Notice to Reader

Royal Nickel Corporation has filed this amended technical report to include disclosure related to the Higginsville Gold Operations as the part of the Beta Hunt Project. There were no changes to any material conclusions or recommendations outlined in the original report with respect to Beta Hunt Mine with an effective date of August 12, 2019.

TECHNICAL REPORT
WESTERN AUSTRALIA OPERATIONS – EASTERN GOLDFIELDS: BETA HUNT MINE (KAMBALDA) AND HIGGINSVILLE GOLD OPERATIONS (HIGGINSVILLE)

Report Prepared and Signed by Qualified Person:

Stephen Devlin, FAusIMM

Effective Date: September 17, 2019
Signature Date: September 17, 2019

Report Prepared for:

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Date & Signature Page

Project Name:	Western Australia Operations – Eastern Goldfields
Title of Report:	Technical Report Western Australia Operations - Eastern Goldfields: Beta Hunt Mine (Kambalda) and Higginsville Gold Operations (Higginsville)
Location:	Eastern Goldfields Region, Western Australia, Australia
Effective Date of Report:	September 17, 2019
Completion Date of Report:	September 17, 2019

------ ORIGINALS SIGNED ------ **------ Date ------**

"*Stephen Devlin*," FAusIMM. September 17, 2019

1. SUMMARY

1.1 Introduction

This Technical Report (the "Report") on RNC Minerals (RNC) titled Technical Report Western Australia Operations – Eastern Goldfields: Beta Hunt Mine (Kambalda) and Higginsville Gold Operations (Higginsville) has been prepared by RNC as an update to the Technical Report published by RNC on August 12, 2019, in response to RNC's acquisition of the Higginsville Gold Operation on June 10, 2019. This Report has been published by press release on September 17, 2019 and can be found on RNC's website at www.rncminerals.com.au and at www.sedar.com.

The Report was prepared in accordance with the requirements of National Instrument 43-101 (NI 43-101), "Standards of Disclosure for Mineral Projects", of the Canadian Securities Administrators (CSA) for lodgement on CSA's "System for Electronic Document Analysis and Retrieval" (SEDAR).

1.2 Property Description and Ownership

1.2.1 Beta Hunt Mine

The Beta Hunt Mine (Beta Hunt) is located 600 km east of Perth in Kambalda, Western Australia and hosts economic deposits of both nickel and gold. Beta Hunt is wholly owned by Salt Lake Mining Pty Ltd (SLM), a company incorporated in Australia. SLM is a wholly owned subsidiary of RNC.

SLM owns and operates Beta Hunt under a sub-lease agreement with St Ives Gold Mining Company Pty Ltd (SIGMC). SIGMC is a wholly owned subsidiary of Gold Fields Limited (Gold Fields). The mining tenements on which the Beta Hunt is located are held by SIGMC.

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 Limited (RML) acquired the nickel rights and resumed production. Consolidated Minerals Limited acquired RML 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 then ceased and recommenced at the end of 2015. The mine has been in continuous operation since then. RNC acquired 100% of SLM in 2016.

1.2.2 Higginsville Gold Operation

Owned and operated by RNC since June 10, 2019, the Higginsville Gold Operation (HGO) is located approximately 75kms south of the Beta Hunt Mine in Higginsville, Western Australia. The operation includes a 1.3Mtpa processing plant, 192 mining tenements including the Mount Henry, Baloo, Pioneer, Fairplay North, Mitchell, Wills and Challenge deposits.

Avoca Resources Limited (Avoca) initially purchased the Higginsville exploration assets from Gold Fields in June 2004. The Trident underground deposit, historically the largest deposit at HGO, was discovered by Avoca in 2004 with mining commencing at the deposit in 2007. In April 2007 Avoca raised A$125 million to commission a new process plant facility at Higginsville. In that same year Avoca purchased the neighbouring Chalice deposit from Chalice Gold Mines Limited. Gold production began in 2008 with the first gold pour on July 1, 2008.

Alacer Gold Corporation, a wholly owned subsidiary of Alacer Gold a company incorporated in Canada, acquired HGO after it merged with Avoca Resources Limited (Avoca) in 2011.

On October 29, 2013 Alacer Gold Corporations completed the sale of its Australian Business Unit, which included HGO and its assets, to Westgold Resources Pty Ltd who was a wholly owned subsidiary of Metals X Ltd at that time.

In July, 2015 Metals X acquired the Mt Henry Gold Project from Panoramic Resources Ltd and Matsa Resources Limited.

Up to December 4, 2016 (mine closure), the Trident underground mine produced 7,434,000 tonnes @ 4.4g/t Au for 1,045,000 oz of gold.

On December 1, 2016 Westgold Resources Limited demerged from Metals X Ltd. Avoca remained a subsidiary of Westgold Resources Limited and was part of the resultant demerger.

RNC acquired HGO outright on June 10, 2019 from Westgold Resources Limited.

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.

Gold mineralization occurs mainly in subvertical shear zones in the Lunnon Basalt and is characterized by shear and extensional quartz veining within a halo of biotite/pyrite alteration. Within these shear zones, coarse gold sometimes occurs where the shear zones intersect iron-rich sulphidic metasediments in the Lunnon Basalt or nickel sulphides at the base of the Kambalda Komatiite (ultramafics).

Nickel mineralization is hosted mainly by talc-carbonate and serpentine altered ultramafic rocks (Kambalda Komatiite) that overlie the Lunnon Basalt. The primary sulphide minerals are typically pyrrhotite > pentlandite > pyrite with trace chalcopyrite.

Higginsville is located almost entirely within the well-mineralised Archean Kalgoorlie Terrane, between the gold mining centres of Norseman and Saint Ives. The Archaean stratigraphy has a general northward trend comprising multiply deformed ultramafic – gabbro – basalt successions adjoined by sediments to the west and east. Shearing and faulted contacts are common. The units have been structurally repeated by east over west thrust faulting.

The majority of gold mineralisation projects along the Trident line-of-lode and is hosted by Poseidon Gabbro and high MgO dyke complexes. Mineralisation is hosted within or marginal to quartz veining and is structurally and lithologically controlled. Higginsville is also host to significant palaeochannel mineralisation. Mineralised zones comprise both placer gold, normally near the base of the channel-fill sequences, and chemically-precipitated secondary gold within the channel-fill materials and underlying saprolite. These gold concentrations commonly overlie, or are adjacent to, primary mineralised zones within Archaean bedrock.

1.4 Mineral Resource Estimates

The gold mineral resource estimate for the Beta Hunt is presented in Table 1.1.

Table 1.1: Beta Hunt Gold Mineral Resource

Resource (1, 2, 3, 4)	Measured			Indicated			Measured & Indicated			Inferred		
	kt	g/t	koz	kt	g/t	koz	kt	g/t	koz	kt	g/t	koz
Western Flanks (5)	447	2.8	40	7,001	3.0	670	7,448	3.0	710	2,481	3.1	250
A Zone (6)	254	2.7	22	2,403	2.7	212	2,657	2.7	234	1,628	3.0	156
Total - Beta Hunt Mine	701	2.8	62	9,404	2.9	882	10,105	2.9	944	4,109	3.1	406

(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) Gold Mineral Resources are reported using a 1.6 g/t Au cut-off grade.

(4) Mineral Resources described here are based on information compiled by Paul Ellison, Senior Resource Geologist for Salt Lake Mining Pty. Ltd. (SLM). Paul Ellison is an employee of SLM and is a member of the Australasian Institute of Mining and Metallurgy (MAusIMM.).

(5) Mineral Resource Estimate as of June 26, 2019.

(6) Mineral Resource Estimate as of August 9, 2019.

The current nickel Mineral Resource for Beta Hunt Mine remains the February 2016 estimate completed for the 2016 PEA – NI43-101 Technical Report Preliminary Economic Assessment The Beta Hunt Mine Kambalda, Western Australia, Effective February 1, 2016. An updated nickel Mineral Resource has not been completed at this time.

1.5 Operations and Development

SLM has been mining gold at Beta Hunt continuously since Q4 2015. Gold is primarily mined by longhole stoping while nickel is mined by airleg slot stoping.

In November 2018, RNC temporarily ramped-down bulk production of gold at Beta Hunt in order to provide drill rig access to drill-out the main shear zone hosted resources and complete an updated gold resource estimate while continuing to develop access to the resource.

Late in the first quarter of 2019, RNC announced the drilling program had sufficiently advanced to allow for commencement of a limited restart of bulk mining for gold in areas with mine development already in place. The timing for a full ramp-up decision will be based on completion of an updated mine plan based on this resource update and is expected by the end of the third quarter of 2019. SLM has also restarted mining of remnant nickel resources on a small scale at Beta Hunt.

There is limited requirement for site infrastructure as processing of both gold and nickel mineralization is conducted off-site. Gold mineralization is processed at RNC's 1.3 Mtpa Higginsville Gold Operation located 80 km by road to the south of Beta Hunt Mine. Nickel mineralization processing is bound by the terms of the Ore Tolling and Concentrate Purchase Agreement (OTCPA) with BHP Billiton Nickel West

Pty Ltd (BHP). The contracted delivery point for nickel ore (Kambalda Nickel Concentrator) is under care and maintenance requiring amendments to the OTCPA to process Beta Hunt ore. The most recent tolling amendment with BHP expired in June 2019. Under this amendment, Beta Hunt ore was processed at their Leinster mill. A new amendment is required to process future ore production under the OTCPA.

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. No mining feasibility study has been completed on Beta Hunt. Mineral resources are not mineral reserves and do not have demonstrated economic viability.

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 61 persons from a total complement of 83 full time employees. The region hosts a number of operating mines and local communities are strongly supportive of the mining industry.

Higginsville is an operating mine with a mineral processing facility and in possession of all required permits. Environmental permitting and compliance requirements for mining and processing is the responsibility of RNC. The Project covers over 1,800 km^2 and has a significant disturbance footprint including tailings storage facilities, an operating processing facility, open pits, underground mines and haul roads. All of the current workforce of approximately 54 persons is accommodated on site during their rostered-on periods. Most workers permanently reside in Perth and fly-in/fly-out (FIFO) of Perth to attend site. The FIFO workers are supplemented by workers who reside in closer regional towns such as Norseman, Kambalda, Kalgoorlie and Esperance.

The region is located in the state of Western Australia, which was ranked as the 2nd best jurisdiction in the world for mining investment by the Fraser Institute in their 2018 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. Table 1.3 summarizes 2018 capital costs.

Table 1.2: Beta Hunt Capital Costs - 2018

Item	Units	2018
Capitalized Development	A$ 000s	17,992
Mining Fleet	A$ 000s	338
Sustaining	A$ 000s	1,646
Total Capital	**A$ 000s**	**19,976**

The gold mining operations operating costs for 2018 are summarized in Table 1.4.

Table 1.3: Beta Hunt Gold Operating Cost

Item	Units	2018 Total
Mineralization Mined	kt	512
Gold Mining (1)	A$/t	121.75
Central Services	A$/t	8.22
G & A	A$/t	3.71
Total Operating Costs	**A$/t**	**140.94**
Total Operating Costs	**A$ 000s**	**72,159**

(1) Direct costs include mining, transportation and processing

Higginsville Gold Mine is an operating mine with all necessary infrastructure already in place and primary development to the various mining areas already established. Processing of mineralization is performed onsite by a carbon in pulp mill.

Table 1.4: Higginsville Capital Cost Estimate (July 2019 - December 2019)

Item	Units	2019
Capitalised Development	A$ 000s	820
Sustaining	A$ 000s	2,072
Total Capital	**A$ 000s**	**2,892**

Table 1.5: Higginsville Operating Cost Estimate

Item	Units	1 July 2019 to 31 December 2019 Total
Mineralization Mined	kt	241
Gold Mining (1)	A$/t	79.30
Mineralization processed	kt	634
Processing	A$/t	30.80 (2)
G & A	A$/t	3.16 (3)
Total Operating Costs	**A$/t**	**64.17** (4)
Total Operating Costs	**A$ 000s**	**40,688**

(1) Direct costs include mining and transportation

(2) Calculated on Higginsville Processing costs over mineralization processed

(3) Calculated on Higginsville Administration costs over mineralization processed

(4) Calculated on Total Higginsville Operating costs over mineralization processed

1.8 Conclusion and Recommendations

Beta Hunt Mine is an established operation with a long history to support development of plans to exploit the available Mineral Resources. Current gold resources are sufficient for the medium term. A substantial effort combining direct underground exploration, underground drilling, and surface drilling will be necessary to sustain the mine and continually expand resources and reserves of gold and nickel.

The author recommends that SLM complete the process of converting gold mineral resources into mineral reserves.

At Higginsville the author recommends that management complete a property-wide review of the historical Mineral Resources with the aim to prioritise those Mineral Resources for conversion to Mineral Reserves where possible to provide confidence in future mining endeavours.

1.9 Cautionary Statement Regarding the Beta Hunt and Higginsville Mines

The decision to produce at the Beta Hunt Mine was not based on a feasibility study of mineral reserves, demonstrating economic and technical viability, and, as a result, there may be an increased uncertainty of achieving any particular level of recovery of minerals or the cost of such recovery, which include 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 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. Readers are cautioned that there is increased uncertainty and higher risk of economic and technical failure associated with such production decisions.

A production decision at the Higginsville gold operations was made by previous operators of the mine, prior to the completion of the acquisition of the Higginsville gold operations by RNC and RNC made a decision to continue production subsequent to the acquisition. This decision by RNC to continue production and, to the knowledge of RNC, the prior production decision were not based on a feasibility study of mineral reserves, demonstrating economic and technical viability, and, as a result, there may be an increased uncertainty of achieving any particular level of recovery of minerals or the cost of such recovery, which include 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 anticipated production costs will be achieved. Failure to achieve the anticipated production costs would have a material adverse impact on the Corporation's cash flow and future profitability. Readers are cautioned that there is increased uncertainty and higher risk of economic and technical failure associated with such production decisions.

TABLE OF CONTENTS

List of Tables

List of Figures

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. RNC acquired 100% of SLM through a staged acquisition process in 2016. On June 11, 2019, the Company announced that it completed the acquisition of HGO from Westgold through the exercise of a purchase option agreement announced on March 26, 2019. The Company paid Westgold A$25 million in cash and issued 56.9 million shares in satisfaction of the HGO purchase price.

Following recent completion of a 35,674 metre resource definition and exploration drilling program at RNC Mineral's (RNC) Beta Hunt Mine Property (Beta Hunt) near Kambalda in the state of Western Australia, RNC has completed an update to the resource estimate for the Western Flanks and A Zone gold zones.

This Technical Report (the Report) on Beta Hunt and Higginsville Gold Operation has been prepared by RNC as an update to reflect acquisition of the Higginsville Operation on June 10, 2019.

This technical report is to support disclosure of the results of the Resource Estimation 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.

2.2 Report Contributors and Qualified Person

The Report was assembled by the Qualified Person (QP) Stephen Devlin with contributions from other SLM employees. Roles and responsibilities are summarized in Table 2.1. along with dates that QPs visited the property.

Table 2.1: Persons who Prepared or Contributed to this Technical Report

Name	Position	Employer	Independent of RNC	Date of Last Site Visit	Professional Designation	Section of Report
Qualified Person responsible for the Preparation and signing of this Technical Report						
Stephen Devlin	VP Exploration and Growth	SLM	No	July 2019	FAusIMM	All Sections
Other persons who assisted the Qualified Person						
Paul Ellison	Senior Geologist	SLM	No	July 2019	MAusIMM	14
Chris Allen	Resource Geologist	SLM	No	Employed at site	AIG	10,11
Anthony Wallace	Mining Manager Beta Hunt Mine	SLM	No	Employed at site	MAusIMM	16,18,21
Greg Harvey	General Manager Beta Hunt Mine	SLM	No	Employed at site	MAusIMM	16,18,21

Name	Position	Employer	Independent of RNC	Date of Last Site Visit	Professional Designation	Section of Report
Johnna Muinonen	VP, Nickel	RNC	No	June 2019	P.Eng.(Ontario)	13,17
Christian Ridley	Director – HGO	RNC	No	August 2019	Accountant	21
Graeme Sloan	Director – HGO & SLM	RNC	No	September 2019	MAusIMM	24, 25

2.3 Basis of Technical Report

Mr. Stephen Devlin was employed by SLM from 2014 to present. In both his previous and current roles, Mr. Devlin visited the Beta Hunt site on numerous occasions including several occasions during 2019 at which time he inspected both underground and surface aspects of the mining operations in addition to the processing and infrastructure facilities. Mr. Devlin is currently an employee of SLM and accepts Qualified Person responsibility for the Report. Mr. Paul Ellison was employed at Beta Hunt Mine from September 2017 to present and last visited the Beta Hunt operations in July 2019. Mr. Paul Ellison is an employee of SLM and has been appointed as the Competent Person for reporting Beta Hunt Mineral Resources under the JORC Code. Mr. Chris Allen is employed by SLM at the Beta Hunt Mine site.

This Report is based on internal information (listed in Section 26, site visits undertaken by the Qualified Person, and discussions with other SLM personnel.

The Mineral Resource estimates set out in this report have been prepared by Paul Ellison MAusIMM, an employee of SLM, using accepted industry practice and classified in accordance with the JORC Code, 2012 Edition. Stephen Devlin, FAusIMM of SLM 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.

This Report is effective as of August 12, 2019. The Mineral Resource statement reported herein has been depleted to June 26, 2019 to take account of mining activities and are presented with an effective date of June 26, 2019.

2.4 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
Australian Securities Exchange	ASX
Avoca Resources Pty Ltd (previously Avoca Resources Limited)	Avoca
Avoca Mining Pty Ltd	AML
Beta Hunt Mine	Beta Hunt
Cemented rock fill	CRF
Centimetre	cm
Consolidated Nickel Kambalda Operations Pty Ltd.	CNKO
Canadian Securities Administrators	CSA
Cubic metre	m3
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 m2)	ha
Higginsville Gold Operations	HGO
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
Ore Tolling & Concentrate Purchase Agreement (BHP)	OTCPA
Operating cash flow	OCF
Ordinary Kriging	OK
Ore Research and Exploration Pty Limited	OREAS
Parts per billion	ppb
Parts per million	ppm
Percent	%
Pre-feasibility study	PFS
Polar Metals Pty Ltd	PMT
Pound(s)	lb(s)
Quality Assurance and Quality Control	QA/QC
Reliance Mining Limited	RML
Return air pass	RAP
RNC Minerals	RNC
Run of mine	ROM
Salt Lake Mining Pty Limited	SLM
Second (plane angle)	"
Square kilometre	km2
Square metre	m2
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

3. RELIANCE ON OTHER EXPERTS

The Qualified Persons relied, in respect of legal and environmental aspects, upon the work of certain Experts listed below:

The author was informed by SLM and RNC counsel that there are no known litigations potentially affecting the Beta Hunt Mine or Higginsville Gold Operation.

4. PROPERTY DESCRIPTION AND LOCATION

4.1 Location

4.1.1 Beta Hunt

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. Run of mine gold production is processed at RNC's 1.3 Mtpa Higginsville Gold Operation located 80 km by road to the south of Beta Hunt Mine. Nickel mineralization is processed by BHP under the OTCPA Agreement.

4.1.2 Higginsville

The Higginsville Gold Operation is located 57 km south of Beta Hunt and 107 km south of the regional mining centre of Kalgoorlie. The operation comprises a 1.3Mtpa gold processing facility, 3 underground mines (inactive) and 20 open pits. One open pit being Baloo is active. The processing facility is accessed via the Goldfields Highway, which 1.2kms to the southwest of HGO.

4.2 Mineral Tenure

4.2.1 Beta Hunt

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 4.2and 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.

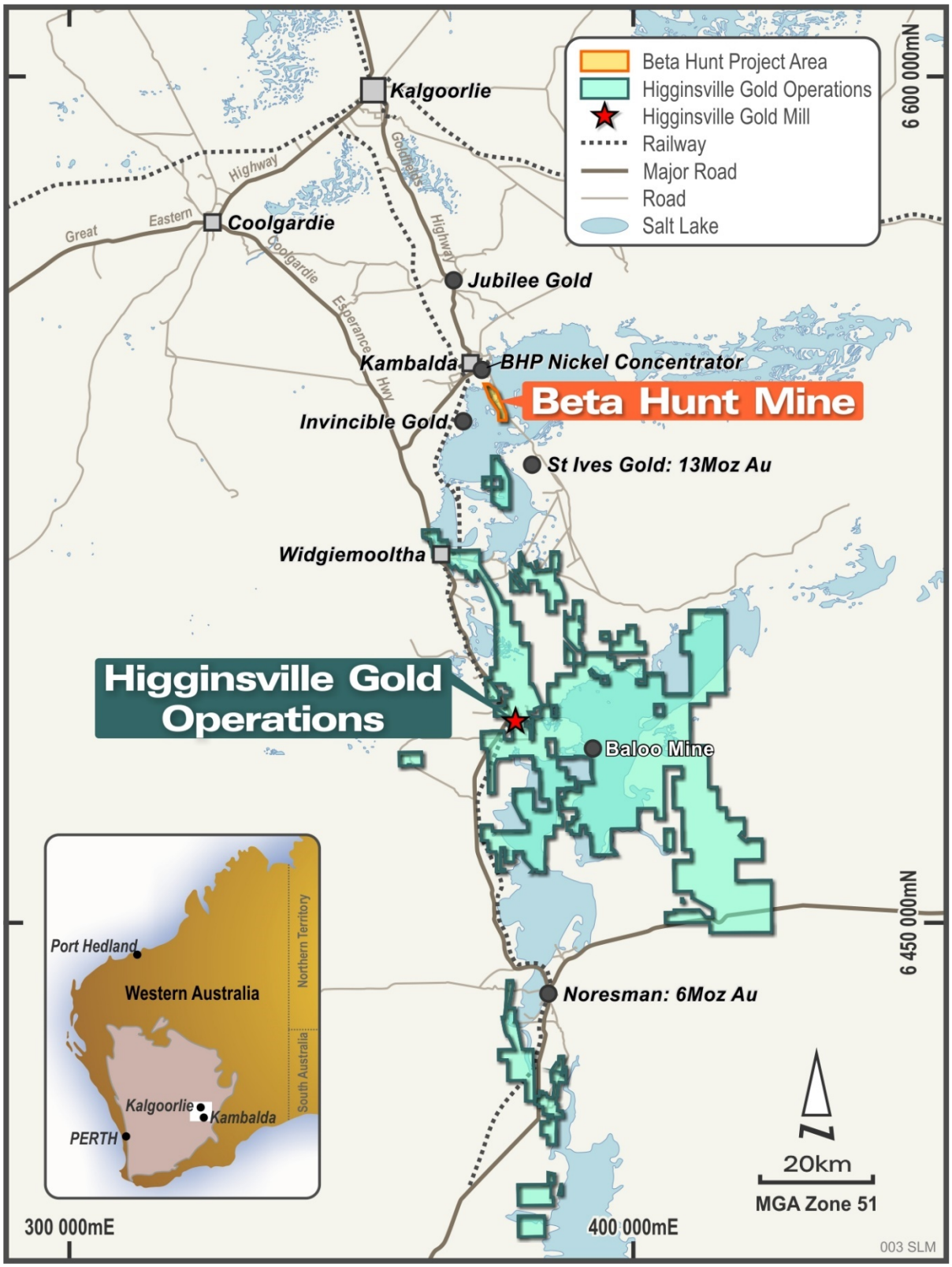
SIGMC is the registered holder of the mineral leases that are all situated on vacant Crown Land.

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, and M 15/1517.

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	$2,281	$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1513	SIGMC	121.20	ha	$2,281	$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1516	SIGMC	121.35	ha	$2,281	$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1517	SIGMC	121.45	ha	$2,281	$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1518	SIGMC	121.35	ha	$2,281	$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1526	SIGMC	121.45	ha	$2,281	$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1527	SIGMC	121.35	ha	$2,281	$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1529	SIGMC	121.40	ha	$2,281	$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1531	SIGMC	121.35	ha	$2,281	$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1628	SIGMC	121.35	ha	$2,281	$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1629	SIGMC	121.35	ha	$2,281	$12,200	Dec 24, 2004	Dec 23, 2025
M 15/1691	SIGMC	108.15	ha	$2,038	$10,900	Dec 24, 2004	Dec 23, 2025
M 15/1694	SIGMC	110.85	ha	$2,076	$11,100	Dec 24, 2004	Dec 23, 2025
M 15/1698	SIGMC	7.74	ha	$150	$10,000	Dec 24, 2004	Dec 23, 2025
M 15/1699	SIGMC	110.95	ha	$2,076	$11,100	Dec 24, 2004	Dec 23, 2025
M 15/1702	SIGMC	110.40	ha	$2,076	$11,100	Dec 24, 2004	Dec 23, 2025
M 15/1705	SIGMC	42.39	ha	$804	$10,000	Dec 24, 2004	Dec 23, 2025

(1) Rent and commitment are for 2018/2019 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	

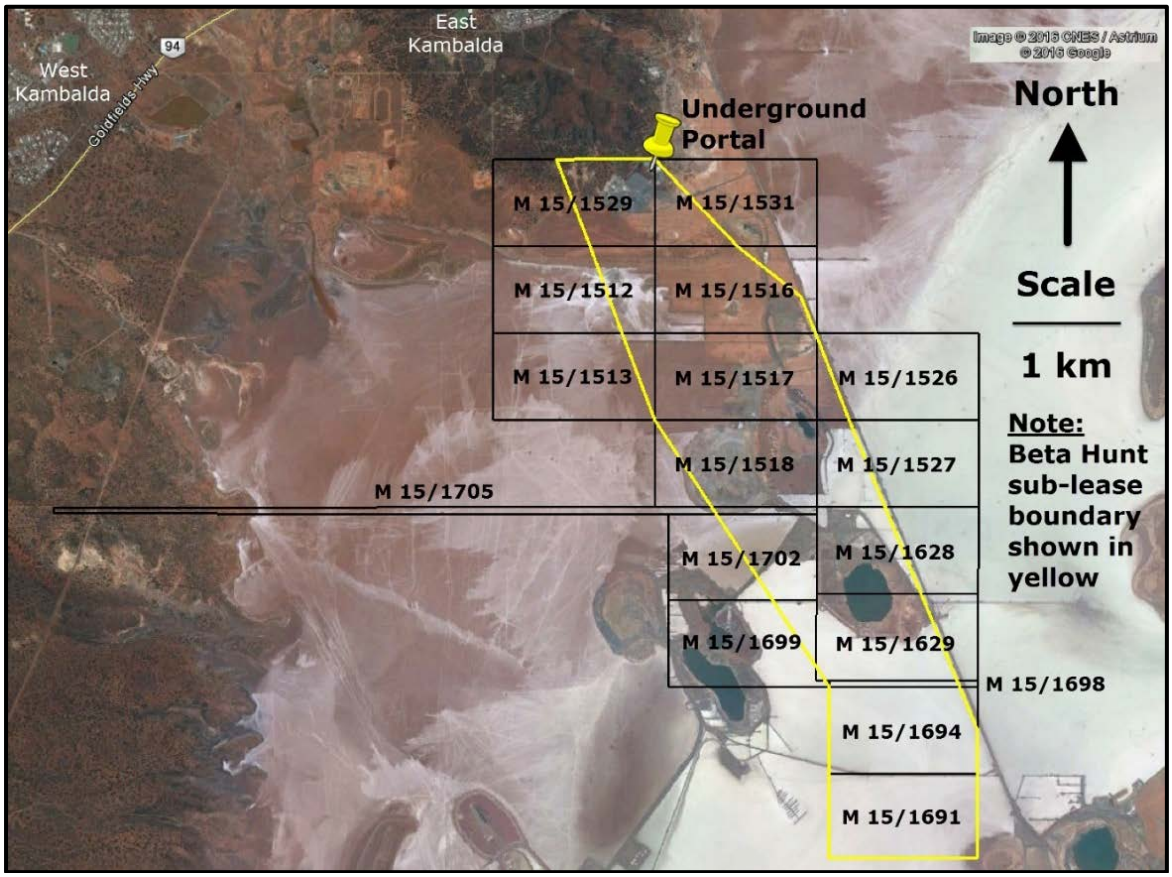
Point	MGA[1] Easting	MGA[(1)] Northing	Description
17	373767.27	6544742.02	
18	373444.00	6545542.58	Northwest corner of the Beta Hunt tenements

(1) Map Grid of Australia, Zone 51, GDA94 Datum

Table 4.3: Beta Hunt Sub-Lease Exploitable Area

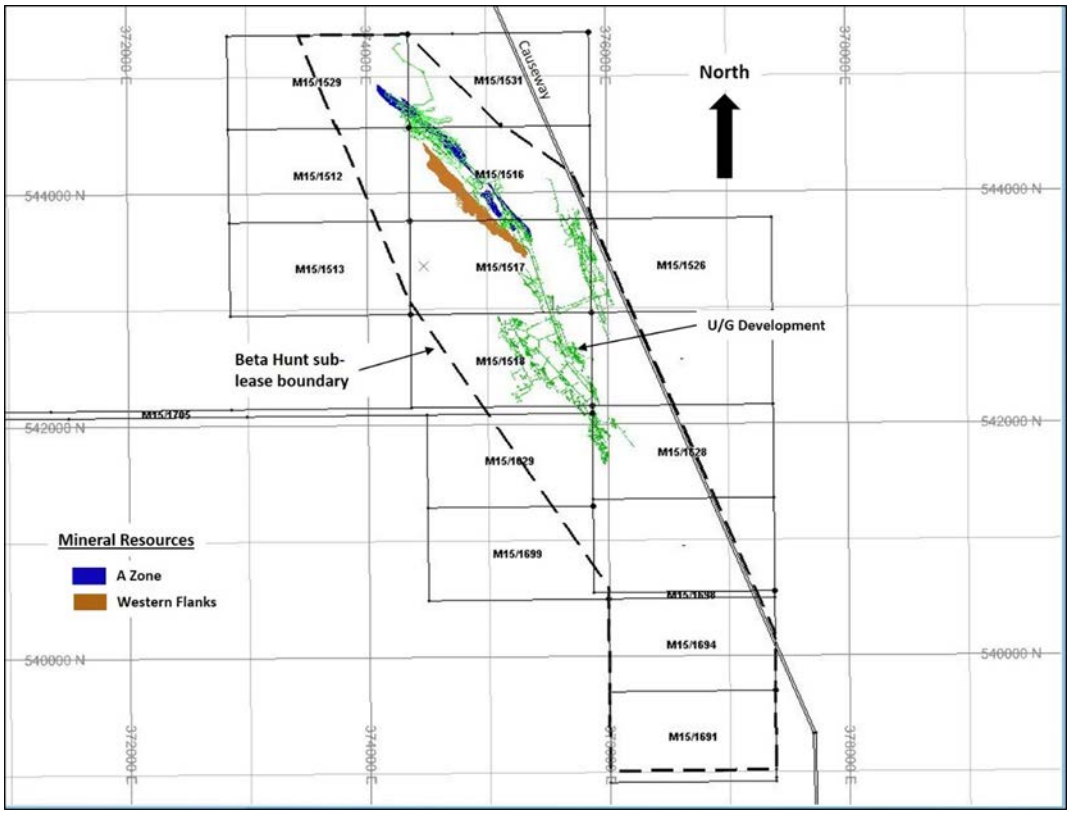
Mineral Lease	**Exploitable Area** (begins below elevation Australian Height Datum metres)
M 15/1512	Linear decrease from northern limit of the tenement to southern limit of the tenement, being from 200 to zero
M 15/1513	0
M 15/1516	Linear decrease from northern limit of the tenement to southern limit 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

4.2.2 Higginsville

The Higginsville Gold Operation comprises 192 tenements covering approximately 1,800 km^2 owned or partly owned by RNC through its wholly owned subsidiaries Avoca Resources Pty Ltd (Avoca), Polar Metals Pty Ltd (PMT) and Avoca Mining Pty Ltd (AMG). These tenements are listed in Table 4.4, and include the following:

- The AMG tenements comprise 119 tenements owned by AMG and 1 mining tenement (M15/512) owned by AMG (90%) and Noel Arthur Paynter (10%). M15/231 has a mining mortgage registered against it in favour of Gindalbie Gold NL (now Gindalbie Metals Ltd).

- The Avoca tenements comprise 25 tenements owned by Avoca and 4 tenements and one mining lease application owned by Avoca (93.3% and Trent Paterson Stehn (6.7%).

The PMT tenements comprise 31 tenements owned by PMT and 6 mining tenements owned by PMT (80%) and Shumwari (20%).

There is an expenditure commitment for each tenement as well as rent payable to the DMP and local rates. There is also an annual reporting requirement for each tenement or group of tenements, in terms of the Mining Act (1978) WA.

The tenements at Higginsville are currently in good standing, however a number of these tenements have not met annual expenditure commitments. In order to retain these leases, RNC will be required to lodge expenditure exemption applications and have them approved by the DMIRS. If the exemptions are refused, RNC will request DMIRS impose a penalty in lieu of forfeiture. If a penalty is imposed, once paid the tenement will retain the good standing. A review of Westgold's historical dealings with

the DMIRS indicates this to be the process with respect to expediting the retention of leases where an exemption has been refused.

Figure 4.4: Higginsville Land Tenure Map highlighting tenements with royalties

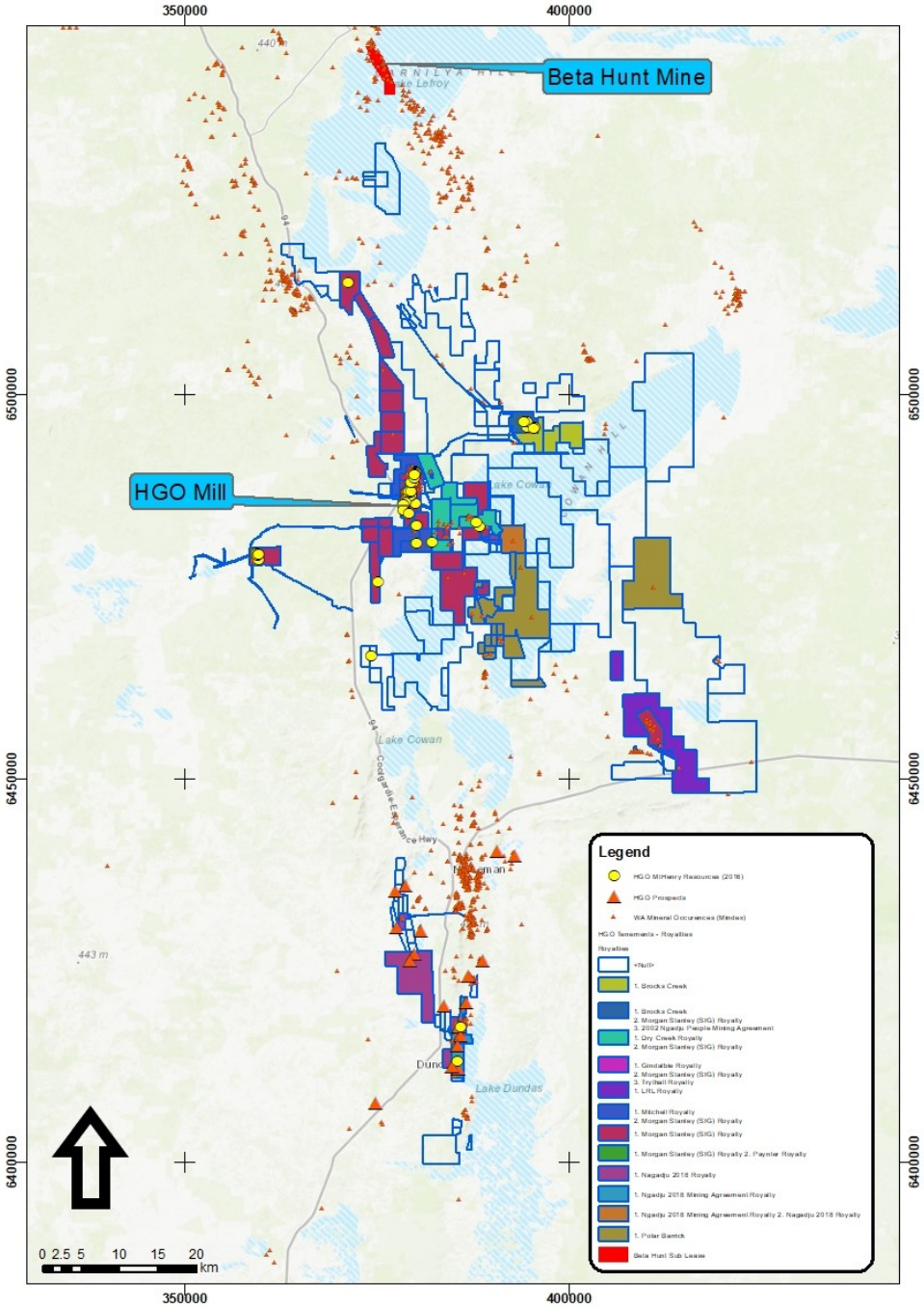


Table 4.4: HGO Mineral Tenure Information

Mineral Lease	Status	Holder	Area ha (approx)	Rent	Commitment	Grant Date	Expiry Date	Royalties
E15/1037	Live	Avoca Resources Pty Ltd	9800	$19,845	$105,000	30-Sep-08	29-Sep-20	
E15/1094	Live	Avoca Resources Pty Ltd	2240	$4,536	$70,000	13-Aug-09	29-Sep-20	

Mineral Lease	Status	Holder	Area ha (approx)	Rent	Commitment	Grant Date	Expiry Date	Royalties
E15/1117	Live	Avoca Resources Pty Ltd	1120	$2,268	$50,000	13-Aug-09	29-Sep-20	
E15/1197	Live	Avoca Resources Pty Ltd	2800	$5,670	$70,000	7-Feb-11	6-Feb-21	
E15/1199	Live	Avoca Resources Pty Ltd	560	$1,134	$50,000	10-Nov-10	9-Nov-20	
E15/1203	Live	Avoca Resources Pty Ltd	5320	$10,773	$70,000	17-Dec-10	16-Dec-20	
E15/1223	Live	Avoca Resources Pty Ltd	4480	$9,072	$70,000	8-Sep-11	7-Sep-21	
E15/1260	Live	Avoca Resources Pty Ltd	280	$341	$20,000	12-Oct-11	11-Oct-21	
E15/1298	Live	Polar Metals Pty Ltd	840	$1,701	$30,000	31-Jul-12	30-Jul-22	
E15/1402	Live	Avoca Mining Pty Ltd	280	$341	$10,000	8-Apr-14	7-Apr-19	
E15/1448	Live	Avoca Resources Pty Ltd	280	$341	$10,000	6-May-15	5-May-20	
E15/1458	Live	Polar Metals Pty Ltd (80%) Shumwari Pty Ltd (20%)	7280	$5,720	$39,000	24-Aug-15	23-Aug-20	
E15/1459	Live	Polar Metals Pty Ltd (80%) Shumwari Pty Ltd (20%)	560	$440	$20,000	25-Aug-15	24-Aug-20	
E15/1461	Live	Polar Metals Pty Ltd	1960	$1,540	$30,000	16-Oct-15	15-Oct-20	
E15/1462	Live	Avoca Resources Pty Ltd	280	$341	$10,000	22-Sep-15	21-Sep-20	
E15/1464	Live	Polar Metals Pty Ltd (80%) Shumwari Pty Ltd (20%)	280	$341	$10,000	6-Oct-15	5-Oct-20	
E15/1487	Live	Polar Metals Pty Ltd	5040	$3,960	$20,000	1-Jul-16	30-Jun-21	This tenement is subject to the Polar & Barrick Royalty.
E15/1512	Live	Avoca Mining Pty Ltd	280	$0	$10,000	19-Mar-18	18-Mar-23	
E15/1533	Live	Avoca Resources Pty Ltd	1400	$680	$15,000	11-Oct-17	10-Oct-22	
E15/1541	Live	Polar Metals Pty Ltd	1680	$816	$20,000	11-Oct-17	10-Oct-22	
E15/1586	Live	Avoca Mining Pty Ltd	560	$272	$15,000	6-Oct-17	5-Oct-22	
E15/1613	Pending	Avoca Mining Pty Ltd	280					
E15/1628	Live	Avoca Mining Pty Ltd	10080	$4,896	$36,000	26-Nov-18	25-Nov-23	
E15/786	Live	Avoca Resources Pty Ltd	3920	$7,938	$70,000	28-Oct-05	27-Oct-19	
E15/808	Live	Avoca Resources Pty Ltd	2520	$5,103	$70,000	5-Jul-06	4-Jul-19	
E15/810	Live	Avoca Resources Pty Ltd	9520	$19,278	$102,000	4-Aug-04	3-Aug-19	
E15/828	Live	Avoca Mining Pty Ltd	5600	$11,340	$70,000	17-Nov-04	16-Nov-19	This tenement is subject to the Morgan Stanley Royalty.
E63/1051	Live	Avoca Resources Pty Ltd	1120	$2,268	$50,000	3-Jul-07	2-Jul-19	
E63/1117	Live	Avoca Resources Pty Ltd (93.33%) Stehn, Trent Paterson (6.67%)	1400	$2,835	$50,000	7-Oct-08	6-Oct-20	
E63/1142	Live	Polar Metals Pty Ltd	5600	$11,340	$70,000	13-Feb-09	12-Feb-21	This tenement is subject to the Polar & Barrick Royalty, secured by a mortgage which has been subsequently assigned to Franco Nevada Australia Ltd.
E63/1165	Live	Avoca Resources Pty Ltd	1400	$2,835	$50,000	15-Apr-08	14-Apr-20	
E63/1712	Live	Polar Metals Pty Ltd	5880	$4,620	$31,500	25-May-15	24-May-20	
E63/1724	Live	Avoca Resources Pty Ltd	280	$341	$10,000	1-Sep-15	31-Aug-20	
E63/1725	Live	Polar Metals Pty Ltd	2240	$1,760	$30,000	26-Oct-15	25-Oct-20	
E63/1726	Live	Polar Metals Pty Ltd (80%) Shumwari Pty Ltd (20%)	2520	$1,980	$30,000	1-Sep-15	31-Aug-20	
E63/1727	Live	Polar Metals Pty Ltd (80%) Shumwari Pty Ltd (20%)	280	$341	$10,000	1-Sep-15	31-Aug-20	
E63/1728	Live	Polar Metals Pty Ltd	19600	$15,400	$105,000	6-Jan-16	5-Jan-21	

Mineral Lease	Status	Holder	Area ha (approx)	Rent	Commitment	Grant Date	Expiry Date	Royalties
E63/1738	Live	Polar Metals Pty Ltd (80%) Shumwari Pty Ltd (20%)	560	$440	$20,000	19-Oct-15	18-Oct-20	
E63/1756	Live	Polar Metals Pty Ltd	1120	$880	$20,000	9-Feb-16	8-Feb-21	
E63/1757	Live	Polar Metals Pty Ltd	560	$440	$20,000	9-Feb-16	8-Feb-21	
E63/1763	Live	Avoca Mining Pty Ltd	3360	$1,632	$20,000	8-May-17	7-May-22	This tenement is subject to the Morgan Stanley Royalty.
E63/1876	Live	Avoca Mining Pty Ltd	1960	$952	$20,000	2-Jul-18	1-Jul-23	
E63/1881	Live	Avoca Mining Pty Ltd	2520	$1,224	$20,000	1-Jun-18	31-May-23	
E63/1900	Pending	Avoca Mining Pty Ltd	1680					
E63/1901	Pending	Avoca Mining Pty Ltd	560					
E63/856	Live	Avoca Resources Pty Ltd	6440	$13,041	$70,000	6-Sep-04	5-Sep-19	
G15/19	Live	Avoca Mining Pty Ltd	66	$1,089		3-Oct-07	2-Oct-28	
G15/23	Live	Avoca Mining Pty Ltd	3	$66		2-Jun-15	1-Jun-36	
G15/26	Live	Avoca Mining Pty Ltd	94	$1,551		9-Nov-16	8-Nov-37	
G15/27	Live	Avoca Mining Pty Ltd	149	$2,458.50		9-Nov-16	8-Nov-37	
G15/29	Live	Avoca Mining Pty Ltd	6	$99		27-Jan-17	26-Jan-38	
G63/6	Live	Avoca Mining Pty Ltd	281	$4,636.50		28-Aug-15	27-Aug-36	The tenement is subject to the 2018 Ngadju Royalty.
G63/7	Live	Avoca Mining Pty Ltd	183	$3,036		27-Apr-16	26-Apr-37	The tenement is subject to the 2018 Ngadju Royalty.
L15/2331.	Live	Avoca Mining Pty Ltd	89	$1,468.50		16-Sep-02	15-Sep-23	
L15/244	Live	Avoca Mining Pty Ltd	5	$82.50		14-Apr-03	13-Apr-24	
L15/259	Live	Avoca Mining Pty Ltd	28	$462		2-Jun-06	1-Jun-27	
L15/261	Live	Avoca Mining Pty Ltd	3	$49.50		2-Jun-06	1-Jun-27	
L15/272	Live	Avoca Mining Pty Ltd	12	$198		9-Aug-06	8-Aug-27	
L15/282	Live	Avoca Mining Pty Ltd	73	$0		13-Mar-08	12-Mar-29	
L15/288	Live	Avoca Mining Pty Ltd	35	$577.50		27-Nov-08	26-Nov-29	
L15/298	Live	Avoca Mining Pty Ltd	51	$858		24-Jun-09	23-Jun-30	
L15/302	Live	Avoca Mining Pty Ltd	8	$148.50		17-Dec-10	16-Dec-31	
L15/308	Live	Avoca Mining Pty Ltd	44	$742.50		17-Dec-10	16-Dec-31	
L15/322	Live	Avoca Mining Pty Ltd	26	$429		6-Oct-11	5-Oct-32	
L15/346	Live	Avoca Mining Pty Ltd	33	$561		13-May-14	12-May-35	
L15/347	Live	Avoca Mining Pty Ltd	12	$198		25-Jul-14	24-Jul-35	
L15/381	Live	Avoca Mining Pty Ltd	24	$396		25-Oct-18	24-Oct-39	
L15/382	Live	Avoca Mining Pty Ltd	15	$247.50		27-Sep-18	26-Sep-39	
L15/386	Live	Avoca Mining Pty Ltd	275	$4,537.50		29-Aug-18	28-Aug-39	The tenement is subject to the 2018 Ngadju Royalty.
L15/389	Live	Avoca Mining Pty Ltd	12	$198		8-Feb-19	7-Feb-40	
L63/58	Live	Avoca Mining Pty Ltd	32	$528		19-Jul-07	18-Jul-28	The tenement is subject to the 2018 Ngadju Royalty.
L63/64	Live	Avoca Mining Pty Ltd	7	$115.50		29-Apr-10	28-Apr-31	The tenement is subject to the 2018 Ngadju Royalty.
L63/72	Live	Avoca Mining Pty Ltd	3	$49.50		7-Oct-15	6-Oct-36	The tenement is subject to the 2018 Ngadju Royalty.
L63/73	Live	Avoca Resources Pty Ltd	38	$643.50		1-Sep-15	31-Aug-36	
L15/368	Pending	Avoca Mining Pty Ltd	115					
L15/377	Pending	Avoca Mining Pty Ltd	8					The tenement is subject to the 2018 Ngadju Royalty.
L63/76	Pending	Avoca Mining Pty Ltd	64					
L63/82	Pending	Avoca Mining Pty Ltd	251					

Mineral Lease	Status	Holder	Area ha (approx)	Rent	Commitment	Grant Date	Expiry Date	Royalties
M15/1132	Live	Avoca Mining Pty Ltd	919	$17,204	$92,000	2-Oct-02	1-Oct-23	1. The tenement is subject to the Morgan Stanley Royalty. 2.Consent Caveat 451097 relates to the Brocks Creek Royalty payable by AMG. 3.The tenement is subject to the 2002 Ngadju Royalty.
M15/11331.	Live	Avoca Mining Pty Ltd	792	$14,829.10	$79,300	2-Oct-02	1-Oct-23	1. This tenement s subject to the 2002 Ngadju Royalty. 2.Consent Caveat 451097 relates to the Brocks Creek Royalty payable by AMG.
M15/11341.	Live	Avoca Mining Pty Ltd	599	$11,220	$60,000	2-Oct-02	1-Oct-23	1. This tenement s subject to the 2002 Ngadju Royalty. 2.Consent Caveat 451097 relates to the Brocks Creek Royalty payable by AMG.
M15/11351.	Live	Avoca Mining Pty Ltd	905	$16,942.20	$90,600	2-Oct-02	1-Oct-23	1. This tenement s subject to the 2002 Ngadju Royalty. 2.Consent Caveat 451097 relates to the Brocks Creek Royalty payable by AMG.
M15/1790	Live	Avoca Mining Pty Ltd	623	$11,650.10	$62,300	8-Jul-13	7-Jul-34	This tenement is subject to the Morgan Stanley Royalty.
M15/1792	Live	Avoca Resources Pty Ltd	1,088	$20,345.60	$108,800	25-Jul-13	24-Jul-34	This tenement is subject to the Morgan Stanley Royalty.
M15/1814	Live	Polar Metals Pty Ltd	1,147	$21,448.90	$114,700	12-Jul-18	11-Jul-39	The tenement is subject to the 2018 Ngadju Royalty.
M15/225	Live	Avoca Mining Pty Ltd	17	$336.60	$10,000	28-Jan-87	27-Jan-29	This tenement is subject to the Morgan Stanley Royalty.
M15/231	Live	Avoca Mining Pty Ltd	19	$374	$10,000	3-Nov-87	2-Nov-29	1.This tenement is subject to the Morgan Stanley Royalty. 2. The tenement is subject to the Trythall Royalty. 3. The tenement is subject to the Gindalbie Royalty.
M15/289	Live	Avoca Mining Pty Ltd	10	$187	$10,000	3-Nov-87	2-Nov-29	This tenement is subject to the Morgan Stanley Royalty.
M15/31	Live	Avoca Mining Pty Ltd	10	$187	$10,000	24-Aug-83	23-Aug-25	This tenement is subject to the Morgan Stanley Royalty.
M15/325	Live	Avoca Mining Pty Ltd	2	$56.10	$5,000	9-Mar-88	8-Mar-30	This tenement is subject to the Morgan Stanley Royalty.
M15/338	Live	Avoca Mining Pty Ltd	129	$0	$13,000	14-Mar-88	13-Mar-30	This tenement is subject to the Morgan Stanley Royalty.
M15/348	Live	Avoca Mining Pty Ltd	495	$9,256.50	$49,500	25-Mar-88	24-Mar-30	This tenement is subject to the Morgan Stanley Royalty.
M15/351	Live	Avoca Mining Pty Ltd	343	$6,414.10	$34,300	2-May-88	1-May-30	This tenement is subject to the Morgan Stanley Royalty.
M15/352	Live	Avoca Mining Pty Ltd	23	$448.80	$10,000	2-May-88	1-May-30	This tenement is subject to the Morgan Stanley Royalty.
M15/375	Live	Avoca Mining Pty Ltd	397	$7,442.60	$39,800	22-Apr-88	21-Apr-30	This tenement is subject to the Morgan Stanley Royalty.
M15/506	Live	Avoca Mining Pty Ltd	779	$14,567.30	$77,900	7-May-90	6-May-32	1. This tenement is subject to the Morgan Stanley Royalty. 2.This tenement is subject to the Dry Creek Royalty.
M15/507	Live	Avoca Mining Pty Ltd	347	$6,488.90	$34,700	7-May-90	6-May-32	1. This tenement is subject to the Morgan Stanley Royalty. 2.This tenement is subject to the Dry Creek Royalty.
M15/512	Live	Avoca Mining Pty Ltd (90%)	19	$374	$10,000	2-Apr-90	1-Apr-32	This tenement is subject to the Morgan Stanley Royalty.

Mineral Lease	Status	Holder	Area ha (approx)	Rent	Commitment	Grant Date	Expiry Date	Royalties
		Paynter, Noel Arthur (10%)						
M15/528	Live	Avoca Mining Pty Ltd	10	$205.70	$10,000	21-Mar-91	20-Mar-33	This tenement is subject to the Morgan Stanley Royalty.
M15/580	Live	Avoca Mining Pty Ltd	962	$17,989.40	$96,200	1-Aug-91	31-Jul-33	1. This tenement is subject to the Morgan Stanley Royalty. 2.This tenement is subject to the Dry Creek Royalty.
M15/581	Live	Avoca Mining Pty Ltd	480	$8,994.70	$48,100	1-Aug-91	31-Jul-33	1. This tenement is subject to the Morgan Stanley Royalty. 2.This tenement is subject to the Dry Creek Royalty.
M15/597	Live	Avoca Mining Pty Ltd	595	$11,145.20	$59,600	6-Jan-92	5-Jan-34	This tenement is subject to the Morgan Stanley Royalty.
M15/610	Live	Avoca Mining Pty Ltd	174	$3,253.80	$17,400	10-Dec-91	9-Dec-33	This tenement is subject to the Morgan Stanley Royalty.
M15/616	Live	Avoca Mining Pty Ltd	667	$12,472.90	$66,700	18-Nov-92	17-Nov-34	1. This tenement is subject to the Morgan Stanley Royalty. 2.This tenement is subject to the Dry Creek Royalty.
M15/620	Live	Avoca Mining Pty Ltd	120	$2,244	$12,000	20-Oct-92	19-Oct-34	This tenement is subject to the Morgan Stanley Royalty.
M15/629	Live	Avoca Mining Pty Ltd	120	$2,262.70	$12,100	20-Oct-92	19-Oct-34	This tenement is subject to the Morgan Stanley Royalty.
M15/639	Live	Avoca Mining Pty Ltd	847	$15,838.90	$84,700	25-Jan-93	24-Jan-35	1. This tenement is subject to the Morgan Stanley Royalty. 2. This tenement is subject to the Mitchell Royalty.
M15/640	Live	Avoca Mining Pty Ltd	726	$13,594.90	$72,700	25-Jan-93	24-Jan-35	1. This tenement is subject to the Morgan Stanley Royalty. 2. This tenement is subject to the Mitchell Royalty.
M15/642	Live	Avoca Mining Pty Ltd	934	$17,484.50	$93,500	25-Jan-93	24-Jan-35	1. This tenement is subject to the Morgan Stanley Royalty. 2. This tenement is subject to the Mitchell Royalty.
M15/651	Live	Polar Metals Pty Ltd	137	$2,580.60	$13,800	11-Feb-93	10-Feb-35	This tenement is subject to the Polar & Barrick Royalty, secured by a mortgage which has been subsequently assigned to Franco Nevada Australia Ltd.
M15/665	Live	Avoca Mining Pty Ltd	875	$16,381.20	$87,600	14-Oct-93	13-Oct-35	1. This tenement is subject to the Morgan Stanley Royalty. 2. This tenement is subject to the Mitchell Royalty.
M15/680	Live	Avoca Mining Pty Ltd	686	$12,828.20	$68,600	1-Mar-94	28-Feb-36	This tenement is subject to the Morgan Stanley Royalty.
M15/681	Live	Avoca Mining Pty Ltd	943	$17,652.80	$94,400	1-Mar-94	28-Feb-36	This tenement is subject to the Morgan Stanley Royalty.
M15/682	Live	Avoca Mining Pty Ltd	876	$16,399.90	$87,700	30-Mar-94	29-Mar-36	This tenement is subject to the Morgan Stanley Royalty.
M15/683	Live	Avoca Mining Pty Ltd	784	$14,679.50	$78,500	1-Mar-94	28-Feb-36	This tenement is subject to the Morgan Stanley Royalty.
M15/684	Live	Avoca Mining Pty Ltd	799	$14,941.30	$79,900	1-Mar-94	28-Feb-36	This tenement is subject to the Morgan Stanley Royalty.
M15/685	Live	Avoca Mining Pty Ltd	840	$15,708	$84,000	1-Mar-94	28-Feb-36	This tenement is subject to the Morgan Stanley Royalty.
M15/710	Live	Polar Metals Pty Ltd	666	$12,472.90	$66,700	10-Aug-94	9-Aug-36	This tenement is subject to the Polar & Barrick Royalty, secured by a mortgage which has been subsequently

Mineral Lease	Status	Holder	Area ha (approx)	Rent	Commitment	Grant Date	Expiry Date	Royalties
								.assigned to Franco Nevada Australia Ltd.
M15/748	Live	Avoca Mining Pty Ltd	9	$168.30	$10,000	8-Feb-95	7-Feb-37	This tenement is subject to the Morgan Stanley Royalty.
M15/757	Live	Avoca Mining Pty Ltd	418	$7,816.60	$41,800	3-Mar-95	2-Mar-37	This tenement is subject to the Morgan Stanley Royalty.
M15/758	Live	Avoca Mining Pty Ltd	892	$16,680.40	$89,200	3-Mar-95	2-Mar-37	This tenement is subject to the Morgan Stanley Royalty.
M15/786	Live	Avoca Mining Pty Ltd	954	$17,858.50	$95,500	27-Apr-95	26-Apr-37	This tenement is subject to the Morgan Stanley Royalty.
M15/815	Live	Avoca Mining Pty Ltd	944	$17,652.80	$94,400	8-Jan-97	7-Jan-39	This tenement is subject to the Morgan Stanley Royalty.
M15/817	Live	Avoca Mining Pty Ltd	919	$17,185.30	$91,900	23-Sep-96	22-Sep-38	This tenement is subject to the Morgan Stanley Royalty.
M15/820	Live	Avoca Mining Pty Ltd	968	$18,101.60	$96,800	19-Aug-96	18-Aug-38	This tenement is subject to the Morgan Stanley Royalty.
M63/165	Live	Avoca Mining Pty Ltd	202	$3,777.40	$20,200	16-Feb-88	15-Feb-30	The tenement is subject to the 2018 Ngadju Royalty.
M63/230	Live	Polar Metals Pty Ltd	497	$9,293.90	$49,700	19-Nov-90	18-Nov-32	This tenement is subject to the Polar & Barrick Royalty, secured by a mortgage which has been subsequently assigned to Franco Nevada Australia Ltd.
M63/236	Live	Avoca Mining Pty Ltd	9	$187	$10,000	9-Aug-91	8-Aug-33	The tenement is subject to the 2018 Ngadju Royalty.
M63/255	Live	Polar Metals Pty Ltd	369	$6,919	$37,000	22-Oct-92	21-Oct-34	This tenement is subject to the Polar & Barrick Royalty, secured by a mortgage which has been subsequently assigned to Franco Nevada Australia Ltd.
M63/269	Live	Polar Metals Pty Ltd	649	$12,136.30	$64,900	1-Oct-93	30-Sep-35	This tenement is subject to the Polar & Barrick Royalty, secured by a mortgage which has been subsequently assigned to Franco Nevada Australia Ltd.
M63/279	Live	Polar Metals Pty Ltd	13	$243.10	$10,000	23-Mar-94	22-Mar-36	This tenement is subject to the Polar & Barrick Royalty, secured by a mortgage which has been subsequently assigned to Franco Nevada Australia Ltd.
M63/329	Live	Avoca Resources Pty Ltd (93.33%) Stehn, Trent Paterson (6.67%)	68	$1,271.60	$10,000	23-Jul-01	22-Jul-22	
M63/366	Live	Avoca Mining Pty Ltd	54	$1,009.80	$10,000	30-Jul-10	29-Jul-31	The tenement is subject to the 2018 Ngadju Royalty.
M63/368	Live	Avoca Resources Pty Ltd (93.33%) Stehn, Trent Paterson (6.67%)	383	$7,162.10	$38,300	23-Jul-01	22-Jul-22	
M63/515	Live	Avoca Mining Pty Ltd	709	$13,258.30	$70,900	29-Aug-07	28-Aug-28	The tenement is subject to the 2018 Ngadju Royalty.
M63/516	Live	Avoca Mining Pty Ltd	710	$13,295.70	$71,100	29-Aug-07	28-Aug-28	The tenement is subject to the 2018 Ngadju Royalty.
M63/647	Live	Avoca Resources Pty Ltd	998	$18,662.60	$99,800	6-Aug-13	5-Aug-34	This tenement is subject to the Morgan Stanley Royalty.
M63/660	Pending	Avoca Resources Pty Ltd (93.33%)	277					

Mineral Lease	Status	Holder	Area ha (approx)	Rent	Commitment	Grant Date	Expiry Date	Royalties
		Stehn, Trent Paterson (6.67%)						
M63/662	Pending	Polar Metals Pty Ltd	971					
P15/5634	Live	Avoca Resources Pty Ltd	104	$286	$4,160	21-Oct-11	20-Oct-19	
P15/5638	Live	Polar Metals Pty Ltd	109	$299.75	$4,360	14-Jun-12	13-Jun-20	
P15/5639	Live	Polar Metals Pty Ltd	98	$269.50	$3,920	14-Jun-12	13-Jun-20	
P15/5640	Live	Polar Metals Pty Ltd	95	$261.25	$3,800	3-Sep-12	2-Sep-20	
P15/5958	Live	Polar Metals Pty Ltd	41	$112.75	$2,000	22-Dec-15	21-Dec-19	
P15/5959	Live	Polar Metals Pty Ltd	21	$57.75	$2,000	22-Dec-15	21-Dec-19	
P15/5960	Live	Avoca Resources Pty Ltd	131	$363	$5,280	24-Aug-15	23-Aug-19	
P15/5961	Live	Avoca Resources Pty Ltd	187	$517	$7,520	24-Aug-15	23-Aug-19	
P15/6179	Live	Avoca Mining Pty Ltd	21	$57.75	$2,000	11-Oct-18	10-Oct-22	
P63/1468	Live	Avoca Resources Pty Ltd (93.33%) Stehn, Trent Paterson (6.67%)	13	$35.75	$2,000	3-Jun-08	2-Jun-16	
P63/1587	Live	Polar Metals Pty Ltd	121	$335.50	$4,880	10-Jun-09	9-Jun-17	This tenement is subject to the Polar & Barrick Royalty, secured by a mortgage which has been subsequently assigned to Franco Nevada Australia Ltd.
P63/1588	Live	Polar Metals Pty Ltd	120	$332.75	$4,840	10-Jun-09	9-Jun-17	This tenement is subject to the Polar & Barrick Royalty, secured by a mortgage which has been subsequently assigned to Franco Nevada Australia Ltd.
P63/1589	Live	Polar Metals Pty Ltd	121	$335.50	$4,880	10-Jun-09	9-Jun-17	This tenement is subject to the Polar & Barrick Royalty, secured by a mortgage which has been subsequently assigned to Franco Nevada Australia Ltd.
P63/1590	Live	Polar Metals Pty Ltd	120	$330	$4,800	10-Jun-09	9-Jun-17	This tenement is subject to the Polar & Barrick Royalty, secured by a mortgage which has been subsequently assigned to Franco Nevada Australia Ltd.
P63/1591	Live	Polar Metals Pty Ltd	121	$335.50	$4,880	10-Jun-09	9-Jun-17	This tenement is subject to the Polar & Barrick Royalty, secured by a mortgage which has been subsequently assigned to Franco Nevada Australia Ltd.
P63/1592	Live	Polar Metals Pty Ltd	121	$335.50	$4,880	10-Jun-09	9-Jun-17	This tenement is subject to the Polar & Barrick Royalty, secured by a mortgage which has been subsequently assigned to Franco Nevada Australia Ltd.
P63/1593	Live	Polar Metals Pty Ltd	121	$335.50	$4,880	10-Jun-09	9-Jun-17	This tenement is subject to the Polar & Barrick Royalty, secured by a mortgage which has been subsequently assigned to Franco Nevada Australia Ltd.
P63/1594	Live	Polar Metals Pty Ltd	121	$335.50	$4,880	10-Jun-09	9-Jun-17	This tenement is subject to the Polar & Barrick Royalty, secured by a mortgage which has been subsequently

Mineral Lease	Status	Holder	Area ha (approx)	Rent	Commitment	Grant Date	Expiry Date	Royalties
								assigned to Franco Nevada Australia Ltd.
P63/1977	Live	Avoca Resources Pty Ltd	88	$242	$3,520	3-Mar-15	2-Mar-23	
P63/2011	Live	Avoca Mining Pty Ltd	170	$467.50	$6,800	8-May-17	7-May-21	
P63/2012	Live	Avoca Mining Pty Ltd	164	$451	$6,560	8-May-17	7-May-21	
P63/2013	Live	Avoca Mining Pty Ltd	181	$497.75	$7,240	9-May-17	8-May-21	
P63/2014	Live	Avoca Mining Pty Ltd	147	$404.25	$5,880	9-May-17	8-May-21	
P63/2015	Live	Avoca Mining Pty Ltd	117	$324.50	$4,720	9-May-17	8-May-21	
P63/2025	Live	Avoca Mining Pty Ltd	144	$396	$5,760	8-May-17	7-May-21	
P63/2050	Live	Avoca Mining Pty Ltd	182	$503.25	$7,320	8-May-17	7-May-21	
P63/2051	Live	Avoca Mining Pty Ltd	151	$415.25	$6,040	8-May-17	7-May-21	
P63/2064	Live	Avoca Mining Pty Ltd	21	$57.75	$2,000	20-Jul-17	19-Jul-21	
P63/2067	Live	Avoca Mining Pty Ltd	172	$473	$6,880	9-May-17	8-May-21	
P63/2080	Live	Avoca Mining Pty Ltd	19	$55	$2,000	13-Apr-18	12-Apr-22	The tenement is subject to the 2018 Ngadju Royalty.
P63/2094	Live	Avoca Mining Pty Ltd	168	$464.75	$6,760	18-Jan-18	17-Jan-22	
P63/2095	Live	Avoca Mining Pty Ltd	183	$506	$7,360	18-Jan-18	17-Jan-22	
P63/2097	Live	Avoca Mining Pty Ltd	149	$412.50	$6,000	18-Jan-18	17-Jan-22	
P63/2100	Live	Avoca Mining Pty Ltd	182	$500.50	$7,280	5-Jun-18	4-Jun-22	
P63/2101	Live	Avoca Mining Pty Ltd	102	$280.50	$4,080	6-Jun-18	5-Jun-22	
P63/2102	Live	Avoca Mining Pty Ltd	91	$250.25	$3,640	6-Jun-18	5-Jun-22	
P63/2119	Live	Avoca Mining Pty Ltd	102	$280.50	$4,080	10-Oct-18	9-Oct-22	
P63/2120	Live	Avoca Mining Pty Ltd	106	$291.50	$4,240	10-Oct-18	9-Oct-22	
P63/2121	Live	Avoca Mining Pty Ltd	121	$332.75	$4,840	10-Oct-18	9-Oct-22	
P63/2122	Live	Avoca Mining Pty Ltd	130	$357.50	$5,200	10-Oct-18	9-Oct-22	
P15/6229	Pending	Avoca Mining Pty Ltd	200					
P15/6230	Pending	Avoca Mining Pty Ltd	129					
P15/6231	Pending	Avoca Mining Pty Ltd	198					
P15/6234	Pending	Avoca Mining Pty Ltd	121					
P15/6239	Pending	Avoca Mining Pty Ltd	121					
P15/6240	Pending	Avoca Mining Pty Ltd	121					
P63/2021	Pending	Avoca Mining Pty Ltd	198					
P63/2022	Pending	Avoca Mining Pty Ltd	198					
P63/2023	Pending	Avoca Mining Pty Ltd	148					
P63/2024	Pending	Avoca Mining Pty Ltd	177					
P63/2125	Pending	Avoca Mining Pty Ltd	197					
P63/2126	Pending	Avoca Mining Pty Ltd	194					
Total			**178,956**	**$790,927**	**$5,080,260**			

4.3 Underlying Agreements

4.3.1 Beta Hunt

4.3.1.1 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 Limited 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.

4.3.1.2 Royalties

SLM pays the following royalties on nickel production:

- A state royalty equal to 2.5% of recovered nickel;
- A royalty to Consolidated Minerals Limited 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 greater than or equal to A$17,500/t;
- A royalty to Maverix Metals (Australia) Pty Ltd equal to 0.5% of payable nickel less allowable deductions; and
- A royalty to Maverix Metals (Australia) Pty Ltd 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 Maverix Metals (Australia) Pty Ltd equal to 1.5% of recovered gold less allowable deductions; and
- A royalty to Maverix Metals (Australia) Pty Ltd equal to 6.0% of recovered gold.

4.3.2 Higginsville

4.3.2.1 Lithium Rights Agreement – Liontown Resources Limited

Avoca has granted exclusive rights to LRL (Aust) Pty Ltd, a wholly owned subsidiary of ASX listed Liontown Resources Limited, to mine and explore for lithium and accessory minerals, including grant of an irrevocable licence to conduct those activities on tenements E63/856, P63/1977 and M63/647.

4.3.2.2 Nickel Rights Agreement – S2 Resources Limited

Avoca has granted Southern Star Exploration Pty Ltd, a wholly owned subsidiary of ASX listed S2 Resources Limited, nickel rights on those licences that are held by Polar Metals Pty Ltd.

4.3.2.3 Royalties

RNC pays royalties as outlined below. The Tenements to which the royalty agreements below apply are set out in Table 4.4.

- **Morgan Stanley (SIG)**: (a) AMG pay Morgan Stanley 1.7% of the net smelter return; and (b) an additional participation payment where gold price is above the initial participation threshold

(A$1340/oz.) up to 50% of the difference between the average London pm fix price of gold for that quarter and the initial participation rate,(the **Morgan Stanley Royalty**)

- **Dry Creek**: (a) AMG pay Synergy Equities Group Limited (ACN 009 148 529) a royalty of $0.12 per gram of gold per dry metric tonne of royalty ore (mineralised material mined from the applicable tenements which contains an average grade greater than 1gm of gold per dry metric tonne and not classified as waste or low grade); and (b) the royalty is to be adjusted monthly as follows: $0.12 x (price of gold per gram (average Perth Mint purchasing price) / $14). (the **Dry Creek Royalty**).

- **Gindalbie and Trythall**: (a) AMG pay a royalty to Gindalbie Metals Limited (ACN 060 857 614) for ore:(i) transported through the decline on the applicable tenements; and (ii) which has been treated by any treatment process, at the rate of $3.00/dry tonne and capped at a maximum payment of $500,000, (the Gindalbie Royalty), (b) AMG pay a royalty to William Thomas Trythall in respect of gold mined on the applicable tenements at a fixed rate of $20/oz., (the **Trythall Royalty**).

- **Mitchell**: (a) AMG pay a royalty of $32/oz. of fine gold (not less than 0.995 fineness) to Carnegie Corporation Ltd (ACN 009 237 736) and Total Mineral Resources NL (ACN 079 805 253) in equal shares (the **Mitchell Royalty**).

- **Ngadju 2002 mining agreement**. The mining agreement between South Kal Mines Pty Ltd and the Ngadju people dated 20 May 2002 has the following continuing obligations relevant to land including the Tenements: (a) an annual payment of $20,000 towards the "Ngadju Education Trust" for the duration of the project operations; and (b) a royalty of up to $5.00/oz. of gold recovered, (the **2002 Ngadju Royalty**).

- **Ngadju 2018 mining agreement**. The mining agreement between Ngadju Native title Aboriginal Corporation RNTBC, AMG and PMT dated June 12, 2018 has the following continuing obligations relevant to land including the Tenements: (a) an administration contribution of $25,000 per annum when AMG and PMT are not conducting mining operations on applicable tenements, and $50,000 per annum when AMG and PMT are conducting mining activities on the applicable tenements; (b) a scholarship trust contribution of $28,500 per annum; and (c) a production contribution of up to 1%/oz. of gold produced, (the 2018 **Ngadju Royalty**).

- **Brocks Creek**: (a) that AMG pay a royalty of $1 per tonne of ore for all ore mined and milled from the applicable tenements, (the **Brocks Creek Royalty**).

- **Polar & Barrick**: (a) PMT pay a royalty equal to all product mined from the tenements x 2% x Net Smelter Return (ie 100% of gross revenue from sale of product less 100% of charges (only if reasonable and arms length) for smelting, assaying and sampling, penalties for impurities, taxes, transportation and insurance of production of product from PMT processing plant.

- **Paynter**: (a) mineral rights above 20 metres will be retained 100% by Noel Paynter, but Avcoa has the option to buy out the surface rights at any time for a payment of $1.5 million in cash and/or shares at Noel Paynter's election; (b) Avoca must earn a 90% interest in the mineral rights below 20 metres by spending $250,000 by 10 May 2008; and (c) Noel Paynter retains a 10% interest in the mineral rights below 20 metres that may be converted into a 1% interest in net smelter return if he does not elect to contribute 10% of costs. Avoca has the right to buy out the remaining 10% interest at any time after it earns 90% with a payment of $1 million, (the **Paynter Royalty Option**).

- **Western Australia (State Govt)**: A state royalty equal to 2.5% of recovered gold;

4.4 Environmental Considerations

4.4.1 Beta Hunt

SLM is responsible for satisfying all rehabilitation obligations arising on or after July 25, 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. An independent audit and mine closure estimate prepared in 2018 by consultant MBS Environmental estimated the current rehabilitation liability accruing to SLM for the Beta Hunt Sub-Lease at A$881,000.

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

Additional detail on environmental considerations is provided in section 19.

4.4.2 Higginsville

RNC is responsible for satisfying all rehabilitation obligations arising post the sale date of June 10, 2019. In Q1 2019 HGO undertook an audit to satisfy concerns on the assessed value of mine closure remediation costs. The revised remediation costs post 2019 audit is estimated at $25.1M and was accepted by the DMIRS.

Additional detail on environmental considerations is provided in section 20.

4.5 Permits and Authorization

4.5.1 Beta Hunt

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

- Government of Western Australia, Department of Water and Environmental 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, Industry Regulation and Safety– Explosives Storage License ETS002668,
- Government of Western Australia, Department of Mines, Industry Regulation and Safety – 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.

Higginsville

An application for a Mining Lease must be accompanied by a Mining Proposal and Mine Closure Plan (**MCP**) in accordance with the *Mining Act 1978* (WA) (**Mining Act**). A Mining Lease, Mining Proposal and MCP are required to carry out mining activities on a site. There are a number of Mining Proposals and Mine Closure Plans applicable to HGO. Listed below are permits that cover HGO's active mining operations:

- Mine Closure Plan – Higginsville Gold Operations – Reg ID: 61112 dated August 2016 (**Higginsville MCP**).
- Revised Fairplay East In-pit TSF Mining Proposal – Reg ID: 75834 (**Fairplay East TSF MP**).

- Mining Proposal - Mt Henry Gold Operation - Revision A Version 2 – Reg ID: 71989 (**Mt Henry MCP**). Approval was given on April 12, 2018 for AMG to carry out the activities outlined in the Mt Henry MCP. Conditions were varied on April 18, 2018 as set out in a letter from DMIRS dated 23 April 2018.

- Baloo Project Mine Closure Plan – Reg ID: 75377 (**Baloo MCP**). Approval was given by DMIRS on February 11, 2019 for AMG to carry out the activities outlined in the Baloo MCP.

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 Mining Leases at Higginsville are currently in good standing.

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).

4.6.2.1 Beta Hunt

With respect to the Native Title dispute with the Ngadju people detailed in the 2016 PEA, this matter is now closed with the Full Federal Court unanimously confirming the validity of almost 300 mining leases, including the Beta Hunt leases and any sub-lease of them.

4.6.2.2 Higginsville

The HGO tenements are subject to native title determinations and claims. As of the April 11, 2019 the status of Native Title determinations is as follows:

(a) **Ngadju Claim** (WCD2014/004, WAD6020/1998) and **Ngadju B Claim** (WCD2017/002, WAD6020/1998)): the Federal Court of Australia has determined that the Ngadju people have native title rights and interests in relation to an area of land that includes the HGO tenements.

(b) **Marlinyu Ghoorlie Claim** (WC2017/007, WAD647/2017)): the Federal Court has accepted for registration a claim by the Marlinyu Ghoorlie people over an area of land that includes the HGO tenements. This claim has not yet been determined.

(c) **Maduwongga Claim** (WC2017/001, WAD186/2017): the Maduwongga people have registered a native title claim over an area of land that includes the HGO tenements. This claim has not yet been determined.

(d) **Nyalpa Pirniku Claim** (WC2019/00, WAD91/2019): the Nyalpa Pirniku people have lodged a native title claim over an area of land that includes the HGO tenements. This claim is currently identified for a registration decision.

Given where the HGO tenements are within Western Australia, it is not at all surprising that native title groups have lodged claims and obtained determinations under the NTA. The existence of a native title determination or a claim does not impact directly on the validity of mining tenements, nor does it impact on existing operations.

The relevant mining legislation in Western Australia contains provisions that may make a tenement holder liable for the payment of compensation for the effect of mining and exploration activities on any native title rights and interests that may still exist in the area covered by a tenement. It is difficult to estimate the amount of compensation that may be payable, and the Ngadju people would also need to prosecute a compensation claim for it to be payable.

RNC have inherited three active mining agreements with native title groups for the grant of tenements:

(a) **2002 Mining Agreement**: with the Ngadju People dated 20 May 2002

(b) **2010 Mining Agreement**: with the Ngadju People and the Goldfields Land and Sea Council dated June 30, 2010.

(c) **2018 Mining Agreement**: with Ngadju Native Title Aboriginal Corporation RNTBC, dated June 12, 2018. This Agreement appears to supercede the 2010 Agreement.

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.

4.6.3.1 Beta Hunt

A search of the Aboriginal Heritage Inquiry System (AHIS) shows no registered sites on the four tenements (M15/1512, M15/1516, M15/1529 and M15/1531) where SLM is likely to conduct any surface disturbance.

4.6.3.2 Higginsville

A search of the Western Australian Government's Aboriginal Heritage Inquiry System (**AHIS**) conducted on April 18, 2019 shows there are a number of Aboriginal sites within the HGO tenements. Based on records held by HGO, prior to the Project area being developed and mined, ethnographic and archaeological surveys were commissioned over the Higginsville Project area. No sites of ethnographic or archaeological significance were recorded.

HGO, through RNC, is a signatory to a number of heritage protection agreements with the Ngadju Claim Group.

5. ACCESSIBILITY, LOCAL RESOURCES, INFRASTRUCTURE, CLIMATE AND PHYSIOGRAPHY

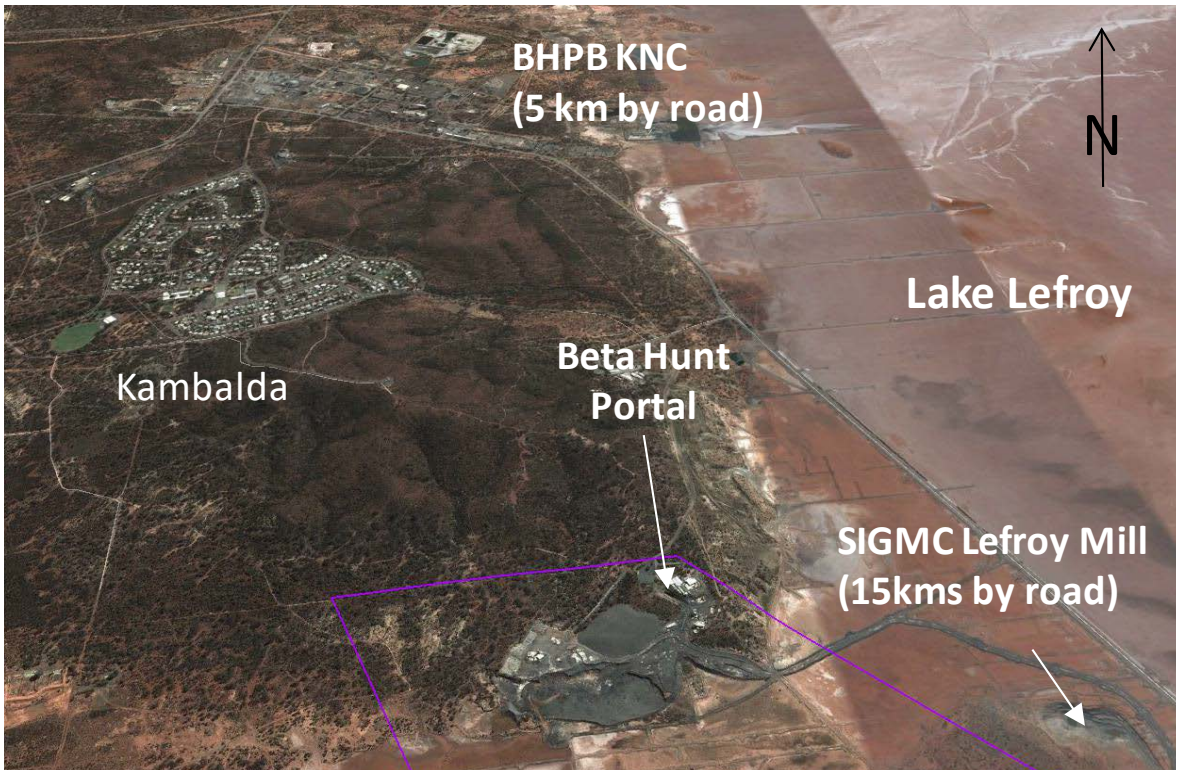
5.1 Accessibility

Beta Hunt

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 road connecting the Beta Hunt mine site to the BHP Kambalda nickel concentrator to the north (5 km) this same road provides trucking access to the Goldfields Highway and the Coolgardie-Esperance Highway leading to the Higginsville Mill.

Figure 5.1: Beta Hunt Mine Access – Oblique Aerial View



Source: SLM

Higginsville

The project lies adjacent to a major highway connecting the Goldfields towns of Coolgardie and Norseman. Higginsville occurs in the Coolgardie Mineral Field in the Shire of Coolgardie, approximately 55 km north of the town of Norseman and 50km south of Kambalda

Access to the Higginsville mill and offices is via a constructed all-weather access road (0.8m) from the Goldfields highway. Station tracks and fence lines provide access to most of the Project away from the Mill and site infrastructure. Most areas are accessible by vehicle except following rare periods of heavy storms when flooding may occur.

Figure 5.2 Higginsville Mine Access – Oblique Aerial View

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 2,539 (2016 Census) and is serviced from the regional hub of Kalgoorlie-Boulder, which has a population of 29,875 (2016 Census). Norseman has a population of 518 (2016 census).

Gold was first discovered at Norseman in 1894 and was once the second-richest goldfield in Western Australia after the Gold Mile of Kalgoorlie.

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 61 persons resides locally within these two towns. The Higginsville workforce of 54 persons are mostly Fly-in/Fly-out workers from Perth who arrive to site by bus from Kalgoorlie Airport.

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 both mines is at Esperance, 350 km south of Kambalda and 240 km south of Higginsville

5.3 Climate

Kambalda and the Higginsville area 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 and Higginsville receive 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

Beta Hunt

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 5.3) 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 5.4).

Figure 5.3: Typical view of Lake Lefroy

Figure 5.4: Local Physiography and the 1966 WMC Discovery Hole Monument

Higginsville

The topography of the Higginsville area is typically flat and comprises dry or shallow lakes, proximal salt flats, sand dunes and low ridges. Elevation is approximately 313m above sea level.

The Project tenements lie within the Great Western Woodland, an area of great biological richness that extends over 16 million ha. It is regarded as the largest remaining area of intact Mediterranean climate woodland left on earth and contains about 3,000 species of flowering plants, one fifth of the known flora in Australia (SRK, 2010).

6. HISTORY

6.1 Beta Hunt

6.1.1 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.

6.1.2 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 1, 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.

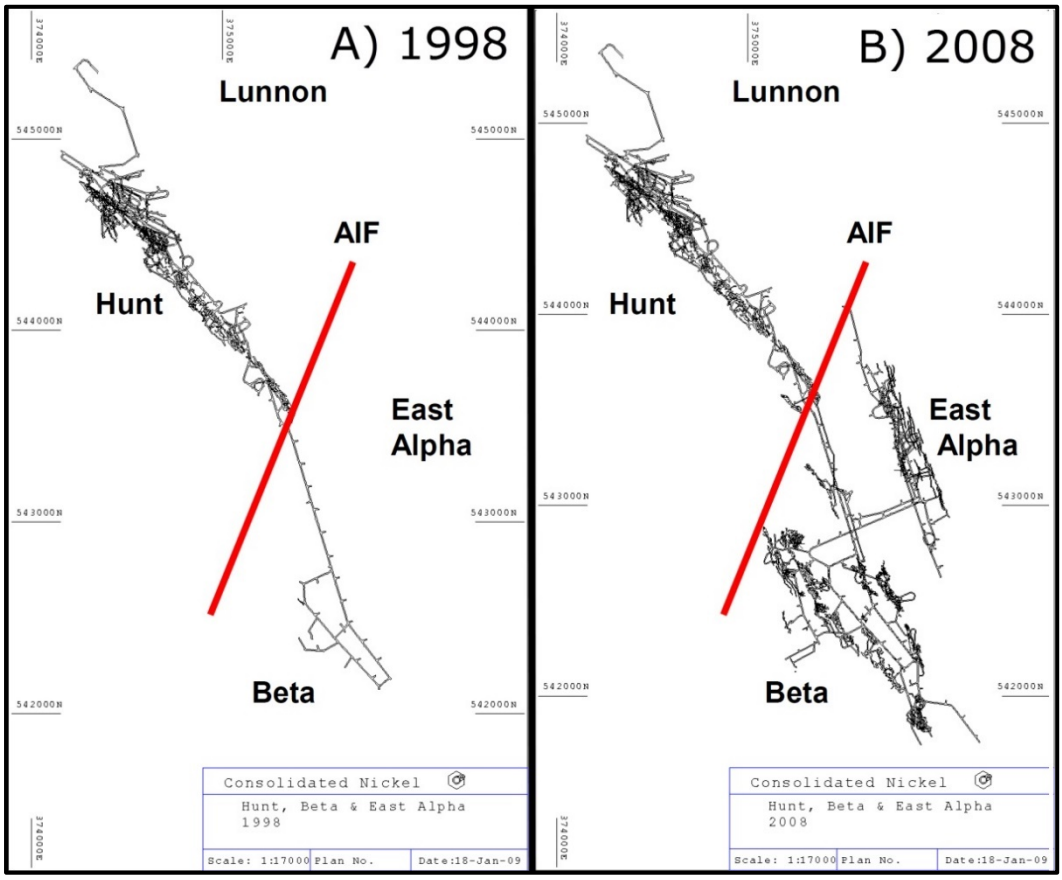
6.1.3 1974 – 1998 WMC Operation

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)

6.1.4 2003 – 2008 Reliance Mining / Consolidate Nickel Kambalda Operations

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.

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.

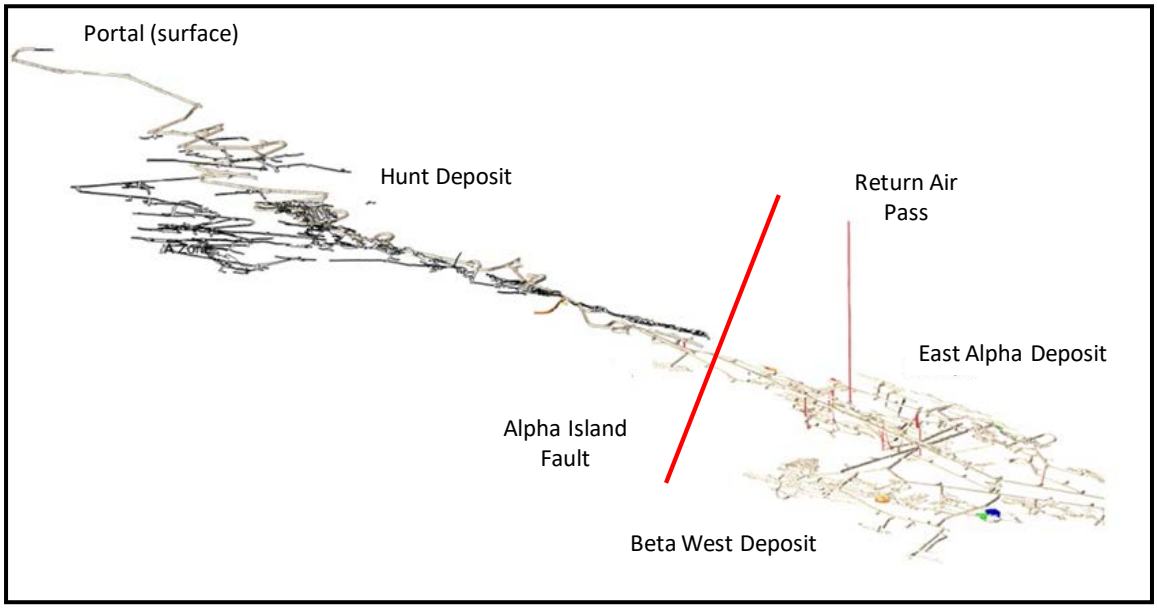
CNKO conducted significant drilling to expand the resource base, resulting in discovery of the East Alpha nickel deposit. The first ore was mined from East Alpha in March 2006. Major exploration drilling programs were undertaken at Beta and East Alpha to extend the life of these mines. Despite the success 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 Nickel Mineral Resources as at 31 December 2008

	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**

Mineral Resources reported above 1% Ni cut off

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.

6.1.5 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 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).

RNC acquired 100% of SLM through a staged acquisition process that was finalised on May 31, 2016.

2016 Preliminary Economic Assessment

In March 2016, RNC completed a preliminary economic assessment (PEA) for Beta Hunt, which is contained in a technical report: "NI 43-101 Technical Report Preliminary Economic Assessment – The Beta Hunt Mine, Kambalda, Western Australia" dated March 4, 2016 authored by D, Penswick and E. Haren.

The 2016 PEA nickel Mineral Resource estimate for Beta Hunt is presented in Table 6.2 and the historical gold Mineral Resource estimate follows in Table 6.3.

Table 6.2: Beta Hunt Nickel Mineral Resources as at February 1, 2016

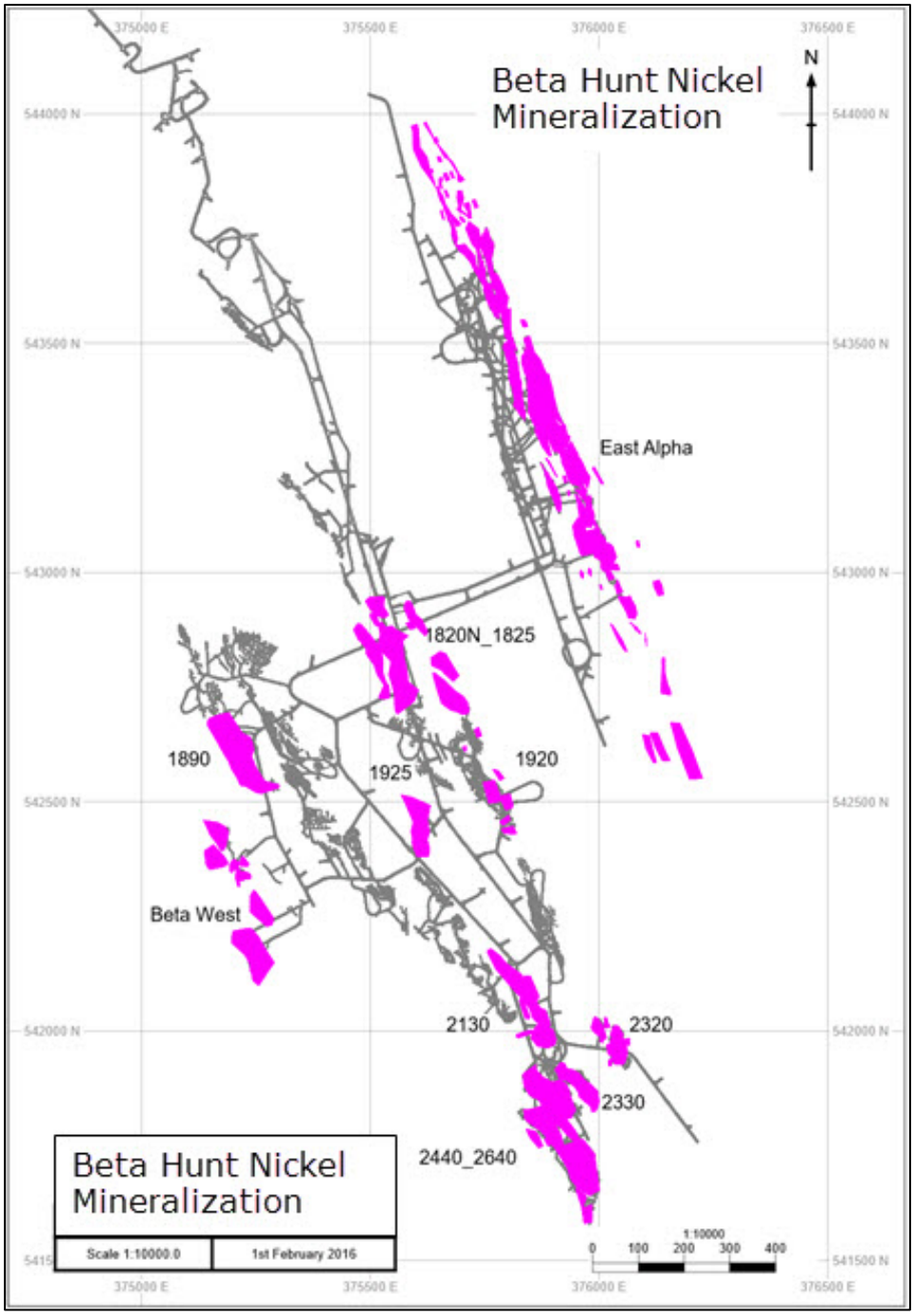
Nickel	Classification	Inventory (kt)	Grade (Ni %)	Contained Metal Nickel Tonnes (NiTs)
>=1% Ni	Measured	96	4.6	4,460
	Indicated	283	4.0	11,380
	Total	**379**	**4.2**	**15,840**
	Inferred	216	3.4	7,400

Nickel Mineral Resources are reported using a 1% Ni cut-off grade

Source: 2016 PEA

There are ten estimation areas that make up the 2016 Beta Hunt nickel Mineral Resource which are illustrated in the plan view location plot in Figure 6.3: 1820N_1825, 1890, 1920, 1925, 2130, 2320, 2330, 2440-2640, Beta West, and East Alpha.

Figure 6.3: Beta Hunt Nickel Mineral Resource Locations



Source: Penswick & Haren, 2016

Table 6.3: Historical Beta Hunt Gold Mineral Resources as at February 1, 2016

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

Source: 2016 PEA

2018 Gold Resource Update

On April 26, 2018 RNC published a gold Mineral Resource estimation update for Western Flanks and A Zone effective December 31, 2017. This historical Mineral Resource is presented in Table 6.4.

Table 6.4: Historical Beta Hunt Gold Mineral Resources as at December 31, 2017

Resource	Indicated			Inferred		
	Kt	**g/t**	**Koz**	**Kt**	**g/t**	**Koz**
A Zone	672	3.4	75	997	3.1	97
Western Flanks	1,513	3.0	145	812	3.3	85
Western Flanks East (A Zone Sth)	136	3.7	16	84	3.3	9
Beta	32	3.3	3	147	3.4	16
Total	**2,353**	**3.2**	**239**	**2,040**	**3.2**	**208**

Gold Mineral Resources are reported using a 1.8 g/t Au cut-off grade.

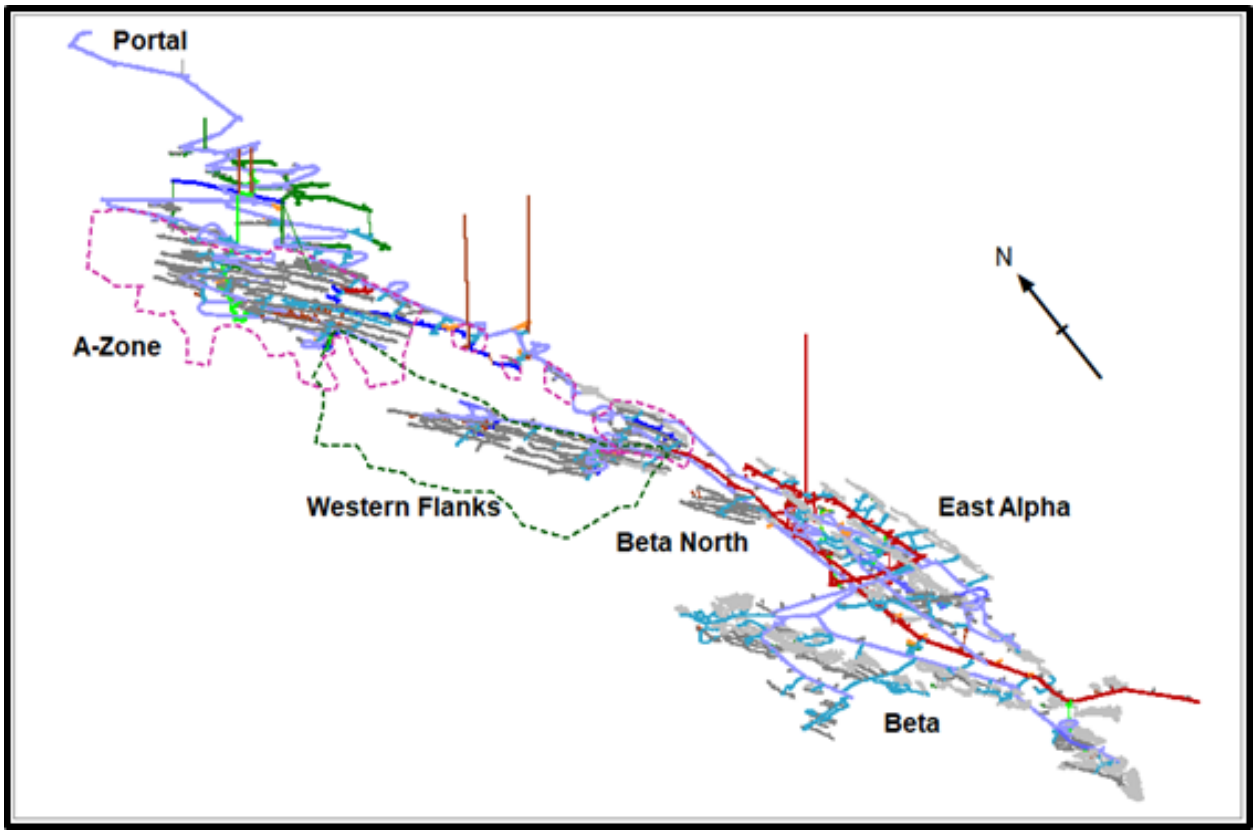
Source: RNC

Since December 31, 2016 to June 30, 2019, Beta Hunt has mined 1,210 kt of gold mineralisation at average grade of 3.23 g/t Au (126 koz contained gold) and has delivered for processing 56 kt of nickel mineralisation at an average grade of 2.57 % Ni (1,439 kt contained nickel).

Gold was produced primarily from the Western Flanks, A Zone and Beta areas. The major single contributor to production over this period was the discovery and recovery of the Father's Day Vein (FDV) development mineralisation from the 15 level of the A Zone lode in September and October, 2018. The FDV hosted specimen quality, coarse gold in quartz veining adjacent to a sheared pyritic sediment unit. An estimated 25 koz of gold was recovered (processed mineralisation and specimen stone) from a single 60 m3 development drive cut.

Nickel was produced primarily from East Alpha and Beta areas.

Figure 6.4: Isometric view of current Beta Hunt Mine development with A Zone and Western Flanks resource outlines. Scale varies in this view. Levels are 25 m apart vertically.



6.2 Higginsville

6.2.1 Pre-Westgold

The pre 2006 history text is taken from the Higginsville Feasibility Study (2006):

Samantha Gold NL commenced exploration activities in and around the historic mining centres of Higginsville and Eundynie in 1983 after acquiring ground from local prospectors. From 1987 to 1993 extensive use of soil geochemistry led to the early discovery of the Poseidon South, Graveyard and Aphrodites deposits and later the Tertiary sediment hosted Challenger-Swordsman deep-lead deposit.

Resolute gained control of Samantha in July 1994 and continued an intensive exploration approach that yielded additional discoveries. In 1996 exploration focus changed to examining the depth potential of the Higginsville Belt. Deep drilling was undertaken to test down dip of the Poseidon South deposit. Underground mining from the base of the Poseidon South Pit was undertaken from 1997 to 1998. From 1989 to 1997, the Higginsville gold plant processed a total of 6.7 million tonnes to produce 613,000 oz.

In July 1999, WMC Resources Ltd. (**'WMC'**) entered into a joint venture with Resolute to explore the Project area for nickel and gold. Gold Fields Australasia (**'GFA'**) purchased WMC's interest in the project as a part of the Sale and Purchase Agreement for WMC's Western Australian gold assets in November, 2001, and acquired interest in the Higginsville Joint Venture on 22nd February 2002. GFA took over full control of the Project in October, 2003 with Resolute retaining the nickel rights (subsequently sold to Bullion Minerals Limited). Over the period of WMC's involvement in the Project, the ground holding has reduced by over 50%, from 400 km2 to 178 km2.

Avoca reached agreement with Gold Fields to acquire 100% of the Higginsville Gold Project on 30 June 2004, with subsequent settlement occurring on 3 December 2004. The Nickel rights to particular

tenements are held by Bullion. Equinox commenced a joint venture arrangement with Bullion on these tenements to explore for nickel (the Cowan Nickel Joint Venture). Bullion subsequently transferred the nickel rights to Liontown Resources Limited.

Avoca discovered the Trident Deposit in October 2004, with an initial resource statement of 450,000 ounces completed in August 2005. A pre-feasibility study was completed in December 2005. Additional drilling resulted in an updated resource statement released in May (to 870,000 ounces) and August 2006 (to 1.1 million ounces). The Trident Proved and Probable Mineral Reserve, based on the Trident Feasibility Study, was 3,394 kt @ 5.3 g/t for 581,000 oz.

Underground development at Trident commenced in early 2007, and the first high grade ore was mined from Trident in August, 2007.

The procurement and construction of a new 1 Mtpa CIL treatment plant at Higginsville commenced in late 2007. The plant was commissioned in the first half of 2008 with the first official gold pour on 1st July, 2008. The plant is designed to treat 1.3 Mtpa. The Trident mine was the base load of the Operation, supplemented by feed coming from paleochannels and open pits. A paste plant delivering paste to the underground was completed in October, 2009.

Figure 6.5: Higginsville Processing Plant (2008)

Up to December 4, 2016 (mine closure), the Trident underground mine produced 7,434,000 tonnes @ 4.4g/t Au for 1,045,000 oz of gold.

On February 18, 2011, Toronto: Anatolia Minerals Development Limited ("**Anatolia**") and Avoca Resources Limited ("**Avoca**") merged, resulting in a new company called Alacer Gold Corp. ("**Alacer**").

6.2.2 Westgold

On October 1, 2013, Metals X Limited ("**Metals X**") acquired the whole of Alacer's Australian gold operations on a going concern basis through its wholly owned subsidiary, Westgold Resources Pty Ltd (Westgold). The acquisition included the Higginsville Project. Since the acquisition by Westgold (to

June 10, 2019), HGO has produced 5,484,406 tonnes @ 2.5g/t for 441,493ozs. This excludes production from toll milling.

In July, 2015 Metals X acquired the Mt Henry Gold Project from Panoramic Resources Ltd (Panoramic) and Matsa Resources Limited (Matsa). The Mt Henry Gold Project is located approximately 15 km south of Norseman and 75 km south of the Higginsville Gold Operations. The Mt Henry Gold Project consists of three known deposits: North Scotia, Selene and Mt Henry. All the deposits are located on granted mining leases. At the date of acquisition, the deposits had an aggregate JORC 2012 compliant total resources of 1.656 million ounces (43.18 million tonnes @ 1.19 g/t Au using a 0.4 g/t Au cut-off).

In February, 2018, Westgold acquired the Polar Bear and Norcott projects, together with the Eundynie Joint Venture, for A$9 million from S2 Resources Limited (S2). S2 retained nickel rights.

The Polar Bear project abuts the main Higginsville historic gold deposits and provides short term ore sources for the Higginsville treatment plant from mining of the Baloo deposit and further exploring with a view to development of the nearby Monsoon, Bindy, Nanook and Ear Lobe prospects. A Mineral Resource estimate of 4,220,000 tonnes grading 2.0 g/t gold for a contained 264,000 ounces of gold was announced by S2 in February, 2017.

On October 2, 2018 Westgold published a gold Mineral Resource estimation and Mineral Reserve update effective June 30, 2018 (www.westgold.com.au). This historical Mineral Resource is presented in table 6.5 and historical Mineral Reserve is presented in table 6.6.

A qualified person has not done sufficient work on behalf of RNC to classify the historical estimates as current mineral resources or mineral reserves and RNC is not treating the historical estimates as current mineral resources or mineral reserves.

Table 6.5: HGO Historical Gold Mineral Resources as at June 30, 2018 (the Baloo deposit is included in the Polar Bear Project)

Higginsville Gold Operations Historical Mineral Resource Statement - Rounded for Reporting 30/06/2018												
	Measured			Indicated			Inferred			Total		
Project	Tonnes ('000s)	Grade	Ounces Au ('000s)	Tonnes ('000s)	Grade	Ounces Au ('000s)	Tonnes ('000s)	Grade	Ounces Au ('000s)	Tonnes ('000s)	Grade	Ounces Au ('000s)
Trident	620	3.8	75	571	5.2	96	714	4.51	104	1904	4.48	275
Chalice	266	4	35	501	3.6	57	186	4.15	25	953	3.8	116
Corona - Fairplay	2	-	0	944	2.3	69	282	2.95	27	1,228	2.42	96
Vine	-	-	-	190	2.1	13	468	2.04	31	658	2.07	44
Lake Cowan	71	1.6	4	1,191	1.5	58	528	1.34	23	1,790	1.47	85
Two Boys	-	-	-	375	2	25	203	2.88	19	578	2.33	43
Mount Henry	1,301	1.9	79	8,147	1.7	453	898	1.83	53	10,347	1.76	584
Paleochannels	-	-	-	1,474	2.2	102	208	2.13	14	1,682	2.15	116
Greater Eundynie	-	-	-	-	-	-	683	1.86	41	683	1.86	41
Polar Bear	-	-	-	1,160	1.9	71	5260	1.67	282	6,240	1.71	353
Musket	107	2.3	8	376	2.3	28	601	1.6	31	1,084	1.92	67
Other	-	-	-	485	1.5	24	603	1.72	33	1,087	1.64	57
Stockpiles	751	0.9	21	258	1	8	-	-	-	1,009	0.89	29
Total	**3,118**	**2.20**	**220**	**15,672**	**2**	**1,004**	**10,634**	**1.99**	**681**	**29,424**	**2.01**	**1,906**

Table 6.6: HGO Historical Gold Mineral Reserves as at June 30, 2018

Higginsville Gold Operations

Historical Mineral Reserve Statement – Rounded for Reporting 30/6/18									
	Proven			Probable			Total		
Project	**Tonnes ('000s)**	**Grade**	**Ounces Au ('000s)**	**Tonnes ('000s)**	**Grade**	**Ounces Au ('000s)**	**Tonnes ('000s)**	**Grade**	**Ounces Au ('000s)**
Trident	-	-	-	-	-	-	-	-	-
Chalice	-	-	-	-	-	-	-	-	-
Corona – Fairplay	-	-	-	286	2.91	27	286	2.91	27
Vine	-	-	-	-	-	-	-	-	-
Lake Cowan	-	-	-	132	1.97	8	132	1.97	8
Two Boys	-	-	-	57	2.12	4	57	2.12	4
Mount Henry	-	-	-	3,236	1.79	186	3,236	1.79	186
Paleochannels	-	-	-	924	2.06	61	924	2.06	61
Greater Eundynie	-	-	-	-	-	-	-	-	-
Polar Bear	-	-	-	707	1.87	43	707	1.87	43
Musket	-	-	-	244	2.42	19	244	2.42	19
Other	-	-	-	193	1.66	10	193	1.66	10
Stockpiles	29	3.63	3	136	1.27	6	164	1.68	9
Total	**29**	**3.63**	**3**	**5,916**	**1.91**	**363**	**5,945**	**1.92**	**367**

1. Subsequent to the compilation of the Mineral Resources and Ore Reserve Statement, HGO continued to mine. For the period July 1, 2018 to June 10, 2019, a total of 905kt at 1.6 g/t Au (47kozs) was mined from the Mt Henry deposit.
2. The information is extracted from the report entitled '2018 Annual Update of Mineral Resources & Ore Reserves' dated on October 2, 2018 and is available to view on Westgold Resources Ltd's website (www.westgold.com.au) and the ASX (www.asx.com.au). Mineral Resources are quoted inclusive of Ore Reserves.
3. RNC confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement. A qualified person has not done sufficient work on behalf of RNC to classify the historical estimate noted here and in Tables 1 and 2 as current mineral resources or mineral reserves and RNC is not treating the historical estimates as current mineral resources or mineral reserves.
4. RNC plans to undertake further evaluation of the Higginsville deposits. Further updates or revisions will be reported under and in accordance with the JORC Code 2012 and NI 43-101

7. GEOLOGICAL SETTING AND MINERALIZATION

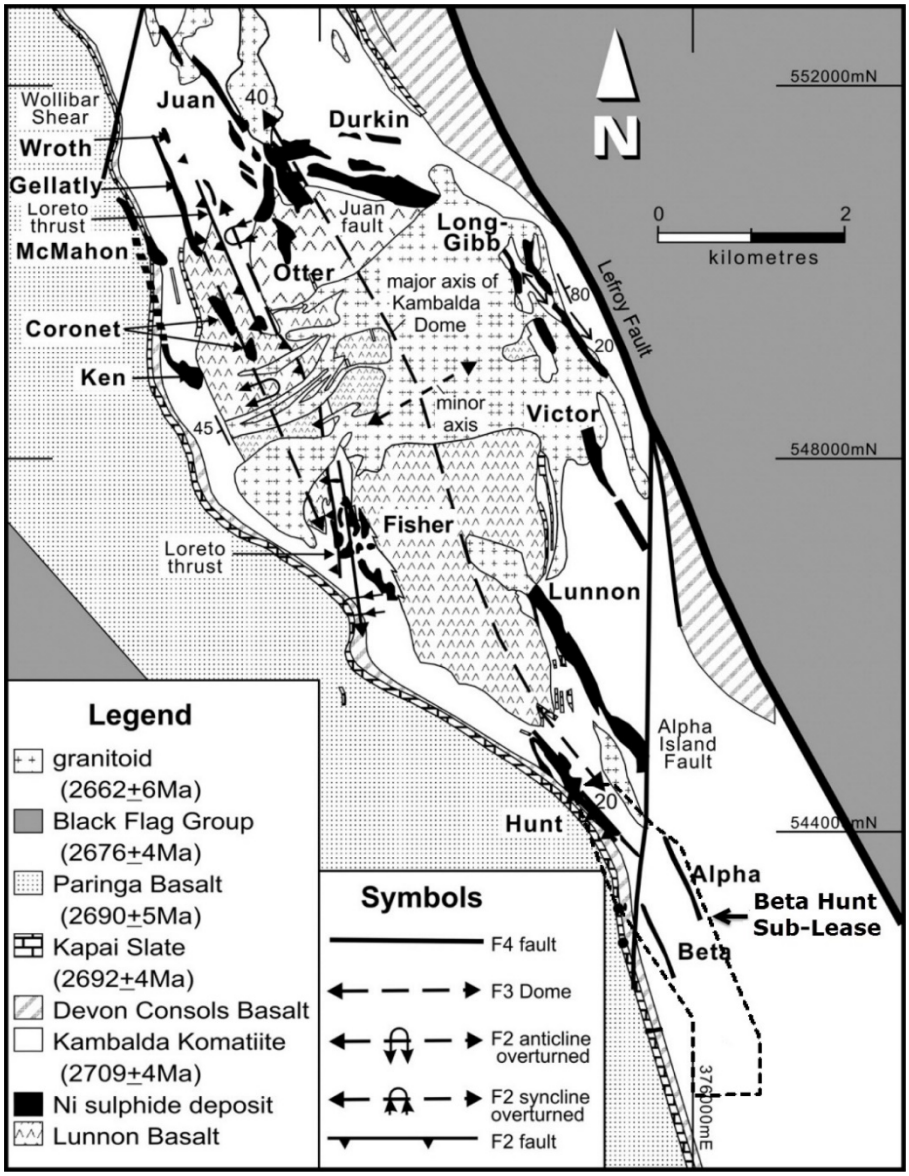
7. 1 Beta Hunt

7.1.1 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 a 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.

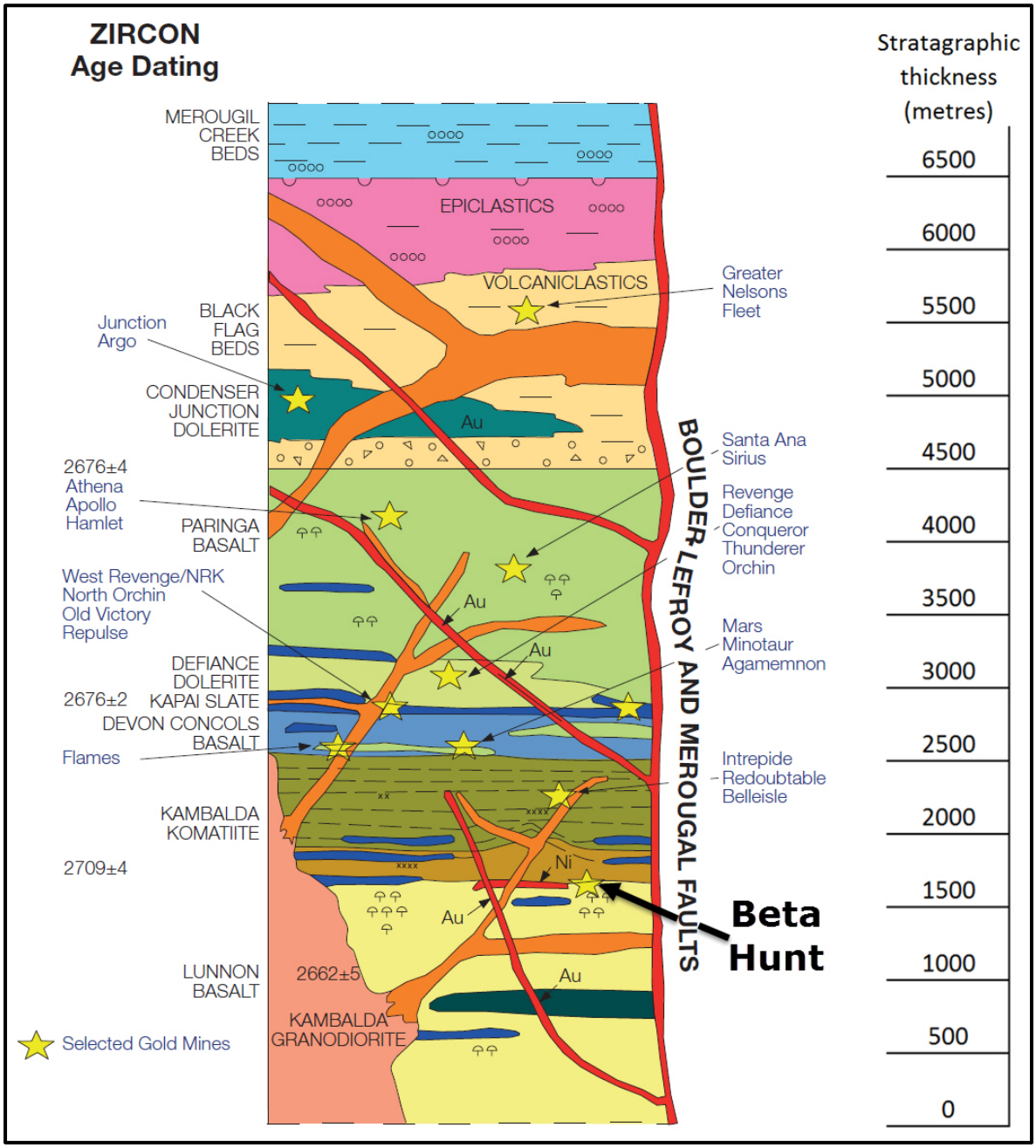
Figure 7.1: Regional geological map of the Kambalda Dome showing nickel sulphide deposits



Source: RNC modified from Stone and Archibald (2004)

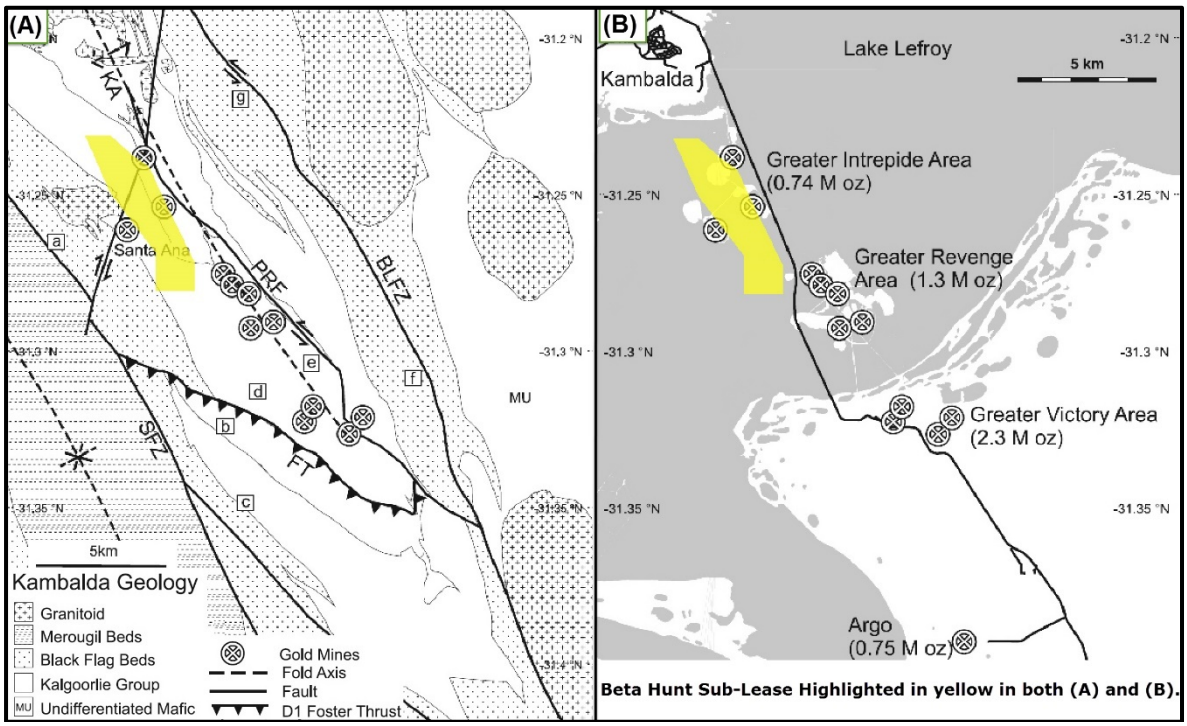
The following geological descriptions are summarized from Phillips and Groves (1982) and Banasik, Squire et al (1998) and Crameri (2006). The local stratigraphy is summarized in Figure 7.2.

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); St Ives production numbers to August 2005.

7.1.1.1 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 has a minimum inferred thickness of 1,750m and comprises tholeiitic basaltic flows with persistent pillowed layers, flow top breccias and sediment bands

Stratigraphically, the basalt can be subdivided into a lower MgO-rich member and an upper less MgO-rich member separated by an iron-rich (pyrite and/or pyrrhotite) sedimentary horizon. The interflow sediment comprises one, sometimes two, narrow (<1m), carbonaceous, finely banded sulphide-rich units conformably located approximately 150m below the top of the basalt. The sulphide banding is typically 2mm to 10mm thick. Drill intersections indicate the sulphide content to be variable across the strike of the sediment. The sediment represents a period of quiescence between volcanic eruptions.

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 systems within sheared and biotite-albite-pyrite altered basalt. Patches of coarse, specimen gold can occasionally be found where the mineralised shears intersect the interflow sediment horizon and the overlying nickel-bearing basalt/ultramafic contact.

7.1.1.2 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.

7.1.1.3 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.

7.1.1.4 Intrusions

The units that host the nickel sulphide mineralization are intruded by granitoids, dykes and sills of mafic, 7.1.1.4 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.

7.1.1.5 Property Geology

The sub-lease covers the lower stratigraphy of the Kambalda Dome sequence comprising the footwall Lunnon Basalt, overlain by the Silver Lake and Tripod Hill members of the Kambalda Komatiite. The stratigraphy is intruded by quartz-feldspar and intermediate porphyry sills and dykes.

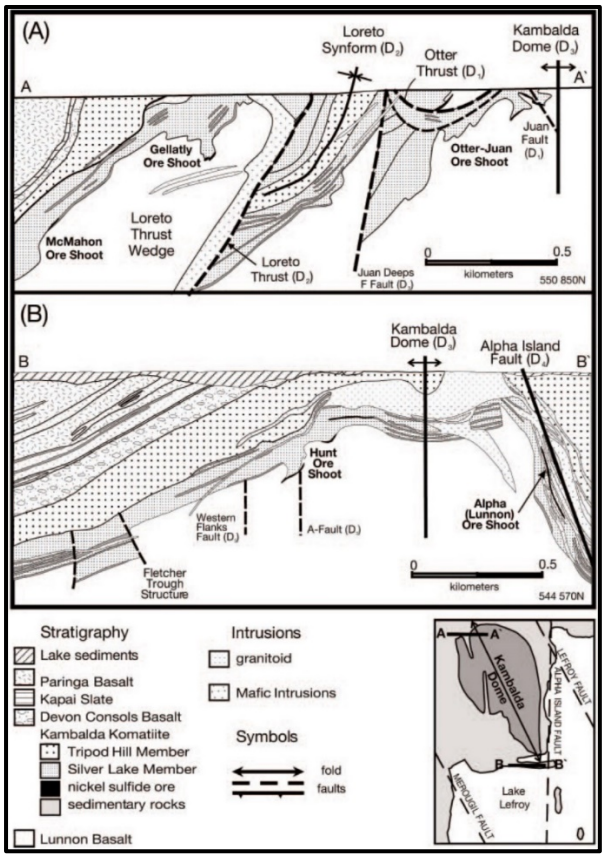
7.1.1.6 Nickel Mineralization

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.

The Hunt and Lunnon shoots are separated from the Beta and East Alpha deposits by the Alpha Island Fault (Figure 7.4). 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: 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)

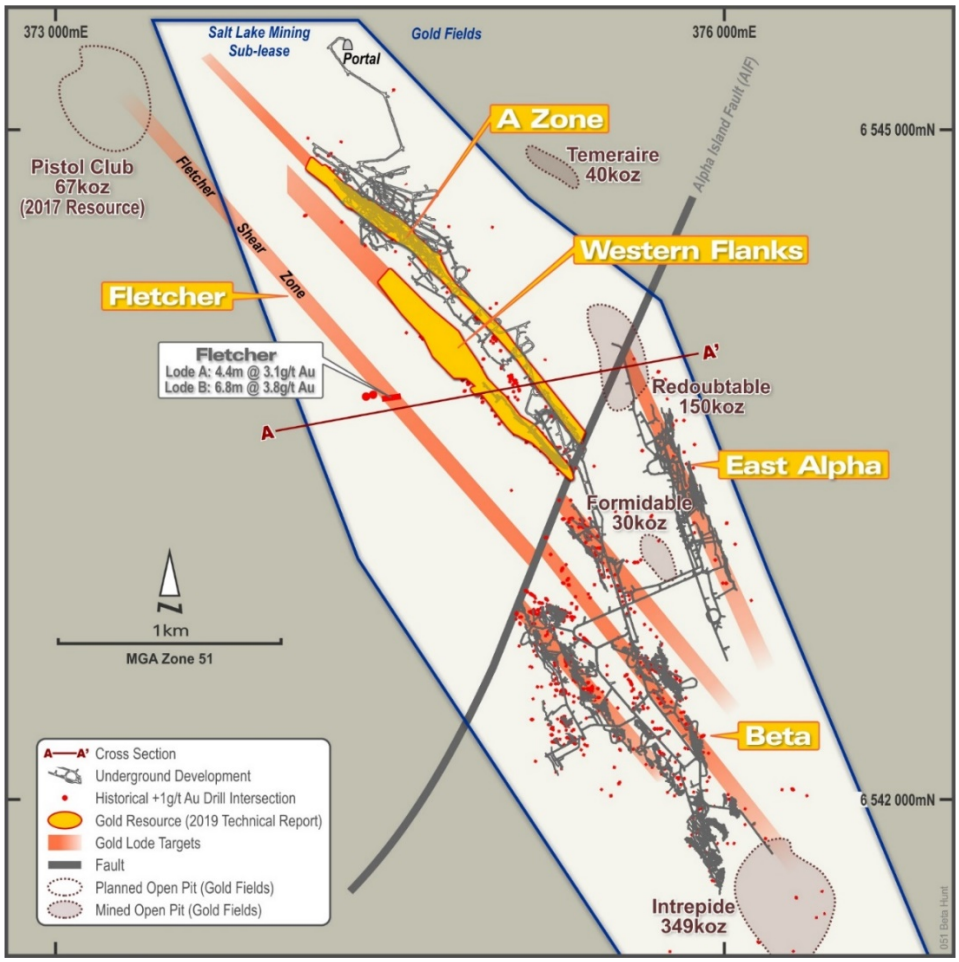
7.1.1.7 Gold Mineralization

Gold mineralisation is focussed about the Kambalda Anticline and controlled by northwest trending, steep, west dipping shear zones associated with re-activated normal faults that previously controlled the komatiitic channel flow and associated nickel sulphide deposition (Figure 7.4(b)). Gold mineralisation

is interpreted as a D3 extensional event associated with porphyry intrusives – the source of magmatic hydrothermal fluids carrying the gold.

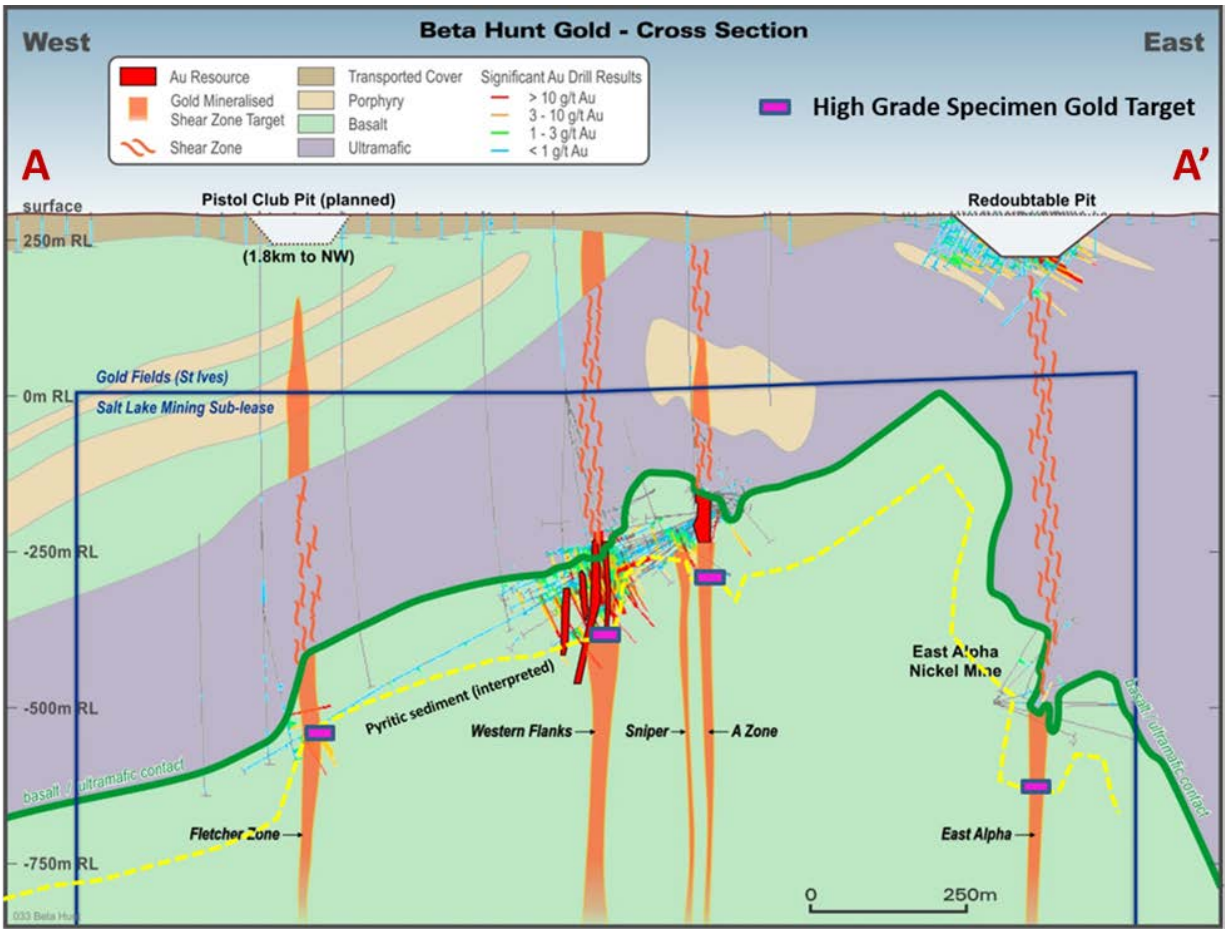
Mineralisation is hosted dominantly in Lunnon Basalt (below the ultramafic contact) with minor amounts associated with specific porphyry intrusives. Not all porphyries are mineralised - some are intruded post-mineralisation. The basalt (and porphyries) are preferred mineralisation hosts as a result of their susceptibility to hydraulic fracturing to form quartz veining, with the migrating ore fluids causing wall-rock alteration. The migrating ore fluids associated with the shearing are interpreted to pass through the overlying ultramafic (because of its ductile nature), developing as mineralisation only where the shear zone passes through more competent rock, e.g, porphyry and basalt (Figure 7.6).

Figure 7.5: Plan view of gold resources and interpreted gold shear zone targets



Source: SLM

Figure 7.6: Composite Cross Section looking north showing interpreted shear zone related gold mineralisation and rock type (Figure 7.5 shows position of section in plan view)



Source: SLM

Gold mineralization occurs in three broad, steeply dipping, north-northwest striking quartz vein systems within biotite-albite-pyrite altered shear zones hosted by the Lunnon Basalt (Figure 7.6, Figure 7.7). Veining is dominated by shear parallel and extensional vein styles. A Zone and the Western Flanks both occur to the north of a major north-northeast trending structure (Alpha Island Fault) and are represented by Beta mineralization to the south of the fault. The Fletcher Shear Zone was discovered by drilling in 2016 and is the third mineralised gold zone at Beta Hunt.

A fourth zone – East Alpha – is inferred by analogy to the known mineralised quartz vein systems, however further drill testing is required to confirm its existence.

Coarse, specimen quality occurrences of gold can occasionally be found where the mineralised shears intersect the interflow sediment horizon and the overlying nickel-bearing basalt/ultramafic contact.

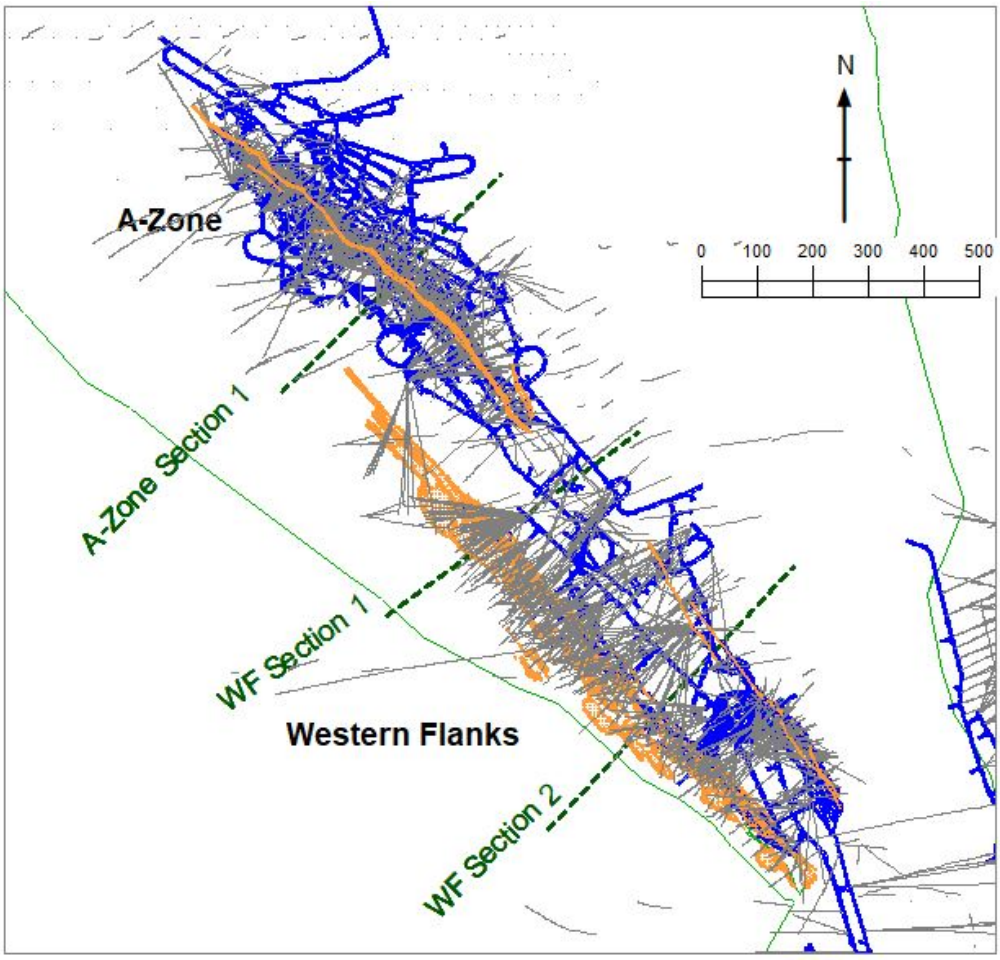
<u>A Zone</u>

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 1.5 km 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.

Western Flanks

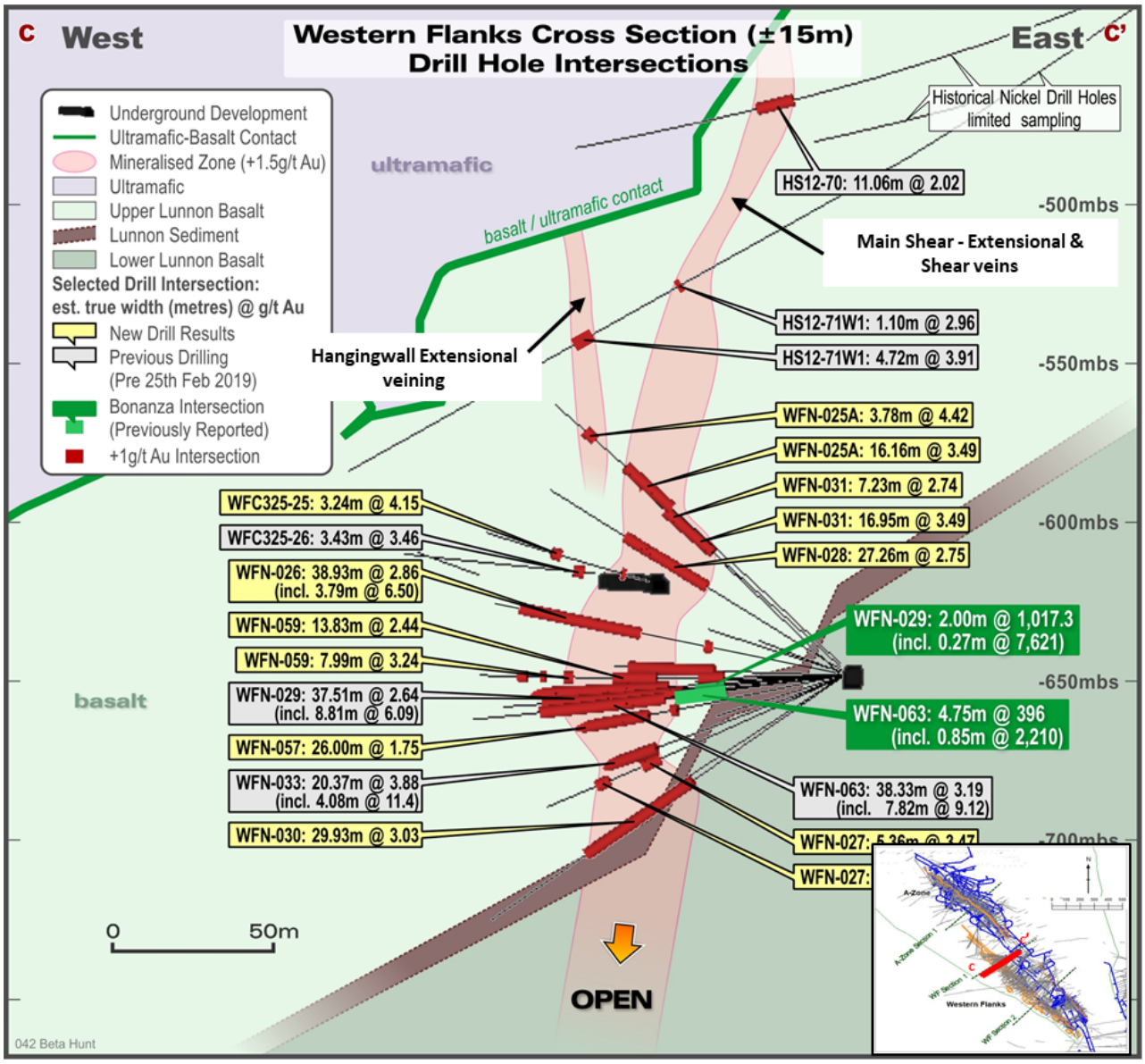
Mineralisation comprises a main, northwest striking (320°), steep southwest dipping shear zone up to 20m in width, over 1.2km in strike length with a 300m down-dip extent and remains open to the north and down-dip (Figure 7.7, Figure 7.8). Coarse "stockwork" mineralisation dominated by shallow, east-dipping extensional quartz veins occur in the hangingwall of the main shear. The combined main shear and hangingwall mineralisation can, in places be up to 50m thick. The main shear zone consists of both shear and extensional veining associated with biotite-albite-pyrite alteration. Mineralisation within the hangingwall is characterised by a lack of shearing and shear veins. Extensional veins in the hangingwall frequently contain specks of visible gold. The shear zone is dextrally offset to the south by the Alpha Island Fault. Felsic porphyries strike oblique to mineralisation and zones of high grade are found along the margins where they are adjacent to or host mineralised structures. Figure 7.9 provides an example from an underground development face of the quartz vein mineralisation found in the main Western Flanks shear.

Figure 7.7: Gold resources (orange) in plan view – A Zone & Western Flanks



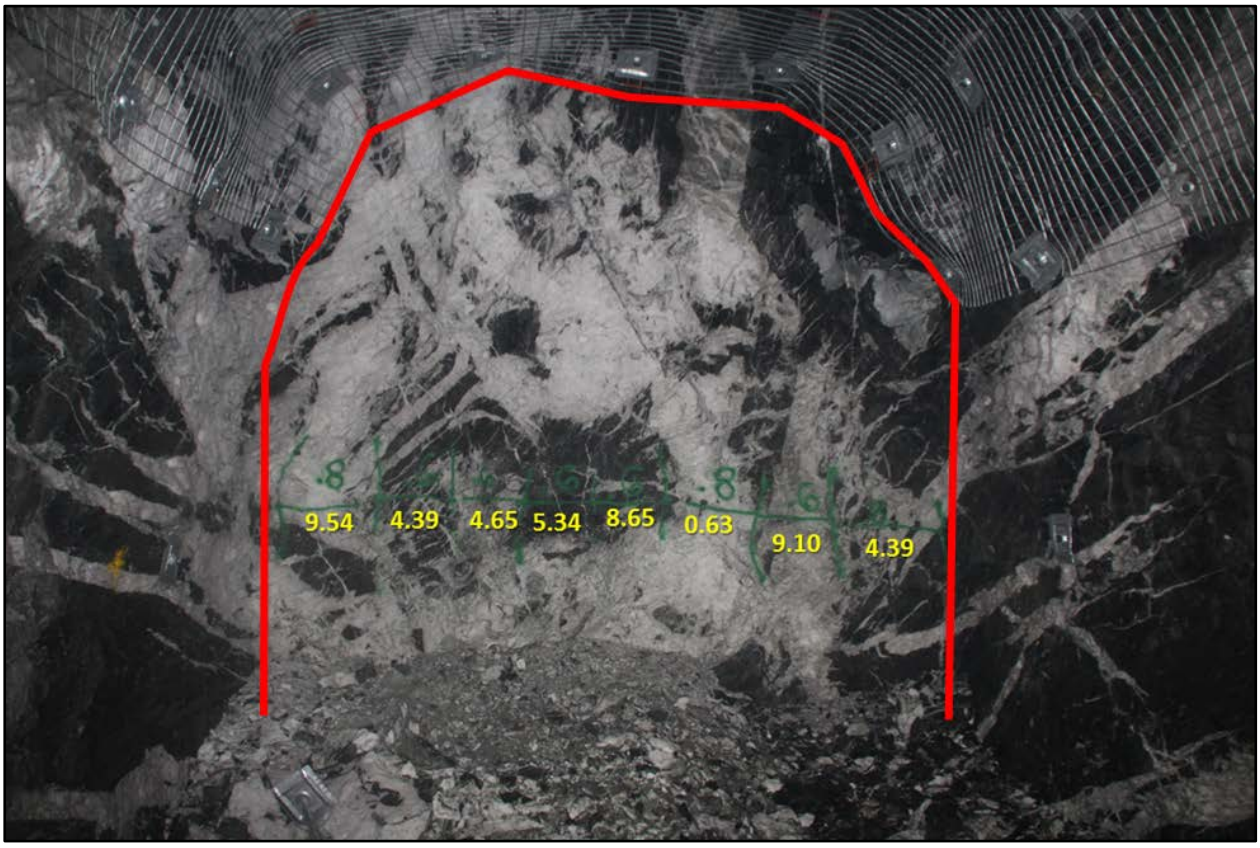
Source: SLM

Figure 7.8: Cross section of showing Western Flanks shear system and gold drill hole intersections.



Source: SLM

Figure 7.9: Face assays – Western Flanks Central 325NOD1-57 collected (gold grades g/t in yellow, assay interval in green)



Source: SLM

The presence of coarse, specimen quality gold associated with the Lunnon interflow sediment was confirmed during the recently completed drilling campaign. Two holes – WFN-063 (2,210g/t Au over 0.85 m) and WFN-029 (7,621g/t Au over 0.28 m) both intersected coarse gold in quartz veining adjacent to pyritic sediment.

Coarse, Specimen Gold

Mining by SLM has intersected and recovered significant coarse, specimen grade gold mineralization (>1% Au) associated with the basalt/ultramafic contact and, more recently with an interflow sediment within the Lunnon Basalt where it intersects the A Zone shear.

This style of mineralisation is intermittently found associated with the A Zone, Western Flanks and Beta mineralisation zones – where the mineralised shears intersect iron sulphide-rich contacts represented by the main basalt/ultramafic contact and pyritic interflow sediment (A Zone).

In September, 2018, RNC intersected the single largest occurrence of this style of mineralisation, known as the Father's Day Vein discovery. An estimated 25,000 oz of gold was recovered from a single 60 m3 development drive cut on the 15L in A Zone Q3 2018. Since recommencement of mining an estimated 28,500 oz has been recovered from this style of mineralisation.

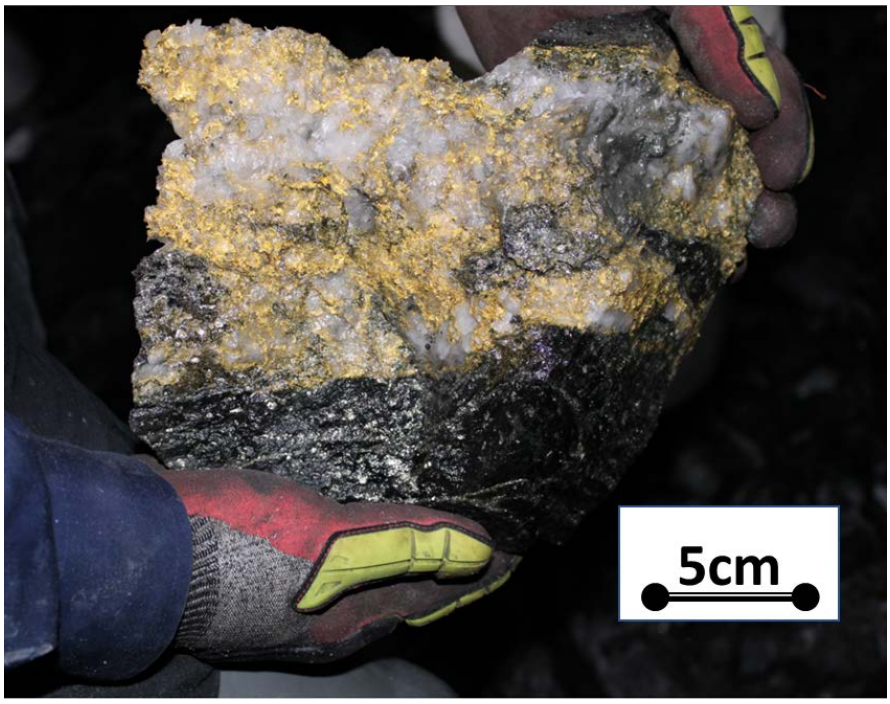
Spectacular coarse specimen gold was mined from Beta Hunt in the past, at the top of the A Zone orebody near the basalt-ultramafic contact. Historical records show 3,295 oz gold was mined from specimen stone by WMC which represents 11.4% of total gold mined by WMC. Records from this

period of mining indicate an average grade of 20,000 g/t (2%, 643 oz/t) Au for the specimen stone. (WMC 1985).

Figure 7.10: Father's Day Vein – 15L, A Zone. Note association with pyritic interflow sediment

Source: SLM

Figure 7.11: Father's Day Vein – 15L, A Zone. Example of the specimen stone recovered from mining



Source: SLM

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 7.12). 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 Shear Zone (Figure 7.12 and Figure 23.5) is a parallel structural analogue to the Western Flanks and A Zone gold deposits occurring approximately 500m west of the Western Flanks vein system. The Fletcher Shear Zone is interpreted to represent the offset continuation of the Beta nickel and gold mineralisation across the Alpha Island Fault.

The Fletcher Shear Zone was successfully targeted by a Government Co-Funded Drill Hole in 2016 and intersected two distinct lodes containing over 24m of gold mineralization in excess of 2g/t.

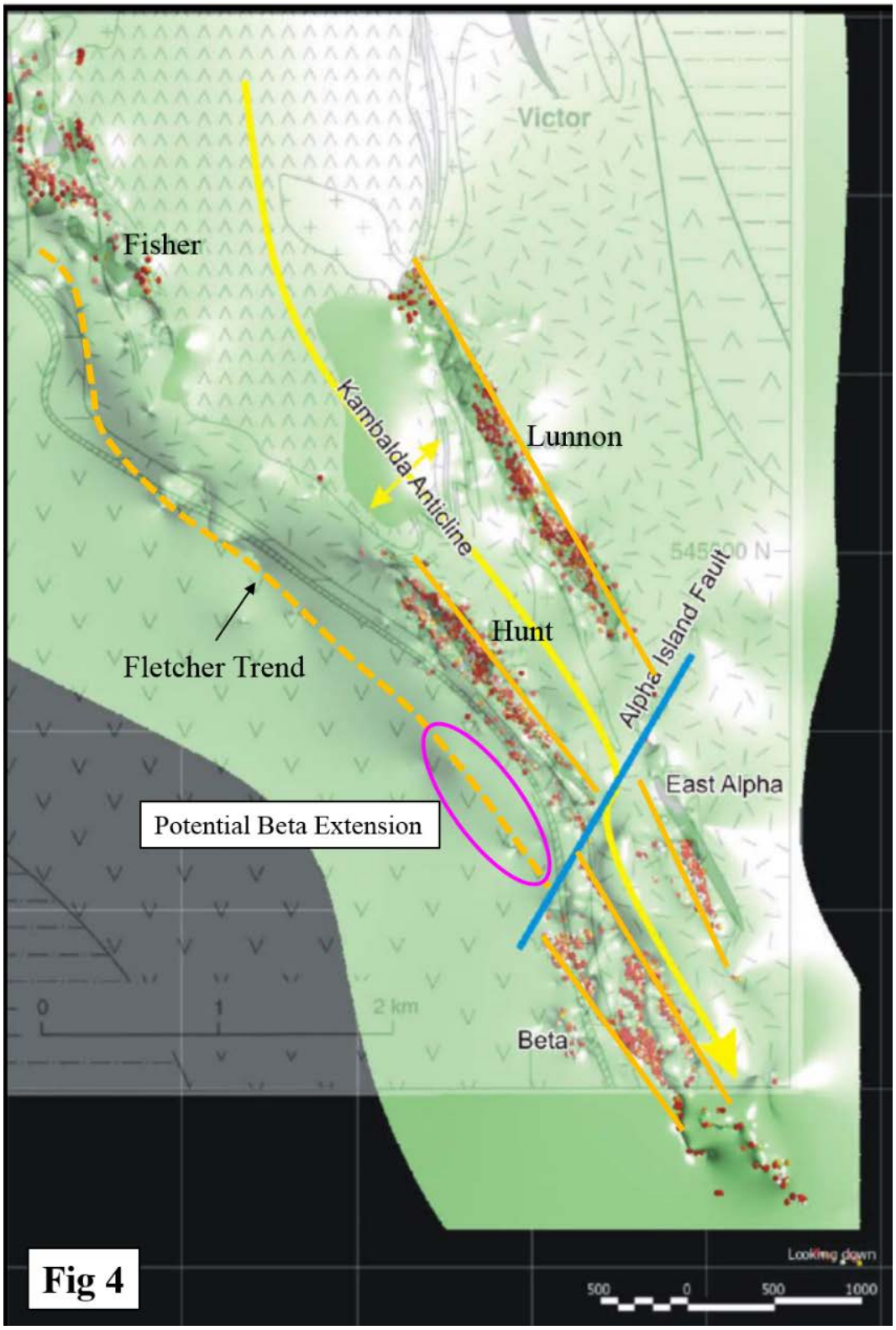
Lode A returned results of 8.9m of 2.67g/t from 716.6m including:

- 3.1m @ 3.1g/t from 716.6m, including 1.0m @ 6.5g/t from 718.0m; and
- 4.4m @ 3.1g/t from 722.4m

Lode B returned results of 15.8m of 2.32g/t from 736.5m including:

- 6.8m @ 3.8g/t from 739.1m, including 1.1m of 7.4g/t from 744.8m.

Figure 7.12: Offset relationship of deposits across Alpha Island Fault (gold intersections > 1g/t Au)



Source: SLM

7.1.3 Structural Controls on Mineralization

Structural Framework

The structural controls on mineralization at the Beta Hunt deposit are related to the complex polyphase deformation exhibited throughout the Kambalda Dome (Figure 7.4). 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 mineralisation and adjacent host rocks. S1 fabrics in massive mineralisation 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 deposits forming the mineralisation 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 dextral 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.

Controls on Gold Mineralisation

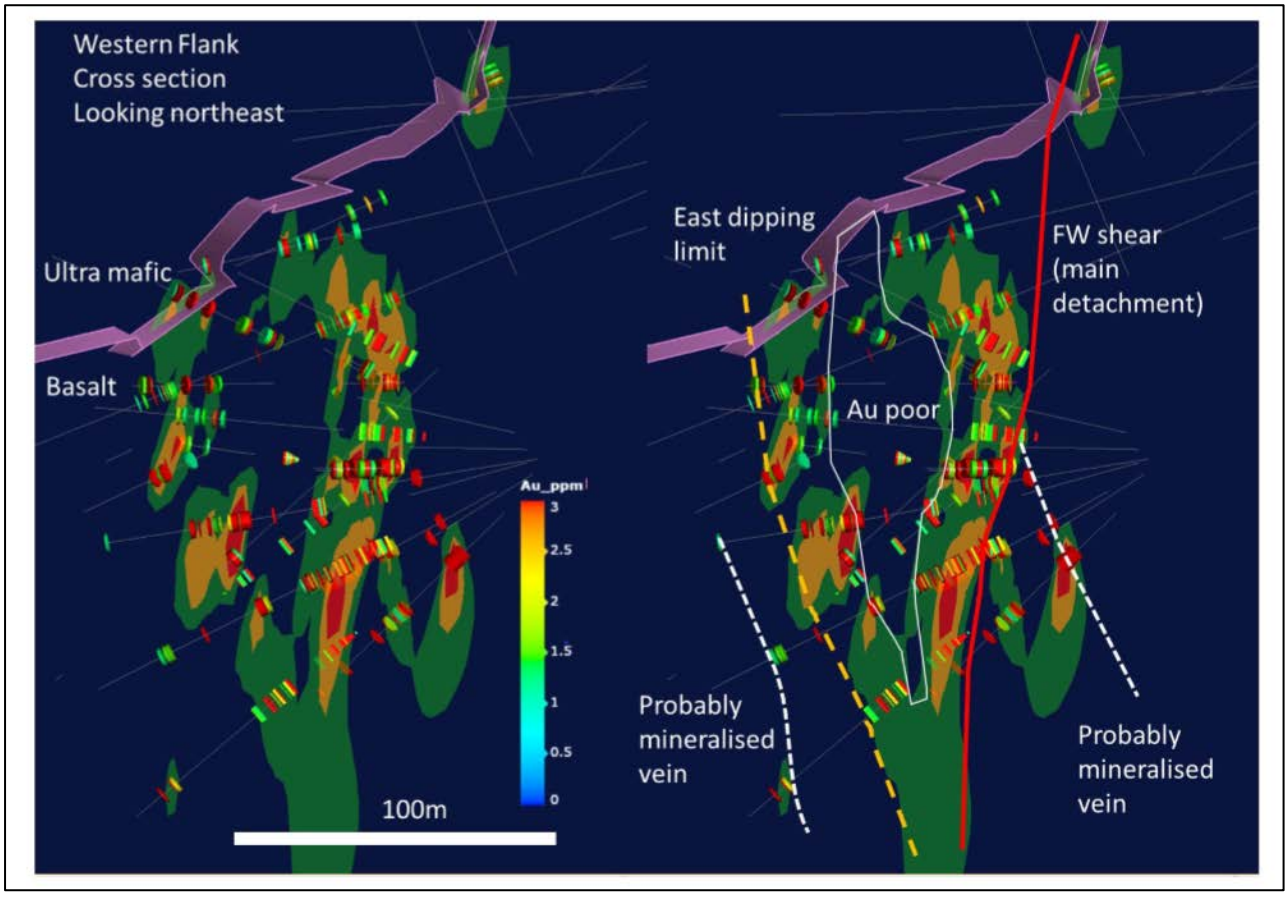
The following structural summary on the controls of gold mineralisation is based on a structural study undertaken by AMC Consultants in May 2019 (AMC, 2019).

A Zone mineralisation is dominantly controlled by the major NW shear orientation. Mineralisation within the shear zone is present as both sulphide and quartz shear hosted, as well as hosted in internal (late or coeval) cross-cutting quartz veins. Outside of the main shear zone, minor mineralised veins that dip both east and west are evident.

The Western Flanks mineralisation is different to the A Zone mineralisation – as well as shear hosted mineralisation, there is a significant volume of mineralisation that occurs in the hangingwall of the "shear-hosted" mineralisation. That is, there are additional controls on mineralisation beyond a dominant A Zone-style shear hosted mineralisation.

The dominant Western Flanks shear hosted mineralisation is now interpreted to be juxtaposed with vein-hosted mineralisation, dominantly in the basalt hangingwall to the Western Flanks shear zone (Figure 7.13). The majority of vein-hosted mineralisation appears to be northeast dipping. The study noted that defining consistent boundaries of coherent and continuous mineralisation as separate domains would be problematic with mineralisation a function of both relatively high grade veins and general vein density.

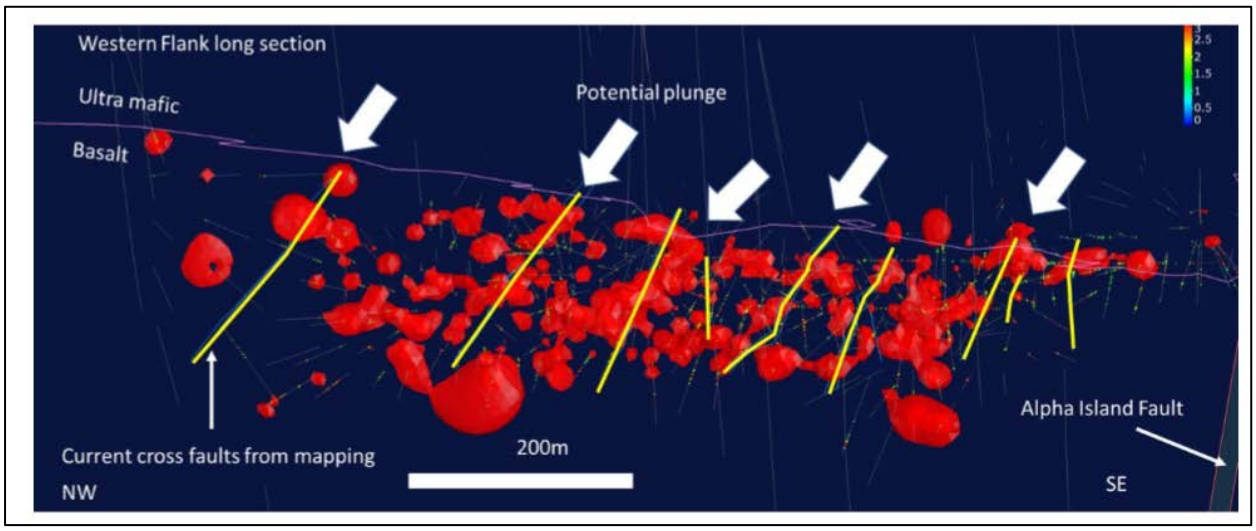
Figure 7.13: Cross section of mineralisation synthesis at Western Flanks



Source: SLM

Using isosurfaces from a leapfrog model, the study identified an apparent steep plunge orientation to the northwest (Figure 7.14). This interpretation is supported by structural measurements on a major cross-cutting fault faults which showed the dominant movement was steep from the northwest.

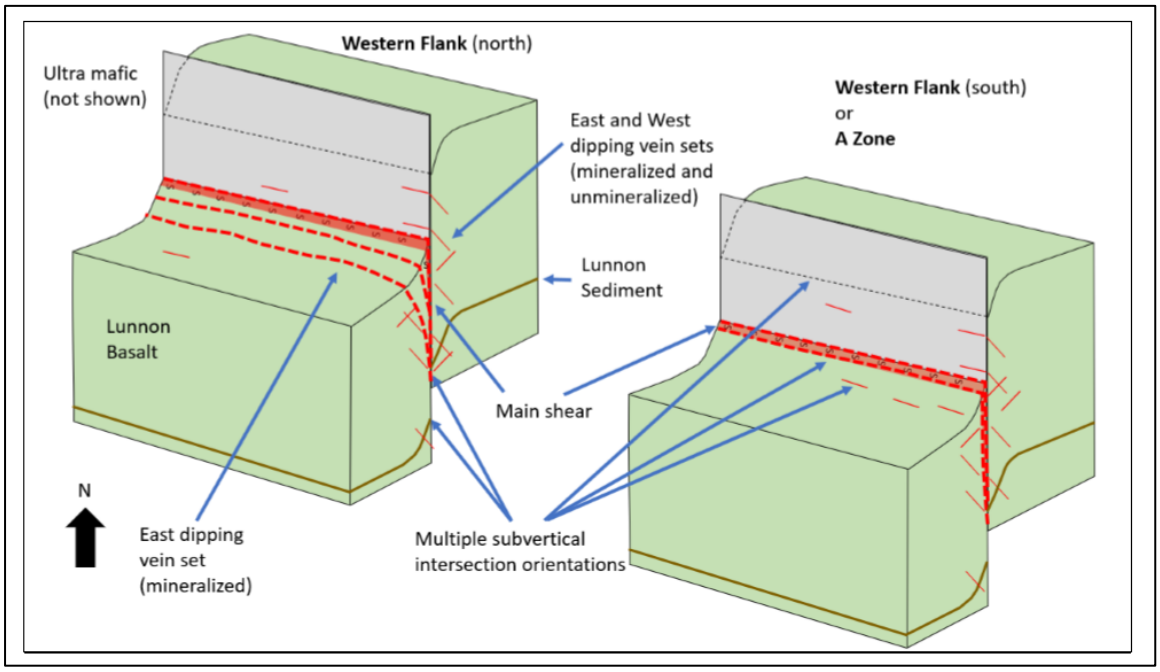
Figure 7.14: Western Flank long section looking northeast – potential ore shoot geometry



Source: SLM

A summary of the differences in style between Western Flanks and A zone are illustrated in Figure 7.15 below:

Figure 7.15: Mineralisation styles A Zone compared to Western Flanks



Source: SLM

With respect to very high-grade mineralisation, concepts around intersections and plunge orientations are likely to play a part in the development of an exploration model. This model would need to take into account the intersection of the Lunnon interflow sediment with the main shear zones.

7.2 Higginsville

7.2.1 Regional Geology

The following geological descriptions are summarised from the Westgold Annual Mineral Resource Commentary (Westgold 2018). The Higginsville Gold Operations are located in the Eastern Goldfields Superterrane (Cassidy *et. al*., 2006) of the Archean Yilgarn Craton of Western Australia (Figure 7.16). The Eastern Goldfields Superterrane is comprised of metavolcanic and metasedimentary rocks, granites and granitic gneiss, and is divided into a number of terranes, namely the Kalgoorlie, Kurnalpi and Burtville Terranes. These tectono-stratigraphic terranes are defined on the basis of distinct volcanic facies, geochemistry and geochronology with the Eastern Goldfields Superterrane, and range in age from 2.81 to 2.66 Ga.

The Higginsville tenement package are located almost entirely within the well-mineralised Kalgoorlie Terrane, between the gold mining centres of Norseman and Saint Ives. This region is made up predominantly of younger (2.71 – 2.66 Ga) and minor older (>2.73 Ga) greenstone successions.

The structurally complex Archaean geology is rarely observed in outcrop, being obscured by well-developed ferruginous and carbonate soils, aeolian sands, tertiary palaeo-sediments and salt lake sediments. Many areas are also overprinted by deep lateritic profiles, which have resulted in extensive chemical remobilisation and deposition. The Archaean stratigraphy has a general northward trend comprising multiply deformed ultramafic – gabbro – basalt successions adjoined by sediments to the west and east. Shearing and faulted contacts are common. The units have been structurally repeated by east over west thrust faulting.

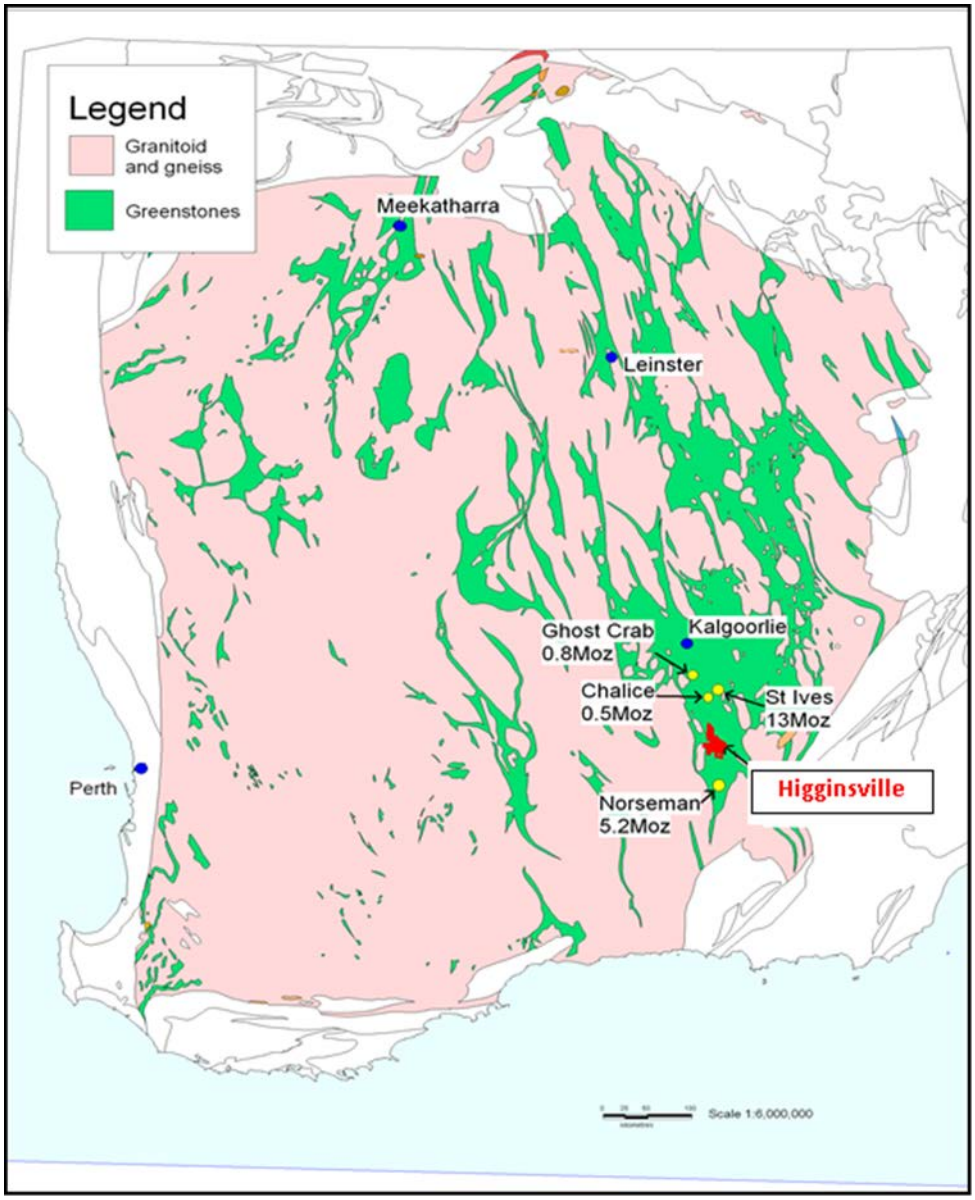


Figure 7.16: Greenstone belts within the Yilgarn Craton.

Greenstone rocks of the Norseman region can be broadly correlated with the Kalgoorlie-Kambalda region in that they form a distinct lithology which is bounded on all sides by major regional shears.

The Norseman Terrane has prominent Banded Iron Formation (BIF), which distinguishes it from the Kalgoorlie-Kambalda lithology.

The Archean rocks in the Norseman area have been classified into the following series of formations:

- **Penneshaw Formation**: The Penneshaw Formation forms the greenstone sequence on the eastern side of the belt. It consists of mafic volcanic rocks with interlayered units of felsic volcaniclastic and sedimentary rocks, and is intruded by doleritic sills and dykes. This formation is intruded by the Buldania Granite complex in the east and is structurally overlain by the Noganyer formation in the west.

- **Noganyer Formation**: The Noganyer Formation forms a distinct sedimentary sequence of siliclastic rocks, principally silicate facies BIF, chert, sandstone and shales. Intrusion of dolerite

dykes and sills are common throughout. The Mount Henry and Selene gold deposits are hosted in the Noganyer Formation. This formation is conformably overlain by the Woolyeenyer Formation.

- **Woolyeenyer Formation**: The Woolyeener Formation both dips and faces west and consists of a sequence of mafic volcanic rocks with minor ultramafics and sedimentary units. Syn-volcanic dolerite dykes and sills intrude the strata and Noganyer Formation below. This formation hosts the Norseman style quartz reef gold mineralisation as well as the Abbotshall gold deposit which is hosted in a regionally extensive porphyry/siliceous sedimentary unit of the Woolyeenyer Formation. It is unconformably overlain by the Mount Kirk Formation.

- **Mount Kirk Formation**: The Mount Kirk Formation consists of felsic volcanic and sedimentary rocks which are intruded by large, thick mafic sills. The Mount Kirk Formation is bounded to the west by a granite-gneiss complex. No gold deposits have been found in the Mount Kirk Formation.

Intrusive rocks in the Norseman area comprise:

- Large external granitoid complexes that bound the greenstone belt to the southeast and Southwest.

- A suite of domal granites and porphyry that intrude the western granitoid complex and the Woolyeenyer Formation.

- Stocks of potassic granite and associated pegmatite.

- Proterozoic dolerite dykes that intrude sets of east-west fractures in the craton.

The solid rock geology is overlain by Quaternary and Tertiary sediments, comprising aeolian dune deposits, alluvium and colluvium. These include Tertiary Wollubar Sandstone which forms the basal sand within the palaeochannels. These are overlain by silts and clays of the Perkolilli Shale, which outcrop under Lake Dundas and the greater Lake Cowan palaeochannel system.

<u>Mineralisation (by Geological Domain)</u>

The HGO can be sub-divided into six major geological domains:

- Trident line-of-lode;
- Chalice;
- Lake Cowan;
- Southern palaeochannels;
- Mount Henry; and
- Polar Bear Group.

Trident line-of-lode

The majority of mineralisation projects along the Trident line-of-lode are hosted within the Poseidon Gabbro and high-MgO dyke complexes in the south (Figure 7.17). The Poseidon Gabbro is a thick, weakly-differentiated gabbroic sill (Newman *et. al*., 2005), which strikes north south and dips 60° to the east, is over 500m thick and 2.5km long. The gabbro is broadly zoned (Zones 1 - 5), with Zone 3 considered the most favourable for mineralisation:

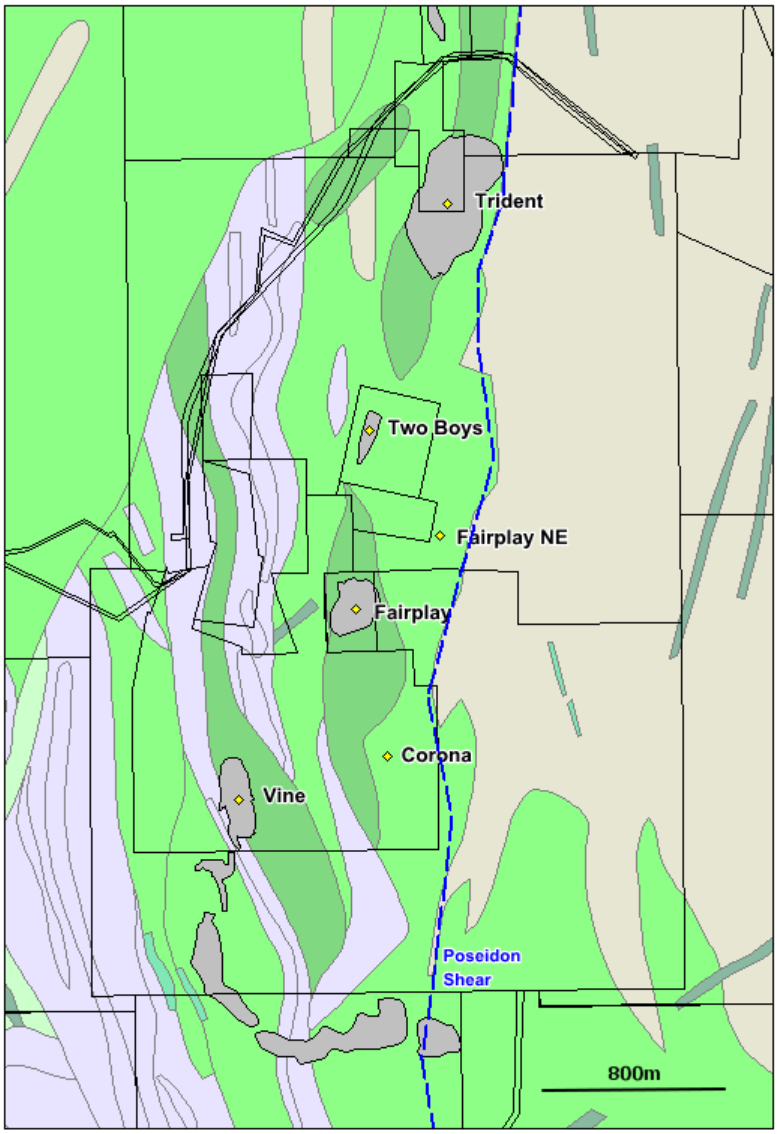


Figure 7.17 Deposits along the Trident Line-of-Lode.

- Zone 1 is interpreted as an ultramafic cumulate base;
- Zone 2 is a feldspar-phyric mafic unit;
- Zone 3 is an equigranular, feldspar-quartz phyric unit.
- Zone 4 is a bladed amphibole unit; and
- Zone 5 is an equigranular, feldspar-amphibole phyric unit.

Faulting and shearing are important geological features in the region, with the Poseidon Thrust comprising a 5 to 10m wide mylonite zone, which marks the contact between the eastern sedimentary packages of the Black Flag Beds and the underlying Paringa Basalt.

A number of shallow, east-dipping, reverse fault zones have also been intersected in both the Trident underground mine and the Poseidon open pit. These structures vary in thickness between 5 and 50m, and are generally moderately to well mineralised. Vertical to sub-vertical (steep east and steep west-dipping), north to northeast striking shear zones are evident throughout the Trident deposit, and are thought to form a primary control and fluid source for mineralization.

In the south deposits such as Fairplay North East and Corona are hosted by high-Mg basalts which strike North-South and dip at 50°- 60° to the east. Thrust over the basalts are thick sequences of

metasediments (Black Flag Beds) comprising fine grained, laminated to massive epiclastics tending to be more arenaceous and quartz rich to the east.

The mineralisation is hosted within or marginal to quartz veining and is structurally and lithologically controlled. Veins occur on and adjacent to the thrust contact and may be up to 3m in width and lie preferentially in the basalt host. Alteration consists of silica flooding which has obscured older textures; locally intense biotite alteration within the basalts closely associated with the silicification and arsenopyrite alteration is common and locally intensified with the quartz veining and silica-biotite alteration. Laterisation and erosion have resulted in supergene enrichment within the transitional layer following downward surface water leaching of the upper saprolite.

Chalice

The Chalice deposit is located within a north south trending, 2-3km wide greenstone terrane, flanked on the west calc-alkaline granitic rocks of the Boorabin Batholith and to the east by the Pioneer Dome Batholith. The mafic-ultramafic rocks of the greenstone terrane comprise upper greenschist to middle amphibolite facies metamorphosed, high-magnesium basalt, minor komatiite units and interflow clastic sedimentary rocks intruded by a complex network of multi-generational granite, pegmatite and porphyry bodies (Figure 7.18).

The dominant unit that hosts gold mineralisation is a fine grained, weak to strongly foliated amphibole-plagioclase amphibolite, with a typically lepidoblastic (mineralogically aligned and banded) texture. It is west-dipping and generally steep, approximately 60°-75°. It is typically more competent than the ultramafic unit. The amphibolite is of basaltic derivation, with alteration and the metamorphic grade generally increasing markedly towards the main mineralization zone.

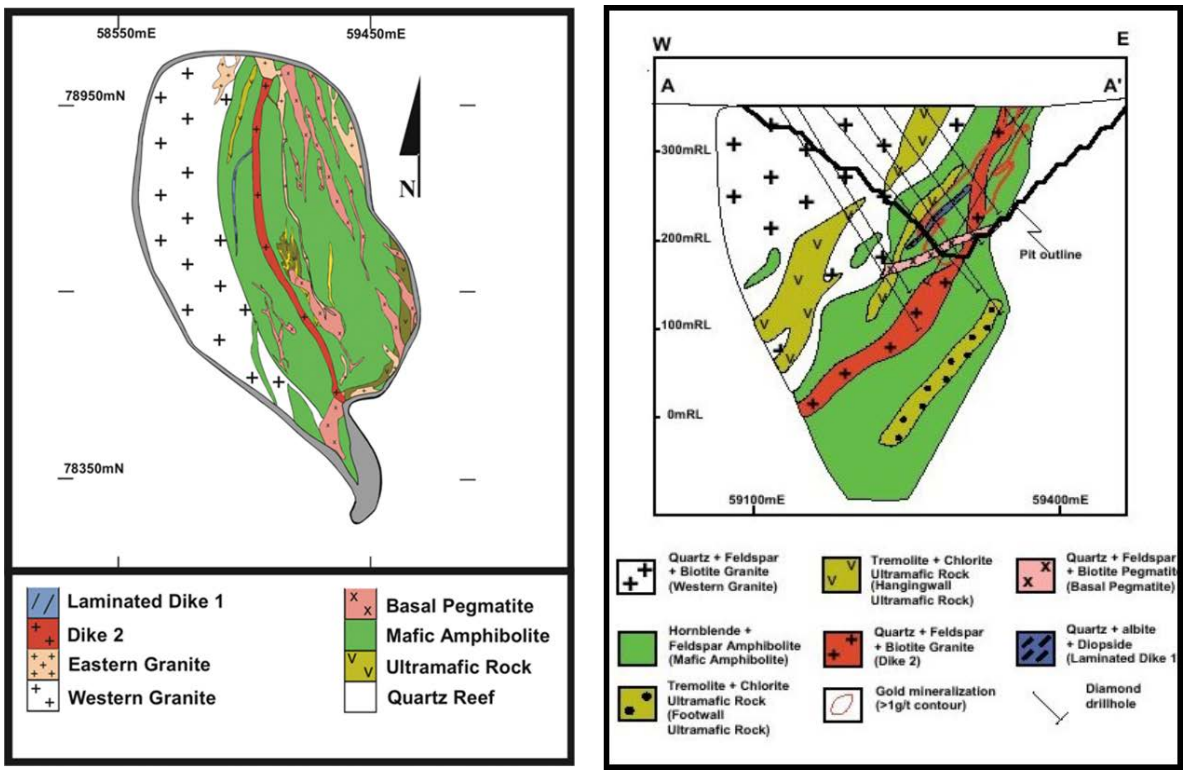


Figure 7.18 Simplified Geology of the Chalice Pit (left) Plan View, (right) Section view looking north.

Lake Cowan

The Lake Cowan Project is located on the northwest shore of the Lake Cowan salt pan, 19km northeast of the historic Higginsville town site.

The area is situated near the centre of a regional anticline between the Zuleika and Lefroy faults, with the local geology of the area made more complex by the intrusion of the massive Proterozoic Binneringie dyke (Figure 7.19). The anticlinal system is in a rift-phase portion of the greenstone belt, comprising a complex succession of mafics and ultramafics, sulphidic carbonaceous shales, felsic volcanics and volcaniclastic sediments. These have been intruded by several younger felsic granitoids.

The area is interpreted to have undergone intense intraformational folding and transposition, and has a metamorphic grade estimated to be upper greenschist facies with local hornfelsing proximal to the Binneringie dyke.

The Binneringie dyke varies locally from a hornblende dominated dolerite to a feldspar dominated granodiorite, is medium to coarse grained, and is complexly interrelated to the mineralised structures in the Lake Cowan area. In a break of form for these generally east-northeast – west-southwest trending dyke systems, at Lake Cowan the Binneringie dyke follows the deep seated crustal weaknesses north and south for some distance, in the process interfering with the pre-existing mineralisation on a large scale. The majority of mineralisation at the Lake Cowan Mining Centre is hosted within an enclave of Archaean material surrounded by the Binneringie dyke.

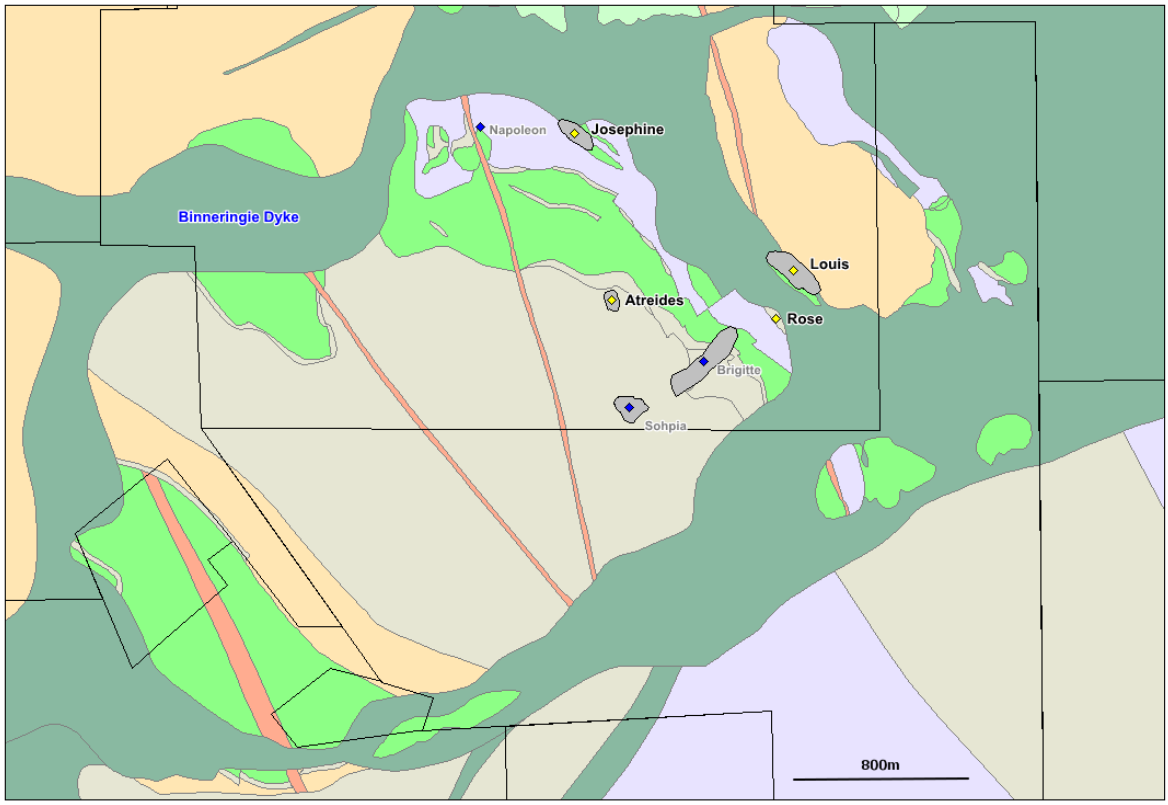


Figure 7.19 Deposits within the Lake Cowan Project.

Southern Palaeochannels

Throughout the Higginsville Gold Operations, a significant proportion of gold deposits are hosted by sediments within the Southern Palaeochannel network (Figure 7.20). Mineralised zones comprise both placer gold, normally near the base of the channel-fill sequences, and chemically-precipitated secondary

gold within the channel-fill materials and underlying saprolite. These gold concentrations commonly overlie, or are adjacent to, primary mineralised zones within Archaean bedrock.

Outcrop is generally poor, due to extensive ferruginisation, calcareous soils, aeolian sands and extensive areas of remnant lacustrine and fluvial sediments. The result is a complex, layered regolith, with considerable chemical re-mobilisation and re-deposition (Lintern *et. al*., 2001).

The regional palaeodrainage system has incised several fault-bounded greenstone sequences, which comprise high-Mg basalt, komatiite and minor interflow sedimentary rocks, intruded by dolerite and gabbro. The orientation of palaeochannels is largely controlled by major faults and shear-zones, that trend north-northwest, parallel to lithological contacts (Swager, 1989; Griffin, 1990).

The Cowan palaeodrainage system that includes the Challenge / Swordsman and Mitchell palaeochannels comprises up to 100m of Cainozoic sediment overlying Precambrian basement. Clarke (1993) divided the sedimentary sequence into the Eundynie Group, comprising a succession of Eocene sedimentary rocks, and the overlying Redmine Group, comprising Oligocene to Recent deposits.

Within oxidised basal sediments gold distribution is typically irregular and sparse. Placer gold is confined to quartzitic sand and gravel lag adjacent to a Tertiary / Archaean unconformity (autotchonous style) and is absent from clay and sand units throughout the upper part of the basal sand facies (allotchonous style). Placer gold may be preferentially concentrated according to palaeotopography where highly-elevated concentrations, commonly incorporating nugget-sized gold grains, occur at stream junctions, particularly in the upper reaches of channel systems. Elevated concentrations may also occur with particular orientations of the channel base, defined by regional bedrock structures.

Two main palaeochannel systems exist at Higginsville:

- Mitchell palaeochannel system – This includes the existing pits of Graveyard North, Graveyard, Aphrodities and Mitchell. Mitchell 3 and 4 remain unmined and are located to the south of the existing Mitchell pit.

- Challenge / Swordsman palaeochannel system – Which includes existing pits - Bullseye, Venus, Jupiter, Saturn, Neptune and Pluto. The areas of Mars (south of the Venus pit) and the southern extension of Pluto remain insitu (unmined).

Both palaeochannel systems get deeper towards the south (which suggest the flow direction of the ancient rivers) and flow into Lake Cowan.

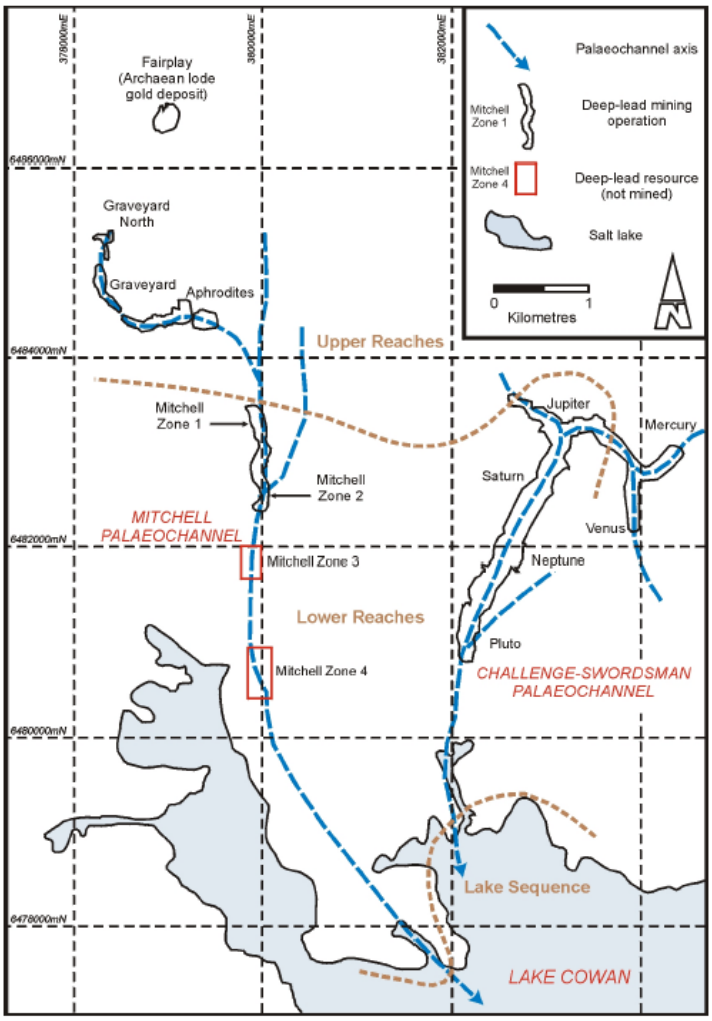


Figure 7.20 Location of the Challenge / Swordsman and Mitchell Palaeochannels.

Mount Henry

The Archean rocks in the Norseman area have historically been classified into a series of formations Figure 7.21, 7.22). The stratigraphic sequence for the area is:

Penneshaw Formation

The Penneshaw Formation forms the greenstone sequence on the eastern side of the belt. It consists of predominantly mafic volcanic rocks with inter layered units of felsic volcaniclastic and sedimentary rocks, and is intruded by dolerite sills and dykes. Units of the formation host the gold mineralisation at Everlasting and Mildura prospects. The Penneshaw formation is similar to the Woolyeenyer Formation, however a date of 2,938 (+/-10) Ma derived from a felsic unit has led to the Penneshaw formation be assigned to an early, separate greenstone unit.

The Penneshaw Formation is intruded by the Buldania Granite Complex in the east and is structurally overlain by the Noganyer Formation in the west.

Noganyer Formation

The Noganyer Formation forms a distinct sedimentary sequence of siliclastic rocks, principally silicate facies banded iron formations (BIF), chert, sandstones and shales. Intrusions of dolerite dykes and sills are common throughout. An age of 2,706 (+/-5) Ma has been obtained from a chert bed.

The Mount Henry and Selene gold deposits are hosted in the Noganyer Formation.

The Noganyer Formation is conformably overlain by the Woolyeenyer Formation in the west.

Woolyeenyer Formation

The Woolyeenyer Formation both dips and faces west and consists of a sequence of mafic volcanic rocks with minor ultramafic and sedimentary units. Syn-volcanic dolerite dykes and sills intrude the strata and the Noganyer Formation below. One dyke in the lower part of the sequence has an age of 2,714 (+/-5) Ma which is the same age (within error) as the chert in the lower Noganyer Formation.

The Woolyeenyer Formation hosts the Norseman style quartz reef gold mineralisation as well as the Abbotshall gold deposit which is hosted in a regionally extensive porphyry / siliceous sedimentary unit of the Woolyeenyer Formation.

The Woolyeenyer Formation is disconformably overlain by the Mount Kirk Formation.

Mount Kirk Formation

The Mount Kirk Formation consists of felsic volcanic and sedimentary rocks which are intruded by large, thick mafic sills. It has a date of 2,688 (+/-8) Ma.

The Mount Kirk Formation is bounded to the west by a granite–gneiss complex. No gold deposits are known to exist within the Mount Kirk Formation.

Intrusive rocks

Intrusive rocks in the Norseman area comprise:

- Large external granitoid complexes that bound the greenstone belt to the south-east and south-west. These have been dated at 2,686 (+/-6) Ma and 2,691 (+/-8) Ma, respectively.
- A suite of small domal granites and porphyry dykes that intrude the western granitoid complex and the Woolyeenyer Formation. The porphyry dyke at Abbotshall is an example of this type and has been dated at 2,670 – 2,660Ma.
- Small stocks of potassic granite and associated pegmatite have been dated at 2,612 (+/-12) Ma. The pegmatite dykes that cut the Mount Henry, Selene and North Scotia mineralisation are examples of this intrusive type.
- Proterozoic dolerite dykes the intrude sets of east-west fractures in the craton. The Jimberlana Dyke, dated at 2,411 (+/-38) Ma, is an example of this type.

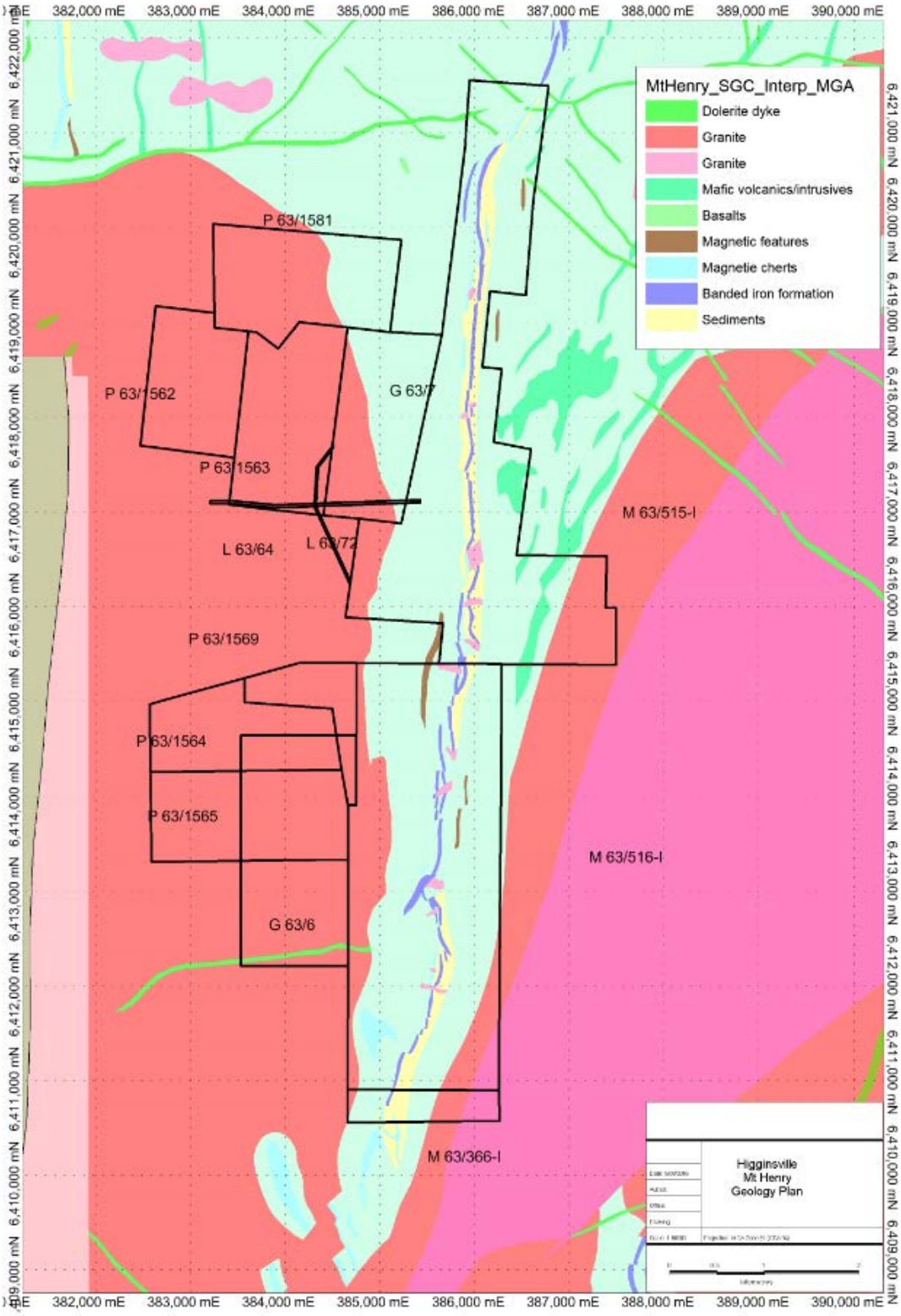


Figure 7.21 Geology of the Mount Henry area.

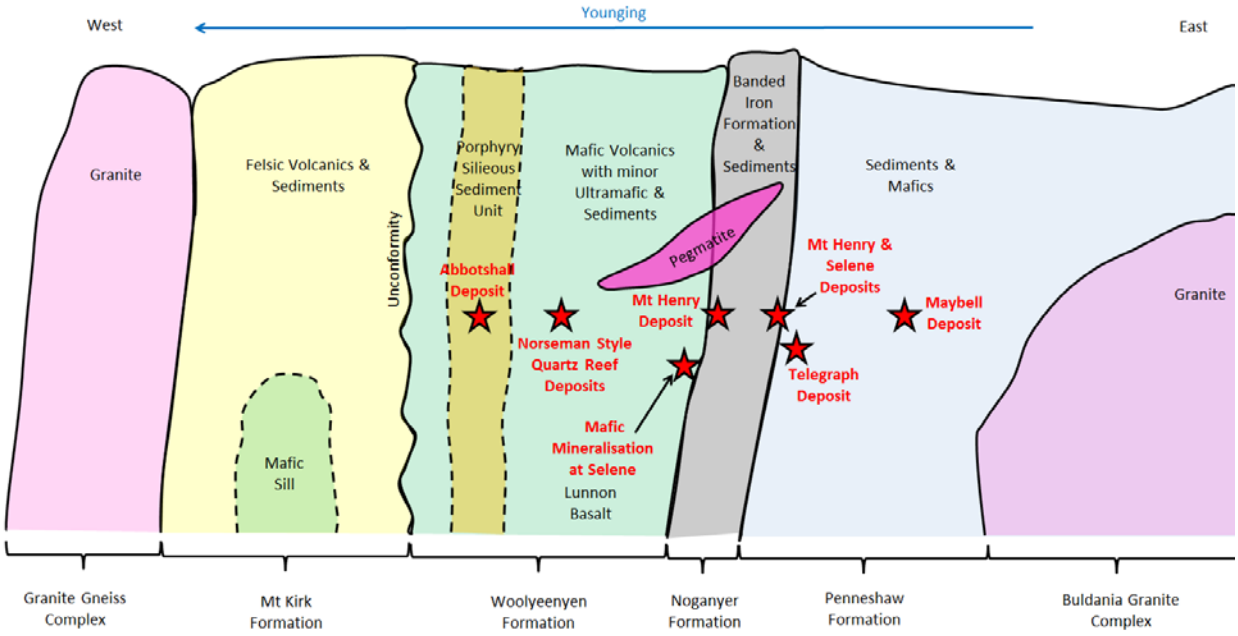


Figure 7.22 Stratigraphic diagram of the Mount Henry area and location of various deposits

Polar Bear Group

The geology at Polar Bear is dominated by complexly deformed Achaean greenstone assemblages of the Norseman-Wiluna Greenstone Belt which have been metamorphosed to upper greenschist facies (Figure 7.23). The major regional structures in the area are the Boulder-Lefroy Fault, located approximately 10km northeast of the project area, the Mission Fault located in the southern portion of the package, and the Black Knob Fault that transects the central portion of the project. The Mission Fault merges with the Black Knob Fault in the southwest portion of the project area. Both the Boulder-Lefroy and the Black Knob faults strike north-northwest. The Black Knob Fault is interpreted to be the southern extension of the Zuleika Shear.

Lake Cowan covers most of the project area with a 1-3 m thick layer of gypferrous mud and clay with a poorly developed halite crust. The deeper channels within the lake contain thick sequences of transported clays, with intercalated lignite beds from 1 to 20m, which overlie laterally extensive fossiliferous sandstone, locally known as the Norseman Formation of probable Eocene age. Locally running sands and gravels are present at the base the channels, which can be in excess of 90m thick. Some of these channels are mineralised with gold and have been minded historically including the Challenge-Swordsman palaeochannel on the Eundynie Peninsula. The entire project area is intruded by numerous Proterozoic dolerite dykes.

The local Polar Bear geology is characterised by a complex array of structural features including repeated thrusts, folding, plunging and shearing. Meta-basalt, meta-dolerite and repeated flows of serpentinised peridotites and pyroxenites are the dominant lithologies. Wedged within the greenstone sequences are steeply dipping black shale and chert units. Carbonate-talc alteration of ultramafic units is common and often accompanied by asbestos veining. Felsic intrusions in the form of massive quartz-feldspar-biotite porphyritic granites are widespread in the northern islands and northern Peninsula. At the Snout gold prospect, the coarse felsic unit is repeatedly cross-cut by quartz veinlets often containing visible sulphides.

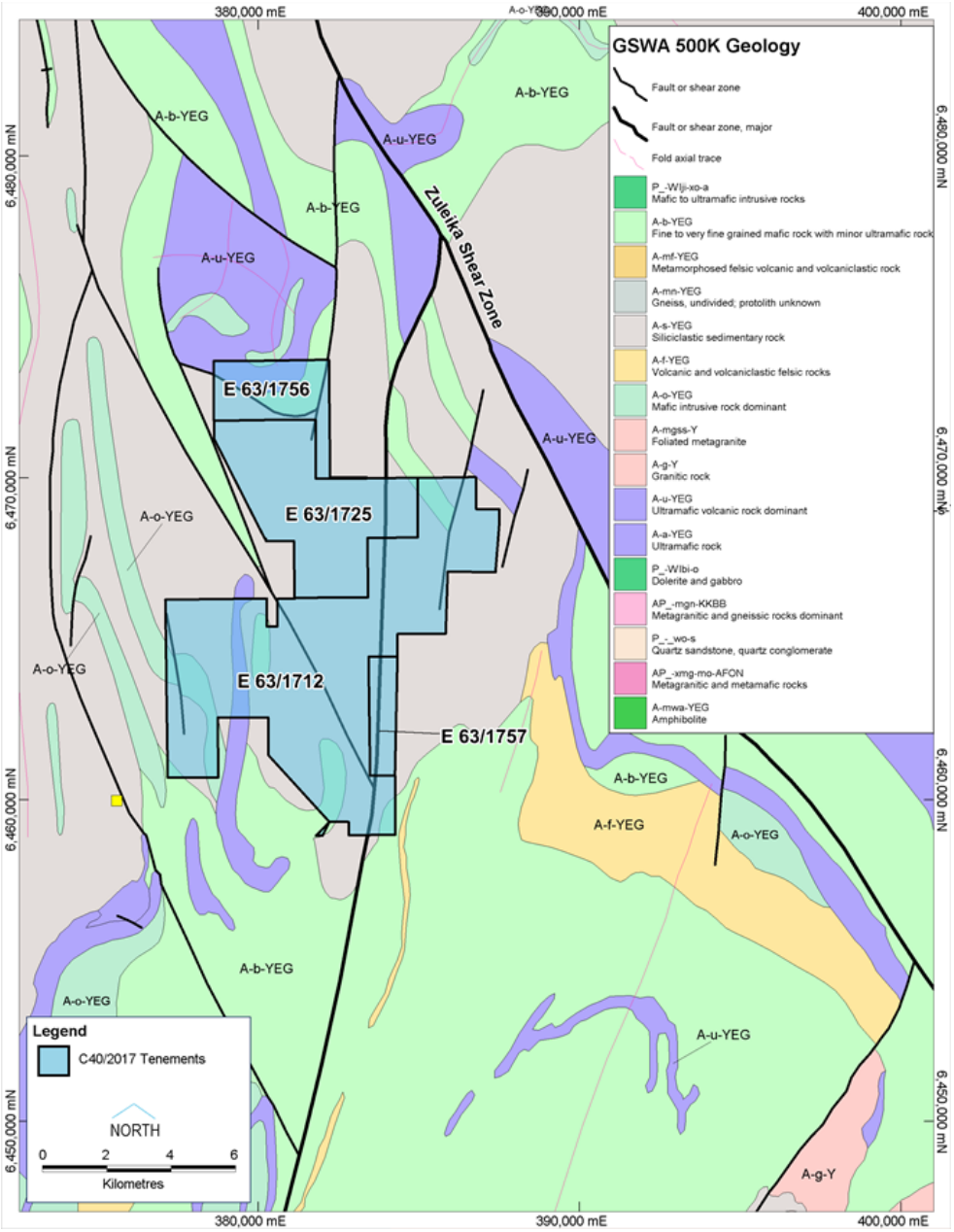


Figure 7.23 Geology of the Polar Bear region.

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 lodes at Beta Hunt and the gold deposits at Higginsville 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.

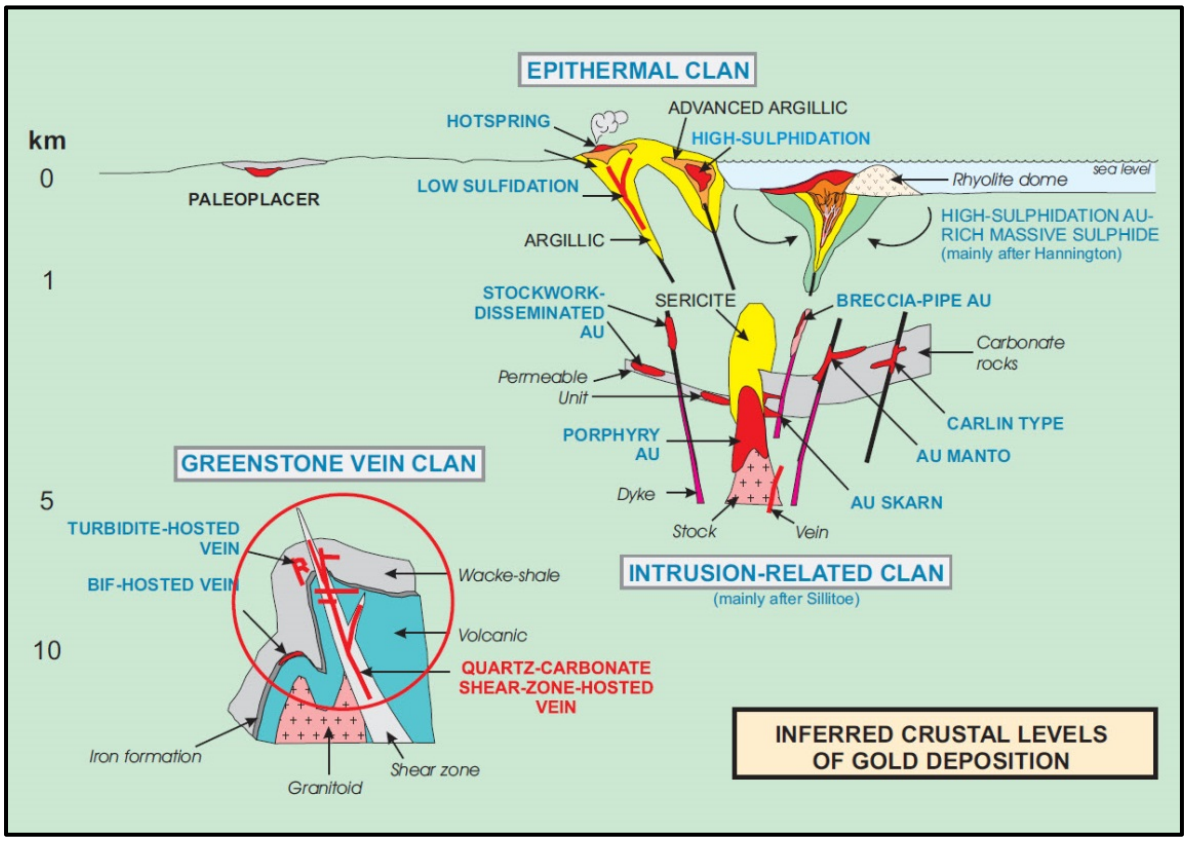
Most of the ore bodies are at the basal contact of the lowermost channel flows (accounting for 80% of reserves), though some do occur in overlying flows in the lower part of the flow sequence. The ore bodies typically form long tabular or lenticular bodies up to 3 km long and 5 m thick. The ores generally 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 (a.k.a. Orogenic / 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).

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 gold bearing, 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, CO2- H2O-rich hydrothermal fluid thought to also contain CH4, N2, 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

9.1 Beta Hunt

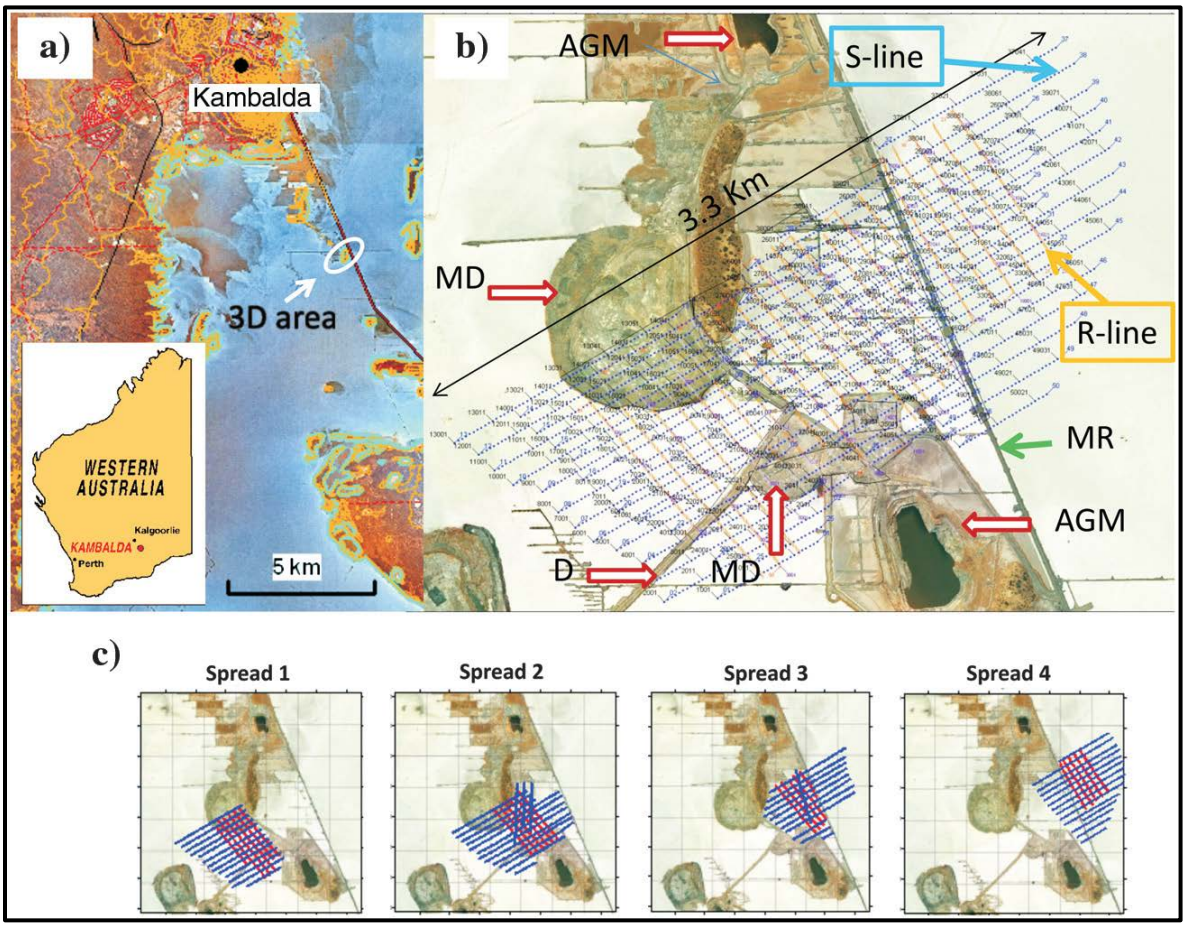
Exploration for nickel and gold mineralization on the Beta Hunt sub-lease has been completed primarily by drilling which is described in section 10. Since the sale of the asset by WMC in 2001, limited non-drilling exploration has been completed on the property. Programs relevant to ongoing exploration work are described below.

9.1.1 Geophysics

9.1.1.1 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).

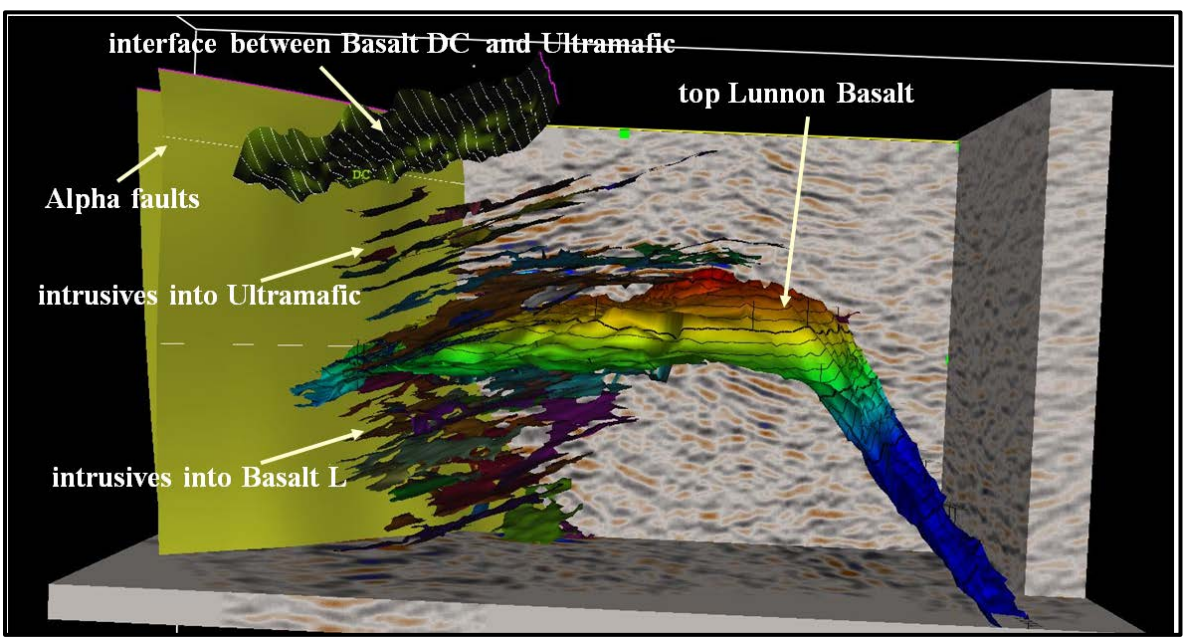
Source: Urosovic et al. (2012)

The total area covered by the shot/receiver lines was approximately 3.5 km2. 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.

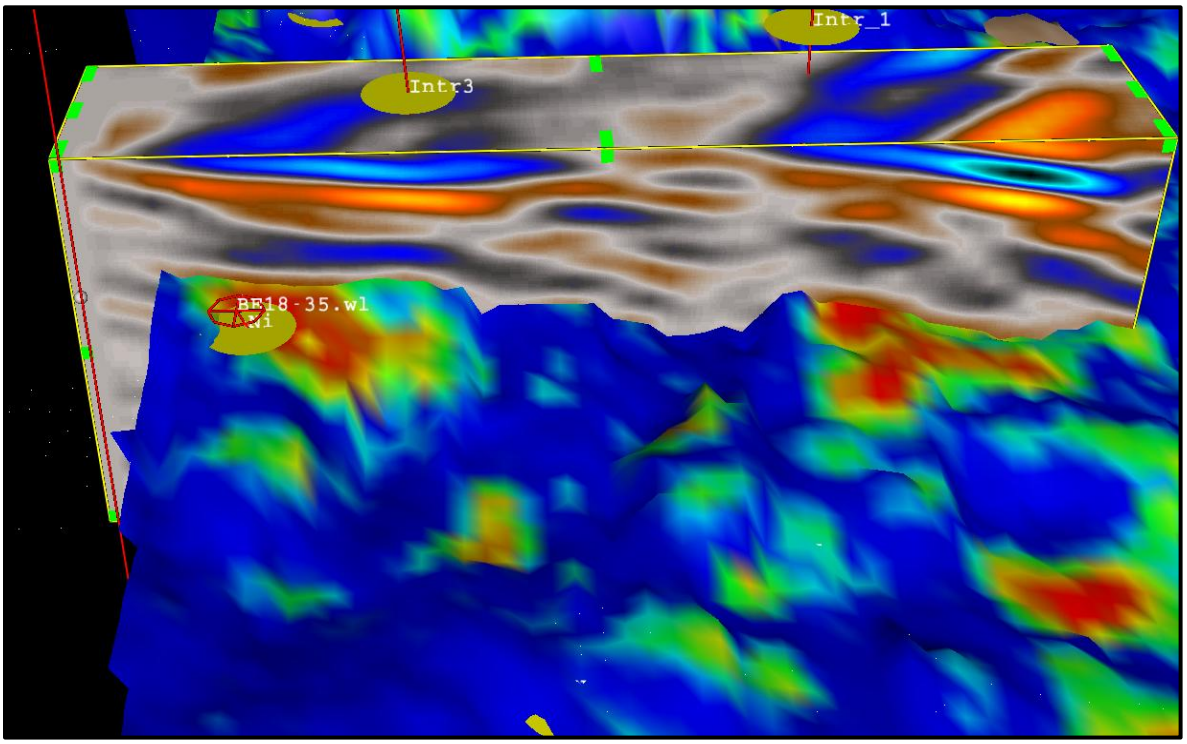
Figure 9.2: 3D seismic interpretation showing interpreted geological features



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.

9.2 Higginsville

Exploration for gold mineralization on the HGO tenements has been completed primarily by drilling which is described in sections 10.. Since the sale of the asset by Alacer to Westgold in 2013, limited non-drilling exploration has been completed on the property.

10. DRILLING

10.1 Beta Hunt

10.1.1 Historical Drilling

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, the drill hole database holds 12,823 drill holes for approximately 541,000 metres within the sub-lease boundary as presented in Table 10.1. Only diamond drilling was used to estimate the resources in this report. Table 10.2 provides a summary of holes drilled by type.

Table 10.1: Beta Hunt Database1 – total metres

Drill Type	Pre-2016	2016-2019	Total
AC	2,672		2,672
Diamond	459,005	77,376	536,381
Percussion	714		714
RAB	266		266
RC	1,269		1,269
Total	**463,926**	**77,376**	**541,302**

1. *Note-2016 PEA reported all drillholes within the sublease boundary to surface-adding additional metres and holes above the top of the sublease boundary*

Table 10.2: Drilling by SLM and Previous Operators – number of holes

Drill Type	Pre-2016	2016-2019	Total
AC	88		88
Diamond	12,003	688	12,691
Percussion	12		12
RAB	5		5
RC	27		27
Total	**12,135**	**688**	**12,823**

10.1.2 Current Drilling

Since publication of the PEA in 2016, SLM have drilled 77,376 metres of diamond drilling in 688 holes to define additional Mineral Resources and to upgrade the Mineral Resource classification to support ongoing production and define mineable material. This drilling has been performed on:

- Western Flanks - 32,564m
- A Zone – 37,888 m and
- Fletcher Trend – 859 m in 1 diamond drill hole.

- Beta/East Alpha – 6,066 m

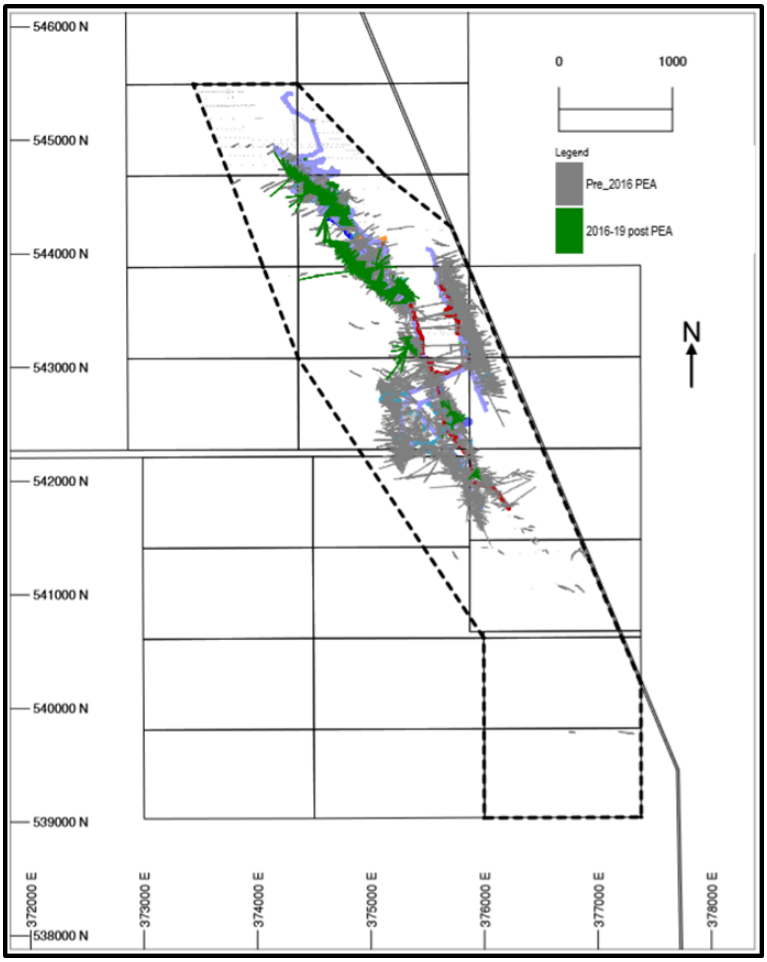
The above figures include the most recently completed campaign which commenced in October, 2018 and ended June 2019. This campaign comprised:

- Resource Definition drilling
  - Western Flanks – 12,440 m in 75 diamond holes
  - A Zone - 23,233 m in 194 diamond holes
- Grade Control – 3,703 in 28 holes

10.1.3 Drilling Maps

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

Figure 10.1: Plan map showing pre and post 2016 drilling at Beta Hunt

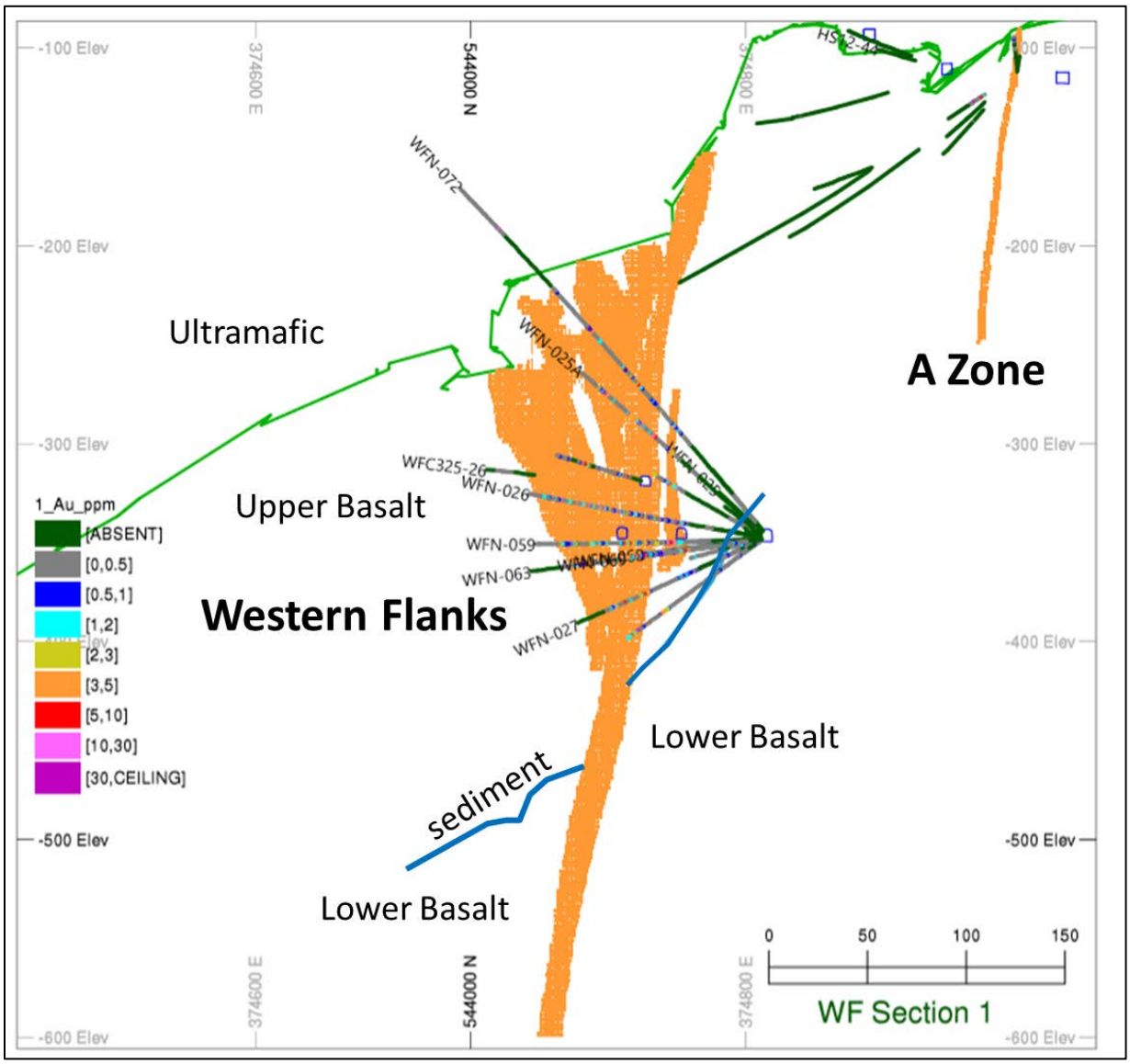


Source: RNC

10.1.4 Drilling Sections

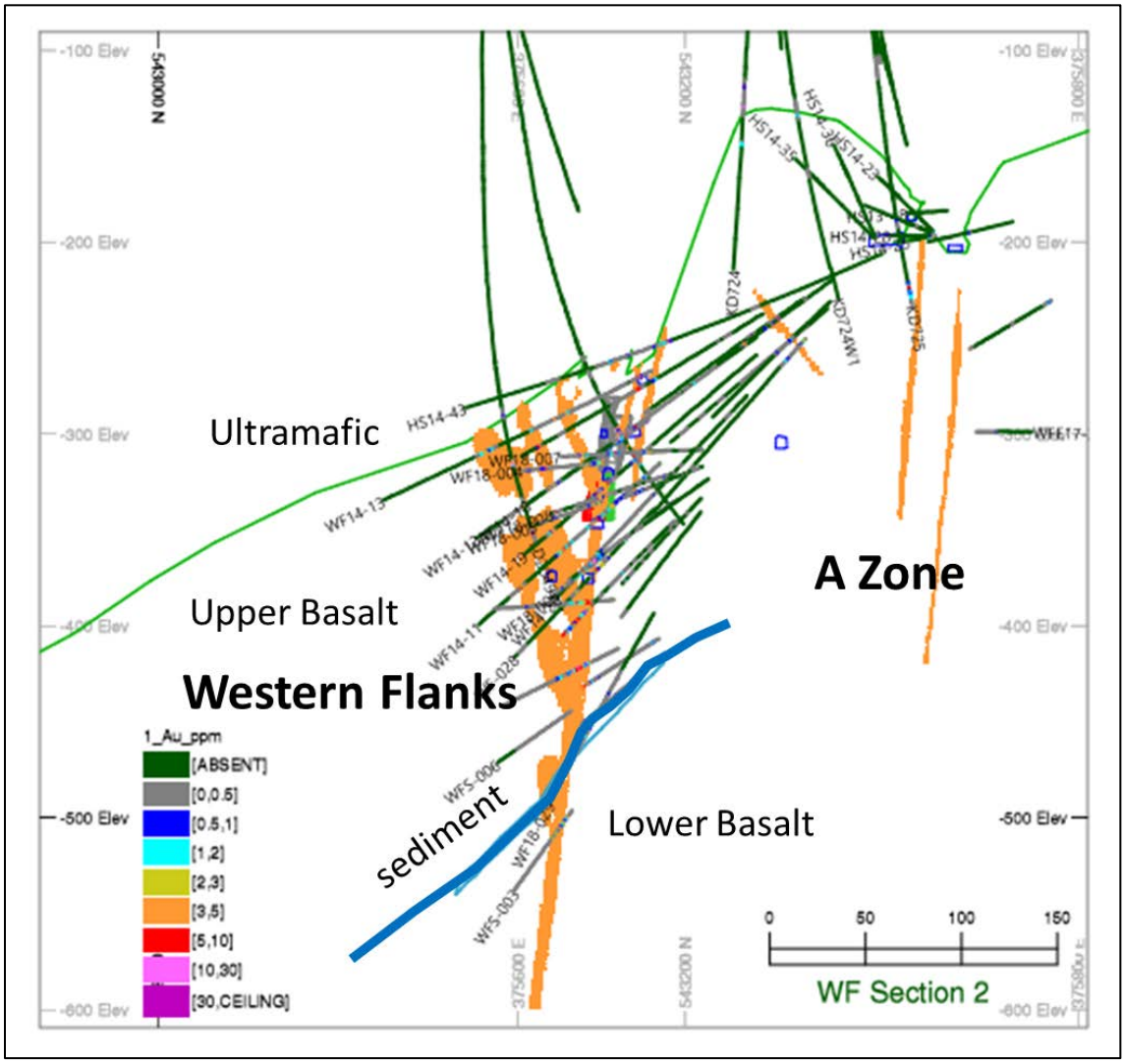
Representative cross sections showing drill assays and resource outlines for Beta Hunt are included below.

Figure 10.2: Western Flanks Cross Section #1 - looking north (Figure 7.7 shows position of section in plan view)



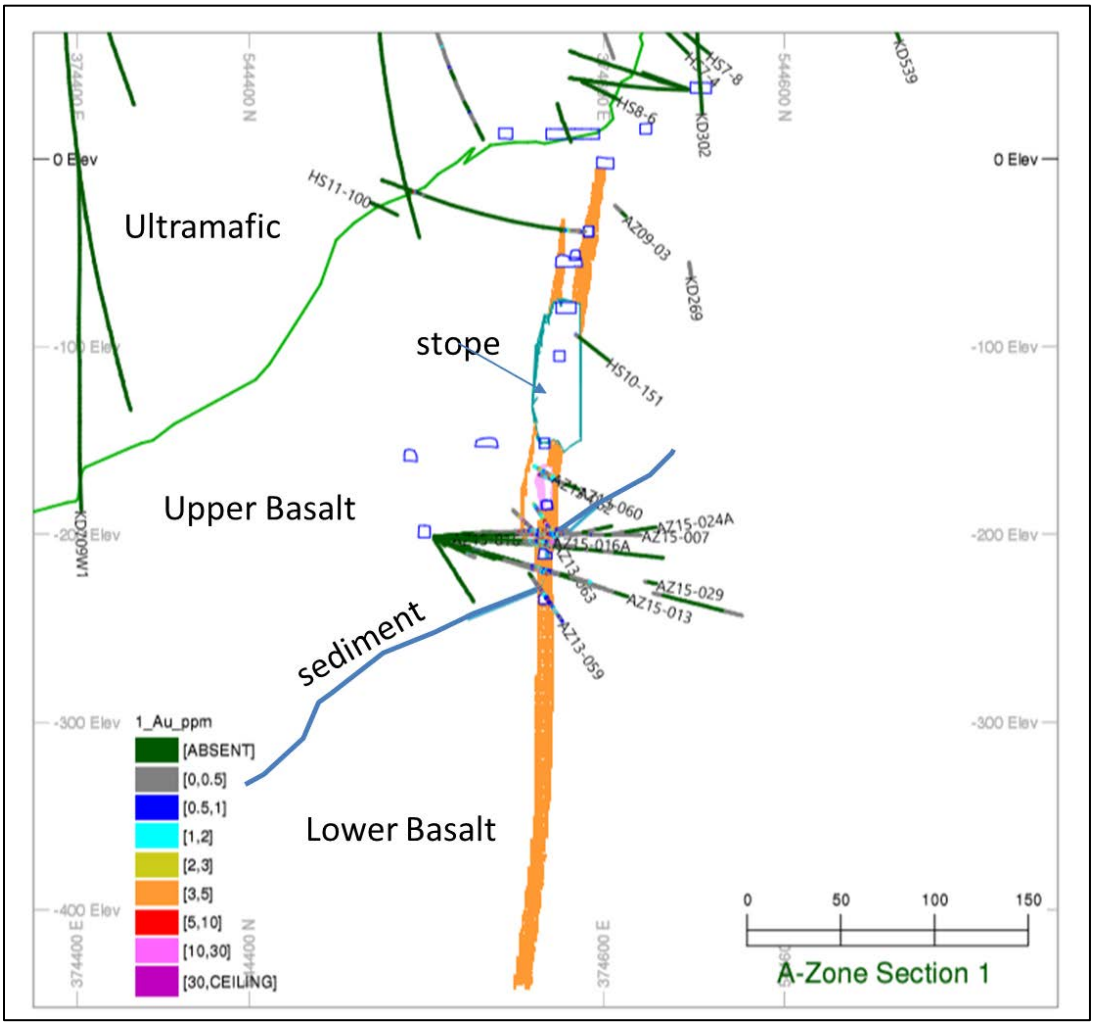
Source: SLM

Figure 10.3: Western Flanks Cross Section #2 - looking north (Figure 7.7 shows position of section in plan view)



Source: SLM

Figure 10.4: A Zone Cross Section looking north (Figure 7.7 shows position of section in plan view)



Source: SLM

10.1.5 Results

Resource Estimates

Drilling at Beta Hunt has served to establish resource estimation for gold as detailed in Section 13.

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 23.

10.2 Higginsville Gold Operation

10.2.1 Drilling Summary

Drilling Summary

Drilling at HGO has been carried out by a number of companies since the 1970's to explore for and delineate nickel and gold resources using a variety of methods. At the sale date (June 10, 2019) to RNC, the Higginsville drill hole database holds 54,290 drill holes for approximately 2,739k metres as presented in Table 10.3. Table 10.4 provides a summary of holes drilled by type.

Table 10.3: Higginsville drill hole database[1.] – number of holes

Drill Type	Pre-Westgold	WestGold	Total
RC/DDH	65	11	76
PERC	108	2	110
DDH	2772	33	2805
RC	9686	2314	12000
AC	26151	1953	28104
RAB	10515	261	10776
RAB/RC	64		64
UNK	348		348
AC/RC		7	7
Total	**49709**	**4581**	**54290**

(1) Excludes grade control drilling

Table 10.4: Higginsville drill hole database[1.] – number of metres

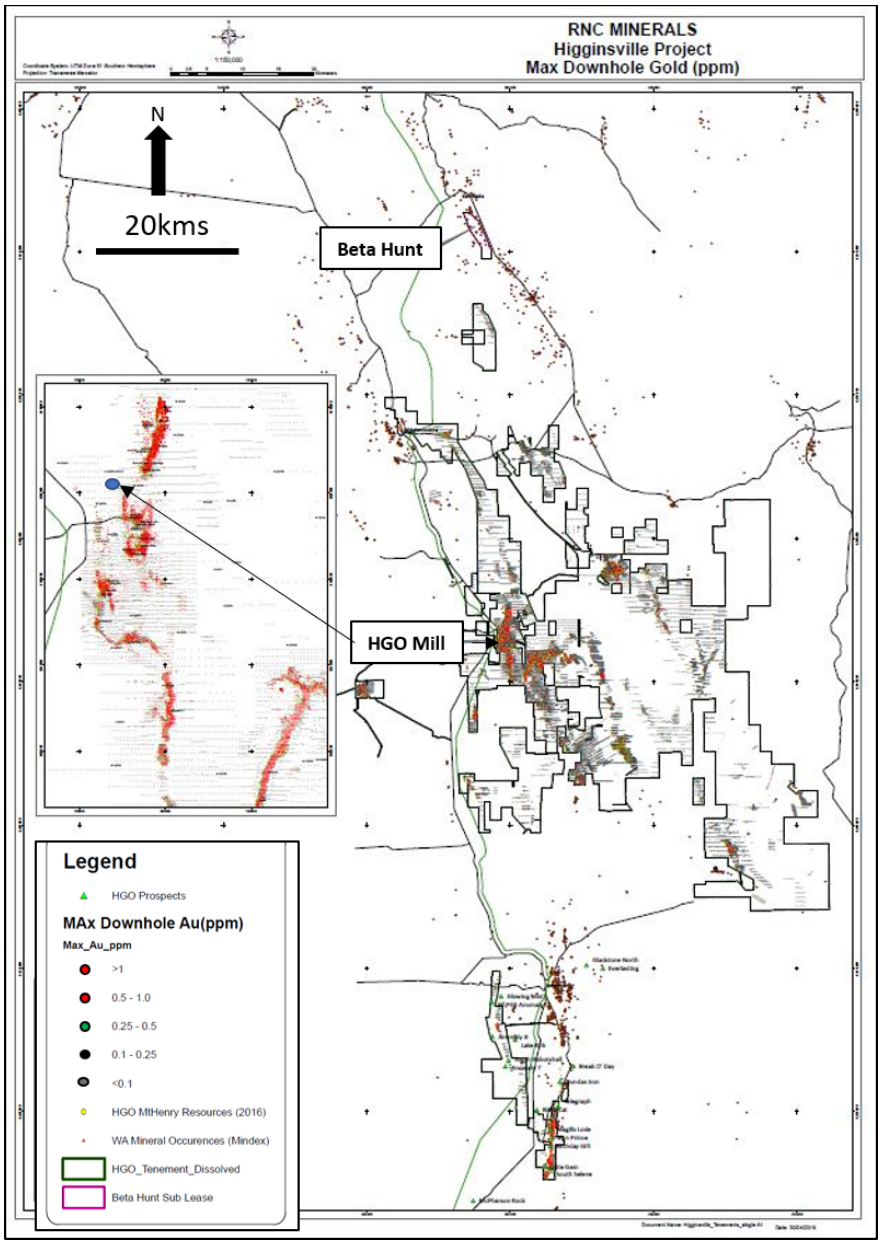
DrillType	Pre-Westgold	WestGold	Total
RC/DDH	9,210	2,793	12,003
PERC	1,578	30	1,608
DDH	480,766	4,837	485,602
RC	719,064	107,556	826,620
AC	1,001,849	66,045	1,067,894
RAB	324,812	5,811	330,623
RAB/RC	2,768		2,768
UNK	11,435		11,435
AC/RC		345	345
Total	**2,551,482**	**187,417**	**2,738,898**

(1) Excludes grade control drilling

10.2.2 Drilling Maps

Representative plan showing drilling distribution for Higginsville is included below.

Figure 10.5 Plan showing distribution of all drilling within the Higginsville tenements. Drill holes are color coded based on maximum downhole gold assays (ppm Au).



10.2.3 Drill Sections

Representative cross sections showing drill assays and resource outlines for Higginsville are included below.

Figure 10.6: Baloo X section – 6480940N - looking north. Section shows block model and current pit design

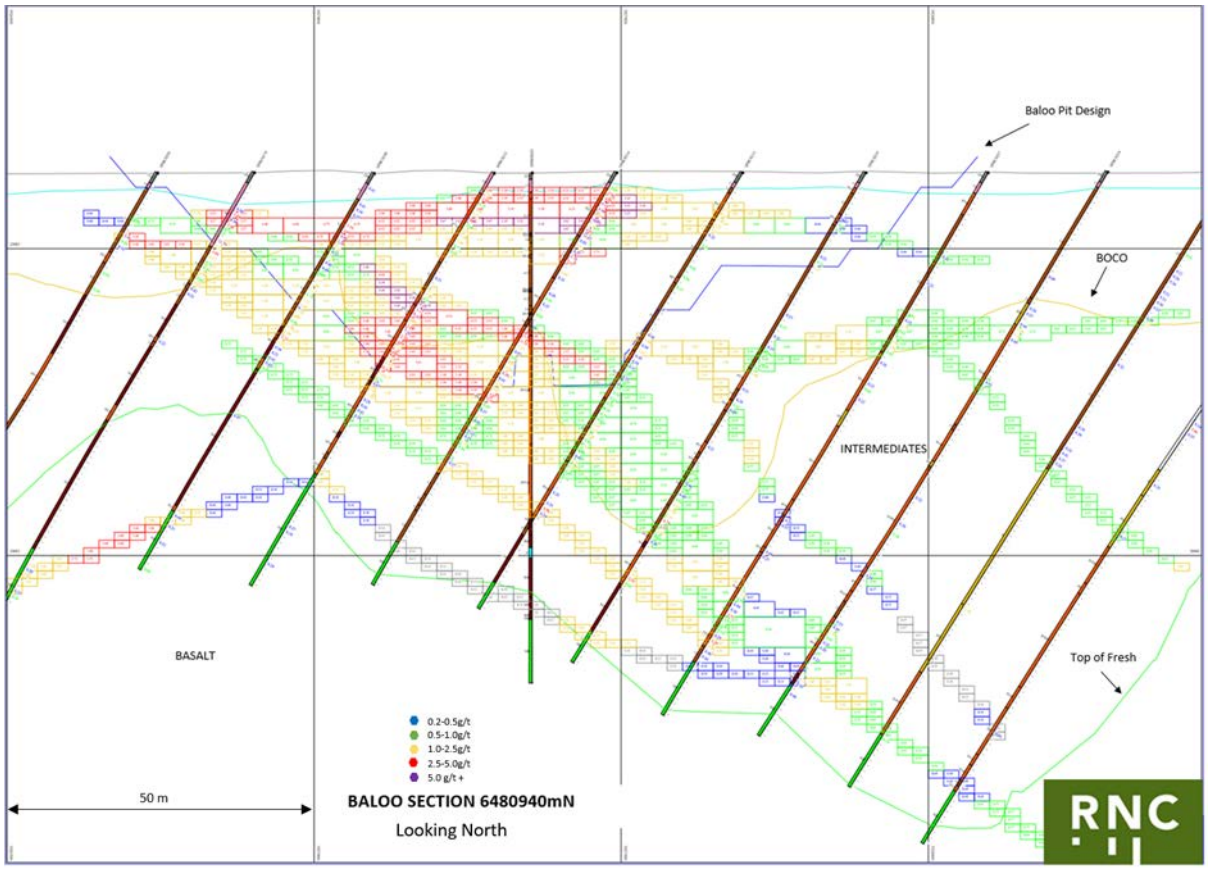
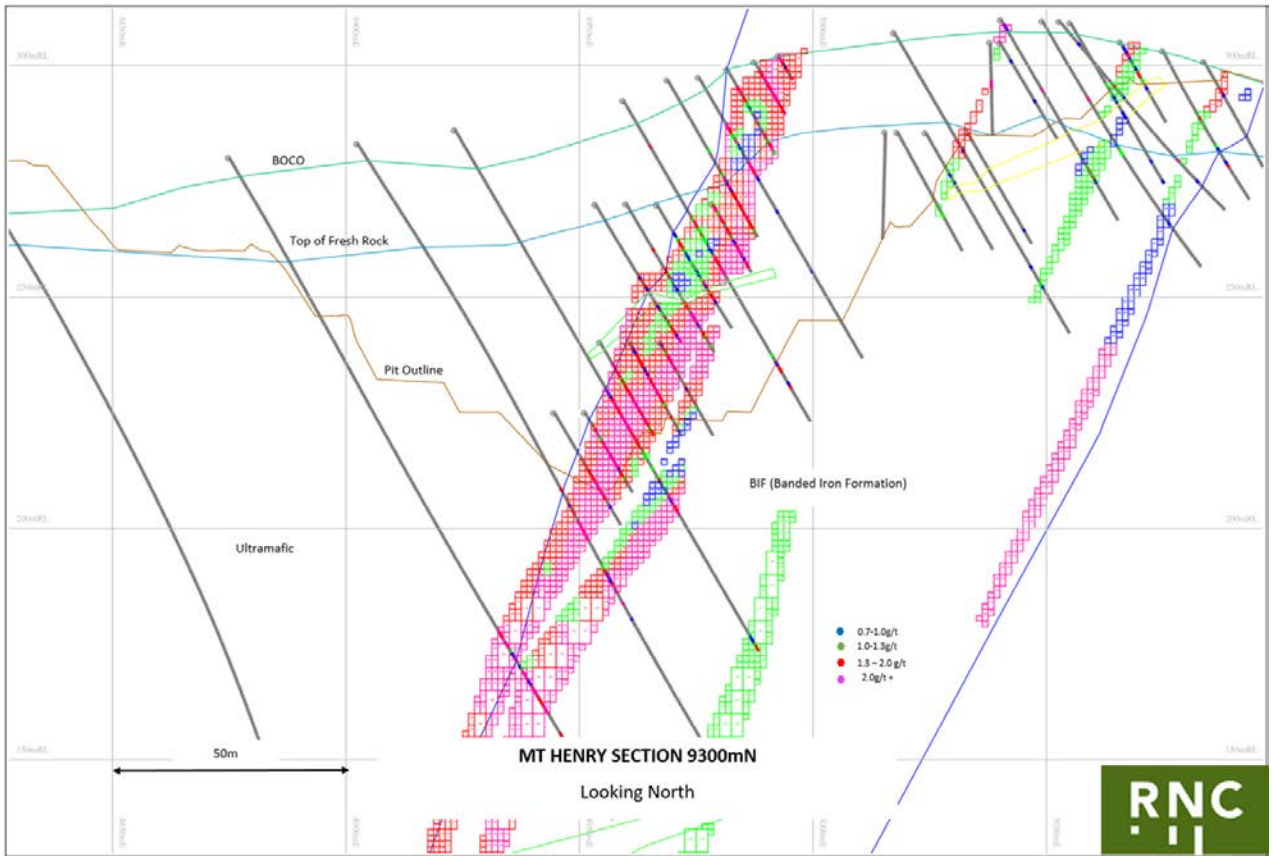


Figure 10.7: Mt Henry X section – 9300m N - looking north. Section shows block model and existing pit outline.



11. SAMPLE PREPARATION, ANALYSIS, AND SECURITY

11.1 Beta Hunt

11.1.1 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. The operator's geologists performed 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.

Over the first decades of operation drilling targeted nickel mineralization. Sampling 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 intervals though some historical sample intervals were noted to 0.06 m. Sampling for gold was somewhat less selective as the gold mineralization does not have clear visual indications. In general, recent resampling has confirmed that the older sampling was soundly carried out.

SLM gold sampling is non-selective to ensure gold assays are received to cover the full extent of gold related alteration.

Sample handling and submission to the laboratory protocols were documented for SLM and CNKO. No historic documentation is 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. Samples are taken on site by SLM staff and contract employees, supervised by geology staff. The work area and sample storage areas are covered by general site security video surveillance. Samples bagged in plastic sacks are collected by the laboratory transport from site and driven to the Kalgoorlie laboratory, in line with the practice across the industry.

During the site visits, and working on site, the Qualified Persons have inspected the core logging yard and directly observed how core was sampled and transferred to the care of the Laboratory. In the opinion of the Qualified Person, the procedures in place ensure samples remained in the custody of appropriately qualified staff. The sampled trays of cut core are stacked on pallets and placed in the on-site core yard.

Pulps returned from laboratory sample preparation are stored in the core yard on pallets. These remain available for later check assay programs.

During the site visits, and working on site, the Qualified Persons found no evidence of active tampering. Procedures to prevent inadvertent contamination of assay samples have been followed, including daily hosing out of core saw and sampling area.

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

11.1.2 SLM 2016-2019

Diamond drilling carried out by SLM is logged, sampled and analysed according to written procedures.

Gold mineralization is targeted using NQ2 diamond drill holes generally sampled as half core, except for grade control holes which were sampled as whole core. Sample intervals were based on geology, with a minimum 0.2 m to maximum 1.2 m sample size. Whole core samples were taken with a maximum length around 0.8m to reduce excessive sample weight.

Grade control holes in 2018-2019 were drilled in core size LTK60 and sampled as whole core.

Core is photographed wet and dry before sampling and stored electronically.

Sampling was performed by a technician in line with sample intervals marked up on the core by a geologist. 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, and QAQC standards and blanks inserted.

All diamond core was oriented, as far as possible, and oriented structures logged with alpha and beta angles.

11.1.3 SLM 2014-2016

Diamond drilling carried out by SLM before 2016 was sampled and analysed according to written procedures. Gold mineralization was targeted using diamond drill holes with a minimum 0.3 m to maximum 1.2 m sample size. Diamond holes were NQ, BQ and AQ sizes. NQ2 holes drilled in 2014 were orientated.

Logging was performed on field laptop computer in Microsoft Excel templates and imported to a Microsoft Access drillhole database.

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.

11.1.4 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.

11.1.5 Reliance Mining Limited 2003-2005

Diamond drilling carried out by Reliance Mining Limited 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.

11.1.6 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.

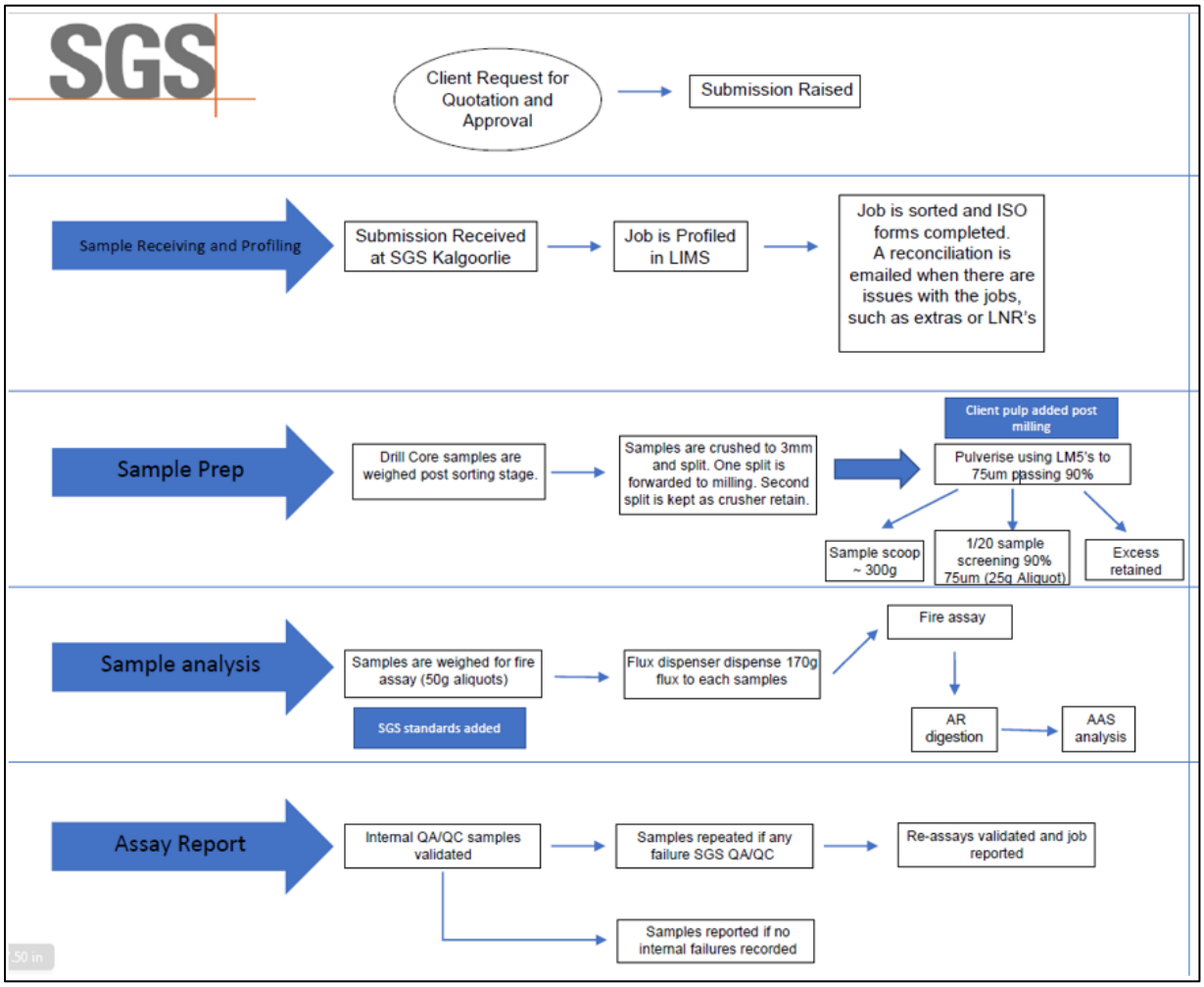
11.1.7 Laboratory Sampling and Sub-sampling Procedures

All SLM samples since March 2016 have been processed at SGS Kalgoorlie. The subsampling process is as follows:

- Samples are dried if necessary.
- Samples are crushed to 3mm and split. Most samples weigh from 1 to 2.8 Kg.
    - One split is forwarded to milling.
    - Second split is kept as retained crushed sample.
    - Second split is also analysed at intervals generated by the Laboratory computer.
- Sample splits are pulverised to 90% passing 75µm. This is done in a cycle through a row of four mills, so a sample numbered four higher than the previous will be processed through the same mill.
- The pulverised material is taken:
    - 300g taken in scoop,
    - subsampled taking 25g to check screening (one sample in 20),
    - excess retained.

Refer to Figure 11.1 for the sample management flowchart.

Figure 11.1 Flowchart of Laboratory Sample Management, SGS Kalgoorlie



11.1.8 Sample Analysis

Since March 2016, all analyses for SLM have been carried out by SGS Kalgoorlie (Au) and SGS Perth (with only a small number of batches for Ni by multielement ICP).

From 2005 to March 2016 all samples to be analysed for either nickel or gold were sent to Bureau Veritas (Kalassay) laboratories in Kalgoorlie. The assay laboratories used prior to this time are unknown.

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.

11.1.9 Gold Analysis

In March 2016 SLM changed from Bureau Veritas (Kalassay) to SGS Kalgoorlie for analysis.

The basic fire assay procedure for gold used at SGS is as follows:

- Sample Preparation crushing and splitting as per Section 11.1.7 above
- 50g subsample of pulverised material taken for fire assay in disposable container
- Flux dispenser adds 170g of flux to 50g charge in racked disposable container
    - Carry out fire assay as follows:
    - Pour the racked charges into racked fire assay crucibles
    - Fire the charges in their racks.
    - Remove from furnace and pour racks into cooling moulds
    - Recover the fused button from the glass slag
    - Cupellation – the button is fired in a cupel which absorbs the base metals and leaves a prill of precious metal (Au and if present Pt and Pd) only.
- Acid digest – the prill is dissolved in nitric acid, hydrochloric acid, Aqua Regia
- AAS finish – the solution is made up to volume and analysed by Atomic Absorption Spectroscopy.
- QAQC run by the laboratory using internally supplied blanks duplicates, replicates and standards in every batch.

11.1.10 Nickel Analysis

Most Ni assays were completed before SLM changed to SGS in March 2016. Only fifteen batches were analysed for Ni at SGS, using their Perth laboratory - can be identified by WM prefix in batch number.

The SGS samples were analysed by four-acid digest with ICP finish.

Previous to March 2016, 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 of a 200 mg (0.2 g) sub-sample.

- 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 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.

11.1.11 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 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 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.

However, in the parts of the mineralised structures included in present Mineral Resources there are very few WMC holes and their data makes little contribution to the estimates.

11.1.12 SLM 2014-2019

All drill hole programs completed by SLM were conducted under written procedural standards. Relevant changes occurred since the February 2016 PEA (Penswick and Haren 2016) are outlined below:

- Standards for gold and nickel were provided by Ore Research & Exploration Pty Ltd (OREAS). From June 2016 on, Geostats standards were procured for Au, and by November 2016 were exclusively used for Au assay batches.

- Coarse Blank used by SLM is Bunbury Basalt sourced from Gannet Holdings Pty Ltd via Geostats Pty Ltd.

- From March to December 2017, SLM made their own blank material for cost reasons. This was made up from crushed sample reject, by selecting samples with analyses of <0.01 g/t Au.

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

- For drilling, start every batch with a blank. (Note: in the past this was under the assumption that the blank would clean the crusher and mill before our samples started. This does not take account of the cycling four-unit setup at the lab.)

- Insert at least one blank and one CRM per batch, however small the batch of drillhole samples plus

- One CRM or blank every 20 samples.
- One blank and one standard may be inserted within a recognised ore zone, either added or by moving ones applied every 20 samples.
- In samples with observed visible Au, it is recommended to put a coarse blank in the fourth sample after the visible Au. This serves both as a coarse flush to prevent contamination of subsequent samples and a test for Au smearing from one sample to the next due to inadequate cleaning of the crusher and pulveriser.
- Visible gold sample numbers should be notified on Lab dispatch sheet. The Laboratory have added feldspar flush and additional cleaning after those samples.

The SGS Kalgoorlie lab apply their own QAQC insertions by random insertion generated by their LIMS system as follows:

- 4 internal standards per 84 samples
- 2 repeats per 84 samples
- 2 duplicates per 84 samples
- 1 blank per 84 samples.

SLM load the laboratory splits and repeats in our database, but do not use the laboratory standards and blanks data.

11.1.13 CNKO 2005-2008

All drill hole programs completed by CNKO were conducted under 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.

11.1.14 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 were:

- 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.

11.1.15 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.

11.1.16 Quality Control Analysis

To monitor quality from the SGS laboratory in Kalgoorlie there have been 4,950 certified standards and 4,170 certified blanks inserted into sample batches since March 2016. An additional 209 non-certified blanks were briefly used, made up from sample reject of <0.01 Au.

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.

Descriptions of the quality control standards and blanks are summarized in Table 11.1 with the frequency of each sample presented in Table 11.3. Individual control charts of the standards are presented in Appendix A. The numbers and periods of use of each standard are shown in Gantt chart form in Figure 11.2 and Figure 11.3.

Table 11.1 Certified Standards and Blank Sample Descriptions for Au - 2016, 2017, 2018, 2019

Standard	Element	Au-3SD	Expected Value	Au+3SD
G310-9	Au	2.87	3.29	3.71
G314-2	Au	0.87	0.99	1.11
G316-7	Au	5.28	5.85	6.42
G909-5	Au	2.33	2.63	2.93
G912-3	Au	1.85	2.09	2.33
G914-2	Au	2.24	2.48	2.72
G914-6	Au	2.85	3.21	3.57

Standard	Element	Au-3SD	Expected Value	Au+3SD
G915-3	Au	7.92	9.39	10.86
G916-10	Au	2.39	2.81	3.23
OREAS-17pb	Au	2.5	2.56	2.62
OREAS-216	Au	6.19	6.66	7.12
OREAS-205	Au	1.085	1.244	1.402
OREAS-206	Au	1.953	2.197	2.441
OREAS-208	Au	7.934	9.248	10.563
DH_BLANK_BB	Au	0	0	0.03

Table 11.2 Certified Standards and Blank Sample Descriptions for Ni - 2016, 2017, 2018, 2019

Standard	Element	Au-3SD	Expected Value	Au+3SD
OREAS-14p	Ni	1.87	2.09	2.31
OREAS-72a	Ni	0.618	0.693	0.769
OREAS-73a	Ni	1.34	1.41	1.48
DH_BLANK_BB	Ni	0	0	0.255

Figure 11.2 Quality Control Sample Frequency for Au - 2016, 2017, 2018, 2019

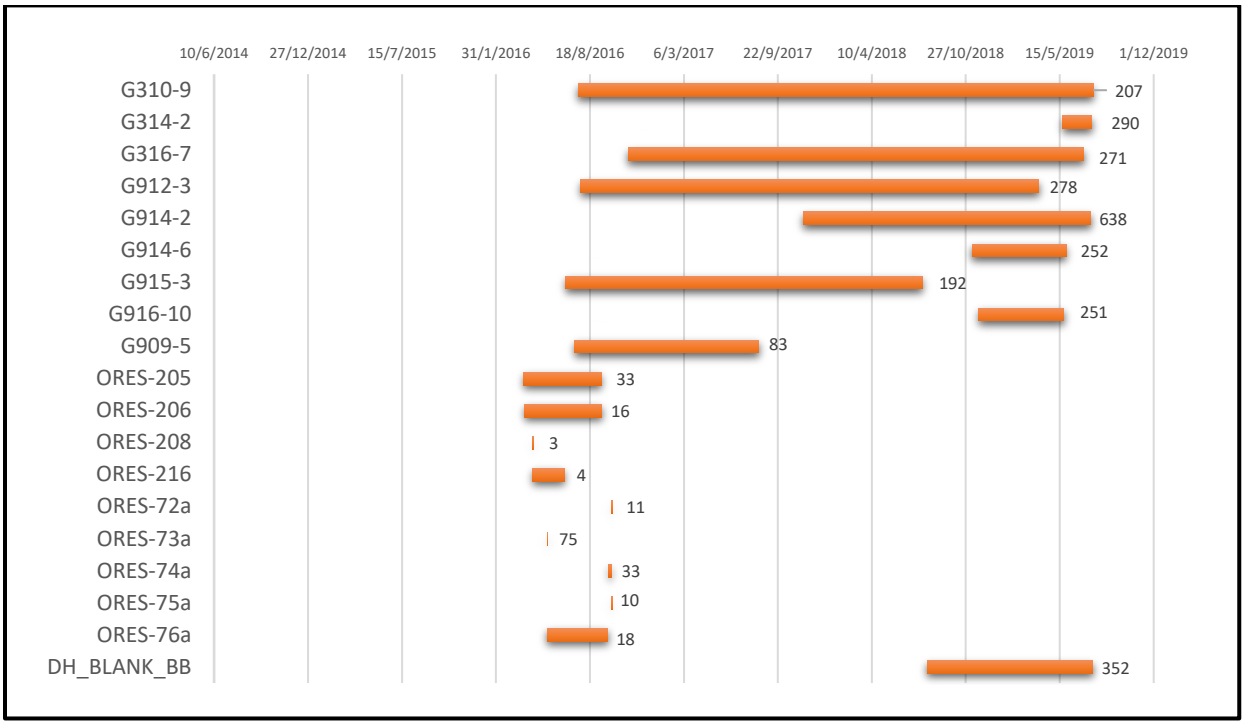
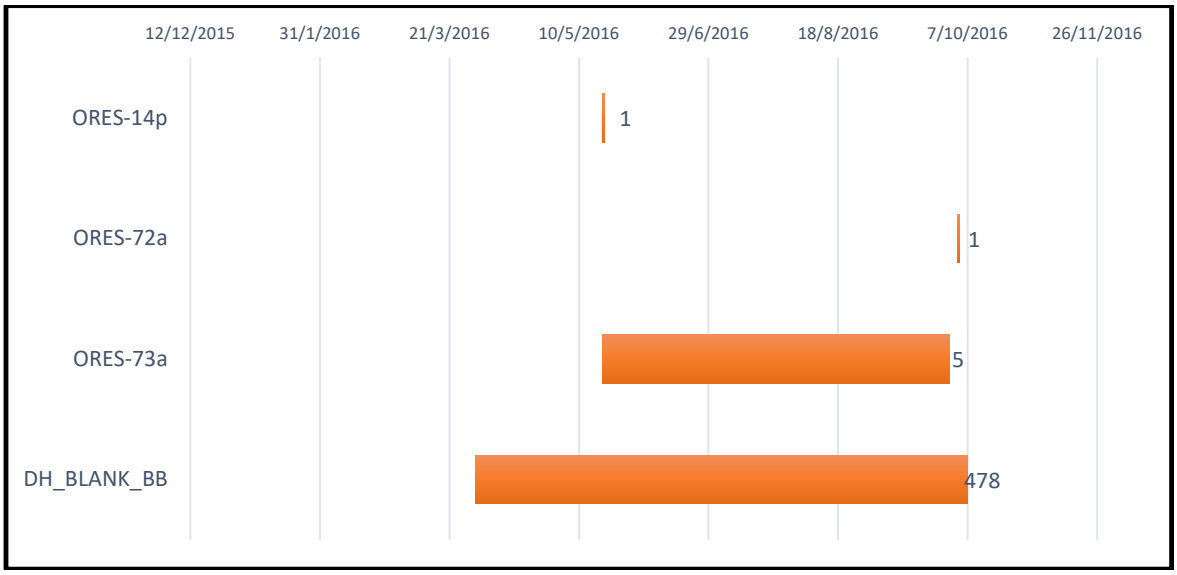


Figure 11.3 Quality Control Sample Frequency for Ni - 2016, 2017, 2018, 2019



When assays are imported into the GDMS, the standards and blanks are automatically checked and pass/fail criteria applied. If a batch fails it is assessed for possible reasons and the Procedure specifies appropriate actions.

- A single failure with no apparent cause, in a length of waste, may be accepted by the Qualified Person (Geologist or Database Administrator).

- A failure or multiple failures that fit a pattern of substituted standards may be accepted.

- A failure near or in a length of mineralisation, will result in a request to the laboratory for re-assay of relevant samples. The QP changes the status from Failed to DH Reassay in the GDMS. The re-assayed results will be re-loaded and checked against QAQC again.

11.1.16.2 Certified Reference Material (Standards) Control Chart Analysis

Control charts and standard assay tables are exported and reviewed to analyse longer term issues such as patterns of failures. Table 11.3 Trend issue Condition and Action shows some of the systemic QAQC problems that have been dealt with in recent years.

Figure 11.4 shows some of the issues that can be identified over the longer term – standards passing inside 3 standard deviation limits (3SD), substitutions of different standards, or swapping blank and standard numbers. In particular, standard G914-2 was heavily substituted with G314-2 by one contract technician. The problem was quickly identified when the first results came in and corrected with training, but the problem continued until the assay backlog was completed.

Figure 11.4 Gold Certified Standard Analysis for G915-3

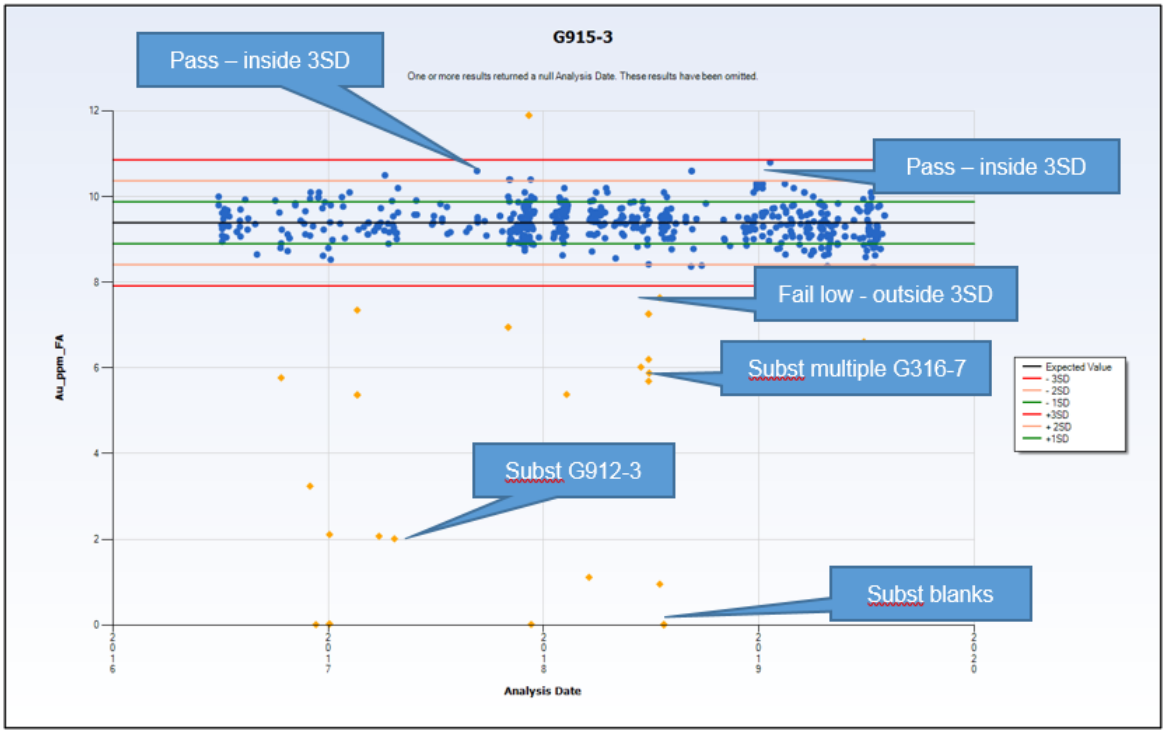


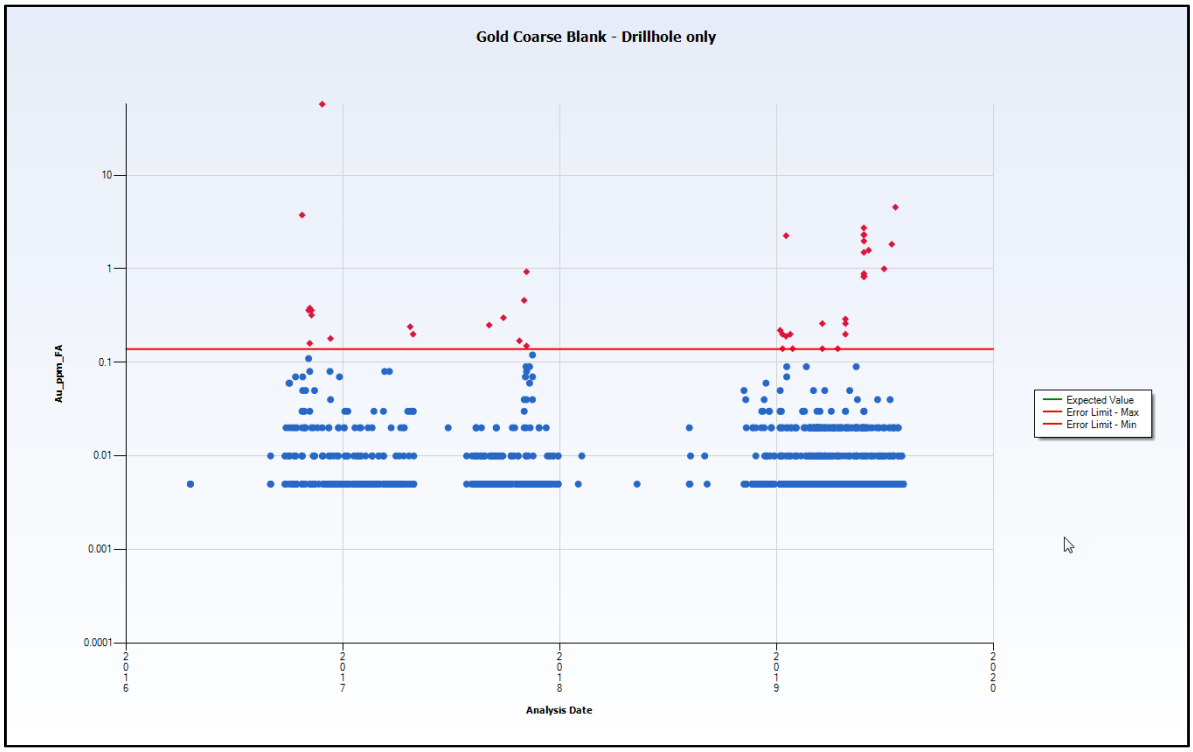
Table 11.3 Trend issue Condition and Action

Problem identified	Response
Fortnightly date-pattern increase in failures	Laboratory corrected training issues for one shift
Series of high failures of blanks	Lab increased cleaning between samples, added feldspar flush after VG or high grades noted in submissions, and now reports analysis of feldspar flushes.
Substantial number of failed standards that were incorrect relating to substitution of incorrect CRM.	Identified a training problem in contract sampling team. Training and supervision were improved and process corrected. Affected batches were queued at the laboratory and the issue continued until the backlog was cleared.
Low bias on standards creating some failures. Lab observed low bias on their own standards, but they were within tolerance.	Laboratory later identified a relationship with a batch of test tubes and moved to replace them.

11.1.16.3 Blank Analysis

The blanks analysed for gold are presented in Figure 11.5. A few failures can be identified from swapping standard and blank numbers, a few from suspected contamination.

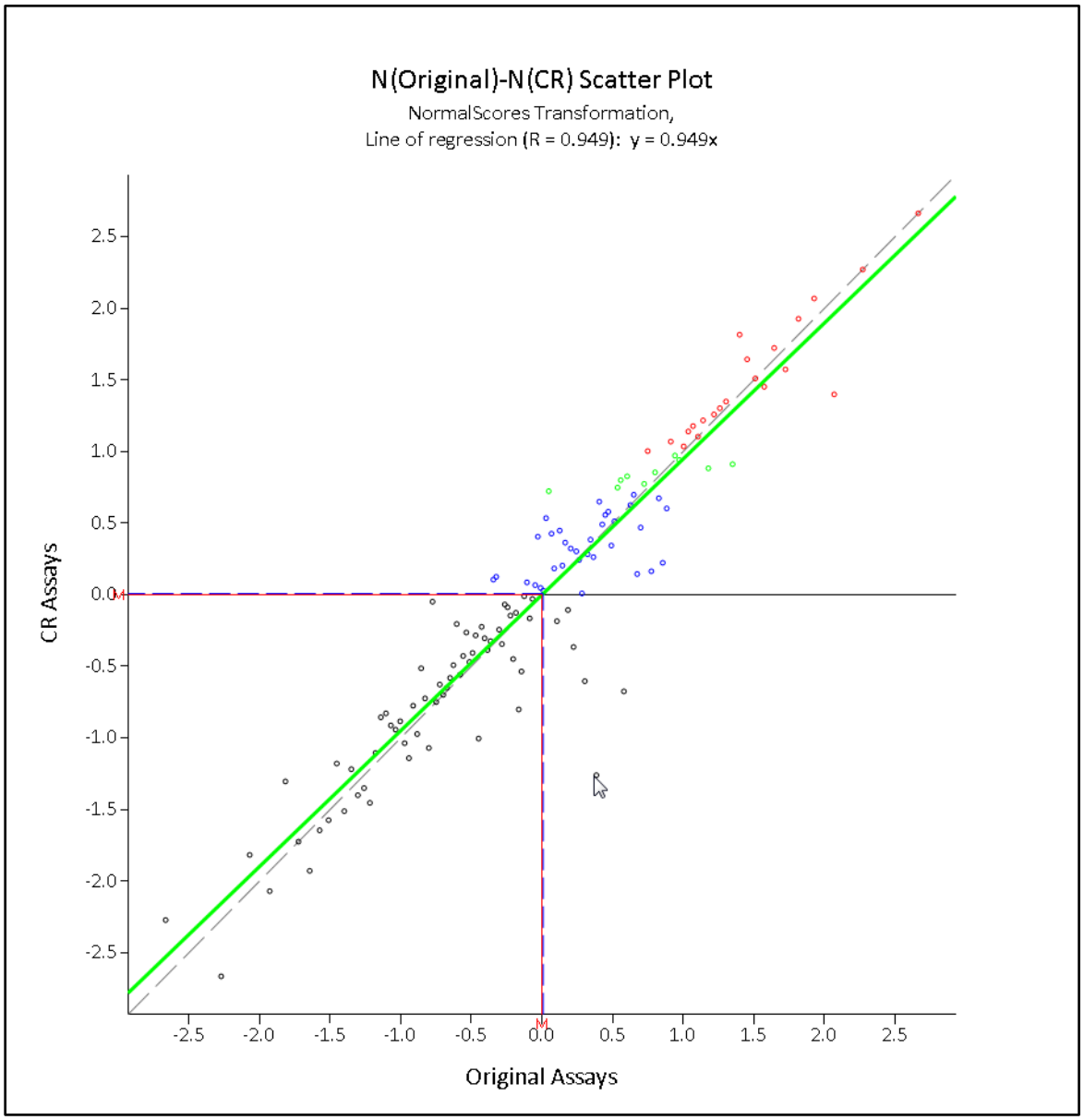
Figure 11.5 Gold Analysis Blanks



11.1.16.4 Duplicate Analysis

Coarse reject was re-assayed as a quality check project for several batches of samples in 2019. The results are presented in Figure 11.6. They demonstrate generally acceptable correlation between paired assays.

Figure 11.6 Scatterplot of Original versus Coarse Reject Duplicates



11.1.16.5 Database Integrity

In October 2016 SLM implemented the Datamine Fusion Geological Database Management System (GDMS) including field logging in the DH Logger application and a SQL Server based database.

In the experience of the Qualified Person and the Database Administrator, this has been an extremely stable and reliable platform, and the conversion was implemented without major interruptions to the database process. In no instance has SLM had to re-access the old database and in no case has data been lost due to any software or hardware problem in almost three years of uninterrupted operation, including one software version upgrade.

SLM data uploaded including, collar locations, downhole surveys and assays have integrity checks during the import process. The checks enable the upload to be cancelled if errors are encountered.

The software records the username, date and time of the access when users edit the data. All users must access the database with username and password, and editing privileges are controlled to responsible geology staff. Back-end editing access using scripts is very tightly controlled, only via authorised request to the administrator within the IT support group, and not available except in exceptional circumstances.

Drill hole logging and sample interval creation is conducted in the DHLogger application of the GDMS. All codes and shortcuts are maintained in reference tables of the database and validation rules operate behind the interface.

Downhole survey data is checked in Reflex SProcess software and exported to csv then reformatted and again visually inspected and validated for upload. Part of the validation procedure for down holes surveys and logging is to perform a visual check of the de-surveyed holes in Datamine Studio RM software. The software also provides validation functions which are utilized.

Once assays are returned from the lab as csv files, the data is daily checked and uploaded using DHLogger and the QAQC performance checked against set pass/fail parameters.

Prior to October 2016, all SLM data was stored in a Microsoft Access database with validation checks described in Penswick and Haren, 2016.

Historical data within the database has not all been validated to the same level as data post 2008. A validation process exists within the database run automatically for all new data as described above. A very small number of drill holes with major errors that cannot be rectified are recorded in a file named badholes.csv and not used in any estimation.

11.1.16.6 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.

11.2 Higginsville

11.2.1 Pre-Westgold (pre-October, 2013)

A detailed description of sample preparation, analysis and security can be found in *NI43-101 Technical Report of the Mining Operations and Exploration Tenements of Avoca Resources Limited. Western Australia* (SRK 2010). This report covers relevant procedures and methods used on its projects to 15 December, 2010, including those employed (historically and at the time of the report) at the Higginsville Project. The Qualified Person's statement concluded that the sampling, sample preparation, sample analysis and sample security procedures at Higginsville are adequate and the data derived from the analyses of these samples can support resource estimation.

From February 2011 to September, 2013, the Higginsville Project was owned by Alacer. During this period, the process of sample preparation, analysis and security is described in ASX releases, the latest one with reference to their December 31st,Resources and Reserves Statement (Alacer, 2013). The description of the sampling method, sample analysis and QA/QC methods employed were consistent with industry standards.

11.2.2 Westgold

Below is a summary of the sampling method, sample analysis and QA/QC methods employed by Westgold. A more detailed description is found attached to their *2018 Annual Update of Mineral Resources and Ore Reserves* (Westgold, 2018).

11.2.3 Sample Preparation

Surface

Reverse Circulation Drilling

This is a form of percussion drilling utilising a (nominally) 5¼" face-sampling hammer which is designed to eliminate downhole contamination. Drill cuttings are extracted from the RC return via cyclone. Prior to 2016 the underflow from each 1m interval was transferred via bucket to a four tiered riffle splitter, delivering approximately three kilograms of the recovered material into calico bags for analysis. The residual material is retained on the ground near the hole. Post-2016 a cone splitter has typically been used located directly below the cyclone, delivering approximately three kilograms of the recovered material into calico bags for analysis. Samples too wet to be split through a splitter are taken as grabs and are recorded as such. The use of a cone splitter is much more accommodating for wet samples.

Diamond Drilling

HQ / NQ2 holes are used to better define resource and exploration prospects, with other core sizes used historically.

This core was both geologically and geotechnically logged, and subsequently halved for sampling.

Underground

Diamond Drilling

The bulk of the data used in resource calculations at Higginsville has been gathered from diamond core. Four types of diamond core sample have been historically collected.

The predominant sample method is half-core NQ2 diamond with half-core LTK60 diamond, whole core LTK48 diamond and whole core BQ diamond is also used. This core is geologically logged and sampled to geologically relevant intervals.

Face Sampling

Each ore development face at HGO was mapped and chip sampled. Depending on the complexity of the geology noted in the face mapping, one or two sample channels were taken perpendicular to the mineralisation. Sampling intervals are determined by geological constraints (e.g. rock type, veining and alteration / sulphidation etc.) with an effort made to ensure each 3kg sample is representative of the interval being extracted. Samples are taken in a range from 0.1m to 1.2m.

Sludge Drilling

Sludge drilling is performed with an underground production drill rig. It is an open hole drilling method using water as the flushing medium, with a 64mm or 89mm hole diameter. Samples are taken twice per

drill steel (1.8m steel, 0.9m sample). Holes are drilled at sufficient angles to allow flushing of the hole with water following each interval to prevent contamination. Sludge drilling is used to guide the geological interpretation of ore lodes. Grade intercepts are not included within the resource estimation process.

Sample Security

For samples assayed at the on-site laboratory, samples were delivered to the facility by company staff. Upon delivery the responsibility for sample security and storage fell to the independent third party operator of the of the facility. The third party operator at HGO was Bureau Veritas Minerals Pty Ltd (Bureau Veritas). The on-site laboratory was removed in June 2019.

For samples assayed off-site, samples are delivered to a third party transport service, who in turn relay them to the Bureau Veritas' Kalgoorlie laboratory. Samples are stored securely until they leave site.

Sample Analysis

Fire Assay

All geological samples requiring assaying are sent off site to a commercial laboratory for analysis. The entire dried sample is jaw crushed (JC2500 or Boyd Crusher) to a nominal 85% passing 4mm with crushing equipment cleaned between samples. The sample is then split using an Integral RSD to produce a product <3kg, the remainder of the sample is stored as the coarse reject. The sample is then pulverised in a LM5 ring mill to grind the sample to a nominal 90% passing 75µm particle size. A charge of 40g is taken and flux added, and fired in a reduction furnace to produce a button. It is then further fired in a muffle furnace to produce a dore bead. The dore bead is then dissolved and silver separated from the gold in solution. The resulting liquor is then analysed for gold content by organic extraction with flame AAS finish, with an overall method detection limit of 0.01 ppm Au content in the original sample.

QA/QC consists of regular submission of blank and certified standard material, as well as regular repeat analysis of the coarse reject material. Internal laboratory standard reference material is also regularly analysed at a rate of 1 in every 20 samples.

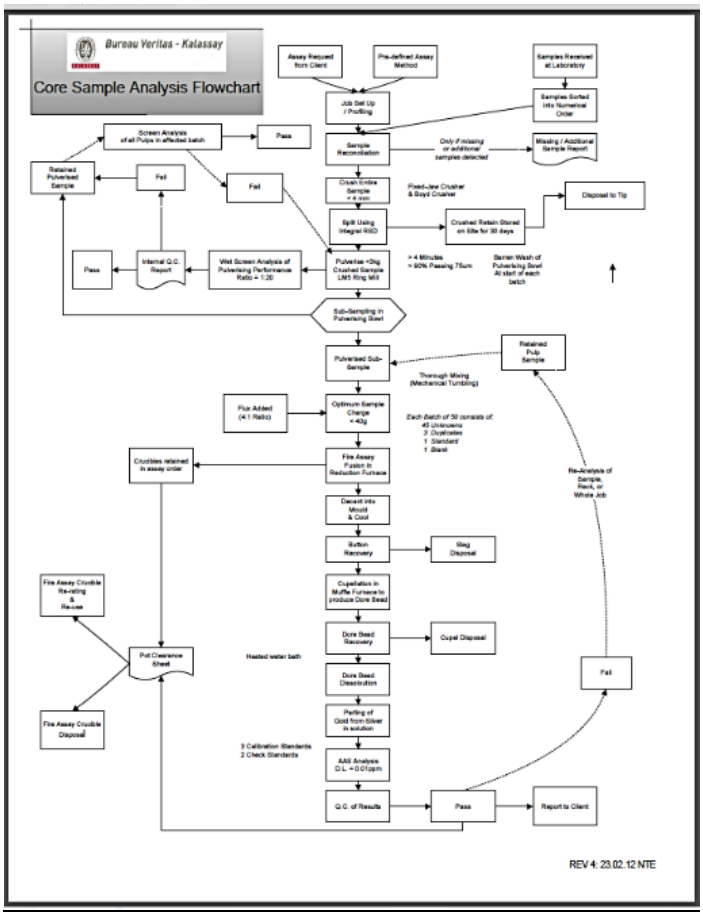


Figure 11.7: Representative fire assay sample flow chart

PAL 1000 (leachwell technique)

The entire dried sample is jaw crushed (JC2500 or Boyd Crusher) to a nominal 85% passing 2mm with crushing equipment cleaned between samples. An analytical sub-sample of approximately 500-750g is split out from the crushed sample using a riffle splitter, with the coarse residue being retained for any verification analysis. The accurately weighed sub-sample is further processed utilising a PAL1000B to grind the sample to a nominal 90% passing 75µm particle size, whilst simultaneously extracting any cyanide amenable gold liberated into a Leachwell liquor. The resulting liquor is then analysed for gold content by organic extraction with flame AAS finish, with an overall method detection limit of 0.01 ppm Au content in the original sample.

QA/QC consists of regular submission of blank and certified standard material, as well as regular repeat analysis of the course reject material. Internal laboratory standard reference material is also regularly analysed at a rate of 1 in every 26 samples.

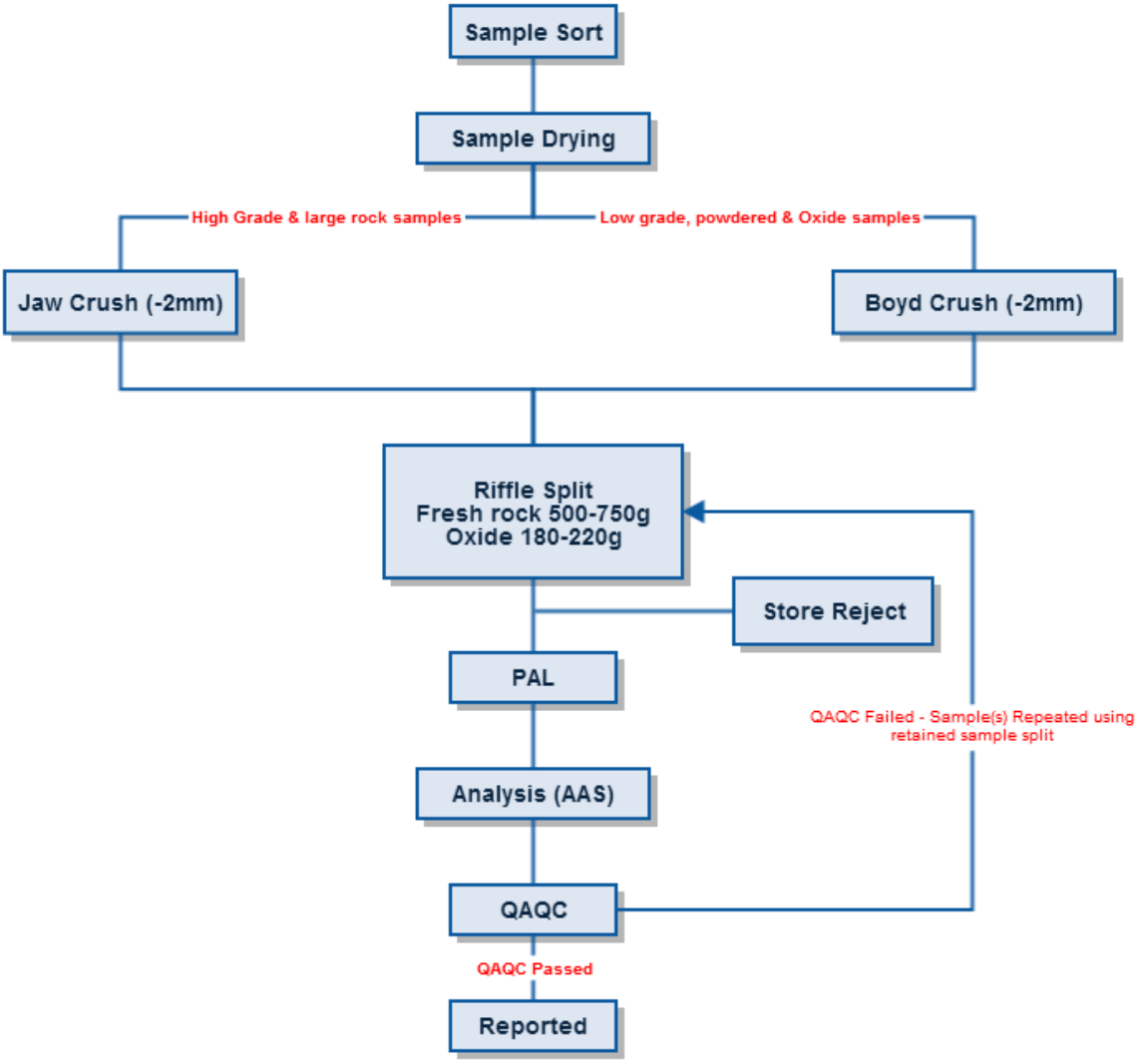


Figure 11.8: Representative PAL sample flow chart.

Sampling Preparation, Analyses and Security Summary

The Qualified Person, has conducted a limited review of the HGO QA/QC procedures. This review indicates the procedures are adequate for the reporting of historical Mineral Resources.

12. DATA VERIFICATION

12. 1 Beta Hunt

The Qualified Person has, through examination of internal SLM documents, personal inspections on site and discussions with other SLM personnel, verified the data in this Report and satisfied himself that the data is adequate for the purpose of this Report.

12.2 Higginsville

Below summary is taken from Westgold's Annual Mineral Resource Commentary, June 2018 (Westgold, 2019):

All data used in the calculation of resources and reserves are compiled in databases (underground and open pit) which are overseen and validated by senior geologists.

- All geology input is logged and validated by the relevant area geologists, incorporated into the assessment of sample recovery.
- All assay data has built in quality control checks. Twinned holes have been drilled in several instances with no significant issues highlighted. Drillhole data is also routinely confirmed by development assay data in the operating environment.
- All data is spatially oriented by survey controls via direct pick-ups. Deeper drillholes are all surveyed downhole, currently with either a gyro tool or a multi-shot camera as appropriate.

The Qualified Person, has conducted a limited review of the HGO database. This review indicates the procedures are adequate for the reporting of historical Mineral Resources.

13. MINERAL PROCESSING AND METALLURGICAL TESTING

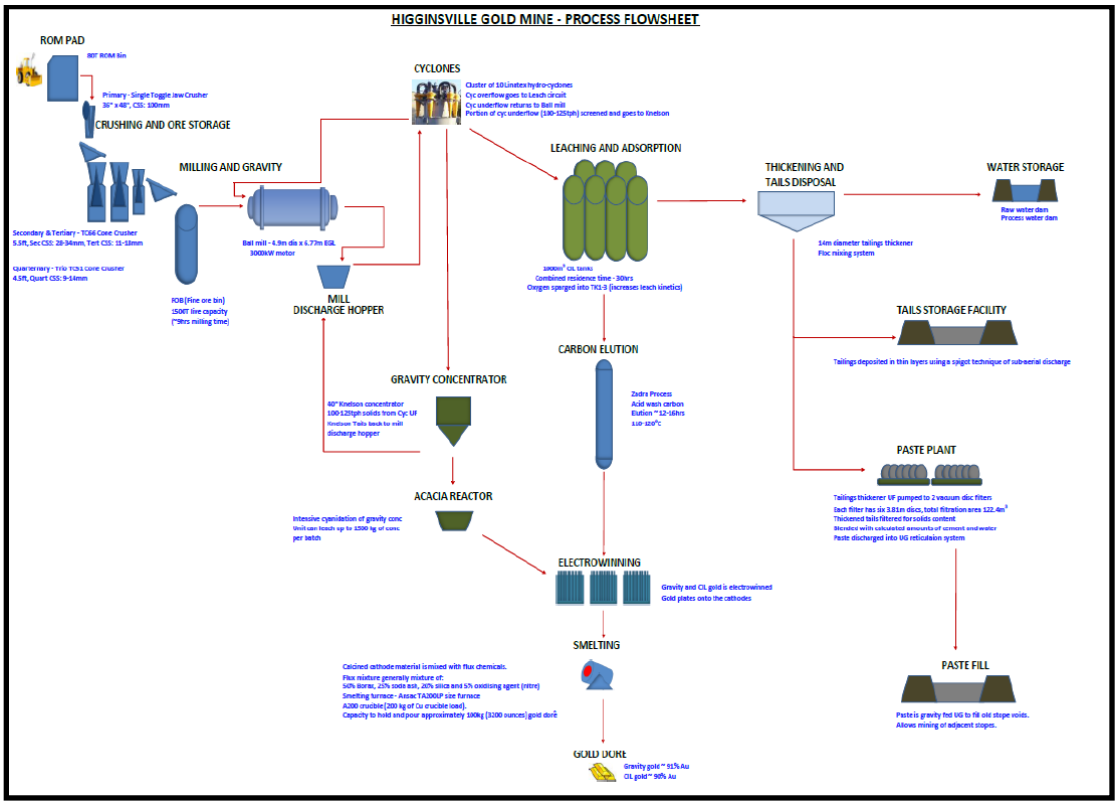
Beta Hunt is an operating mine that processes its gold mineralization through RNC's Higginsville Gold Mill. The processing of nickel is covered by the OTCPA Agreement with BHP. Under this Agreement BHP have the right to process Beta Hunt mineralization till 2023. Details on both nickel and gold processing that relate to the metallurgical performance of Beta Hunt mineralization are summarized below. Further discussion of these contracts is included in section 18.

13.1 Gold Processing

Gold mineralization is processed at the RNC-owned Higginsville Gold Mill, located approximately 80km by road from the Beta Hunt Mine. Material is processed in either batches or mixed with other mineralisation sources from Higginsville. The Higginsville Mill flowsheet (shown in Figure 13.1) is a conventional CIP gold circuit with quaternary crushing and ball milling with a gravity recovery circuit on the cyclone underflow. Grinding is followed by leaching with a production capacity of 1.3Mtpa. The gravity recoverable gold from the mineralization, which is recovered through a Knelson concentrator and Acacia high intensity leach reactor is 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.

There are several approved tailings storage facilities on site, and currently the tailings are being deposited in the exhausted Fairplay East open pit until Q3 2019, after which deposition will be transferred to alternate open pits located on site. There is also a four paddock tailings storage facility that could be used in the future if required with additional dam lifts or expansions.

Figure 13.1: Higginsville Gold Mill Flowsheet



Source: RNC

13.2 Nickel Processing

Since ownership by WMC and until June 2018, nickel mineralization from Beta Hunt was processed at the nearby Kambalda Nickel Concentrator (KNC) that is currently owned by BHP. 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 was blended with mineralization from other mines. As it would not be possible to measure the metallurgical recovery of Beta Hunt material within the blend, recovery was credited based on the grade of material treated as per the contractual agreement between BHP and SLM.

In July 2018, KNC was put on care and maintenance due to declining nickel production in the area. In May 2018, a one-year amendment was signed with BHP under the OTCPA to cover Beta Hunt nickel mineralization production from July 2018 to June 2019. This ore was shipped to the Leinster Nickel Concentrator. A new amendment (under the OTCPA) is now required for future nickel production.

The nickel mineralization also contains limited quantities of both copper and cobalt. Copper was recovered by KNC in sufficient quantities for SLM to receive credit. SLM, as part of the amendment to the OTCPA, was also given credit for cobalt when the material was processed through the Leinster Nickel Concentrator.

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 BHP, as it is blended with their own ores containing much higher concentrations of As in order to produce an acceptable feed to the Kalgoorlie Nickel Smelter (KNS).

14. MINERAL RESOURCE ESTIMATES

14.1 Beta Hunt

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 and Form 43-101F.

14.1.1 Gold

Block model quantities and grade estimates for the Beta Hunt Mine set out in this Report have been prepared using accepted industry practice and classified in accordance with the JORC Code, 2012 Edition by Paul Ellison, MAusIMM, under the supervision of Stephen Devlin, FAusIMM. Both are employees of Salt Lake Mining Pty. Ltd (SLM), a 100% owned subsidiary of RNC Minerals.

Mr. Ellison is a Senior Geologist for SLM and has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the JORC Code, 2012 Edition.

Mr. Devlin is Vice President Exploration and Growth for SLM and has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the JORC Code, 2012 Edition and fulfils the requirements to be a "Qualified Person" for the purposes of NI 43-101.

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.

The effective date of the Mineral Resource Statement for Western Flanks and A Zone are June 26, 2019 and August 9, 2019 respectively.

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 gold mineral resources found in the Beta Hunt Mine at the current level of sampling. 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 compiled by Paul Ellison. Paul Ellison is of the opinion that the current drilling information is sufficiently reliable to interpret with confidence the mineralization domains for gold and that the assay data are sufficiently reliable to support mineral resource estimation.

Datamine software was used to construct the geological and mineralization solids, build block models and estimate gold grades. Snowden Supervisor software was used for statistical analysis of drill data and block data and generating variogram models for estimating gold grades.

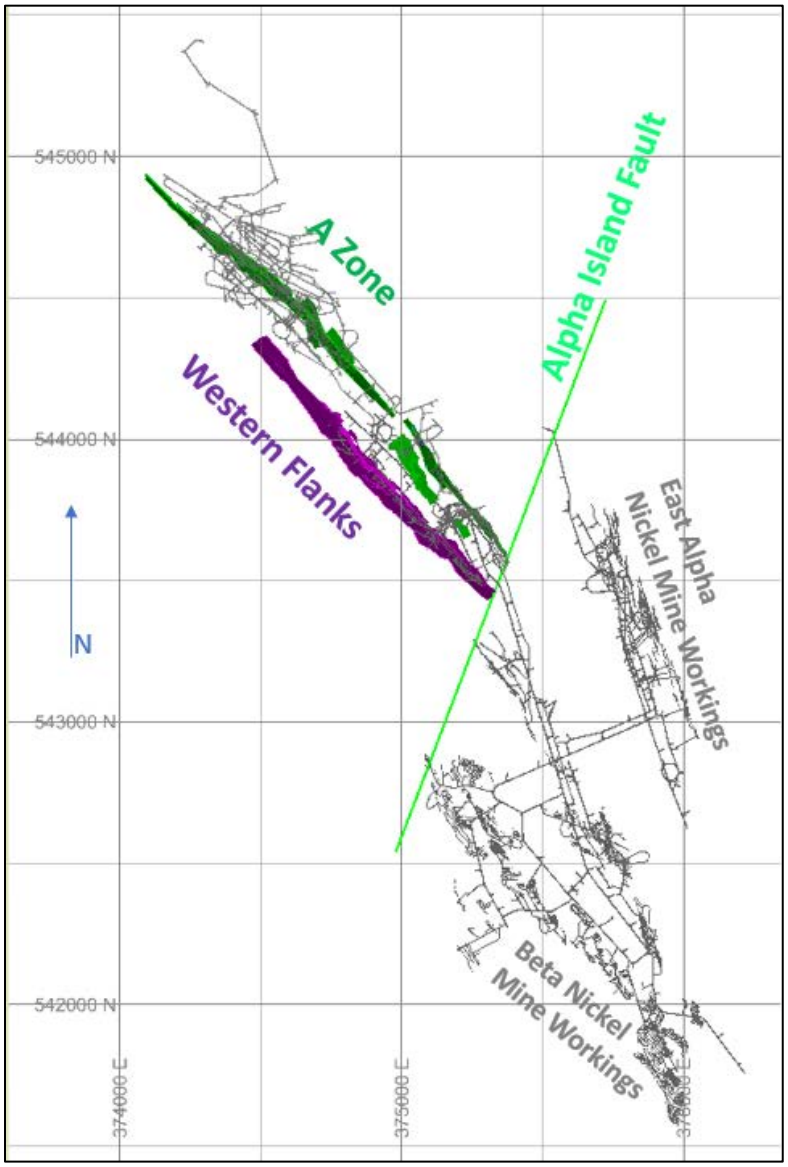
14.1.2 Resource Estimation Process

The resource estimation methodology involved the following procedures:

- Database compilation and verification of drill hole survey data and collar locations.
- Construction of wireframe models was completed for cross-cutting faults, host rock types and mineralization domains. Interpreted shapes for faults were modelled prior to the host lithologies due to the faults disrupting stratigraphy and mineralisation. Modelling host lithologies prior to modelling mineralised domains assisted interpretation of the architecture of the mineralisation with Beta Hunt gold bearing structures frequently located along/within the margins of different host lithologies.
- Data conditioning (compositing and capping of extreme grades) for geostatistical analysis and variography.
- Block modelling and grade interpolation. All domains have been estimated directly using ordinary kriging, however, the hangingwall domain of Western Flanks was coded with indicator values (mineralisation or waste) prior to estimating.
- Resource classification and validation.
- Depletion of the mineral resource using triangulations of development and stope voids supplied by Beta Hunt Mine surveyors.
- As Beta Hunt is an operating mine, the assessment of "reasonable prospects for eventual economic extraction" and selection of appropriate cut-off grades, is based on the cut off grade calculation in Section 16.1.4.
- Preparation of the Mineral Resource Statement

There are two estimation areas that make up the Beta Hunt gold Mineral Resource which are illustrated in the plan view location plot in Figure 14.1. Both areas are located immediately north of the Alpha Island Fault and the A Zone resource now captures the area previously named Western Flanks East.

Figure 14.1: Beta Hunt Gold Mineral Resource Locations



Source: SLM

No update was completed for the historical Beta Hunt nickel Mineral Resource published in the 2016 Technical Report by Penswick and Haren, titled "NI 43-101 Technical Report Preliminary Economic Assessment the Beta Hunt Mine Kambalda, Western Australia" (the "2016 PEA"). Since the effective date of this historical estimate (February 1, 2016), SLM has processed a total of 124kt grading 2.6% Ni (3,354 t contained Ni t) from the Beta Hunt mine.

14.1.3 Resource Database

The updated Beta Hunt Gold Mineral Resource estimate is based only on data obtained via diamond drilling that is kept on the site database and maintained using Datamine Fusion software. Approximately 541,000 metres are contained within the sub-lease boundary as presented in Table 14.1 and illustrated previously in

Figure 10.1. The data used for each estimate is discussed for each mineral resource area in the following sections.

Table 14.1: Beta Hunt Database

Drill Type	Pre-2016	2016-2019	Total Metres
Air Core	2,672		2,672
Diamond	459,005	77,376	536,381
Percussion	714		714
Rotary Air Blast	266		266
Reverse Circulation	1,269		1,269
Total	**463,926**	**77,376**	**541,302**

14.1.4 Gold

Drilling was conducted at A Zone by Western Mining Corporation (WMC) from 1978 to 1998 and Consolidated Minerals tested Western Flanks with diamond drilling from 2006 to 2007. Salt Lake Mining (SLM) directed exploration/resource extension/grade control drilling that was conducted by HMR Diamond Drilling contractors in two separate campaigns of diamond drilling between 2014 and 2017 and October 2018 through July 2019. Both campaigns tested Western Flanks and A Zone ore systems. The 2014-2017 activities also included some testing for nickel and gold mineralisation located south of the Alpha Island Fault.

Table 14.2: Summary of holes used for estimation of Gold for A Zone

Company	Type	Number	Proportion	Metres	Proportion
SLM	Diamond	405	38%	45,032	37%
pre-SLM (pre 2014)	Diamond	672	62%	75,382	63%
Total		**1077**			**120,414**

Table 14.3: Summary of holes used for estimation of Gold for Western Flanks

Company	Type	Number	Proportion	Metres	Proportion
SLM	Diamond	275	63%	37,037	50%
pre SLM	Diamond	160	37%	37,500	50%
Total		**435**			**74,537**

14.1.5 Nickel

No update was completed for the historical Beta Hunt nickel Mineral Resource published in the 2016 PEA.

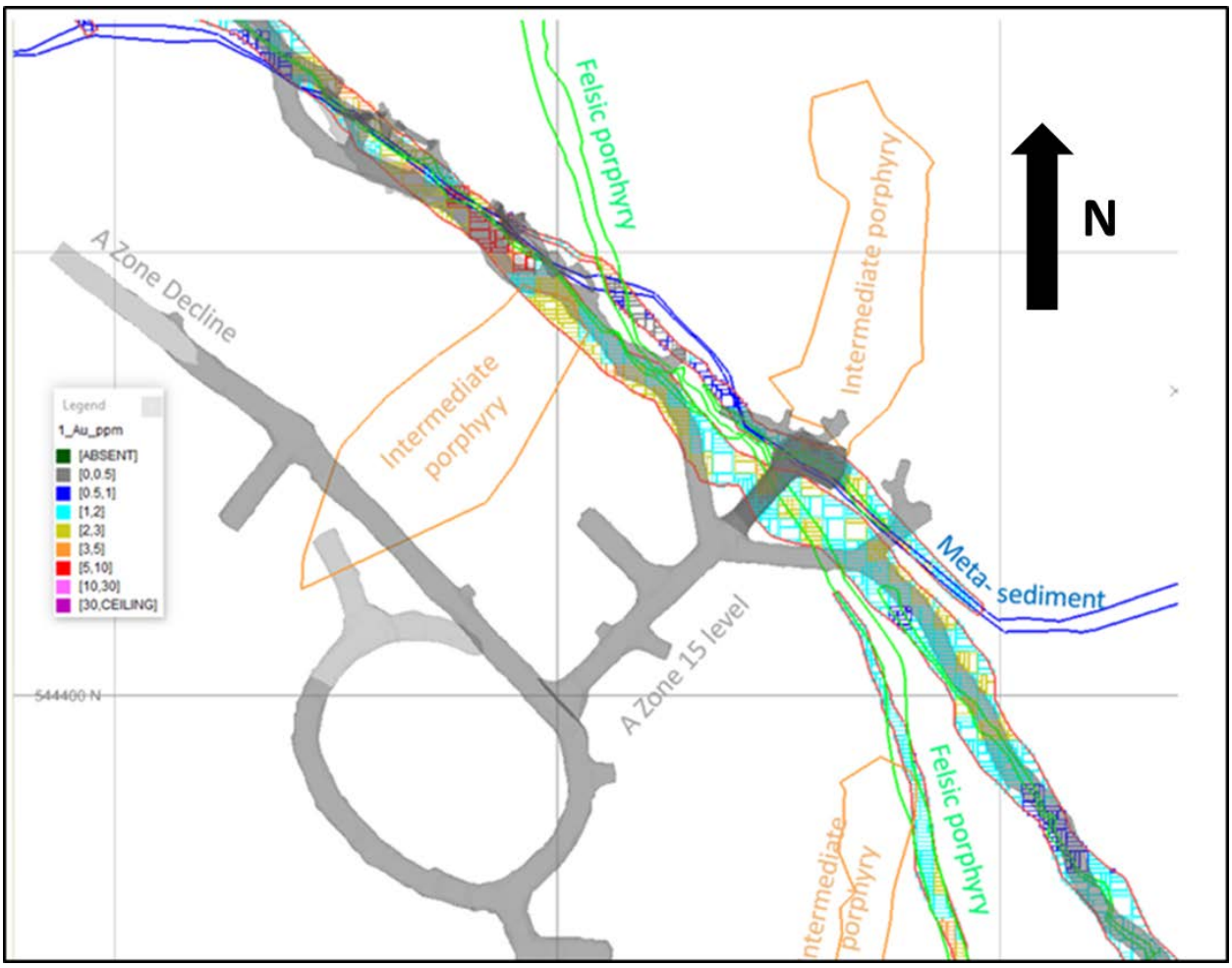
14.1.6 Solid Body Modelling

Gold mineralisation at Beta Hunt is predominantly hosted in basalt within shears. These shears are orientated subparallel/oblique to porphyritic intrusives that are more competent than the surrounding basalts

and, where present, meta-sediments. Fault zones offset rock strata small distances (approximately 5m offsets are common but 10m-20m offsets do occur) and post date mineralisation. Modelling of mineralised domains in Western Flanks and A Zone was accomplished after modelling cross-cutting faults (1st) and host rock types (2nd) due to the combined effect of variable rock strength and cross-cutting faults contributing to overall architecture of the mineralisation. Lenses of sedimentary rock types were modelled to identify areas of potential "Fathers Day Vein" style mineralisation.

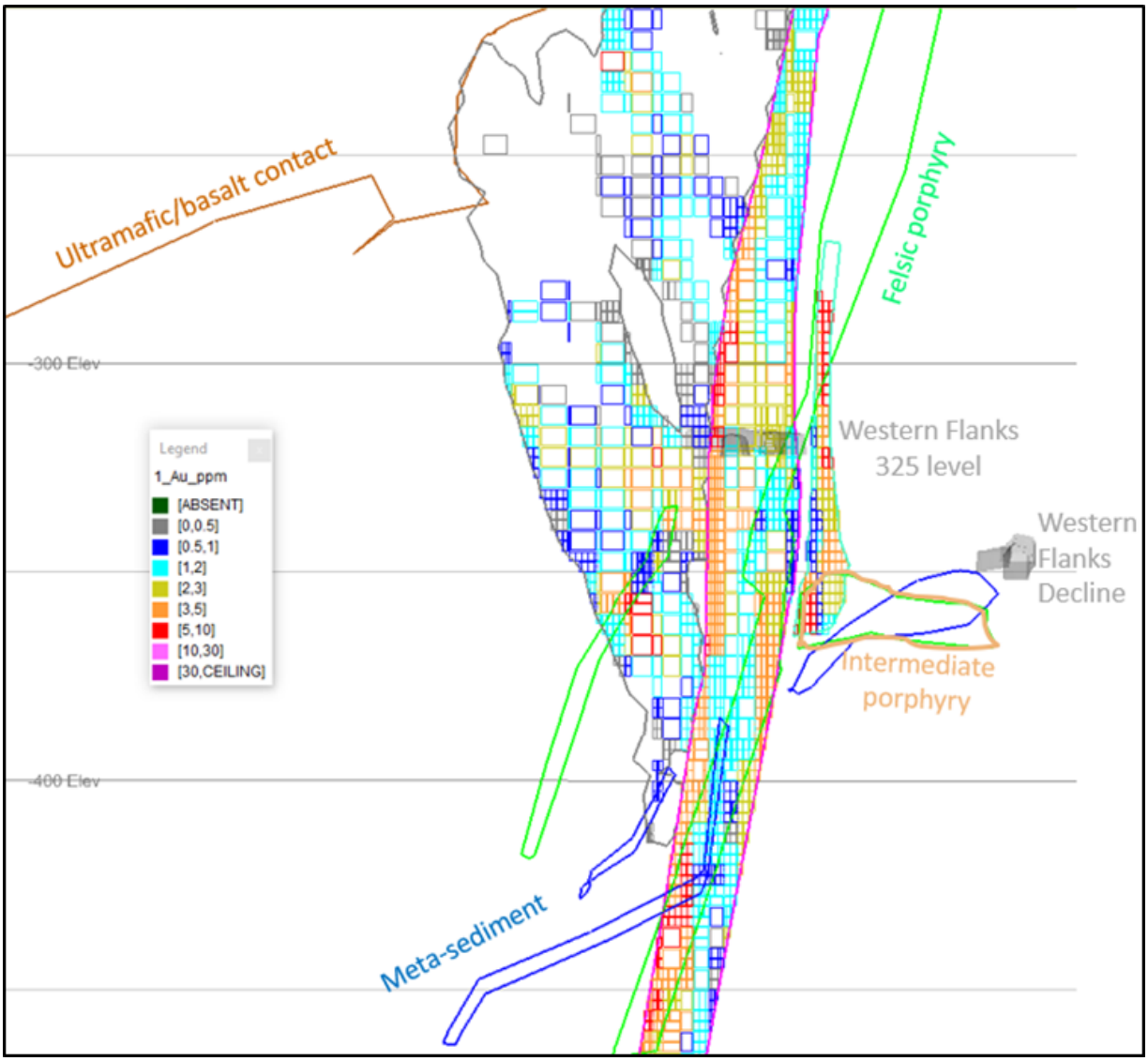
A plan view of the intrusive porphyries and meta-sediments with mineralised structures at A Zone 15 level is included in Figure 14.2 and a cross section showing the relationship of mineralisation with porphyries and meta-sediment is also shown for the Western Flanks (Figure 14.3).

Figure 14.2: Plan view of the host lithologies and mineralisation seen at A Zone 15 level.



Source: SLM

Figure 14.3: Cross section of the interpreted host lithologies and mineralisation at Western Flanks- looking north.



Source: SLM

14.1.7 Gold

For the construction of the gold mineralization domains, drill hole cross sections were evaluated at intervals matching drill hole spacing. Drill density at Western Flanks and A Zone is variable and sections were spaced between 5m and 40m. All available assay, lithology and structural data from the drill hole logs and geological mapping of underground exposures. Rock chip logs collected from lateral development exposures were used for interpreting mineralisation, however, they were not used for the estimation process. The coding for mineralised shears/penetrative foliation in drill core logs was used to delineate the margins of the main mineralised shears domain in Western Flanks and, to a lesser extent, A Zone.

Mineralization domains were identified using geological characteristics (shear intensity, biotite and/or pyrite alteration and logged veining intensity and style), orientation of logged structures and assay grades.

A geological approach to domain modelling indicates there are three principle styles of gold mineralisation in this mineral resource:

1. Shear related envelopes with variable grades related to plunging ore shoots that dip steeply to the west.

2. Vein swarms that consist of east dipping extensional quartz veins with minimal to no associated west dipping shear fabric (this style is confined to the hangingwall area of Western Flanks).

3. "Fathers Day Vein" style mineralisation where mineralised patches of extensional veins host coarse gold in areas where structures transect areas including intrusive intermediate porphyries and sulfidic meta-sediments.

The sectional mineralization outlines were manually triangulated to form three-dimensional wireframes in all domains except for the hangingwall area of Western Flanks (domain 8). The fault and lithology models were used to justify changes in thickness of mineralisation plus variations in strike and dip. 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 biotite-pyrite alteration.

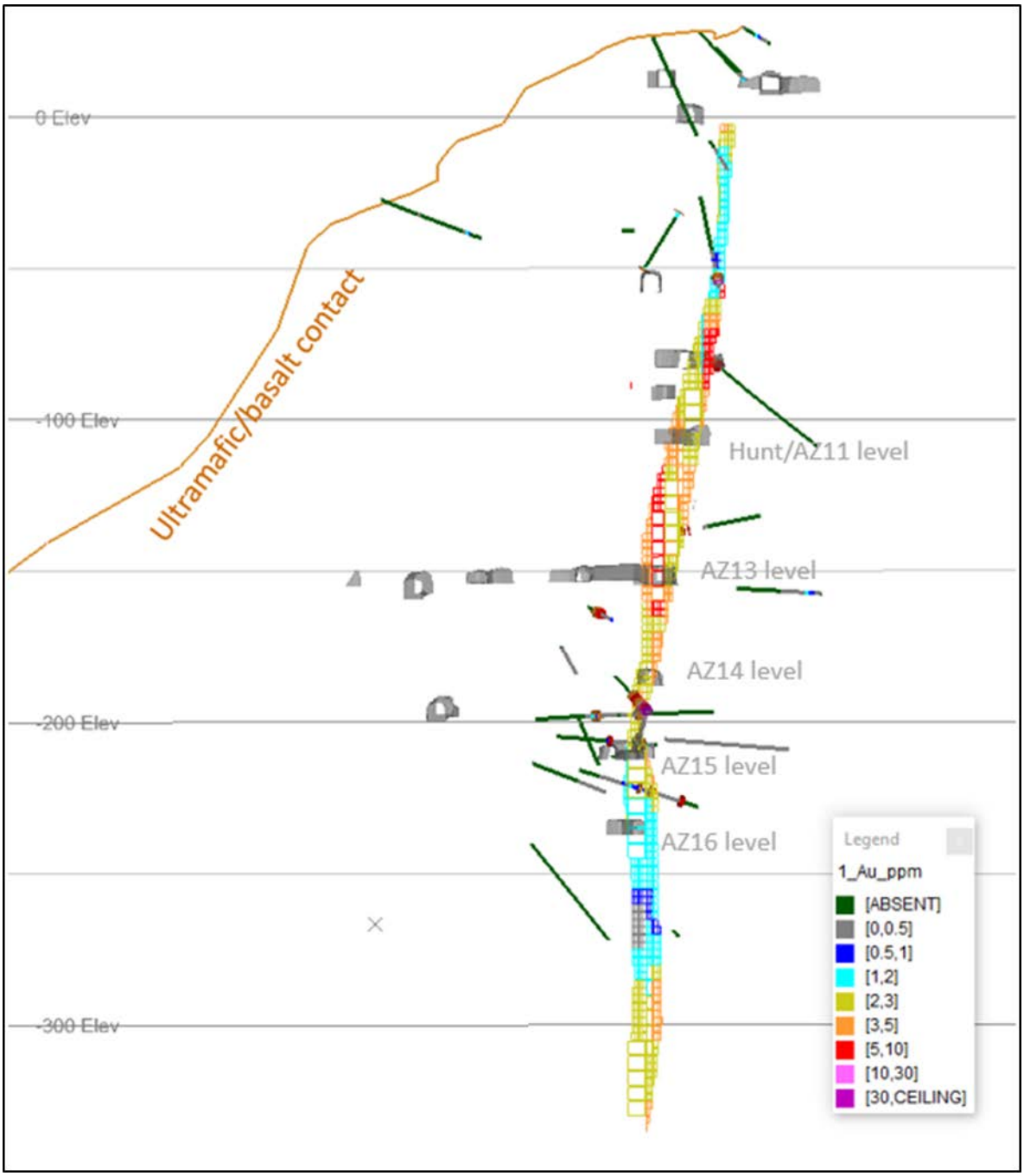
Validations of the wireframes were carried out in section and plan view, and all wireframes were verified as coherent solids. All mineralised domains were subject to peer review and a technical review of the structural framework of A Zone and Western Flanks was conducted by AMC (AMC, 2019) during May 2019 to guide/support interpreted mineralised domains.

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

Figure 14.4 shows a cross section through the A Zone gold mineralization interpretation,

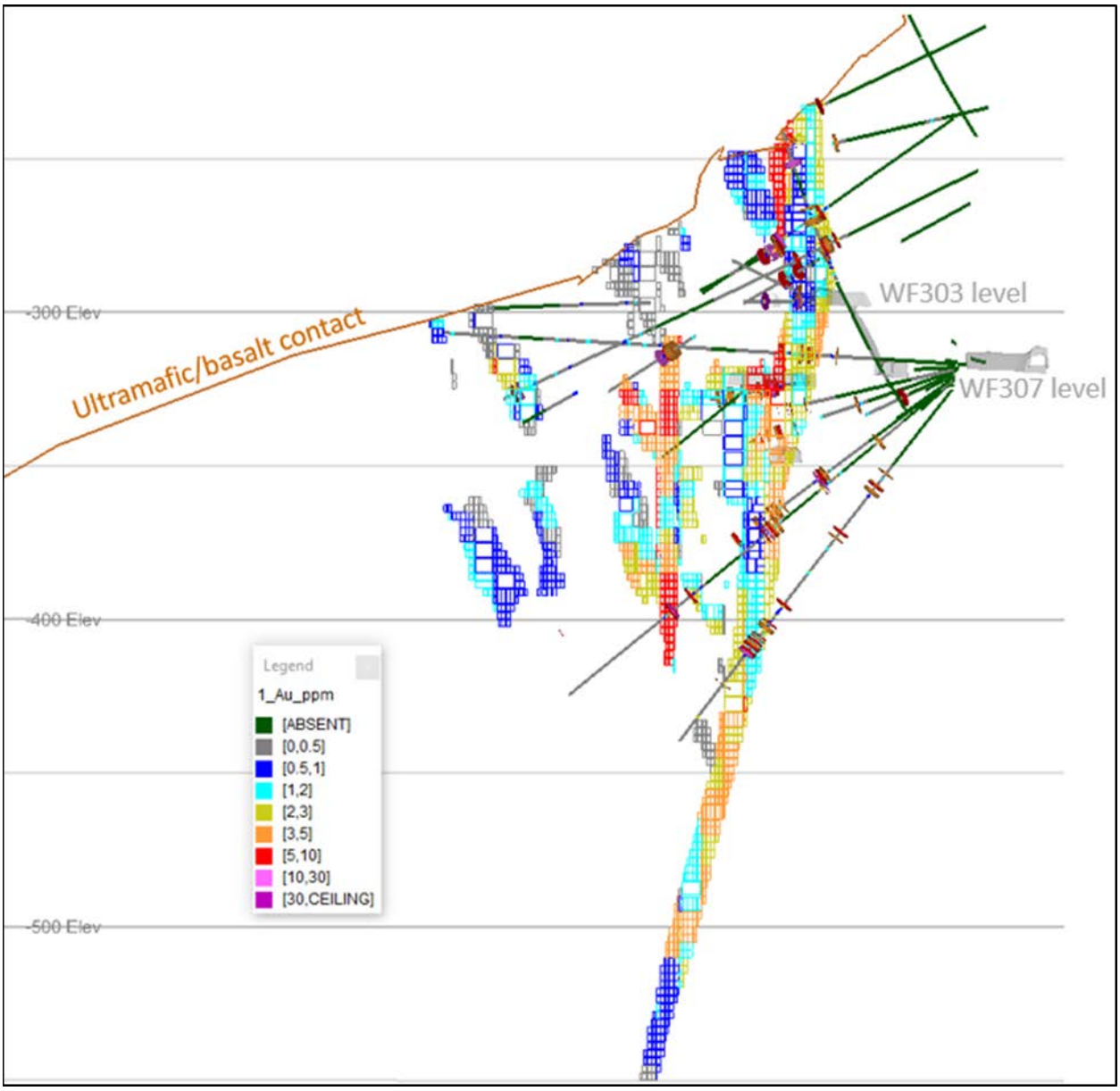
Figure 14.5 through the Western Flanks gold mineralization interpretation.

Figure 14.4: Example Section of A Zone Gold Mineralization. Assays over 3 g/t displayed with broad drill trace.



Source: SLM

Figure 14.5: Example Section of Western Flanks Gold Mineralization. Assays over 3 g/t displayed with broad drill trace.



Source: SLM

14.1.8 Compositing

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

14.1.9 Gold

For the estimation of gold, the mineralization wireframes were used to code the diamond drill samples with a unique domain code for each discrete lode. The samples were composited to a standard one metre length

with a maximum length of 1.5m used to minimise bias associated with composite lengths less than 1m. The composites were validated visually against the wireframes and geological mapping of lateral development.

14.1.10 Statistical Analysis and Variography

Gold

Statistics for the composited gold values were examined to determine if top-cuts (assay capping) was required. If the co-efficient of variation (COV) is higher than 2 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, and log scale histograms were used to determine top-cuts for composited grades and were further refined where extreme grades contributed to apparent over-estimation (due to lack of drilling or clustering of drill data).

The A Zone global statistics are compared in Table 14.4 and capped composite grades are included where capping was applied. Four domains were subject to grade capping (domain 20, 21, 25, 31). The statistics for each domain of A Zone are included in Table 14.5.

Table 14.4: A Zone Global DD Assay and Composite Statistics

Data	Number	Min	Max	Mean	StDev	Variance	COV
Raw Samples	10113	0.005	1408	2.72	16.98	288.32	6.24
1 m Comps	7607	0.02	455	2.35	8.8	77.44	3.49
Top-cut Comps	7607	0.02	60	2.2	3.76	14.14	1.71

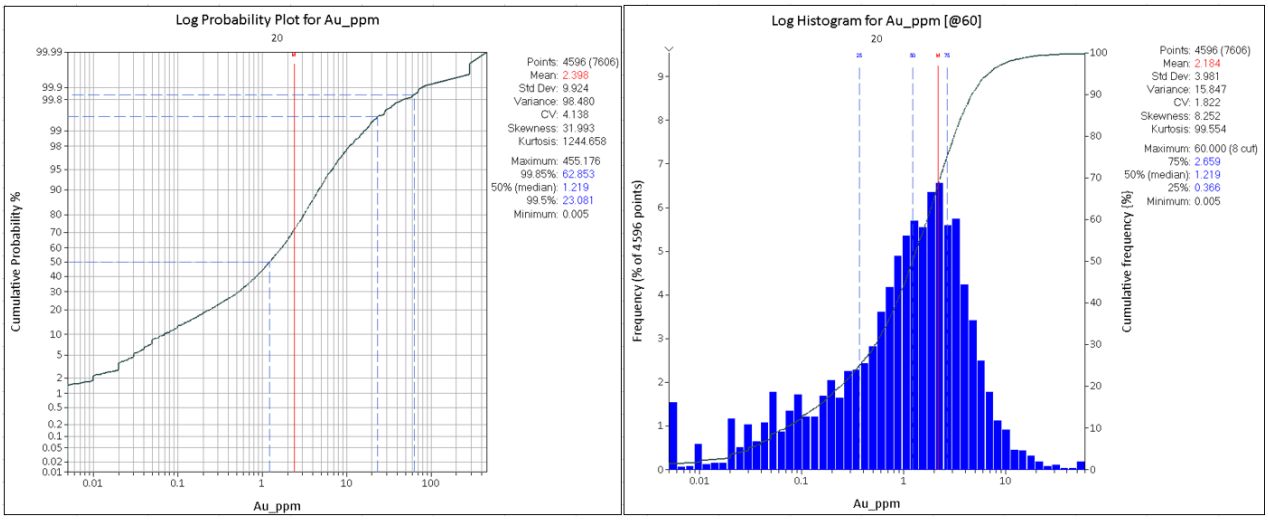
Table 14.5: A Zone Composite Statistics by Domain

Domain	Count	Minimum	Maximum	Mean	Std Dev	Variance	CV
20	4,596	0.01	455.18	2.40	9.92	98.48	4.14
20 capped	4,596	0.01	60.00	2.18	3.98	15.85	1.82
21	1,132	0.01	141.58	2.89	6.88	47.32	2.38
21 capped	1,132	0.01	40.00	2.72	4.44	19.71	1.63
22	61	0.01	17.80	1.90	3.51	12.30	1.85
23	41	0.01	7.17	1.47	2.03	4.13	1.38
24	282	0.01	16.97	2.02	2.71	7.36	1.34
25	210	0.01	90.00	3.60	7.62	58.14	2.12
25 capped	210	0.01	40.00	3.36	5.36	28.70	1.60
26	175	0.01	18.35	1.82	2.88	8.28	1.58
27	91	0.01	9.78	1.84	2.23	4.98	1.21
28	229	0.01	24.96	2.62	3.54	12.56	1.35
29	35	0.01	7.19	1.99	2.09	4.37	1.05
30	72	0.01	15.08	2.06	2.87	8.25	1.40

Domain	Count	Minimum	Maximum	Mean	Std Dev	Variance	CV
31	24	0.01	20.80	2.69	4.87	23.73	1.81
31 capped	24	0.01	15.00	2.50	4.00	16.00	1.63
32	161	0.01	12.30	1.32	2.00	3.99	1.51
33	84	0.01	11.35	1.06	1.59	2.51	1.49
34	218	0.01	25.70	1.33	2.74	7.51	2.06
35	103	0.01	11.20	1.13	1.88	3.52	1.65
36	50	0.05	13.60	2.00	2.37	5.63	1.19
37	32	0.02	6.08	1.34	1.53	2.33	1.14
38	10	0.69	8.54	3.87	2.73	7.45	0.71

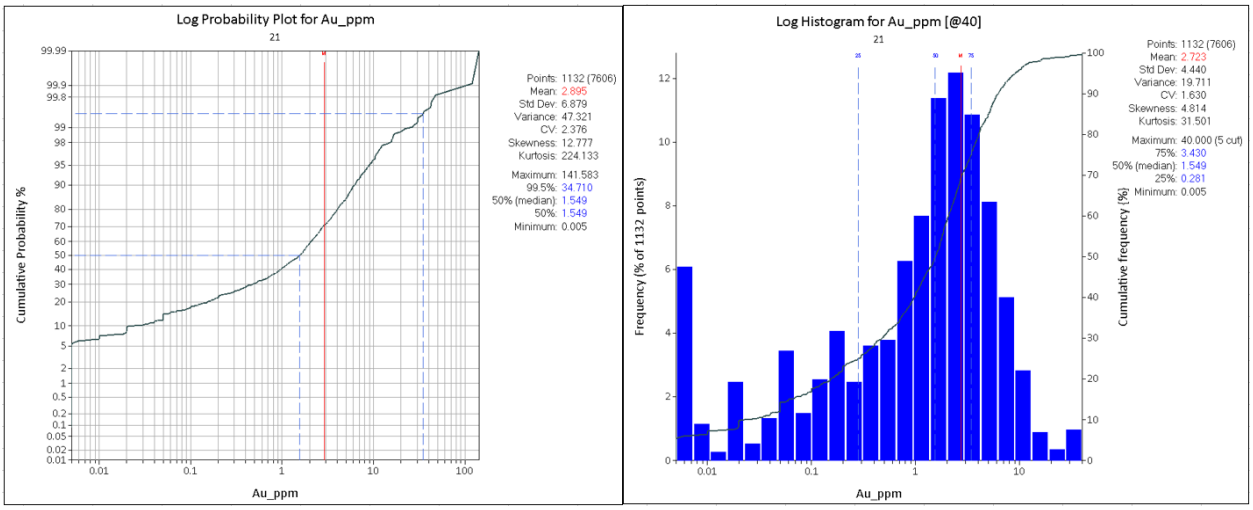
Top cuts were applied to the domains 20, 21, 25 and 31. Log probability plots (domain population) and cumulative histograms (capped domain population) of the Domains 20 and 21 are included in Figure 14.6 and Figure 14.7.

Figure 14.6: A Zone Domain 20 composite statistics



Source: SLM

Figure 14.7: A Zone Domain 21 composite statistics



Source: SLM

Variography was performed on the composited drill data for domains 20 through 37. The data was output from Datamine to a csv file in order to import the data into Supervisor 8 and evaluate spatial continuity of gold grades. Most variogram models plunge northwards along strike.

The variogram models used for estimating A Zone are summarized in Table 14.6. variogram models consist of the nugget and a minimum of two nested directional structures. All directional structures were modelled using spherical variograms.

Table 14.6: A Zone Variogram Models

Domain	Angle 1	Angle 2	Angle 3	Axis 1	Axis 2	Axis 3	Nugget	ST1 range 1	ST1 range 2	ST1 range 3	Variance protportion ST1	ST2 range 1	ST2 range 2	ST2 range 3	Variance protportion ST2	ST3 range 1	ST3 range 2	ST3 range 3	Variance proportion ST3
20	135	-90	60	3	2	3	0.52	8	2	3	0.17	15	10	7	0.19	44	30	8	0.12
21	135	-80	55	3	2	3	0.36	3	29	3	0.14	35	33	5	0.22	140	44	7	0.28
22	130	-85	50	3	2	3	0.54	25	20	1	0.22	28	24	6	0.23				
23	-40	-100	-10	3	2	3	0.57	20	28	4	0.19	35	35	8	0.24				
24	135	-85	40	3	2	3	0.51	42	8	5	0.11	61	62	8	0.38				
25	-40	-100	-10	3	2	3	0.57	20	28	4	0.19	35	35	8	0.24				
26	-50	-90	-75	3	2	3	0.37	37	20	2	0.4	49	40	4	0.24				
27	-35	-95	-60	3	2	3	0.18	20	46	1	0.09	61	50	3	0.72				
28	140	-80	70	3	2	3	0.34	13	20	2	0.4	63	32	4	0.25				
29	-35	-90	-30	3	2	3	0.55	18	20	2	0.19	37	35	3	0.26				
30	-35	-95	-50	3	2	3	0.39	58	20	1	0.29	71	23	4	0.33				
31	-25	-90	-30	3	2	3	0.28	20	8	3	0.44	26	21	4	0.27				
32	-35	-95	-70	3	2	3	0.4	16	20	2	0.32	30	37	6	0.29				
33	150	-130	130	3	2	3	0.21	20	10	1	0.34	39	18	5	0.44				
34	150	-140	100	3	2	3	0.6	11	8	4	0.17	74	14	8	0.22				
35	-15	-100	-20	3	2	3	0.25	36	26	1	0.42	45	36	5	0.34				
36	-25	-105	-45	3	2	3	0.37	33	8	2	0.23	64	32	4	0.4				
37	-40	-145	95	3	2	3	0.5	28	9	3	0.15	44	25	6	0.35				
38	-40	-145	95	3	2	3	0.5	28	9	3	0.15	44	25	6	0.35				

or the Western Flanks the global statistics of the raw diamond drill assays and composites are included in Table 14.7. Statistics for composites by domain are included in Table 14.8.

Table 14.7: Western Flanks Global DD assay and composite statistics

Data	Number	Min	Max	Mean	StDev	Variance	COV
Raw Samples	22308	0.0005	7607.0	2.24	54.16	2933.48	24.21
1 m Comps	13983	0.005	1755	2.02	21.01	441.33	10.38
Top-cut Comps	13983	0.005	40.00	1.63	3.38	11.41	2.07

Table 14.8: Western Flanks composite statistics by domain

Domain	Count	Minimum	Maximum	Mean	Std Dev	Variance	CV
1	5,245	0.005	394	2.44	8.32	69.27	3.40
1 capped	5,245	0.005	40.00	2.27	3.69	13.64	1.63
2	203	0.005	1,755	21.29	164.62	27,099	7.73
2 capped	203	0.005	30.00	2.69	5.41	29.26	2.01
3	68	0.02	322	7.23	38.90	1,513	5.38
3 capped	68	0.02	20.00	2.66	3.93	15.47	1.48
4	121	0.005	30.75	1.54	3.31	10.95	2.14
4 capped	121	0.005	10.00	1.37	2.10	4.41	1.53
5	40	0.02	14.60	1.30	2.46	6.03	1.89
6	104	0.005	8.82	1.03	1.57	2.47	1.52
7	178	0.005	112	3.06	9.72	94.41	3.17
7 capped	178	0.005	25.00	2.38	3.81	14.54	1.60
8	8,005	0.005	214	1.21	4.01	16.11	3.31
8 capped	8,005	0.005	40.00	1.18	3.02	9.12	2.57
10	19	0.05	30.80	2.89	6.89	47.53	2.38
10 capped	19	0.05	15.00	2.06	3.42	11.68	1.66

Variography was performed on the composited data for all interpreted mineralised domains for Western Flanks. Composited assay data was output from Datamine to a csv file in order to import the data into Supervisor 8. Domains 3, 5 and 10 include small populations of drill data and subsequently variogram models were allocated to suit the extents of the individual domains. Spatial continuity in the domains with larger populations indicates grade is plunging northwards along strike. The variogram models used for estimation of Western Flanks is summarized in Table 14.9.

Table 14.9: Western Flanks variogram models

Domain	Angle 1	Angle 2	Angle 3	Axis 1	Axis 2	Axis 3	Nugget	ST1 range 1	ST1 range 2	ST1 range 3	Variance protportion ST1	ST2 range 1	ST2 range 2	ST2 range 3	Variance protportion ST2	ST3 range 1	ST3 range 2	ST3 range 3	Variance proportion ST3
1	130	-85	-140	3	2	3	0.69	27	23	7	0.23	50	34	8	0.06	86	35	9	0.03
2	-45	-85	-5	3	2	3	0.59	27	14	1	0.13	38	15	3	0.28				
3	-35	-95	-10	3	2	3	0.63	12	20	1	0.24	30	31	4	0.13				
4	-35	-95	-20	3	2	3	0.39	19	20	2	0.36	27	22	6	0.25				
5	-50	-85	-70	3	2	3	0.34	17	11	1	0.46	36	20	2	0.21				
6	-45	-100	-70	3	2	3	0.11	20	20	2	0.38	79	25	4	0.51				
7	125	-85	-160	3	2	3	0.29	24	20	2	0.39	50	27	3	0.32				
10	-50	-85	-70	3	2	3	0.34	17	11	1	0.46	36	20	2	0.21				
8	135	-120	160	3	2	3	0.48	14	9	4	0.46	15	25	5	0.06				

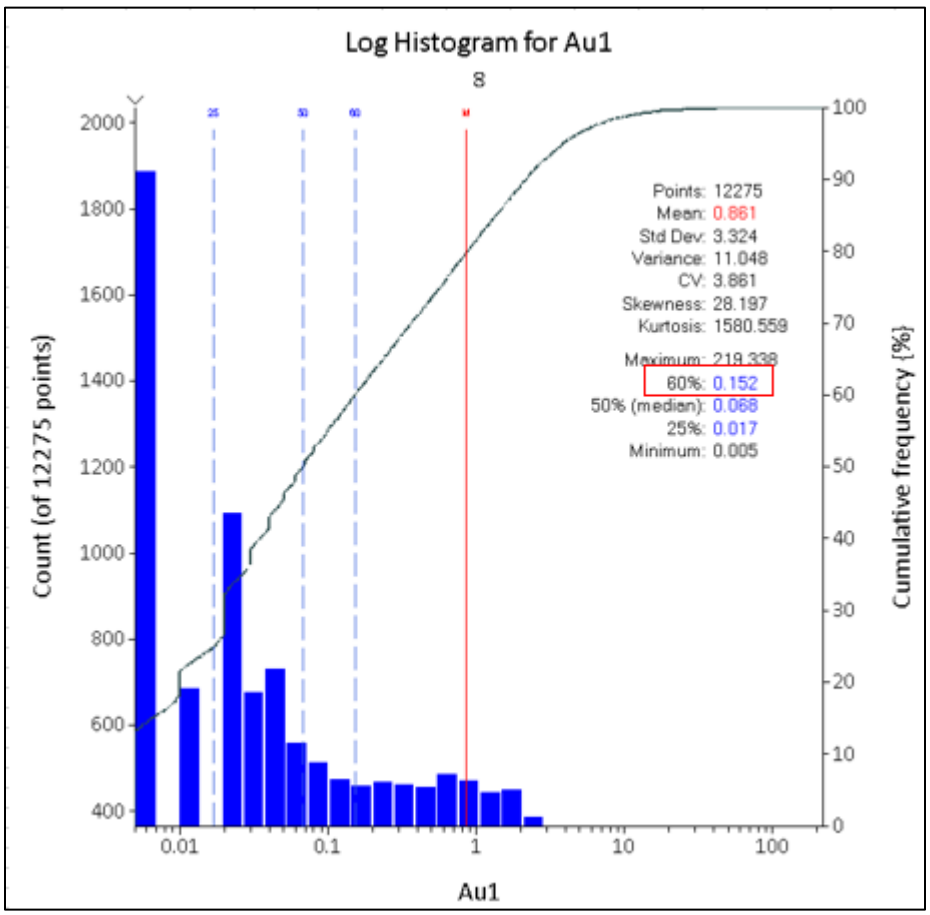
14.1.11 Western Flanks Domain 8 Indicator modelling

The structure and style of mineralisation in the area located above the hangingwall of the main Western Flanks Shear (domain 1) is not associated with steep, west dipping shear fabrics which characterises the main shear domain. Instead, the hangingwall is associated with a range of structural orientations (that combine to form an ordered stockwork), the dominant orientation is steep, east dipping and swarms of narrow extensional veins associated with pockets of economic mineralisation. This area is identified as domain 8 in the Mineral Resource and drill data has been coded and conditioned using the following methodology:

1. All drill assays in the area located above the Western Flanks Shear (excluding drill data from domain 7 that is also located above the shear hangingwall) composited to 1m lengths and statistics reviewed.

2. The 60th percentile of the population was selected to segregate the population into "mineralised" composites and "unmineralized" composites. Mineralised composites were coded 1 and waste was coded 0. The 60th percentile of the area above the shear hanging-wall is 0.15 Au g/t. All un-sampled intervals were allocated a grade of 0.01 Au g/t.

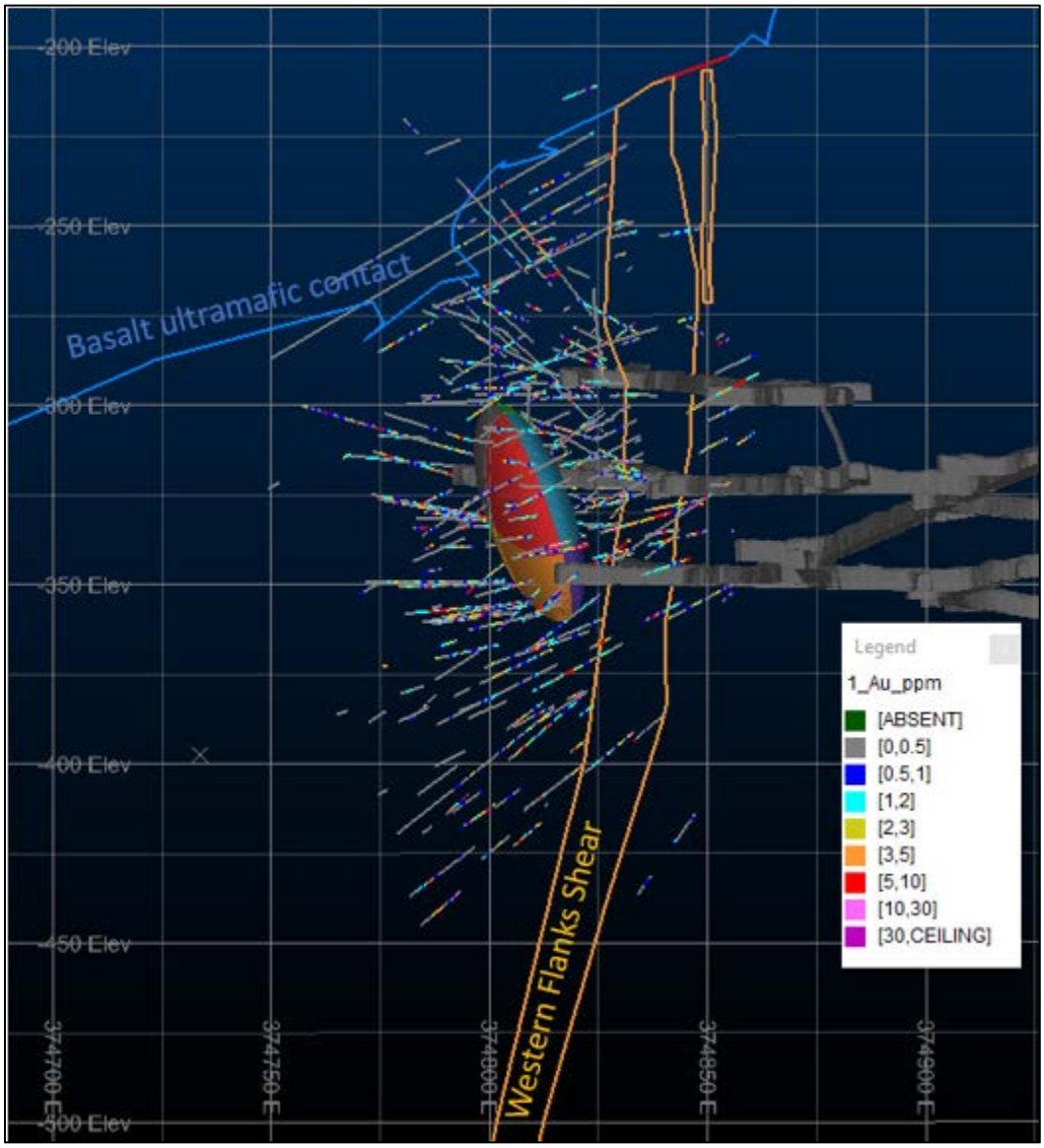
Figure 14.8: Composited assay data from area located above the Western Flanks Shear hangingwall.



Source: SLM

3. The indicator coded composites were the basis for an indicator estimate. The indicator model was built using a rotated block framework that strikes 322° and dips 76° towards the east. Parent blocks dimensions were 5m*5m*5m. The variogram model used for this indicator estimation was orientated with weak anisotropy plunging steep north east.

Figure 14.9: Variogram model used to estimate domain 8 indicator variable.



Source: SLM

4. Iso-shell triangulation of the estimated indicator variable was generated using a 0.4 indicator cut-off. The 0.4 value represents a 40% probability of the block having a minimum grade of 0.15 Au g/t.

5. The iso-shell was trimmed using wireframe boolean operations to suit interpreted geology.

6. Drill assays were selected within the final iso-shell that is the basis for estimating domain 8 gold grades, composited to 1m lengths and grades capped to 40 Au g/t.

14.1.12 Block Model and Grade Estimation

Gold

All modelled mineralised domains were estimated onto 5m X* 5m Y* 5m Z block models, full details of the model parameters are listed in Table 14.10.

Table 14.10: Gold: Block model parameters

Area	A_Zone	Western Flanks
Model	az_201908_au-m	wf_201907_au-m
Software	Datamine	Datamine
Rotation	No	No
X Origin	369000 mE	374325 mE
Y Origin	543455 mN	543255 mN
Z Origin	-550 mRL	-600 mRL
X Extent	1,600	1,060
Y Extent	1,735	1155
Z Extent	625	500
X Block Size	5	5
Y Block Size	5	5
Z Block Size	5	5
X Sub-cell	1	1
Y Sub-cell	1	1
Z Sub-cell	1	1

All domains (except for Domain 8 in Western Flanks) were subject to dynamic anisotropy prior to estimating gold grades. Dynamic anisotropy is a technique that accounts for local variations in strike and dip within an estimation domain and allows small changes in orientation of the estimation search ellipsoid to better suit the local orientation of the neighbouring margins of the domain. Gold grades were estimated directly with ordinary kriging. Only data from within each domain was used for estimating, thus the domain boundaries can be considered hard. The composited assay data was top-cut prior to estimation as discussed in the statistics section of this report.

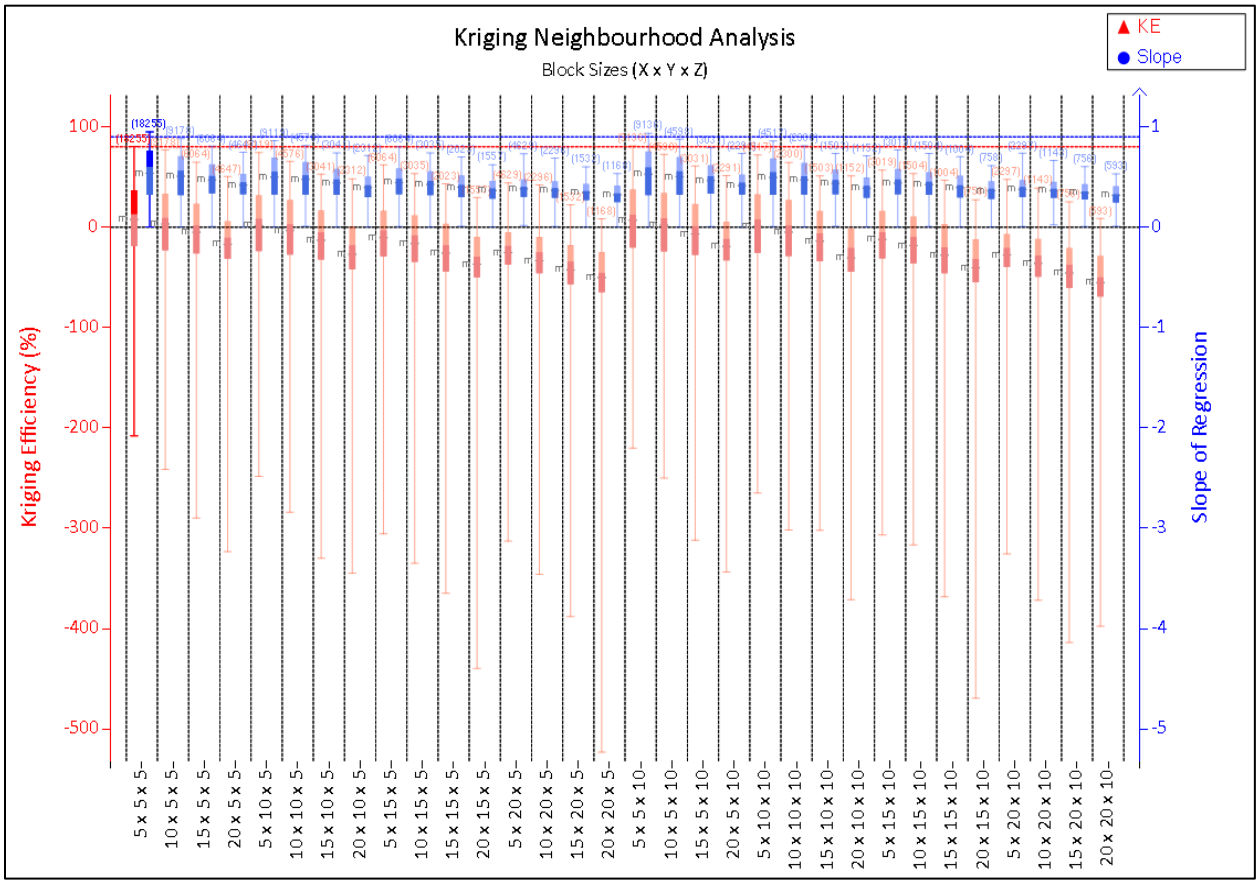
Discretization of parent 5m blocks was set to 2X 2Y 2 Z for both all mineralisation domains. Kriging Neighbourhood Analysis (Figure 14.9) of the domains with reasonable drill coverage (5m block size with 8 discretizations is supported by kriging efficiency and slope of regression analysis). Search neighbourhood distances were multiplied by expansion factors (between 1.25 and 2) to facilitate estimation of areas subject to broad drill hole spacing (beyond 40m*40m spaced drill centres) and un-tested ground along strike or down dip from resource definition drilling. Example cross sections of the estimates are shown in Figure 14.10 for A Zone, Figure 14.11 for Western Flanks.

Table 14.11: Variogram models

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	44	30	8	4	22	55	37.5	10	4	22	66	45	12	4	22
AZ	21	140	44	7	4	22	175	55	8.75	4	22	210	66	10.5	2	9
AZ	22	28	24	6	4	14	35	30	7.5	4	14					
AZ	23	85	40	5	4	14	106.25	50	6.25	4	14	170	80	10	2	9
AZ	24	61	62	8	4	22	76.25	77.5	10	4	22	91.5	93	12	4	10
AZ	25	35	35	8	4	22	43.75	43.75	10	4	22	52.5	52.5	12	4	22
AZ	26	49	40	4	4	20	61.25	50	5	4	20					
AZ	27	61	50	3	4	14	76.25	62.5	3.75	4	14	91.5	75	4.5		
AZ	28	63	32	4	4	28	78.75	40	5	4	28	94.5	48	6	2	28
AZ	29	37	35	3	4	14	46.25	43.75	3.75	4	14				4	14
AZ	30	71	23	4	4	14	88.75	28.75	5	4	14	106.5	34.5	6		
AZ	31	26	21	4	4	14	32.5	26.25	5	4	14	39	31.5	6	3	14
AZ	32	30	37	6	4	22	37.5	46.25	7.5	4	22				3	14
AZ	33	39	18	5	4	22	48.75	22.5	6.25	4	22	58.5	27	7.5		
AZ	34	74	14	8	4	22	92.5	17.5	10	4	22	111	21	12	4	22
AZ	35	45	36	5	4	16	56.25	45	6.25	4	16	67.5	54	7.5	4	16
AZ	36	64	32	4	4	16	80	40	5	4	16	96	48	6	4	16
AZ	37	44	25	6	4	16	55	31.25	7.5	4	16	66	37.5	9	4	16
AZ	38	44	25	6	3	16	55	31.25	7.5	3	16	66	37.5	9	3	16
WF	1	86	35	9	6	22	107.5	43.75	11.25	6	22	172	70	18	4	22
WF	2	38	15	3	4	12	47.5	18.75	3.75	4	12	-	-	-	-	-
WF	3	30	31	4	4	12	37.5	38.75	5	4	12	46.5	6	8	4	12
WF	4	27	22	6	4	12	33.75	27.5	7.5	4	12	33	9	12	4	12
WF	5	36	20	2	4	12	45	25	2.5	4	12	30	3	4	4	12
WF	6	79	25	4	4	14	98.75	31.25	5	4	14	37.5	6	8	4	14
WF	7	50	27	3	4	16	62.5	33.75	3.75	4	16	40.5	4.5	6	4	16
WF	8	15	25	5	4	12	18.75	31.25	6.25	4	12	-	-	-	-	-
WF	8 ind	33	29	11	4	16	41.25	36.25	13.75	4	16	49.5	43.5	16.5	4	16
WF	10	36	20	2	4	12	45	25	2.5	4	12	54	30	3	4	12

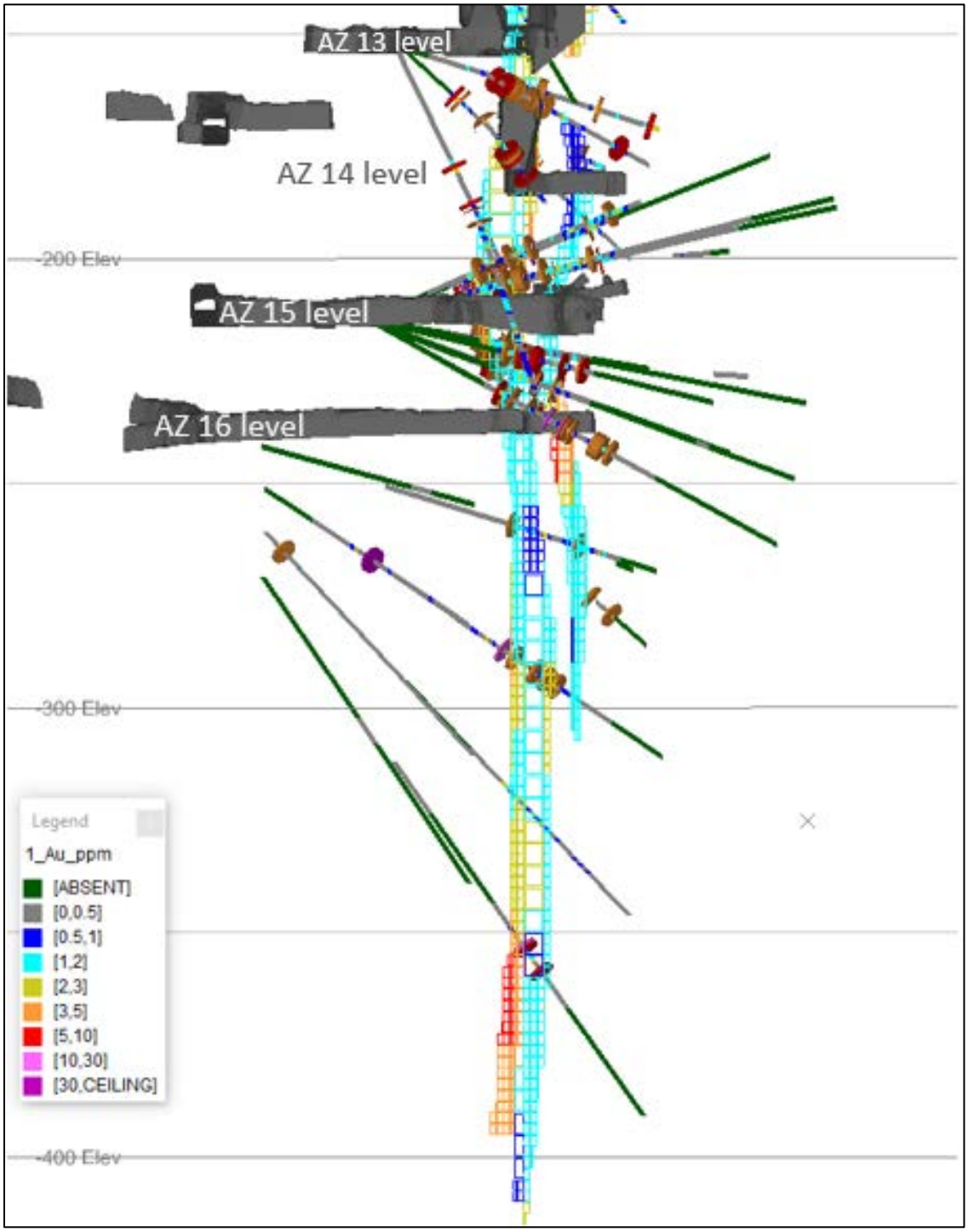
AZ = A Zone, WF = Western Flanks

Figure 14.10: Western Flanks Domain 1 Kriging Neighbourhood Analysis



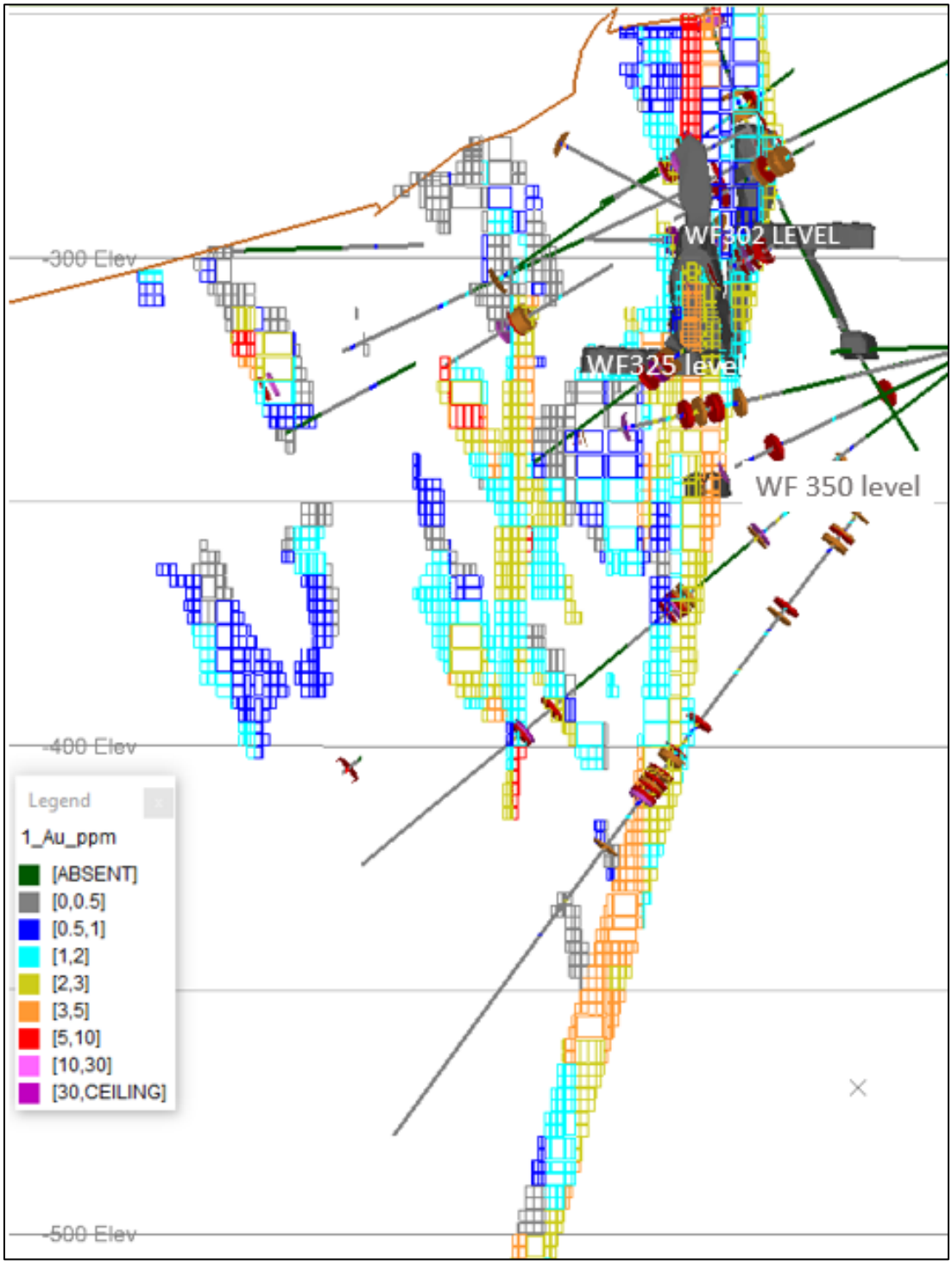
Source: SLM

Figure 14.11: Gold A Zone block model in cross section coloured by gold grade. Looking North. Drill assays grater than 3 Au g/t displayed with broad trace.



Source: SLM

Figure 14.12: Gold Western Flanks block model in oblique section view coloured by gold grade. Looking North. Drill assays grater than 3 Au g/t displayed with broad trace.



Source: SLM

14.1.13 Density

Blocks were coded for density values according to the average values for rock type. Table 14.12 includes the density values allocated to the respective rock types.

Table 14.12: Density values for Beta Hunt Gold Host lithologies.

Rock type	density (g/cm3)
Felsic porphyry	2.71
Intermediate porphyry	2.71
Meta-sediment	2.89
Basalt	2.84

14.1.14 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 were validated by:

- Swath plots of composite grades vs block grades. Each domain was assessed with cross section orientation (perpendicular to strike) and plan slices were reviewed for.

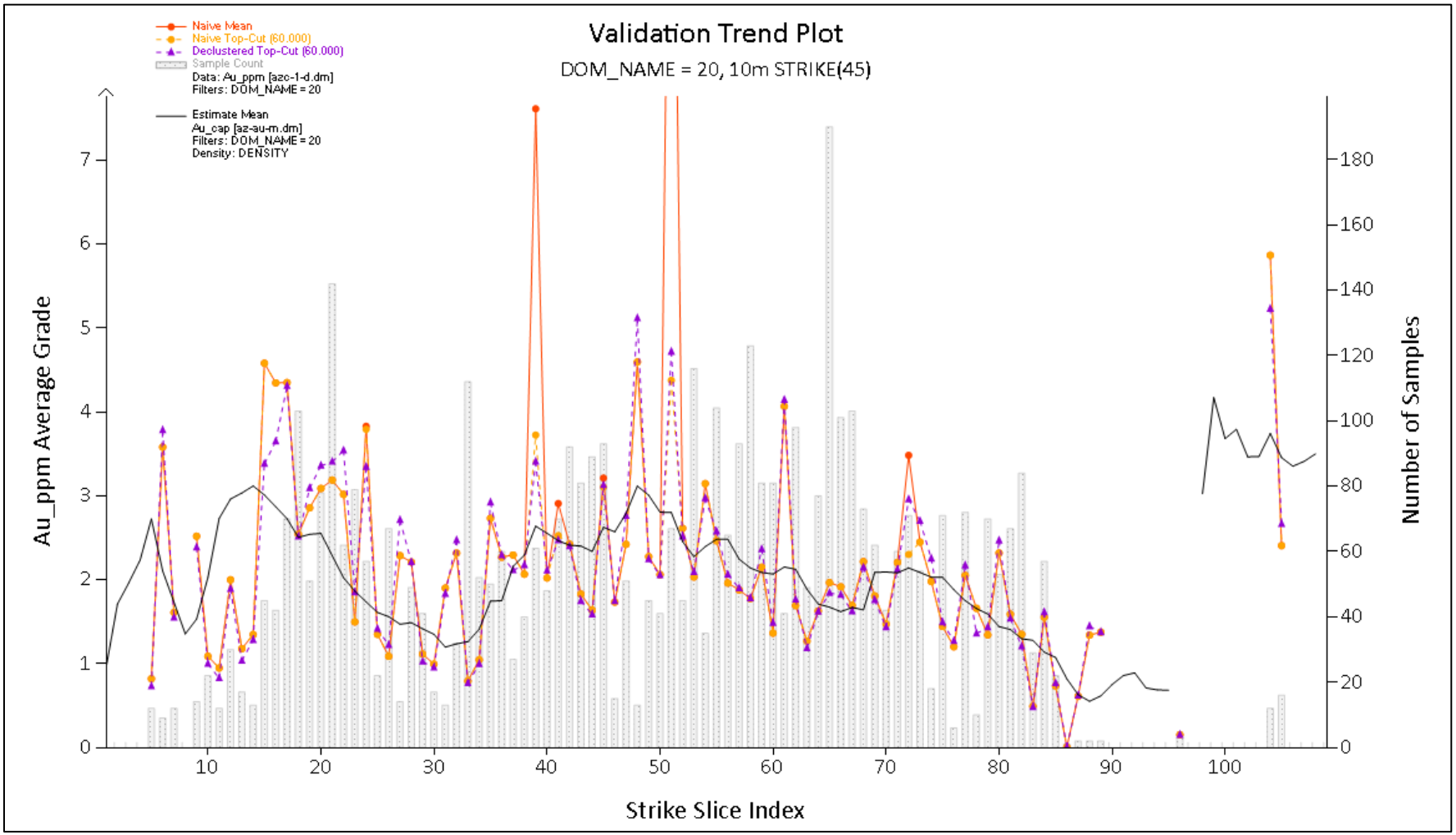
- Visual examination of the model and composite data to ensure the expected grade continuity has been produced and the estimate reflects the input composites.

- Global comparison of composite and block populations by domain (Table 14.12, Table 14.13).

The swath plots show reasonable correlation between the composite grades and block model grades along strike and on plan section. Examples of swath plots for A Zone (figures 14.13 and 14.14) and Western Flanks (figures 14.15 and 14.16). The comparison identifies areas where apparent estimation errors are due to either poor drill coverage or isolated extreme grades in the composited drill assays.

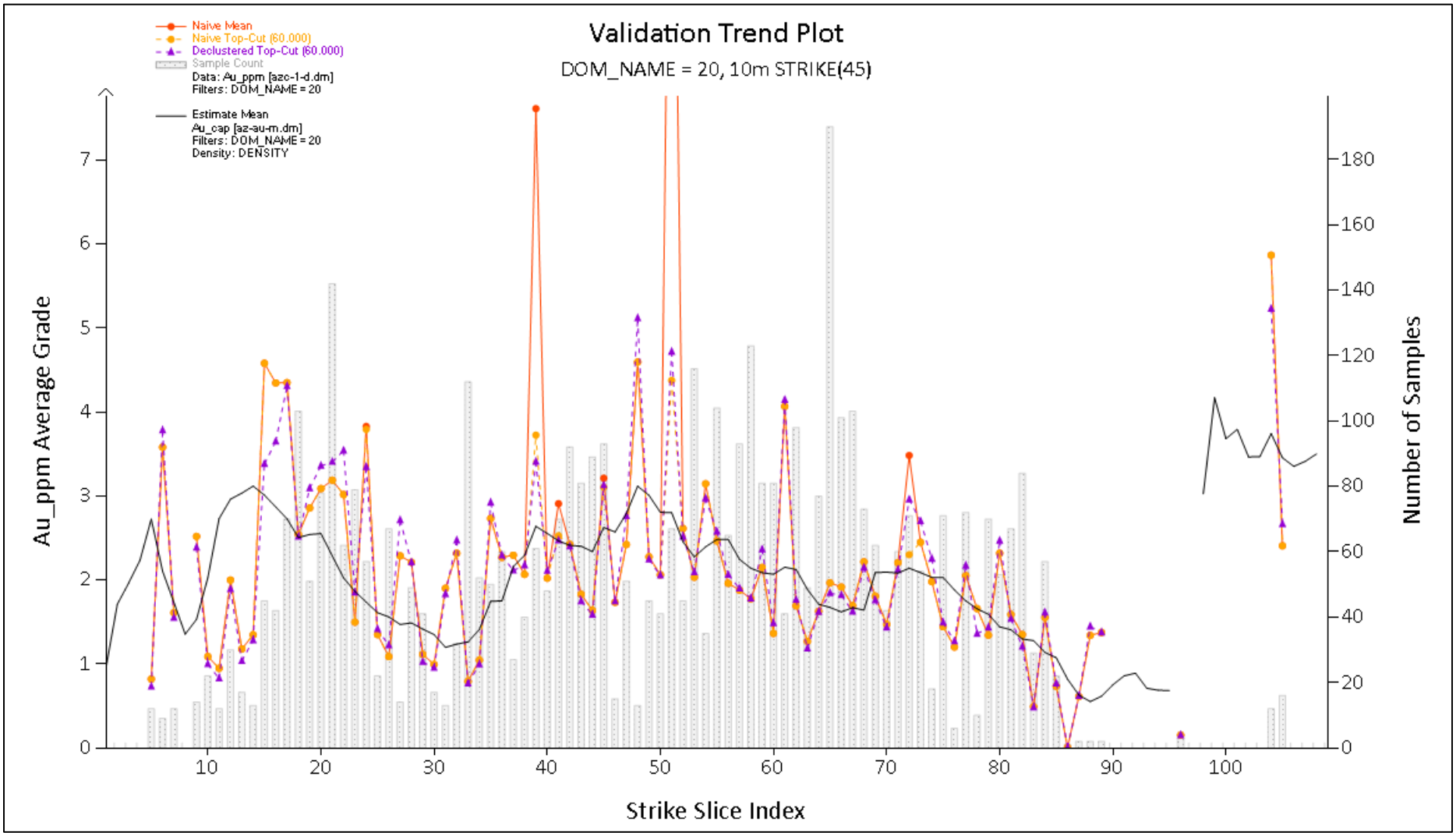
The visual comparisons of block grades and drill assays (figures 14.11 and 14.12) show how both mineralised deposits have zones of high grades external to internal low grade and the block grades reflect the drill hole grades correspondingly.

Figure 14.13: A Zone domain 20 cross strike direction swath plot.



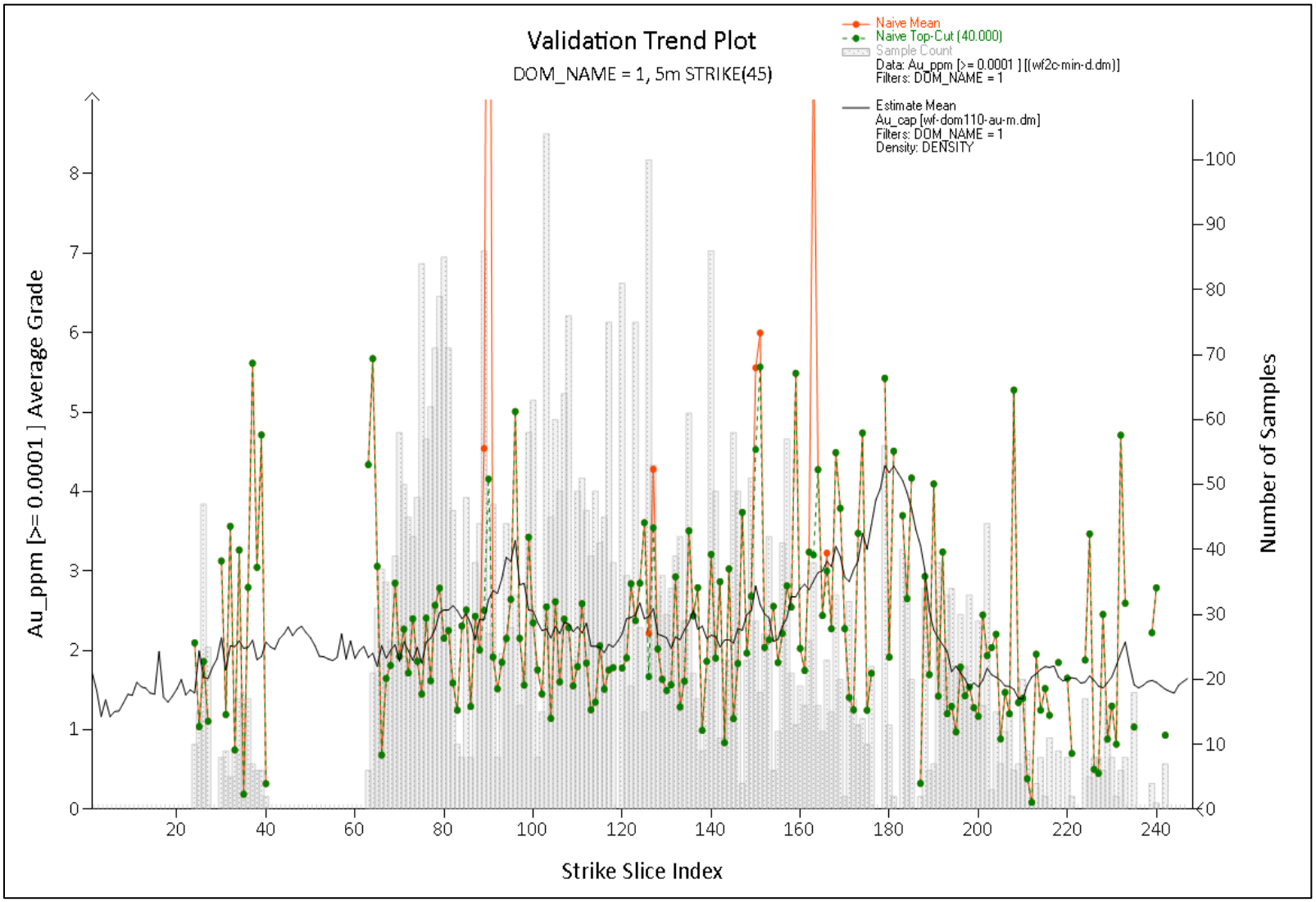
Source: SLM

Figure 14.14: A Zone domain 21 strike direction swath plot.



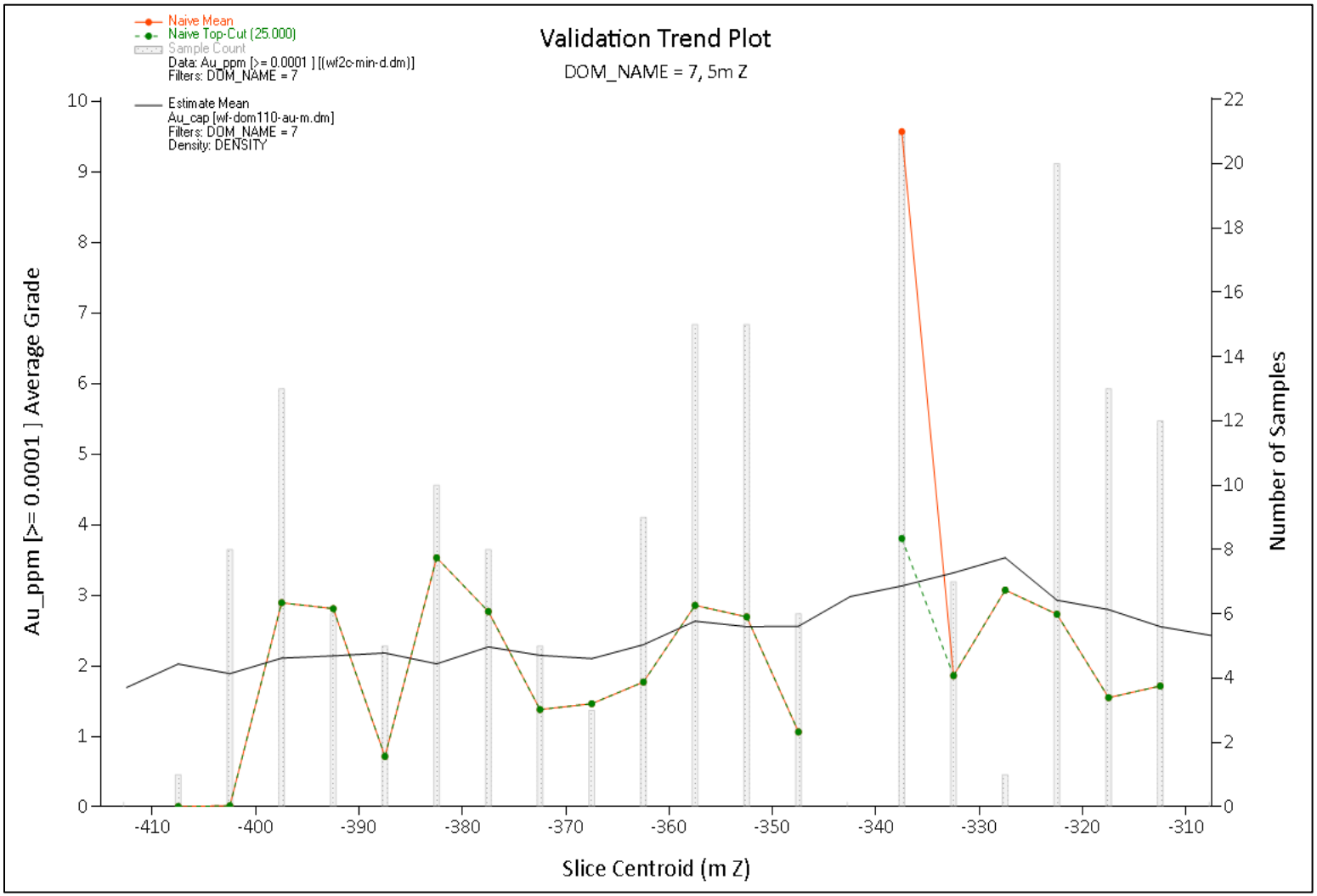
Source: SLM

Figure 14.15: Western Flanks Domain 1 strike direction swath plot.



Source: SLM

Figure 14.16: Western Flanks Domain 7 plan direction swath plot.



Source: SLM

Table 14.13: A Zone validation of estimated Au grades vs composite grades

Domain	Number of Composites	Composite Mean	Top-cut Composite Mean	Model Mean	% Difference Model to Composites
20	4596	2.4	2.18	2.08	-4.8%
21	1132	2.89	2.72	2.16	-25.9%
22	61	1.9	-	2.61	27.2%
23	41	1.54	1.37	2.56	46.5%
24	282	2.02	-	2.09	3.3%
25	210	3.6	3.36	3.37	0.3%
26	175	1.82	-	2.08	12.5%
27	91	1.84	-	1.99	7.5%
28	229	2.62	-	2.06	-27.2%
29	35	1.99	-	1.99	0.0%
30	72	2.06	-	2.6	20.8%
31	24	2.69	2.5	2.8	10.7%
32	161	1.32	-	1.41	6.4%
33	84	1.06	-	1.14	7.0%
34	218	1.33	-	1.34	0.7%
35	103	1.13	-	1.29	12.4%
36	50	2	-	1.84	-8.7%
37	32	1.34	-	1.53	12.4%
38	10	3.87	-	3.75	-3.2%

Table 14.14: Western Flanks validation of estimated Au grades vs composite grades

Domain	Number of Composites	Composite Mean	Top-cut Composite Mean	Model Mean	% Difference Model to Composites
1	5245	2.44	2.27	2.23	-1.8%
2	203	21.29	2.69	2.92	7.9%
3	68	7.23	2.66	2.75	3.3%
4	121	1.54	1.37	1.51	9.3%
5	40	1.3	-	1.41	7.8%
6	104	1.03	-	1.21	14.9%
7	178	3.06	2.38	2.55	6.7%
8	8005	1.21	1.18	1.19	0.8%
0	19	2.89	2.06	1.72	-19.8%

14.1.15 Mineral Resource Classification

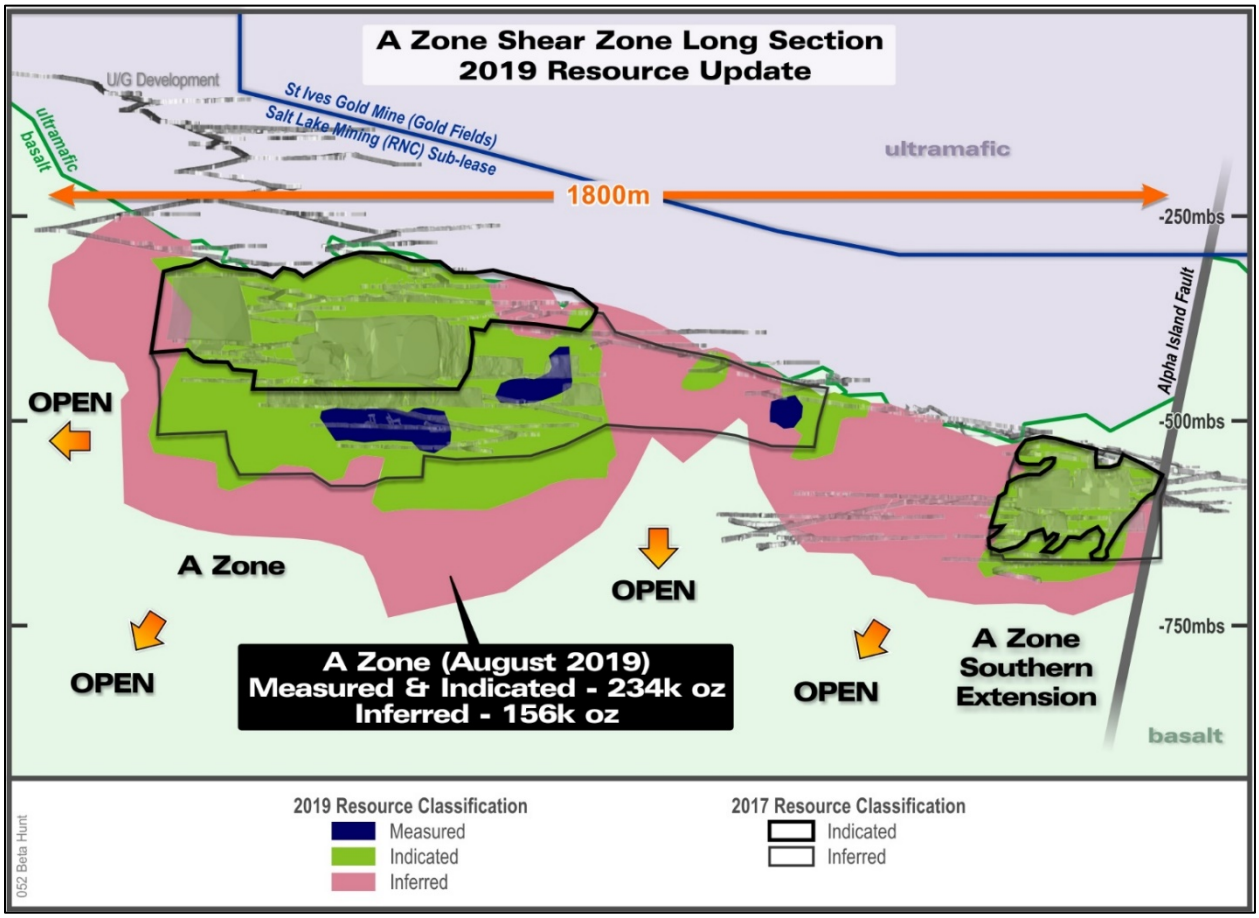
Mineral Resource classification has been determined via visual review of drill hole spacing and location of un-sampled areas in relation to drill traces and the continuity of grade according to the variogram model. The latest campaign of diamond drilling included some very closely spaced holes that were to test patches of "Fathers Day Vein" style mineralisation and subsequently there is a small proportion of measured mineral resource. General rules that apply to the classification of mineral resource for Western Flanks and A Zone are as follows:

1. areas that have been tested by 12m-30m spaced drill centres have been classed as indicated, 30m-60m are inferred. Measured Mineral Resource has been tested by 12m spaced drill centres (or tighter).

2. All areas that have been tested by drilling are classed as Inferred as a minimum level of confidence.

3. All areas that are located adjacent to existing mine development voids are classed as indicated resource as a minimum level of confidence.

Figure 14.17: A Zone Resource Category margins 2017 vs 2019. Long section looking East.



14.1.16 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, Paul Ellison, MAusIMM, under the supervision of Stephen Devlin, FAusIMM. considers that major portions of gold resource are amenable for underground extraction.

Table 14.15: Beta Hunt Gold Mineral Resources

Resource (1, 2, 3, 4)	**Measured**			**Indicated**			**Measured & Indicated**			**Inferred**		
	kt	**g/t**	**koz**	**kt**	**g/t**	**koz**	**kt**	**g/t**	**koz**	**kt**	**g/t**	**koz**
Western Flanks (5)	447	2.8	40	7,001	3.0	670	7,448	3.0	710	2,481	3.1	250
A Zone (6)	254	2.7	22	2,403	2.7	212	2,657	2.7	234	1,628	3.0	156
Total - Beta Hunt Mine	701	2.8	62	9,404	2.9	882	10,105	2.9	944	4,109	3.1	406

(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) Gold Mineral Resources are reported using a 1.6 g/t Au cut-off grade

(4) Mineral Resources described here are based on information compiled by Paul Ellison, Senior Resource Geologist for Salt Lake Mining Pty. Ltd. (SLM). Paul Ellison is an employee of SLM and is a member of the Australasian Institute of Mining and Metallurgy (MAusIMM).

(5) Mineral Resource Estimate as of June 26, 2019.

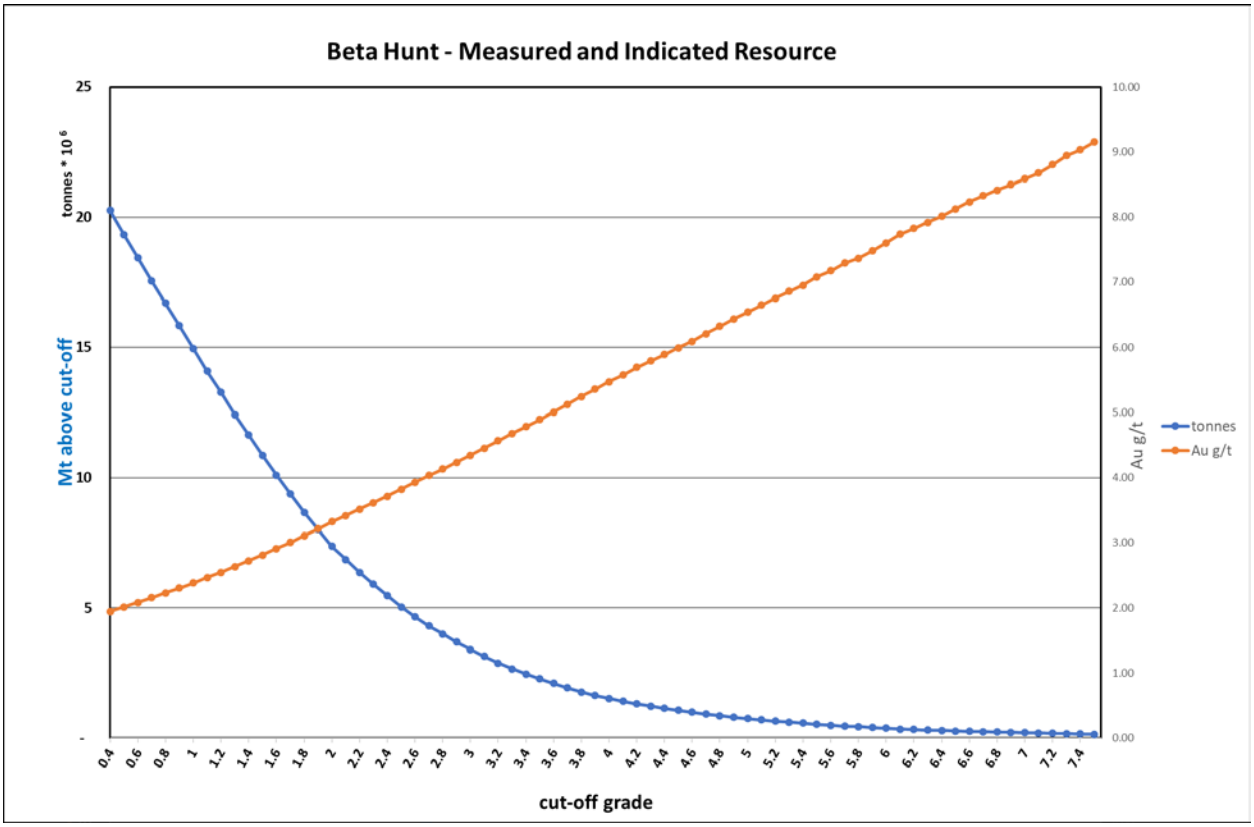
(6) Mineral Resource Estimate as of August 9, 2019.

14.1.17 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 14.16 at different cut-off grades.

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 14.18 presents this sensitivity as grade tonnage curves for gold. The global resource estimation summary for Beta Hunt Gold resource indicates 10,104,000 tonnes @ 2.9 Au g/t for 944,000 ounces at 1.6 Au g/t cut-off.

Figure 14.18: Gold Global Block Model Curve



Source: SLM

Table 14.16: Global Block Model Quantities and Grade Estimates*, Beta Hunt Mine at Various Cut-off Grades

cut-off	tonnes	Au g/t	Au oz
0.4	20,251,140	1.94	1,263,881
0.5	19,307,107	2.01	1,250,196
0.6	18,431,671	2.08	1,234,727
0.7	17,537,444	2.16	1,216,033
0.8	16,694,459	2.23	1,195,653
0.9	15,840,403	2.30	1,172,326
1	14,950,730	2.38	1,145,146
1.1	14,083,586	2.46	1,115,871
1.2	13,273,039	2.54	1,085,919
1.3	12,426,022	2.63	1,051,846
1.4	11,642,519	2.72	1,017,841
1.5	10,875,232	2.81	982,071
1.6	**10,104,222**	**2.90**	**943,651**
1.7	9,376,544	3.00	905,045
1.8	8,678,519	3.10	865,794
1.9	8,019,309	3.21	826,580
2	7,384,124	3.31	786,761
2.1	6,868,139	3.41	752,759
2.2	6,377,875	3.51	718,869
2.3	5,924,188	3.60	686,063
2.4	5,487,165	3.70	653,052
2.5	5,044,611	3.81	618,242
2.6	4,658,616	3.92	586,627
2.7	4,310,102	4.02	556,951
2.8	4,001,330	4.12	529,650
2.9	3,692,500	4.22	501,353
3	3,404,807	4.33	474,085
3.5	2,280,435	4.87	357,215
4	1,518,651	5.45	265,861
4.5	1,066,177	5.96	204,307
5	736,440	6.51	154,116
6	367,230	7.58	89,476
7	196,963	8.58	54,316

14.2 Nickel

The Beta Hunt Nickel Mineral Resource has not been updated since the 2016 PEA . It is still the current Mineral Resource and is presented below:

Table 14.17 Beta Hunt Mineral Resource as at February 1, 2016

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

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. *Mineral Resources described here are based on information compiled by Elizabeth Haren, MAusIMM CPGeo, of Haren Consulting Pty Ltd.*

The nickel Mineral Resource must be viewed in the context that since this estimate was produced (February 1, 2016), SLM has processed a total of 124kt grading 2.6% Ni (3,354 t contained Ni t) from the Beta Hunt mine. This material has been sourced from areas making up the resource (depletion) and also from areas outside the resource.

Full supporting documentation for the Nickel Mineral Resource can be found in the 2016 PEA - NI 43-101 Technical Report Preliminary Economic Assessment The Beta Hunt Mine Kambalda, Western Australia, Effective February 1, 2016.

14.3 Higginsville

No Mineral Resources have been estimated for the project. Westgold have publicly released resource estimates for Higginsville as of the June 30, 2018, (refer Section 6.2), however, a qualified person has not done sufficient work on behalf of RNC to classify the historical estimate noted in Chapter 6.2 as current Mineral Resources and RNC is not treating the historical estimates as current Mineral Resources.

15. MINERAL RESERVE ESTIMATES

15.1 Beta Hunt

No mineral reserves have been estimated for either the Beta Hunt.

15.2 Higginsville Gold Operation

No Mineral Reserves have been estimated for the Higginsville project. Westgold publicly released Mineral Reserve estimates for Higginsville as of the June 30, 2018, (refer Section 6.2) however, a qualified person has not done sufficient work on behalf of RNC to classify the historical estimate noted in Chapter 6.2 as current Mineral Reserves and RNC is not treating the historical estimates as current Mineral Reserves.

16. MINING METHODS

16.1 Beta Hunt

16.1.1 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.

Mining methods in the A Zone and Western Flanks zones of Au mineralization - steep dipping geometry permits use of mechanized drilling equipment and the long hole blast stoping method.

The main decline that provides access to all the various zones of mineralization is already in place. Similarly, the existing pumping and ventilation systems are sufficient for the future requirements.

Capacity of the existing fleet of mobile equipment meets current production rates and only limited additional units will be required as the gold operations ramp up. The workforce is non-unionized and flexible.

16.1.2 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 17, 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.

16.1.3 Geotechnical

<u>Beta Hunt</u>

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

Lithology	Logging RQD	Laboratory 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.

16.1.4 Mine Design

The cut-off grade used in mine design (and applied to Mineral Resource estimates) is the marginal stoping cut-off grade and takes into account budgeted mining (stoping), processing and haulage costs to Higginsville. The high-level calculation is detailed below:

Table 16.2: Calculated Cut-Off Grade for Gold

Item	Units	Ni	Au	Comment
Metal Price	US$/lb or oz	n/a	1400.00	refer section 18
f/x	US$		0.68	long term forecast
Metal Price	A$/lb or oz	n/a	$ 2,059	
Operating Cost	A$/t mined and processed[1]	n/a	$ 108.90	
In-Situ Metal Grade[2]	% Ni or g/t Au	n/a	1.60	

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

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 330 m/month, which equates to 3.1 by 3.6 m development rounds per day.

- 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 216 m3/sec, which represents 72% of the design limit of 300 m3/sec.

The airflow required has been calculated based on the Australian regulation of 0.05 m3/sec per kW equipment.

16.2 Mine Operations

16.2.1 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. 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.

Development headings are excavated using mechanized equipment, including:

- Twin boom jumbos are used for drilling both blastholes and for installation of rock bolts. The rate of advance is 3.6 m per round.

- Blast holes are charged using an explosives charger. As the mine is dry, ANFO is used.

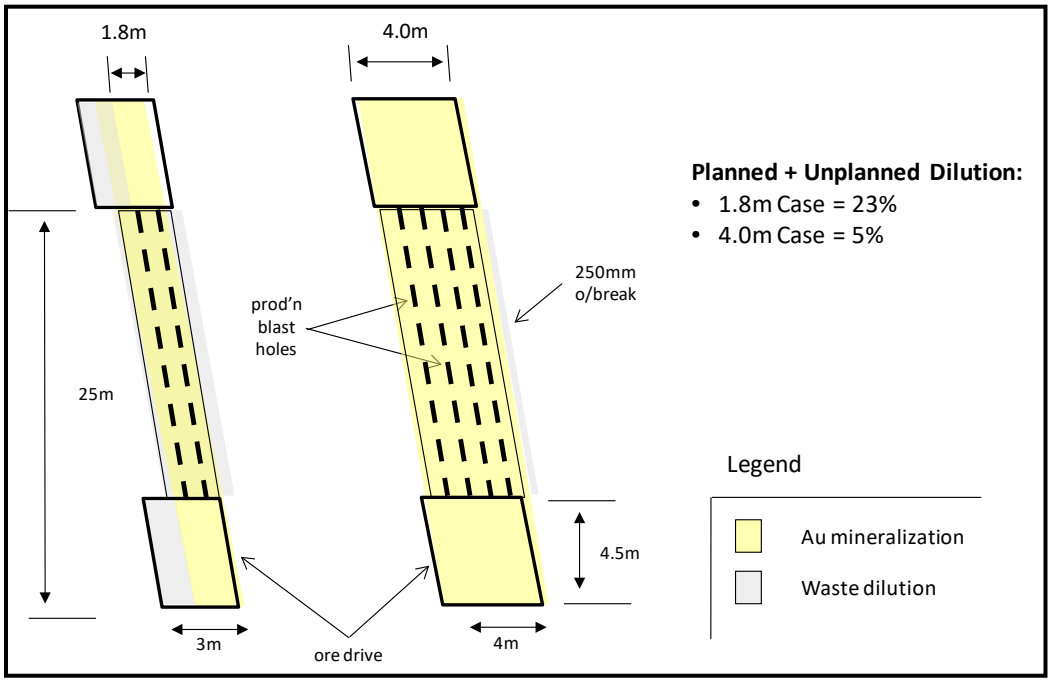
- Development blasts are cleaned using medium (12 t payload) LHDs.

- Material trammed to surface, including mineralization from ore drives and waste, is loaded by the large (17 t payload) LHD onto 50 t trucks at the re-muck stockpiles.

16.2.2 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 16.1.

Figure 16.1: Gold Stoping Method



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 76 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 16.1.3 previously).

16.2.3 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 stopes,
- small LHDs (6 t capacity) used in development and narrow vein stoping,
- medium LHDs (12 t capacity) used in development and bulk stoping,
- large LHD (17 t capacity) used for re-handling mineralization and waste into trucks,
- grader for road maintenance, and
- 50 t trucks for hauling material to surface.

Table 16.3 lists the current mining fleet.

Table 16.3: Mechanized Mining Fleet

Item	Existing units
Jumbo	2
Charger	1
Narrow Vein LHD (3t)	2
Small LHd (6t)	1
Medium LHD (12t)	3
Large LHD (17t)	2
Truck	4
Grader	1
Long Hole	0

16.2.4 Labour

The current site complement of approximately 83 full time employees (FTE) will increase over the next 6-12 months as production increases. The current complement of full-time employees is detailed in Table 16.4.

Table 16.4: Labour Complement Beta Hunt

Area	Position	units	Current
Au Mining	Jumbo Operator	FTE	4
	Charger Operator	FTE	4
	LHD Operator	FTE	6
	Truck Driver	FTE	10
	Production Engineer	FTE	2
	Production Geologist	FTE	7
	Shift Supervisor	FTE	4
	Air Leg Miners	FTE	2
	Long Hole Operators	FTE	0
	Grader Operators	FTE	1
	Fitter	FTE	16
	Electrician	FTE	5
	Service Crew	FTE	3
	Nipper Crew	FTE	0
	Sub-Total	**FTE**	**64**
Central Services	General Manager	FTE	1
	Technical Manager	FTE	1
	Geology Manager	FTE	1
	Underground Manager	FTE	1
	Mine Surveyor	FTE	2
	Mine Foreman	FTE	2
	Geotechnical Engineer	FTE	1
	EHS/ERT Advisor	FTE	2
	EHS Manager	FTE	1
	Project Engineer	FTE	1
	Resource Geologist	FTE	1
	Project Geologist	FTE	1
	Administration Manager	FTE	0
	Site Accountant	FTE	1
	Site Clerk	FTE	1
	Storeperson	FTE	1
	Cleaner	FTE	1
	Sub-Total	**FTE**	**19**
Total Labour		**FTE**	**83**

16.3 Higginsville Gold Operation

16.3.1 Overview

The only active mining operation is the Baloo open pit at HGO.

Baloo is a deposit situated within Lake Cowan and is situated approx. 1km from the nearest shore line. The mineralisation is covered with lake alluvium with inconsistent stability characteristics. Access to the deposit will need to be established which has sufficient strength to provide a stable haul road for the mining activities.

A 35m deep initial pit has been designed which targets the oxide portion of the resource preferentially. The design configuration suits a 120t class excavator and 90t tonne payload rigid dump trucks.

16.3.2 Hydrology and Ground Water

There are two potential aquifers that Baloo will affect. The main aquifer has been identified as being associated with the weathered and fracture zones within the bedrock with minor amounts of groundwater in the alluvium deposits of Lake Cowan.

The above details have been extracted by Westgold from a hydrogeological report prepared by AQ2 for S2 Resources.

The inflow was water will be managed by utilising bench perimeter drains and sumps.

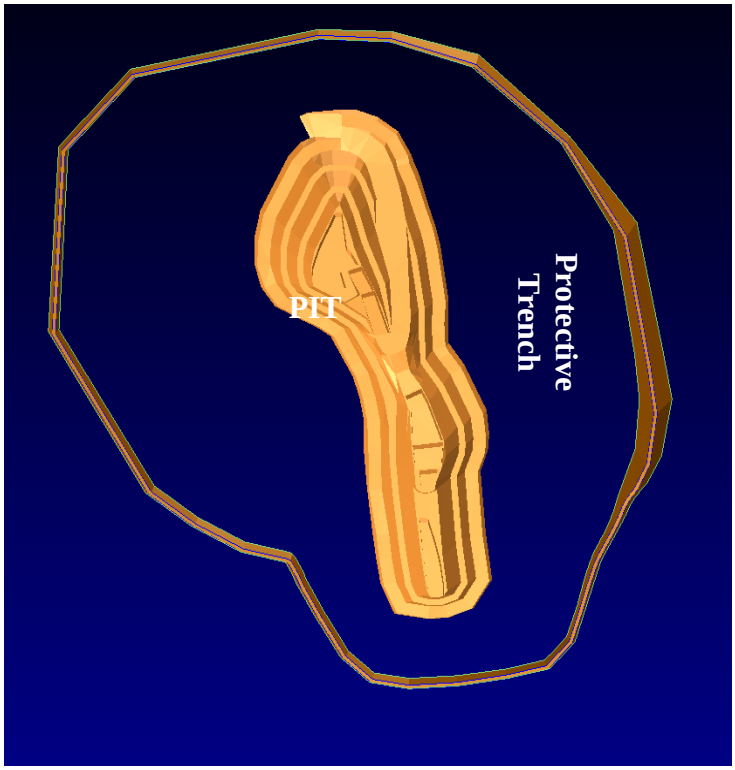


Figure 16.2 Pump installed at deepest part of trench and pump water out to the lake.

16.3.3 Geotechnical

The generalized lithological package for all styles of mineralization at Baloo open pit comprises the following:

- Basalt,
- Black Shale,
- Intermediate clastic, and
- Lake sediments

16.3.4 Mine Design

Wall design parameters have been derived from:

- Inspection and data obtained from geotechnical logging of cores
- Results of kinematic stability analyses based on defect data obtained from exploration cores
- Basic rock mass classification using empirical methods
- Limit equilibrium slope stability analysis
- Assumed depressurised wall rock conditions
- Experience in wall development in similar geological and geotechnical conditions elsewhere

Western Wall

Face height	10m	Surface to 240mRL
	15m	below 240mRL
Face angle	50 degree	throughout
Berm width	4m	at 260mRL
	5m	at 250mRL
	6m	at 240, 225, 210 & 195mRL (assuming pit floor at 180mRL)
		(Inter-ramp angle (IRA) ~39 degrees)

Eastern Wall & Endwalls

Face height	10m	Surface to 240mRL
	15m	Below 240mRL
Face angle	50 degrees	Surface to 260mRL
	55 degrees	below 260mRL
Berm width	4m	at 260mRL
	5m	at 250, 240, 225, 210 & 195mRL
		(Inter-ramp angle (IRA) ~ 43 degrees)

Information sourced from a report prepared from Peter O'Bryan and Associates

16.4 Mine Operations

16.4.1 Development

Figure 16.3 demonstrates the development stages and levels for the Baloo open pit.

Figure 16.3 Development stages – Baloo Open Pit

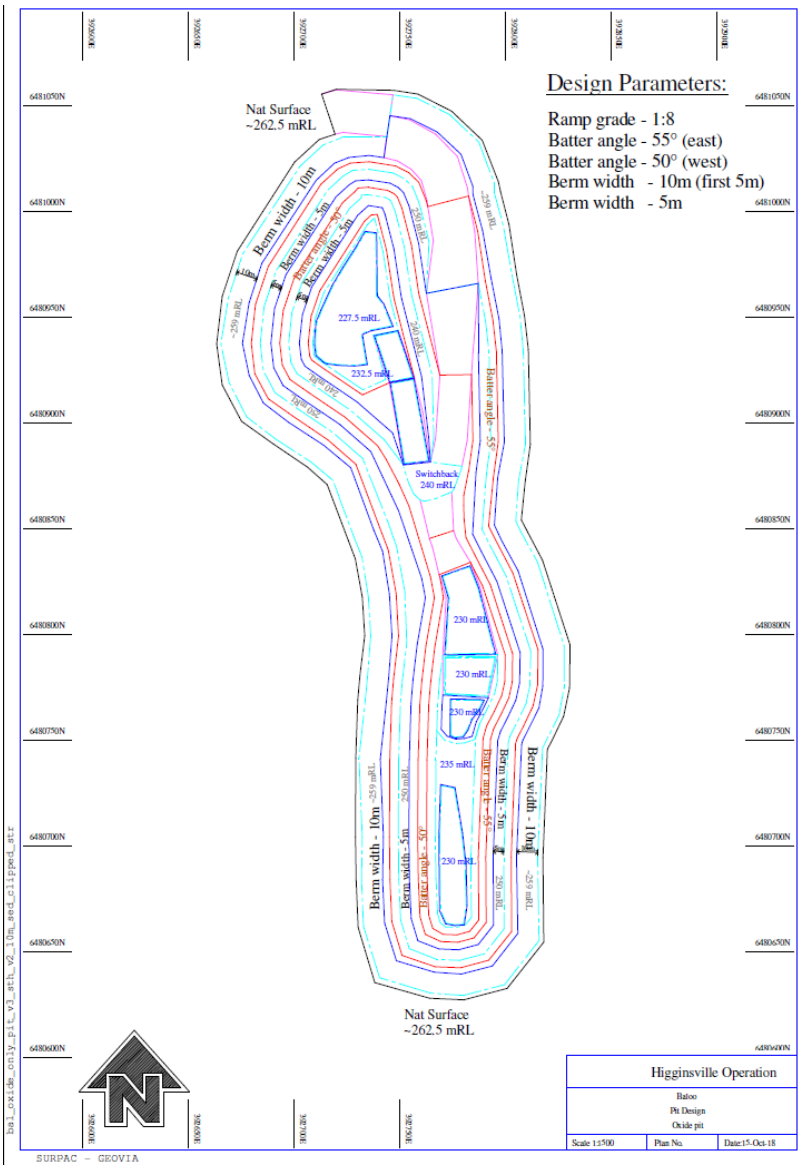


Figure 16.4 – Top Loading Baloo Pit (August 2019)

16.4.2 Mining Fleet

Mining fleet requirements are assessed per each individual open pit. The necessary mining fleet have been sourced from open pit mining contractors and are funded on an "as used basis" or part of a contract mining service agreement. The mining fleet are supplied and maintained to an industry standard.

16.4.3 Labour

The current site complement of approximately 54 full time employees (FTE). The current complement of full-time employees is detailed in Table 16. 16.5.

Table 16.5: Labour Complement Higginsville

Area	Position	units	Current
Open Pit Mining	Engineer	FTE	2
	Geologist	FTE	7
	Manager	FTE	3
	Surveyor	FTE	2
	Sub-Total	**FTE**	**14**
Plant Maintenance	Serviceperson	FTE	2
	Tradesperson, Electrical	FTE	5
	Tradesperson, Mechanical	FTE	5
	Tradesperson, Boilermaker	FTE	2
	Sub-Total	**FTE**	**14**
Total Labour	Supervisor, Processing	FTE	3
	Technician, Processing	FTE	9
	Operator, Goldroom	FTE	2
	Superintendent	FTE	2
	Manager, Processing	FTE	1
	Coordinator, Training	FTE	1
	Metallurgist	FTE	1
	Sub-Total	**FTE**	**19**
Site Management	General Manager	FTE	1
	Senior Accountant	FTE	1
	OH&S Personnel	FTE	2
	Site Administrator	FTE	1
	Supply Personnel	FTE	2
	Sub-Total	**FTE**	**7**
Total Labour		**FTE**	**54**

17. RECOVERY METHODS

Historically, Beta Hunt has been toll milled through various third party owned mills in the Kambalda region. Metallurgical performance and processed methods varied slightly between the mills. In June 2019, RNC purchased the Higginsville Gold Operation, which includes a 1.3Mtpa gold mill, associated infrastructure and tailings storage facility that was built in 2007-2008. Since the purchase, all Beta Hunt gold mineralization is processed through the Higginsville Mill.

17.1 Current Situation – Gold Processing

Please refer to section 13.1 Gold Processing for details of the current situation at Higginsville.

17.2 Current Situation – Nickel Milling

Nickel mineralization is purchased and processed by BHP at either the Kambalda Nickel Mill or the Leinster Mill, both which are conventional flotation style nickel concentrators. There is limited risk associated with the ongoing processing of nickel mineralization as:

- BHP has successfully processed mineralization from Beta Hunt for many years, and
- In 2018, BHP realised the option to extend the term of the OTCPA to 31st January 2023. Under this Agreement BHP have the right to process mineralisation from Beta Hunt till 2023.

Mineralization is blended with mill feed from other mines and the recovery credited to Beta Hunt is based on the grade of feed. Concentrate produced from Beta Hunt mineralization was treated and refined by BHP at the Kalgoorlie Nickel Smelter to June 2018, and more recently (Jun 2019) at the Leinster Mill. An amendment to the OTCPA, is required for future production from Beta Hunt as long as the nickel mineralization cannot be processed at the Kambalda Nickel Concentrator (KNC) – currently on care and maintenance. KNC is the defined delivery point under the OTCPA. The most recent amendment provided processing of nickel mineralization at the Leinster Mill. This amendment expired on June 30, 2019.

18. PROJECT INFRASTRUCTURE

18.1 Beta Hunt

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.
- A surface workshop used for major maintenance and weekly services for the mobile equipment fleet.
- An underground workshop is available 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 300 m3/s, compared to the current airflow of 216 m3/s.
- 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 and BHP.

Figure 18.1: Beta Hunt Decline Portal

Source: SLM

Figure 18.2: Beta Hunt Return Air Fan and Secondary Escapeway

Source: SLM

Figure 18.3: Beta Hunt Management and Administration Offices

Source: SLM

18.2 Higginsville Gold Operation

Higginsville is an operating mine and carbon in pulp processing facility with all required infrastructure already in place. Main elements of this infrastructure include:

- processing plant was originally designed for 1.0Mtpa throughput, with the quaternary crusher later added to expand capacity to 1.3Mtpa.
- A surface workshop used for major maintenance and weekly services for the mobile equipment fleet.
- Buildings, village, camp & associated infrastructure:
    - the camp was supplied new in 2008 and can accommodate 192 people in separate ensuited rooms; and
    - the village incorporates a kitchen/diner/crib room, wet mess including beer garden, admin/retail store, recreation room, gym, laundry and service facilities.
- Light Vehicles for the transportation of personnel on and around the mine properties.

Figure 18.4 Higginsville Carbon in Pulp Process Plant

19. MARKET STUDIES AND CONTRACTS

19.1 Market Studies

The following discussion of nickel and gold markets is provided as background to cut-off grade calculations used in this study16.4.

19.1.1 Gold Market

Mined gold production hit a new record high of 3,346.9 tonnes in 2018, the tenth straight year of annual growth. Net producer de-hedging of 27.9 tonnes, plus recycled gold of 1,172.6 tonnes in 2018 brought the total gold supply 4,490.2, 43 tonnes higher than 2017 and 109.5 tonnes lower than 2016.

The demand side totaled 4,414.8 tonnes in 2018, resulting in a small surplus of 75.3 tonnes gold for the year. Fabrication, comprised of Jewellery and technology applications, totaled 2,604.3 tonnes of demand, while investment and central bank net purchases of 1,810.6 made of the balance of demand in 2018.

Table 19.1: Gold Market Supply – Demand Balance

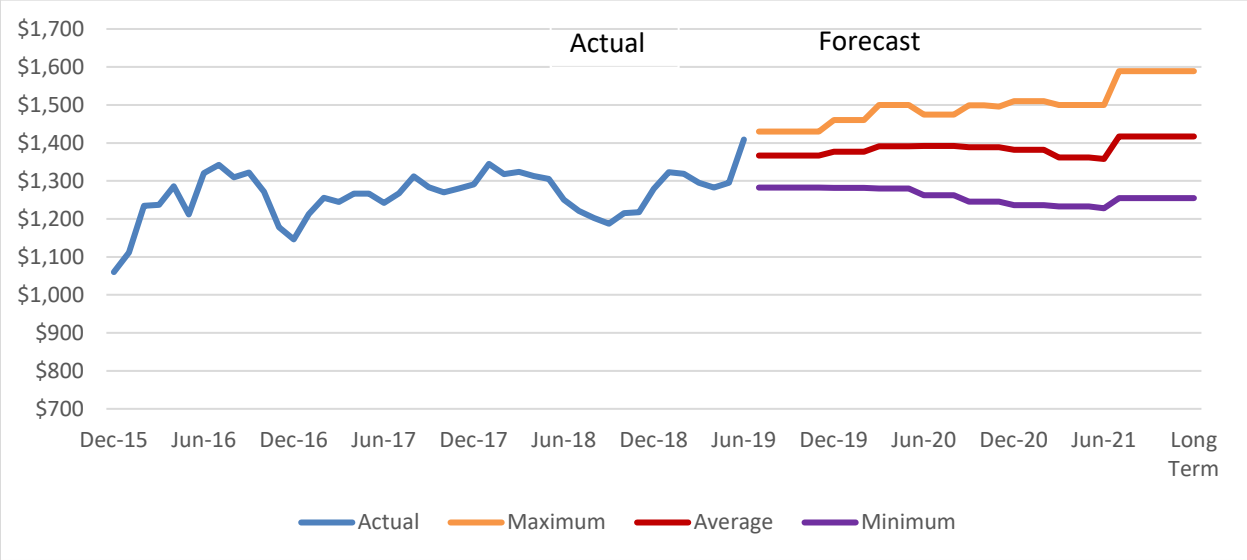
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Supply									
Mine production	2,743.3	2,844.0	2,916.6	3,071.7	3,138.1	3,207.5	3,285.2	3,318.9	3,346.9
Net producer hedging	-108.8	22.5	-45.3	-27.9	104.9	12.9	33.1	-27.9	-29.4
Recycled gold	1,679.4	1,652.5	1,672.0	1,248.9	1,187.1	1,120.6	1,281.4	1,156.1	1,172.6
Total supply	**4,313.9**	**4,519.0**	**4,543.3**	**4,292.7**	**4,430.1**	**4,341.0**	**4,599.7**	**4,447.2**	**4,490.2**
Demand									
Fabrication									
Jewellery[1]	2,041.7	2,086.5	2,134.2	2,727.1	2,532.6	2,469.8	2,007.8	2,244.2	2,269.7
Technology	460.5	428.6	381.3	355.8	348.4	331.7	323.0	332.6	334.6
Sub-total above fabricatio	2,502.2	2,515.1	2,515.6	3,082.9	2,881.0	2,801.5	2,330.8	2,576.8	2,604.3
Total bar & coin demand	1,204.2	1,502.1	1,311.1	1,729.6	1,065.2	1,090.1	1,071.3	1,045.2	1,090.2
ETFs & similar products[2]	420.9	192.5	307.4	-906.3	-172.6	-122.5	574.9	206.4	68.9
Central bank & other inst.[3]	79.2	480.8	569.3	623.8	583.9	576.5	389.8	374.8	651.5
Gold demand	4,206.5	4,690.4	4,703.4	4,530.1	4,357.5	4,345.7	4,366.8	4,203.2	4,414.8
Surplus/Deficit	107.4	-171.4	-160.1	-237.4	72.5	-4.7	232.9	244.0	75.3
Total demand	**4,313.9**	**4,519.0**	**4,543.3**	**4,292.7**	**4,430.1**	**4,341.0**	**4,599.7**	**4,447.2**	**4,490.2**
LBMA Gold Price (US$/oz)	1224.52	1571.52	1668.98	1411.23	1266.4	1160.06	1250.8	1257.15	1268.49

Source: World Gold Council

Figure 19.1 illustrates the price history for gold over the two-year period beginning on December 31, 2015 and ending June 30, 2018. The price trended up over the selected period from a low of US$1,060 at the beginning of the period to a high of US$1,409 at the end of the period. Over the forecast period, consensus forecasts estimate the gold price to range from an average annual price of US$1,389 in 2020 to a long-term average US$1,417.

The forecast periods out to June 2021 were compiled by Consensus Economics Inc. and are based on an average of between 21-29 analyst forecasts. For the long-term forecast, prices were based on an average of 10 analyst forecasts.

Figure 19.1: Gold Price History and Consensus Forecast (US$/oz)



Source: Consensus Economics Inc.

19.1.2 Nickel & Stainless Steel Market Outlook

According to the long-term outlook (May 2019) by Red Door Research global nickel consumption is forecast to increase by 5.0% in 2019 to 2.33 Mt; and by 4.6% per year to 2.96 Mt in 2023; and 4.4% per year thereafter to 4.00 Mt in 2030. Both of the two main consumption sectors, stainless and non-stainless, are expected to grow in the future with the non-stainless sector being primarily driven by rapid growth in the use of nickel in lithium-ion batteries.

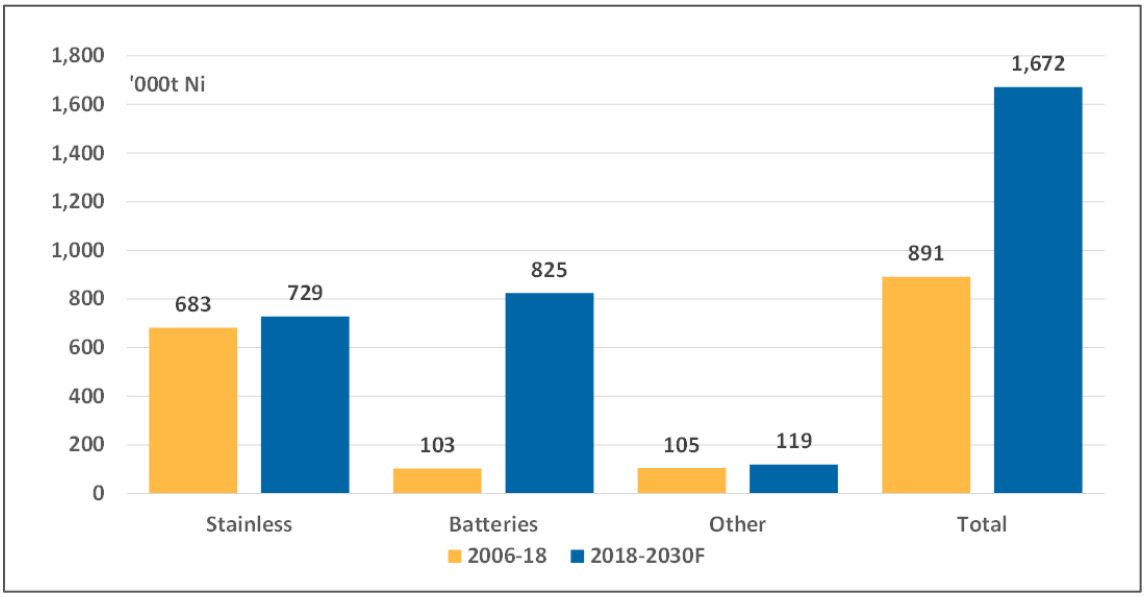
In 2018, stainless steel made up 70% of total world nickel use. Primary nickel demand in stainless steel is projected to increase to 2.4 Mt by 2030 driven by growth in global stainless melt output of 4.4% per annum to 63.5 Mt until 2023 with further growth of 3.4% per annum to 80.2 Mt until 2030. The bulk of this growth will be supported by the continued expansion of the Chinese stainless steel industry.

The fastest growing sector for nickel in recent years and for the foreseeable future is the use of nickel in lithium ion batteries for the booming electric vehicle market. Driven by governmental policy (to ban sales of internal combustion engine vehicles in the coming decades) and environmental concerns, the switchover of the existing car fleet from internal combustion engines to hybrid and ultimately fully electric vehicles (EVs) is now under way.

EVs are still a small portion of the vehicle market and in 2018 accounted for 5 million vehicles, only 2.2% of global vehicle sales, but the growth rate from 2014-2018 was just under 60% a year. With consensus trend growth rates of 25-35% a year in sales, the share of EVs will grow steadily with forecasts of the global market share of electric vehicles being 10-20% by 2025 and 30-50% by 2030.

According to Red Door Research, the forecast trend annual growth rate for nickel use is 17.9% a year for all battery types to 958 kt per annum by 2030, noting that the growth rate for lithium ion batteries for cars alone (which is only around 50% of 2018 total nickel use in batteries) is more than double the overall rate.

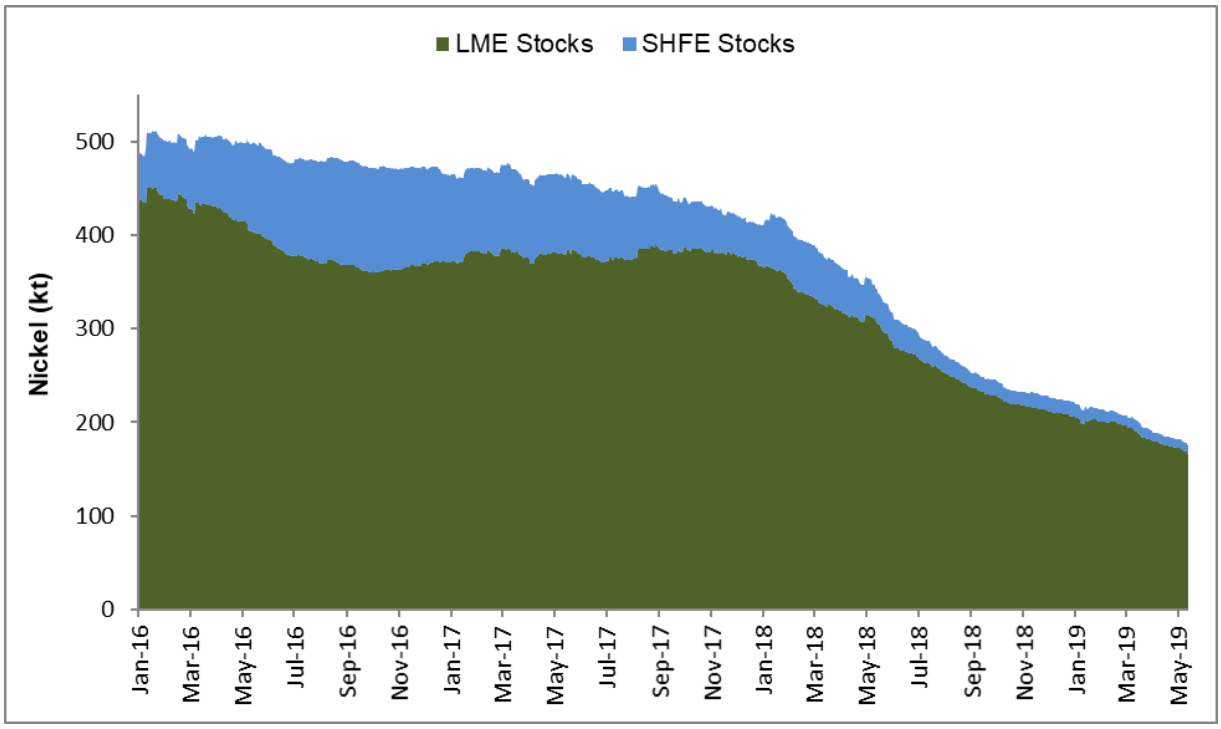
Figure 19.2: Nickel Consumption Growth Drivers, Stainless Steel and Batteries



Source: Red Door Research, INSG

According to Red Door, ongoing deficits are expected between supply and demand, albeit at reduced rates from the large deficits experienced recently. Market inventories are expected return to normal levels by the end of 2020 and potentially fall to critical levels in 2022/2023, placing strong upward pressure on prices.

Figure 19 3: LME and SHFE Nickel Inventory Levels



Source: Red Door Research, INSG.

19.2 Contracts

The material contracts, other than the material contracts described elsewhere in this report, are those relating to the toll treatment of nickel ore and trucking.

19.2.1 Nickel Tolling

Nickel ore processing is covered by the OTCPA Agreement with BHP to 31st January 2023. SLM recently completed a tolling campaign through the Leinster Mill under a one-year tolling amendment to OTCPA. The amendment was required as the Kambalda Nickel Concentrator (KNC), which is referenced as the delivery point for Beta Hunt ore under the OTCPA, is on care and maintenance. Further amendments to treat Beta Hunt nickel ore are required while the KNC remains on care and maintenance as described in section 17.2

19.2.2 Trucking

Gold mineralization is trucked to the Higginsville Mill using a contracted haulage operator (KBD Haulage WA Pty Ltd) via the Goldfields Highway, a distance of 78km.

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 for Beta Hunt 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.

Higginsville is an operating mine with a mineral processing facility and in possession of all required permits. Environmental permitting and compliance requirements for mining and processing is the responsibility of RNC. The Project covers over 1,800 km^2 and has a significant disturbance footprint including tailings storage facilities, an operating processing facility, open pits, underground mines and haul roads. The summary provided in this Section for Higginsville is based on information provided by Westgold, a legal due diligence report (Norton Rose, 2018) and site inspections. The author did not independently verify compliance with regulatory requirements.

Note that historical references to superceded government departments - DER/DoW and DMP - are retained, where relevant, to be consistent with the document references. The DER and DoW are now replaced by the Department of Water and Environmental Regulation (DWER) and the DMP is now replaced by the Department of Mines, Industry Regulation and Safety (DMIRS).

20.1 Beta Hunt

20.2 Environmental Studies

The Beta Hunt mine is located within a developed mining camp that has been subject to many environmental studies throughout its history. Most recently, SIGMC completed The Beyond 2018 Project – Environmental Review Document (Gold Fields, 2018) which covered all SIGMC tenements. This Review also covered the Beta-Hunt sub-lease tenements and was produced by SIGMC in response to the framework set out in the Environmental Scoping Document (ESD) prepared by the Environmental Protection Authority (EPA) in October, 2017. The objective of the Beyond 2018 Project is to ensure the continuation of mining activities, including those leases that make up the Beta Hunt sub-lease tenements, beyond 2018. Key findings of this and earlier 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.

The Beta Hunt sub-lease covers the Lefroy and Red Hill Land Systems detailed below:

- Lefroy: Salt lakes and fringing saline plains, sandy plains and dunes with chenopod low shrublands
- Red Hill: Basalt hills and ridges supporting acacia shrublands and patchy eucalypt woodlands with mainly non-halophytic undershrubs

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 17, 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

20.2.2.1 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

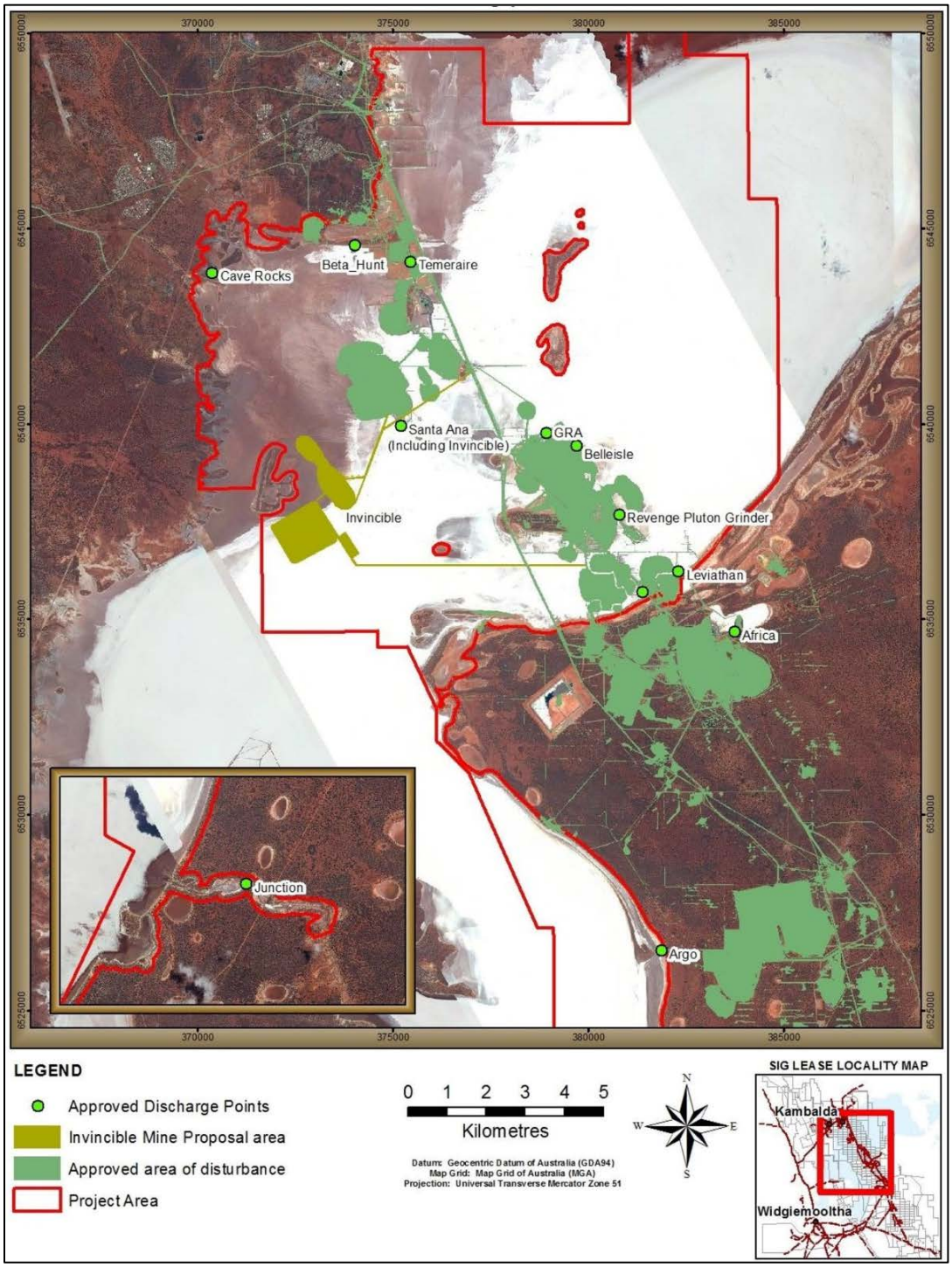
Ministerial approvals were subsequently consolidated and the Part IV approval is now entirely described in Ministerial Statement 548. The Ministerial approval for mining on Lake Lefroy is held by SIGMC. Accordingly, the implementation conditions contained in Ministerial approval 879 are not directly binding on SLM.

20.2.2.2 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 500 kt/pa 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 1), actual discharge is below this limit. The Department of Environment Regulation (DER) licence is due for review on 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 (now DWER), 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, EPA (2011)

20.2.2.3 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 DMIRS's Mineral Titles Online (MTO) database, the most recent mining proposals submitted to the DMIRS (prev. 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 DMIRS 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/pa and is valid until February 2024. Beta Hunt's dewatering requirements (up to 500 kt/a) represent less than 2% of the water that may be abstracted under the current licence. SIGMC is proposes to increase the discharge limit to 40,000 kt/pa as part of the Beyond 2018 Project.

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 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 21.1.7.

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 July 1, 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 its rehabilitation commitments as defined in the Beta Hunt Sub-Lease Agreement. SLM's contribution is on the order of A$10,000 annually.

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 2,539 (2016 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 29,875 (2016 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 90 persons is accommodated within these two towns. The recent downturn in base metal prices and associated premature and unplanned closure or nearby mines, including placing the BHP nickel concentrator on care and maintenance, 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.

20.2 Higginsville

20.2.1 Environmental Studies

In August 2006 a Flora study was conducted on the following tenemnets M15/351, M15/289, M15/225, M15/325 and P15/47. No Priority Species as defined by the Department of Environment and Conservation (DEC) were located during the survey. Also in August 2006 ATA Environmental conducted a fauna survey of tenements M15/351, M15/289, M15/225, M15/325 and P15/478. The Carpet Python is the only herpetofauna species of conservation significance that occurs in the project area. Given that there is the potential for some rare and endangered species to occur on the leases Avoca will prior to any clearing activity assess for the following:

- A grid search for Malleefowl and their breeding mounds;
- Inspection of large hollow bearing trees for Major Mitchell cockatoo nests;
- Personnel are made aware of the presence of Carpet Pythons so that they can be relocated to suitable habitat.

The Baloo pit, recently commenced required the following studies to be undertaken:

- Level 1 Vertebrate Fauna Risk Assessment for the Baloo Project Area (2015) prepared by Terrestrial Ecosystems
- Baloo Project: Salt Lake Ecological Survey (2016) prepared by Bennelongia Environmental Consultants
- Level 1 Flora and Vegetation survey of the Baloo Gold Project Prospect Proposed Access Corridor (2015) prepared by Vegetation Solutions
- Baloo Project Waste Rock Characterisation (2016) prepared by MBS Environmental

Additional recently completed studies include:

- Vine in-pit TSF, Results of Groundwater Modelling (2019) prepared by Rockwater Hydrogeological and Environmental Consultants
- Desktop Biological Assessment and Broadscale Vegetation Mapping (2010) prepared by GHD

20.2.2 Required Permits and Status

A licence under the EP Act is required to operate certain industrial premises, known as "prescribed premises". In addition, a works approval is required for any work or construction that will cause the premises to become prescribed premises, or for work or construction which may cause, or alter the nature or volume of, emissions and discharges from an existing prescribed premises. Key Licences and Approvals are listed below

Reference	Approval	Date Commenced	Issued by	Expiry Date
L9155/2018/1 (Higginsville)	Licence relating to category 5 - Processing or benefication or metallic or non-metallic ore, 06 - mine dewatering and 054 - sewerage facility operations	18 September 2018	DWER	17 September 2024
GWL160795 (5) (Higginsville)	Licence to take water under section 5C of the Rights in Water and Irrigation Act 1914 (WA). Annual water entitlement 500,000 kL. Taking water for mining purposes and mineral ore processing and other mining purposes.	5 May 2014	DER	4 May 2024
GWL 201728(1)	Dewatering for mining purposes. Dust suppression for mining purposes. Mineral ore processing and other mining purposes. Amendment application to allow for the dewatering of the Baloo pit on M15/1814 lodged. Amendment granted on 6 May 2019 (licence amended from GWL 178699 to GWL 178699 to GWL2072728(1)	6 May 2019	DWER	5 May 2029
GWL181866 (Mt Henry and Selene)	Licence to take water 1,030,000 kL	16 April 2016	DWER	22 June 2026
CPSS7674/1 (Fairplay and Two Boys)	Clearing of Native Vegetation for the purpose of mineral Production	28 July 2018	DWER	31 July 2023
CPS8152/1 (Baloo)	Clearing Native vegetation for the purpose of mineral production	27 October 2018	DWER	31 July 2023
GWL165489 (Chalice)	Dewatering for mining purposes. Dust suppression for mining purposes. Mineral ore processing	11 November, 2012	DWER	11 December 2022

The Higginsville premises licence, issued under the Environmental Protection Act 1986 (PartV) provides for the processing and benefication of metallic and non-metallic ore up to 1,900 ML per year. Conditions

such as groundwater level and limits, monitoring, discharge and reporting requirements are set in the licences.

The Chalice groundwater licence has an allocation of 1,900 ML per year and allows for the dewatering of the Chalice open pit. The water is pumped 30 km to the Aphrodites pit from which it is stored prior to pumping to the process mill. The Higginsville groundwater licence allows for dewatering of open pits and underground operations in close vicinity to the Higginsville processing plant.

The clearing permits for Baloo, Fairplay and Two Boys, allow for open pit mining to commence for these deposits.

Based on interrogation of the documentation provided as part of the RNC Due Diligence process and site visits conducted by RNC personnel, the author is satisfied that Higginsville has the required environmental and groundwater licences in place and that there is material compliance with the licence conditions.

20.2.3 Mining Proposals and Mine Closure Plans

A total of 61 Mining Proposals and Mine Closure Plans are registered as belonging to the HGO. An application for a Mining Lease must be accompanied by a Mining Proposal and Mine Closure Plan (MCP) in accordance with the *Mining Act 1978* (WA) (Mining Act). A Mining Lease, Mining Proposal and MCP are required to carry out mining. A Mining Lease, Mining Proposal and MCP are required to carry out mining activities on a site.

The Higginsville Mine Closure Plan (MCP) – Reg ID:61112 dated August 16, 2016, approved on April 4, 2018 - is the most extensive as it covers several mining areas including Higginsville, Chalice, Lake Cowan, Paleochannel and Mt Henry areas. The Baloo MCP approval is the most recent – February 11, 2019. The Baloo open pit is budgeted as a key source of mill feed for HGO post June 2019.

20.2.4 Aboriginal Heritage Act 1972

As part of RNC's Due Diligence of HGO, a number of Aboriginal sites were flagged within the Higginsville tenements based on a search of the Western Australian Government's Aboriginal Heritage Inquiry System (**AHIS**) conducted on April 18, 2019. there are a number of Aboriginal sites within the tenements. The AHA preserves all Aboriginal sites in Western Australia whether or not they are registered. Aboriginal sites may exist that are not recorded on the register.

A high level review of the Due Diligence materials indicate that prior to the Project area being developed and mined, ethnographic and archaeological surveys were commissioned over the Higginsville Project area. No sites of ethnographic or archaeological significance were recorded.

Heritage protection agreements are in place with the Ngadju Claim group. These agreements also contain provisions dealing with heritage protection.

20.2.5 Environmental Aspects, Impacts and Management

As part of the RNC acquisition of HGO, due diligence work undertaken by RNC in April/May 2019 found the HGO operation went through a period of non-compliance from April 2016 to Jan 2019. The non-compliance related to high standing water levels in a number of monitoring boreholes adjacent to active tailings storage facilities (TSF 1,2,3 and 4). All are now in compliance with TSF 1, 2, 3 and 4 no longer active and tailings currently being deposited into the Fairplay East pit with plans for further in-pit storage to September 2020. The company is considering a number of additional options post September 2020.

The HGO site has a detailed environmental management plan that includes site specific processes and procedures. The site has a detailed record of the applicable legislation and legal requirements as well as various management and monitoring programs required to ensure compliance with legal and legislative compliance.

The author concludes that from an environmental aspect, RNC have put in place the appropriate processes and plans to meet their environmental requirements and commitments.

20.2.6 Mining Rehabilitation Fund

The Mining Rehabilitation Fund (**MRF**) is a pooled fund, established under the *Mining Rehabilitation Fund Act 2012* (WA) (**MRF Act**), that is used to rehabilitate abandoned mine sites in Western Australia. All tenement holders (with the exception of tenements covered by State Agreements not listed in the *Mining Rehabilitation Fund Regulations 2013* (WA) (**MRF Regulations**)), are required to participate in the MRF. The HGO tenements are subject to the MRF Act.

A 1% levy is paid annually by tenement. HGO is up to date with payment to June 2018. The July 2018/June 2019 levy is due Q2 2020.

HGO's MRF mine closure is estimated at A$25.1 M. Annual payments approximate $250k.

20.2.6 Social and Community

The Higginsville region has a substantial history of exploration and mining. Gold was first discovered in 1905 with gold mining operations continuing sporaadically throughout the 20th century and then recommencing in earnest in 1989. Additional mining activities included salt mining at Lake Lefroy during the 1960's to 1980's and nickel mining from the 1970's to the present. Higginsville operates within an environment of strong local community support.

The nearest town to Higginsville is Norseman, with a population of 581 (2016 Census), 52 km south of the Higginsville process facility. Kambalda with a population of 581 (2016 Census), is located 68 km via the Goldfields Highway to the north.

Kalgoorlie-Boulder has a population of 29,875 (2016 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.

All of the current workforce of approximately 54 persons is accommodated on site during their rostered-on periods. Most workers permanently reside in Perth and fly-in/fly-out (FIFO) of Perth to attend site on either an 8 days-on/6 days-off or 14 days-on/7 days-off rotation. The FIFO workers are supplemented by workers who reside in closer regional towns such as Norseman, Kambalda, Kalgoorlie and Esperance.

The nearest port is Esperance, 260 km south of Higginsville.

21. CAPITAL COSTS

Capital and operating costs for Beta Hunt have been estimated using a budget 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 Beta Hunt

Beta Hunt is an operating mine with all necessary infrastructure already in place and primary development to the various mining areas already established. 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 2018 capital spend.

Table 21.1: Beta Hunt Capital Cost Estimate

Item	Units	2018
Capitalized Development	A$ 000s	17,992
Mining Fleet	A$ 000s	338
Sustaining	A$ 000s	1,646
Total Capital	**A$ 000s**	**19,976**

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 Au mineralization (mined at 4.0m wide x 4.5m high),
- Raises installed for storage of broken mineralization, access and ventilation (raise-bored 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).

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

21.1.2 Mining Fleet

The current fleet of production equipment at Beta Hunt includes:

- 2 x twin boom jumbo,
- 1 x explosives charger,
- 1 x 12H Grader
- 2 x narrow vein LHDs (3t capacity) used in narrow vein stoping,
- 1 x small LHD (6t capacity) used in narrow vein stoping,
- 3 x medium LHD (12t capacity) used in development and bulk stoping,
- 2 x large LHD (17t capacity) used for rehandling mineralization into trucks, and
- 4 x 50t trucks.

21.1.3 Sustaining Capital

Included under sustaining capital are the following:

- 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.

21.1.4 Operating Costs

The gold mining operations operating costs for 2018 are summarized in Table 21..

Table 21.2: Operating Cost Estimate

Item	Units	2018 Total
Mineralization Mined	kt	512
Gold Mining (1)	A$/t	121.75
Central Services	A$/t	8.22
G & A	A$/t	3.71
Total Operating Costs	**A$/t**	**140.94**
Total Operating Costs	**A$ 000s**	**72,159**

(1) *Direct costs include mining, transportation and processing*

Discussion on each of the areas of spending follows below.

21.1.5 Gold Mining

With the mechanized mining utilising the long hole open stope method improved labour productivity can be achieved resulting in unit operating costs that are lower than hand held mining.

21.1.6 Central Services and G&A

Costs associated with the mining operation that cannot be directly allocated to 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.

21.1.7 Closure

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

An independent audit and mine closure estimate prepared in 2018 by consultant MBS Environmental estimated the current rehabilitation liability accruing to SLM for the Beta Hunt Sub-Lease at A$881k, as detailed in Table 21..

Table 21.3: Estimated Closure Costs – February, 2018

Category	Cost
Infrastructure Item Tasks	$586,281
Rehabilitation Area Tasks	$125,531
Rehabilitation Volume Tasks	$100,076
Management and Monitoring	$68,631
Total	$880,519

21.2 Higginsville

21.2.1 Capital Costs - Higginsville

Higginsville Gold Mine is an operating mine with all necessary infrastructure already in place and primary development to the various mining areas already established. Processing of mineralization is performed onsite by a carbon in pulp mill.

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 21.4 summarizes the intended capital spend for the period July 1, 2019 to December 31, 2019.

Table 21.4: Higginsville Capital Cost Estimate

Item	Units	2019
Capitalised Development	A$ 000s	820
Sustaining	A$ 000s	2,072
Total Capital	**A$ 000s**	**2,892**

Discussion on each of the areas of spending follows below.

21.2.2 Capitalized Development

Production from the HGO tenement areas will initially be sourced from the Baloo Stage I pit (currently being operated).

21.2.3 Mining Fleet

Mining fleet requirements are assessed per each individual open pit. The necessary mining fleet are sourced from open pit mining contractors and are funded on an as used basis. The mining fleet are supplied and maintained to an industry standard.

21.2.4 Sustaining Capital

Included under sustaining capital are the following:

- Plant and Equipment
  - Processing Department A$1,335k
  - Environmental Department A$220k
  - Remaining Departments A$117k
- Sustaining Mine Development A$400k

21.2.5 Operating Costs

The Higginsville gold mining operations budgeted operating costs for the period July 1, 2019 to December 31, 2019 are summarized in Table 21.4.

Table 21.4: Higginsville Operating Cost Estimate

Item	Units	July 1, 2019 to December 31, 2019 Total
Mineralization Mined	kt	241
Gold Mining (1)	A$/t	79.30
Mineralization processed	kt	634
Processing	A$/t	30.80 (2)
G & A	A$/t	3.16 (3)
Total Operating Costs	**A$/t**	**64.17** (4)
Total Operating Costs	**A$ 000s**	**40,688**

(1) Direct costs include mining and transportation

(2) Calculated on Higginsville Processing costs over mineralization processed

(3) Calculated on Higginsville Administration costs over mineralization processed

(4) Calculated on Total Higginsville Operating costs over mineralization processed

Discussion on each of the areas of spending follows below.

21.2.5.1 Gold Mining

Gold mining is conducted by open-pit mining. Open-pit mining, also known as opencast mining, is a surface mining technique that extracts minerals from an open pit in the ground. The open-pits are dug on benches that vary in size, depending on the size of machinery used to excavate.

Processing

Costs associated with the processing of Higginsville mined mineral and planned toll treatment of third parties mineralised ore. Processing of mineralization is performed onsite by a carbon in pulp mill. These costs are associated with crushing, grinding, leaching, pouring, tailings, water supply and laboratory functions within the carbon in pulp mill.

General & Administration (G&A)

Costs associated with the mining operation that cannot be directly allocated to gold mining have been grouped under G&A. G&A costs are of an administrative nature, including:

- The complement of supervisory and technical personnel responsible for managing operations, such as Environment, Occupation Health and Safety, Mines Rescue and Logistics;
- 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.

Closure

An un-audit and mine closure estimate as at June 10, 2019 demonstrated a rehabilitation liability accruing to Higginsville Gold operation for the disturbance of tenements held at A$22.3M.This compares to the MRF Liability Estimate of $25.1M provided to DMIRS.

22. ECONOMIC ANALYSIS

As a producing issuer RNC is not required to provide an economic analysis as provided in Item 22 of NI 43-101 Form 1.

Cautionary Statement Regarding the Beta Hunt and Higginsville Mines

The decision to produce at the Beta Hunt Mine was not based on a feasibility study of mineral reserves, demonstrating economic and technical viability, and, as a result, there may be an increased uncertainty of achieving any particular level of recovery of minerals or the cost of such recovery, which include 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 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. Readers are cautioned that there is increased uncertainty and higher risk of economic and technical failure associated with such production decisions.

A production decision at the Higginsville gold operations was made by previous operators of the mine, prior to the completion of the acquisition of the Higginsville gold operations by RNC and RNC made a decision to continue production subsequent to the acquisition. This decision by RNC to continue production and, to the knowledge of RNC, the prior production decision were not based on a feasibility study of mineral reserves, demonstrating economic and technical viability, and, as a result, there may be an increased uncertainty of achieving any particular level of recovery of minerals or the cost of such recovery, which include 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 anticipated production costs will be achieved. Failure to achieve the anticipated production costs would have a material adverse impact on the Corporation's cash flow and future profitability. Readers are cautioned that there is increased uncertainty and higher risk of economic and technical failure associated with such production decisions.

23. ADJACENT PROPERTIES

23.1 Beta Hunt

23.1.1 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.

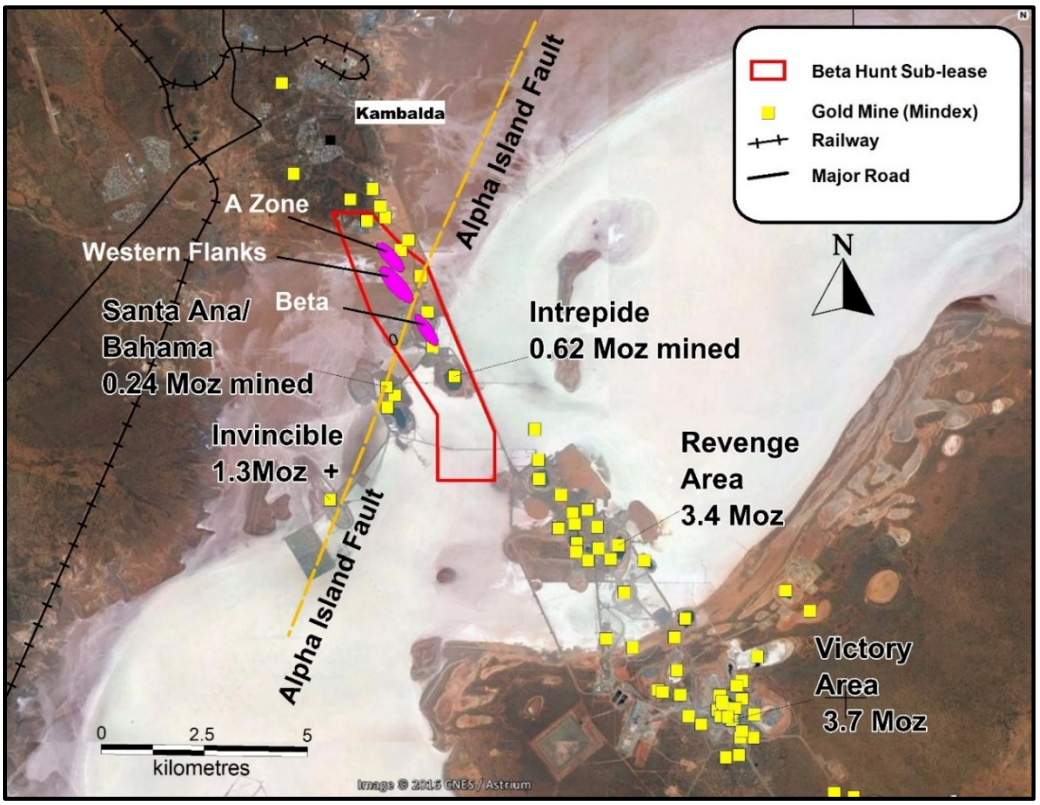
Total production from this orebody was 4.5M tonnes of ore at a grade of 2.7% Ni for a total of 123 ktonnes of Ni contained in ore (Western Mining Corporation Ltd, 1985).

23.1.2 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 22.1). The Alpha Island Fault is associated with the Intrepide, Santa Ana, and Bahama gold deposits.

In 2015, SIGMC reported a mineral resource estimate of 9.2Mt grading 4.5 g/t Au for 1,300 koz contained Au (Gold Fields Limited 2015) for their Invincible discovery, 5km southwest of Beta Hunt and also associated with the Alpha Island Fault. Open pit production commenced in 2015 and underground development in 2017.

Figure 22.1: 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.

23.2 Higginsville

In July, 2019 Pantoro Limited (Pantoro) acquired a 50% interest in the Central Norseman Gold Project (CNGP) from Central Norseman Gold Corporation Pty Ltd for a transaction cost involving cash and shares equating to approximately A$39/oz (50% share) or A$85M. Norseman has produced 6M ozs of gold since its discovery in 1894. The CNGP contains a current JORC compliant Mineral Resource of 4.4 million ounces of gold (www.pantoro.com: ASX release, May 14, 2019). The CNGP, which includes the historical Norseman gold deposits is located between and adjacent to HGO's Mt Henry gold project to the south and the bulk of the HGO tenements (including the mill) to the north.

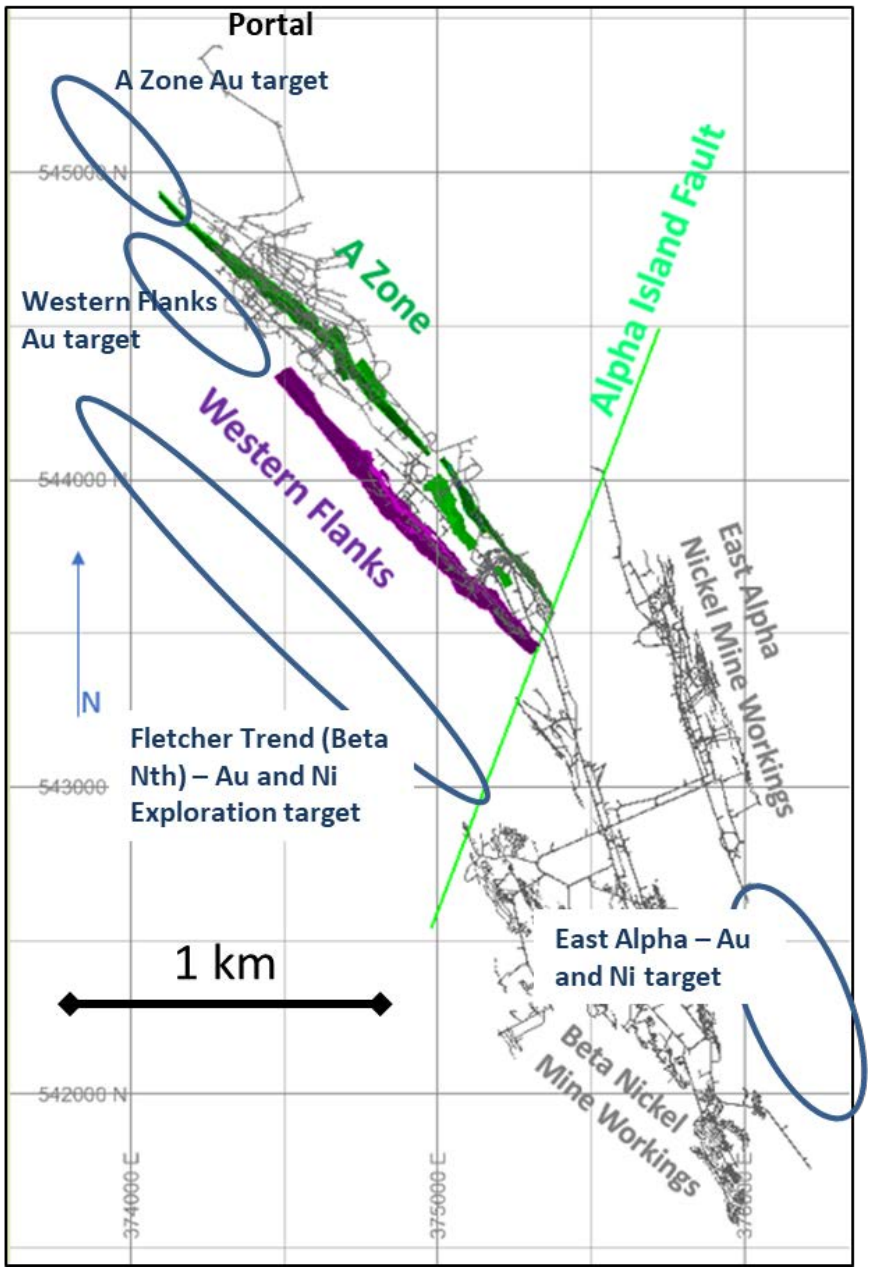
24. OTHER RELEVANT DATA AND INFORMATION

24.1 Beta Hunt

24.1.1 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 23.1).

Figure 23.1: Schematic highlighting gold resources and zones of exploration potential.



Source: SLM

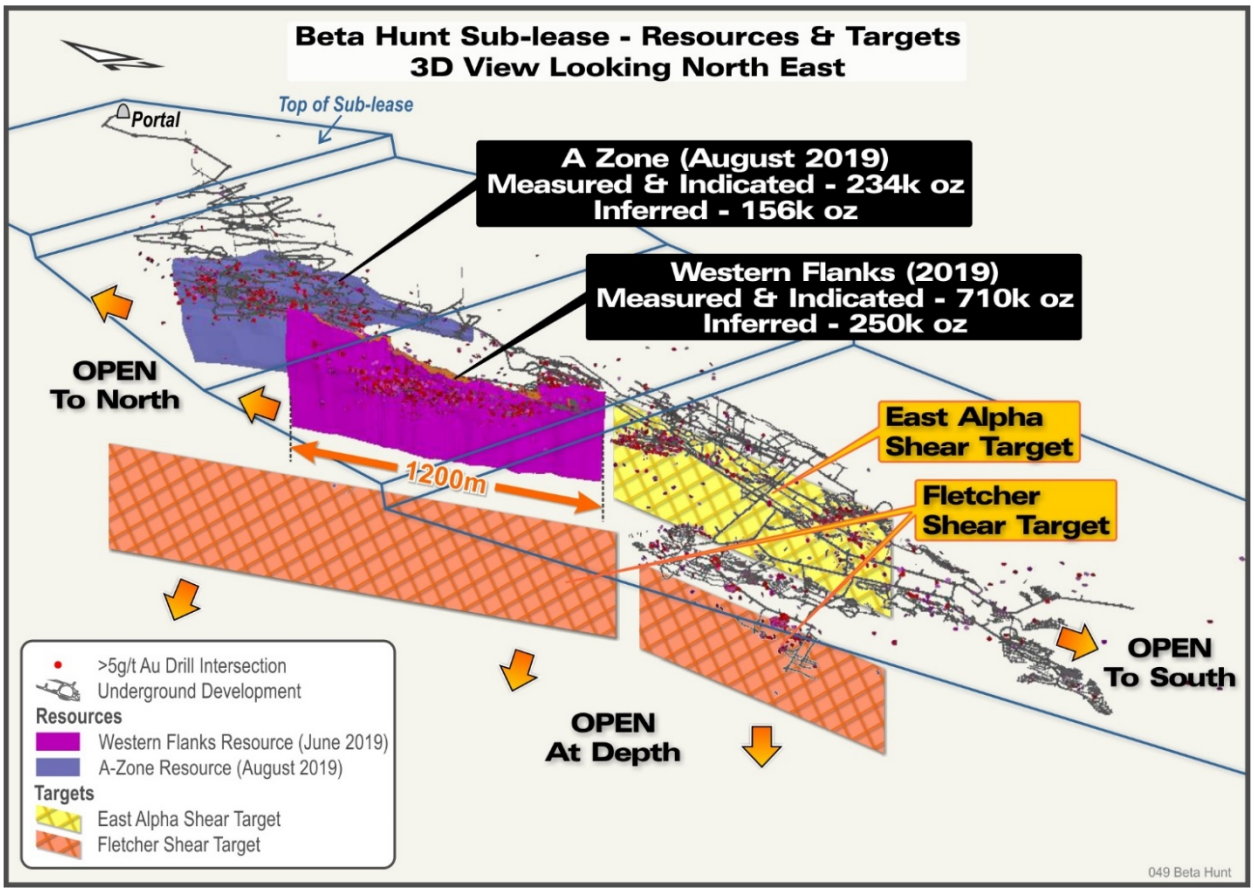
24.1.2 Gold Exploration Potential

The historical focus on nickel mining by previous owners has left much of the gold potential at Beta Hunt unevaluated. SLM's rejuvenated focus on the gold mineralisation has identified and, in part, realised the potential of this metal through extensive underground drilling programs and ongoing mining activity along the main shear zones. An improved understanding of the mineralisation controls from the drilling and mining has led to the delineation of both new parallel, mineralised shear zone targets – Fletcher and East Alpha – plus extensions to the known mineralised shears – Western Flanks and A Zone (Figure 23.2).

In addition to the broad shear zone targets, the recognition of the potential for coarse, specimen quality gold pods to occur where the Lunnon interflow sediment intersects these shear zones provides a more focused target for drill planning.

The following sub-sections discuss key targets in more detail.

Figure 23.2: 3D view of new gold targets and extensions to known gold resources

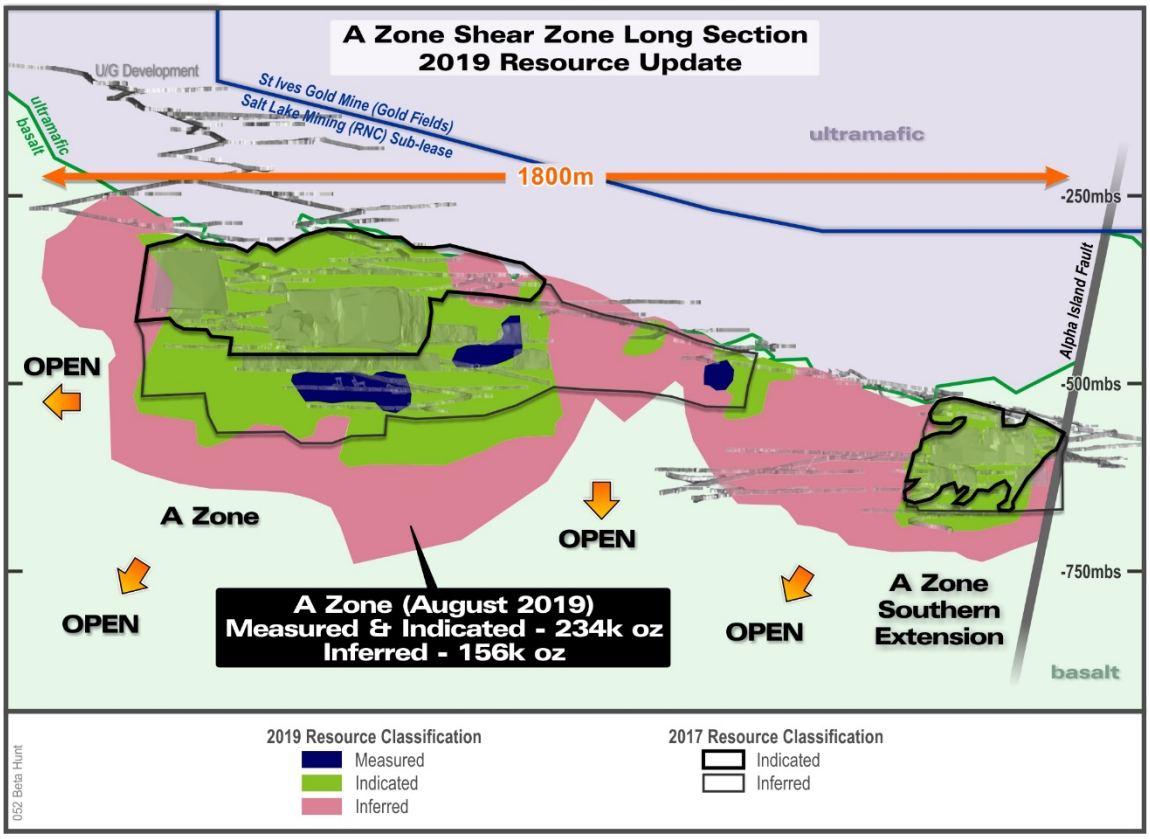


Source: SLM

24.1.3 A Zone

The A Zone resource remains open along strike to the north and down dip. The recently completed drilling program continues to show economic grade drill intersections on the resource margins.

Figure 23.3: A Zone long section



Source: SLM

24.1.4 Western Flanks

The 390% increase in Measured and Indicated Gold Mineral Resource for the Western Flanks to 710k oz as a result of the recently completed drilling campaign (RNC News release: July 2, 2019) flags this resource as a major mineralised system with the capacity to grow further.

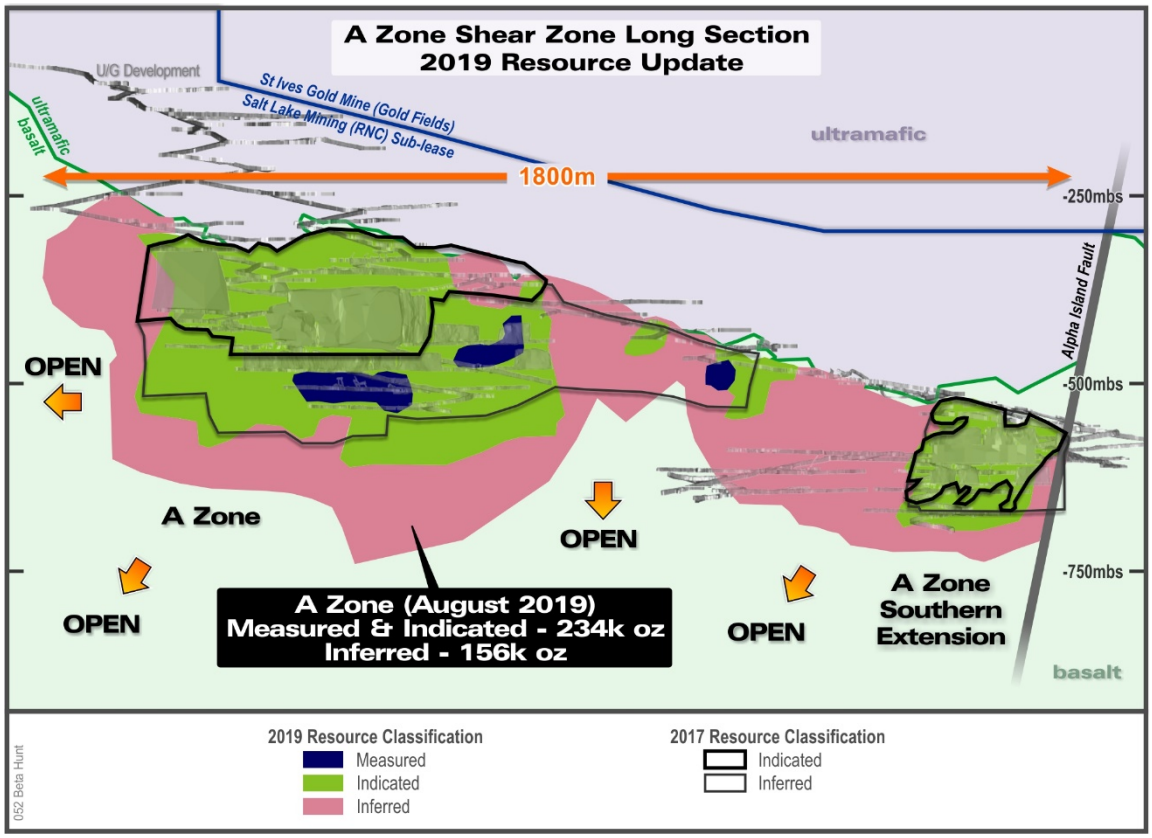
The Western Flanks structure remains open to the north and at depth with good grade and thicknesses of mineralization at the margins of the resource including the deepest and northernmost hole from the recently completed campaign (WFN-083) that yielded 6.3 g/t over 13.9 metres (estimated true width).

In addition to the northern strike potential, down dip drill intersections also highlight the potential of this mineralised system to continue at depth. Some of these intersections (est. true width) are listed below:

- WFN-049 – 3.04 g/t over 16.42 m (including 17.8 g/t over 0.93) and 2.5 g/t over 16.42 m (including 3.6 g/t over 5.74 m and 6.7 g/t over 2.54 m);

- WFN-015 – 4.5 g/t over 23.75 m (including 13.8 g/t over 2.23 m and 10.4 g/t over 3.35 m) and 7.4 g/t over 5.95 m (including 42.3 g/t over 0.79 m);
- WFS-010A – 5.92 g/t over 8.50 m (including 12.23 g/t over 2.32 m)

Figure 23.4: Western Flanks Shear Zone highlighting significant intersections on the margins of the resource. Long section looking east.



Source: SLM

24.1.5 Beta

Beta mineralisation describes the less continuous, ultramafic/basalt contact related gold mineralisation intersected in drill holes south of the Alpha Island Fault. Nearly all holes drilled in this part of the mine were targeted to intersect nickel mineralisation on the contact. Despite the focus on nickel, numerous very high gold grades were recorded close to the basal contact, including those listed below:

- 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. An example of this type of mineralisation was found in April 2016 (RNC News Release: April 21, 2016), when

an estimated 127ozs of coarse, specimen quality gold was recovered from a development cut known as the "HOF".

Historically the Beta 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. It is interpreted that the Beta area hosts the offset continuation of the A Zone, Western Flanks and Fletcher shear zones.

24.1.6 Fletcher Shear Zone

In June 2016, Co-funded drill hole, WF98-14 intersected the Fletcher Shear Zone, a conceptual target based on applying the structural analogue of the A Zone and Western Flanks to the Fletcher nickel trough target identified by WMC in the 1090s. The Fletcher Shear Zone is marked by a near 200 m normal fault offset defined by wide spaced historical surface drilling.

In the newly discovered Fletcher structure, two distinct lodes containing over 24m of gold mineralization in excess of 2g/t were intersected:

Lode A returned results of 8.9 m of 2.67 g/t from 716.6 metres including:

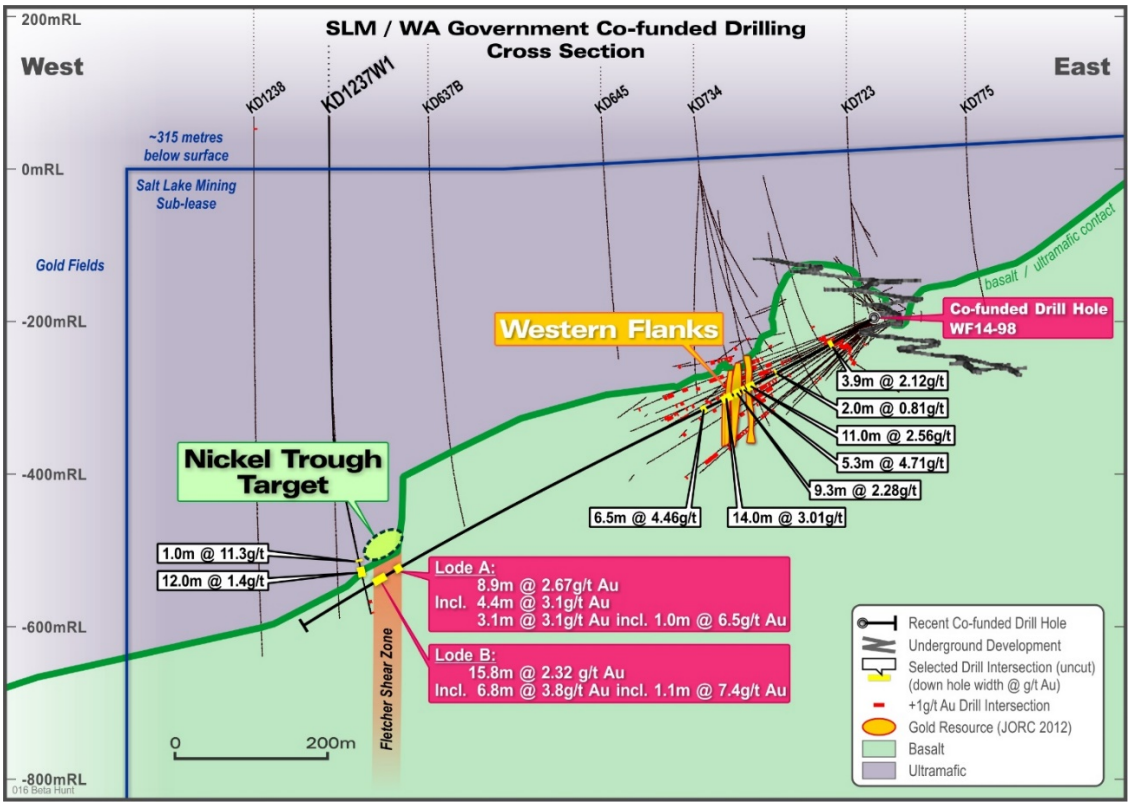
- 3.1 m @ 3.1 g/t from 716.6 m, including 1.0 m @ 6.5 g/t from 718.0 m
- 4.4m @ 3.1 g/t from 722.4 m

Lode B returned results of 15.8 m of 2.32 g/t from 736.5 metres including:

- 6.8m @ 3.8 g/t from 739.1m, including 1.1 m of 7.4 g/t from 744.8 m

The discovery of the Fletcher Zone also provides a focus for targeting nickel mineralization at the top of the shear on the Ultramafic/basalt contact. The analogy used is the A Zone shear where the bulk of 33kt of nickel metal mined from Hunt mine by WMC came from directly above the A Zone shear.

Figure 23.5: Discovery drill hole WF98-14 intersecting Fletcher Shear Zone, June 2016 - Looking north.



Source: SLM

24.1.7 East Alpha

This target represents the interpreted mineralised shear zone directly below the East Alpha nickel trough on the east side of the Kambalda Dome. The location of the Redoubtable open-pit directly above the nickel trough supported by anomalous gold assays from holes testing for nickel mineralisation in the trough provide evidence of gold mineralisation analogous to the steep, mineralised structures as at Western Flanks and A Zone.

To date this target remains untested.

24.2 Nickel Exploration Potential

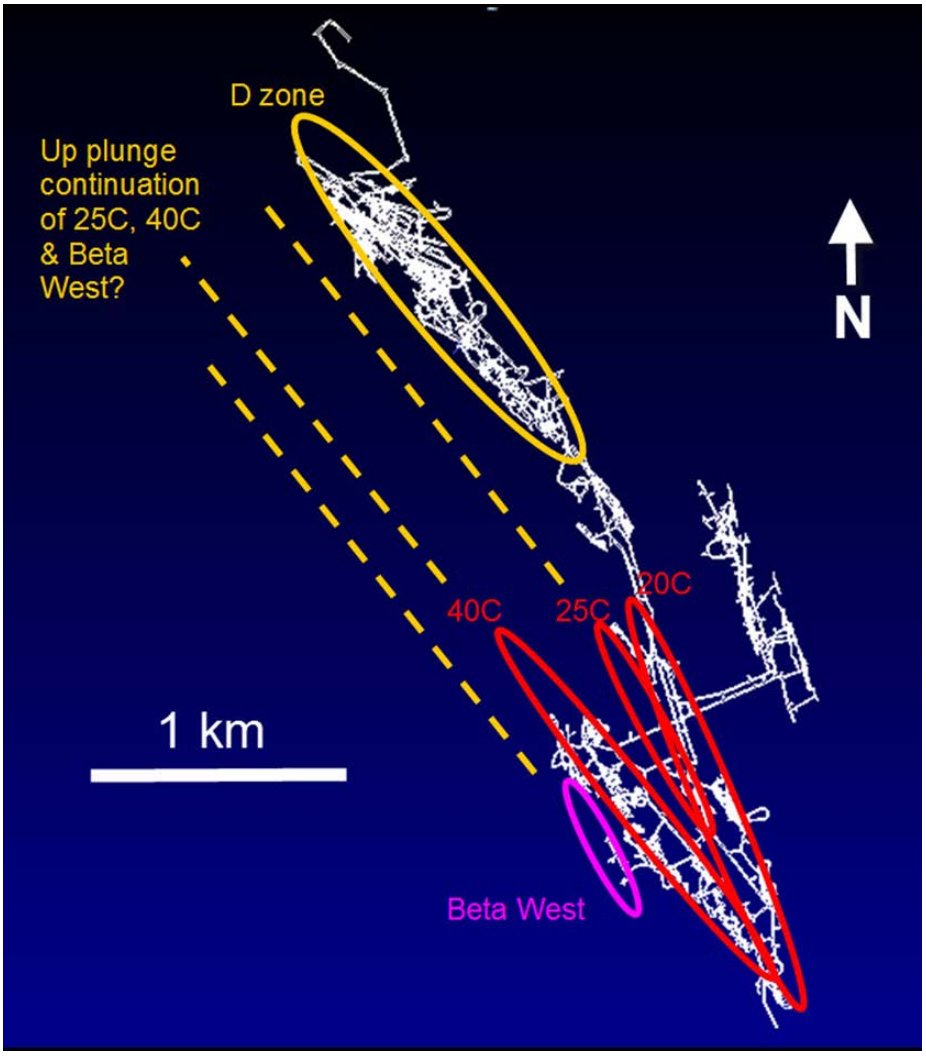
Significant potential exists for the discovery of additional nickel deposits at Beta Hunt along trend from known nickel shoots and in parallel structures north of the Alpha Island Fault Figure 23.1). Potential also exists down plunge to the south of the Alpha and Beta deposits as indicated by results from widely spaced drilling (Figure 23.8).

Since the release of the 2016 PEA, there has been no drilling activity dedicated to upgrading or growing the existing nickel resource. All drilling has been entirely focussed on gold mineralisation. Given this situation, the nickel targets previously described in the 2016 PEA continue to remain relevant for future exploration.

24.2.1 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 23.5). 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 23.5: 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, there may be some potential for further drilling, re-interpretation and remnant mining of the Hunt shoot.

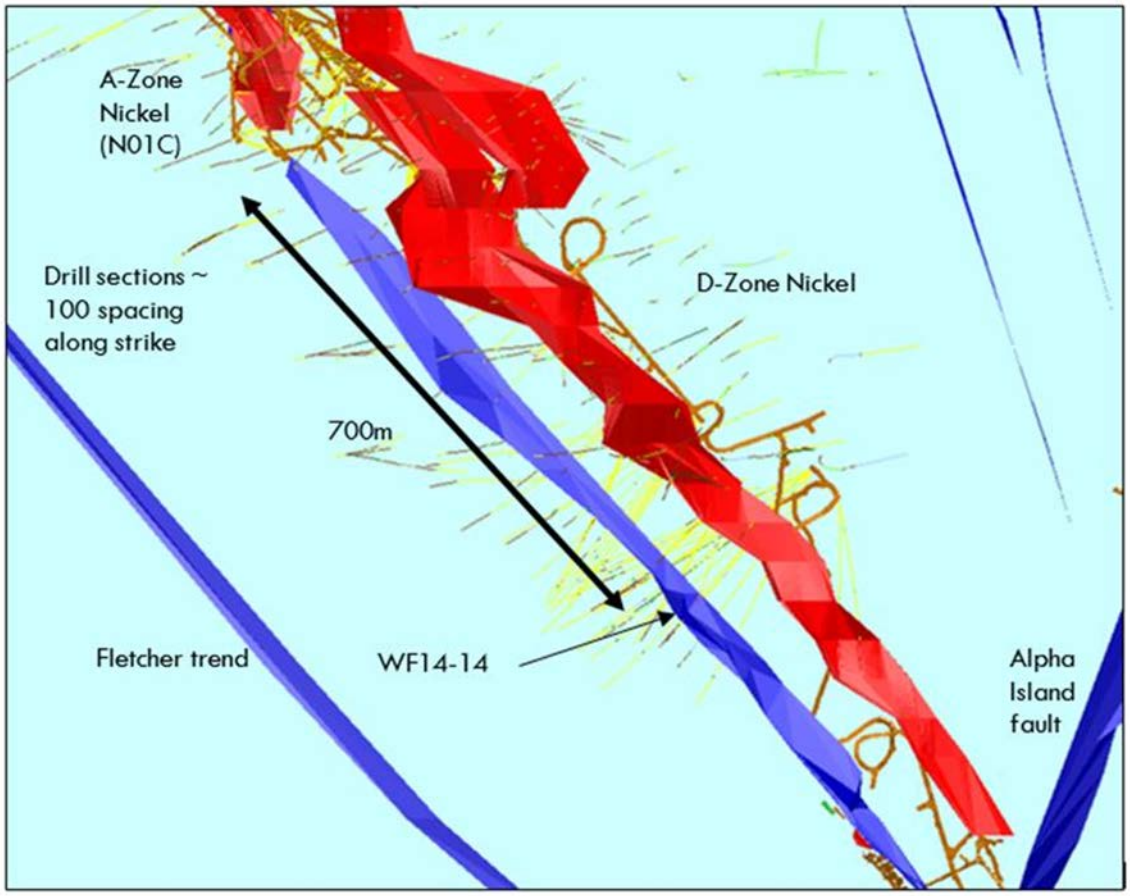
There is, however, excellent potential for exploration drilling to the west of the already mined surfaces in Hunt along the Beta North and Fletcher trends. Existing drilling in this area consists of surfaces holes with

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.

24.2.2 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 position of the A Zone surface (Figure 23.6). 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 23.6: A Zone Trend nickel exploration potential west of D Zone. Oblique view looking northeast



Source: SLM

24.2.3 Lunnon Extensions

Exploration potential exists along the southern extension of the Lunnon trend (see adjacent deposits in Section 23.1.1) onto the Beta Hunt sub-lease, between existing development and the Alpha Island Fault (Figure 23.8)

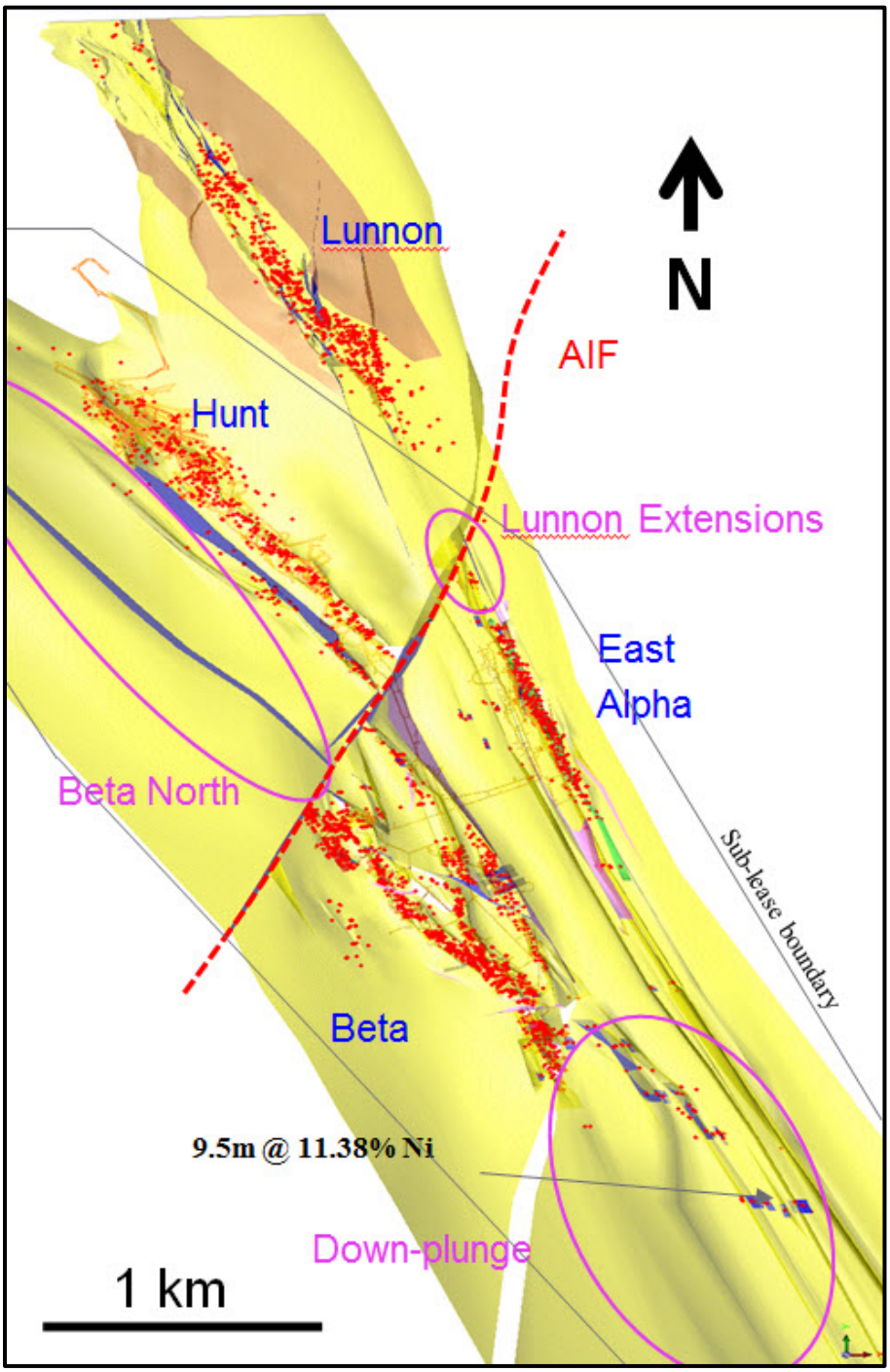
24.2.4 Down Plunge Extensions

Exploration potential exists down plunge from the Beta and East Alpha deposits as indicated by several widely spaced nickel intersections (Figure 23.7 and Figure 23.8). 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.

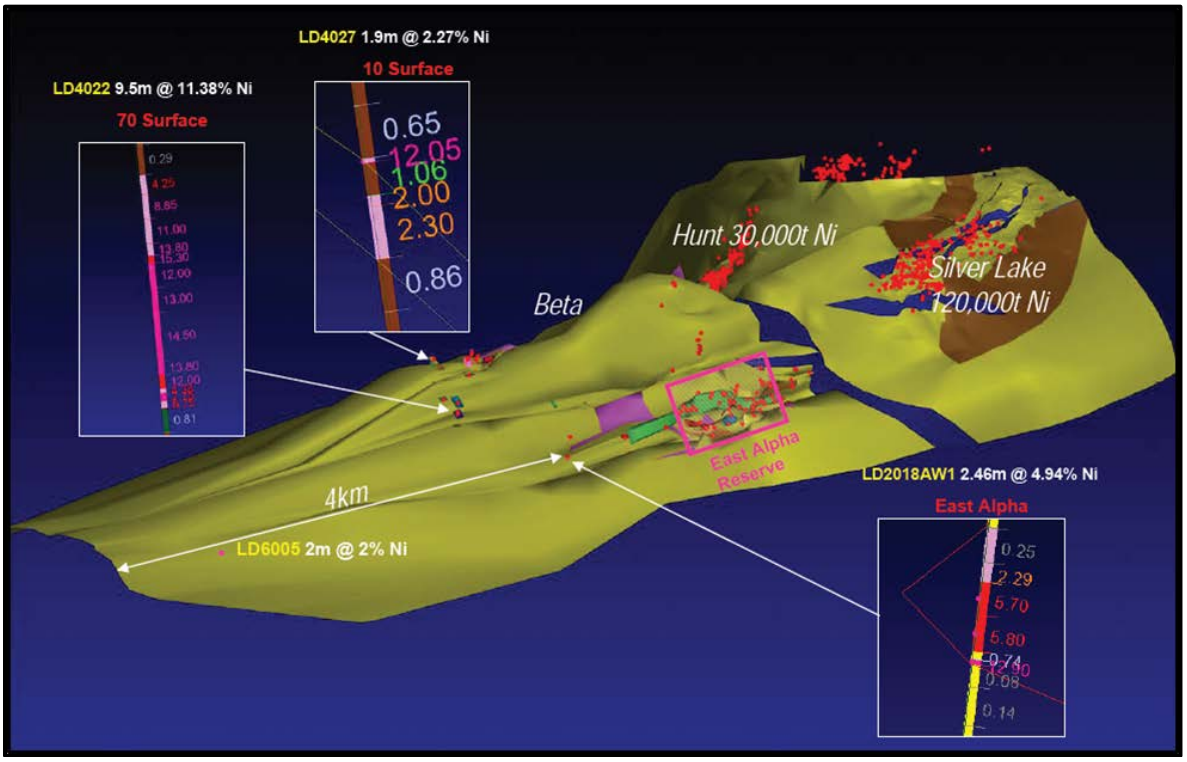
These occurrences suggest that nickel mineralization potential extends over 3 km to the south toward the boundary of the Beta Hunt Sub-lease. No follow-up work in this area has been carried-out since WMC sold the property to Goldfields in 2001.

Figure 23.7: Basalt geology model showing mine development and assays greater than 1% nickel (red dots)



Source: SLM

Figure 23.8: Oblique view of basalt geology model looking northwest



Source: SLM

24.3 Higginsville

The Higginsville Project encompasses approximately 1,800 km^2 of the prospective Norseman-Wiluna greenstone belt, located between the world-class gold mining centres of St Ives (+13Mozs) and Norseman (6Mozs).

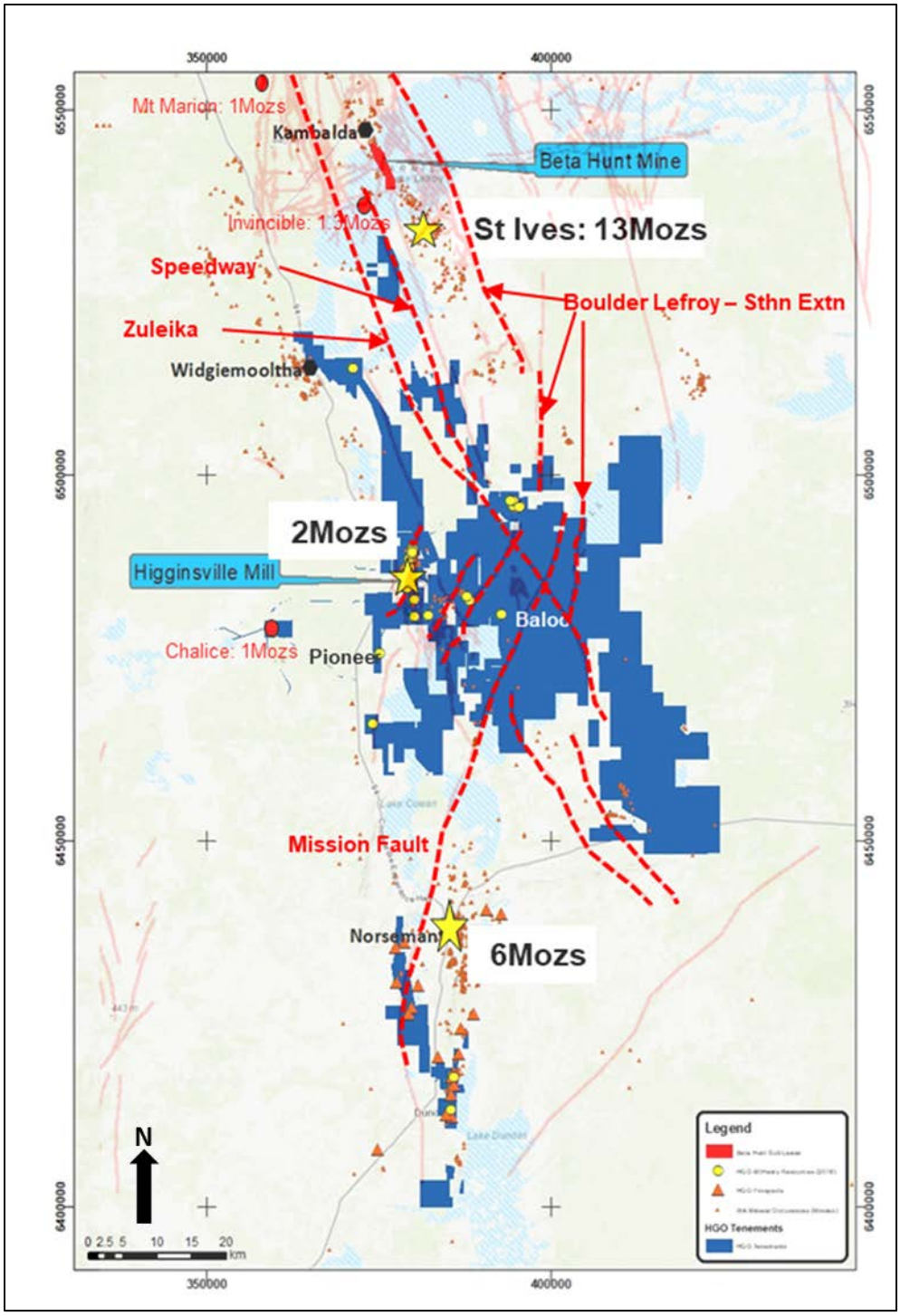


Fig.23.9 HGO Project area in relationship top major regional gold deposits and shear zones.

The Project area also overlies three of the richest mineralised regional shear zones in the Eastern Goldfields – Boulder-Lefroy, Zuleika and Speedway (Fig.23.9). The Boulder Lefroy controls the Golden Mile deposit of Kalgoorlie (50Mozs) and the St Ives gold camp (13Mozs). The newly discovered Invincible deposit (1.3Mozs) found in 2012 is controlled by the poorly explored Speedway shear, while the Zuleika is associated with the Kundana and Mt Marion (1.2Mozs) deposits to the north.

In the last 15 years, the Project area has delivered significant discoveries – Trident in 2004 (1Mozs) and the Polar Bear deposits, including Baloo, in 2015. Trident was discovered testing down plunge extensions to a known deposit (Poisedon Sth) while Baloo was discovered by S2 using reconnaissance aircore, highlighting the potential for early stage exploration to still deliver new discoveries in a "mature" goldfield. The area of the Baloo discovery remains relatively unexplored due to it being largely concealed by the shallow salt lake sediments.

The Project has a large number of prospects at various stages of progress to deliver a resource. The Exploration team at HGO has used a milestone based system to rank and target these prospects (Fig 23.10), Very little greenfields exploration has occurred in recent years with drilling focusing on upgrading existing resources, eg., Mt Henry.

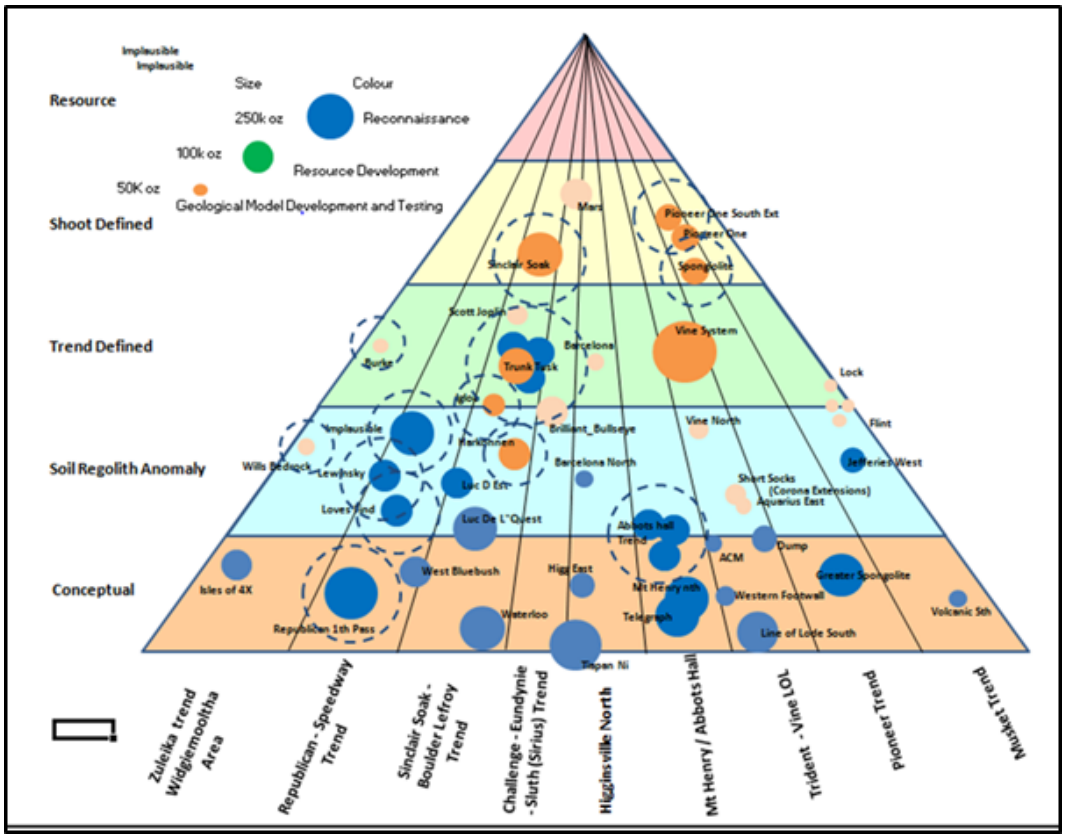
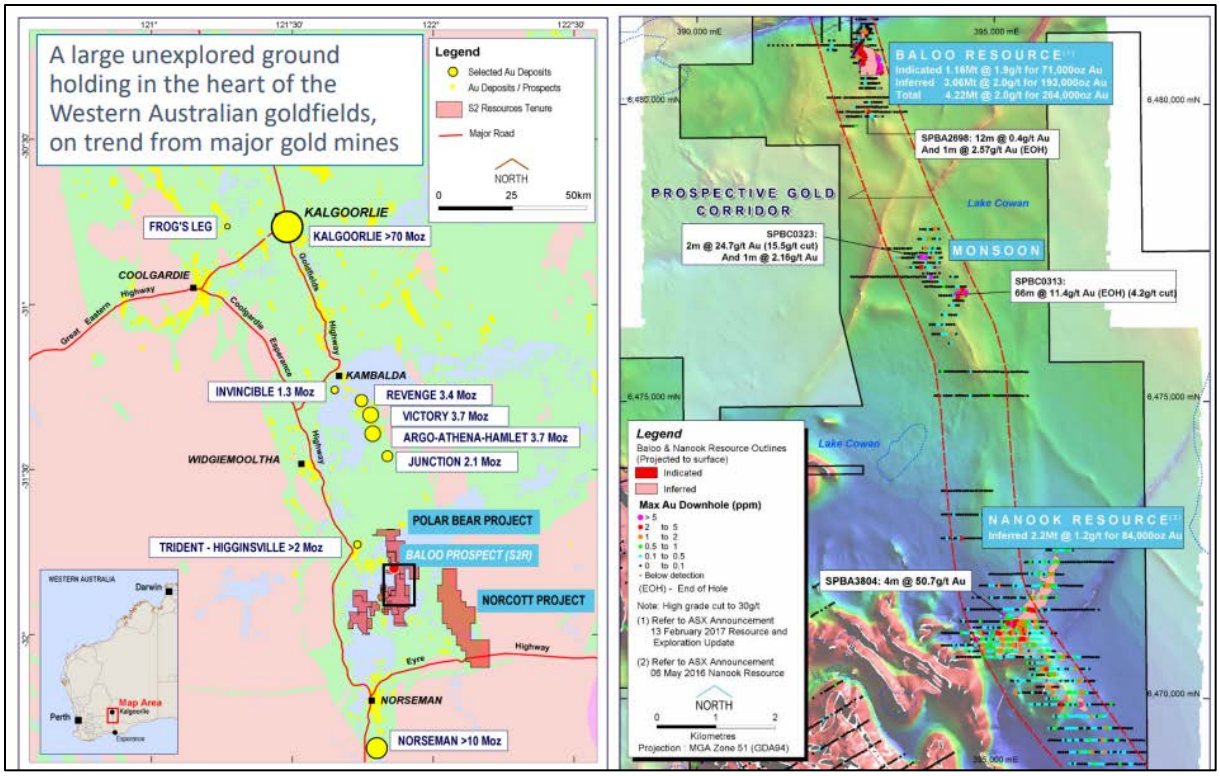


Fig.23.10 C2018 Exploration Targets identified by HGO

Under a rejuvenated exploration program there is the opportunity to follow-up on numerous targets already identified. Examples of preliminary early stage targets would include:

- Scoping out the size and drill testing the extent paleochannel mineralisation – 350kozs mined to date;
- Targeting another Invincible deposit on the Speedway shear; and
- Following up and extending the exploration activity, including additional aircore drilling targeting the Baloo Trend (Figure 23.10).

Figure 23.11: The location of the Baloo gold trend identified by S2 Resources in 2015 (www.s2resources: RIU roundup presentation, May 10, 2017). Note – project known as the Polar Bear project acquired by Westgold in February, 2018.



At this early stage of understanding the geology at Higginsville by RNC initial drilling programs would be directed at ensuring confidence in the short to medium term LOM plan. Work is expected to include validation drilling and resource modelling and deposits including Pioneer, Baloo Stage 2, Two Boys and Fairplay Nth.

25. INTERPRETATION AND CONCLUSIONS

Beta Hunt and HGO are established operations with a long history in mining to support their proposed development plans to exploit the available Mineral Resources in both areas.

Specific conclusions by area follow.

25.1 Mineral Resources

Gold: Beta Hunt currently hosts 944koz Au in Measured & Indicated Resources and 406 koz Au contained in Inferred Resources (Table 1.1). This estimate delivers a 395% and a 195% increase in contained metal for the respective resource categories over the December, 2017 Mineral Resource estimate. This represents a substantial increase in not only the size of the resource, but also the confidence and quality of the resource providing the opportunity for the operation to develop a medium to long term mine plan. The property-wide exploration potential remains significant. Both the A Zone and Western Flanks lodes remain open at depth and along strike, while testing of parallel, analogue gold systems to the A Zone and Western Flanks is at a very early stage, with results from testing the Fletcher Trend already providing very encouraging results. The medium to long term plan is to continue to extend the known resources, test structures, such as the Fletcher Trend, plus porphyry-hosted mineralisation, that hold the potential to replicate the economic zones discovered to date.

Nickel: Nickel resources have not been updated since the 2016 PEA. Mining is limited to difficult-to-access remnant ore. Exploration work has identified a number of targets with potential to grow the nickel resource. An intensive drill program is required to realise this potential.

Gold: Higginsville has a historic resource of 1.22Moz in Measured and Indicated and 681koz of Inferred (see Table 6.5). The Company is currently undertaking a review of all historic resources with the aim to identify those that can be quickly brought into a new JORC 2012 and eventually 43-101 Mineral Resource category.

There are a number of areas close to existing infrastructure that have some drilling where it is expected that a limited number of drill holes could provide further mining targets. Drilling is underway in some of these areas.

25.2 Mineral Processing

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

- The ability to blend Beta Hunt and Higginsville mineralization has in some cases resulted in improving throughputs and lowering overall milling costs.
- Higginsville and Beta Hunt mineralisation have shown themselves to be readily amenable to the HGO milling circuit achieving good recoveries and throughputs
- Beta Hunt is an operating mine with gold production currently being processed at the SLM owned HGO mill and an agreement in place for processing of nickel.
- Beta Hunt mineralization was successfully processed by toll operators for many years including the HGO and as such are well understood.

25.3 Mining

SLM transitioned to owner-operations using conventional methods and has since experienced considerably improved results. The steady-state production rate of 1,450 t/d was achieved by the second half of 2019.

Gold mineralization occurs in wide and steeply dipping shear-vein system that are amenable to mechanized methods. Production is ramping up to a target of 1,750 t/d that is expected to be reached by the end of 2019.

At Higginsville mining commenced at the Baloo Stage 1 open pit in August 2019 with Stage 2 optimisation underway and necessary approvals to be sought later in the year. A series of open pits to follow the completion of Baloo have been identified and are currently in various stages of permitting. Fairplay North which is located on 2 kms from the HGO mill is fully permitted and approved for mining and will provide the next open pit in the mining sequence.

25.4 Environmental

Risks associated with environmental issues at Beta Hunt and Higginsville are considered low. 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 one of the top jurisdictions globally for mining investment.

- At Higginsville water and tailings management remain the key focus. Since the acquisition of Higginsville by RNC considerable work has been undertaken to ensure compliance and risk mitigation. All areas are currently in compliance.

- A medium-long term tails management plan is currently being developed by the onsite team with input from mill tailing impoundment specialists.

25.5 Capital and Operating Costs

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

- The acquisition of the Higginsville operations realised many benefits to RNC outside the large historical resource, extensive land holding and existing HGO mill with its regional importance. By acquiring the following fully functional infrastructure meant limited capital would be required in these areas for some time, including office and workshops, 200 person accommodation village, fully stocked store including most critical spares and a mobile fleet/fixed plant fleet capable of supporting the entire Higginsville team.

- At Beta Hunt, it is an operating mine with all necessary infrastructure mostly in place and primary development to the various working areas established. The new updated Resource is relatively close to existing infrastructure and will not require large capital investments to access.

- At Higginsville, a large portion of the current historic resource is within easy trucking distance to the current HGO mill and once converted to mining projects will require limited capex commence mining. 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.

26. RECOMMENDATIONS

At Beta Hunt, the author recommends that SLM use the recently defined gold Mineral Resource estimate to produce Mineral Reserves that provide medium to long term security for the on-going development of the Beta Hunt mine.

Specific recommendations for Beta Hunt include:

- Completion of the process of converting gold mineral resources into mineral reserves.
- A review of the historical undeveloped nickel Mineral Resources and nickel exploration targets with the aim of defining Mineral Resources that could be converted to Mineral Reserves.
- Continue to evaluate and test with drilling the gold exploration potential at Beta Hunt.

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.

At Higginsville the author recommends that management complete a property-wide review of the historical Mineral Resources with the aim to prioritise those Mineral Resources for conversion to Mineral Reserves where possible to provide confidence in future mining endeavours.

Specific recommendations for Higginsville include:

- Prioritise the conversion of historic Mineral Resources to JORC 2012 and 43-101
- Where possible focus on Mineral Resources close to existing infrastructure

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 Certified Standard Analysis for G310-9

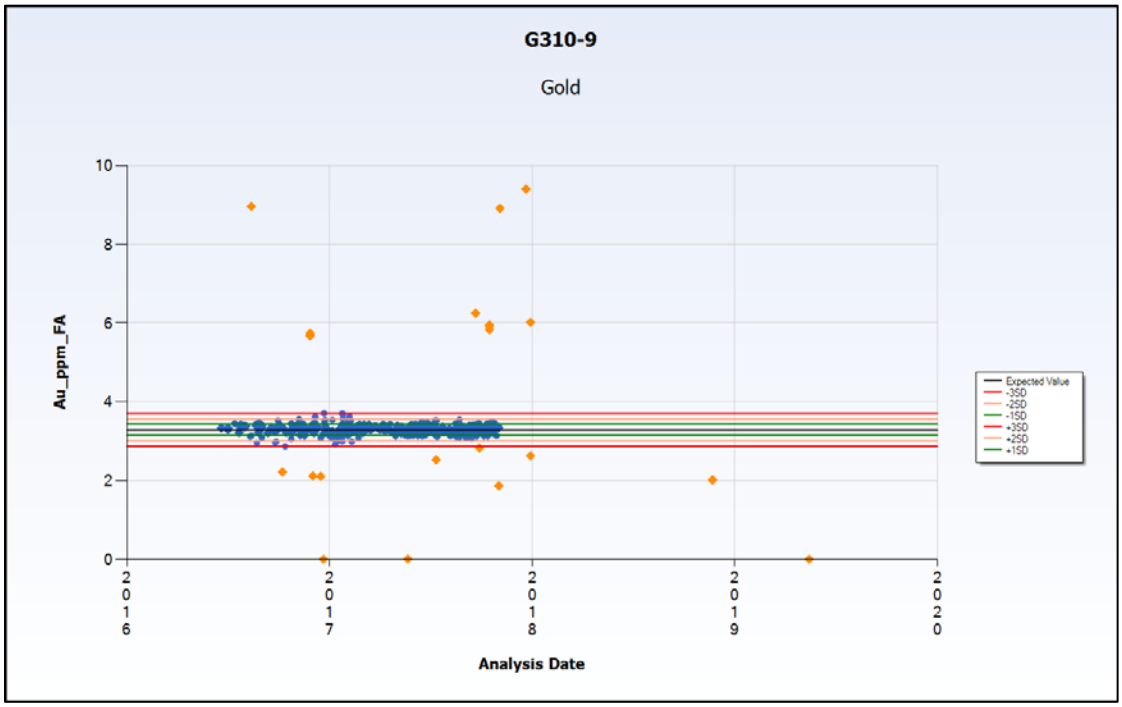


Figure 27.2 Gold Certified Standard Analysis for G314-2

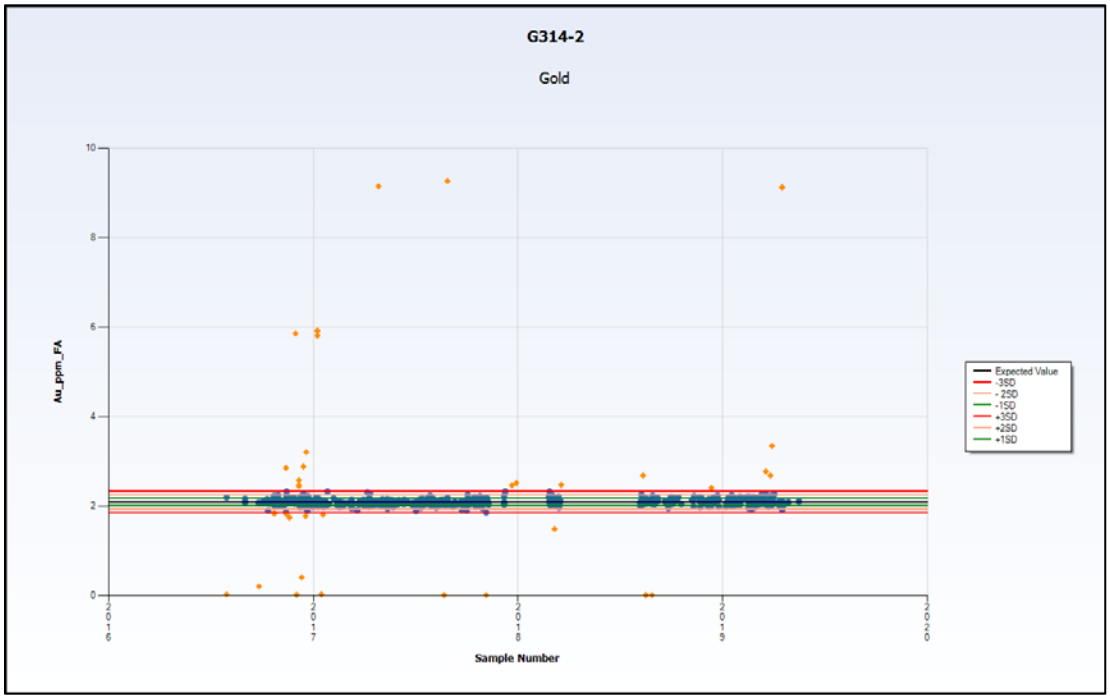


Figure 27.3 Gold Certified Standard Analysis for G316-7

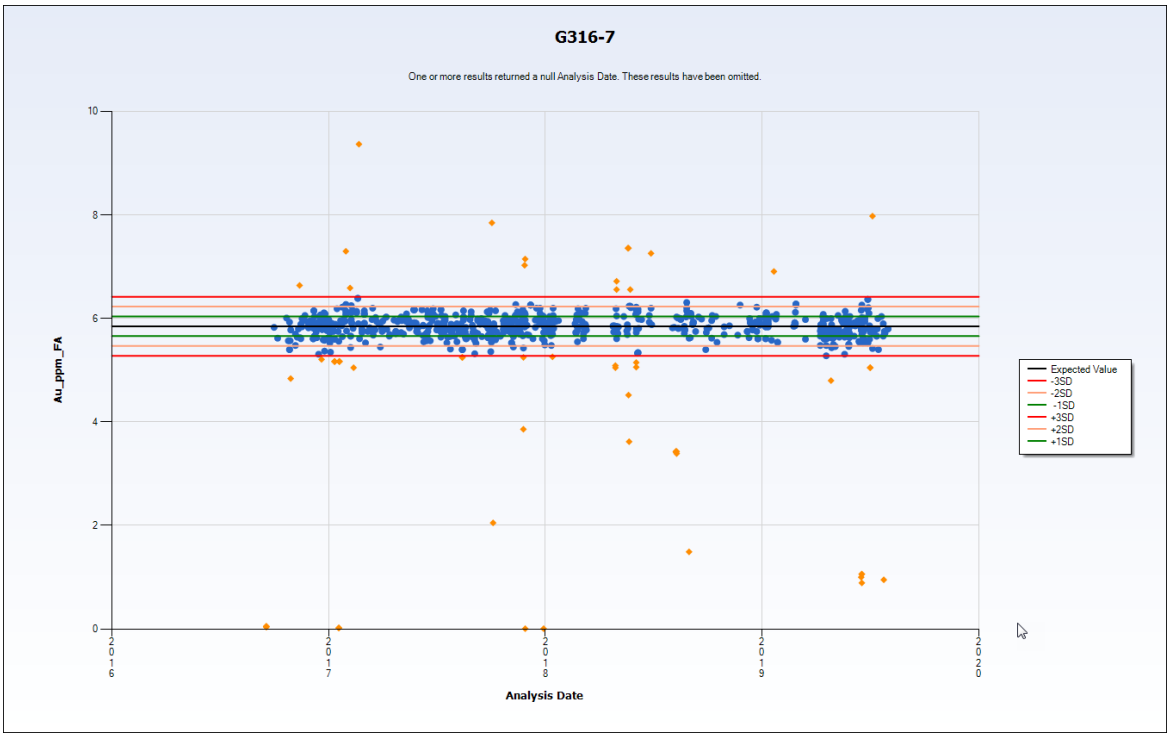


Figure 27.4 Gold Certified Standard Analysis for G909-5

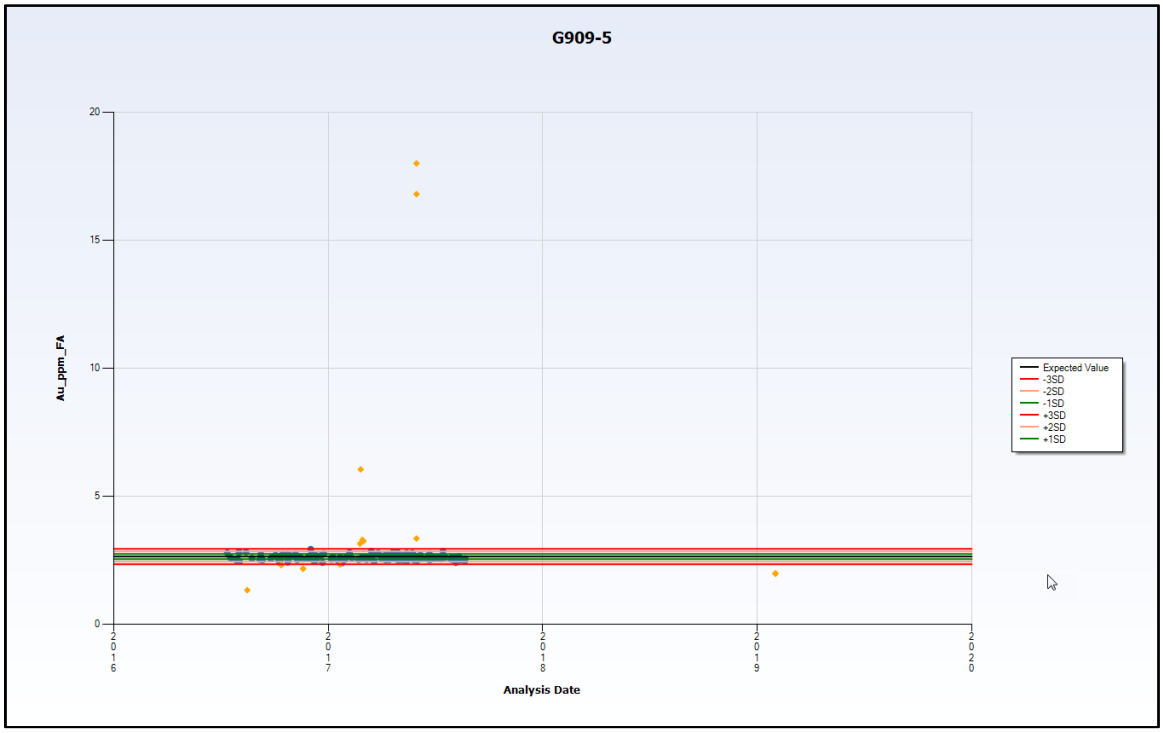


Figure 27.6 Gold Certified Standard Analysis for G912-3

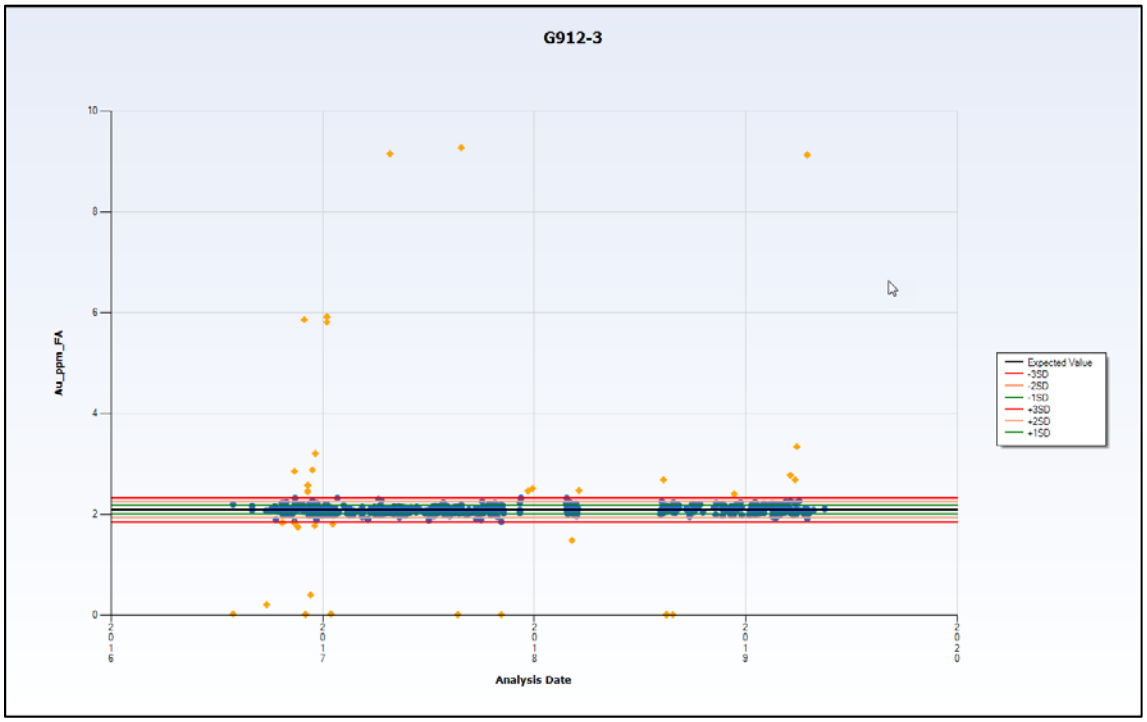


Figure 27.7 Gold Certified Standard Analysis for G914-2

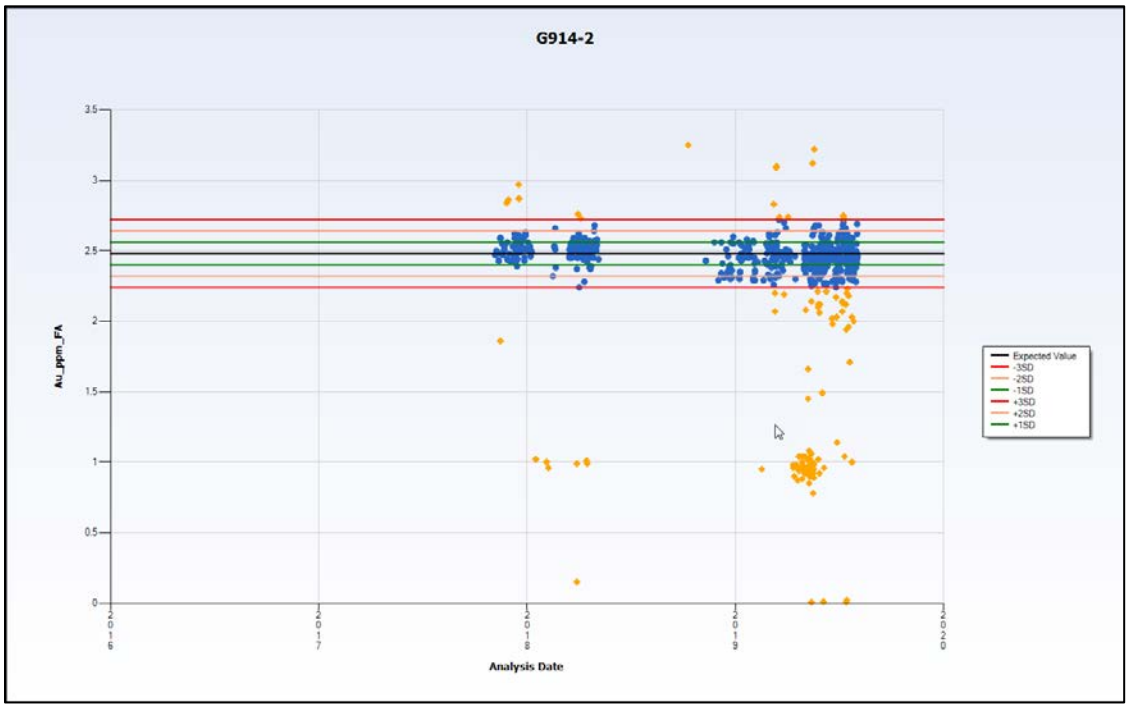


Figure 27.8 Gold Certified Standard Analysis for G915-3

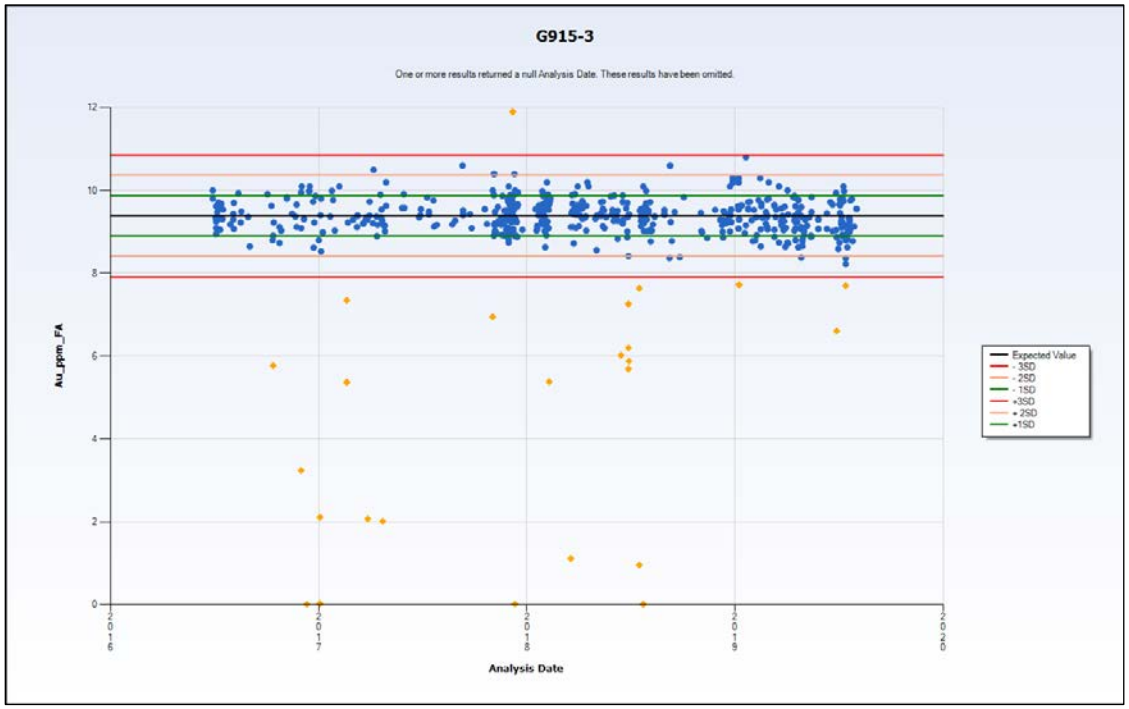


Figure 27.9 Gold Certified Standard Analysis for OREAS-205

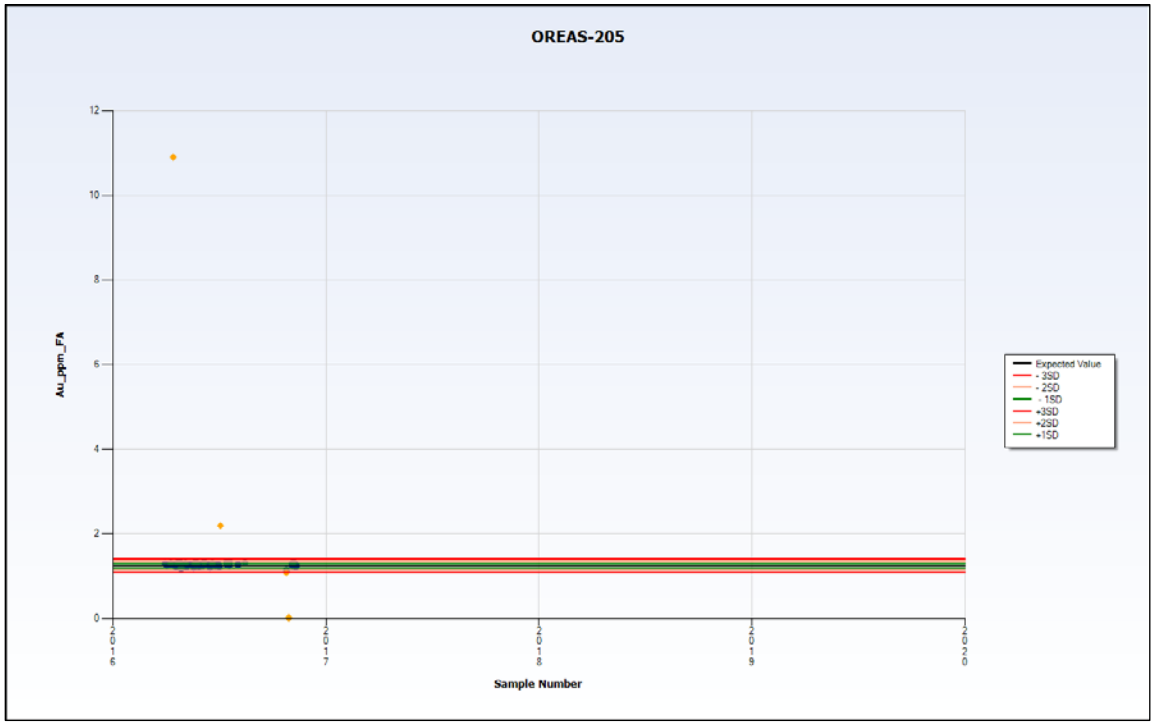


Figure 27.10 Gold Certified Standard Analysis for OREAS-206

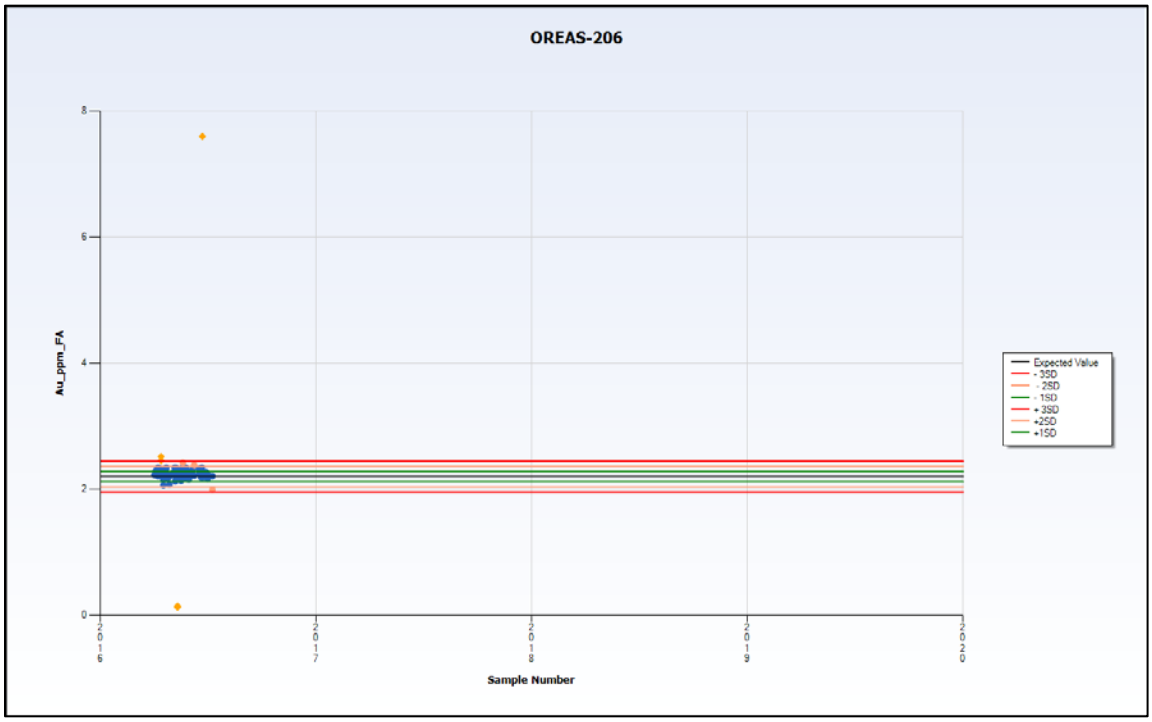


Figure 27.11 Gold Certified Standard Analysis for OREAS-208

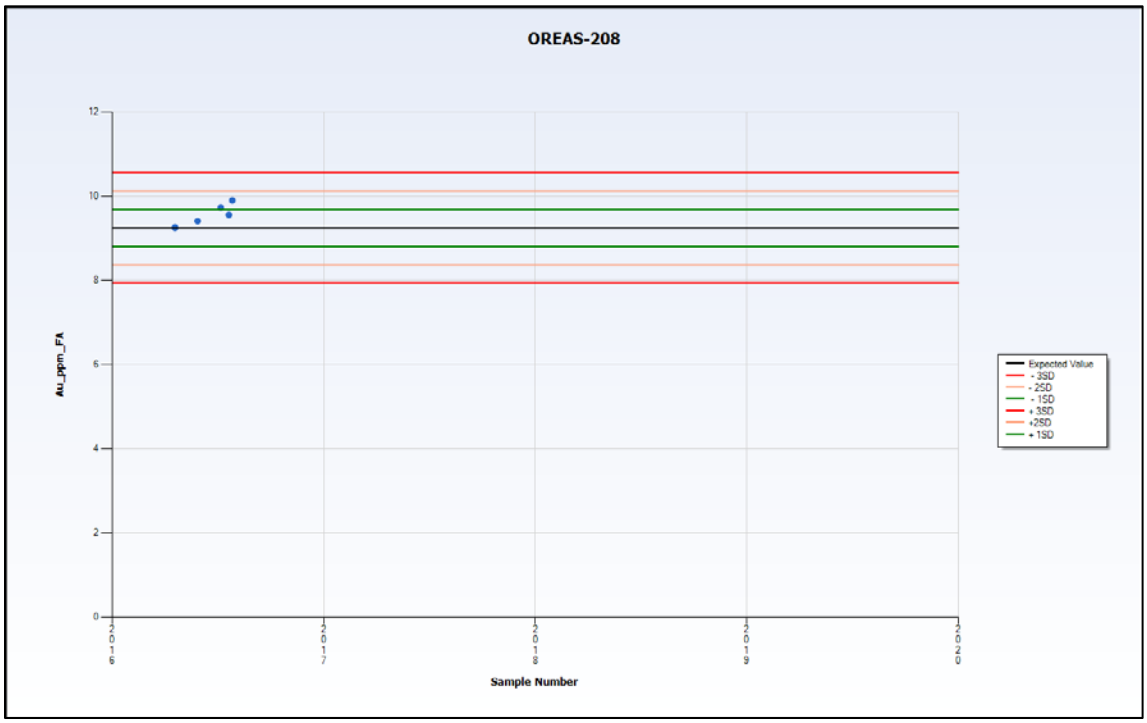


Figure 27.12 Gold Certified Standard Analysis for OREAS-216

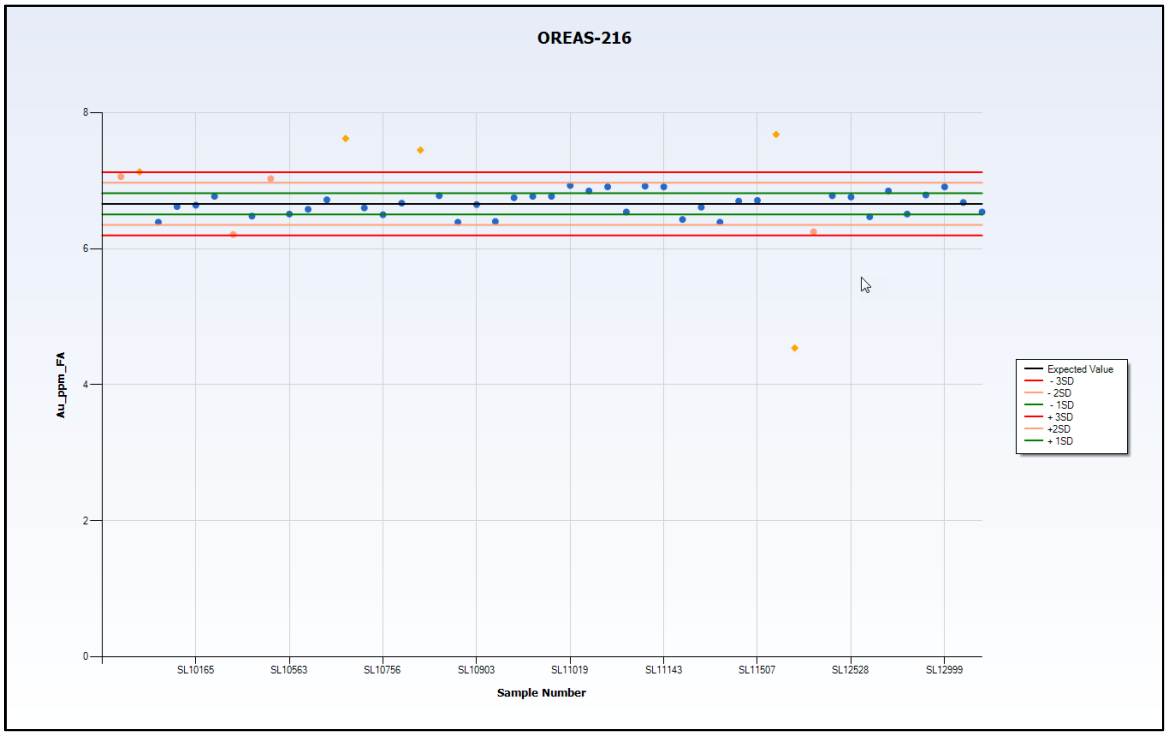


Figure 27.13 Nickel Certified Standard Analysis for OREAS-72a

Figure 27.14 Nickel Certified Standard Analysis for OREAS-14p

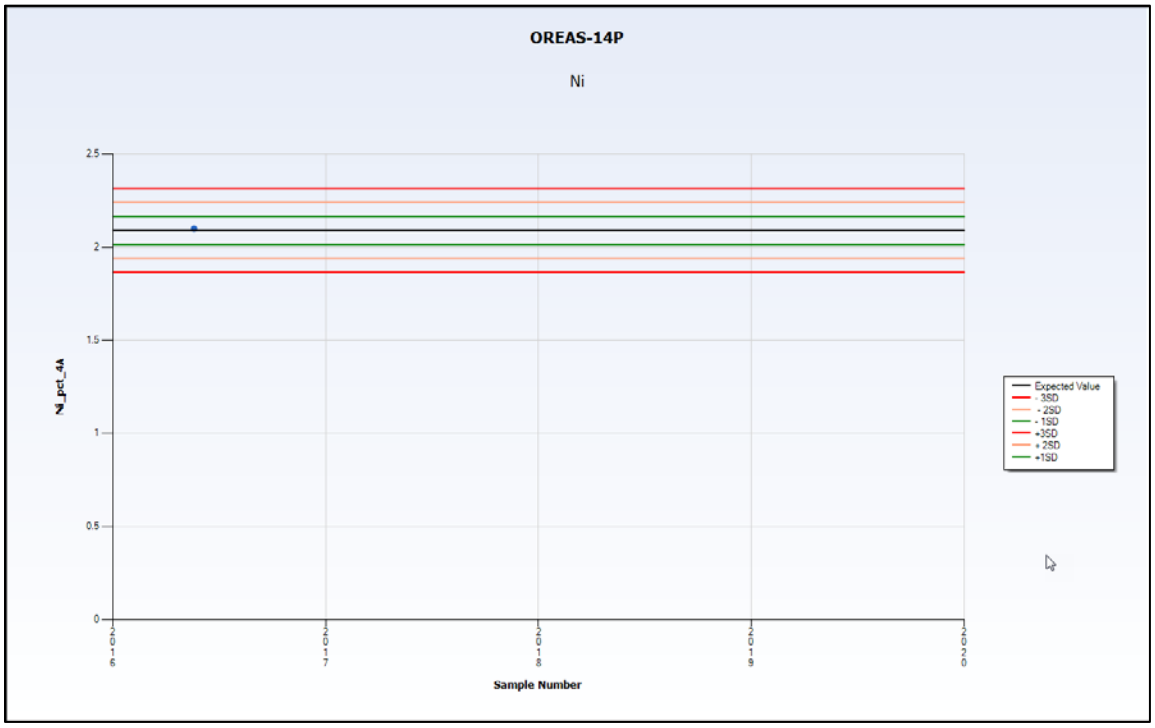
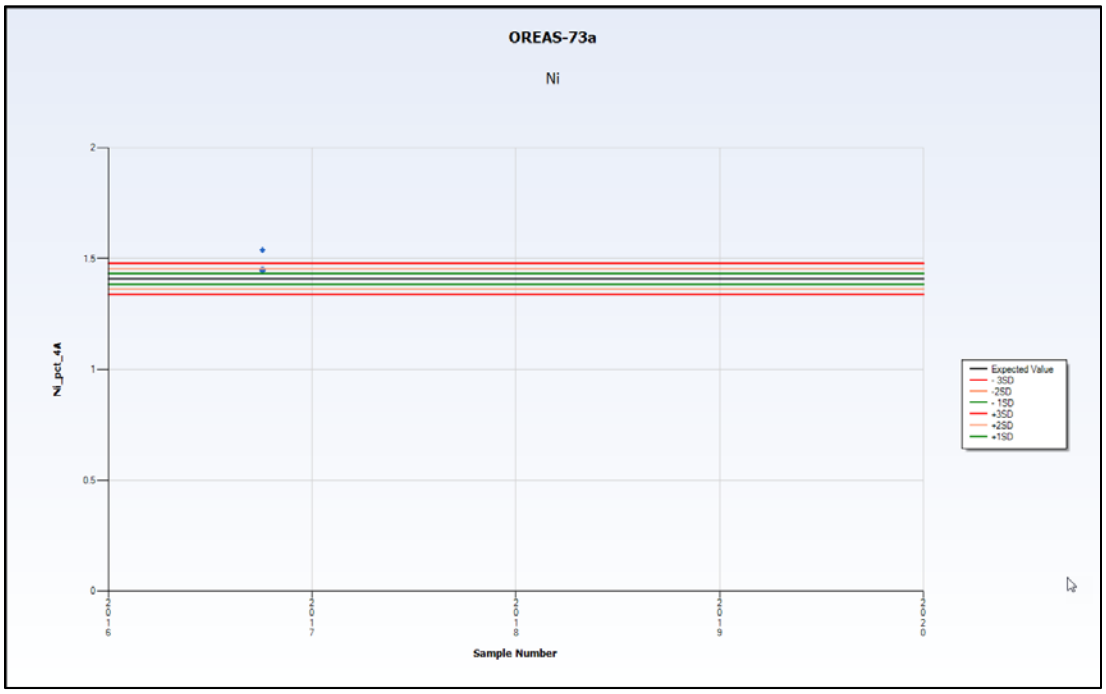


Figure 27.15 Nickel Certified Standard Analysis for OREAS-73a



CERTIFICATE OF QUALIFIED PERSON

Stephen Devlin
Salt Lake Mining Pty Ltd
21 Ord Street, West Perth WA 6005, Australia
Telephone: +61 (0)8 9421 3490
Email: steve.devlin@saltlake.com.au

To accompany the Technical Report entitled: "Technical Report Western Australia Operations - Eastern Goldfields: Beta Hunt Mine (Kambalda) and Higginsville Gold Operations (Higginsville)" dated September 17, 2019.

I, Stephen Devlin, B.Sc.FAusIMM, do herby certify that:

1. I am Vice President Exploration and Growth with Salt Lake Mining Pty Ltd, a 100% owned subsidiary of RNC Minerals, with an office at 21 Ord St, West Perth, Western Australia, Australia;

2. I am a graduate from Sydney University, NSW Australia in 1980 with a B.Sc. Hons in Geology and from Curtin University, Perth, Western Australia in 2013 with a Grad. Certificate in Mineral & Energy Economics; and I have practised my profession continuously since 1981. My relevant experience for the purpose of the Technical Report is: Over 30 years of gold industry experience in exploration, resource development, resource estimation/auditing, mining and management of gold deposits in the Archean of Western Australia;

3. I am a Fellow of the Australasian Institute of Mining and Metallurgy;

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

5. I have prior involvement with the property that is the subject of the Report. This involvement is via my role as Vice President Exploration and Growth with Salt Lake Mining between January 2019 and present, as well as fulfilling the role of Business Development Manager with Salt Lake Mining between 2014 and 2018;

6. I am responsible for the preparation of the Technical Report titled entitled " Technical Report Western Australia Operations - Eastern Goldfields: Beta Hunt Mine (Kambalda) and Higginsville Gold Operations (Higginsville)" dated September 17, 2019;

7. I am not an independent "qualified person" within the meaning of section 1.5 of National Instrument 43-101 – Standards of Disclosure for Mineral Projects of the Canadian Securities Administrators;

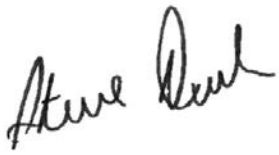
8. I have read NI 43-101 and Form 43-101F1 and have prepared and read the report entitled " Technical Report Western Australia Operations - Eastern Goldfields: Beta Hunt Mine (Kambalda) and Higginsville Gold Operations (Higginsville)" dated September 17, 2019 for RNC Minerals in compliance with NI 43-101 and Form 43-101F1;

9. That, at the effective date of this technical report September 17, 2019, to the best of my knowledge, information, and belief it contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

This 17th day of September 2019

'Original Signed and Sealed'

(Signed) "Stephen Devlin"



Stephen Devlin

21 Ord St,
West Perth 6005
Western Australia

September 17, 2019

To:	Royal Nickel Corporation
And To:	Alberta Securities Commission British Columbia Securities Commission Ontario Securities Commission Financial and Consumer Affairs Authority of Saskatchewan Division Manitoba Securities Commission Financial and Consumer Services Commission, New Brunswick Nova Scotia Securities Commission Securities Commission of Newfoundland and Labrador Register of Securities, Prince Edward Island L'Autorité des marchés financiers

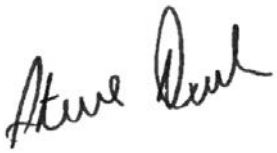
CONSENT OF AUTHOR

I, Stephen Devlin, do hereby consent to the public filing of the technical report entitled "Technical Report Western Australia Operations – Eastern Goldfields: Beta Hunt Mine (Kambalda) and Higginsville Gold Operations (Higginsville)", (the Technical Report) and dated September 17, 2019, and any extracts from or a summary of the Technical Report under the National Instrument 43-101 disclosure of Royal Nickel Corporation and to the filing of the Technical Report with any securities regulatory authorities.

I further consent to the company filing the report on SEDAR and consent to press releases made by the company with my prior approval. In particular, I have read and approved the press release of Royal Nickel Corporation dated September 17, 2019 (the "Disclosure") in which the findings of the Technical Report are disclosed.

I also confirm that I have read the Disclosure and that it fairly and accurately represents the information in the Technical Report that supports the Disclosure.

Dated this 17th day of September, 2019.



"Stephen Devlin" {signed and sealed}

Stephen Devlin, B.Sc.FAusIMM.