50 m, and less (down to 10 m) where patches overlapped. Receiver line separation was kept to around 90 m. Four patches, each consisting of six receiver lines with a variable number of channels (up to 500), were used to cover the 3D area (Figure 9.1c). Nominal receiver separation was 10 m and shot separation was 20 m. Small explosive charges (110 g) were deployed in 1.2 to 1.5 m deep holes. On the hard ground, away from the salt lake, a free fall weight drop (375 kg) was used to generate seismic energy.

Processing focused on computation of accurate static and dynamic corrections, whereas imaging was helped by the existing geologic model. Advanced volumetric interpretation supported by seismic forward modeling was used to guide mapping of the main lithological interfaces and structures.

A combination of several factors, such as high data density, very good source/receiver coupling, deployment of small explosive charges, and high precision data processing produced a high-resolution, high-quality seismic data cube. The 3D volumetric seismic interpretation project was successful in achieving the primary objectives of mapping the main rock units as well as the Alpha Island Fault system down to 2-km depth (Figure 9.2). The knowledge gained from these structural models will be useful for future mine infrastructure design and development.

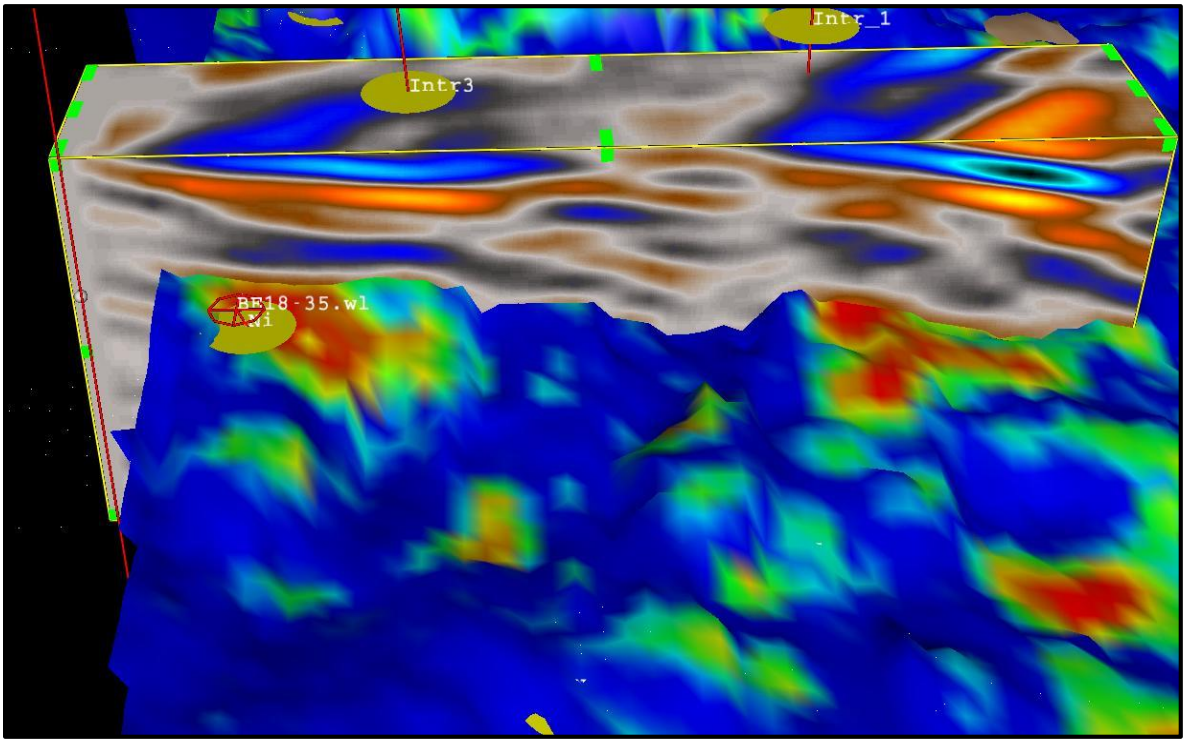
Figure 9.2: 3D seismic interpretation showing interpreted geological features



Source: SLM

Forward modeling was carried out using rock properties obtained from ultrasonic measurements and one borehole, drilled in the proximity of the 3D seismic volume (Figure 9.3). Using this information, geometric constraints based on the typical size of ore bodies found in this mine and a simple window-based seismic attribute, several new targets were proposed.

Figure 9.3: 3D seismic interpretation showing high amplitude features extracted in a window above (10 m) and below (4 m) of the basalt contact



Source: SLM

The survey demonstrates that high-quality, high-resolution, 3D seismic data combined with volumetric seismic interpretation could become a primary methodology for exploration of deep, small, massive sulfide deposits distributed across the Kambalda area.

10 Drilling

10.1 Historical Drilling

10.1.1 Drilling Summary

Drilling at Beta Hunt has been carried out by SLM, CNKO, RML and WMC since 1970 to explore for and delineate nickel and gold resources using a variety of methods. At the effective date of the Mineral Resources, this database contains 5,692 drill holes for approximately 675,000 metres within the Sub-Lease boundary as presented in Table 10.1. Only diamond drilling and, in the case of the A Zone gold resource, face chip samples were used to estimate the resources in this report. Table 10.2 provides a summary of diamond drilling by each operator

Table 10.1: Beta Hunt Database

Hole Type	Code	Number	Metres
Air Core	AC	1,072	37,662
Diamond	D	3859	567,415
Face or wall chip	FC	29	164
Percussion	P	155	13,315
Rotary Air Blast	R	6	289
Reverse Circulation	RC	571	56,151
Total		**5,692**	**674,996**

Table 10.2: Drilling by SLM and Previous Operators

Operator	Number	Metres
SLM	113	14,671
CNKO	1,924	225,484
RML	326	27,435
WMC	3,329	407,406
Total	**5,692**	**674,996**

10.1.2 SLM Drilling

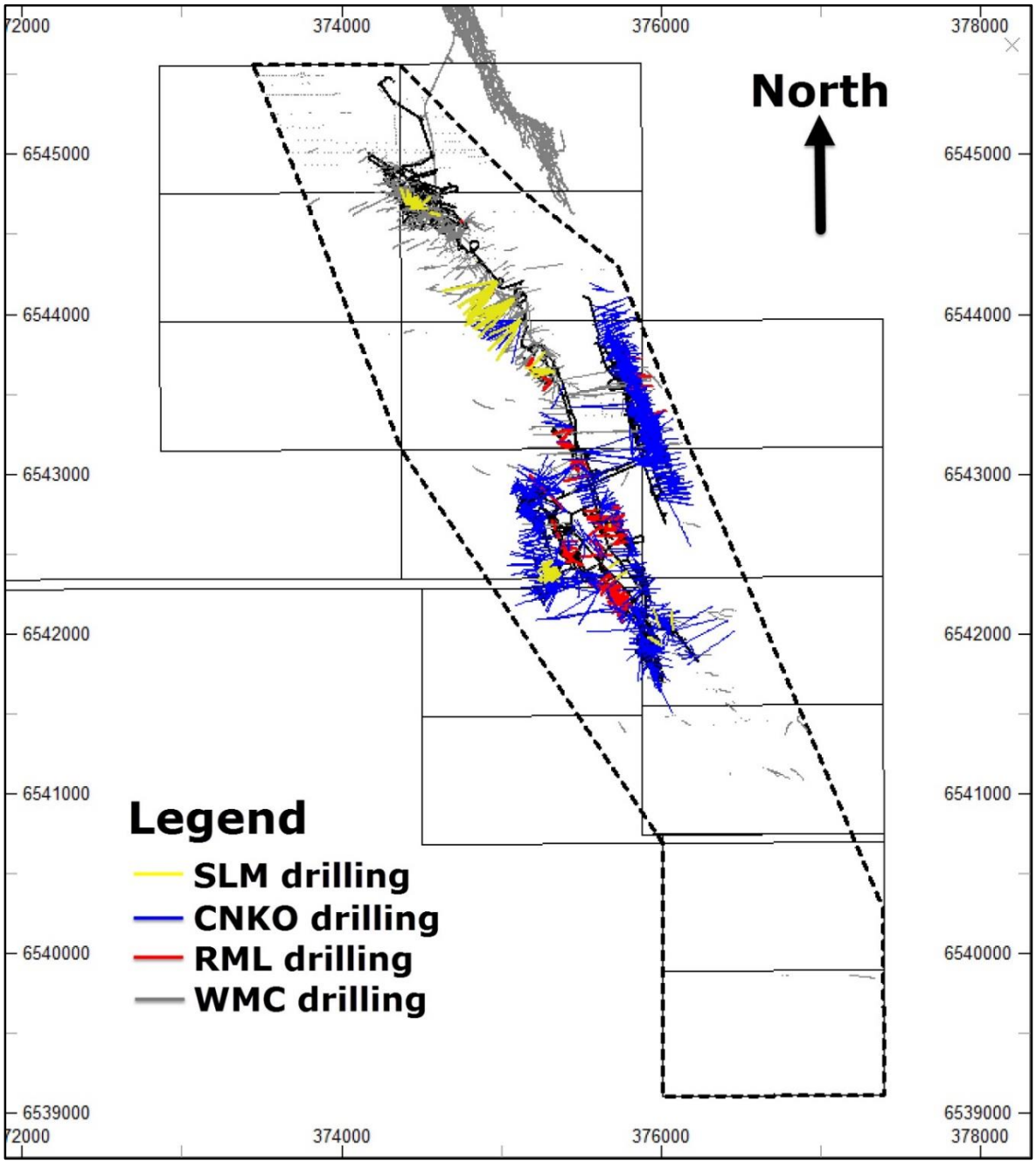
Since acquisition of the Beta Hunt Sub Lease in 2014, SLM have drilled more than 100 drill holes to define additional Mineral Resources and to upgrade the Mineral Resource classification to support ongoing production and define mineable material. To date SLM has concentrated the majority of drilling on:

- Western Flanks - 9,983 m in 39 diamond drill holes,
- A Zone – 1,955 m in 26 diamond drill holes, and
- Nickel resource confirmation – 2,733m in 48 diamond drill holes.

10.2 Drilling Maps

Representative plan maps showing drilling distribution for Beta Hunt are included below. Figure 10.1 shows the distribution of historical drilling at Beta Hunt.

Figure 10.1: Plan map showing historical drilling at Beta Hunt

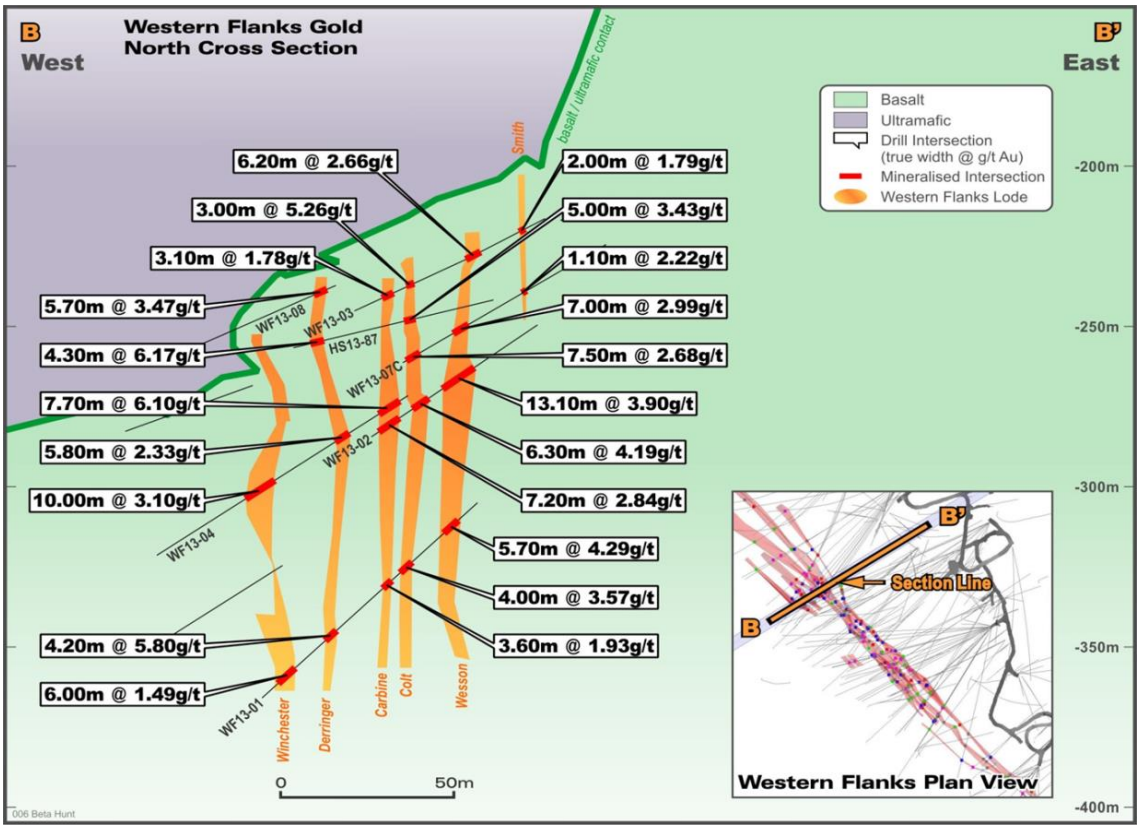


Source: RNC

10.3 Drilling Sections

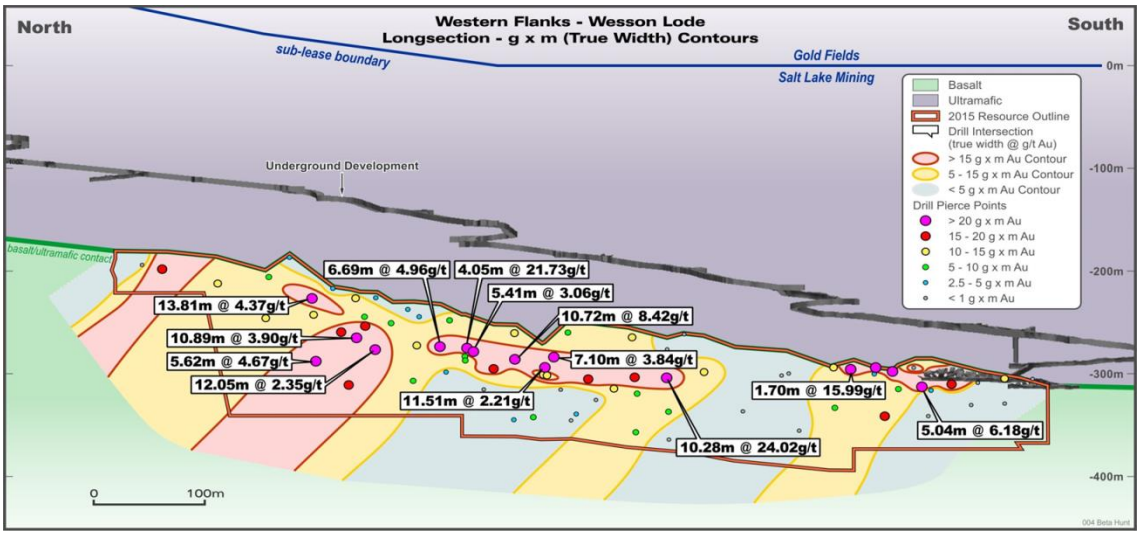
Representative cross sections and long sections showing drill results for Beta Hunt are included below.

Figure 10.2: Western Flanks Cross Section looking north



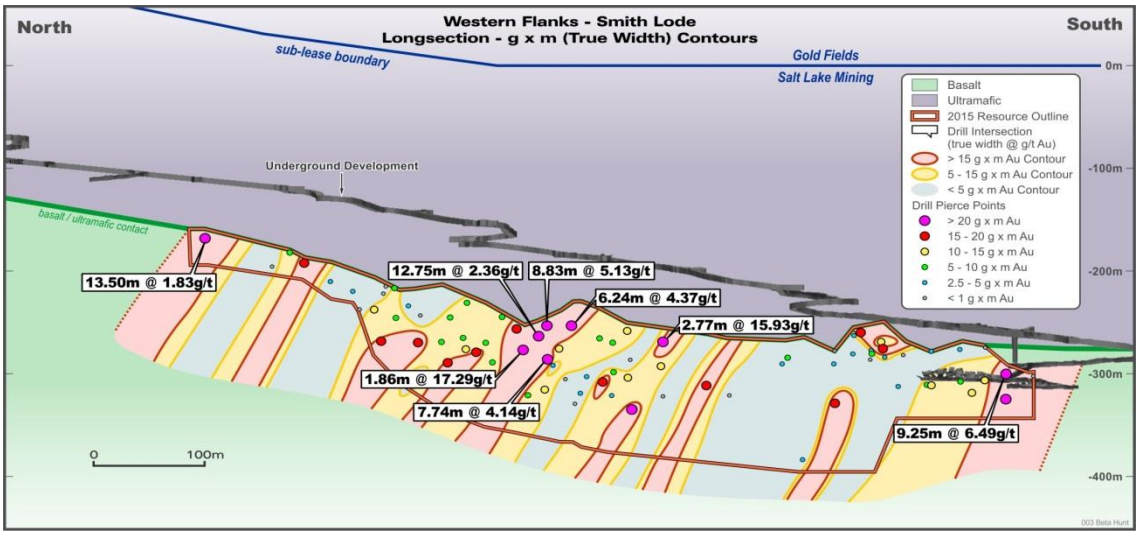
Source: SLM

Figure 10.3: Western Flanks Wesson Lode - Long Section looking east



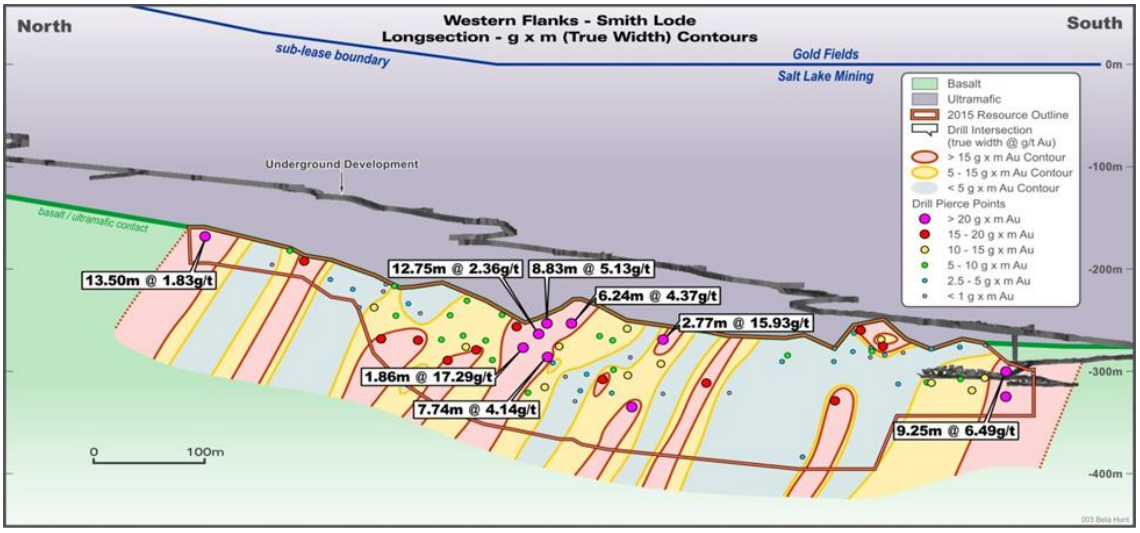
Source: SLM

Figure 10.4: Western Flanks Smith Lode - Long Section looking east



Source:SLM

Figure 10.5: Western Flanks Colt Lode - Long Section looking east



Source: SLM

10.4 Results

10.4.1 Resource Estimates

Drilling at Beta Hunt has served to establish resource estimations both for nickel and gold as detailed in Section 14.

10.4.2 Exploration Targets

A significant number of nickel and gold occurrences have been intersected outside the current resources. These include both occurrences along the immediate trends of current resources and along poorly explored parallel trends. Exploration potential defined by these drill intersections is summarized in Section 24.

11 Sample Preparation, Analysis, and Security

In the opinion of Haren Consulting, the sampling preparation, security and analytical procedures used by SLM are consistent with generally accepted industry best practices and are, therefore, adequate.

11.1 Sample Preparation

Drill hole data for the Beta Hunt gold and nickel mineralization has been collected by SLM, CNKO, and WMC since 1966. Drill-hole programs by SLM and CNKO were conducted under written protocols which were very similar and generally derived from the original operator, WMC. In the case of diamond drill holes, the operators geologists performed the geological (and geotechnical where required) logging and marked the core for sampling. The core was either cut onsite or delivered to the laboratory where all further sample preparation was completed prior to assay analysis.

All diamond core has been 100% logged by a geologist. Core after 2007 has also been geotechnically logged. All core after 2007 has been photographed both wet and dry and the photos are stored on the network.

Initial drilling targeted nickel mineralization and was highly selective according to the visual nickel mineralization observed by the geologist. Generally, sampling was between 0.1 m or 0.3 m to 1.2 m though some historical sample intervals were noted to 0.06 m. As the importance of gold mineralization was realized, sampling became less selective as the gold mineralization did not have significant visual clues.

Sample handling and submission to the laboratory protocols were documented for SLM and CNKO. No documentation was available for WMC drill holes.

Sample security involves two aspects: maintaining the chain of custody of samples to prevent inadvertent contamination or mixing of samples, and rendering active tampering as difficult as possible. No specific security safeguards have been put in place to maintain the chain of custody during the transfer of core between drilling sites, core library and sample preparation and assaying facilities. During the site visits, the Qualified Person inspected the core logging yard however did not observe directly how core was transferred. In the opinion of the Qualified Person, the procedures in place should ensure samples remained in the custody of appropriately qualified staff. Core and rejects from assay sample preparation are archived in secured facilities and remain available for future testing. During the site visits, the Qualified Person found no evidence of active tampering or inadvertent contamination of assay samples.

Key details of each operators sample preparation procedures as well as laboratory sampling and sub-sampling procedures follows.

11.1.1 SLM 2014-2016

Diamond drilling carried out by SLM is sampled and analysed according to written procedures. Gold mineralization is targeted using diamond drill holes with a minimum 0.3 m to maximum 1.2 m sample size. Diamond holes drilled are NQ, BQ and AQ sizes. NQ2 holes drilled in 2014 were

orientated. Sampling was performed by a technician after the geologist marked sample intervals on the core. Core is cut at the sample line and either full or ½ core is taken according to the geologist instructions and placed into numerically marked calico sample bags ready for dispatch to the laboratory.

11.1.2 CNKO 2005-2008

CNKO drilling was targeting nickel mineralization in most cases. Diamond drilling carried out by CNKO was sampled and analysed according to written procedures. Drill core is halved and sampled at maximum 1 m intervals through potentially mineralized zones. Sampling to lithological boundaries takes precedence for smaller intervals, down to a minimum length of 0.1 m. The sampling protocol and the sampling volumes are considered to provide a representative sample for the style of massive sulphide mineralization encountered. The remaining half core is retained on site and stored at the core yard.

11.1.3 RML 2003-2005

Diamond drilling carried out by Reliance Mining Limited (RML) was sampled and analysed according to written procedures. Core is logged geologically on site by mine geologists and marked with the desired sample intervals. The core is then transported to Kalassay's (formerly Kalgoorlie Assay Laboratory's), Kalgoorlie laboratory for cutting, sample preparation and analysis.

11.1.4 WMC pre 2003

Western Mining Corporation procedures for logging, sampling, assaying and QAQC of drill hole programs are not available at the time of this report. It is assumed it was of high quality and in line with industry standards.

11.2 Laboratory Sampling and Sub-sampling Procedures

Bureas Veritas (Kalassay) sampling and sub-sampling procedures are identical for both nickel and gold to produce a pulp for sample analysis. The procedure is:

- If required by the operator the core is half sampled.
- The sample put into a number of calico bags and placed into a drying oven. The sample remains in the drying oven at 1200 °C until dried sufficiently to permit further processing.
- The sample is jaw crushed to ~2 mm. If the sample size is greater than 3kg a 50:50 Jones type riffle splitter is used.
- The sub-sample is pulverised in a Labtech LM5 ring mill. Standard specification for pulverising is to achieve 90% passing 75 microns. Quality assurance of pulverising performance is done by randomly wet screening retained pulps. This is done at the frequency of one sample per box (approximately 1 in 30).
- The pulp is sent to sub-sampling according to analytical method as described in the next section.

- A sub-sample of approximately 100 g is taken and put into a paper seed pouch.

An analytical sub-sample of 30 g is taken from the pulped sample and placed in an aqua regia acid digest. The liquor is then drawn off and analysed for gold to a detection limit of 0.01 ppm by atomic absorption spectroscopy.

11.3 Sample Analysis

SLM 2014-2016 / CNKO 2005-2008 / RML 2003-2005

Since 2005 all samples to be analysed for either nickel or gold have been sent to Bureau Veritas (Kalassay) laboratories in Kalgoorlie. The assay laboratories used prior to this time are unknown.

In September 2010, Inspectorate Kalassay became part of the Bureau Veritas Group and now operates under the global Bureau Veritas Minerals brand. The Kalassay Group was a privately owned company, established in 1989 to provide commercial assay services to the mining industry. In late 2007, Kalassay Group was purchased by Inspectorate Holdings Australia Limited, which is part of the worldwide Inspectorate group of companies.

Bureau Veritas Minerals has adopted the ISO 9001 Quality Management Systems. All Bureau Veritas Amdel laboratories work to documented procedures in accordance with this standard

WMC pre 2003

WMC procedures for logging, sampling, assaying and QAQC of drill hole programs are not available at the time of this report. It is assumed it was of high quality and in line with industry standards.

11.3.1 Gold Analysis

The Bureau Veritas (Kalassay) analytical method for analysing gold by Fire Assay / ICP-AES (FA002) is:

- Assay Weight. A sub-sample of 40 g is taken from the homogenised, pulped sample – this will be the assay sample charge. The remainder of the pulp is stored in its paper pouch inside cardboard cartons. Each sample pouch has a printed label with all the sample and job information, including a reproduction of the original barcode. Similarly, the carton also has a printed label with the job details and an individual carton number.

- Fluxing. Flux and reducing agents are introduced to the assay sample charge and mixed mechanically to ensure a homogenous mixture. This process is conducted in a sealed disposable container.

- Fire Assay Fusion. The samples are then subjected to the standard fire assay fusion method, using digitally controlled, high temperature gas furnaces. A “multi-pour” method is used to pour the melt from the fire assay pot to the assay mould.

- Button Production. The melt settles and cools in the mould, with the lead fraction settling to the bottom. When sufficiently cool, the glassy "slag" is removed and the button recovered.

- Cupellation. The button is placed on a Cupel and heated in a muffle furnace. The lead oxidizes and is absorbed into the Cupel, leaving behind a small ball of silver and other precious metals – this is called a "Dore Bead". The cupel and the bead are allowed to cool in a vented rack.

- Bead Digest. Once cooled, the bead is placed into a test tube, to which dilute nitric acid is added. The tube is then heated.

- Parting. The combination of heat and nitric acid causes the silver present to go into solution, leaving behind the gold and other precious metals as solids.

- Aqua Regia Digest. Concentrated hydrochloric acid is then added to the tube, which combines with the nitric acid already present, to form Aqua Regia. This powerful acid mixture forces the gold and other precious metals into solution.

- Instrumental Analysis. After the digestion stage, the solution is diluted and then subjected to analysis by ICP-AES. The instrument provides a 1 ppb lower limit of detection for gold.

Instruments are calibrated at the commencement of each working day and are constantly monitored throughout an analytical batch. The instrument's solution transfer tubing is flushed between samples, using distilled water to prevent cross contamination between samples.

The standard checking scheme for each batch of fifty fired pots will include the following:

- 46 samples (unknowns),

- 2 duplicates randomly selected and inserted into the assay batch by the laboratory computer system,

- 1 blank randomly selected and inserted into the assay batch by the laboratory computer system,

- 1 standard randomly selected and inserted into the assay batch by the laboratory computer system, and

- A range of commercial standards are used which are alternated randomly.

All stages of the process are tracked and controlled by the Laboratory Information Management System (Sorby LIMS). Integral to this system are a range of internal checks and QA/QC protocols. Each job is checked for:

- Analytical performance against known standards,

- Reproducibility of repeat samples,

- Analytical performance of blank samples, and

- Distribution of anomalous elemental values.

11.3.2 Nickel Analysis

The Bureau Veritas (Kalassay) analytical method for analysing nickel by multi-element analysis by mixed acid digest / ICP-AES or ICP-MS (MA200, MA201, MA202) is:

- Assay Weight. A sub-sample of 200 mg is taken from the pulped sample in the high wet strength paper packet – this is the assay weight. The actual weight is recorder and is included in the results calculation process.

- Mixed Acid Digest. The 200 mg (0.2 g) sub-sample is then placed into a Teflon beaker, numbered for identification purposes, to which a very aggressive acid mixture is introduced. The acids which constitute the mixture are added to the sample in a set order: Nitric Acid, Perchloric Acid and finally, Hydrofluoric Acid. The digest commences with the samples at room temperature and after thirty minutes the beakers are transferred to a hotplate which heats the digest solution to 200 °C the digest solution is reduced until the solution is reduced to a dry, solid, state. This process takes approximately four hours. The dry, powdery, material which remains is soluble in hydrochloric acid and ready for the next stage. The beaker is then removed from the hot plate and hydrochloric acid is added. The beaker is then returned to a hotplate, this time operating at 100 °C. This process is referred to as the leach back stage. When all the crystallised solids have gone back into solution, the beaker is removed from the hotplate and allowed to cool. Water is then added to the beaker to bring the volume up of the solution up to a standard volume. The solution is then transferred to a test tube, where the volume is checked again and if necessary adjusted. This solution is now vigorously agitated, to that solution is fully homogenised. This solution is the primary digest liquor. The solution is diluted using a computer controlled auto-diluter. The dilution ratio is set as part of the job set up process in the LIMS System and is factored into the results calculation process.

- ICP Analysis. The diluted sample solution is now subjected to analysis by ICP-AES or ICP-MS. Commercially available and traceable standards are digested and analysed as part of the job. The performance of these standards within the analytical batch is used to validate the job data and are reported with the job results.

All stages of the process are tracked and controlled by the LIMS. Integral to this system are a range of internal checks and QA/QC protocols. Each job is checked for:

- Analytical performance against known/client standards,

- Analytical performance against internal standards,

- Reproducibility of repeat samples, taking into account method limitations and agreed error bars,

- Analytical performance of blank samples, and

- Distribution of anomalous elemental values.

Should there be any failures be detected at this stage an investigation is initiated and the results of that could be reanalysis of part or all of the samples in the batch. Only when the analysts are satisfied with all the results are results made available.

11.4 Quality Assurance and Quality Control Programs

Drill hole programs by SLM, CNKO and RML were conducted under written protocols which were very similar and generally derived from the previous operator. Certified standards, blanks and duplicates were part of the protocols. No umpire laboratories have been used.

QA/QC data is available for certified standards and blanks which were routinely inserted into sample batches after 2007.

The standards and blanks analysed suggest the quality of nickel sample preparation and assaying work conducted by the Kalassay during 2008 was not to a high standard with some jobs requiring re-assay. The analysis did not demonstrate any clear bias in the data. Reconciliation of nickel mining by SLM has generally been very good and therefore it is assumed that quality of laboratory work during this time has not impacted materially on the estimation of nickel mineral resources.

Documentation for WMC QA/QC data is potentially held in hard copy at the SLM site however at the time of this report is not available. Reconciliation of nickel mining by SLM has generally been very good and therefore it is assumed that the WMC data is reliable. It is worth noting that WMC were considered to be leaders in the mining industry and had a reputation as a company with high standards.

11.4.1 SLM 2014-2016

All drill hole programs completed by SLM were conducted under the protocols of written procedural standards. Coarse blanks were provided by Geostats. Standards for gold and nickel were provided by Ore Research & Exploration Pty Ltd.

The procedure for insertion of quality control samples is as follows:

- Coarse blank material used should be as close as possible to the sample weights being submitted. The standard blank weight to be used for half core samples is 2 kg, and whole core samples is 4 kg. These can be prepared in blank sample bags and then added to a numbered sample bag during sampling.

- A blank must be inserted at the beginning of the sampling for each drill hole. This ensures there is no contamination between batches. A minimum of one standard and one blank should be inserted at each ore zone within each drill hole.

- Standards should be inserted immediately before the start of the ore zone (and also within the ore zone where the zone is >10 m). The value of the standard inserted should, wherever possible, be of similar grade to the mineralization (as estimated visually).

- Blanks should be inserted immediately after the ore zone or after any area within the ore zone where very high grade is expected.

- The geological technician shall select the specified standard or blank and then re-label the standard or blank with the sample number specified in the drillhole_samp_submission spreadsheet. The standards and blanks shall be sent to the lab with the drill core.

11.4.2 CNKO 2005-2008

All drill hole programs completed by CNKO were conducted under the protocols of written procedural standards. Core recovery was > 99%, and is recorded in RQD logs.

All drill core is geologically logged using codes set up for direct computer input. Rock type, including mineralization intensity and texture, plus structural information are recorded. Zones of sulphide mineralization determined during geological logging are selected for assays.

CNKO initiated routine duplicate sampling in October 2008.

In order to establish the degree of error associated with testing of drill core samples, certified standards and course blanks were placed within each sample batch which represents about 13% of submitted samples. Overall, an acceptable reconciliation exists between assayed and the expected value of standards.

11.4.3 RML 2003-2005

All drill hole programs completed by RML were conducted under the protocols of written procedural standards. The RML procedure for inserting standards and blanks into drill core are:

- Each day after the core has been logged and assay intervals have been specified, the geologist shall specify which standards and blanks are to be inserted into the sample, and at which depths using the drillcore_samp_submission spreadsheet.

- As a general rule, a minimum of 1 standard and 1 blank should be inserted into each ore zone within each hole. If an ore zone is particularly wide (say >10 m) then more than 1 standard may be inserted at the discretion of the geologist.

- The value of the standard inserted should wherever possible be of similar tenor to the mineralization (as estimated visually).

- Standards should be inserted either within the ore zone or immediately before the start of the ore zone.

- Blanks should preferably be inserted within the ore zone or (less preferably) immediately after it. Note that there is no point placing a blank within or immediately after a zone of barren-looking material.

- The geological technician shall select the specified standard or blank and then relabel the standard or blank with the sample number specified in the drillhole_samp_submission spreadsheet.

- The standards and blanks shall be sent to the lab with the drill core.

11.4.4 WMC pre 2003

WMC procedures for logging, sampling, assaying and QA/QC of drill hole programs for gold and nickel are not available at the time of this report. QA/QC data is also not available, however considering their excellent reputation it is assumed drilling, sampling and assaying were carefully managed by WMC.

11.4.5 Quality Control Analysis

To monitor quality from the Bureau Veritas (Kalassay) laboratory in Kalgoorlie there have been 19 certified standards inserted into sample batches since 2008 of which two are blanks. An additional coarse blank has also been used which when submitted is approximately the same weight as routine samples. The standards have been sourced from Ore Research and Exploration Pty Ltd (OREAS).

Should the quality control standard(s) and/or blanks fail the batch may be re-assayed at the discretion of the geologist. Where re-assaying has occurred the quality control standards and blanks are checked again and if passed the data is added to the database.

Two holes were quarter-cored in October 2008 and sent as duplicates to the lab. BE18-219 had an outlier of 17%Ni vs 0.5%Ni for one sample; this has been deemed a sample mix-up and is not included in the results. The comparison shows no bias and an acceptable scatter for a field duplicate of this type.

Descriptions of the quality control standards are summarized in Table 11.1 and blanks in Table 11.2 with the frequency of each sample presented in Table 11.3. Individual graphs of the samples are presented in Appendix A.

Table 11.1: Certified Standards Sample Descriptions - 2008, 2014, 2015

Name	Assay	Expected Value	StdDev	Description
OREAS-10c	Au	6.600	0.160	Gold Ore Reference Material
OREAS-10pb	Au	7.150	0.190	Gold Ore Reference Material
OREAS-15pa	Au	1.020	0.030	Gold Ore Reference Material
OREAS-17c	Au	3.040	0.080	Gold Ore Reference Material
OREAS-17pb	Au	2.560	0.030	Gold Ore Reference Material
OREAS-18pa	Au	3.360	0.100	Gold Ore Reference Material
OREAS-18pb	Au	3.630	0.070	Gold Ore Reference Material
OREAS-204	Au	1.043	0.039	Gold Ore Reference Material
OREAS-208	Au	9.250	0.440	Gold Ore Reference Material
OREAS-61e	Au	4.430	0.150	Gold Ore Reference Material
OREAS-14P	Ni	2.090	0.050	Nickel Sulphide Ore Reference Material
OREAS-72a	Ni	0.693	0.025	Nickel Sulphide Ore Reference Material
OREAS-73a	Ni	1.410	0.020	Nickel Sulphide Ore Reference Material
OREAS-74a	Ni	3.140	0.180	Nickel Sulphide Ore Reference Material
OREAS-75a	Ni	5.110	0.210	Nickel Sulphide Ore Reference Material
OREAS-76a	Ni	7.290	0.230	Nickel Sulphide Ore Reference Material
OREAS-77a	Ni	10.590	0.370	Nickel Sulphide Ore Reference Material

Table 11.2: Blank Sample Descriptions - 2008, 2014, 2015

Name	Assay	Expected Value	StdDev	Description
COARSE BLANK	Au + Ni	0.000	-	Coarse Blank: ½ core from barren basalt
OREAS-22P	Au + Ni	0.000	-	Blank: Quartz
OREAS-24P	Au + Ni	0.000	-	Blank: Basalt

Table 11.3: Quality Control Sample Frequency - 2008, 2014, 2015

Type	Name	Assay	Number	Description
Certified Standard	OREAS-10C	Au	4	Gold Ore Reference Material
Certified Standard	OREAS-10PB	Au	42	Gold Ore Reference Material
Certified Standard	OREAS-14P	Ni	113	Nickel Sulphide Ore Reference Material
Certified Standard	OREAS-15PA	Au	71	Gold Ore Reference Material
Certified Standard	OREAS-17C	Au	32	Gold Ore Reference Material
Certified Standard	OREAS-17PB	Au	30	Gold Ore Reference Material
Certified Standard	OREAS-18PA	Au	7	Gold Ore Reference Material
Certified Standard	OREAS-18PB	Au	29	Gold Ore Reference Material
Certified Standard	OREAS-204	Au	13	Gold Ore Reference Material
Certified Standard	OREAS-208	Au	5	Gold Ore Reference Material
Certified Standard	OREAS-61E	Au	27	Gold Ore Reference Material
Certified Standard	OREAS-72A	Ni	259	Nickel Sulphide Ore Reference Material
Certified Standard	OREAS-73A	Ni	85	Nickel Sulphide Ore Reference Material
Certified Standard	OREAS-74A	Ni	42	Nickel Sulphide Ore Reference Material
Certified Standard	OREAS-75A	Ni	108	Nickel Sulphide Ore Reference Material
Certified Standard	OREAS-76A	Ni	36	Nickel Sulphide Ore Reference Material
Certified Standard	OREAS-77A	Ni	84	Nickel Sulphide Ore Reference Material
Blank	COARSE BLANK	Au, Ni	869	Coarse Blank: ½ core from barren basalt
Blank	OREAS-22P	Au, Ni	106	Blank: Quartz. Certified Blank Standard
Blank	OREAS-24P	Au, Ni	277	Blank: Basalt. Certified Blank Standard
Duplicate	N/A	Ni	46	¼ Core of drill holes BE18-217, BE18-219
TOTAL			**2,286**	

Certified Standards Analysis

Standards and blanks are reviewed at the time of assay return from the laboratory with the geologist determining whether the quality control samples have passed and therefore the batch of assays is accepted. This is done by reviewing all standards and blanks submitted with a batch in unison. The results presented here are from batches which have passed.

A total of 987 standards have been used with summary statistics for each standard presented in Appendix A. An example of the summary statistics for one of the gold standards, OREAS-15PA (Figure 11.1), and one of the nickel standards, OREAS-72A (Figure 11.2) is shown here as a summary.

Figure 11.1: Gold Certified Standard Analysis for OREAS-15PA

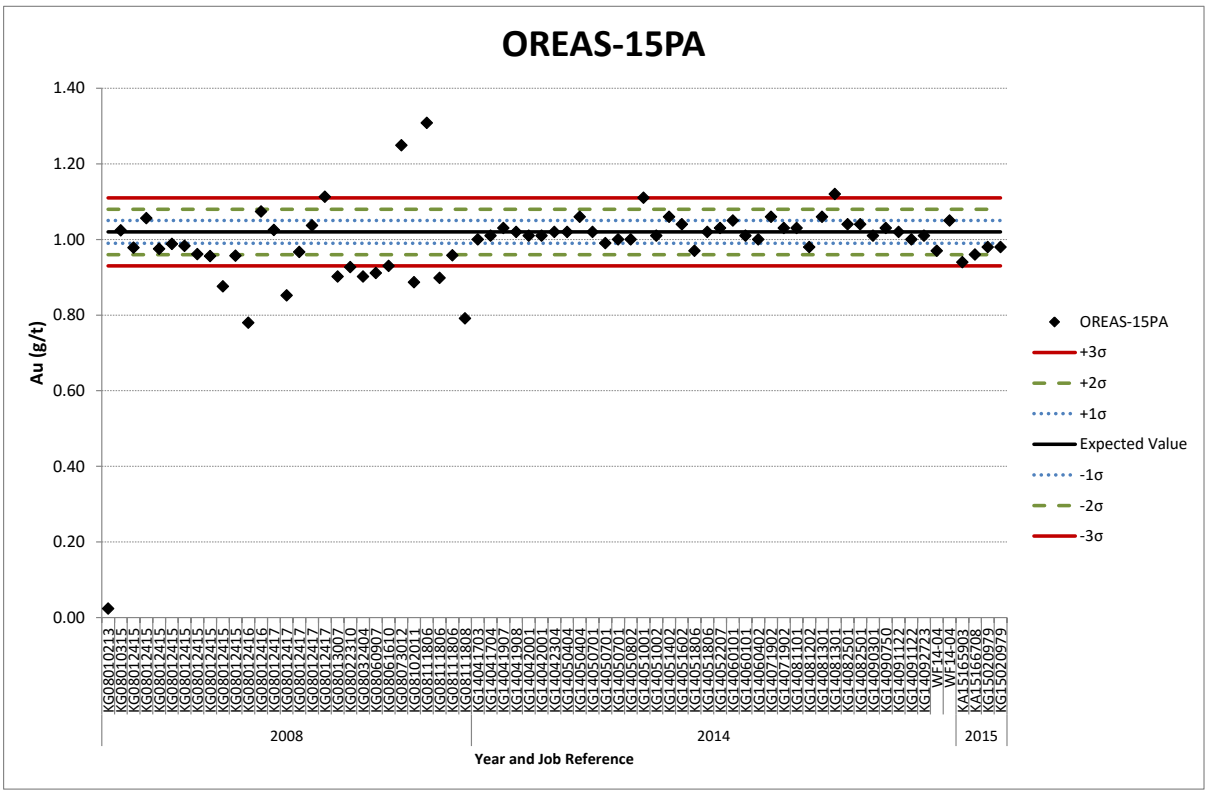
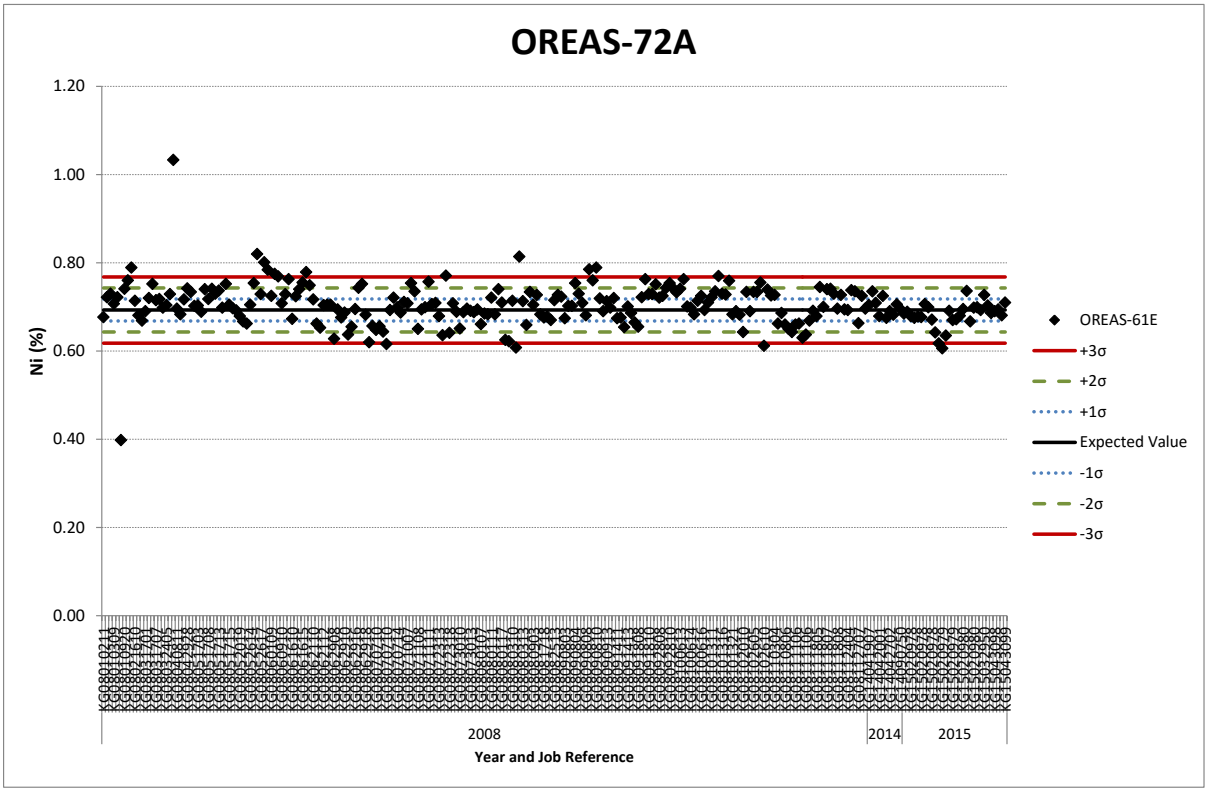


Figure 11.2: Nickel Certified Standard Analysis for OREAS-72A



Blank Analysis

Standards and blanks are reviewed at the time of assay return from the laboratory with the geologist determining whether the quality control samples have passed and therefore the batch of assays is accepted. This is done by reviewing all standards and blanks submitted with a batch in unison. The results presented here are from batches which have passed. The blanks analysed for gold are presented in Figure 11.3 with nickel analysis in Figure 11.4.

Figure 11.3: Gold Analysis Blanks

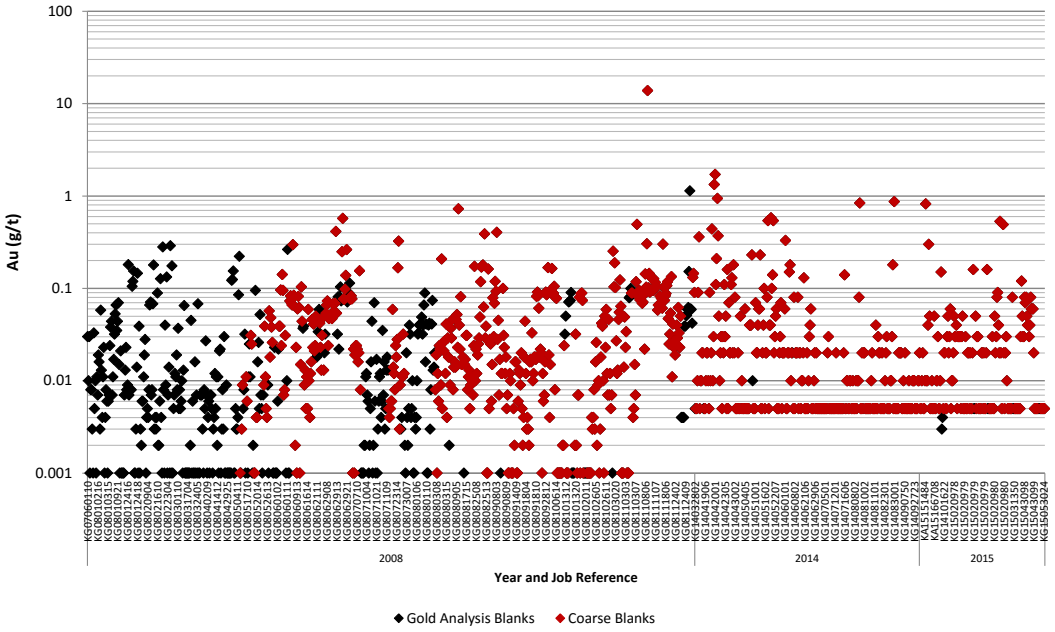
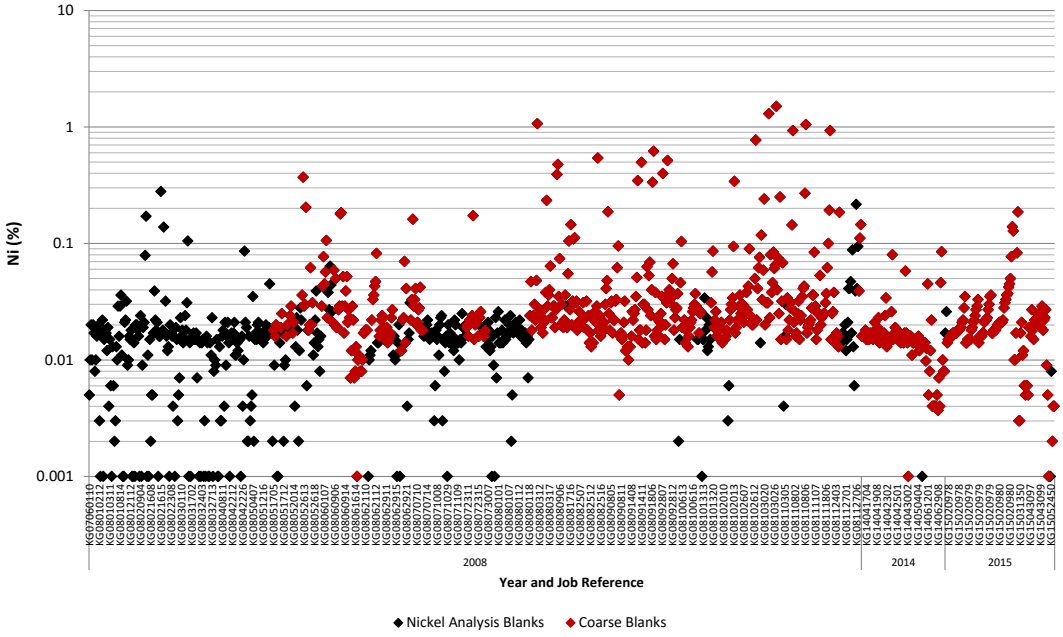


Figure 11.4: Nickel Analysis Blanks



Duplicate Analysis

Two holes were quarter-cored in October 2008 and sent as duplicates to the lab. BE18-219 had an outlier of 17% Ni vs 0.5% Ni for one sample; this has been deemed a sample mix-up and is not included in the results.

Table 11.4 presents the summary statistics of the original versus ¼ core field duplicates and Table 11.5 presents the summary bivariate statistics which indicate a good correlation between the original and duplicate assays.

Figure 11.5 shows the scatterplot of original versus duplicate assays with the ±10% thresholds and the line of parity indicated. Figure 11.6 shows the precision for the duplicates.

The comparison statistics and graphs do not indicate any bias and the data shows an acceptable scatter for a field duplicate of this type with 89% of pairs falling with a 20% precious tolerance.

Table 11.4: Summary Statistics of $^1/_4$ Core Field Duplicates

Statistic	Original	Duplicate	% Difference
Number of data	46	46	0%
Minimum	0.007	0.005	-29%
Maximum	5.46	5.50	1%
Mean	0.29	0.32	7%
First quartile	0.02	0.01	-11%
Median	0.07	0.07	1%
Third quartile	0.32	0.32	2%
Skewness	6.00	5.84	-3%
Standard deviation	0.81	0.82	1%
Coeff. of variation	2.75	2.61	-5%

Table 11.5: Summary Bivariate Statistics of $^1/_4$ Core Field Duplicates

Statistic	Value
Correlation	99.84%
Slope	101.25%
R^2	99.69%
Intercept	-0.015
Mean Abs Diff %	22.3%
Mean diff %	0.0%
Relative Std Dev %	32.7%
95% Rel Conf.	64.1%
Pair Mean Relative Differences	
Relative Difference	% of data
± 1%	10.9%
± 5%	32.6%
± 10%	54.3%
± 20%	89.1%
± 50%	97.8%
± 100%	100.0%

Figure 11.5: Scatterplot of Original versus $^{1}/_{4}$ Core Field Duplicates

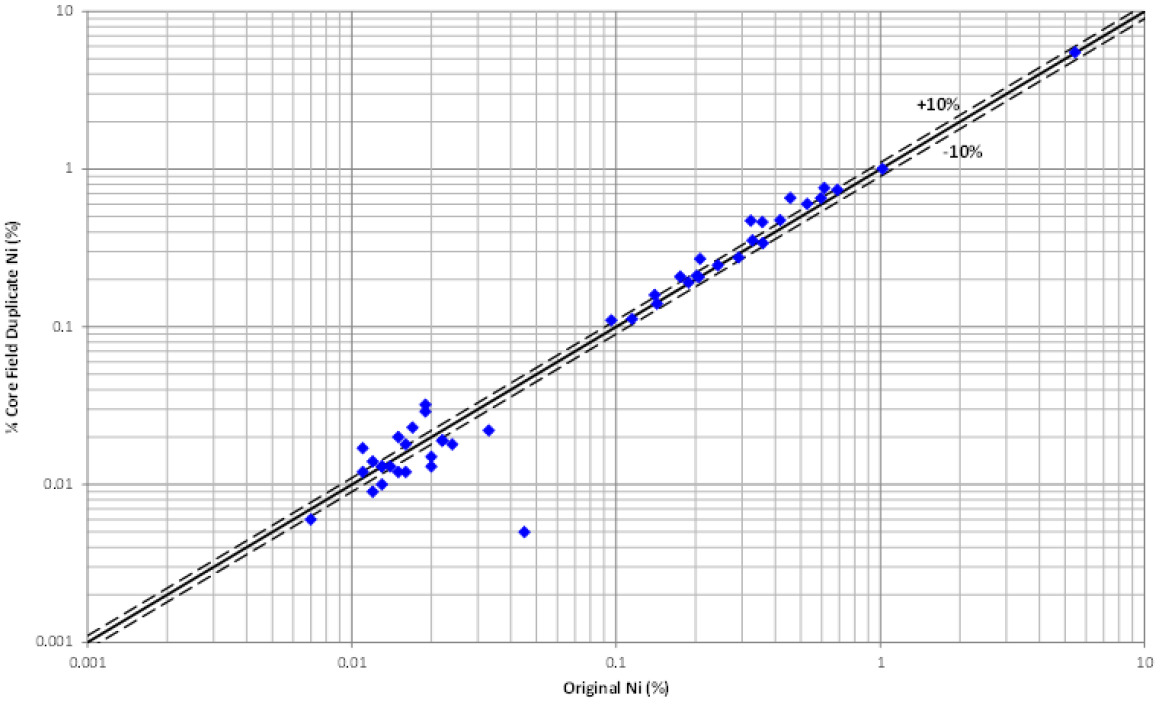
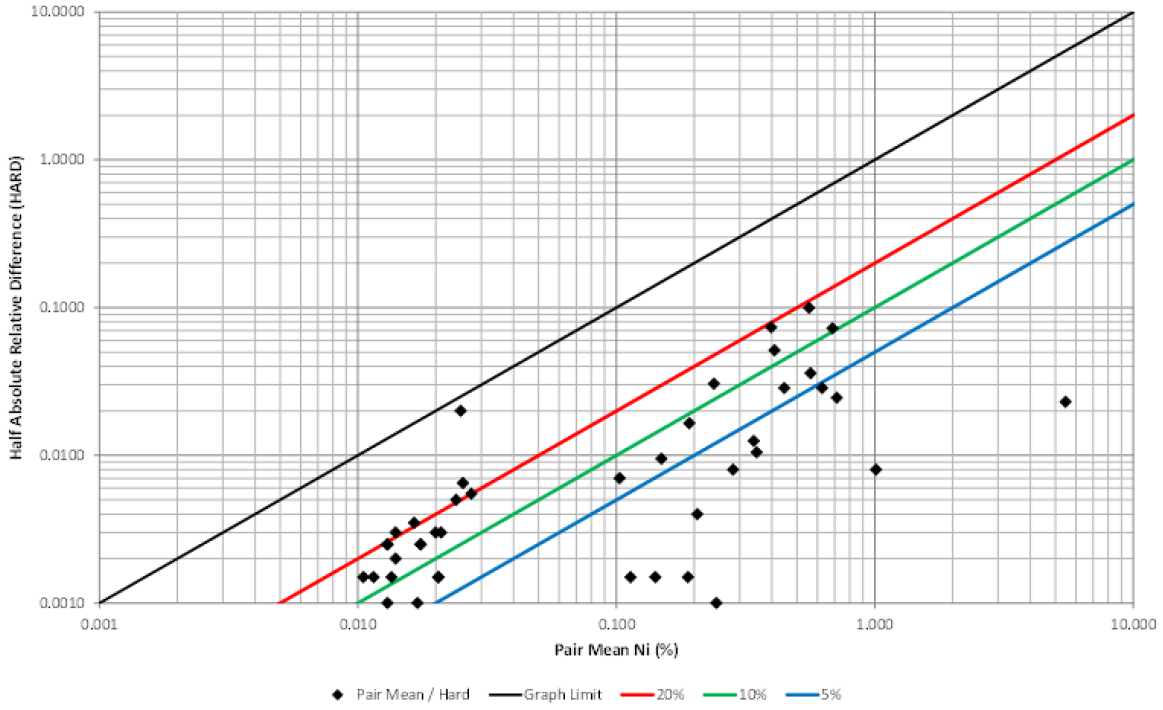


Figure 11.6: Precision Plot of $^{1}/_{4}$ Core Duplicates



11.5 Database Integrity

All data is stored in the Microsoft Access file Kambalda Master.mdb.

Current drilling and sampling carried out by SLM is sampled and analysed according to written procedures. The current SLM data upload including, collar locations and assays have checks during the import process. The checks enable the upload to be cancelled if errors are encountered. Drill hole logging is conducted on a Microsoft access logging database with internal referential validation matching the referential integrity rules within the main database, the intervals selected for sampling are then validated against the returned assays results. Downhole survey data is checked in an excel spreadsheet prior to uploading and again visually inspected and validated within the validation table once assays and geology are uploaded. Part of the validation procedure for down holes surveys and logging is to perform a visual check of the de-surveyed holes in Datamine or Surpac software. The software also provides validation functions which are utilized.

Once assays are returned from the lab, the data is stored in a network location in preparation for importing. The import process involves checks of the standard and blank performance against set pass/fail parameters. If either QA/QC element fails, the data is not imported into the database. The error that has occurred is either fixed in house i.e., type error on standard number or the lab is contacted for another analysis. The re-assay follows the same procedure and if all the QA/QC passes, the assay data is then imported into the database.

Historical data within the database has not all been validated to the same level as recent data (post 2008). A validation table exists within the database generated automatically for all new data as described previously. Any drilling used for mineral resource estimation is manually added and verified within this validation table and any errors or issues highlighted and fixed. Drill holes with major errors that cannot be rectified are highlighted as such and not used in any estimation.

11.6 Sampling Preparation, Analyses and Security Summary

The Qualified Person considers the sampling preparation, security, and analytical procedures to be adequate. Any data which has errors has either been corrected or excluded to ensure data used for mineral resource estimation is reliable.

12 Data Verification

12.1 Verifications by Haren Consulting

Ms Haren has completed site visits to the Beta Hunt mine on October 22-23, 2014, January 27-28 2015 and July 7-8, 2015. During the site visits, Ms Haren discussed diamond drilling procedures and carried out a review of the on-site logging and sampling facilities for processing the drill core. Ms Haren visited some underground nickel mining headings and observed air leg mining taking place. Comparison of the ore being mined and the tenor of the drill holes in the area confirmed qualitatively the presence of nickel ore.

12.1.1 Database Verifications

Drill hole programs by Salt Lake Mining, Consolidated Minerals and Reliance Operations were conducted under written protocols which were very similar and generally derived from the previous operator. Drill hole logging is directly entered into a pro-forma spreadsheet using a Toughbook. Logging data and assay data are put through a number of checks to ensure validity before being uploaded into the master Access database.

Haren is of the opinion that the database is acceptable and sufficiently reliable for mineral resource estimation.

12.2 Verifications of Analytical Quality Control Data

SLM made available to Haren Consulting analytical control data as Microsoft Excel spreadsheets containing the assay results for the quality control samples including field blanks, field duplicates, certified reference material and pulp blanks.

Haren Consulting aggregated the assay results for the external quality control samples for further analysis. The gold and nickel variables were examined. Sample blanks and certified reference materials data were summarized on time series plots to highlight the performance of the control samples. The paired field duplicate data were analyzed using bias charts and relative precision plots. The analytical quality control data available for the Beta Hunt project are summarized in Table 12.1 and presented in graphical form in the Appendices.

The external analytical quality control data produced for this project represents approximately 14% of the total number of samples submitted for assaying since 2008 (Table 12.1).

Table 12.1: Summary of Analytical Quality Control Data

Sampling Program	2008		2014-2015		Total		Comment
	Num	%	Num	%	Num	%	
Sample count	9,159		7,008		16,167		There are 513,699 assayed samples in the database
Field blanks	427	4.7%	442	6.3%	869	5.4%	Coarse basalt blank ½ core from barren basalt
Standards	687	7.5%	300	4.3%	987	6.1%	All standards
OREAS-10C	0	0.0%	4	0.1%	4	0.0%	Gold Ore Reference Material
OREAS-10PB	5	0.1%	37	0.5%	42	0.3%	Gold Ore Reference Material
OREAS-14P	92	1.0%	21	0.3%	113	0.7%	Magmatic Massive Sulphide Ore
OREAS-15PA	29	0.3%	42	0.6%	71	0.4%	Gold Ore Reference Material
OREAS-17C	0	0.0%	32	0.5%	32	0.2%	Gold Ore Reference Material
OREAS-17PB	18	0.2%	12	0.2%	30	0.2%	Gold Ore Reference Material
OREAS-18PA	6	0.1%	1	0.0%	7	0.0%	Gold Ore Reference Material
OREAS-18PB	0	0.0%	29	0.4%	29	0.2%	Gold Ore Reference Material
OREAS-204	0	0.0%	13	0.2%	13	0.1%	Gold Ore Reference Material
OREAS-208	0	0.0%	5	0.1%	5	0.0%	Gold Ore Reference Material
OREAS-61E	0	0.0%	27	0.4%	27	0.2%	Gold Ore Reference Material
OREAS-72A	219	2.4%	40	0.6%	259	1.6%	Nickel Sulphide Ore Reference
OREAS-73A	80	0.9%	5	0.1%	85	0.5%	Nickel Sulphide Ore Reference
OREAS-74A	38	0.4%	4	0.1%	42	0.3%	Nickel Sulphide Ore Reference
OREAS-75A	86	0.9%	22	0.3%	108	0.7%	Nickel Sulphide Ore Reference
OREAS-76A	36	0.4%	0	0.0%	36	0.2%	Nickel Sulphide Ore Reference
OREAS-77A	78	0.9%	6	0.1%	84	0.5%	Nickel Sulphide Ore Reference
Field duplicates	46	0.5%	0	0.0%	46	0.3%	Quarter Core of two holes
Pulp blanks	0	0.0%	0	0.0%	0	0.0%	CRM OREAS-22P and OREAS-24P
Total QC Samples	**366**	**4.0%**	**17**	**0.2%**	**383**	**2.4%**	

Overall, Haren considers that analytical quality control data reviewed suggest that the assay results delivered by the Kalassay laboratory used by SLM are sufficiently reliable for the purpose of mineral resource estimation. The data sets examined by Haren do not present obvious evidence of analytical bias.

The proximity of recent drill holes (2008-2015) to older drill holes (pre 2008) and their similar geology and grade suggests the older sample data is sufficiently reliable.

12.3 Independent Verification Sampling

Haren Consulting has not undertaken any independent verification sampling.

Ms Haren has reviewed the reconciliation of nickel ore mined compared to drill hole intercepts, modelled mineralization and grade estimates. The generally good reconciliation lends veracity to

the drill hole assay values. It is not anticipated that the gold data will be of different quality to the nickel data.

Verification of historic WMC/Relance Operations significant drill intersections was undertaken by Consolidated Minerals/Reliance Operations Ltd in preparing their 2005 Mineral Resource Estimate for the Beta Hunt Gold Deposits, Kambalda, Western Australia as part of the 2004 JORC compliance guidelines. Salt Lake Mining have subsequently undertaken desktop verification of results selectively checking significant intersections against geology, existing mine development and more recent Salt Lake Mining drill intersections as part of the Western Flanks resource estimate in 2015. As part of this exercise, all mineralized drill intersections were visually verified by and Salt Lake Mining geologist on-site during the drill hole validation process.

The Qualified Person considers the sample preparation, security, and analytical procedures to be adequate to estimate the Mineral Resources for gold and nickel at Beta Hunt contained in this report.

13 Mineral Processing and Metallurgical Testing

Beta Hunt is an operating mine with separate tolling contracts in place for processing of nickel and gold ores. Elements of these contracts that relate to the metallurgical performance of Beta Hunt mineralization are summarized below. Further discussion of these contracts is included in section 19.

13.1 Nickel Processing

Since ownership by WMC, nickel ore from Beta Hunt has been processed at the nearby KNC that is currently owned by BHPB. As a result, the quality, variability and metallurgical response for this material is well understood. The mineralization is considered to be typical for the area and is blended with ores from other mines. As it would not be possible to measure the metallurgical recovery of Beta Hunt material within the blend, recovery is credited based on the grade of material treated as per the contractual agreement between BHPB and SLM.

The nickel mineralization also contains limited quantities of both copper and cobalt. Copper is recovered by KNC in sufficient quantities for SLM to receive some credit. However, as the resource statement does not include a copper grade estimate, no accounting for copper has been made in this PEA. SLM is given no credit for cobalt.

The nickel mineralization is considered 'clean' as it has low levels of deleterious elements, specifically:

- Arsenic (As) levels currently average < 20 ppm, compared to the penalty threshold of 400 ppm, and
- The Fe : MgO ratio is well above the threshold level of 0.8, below which penalties are charged.

The low levels of deleterious elements make Beta Hunt mineralization attractive to BHPB, as it is blended with their own ores containing much higher concentrations of As in order to produce an acceptable feed to the KNS.

13.2 Gold Processing

The Beta Hunt gold mineralization is processed by SIGMC through the nearby Lefroy Mill. Material is treated in batches of between 10 – 50 kt and SLM is credited with the actual recovery achieved. To date, two batches have been processed. The initial batch treated in December 2015 achieved a 96% recovery while the second batch in January 2016 achieved a 94% recovery.

Recovery for January is in line with the average performance of other gold ores in the region and 94% has been used as the basis for forecasting future production.

14 Mineral Resource Estimates

14.1. Introduction

The Mineral Resource Statement presented herein represents the mineral resource estimates prepared for the Beta Hunt Mine in accordance with the Canadian Securities Administrators' National Instrument 43-101.

Block model quantities and grade estimates for the Beta Hunt project were classified according to the CIM *Definition Standards for Mineral Resources and Mineral Reserves* (May 2014) by the SLM geology team and are endorsed by Elizabeth Haren MAusIMM CPGeo who is an appropriate independent Qualified Person for the purpose of National Instrument 43-101.

The effective date of the Mineral Resource Statement is February 1, 2016.

This section describes the resource estimation methodologies and summarizes the key assumptions considered. In the opinion of the author, the resource estimation reported herein is a reasonable representation of the global nickel and gold mineral resources found in the Beta Hunt Mine at the current level of sampling. The mineral resources have been estimated in conformity with generally accepted CIM Estimation of Mineral Resource and Mineral Reserves Best Practices Guidelines and are reported in accordance with the Canadian Securities Administrators' National Instrument 43-101. Mineral resources are not mineral reserves and have not demonstrated economic viability. There is no certainty that all or any part of the mineral resource will be converted into mineral reserve.

The database used to estimate the Beta Hunt Mine mineral resources was audited by Haren Consulting. Haren Consulting is of the opinion that the current drilling information is sufficiently reliable to interpret with confidence the mineralization envelopes for gold and nickel and that the assay data are sufficiently reliable to support mineral resource estimation.

Both Surpac and Datamine software was used to construct the geological and mineralization solids, prepare assay data for geostatistical analysis, construct the block model, estimate metal grades, and tabulate mineral resources. Snowden Supervisor software was used for geostatistical analysis and variography.

14.2. Resource Estimation Procedures

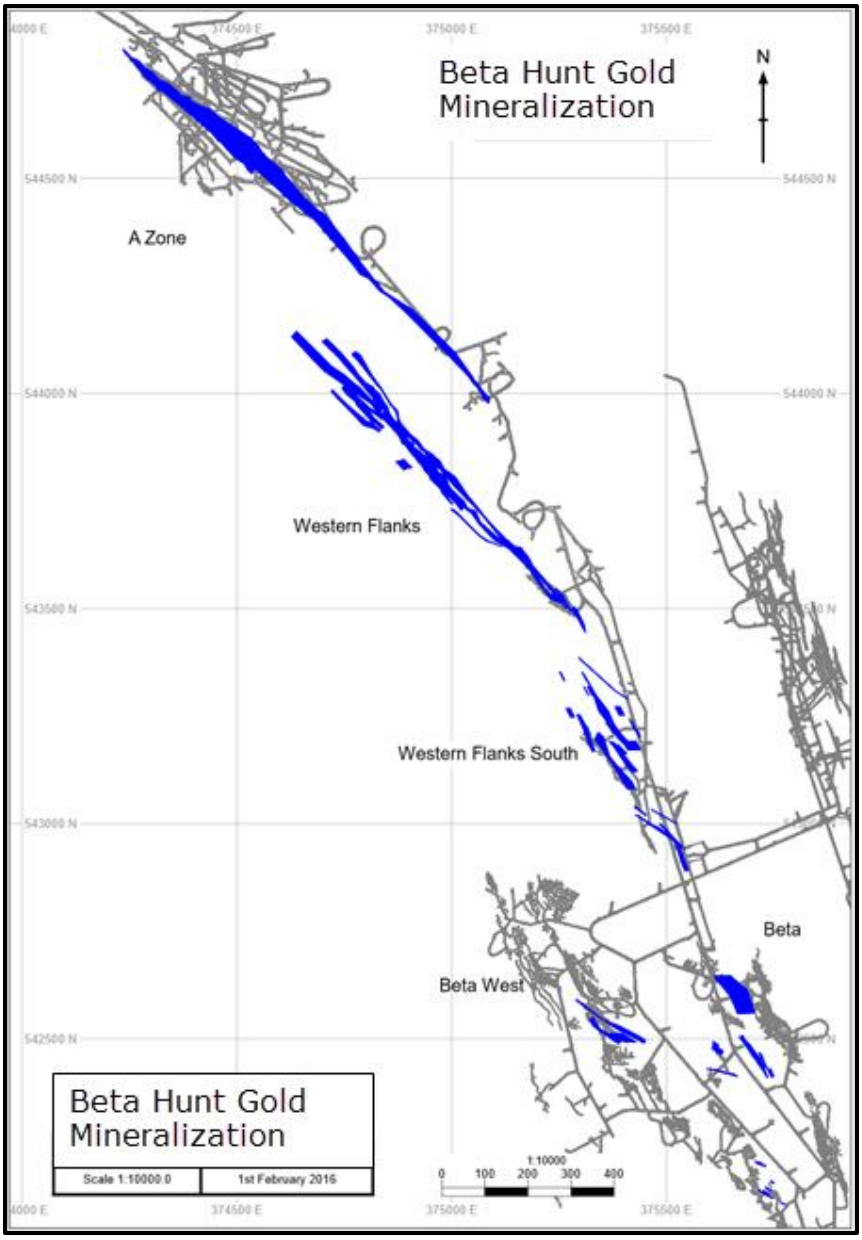
The resource estimation methodology involved the following procedures:

- Database compilation and verification,
- Construction of wireframe models for the mineralization envelopes,
- Definition of estimation domains,
- Data conditioning (compositing and capping) for geostatistical analysis and variography,
- Block modelling and grade interpolation,

- Resource classification and validation,
- Assessment of "reasonable prospects for eventual economic extraction" and selection of appropriate cut-off grades, and
- Preparation of the Mineral Resource Statement

There are three estimation areas that make up the total Beta Hunt gold mineral resource which are illustrated in the plan view location plot in Figure 14.1: A Zone, Western Flanks, and Beta.

Figure 14.1: Beta Hunt Gold Mineral Resource Locations

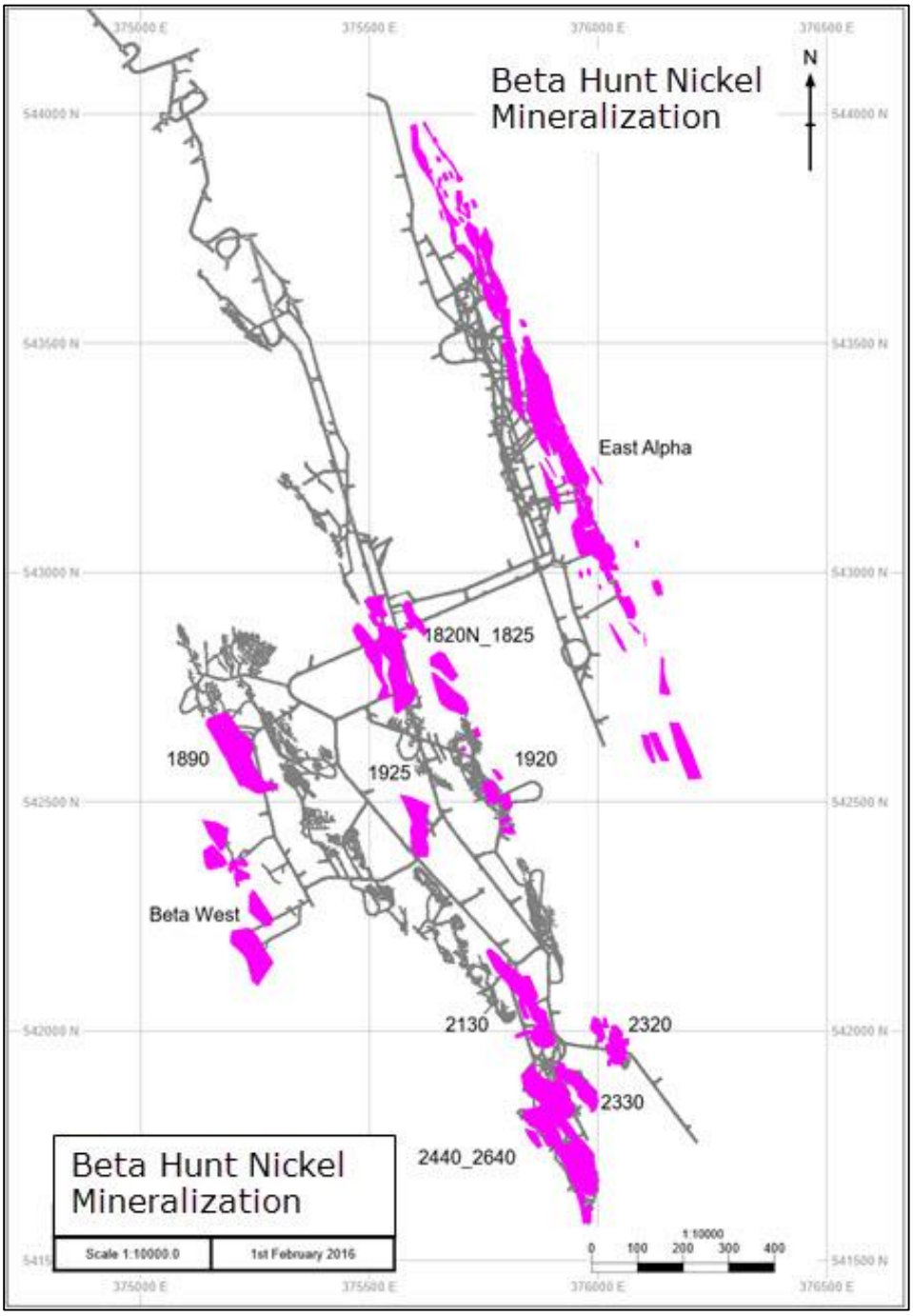


Source: Haren Consulting

While the gold mineralization in each area is intrinsically linked the three areas have been modelled at different times using slightly different methodologies which are discussed in the following sections.

There are ten estimation areas that make up the total Beta Hunt nickel mineral resource which are illustrated in the plan view location plot in Figure 14.2: 1820N_1825, 1890, 1920, 1925, 2130, 2320, 2330, 2440-2640, Beta West, and East Alpha.

Figure 14.2: Beta Hunt Nickel Mineral Resource Locations



Source: Haren Consulting

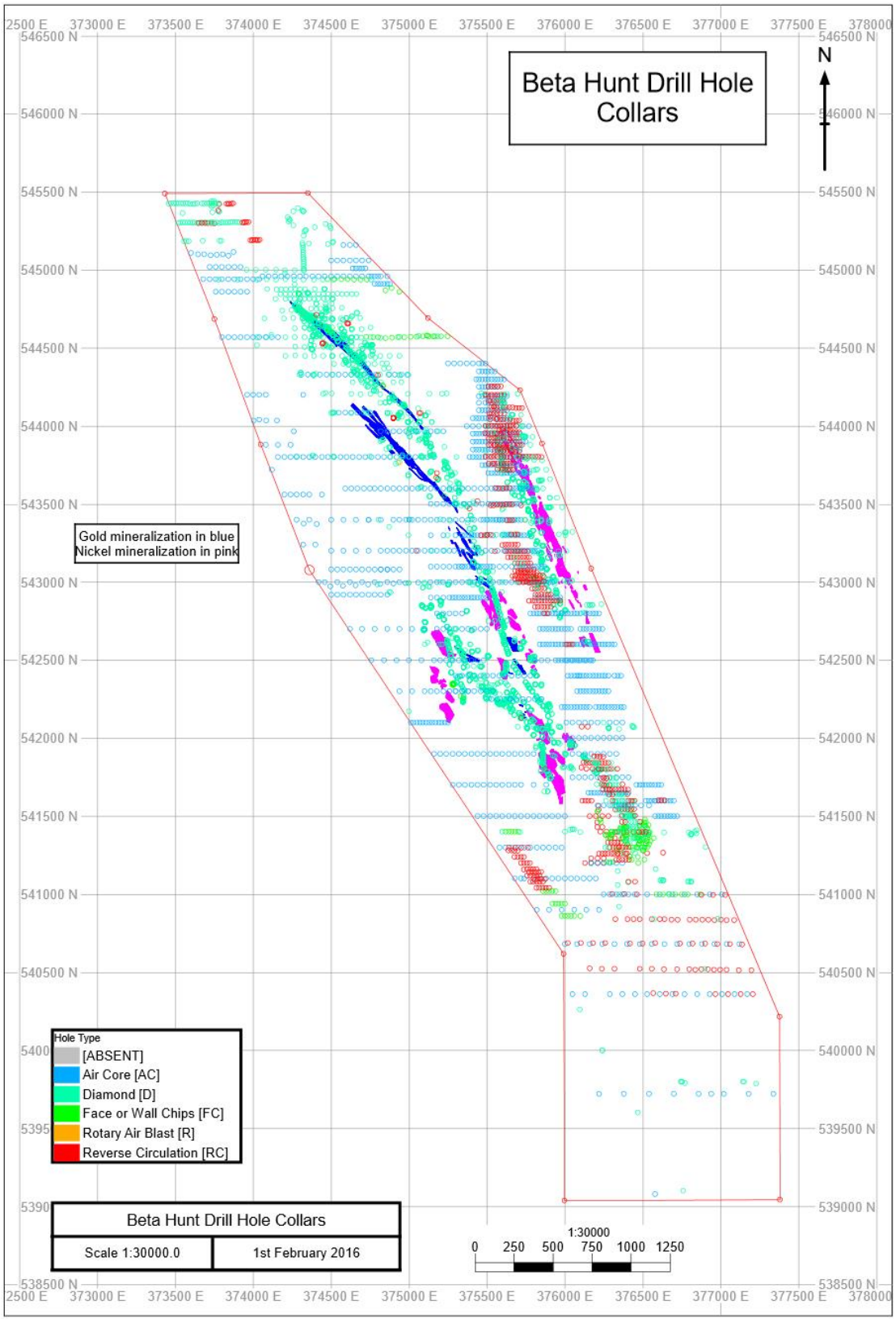
14.3. Resource Database

The Beta Hunt data is contained in an access database Kambalda_Master.mdb. At the effective date of the Mineral Resources, this database contains over 5,000 drill holes for approximately 700,000 metres within the Sub-Lease boundary as presented in Table 14.1 and illustrated in Figure 14.3. The data used for each estimate is discussed for each mineral resource area in the following sections.

Table 14.1: Beta Hunt Database

Hole Type	Code	Number	Metres
Air Core	AC	1,072	37,662
Diamond	D	3859	567,415
Face or wall chip	FC	29	164
Percussion	P	155	13,315
Rotary Air Blast	R	6	289
Reverse Circulation	RC	571	56,151
Total		**5,692**	**674,996**

Figure 14.3: Beta Hunt Drill Holes Collars



Source: Haren Consulting

14.3.1. Gold

Drilling was conducted at A Zone by Western Mining Corporation (WMC) from 1978 to 1998 and Salt Lake Mining (SLM) in 2014. In November 2015, SLM added some back samples and Rotary Air Blast drill holes to help with the confirmation of the grade estimate in a planned stope on 1221. A summary of the data used for estimation within the A Zone area is shown in Table 14.2. Note that these drill holes are only those used for the A Zone estimation.

Table 14.2: Data used for Estimation of Gold for A Zone

Company	Type	Code	Number	Proportion	Metres	Proportion
WMC	Diamond	D	213	80%	18,908	82%
1978 -1998	Face or wall chip	FC	0	0%	0	0%
	Rotary Air Blast	R	4	2%	131	1%
SLM	Diamond	D	32	12%	3,948	17%
2014 - 2015	Face or wall chip	FC	17	6%	101	0%
	Rotary Air Blast	R	0	0%	0	0%
Total			**266**		**23,088**	

Drilling was conducted at Western Flanks in several phases by several operators beginning with WMC from 1981 to 1998, Reliance Mining Limited (RML) in 2004, Consolidated Nickel Kambalda Minerals (CNKO) in 2006 and 2007, then infill drilling by SLM in 2014. A summary of the drilling data which has been used for estimation of Western Flanks area is shown in Table 14.3. Note that these drill holes are only those used for Western Flanks estimation.

Table 14.3: Data Used for Estimation of Gold for Western Flanks

Company	Type	Code	Number	Proportion	Metres	Proportion
WMC 1981 – 1998	Diamond	D	46	41%	12,978	45%
RML 2004	Diamond	D	19	17%	1,742	6%
CNKO 2006 – 2007	Diamond	D	15	13%	4,852	17%
SLM 2014	Diamond	D	33	29%	9,437	33%
Total			**113**		**29,009**	

A summary of the drilling data, which has been used for estimation of Beta area, is shown in Table 14.4.

Table 14.4: Data Used for Estimation of Gold for Beta

Company	Type	Code	Number	Proportion	Metres	Proportion
WMC 1993-1999	Diamond	D	65	58%	14,720	51%
RML 2004-2005	Diamond	D	33	29%	9,437	33%
Total			**98**		**24,157**	

14.3.2. Nickel

Drilling was conducted for nickel by WMC from 1970 to 2003, RML from 2003 to 2005, CNKO from 2005 to 2008 and SLM from 2014 to 2015.

A summary of the data used for estimation of each nickel area is shown in Table 14.5. Note that these drill holes are only those used for estimation. Additional holes surrounding the currently defined Mineral Resource were used for interpretation.

Table 14.5: Data Used for Estimation of Nickel by Area

Area	Company	Type	Code	Number	Proportion	Metres	Proportion
1820N 1825	WMC	Diamond	D	7	10%	3,081	28%
	RML	Diamond	D	4	6%	497	5%
	CNKO	Diamond	D	57	84%	7,435	68%
	Total			**68**		**11,013**	
1890	WMC	Diamond	D	1	4%	751	20%
	CNKO	Diamond	D	27	96%	2,995	80%
	Total			**28**		**3,746**	
1920	RML	Diamond	D	2	10%	322	22%
	CNKO	Diamond	D	19	90%	1,128	78%
	Total			**21**		**1,450**	
1925	WMC	Diamond	D	2	10%	1,394	65%
	RML	Diamond	D	15	75%	675	31%
	CNKO	Diamond	D	3	15%	76	4%
	Total			**20**		**2,145**	
2130	WMC	Diamond	D	3	7%	1,346	31%
	RML	Diamond	D	4	10%	297	7%
	CNKO	Diamond	D	35	83%	2,729	62%
	Total			**42**		**4,371**	
2320	WMC	Diamond	D	1	3%	564	15%
	CNKO	Diamond	D	30	97%	3,267	85%
	Total			**31**		**3,831**	
2330	CNKO	Diamond	D	13	100%	1,062	100%
	Total			**13**		**1,062**	
2540	CNKO	Diamond	D	68	100%	6,310	100%
	Total			**68**		**6,310**	
Beta West	CNKO	Diamond	D	45	100%	8,071	100%
	Total			**45**		**8,071**	
East Alpha	WMC	Diamond	D	17	4%	7,643	11%
	RML	Diamond	D	8	2%	4,405	7%
	CNKO	Diamond	D	373	94%	55,558	82%
	Total			**398**		**67,606**	

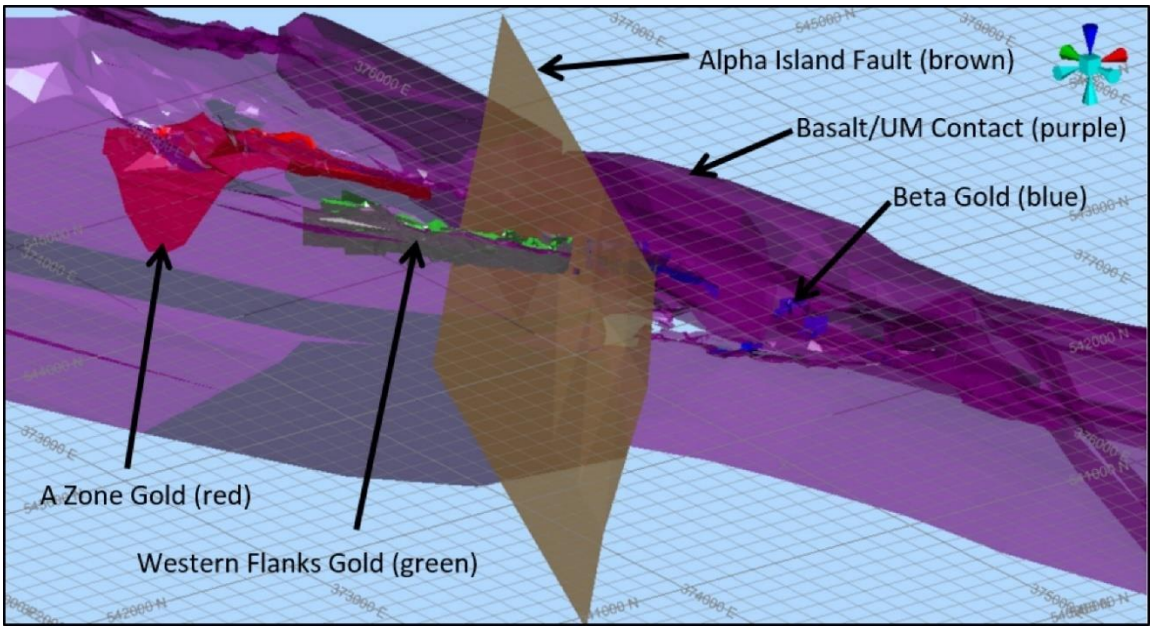
14.4. Solid Body Modelling

The most significant geological features related to both gold and nickel mineralization occurrences at the Beta Hunt project are the Alpha Island Fault and the contact between the basalt and ultramafic rock types. Whether a model is being constructed for gold or nickel mineralization these two features are routinely checked and wireframes updated when intersected by drilling or underground workings.

There are numerous barren porphyry intrusions that dissect mineralization which are also routinely interpreted and wireframed.

An isometric view of the occurrence of the basalt / ultramafic contact and the alpha island fault with gold mineralization is shown in Figure 14.4.

Figure 14.4: Isometric view of the Basalt/Ultramafic Contact and the Alpha Island Fault



Source: Haren Consulting

14.4.1. Gold

For the construction of the gold mineralization envelopes, drill hole cross sections were evaluated at nominal 25 m intervals depending on the density of drilling. All available assay and lithology data from the drill holes were used to generate string interpretations of the mineralization. Underground workings and surveyed faces are also used to interpret mineralization.

Mineralization envelopes are interpreted in cross section by application of a nominal 0.5 g/t gold cut-off. The interpreted geometry of the gold mineralization is of relatively continuous mineralization therefore some intersections of lower grade mineralization are incorporated to ensure continuity and consistency of the envelopes. Strings are snapped to drill hole intersections.

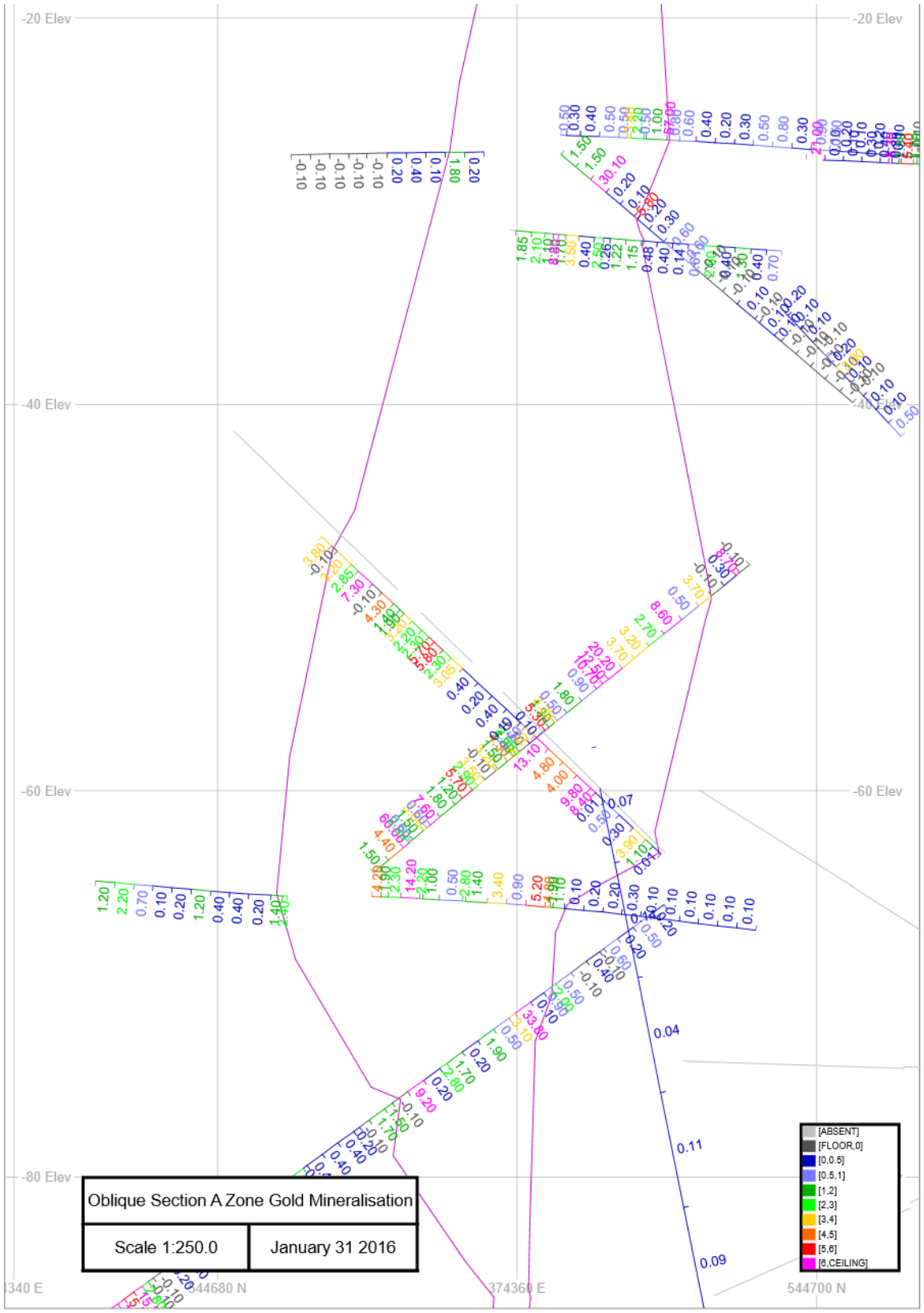
The interpreted sectional mineralization outlines were manually triangulated to form three-dimensional wireframes. To form ends to the wireframes, the end section strings were copied to a position midway to the next section or up to a maximum of 20 m in broad spaced areas and adjusted to match the dip, strike and plunge of the zone.

Validations of the wireframes are carried out in section and plan view, and checks for errors in wireframe construction are performed.

The wireframes are used to code the drill holes with a numeric domain value and these are also manually validated to ensure correct interval selection.

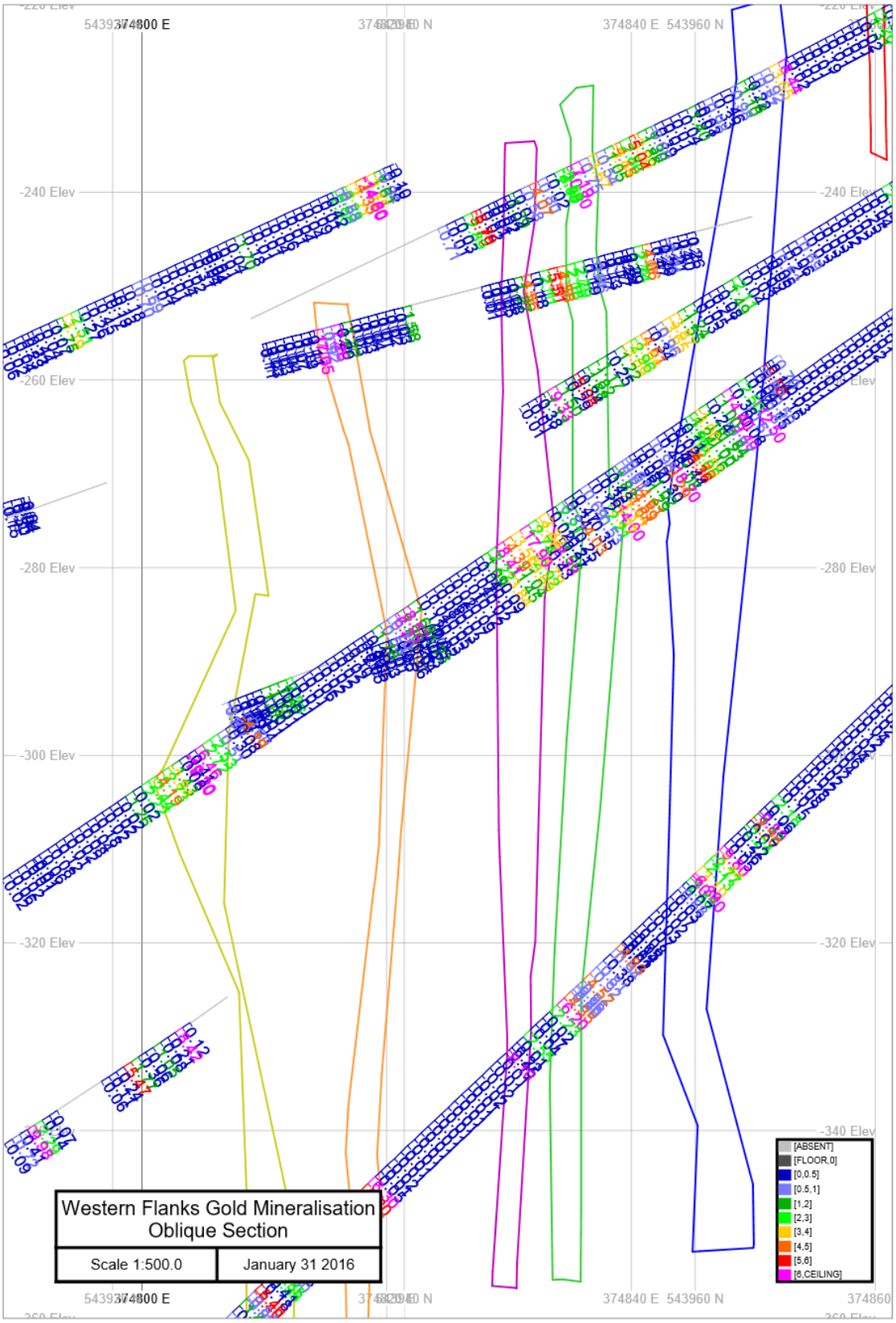
Figure 14.5 shows a cross section through the A Zone gold mineralization interpretation, Figure 14.6 though the Western Flanks gold mineralization interpretation and Figure 14.7 though the Beta gold mineralization interpretation.

Figure 14.5: Example Section of A Zone Gold Mineralization



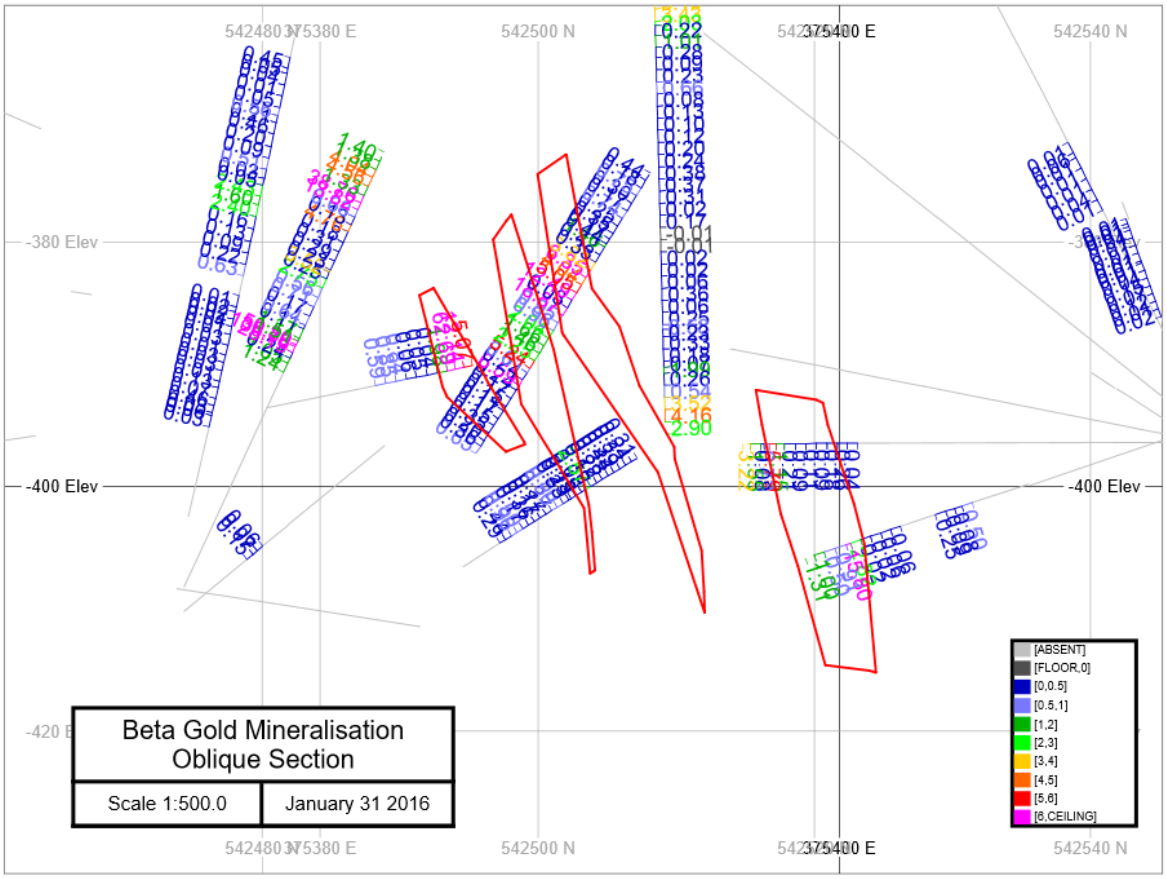
Source: Haren Consulting

Figure 14.6: Example Section of Western Flanks Gold Mineralization



Source: Haren Consulting

Figure 14.7: Example Section of Beta Gold Mineralization



Source: Haren Consulting

14.4.2. Nickel

For the construction of the nickel mineralization envelopes drill hole cross sections were evaluated at nominal 25 m intervals depending on the density of drilling. All available assay and lithology data from the drill holes were used to generate string interpretations of the mineralization. Underground workings and surveyed faces are also used to interpret mineralization.

Mineralization envelopes are interpreted in cross section by application of a nominal 1% Ni cut-off however this is not prescriptive as the nickel mineralization geological boundaries is generally visually obvious. The nickel mineralization occurs as troughs at the contact between basalt and ultramafic therefore sectional interpretation is oriented to the most favourable direction for interpretation. The geometry of the troughs is defined by basalt/basalt punch-out points, basalt hoods, and the geological relationships as understood from similar deposits. Some intersections of lower grade mineralization are incorporated to ensure continuity and consistency of the envelopes.

All mineralized intervals selected for the purposes of modelling were validated against the logging and core photographs, with the hangingwall and footwall contacts generally defined by the presence/absence of quartz-feldspar veining and biotite-pyrite-pyrrhotite alteration. Generally, this contact is coincident with a sharp grade cut-off, while other times it can be slightly more diffuse from mineralized to non-mineralized down the hole in which case the boundary is selected based on geology as much as possible.

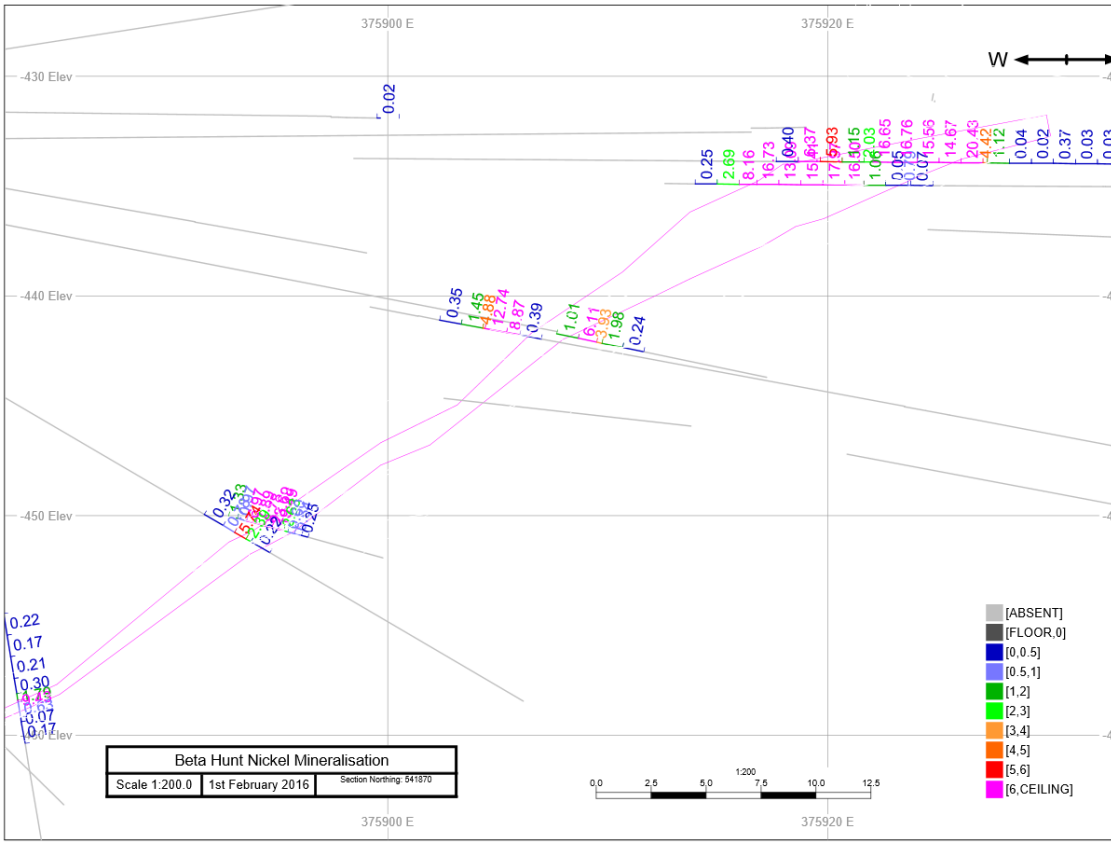
The interpreted sectional mineralization outlines were manually triangulated to form three-dimensional wireframes. To form ends to the wireframes, the end section strings were copied to a position midway to the next section or up to a maximum of 20 m in broad spaced areas and adjusted to match the dip, strike and plunge of the zone.

Validations of the wireframes are carried out in section and plan view, and checks for errors in wireframe construction are performed.

The wireframes are used to code the drill holes with a numeric domain value and these are also manually validated to ensure correct interval selection.

An example section through nickel mineralization from the 2440-2640 area is shown in Figure 14.8 with drill hole nickel grades annotated.

Figure 14.8: Nickel 2240-2640 Mineralization



Source: Haren Consulting

14.5. Compositing

The compositing process was tailored to suit the mineralization style and varied between the gold and nickel estimates.

14.5.1. Gold

For the estimation of gold, the mineralization wireframes were used to code the samples with a unique domain code for each discrete lode. The samples were composited to one metre as this represented the dominant sample length. Larger composite intervals would not allow the variability of mineralization to be investigated optimally and would result in the grade estimation being very smooth. Any intervals less than 0.25 m were excluded. The composites were validated visually against the wireframes.

14.5.2. Nickel

For the estimation of nickel, seam composites were predominantly used where samples are composited to the whole length of the intersection within the mineralized envelope. Nickel composites were weighted by length and density.

The East Alpha modelling used 0.5 m composites for the ordinary kriging estimate.

Validation of the composite process was performed including checks of excluded intervals, composite length versus total length and zero grade composite values. Spatial checks of the composites were performed in the software to ensure the composites were within the wireframes and any short length reject composites were also checked. Charts of grade vs density were compared for the un-composited data for each domain and these showed very similar trends. The raw samples were also extracted from the database and analysed to compare the results of the density weighting calculations with a manual check calculation.

14.6. Statistical Analysis and Variography

14.6.1. Gold

Statistics for the gold composites were examined to determine if top-cuts (assay capping) was required. If the co-efficient of variation (COV) is higher than 3 then the distribution is considered to have extreme skew with the effect being a bias to any statistical analysis and the potential to over-estimate grades when interpolation is performed. High COV's were observed in some domains therefore top-cutting was used. Log probability plots, histograms and disintegration analysis was used to determine an appropriate top-cut for these domains.

The A Zone statistics are compared in Table 14.6 where a 30 g/t Au top-cut was applied to the composites.

Table 14.6: A Zone Sample and Composite Statistics

Data	Number	Min	Max	Mean	StDev	Variance	COV
Raw Samples	2523	0.01	120.00	3.53	7.15	51.19	2.02
1 m Comps	2226	0.01	90.00	3.13	5.29	27.94	1.69
Top-cut Comps	2226	0.01	30.00	2.99	3.96	15.71	1.32

Variography was performed on the composited data for A Zone. The data was output from Datamine to a csv file in order to import the data into Supervisor 8. Variography could only be determined for the large domain where there was enough data to generate robust experimental variograms. The A Zone hangingwall "borrowed" the variography from the main lode for the estimation. The strike and dip of the interpreted continuity matched the general lode strike and dip and no plunge was interpreted.

The variogram model used for estimation of A Zone is summarized in Table 14.7

Table 14.7: A Zone Variogram Model

Lode	Direction	Nugget	Structure 1	
		C_0	C_1	A_1
A Zone (20)	1 2 3	0.64	0.36	29 17.5 9.5

For the Western Flanks modelling the statistics can be compared by domain for the raw samples in Table 14.8, the composites in Table 14.9 ad the top-cut composites in Table 14.10.

Table 14.8: Western Flanks Raw Sample Statistics

Domain	Number	Min	Max	Mean	StDev	Variance	COV
11	527	0.001	79.30	2.96	6.14	37.70	2.08
12	584	0.001	922.62	4.51	38.54	1485.23	8.54
13	291	0.001	225.00	4.22	14.20	201.58	3.36
14	47	0.005	24.30	4.26	4.74	22.48	1.11
15	48	0.02	17.05	4.21	4.39	19.29	1.04
16	45	0.001	40.80	3.88	6.93	47.96	1.79
30	11	0.16	38.03	7.45	10.88	118.41	1.46
31	11	0.005	5.60	3.04	1.64	2.68	0.54
110	41	0.001	46.65	2.94	7.41	54.87	2.52
140	57	0.005	13.00	2.81	2.92	8.53	1.04
150	18	0.40	60.00	8.61	13.09	171.48	1.52

Table 14.9: Western Flanks 1 m Composite Statistics

Domain	Number	Min	Max	Mean	StDev	Variance	COV
11	394	0.001	39.25	2.61	3.92	15.38	1.50
12	454	0.001	268.39	3.37	13.34	177.91	3.96
13	235	0.001	150.13	4.29	11.72	137.46	2.73
14	40	0.20	12.69	3.90	3.06	9.36	0.78
15	41	0.02	15.92	3.84	3.65	13.35	0.95
16	38	0.06	24.49	2.95	4.14	17.11	1.40
30	8	0.90	12.52	4.70	4.20	17.64	0.89
31	9	1.08	4.91	3.13	1.23	1.51	0.39
110	31	0.02	37.28	3.42	6.90	47.56	2.02
140	47	0.04	12.86	2.80	2.63	6.93	0.94
150	15	1.30	60.00	9.96	14.07	197.91	1.41

Table 14.10: Western Flanks Top-cut 1 m Composite Statistics

Domain	Number	Top-Cut	Min	Max	Mean	StDev	Variance	COV
11	394	15	0.001	15.00	2.43	2.74	7.50	1.13
12	454	24	0.001	24.00	2.73	4.14	17.17	1.52
13	235	44	0.001	44.00	3.73	6.53	42.61	1.75
14	40	N/A	0.20	12.69	3.90	3.06	9.36	0.78
15	41	N/A	0.02	15.92	3.84	3.65	13.35	0.95
16	38	10	0.06	10.00	2.57	2.46	6.07	0.96
30	8	N/A	0.89	12.52	4.70	4.20	17.64	0.89
31	9	N/A	1.07	4.91	3.13	1.23	1.51	0.39
110	31	8	0.02	8.00	2.21	2.29	5.25	1.04
140	47	N/A	0.04	12.86	2.80	2.63	6.93	0.94
150	15	20	1.30	20.00	7.29	5.53	30.56	0.76

Variography was performed on the composited data for Western Flanks. The data was output from Datamine to a csv file in order to import the data into Supervisor 8. Variography could only be determined for the three larger domains where there was enough data to generate robust experimental variograms. The other domains "borrowed" the variography from Smith for the estimation. The strike and dip of the interpreted continuity matched the general lodes strike and dip; however, no plunge could be interpreted. Based on the geology work and strong understanding of mineralization controls a moderate northerly plunge was implemented.

The variogram models used for estimation of Western Flanks is summarized in Table 14.11.

Table 14.11: Western Flanks variogram models

Lode	Direction	Nugget	Structure 1	
		C_0	C_1	A_1
Smith (11)	1 2 3	0.54	0.46	34 18 7
Wesson (12)	1 2 3	0.70	0.30	40 27 12
Colt (13)	1 2 3	0.47	0.53	45.5 31.5 9

For the Western Flanks South modelling the statistics can be compared by domain for the raw samples in Table 14.12, the composites in Table 14.13, and the top-cut composites in Table 14.14. Only the 1713 domain required a top-cut which was 10 g/t.

Table 14.12: Western Flanks South Raw Sample Statistics

Domain	Number	Min	Max	Mean	StDev	Variance	COV
1711	31	0.37	6.15	1.49	1.17	1.37	0.79
1712	61	0.00	7.80	2.09	1.42	2.03	0.68
1713	90	0.00	124.93	4.07	13.07	170.91	3.22
1714	93	0.00	9.78	2.21	1.95	3.80	0.88
1715	34	0.09	19.42	2.72	3.54	12.56	1.31
1721	38	0.04	9.37	2.24	2.50	6.24	1.12

Table 14.13: Western Flanks South 1 m Composite Statistics

Domain	Number	Min	Max	Mean	StDev	Variance	COV
1711	27	0.38	4.76	1.51	1.00	1.01	0.67
1712	49	0.00	7.38	1.96	1.35	1.81	0.69
1713	65	0.00	67.85	3.80	8.96	80.21	2.36
1714	76	0.00	7.47	2.05	1.54	2.37	0.75
1715	25	0.11	12.38	2.53	2.71	7.32	1.07
1721	33	0.18	7.53	2.24	2.21	4.90	0.99

Table 14.14: Western Flanks South Top-cut 1 m Composite Statistics

Domain	Number	Top-Cut	Min	Max	Mean	StDev	Variance	COV
1711	27	N/A	0.38	4.76	1.51	1.00	1.01	0.67
1712	49	N/A	0.00	7.38	1.96	1.35	1.81	0.69
1713	65	10	0.00	10.00	2.58	2.31	5.34	0.90
1714	76	N/A	0.00	7.47	2.05	1.54	2.37	0.75
1715	25	N/A	0.11	12.38	2.53	2.71	7.32	1.07
1721	33	N/A	0.18	7.53	2.24	2.21	4.90	0.99

Variography was performed on the composited data for Western Flanks South by joining all the domains together so that there was enough data for meaningful analysis. The data was output from Datamine to a csv file in order to import the data into Supervisor 8. The strike and dip of the interpreted continuity matched the general lodes strike and dip.

The variogram models used for estimation of Western Flanks South is summarized in Table 14.15.

Table 14.15: Western Flanks South variogram model

Lode	Direction	Nugget	Structure 1	
		C_0	C_1	A_1
WFS	1	0.47	0.53	45.5
	2			31.5
	3			9

The Beta statistics for raw samples and composites are compared in Table 14.16. A 30 g/t Au top-cut was applied to the composites.

Table 14.16: Beta Sample and Composite Statistics

Data	Number	Min	Max	Mean	StDev	Variance	COV
Raw Samples	717	0.01	1000.00	6.27	48.29	2331.70	7.70
1 m Comps	634	0.01	455.88	4.56	20.80	432.68	4.56
Top-cut Comps	634	0.01	30.00	3.33	4.04	16.31	1.21

The Beta West statistics for raw samples and composites are compared in Table 14.17. No top-cut was required for the composites.

Table 14.17: Beta West Sample and Composite Statistics

Data	Number	Min	Max	Mean	StDev	Variance	COV
Raw Samples	347	0.01	54.00	3.07	4.26	18.14	1.39
1 m	290	0.005	18.09	2.77	2.35	5.52	0.85
Comps	347	0.01	54.00	3.07	4.26	18.14	1.39

Variography was attempted for the Beta mineralization; however, the directional variograms generated were difficult to interpret and no modelling of spatial continuity for grade estimation was possible. Inverse distance was therefore chosen as the estimation method.

14.6.2. Nickel

Statistics for the nickel composites were examined to determine if top-cuts (assay capping) was required. The distributions of nickel are close to normally distributed therefore no top-cutting was required.

The nickel and density summary statistics for samples and composites is presented in Table 14.18.

Table 14.18: Nickel sample and composite statistics

Area	Data	Num	Min	Max	Mean	StDev	Variance	COV
1820N_1825	Ni Raw	205	0.03	11.5	3.14	2.48	6.14	0.79
	Ni Comp	70	1.09	11.5	3.16	1.85	3.44	0.59
	Density	205	2.79	4.77	3.4	0.48	0.23	0.14
1890	Ni Raw	166	0.02	10.81	3.71	2.9	8.39	0.78
	Ni Comp	29	1.04	8.77	3.85	2.13	4.52	0.55
	Density	166	1.94	6.8	3.65	0.71	0.51	0.19
1920	Ni Raw	78	0.07	16.68	3.49	2.9	8.4	0.83
	Ni Comp	21	1.03	13.81	3.55	3.07	9.42	0.86
	Density	78	2.84	4.67	3.46	0.47	0.22	0.14
1925	Ni Raw	95	0.1	19.59	2.44	2.50	6.24	1.02
	Ni Comp	20	0.52	7.8	2.34	1.53	2.35	0.65
	Density	95	2.66	4.65	3.12	0.29	0.09	0.09
2130	Ni Raw	164	0.03	16.08	3.57	3.65	13.31	1.02
	Ni Comp	44	0.55	12.4	3.85	2.81	7.88	0.73
	Density	164	2.54	5.70	3.34	0.55	0.30	0.16
2320	Ni Raw	134	0.07	15.80	5.76	3.96	15.67	0.69
	Ni Comp	47	1.80	13.98	5.87	2.74	7.51	0.47
	Density	134	2.77	5.28	3.69	0.65	0.42	0.18
2330	Ni Raw	104	0.02	16.90	4.97	4.15	17.25	0.84
	Ni Comp	19	1.35	10.04	4.90	2.52	6.35	0.51
	Density	105	2.82	5.12	3.57	0.61	0.37	0.17
2440-2640	Ni Raw	469	0.01	26.70	5.45	5.23	27.30	0.96
	Ni Comp	78	0.01	15.36	5.61	3.61	13.00	0.64

Beta West	Density	395	1.39	5.60	3.50	0.65	0.42	0.18
	Ni Raw	140	0.00	13.06	4.11	3.29	10.8	0.80
	Ni Comp	55	0.16	10.46	4.21	2.32	5.41	0.55
	Density	135	2.76	4.87	3.84	0.64	0.41	0.17
East Alpha	Ni Raw	628	0.01	14.31	4.41	3.13	9.79	0.71
	Ni Comp	1,821	0.01	18.79	4.11	3.64	13.22	0.89
	Density	1,820	2.57	5.73	3.44	0.16	0.54	0.05

14.7. Block Model and Grade Estimation

14.7.1. Gold

The gold mineralization was modelled using blocks sizes specific to the mineralization style and data spacing. Parent cell block size was chosen to be large enough to reflect drill spacing and not too small to generate unrealistic and artificial smoothing of grades. Sub-celling was used to honour the geometry of the lodes and ensure the correct volumes were modelled.

Due to the NNW trend of the mineralization relative to the grid, the Western Flanks and Beta models were rotated around the "z" axis to align the major axis of the blocks with the strike of the mineralization.

In the same way as the data, the block model was coded by the mineralization and geology wireframes. The gold block model parameters are shown in Table 14.19.

Table 14.19: Gold: Block model parameters

Area	A_Zone	Western Flanks		Beta	
		Western Flanks	Western Flanks South	Beta	Beta West
Model	aznov15-m.dm	wfmar15rot	wfsjan16a.dm	beta_id2_au_0505.mdl	bw1820au.dm
Software	Datamine	Datamine	Datamine	Surpac	Datamine
Rotation	No	Z:50 X:0 Y:0		Y:320 X:0 Z:0	Z:58 X:0 Y:0
X Origin	369000 mE	374000 mE	375100 mE	375900 mE	375520 mE
Y Origin	538000 mN	544500 mN	543300 mN	541800 mN	542700 mN
Z Origin	-500 mRL	-500 mRL	-400 mRL	-500 mRL	-450 mRL
X Extent	11,000	1,800	500	1,000	400
Y Extent	12,000	500	300	1,300	200
Z Extent	900	400	300	500	200
X Block Size	10	10	10	10	10
Y Block Size	10	10	10	50	10
Z Block Size	10	10	10	25	10
X Sub-cell	1.00	0.50	0.5	1.25	0.5
Y Sub-cell	1.00	1.00	1.0	6.25	0.50
Z Sub-cell	1.00	0.50	0.5	3.125	1.0

Gold grade estimation was by ordinary kriging for A Zone, Western Flanks, Western Flanks South and inverse distance squared (ID^2) method for Beta and Beta West.

For the estimation of each domain, only data from that domain was used, thus the domain boundaries can be considered hard. The composite data was top-cut prior to estimation as discussed in the statistics section of this report.

Parent cell estimation was used therefore the sub-block grades were assigned from the parent cell.

Estimation parameters were varied for each domain depending on the relative data configuration and mineralization continuity identified from geostatistical analysis. Where available the ranges obtained from the variogram models were used as guides in defining the search ellipse parameters used in the estimate.

Discretisation was set to

- 2 X by 2 Y by 4 Z for A Zone;
- 2 X by 2 Y by 4 Z for Western Flanks;
- 2 X by 2 Y by 4 Z for Western Flanks South;
- 2 X by 2 Y by 4 Z for Beta West;
- 3 X by 3 Y by 3 Z for Beta

Estimation parameters are summarized in Table 14.20 where AZ = A Zone, WF = Western Flanks, WFS = Western Flanks South and BW = Beta West.

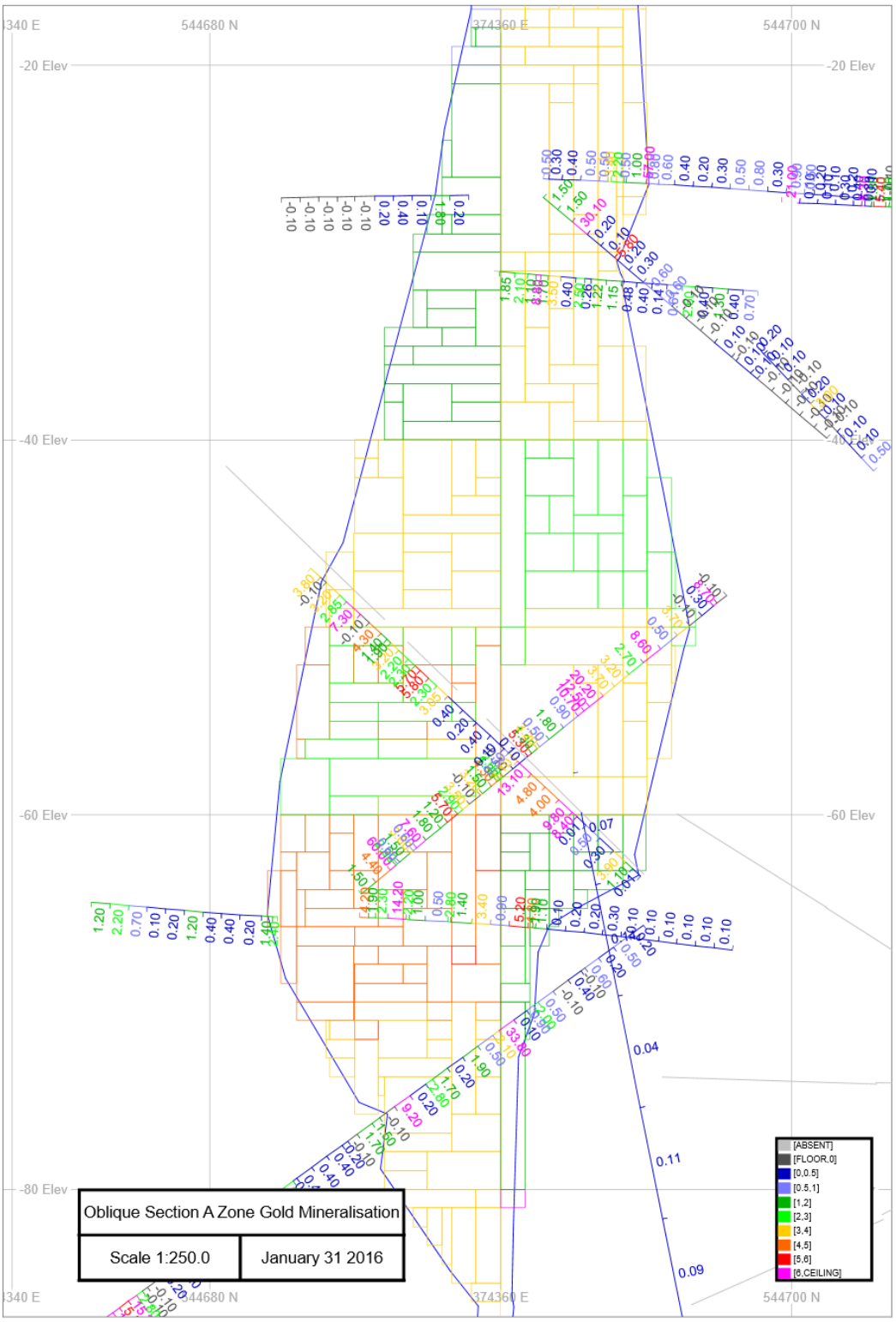
Example cross sections of the estimates are shown in Figure 14.9 for A Zone, Figure 14.10 for Western Flanks and Figure 14.11 for Beta.

Table 14.20: Gold: Estimation parameters

Area and Domain		Estimation Pass 1					Estimation Pass 2					Estimation Pass 3				
		Search (m)			Composites		Search (m)			Composites		Search (m)			Composites	
		1	2	3	Min	Max	1	2	3	Min	Max	1	2	3	Min	Max
AZ	20	29	17.5	9.5	6	16	58	35	19	6	16	145	87.5	47.5	4	20
AZ	20	29	17.5	9.5	6	16	58	35	19	6	16	145	87.5	47.5	4	20
WF	11	34	18	7	6	16	68	36	14	6	16	170	90	35	4	20
WF	12	40	27	12	6	16	80	54	24	6	16	200	135	60	4	20
WF	13	58	30	6.5	6	14	116	60	13	6	14	290	150	32.5	4	20
WF	14	34	18	7	6	16	68	36	14	6	16	170	90	35	4	20
WF	15	34	18	7	6	16	68	36	14	6	16	170	90	35	4	20
WF	16	34	18	7	6	16	68	36	14	6	16	170	90	35	4	20
WF	110	34	18	7	6	16	68	36	14	6	16	170	90	35	4	20
WF	140	34	18	7	6	16	68	36	14	6	16	170	90	35	4	20
WF	150	34	18	7	6	16	68	36	14	6	16	170	90	35	4	20
WF	30	34	18	7	4	8	68	36	14	4	8	170	90	35	4	20
WF	31	34	18	7	4	8	68	36	14	4	8	170	90	35	4	20
WFS	1711	40	20	10	6	16	80	40	20	6	16	200	100	50	4	20
WFS	1710	58	30	6.5	6	14	116	60	13	6	14	290	150	32.5	4	20
BW	1801	34	18	7	4	16	68	36	14	4	16	170	90	35	4	20
BW	2001	42.5	18	6	4	16	85	36	12	4	16	212.5	90	30	4	20
BW	2002	34	18	7	2	16	68	36	14	2	16	170	90	35	2	20
Beta	All	40	27	8	4	32	100	67	20	1	32	-	-	-	-	-

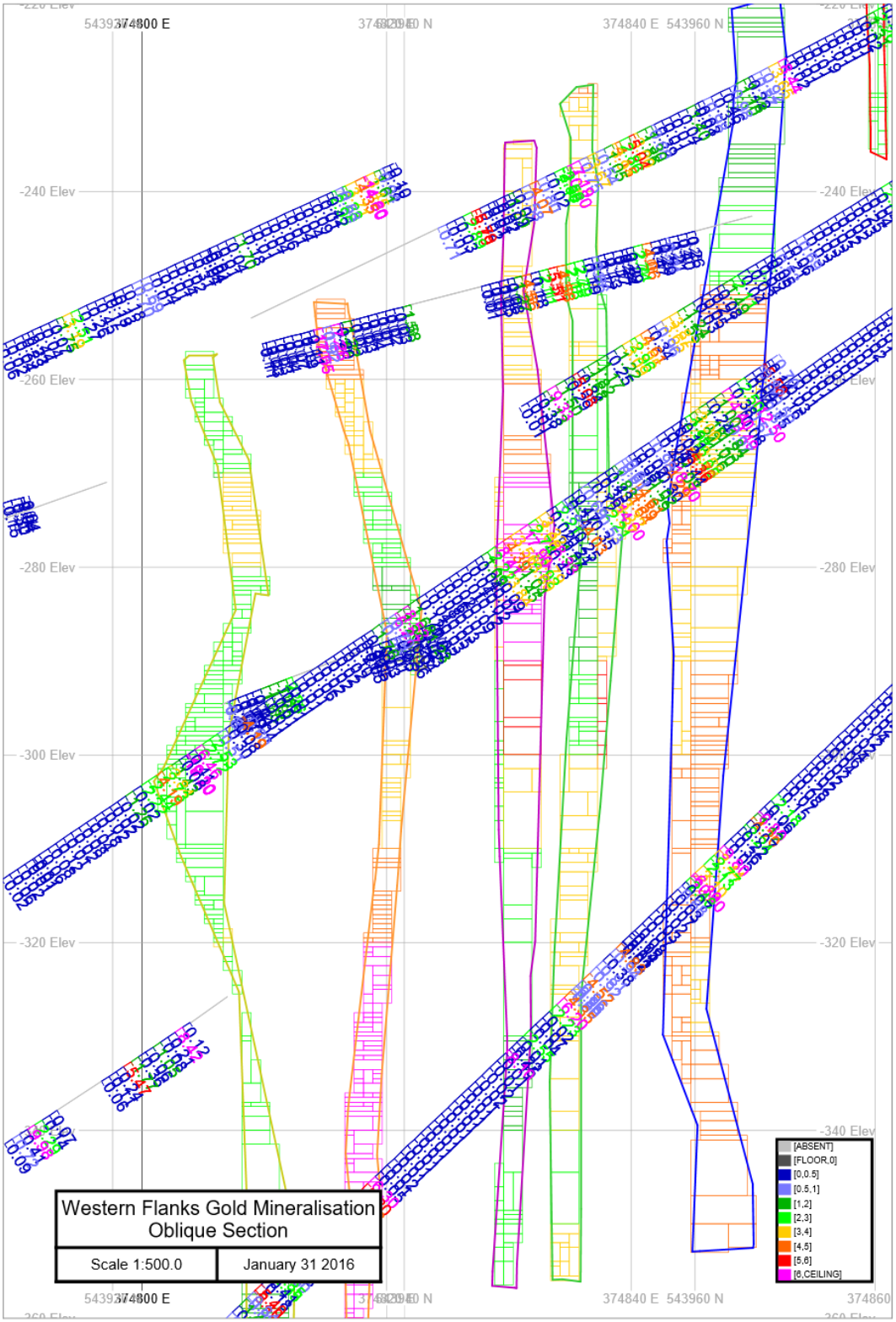
AZ = A Zone, WF = Western Flanks, WFS = Western Flanks South and BW = Beta West

Figure 14.9: Gold A Zone block model in oblique section coloured by gold grade



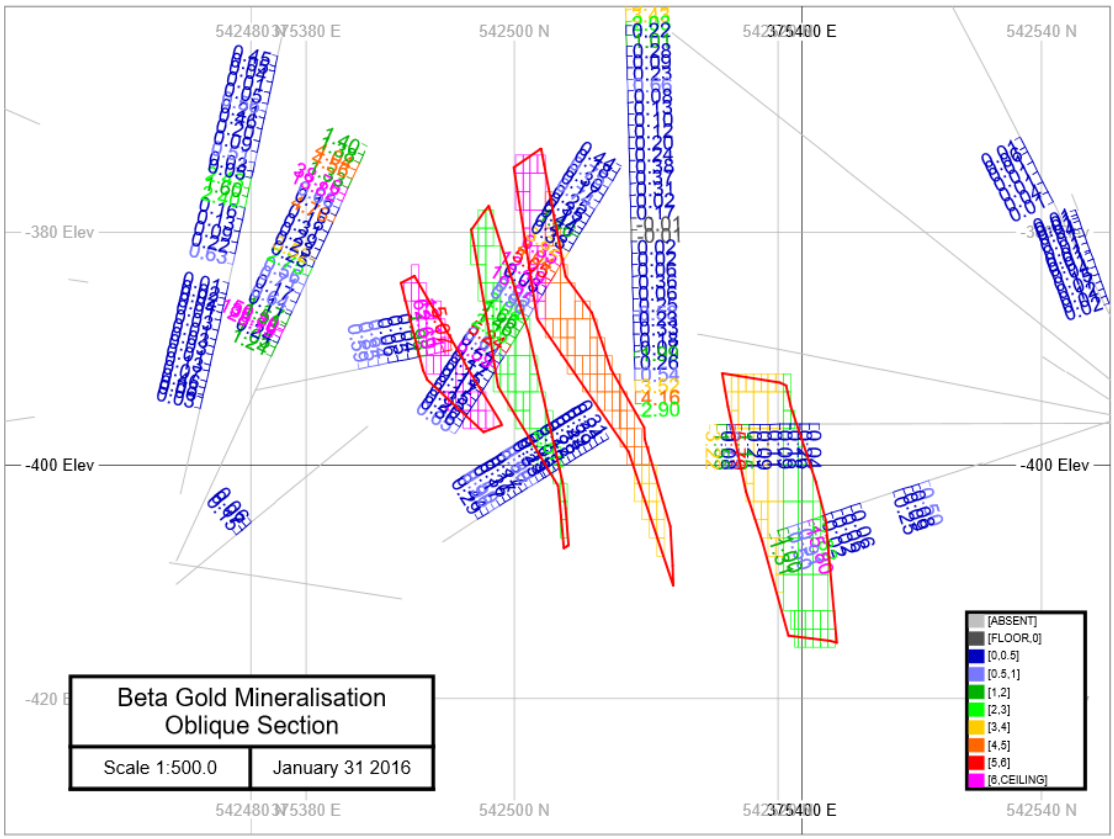
Source: Haren Consulting

Figure 14.10: Gold Western Flanks block model in oblique section view coloured by gold grade



Source: Haren Consulting

Figure 14.11: Gold Beta block model in oblique section view coloured by gold grade



Source: Haren Consulting

14.7.2. Nickel

The nickel mineralization was modelled using blocks sizes specific to the mineralization style and data spacing. Sub-celling was used to honour the geometry of the lodes and ensure the correct volumes were modelled.

Due to the variable nature of the nickel troughs, each model was rotated to align with mineralization specific to that area.

In the same way as the data, the block model was coded by the mineralization and geology wireframes. The nickel block model parameters are shown in Table 14.21 and Table 14.22.

Table 14.21: Nickel: Block model parameters

Area	1820N_1825	1890	1920	1925	2130
Model	1820n_1825_mar 15-m	1890_jan15.mdl	1920_jan15.mdl	1925_jan15.mdl	2130_jun2008
Software	Datamine	Surpac	Surpac	Surpac	Surpac
Rotation	3(Z) -33.62 1(X) -19.68 2(Y) 10.63	Y 330 X 28 Z 0	Y 330 X 0 Z 15	None	Y 330 X 21 Z 0
X Origin	375650 mN	375246 mN	375770 mN	375500 mN	375810 mN
Y Origin	542550 mE	542490 mE	542380 mE	542350 mE	541890 mE
Z Origin	-500 mRL	-435 mRL	-400 mRL	-400 mRL	-480 mRL
X Extent	300	110	150	160	200
Y Extent	500	260	700	200	300
Z Extent	200	50	100	60	100
X Block Size	1	1	1	10	1
Y Block Size	10	10	10	10	10
Z Block Size	1	1	1	1	1
X Sub-cell	0.20	0.25	0.25	1.25	0.25
Y Sub-cell	0.50	2.50	2.50	1.25	2.50
Z Sub-cell	0.10	0.25	0.25	0.25	0.25

Table 14.22: Nickel: Block model parameters continued

Area	2320	2330	2440-2640	Beta West	East Alpha
Model	2320_may15-m	2330_apr15-m	2540_may15BM	betawest_feb16	ea_new_feb16-m ea_old_feb16-m
Software	Datamine	Datamine	Surpac	Surpac	Surpac
Rotation	Z -5.96 X -4.91 Y 11.04	Z -6 X -5 Y 12	Y 330 X 30 Z 5	Y -30 X 40 Z 0	Z -25 Y 28 X 0 Y 0 X 0 Z -25
X Origin	375980 mN	375900 mN	376000 mN	375300 mN	376200 mN
Y Origin	541900 mE	541780 mE	541500 mE	542050 mE	542340 mE
Z Origin	-410 mRL	-460 mRL	-600 mRL	-510 mRL	-1000 mRL
X Extent	120	150	200	200	600
Y Extent	180	200	540	500	1800
Z Extent	80	80	200	110	600
X Block Size	10	10	5	1	1
Y Block Size	10	10	30	10	20
Z Block Size	10	10	1	1	5
X Sub-cell	2.00	2.00	0.625	0.25	0.125
Y Sub-cell	0.50	0.50	3.750	2.50	2.500
Z Sub-cell	1.00	1.00	0.125	0.25	0.625

For nickel modelling, grade and bulk density estimations are generated predominantly by the inverse distance squared (ID^2) method of interpolation. Ordinary kriging (OK) has been used for the well supported domains in East Alpha. The contact and hangingwall lode data were analysed using Snowdens Supervisor software to produce variograms and to determine the ellipse orientation and search radius.

Some of the small ore surfaces containing only one drill hole intercept have grade and density assigned to them based on composite value generated from a drill hole intercept; however, these are always classified as Inferred. In the areas with small amount of data, grade estimates have been calculated by length weighted averaging of composites of nickel and density.

For the estimation of each domain, only data from that domain was used, thus the domain boundaries can be considered hard. The composite data was top-cut prior to estimation as discussed in the statistics section of this report.

Parent cell estimation was used therefore the sub-block grades were assigned from the parent cell.

Estimation parameters were varied for each domain depending on the relative data configuration and mineralization continuity identified from geostatistical analysis. Where available the ranges obtained from the variogram models were used as guides in defining the search ellipse parameters used in the estimate. Estimation of density used the same parameters as the nickel estimation.

Discretisation was set to:

- 4 X by 2 Y by 2 Z for 1820N_1825,
- 4 X by 2 Y by 2 Z for 1890,
- 4 X by 1 Y by 2 Z for 1920,
- 3 X by 3 Y by 3 Z for 1925,
- 4 X by 1 Y by 2 Z for 2130,
- 2 X by 2 Y by 4 Z for 2320_01,
- 2 X by 2 Y by 4 Z for 2330,
- 4 X by 1 Y by 2 Z for 2440-2640,
- 4 X by 1 Y by 1 Z for Beta West, and
- 4 X by 1 Y by 1 Z for East Alpha.

Nickel estimation parameters are summarized in Table 14.23.

Table 14.23: Nickel: Estimation parameters

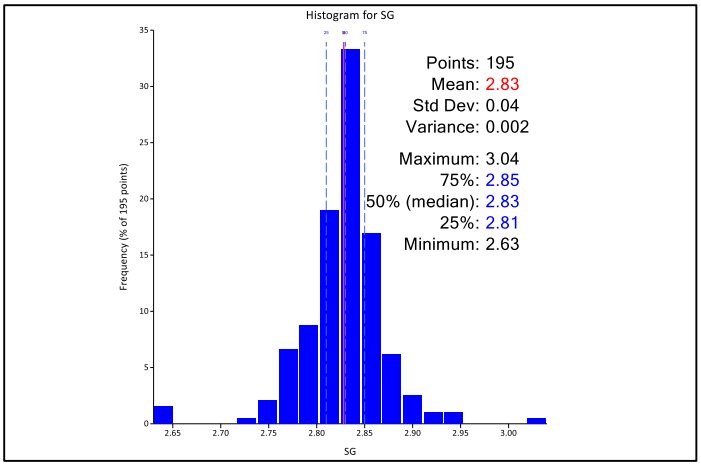
Area and Domain	Estimation Pass 1					Estimation Pass 2					Estimation Pass 3				
	Search (m)			Composites		Search (m)			Composites		Search (m)			Composites	
	1	2	3	Min	Max	1	2	3	Min	Max	1	2	3	Min	Max
1820N_1825	40	40	40	2		80	80	80	2		100	100	100	1	
1890	50	25	12.5	2		75	37.5	18.75	1						
1920	50	25	12.5	2		75	37.5	18.75	1						
1925	20	4	20	2	32	80	16	80	1						
2130	30	15	7.5	2	32	60	30	15	2						
2320_01	25	50	15	1	12	50	100	30	1	12	125	250	75	1	12
2330	20	30	10	2	4	40	60	20	1	4	100	150	50	1	4
2440-2640	30	30	30	2	40	150	150	150	1	40					
Beta West	50	50	12.5	2		75	75	18.75	1						
East Alpha 107	120	75	8.6	8	24	120	75	8.6	1	24					
East Alpha 201	120	75	8.6	8	24	120	75	8.6	1	24					
East Alpha 302	120	75	8.6	8	24	120	75	8.6	1	24					
East Alpha 504	160	50	2.7	8	24	160	50	5.3	1	24					
East Alpha 605	160	50	2.7	8	24	160	50	5.3	1	24					
East Alpha 706	160	50	2.7	8	24	160	50	5.3	1	24					

14.7.3. Bulk Density

For the gold models, bulk density was assigned. A density of 2.85 t/m^3 was used for A Zone, and Beta. At the time of the Beta modelling in 2005 there were few bulk density measurements collected for gold mineralization and the value of 2.85 t/m^3 was chosen as it reflected historical information and typical values for similar lithology in the region.

Bulk density measurements have been collected since then and in the Western Flanks area, the density was set to 2.83 t/m^3. This was derived from the recorded density of the diamond samples. The histogram of density measurements for Western Flanks is shown in Figure 14.12.

Figure 14.12: Western Flanks bulk density histogram



Source: Haren Consulting

For the nickel models, the bulk density was estimated using the recorded density measurements. All bulk density data collected from non-dried drill core samples since 1997 have been measured using a gravimetric method. Therefore, for the bulk of the current nickel mineralization remaining, density was measured. As drill core samples are of solid, non-porous fresh rock, the measured density is assumed to be dry bulk density. All density estimates used the same estimation parameters as nickel in order to preserve the correlation between nickel and density.

In some cases, there were missing density measurements. Where there were enough other samples for a quality density estimate to be made no adjustments were made to the data. Where data was spares, a regression formula was used to populate the density composite value. Non-sampled areas (waste rock or porphyry intrusives) are assigned with a density of 2.80 t/m^3.

14.8. Model Validation and Sensitivity

Each estimation is accompanied by a standard set of validation procedures to ensure a quality estimate and to allow fine-tuning of estimation parameters. The estimates for gold, nickel and, where required, density are validated by:

- Global statistical comparison by domain of top-cut composites and estimated values.
- Trend plot validation in northing, easting and/or elevation slices where appropriate. These plots help to understand the level of smoothing which has occurred during the estimation process.
- Visual examination of the model and composite data to ensure the expected grade continuity has been produced and the estimate reflects the input composites.

An example of the validation for Western Flanks is illustrated with the global statistical comparison of each domain in Table 14.16, the trend plots for domain 13 in Figure 14.13 and a visual comparison of composites and estimated gold grades in where composite grades and model grades were compared using 50 m slices in a north-south direction.

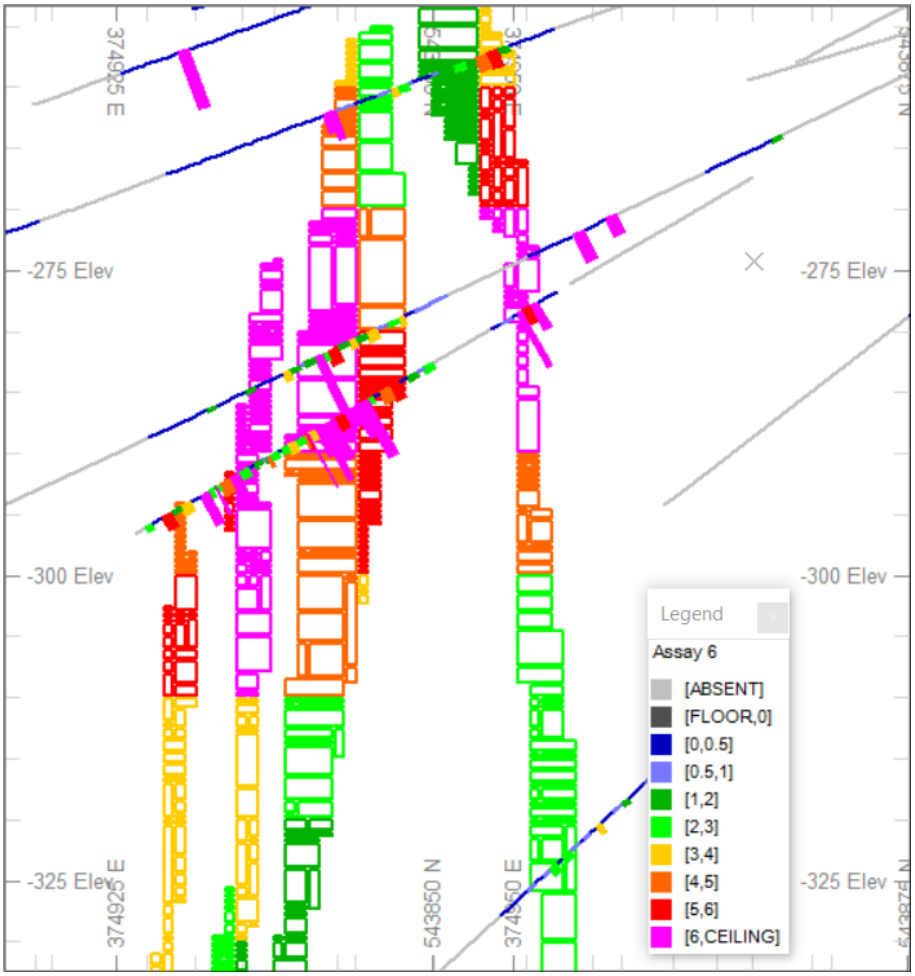
The validation plots show good correlation between the composite grades and the block model grades for the comparison by northing. The trends shown by the composite data are honoured by the block model.

The comparisons also show the effect of the interpolation, which results in smoothing of the block grades compared to the composite grades.

Table 14.24: Gold: Western Flanks validation of estimation vs composite grades

Domain	Number of Composite	Sample Mean	Top-cut Composite Mean	Model Mean	% Difference Model to Composites
11	527	2.96	2.43	2.60	7.1%
12	584	4.51	2.73	2.45	-10.1%
13	291	4.22	3.73	3.98	6.7%
14	47	4.26	3.90	3.72	-4.6%
15	48	4.21	3.84	4.18	8.8%
16	45	3.88	2.57	2.67	3.8%
30	11	7.45	4.70	5.32	13.2%
31	11	3.04	3.13	3.23	3.1%
110	41	2.94	2.21	1.59	-28.0%
140	57	2.81	2.80	2.72	-2.8%
150	18	8.61	7.29	6.51	-10.7%

Figure 14.13: Gold - Western Flanks validation of estimation vs composite grades by section



Source: Haren Consulting

14.9. Mineral Resource Classification

Block model quantities and grade estimates for the Beta Hunt project were classified according to the CIM *Definition Standards for Mineral Resources and Mineral Reserves* (May 2014) by the SLM geology team and are endorsed by Elizabeth Haren MAusIMM CPGeo who is an appropriate independent Qualified Person for the purpose of National Instrument 43-101.

Mineral resource classification is typically a subjective concept. Industry best practices suggest that resource classification should consider the confidence in the geological continuity of the mineralized structures, the quality and quantity of exploration data supporting the estimates, and the geostatistical confidence in the tonnage and grade estimates. Appropriate classification criteria should aim at integrating these concepts to delineate regular areas at similar resource classification.

Haren Consulting is satisfied that the geological modelling honours the current geological information and knowledge. The location of the samples and the assay data are sufficiently reliable to support resource evaluation. The sampling information was acquired primarily by diamond drilling.

For the gold and nickel mineralization which is exhibiting good geological and grade continuity investigated at an adequate spacing with reliable sampling information accurately located, Haren Consulting considers that blocks estimated during the first estimation run considering can be classified in the Indicated category within the meaning of the CIM *Definition Standards for Mineral Resources and Mineral Reserves*. For those blocks, Haren Consulting considers that the level of confidence is sufficient to allow appropriate application of technical and economic parameters to support mine planning and to allow evaluation of the economic viability of the deposit. Those blocks can be appropriately classified as Indicated.

Conversely, blocks estimated during the second or third pass considering search neighbourhoods set at ranges wider than the general drill spacing should be appropriately classified in the Inferred category because the confidence in the estimate is insufficient to allow for the meaningful application of technical and economic parameters or to enable an evaluation of economic viability.

14.9.1.1. Gold Classification

The Beta Hunt gold mineralization has been tested with a number of quality drill holes using acceptable sampling and assaying procedures. The mineralization interpretations are robust and fit well with observed regional controls. In general, the portion of the resource to 100 m below the basalt contact has geological and grade continuity and is therefore suitable for public reporting. The remainder of the resource has insufficient information to assume continuity between drill holes and is not reported.

The upper portions of the deposit (~100 m below the basalt contact) are generally sampled at 50 m by 50 m spacing or better.

14.9.1.2. Nickel Classification

Categories were applied to the Resource estimates based on data density and quality. The drill density required for each area was assessed from the knowledge of the geology and continuity of mineralization in this area. The general criteria for classification are as follows:

- Measured Mineral Resources:
    - Resource Definition detailed drilling (nominally 20 m spacing),
    - Good geological understanding of the controls on geometry and extents,
    - Level development on 2 or more levels, and
    - Development to extents of resource models.
- Indicated Mineral Resources:
    - Resource Definition drilling to 20 m by 30 m,
    - Good geological understanding of the controls on geometry and extents, and
    - Proximal to development, or limited development of resource block.
- Inferred Mineral Resources:
    - Broad spaced resource extension or exploration drilling (density > 30 m),
    - Lower level of confidence in definition of geometry and extents of mineralization,
    - No development, or
    - Single drill hole intersection.

The models have been stamped with default grades for porphyry intrusive bodies, and flagged with codes to indicate mining depletion. All reported resource figures are depleted for mining, and use a 1% Ni cut-off grade.

The 1820 North and 1825 Mineral Resource have been classified according to the level of geological confidence in the interpretation and the amount of supporting data. An Indicated Mineral Resource classification was given to the bulk area where there was a greater degree of confidence and nominal 10 m by 20 m spacing. The area classed as Inferred Mineral Resources have nominal 15 m by 30 m drill spacing or have missing assay values.

The 1890 Mineral Resource has been classified according to the level of geological confidence in the interpretation and the amount of supporting data. The 1890 September 2008 mineral resource has all been characterised as a Measured Mineral Resource as it has close spaced underground drilling, face sample data and is completely developed with ore drives throughout. The geological confidence is high.

The 1920 Mineral Resource has been classified according to the level of geological confidence in the interpretation and the amount of supporting data. An Indicated Mineral Resource classification was given to domain 17, 47, 37 and 27 (above 542,520 mN) due to high geological confidence and proximity to development. Domain 8, 67, 57 and 27 (below 542,520 mN) have been classified as an Inferred Mineral Resource due to lower geological confidence.

The 1925 contact surface shows good continuity of mineralization along strike, with the structural constraints on mineralization extent controlled by the geometry of the mafic trough.

Mining has occurred in the southern portion of the resource and reconciling well to the resource model in geometry and grade thus the area in close proximity to this development has been classified as Measured. It is considered that the continuity and geometry of the remaining resource is defined with sufficient confidence to categorise the majority of the 1925 surface as an Indicated Resource and where drill spacing becomes sparse an Inferred Resource.

For the 2130 mineralization domain 8,47 has been classified as a Measured Mineral Resource by nature of the data density, development to the full lateral extents of the block, and extensive stoping. Domain 8,27 has been split at the 542,100 mN point to be classified as an Indicated Mineral Resource to the south where there is sufficient drilling (~15 m spacing) and Inferred Mineral Resource in the northern end where the drilling is more sparse. A wedge in the central part of this block is considered too thin for reporting and has not been classified. Domains 8,37, 8,57 and 8,67 are classified as Inferred Mineral Resources due to lower geological confidence and data density.

The bulk of the Beta West Mineral Resource has been classified as Inferred Mineral Resource as it is a geological complex area and confidence in the extents of continuity in the interpretation is low. Domain 8 and the northern end of domain 2 have been classified as Indicated Mineral Resources as they have close drill hole spacing (nominal ~20 m) and ore drives development in this area.

The East Alpha deposit shows good continuity of mineralization along strike, with the structural constraints on mineralization extent controlled by the geometry of the mafic trough. It is considered that the geometry of the surfaces is defined to a moderate confidence level, given the high level of geological understanding of similar komatiite hosted nickel deposits in the area, and the production history of proximal ore bodies (Hunt, Silver Lake).

Infill drilling at East Alpha has validated the current interpretation and has not resulted in major changes in strike or attitude of the mineralized surfaces.

Measured Mineral Resources have been defined where the infill drilling is a nominal 20 m by 20 m spaced or development drives occur top and bottom or where stoping has commenced. All of the 01C contact and 05H hangingwall surfaces are categorized as Indicated Resources.

Peripheral domains are classified as Inferred due to the poorer resolution of the available data leading to some geological uncertainty. The minor flanking surfaces and all surfaces that are only defined by single intercept have also been classified as Inferred Resources.

14.10. Mineral Resource Statement

CIM *Definition Standards for Mineral Resources and Mineral Reserves* (May 2014) defines a mineral resource as:

"A Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction.

The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling."

The "reasonable prospects for eventual economic extraction" requirement generally implies that the quantity and grade estimates meet certain economic thresholds and that the mineral resources are reported at an appropriate cut-off grade that takes into account extraction scenarios and processing recoveries. In order to meet this requirement, Haren Consulting considers that major portions of the nickel and gold resource are amenable for underground extraction.

The block model quantities and grade estimates have been reviewed in the PEA to determine the portions of the Beta Hunt deposit having "reasonable prospects for economic extraction" from an underground mine. The details of the economic assessment are discussed in Section 16.

Between 1979 and 1984, WMC mined 335,395 tonnes @ 2.67 g/t Au for 28,500 ounces from the A Zone mineralization. An extensive portion of the A Zone mineralization has been developed but not mined. The exact extent and location of all the stoping is uncertain. To account for material which may have been mined a manual depletion has been applied to the A Zone Mineral Resource reported from the block model.

Gold mining has been occurring at Beta Hunt in the period from December 2015 up until the effective date of this report February 1, 2016. To account for this material a manual depletion has been applied to the A Zone, Western Flanks, Western Flanks South and Beta West.

The nickel mineral resource estimate for the Beta Hunt is presented in Table 14.25 and the gold mineral resource estimate follows in Table 14.26.

Table 14.25: Beta Hunt Nickel Mineral Resources as at February 1, 2016[1,2,3,5]

Nickel	Classification	Inventory (kt)	Grade (Ni %)	Contained Metal Nickel Tonnes (NiTs)
>=1% Ni	Measured	96	4.6	4,460
	Indicated	283	4.0	11,380
	Total	**379**	**4.2**	**15,840**
	Inferred	216	3.4	7,400

Table 14.26: Beta Hunt Gold Mineral Resources as at February 1, 2016[1,2,4,5]

Gold	Classification	Inventory (kt)	Grade (Au g/t)	Contained Metal (Ounces)
>=1.8 g/t Au	Measured	0	0.0	0
	Indicated	815	3.5	92,000
	Total	**815**	**3.5**	**92,000**
	Inferred	2,910	3.4	321,000

1. *Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the Mineral Resources estimated will be converted into Mineral Reserves.*
2. *The Mineral Resource estimates include Inferred Mineral Resources that are normally considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as Mineral Reserves. There is also no certainty that Inferred Mineral Resources will be converted to Measured and Indicated categories through further drilling, or into Mineral Reserves once economic considerations are applied. Mineral resource tonnage and contained metal have been rounded to reflect the accuracy of the estimate, and numbers may not add due to rounding*
3. *Nickel Mineral Resources are reported using a 1% Ni cut-off grade*
4. *Gold Mineral Resources are reported using a 1.8 g/t Au cut-off grade*
5. *Mineral Resources described here has been prepared by Elizabeth Haren, MAusIMM CPGeo, of Haren Consulting Pty Ltd.*

14.11. Grade Sensitivity Analysis

The mineral resources of the Beta Hunt Mine are sensitive to the selection of the reporting cut-off grade. To illustrate this sensitivity, the global model quantities and grade estimates are presented for gold Indicated Mineral Resources in Table 14.27 and for nickel Measured and Indicated Mineral Resources in Table 14.28 at different cut-off grades. Table 14.29 and Table 14.30 breakdown the summary tables by area for nickel and gold respectively.

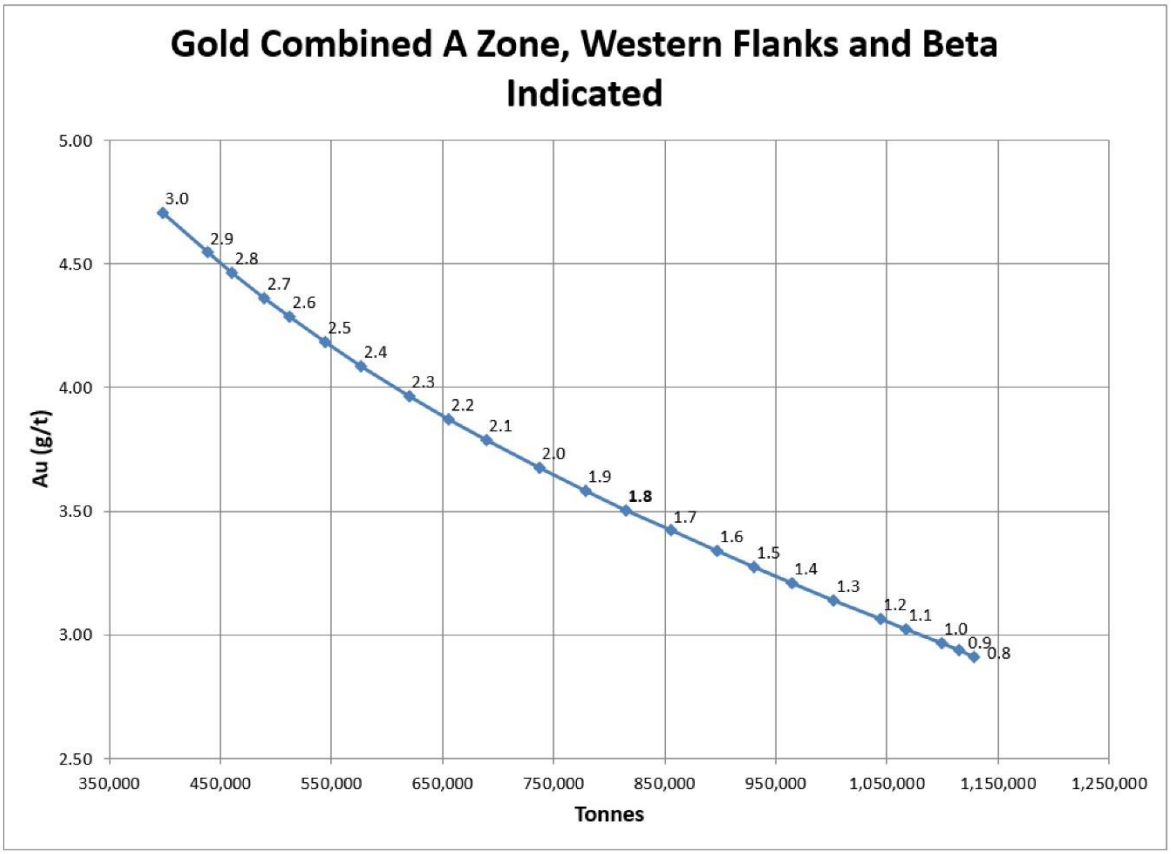
The reader is cautioned that the figures presented in this table should not be misconstrued with a Mineral Resource Statement. The figures are only presented to show the sensitivity of the block model estimates to the selection of cut-off grade. Figure 14.14 presents this sensitivity as grade tonnage curves for gold and Figure 14.15 for nickel.

Table 14.27: Gold Global Block Model Quantities and Grade Estimates*, Beta Hunt Mine at Various Cut-off Grades

Cut-off Grade Gold (g/t)	Quantity Tonnes	Grade Gold (g/t)	Metal Ounces
3.0	397,843	4.71	60,216
2.9	438,243	4.55	64,046
2.8	460,547	4.46	66,084
2.7	489,744	4.36	68,664
2.6	512,354	4.29	70,588
2.5	544,185	4.18	73,192
2.4	576,582	4.09	75,752
2.3	619,655	3.97	79,002
2.2	655,142	3.87	81,556
2.1	689,220	3.79	83,907
2.0	736,881	3.67	87,048
1.9	778,367	3.58	89,639
1.8	**814,674**	**3.50**	**91,796**
1.7	855,253	3.42	94,086
1.6	897,229	3.34	96,314
1.5	930,416	3.27	97,956
1.4	964,066	3.21	99,526
1.3	1,002,193	3.14	101,181
1.2	1,044,275	3.06	102,882
1.1	1,067,120	3.02	103,730
1.0	1,098,914	2.97	104,807
0.0	1,186,596	2.86	108,994

** The reader is cautioned that the figures in this table should not be misconstrued with a Mineral Resource Statement. The figures are only presented to show the sensitivity of the block model estimates to the selection of a cut-off grade.*

Figure 14.14: Gold Global Block Model Curve



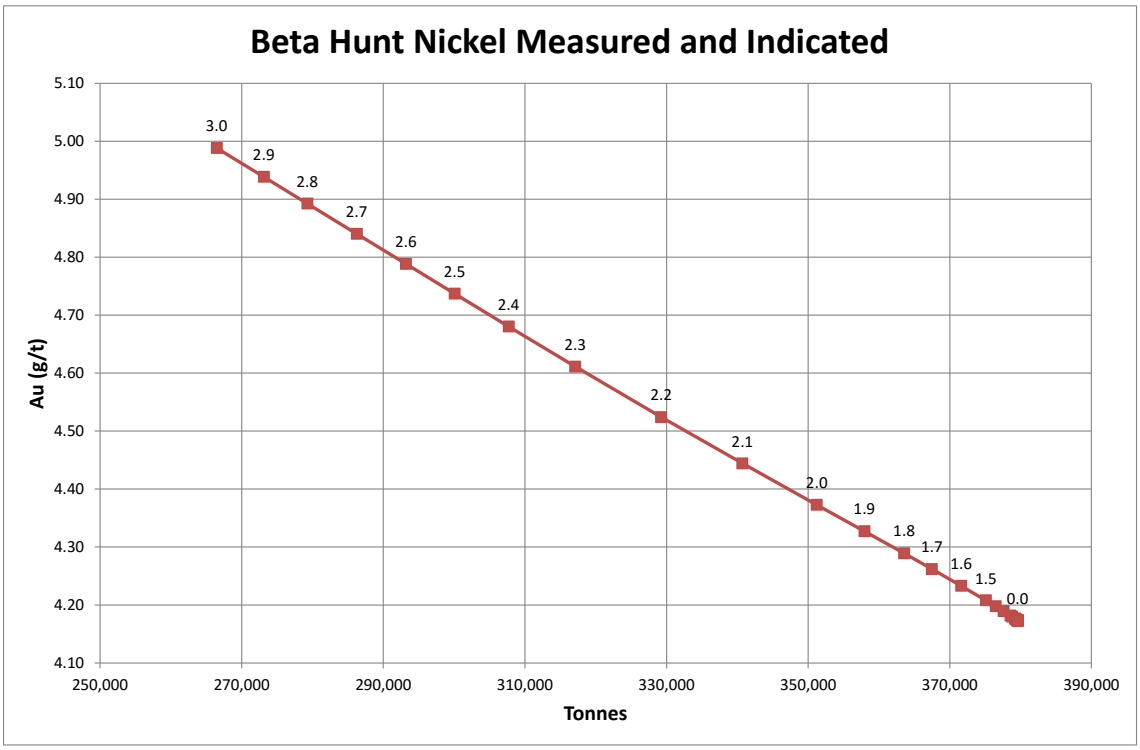
Source: Haren Consulting

Table 14.28: Nickel Global Block Model Quantities and Grade Estimates*, Beta Hunt Mine at Various Cut-off Grades

Cut-off Grade Nickel (%)	Quantity Tonnes	Grade Nickel (%)	Metal NiTs
2.5	300,099	4.74	14,215
2.4	307,727	4.68	14,402
2.3	317,111	4.61	14,623
2.2	329,251	4.52	14,896
2.1	340,723	4.44	15,143
2.0	351,226	4.37	15,358
1.9	357,954	4.33	15,489
1.8	363,556	4.29	15,593
1.7	367,484	4.26	15,662
1.6	371,613	4.23	15,730
1.5	375,110	4.21	15,784
1.4	376,516	4.20	15,805
1.3	377,598	4.19	15,819
1.2	378,594	4.18	15,832
1.1	378,818	4.18	15,834
1.0	**379,236**	**4.18**	**15,839**
0.9	379,261	4.18	15,839
0.8	379,370	4.18	15,840
0.7	379,562	4.17	15,841
0.6	379,594	4.17	15,841
0.5	379,595	4.17	15,841
0.0	379,595	4.17	15,841

** The reader is cautioned that the figures in this table should not be misconstrued with a Mineral Resource Statement. The figures are only presented to show the sensitivity of the block model estimates to the selection of a cut-off grade.*

Figure 14.15: Nickel Global Block Model Curve



Source: Haren Consulting

Table 14.29: Beta Hunt Nickel Mineral Resources by Area as at February 1, 2016[1,2,3,5]

Area	Measured			Indicated			Measured + Indicated			Inferred		
	Inventory (kt)	Grade Ni %	Contained Metal (kt)	Inventory (kt)	Grade Ni %	Contained Metal (kt)	Inventory (kt)	Grade Ni %	Contained Metal (kt)	Inventory (kt)	Grade Ni %	Contained Metal (kt)
1820N_1825	0	0	0	63.9	3.1	2.01	63.9	3.1	2.01	8.0	2.8	0.23
1890	18.3	3.8	0.70	0	0	0.00	18.3	3.8	0.70	0	0	0.00
1920	0	0	0	8.4	2.6	0.22	8.4	2.6	0.22	0.6	4.6	0.03
1925	3.9	2.3	0.09	12.2	2.2	0.27	16.1	2.2	0.36	8.2	2.1	0.17
2130	2.1	7.9	0.16	14.3	3.1	0.44	16.4	3.7	0.60	3.5	2.6	0.09
2320	0	0	0	3.8	7.1	0.26	3.8	7.1	0.26	2.8	4	0.11
2330	0	0	0	9.1	4.3	0.39	9.1	4.3	0.39	0	0	0.00
2440-2640	10.1	5.4	0.55	10.4	6.0	0.63	20.4	5.7	1.17	4.3	4.5	0.19
Beta West	0	0	0	25.6	5.3	1.36	25.6	5.3	1.36	14.8	4.3	0.64
East Alpha	61.7	4.8	2.96	135.7	4.3	5.79	197.4	4.4	8.75	174.1	3.4	5.93
Total	**96.0**	**4.6**	**4.46**	**283.2**	**4.0**	**11.38**	**379.2**	**4.2**	**15.84**	**216.3**	**3.4**	**7.40**

Table 14.30: Beta Hunt Gold Mineral Resources by Area as at February 1, 2016[1,2,4,5]

Area	Measured			Indicated			Measured + Indicated			Inferred		
	Inventory (kt)	Grade Au g/t	Metal (koz)	Inventory (kt)	Grade Au g/t	Metal (koz)	Inventory (kt)	Grade Au g/t	Metal (koz)	Inventory (kt)	Grade Au g/t	Metal (koz)
A_Zone	0	0.0	0	0	0.0	0	0	0.0	0	1,327	3.5	148
Western Flanks	0	0.0	0	779	3.5	88	779	3.5	88	1,404	3.4	153
Beta	0	0.0	0	36	3.4	4	36	3.4	4	179	3.6	21
Total	**0**	**0.0**	**0**	**815**	**3.5**	**92**	**815**	**3.5**	**92**	**2,910**	**3.4**	**321**

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3. *Nickel Mineral Resources are reported using a 1% Ni cut-off grade*
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5. *Mineral Resources described here has been prepared by Elizabeth Haren, MAusIMM CPGeo, of Haren Consulting Pty Ltd.*

15 Mineral Reserve Estimates

No mineral reserves have been estimated for the project.

16 Mining Methods

16.1 Overview

Beta Hunt is an operating mine that enjoys relatively good ground conditions, as:

- Water inflows to the working areas are limited, and
- Rocks are competent while the depth of workings at less than 1 km is relatively shallow. As a result, fairly wide spans with only limited support are feasible in both development headings and production stopes.

The mine hosts a number of discrete deposits of varying geometry that are mined using the following three methods:

- In the Beta West zone, where Ni mineralization is narrow vein and flat lying, mineralization is mined with handheld airleg drills, using the room and pillar method.
- In the East Alpha zone, where Ni mineralization is narrow vein and more steeply dipping, mineralization is also mined with handheld drills, using a cut and fill method.
- In the A Zone and Western Flanks zones of Au mineralization, wider and more steeply dipping geometry permits use of mechanized drilling equipment and the blast hole stoping method.

The main decline that provides access to all the various zones of mineralization is already in place and only limited ongoing development is required. Similarly, the existing pumping and ventilation systems are sufficient for the LOM requirements of the Base Case plan for mining current MII Resources. Capacity of the existing fleet of mobile equipment exceeds current production rates and only limited additional units will be required as the gold operations ramp up. The workforce is non-unionized and flexible, which will allow short-term priorities between gold and nickel to be adjusted if warranted by market conditions.

16.2 Hydrology and Ground Water

The Beta Hunt mine lies beneath Lake Lefroy. As reported in Section 3 previously, this lake is typically dry as the rate of annual evaporation is approximately an order of magnitude greater than the mean annual rainfall. The lake is, however, subjected to occasional and variable levels of inundation. The mining methods employed are non-caving and a solid crown pillar has been established between the workings and Lake Lefroy. Procedures are in place to ensure that exploration drill holes do not create a hydraulic connection through to the lake.

No significant sources of ground water have been identified on the Beta Hunt property to date and the mining methods do not introduce hydraulic fill. Inflows to the working areas are consequently limited.

As noted in Section 18, ground water has collected in mined out areas of the neighbouring Silver Lake deposit to create what is effectively an aquifer. Service water for the Beta Hunt operation is drawn from this source.

16.3 Geotechnical

The generalized lithological package for all styles of mineralization at Beta Hunt comprises the following (in order, from footwall to hangingwall):

- Basalt,
- Intermediate porphyry,
- Felsic porphyry,
- The mineralized horizon, comprising massive and disseminated sulphides, and
- Ultramafic rocks.

Geotechnical logging and laboratory testing on these various lithologies was performed by WMC, with results as summarized in Table 16.1

Table 16.1: Rock Properties

	Logging	Laboratory			
Lithology	RQD	UCS (MPa)	UTS (MPa)	Young's (GPa)	Poisson's Ratio
Basalt	100	203	27	81	0.26
Intermediate Porphyry	90	115	16	58	0.21
Felsic Porphyry	90	252	21	64	0.26
Mineralization	100	118	11	55	0.32
Ultramafic	95	83	8	52	0.37

These results indicate that all Beta Hunt lithologies are competent, if somewhat brittle. The risk of bursting is mitigated by a stress regime where the maximum principal stress is on the lower end of that reported regionally.

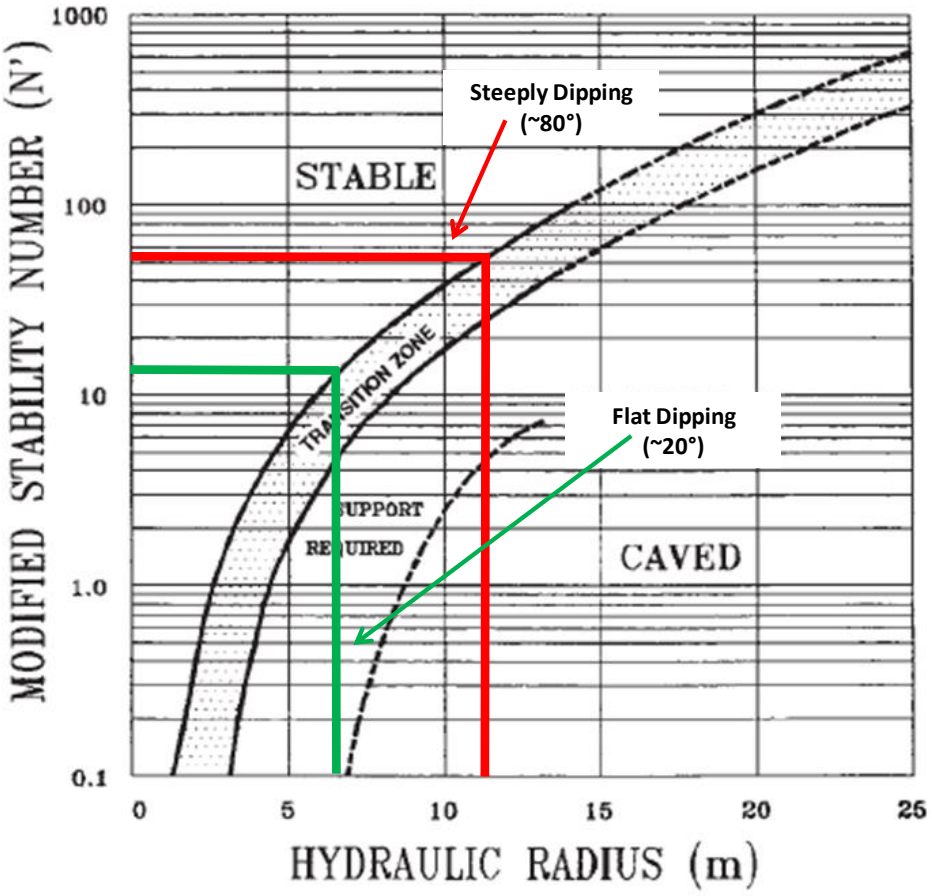
Waste development excavations are predominantly located in the footwall basalt, which is the most competent lithology. The backs of all waste development are arched to improve stability. Ends are supported with galvanized rock bolts, typically installed on a 1.4 m by 1.1 m pattern and supplemented with wire mesh. In areas where higher stress is encountered, such as intersections and the break-aways to stopes, cablebolts are installed. Previous operators also used shotcrete in places, particularly to support wider development excavations in ultramafic rocks. SLM have not developed any ends larger than 3 m by 3 m in this rock type to date and have thus not needed to use shotcrete.

Stope spans have been designed using Potvin's Modified Stability Diagram (Figure 16.1). A key input to the Modified Stability Number that is plotted on the Y-axis is the Q-value, or measure of rock quality. For the range of RQD given in Table 16.1 and the various joint parameters for the rock mass, a Q-value of approximately 22 has been calculated. Another key determinant of the

Modified Stability Number is dip of the mineralization and associated gravitational loading. Figure 16.1 illustrates that, for the steeply dipping gold and nickel mineralization, when the dip of approximately 80° is applied to the Q-value, the resultant N' value of 47 ultimately translates to a maximum stable hydraulic radius of approximately 11 m. This is equivalent to an open stope measuring in excess of 70 m along strike over a height of 30 m.

For flatter lying nickel mineralization, the dip of approximately 20° results in an N' value of 16, for which the maximum stable hydraulic radius is approximately 6 m.

Figure 16.1: Modified Stability Diagram (after Potvin, 1988)



Source: Potvin (1988)

Support regimes for the various stoping methods reflect both hydraulic radius and economic considerations.

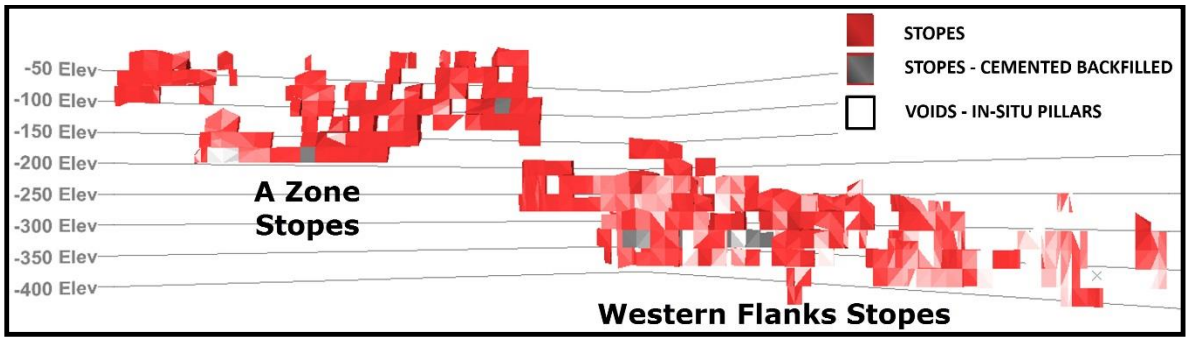
In gold mineralization, open stopes were designed with variable lift heights (as a function of the number of 25 m lifts) depending on the distribution of grades – with the aim of maximizing the tonnage of high grade material that could be extracted. In areas where the span of mineralization exceeds the stable hydraulic radius, two alternatives were considered:

- Material where the recoverable value exceeds the marginal cost associated with mining and backfilling will be extracted in a primary-secondary sequence, with the primary stope

backfilled with cemented rock fill (CRF) containing 5% binder. For the financial assumptions given in Section 22, material grading ≥ 2.0 g/t will be backfilled.

- Material grading < 2.0 g/t will be left in place as a pillar. The minimum strike length of pillars is 2.5 times the thickness of mineralization, with mineralization 4.0 m thick requiring a 10 m pillar.

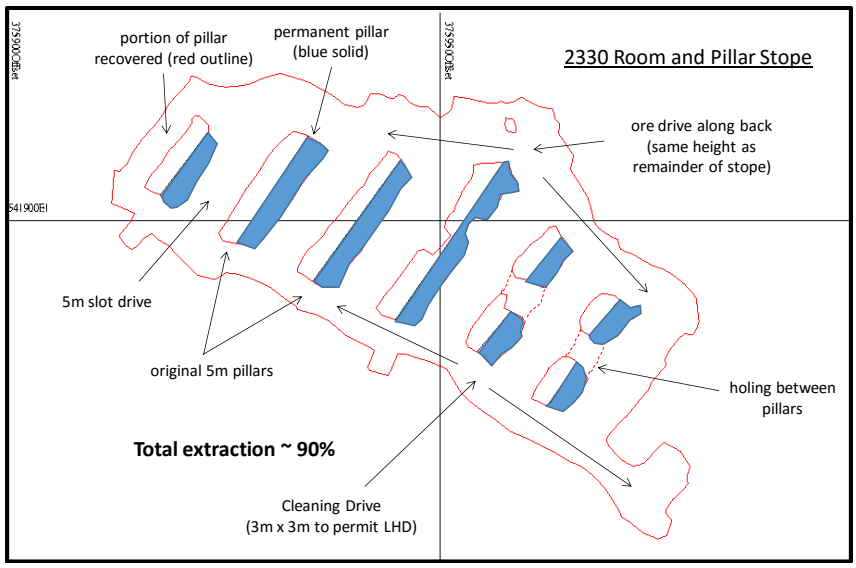
Figure 16.2: Isometric view of A Zone and Western Flanks looking northeast



For the steeply dipping narrow vein East Alpha nickel mineralization, the flat back cut and fill method is employed. This overhand method results in a stope being opened up to its strike limits on a 3.0 – 3.5 m lift, then backfilled with un-cemented rock fill (URF) before progressing to the next lift up-dip.

For the flat-lying narrow vein nickel mineralization, it is logistically challenging to introduce fill so the room and pillar method is used. After an ore drive has been established along the perimeter of a stope, primary slots measuring 5 m are driven between pillars that also measure 5 m. Scavenging of pillars is then performed in a retreat manner. For the stope design pictured in Figure 16.3, more than 50% of pillars are recovered and extraction of 90% of resources will be achieved. On average for all stopes, pillar recovery of 50% is planned, resulting in extraction of 82%.

Figure 16.3: Beta Hunt Room and Pillar Mining



Source: SLM

16.4 Mine Design

The cut-off grade calculation for Beta Hunt differs from that for many underground mines in that:

- The primary constraint on underground production is not the capacity of the main ramp and/or truck fleet for hauling to surface (there is currently surplus capacity) but rather the number of mining faces available.

- Within the range of feasible production rates, there is no restriction on the tonnage of mineralization that can be processed.

As a result, the decision to mine lower grade mineralization will not result in displacement of higher-grade material and the operating cut-off can be determined based on marginal rather than full costs. Table 16.2 summarizes these marginal costs along with the calculated marginal cut-off grades.

Table 16.2: Calculated Cut-Off Grades

Item	Units	Ni	Au	Comment
Metal Price	US$/lb or oz	$6.50	$1,150	long term forecast
f/x	US$	$0.72	$0.72	long term forecast
Metal Price	A$/lb or oz	A$9.03	A$1,597	
Operating Cost	A$/t mined and processed[1]	A$138	A$68	
In-Situ Metal Grade[2]	% Ni or g/t Au	1.2	1.4	

1. Direct Costs
2. Accounts for processing recovery and payability of marginal grade mineralization

As discussed in section 21, the mining costs used in the above calculation are not entirely marginal in nature – particularly for the Ni operation, where labour is fixed and represents over 50% of total costs. As a result, the inclusion of lower grade mineralization that allowed the overall production rate to be increased would improve economics. Conversely, additional material that increased overhead costs (by extending the life of mine) or necessitated a step change in capital costs (by requiring purchase of additional fleet) could be detrimental to overall economics. Accordingly, a range of cut-off grades was tested and the following found to be optimal by iteration:

- Nickel cut-off = 1.0% Ni, and

- Gold cut-off = 1.8 g/t Au.

For each of the cut-off grades tested, mineable resources were determined using CAE's Mineable Shape Optimiser (MSO) design package. A key design criterion was a minimum mining width / stoping height. Dilution for the various methods was calculated as follows:

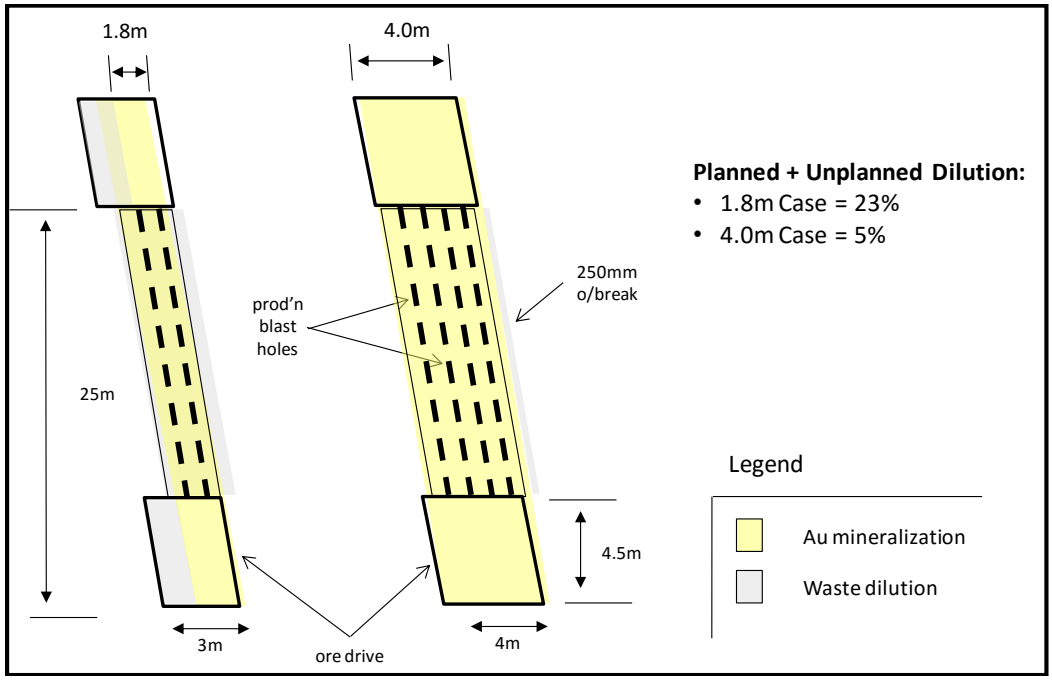
- For the flat lying nickel mineralization, stopes are opened up with an initial 3 m by 3 m cleaning drive along the front of the stope and extending the entire strike length. This drive allows sufficient operating space for a narrow vein LHD to extract mineralization from the stope. Mineralization is transported from other headings into this drive using scraper winches, allowing the remainder of the stope to be developed at a low profile that is the greater of a 2.0 m minimum or actual thickness of mineralization (note that the actual thickness of mineralization ranges up to 3.0 m). The control afforded by use of handheld

drills (at the expense of productivity) results in no additional dilution beyond the minimum stoping height. For the stope pictured in Figure 16.3, dilution associated with the additional 1.0 m height of the cleaning drive would approximate 10%.

- The steeply dipping nickel mineralization is mined at the thickness of mineralization down to a minimum of 1.8 m. However, a wider drive is required for LHD extraction at the bottom of a panel. This drive measures 2.5 m wide by 2.8 m high. As with the flat lying mineralization, the control afforded by use of handheld drills results in no additional unplanned dilution beyond the minimum stoping width.

- For steeply dipping gold mineralization, ore drives measuring 4.5 m high are driven at the width of mineralization, down to a minimum width of 3.0 m (the minimum required to set up a machine to drill production blast holes). The remaining 20.5 m of mineralization between drill drives is mined at the thickness of mineralization, down to a minimum of 1.8 m. As more productive long holes are used, hangingwall overbreak of up to 250 mm occurs. As illustrated in Figure 16.4, overall dilution varies as a function of mineralization, ranging from 23% for 1.8 m width down to 5% for mineralization 4 m in width.

Figure 16.4: Dilution in Gold Stoping



Other key design criteria used in mine design are based on current practice, including:

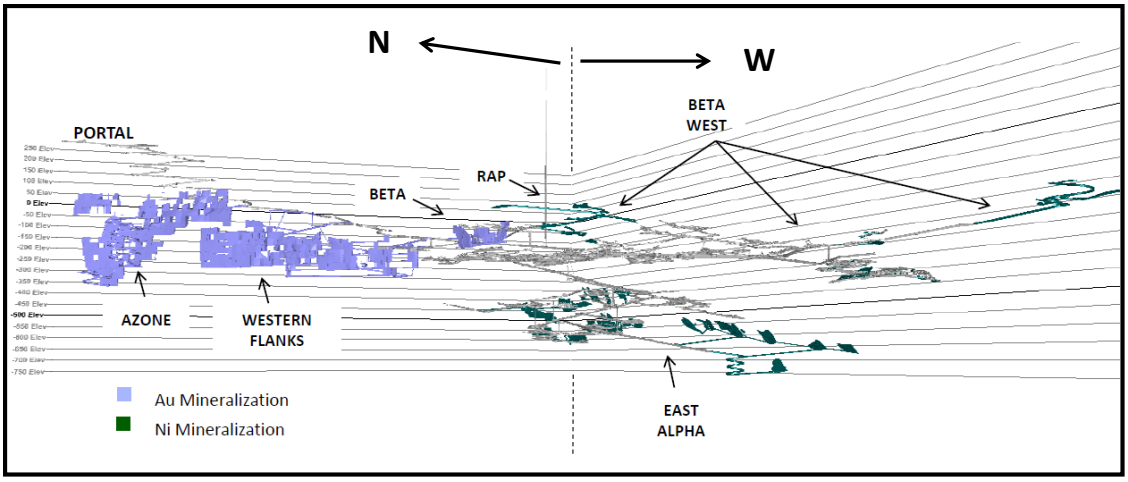
- The decline gradient is one to seven, which allows for maximum productivity of the haul truck fleet.

- The footwall pillar (between mineralization and lateral or decline development) is five times the width of excavation, or 25 m for the main decline.

- Where mineralization occurs in multiple lenses, the minimum thickness of interstitial pillar is three times the thickness of mineralization, resulting in a 6 m pillar for mineralization measuring 2 m thick.

The total extent of development and stoping at the end of life of mine is illustrated in Figure 16.5.

Figure 16.5: Total Development and Stoping at End of LOM



16.5 Mine Plan

Design criteria used in the development of the production schedule are based on current operating performance, and include the following:

- Mechanized development ends are driven at a maximum rate of 190 m/month, which equates to 1.5 m by 4.2 m development rounds per day.
- A single crew would be responsible for 2 development ends and thus achieves 3 rounds per day.
- The nickel stoping operation will remain at the current steady-state rate of approximately 13 kt per month until depletion of existing mineable resources.
- The gold stoping operation will ramp up to a steady-state rate of approximately 50 kt per month and maintain this rate until depletion of mineable resources.

A key constraint considered in the scheduling of production from various zones was ventilation, specifically the maximum capacity of the existing system. Fresh air enters the mine via the portal and two fresh air passes, then is ultimately exhausted via a RAP measuring 4.2 m in diameter. The system currently supplies approximately 180 m^3/sec, which represents 60% of the design limit of 320 m^3/sec. It would be possible to supply airflow in excess of this limit through investment in additional ventilation passes – CKNO contemplated an expansion to 400 m^3/sec by adding a 2.4 m diameter intake raise.

The airflow required has been calculated based on the Australian regulation of 0.05 m^3/sec per kW equipment. The contribution to the total life of mine load is as follows:

- Drill and blast fleet (jumbo, long hole and explosives charger) = 10%. The load from this equipment is remains relatively constant throughout the life of mine, with increasing output from long hole production drilling partially offset by a concurrent reduction in development drilling.

- LHD fleet (4 different sizes) = 32%. The load from this equipment increases as gold production ramps up. However, as incremental production will be handled with larger and more efficient LHDs, the more than doubling of total mining rate necessitates only a 20% increase in airflow.

- Haulage fleet (trucks and road maintenance grader) = 58%. The load from this equipment varies not only as a function of the tonnage hauled but also the distance hauled and associated travel time. The depth of nickel mineralization from East Alpha is approximately 270 m greater than the depth of gold mineralization in A Zone, resulting in an additional 21 minutes travel time for each cycle.

Table 16.3 provides a summary of mine production

Table 16.3: Mining Production Plan

Item	units	Total	2016	2017	2018	2019	2020	2021
Decline Development	metres	5,612	2,725	2,231	633	23	0	0
Lateral Waste	metres	7,333	3,291	3,376	570	94	0	0
Ore Drives	metres	6,892	3,362	2,408	1,045	77	0	0
Raises	metres	819	232	365	219	3	0	0
Total Development	**metres**	**20,655**	**9,610**	**8,380**	**2,467**	**198**	**0**	**0**
Nickel Mineralization[1]	kt	572	143	156	152	121	0	0
Nickel Grade[1]	% Ni	2.42	2.75	2.55	2.37	1.94	0.00	0.00
Contained Nickel	000 lbs	30,556	8,675	8,782	7,951	5,149	0	0
Gold Mineralization[1]	kt	2,924	425	600	600	600	495	204
Gold Grade[1]	g/t Au	3.06	3.30	3.07	2.76	3.16	3.01	3.19
Contained Gold	000 oz	287	45	59	53	61	48	21
Average Airflow	m^3/sec	171	202	220	194	179	129	100
Maximum Airflow	m^3/sec	241	227	241	199	194	133	112

1. Diluted tonnes and grade

The global dilution and mining recovery is as follows:

- Nickel operations extract 60% of the total MII Resource with overall dilution of 38%, and
- Gold operations extract 67% of the total MII Resource with overall dilution of 11%

Cautionary Statement: The decision by SLM to produce at the Beta Hunt mine was not based on a feasibility study of mineral reserves, demonstrating economic and technical viability. As a result, there may be an increased uncertainty of achieving any particular level of recovery of minerals or the cost of such recovery, including increased risks associated with developing a commercially mineable deposit. Historically, such projects have a much higher risk of economic and technical failure. There is no guarantee that the anticipated production costs will be achieved. Failure to achieve the anticipated production costs would have a material adverse impact on SLM's cash flow and future profitability. It is further cautioned that the PEA is preliminary in nature. No mining feasibility study has been completed on Beta Hunt. Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that the PEA will be realized.

Figure 16.6 provides a schematic of the annual progression in nickel operations while Figure 16.7 provides the progression in gold operations.

Figure 16.6: Schematic of Annual Nickel Production

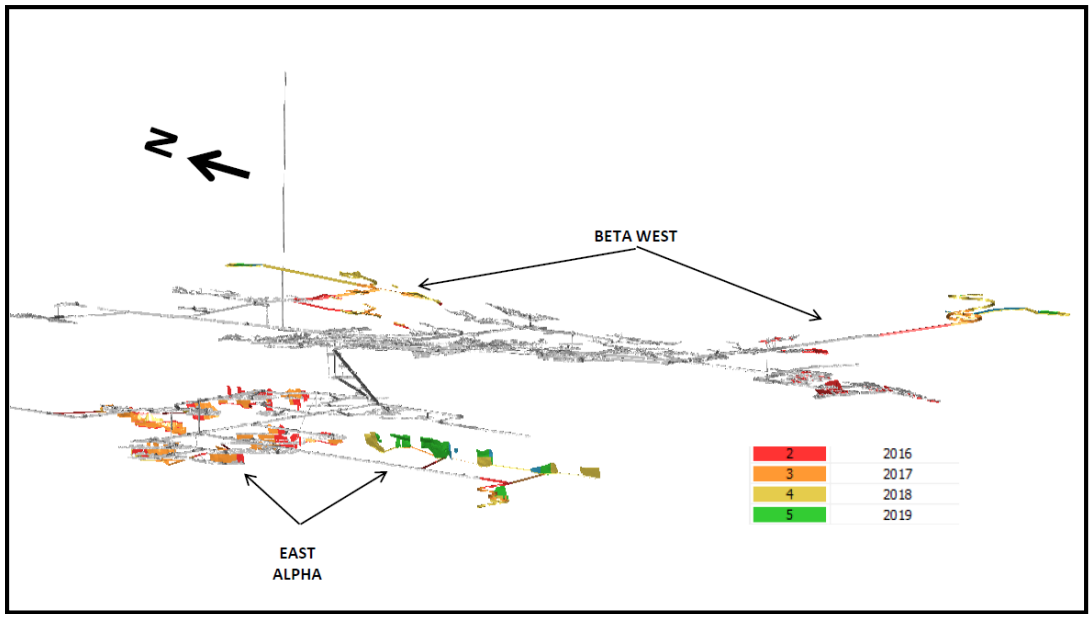
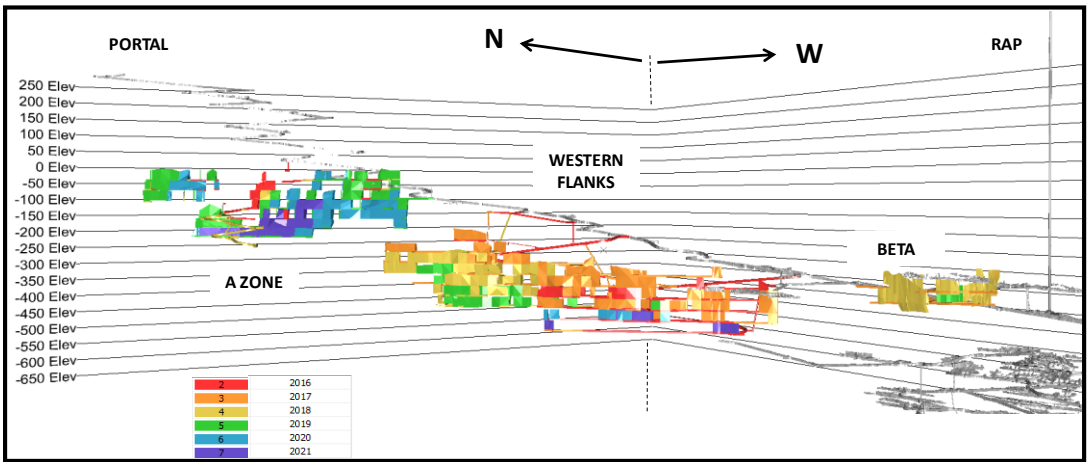


Figure 16.7: Schematic of Annual Gold Production



16.6 Mine Operations

16.6.1 Development

The various types of development include:

- The main decline, sized at 5.0 m wide by 5.5 m high,
- Lateral development located in the footwall of both nickel and gold mineralization. These are sized at 4.0 m wide by 4.5 m high, and
- Ore drives in gold mineralization. In wider vein mineralization, these have the same dimensions as lateral waste. Where mineralization tapers, drives can be reduced to a minimum of 3.0 m width.

Development headings are excavated using mechanized equipment, including:

- Twin boom jumbos are used for drilling both blastholes and for installation of rockbolts. The rate of advance is 4.2 m per round.
- Blast holes are charged using an explosives charger. As the mine is dry, ANFO is used.
- Development blasts are cleaned using either the small (6 t payload) or medium (12 t payload) LHDs. The bulk of waste development is used to backfill mined out voids. Material that must be trammed out to the surface waste dump is first delivered to a re-muck stockpile that is typically located at 125 m intervals along the main decline.
- Material trammed to surface, including mineralization from ore drives and waste in excess of backfilling requirements, is loaded by the large (17 t payload) LHD onto 50 t trucks at the re-muck stockpiles.

Note that ore drives in nickel mineralization are developed conventionally, using hand held drills. The mining process is therefore the same as nickel stoping and has been included under this heading.

16.6.2 Nickel Operations

The nickel operation extracts mineralization hosted in two distinctly different styles of mineralization:

- In the Beta West zone, nickel mineralization is narrow vein and flat lying (typically dipping at ~20°). This style of mineralization is mined using the room and pillar method.
- In the East Alpha zone, nickel mineralization is also narrow vein but more steeply dipping (typically at ~65°). This style is also mined using the flat back cut and fill method.

Both styles are mined conventionally, using handheld airleg drills. These drills are also used for installation of rock bolts. Holes are charged using ANFO and the target advance is 2.0 m per round. In the flat-lying room and pillar stopes, broken ground is scraped using winches to ore drives at the front of the stopes. Here, material is excavated using narrow vein (3 t payload) LHDs and trammed to re-muck stockpiles where it is re-handled by the large LHD onto 50 t trucks. In the steeply dipping flat back stopes, the loading drives have been sized to allow immediate loading of broken material by narrow vein LHDs, eliminating the need for scrapers.

16.6.3 Gold Operations

The steeply dipping gold mineralization is mined using the longitudinal blast hole stoping method, for which typical cross-section views have been provided in Figure 16.4 previously.

With this method, ore drives are developed on a 25 m level spacing along strike to the limits of mineralization. The resulting pillar between ore drives will be drilled using long holes that measure 64 mm and are charged with ANFO. Production blasts will retreat from the extremities to the limits of an open stope that can be supported (as discussed in section 16.3 previously).

Where mineralization extends beyond the limits of open stoping, support will be provided either by:

- Leaving a pillar (in lower grade material < 2.0 g/t), or
- Backfilling the primary stope with CRF (for mineralization ≥ 2.0 g/t).

16.6.4 Mining Fleet

The fleet of mechanized mining equipment includes:

- twin boom jumbos for drilling development blast holes and wall support,
- an explosives charger for charging blast holes,
- narrow vein LHDs (3 t capacity) used for cleaning the narrow vein Ni stopes,
- small LHDs (6 t capacity) used in development and bulk stoping,
- medium LHDs (12 t capacity) used in development and bulk stoping,
- large LHD (17 t capacity) used for rehandling mineralization and waste into trucks,

- grader for road maintenance, and
- 50 t trucks for hauling material to surface.

Table 16.4 compares the current fleet levels to the maximum required by year over the remaining life of mine.

Table 16.4: Mechanized Mining Fleet

Item	Ownership[1]	Existing units	Maximum Required					
			2016	2017	2018	2019	2020	2021
Jumbo	1 & 2	2	4	3	2	1	0	0
Charger	2	1	3	3	2	1	1	1
Narrow Vein LHD (3t)	1	3	2	2	2	2	0	0
Small LHd (6t)	1	1	1	1	1	1	0	0
Medium LHD (12t)	3	1	3	3	2	2	2	1
Large LHD (17t)	1	1	1	1	1	1	1	1
Truck[2]	1	5	6	7	6	6	4	2
Grader	1	1	1	1	1	1	1	1
Long Hole	3	0	1	1	2	2	1	1

1. *Ownership Cases: 1 = Ownership, 2 = Lease-To-Buy, 3 = Lease*
2. *SLM currently own 6 trucks, but one is held for spare parts only*

16.6.5 Labour

The current site complement of approximately 120 FTE will increase by 24% to a maximum of 147 when the gold operations are at full production. The average complement over the life of mine for current resources is 126 as shown in Table 16.5.

Table 16.5: Labour Complement

Area	Position	units	Current	Max	Average
Development	Jumbo Operator	FTE	7	11	6
	Charger Operator	FTE	2	4	2
	LHD Operator	FTE	5	7	3
	Truck Driver	FTE	5	7	3
	Sub-Total	**FTE**	**19**	**29**	**15**
Ni Mining	Production Engineer	FTE	1	1	1
	Production Geologist	FTE	2	2	2
	Operations Supervisor	FTE	3	3	3
	Maintenance Supervisor	FTE	2	2	2
	Air Leg Miners	FTE	14	14	14
	Charger Operator	FTE	3	3	3
	Scraper operators	FTE	6	6	6
	LHD Operators	FTE	6	6	6
	Truck Driver	FTE	3	5	4
	Grader Operator	FTE	1	1	1
	Fitter	FTE	6	6	6
	Nipper	FTE	1	1	1
	Sub-Total	**FTE**	**48**	**50**	**48**
Au Mining	Production Engineer	FTE	1	1	1
	Production Geologist	FTE	2	2	2
	Operations Supervisor	FTE	1	1	1
	Air Leg Miners	FTE	2	2	2
	Long Hole Operators	FTE	0	6	4
	Charger Operators	FTE	0	1	1
	LHD Operators	FTE	1	5	4
	Truck Operators	FTE	8	13	11
	Grader Operators	FTE	1	1	1
	Fitter	FTE	8	8	8
	Electrician	FTE	3	3	3
	Service Crew	FTE	4	4	4
	Nipper Crew	FTE	4	4	4
	Sub-Total	**FTE**	**35**	**51**	**46**
Central Services	General Manager	FTE	1	1	1
	Technical Manager	FTE	1	1	1
	Geology Manager	FTE	1	1	1
	Mine Superintendent	FTE	1	1	1
	Contract Surveyor	FTE	1	1	1
	Mine Foreman	FTE	1	1	1
	Geotechnical Engineer	FTE	1	1	1
	EHS/ERT Advisor	FTE	1	1	1
	Mine Engineer	FTE	1	1	1
	Project Engineer	FTE	1	1	1
	Resource Geologist	FTE	1	1	1
	Project Geologist	FTE	1	1	1
	Administration Manager	FTE	1	1	1
	Site Accountant	FTE	1	1	1
	Site Clerk	FTE	1	1	1
	Storeperson	FTE	1	1	1
	Cleaner	FTE	1	1	1
	Sub-Total	**FTE**	**17**	**17**	**17**
Total Labour		**FTE**	**119**	**147**	**126**

17 Recovery Methods

Processing of Beta Hunt mineralization is performed offsite, by third parties under separate tolling contracts.

17.1 Current Situation

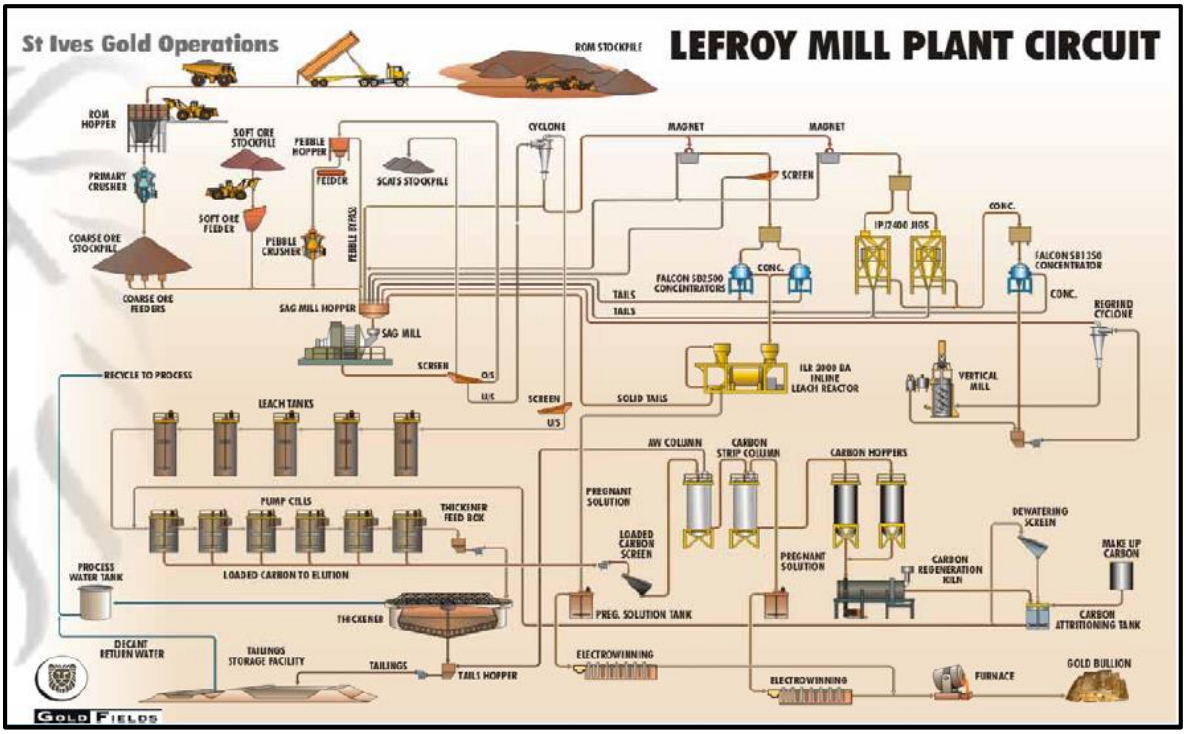
Nickel mineralization is processed by BHPB at the KNC, which is a conventional flotation style nickel concentrator. There is limited risk associated with the ongoing processing of nickel mineralization as:

- KNC has successfully processed ore from Beta Hunt for many years, and
- The term for the current contract extends until January 31, 2018. BHPB have an option to extend this contract.

Mineralization is blended with ores from other mines and the recovery credited to Beta Hunt is based on the grade of feed. Concentrate produced from Beta Hunt mineralization is treated and refined by BHPB at the KNS under standard commercial terms.

Gold mineralization is processed at the SIGMC Lefroy Mill. Material is processed in batches and SLM is credited with the recovery actually achieved. The Lefroy Mill flowsheet (shown in Figure 17.1) is a conventional gold circuit with SAG milling with a production capacity of 4.8 Mt/a. After milling, a gravity circuit recovers the gravity recoverable gold from the ore, with this gold treated separately to produce bullion. The mill cyclone overflow product flows to a leach circuit. The pregnant solution reports to, carbon adsorption tanks followed by an acid wash and elution before the electrowinning circuit produces a calcine for smelting. Tailings are alternately deposited on two paddock-type tailings facilities, which are constructed upstream.

Figure 17.1: SIGMC Lefroy Mill Flowsheet



Source: St Ives Gold Mining Company (2014)

17.2 Opportunity

Concentrate produced from Beta Hunt nickel mineralization could potentially be treated using a roasting process similar to that first described by RNC in a news release dated October 3, 2011. In simple terms, the dead roasting process removes the majority of sulphur from the nickel sulphide concentrate. This creates a nickel oxide calcine that is suitable feed to a nickel pig iron operation, to either produce ferro-nickel or directly feed a stainless steel producer. RBC estimates the stainless steel market currently represents 68% of total new nickel demand. The roasting option is a significantly less expensive treatment option than producing refined nickel through a conventional sulphide smelter, which then must be recombined with iron in the stainless steel-making process. The roasting process has additional benefits of:

- Lower nickel losses, resulting in payment for a higher percentage of nickel recovered to the concentrate, and
- Iron contained in the roasted calcine product is a valuable by-product for the stainless steel or nickel pig iron producer.

18 Project Infrastructure

Beta Hunt is an operating mine with all required infrastructure already in place. Main elements of this infrastructure include:

- Normal infrastructure associated with a ramp access underground mine, including the portal (Figure 18.1), a decline ramp measuring 5.0 m x 5.5 m, the trackless mining fleet (described in section 16.6.4) and refuge stations. This existing infrastructure is adequate to support the LOM plan; specifically permitting the safe operation at planned maximum mining rates of 2.1 kt/d.

- A surface workshop used for major maintenance and weekly services for the mobile equipment fleet.

- An underground workshop used for minor maintenance of the mobile fleet. This is located in the footwall side of the main decline in the East Alpha section.

- A ventilation system that uses the decline and two smaller raises as intakes, with a single RAP measuring 4.2m in diameter (Figure 18.2). The system has a capacity to supply 320 m^3/s, compared to the current airflow of 180 m^3/s. At the maximum production rate of 2.1 kt/d, airflow of 241 m^3/s will be required.

- A dewatering system which includes six stage pumps that discharge, via a 100 mm line, into Lake Lefroy.

- The management and administration offices, which are portable buildings that will be easy to de-commission at closure (Figure 18.3).

Utilities provided to the mine include:

- Electricity that is supplied by SIGMC at a cost of A$0.23/kWh.

- Service water that is sourced from ground water stored in what is effectively an aquifer created by the mined out Silver Lake deposit. Storage tanks have been added to provide surge capacity.

- Potable water that is supplied by SIGMC.

Figure 18.1: Beta Hunt Decline Portal



Figure 18.2: Beta Hunt Return Air Fan and Secondary Escapeway



Figure 18.3: Beta Hunt Management and Administration Offices



19 Market Studies and Contracts

19.1 Market Studies

The following discussion of nickel and gold markets is provided as background to price forecasts used in this study (see Section 22). Market statistics are taken from recent (January 2016) commentary by RBC Capital Markets.

19.1.1 Nickel Market

After growing at an average rate of 8.7% pa for the five years to 2014, nickel demand cooled unexpectedly in 2015 to an estimated 1,891 kt for the year or a 1.5% year-on-year (YoY) increase. This decline has been largely attributed to a slowdown in Chinese stainless steel production and associated de-stocking of inventories. For 2016, RBC expects improving demand based on rebounding global stainless production and modest re-stocking. In the longer term, a return to the long-term trend growth rate of approximately 5% is anticipated by 2018.

While growth in nickel supply over the previous five years exactly matched that of demand at 8.7% pa, more recently restrictions in the export of nickel in pig iron (NPI) ore from Indonesia resulted in supply for 2015 contracting at an estimated rate of 3.1%. Resulting supply of 1,932 kt led to a market surplus of 41 kt for the year, pushing global stocks to 542 kt, or 32 weeks consumption by the Western World. This level of stocks is a record in both absolute and relative terms, surpassing the previous record of 27 weeks reached in 1982. A summary of the supply – demand balance is presented in Table 19.1

Table 19.1: Nickel Market Supply – Demand Balance

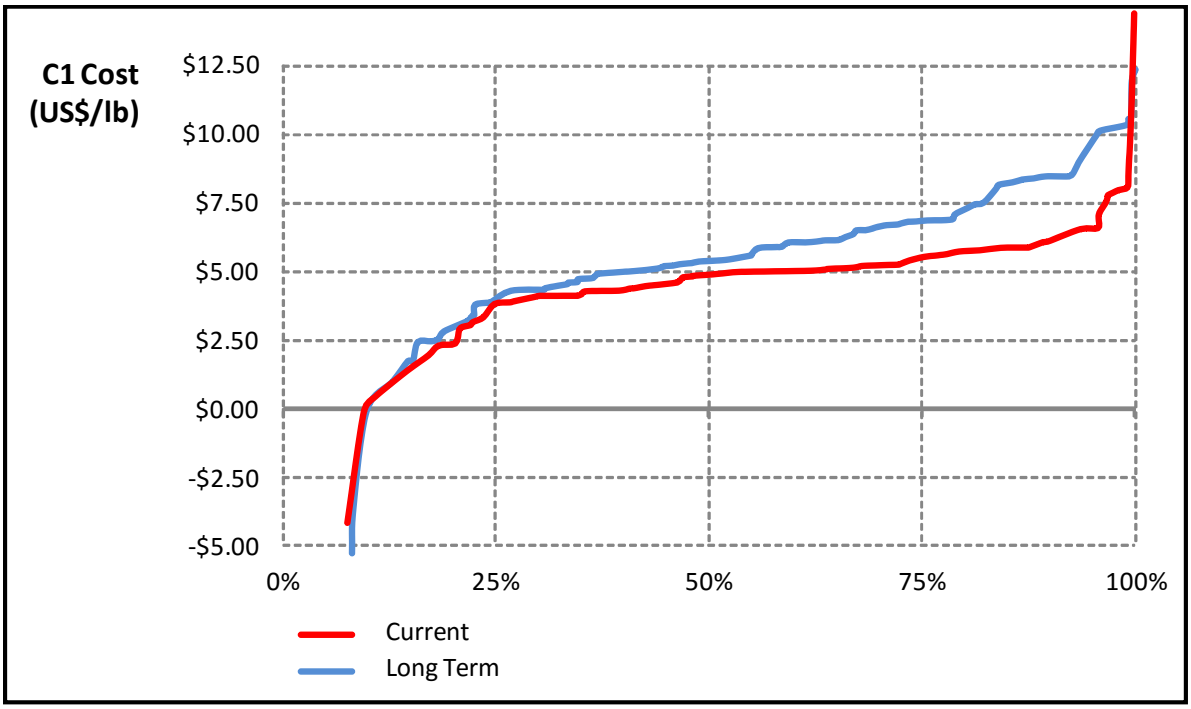
Item	Units	2009A	2010A	2011A	2012A	2013A	2014A	2015E
Global Supply	Kt	1,314	1,442	1,602	1,760	1,963	1,994	1,932
% change	YoY	(3.8%)	9.7%	11.1%	9.9%	11.5%	1.6%	(3.1%)
Global Demand	kt	1,234	1,465	1,607	1,668	1,785	1,863	1,891
% change	YoY	(4.0%)	18.7%	9.7%	3.8%	7.0%	4.4%	1.5%
Implied Surplus / (Deficit)	kt	80	(23)	(5)	92	178	131	41
Reported Stocks [1]	kt	244	225	182	223	342	502	542
Global Consumption	weeks	10.3	8.0	5.9	7.0	10.0	14.0	14.9
WW Consumption	weeks	16.8	13.7	10.9	13.5	21.0	29.8	32.0
Nominal LME Cash Price	US$/lb	$6.64	$9.89	$10.38	$7.95	$6.81	$7.65	$5.38

1. Reported stocks in Year (T) reported stocks in (T-1) + Surplus / (Deficit) due to unseen inventory movements

Source: RBC Capital Markets

Past price behaviour suggests that at high levels of inventory, the support price slides to approximately the 75th percentile on the cost curve, Wood Mackenzie estimate the 75th percentile of the current cost curve to be approximately US$5.50/lb. However, current costs reflect abnormally low oil prices and the associated impact on exchange rates and are considered unsustainable in the longer term. Wood Mackenzie forecasts that, in the longer term, the 75th percentile will be approximately US$6.50/lb (Figure 19.1).

Figure 19.1: Nickel Cost Curves (2016)



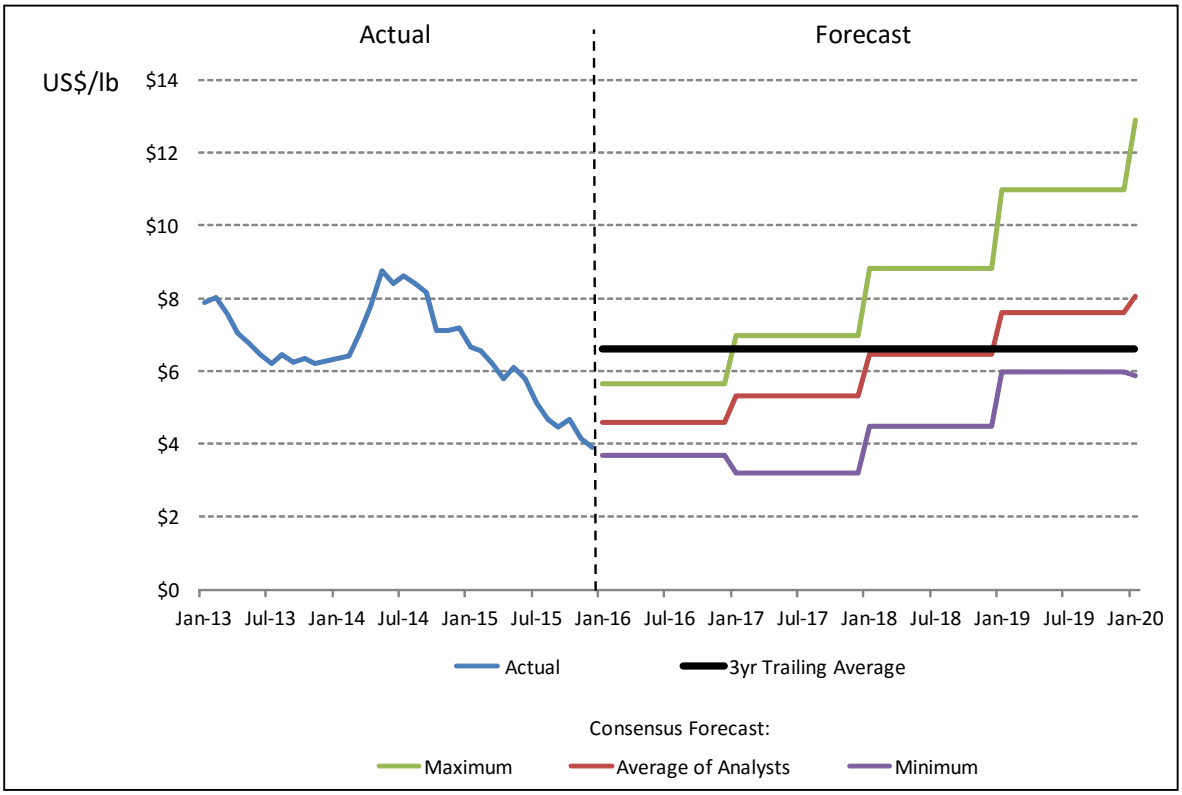
Source: RNC after Wood Mackenzie Estimates for 2015 and Forecasts to 2025

Current prices (≤ US$4.00/lb) are well below this level and reflect the fact that inventories are continuing to grow. However, the pace of inventory growth is slowing – to only 1.8 kt in Q4 2015. Moreover, the majority of current production is operating at a loss and, over time, this will lead to inevitable closures. For 2016, RBC expects curtailments will materially offset new production and expansions at existing operations, resulting in supply remaining essentially flat. Coupled with anticipating increased demand, RBC forecasts the market swinging to a deficit, in which it will remain through the end of the decade.

The resulting drawdown of inventory should underpin strengthening prices. For the reason explained above, in the medium term prices are expected to remain capped at $6.50/lb. This level is considered insufficient to justify material additions of new production, resulting in continued drawdown of inventories. Past behaviour suggests that when inventories are drawn down to the critical level of 6 weeks WW supply, the price can increase suddenly and dramatically.

Figure 19.2 illustrates the price history for nickel over the previous three years. Monthly average prices ranged between a high of US$8.94/lb and low of US$3.94/lb and averaged US$6.60/lb over the 3-year period. The consensus forecast is for prices to remain below this trailing average until 2018 but to exceed US$8/lb in the longer term.

Figure 19.2: Nickel Price History and Consensus Forecast



Source: RNC analysis of public market disclosure by multiple research analysts

The current supply of nickel is roughly balanced between concentrate producers (such as Beta Hunt) and laterites. Outside of China, there are only 10 traditional smelters available to treat primary nickel concentrates globally. These have a combined annual capacity of no more than 700 kt nickel refined metal. Note that losses in the nickel smelting process are relatively high so that nickel contained in feed required to achieve this level of output would approximate 750 kt. Certain of the smaller facilities are currently closed and/or are facing permanent closure in the near future. Environmental issues associated with pyro-metallurgical treatment, depletion of Western World (WW) sulphide ores and processing developments render it highly unlikely that any additional WW smelters will be constructed.

These smelters are generally located at the site of historic large-scale nickel mining operations (for example, KNS was located centrally to the WMC nickel mines). Previously, the limited requirement by smelters for custom concentrates from third party operations, coupled with the very small number of smelters, made for an illiquid and opaque market where terms significantly favoured the smelters. More recently, depletion and/or deterioration in quality of the captive feed sources have led to much wider demand for custom feeds. While recent anecdotal evidence suggests the concentrate market remains in surplus and disclosed treatment terms continue to favour the smelters, the current price environment is expected to accelerate the closure of higher cost mines and bring the market into better balance. At this time, terms may dramatically improve for concentrate producers.

19.1.2 Gold Market

Estimated world mine production in 2015 of 3,150 tonnes gold (101 Moz) was an all-time record. However, lower prices led to a reduction in sales from central banks and scrap along with reduced

levels of producer hedging. As a result, estimated total supply of 4,275 tonnes (137 Moz) was 6% lower than the peak reached in 2012.

The two largest sources of demand for gold are:

- Fabrication, which currently represents 59% of total demand. Not surprisingly, the level of demand is inversely correlated to gold price.

- Investment, by both individuals and the official sector. Somewhat counter-intuitively, the level of investment is very strongly positively correlated to price (r^2 = 92%), suggesting that investors tend to buy high and sell low.

Exchange Traded Funds (ETFs) are another key source of demand. After many years of consistent inflows, funds turned bearish in 2012 and began liquidating holdings. The pace of outflow has since moderated, with RBC reporting a resumption of net inflows in January 2016. Table 19.2 summarizes the gold market supply – demand balance since 2005.

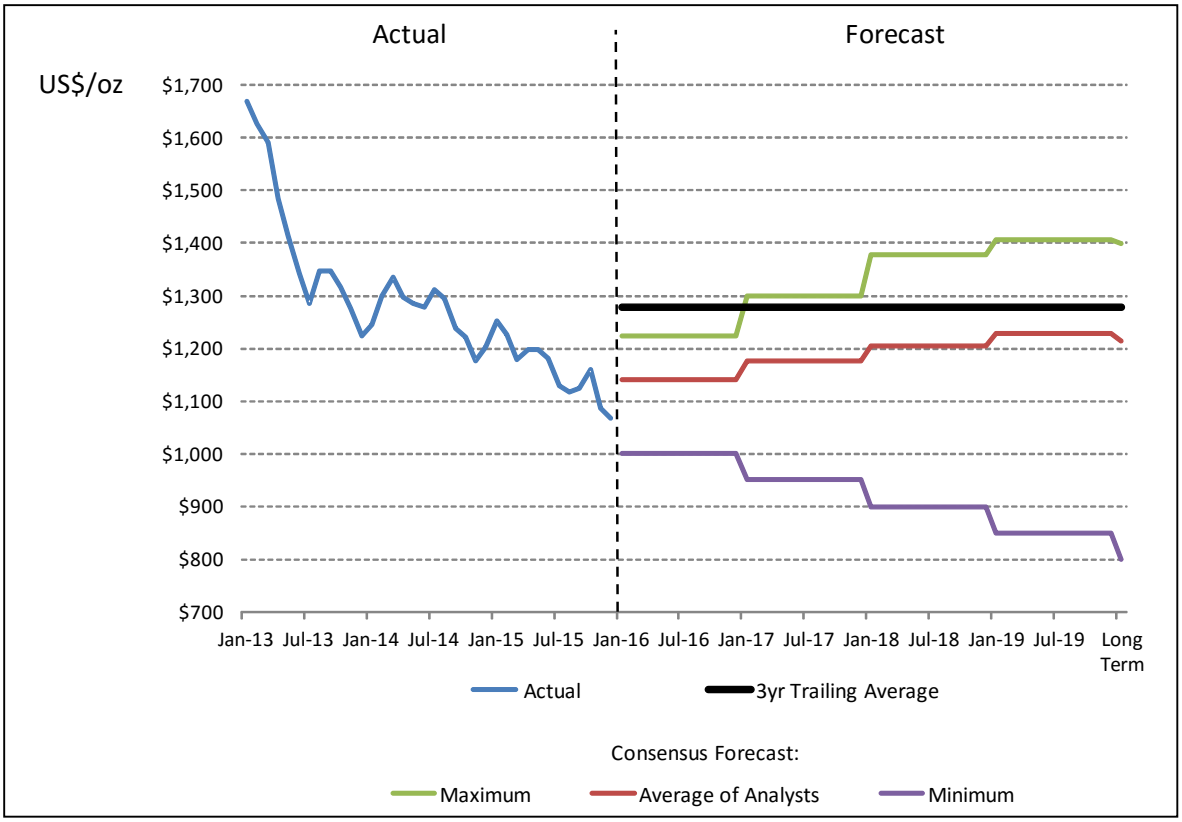
Table 19.2: Gold Market Supply – Demand Balance

Item	units	05A	06A	07A	08A	09A	10A	11A	12A	13A	14A	15E
Mine Production	tonnes	2,561	2,496	2,498	2,429	2,612	2,742	2,846	2,875	3,061	3,133	3,150
Net Official Sector Sales	tonnes	663	365	484	235	34	-	-	-	-	-	-
Old Gold Scrap	tonnes	903	1,133	1,006	1,352	1,728	1,713	1,675	1,677	1,287	1,125	1,125
Net Producer Hedging	tonnes	-	-	-	-	-	-	18	-	-	103	-
Total Supply	**tonnes**	**4,127**	**3,994**	**3,988**	**4,016**	**4,374**	**4,455**	**4,539**	**4,552**	**4,348**	**4,361**	**4,275**
Jewellery Fabrication	tonnes	2,722	2,302	2,426	2,308	1,819	2,033	2,034	2,008	2,439	2,213	2,150
Other Fabrication	tonnes	449	480	487	471	422	476	468	426	419	400	390
Total Fabrication	tonnes	3,171	2,782	2,913	2,779	2,241	2,509	2,502	2,434	2,858	2,613	2,540
Physical Investment (bars & coins)	tonnes	416	428	436	916	830	1,221	1,556	1,343	1,775	1,079	1,060
Net Producer De-Hedging	tonnes	92	434	432	357	234	106	-	40	39	-	50
Net Official Sector Purchases	tonnes	-	-	-	-	-	77	457	544	409	466	450
ETF / Exchange	tonnes	237	292	253	355	662	436	179	269	(978)	(159)	(140)
OTC Flows	tonnes	211	58	(45)	(391)	407	106	(155)	(78)	245	362	315
Total Demand	**tonnes**	**4,127**	**3,994**	**3,989**	**4,016**	**4,374**	**4,455**	**4,539**	**4,552**	**4,348**	**4,361**	**4,275**
Gold Price (London Fix)	US$/oz	$444	$604	$695	$872	$972	$1,225	$1,572	$1,669	$1,412	$1,266	$1,163

Source: RBC Capital Markets

Figure 19.3 illustrates the price history for gold over the previous three years. The price trended down from a high of $1671/oz in January 2013 to a low of $1068/oz most recently, with the average over the three-year period being $1279/oz. Prices subsequently rebounded from their recent lows and at time of writing approximate $1200. The consensus forecast is for the price to steadily improve and average $1215/oz in the long term.

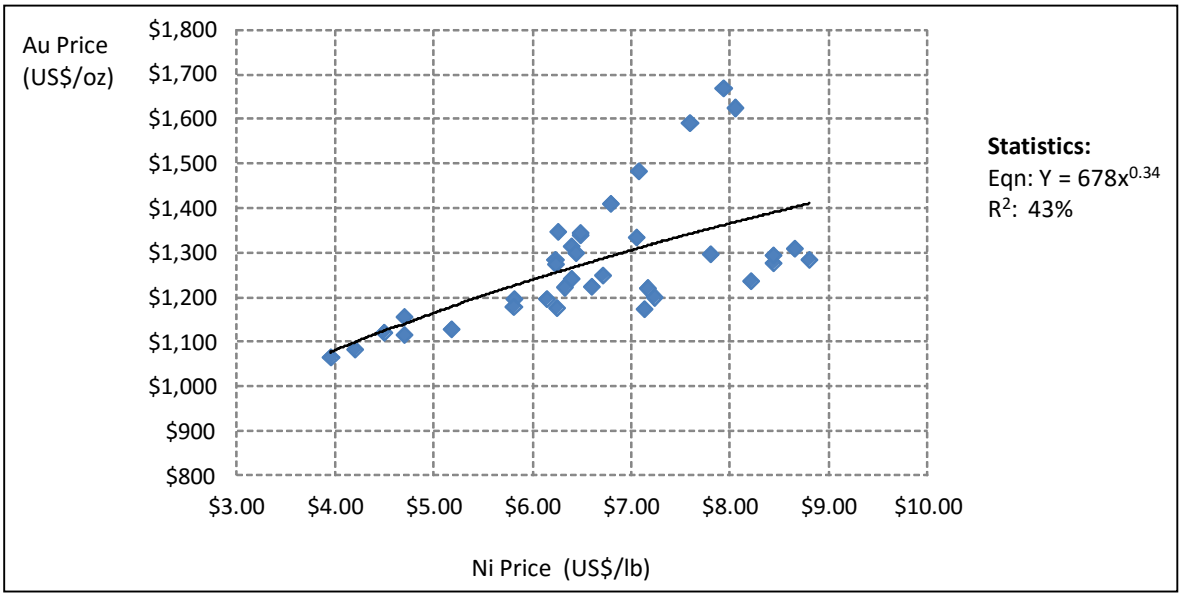
Figure 19.3: Gold Price History and Consensus Forecast



Source: RNC analysis of public market disclosure by multiple research analysts

Notwithstanding the consensus forecast, cognisance is taken of the fact that gold is seen as a 'safe haven' or insurance policy, with an associated implication of counter-cyclical movements relative to base metals such as nickel. (Simply put, there is a perception that the gold prices strengthens as nickel weakens and vice-versa). However, Figure 19.4 refutes this perception by illustrating a positive correlation between gold and nickel prices over the previous 3 years. This suggests there is some validity to the consensus view that nickel and gold prices will improve concurrently

Figure 19.4: Correlation of Gold and Nickel Prices (Monthly Avg, Jan '13 – Dec '15)



Source: RNC

19.2 Contracts

SLM initially employed a mining contractor but have since moved to owner-operations. The remaining material contracts, other than the material contracts described elsewhere in this report, are those relating to the toll treatment of ore.

19.2.1 Nickel Tolling

Nickel mineralization is toll processed at KNC by BHPB under a contract that includes the following key elements:

- The contract extends until Jan 31 2018. BHPB has the option to extend the contract after this date.
- The contract calls for delivery of up to 70 kt material annually. SLM does not anticipate issues regarding processing material in excess of this amount, as evidenced by the 136 kt processed in 2015.
- Material is blended with ores from other mines and the metallurgical recovery credited to Beta Hunt is based on the mineralization grade.
- There is no penalty to SLM for non-delivery of material, but BHPB may become entitled to terminate the contract if SLM fails to rectify the non-delivery within 28 days (or longer at BHPB's discretion) if BHPB issue a notice of that breach.
- BHPB must give SLM at least 6 months' notice before ceasing operations at KNC.

Material is trucked approximately 5 km to KNC under a separate contract.

19.2.2 Gold Tolling

Gold mineralization is toll processed at the SIGMC Lefroy Mill. Key elements of this contract include:

- The contract extends until June 30 2016, at which time it can be renewed,
- The contract calls for delivery of 10 - 50 kt material per month, and
- Material is batch treated and the metallurgical recovery is based on actual results. As reported in Section 13.2 previously, the recovery for batches treated to date ranges between 94 – 96%.

Material is trucked approximately 15 km to SIGMC under a separate contract.

20 Environmental Studies, Permitting, and Social or Community Impact

Beta Hunt is an operating mine and in possession of all required permits. SLM operates Beta Hunt through a sub-lease, most environmental permitting and compliance requirements for mining operations on the project tenements are the responsibility of the primary tenement holder, SIGMC. The project is a small operation with a limited disturbance footprint and the environmental impacts of the project are correspondingly modest. The summary provided in this Section is based on information provided by SLM or sourced from publicly accessible sources and government databases. The author did not independently verify compliance with regulatory requirements.

20.1 Environmental Studies

The Beta Hunt mine is located within a developed mining camp that has been subject to many environmental studies throughout its history. Key findings of these studies are summarized in the following sub-sections.

20.1.1 Soils and Flora

Soils in the region are typically composed of weathered basalt mixed with gravels and wind-blown sands. Soils in the immediate project area have been heavily disturbed by prior mining activity and have been covered with crushed rock to provide stability for equipment and machinery. Soils in the adjacent lake embayment are saline sediments.

The predominant vegetation species is eucalyptus, which is a fast-growing tree that emits compounds inhibiting other species from growing near-by. Other species that have managed to overcome the effects of these compounds include those in the acacia, figwort, protea and soapberry families. No known declared rare flora or restricted flora occurs in the region.

20.1.2 Fauna

A wide range of fauna is indigenous to the Goldfields area in which Beta Hunt is located. None of the species is restricted to the immediate locale habitat type. Studies have found that the long history of mining has had little impact on the fauna of the area, with the reduction in both diversity and abundance being temporary (resulting from habitat removal), with a return of diversity and abundance following reclamation. As a result, operations at Beta Hunt are not expected to cause the loss of any species or populations.

20.1.3 Hydrology

Surface hydrology of the Beta Hunt area is dominated by the Lake Lefroy salt lake. The lake is subject to occasional inundation from rainfall and associated runoff. Surface water is hyper-saline, with salinity of up to 450 g/L.

Ground water within aquifers is also hyper-saline, though with lower salinity in the range of 250 - 350 g/L. As discussed in Section 18, ground water is used for service water. Where possible, this

water is re-circulated to minimise discharge. Where discharge is necessary, the excess is pumped to Lake Lefroy. No treatment is necessary as the surface water (when present) has higher salinity than, and is otherwise chemically and physically similar to, the discharge.

20.2 Required Permits and Status

20.2.1 Permitting History

SLM acquired the Beta Hunt mine from CNKO in December 2013. The mine was non-operational at this time, having been placed on care and maintenance in November 2008 in response to the financial crisis and associated collapse in metal prices. Permits held by the mine remained valid, allowing SLM to re-start operations in April 2014.

Beta Hunt is located on tenements held by SIGMC and operated by SLM under a sub-lease. Accordingly, most environmental permitting and compliance requirements for mining operations on the project tenements are the responsibility of the primary tenement holder, SIGMC

20.2.2 Environmental Protection Act 1986

Part IV

Part IV of the *Environmental Protection Act* 1986 ("EP Act") applies to "environmentally significant proposals". The term "environmentally significant" in not defined in the EP Act, but is described in the Environmental Impact Assessment (Part IV Divisions 1 and 2) Administrative Procedures 2012. The Beta Hunt operation has not been separately assessed under Part IV of the EP Act, but discharges from Beta Hunt are recognised under Part IV assessments for SIGMC operations at Lake Lefroy (Figure 20.1).

Gold mining on Lake Lefroy was originally approved in July 2000 under Ministerial Statement 548. In 2011, an expansion of lake based mining activities was assessed by the EPA (Assessment Number 1809, EPA Report 1411) and was approved under Ministerial Statement 879 in November 2011. The two Ministerial approvals were subsequently consolidated and the Part IV approval is now entirely described in Ministerial Statement 548. The Ministerial approval for mining on Lake Lefroy is held by SIGMC. Accordingly, the implementation conditions contained in Ministerial approval 879 are not directly binding on SLM.

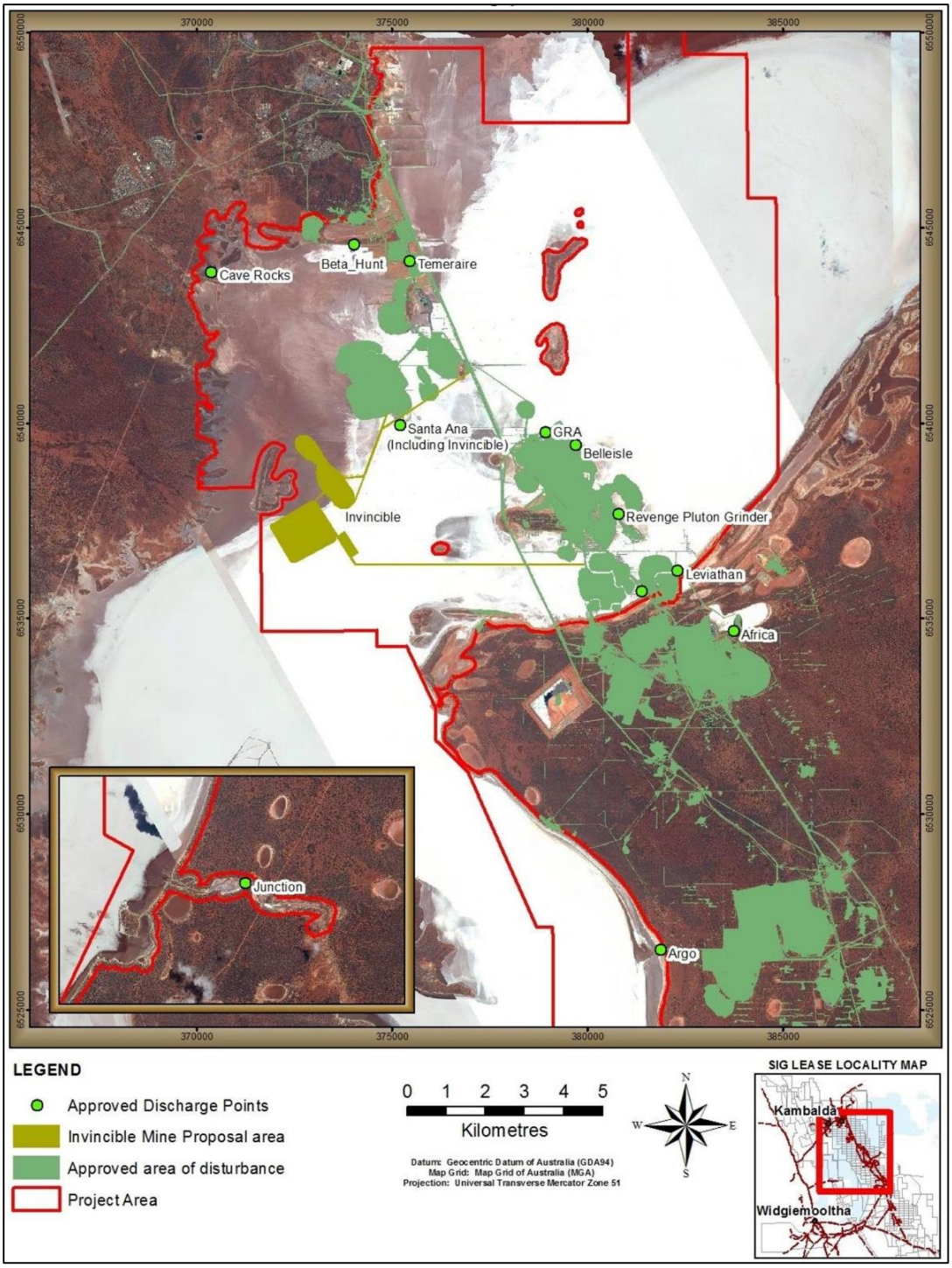
Part V – Work approvals and licenses

Although mining itself is not regulated under Part V of the EP Act, the Act and associated regulations stipulate that certain "prescribed activities", including mine dewatering, must be permitted through a works approval and licence if the scale of the activity exceeds a specified threshold. The licensing threshold for mine dewatering is 50,000 tonnes or more per year.

The Beta Hunt mine is currently licensed for discharge of up to 480 kt/a of water from mine dewatering (DER licence number L8893/2015/1). As ground water inflows from the mined out Silver Lake mine are the source of service water (discussed in Section 18), actual discharge is below this limit. The Department of Environment Regulation (DER) licence is valid until 8 July 2020. In addition to limiting the quantity of water that may be discharged, the licence imposes a number of implementation conditions relating to the discharge location, monitoring requirements and

environmental management and reporting obligations. Although the licence specifies requirements for monthly and quarterly water quality monitoring, and for reporting monitoring results to the DER, it does not impose any explicit limits on the concentration or load of any chemical constituent in the discharge water. In part, this reflects levels of salinity in the discharge that are lower than the salinity of surface water into which it is discharged.

Figure 20.1: Approved discharge points (St. Ives Gold, Ministerial Statement 879)



Source: SLM

Part V – Native vegetation clearing permits

Under some circumstances, a permit for clearing of native vegetation is required under Part V of the EP Act. Holders of approved mining proposals or other authorisations under the *Mining Act* 1978 are allowed to clear up to 5 ha of native vegetation per tenement per financial year without getting a vegetation-clearing permit, providing the vegetation is not specially protected and does not lie in an environmentally sensitive area.

Public databases of native vegetation clearing permits do not include any records of permits issued to SLM, or to the previous operator of Beta Hunt, CNKO. Note that mining operations take place underground, most waste rock is used as backfill for mined out voids, while processing and the associated storage of tailings is performed off-site by third parties. As a result, only limited clearing of vegetation is required.

In the event that clearing of native vegetation were required for future development at Beta Hunt, it is likely that authorization for clearing would need to be sought by, or in consultation with, SIGMC (as primary tenement holder). SIGMC holds many clearing permits relating to its Lake Lefroy mining operations and is expected that permits would be obtained in due course.

20.2.3 Mining Act 1978

Fifteen mining tenements are listed on DER licence L8626/2012/1 as relevant to the Beta Hunt mine. According to the project management plan for Beta Hunt (Salt Lake Mining, 2013), the main surface infrastructure is located on M 15/1512, M 15/1516, M 15/1529 and M 15/1531.

The licensed discharge from Beta Hunt appears mainly to occur on tenement M15/1512. All tenements are held by SIGMC.

Environmental aspects of mining and mineral processing (and related infrastructure) are regulated under the *Mining Act* 1978. Based upon information contained in DMP's Mining Tenements On-line (MTO) database (accessed February 2016), the most recent mining proposals submitted to the DMP in relation to the Beta Hunt mine appear to be:

- "Letter of Intent for Pre-Commissioning Activities of the Beta Hunt Project" dated August 4, 2003, signed by Dale Rogers Registered Manager (NOI 4351) and retained on Department of Industry and Resources File No. E2683/200301.

- "Notice of Intent For Re-Commencement of Mining Beta Hunt Project - Kambalda" dated September 11, 2003 (NOI 4379) signed by Dale Rogers Registered Manager and retained on Department of Industry and Resources File No. E2683/200301.

- "Project Update and Environmental Report - Beta Hunt Mine to 2007" (MP 5558) dated November 2007 signed by Les Davis Registered Manager Beta Hunt Project and retained on Department of Industry and Resources File No. E2683/200301.

As SIGMC is the legal holder of the tenement, it is chiefly the responsibility of SIGMC to notify DMP of any changes to activities on tenements used by the Beta Hunt project.

20.2.4 Rights in Water and Irrigation Act 1914

Construction of bores, taking of surface water and groundwater and implementation of works that may affect watercourses are generally regulated under the Right in Water and Irrigation Act 1914. However, special administrative and policy arrangements have been agreed between DMP and the Department of Water (DoW), such that some mining activities that would normally require formal DoW approval are exempt from DoW permitting and are instead managed through the instrument of a mining proposal approved by the DMP (DMP and DoW, 2012). Licensing exemptions do not apply to taking of water.

Abstraction of water from the Beta Hunt mine workings is regulated under groundwater licence GWL62505, which is held by SIGMC. The licence provides a water allocation of 30,000 kt/a and is valid until February 2024. Beta Hunt's dewatering requirements (up to 480 kt/a) represent less than 2% of the water that may be abstracted under the current licence.

20.2.5 Aboriginal Heritage Act 1972

The Department of Aboriginal Affairs database shows no registered heritage sites on the four tenements (M15/1512, M15/1516, M15/1529 and M15/1531) where SLM is likely to do any surface disturbance.

20.3 Environmental Aspects, Impacts and Management

The project is a small operation with a limited disturbance footprint and the environmental impacts of the project are correspondingly modest. The information reviewed suggests that the key environmental aspects requiring management effort are:

- Water management, and
- Mine rehabilitation and closure.

SLM has disclosed that there are no other outstanding significant environmental issues.

20.3.1 Water Management

Mine dewatering at Beta Hunt is generally required to be undertaken in accordance with the Licence to Take Water (GWL 62505) and the conditions attached to that licence. SIGMC is the licence holder and accordingly has primary responsibility for ensuring compliance with the licence.

Discharge of mine water, however, is regulated under DER licence L8893/2015/1, held by SLM. SLM is required to lodge annual compliance in relation to its water discharge licence and periodic scrutiny by the DER should be expected. The water quality monitoring results presented in the 2012 - 2013 environmental compliance report showed relatively high concentrations of nickel in water being discharged to Lake Lefroy, as well as trace amounts of hydrocarbon and slight turbidity, but were otherwise unremarkable. The discharge water was hypersaline (as expected). The licence approved by DER specifies no limits for the other parameters to be monitored.

20.3.2 Mine Rehabilitation and Closure

Under the *Mining Act* 1978, responsibility for mine rehabilitation and closure generally lies with the tenement holder (SIGMC, in this case). The Beta Hunt project management plan explains that accountability for rehabilitation of the Beta Hunt tenements will be allocated as follows:

- SLM will be responsible for disturbance arising from September 9, 2003 to the completion of its operations.
- SIGMC will be responsible for disturbance prior to September 9, 2003 or after the cessation of SLM's operations and mine rehabilitation / closure activities.

SLM does not contemplate any significant clearing of vegetation or new surface disturbance so rehabilitation and closure costs are limited.

SLM notes that it does not propose to undertake any work on the existing mullock dump unless it disturbs the dump through removal of material. It is SLM's expectation that the rehabilitation that it will be required to implement will be generally limited to closure and rehabilitation of access tracks, routine clean-up of rubbish and waste materials, removal of buildings, pavements and above ground infrastructure, and sealing of exploration boreholes and mine openings.

The estimated closure costs are described in section 21.3.

20.3.3 Mining Rehabilitation Fund

The MRF is a State Government levy, the responsibility of the DMP, which provides a pooled fund, based on the environmental disturbance existing on a tenement at the annual reporting date. Levies paid into the MRF will be used for rehabilitation where the operator fails to meet rehabilitation obligations and every other effort has been used to recover funds from the operator. Liability to pay the MRF Levy became compulsory from 1 July 2014. This means that tenement holders now need to report for the MRF each year prior to the close of the levy period, which is on 30 June each year (prescribed day).

The MRF Liabilities are based on negotiated set of standard rates for the purposes of setting the levy. The amount of levy payable is assessed as the Rehabilitation Liability Estimate (if over $50,000) multiplied by the Fund Contribution Rate which is set at 1%.

With respect to the Beta Hunt Sub-Lease, the MRF levy is paid by SIGMC as registered owners of the leases to which SLM contributes an agreed to amount based on it's rehabilitation commitments as defined in the Beta Hunt Sub-Lease Agreement. For 2015, SLM's contribution was A$9,091.

It should be noted that levies paid into the MRF required under the *Mining Rehabilitation Fund Act 2012* and *the Mining Rehabilitation Fund Regulations 2013* are non-refundable and separate from the internal accounting provisions for closure and rehabilitation and should not be used to offset the costs for rehabilitation.

20.4 Social and Community

The Kambalda region has a substantial history of exploration, mining and pastoral activity. This includes small alluvial and underground mining around the early 1900's, salt mining at Lake Lefroy during the 1960's to 1980's, nickel and gold mining from the 1970's to the present, and pastoral grazing on the nearby Woolibar and Mt Monger pastoral stations. Beta Hunt operates within an environment of strong local community support.

The nearest town to Beta Hunt is Kambalda, with a population of 2,701 (2011 Census). The closest houses are approximately 2 km from the portal. As the active underground workings are a further 1 - 4 km down the decline and the scale of operation is small, noise and vibration do not affect the residents. The mine workings are underground and waste rock is generally used to backfill mined out voids so there is no active surface waste dump. There is also no concentrator or tailings storage facility. As a result, dust generation is not an issue.

Kalgoorlie-Boulder has a population of 31,107 (2011 Census) and is located 60 km north of north of Kambalda. Kalgoorlie is the regional centre for the Eastern Goldfields and is a regional hub for transport, communications, commercial activities and community facilities.

The majority of the current workforce of approximately 120 persons is accommodated within these two towns. The recent downturn in base metal prices and associated premature and unplanned closure or nearby mines has resulted in a pool of local labour that is available to meet the increased staffing requirements as the Beta Hunt gold operation ramps up.

There are no registered heritage sites within the Project area or nearby. Red Hill lookout is situated on nearby Red Hill and overlooks the Lake Lefroy area.

The nearest port is Esperance, 330 km south of Kambalda.

21 Capital and Operating Costs

Capital and operating costs for Beta Hunt have been estimated using a zero-based model. The design criteria, unit costs and other assumptions used in this model are based on current actual performance at Beta Hunt. The currency for all costs presented in this section is Australian dollars (A$).

21.1 Capital Costs

Beta Hunt is an operating mine with all necessary infrastructure already in place and primary development to the various mining areas already established. Capacity of the existing mining fleet is in excess of current production rates and only limited additional units will be required as the gold operation ramps up to full production. Processing of mineralization is performed off site and by third parties so there is no required investment by SLM in surface infrastructure such as a mill or tailings storage facility.

The mine is in operation, with no requirement for initial pre-production capital. As is customary for sustaining capital estimates, contingency has not been included.

Table 21.1 summarizes the life-of-mine capital requirements for the Base Case mine plan that depletes current Measured, Indicated and Inferred (MII) Resources.

Table 21.1: Beta Hunt Capital Cost Estimate

Item	Units	Base Case
Capitalized Development	A$ 000s	22,638
Mining Fleet	A$ 000s	4,223
Sustaining	A$ 000s	19,094
Total Capital	**A$ 000s**	**45,955**

Discussion on each of the areas of spending follows below.

21.1.1 Capitalized Development

Any development access in waste that has a useful life exceeding 12 months is classified as capital and includes:

- Extensions to the main decline (mined at 5.0m wide x 5.5m high),
- Lateral accesses to both Ni and Au mineralization (mined at 4.0m wide x 4.5m high),
- Raises installed for storage of broken mineralization, access and ventilation (raisebored by contractors at 3m diameter).

Costs for lateral development reflect the design criteria, productivity and unit costs for the current operation. Given a large component of fixed costs (mainly labour), the overall rate (A$/m developed) varies as a function of the development rate (metres developed per month). A large

percentage of the broken waste is used to backfill mined out voids underground, reducing the need for rehandle into trucks and haulage to surface.

The cost for contracted raise boring is based on the current fixed unit rate.

Table 21.2 summarizes total quantities of capital development and associated costs for the LOM plan.

Table 21.2: Beta Hunt Capital Development

Item	Units	Base Case
Decline	metres	5,612
Ni Lateral Waste	metres	2,490
Au Lateral Waste	metres	4,843
Sub-Total Lateral Development	**metres**	**12,945**
Raises	metres	819
Total Development	**metres**	**13,763**
Lateral Development Rate	A$/m	1,464
Raise Development Rate	A$/m	4,500
Total Development Rate	**A$/m**	**1,645**
Capitalized Development	**A$ 000s**	**22,638**

21.1.2 Mining Fleet

The current fleet of production equipment at Beta Hunt includes:

- 2 x twin boom jumbo,
- 1 x explosives charger,
- 3 x narrow vein LHDs (3t capacity) used in narrow vein stoping,
- 1 x small LHD (6t capacity) used in development and bulk stoping,
- 2 x medium LHD (12t capacity) used in development and bulk stoping,
- 1 x large LHD (17t capacity) used for rehandling mineralization into trucks, and
- 6 x 50t trucks, of which one is considered to be reserved for spare parts.

The existing units are either owned, leased or held on a lease-to-buy option. Many of the units that are currently owned were used at time of purchase. Key assumptions used in estimating the fleet capital requirements were:

- There would be no buy-out of existing leases, which are reflected as an operating cost.
- Given the relatively short life of mine for current MII Resources, it would not be necessary to replace any of the units of existing fleet.

- Given the current availability of used equipment, it would be possible to source used equipment for any additional units that may be required. Note that the assumed cost of used equipment was conservatively estimated at rates significantly higher than prior purchases.

Table 21.3 summarizes the capital fleet requirements.

Table 21.3: Beta Hunt Fleet Capital Requirements

Unit	Cost	Units	Additional Units
Jumbo	A$300k	# of purchases	2
Charger	A$150k	"	2
3t LHD	A$180k	"	0
6t LHD	A$300k	"	0
12t LHD[2]	n/a	"	1
17t LHD	A$500k	"	0
Truck	A$300k	"	2
Grader	A$150k	"	0
Production Drill[1]	n/a	"	2
Sub-Total		**A$ 000s**	**1,500**
Miscellaneous Units[2]		A$ 000s	2,348
Remaining hire-purchase costs[3]		A$ 000s	375
Total Fleet Capital		**A$ 000s**	**4,223**

1. 12t LHD and production drill leases at rates of A$30k/m and A$29k/m, respectively (operating cost)
2. Including tool carrier, scrapers, ambulance, fuel and water tanks, and refuge chambers
3. For 1 x jumbo and explosives charger

21.1.3 Sustaining Capital

Included under sustaining capital are the following:

- An allowance for infill drilling of existing Inferred Resources of A$2.6M. The bulk of this expenditure will be incurred in 2016.
- An allowance for step-out drilling of targets near existing resources of A$2.2M. The bulk of this expenditure will be incurred in 2017.
- An allowance for completing a PFS of A$1.0M. This estimate reflects the limited complexity and significant database associated with an operational mine. Additionally, with offsite toll treatment by third parties, there is no requirement to include surface infrastructure such as a concentrator or tailings storage facility in the study.
- A further allowance for ongoing drilling of A$8.9M that will be expended after 2017. It should be noted that the financial model does not associate any benefit to this expenditure (i.e., notwithstanding the inclusion of expenditures in the cash flows, any success in identifying new targets and converting mineable resources has not been included in the production plan). The actual amount invested on drilling will be contingent upon the success of earlier phases.
- A monthly allowance for maintenance (above and beyond that provided under operating costs) of A$25k.
- A monthly allowance for unspecified sustaining items of A$25k.

21.2 Operating Costs

The nickel and gold mining operations share common infrastructure and overhead costs, resulting in low costs for the combined operation, as summarized in Table 21.4.

Table 21.4: Operating Cost Estimate

Item	Units	Base Case		
		Nickel	Gold	Total
Mineralization Mined	kt	572	2,924	3,496
Development	A$/t			2.95
Nickel Mining[1]	A$/t	137.69		22.53
Gold Mining[1]	A$/t		68.42	57.24
Central Services	A$/t			8.22
G & A	A$/t			3.71
Total Operating Costs	**A$/t**			**94.65**
Total Operating Costs	**A$ 000s**			**330,899**

1. Direct costs include mining, transportation and processing

Discussion on each of the areas of spending follows below.

21.2.1 Operating Development

Operating development includes waste development with a useful life up to 12 months. In practice, no waste development meets this criteria and the operating development cost includes only the ore drives established using mechanized equipment in gold mineralization. The standard dimension for ore drives is 4.0m wide x 4.5m high, but SLM are able to drive ends down to 3.0m wide where mineralization tapers.

Table 21.5 summarizes total quantities of operating development and associated cost.

Table 21.5: Beta Hunt Operating Development

Item	Units	Base Case
Total Operating Development	metres	6,892
Total Mineralization	kt	3,496
Development Rate	A$/m	1,495
Total Development Cost	A$ 000s	10,306
Development Cost	**A$/t**	**2.95**

21.2.2 Nickel Mining

The conventional mining method employed in narrow vein nickel mineralization results in labour being the largest cost element, representing more than 50% of total costs.

Table 21.6: Beta Hunt Nickel Mining Operating Costs

Item	Units	Base Case
Total Mineralization	kt	572
Average Mining Rate	kt / month	12.2
Labour	avg # FTE	48
Labour Cost	A$/t	70.74
Consumables	A$/t	20.53
Maintenance	A$/t	10.50
Energy	A$/t	2.13
Equipment Leases	A$/t	5.94
Contract Services[1]	A$/t	27.86
Total Nickel Mining Directs	**A$/t**	**137.69**

1. Contract Services includes trucking to and processing of mineralization at plants owned by third parties.

21.2.3 Gold Mining

With the mechanized mining method employed in the wider vein gold mineralization, significantly greater labour productivity can be achieved resulting in unit operating costs that are 50% lower than for nickel.

Table 21.7: Beta Hunt Gold Mining Operating Costs

Item	Units	Base Case
Total Mineralization	kt	2,924
Average Mining Rate	kt / month	44.3
Labour	avg # FTE	45
Labour Cost	A$/t	14.13
Consumables	A$/t	4.78
Maintenance	A$/t	6.26
Energy	A$/t	1.72
Equipment Leases	A$/t	7.03
Contract Services[1]	A$/t	34.50
Total Nickel Mining Directs	**A$/t**	**68.42**

1. Contract Services includes trucking to and processing of mineralization at plants owned by third parties.

21.2.4 Central Services and G&A

Costs associated with the mining operation that cannot be directly allocated to either nickel or gold mining have been grouped under Central Services and include:

- The complement of supervisory and technical personnel responsible for managing operations, and
- The costs of de-watering and ventilating the mine.

G&A costs are of an administrative nature, including:

- Travel and accommodation,
- Insurance,
- The mines safety levy, and
- Operation of surface facilities such as the gate house and core farm

Both cost areas are largely fixed in nature. In the event that higher than planned production rates were achieved, unit costs could be materially lower than currently forecast

Table 21.8: Beta Hunt Central Services and G&A Costs

Item	Units	Base Case
Total Mineralization	kt	3,496
Average Mining Rate	kt / month	53.0
Labour	avg # FTE	17
Labour Cost	A$/t	4.40
Consumables	A$/t	0.00
Maintenance	A$/t	0.00
Energy	A$/t	5.40
Equipment Leases	A$/t	2.12
Total Central Services and G&A Costs	**A$/t**	**11.93**

21.3 Closure

As discussed in section 20.3 previously, according to terms of Sub-Lease with SIGMC, SLM is responsible for satisfying all rehabilitation obligations arising since inception of the lease in September 2003.

In June 2008, Consolidated Minerals had estimated its share of this total liability would be A$308k, as detailed in Table 21.9.

Table 21.9: Consolidated Minerals 2008 Closure Estimate

Item	Liability A$ 000s	Description
Infrastructure Area	98	Footprint for plant, roads, dumps and other surface infrastructure.
Plant	94	Remove mine compound and other surface infrastructure
Underground	52	Stockpiles, dumps and pads
Sub-Total Direct Costs	**243**	
Indirect Costs - Labour	34	Project management, supervisor, plant operators.
Indirect Costs - Operations	21	Light vehicle fuel, power, misc., admin.
Audit	9	Final audit and report
Sub-Total In Direct Costs	**64**	
Total Closure Provision	**308**	

Comparison of photos taken at the time of this estimate with more recent images from Google Earth do not show significant increase in the footprint of disturbances other than for addition of a small water management dam. While some additional material has been deposited in dumps and stockpiles, waste from earlier dumps has since been removed for road construction and the net change is not significant.

22 Economic Analysis

The economic analysis contained in this report is based, in part, on Inferred Resources, and is preliminary in nature. Inferred Resources are considered too geologically speculative to have mining and economic considerations applied to them to be categorized as Mineral Reserves. There is no certainty that economic forecasts on which this PEA is based will be realized. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

22.1 Summary

Table 22.1 summarizes key metrics for the Base Case evaluation.

Table 22.1: Beta Hunt Summary Metrics

Area	Item	Units	Base Case
Macro-Economic	Nickel Price[1]	US$/lb	$5.41
	Gold Price[1]	US$/oz	$1,150
	A$ f/x[1]	US$	$0.72
Production	Total Mineralization	kt	3,496
	Total Nickel[2]	Mlbs	26.8
	Total Gold[3]	000 oz	270
	Average Annual Nickel[2]	Mlbs pa	6.7
	Average Annual Gold[3]	000 oz pa	47
Opex	Revenue / tonne[4]	US$/t	$116
	Total Operating Costs	US$ / t	$68
	Ni Net C1 Cost	US$ / lb Ni[2]	($2.70)
	Au Net C1 Cost	US$ / oz Au[3]	$529
	EBITDA Margin	EBITDA : Revenue	41.3%
Capex & Total Costs	Total Capital Investment[5]	US$ M	$33
	Ni Net AISC[6]	US$/lb Ni[2]	$0.28
	Au Net AISC [6]	US$/oz Au[3]	$825
	Ni Co-Product AISC[6]	US$/lb Ni[2]	$2.87
	Au Co-Product AISC[6]	US$/oz Au[3]	$893
Valuation	Annual post-tax OCF	US$ M	$17
	Post-tax $NPV_{5\%}$[7]	US$ M	$70
	Post-tax $NPV_{8\%}$[7]	US$ M	$65

1. *Weighted average over life of mine*
2. *Nickel recovered to concentrate*
3. *Recovered Gold*
4. *Revenue includes deductions for payability*
5. *Capital investment includes closure costs*
6. *AISC: All-in sustaining cost includes site costs, off-site costs, royalties, and sustaining capital*
7. *NPV includes Operating Cash Flow and Investment, excludes Financing*

22.2 Key Assumptions

All financial metrics presented in Table 22.1 are expressed in real, Q1 2016 terms. Metrics reflect the forecast performance of Beta Hunt from February 1, 2016.

Macro-economic assumptions are based on the analysis presented in Section 19 and are summarized in Table 22.2

Table 22.2: Macro-Economic Assumptions

Item	Units	2016	2017	2018	2019+
Nickel Price	US$/lb	4.00	5.25	6.50	6.50
Gold Price	US$/oz	1,150	1,150	1,150	1,150
A$ f/x	US$	0.72	0.72	0.72	0.72

Returns are expressed on a post-tax basis, incorporating the following assumptions regarding taxation:

- The federal rate for corporate income tax is 30% and no other taxes are charged. The State of Western Australia collects revenues via the royalties included in the list summarized in Section 4. Note that the Mineral Resource Rent Tax only applied to iron ore and coal operations and was repealed in September 2014.
- Interest charges are deductable from taxable income.
- Historic tax losses and the un-depreciated capital balance as of Dec 31 2015 were approximately A$0.4M and A$17.8M, respectively.
- The Australian tax code does not allow carry-back of a terminal loss at the end of mine life to offset taxes paid in previous years.

22.3 Base Case Evaluation

The Base Case plan entails the following:

- A continuation of the nickel operation at current production rates of approximately 13 ktpm until depletion of existing MII resources in Q4 2019.
- A ramping up of gold operations to a steady-state rate of 50 ktpm by December 2016 then maintenance of this rate until depletion in Q2 2021.

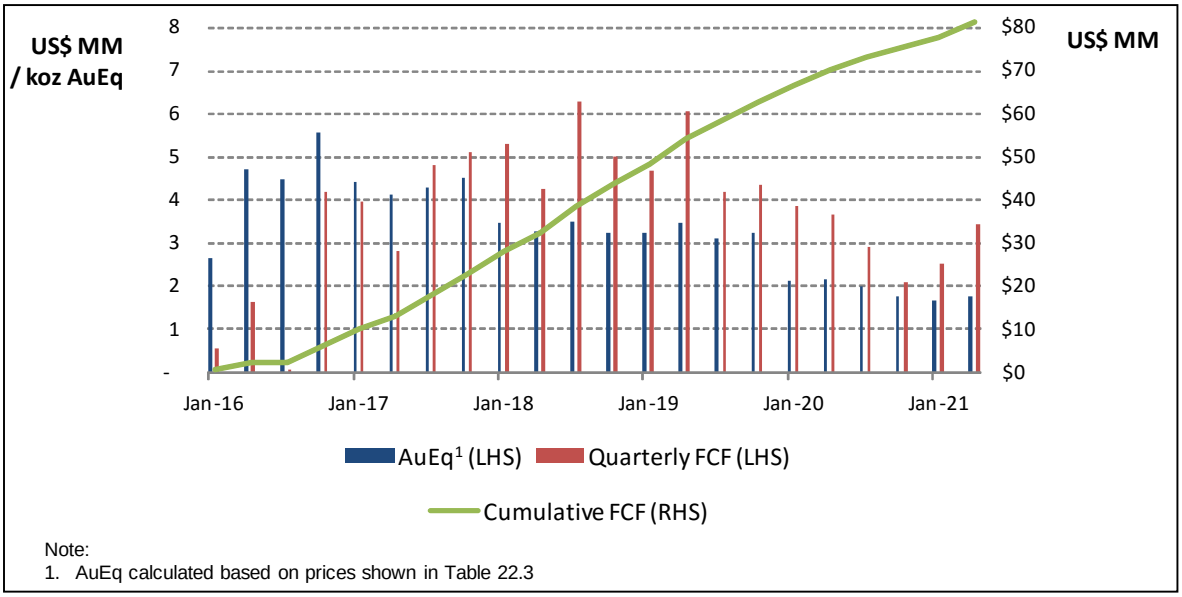
Table 22.3 provides a summary of annual production, revenue, costs and cash flow.

Table 22.3: Base Case LOM Summary

Macro-Economic	**units**		**Jan-16**	**Jan-17**	**Jan-18**	**Jan-19**	**Jan-20**	**Jan-21**
Ni	US$ / lb		$4.00	$5.25	$6.50	$6.50	$6.50	$6.50
Gold	US$ / oz		$1,150	$1,150	$1,150	$1,150	$1,150	$1,150
Production	**units**	**TOTAL**	**Jan-16**	**Jan-17**	**Jan-18**	**Jan-19**	**Jan-20**	**Jan-21**
Ni rec'd to conc	'000 lbs	26,779	7,712	7,764	6,966	4,337	-	-
Payable Au	'000 oz	270	42	56	50	57	45	20
Income Statement	**units**	**TOTAL**	**Jan-16**	**Jan-17**	**Jan-18**	**Jan-19**	**Jan-20**	**Jan-21**
Gross Revenue	**US$ 000s**	**$405,836**	**$69,259**	**$90,744**	**$87,152**	**$84,303**	**$51,789**	**$22,588**
Operating Costs	**US$ 000s**	**$238,189**	**$42,208**	**$51,587**	**$50,243**	**$49,493**	**$30,622**	**$14,036**
Net C1 Costs - Ni	US$ / lb Ni	($2.70)	($0.86)	($1.60)	($1.04)	($3.77)	n/a	n/a
Net C1 Costs - Au	US$ / oz Au	$529	$513	$447	$412	$542	$680	$715
Royalties	US$ 000s	$33,124	$5,541	$7,213	$7,434	$7,086	$4,059	$1,791
EBITDA	**US$ 000s**	**$134,523**	**$21,510**	**$31,944**	**$29,475**	**$27,725**	**$17,108**	**$6,760**
Depreciation	US$ 000s	$46,646	$5,601	$8,671	$8,740	$10,137	$8,226	$5,271
Earnings Before Tax	**US$ 000s**	**$87,877**	**$15,909**	**$23,274**	**$20,736**	**$17,588**	**$8,882**	**$1,489**
Net AISC (Ni in conc)	US$ / lb Ni	$0.28	$0.59	$0.44	$1.28	$0.20	n/a	n/a
Net AISC (Au)	US$ / oz Au	$825	$775	$732	$735	$843	$953	$1,074
AISC Co-Product Ni	US$ / lb Ni	$2.87	$2.37	$2.66	$3.16	$3.65	n/a	n/a
AISC Co-Product Au	US$ / oz Au	$893	$826	$841	$889	$889	$953	$1,074
Accounting Taxes	US$ 000s	$26,363	$4,773	$6,982	$6,221	$5,276	$2,665	$447
Earnings	**US$ 000s**	**$61,514**	**$11,136**	**$16,291**	**$14,515**	**$12,311**	**$6,217**	**$1,042**
Cash Flow Statement	**units**	**TOTAL**	**Jan-16**	**Jan-17**	**Jan-18**	**Jan-19**	**Jan-20**	**Jan-21**
Earnings	US$ 000s	$61,514	$11,136	$16,291	$14,515	$12,311	$6,217	$1,042
Depreciation	US$ 000s	$46,646	$5,601	$8,671	$8,740	$10,137	$8,226	$5,271
Accounting Taxes	US$ 000s	$26,363	$4,773	$6,982	$6,221	$5,276	$2,665	$447
Pre-Tax Cash OCF	**US$ 000s**	**$134,523**	**$21,510**	**$31,944**	**$29,475**	**$27,725**	**$17,108**	**$6,760**
Cash Taxes	US$ 000s	$20,850	$3,614	$5,224	$3,731	$5,170	$2,665	$447
Post-Tax Cash OCF	**US$ 000s**	**$113,673**	**$17,896**	**$26,721**	**$25,744**	**$22,555**	**$14,443**	**$6,313**
Total Investment	**US$ 000s**	**$33,310**	**$11,511**	**$10,127**	**$4,953**	**$3,347**	**$1,989**	**$1,382**
Free Cash Flow	**US$ 000s**	**$80,363**	**$6,385**	**$16,594**	**$20,791**	**$19,208**	**$12,454**	**$4,931**

Under the base case macro-economic forecast, from the end of this year, the Base Case is forecast to consistently generate quarterly free cash flow in excess of US$4M (Figure 22.1).

Figure 22.1: Base Case LOM Production and Cashflow



Note:
1. AuEq calculated based on prices shown in Table 22.3

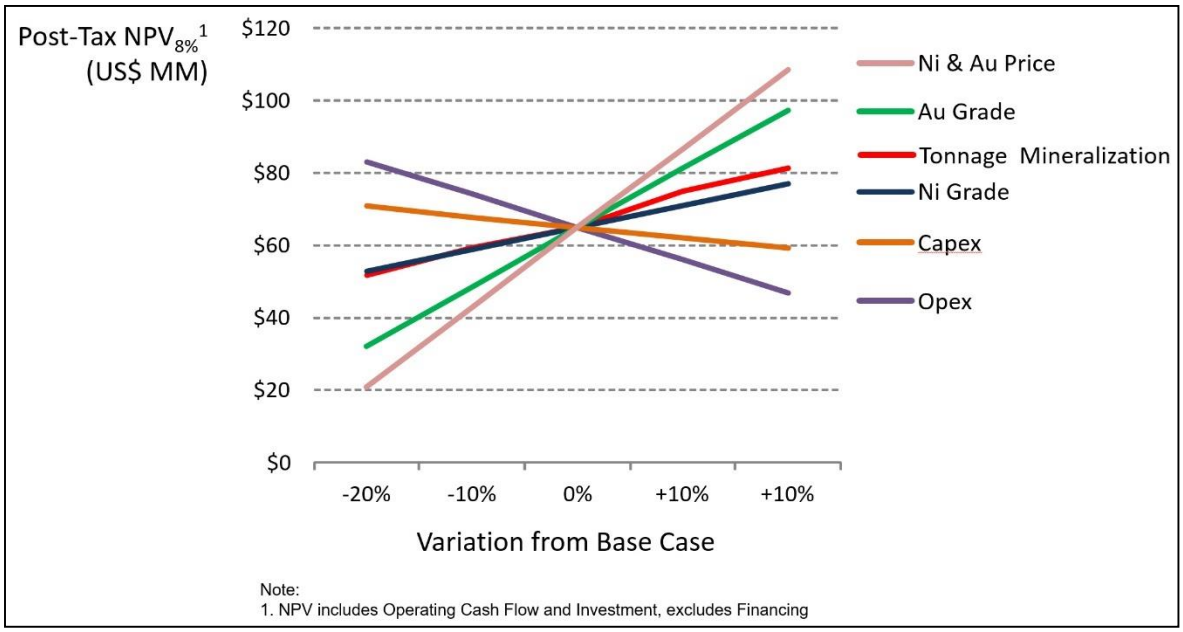
22.3.1 Sensitivity Analysis

Analysis was performed to test the sensitivity of returns to a ±20% variation in the following key parameters:

- The total tonnage of mineralization extracted and processed,
- The grade of both nickel and gold mineralization,
- Site operating costs,
- Total capital costs, and
- The prices of nickel and gold

As illustrated in the 'spider' graph Figure 22.2, returns are most sensitive to factors impacting revenue (grade and metal price) and more sensitive to operating costs than capital.

Figure 22.2: Base Case – Sensitivity Analysis



In the event that key macro-economic assumptions vary from the base case assumptions, returns are most sensitive to variation in gold prices and less sensitive to variations in nickel prices and exchanges rate (Table 22.4).

Table 22.4: Beta Hunt Economic Sensitivity Metrics

Metric	units	Variation from Base Case			Base Case	Variation from Base Case		
		Nickel - $1.00/lb	Gold - $100/oz	A$ f/x - US$0.01		Nickel + $1.00/lb	Gold + $100/oz	A$ f/x + US$0.01
Net Ni C1 Cash Cost	US$/lb Ni	$0.00	$1.01	($0.12)	($2.70)	$0.00	($1.01)	$0.12
Net Au C1 Cash Cost	US$/oz Au	$64	$0	($12)	$529	($65)	$0	$12
Net Ni AISC	US$/lb Ni	($0.09)	$0.91	($0.14)	$0.28	$0.08	($0.91)	$0.14
Net Au AISC	US$/oz Au	$55	($10)	($14)	$825	($57)	$10	$14
Co-Product Ni AISC	US$/lb Ni	($0.16)	$0.02	($0.03)	$2.87	$0.16	($0.01)	$0.03
Co-Product Au AISC	US$/oz Au	$7	($11)	($11)	$893	($7)	$11	$11
NPV 5%	US$ M	($10)	($15)	$2	$70	$11	$15	($2)
NPV 8%	US$ M	($10)	($14)	$2	$65	$10	$14	($2)

23 Adjacent Properties

23.1 Adjacent Nickel Deposits

Nickel ore was first mined in the Kambalda region from WMC Resources Silver Lake shaft in 1966. The orebodies mined from this shaft were known as the Lunnon shoot or deposit (Figure 7.4). The Silver Lake mine commenced in 1966/67 with final remnant mining being completed in 1985/86.

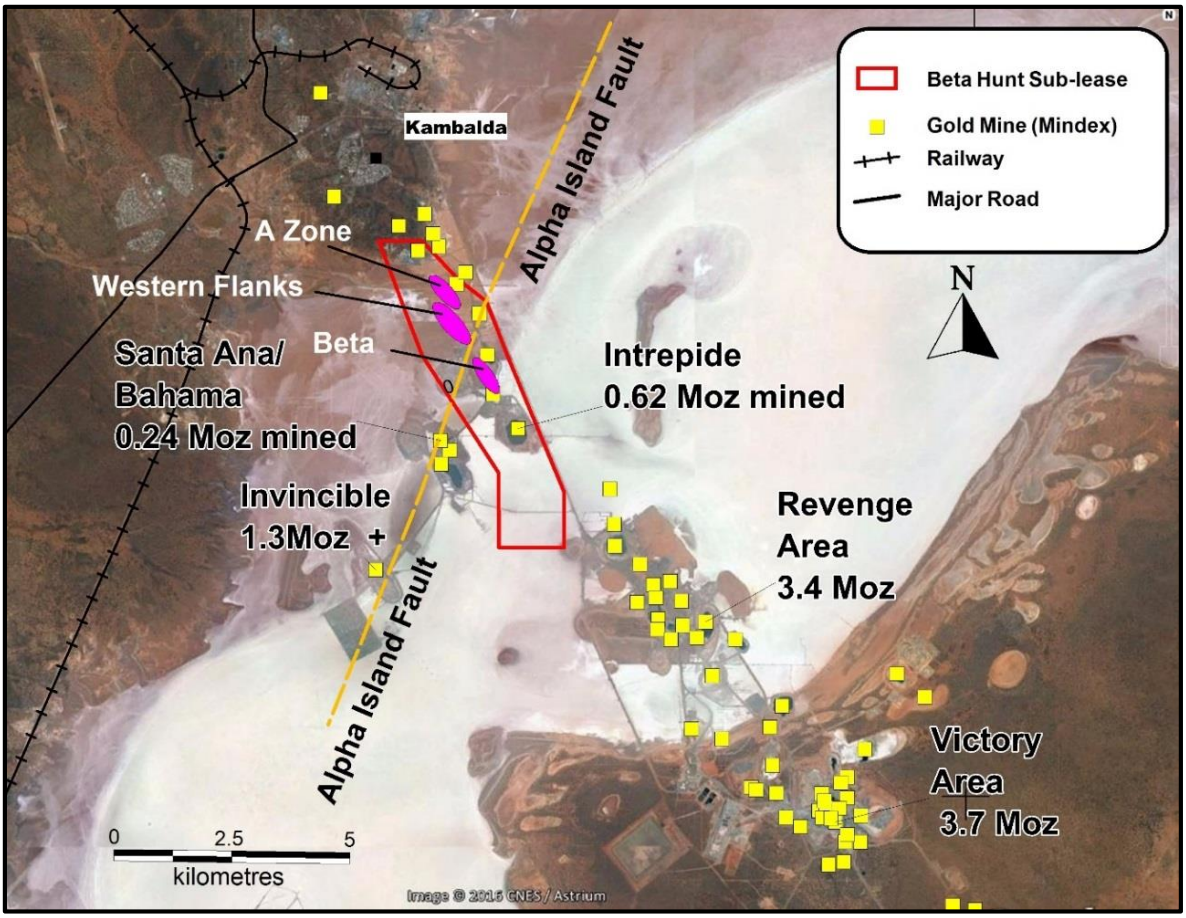
Total production from this orebody was 4.5M tonnes of ore at a grade of 2.7% Ni for a total of 123 ktonnes of Ni contained in ore (Western Mining Corporation Ltd, 1985).

23.2 Adjacent Gold Deposits

The Beta Hunt Gold deposits (A Zone, Western Flanks) are localized about the Alpha Island Fault and are part of a multi-million oz gold ore system (Figure 23.1). The Alpha Island Fault is associated with the Intrepide, Santa Ana, and Bahama gold deposits.

More recently, SIGMC are currently reporting resources at their Invincible discovery of 9.2Mt grading 4.5 g/t Au for 1,300 koz contained Au (Gold Fields Limited 2015).

Figure 23.1: Gold deposits along the Alpha Island Fault.



Source: RNC, data after Woodcock (2014), St Ives Gold Mining Company (2014) and Mindex Database

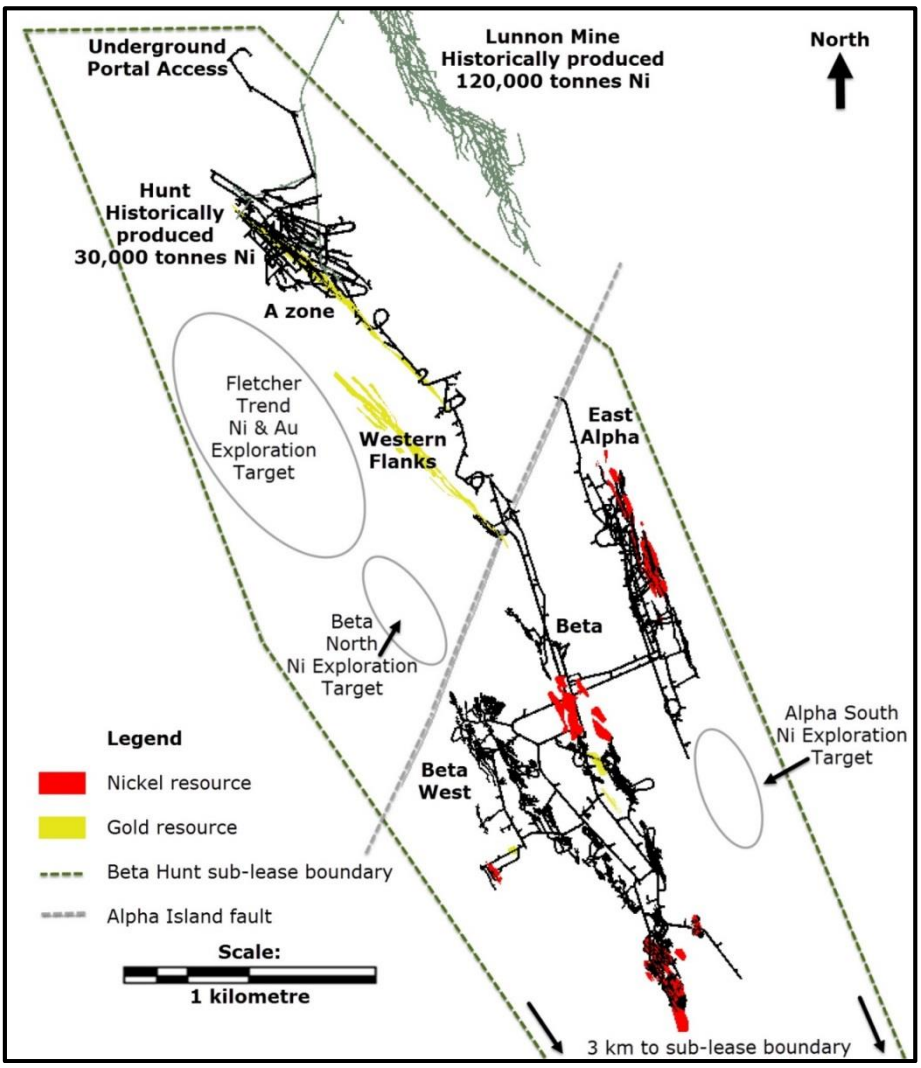
The qualified person has been unable to verify the information on these adjacent properties. This information is not necessarily indicative of the mineralization on the property that is the subject of the technical report.

24 Other Relevant Data and Information

24.1 Exploration Potential

The exploration potential of Beta Hunt is significant as a number of nickel and gold occurrences have been intersected outside the current resources. These include occurrences both along the immediate trends of current resources and along poorly explored parallel trends (Figure 24.1).

Figure 24.1: Schematic highlighting resources and zones of exploration potential.

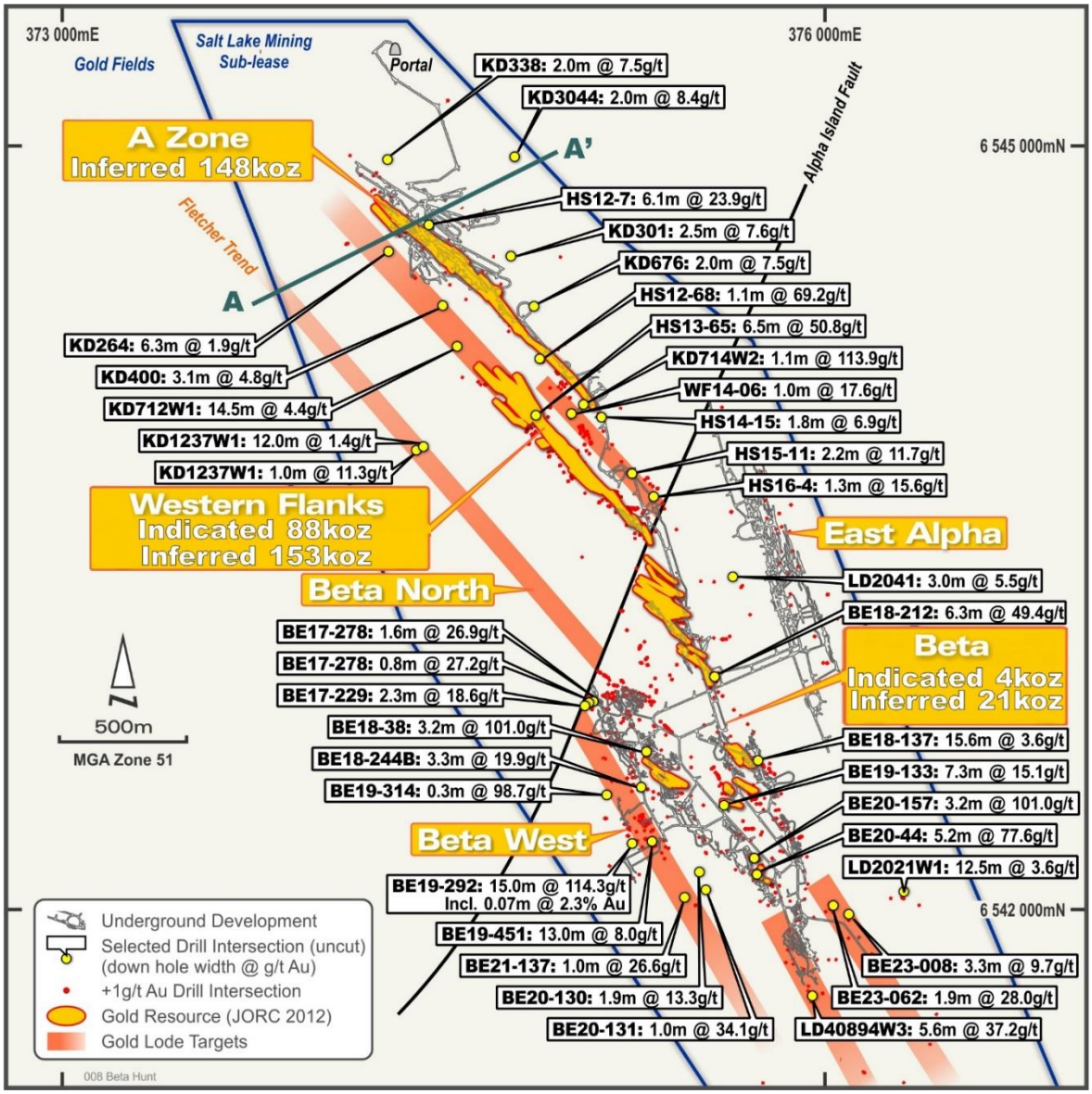


Source: RNC

24.2 Gold Exploration Potential

The historical focus on nickel mining by previous owners has left much of the gold potential at Beta Hunt unevaluated. As part of a review of historical data, a significant number of historical, high-grade gold intersections were identified outside existing resources. Figure 24.2 illustrates that these targets occur down-dip, along strike and parallel to existing gold resources. The following sub-sections discuss key targets in more detail.

Figure 24.2: Plan view of gold targets and drill intersections outside the existing resource



Source: SLM

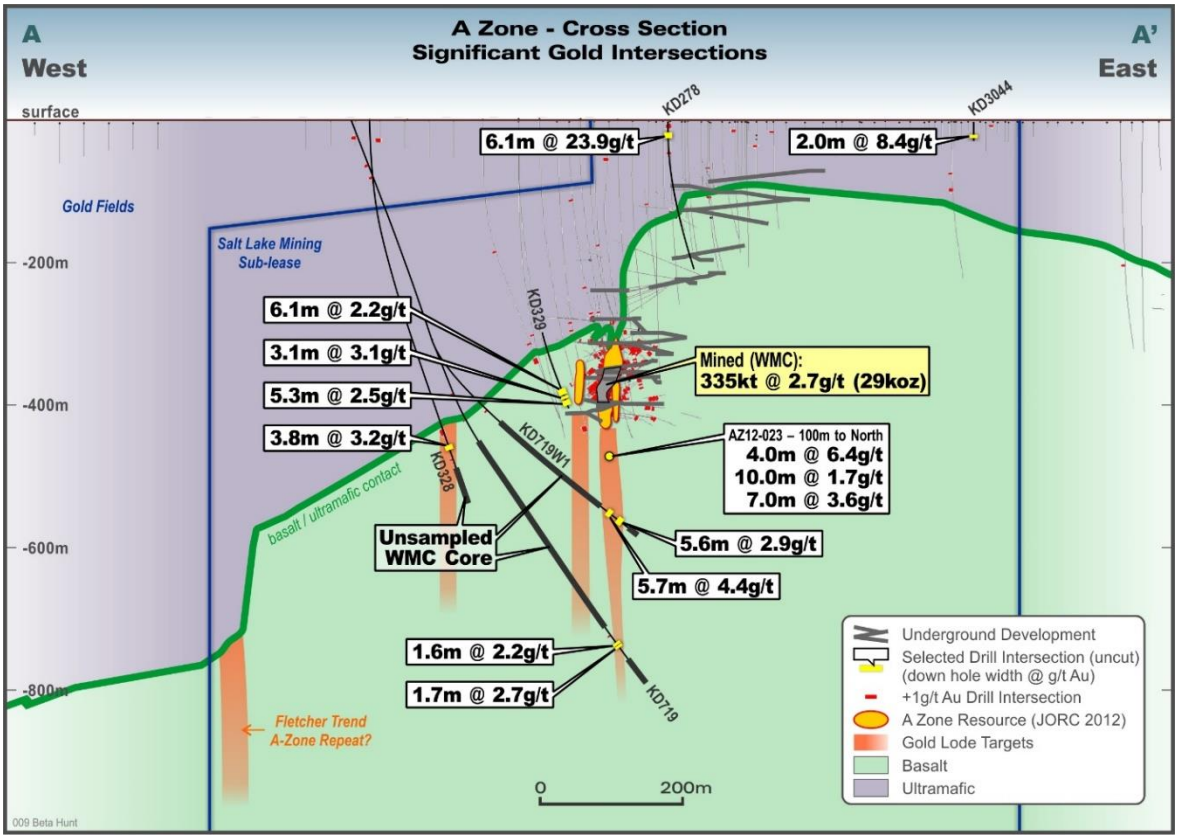
24.2.1 A Zone

There is significant potential to extend the A Zone resource down dip. The following holes shown on Figure 24.3 have established the presence of mineralization up to 250 m down-dip of the basal contact:

- AZ12-023, which intersected 4.0 m grading 6.4 g/t Au as well as 7.0 m grading 3.6 g/t Au
- KD719W1, which intersected 5.7 m grading 4.4 g/t Au

In the event that continuity of mineralization is proven by drilling this exploration target, the potential increase to A Zone resources could be 0.8 – 1.2 Mt grading 2.7 – 3.3 g/t Au, for 70 – 130 koz contained gold. See Figure 24.4 for the A Zone exploration target area.

Figure 24.3: A Zone Cross Section highlighting targets peripheral to resources



Source: SLM

24.2.2 Western Flanks

The limited drilling of Western Flanks performed to date includes the following notable intersections:

- KD712W1, which intersected 15.5 m grading 4.4 g/t Au
- KD400, which intersected 3.1 m grading 4.8 g/t Au

Together, these holes and additional drill intersections suggest Western Flanks mineralization may extend up to 700 m north of and 200 m down dip from the existing resource. In the event continuity of mineralization above cut-off grades was proven for this exploration target, the potential increase to Western Flanks resources could be 1.6 – 2.4 Mt grading 4.4 – 5.4 g/t Au, for 230 – 420 koz contained gold. See Figure 24.4 for the Western Flanks exploration target area.

24.2.3 Beta

Mineralization at Beta is less continuous than mineralization north of the Alpha Island Fault. However, the potential of this zone is highlighted by the following very high grades intersections close to the basal contact:

- BE19-451: 13.0 m grading 8.0 g/t Au
- BE19-292: 15.0 m grading 114 g/t Au, including 0.07 m grading 23,000 g/t Au (2.3% Au) close to the basal contact

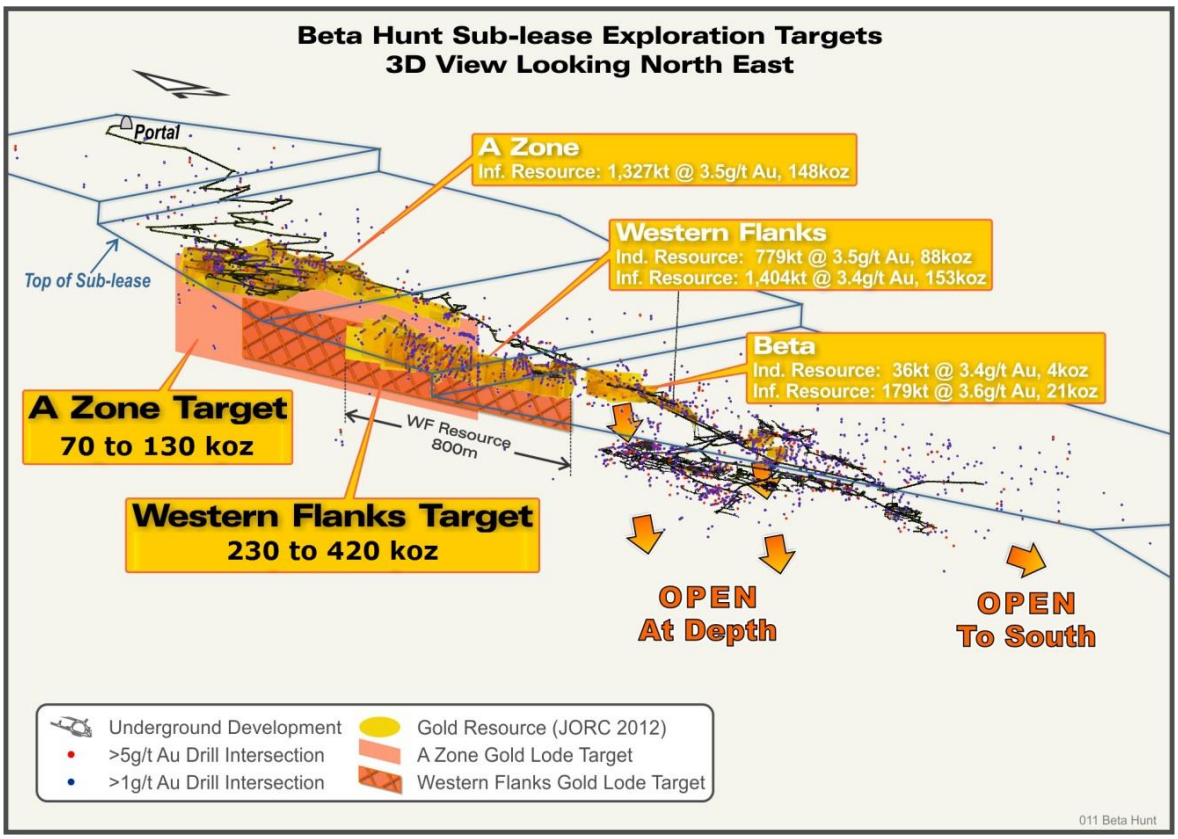
These high-grade intersections are characteristically associated with narrow gold-rich veins/veinlets concentrated along the ultramafic/basalt contact at the intersection with gold mineralised structures.

Historically the area has only been drill tested for nickel mineralization with gold assays a secondary consideration when part of the historically nickel-only production operation. The area has yet to be directly targeted for gold with the down dip potential remaining untested.

24.2.4 Fletcher Trend/Beta North

The Fletcher Trend is marked by a near 200 m normal fault offset defined by wide spaced historical surface drilling. Where drilled, these fault off-sets are associated with significant gold lodes as represented by the A Zone and Western Flanks. Limited, sub-optimal historical surface drilling confirms that gold mineralization occurs on the Fletcher Trend – for example hole KD7123W1 intersected 12 m grading 1.4 g/t Au and 1 m grading 11.3 g/t. This target is believed to hold potential for an A Zone / Western Flanks repeat mineralized structure.

Figure 24.4: 3D view of Beta Hunt Gold Resources highlighting key targets for drilling.



Source: SLM

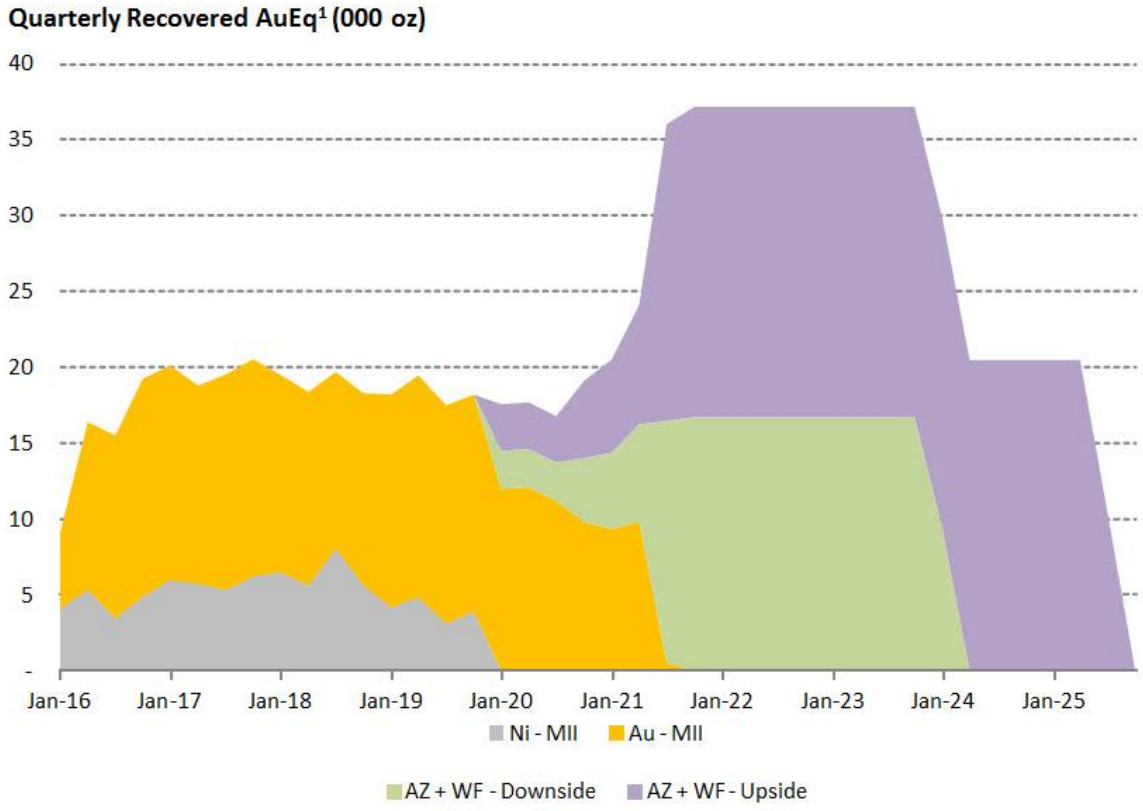
24.2.5 Impact on Mine Plan

The potential impact of the near term targets at A Zone and Western Flanks is illustrated in Figure 24.5. Note that the assumed output from mineral potential assumes rates for mining recovery and dilution equal to the present operation. Note that the assumed output from mineral potential assumes rates for mining recovery and dilution equal to the present operation.

Note that the potential tonnages and grades are conceptual in nature and are based on previous drill results that defined the approximate length, thickness, depth and grade of the exploration target. There

has been insufficient exploration to define a current resource and the Company cautions that there is a risk further exploration will not necessarily result in the delineation of a mineral resource.

Figure 24.5: Conceptual Production Plan Including Gold Exploration Targets



Notes:
1. Ni converted to AuEq based on metal recovered to concentrate and annual forecast metal prices

AZ = A Zone, WF= Western Flanks

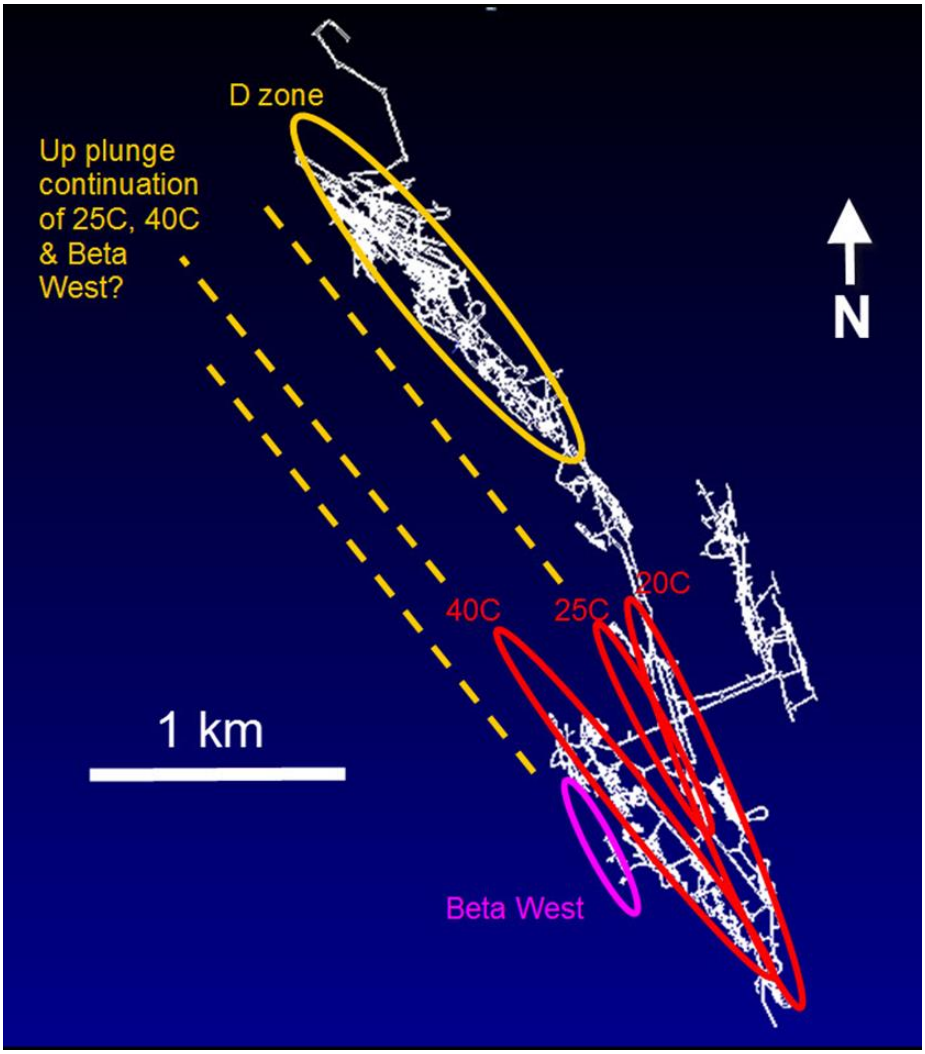
24.3 Nickel Exploration Potential

Significant potential exists for the discovery of additional nickel deposits at Beta Hunt along trend from known nickel shoots and in parallel structures north of the Alpha Island Fault (Figure 24.1). Potential also exists down plunge to the south of the Alpha and Beta deposits as indicated by results from widely spaced drilling (Figure 24.8).

24.3.1 Beta North and Fletcher Trends

The Alpha Island Fault separates the Hunt shoot from the Beta mine on the western limb of the Kambalda dome. Beta contains three major, well-defined troughs: 20C, 25C and 40C, and minor associated hangingwall surfaces, as well as a major hangingwall surface further west: Beta West (Figure 24.6). The 20C surface is interpreted to be the down plunge continuation of the D Zone/Q Fault/D Zone Deeps/05C trough from the Hunt deposit.

Figure 24.6: Plan view of the current development at Beta Hunt showing the three major troughs and Beta West hangingwall surface in Beta, and the potential for extending these north into Hunt



Source: SLM

Although Hunt has been extensively drilled and mined out, there may be some potential for further drilling, re-interpretation and remnant mining of the Hunt shoot.

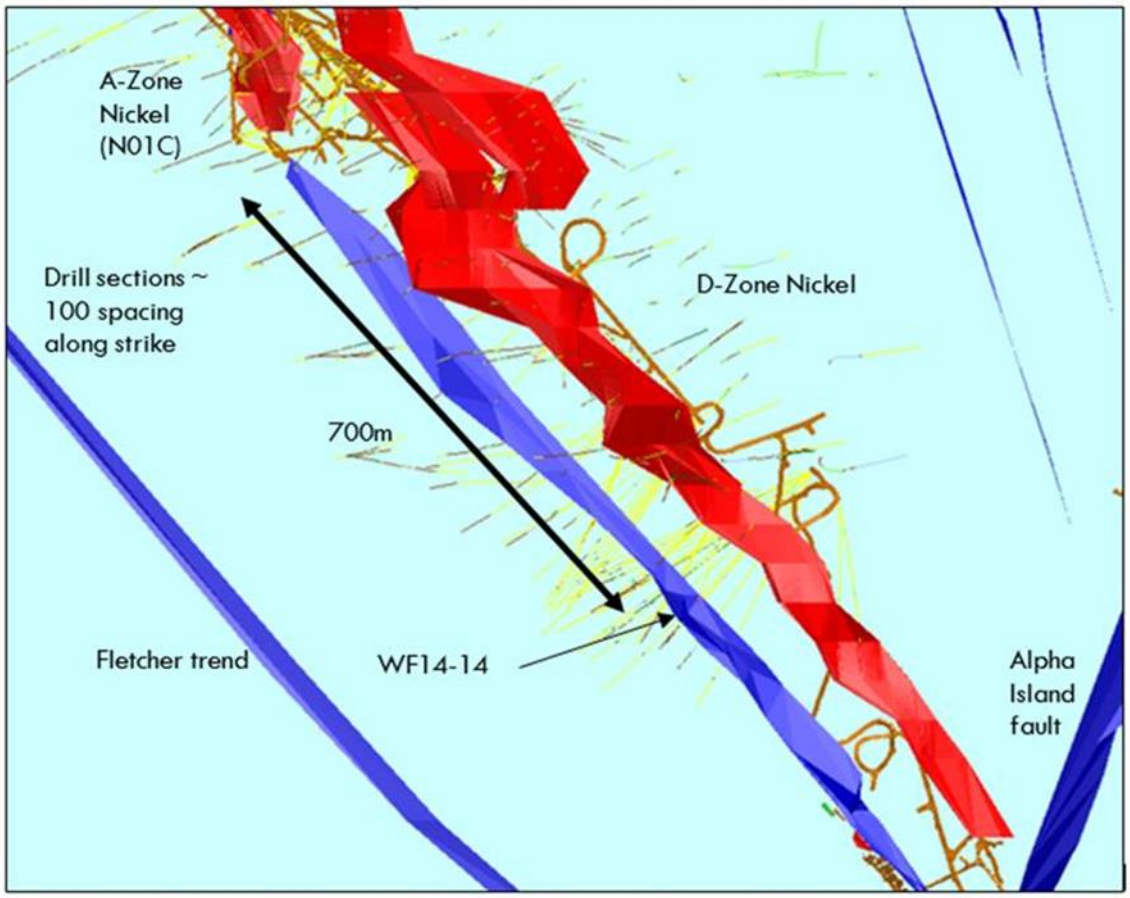
There is, however, excellent potential for exploration drilling to the west of the already mined surfaces in Hunt along the Beta North and Fletcher trends. Existing drilling in this area consists of surfaces holes with a spacing of a minimum of 300m up to several kilometres. Exploration drilling is required to test these areas west of Hunt in search of surfaces analogous to the 25C, 40C and Beta West HW surface.

24.3.2 A Zone Trend

A Zone nickel mineralization was mined from Hunt and was recognized as the single most important ore surface with the highest grade-tonnage of any ore surface. Infill drilling has been completed from surface south of the last known occurrence in the 13 level and appears to cut off A Zone mineralization to the immediate south. However, 700 m further south along strike, hole WF14-14 was drilled in 2014 for Western Flanks gold and intersected a small amount of high tenor massive sulphide in the expected positon of the A Zone surface (Figure 24.7). This nickel occurrence intersected 2.35 m grading 5.8%

Ni including 0.65 m grading 14.4% Ni. This intersection along with a number of other small nickel intersections indicates that exploration follow-up of the A Zone trend in this area is warranted.

Figure 24.7: A Zone Trend nickel exploration potential west of D Zone. Oblique view looking northeast



Source: SLM

24.3.3 Lunnon Extensions

Exploration potential exists along the southern extension of the Lunnon trend (see adjacent deposits in Section 23.1) onto the Beta Hunt sub-lease, between existing development and the Alpha Island Fault (figure 24.8)

24.3.4 Down Plunge Extensions

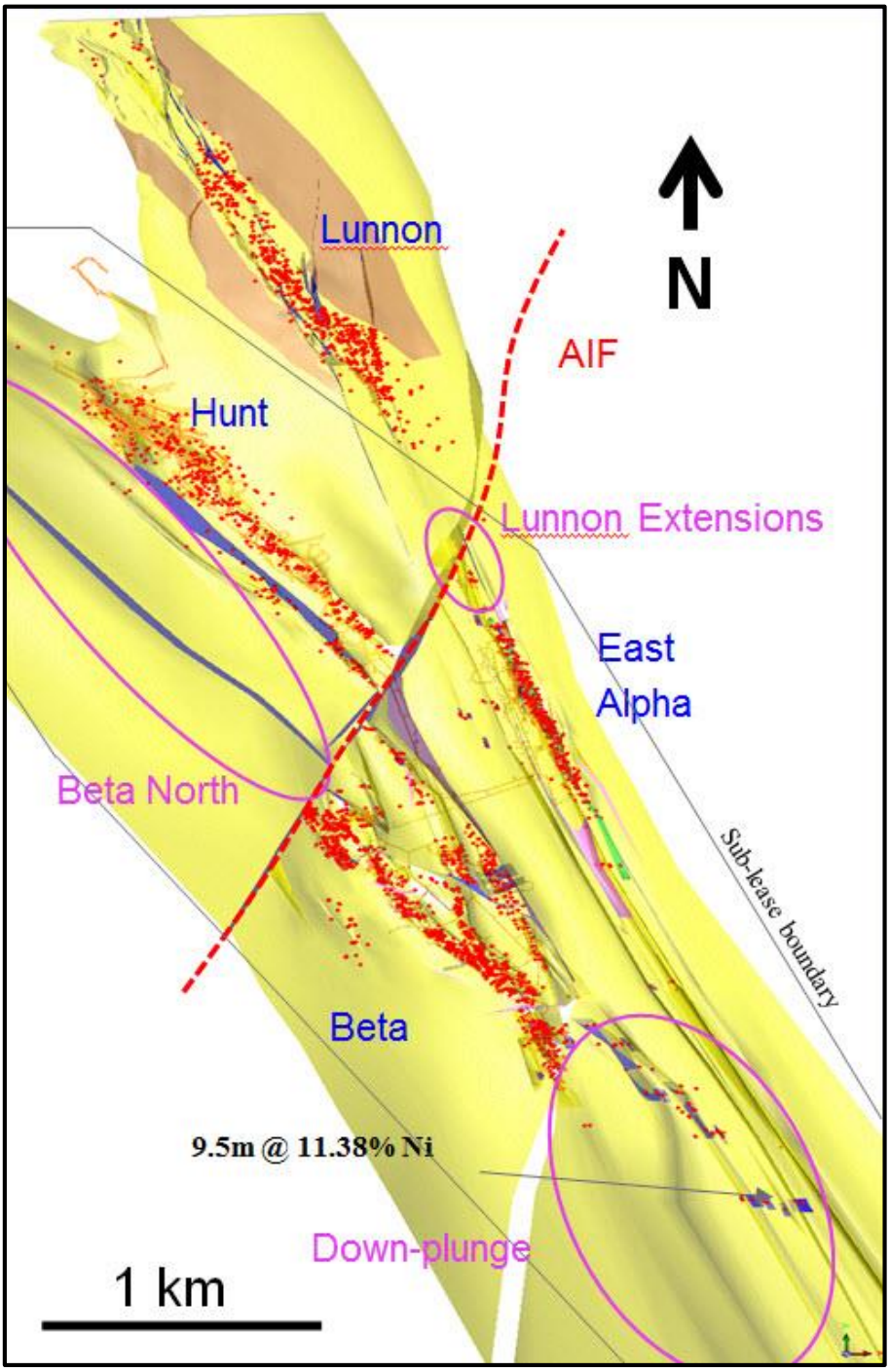
Exploration potential exists down plunge from the Beta and East Alpha deposits as indicated by several widely spaced nickel intersections (Figure 24.8 and Figure 24.9). Historic WMC drilling intersected the following ore-grade nickel occurrences:

- 9.5 m grading 11.38% Ni in hole LD4022,
- 1.9 m grading 2.27% Ni in LD4027,
- 2.5 m grading 4.94% Ni in LD2018AW1, and

- 2.0 m grading 2.00% Ni in LD6005.

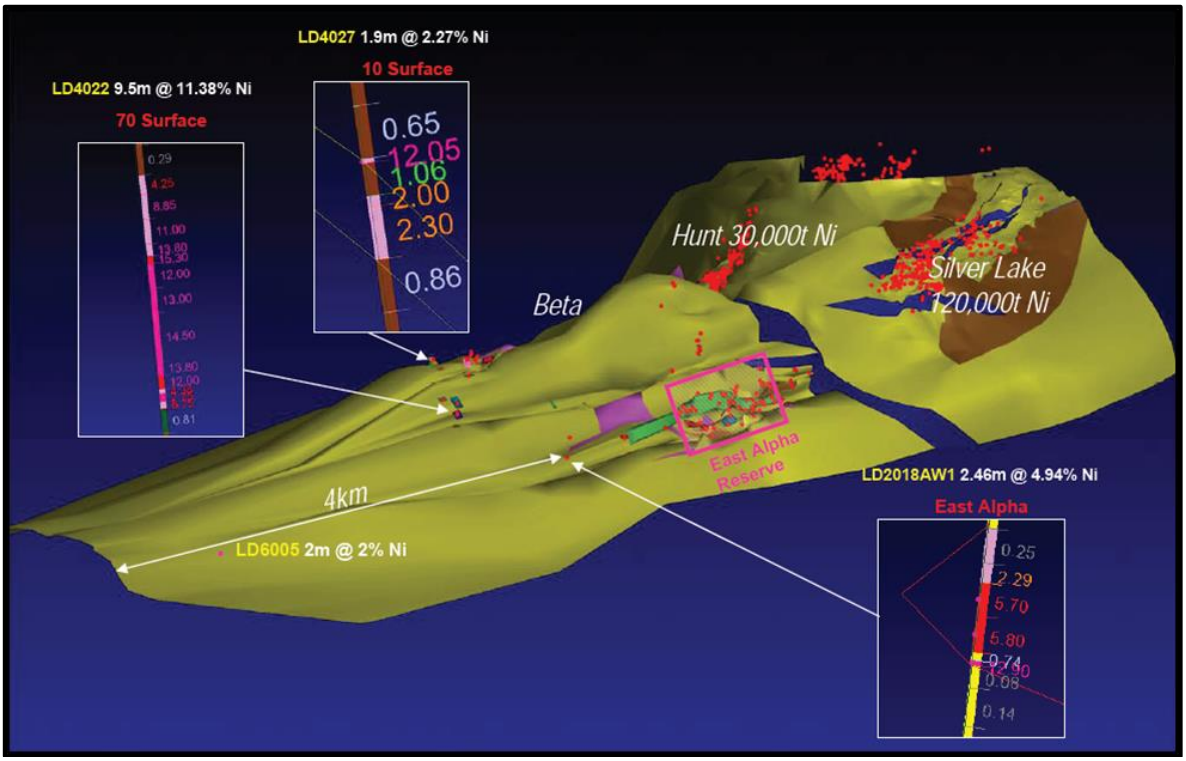
These occurrences suggest that nickel mineralization potential extends over 3 km to the south toward the boundary of the Beta Hunt Sub-lease. No follow-up work in this area has been carried-out since WMC sold the property to Goldfields in 2001.

Figure 24.8: Basalt geology model showing mine development and assays greater than 1% nickel (red dots)



Source: SLM

Figure 24.9: Oblique view of basalt geology model looking northwest



Source: SLM

25 Interpretation and Conclusions

In the opinion of the authors, the PEA demonstrates the continued viability of the Beta Hunt operation, even at current low metal prices.

This analysis and the associated conclusion of continued viability is based, in part, on Inferred Resources and is preliminary in nature. Inferred Resources are considered too geologically speculative to have mining and economic considerations applied to them to be categorized as Mineral Reserves. There is no certainty that economic forecasts on which this PEA is based will be realized. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

Specific conclusions by area follow.

25.1 Mineral Resources

Beta Hunt currently hosts approximately 16 kt Ni and 90 koz Au in separate M&I resources, while a further 7 kt Ni and 320 koz Au are contained in Inferred Resources. The property-wide exploration potential is significant. Near term work is planned for targets close to existing resources. The limited intersections to date suggest these targets could contribute as much as 550 koz Au and lesser amounts of Ni (on an equivalent basis) to total mineral inventory. The long term plan is to test more distant structures, such as the Fletcher Trend, that hold the potential to replicate the economic zones discovered to date.

25.2 Mineral Processing

There is limited risk associated with the ongoing processing of mineralization from Beta Hunt as:

- Beta Hunt is an operating mine with existing contracts in place for processing of both nickel and gold ores.
- Beta Hunt ores have been successfully processed by the toll operators for many years and are well understood.
- Both toll operators are currently operating at less than capacity and feed from Beta Hunt is an important component of their respective business plans.

25.3 Mining

SLM initially employed a contractor who used the same mechanized methods as previous owners to mine the nickel resource. This resulted in low productivity and significant dilution for the high grade, narrow vein and relatively flat-lying deposit. SLM transitioned to owner-operations using conventional methods and since experienced considerably improved results. The steady-state production rate of 450 t/d was achieved by the second half of 2015.

Gold mineralization occurs in wider and more steeply dipping veins that are amenable to mechanized methods. Production is ramping up to a target of 1,600 t/d that is expected to be reached by the end of 2016.

25.4 Environmental

Risks associated with environmental issues at Beta Hunt are considered low, for the following reasons:

- Beta Hunt is an operating mine and in possession of all required permits.
- The mine is high grade, low tonnage and uses underground methods. Furthermore, there is no processing of ore and associated impoundment of tailings performed on the site. The consequent impact on the environment is low.
- The mine is located in a region that hosts a number of active mines and local communities are strongly supportive of the mining industry.
- The region is located in a state that was recently ranked as the top jurisdiction globally for mining investment.

25.5 Capital and Operating Costs

The capital intensity at Beta Hunt is low for the following reasons:

- It is an operating mine with all necessary infrastructure already in place and primary development to the various working areas already established.
- Capacity of the existing mining fleet is in excess of current production rates and only limited additional units will be required as the gold operation ramps up to full production. Furthermore, there is a considerable inventory of used equipment in good condition available for sale regionally.
- Processing of mineralization is performed off site and by third parties so there is no required investment in surface infrastructure such as a mill or tailings facility.

The estimate for sustaining capital makes provision for an aggregate of A$5.75M to be spent before the end of 2017 on exploration drilling and a PFS that would allow the economic portion of M&I Resources to be classified as reserves.

The nickel and gold mining operations share common infrastructure and overhead costs, resulting in low costs for the combined operation

25.6 Economic Evaluation

Evaluation of the Base Case plan indicates that, for averages prices of US$5.41/lb and US$1,150/oz for nickel and gold respectively, Beta Hunt would achieve the following metrics:

- Net C1 cash costs of (US$2.70)/lb Ni or US$529/oz Au,
- An EBITDA margin of 42%,
- Co-Product AISC costs of US$2.87/lb Ni and US$893/oz Au, and
- A post-tax $NPV_{5\%}$ of US$70M

Returns are most sensitive to metal prices, with a 20% increase (to US$7.80/lb Ni and US$1380/oz Au in the longer term post- 2018) leading to a 67% increase in post-tax NPV. Conversely, a 20% increase in operating cost would lead to a 28% decline in NPV while a 20% increase in capital costs would lead to a 9% contraction in NPV.

26 Recommendations

The authors recommend that SLM proceed with data collection and analysis necessary for the reporting of reserves as well as further work to expand the resource base. The costs for the program are included in the Base Case evaluation presented in this report.

Specific recommendations include:

- Infill drilling of existing Inferred Resources should be performed in order to confirm resource estimates and upgrade these resources to Indicated or Measured categories. The recommended program could be completed from stations in existing workings and entails 8,000 m drilling of Ni mineralization and 18,000 m drilling for Au for a combined target of 26,000 m.

- Infill drilling should be followed by a pre-feasibility study (PFS) to identify the economically viable portion of Measured and Indicated Resources that can be classified as reserves. This study will include test work on Beta Hunt mineralization to validate the concentrates suitability for roasted concentrate market. It is expected this study would be initiated before the end of 2016

- Subsequent to infill drilling and in parallel with the engineering study, step-out drilling of exploration targets should be conducted in order to define new resources that would permit mine life to be extended. The recommended initial program consists of 21,500 m, including 16,500 m targeting gold and the remaining 5,000 m to target nickel.

Table 26.1 summarises the estimated cost for this work plan. As Beta Hunt is an operational mine with necessary permits in place, this study has relatively limited complexity relative to a greenfields project. There is additionally a existing significant database of information on which to base designs on. Finally, the offsite toll treatment by third parties results in no requirement to include surface infrastructure such as a concentrator or tailings storage facility in the study.

Table 26.1: Estimated Cost for the Exploration Program Proposed for the Beta Hunt Mine

Item	Units	(A$ 000s)
Delineation Drilling		
Infill Drilling of Ni Inferred Resources	8,000m	
Infill Drilling of Au Inferred Resources	18,000m	
Step-Out Drilling of Ni Targets	5,000m	
Step-Out Drilling of Au Targets	16,500m	
Subtotal Drilling	47,500m	**4,300**
Engineering Studies (Pre-Feasibility Study)		
Update resource model		250
Geotechnical studies		200
Mine engineering design		250
Roasting metallurgical studies		100
Preparation of PFS technical report		150
Subtotal Engineering Studies		**950**
Contingency		500
Total Cost		**5,750**

A key feature of Beta Hunt is the separate but adjacent nickel and gold deposits and associated ability to modulate production in response to market conditions. Accordingly, and given current market

turbulence, short-term plans should include sufficient flexibility to allow prioritization of whichever metal that allows free cash flow to be maximized at the time.

The authors are unaware of any other significant factors and risks that may affect access, title, or the right or ability to perform the exploration work recommended for the Beta Hunt Mine.

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APPENDIX A

Analytical Quality Control Data and Relative Precision Charts

Figure 27.1 Gold Certified Standard Analysis for OREAS-10C

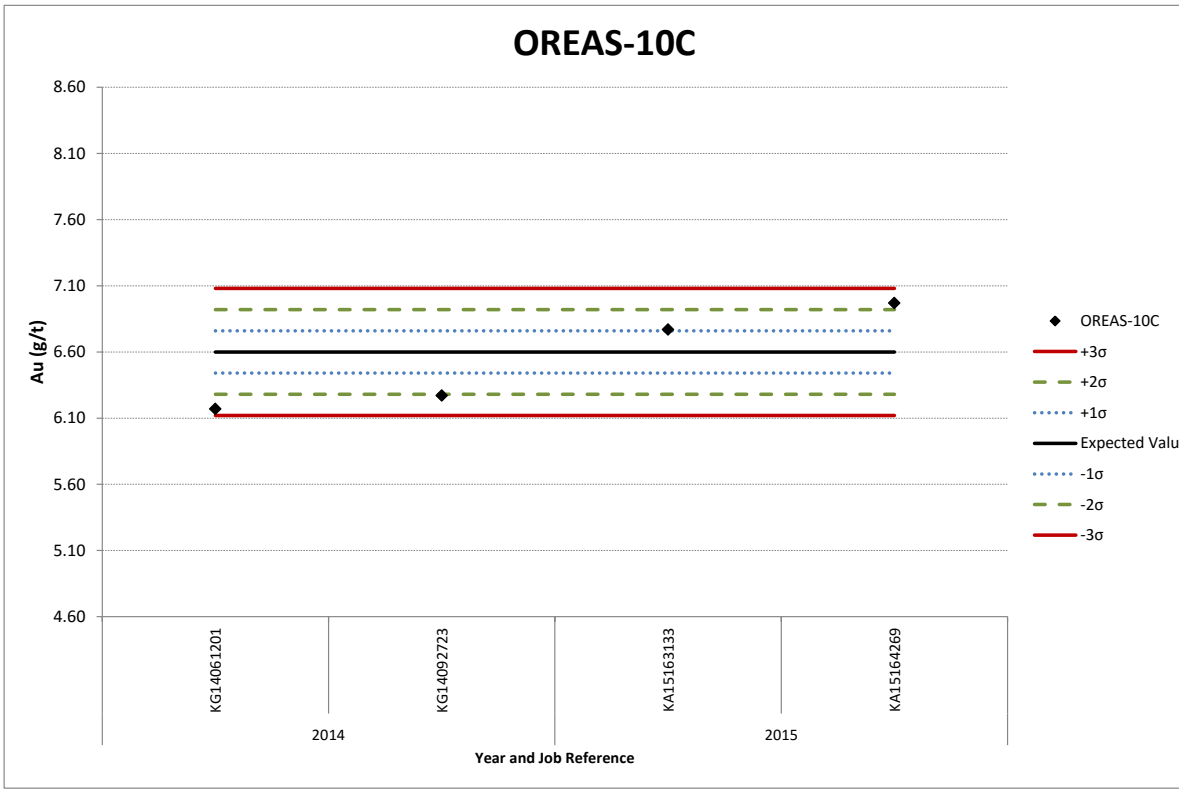


Figure 27.2 Gold Certified Standard Analysis for OREAS-10PB

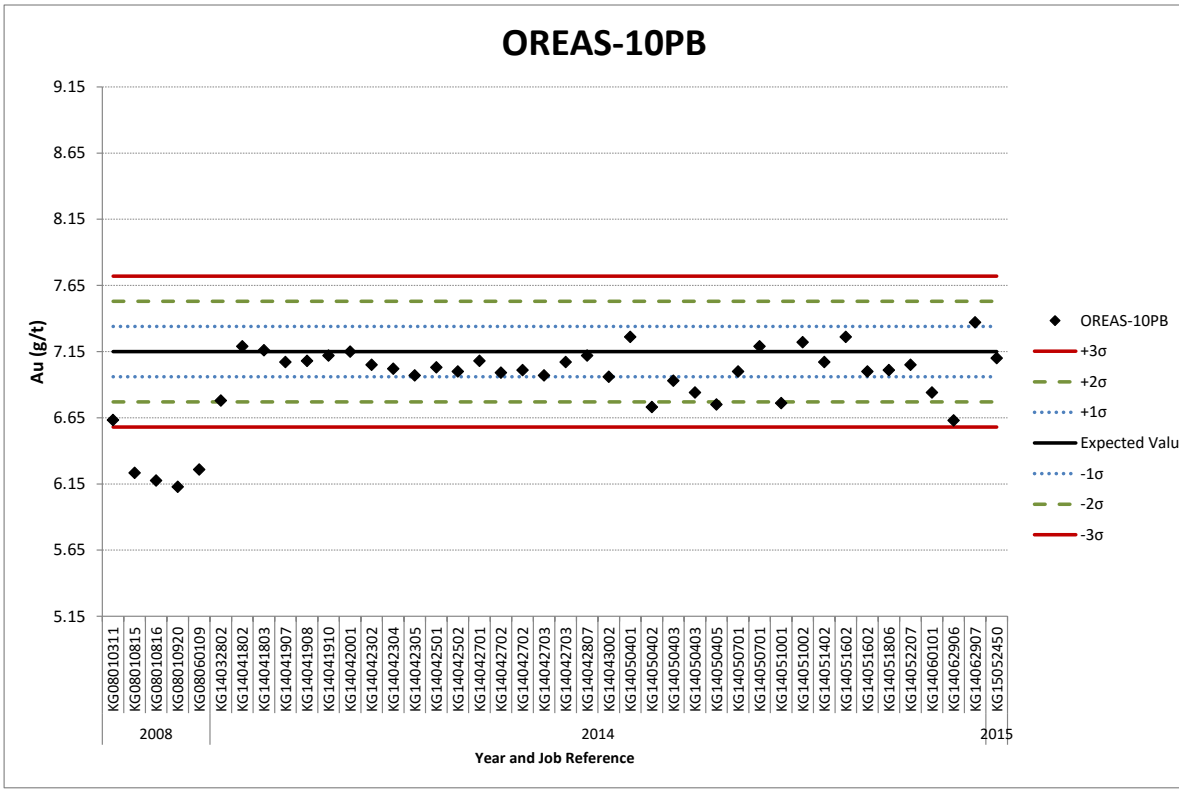


Figure 27.3 Nickel Certified Standard Analysis for OREAS-14P

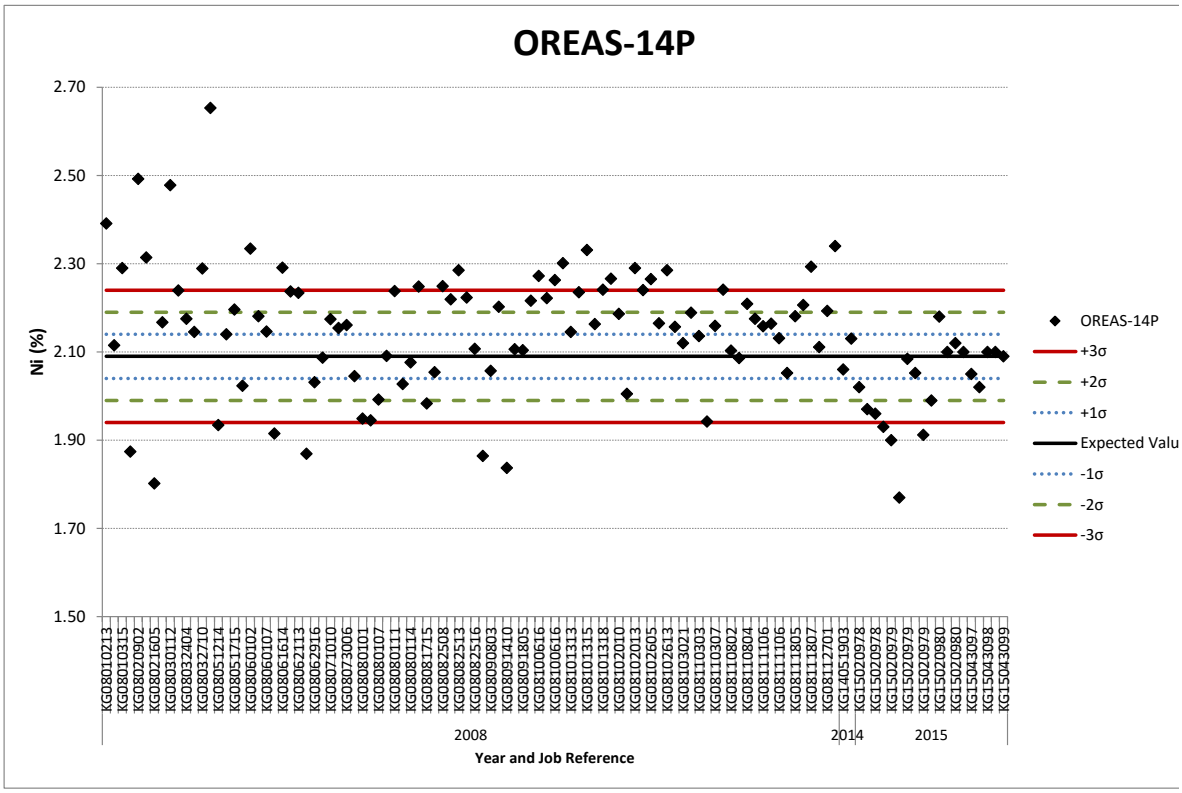


Figure 27.4 Gold Certified Standard Analysis for OREAS-15PA

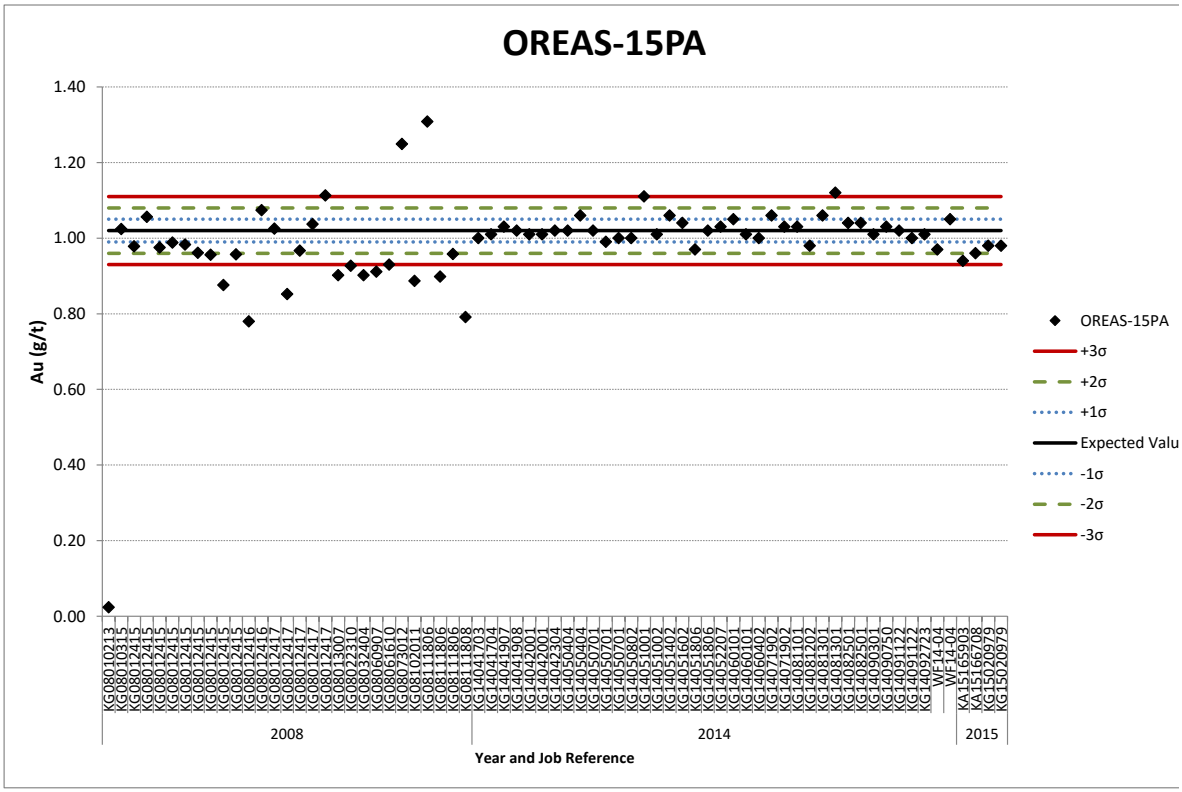


Figure 27.5 Figure 2 Gold Certified Standard Analysis for OREAS-17C

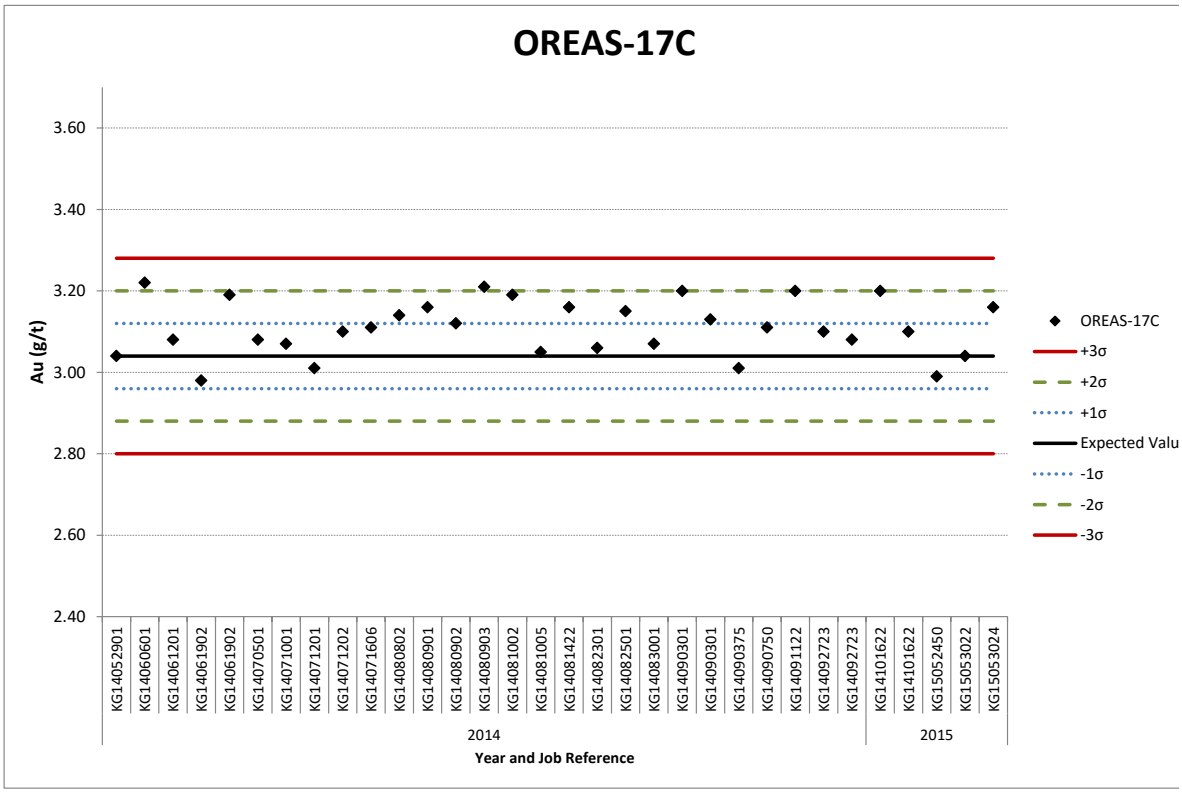


Figure 27.6 Gold Certified Standard Analysis for OREAS-17PB

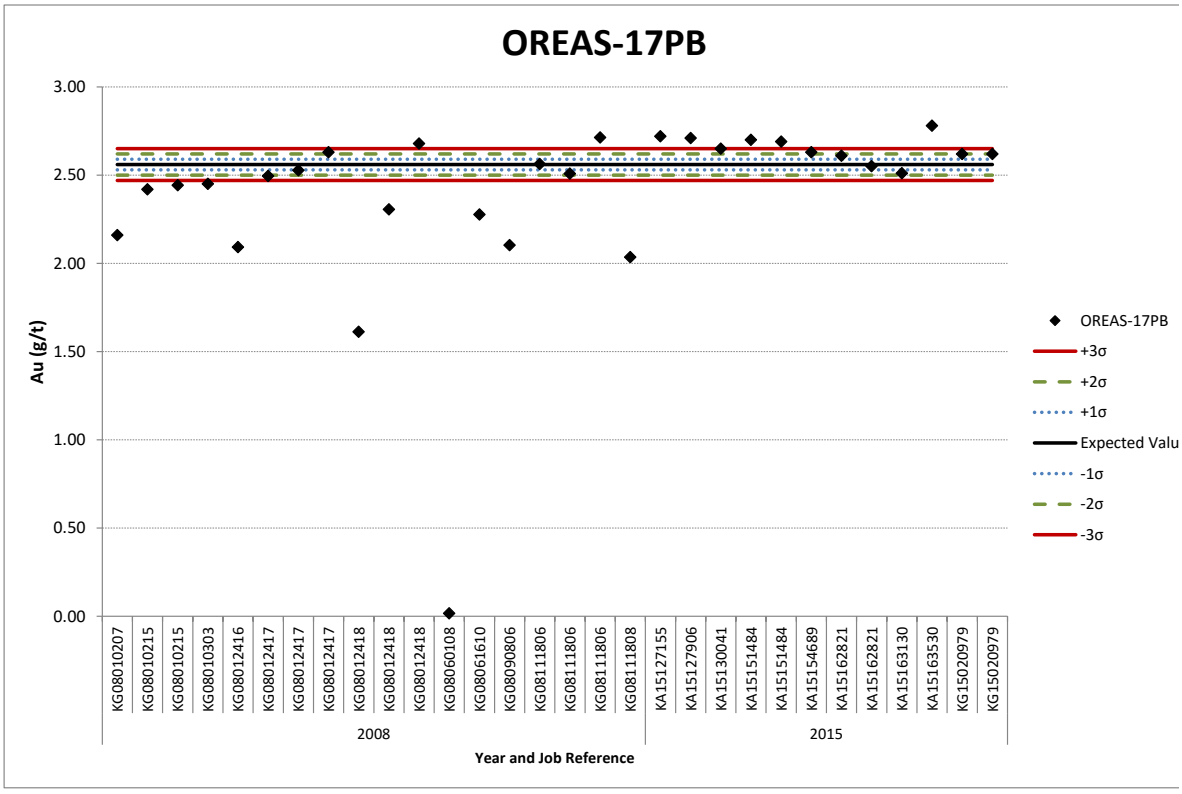


Figure 27.7 Gold Certified Standard Analysis for OREAS-18PA

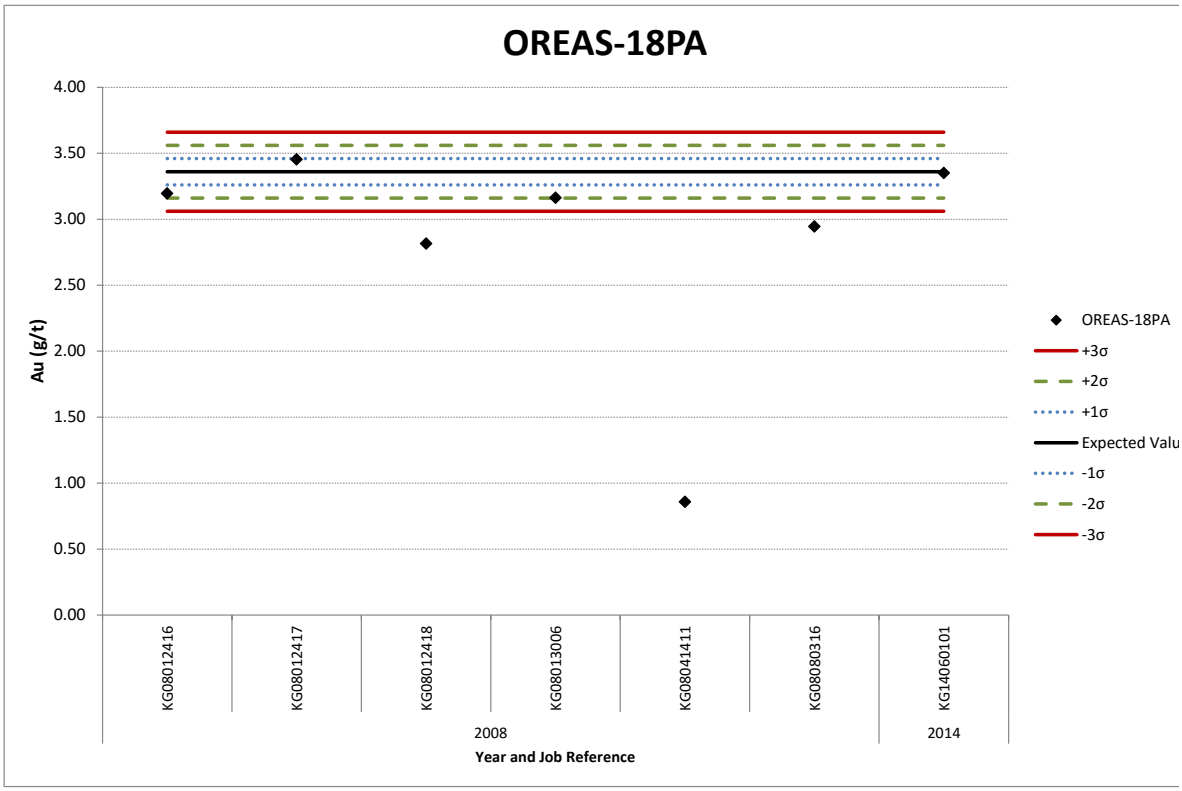


Figure 27.8 Gold Certified Standard Analysis for OREAS-18PB

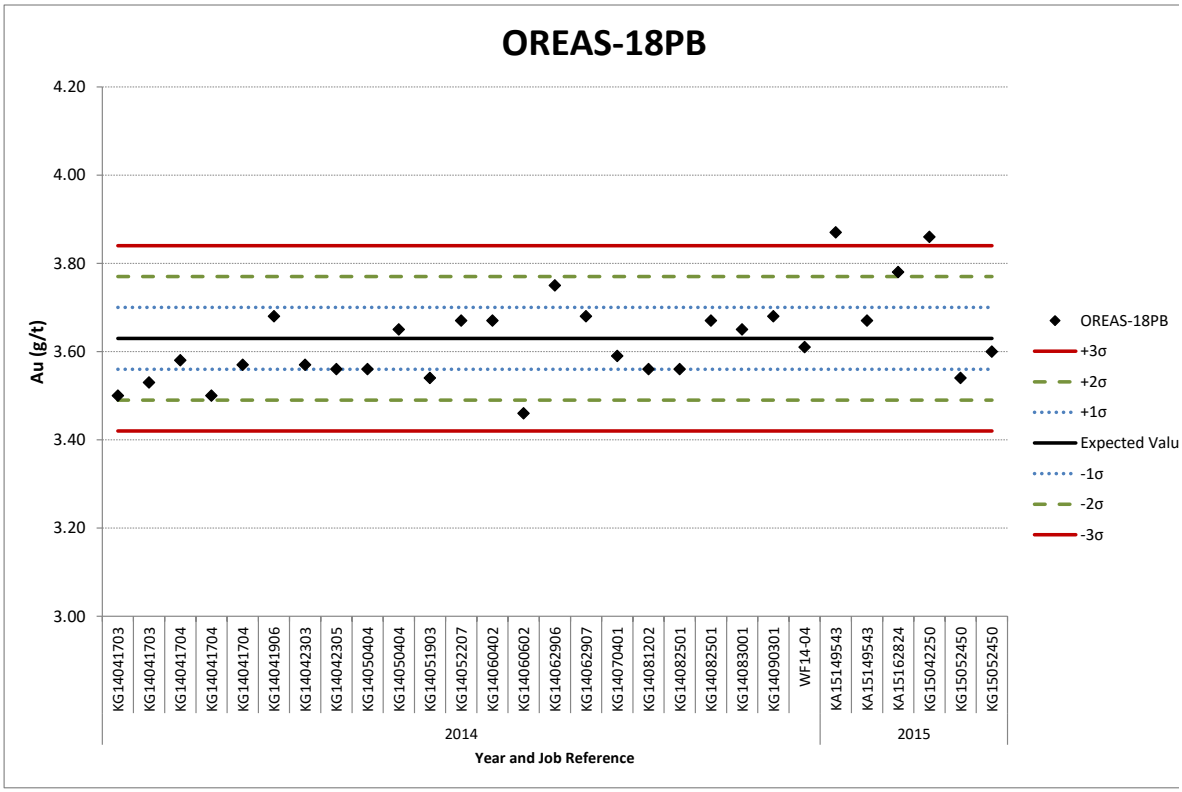


Figure 27.9 Gold Certified Standard Analysis for OREAS-204

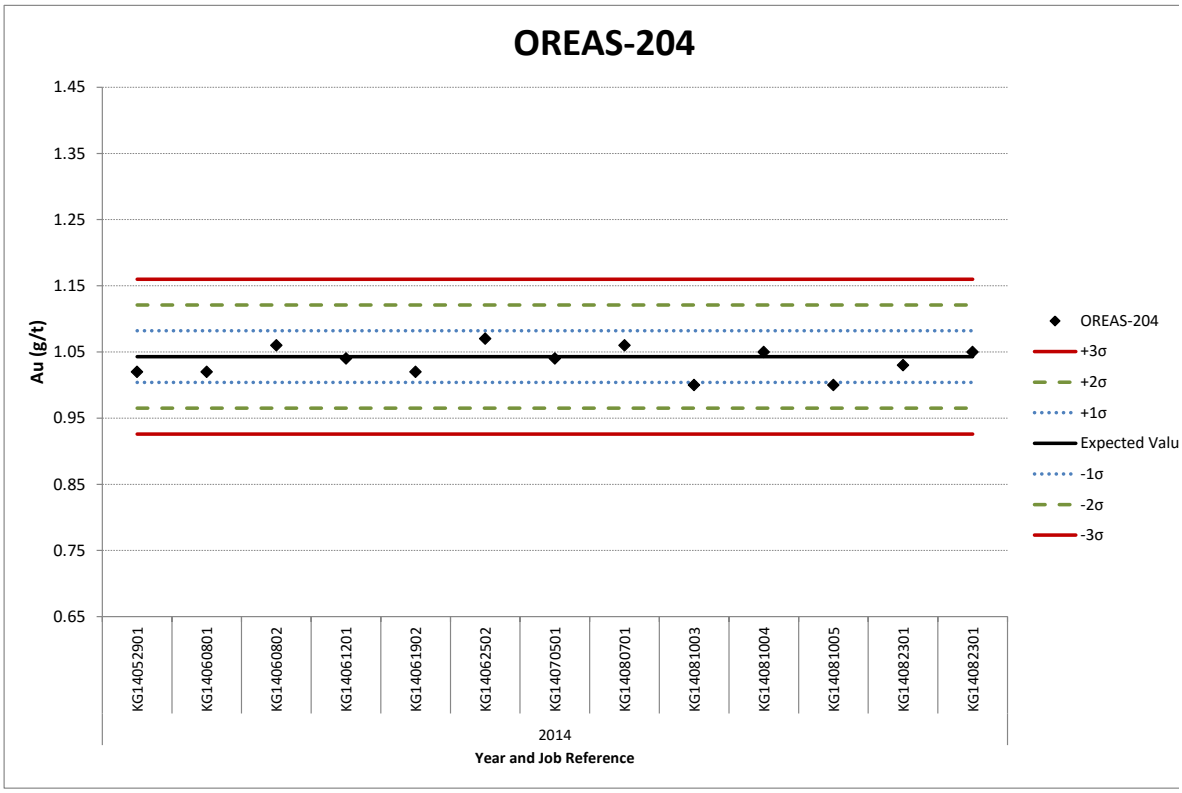


Figure 27.10 Gold Certified Standard Analysis for OREAS-208

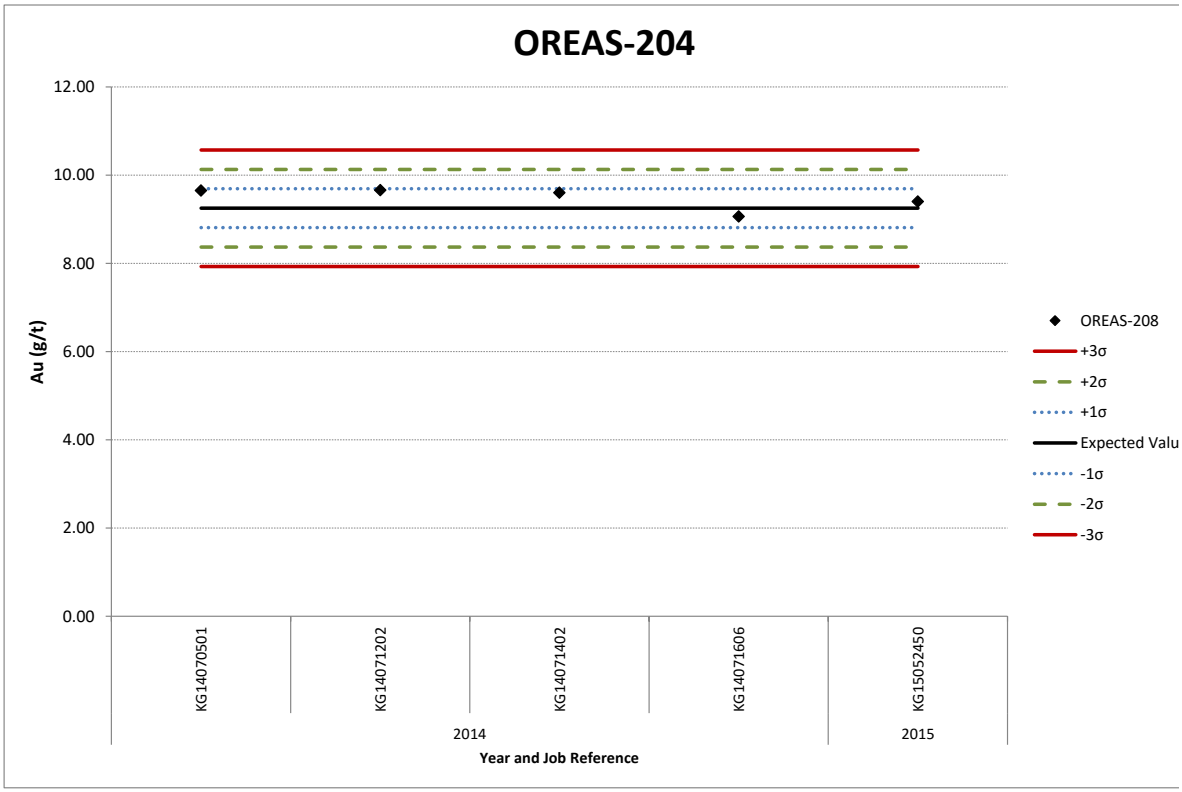


Figure 27.11 Gold Certified Standard Analysis for OREAS-61E

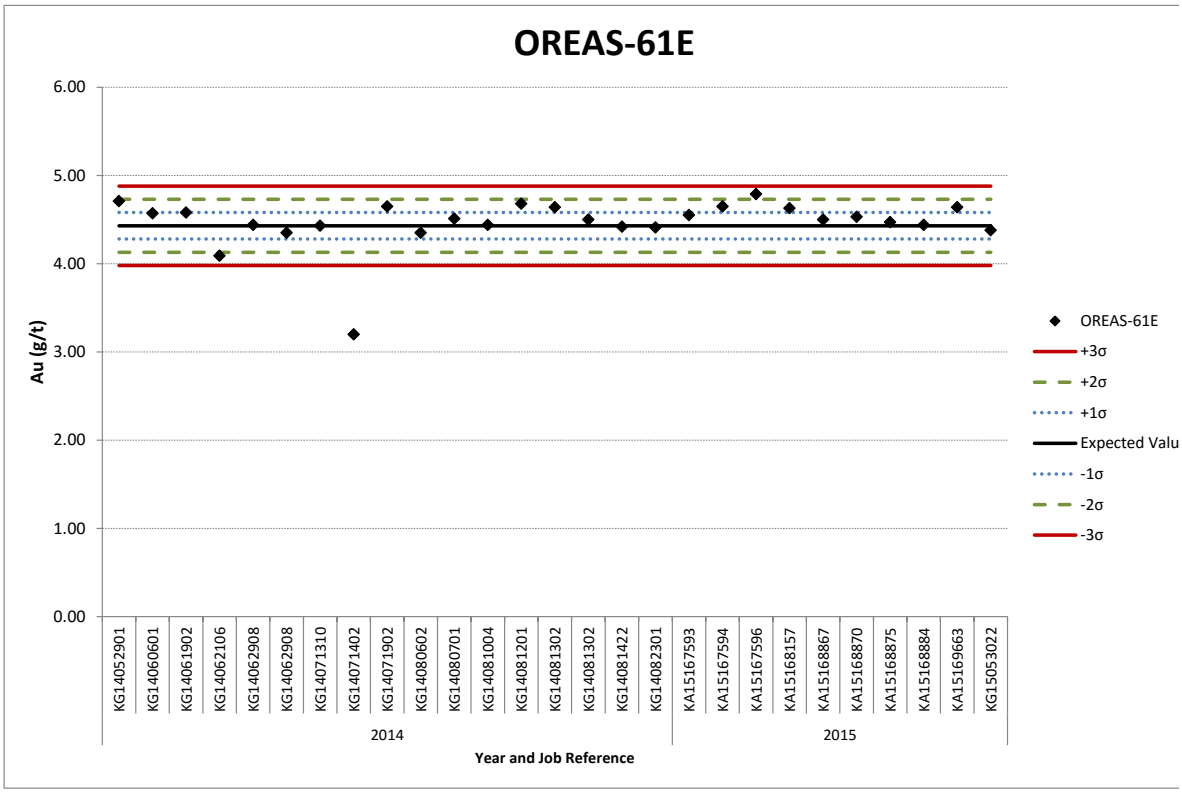


Figure 27.12 Nickel Certified Standard Analysis for OREAS-72A

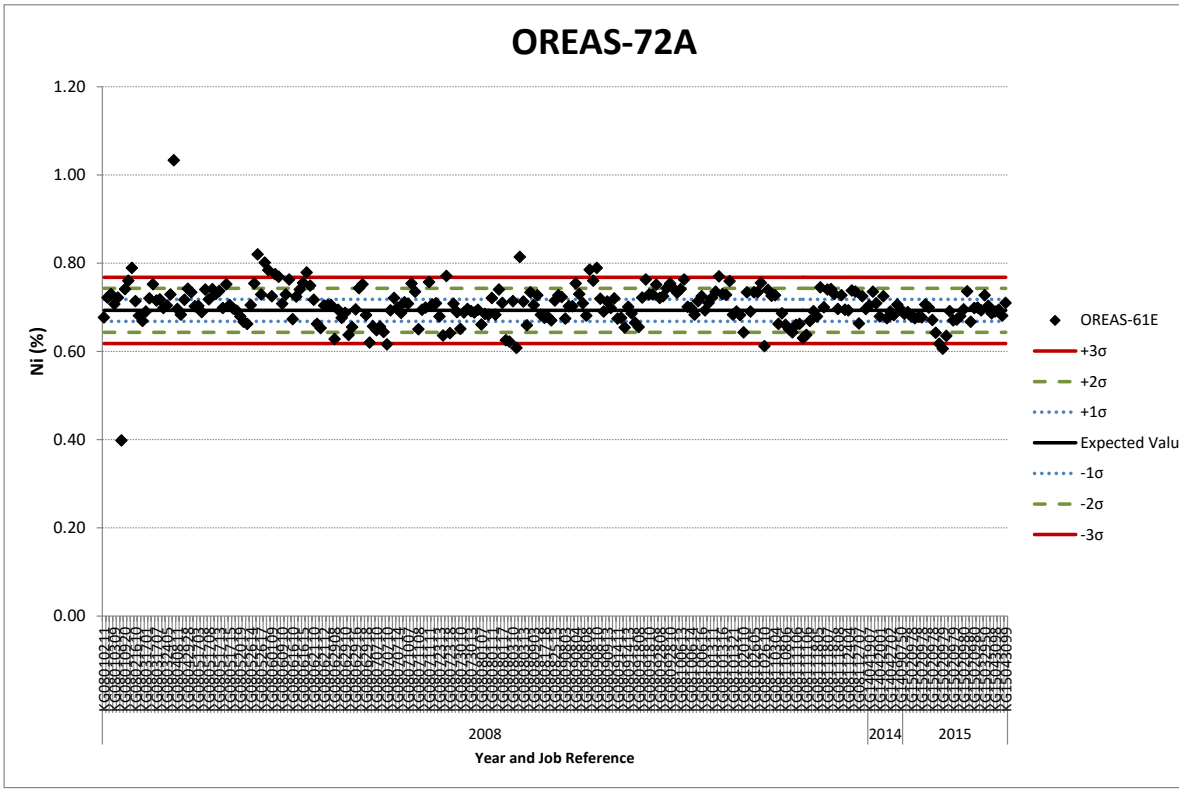


Figure 27.13 Nickel Certified Standard Analysis for OREAS-73A

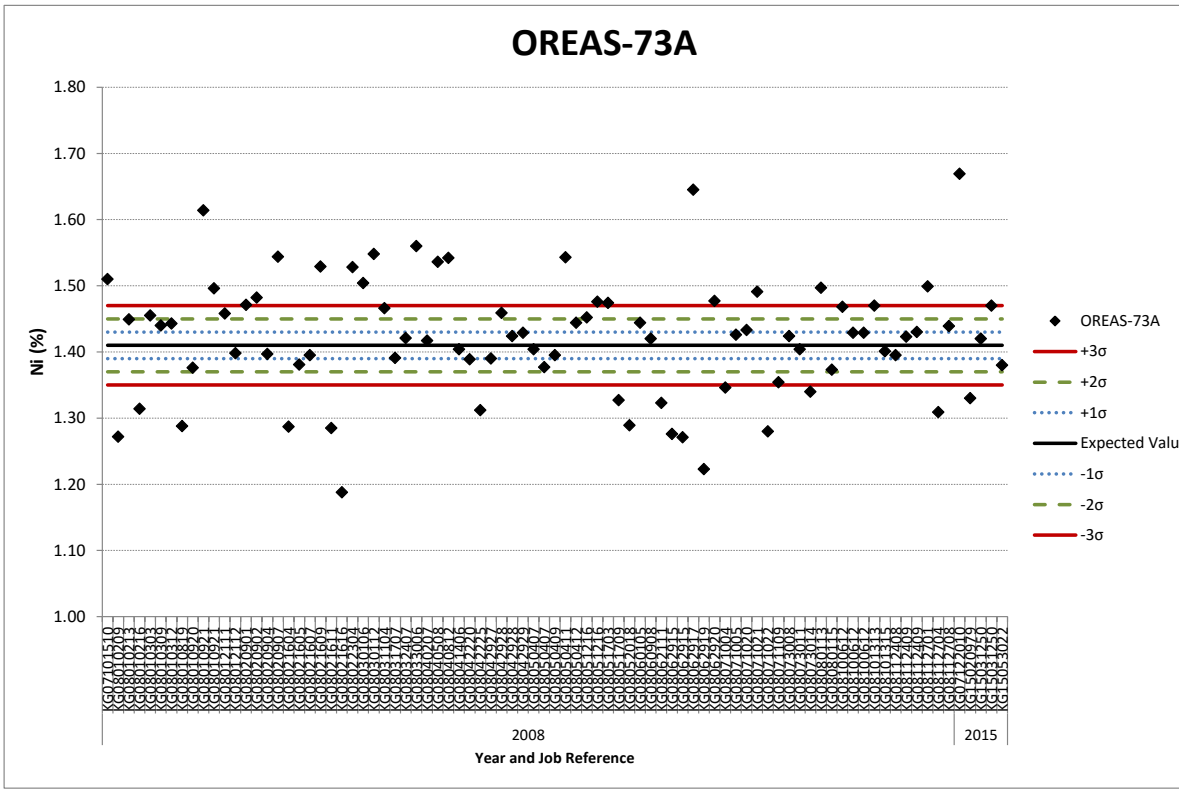


Figure 27.14 Nickel Certified Standard Analysis for OREAS-74A

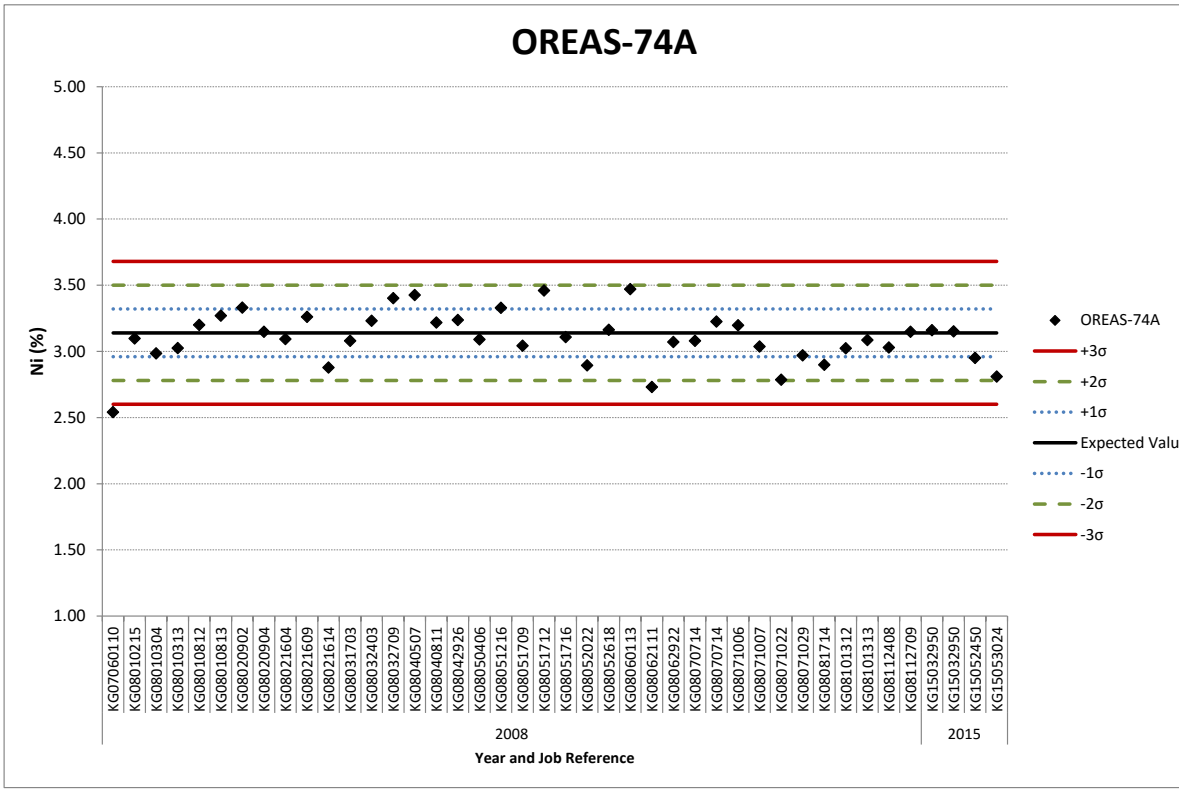


Figure 27.15 Nickel Certified Standard Analysis for OREAS-75A

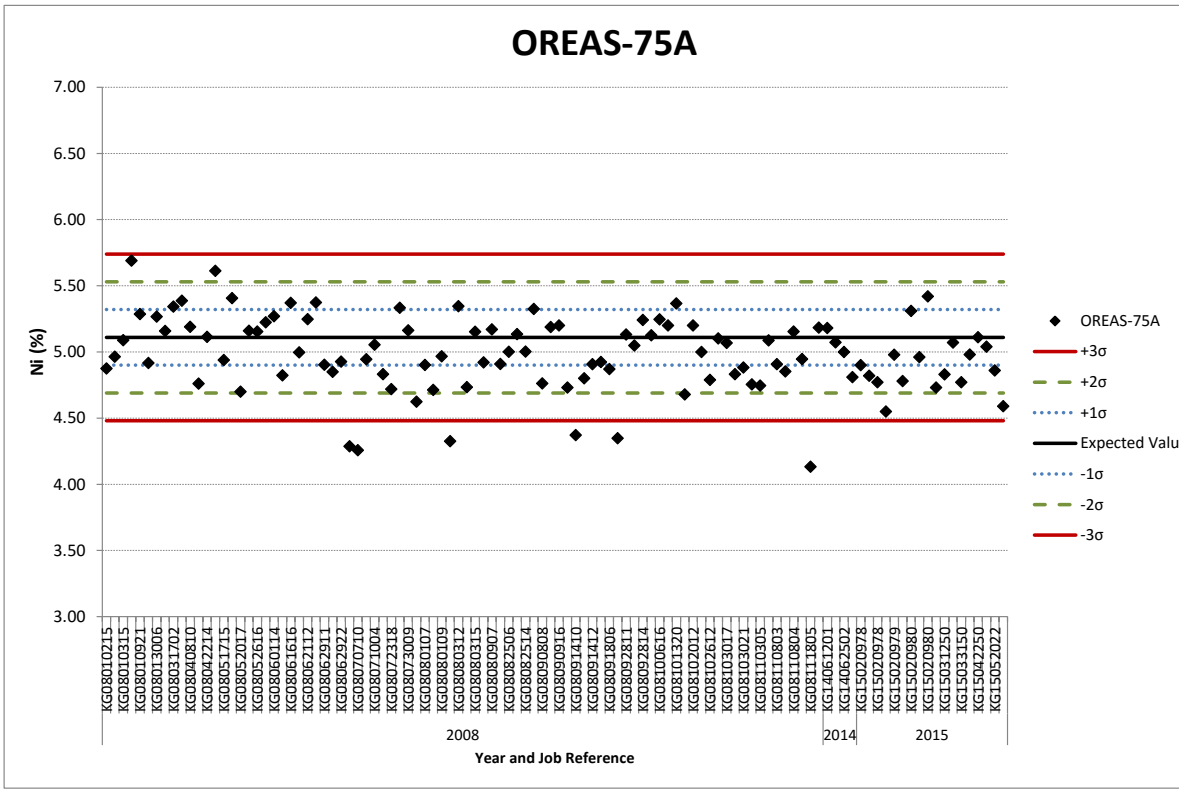


Figure 27.16 Nickel Certified Standard Analysis for OREAS-76A

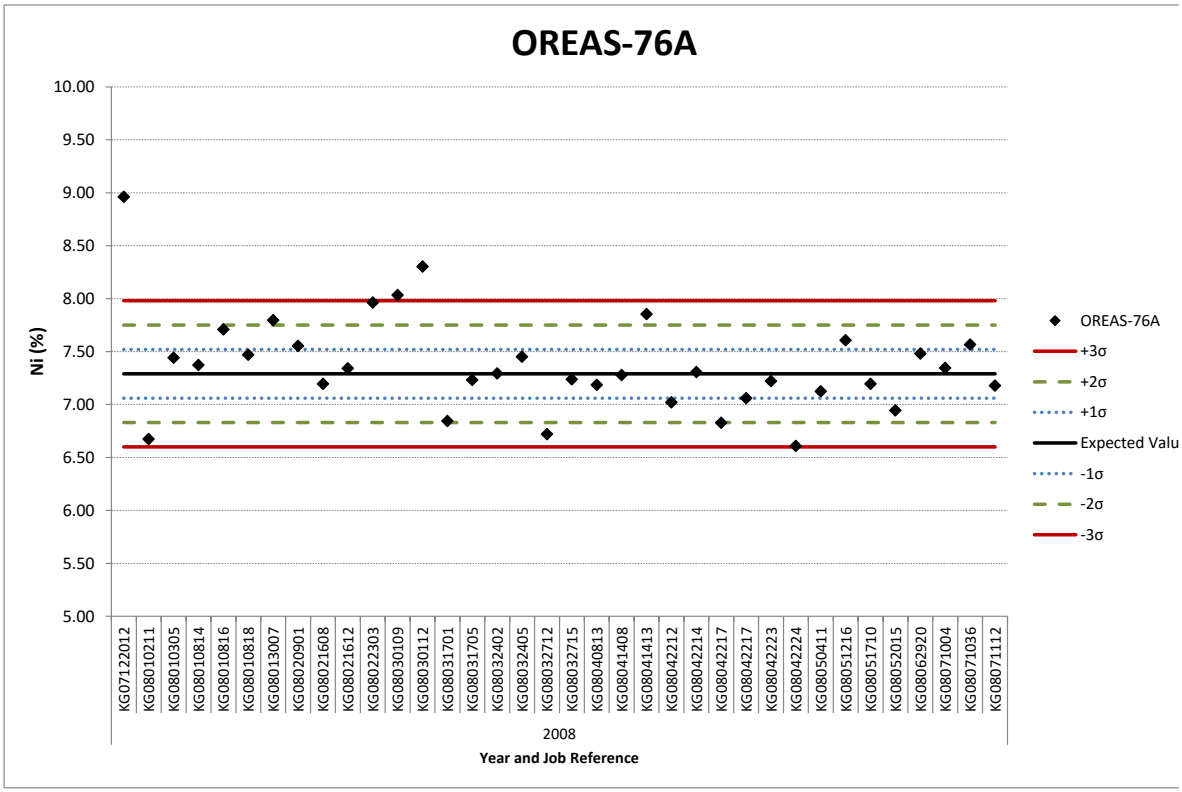
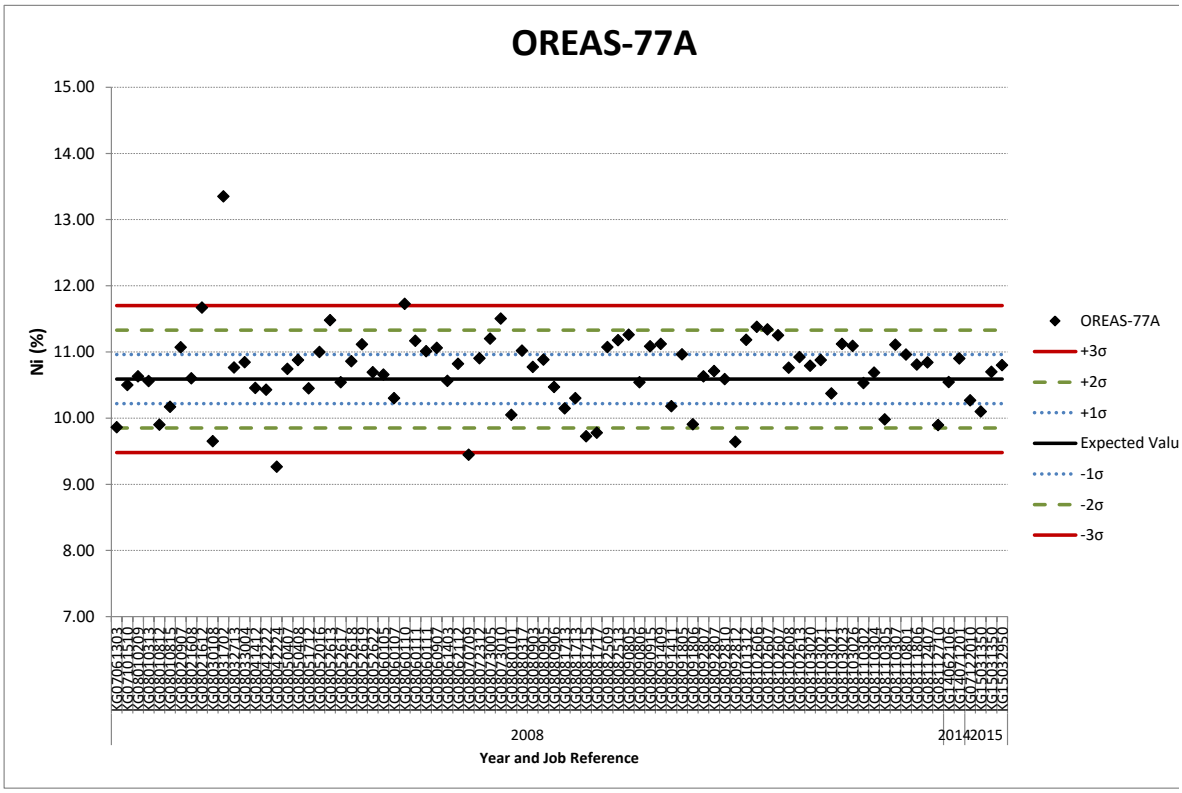


Figure 27.17 Nickel Certified Standard Analysis for OREAS-77A



CERTIFICATE OF QUALIFIED PERSON

To accompany the report entitled: NI 43-101 Technical Report, Preliminary Economic Assessment, The Beta Hunt Mine, Kambalda, Western Australia, March 4th, 2016.

I, David P. Penswick, residing at 43 Ravensbourne Cr, Toronto, Canada do hereby certify that:

1) I am self-employed and work from an office at 123 - 1 Old Mill Drive, Toronto, Ontario, Canada M6S 0A1, tel. +1 (416) 388 1714, email david.penswick@rogers.com;
2) I hold the following academic qualifications:
   BSc. (Mining Engineering) Queen's University 1989; and
   MSc. (Mining Engineering) University of the Witwatersrand 1993.
   I have practiced my profession continuously for over 25 years, and as an equity analyst for investment banks providing capital to base metal mining companies for 2 years;
3) I am a registered Professional Engineer of Ontario (membership number 100111644);
4) I have personally inspected the Beta Hunt Mine during site visits September 22-23, 2015 and February 2-5, 2016;
5) I have read the definition of Qualified Person set out in National Instrument 43-101 and certify that by virtue of my education, affiliation to a professional association, and past relevant work experience, I fulfill the requirements to be a Qualified Person for the purposes of National Instrument 43-101 and this technical report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;
6) I, as a Qualified Person, I am independent of the issuer as defined in Section 1.5 of National Instrument 43-101;
7) I am the lead author of this report and responsible for sections 1-6, 13, and 15-27 of the report and accept professional responsibility for those sections of this technical report;
8) I have had prior involvement with the subject property. In the fall of 2015, I visited the site to conduct due diligence on behalf of Royal Nickel Corporation. I prepared private reports and technical models on Beta Hunt Mine for Royal Nickel Corporation;
9) I have read National Instrument 43-101 and confirm that this technical report has been prepared in compliance therewith;
10) I was retained by Royal Nickel Corporation to prepare a Preliminary Economic Assessment of the Beta Hunt Mine. In conducting our work for this project, technical data was completed using CIM *Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines* and Canadian Securities Administrators National Instrument 43-101 guidelines. The preceding report is based on a site visit, a review of project files and discussions with SLM personnel;
11) I have not received, nor do I expect to receive, any interest, directly or indirectly, in SLM Pty Ltd. or securities of Royal Nickel Corporation; and
12) That, as of the date of this certificate, to the best of my knowledge, information and belief, this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.



Toronto
March 4, 2016

David P. Penswick P.Eng.

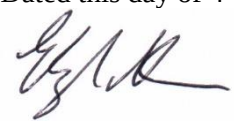
CERTIFICATE OF QUALIFIED PERSON

To accompany the report entitled: NI 43-101 Technical Report, Preliminary Economic Assessment, The Beta Hunt Mine, Kambalda, Western Australia, March 4th, 2016.

I, Elizabeth Haren, B.Sc, MAusIMM(CPGeo), as co-author of the NI 43-101 Technical Report, Preliminary Economic Assessment, The Beta Hunt Mine, Kambalda, Western Australia, March 4th, 2016 do hereby certify that:

1) I am a full time employee of Haren Consulting with an office at PO Box 1159, Scarborough, Western Australia, 6922, tel. +61 (0) 408 958 259, email elizabeth@haren.com.au;
2) I graduated from the University of Newcastle, Newcastle Australia with a Bachelor of Science (Geology) Degree, and I have continually practiced my profession since 1996 as a geologist. I have worked in the mining industry for 20 years with experience in underground geology, open pit geology and geostatistics;
3) I am a member of The Australasian Institute of Mining and Metallurgy and a Chartered Professional (membership number 208050);
4) I have personally inspected the Beta Hunt Mine during site visits October 22-23, 2014, January 27-29, 2015 and July 7-8, 2015;
5) I have read the definition of Qualified Person set out in National Instrument 43-101 and certify that by virtue of my education, affiliation to a professional association, and past relevant work experience, I fulfill the requirements to be a Qualified Person for the purposes of National Instrument 43-101 and this technical report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;
6) I, as a Qualified Person, I am independent of the issuer as defined in Section 1.5 of National Instrument 43-101;
7) I am the co-author of this report and responsible for sections 7 – 12, and 14 and accept professional responsibility for those sections of this technical report;
8) I have had prior involvement with the subject property. In 2015, I was co-author of private reports and technical memos for the Beta Hunt Mine prepared for a senior lending facility;
9) I have read National Instrument 43-101 and confirm that this technical report has been prepared in compliance therewith;
10) I was retained by Royal Nickel Corporation to prepare the mineral resources upon which the Preliminary Economic Assessment of the Beta Hunt Mine is based. In conducting our work for this project technical data was completed using CIM *Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines* and Canadian Securities Administrators National Instrument 43-101 guidelines. The preceding report is based on a site visit, a review of project files and discussions with SLM personnel;
11) I have not received, nor do I expect to receive, any interest, directly or indirectly, in Salt Lake Mining Pty Ltd. or securities of Royal Nickel Corporation; and
12) That, as of the date of this certificate, to the best of my knowledge, information and belief, this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Dated this day of 4th March 2016 at Scarborough, Australia



Elizabeth Haren MAusIMM CPGeo
Director – Haren Consulting