

FY23 MINERAL RESOURCES AND ORE RESERVES STATEMENT & EXPLORATION RESULTS UPDATE

IGO Limited (ASX: IGO) is pleased to report its Mineral Resources and Ore Reserves update for financial year 2023 (FY23) and Exploration Results for activities to 1 April 2023. The attachments to this release include:

- A report describing the detail of IGO's JORC Code reportable Mineral Resource estimates (MREs) and Ore Reserve estimates (OREs) for its:
 - 24.99% interest in the Greenbushes Lithium Mine (Greenbushes), with estimates reported effective
 31 December 2022 and reconciled to Greenbushes 31 August 2021 estimate, which was the prior
 estimation revision date for the Greenbushes Central Lode and TSF1¹ ore sources.
 - 100% interest in the Cosmos Project (Cosmos) and Forrestania Operation (Forrestania), which are reported effective 30 June 2023, and reconciled to IGO's 30 June 2022 (FY22) estimate reporting.
 - 100% interest in the Nova Operation (Nova) effective for mining depleted to 30 June 2023 and reconciled to 31 December 2021 (CY1), which was IGO's last reporting of mining depleted estimate.
- A report of IGO's JORC Code reportable Exploration Results received for all exploration activities undertaken prior to 1 April 2023, with this report discussing IGO's exploration activities and associated key results for the period 1 January 2022 to 31 March 2023.

This announcement is authorised for release to the ASX by Matt Dusci, Acting Chief Executive Officer

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Forward Looking Statements

This document may include forward-looking statements including, but not limited to, statements of current intention, statements of opinion and expectations regarding IGO's present and future operations, and statements relating to possible future events and future financial prospects, including assumptions made for future commodity prices, foreign exchange rates, costs, and mine scheduling. When used in this document, the words such as "could", "plan", "estimate", "expect", "intend", "may", "potential", "should" and similar expressions are forward-looking statements. Such statements are not statements of fact and may be affected by a variety of risks, variables and changes in underlying assumptions or strategy which could cause IGO Limited's (IGO's) actual results or performance to materially differ from the results or performance expressed or implied by such statements. There can be no certainty of outcome in relation to the matters to which the statements relate, and the outcomes are not all within the control of IGO.

IGO makes no representation, assurance or guarantee as to the accuracy or likelihood of fulfilment of any forward-looking statement or any outcomes expressed or implied in any forward-looking statement. The forward-looking statements in this document reflect expectations held at the date of this document. Except as required by applicable law or the Australian Securities Exchange (ASX) Listing Rules, IGO disclaims any obligation or undertaking to publicly update any forward-looking statements or discussions of future financial prospects, whether because of new information or of future events.





FY23 ANNUAL REPORT OF MINERAL RESOURCES AND ORE RESERVES 30 JUNE 2023



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Abbreviations, units, and symbols

Abbreviations and initialisms

Abbreviation	Explanation
3D	Three dimensional
6% Con	6% litha concentrate equivalent in situ and pre-process recovery
AHD	Australian Height Datum
AIG	Australian Institute of Geoscientists
Alkane	Alkane Resources NL
ALS	ALS laboratory Perth
AM5	Alec Mairs 5 Deposit
AM6	Alec Mairs 6 Deposit
ANI	Australian Nickel Investments
ASX	Australian Securities Exchange
Aug-2021	31 August 2021 Greenbushes Mineral Resource and Ore Reserve estimate
AWGB	Agnew-Wiluna Greenstone Belt
BDA	Behre Dolbear Australia Pty Ltd
Beautiful Sunday	Beautiful Sunday Deposit
BQ	36.4mm diamond core
Central Lode	Central Lode Deposit
CGP	Chemical Grade Plant
Cosmic Boy	Cosmic Boy Deposit
Cosmos	Cosmos Project
Сру	Chalcopyrite
CRM(s)	Certified Reference Material(s)
CV	Coefficient of variation
CY21	Calendar year 2021 or 31 December 2021
CY22	Calendar year 2022 or 31 December 2022
CY23	Calendar year 2023 or 31 December 2023
CY24	Calendar year 2024 or 31 December 2024
CY25	Calendar year 2025 or 31 December 2025
Declass.	Declassification of Mineral Resource or Ore Reserve from being JORC Code reportable
DD	Diamond core drilling or drill hole
DGPS	Differential global position system
DIDO	Drive-in-drive-out
Diggers	Diggers Deposit or area
DMIRS	Western Australian Department of Mines, Industry Regulation and Safety
DWER	Western Australian Department of Water and Environmental Regulation



Abbreviation	Explanation
DZ	Depleted Zone
E	East
EPCM	Engineering, procurement, and construction management
EPS	Enhanced Production Scheduler
EZ	Enriched Zone
FAusIMM	Fellow of the Australian Institute of Mining and Metallurgy
FGB	Forrestania Greenstone Belt
FIFO	Fly-in-fly-out
Flying Fox	Flying Fox Deposit
Forrestania	Forrestania Operation
FS	Feasibility Study
FX	Australian to United States dollar foreign exchange rate
FY22	Financial year 2022 ended 30 June 2022
FY23	Financial year 2023 ended 30 June 2023
GAM	Global Advanced Metal Incorporated
Greenbushes	Greenbushes Lithium Mine or Lithium Deposit
HQ	63.5mm diamond core
ICP-AES	Inductively coupled plasma – atomic absorption spectroscopy
IGL	Intertek Genalysis Laboratory Perth
IGO	IGO Limited
JBM	Jubilee Mines Limited
JORC Code	The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves – 2012 Edition
JV(s)	Joint Venture(s)
Kapanga	Kapanga Deposit
KE	Kriging efficiency
KNA	Kriging neighbourhood analysis
ΚV	Kriging variance
LCE	Lithium carbonate equivalent in situ and pre-process recovery
LME	London Metals Exchange
LOM	Life-of-mine (plan)
MAusIMM	Member of the Australian Institute of Mining and Metallurgy
MGA(94)	Map Grid Australia (1994)
MSO	Mineable stope optimiser
MRE	Mineral Resource estimate
Mt Goode	Mt Goode Deposit
MUM	Mafic-ultramafic intrusive rocks or complex
NMDB	New Morning/Daybreak Deposit
Nova	Nova Operation
Nova-Bollinger	Nova-Bollinger Deposit
NPV	Net present value



Abbreviation	Explanation
NQ	47.6mm diamond core
NSR	Net smelter returns Australian Dollar per tonne
ODN	Odysseus North zone
ODS	Odysseus South zone
Odysseus	Odysseus Deposit
OPEX	Operating expenditure
ORE	Ore Reserve estimate
p10	10 th percentile
p25	25 th percentile or lower quartile
p50	50 th percentile or median
p75	75 th percentile or upper quartile
P90	90 th percentile
PAF	Potentially acid forming
Pe	Pentlandite
PFS	Pre-feasibility study
Po	Pyrrhotite
RPGeo	Registered Professional Geoscientist
PSD	Particle size distribution
Purple Haze	Purple Haze Deposit
pXRF	Portable X-ray fluorescence
Ру	Pyrite
QAQC	Quality assurance and quality control methods and/or samples
RAB	Rotary air blast percussion drilling or drill hole
RC	Reverse circulation percussion drilling or drill hole
ROM	Run-of-mine ore, stockpile, or pad
RP3E	Reasonable prospects of eventual economic extraction
RQD	Rock quality designation
S	South
SD	Sonic drilling
Seagull	Seagull Deposit
SG	Specific gravity
Sirius	Sirius Resources NL
SOG	Sons of Gwalia Ltd
SOR	Kriging slope of regression
Spotted Quoll	Spotted Quoll Deposit
SRK	SRK Consulting Australasia
Tianqi	Tianqi Lithium Corporation
Talison	Talison Lithium Pty Ltd
TG	Technical grade lithium ore
TRP	Tailing retreatment plant

Abbreviations and initialisms



Abbreviations and initialisms

Abbreviation	Explanation
TSF	Tailing storage facility
TSF1	Tailings Storage Facility 1 at Greenbushes
WA	Western Australia
WSA	Western Areas Limited
XRD	X-ray diffraction
XRF	X-ray fluorescence
Xstrata	Xstrata plc

Units of measure

1.1 24	Fuelessfee
Unit	Explanation
%	Weight percent or percentage proportion
°E	Degrees latitude
°S	Degrees longitude
μm	Microns
A\$	Australian dollars
Ga	Billions of years
ha	Hectare
km	Kilometre(s)
kt	Thousands of tonnes
kt/a	Thousands of tonnes per annum
kV	Kilovolts
lb	US pound
m ³	Cubic metres
mE	Grid metres easting
mΝ	Grid metres northing
mRL	Grid metres reduced level (elevation)
Mt	Millions of tonnes
Mt/a	Millions of tonnes per annum
t	Tonne(s)
t/m ³	Tonnes per cubic metre
US\$	United States dollars

Mathematical and chemical symbols

Symbol	Explanation
-	Minus or zero
0	Degrees
±	Above and below or plus and minus
~	Approximately



Symbol	Explanation
1	Minutes
"	Seconds
<	Less than
>	Greater than
≥	Greater than or equal to
\leq	Less than or equal to
Со	Cobalt
Cu	Copper
Fe	Iron
Fe_2O_3	Ferric oxide
FeO	Ferrous oxide
Li ₂ O	Lithia
MgO	Magnesia
Ni	Nickel

Mathematical and chemical symbols

Forward looking statements disclaimer

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Introduction

IGO Limited (IGO) has a strategic focus on green energy metals, including those used in renewable energy generation, grid-scale energy storage and electric vehicle batteries. Through direct ownership, or indirectly through joint ventures (JVs) with other parties, IGO produces saleable concentrates containing either nickel \pm copper \pm cobalt (Ni-Cu-Co), or lithia (Li₂O). All IGO mining interests are located in Western Australia (WA), as depicted in Figure 1, which is a map of IGO's operations and development project sites on 30 June 2023 (FY23).

The purpose of this report is to provide IGO's investors and stakeholders with the material technical information that pertains to its Mineral Resource estimates (MREs) and Ore Reserve estimates (OREs), effective FY23, that it Publicly Reports to the Australian Securities Exchange (ASX). IGO reports these estimates in accordance with the requirements of the 2012 Edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves, which is known as the JORC Code [1]. To comply with both the JORC Code's requirements and the ASX's listing rules [2]–[5], IGO reports these estimates annually to the ASX.

For FY23 end, IGO is reporting estimates from its:

- 100% owned Nova Operation (Nova), which produces saleable concentrates containing nickel, copper, and cobalt,
- 100% owned Forrestania Operation (Forrestania), which produces saleable nickel concentrates that also has some cobalt credits,
- 100% owned Cosmos Project (Cosmos), which is in project development to produce saleable nickel concentrates, and
- IGO's 24.99% indirect interest in the Greenbushes Lithium Mine (Greenbushes), which produces saleable lithia concentrates.



Figure 1: IGO's FY23 operations and development projects



Product price and foreign exchange assumptions

At the end of FY23, IGO used United States dollar (US\$) product price and Australian dollar (A\$) to US\$ foreign exchange (FX) assumptions differently at its operations, projects and deposits, for the various reasons discussed in the following subsections.

Nova

As part of its annual process of revising Nova's MREs and OREs, IGO's business development team provides product price guidance and FX rates to its Nova MRE and ORE practitioners. IGO's estimators then use these prices and FX values to prepare the annually revised Nova MRE and ORE, and also determine the net-smelter return (NSR) A\$ cut-offs for reporting Nova's estimates to the ASX.

Table 1 contains lists of the metal prices and FX rates that IGO has used for MRE and ORE estimation and reporting for Nova for FY23, and these assumptions are reconciled to IGO's end of calendar year 2021 (CY21) reporting assumptions.

	Μ	lineral F	Resources					Ore Re	serves			
Year	FX	1.1	Ν	letal prices	3	Year	FX	1.1	N	letal price	s	
ending	(A\$:US\$)	Unit	Nickel	Copper	Cobalt	ending	(A\$:US\$)	Unit	Nickel	Copper	Cobalt	
CY21	0.75	US\$	17,900	8,110	55,070	CY21	0.76	US\$	16,850	7,390	48,900	
		A\$	23,810	10,780	73,240			A\$	22,120	9,700	64,170	
FY23	0.73	US\$	19,670	8,020	61,160	FY23	0.75	US\$	18,580	7,620	54,400	
		A\$	26,810	10,930	83,380			A\$	24,940	10,230	73,020	
Ratio	98%	US\$	110%	99%	111%	Ratio	98%	US\$/	110%	103%	111%	
		A\$/t	113%	101%	114%			A\$/t	113%	106%	114%	

Table 1: Nova's CY21/FY23 price/FX assumptions

Note: Prices are rounded to \$10 before and after FX conversion and totals and average may be affected by rounding.

The metal prices in Table 1 are sourced from macroeconomic survey firm Consensus Economics, with the 50th percentile or median (p50) forecast metal prices used in ORE work. For MRE work, the more optimistic 75th percentile (p75) forecast metal prices are used to assess the JORC Code's Clause 20 requirement that Nova's MRE should have Reasonable Prospects of Eventual Economic Extraction (RP3E).

In terms of FX assumptions, IGO uses the Bloomberg Terminal service p50 FX rate for ORE work and the more optimistic p25 forecast rates for assessing the RP3E of Nova's MRE.

According to the relative ratios listed in the last rows of Table 1, IGO's FX assumptions have decreased marginally since CY21, while nickel and cobalt price assumptions have increased by 13% to 14% in A\$ terms. Copper prices, on the other hand, remain effectively unchanged for the p75 MRE case but have increased by 6% for the p50 ORE case.

Cosmos and Forrestania

IGO acquired Cosmos and Forrestania through a takeover of Western Areas Limited (WSA) in June 2022 [6]. As such, at FY23 the metal price and FX assumptions applied in the preparation of OREs and MREs for many of the WSA deposits, including the actively mined Flying Fox and Spotted Quoll deposits at Forrestania, and the project development deposit of Odysseus, AM5 and AM6 at Cosmos, are based on WSA's FY22 metal price assumptions for Odysseus and IGO FY23 assumptions for Forrestania due



to its short remanent life. Table 2 is a comparative listing of WSA's FY22 and IGO's nickel metal price assumptions for FY23.

				Assum	ptions
Site	Price or FX	Unit	IGO FY23	WSA FY22	Relative ratio (WSA/IGO)
orrestania	Nickel Price	US\$/t	19,016	16,535	115%
	-	A\$/t	26,085	22,046	118%
	FX	US\$:A\$	0.67/0.74	0.73	91%/100%
Cosmos	Nickel Price	US\$/t	19,670	16,535	84%
		A\$/t	26,810	22,046	82%
	FX	US\$:A\$	0.73	0.73	100%

Notes: Applicable to Flying Fox, Spotted Quoll, Odysseus, AM5 and AM6 deposits

Given the short mine life at Forrestania, the price assumptions listed in Table 2 will likely remain unchanged as per the prevailing life of mine (LOM) plans. It is worth noting, however, that Forrestania opportunistically mines and processes material tonnages of ore outside its mining LOM ORE plan when nickel spot prices are higher than the longer term forecast values listed in Table 2.

RP3E assumptions for Mt Goode, Diggers and New Morning/Daybreak deposits

To confirm the RP3E of the MREs at Cosmos's Mt Goode Deposit, and Forrestania's Diggers and New Morning/Daybreak deposits (NMDB), IGO used a set of optimistic parameters as follows and as listed in Table 3:

- Consensus Economics 90th percentile (p90) forecast for nickel price, and
- Bloomberg 10th percentile (p10) forecast for FX, which equates to a higher than current FX going forward.

Price or FX	Units	Assumptions	
PIICE OF FX	Units	Basis	Value
Nickel price	US\$/t	Consensus Economics p90	19,210
	A\$/t		25,610
FX	US\$:A\$	Bloomberg Terminal p10	0.75

Table 3: IGO's MRE RP3E assumptions

Notes: Applicable to Mt Goode, NMDB and Diggers FY23 MREs

The assumptions in Table 3 assume the Consensus Economics long term nickel price. As such, Nova's FY23 MRE assumptions above, which are coupled to the Nova LOM, have a higher A\$ nickel price due to higher price forecasts in the short to medium term.

Greenbushes

IGO is reporting CY22 MREs and OREs for Greenbushes and production to FY23 end in this report as FY23 depleted estimates were not available in time for this report. Greenbushes is a significant global producer of saleable lithium concentrates, with the lithium contained in the hard-rock mineral spodumene. Talison Lithium Pty Ltd (Talison), the entity managing the operation of Greenbushes, has



assumed a US\$1,490/t long-term price for a saleable 6% Li₂O spodumene concentrate and an FX of 0.75 for the CY22 Greenbushes MRE and ORE. This equates to a price of A\$1,987/t of saleable concentrate for these assumptions.

Reporting governance and Competent Persons

IGO reports its MREs and OREs in compliance with ASX listing rules, the prevailing JORC Code and IGO's internal risk policies. The MREs are reported according to the increasing confidence JORC Code classes of Inferred, Indicated, and Measured Resources, while OREs are reported based on the increasing confidence classes of Probable or Proved Ore Reserves.

Reporting Governance

IGO's corporate governance process for resource and reserve reporting follows the JORC Code's guiding principles of competence, transparency, and materiality. IGO implement multiple quality control for Public Reporting of its estimates to the ASX including competency assessment, reconciliation assessment, financial input review, assessment expectations of eventual extraction, final report peer review, optional external auditing where deemed material, and compliance with ASX listing rules. These items are discussed below.

Competence

IGO's quality control process first ensures that a Competent Person who is taking responsibility for the reporting of an IGO estimate has:

- Provided IGO with verifiable evidence that they hold at least one current membership to a professional organisation that is recognised in the prevailing JORC Code framework at the effective date of the estimate being reported to the ASX
- At least five years of industry experience that is relevant to the style of mineralisation and reporting activity for which they are acting as a Competent Person
- Signed a Competent Person Consent letter that states that the results and estimates that are reported in the final version of IGO's final public report to the ASX, agrees in form and context with the Competent Persons supporting documentation
- Additionally confirmed in writing any perceived material conflict of interests relating to the reporting activity for which they are taking responsibility, or otherwise stating there are no material conflicts reportable; and
- Prepared supporting documentation for results and estimates to a level consistent with normal industry practices and provided the documentation for peer review by IGO's senior technical staff – including the JORC Code Table 1 Checklists for any results and/or estimates that IGO is reporting under the JORC Code 2012 framework.

Reconciliation

Where an operation or development project is directly controlled by IGO, IGO's second quality control process is to ensure that the precision of estimates which are used for production forecasts and market guidance are compared or reconciled to the actual production data. The reconciliation results are then used to improve future forecasts through estimation process modifications going forward.

Financial inputs and RP3E

IGO also ensures that, where it has control, estimates are reviewed annually in term of the key inputs of product sale prices and foreign exchange rates. For Mineral Resource estimates, IGO also ensures that the estimates have been tested to meet the JORC Code requirement that such estimates should



have "Reasonable Expectations of Eventual Economic Extraction" (RP3E). Note that Ore Reserve estimates implicitly have RP3E, otherwise they cannot be considered as such and reported according to JORC Code.

Peer review

Finally, no matter the degree of IGO's interest in a mineral asset, IGO's final tertiary control for ASX reporting involves ensuring that all IGO's public report tabulations of results and/or estimates, are peer reviewed and fact checked by IGO's senior technical staff, before being finally reviewed by IGO's Company Secretary, and currently, Acting Chief Executive Officer, before being presented to IGO's Board for approval and subsequent ASX announcement.

External review

IGO also has an optional governance policy whereby any estimates and results IGO deems to be market sensitive or production critical, may also be audited by suitably qualified external consultants to confirm and/or endorse the precision, correctness and veracity of the reported estimates and/or the estimation methodology.

ASX compliance

This report has been prepared with due consideration of Chapter 5 of the ASX listing rules, including rule 5.6 relating to the reporting of resource and reserves, rule 5.8 for a first time JORC Code 2012 estimate of the Diggers Deposit at Forrestania, and rule 5.21 with respect to annual reporting.



Competent Persons

The MREs and OREs discussed in this report were prepared by, or under the supervision of, the Competent Persons listed in Table 4 below.

Competent	Professional a	association	- Dolo	Employer	Location reporting and
Person	Membership			Employer	period responsibilities
Daryl Baker	MAusIMM	221170	Geology Superintendent	Talison	Greenbushes CY22
Paul Hetherington	MAusIMM	209805	Senior Consultant	Cube Consulting	Nova FY23
Andre Wulfse	FAusIMM	228344	Group Manager Mineral Resources	IGO	Cosmos/Forrestania FY23
Gregory Laing	MAusIMM	206228	Principal Mining Engineer	IGO	Nova FY23
Marco Orunesu Preiata	MAusIMM	305362	General Manager Operations Support	IGO	Cosmos/Forrestania FY23
Andrew Payne	MAusIMM	308883	Mine Planning Superintendent	Talison	Greenbushes CY22
Mark Murphy	MAIG/RPGeo	2157	Manager Geological Services	IGO	Annual Report FY23
	Person Daryl Baker Paul Hetherington Andre Wulfse Gregory Laing Marco Orunesu Preiata Andrew Payne	Competent PersonMembershipDaryl BakerMAusIMMPaul HetheringtonMAusIMMAndre WulfseFAusIMMGregory LaingMAusIMMMarco Orunesu PreiataMAusIMMAndrew PayneMAusIMM	PersonMembershipNumberDaryl BakerMAusIMM221170Paul HetheringtonMAusIMM209805Andre WulfseFAusIMM228344Gregory LaingMAusIMM206228Marco Orunesu PreiataMAusIMM305362Andrew PayneMAusIMM308883	Competent PersonMembershipNumberRoleDaryl BakerMAusIMM221170Geology SuperintendentPaul HetheringtonMAusIMM209805Senior ConsultantAndre WulfseFAusIMM228344Group Manager Mineral ResourcesGregory LaingMAusIMM206228Principal Mining EngineerMarco Orunesu PreiataMAusIMM305362General Manager Operations SupportAndrew PayneMAusIMM308883Mine Planning Superintendent	Competent PersonNumberRoleEmployerDaryl BakerMAusIMM221170Geology SuperintendentTalisonPaul HetheringtonMAusIMM209805Senior ConsultantCube ConsultingAndre WulfseFAusIMM228344Group Manager Mineral ResourcesIGOGregory LaingMAusIMM206228Principal Mining EngineerIGOMarco Orunesu PreiataMAusIMM305362General Manager Operations SupportIGOAndrew PayneMAusIMM308883Mine Planning SuperintendentTalison

Table 4: Competent Person for IGO's FY23 (CY22) ASX reports

The information in this report that relates to Mineral Resources or Ore Reserves is based on the information compiled by the relevant Competent Persons and activities listed in Table 4 where:

- MAusIMM is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM), FAusIMM is a Fellow level member of the AusIMM, and MAIG/RPGeo is a Registered Professional Geoscientist Member of the Australian Institute of Geoscientists.
- All IGO personnel listed are full-time employees of IGO, and all Talison personnel are full-time employees of Talison.
- Paul Hetherington is a full-time employee of Cube Consulting and provides his consulting services on a professional fee basis.
- Andre Wulfse, Gregory Laing and Mark Murphy are minor IGO shareholders.
- All the Competent Persons have provided IGO with written confirmation that they have sufficient experience that is relevant to the styles of mineralisation and types of deposits reported, and the activity being undertaken with respect to the responsibilities listed against each person above, to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves – the JORC Code 2012 Edition.
- Each Competent Person listed above has provided to IGO by e-mail:
 - Proof of their current membership to their respective professional organisations as listed above.
 - A signed consent to the inclusion of information for which each person is taking responsibility in the form and context in which it appears in this report, and that the respective parts of this report accurately reflect the supporting documentation prepared by each Competent Person for the respective responsibility activities listed above.
 - Confirmation that there are no issues other than those listed above that could be perceived by investors as a material conflict of interest in preparing the reported information.



IGO total estimates

In this section of the report, IGO's total MREs and OREs by reporting location are discussed, with summaries included for Nova, Forrestania, Cosmos and Greenbushes. IGO acquired Nova in its 2015 acquisition of Sirius Resources NL (Sirius) [7] and more recently, secured Cosmos and Forrestania as part of its Western Area Limited (WSA) acquisition in June 2022 [6].

Lithium pegmatite deposits

IGO relies on Talison for updates of Greenbushes' MRE and ORE estimates. The last MRE and ORE revision for Greenbushes was deemed by Talison to be effective, and mining depleted, to 31 August 2021 (Aug-2021). For IGO's CY21 MRE/ORE reporting cycle, IGO reported Talison's Aug-2021 Greenbushes estimates, and a statement of ore mining production between Talison's Aug-2021 estimate and CY21 end [8].

Talison is a JV between Tianqi Lithium Corporation (Tianqi) who owns 51% of Talison through Tianqi Lithium Energy Australia (TLEA), and Albermarle Corporation who owns the other 49%. IGO has a JV with Tianqi for a 49% interest in TLEA and, as such, holds a (49%×51%) 24.99% indirect ownership in Greenbushes.

Table 5 on page 18 below, is a listing of IGO's 24.99% interest in Greenbushes' total MREs and OREs at Aug-2021 and CY22 end. This tabulation reveals that IGO's interest in Greenbushes' total MRE has decreased by 3.2Mt over the 16 months from the Aug-2021 MREs to the CY22 estimates. This reduction in MRE tonnage represents 4% of IGO's share of the total Greenbushes MRE estimated by Talison at Aug-2021 end. The changes to the MRE are almost entirely due to mining depletion, apart from a small reduction in MRE and ORE density, that Talison made in the CY22 estimates for the Tailing Storage Facility 1 Deposit (TSF1). This lower density had a very minor negative effect on TSF1's tonnage in the CY22 MRE, in addition to the mining depletion tonnage reduction as discussed in more detail in the following section of this report.

In terms of MRE *in situ* contained metrics, the estimated tonnages of lithia, lithium carbonate equivalent (LCE), and a notional 6% Li₂O saleable concentrate (6% Con) in the 3.2Mt of MRE depleted from IGO's share of Greenbushes since Aug-2021 end, are 0.06Mt of lithia, 0.15Mt of LCE and 0.98Mt of a 6%Con respectively (Table 5). Note that Talison reports Greenbushes' MREs using a \geq 0.5% Li₂O MRE block model threshold and that the MREs reported are notionally inclusive of the OREs. Additionally, metallurgical testing at Greenbushes indicates that below a 0.5% Li₂O modelling cut-off a 6.0% Li₂O spodumene concentrate is not recoverable, in part due to lithia deportment into minerals other than spodumene. For Greenbushes' ORE, which Talison reports using a \geq 0.7% Li₂O cut-off, the change in IGO's interest from Aug-2021 to the end of CY22 is a 2.1Mt ORE reduction, with this tonnage containing *in situ* 0.05Mt of lithia, 0.12Mt of LCE and 0.78Mt of 6% lithia concentrate (Table 5).

Listings of Greenbushes' Aug-2021 and CY22 end MREs and OREs, on a 100% basis, are included in the next subsection of this report.



													Diffe	erence (CY2	22 – 31 August	2021)	
			3	1 August 2	2021			31 E)ecembe	er 2022			Arith	metic		Relati	ve
		Mass	L	i2O	LCE	6%Con	Mass	Li	20	LCE	6%Con	Mass	Li ₂ O	LCE	6%Con	Mass	6%Con
Estimate	JORC	(Mt)	(%)	(Mt)	(Mt)	(Mt)	(Mt)	(%)	(Mt)	(Mt)	(Mt)	(Mt)	(Mt)	(Mt)	(Mt)	IVId55	0 /00011
MRE	Measured	0.1	3.2	0.004	0.01	0.07	0.2	3.0	0.01	0.01	0.08	0.04	0.001	0.002	0.02	30%	24%
	Indicated	62.3	1.8	1.11	2.75	18.53	59.6	1.8	1.06	2.62	17.67	-2.7	-0.05	-0.13	-0.86	-4%	-5%
	Inferred	27.6	1.0	0.27	0.68	4.56	27.0	1.0	0.27	0.66	4.42	-0.6	-0.01	-0.02	-0.14	-2%	-3%
	Total	90.0	1.5	1.39	3.44	23.16	86.8	1.5	1.33	3.29	22.17	-3.2	-0.06	-0.15	-0.98	-4%	-4%
ORE	Proved	0.1	3.2	0.004	0.01	0.07	0.2	3.0	0.01	0.01	0.08	0.04	0.001	0.002	0.02	30%	24%
	Probable	44.8	2.0	0.87	2.16	14.56	42.6	1.9	0.83	2.04	13.77	-2.2	-0.05	-0.12	-0.80	-5%	-5%
	Total	44.9	2.0	0.88	2.17	14.63	42.8	1.9	0.83	2.06	13.85	-2.1	-0.05	-0.12	-0.78	-5%	-5%
In situ 6%	Li2O concentra	ate recon	ciliatio	<u>n</u>													
MRE	OMt	5Mt	10	Mt	15Mt	201	√lt	25Mt		<u>0</u> R	E	OMt	5Mt	10Mt	15Mt	20Mt	25Mt
[Total]								.98			[Total	,					
							-0	.90			[-0.78		
Indicated						-0.86											
Inferred]						ug-202	21-CY2	2	Probable	; 			-0.80		
Measured	0.02	-0.14						.ıg-2021 (22	L		Provec	0.02					

Table 5: IGO's 24.99% interest in Greenbushes 31 August 2021 and CY22 Mineral Resources and Ore Reserves

Notes:

- This MRE is reported using a ≥0.5% Li2O block model cut-off and the ORE at a ≥0.7% Li₂O block model cut-off.

- Lithia (Li₂O), lithium carbonate equivalent (LCE) and the 6% Li₂O spodumene concentrate equivalent (6%Con) MRE estimates do not account for mining or metallurgical recovery losses.

- Zero values are reported as '-' symbol and where necessary more decimals are used to avoid reporting values that round to zero.

- Totals and averages are affected by rounding to one decimal for tonnage and lithia grade.

- The total MRE is notionally inclusive of the total ORE.

- Production from 1 January 2023 to 30 June 2023 inclusive was 1.95Mt grading 2.73% Li₂O sourced from the Central Lode and 0.94Mt grading 1.39% Li₂O from TSF1.



Magmatic nickel sulphide deposits

The nickel sulphide deposits found at Cosmos, Forrestania and Nova have been described in the geological literature as being 'magmatic' nickel sulphide deposits because the sulphides are derived for igneous magma and/or their associated surface erupted lavas. The Nova-Bollinger Deposit (Nova-Bollinger) at Nova is an example of a deep crustal intrusive style deposit, while the other deposits at Cosmos and Forrestania are associated with lavas derived from nickel sulphide rich magmas.

At Cosmos, IGO is reporting four MREs effective FY23 end, including the Odysseus Deposit (OD), the Alec Mairs (AM) AM5 and AM6 deposits, and the Mt Goode Deposit (Mt Goode). The Cosmos FY23 magmatic nickel sulphide OREs are reported for only OD and AM6.

Both Cosmos and Forrestania ore is depleted against FY22 ORE. IGO is reporting Cosmos MRE and ORE depleted to FY22 because it is currently reviewing and updating the Cosmos Project's MRE and ORE, which are being informed by new drilling, and revised capital and cost data.

The decision to report Cosmos ORE depleted for minor development production against the FY22 ORE has been adopted because IGO is currently undertaking a comprehensive review of the Cosmos Project. This review is covering the mine plan and production schedule, development delays and the effect of higher capital and operating costs [9]. This process may change the ORE reported in this report, but it is not currently advanced enough for IGO to provide a new Ore Reserve estimate, which will be released around end of Q4 CY23.

At Forrestania, IGO is reporting multiple MREs effective FY23, which include the Flying Fox Deposit (Flying Fox), the Spotted Quoll Deposit (Spotted Quoll), and the New Morning/Daybreak Deposit (NMDB). The MREs Forrestania reported at the end of FY22 [10] for Forrestania's Seagull Deposit (Seagull), Cosmic Boy Deposit (Cosmic Boy), Beautiful Sunday Deposit (Beautiful Sunday), and Purple Haze Deposit (Purple Haze) have been 'declassified' and are no longer JORC Code reportable for reasons discussed further below. FY23 OREs are reported for Forrestania's Flying Fox and Spotted Quoll deposits but the FY22 ORE reported Diggers has been declassified as such is JORC Code reportable effective FY23.

At Nova, an FY23 MRE and ORE is reported for Nova-Bollinger, but the prior Silver Knight CY21 MRE, which is near Nova, has been declassified and is no longer reportable for reasons discussed further below.

Note that IGO only estimates nickel content and rock density to evaluate MREs and OREs in the Cosmos and Forrestania deposits, while at Nova-Bollinger, copper and cobalt are also estimated as payable co-products.

Total magmatic nickel sulphide deposits estimates

IGO's most recent JORC Code Public Reports of its MREs and OREs for Nova and Silver Knight was as of CY21 [8]. In contrast, IGO's post-acquisition estimates for the Cosmos and Forrestania deposits were reported as of FY22 [10]. As a result, Table 5 and Table 7 list the FY23 estimates and the prior MRE and ORE reconciliations of the estimates, relative to either the CY21 or FY22 results as appropriate. While the total MREs listed in Table 6 below are notionally inclusive of the respective OREs in Table 7, in most cases an ORE incorporates a material proportion of waste that has a reporting cut-off lower than the threshold cut-offs used to report MREs. As such, the difference between an MRE and ORE estimate for a given deposit is not a directly subtractive difference due to the different assumptions an application of modifying factors to the ORE.



For a comprehensive understanding of the JORC Code parameters governing the reporting of estimates for each of IGO's magmatic nickel sulphide deposits, refer to the relevant sections of this report further below or the JORC Code Table 1 summaries for each estimated included as appendices to this report.



Table 6: IGO's total magmatic nickel sulphide deposit CY21/FY22 and FY23 Mineral Resources

																Difference	e (FY23 –	- prior A	ASX reporte	ed depleted	estimate)	
		31 Dec	ember 2	2021 ¹ or 3	30 June 202	2 ²				30	June 202	3				Arithme	tic			Relat	ive	
	Mass	G	rades (%	(o)	Metal m	nass (kt))	Mass	G	irades (%)	Metal	mass (kt)	Mass	Metal	mass (ki	t)	Maga		Metal	
Location	(Mt)	Ni	Cu	Со	Ni	Cu	Со	(Mt)	Ni	Cu	Со	Ni	Cu	Со	(Mt)	Ni	Cu	Со	Mass	Ni	Cu	Со
Silver Knight ¹	0.4	2.81	1.47	0.140	10.9	5.7	0.5	-	-	-	-	-	-	-	-0.4	-10.9	-5.7	-0.5	-100%	-100%	-100%	-100%
Nova ¹	11.2	1.52	0.62	0.050	169.1	68.7	5.6	5.8	1.84	0.71	0.060	105.8	41.0	3.5	-5.4	-63.3	-27.7	-2.1	-48%	-37%	-40%	-38%
Forrestania ²	12.4	1.79			223.0			3.5	2.80			99.0			-8.9	-124.0			-72%	-56%		
Cosmos ²	67.0	0.98			656.0			39.8	1.27			506.7			-27.2	-149.3			-41%	-23%		
Total	91.0	1.16			1,059.0	74.4	6.1	49.1	1.45			711.5	41.0	3.5	-41.9	-347.6	-33.4	-2.6	-46%	-33%	-45%	-43%

FY22 or CY21 to FY23 in situ nickel metal reconciliation



Notes:

- Reporting cut-offs vary by location and deposit. Readers should refer to either subsequent sections of the report for cut-off details or the relevant JORC Code Table 1 listings.
- Zero values are reported using the '-' symbol and where necessary more decimals are used to avoid reporting values that round to zero.
- In situ MRE metal estimates do not account for expected mining and metallurgical recovery losses.
- Totals and averages are affected by rounding to one decimal for tonnage, two decimals for nickel and copper grade, and three decimals for cobalt grade.
- Copper and cobalt grades are not additive for IGO overall totals as these metals are only estimated for Nova-Bollinger.
- All MREs are notionally inclusive of the OREs listed in Table 7, albeit OREs may include dilution below MRE reporting cut-off grades.
- Silver Knight's CY21 has been declassified and as such is not reported for FY23.



															C	Difference	(FY23 - p	rior AS	X reported	depleted	estimate))
		31 Dec	ember 2	021 ¹ <u>or</u> 3	0 June 20	22 ²				30 J	une 2023	3				Arithme	etic			Rela	tive	
	Mass	G	irades (%	6)	Metal	mass (kt)	Mass	(Grades (%))	Metal	mass (ł	<t)< td=""><td>Mass</td><td>Meta</td><td>l mass (k</td><td>it)</td><td>Mass</td><td>N</td><td>letal mass</td><td>3</td></t)<>	Mass	Meta	l mass (k	it)	Mass	N	letal mass	3
Location	(Mt)	Ni	Cu	Со	Ni	Cu	Со	(Mt)	Ni	Cu	Со	Ni	Cu	Со	(Mt)	Ni	Cu	Со	IVId55	Ni	Cu	Со
Forrestania ²	2.9	1.90			54.9			0.5	2.96			13.4			-2.4	-41.6			-84%	-76%		
Nova ¹	7.3	1.70	0.72	0.062	123.1	52.1	4.5	4.6	1.62	0.654	0.058	74.5	30.1	2.6	-2.7	-48.7	-22.1	-1.8	-37%	-40%	-42%	-41%
Cosmos ²	10.2	2.07			211.5			10.3	2.06			212.3			0.07	0.8			0.7%	0.4%		
Total	20.4	1.91			389.6	52.1	4.5	15.4	1.96			300.1	30.1	2.6	-5.0	-89.5	-22.1	-1.8	-25%	-23%	-42%	-41%

Table 7: IGO's total magmatic nickel sulphide deposit CY21/FY22 and FY23 Ore Reserves

FY22 or CY21 to FY23 in situ nickel metal reconciliation



Notes:

- Reporting cut-offs vary by location and deposit. Refer to either subsequent sections of the report for cut-off details or the relevant JORC Code Table 1 listings.
- Totals and averages are affected by rounding to one decimal for tonnage, two decimals for nickel and copper grade, and three decimals for cobalt grade.
- In situ ORE metal estimates do not account for expected losses due to metallurgical recoveries.
- Note that copper and cobalt grades are not additive for totals as they are only estimated at Nova.



As listed in Table 6, IGO's total of MREs for its magmatic nickel sulphide deposits at the end of FY23 was 49.1Mt grading 1.45% Ni, for a total *in situ* nickel metal estimate of 711.5kt. Compared to the sum of the CY21 and FY22 ASX report, total MREs for magmatic nickel sulphide deposit of 91.0Mt grading 1.16% Ni for 1,059.0kt of *in situ* nickel metal, the FY23 estimates equate to a 46% decrease in MRE mass (41.9Mt), and a ~33% decrease in total *in situ* nickel metal (347.6kt).

This 347.6kt reduction in IGO's total MRE *in situ* metal from the combined FY22/CY21 estimates to the FY23 estimates is consistent with anticipated outcomes from IGO's due diligence review of the magmatic nickel deposits that it acquired as part of its acquisition of Forrestania and Cosmos in June 2022, and assessment of the JORC Code's [1] "reasonable expectations of eventual economic extraction" (RP3E) criteria for all its deposits in FY23. Specifically, following acquisition, IGO reported WSA's estimates on an 'as-is' basis effective and mining depleted to FY22 [10]. Since then, IGO has completed a detailed in-house technical assessment of the WSA estimates considering IGO's RP3E guidelines and to confirm its pre-acquisition due diligence study assumptions. From this review, IGO has declassified all WSA's 2004 JORC Code vintage MREs at Forrestania from being JORC Code 2012 and ASX reportable, and also the Diggers 2004 JORC Code ORE estimate. IGO has also applied RP3E tests and spatially limiting RP3E constraints to several other WSA-acquired MREs (Mt Goode, NMDB and Diggers), which have been reported effective FY23 using these constraints. Further details are given in the following subsections, including a discussion regarding the reduction in the total ORE contained *in situ* nickel metal between CY21/FY22 and FY23.

Mineral Resource changes

As depicted in the ranked cascade chart in Figure 2, the JORC Code declassifications and RP3E assessments are the primary causes of the total reductions in situ nickel metal estimates for FY23-end reporting.





For example, and as depicted in Figure 2a, the RP3E assessment applied to three MRE deposits (Mt Goode, NMDB and an updated Diggers MRE), account for the majority of the total MRE *in situ* nickel metal reduction, with Mt Goode reduced by 149kt of *in situ* nickel metal, NMDB by 72kt, and Diggers by 24kt. In comparison the declassification of multiple JORC Code 2004 estimates at Forrestania (Beautiful Sunday, Cosmic Boy, Purple Haze, and Seagull), resulted in a total MRE reduction of only 21kt of *in situ* nickel metal. Nova's MRE reduction reflects 18 months of mining depletion, some reduction due to RP3E assessment and others due to sterilisation of resource access by on-going mining.



The declassification of Silver Knight's CY21 MRE, which contained 11kt of *in situ* nickel metal, is due to the in-house feasibility study finding that Silver Knight's highly oxidised sulphide mineralisation could not be processed at Nova, which was a critical assumption for the RP3E of the CY21 MRE for Silver Knight. IGO is investigating other processing options for Silver Knight to assess whether a future MRE can be supported using an alternative processing technology.

Changes in Ore Reserves

As listed in Table 7 on page 22, IGO's total magmatic nickel sulphide ORE at FY23 was 15.4Mt grading 1.96% Ni for an *in situ* nickel metal estimate of 300.1kt. This represents a 25% tonnage and 23% *in situ* metal reduction respectively from the combined CY21/FY22 total ORE of 20.4Mt grading 1.91% Ni for 389.6kt of *in situ* metal.

As depicted in Figure 2b above, about 49kt of this reduction occurred at Nova since CY21, and about 42kt related to Forrestania. The majority of the Forrestania ORE reduction is related to the declassification of a JORC Code 2004 ORE for Diggers, which was previously reported by IGO at FY22 on an 'as-is' basis following IGO's acquisition of Forrestania. Most of the Nova reduction is related to mining depletion.

There is no material change in Cosmos' ORE, with only a small tonnage of development ore mined and delivered to the Cosmos' run of mine (ROM) pad at FY23 end. The non-material increase in Odysseus ORE is due to ORE mined outside the MRE and not originally modelled, but with sufficient characteristics to meet the marginal ORE criteria.

Asset and deposit distribution Mineral Resources and Ore Reserves

Figure 3 below depicts sector-specific information on the distribution of IGO's *in situ* nickel metal, presented as bar plots for the respective CY21/FY22 MREs and OREs in Figure 3a and Figure 3b, and also the respective FY23 MREs and OREs in Figure 3c and Figure 3d. The end-of-bar labels in Figure 3a and Figure 3c denote the percentage of IGO's total MRE for the respective periods reported, while the labels in Figure 3b and Figure 3d denote the percentage of IGO's total ORE for each period, and also the MRE to ORE resource conversion percentage in square brackets.





Figure 3: Sector distribution of IGO's total in situ nickel MRE/ORE metal CY21/FY22 and FY23 reporting

Figure 3c reveals that in terms of *in situ* nickel MRE metal at FY23, 68% is found at Cosmos, with 27% of the IGO total in the high grade Odysseus deposit and 24% in the large low grade Mt Goode deposit. The AM5 and AM6 deposits make up the remainder. This chart also reveals that Nova ranks higher in terms of total contained MRE metal than all Forrestania's FY23 MREs.

In terms of ORE, Cosmos comprises 66% of IGO's contained nickel metal, with most of this being in the Odysseus ORE. Nova contained 28% of the total metal at FY23 end. Spotted Quoll and Flying Fox combined make up 7% of the IGO FY22 ORE *in situ* nickel metal, with most of this in Spotted Quoll.

The ensuing sections provide more detail on both the LCT pegmatite and massive sulphide deposit in IGO's FY23 reporting cycle, starting with Greenbushes, then Cosmos, Forrestania and finally Nova.



Greenbushes (IGO 24.99%)

Greenbushes is a hard rock spodumene lithium mining and processing operation that directly abuts the town of Greenbushes in WA, which is 250km south southeast of WA's capital Perth by road, and 90km southeast of the Port of Bunbury. As depicted in Figure 4, the centre of the Greenbushes mining operation is at coordinates 33°51'54"S and 116°4'5"E.



Figure 4: Greenbushes location, regional geology, and infrastructure

Notes: a) Simplified geology of the Greenbushes region. b) Satellite image of Greenbushes on 30 June 2023.

History

Greenbushes' mining operations commenced in 1888 with the extraction of tin minerals through surface mining operations, including dredging in later years. Tin mining was the primary focus at Greenbushes until the 1980s, when lithium and tantalum mining became a new focus. The first lithium plant was commissioned in 1983, and since then, there have been several production increases. According to Talison, to the end of CY22, Greenbushes has produced 10.9Mt of concentrates since its first lithium mining production. At the CY22 end, four concentrate plants were in operation at Greenbushes. One smaller plant produces very high lithia grade concentrates that have technical uses such as ceramics, special glassware and other industrial or medical applications. However, the majority of Greenbushes production is from its larger chemical grade plants, which produces saleable concentrates that Greenbushes' customers use for energy storage applications.

Tantalum mining began in the 1940s at Greenbushes, and during the 1990s, the Cornwall Pit, located at the northern end of Greenbushes, was a significant source of tantalum ore. In 2001, a small underground mine was developed from the pit base to access high-grade tantalum ore. However, due to a subsequent collapse in tantalum prices, the mine was abandoned in the mid-2000s, and the pit and workings are now flooded with groundwater. Global Advanced Metals Inc (GAM) holds the rights to process tantalum ore from Greenbushes. As per Talison's agreement with GAM, Talison stockpiles tantalum-rich and lithium-poor mineralisation for GAM that Talison excavates from its lithium ore mining operations.



Geology and mineralisation

Greenbushes is home to a giant, Archean age 2.5 billion year (Ga) old pegmatite that has intruded in the central region of the Donnybrook-Bridgetown Shear Zone, which is the 150km long geological structure depicted in the simplified regional geology map above that is Figure 4a. The Balingup Metamorphic Belt, which is depicted in the same figure, has deformed and metamorphosed Greenbushes in conjunction with its host rocks. The regional rock types include diorite gneiss, which is interpreted to be the basement for Archean greenstone sequences, as well as amphibolite, metasediments, ultramafic schists and felsic to massive banded paragneiss. In the Greenbushes region, a younger suite of granitoids is associated with the pegmatite intrusion.

Geologists working at Greenbushes have identified several compositional zones in the drill core and pit exposures that are associated with different styles of mineralisation, as depicted in the inset cross section in Figure 5a below. The lithium rich zone is distinguished by a white to pinkish pegmatite that consists of the minerals spodumene, quartz, tourmaline, apatite and perthite, along with smaller amounts of tantalum minerals. The highest grade lithium zones occur at both margins of the main pegmatite and can reach up to 50% spodumene content that grades approximately 5% Li₂O *in situ*.



Figure 5: Central Lode pit geology and TSF1 drilling

Notes: a) Simplified geological map of the Central Lode and Kapanga with inset 'A to B' cross section. b) TSF1 drill collar locations over pre mining surface imagery.

Greenbushes' tin and tantalum mineralisation is associated with the albite zone, a sodium rich feldspar that consists of albite, tourmaline, quartz, spodumene, cassiterite, tantalum minerals, zircon, and minor microcline. Cassiterite is the primary tin mineral, whereas tantalum occurs as inclusions in cassiterite or as several tantalum minerals in silicates.

During the processing of tin-tantalum ores, the lithium mineral, spodumene, tends to report to tailings, which has resulted in the lithium mineral resource in TSF1, accumulated during the 1990s phase of tantalum mining at Greenbushes (see Figure 5b). TSF1 has two distinct horizontal layers of tailing deposition, with an upper layer known as the "enriched zone", which has litha concentrations $\geq 1\%$ Li₂O and a lower "depleted zone", with lithia grades in the range from above 0.5% to below 1.0% Li₂O.



Mineral Resources

In 2021, Talison engaged a well-known and reputable MRE industry consultant to revise Greenbushes' MREs. As discussed above, these revisions were finalised and deemed effective at Aug-2021 end. These revised MREs include Greenbushes' Central Lode Deposit (Central Lode), its satellite Kapanga Deposit (Kapanga), and TSF1. The Central Lode and Kapanga MREs are limited to a 'resource' pit optimisation shell as depicted in the cross sections that are Figure 6.



Figure 6 Central Lode and Kapanga cross sections

Notes: a) Section looking north on mine grid 12,000mN b) Section looking north on mine grid 11,670mN

For IGO's CY22 reporting, Talison provided IGO with the Aug-2021 Greenbushes MRE/ORE block models for review, along with the MRE consultants documentation. Talison's technical staff also directly updated an IGO-provided CY22 end reporting spreadsheet with Greenbushes CY22 estimates. This spreadsheet is the basis of Greenbushes' estimates listed in Table 8 for MREs on page 30, and Table 9 for its OREs on page 31. Note that these tabulations include sector information for both deposit and JORC Code classification.

In a high-level in-house review, IGO's technical staff found that Talison's MRE consultants used standard industry estimation methods for the mineralisation styles considered, and that the Greenbushes' MREs for the Central Lode, Kapanga and TSF1 all meet the requirements and guidelines of the prevailing JORC Code. Specifically, the estimates were prepared using standard software systems, with lithia grades and density estimated from well-validated drill hole information using



industry-standard geostatistical methods. The full technical details of Talison's Aug-2021 MREs and OREs for Greenbushes can be found in Talison's JORC Code Table 1, which starts on page 63. IGO was also able to re-report Talison's MRE block model and confirm Talison's statement of CY22 MREs from the Talison model provided.

Ore Reserves

Greenbushes' Aug-2021 OREs were prepared in-house by Talison's technical staff who used the Aug-2021 MREs described above as the estimation basis. IGO was still in the process of reviewing the revised Greenbushes CY22 OREs at the time of writing this report but has no reason to expect that Talison's OREs do not meet JORC Code requirements. Full details regarding the ORE inputs and outputs are included in Section 4 of Talison's JORC Code Table 1, which starts on page 73 of this report.

The Central Lode and Kapanga Aug-2021 end OREs are derived from an LOM open pit design that is within an ORE pit optimisation shell, which excludes Inferred Mineral Resources. The TSF1 ORE is based on the mining of the entirety of its upper layer enriched zone. The inputs to the ORE assume expansion of Greenbushes ore production and processing to 9Mt/a, with concentrate production ramping up from current capacity of 1Mt/a of saleable products to a doubling of output to 2Mt/a by 2027. Including the Kapanga and TSF1 OREs, the LOM is projected to be over 20 years. Figure 7 is a perspective view of the Central Lode and Kapanga pit designs and also depicts the lithia grades of MRE blocks in TSF1. Profiles of the pit design are also included in the cross sectional images of Figure 6.



Figure 7: Perspective view of Greenbushes LOM pit design and MRE sliced coded by lithia grade.



													Differer	nce (CY22	2 – 31 Augu	st 2021)	
			31	l Augus	t 2021			31	Decemb	er 2022			Arithr	netic		Rel	ative
		Mass	Liz	20	LCE	6%Con	Mass	Li	20	LCE	6%Con	Mass	Li ₂ O	LCE	6%Con	Maaa	6%Con
Deposit	JORC class	(Mt)	(%)	(Mt)	(Mt)	(Mt)	(Mt)	(%)	(Mt)	(Mt)	(Mt)	(Mt)	(Mt)	(Mt)	(Mt)	Mass	0%0011
Central	Measured	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Indicated	189.9	1.8	3.47	8.59	57.91	183.8	1.8	3.33	8.23	55.45	-6.0	-0.15	-0.36	-2.45	-3%	-4%
	Inferred	104.6	1.0	1.00	2.48	16.73	102.6	1.0	0.98	2.41	16.25	-1.9	-0.03	-0.07	-0.48	-2%	-3%
	Total	294.4	1.5	4.48	11.08	74.64	286.5	1.5	4.30	10.64	71.70	-8.0	-0.18	-0.44	-2.94	-3%	-4%
Kapanga	Measured	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Indicated	38.6	1.8	0.69	1.71	11.51	38.6	1.8	0.69	1.71	11.51	-	-	-	-	-	-
	Inferred	3.9	1.9	0.07	0.18	1.21	3.9	1.9	0.07	0.18	1.21	-	-	-	-	-	-
	Total	42.5	1.8	0.76	1.89	12.72	42.5	1.8	0.76	1.89	12.72	-	-	-	-	-	-
TSF1	Measured	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Indicated	18.3	1.3	0.24	0.58	3.92	13.7	1.3	0.17	0.43	2.88	-4.6	-0.06	-0.15	-1.04	-25%	-27%
	Inferred	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total	18.3	1.3	0.24	0.58	3.92	13.7	1.3	0.17	0.43	2.88	-4.6	-0.06	-0.15	-1.04	-25%	-27%
Stockpiles	Measured	0.5	3.2	0.02	0.04	0.27	0.7	3.0	0.02	0.05	0.34	0.2	0.004	0.01	0.07	30%	24%
	Indicated	2.6	1.9	0.05	0.12	0.82	2.6	2.0	0.05	0.13	0.86	-0.1	0.002	0.01	0.04	-2%	4%
	Inferred	1.8	1.0	0.02	0.04	0.29	1.4	1.0	0.01	0.03	0.23	-0.4	-0.004	-0.01	-0.06	-21%	-21%
	Total	5.0	1.7	0.08	0.21	1.39	4.7	1.8	0.09	0.21	1.43	-0.3	0.00	0.01	0.04	-6%	3%
Total	Measured	0.5	3.2	0.02	0.04	0.27	0.7	3.0	0.02	0.05	0.34	0.2	0.004	0.01	0.07	30%	24%
	Indicated	249.4	1.8	4.45	11.00	74.16	238.7	1.8	4.24	10.49	70.70	-10.7	-0.21	-0.51	-3.46	-4%	-5%
	Inferred	110.3	1.0	1.09	2.71	18.24	108.0	1.0	1.06	2.63	17.70	-2.3	-0.03	-0.08	-0.54	-2%	-3%
	Total	360.2	1.5	5.56	13.75	92.67	347.3	1.5	5.32	13.17	88.73	-12.9	-0.24	-0.58	-3.94	-4%	-4%

Table 8: Greenbushes 31 August 2021 and CY22 Mineral Resources (100% basis inclusive of IGO's 24.99% interest)

Notes:

- These MREs are reported using a ≥0.5% Li₂O block model cut-off and are nationally inclusive of the OREs listed in Table 9.

- Li₂O, LCE and 6%Con masses are in situ estimates and, as such, do not account expected mining and metallurgical recovery losses.

- Zero values are reported as '-' symbol and where necessary more decimals are used to avoid reporting values that round to zero.
- Totals and averages are affected by rounding to one decimal for tonnage and lithia grade.

- Production from 1 January 2023 to 30 June 2023 inclusive of 1.95Mt grading 2.73% Li₂O sourced from the Central Lode and 0.94Mt grading 1.39% Li₂O from TSF1.



													Differe	ence (CY	22 – 31 Aug	ust 2021)	
			31	August	2021			31 E)ecemb	er 2022			Arith	nmetic		Rela	ative
		Mass	Li	20	LCE	6%Con	Mass	Li	20	LCE	6%Con	Mass	Li ₂ O	LCE	6% Con	Maaa	C0/ Com
Deposit	JORC class	(Mt)	(%)	(Mt)	(Mt)	(Mt)	(Mt)	(%)	(Mt)	(Mt)	(Mt)	(Mt)	(Mt)	(Mt)	(Mt)	Mass	6% Con
Central	Proved	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Probable	138.5	2.0	2.77	6.86	46.23	132.2	2.0	2.62	6.47	43.62	-6.3	-0.16	-0.39	-2.61	-5%	-6%
	Total	138.5	2.0	2.77	6.86	46.23	132.2	2.0	2.62	6.47	43.62	-6.3	-0.16	-0.39	-2.61	-5%	-6%
Kapanga	Proved	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Probable	27.9	1.9	0.53	1.31	8.84	27.9	1.9	0.53	1.31	8.84	-	-	-	-	-	-
	Total	27.9	1.9	0.53	1.31	8.84	27.9	1.9	0.53	1.31	8.84	-	-	-	-	-	-
TSF1	Proved	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Probable	10.1	1.4	0.14	0.36	2.40	7.9	1.4	0.11	0.26	1.78	-2.2	-0.04	-0.09	-0.61	-22%	-26%
	Total	10.1	1.4	0.14	0.36	2.40	7.9	1.4	0.11	0.26	1.78	-2.2	-0.04	-0.09	-0.61	-22%	-26%
Stockpiles	Proved	0.5	3.2	0.02	0.04	0.27	0.7	3.0	0.02	0.05	0.34	0.2	0.00	0.01	0.07	30%	24%
	Probable	2.6	1.9	0.05	0.12	0.82	2.6	2.0	0.05	0.13	0.86	-0.1	0.002	0.01	0.04	-2%	4%
	Total	3.2	2.1	0.07	0.16	1.09	3.2	2.2	0.07	0.18	1.20	0.1	0.01	0.01	0.10	3%	9%
Total	Proved	0.5	3.2	0.02	0.04	0.27	0.7	3.0	0.02	0.05	0.34	0.2	0.004	0.01	0.07	30%	24%
	Probable	179.2	2.0	3.50	8.65	58.28	170.6	1.9	3.31	8.18	55.10	-8.6	-0.19	-0.47	-3.19	-5%	-5%
	Total	179.7	2.0	3.51	8.69	58.55	171.3	1.9	3.33	8.23	55.43	-8.5	-0.19	-0.46	-3.12	-5%	-5%

Table 9: Greenbushes 31 August 2021 and CY22 Ore Reserves (100% ba	asis inclusive of IGO's 24.99% interest)
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Notes:

- These OREs are reported using a ≥0.7% Li₂O block model cut-off and is exclusive of the MRE.

- Li₂O, LCE and 6%Con masses are *in situ* and do not consider the expected metallurgical recovery losses.

- Zero values are reported as '-' symbol and where necessary more decimals are used to avoid reporting values that round to zero.

- Totals and average are affected by rounding to one decimal for tonnage and lithia grade.

- Production from 1 January 2023 to 30 June 2023 inclusive of 1.95Mt grading 2.73% Li₂O sourced from the Central Lode and 0.94Mt grading 1.39% Li₂O from TSF1.



Cosmos (IGO 100%)

By road, Cosmos is ~50km north along the Goldfields Highway from the town of Leinster, which is about 645km northeast of Perth, the capital city of WA. The portal of the underground decline, which is the current access to Cosmos' OREs, is at coordinates 27°36'00" S and 120°34'28" E.

History

Cosmos has an enviable history of deposit discovery that started in 1997 when Jubilee Gold Mines NL (JBM) found the near-surface high-grade Cosmos massive sulphide nickel deposit, which was the basis of Cosmos' initial mining and processing operations. Over the next two decades, JBM went on to discover and mine six more deposits and defined the disseminated sulphide resources of the large low-grade Mt Goode Deposit (Mt Goode), which JBM acquired in 2003. Xstrata Nickel Australasia Pty Ltd, a 100% owned subsidiary of Xstrata plc (Xstrata), who owned Cosmos after JBM, later discovered the deep high-grade nickel sulphide deposits that now form the foundation OREs of Cosmos' mining and processing revival with IGO. For more information about the discovery, ownership history and mining of Cosmos' deposits that are depicted in Figure 8, see IGO's ASX announcement on 30 August 2022 [10].







Geology and mineralisation

Cosmos' magmatic nickel sulphide deposits occur within or adjacent to a local sequence of 2.7 Ga metamorphosed komatiitic lavas. These lavas are part of the Agnew-Wiluna Greenstone Belt (AWGB) of the Kalgoorlie Terrane in the Eastern Yilgarn Craton. Relative to Cosmos, which is 50km north of Leinster in WA, the AWGB extends 115km north-northwest to the town of Wiluna, as depicted in Figure 9a below, and 150 km south-southeast to the town of Leonora.





Notes: a) Simplified geology of the northern part of the AWGB and nickel deposits in this region. b) Simplified geology of the Cosmos Project with mineral deposits and prospects within IGO's tenure.

The northern arm of the AWGB hosts many world-class, high-grade underground nickel deposits in the Cosmos region. For example, near Leinster, the Perseverance Deposit had a pre-mining resource of approximately 50Mt grading 2.2% Ni (1.1Mt nickel metal *in situ*). The AWGB also contains numerous large-tonnage, low-grade nickel deposits that are typically mined using open-pit methods, such as Mt Keith, which is around 40km north of Cosmos and had a pre-mining resource of approximately 500Mt grading 0.55% Ni (2.75Mt nickel).

The Ida Fault defines the western boundary of the AWGB, while the belt's eastern limit is truncated by the Keith-Kilkenny Lineament. The AWGB's northern and southern margins are less clear, with the northern edge obscured by the Proterozoic Earaheedy Group of rocks near Wiluna. Based on the geochemical characteristics of the komatiite units, the AWGB extends south-eastward to near the town of Leonora. The entire belt has undergone a complex, multi-phase deformational history, with metamorphism ranging from low-temperature facies in some rocks near Wiluna, ranging to middle amphibolite metamorphic grades in the rocks near Leinster, with greenschist to lower amphibolite grade rocks between these end member locations. Major wrench-faults that can be traced over tens of



kilometres frequently disrupt the geology of the AWGB, and the local geology is often characterised by steeply dipping stratigraphy and rocks that can display structural features from up to ten regional deformation events.

As depicted in Figure 9a above on page 33, the geology of Cosmos consists of a metamorphosed sequence of ultramafic, intermediate, and felsic volcanic rocks containing numerous komatiite-hosted (or associated) magmatic nickel sulphide deposits. The mineralised ultramafics can be up to 500m thick in the Cosmos area, where they dip vertically and face east. However, the komatiites thin towards Lake Miranda, just south of Cosmos, and dip more gently to the east. The footwall volcanic succession to the mineralised and now metamorphosed komatiite lavas of Cosmos is an intercalated sequence of fragmental and coherent extrusive lithologies, ranging from metamorphosed basaltic andesites to rhyolites. In addition, there are younger, felsic intrusions and pegmatites that have cross cut the older sequence of rocks and mineralisation.

The stratigraphic hanging wall to Cosmos' mineralised komatiites is made up of reworked volcaniclastic metasediments, including polymictic conglomerates that contain granite clasts. In terms of structure, the Cosmos mine sequence is often disrupted by northwest-trending dextral offset shears. All rocks have undergone upper greenschist to lower amphibolite grade metamorphism, which has typically destroyed primary igneous textures through the formation of metamorphic minerals. However, in some deposits, such as the core zone of the Mt Goode metadunite, some areas of primary textures can still be recognised locally in some of the thicker and less serpentinised parts.

The surface regolith ranges from 40 to 80m deep across the local region and is made up of transported cover and saprolite clays. The carapace over the ultramafic rocks often appears as a siliceous saprock over cavernous clays.

Mineral Resources

Cosmos' FY23 end MREs have been prepared in accordance with the requirements and guidelines of the prevailing JORC Code. Table 10, on page 35, is a listing of Cosmos' MREs reported by deposit and JORC Code classes, effective for FY22 and FY23 end. This listing includes estimates for the OD, AM6, AM5 and Mt Goode deposits, which are depicted in 3D image that is Figure 10 on page 36. Note that further details regarding cut-offs and RP3E constraints that were applied are included in the notes to Table 10.



Table 10: Cosmos FY22 and FY23 Mineral Resources

								Difference (FY23 - FY22)				FY22 to FY23 <i>in situ</i> nickel metal reconciliation		
		30 June 2022			30 June 2023			Arithmetic		Relative		Total 0 kt Ni 200 kt Ni 400 kt Ni 600 kt Ni		
		Mass	Ni	ckel	Mass	Nic	kel	Mass	Ni			[Total]		
Deposit (cut-off)	JORC class	(Mt)	(%)	(kt)	(Mt)	(%)	(kt)	(t)	(t)	Mass	Ni	Indicated -76.8 FY23 - FY22		
AM6	Measured	-	-	-	-	-	-	-	-	-	-	Measured		
(≥1.0% Ni)	Indicated	2.9	2.06	59.4	2.9	2.06	59.4	-	-	-	-	Mt Goode		
	Inferred	0.1	1.45	1.7	0.1	1.45	1.7	-	-	-	-	[Total]149.2		
	Total	3.0	2.03	61.1	3.0	2.03	61.1	-	-	-	-	Indicated		
AM5	Measured	-	-	-	-	-	-	-	-	-	-	Measured		
(≥1.0% Ni)	Indicated	1.4	1.95	28.2	1.4	1.95	28.2	-	-	-	-	Inferred		
	Inferred	1.8	2.21	40.6	1.8	2.21	40.6	-	-	-	-	Odysseus		
	Total	3.3	2.10	68.8	3.3	2.10	68.8	-	-	-	-	[Total]0.1		
Odysseus	Measured	-	-	-	0.12	1.44	1.7	0.12	1.7	-	-			
	Indicated	7.2	2.42	174.7	7.1	2.43	172.9	-0.11	-1.8	-2%	-1.0%	Measured 17		
	Inferred	0.6	4.28	24.4	0.6	4.28	24.4	-	-	-	-	AM5		
	Total	7.8	2.56	199.2	7.8	2.55	199.0	0.00	-0.1	-0.1%	-0.1%			
Mt Goode	Measured	13.6	0.78	105.8	9.4	0.87	81.0	-4.2	-24.7	-31%	-23%			
(≥0.4% Ni)	Indicated	27.4	0.58	158.7	13.8	0.60	83.7	-13.5	-75.0	-49%	-47%			
	Inferred	12.0	0.52	62.4	2.5	0.51	13.0	-9.5	-49.4	-79%	-79%	Measured 0.0		
	Total	52.9	0.62	326.9	25.7	0.69	177.7	-27.2	-149.2	-51%	-46%	AM6		
Total	Measured	13.6	0.78	105.8	9.5	0.87	82.7	-4.1	-23.1	-30%	-22%	[Total] 0.0		
	Indicated	38.9	1.08	421.1	25.3	1.36	344.2	-13.6	-76.8	-35%	-18%	Indicated 0.0		
	Inferred	14.5		129.2	5.1	1.58	79.7	-9.5	-49.4	-65%	-38%	Inferred 0.0 EV23		
	Total	67.0	0.98	656.0	39.8	1.27	506.7	-27.2	-149.3	-41%	-23%	Measured] 0.0		

Notes:

- The MREs for AM6 and Odysseus are notionally inclusive of the respective OREs listed in Table 11, albeit the OREs may include dilution below the MRE reporting cut-offs.

- The reporting cut offs are as per the listing below each deposit name.

- Mt Goode's MRE is limited to a pit optimisation shell using RP3E price/FX assumptions, metallurgical recovery of 39.3%, assumed 4Mt/a processed at A\$22.80/t, and mining costs of A\$4.48/t.

- In situ MRE metal estimates do not account for the expected mining and metallurgical recovery losses.

- Zero values are reported as '-' symbol and where necessary more decimals are used to avoid reporting values that round to zero.

- Totals and averages are affected by rounding tonnages to one decimal place and nickel grades to two decimal places.






Odysseus

At a mine scale of observation, the OD ORE is considered to be two discrete zones, being the Odysseus North (ODN) zone, which is centred at coordinates 27°35'48"S and 120°34'51"E, and the Odysseus South (ODS) zone, which is centred about 400m south southwest of ODN's midpoint. As discussed above, OD was discovered in 2010 by Xstrata and the FY23 OD MRE is based on Xstrata and WSA's geoscientific information that is detailed in OD's JORC Code Table 1, which starts on page 77 of this report. The MRE drill hole pierce point spacing of mineralisation at ODS averages 40 by 45m and reduces to 35 by 30m for ODN in the high-grade cores, albeit the pierce point spacing ranges from 15 to 70m due to the fan-like nature of Xstrata's resource definition drilling from surface.

OD's MRE was prepared using well-known industry software systems for MRE work and digital block modelling methods, which can be considered routine for the style of mineralisation under consideration. Nickel grades and density were interpolated into the blocks of an 'onionskin' style grade shell model using geostatistical ordinary block kriging, with each grade shell treated separately for estimation work (see Figure 11).





Figure 11: Odysseus MRE example cross and long sections - nickel grade model and drilling

Notes: a) Section looking east through ODN's MRE model on section line C to D denoted by the dotted line in the image to the right. b) Long section looking north through ODN and ODS on the section line A to B denoted by the dotted line on the image to the left.

Nickel-barren pegmatites crosscut OD's earlier mineralisation and an implicit 3D interpretation of the pegmatites was prepared from the drill data by a well-known industry MRE consulting firm. This interpretation was then 'stamped over' the grade estimation block model to reset block nickel grades to zero and set the density to that of pegmatite within the bounds of the 3D pegmatite interpretations. The OD MRE models are reported effective FY23 using a $\geq 1.5\%$ Ni block estimate cut-off grade with sector reporting for each JORC Code class as per Table 10 on page 35. Readers should refer to OD's JORC Code Table 1 Checklist that starts on page 77 of this report for full details of the data basis and estimation process for OD.

AM5

As depicted in Figure 10 on page 36, AM5 is 700m below surface centred on coordinates 27°36'21"S and 120°34'31"E, and 350m down dip from the lower limits of Mt Goode's disseminated mineralisation. AM5's mineralisation base is coincident with the base of Cosmos' lower ultramafic unit. The mineralisation comprises two sub-parallel, steeply dipping and plunging lenses separated by a felsic volcanic unit. AM5's massive mineralisation is believed to have been originally basal primary style, but it has undergone subsequent folding and thrusting. The massive mineralisation has an average thickness of one metre, but in some tectonically induced overlapping locations, the average thickness increases to approximately four metres.

During its ownership period, Xstrata partially mined the top of AM5 and utilised underground platforms to drill-define the resources of both AM5 and AM6. As depicted in Figure 12 on page 38, the FY23 JORC Code reportable MRE for AM5 is based on diamond core drilling data primarily collected by Xstrata and JBM, with holes collared from both surface and underground locations. The quality and recovery of the drilling data used to define the MRE for AM5 is like that used for OD's MRE. For full details on the most recent estimation processes and assumptions for AM5's MRE, readers should refer to the AM5 JORC Table 1 Checklist starting on page 108 of this report.



Figure 12: AM5 MRE model example plan and section – nickel grade

Notes: a) Plan view at level C to D denoted by the dotted line in the image to the right. b) Section view at northing A to B in denoted by the dotted line in the image to the left

The JORC Code class reporting details for AM5 are listed in Table 10 on page 35.

AM6

Xstrata discovered AM6 within the Cosmos ultramafic unit and to the south and below AM5 at 30 to 50m above the footwall contact. As depicted in Figure 10 on page 36, AM6 is centred on coordinates 27°36'31"S and 120°34'28"E, which is 300m south southwest of AM5's centre. AM6 has a strike extent of 400m and dips 75° towards the east with a down dip extent of 250m. AM6's disseminated mineralisation ranges from 2 to 25m in true thickness, as depicted in the plan and section drill hole MRE block model slices of Figure 13 on page 39.

Both the geometry and dip of AM6's mineralisation are influenced by multiple northeast trending faults which truncate the AM6 mineralisation at its northern and southern extents. Like AM5 and OD, younger nickel-barren pegmatite dykes cross cut the mineralisation, albeit within a much lower spatial frequency and volume than occurs at OD.

JORC Code class reporting details of AM6's FY23 MRE are listed in Table 10 on page 35 and full details of AM6's data and MRE modelling process are included in the AM6 JORC Code Table 1 starting on page 96 of this report.



Figure 13: AM6 MRE model sections – nickel grade

a) Plan view at level C to D denoted by the dotted line in the image to the right. b) Section view at northing A to B denoted by the dotted line in the image to the left.

Mt Goode

Mt Goode is centred on coordinates 27°36'16"S and 120°34'32"E, which is just 150m north-northeast of the centre of AM5 as depicted in Figure 10 on page 36. The FY23 MRE for Mt Goode is based on Xstrata's May 2012 MRE model, which draws on JBM's prior well-documented April 2006 JORC Code 2004 estimate. Both previous estimates were prepared in accordance with the 2004 edition of the JORC Code, but the Competent Person has reviewed the models and the data and has accepted the estimates as being JORC Code 2012 reportable. The Competent Person has therefore also prepared a JORC Code Table 1 for Mt Goode, which is included starting on page 115 of this report and is based on the Xstrata 2012 model and JBM's 2006 documentation.

Mt Goode is a Type 2 (or Mt Keith) low-grade disseminated nickel sulphide deposit, with the core of its mineralisation located about 700m south of the mined-out Cosmos Pit. The fresh sulphide mineralisation starts at about 200m above the footwall ultramafic contact and extends up to the base of weathering. This zone is within a thick sequence of serpentinised dunitic rocks that have undergone upper greenschist to lower amphibolite grade metamorphism. As a result of this metamorphism, the primary igneous textures have mostly been destroyed, although some primary mesocumulate and adcumulate textures are still preserved locally in the central core of Mt Goode. The resulting mineralogy is mainly composed of coarse porphyroblasts or blades of metamorphic olivine, sometimes with intergranular talc, tremolite and chlorite.

Mt Goode has a gradationally zoned mineralogical profile. The contact rocks to the Mt Goode metadunite are metasomatically altered and are characterised by a schistose fabric in the chlorite matrix. The contact zones grade into the strongly serpentinised-antigorite-rich zone, then into lizardite-rich serpentinites, and finally grade into the least altered central and high-grade core of the deposit. A quartz-biotite porphyry intrusion cross cuts the metadunite and forms the deposit's hangingwall. Like most other deposits at Cosmos, younger, nickel-barren pegmatite dykes crosscut the geology and locally displace the mineralisation.



Mt Goode's nickel sulphide mineralisation forms a broad steeply dipping lens-shaped body within the metadunite and, as depicted in Figure 14, a nominal $\geq 0.7\%$ Ni threshold has been used to demarcate the bounds of its high-grade core zone. This core is encased in a broader zone of lower-grade mineralisation that has been defined using a nominal $\geq 0.4\%$ Ni drill hole sample threshold for MRE work. The principal characteristics of the mineralisation are related to these two zones. Full details relating to Mt Goode's FY23 data and estimation process are included in the JORC Code Table 1 Checklist starting on page 115 of this report.





Notes: a) Long section looking west on the section line C to D denoted by the dotted line in the image to the right. b) Cross section looking north on the section A to B denoted by the dotted line on the image to the left.

The FY23 Mt Goode MRE has been classified into Measured, Indicated, and Inferred JORC Code classes as listed in Table 10 on page 35, and reported using a >0.4% Ni MRE model block cut-off grade as a first reporting constraint. The MRE is also reported as being contained within an RP3E open pit optimisation shell that assumes:

- An RP3E nickel price and FX assumptions as per Table 3 on page 13,
- Assumed open pit mining 15m benches with reblocking to 5m by 5m by 5m blocks which account for dilution and recovery,
- An average metallurgical recovery of 39.3% for nickel and cobalt,
- A 4Mt/a process rate with a dedicated new plant,
- An average mining cost of \$A4.48/t and an average processing cost of \$22.80/t,
- Pit slope overall slope angles vary according to lithology, with slopes ranging from 38.5° to 53.1°, and
- Capital has not been explicitly modelled but has been considered as part of the RP3E assessment.



Ore Reserves

Cosmos' FY23 OREs include estimates from OD and AM6, with the JORC Code class, deposit and total OREs for Cosmos listed in Table 11 on page 42. Figure 15 depicts the planned stoping and underground infrastructure that supports the OD and AM6 FY23 OREs.





The FY23 OD ORE has been adjusted for the small mining tonnage to FY23 end. As such, the only change from estimates reported at FY22 end is a minor ORE increase due a small tonnage of development ore mined and delivered to the Cosmos' run of mine (ROM) pad at FY23 end. The non material increase in Odysseus ORE is due to ORE mined outside the MRE and not originally modelled, but with sufficient characteristics to meet the marginal ORE criteria.



Table 11: Cosmos	FY22 and FY23 Ore Reserves
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								Differ	ence	(FY23 –	FY22)	FY22 to FY23
		30 .	lune 2	022	30	June 2	023	Arithr	netic	Rela	ative	Total
		Mass	Ni	ckel	Mass	Nic	ckel	Mass	Ni			[Tota
Deposit	JORC class	(Mt)	(%)	(kt)	(Mt)	(%)	(kt)	(Mt)	(kt)	Mass	Ni	Probab
AM6	Proved	-	-	-	-	-	-	-	-	-	-	Prove
	Probable	2.1	2.24	47.1	2.1	2.24	47.1	-	-	-	-	Odysseus
	Total	2.1	2.24	47.1	2.1	2.24	47.1	-	-	-	-	[Tota
Odysseus	Proved	-	-	-	0.12	1.44	1.7	0.12	1.7	-	-	Probab
	Probable	8.1	2.02	164.5	8.1	2.02	163.6	-0.05	-0.9	-0.6%	-0.5%	Prove
	Total	8.1	2.02	164.5	8.2	2.01	165.2	0.07	0.8	0.8%	0.5%	AM6
Total	Proved	-	-	-	0.12	1.44	1.7	0.12	1.7	-	-	[Tota
	Probable	10.2	2.07	211.5	10.2	2.07	210.7	-0.05	-0.9	-0.5%	-0.4%	Probab
	Total	10.2	2.07	211.5	10.3	2.06	212.3	0.07	0.8	0.7%	0.4%	Prove



Notes:

- All OREs are reported ≥1.5% Ni block model cut-off.
- In situ ORE metal estimates do not account for expected metallurgical recovery losses.
- Zero values are reported as '-' symbol and where necessary more decimals are used to avoid reporting zeros due to rounding effects.
- Totals and averages are affected by rounding tonnages to one decimal and nickel grades to two decimals.
- Minor ORE tonnages have been mined from Odysseus with some ore mined from outside the ORE resulting in a small positive reconciliation of tonnage and metal (see explanation on the relevant sections).



Odysseus

OD's FY23 ORE is based on a 2018 Feasibility Study (FS) prepared by Cosmos' prior owner, WSA, and depleted against FY22 ORE. WSA's FS confirmed the technical feasibility and economic viability of a proposed 0.9Mt/a mining and sulphide flotation processing operation that would produce 14.6kt/a of a 16.5% Ni saleable concentrate for 10 years. The 2018 FS ORE of 8.1Mt grading 2.02% Ni was based on the WSA prepared OD MRE discussed and reported as Cosmos' FY23 MRE. The WSA FS also considered additional ore mining from AM6 to extend the operational life, which has a FY23 ORE discussed further below.

OD's ORE is accessed through a decline developed from AM5's workings, with the decline splitting to separately access ODN and ODS zones as depicted in Figure 15 on page 41. The planned mining method is long hole open stoping with mining voids subsequently filled with paste. For geotechnical stability reasons, the planned mining sequence is top-down and centre-out for each OD zone, with 25m spaced levels developed to access 15m wide (east-west) stopes that have a maximum strike length of 20m.

OD's ore will be hoisted to the surface through a 1,000m deep shaft in skips having a 12.5t ore capacity. The shaft is considered to have a total capacity of 1.4Mt/a, and at the time of writing this report the headframe was under construction and underground grade control drilling was in progress and mining the first stopes was completed. Full details of ORE modifying factor assumptions for the OD ORE are included in Section 4 of the OD JORC Code Table 1 starting on page 90 of this report.

AM6

AM6's FY23 ORE is based on WSA's AM6 2020 pre-feasibility study (PFS) and depleted against FY22 ORE. This PFS assumes development of a single decline and, like OD, long hole stoping followed by backfilling with paste, and a top-down, centre out mining sequence of stopes, as depicted in Figure 15 on page 41.

WSA's PFS was not optimised, but the study confirmed that following an initial year of mine development, mining rates ranging from 0.3 to 0.6Mt/a of ore were technically feasible and economically viable over a six-year production life. The assumptions of the AM6 PFS are unchanged for IGO's FY23 Cosmos ORE reporting.

AM6's FY23 ORE is listed along with OD's FY23 ORE in Table 11 on page 42, and full details of the ORE process and assumptions are included in Section 4 of AM6's JORC Code Table 1, which starts on page 103 of this report.

Outlook

Since IGO's acquisition of Cosmos in June 2022, IGO's technical staff have been revising Cosmos' operational plan to include the simultaneous mining of both AM6 and OD so the operation can rapidly ramp up to achieve a mining and processing capacity of 1.1Mt/a. At the time of writing this report, IGO was in the process of optimising this new plan. When finalised, and the estimates have been externally audited by a reputable ORE consultant, IGO will release the details of the revised Cosmos estimates and plan to the ASX. This process may lead to changes in the ORE reported for Cosmos in this document to reflect the outcomes of the current review [9].



IGO's technical staff are also reviewing, and where necessary, revising the Cosmos MREs to improve confidence in the estimates, confirm RP3E assumptions, and upgrade the supporting JORC Code documentation for all Cosmos deposits.

Approximately 12,000m of a close spaced underground grade control and resource definition diamond core drilling into OD is nearing completion and the Competent Person has commenced work on an updated MRE for OD.

Underground resource extensional drilling across the Cosmos mine area has commenced, with multiple targets identified from south of AM6 to north of ODN. Additionally, a PFS has commenced to evaluate open pit mining of the large low-grade Mt Goode resource, which will also be based on a revised estimate that will incorporate some new geotechnical and resource drilling that was in progress at the time of writing this report.

Forrestania (IGO 100%)

Forrestania's Cosmic Boy Concentrator is 110km east of the town of Hyden, which is 280km east of WA's capital, Perth. As depicted in Figure 16a on page 45, the concentrator, which is the infrastructure locus of Forrestania, is at coordinates 32°34'52"S and 119°44'35"E. At the time of preparation of this report, Forrestania was sourcing its ore from its two underground mines, Spotted Quoll and Flying Fox, which are depicted in Figure 16b and Figure 16c.

History

From 1992 to 1999, Outokumpu Oyj, who was the first major nickel producer who held ownership over IGO's current Forrestania tenure, discovered, mined, and processed 3.8Mt of ore and produced 55kt of nickel in concentrates, from the Flying Fox, Cosmic Boy, and Diggers deposits before dismantling the original Cosmic Boy mill and moving it to its Silver Swan operation. In the early 2000s, WSA listed on the ASX and subsequently acquired the majority of the current Forrestania tenure from the then owners. In 2002, WSA reported the discovery of the Daybreak zone of NMDB and, over the next 20 years, went on to acquire 100% ownership of the current Forrestania tenure, extended the Flying Fox reserve to 1km below where Outokumpu Oyj had ended mining, and discovered Spotted Quoll. These latter two deposits have sustained 16 years of mining and processing at Forrestania. A more detailed history of Forrestania is included in IGO's FY22 MRE/ORE report to the ASX [10].





Figure 16: Forrestania nickel deposits and IGO tenure

Notes: Clockwise from top left: a) Nickel deposits at Forrestania. b) Flying Fox mine. c) Spotted Quoll mine. d) Diggers mineralisation limits, FY23 RP3E MSO MRE reporting shapes, prior open pit, and FY23 RP3E pit optimisation shell. e) NMDB mineralisation limits and FY23 RP3E MSO MRE reporting shapes.



Geology and mineralisation

Forrestania's magmatic nickel sulphide deposits are hosted by a 2.9Ga old sequence of now metamorphosed igneous and sedimentary rocks that are part of the Forrestania Greenstone Belt (FGB) of the Youanmi Terrane of the Eastern Yilgarn Craton, as depicted in Figure 17a and Figure 17b.





Notes: a) Komatiites and terranes of the Yilgarn Craton. b) Forrestania Greenstone belt and its deposit and prospects in IGO's tenure. c) Sunset at the Cosmic Boy concentrator.

The FGB has a north to south length of about 250km, ranges from 5 to 30km in east to west width and is made up of two distinct Archean geological sequences. The 3.05 to 2.93Ga old Lower Sequence has at least four sequences of tholeiitic and komatiitic metavolcanics intercalated with metasediments, while the 2.76 to 2.72Ga old Upper Sequence, which is found in the belt's centre, is dominated by pelitic and psammitic schists. The FGB is enclosed in a terrain of deformed granites and gneisses that have been locally intruded by undeformed plutons of granitic rocks. A series of east to west trending Proterozoic dykes cut across all the Archean successions.

Up to four phases of regional deformation are recognised in the rocks of the FGB in the geological scientific literature. The first phase of deformation, which induced amphibolite grade metamorphism across the belt, tilted and folded the FGB's stratigraphy so that the Western Belt rocks tend to dip between 40° and 70° towards east, while the dips of the strata of the other belts range between vertical and 70° towards the west. These regional geometries and regional dip asymmetries are interpreted to be due to synclinal folding induced by strong east to west compression, along with concurrent or postfolding local strike-slip faulting. The last brittle deformation phase affecting the FGB is characterised by north dipping faults related to the Proterozoic dykes.



Mineral Resources

For FY22 end, IGO is reporting MREs for the NMDB, Flying Fox, Diggers and Spotted Quoll deposits, as listed in Table 12 on page 49. There have been several material changes to Forrestania's MREs since IGO's FY22 reporting as follows:

- Declassification of four FY22 reported JORC Code 2004 estimates (Cosmic Boy, Beautiful Sunday, Purple Haze, and Seagull), which were all deemed too small to satisfy RP3E criteria, and the base data and/or estimation method too unreliable to be converted to JORC Code 2012 reportable estimates.
- As depicted in FigureFigure 16d and Figure 16e on page 45, the application of RP3E constraints to the reporting of the FY22 NMDB estimate and a revised FY23 Diggers MRE, has resulted in material negative changes in the estimated *in situ* nickel tonnage compared to the respective FY22 MREs *in situ* metal estimates reported for these two deposits.
- Both MREs for Forrestania's operating mines have undergone (expected) mining depletion, and a review of the Flying Fox MRE has also been completed, with underground infrastructureperipheral Indicated Resources reclassified to Inferred Resources, under the consideration that these resources now have lower confidence of being extracted given the relatively short residual mine life of Flying Fox.

The FY23 RP3E reporting constraints applied to the reporting of the Diggers and NMDB MREs are summarised as follows:

- Diggers:
 - An open pit cut back of the existing Diggers Pit is assumed to access fresh sulphide MRE, with this cut back limited to a pit optimisation shell prepared using the RP3E FX and price assumptions listed in Table 3 on page13, and the other assumptions listed below.
 - Overall pit slopes are assumed to be 30° in the oxide zone, 45° in transitional material and 50° in fresh rock.
 - Open pit mining costs are assumed to average A\$6.13/t for all material mined.
 - Contiguous mineable stope optimiser (MSO) volumes have been used to define the underground limits of the fresh sulphide MRE below the optimisation shell.
 - The MSO study was prepared using an A\$268/t NSR cut-off, which is the estimated breakeven cost for mining and hauling ore from Diggers, as well as processing the ore at the Cosmic Boy Concentrator.
 - Processing costs for all fresh sulphide ore are estimated to average A\$80.40/t. Oxide and transitional mineralisation is non-processable at Cosmic Boy.
 - RP3E assumptions also consider an optimistic 5% higher payability and 5% lower operating costs than current Forrestania conditions.
 - Average metallurgical recovery is assumed to be 75%, which is about 5% higher than current operating conditions at Forrestania.
 - Capital has not been explicitly modelled but has been considered as part of the RP3E assessment.
 - A nominal 0.5% Ni cut-off has been used for reporting both the open pit and underground part of the MRE.
- NMDB:
 - Like Diggers, continuous MSO volumes have been prepared to limit the fresh sulphide MRE reporting, using RP3E FX and price assumptions listed in Table 3 on page 13.
 - The MSO NSR cut-off for reporting was \$A282/t for fresh sulphide mineralisation.



- Processing costs, payabilities and metallurgical recoveries are the same as assumed for the Diggers RP3E study above.
- Capital has not been explicitly modelled but has been considered as part of the RP3E assessment.

JORC Code Table 1 checklists for Flying Fox, Spotted Quoll and NMDB are included in this report starting on respective pages 122, 131 and 142.



Figure 18: Diggers and New Morning/Daybreak FY23 MRE long section

Notes: a) Long section of the Diggers Deposit looking west. The Diggers mineralisation wireframe depicted in pink represent the limits of modelled mineralisation. The Diggers pit optimisation shell and MSO shape depicted limit the MRE reporting using RP3E constraint. b) Long section of the NMBD deposit showing the mineralisation limits and MSO shells that represent the FY23 MRE. Only fresh mineralisation is reported in both estimates.

Table 12: Forrestania FY22 and FY23 Mineral Resources

								Diffe	erence (F	FY23 – F	3 – FY22)	
		30	June 2			30 June	e 2023		metic	Relative		
		Mass		Ni	Mass		Ni	Mass	Ni	Mass	Ni	
Deposit	JORC class	(Mt)	(%)	(kt)	(Mt)	(%)	(kt)	(Mt)	(kt)	IVIASS	141	
Seagull	Measured	-	-	-	-	-	-	-	-	-	-	
(≥1.0% Ni)	Indicated	0.2	2.00	3.9	-	-	-	-0.2	-3.9	-100%	-100%	
	Inferred	-	-	-	-	-	-	-	-	-	-	
	Total	0.2	2.00	3.9	-	-	-	-0.2	-3.9	-100%	-100%	
Cosmic Boy	Measured	-	-	-	-	-	-	-	-	-	-	
(≥1.0% Ni)	Indicated	0.2	2.79	5.1	-	-	-	-0.2	-5.1	-100%	-100%	
	Inferred	-	-	-	-	-	-	-	-	-	-	
	Total	0.2	2.79	5.1	-	-	-	-0.2	-5.1	-100%	-100%	
Beautiful Sunday	Measured	-	-	-	-	-	-	-	-	-	-	
(≥1.0% Ni)	Indicated	0.5	1.40	6.7	-	-	-	-0.5	-6.7	-100%	-100%	
	Inferred	-	-	-	-	-	-	-	-	-	-	
	Total	0.5	1.40	6.7	-	-	-	-0.5	-6.7	-100%	-100%	
Purple Haze	Measured	-	-	-	-	-	_	-	-	-	-	
(≥1.0% Ni)	Indicated	0.6	0.90	5.0	-	-	-	-0.6	-5.0	-100%	-100%	
(Inferred	-	-	-	-	-	-	-	-	-	-	
	Total	0.6	0.90	5.0	-	-	-	-0.6	-5.0	-100%	-100%	
Spotted Quoll	Measured	-	-	-	0.005	3.02	0.2	0.005	0.2	-	-	
(≥0.40% Ni)	Indicated	0.5	6.31	29.9	0.4	6.08	22.8	-0.1	-7.1	-21%	-24%	
(-0.10/0111)	Inferred	0.1	3.70	5.4	0.1	3.70	5.4	-		-		
	Total	0.6	5.70	35.2	0.5	5.39	28.3	-0.1	-6.9	-15%	-20%	
Flying Fox	Measured	-	-	-	0.004	1.76	0.07	0.004	0.07	-	2070	
(≥0.40% Ni)	Indicated	0.7	4.48	29.5	0.004	7.06	14.4	-0.5	-15.1	-69%	-51%	
(-0.4070 141)	Inferred	0.1	1.74	2.1	0.2	3.34	17.0	0.0	14.9	328%	721%	
	Total	0.8	4.06	31.5	0.7	4.39	31.5	-0.1	-0.1	-8%	-0.2%	
Diggers	Measured	- 0.0	4.00	-	- 0.1	00	- 01.0	-	-	-	-	
(≥0.50% Ni)	Indicated	3.0	1.42	42.4	1.7	1.33	22.6	-1.3	-19.8	-43%	-47%	
(=0.0070141)	Inferred	0.4	1.26	5.2	0.1	1.49	0.9	-0.3	-4.3	-85%	-82%	
	Total	3.4	1.40	47.6	1.8	1.33	23.5	-1.6	-24.0	-48%	-51%	
NMDB	Measured	-	-	-	-	-		-		-	-	
(>0.4% Ni	Indicated	3.7	1.43	52.4	0.5	2.74	13.0	-3.2	-39.5	-87%	-75%	
1. 0.110.141	Inferred	2.6	1.38	35.5	0.0	4.65	2.8	-2.5	-32.8	-98%	-92%	
	Total	6.2	1.41	87.9	0.1	2.95	15.7	-5.7	-72.2	-91%	-82%	
Total	Measured	- 0.2	-	-	0.01	2.46	0.2	0.01	0.2	-3170	-02 /0	
TOTAL	Indicated	9.2	1.90	- 174.8	2.7	2.40	72.7	-6.4	-102.1	-70%	-58%	
	Inferred	3.3	1.48	48.2	0.8	2.04 3.36	26.1	-0.4	-22.1	-76%	-46%	
	Interieu	0.5	1.79	223.0	0.0	2.80	20. I	-2.0	-22.1	-70%	-40 %	





Table 12 notes:

- The MREs are notionally inclusive of any associated OREs.
- The reporting cut-offs are as per the listing below each deposit name.
- Zero values are reported as '-' symbol.
- In situ MRE metal estimates do not account for expected mining and metallurgical recovery losses.
- Where necessary more decimals are used to avoid reporting zeros due to rounding effects.
- Totals and averages are affected by rounding tonnages to one decimal and nickel grades to two decimals.

Diggers 2012 estimate

As the FY23 Diggers MRE is the first 2012 JORC Code reportable estimate for the deposit, the following summary is included to address the requirements of Section 5.8.1 of the ASX listing rules.

IGO engaged MRE consultants from SRK's Melbourne office to prepare 3D geological digital implicit models and to determine grade estimation domains for the Diggers JORC Code 2012 MRE revision. SRK divided the geology of the Diggers area into six lithological domains, including footwall and hangingwall mafic volcanics, footwall sediments, ultramafics and three discrete narrow sedimentary packages within the ultramafics, which range from 0.5 to 20m in true thickness. The units were modelled as steeply west to south-southwest dipping at 60 to 70°, with these dip interpretations consistent with prior Diggers MRE models. SRK also modelled a fold within the sedimentary package to the south of the Diggers pit, which was not previously recognised in prior modelling.

The drilling database that is the basis of the FY23 Diggers MRE revision has been compiled by several explorers and includes diamond core drilling (DD) results that date back to 1972. Additionally, Outokumpu collected close spaced geoscientific data during its open pit and underground mining phase from 1992 to 1995. However, at least 65% of the drilling and assay data used for the FY23 MRE is from a more recent WSA diamond core drilling campaign. All core used for the MRE was cut longitudinally into quarter cores using a wetted diamond saw blade and marked for sampling over nominal 1m interval lengths.

The DD from the various explorers at Diggers comprises predominantly NQ2 diameter core. RC drilling comprised 140mm diameter face sampling hammer drilling. Rotary air blast (RAB) percussion holes, which were drilled by AMAX from 1971 to 1978, were used to assist in geological domain analysis and grades from RAB drilling were only used for MRE purposes if there was no obvious bias between the AMAX campaign and the subsequent drill campaigns. These RAB holes only influence the oxide zone, which is not part of the FY23 MRE reported for Diggers.

Outokumpu's sampling quality measures taken to monitor accuracy and precision included the insertion of field standards and duplicates at a 1 in 10 to 1 in 100 frequency amongst the routine samples to the laboratory. Outokumpu also inserted nickel barren crushed rock samples at a 1 in 10 frequency to monitor for between-sample cross contamination during laboratory sample preparation. To monitor analytical accuracy, WSA's drilling program also included field nickel grade standards with certified values ranging from 0.7 to 8.4% Ni, which were submitted using a 1 in 10 frequency amongst the routine samples dispatched to the laboratory.

All samples used in the FY23 MRE were assayed by an independent certified commercial laboratory. WSA's samples were sent to ALS in Perth, which specialises in the preparation and analysis of nickel-bearing ores. The drilling history of Diggers spans over 50 years of different owners and drilling campaigns, and each campaign has used a different assay technique and different element suite. Within the estimation domains, only nickel is fully assayed. For full details of the different assay methods applied by each explorer, readers should refer to the Diggers JORC Code Table 1 for full details, which starts on page 150 of this report.

The Competent Person considers that the laboratory sample preparation of all Diggers diamond core followed industry best practice at the time of sample preparation. At ALS this included oven drying, coarse crushing of the quarter core sample down to below 10mm, followed by pulverisation of the entire sample using LM5 grinding mills to a grind size of 90% passing 75µm.

SRK estimated nickel grades in all Diggers' MRE grade estimation domains were interpolated using ordinary block kriging and single pass sample composite searches. The block model estimation parent block size was specified to be 5mX by 10mY by 5mZ. Three different composite searches were tested for block grade estimation, being searches seeking a maximum of 16, 24 or 32 composites respectively. The maximum 16 composites search case was selected as the FY23 JORC Code reportable estimate on the basis that this estimate had the lowest degree of grade smoothing, and the resulting MRE model nickel block grade variability was the best for global grade tonnage assessment at the estimated parent block size, while retaining an acceptable degree of local precision for mine planning, as quantified by conditional bias estimation metrics. Maximum extrapolation distances away from data were in the order of 50m, so no blocks are excessively extrapolated away from data. Check estimates using inverse distance estimation were also prepared and found to validate the kriging results.

SRK also prepared inverse distance squared estimates for all elements (As, Cu, Fe, Mg, Ni, S) and density for all estimation domains. Nearest neighbour estimates were also prepared for nickel only in the North Main High-grade and South Main High-grade domains, primarily to facilitate the preparation of de-clustered composite swath plots.

For the FY23 estimate, the Competent Person has assigned Indicated Mineral Resource class where the data spacing is nominally 25m, and Inferred Mineral Resources have been assigned where the data spacing is nominally 50m. As discussed above, Diggers MRE is reported within an open pit optimisation shell or MSO volumes below the pit shell as part of a RP3E assessment. Full details of the FY23 Diggers MRE process are included in the Diggers JORC Code Table 1 that starts on page 150 of this report.

Ore Reserves

Forrestania's FY23 OREs are listed and reconciled to IGO's prior FY22 reporting of its estimates in Table 13 on page 52. The reconciliation of Forrestania's FY23 ORE to its FY22 report reveals a large reduction in total *in situ* nickel metal in Forrestania's total ORE since FY22. This reduction is partly explained by expected mining depletion of Spotted QuoII and Flying Fox OREs, however, is predominantly due to the declassification of the Diggers JORC Code 2004 ORE, which was reported effective FY22 end. The basis for the declassification of the Diggers FY22 ORE is that the FY22 ORE is based on a 2004 JORC Code MRE that has now been declassified and is no longer JORC Code reportable. Additionally, the study on which the FY22 ORE is based is well out of date in terms of assumptions, such as metal prices, FX, and costs, as well as several other key ORE modifying factors.

Further details regarding Forrestania's FY23 OREs are detailed in the respective Section 4s of the Flying Fox and Spotted Quoll JORC Code Table 1 listings, which respectively start on page 128 and page 138 of this report.



								Differ	ence (I	=Y23 – F	Y22)
		30 J	lune 20)22	30 J	une 20	23	Arithn	netic	Rela	ative
		Mass	Nic	kel	Mass	Nic	kel	Mass	Ni	Maaa	Ni
Deposit	JORC class	(Mt)	(%)	(kt)	(Mt)	(%)	(kt)	(Mt)	(kt)	Mass	INI
Flying Fox	Proved	-	-	-	0.004	1.76	0.07	0.004	0.07	-	-
(≥0.8% Ni)	Probable	0.2	2.22	3.9	0.1	1.91	1.3	-0.11	-2.6	-61%	-67%
	Total	0.2	2.22	3.9	0.1	1.90	1.4	-0.11	-2.6	-59%	-65%
Spotted Quoll	Proved	-	-	-	0.005	3.02	0.2	0.005	0.2	-	-
(≥1.0% Ni)	Probable	0.6	3.45	20.9	0.4	3.17	11.8	-0.23	-9.1	-38%	-43%
	Total	0.6	3.45	20.9	0.4	3.17	12.0	-0.23	-8.9	-37%	-43%
Diggers	Proved	-	-	-	-	-	-	-	-	-	-
(≥1.0% Ni)	Probable	2.1	1.43	30.1	-	-	-	-2.11	-30.1	-100%	-100%
	Total	2.1	1.43	30.1	-	-	-	-2.11	-30.1	-100%	-100%
Total	Proved	-	-	-	0.01	2.46	0.2	0.01	0.2	-	-
	Probable	2.9	1.90	54.9	0.4	2.97	13.1	-2.45	-41.8	-85%	-76%
	Total	2.9	1.90	54.9	0.5	2.96	13.4	-2.44	-41.6	-84%	-76%



Notes:

- The block model reporting cut-offs are as per the listing below each deposit name.
- Zero values are reported as '-' symbol.
- In situ ORE metal estimates do not account for the expected metallurgical recovery losses.
- Where necessary more decimals are used to avoid reporting zeros due to rounding effects.
- Totals and averages are affected by rounding tonnages to one decimal and nickel grades to two decimals.



Outlook

During FY23, IGO intends to review the MREs declassified at Forrestania to determine what conditions would be required give the deposit mineralisation estimates RP3E.

Nova (IGO 100%)

By road, Nova is 160km east northeast of Norseman and 380km directly northeast of the Port of Esperance in southeastern WA. Nova's underground mine portal is at coordinates 123°10'40"E and 31°48'50"S (Figure 19).



Figure 19: Nova infrastructure and simplified regional geology

Notes: a) Nova satellite photo 31 December 2022. b) Simplified regional geology.

History

In 2012, Sirius Resources NL (Sirius) discovered the Nova zone of Nova-Bollinger by exploring the region around a single anomalous nickel-copper grade soil sample that geologists from the Geological Survey of Western Australia had collected in 1998. The sample was taken from within a 3km-long, ellipsoidal shaped feature, which was apparent on regional magnetics images, and named "The Eye" by Sirius' geologists. Further exploration, including additional geochemical sampling, geophysical surveys and drilling, led to the discovery of the Nova zone in 2013. Sirius subsequently used drilling to track a thin mineralised conduit that trended east from the Nova zone to discover the Bollinger zone. The Nova and Bollinger zones are now recognised as a single continuous deposit: Nova-Bollinger.

After announcing the acquisition of Nova from Sirius in May 2015, IGO developed the then Nova Project to its first ore mining in June 2016, and subsequently shipped Nova's first saleable concentrates from a newly commissioned concentrator in December of the same year [7], [11], [12].

Geology and mineralisation

Nova-Bollinger is within the 425 by 50km wide, Mesoproterozoic-age Fraser Zone of the Albany-Fraser Orogen. The Fraser Zone is fault bounded by the Biranup Zone to the northeast and the Nornalup Zone to the southeast (Figure 19b). The Arid Basin forms the basement to the Fraser Zone and the Snowys Dam Formation of the Arid Basin is the basement package in the Nova-Bollinger area. During the first phase of the Albany-Fraser Orogeny at around 1.30Ga, mafic, ultramafic, and granitic intrusions were emplaced penecontemporaneously with the granulite facies metamorphism of the regional stratigraphy,



which was occurring at crustal depths of 28 to 35km below surface. This zone is now characterised by gneissic fabrics, complex refolding and major mylonitic zones.

The rocks within the Nova-Bollinger region are consistent with the regional descriptions of the Snowys Dam formation and include pelitic to psammitic gneisses, a local carbonate unit, along with metamorphosed mafic-ultramafic (MUM) and volcanoclastic rocks. The Nova-Bollinger MUM sill complex that hosts Nova-Bollinger's Ni-Cu-Co sulphide mineralisation is a doubly plunging synform, where a magnetite-bearing footwall gneiss has been identified as the cause of 'The Eye' magnetic feature (Figure 20). The MUM sill complex is a dish-shaped package 2.4 by 1.2km in plan and up to 450m in thickness. The rocks of the complex range in mineralogy from peridotite to pyroxenite, to gabbronorite and norite, with both sharp and gradational contacts between different intrusive phases. An upper and lower intrusion are recognised with the lower 'Nova Gabbro' intrusion intimately associated with the Ni-Cu-Co sulphide mineralisation. The mine area is covered by up to 3m thick regolith and/or transported cover, with oxidation of sulphides in fresh rock down to depths of 20m in the western end of the Nova area.





As noted above, Nova-Bollinger's Ni-Cu-Co sulphide mineralisation is associated with the Nova Gabbro mafic magmatic conduit, from which the sulphide mineralisation precipitated and accumulated within the conduit and the fracture zones surrounding this source intrusion. The Nova Gabbro and associated sulphide mineralisation is interpreted to have been emplaced in a dynamic environment, at peak metamorphism, with most of the sulphide mineralisation remobilised into structures and/or fracture zones surrounding the mineralising intrusion. There are several mineralisation styles in Nova-Bollinger, ranging from massive sulphide accumulations, breccias, net-textured zones (olivine and sulphide matrix), stringer-sulphides in metasediments, and disseminated and blebby textures in gabbroic units.

Nova-Bollinger's massive sulphide mineralogy is dominated by pyrrhotite (80 to 85%), minor pentlandite (10 to 15%) with lesser chalcopyrite (5 to 10%). Concentrations of up to 5% magnetite also occur locally



within more massive sulphides zones. Cobalt is strongly and positively correlated with nickel as both elements are found concentrated in pentlandite, albeit both also occur in minor concentrations in solid solution with pyrrhotite.

Mineral Resources

IGO's mine geologists have estimated the FY23 Nova-Bollinger MRE using routine industry methods of geological interpretation of DD results, preparation of digital wireframes of the geology and mineralisation, and then estimating grades into digital block models using well-known industry geostatistical methods. Full details of the data used, data quality, estimation process and methods are included in the relevant sections of the Nova-Bollinger JORC Table 1 included starting on page 157 of this report.

Nova-Bollinger's FY23 MRE is based on the geoscientific data collected from DD holes initially drilled from surface by Sirius on section lines, but with the majority of DD being IGO-managed, underground-collared DD fan drilling. Combined, these two drill phases have effectively tested the deposit's entire known volume on a nominal 12.5 by 12.5m drillhole pierce-point spacing through the mineralisation's limits. The deposit was fully defined and closed off by drilling in July 2020, albeit some minor infill drilling is planned for FY23. Most of the data informing the MRE is from high-recovery DD, with a smaller component of good quality reverse circulation (RC) percussion drilling that defines part of the resources of the shallower and western end of the Nova area, which is known as the Nova Upper zone. In terms of MRE preparation, the FY23 MRE model is unchanged from the CY21 model, other than the model has been depleted for mining to the end of FY23, and some adjustments made to the MRE reporting of mine access sterilised resource volumes.

The FY23 MRE is based on 22 separate estimation zones, which the mine geologists have interpreted from the drilling information and the high-quality confirmatory mapping from underground development. One of these zones is the 'waste halo zone' that encompasses all other zones which facilitates estimation of dilution grades in the ORE. Figure 21 is a perspective view looking towards the northwest at a selection of the major estimation zones in the Nova-Bollinger MRE model. The mine development to 30 June 2023 is also depicted in grey. The mine's ore haulage decline and surface access is visible towards the rear of Figure 21.







Nova-Bollinger's CY21 and FY23 MREs are reconciled in Table 14 below on page 57, along with the respective ORE reconciliation in Table 15 on page 58.



Table 14: Nova-Bollinger CY21 and FY23 Mineral Resources

																	Differ	ence (F	(23 – CY	21)		
			31 De	cember 2	2021					30	June 20	23				Arithn	netic			Relat	ive	
	Mass	Gi	rades (%)	Ν	/letal (kt)		Mass	G	rades (%)	N	letal (kt)		Mass	Ν	/letal (kt)		Maaa		Metal	
JORC Class	(Mt)	Ni	Cu	Со	Ni	Cu	Со	(Mt)	Ni	Cu	Со	Ni	Cu	Со	(Mt)	Ni	Cu	Со	Mass	Ni	Cu	Со
Measured	9.6	1.64	0.66	0.054	157.4	63.5	5.2	5.4	1.87	0.73	0.061	101.0	39.4	3.3	-4.2	-56.4	-24.1	-1.9	-44%	-36%	-38%	-36%
Indicated	1.5	0.75	0.33	0.026	11.3	5.0	0.4	0.3	1.34	0.44	0.048	4.7	1.5	0.2	-1.15	-6.6	-3.5	-0.2	-77%	-58%	-69%	-57%
Inferred	0.05	0.96	0.37	0.031	0.5	0.2	0.02	0.0	1.21	0.26	0.045	0.1	0.02	0.003	-0.04	-0.39	-0.16	-0.01	-87%	-83%	-91%	-81%
Total	11.2	1.52	0.62	0.050	169.1	68.7	5.6	5.8	1.84	0.71	0.060	105.8	41.0	3.5	-5.4	-63.3	-27.7	-2.1	-48%	-37%	-40%	-38%

FY23 to CY21 in situ nickel metal reconciliation



Notes:

- The MRE is notionally inclusive of the OREs albeit the ORE includes dilution that will be below the MRE reporting cut-off in some areas.

- CY21 MRE reported using a ≥A\$54/t NSR and CY21 MRE metal prices and FX, while FY23 MRE reported using ≥A\$58.5/t NSR and FY23 metal prices and FX.

- In situ nickel metal estimates do not consider the expected losses due to mining and metallurgical recoveries.

- Zero values are reported as '-' symbol and where necessary more decimals are used to avoid reporting zeros due to rounding effects.

- Totals and average are affected by rounding to one decimal for tonnage, two decimals for nickel and copper grades and three decimals for cobalt grades.



																		Diffe	rence (F	Y23 – CY	′21)		
				31 De	cember	2021					30	June 20	23				Arithn	netic			Relat	tive	
		Mass	Gr	ades (%)	N	letal (kt)		Mass	Gi	rades (%)	Ν	/letal (kt)		Mass	Ν	/letal (kt)		N.4		Metal	
JC	RC Class	(Mt)	Ni	Cu	Со	Ni	Cu	Со	(Mt)	Ni	Cu	Со	Ni	Cu	Со	(Mt)	Ni	Cu	Со	Mass	Ni	Cu	Со
Ρ	roved	7.0	1.71	0.72	0.062	119.5	50.6	4.3	4.2	1.60	0.64	0.057	67.7	27.2	2.4	-2.8	-51.8	-23.4	-1.9	-40%	-43%	-46%	-44%
P	robable	0.3	1.40	0.58	0.050	3.7	1.5	0.1	0.4	1.83	0.77	0.063	6.8	2.8	0.2	0.1	3.1	1.3	0.10	41%	84%	87%	76%
	Total	7.3	1.70	0.72	0.062	123.1	52.1	4.5	4.6	1.62	0.65	0.058	74.5	30.1	2.6	-2.7	-48.7	-22.1	-1.8	-37%	-40%	-42%	-41%

Table 15: Nova-Bollinger CY21 and FY23 Ore Reserves

FY23 to CY21 in situ nickel metal reconciliation



Notes:

- The CY21 ORE reported is A\$128/t NSR cut off for full burden stoping, A\$74/t for incremental stoping cost, and A\$34/t for development ore, using CY21 p50 metal prices and FX.

- The FY23 ORE reported is A\$147/t NSR cut off for full burden stoping, A\$79/t for incremental stoping cost, and A\$38/t for development ore, using FY23 p50 metal prices and FX.

- In situ nickel metal estimates do not consider the expected recovery losses.

- Zero values are reported as '-' symbol and where necessary more decimals are used to avoid reporting zeros due to rounding effects.

- Totals and average are affected by rounding to one decimal for tonnage, two decimals for nickel and copper grades and three decimals for cobalt grades.



Ore Reserves

IGO's mining engineers have prepared Nova's FY23 ORE using routine industry methods, whereby the FY23 MRE block model was coded with mine reconciled grades and metallurgical recovery before an A\$/t NSR mining value was calculated for each model block. Stoping shapes were then prepared using an industry standard MSO software. The MSO volumes were then used to validate the final development and stope designs and to prepare an extraction schedule including the LOM plan. The plan was then input into a financial model to demonstrate the economic viability of the FY23 ORE. Full details of the ORE modifying factors applied are included in the Section 4 of Nova-Bollinger's JORC Code Table 1 on page 165 of this report. Figure 22 is a perspective 3D view of Nova-Bollinger's FY23 ORE coded by stoping and development, as well as mined out areas.





Due to the variable geometries of the Nova-Bollinger mineralisation, IGO uses several different mining methods for ore extraction. As depicted in the thicker portions of Nova-Bollinger bulk, stopes up to 75m high are designed, drilled and blasted, then extracted using remotely controlled loaders. The stopes are then backfilled with paste, which is comprised of non-sulphide process tailings mixed with a binder. The paste-fill is then left to cure to a strength that supports the stope walls so that adjacent secondary stopes can be safely mined. This mining method ensures near full extraction of the ORE, while minimising any ore dilution from potential stope wall and crown over-break effects.

In the Upper Nova area, where the mineralisation is narrower and more steeply dipping, either longhole stoping or a modified Avoca mining method is used for extraction. The Upper Nova stopes are backfilled with waste-rock, or in some areas cemented waste-rock, to provide post-mining geotechnical stability. While these two mining methods have inherent higher mining dilution than the paste backfill



method, both methods are more cost and production-rate effective in the areas of narrow and steeply dipping mineralisation.

In the flat lying Mid Zone between the Nova and Bollinger zones, the mining method is paste-filled, inclined room and pillar mining with full pillar extraction. The first stopes in this area were mined during CY20.

The current mining rate targets ~135kt/month with a contractor mining fleet of five trucks, five loaders, one development drill and three production drills. Ore from the underground mine is hauled to the ROM pad adjacent to Nova's crusher with the ore stockpiled in multiple 'fingers' based on nickel and/or magnesia grade. A separate stockpile is created for the high magnesia ore, which must be blended into the crusher with lower magnesia ore to keep the magnesium-iron ratio of the nickel concentrate within customer specifications.

Waste rock not used for underground backfill is hauled to surface with any potentially acid forming (PAF) rock encapsulated in non-PAF waste at the surface waste dump.

Outlook

Nova-Bollinger's Mineral Resource has been fully closed off by its resource definition drilling and no exploration for direct extensions of the mineralisation is in progress. A small infill grade control program is planned for execution in 2023 to help better define the resource for mine planning in selected areas of the deposit, which will result in a revision of the model for CY23 reporting. However, no material changes are expected to the overall estimates.



Summary and conclusions

The key conclusions relating to differences between IGO's CY21/FY22 reporting and FY23 reports have already been detailed on page 23 and 24 for IGO magmatic nickel sulphide deposits, and page 17 for the CY22 report on its lithium pegmatites. Briefly, there has been a material reduction in the magmatic nickel sulphide deposits, above what has been expected from mining depletion, due to re-evaluation of WSA FY22 reported estimates in light of RP3E expectations and suitability of converting JORC Code 2004 estimates to JORC Code 2012 estimates. The RP3E assessments have had the greatest effect on MREs, at both Cosmos and Forrestania. The declassification of a 2004 JORC Code estimate at the Diggers Deposit has also made a material reduction on the ORE side of the FY22 reporting.

At Nova and Greenbushes, changes in MRE and ORE predominantly reflect expected reduction due to mining depletion.



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Greenbushes: JORC Code Table 1

Section 1: Sampling techniques and data

Section 1: Sampling techniques and data – Greenbushes

JORC Criteria	Explanation
Sampling techniques	 Talison has drill-sampled the Greenbushes Central Lode, Kapanga and TSF1 MRE volumes, with the Central Lode and Kapanga drilled by RC drilling and DD. The TSF1 MRE volume was drilled using sonic drilling (SD). The holes drilled from surface at the Central Lode and Kapanga have collar spacings ranging from 25 to 50m across and along strike. The DD holes drilled from underground workings at the northern end of the Central Lode have a close spaced pattern, fanning out from the workings. The underground infill drilling took place from the hangingwall and footwall mine infrastructure. The TSF1 SD holes are drilled on a nominal 200m grid spacing. Apart from a few holes drilled to collect geotechnical information, the Central holes drilled from surface generally plunge towards local mine grid east to intersect the mineralisation at a high angle. Sample representativity has been ensured by monitoring core recovery to minimise sample loss. SD holes drilled to test the TSF1 resource are vertical For the 31 Aug 2021 Central Lode MRE, the database contains approximately 616 diamond core holes equating to approximately 111 km of drilling, and approximately 560 RC holes equating to 77 km of drilling. These holes were drilled in numerous programs conducted between 1977 and 2021. For the 31 Aug 2021 Kapanga MRE, the drill hole database contains 24 diamond core holes equating to approximately 4.8 km of drilling, and 216 RC holes equating to approximately 4.2 km of drilling. Over 90% of these holes were drilled between 2018 and 2021 For the 31 Mar 2018 TSF1 MRE, the drill hole database include 34 SD drillholes for a total length of 759m.
Drilling techniques	 RC drilling using face-sampling bits was used for shorter near-surface holes with hole diameters of either 5½ inch (140mm) or 5¼ inch (133mm). DD has been used for deeper holes and for drilling from underground platforms, with a few diamond tail extensions drilled to extend RC holes Triple tube DD has been used in areas of broken ground to improve core recovery. The core from some DD holes drilled to collect data for geotechnical studies has been oriented. The DDs drilled for Central Lode and Kapanga MRE work include several different core diameters including 36.4mm (BQ), 47.6mm (NQ) and 63.5mm (HQ2, HQ3). The TSF1 MRE drilling comprised SD to collect 3-inch (76.2mm) cores.
Drill sample recovery	 RC recovery: Selected RC holes have had the cuttings from 1m downhole intervals weighed over the entire hole length to provide data for assessment of the expected mass against the actual recovered mass. A few of the older RC holes have had samples collected over 2m down hole intervals. Generally, RC recovery is logged qualitatively as 'good' to 'poor' with recovery generally logged as 'good' except for samples collected within the first few metres from surface. The lithia grades from nearby RC and DD holes have been compared to assess the potential for grade bias due to RC fines losses. No material biases between the two drill methods have been identified for the Central Lode data. Review of several pairs of twinned holes contained in the Kapanga dataset showed apparent biases for Li₂O, raising th possibility of preferential loss of light minerals during RC drilling. DD recovery: Recovery has been measured as the percentage of the total length of core recovered compared to the drill interval. Core recovery is consistently high (95 to 100%) in fresh rock with minor losses occurring in heavily fractured ground or for DD drilling in the regolith. Triple tube DD has been used to maximise recovery in zones of broken ground and the weathered zone. Recovery monitoring and triple tube drilling are the main methods used to maximise core recovery.



Section 1: Sampling techniques and data – Greenbushes

JORC Criteria	Explanation
	- The TSF1 SD recovery was photographed and recorded as good with one logging entry and one sample taken per 1.5m core barrel return to allow for expansion and contraction typical in sonic drilling returns. No significant relationships have been identified between grade and sample recovery
Logging	 RC cuttings and DD and SD cores have been logged geologically and geotechnically with reference to standardised logging codes, to levels of detail that support MRE work, Or Reserve estimation (ORE) and metallurgical studies. The information collected is considered appropriate to support any downstream studies by the Competent Person. Qualitative logging includes codes for lithology, regolith, and mineralisation for RC, DD, and SD samples, with sample quality data recorded for RC such as moisture and recovery and in 10% of RC sample mass. DD subsampling size is recorded. DD cores are photographed, qualitatively structurally logged with reference to orientation measurements where available. Geotechnical quantitative logging includes QSI, rock quality designation (RQD), matrix and fracture characterisation. The total lengths of all drill holes have been logged.
Sub-sampling techniques and sample preparation	 RC sampling: RC samples were collected from a splitter (riffle, static cone, and rotary cone) that collected a 3 to 5kg split of the primary lot from each downhole sampling interval. Most samples were collected from dry ground conditions. The main protocol to ensure the RC samples were representative of the material being collected was visual logging of sample recovery, weighing sample return on 5 to 10% of holes and, collection and assay of 5% field duplicates of primary samples. DD sampling:
	 DD cores samples have been collected over intervals determined by geological boundaries but generally targeting a 1m length within the same zone of contiguous geology. Cores were generally half-core sampled with the core cut longitudinally using a core saw having a wet diamond impregnated cutting blade. Some of the larger diameter HQ core collected for metallurgical test was quarter core sampled. SD sampling:
	- The TSF1 SD sample intervals are 1.5m down hole with the SD core captured in half plastic pipe and cut with a blade or wire to prepare a 'half core' tailings sample. Laboratory preparation:
	- All samples were delivered in pre-numbered sample bags to Talison's on-site laboratory, with the sample chain-of-custody from the drill site to the laboratory managed by the Talison's site technical staff.
	 The laboratory then took over the chain-of-custody and used an internal digital tracking system for sample management. The samples were then oven dried for 12 hrs at 110°C before being crushed to a particle size distribution (PSD) of 100% passing 5mm. A rotary splitter was then used to collect a nominal 1kg sub-sample from the crushed lot.
	 For the majority of samples, the crushed lots were pulverised using tungsten grinding bowls. During the tantalum mining era up around 2012 most samples were pulverised usin standard steel grinding bowls except those expected to represent low iron technical grade plant feed which also used tungsten grinding bowls. Following pulverising, a pulp sub-sample was collected into a small packet to serve as the assaying source lot. Quality controls:
	 All laboratory sample preparation was carried out by trained technicians who followed the specified laboratory procedures for each sample preparation workflow. Independently of the site laboratory, the site geological staff insert certified reference materials at a 1:20 frequency in every batch Sample pulps are retained for future reference and coarse rejects are discarded.
	 Talison's reviews of quality sample results confirm that the levels of precision, accuracy and levels of potential sample cross contamination are acceptable for MRE work. The precision half absolute relative difference values for field duplicates having grades ≥0.2% Li2O is less than ±10% relative for 85% of replicates collected since 2016. Sample size versus grain size:
	 Lithia bearing spodumene typically comprises between 15 to 55% of the mineralisation, and as such is in relatively high concentration. The sample sizes collected at the primary and sub-sampling stages are considered appropriate by the Competent Person.



Section 1: Sampling techniques and data – Greenbushes

eophysical tools have been use all aliquot of the sample prepar ite of 36 accessory analytes we vorted MRE, albeit iron grade ha on's technical staff maintains st checked and accepted before d site laboratory internal quality st pratories. in geological drill samples is no vn solution standards and blank nique for lithium is statistically i ificant drill hole intersections of itors. holes have been drilled to com element assay suite is compar- naterial down hole smearing of e have been no adjustments or	ration pulp was collected ere also determined using as been used to assist in standard work procedures data can be loaded. systems include replicate ot analysed in replicates; ks are embedded in each monitored by the laborato f mineralisation have beer npare assay results from I red to lithology which has f grades in the RC drilling	and digested ir fusion digestio the interpretatio for all data main pulp repeat) la instead, the AA batch and the ry, routinely verifi RC and DD drill high contrast b	n sodium pero n and X-ray f on of zones of nagement ste boratory anal S machine is accuracy of th ed by Talison ling.	xide and the re luorescence (X f TG mineralisa ps, with an ass yses, analysis of recalibrated be ne calibrated be ne calibration is	RF), however these tion. ay importing protoco of known standards t fore every batch of s monitored regularly
itors. holes have been drilled to com element assay suite is compar- naterial down hole smearing of	npare assay results from I red to lithology which has f grades in the RC drilling	RC and DD dril high contrast b	ling.		gical staff and have a
	i scalling of humaniassay (otwoon pogn	atite and host i	ocks. From these co
ing. Generally, holes have the p path surveys. mine grid eastings are approxin rue North.	e kinematic differential glo eyed using total station eq been surveyed using sin plunge recorded every ~3 mately aligned to the strik	bal positioning uipment during gle shot camer Om down hole. e of the main p	system equip the time of u as for holes d A few early F egmatites with	ment (RTK-DG nderground min Irilled prior to 20 RC holes have r n the trend of m	PS), to a reported an ning. 007, and gyroscopic not been surveyed ar nine grid north appro.
	Locatio	n Local X	Local Y	MGA X	MGA Y
	A	10,166.941	10,524.225	414,290.966	6,251,535.324
	В	9.833.499	12,778.814	413,362.002	6,253,615.642
plu ing mir rue trai	Inges of drill hole paths have I. Generally, holes have the ath surveys. ne grid eastings are approxi e North. Insformation between local a adds constant of 1,000m to	inges of drill hole paths have been surveyed using sing Generally, holes have the plunge recorded every ~30 ath surveys. ne grid eastings are approximately aligned to the strike e North. Insformation between local and Map Grid Australia (Mo Location A B adds constant of 1,000m to the mine grid elevations r	Inges of drill hole paths have been surveyed using single shot camer J. Generally, holes have the plunge recorded every ~30m down hole. ath surveys. Ine grid eastings are approximately aligned to the strike of the main present North. Insformation between local and Map Grid Australia (MGA) grid is a two Location Local X A 10,166.941 B 9.833.499 adds constant of 1,000m to the mine grid elevations relative to Austri	Inges of drill hole paths have been surveyed using single shot cameras for holes d (). Generally, holes have the plunge recorded every ~30m down hole. A few early F ath surveys. ne grid eastings are approximately aligned to the strike of the main pegmatites with e North. Insformation between local and Map Grid Australia (MGA) grid is a two point transf Location Local X Local Y A 10,166.941 10,524.225 B 9.833.499 12,778.814	Inges of drill hole paths have been surveyed using single shot cameras for holes drilled prior to 20 (). Generally, holes have the plunge recorded every ~30m down hole. A few early RC holes have r ath surveys. Ine grid eastings are approximately aligned to the strike of the main pegmatites with the trend of m e North. Insformation between local and Map Grid Australia (MGA) grid is a two point transform using the f Location Local X Local Y MGA X A 10,166.941 10,524.225 414,290.966 B 9.833.499 12,778.814 413,362.002 adds constant of 1,000m to the mine grid elevations relative to Australian Height Datum (AHD) e

The precision of the TSF1 survey is considered have a precision of ±1m in three dimensions.



Section 1: Sampling techniques and data – Greenbushes

JORC Criteria	Explanation
Data spacing and distribution	 For the Central Lode the drill section spacing is typically 50 m, with spacings of approximately 25 m along section. However, the drill coverage and spacing is quite irregular given the extensive mining and exploration history, and the variable geometry of the pegmatite For Kapanga, the majority of the holes were drilled on a regular grid with a nominal spacing of 40 m along east-west section lines and 50 m between section lines The drill hole spacing for the TSF1 estimate is ~200m square collar spacing. Down hole sample intervals for the Central Lode and Kapanga are 1m, while a 1.5m down hole interval was used for the TSF1 estimate. Central Lode sample results were composited to 3m lengths prior to estimation The majority of Kapanga samples were collected using RC drilling over 1m intervals, and this was retained as the composite length The Competent Person considers that these data spacings are sufficient to establish the degree of geological and grade continuity appropriate for the MRE and ORE estimation procedures, and the JORC Code classifications applied by Talison.
Orientation of data in relation to geological structure	- Nearly all drill holes are oriented to intersect the mineralisation at a high angle and as such, the Competent Person considers that a grade bias effect related to the orientation of data is highly unlikely.
Sample security	 The sample chain-of-custody is managed by Talison's technical personnel. Samples were collected in pre-numbered bags, for transport from the primary collection site to the laboratory. Sample dispatch sheets are verified against samples received at the laboratory and other issues such as missing samples and so on are resolved before sample preparation commences. The Competent Person considers that the likelihood of deliberate or accidental loss, mix-up or contamination of samples is very low.
Audits or reviews	 Field quality control data and assurance procedures are reviewed by Talison's technical staff on a daily, monthly, and quarterly basis RSC conducted a review of the 2021 MRE and found no fatal flaws and recommended additional twinned holes in the Kapanga deposit. The sampling quality control and assurance of the sampling was reviewed by consultants Quantitative Geoscience in the 2000s, Behre Dolbear Australia in 2018, and as part of IGO's due diligence work by Snowden Mining Industry Consultants in 2019. No adverse material findings were reported in any of these reviews, A 2021 review by SRK Consulting Australasia (SRK) noted that Talison rigorous quality control programs for assay, which have been in place since 2007, cover ~40% of the Central Lode data and effectively all the Kapanga drilling. In a recent Competent Person Report review by Behre Dolbear Australia (BDA), BDA noted that there is an apparent positive bias for lithia when comparing nearby RC and DD samples, which may be material give most of the Kapanga drilling is RC. BDA further noted that a similar bias is observed by Talison in pit grade control samples, with a 5% factor applied to adjust grades down for forecasting plant head grades.

Section 2: Exploration Results

Section 2: Exploration Results – Greenbushes

JORC Criteria	Explanation
Mineral tenement and land tenure status	 Greenbushes is 100% owned by Talison. Talison is 51% owned by Tianqi Lithium Energy Australia Pty Ltd (TLEA) which is the holding company for the Tianqi Lithium (51%) and IGO (49%) JV. The remaining 49% of Talison is owned by Albermale Corporation. The WA mineral tenements relevant to Greenbushes' MREs and OREs are tabulated below.



Section 2: Exploration Results – Greenbushes

JORC Criteria

Explanation

Tenement	Name	Date		Area	
type	Name	Granted	Expiry	(ha)	
Mining	M01/02	28 Dec 1984	27 Dec 2026	969	
	M01/03	28 Dec 1984	27 Dec 2026	1000	
	M01/04	28 Dec 1984	27 Dec 2026	999	
	M01/05	28 Dec 1984	27 Dec 2026	999	
	M01/06	28 Dec 1984	27 Dec 2026	985	
	M01/07	28 Dec 1984	27 Dec 2026	998	
	M01/08	28 Dec 1984	27 Dec 2026	999	
	M01/09	28 Dec 1984	27 Dec 2026	987	
	M01/10	28 Dec 1984	27 Dec 2026	1000	
	M01/11	28 Dec 1984	27 Dec 2026	999	
	M01/16	28 Sep 1994	27 Dec 2036	19	
	M01/18	28 Dec 1984	27 Dec 2026	70.4	
	M70/765	20 Jun 1994	19 Jun 2028	3	
Exploration	E70/5540	08 Mar 2021	07 Mar 2026	222.6	
General purpose	G01/01	17 Nov 1986	5 Jun 2028	10	
	G01/01	17 Nov 1986	5 Jun 2028	10	
Miscellaneous	L01/01	19 Mar 1986	27 Dec 2026	9	

	 State Forest (managed by the WA State Department of Biodiversity, Conservations and Attractions) covers ~55% of the tenure, with most of the remaining (~40%) being private land. M01/06, M01/07 and M01/16 cover the operating mining, and processing areas an area ~2000ha, and contains the entire MRE. The general purpose leases cover the processing facilities. There is a sublease agreement between Talison and GAM, with the latter owning the rights to all non-lithium metals on the tenements.
Exploration done by other parties	 Mining in the Greenbushes region has been almost uninterrupted since the tin mineral cassiterite was first discovered in 1886, making Greenbushes the longest continuously operating mine in WA. The first tin miner in the area was the Bunbury Tin Mining Co in 1888 followed by Vulcan Mines who carried out oxide tin sluicing operations from 1935 to 1943. From 1945 to 1956 tin dredging commenced using more modern equipment and in 1969, Greenbushes Tin NL commenced open pit mining of oxidised soft rock below surface. Hard rock open pit tin-tantalum mining and processing at 0.8Mt/a commenced in 1992 with the ore sourced from the now near completed Cornwall Pit. This mining included underground mine development in 2001 to source high grade tantalum ore when the process capacity was increased to 4Mt/a. In 2002, tantalum demand declined rapidly and the tantalum/tin treatment plant was placed into care and maintenance. Greenbushes Limited commenced open pit mining in 1983 and commissioned a 30kt/a lithium mineral concentrator in 1985. The mining and processing assets were subsequently acquired by Sons of Gwalia Ltd (SOG) in 1989 and the concentrate production capacity was increased to the 100kt/a in the early 1990s, then increased to 150kt/a by 1997, including the production of chemical grade lithium concentrate.





and tantalum company Talison bal Advance Metals Ltd with the rights elongate steeply north striking and nd largely lithium-barren, high grade eted to have intruded around the time
nd largely lithium-barren, high grade
e length up to 3km, and with true nner. The Kapanga pegmatites angingwall zones of the Central Lode nly from the Cornwall Pit. Generally, milar, with concentration of spodumene to 50% of the lithium bearing mineral tral Lode deposits. As such the tailings pleted' layer, which in turn overlies a to depths of up 40m below surface.
neralisation at a high angle and as y low.
leration.



JORC Criteria	Explanation
Further work	- Exploration drilling is continuing within the Greenbushes tenements with several advanced exploration targets on regional pegmatites.

Section 3: Mineral Resources

Section 3: Mineral Resources – Greenbushes

JORC Criteria	Explanation
Database integrity	 Talison capture all geoscientific drill hole information for MRE work using laptop interfaces. The data is then stored in an SQL Server database and managed using acQuire software, which is a well-recognised industry software for geoscientific data storage, manipulation, and validation. Much of the older drill hole data was manually captured on hard copy log sheets. Talison has focussed on verifying the assay data from early drill holes and not all geological logging has been captured in the SQL database. However, as interpretation of the mineralisation is primarily driven by lithia assays, the Competent Person considers that the lact of complete geology transfer to be not material. Talison selected a random sample of historical assay data transferred into the QSL database and compared the results to the original records to confirm the loading of historical assay records was correct – no material issues were found in this audit process. Talison validates all data following loading through visual inspection of results on-screen both spatially and using database queries and cross section plots. Typical checks carried out against original records to ensure data accuracy include items such as overlapping records, duplicate records, missing intervals, end of hole checks and so on. The Competent Person considers the risk of data corruption through transcription errors between initial collection and use in the MRE process to be very low risk.
Site visits	The Competent Person for the MRE is the Geology Superintendent for Greenbushes and as such has detailed knowledge of the data collection, estimation, and reconciliation procedures for this MRE revision.
Geological interpretation	 Central Lode and Kapanga: The Central Lode geological model was prepared by SRK NA and Talison using Leapfrog Geo implicit modelling techniques, and subsequently reviewed and updated by SRK. The Kapanga model was prepared by Talison using Leapfrog Geo implicit modelling techniques and reviewed and updated by SRK. A second 3D digital wireframe in a similar process for the highly mineralised pegmatite using a ≥0.7% Li2O threshold on one metre drill composites. The high-grade wireframe was nested inside the larger volume pegmatite wireframe. The models were prepared using extensive datasets that included geological logging data and geochemical data acquired from resource definition drilling. Grade control data and pit mapping data were also used for Central Lode. The models included the main lithological units, structural features, alteration zones, and grade domains The deposits show significant complexity, which is common for most pegmatite deposits. Alternative interpretations are possible for both the geometry and extents of the pegmatites, and for the alteration zones, which have been defined using probabilistic approaches. However, given the relatively good drill coverage, is it unlikely that alternative interpretations will report significantly different grades and tonnages. It is considered that the uncertainty in the geology model is adequately accounted for in the resource classifications. A depth of weathering surface was prepared to allow modelling of the oxidised near surface parts of the deposit. TSF1: Multiple current staff at the mining operation were present in the creation of this man made structure. This along with the survey data that constrains the dam provides for an indicated level of confidence in the geological interpretation of the deposit with respect to spatial constraints and depositional process. Geology logging provides a clear indication of the domain boundaries of the natural surface, unmineralised cl

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JORC Criteria	Explanation
	- The grade and geological continuity of the deposit is a function of the ore types processed through the processing plants that generated the deposited tailings over several years. As tailings are discharged at the walls they flow toward the middle with the heavier spodumene settling out earliest in sub horizontal layers.
Dimensions	 Central Lode and Kapanga: The pegmatite zone in the MRE model is ~2.8km strike length (north-south in mine grid) and horizontal east-west widths ranging from ~150m to ~300m. The maximum MRE modelled depth is ~800m below surface with depth varying along strike as a function of maximum drill depths on drill sections. The Publicly Reported MRE is constrained by a 'break-even' pit optimisation shell that has dimensions of 2.8km along strike 1.9km wide horizontally and extending to a maximum depth of 580m below surface. TSF1: TSF1's MRE is has dimensions of ~1km north south and ~0.7km east west in the mine grid system. The mean depth of the combined mineralised tailings of the layers of Enriched Zone (EZ) and Depleted Zone (DZ) tailings ranges between 8 to 15m below current surface.
Estimation and modelling techniques	 Central Lode and Kapanga: Consultants SRK prepared the Central Lode/Kapanga MRE for Talison. Talison reviewed the outputs and accepted the interpretation for MRE work. The Mineral Resource Estimates were prepared using conventional block modelling and geostatistical estimation techniques. The same model framework was used for Central Lode and Kapanga. However, they were modelled separately using different datasets and estimation procedures and parameters. The two models were combined into a single model. Datamine Studio RN was used to prepare the Kapanga model. The two models were combined and converted to Surpac for handver to Talison's mine planning tem. KNA studies were used to assess a range of parent cell dimensions, and a size of 20 × 20 × 20 m (XYZ) was considered appropriate given the drill spacing, grade continuity characteristics, and expected end-user requirements for the combined model. Sub-celling down to 5 × 5 × 5 m was applied to enable the wireframe volumes to be accurately modelled. The domain wireframes were applied as soft boundary estimation constraints in the Central Lode model and as hard boundary estimation constraints in the Kapanga model. Probability plots were used to assess for outier values. Grade cuts were not applied, but distance restrictions were applied to Li2O grades above selected thresholds in some domains. The parent cell grades were estimated using Ordinary Kriging. Search orientations and weighting factors were derived from variographic studies. Dynamic anisotropic searching was used in Central Lode to adjust the local search orientations to match any localised changes more closely to the strike and dip of the pegmatite units in the geological model. It was not applied for Kapanga where the pegmatite orientations to match any localised changes more closely to the strike and dip of the pegmatite. A multiple-pase estimated using ordinary Kriging. Search orientations devine danges more closely to







JORC Criteria	Explanation
	 The parent block dimensions were set to 80m squares in the horizontal and 1.5m vertically, which approximates half the information spacing horizontally and agrees with the SE sampling length. Sub blocks were permitted down to 10m squares in the horizontal and 0.75m in the vertical to ensure acceptable precision by block volume of the wireframe volumes defining each estimation layer. The wireframe surfaces were used to prepare blocks for the EZ and DZ as well as the dam walls and the basal clay zone Only lithia grade was estimated. Block grades were estimated from the 1.5m long composites using an inverse distance squared algorithm with a 200m wide horizontal, and 50m vertical search that estimated grades for 98% of the model volume in each layer. Blocks not estimated in the search were assigned the mean grade of composites from each zone. A minimum of three and a maximum of 16 composites were required for a block to be estimated. The grade estimate is supported by the 2022 mining to mill reconciliation, which resulted in 99% Li₂O% grade reconciliation.
Moisture	- Tonnages for both the Central Lode, Kapanga and TSF1 were estimated on a dry basis.
Cut-off parameters	 Central Lode and Kapanga: Talison reported the estimate using a 0.5% Li2O block model cut-off within a break-even pit optimisation shell. The cut-off grade is consistent with the operations' process tailing grades at the time the estimate was prepared. TSF1: Talison reported the estimate using a 0.7% Li₂O block model cut-off which is deemed the break-even grade for processing of tailings through the tailings retreatment plant (TRP in the FS.
Mining factors or assumptions	 Central Lode and Kapanga: Talison has assumed that mining will continue by conventional open pit drill and blast, and load and haul as currently used in the active Central Lode pits. RC grade control will be used to define ore prior to mining, and close spaced patterns will be used to delineate pods of TG ore. The resource model will contain some internal dilution, but external dilution has not been intentionally added to the resource model. It is expected that Kapanga will be mined using techniques that that similar to those currently used at Central Lode. In order to assist with an assessment of the reasonable prospects of eventual economic extraction, Talison used the combined model to conduct a preliminary pit optimisation study. This was based on current and projected operational data and on pricing provided by their corporate division. A series of pit shells were generated, and the Mineral Resource has been limited to the pegmatite contained within the pit shell based on a revenue factor = 1. TSF1: The tailings will be mined by conventional load and haul surface methods without blasting and processed through the TRP.
Metallurgical factors or assumptions	 Central Lode and Kapanga: Ore will be processed through the existing spodumene concentration plants to produce TG and chemical grade (CG) saleable spodumene concentrates. Proposed new plants will have similar or superior design parameters to the existing plants. Process plant recovery factors and mineralogy for the existing plants are based on historical processing metrics, with these recoveries considered achievable in new proposed chemical grade plants. Preliminary metallurgical test work on Kapanga indicates similar mineralogy and that saleable spodumene concentrates are achievable. The process flowsheets keep deleterious elements at acceptable levels for customer products and multi-finger stockpile blending is also used to assist in meeting product specifications. The technical grade concentrate produced ranges from 5.0 to 7.2% Li2O and <0.15% Fe, and chemical grade concentrate grades 6.0% Li2O. TSF1: The tailings will be processed through the TRP and produce a saleable concentrate.


Section 3: Mineral Resources – Greenbushes

JORC Criteria	Explanation
Environmental factors or assumptions	 Talison's senior management has confirmed to the Competent Person that Greenbushes Operation has all approvals in place to mine, process, and extract spodumene concentrates, and that there are no known impediments to gaining additional approvals for additional process plants, expanded infrastructure and water supply. See the relevant Ore Reserve sections further below for more details.
Bulk Density	 Central Lode and Kapanga: In situ density of the pegmatite was determined using conventional water displacement methods on 2,071 drill cores. Unweathered core is relatively impermeable, and porosity is not a significant issue when performing the water immersion tests The data was used to derive a regression equation to estimate MRE block density based on lithia grade – where Density (t/m3) = 2.59 + 0.071× %Li2O. A density value of 3.0 t/m3 was assigned to waste zones in the MRE model based on mining reconciliation information. A value of 1.8t/m3 was applied to the oxidised near surface materials, also based on mining reconciliation information. Test work consisting of five SD core measurements throughout the deposit initially produced an average density of 1.67t/m3 which was assigned to all tailing (both EZ and DZ) in the 2018 resource model. -Further test work in November 2022 consisting of six push tube and sand replacement test throughout the deposit. These produced a consistent average density of 1.38t/m3. This density was supported by the 2022 mill reconciliation, resulting in a 93% tonnage reconciliation. The 2022 resource model density was updated 1.38t/m3 for all tailings (both EZ and DZ).
Classification	 The MRE has been classified into the JORC Code categories of Measured, Indicated and Inferred Mineral Resource based on Talison's and the Competent Persons assessment of data quality, data spacing and estimation quality. JORC Code Measured Mineral Resources were assigned to broken ore stockpiles, where grade control has given high confidence in the lithia grades. Indicated Mineral Resources were assigned to volumes with average wider spaced data, and Inferred Resources have been assigned at depth and at the peripheries of the MRE, where the data is very widely spaced. The outcome of the MRE process reflects the Competent Person's view of the estimates.
Audits or reviews	 Prior MRE estimates and the Talison's estimation processes have been reviewed in 2018 at a high level by Behre Dolbear Australia Pty Ltd, who concluded that the estimates were consistent with the requirements of the prevailing JORC Code and that reasonable prospects of eventual economic extraction had been demonstrated. In 2020, Snowden Mining Industry Consultants reviewed the prior estimates and process for IGO and concluded there were no fatal flaws in the MRE processes applied for the Central Lode and TSF1 and the estimates were generally low risk. The 2021 MRE revision has been reviewed internally by Talison's senior geological staff. A December 2021, fatal flaw independent review prepared by resource and mining consultants RSC found no fatal flaws in Talison's method of preparation or reporting of the Aug-21 MRE and ORE.
Relative Accuracy/Confidence	 Central Lode and Kapanga No specific statistical studies have been completed to quantify the estimation precision of either the Central Lode, Kapanga or TSF1 estimates. The Central Lode 2022 mining to mill reconciliation resulted in a 102% Li2O% grade reconciliation which has continued through to April 2023. The Central Lode 2022 mining to mill reconciliation resulted in a 81% tonnage reconciliation due to mining through a localised zone of internal host rock dilution resulting in significant loss due to ore contamination. Mining to mill reconciliation YTD to April 2023 resulted in 102% tonnage reconciliation as mining has progressed past areas of internal dilution. TSF1: The TSF1 grade estimate is supported by the 2022 mining to mill reconciliation, which resulted in 99% Li₂O% grade reconciliation. The TSF1 density was revised to 1.38t/m3 following 2022 mining to mill reconciliation and additional test work, the 1.38t/m3 value give a 97% reconciliation for 2022 mining.



JORC Criteria	Explanation
Mineral Resource estimate for conversion to Ore Reserves	 The MREs for the Central Lode, Kapanga and TSF1 described in the previous sections of this JORC Table 1 were used as the basis for ORE work. The MREs are inclusive of the ORE for both the Central Lode, Kapanga and TSF1 estimates
Site Visits	- The Competent Person for the estimate is Andrew Payne, who is a qualified mining engineer, and an employee of Talison Lithium who holds the position of Mine Planning Superintendent.
Study Status	 Central Lode and Kapanga: The Central Lode open pit mine has been in operation since the mid-1980s. The Aug-2021 ORE study is based on operational budgets, well understood operating expenditure (OPEX) and capital expenditure (CAPEX) costs with the level of study equivalent to FS or better as defined in the prevailing JORC Code. Process expansions have been costed and scheduled for in-house studies at least a PFS if not FS level. TSF1: TSF1 reprocessing has been in operation since February 2022 and has been performing well when compared to the assumptions used in the August 2021 ORE. The modified densities used in the 2022 MRE updated have been used to modify the ORE.
Cut-off parameters	 Central Lode, Kapanga and stockpiles: The cut-off grade is a ≥0.7% Li₂O ORE model block threshold after application of key Modifying Factors such as mining, processing, and product delivery cost assumptions. An analysis of a breakeven cut-off grade has been completed and is well below 0.7% Li₂O A cut-off lower than 0.7% Li₂O is not appropriate for the ORE until test work is completed to test if that material is able to be processed. Material between 0.5% and 0.7% Li₂O and all pegmatite <0.5% Li₂O are stockpiles for potential processing later. The ORE is reported within the LOM final pit design. TSF1: The cut-off grade is a ≥0.7% Li₂O ORE model block threshold after application of key Modifying Factors such mining, processing, and product delivery cost assumptions. Costs considered include processing and maintenance fixed and variable costs, general administration costs, ore premium including re-handle and overhaul, closure costs and all non-mining related stay-in-business capital expenses.
Mining factors or assumption	 Central Lode: The recovery and yield factors translating Resources to Reserves are determined from process plant performance (Technical Grade Plants and Chemical Grade Plant 1) over the last 12 months. Chemical Grade Plant 2 (CGP2) is being commissioned at the time of compiling the Ore Reserve and has not yet reached the modelled recovery or yield. Modelled recoveries and yields for CGP2 have been used to derive the Ore Reserve as those recoveries and yields are expected beyond plant commissioning. The Resource-to-Reserve translation factors for the 2021 Reserves are 100% of tonnes and 100% of the lithium grade. The Mineral Resource has been reconciled / calibrated to process plant performance, so no factors were necessary. The mining method is contractor mining open pit drill and blast, load, and haul, which has been executed at the operation since the mid-1980s. The pit development plan is a series of staged cutbacks using practical mining widths and equipment access, and achievable vertical advance rates. The pit optimisation that was used to guide the mine design was prepared in Whittle Software using geotechnical parameters recommend by well-respected geotechnical consultant.





JORC Criteria	Explanation
	 Inferred Resources are not applied to the pit optimisation determining the Reserve shell and Pit Design; however Inferred Resources have been included in the LOM schedule that underpins the cashflow model. Inclusion of these Inferred Resources is not expected to alter the Ore Reserve. The voids from a former underground mine have not been excluded from the ORE, but the tonnage of ~200kt is not material in terms of the reporting estimation precision. TSF1: Only the top ~7m of TSF1, which comprises the EZ of mineralisation, is considered for the ORE. An average of 0.2m has been considered as ore loss, mainly due to the vegetation cover. An average of 0.2m has been considered as floor dilution from the underlying DZ. The TSF walls are assumed to remain with a 3:1 slope angle around the margins of the extracted ORE. There are no Inferred Mineral Resources associated with the ORE for TSF1.
Metallurgical factors or assumptions	 Spodumene concentrates have been extracted and sold from Greenbushes since the mid-1980s using conventional crushing, grinding, gravity, and flotation circuits. Processing plant recovery factors from the three (3) existing plants applied to the Ore Reserves estimates are based on historical performance capabilities of the plant, ore grades and ore quality, except for chemical grade plant #2 (CGP2). This plant was being commissioned at the time of compiling the ORE and has not yet reached the modelled recovery or yield. Modelled recoveries and yields have been used to derive the Ore Reserve as those recoveries and yields are expected beyond plant commissioning. The process flowsheets keep deleterious elements at acceptable levels for customer products and multi-finger stockpile blending is also used to assist in meeting product specifications. Talison defines 'yield' as the mass percent of ore feed to the process plants that reports to concentrate. The yields are consistent with the lithia (and hence spodumene mineral) grades fed to each respective plant. The technical grade concentrate produced ranges from 5.0 to 7.2% Li2O and <0.15% Fe, and chemical grade concentrate grades 6.0% Li2O. The TRP, which has been in operation since Q1 2022 processes TSF1 ORE at ~2Mt/a. The flow sheet involves scrubbing, attrition, desliming, magnetic separation of iron minerals, the flotation of lithium minerals followed by filtration to a concentrate. Greenbushes produces five technical grade products, ranging from 5.0% to 7.2% Li2O with different target maximum ferric oxide grades ranging from a 0.12% up to 0.25% Fe₂O₃. Chemical grade concentrate grades 6% Li2O with a 1.0% Fe2O3. Grade.
Environmental	 Greenbushes operates under the Department of Mines, Industry Regulation and Safety (DMIRS) requirements and a Department of Water and Environmental Regulation (DWER) environmental licence. Current permits allow a processing rate of 5.0Mt/a of ore. Approvals to expand the processing capacity to ~9.5Mt/a will be required with the relevant state and federal authorities and Talison expects that the expansions will be managed under the existing licences described above. To meet a ~9.5Mt/a process rate, the site will require the either the construction of new surface water dams or the increase in height of existing dams. Construction has begun on increasing existing dam heights. All approvals for the exploitation of the TSF1 ORE are in place. Greenbushes Operation is within a state forest and Talison are in ongoing consultation with the Department of Biodiversity, Conservation and Attractions with respect to mine closure.
Infrastructure	 Greenbushes has mined and processed lithium ore since the mid-1980s and all necessary infrastructure is in place to support the currently approved operations. The two planned additional chemical grade plants (CGP3 and CGP4) will require additional power supply and Talison are working to fully commission a 133kV powerline from Bridgetown to the mine to power the new processing operations. A 250 room camp has been established for the CGP3 construction workforce. A 500 room village has been approved to house construction and operational personnel. This village is scheduled for to be completed in mid-2024.



JORC Criteria	Explanation
	 Investigations are underway to provide additional catchment water supply from the eastern side of the mine area. An additional TSF is required to store excess tailings. Strategies for the location of this facility are being formulated. A lack of tailings storage is not expected to impact on planned production targets and therefore Ore Reserves. Strategies are being formulated to provide additional waste dump capacity to support the mining of these Reserves. Land tenure or government approvals are not expected to impact on planned production targets and therefore Ore Reserves. Approval was granted in December 2022 for enough waste dump capacity until 2029. No other significant infrastructure is anticipated and sustaining capital costs for infrastructure are included in current plans and supporting studies. The ramp-up schedule for the pit optimisation study assumed product CY end productions of ~0.88Mt (CY21), ~1.13Mt (CY22), ~1.13Mt (CY24), ~1.54Mt (CY25), ~ 1.7Mt (CY26), and ~2.1Mt (C27 onwards). Production for 2021 (0.97Mt) and 2022 (1.32Mt) has exceeded that schedule. In August of 2019 Talison received Ministerial Approval No. 1111 to undertake Stage 3 and Stage 4 expansion of Greenbushes including development of larger open, construction of two additional chemical grade processing plants and the TRP, and additional crusher and centralised ROM, a new mine services area and explosives storage and handling facility, expansion of the Floyd's Waste Dump, and the establishment of new infrastructure corridors for a bypass road, powerline, pipeline and road corridors.
Costs	 Capital costs for production expansions include the cost associated with the completion of the TRP plant and the construction of CGP3 and CGP4. The remaining costs for the TRP are based on engineering, procurement, and construction management (EPCM) estimates by the construction contractor and Talison estimates for owner's costs. The costs for the additional two chemical plants are based on in-house FSs and Talison's prior experience with the construction of the newly commissioned CGP2 plant. Sustaining capital costs are estimated based on Talison's prior experience of cost relative to the value of installed processing operations. Mining costs are based on current open pit contractor mining costs and have been adjusted for 'rise and fall' terms. Adjustments have been made for the new mining contractor (Macmahon Holdings) who took over the mining contract on 1 July 2023. Processing costs (including tailings costs), product transportation costs and administration costs are based on operating budgets, that have been adjusted for planned increases in production and are based on Talison's past extensive experience relating to fixed and variable costs. WA State royalties are levied at 5% of sales revenue after allowing for deductions of overseas shipping costs, where applicable.
Revenue factors	 Long term chemical grade product prices and exchange rates are based on reputable, independent forecasts. Long term technical grade product prices are based on current prices and are assumed to remain flat in real terms. Price and FX assumptions for Greenbushes are managed by Talison. Sales agreements are commercial in confidence but are consistent with independent forecasts.
Market assessment	 The continued strong growth in the rechargeable battery sector is expected to drive increasing demand for lithium. Talison expects to see a decline in market share as forecast lithium market growth outpaces the rate of growth of Talison's sales because of production expansions.
Economic	 An inflation rate of 2.5% per annum was assumed for all prices and costs, except capital costs in 2022 where 6.25% was assumed. The net present value (NPV) of the mine plan was determined using a nominal discount rate of 10% per annum. The NPV is most sensitive to changes in product price, exchange rates and sales volumes.
Social	 Talison has strong working relationships with the local community and key stakeholders and considers that it has a social licence to operate. Proactive community programs include community programs and projects, tourism, environmental actives, and schools and education programs. Talison is also a significant employer in the local community with most of its workforce living within a 20 minute drive from the operation.
Other	 Talison considers that there: Are no material naturally occurring risks associated with the current operation or planned future expansions. No material issues relating to current legal and marketing agreements. Are reasonable grounds to expect that all necessary government approvals will be received within the timeframes anticipated for the FS expansion plans.



JORC Criteria	Explanation
Classification	 The OREs are classified after due consideration of the MRE classifications with Measured Mineral Resources converting to Proved Ore Reserves and Indicated Mineral Resources converting to Probable Ore Reserves after due consideration of all Modifying Factors as described in the JORC Code. The results reflect the Competent Persons view of the Central Lode and TSF1 OREs. No portion of Probable Reserves is derived from Measured Resources.
Audits and reviews	 The prior ORE estimates have been reviewed in 2018 at a high level by BDA, who concluded that the estimates are consistent with the requirements of the prevailing JORC Code and that reasonable prospects of eventual economic extraction had been demonstrated. In 2019 and 2020, Snowden Mining Industry Consultants reviewed the estimates and concluded there were no fatal flaws in the prior ORE processes applied for the Central Lode and TSF1 and the estimates were generally low risk. A December 2021, fatal flaw review prepared by resource and mining consultants RSC found no fatal flaws in Talison's method of preparation or reporting of the Aug-21 MRE and ORE. A December 2021, review of the mine design for the Central Lode – Kapanga Pit by geotechnical consultants PSM found the pit design largely compliant with prior design recommendations, with suggestions as to so minor revisions related to small local areas of potential higher failure risk related to steeper than recommend over slopes and the presence of underground workings. BDA in a 2021 review for a Tianqi Prospectus, stated that planned mining rates and mining recovery factors are an acceptable basis for future planning, and that geotechnical conditions are good. BDA also reported that Talison's planned expansions are practical and achievable at low risk give planned replication of existing facilities in which Talison has developed significant expertise. Additionally, BDA stated that it could see no reason that future development applications for the operation would not be forthcoming.
Discussion of relative accuracy/ confidence	 No specified statistical studies have been completed to quantify the estimation precision of either the Central Lode or TSF estimates. The August 2021 ORE is underpinned by a new block model which has been calibrated to historical mine to mill reconciliation and therefore no factors have been applied to neither tonnes nor grade.



Cosmos: Odysseus JORC Code Table 1

Section 1: Sampling techniques and data

Section 1: Sampling techniques and data – Odysseus

JORC Criteria	Explanation
Sampling techniques	- Sampling of diamond core drilling was the sampling technique used to define the ODS and ODN deposits - refer to the following sections.
Drilling techniques	 Diamond drilling comprised HQ and NQ2 diameter core. Approximately 89% of the core was NQ2 diameter core. Most of the core was oriented,
Drill sample recovery	 Diamond core recoveries were logged and recorded in the database. Core recoveries were based on the ratio of measured core recovered lengths to drill advance lengths for each core-barrel run. Overall recoveries were >99% and there were no core loss issues or significant sample recovery problems. Core loss was recorded in logging where it occurred. Diamond core was reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths were checked against the depth given on the core blocks and the driller routinely carried out rod counts. As there was minimal sample loss, a relationship between grade and sample recovery was not established.
Logging	 All geological logging was carried out to a high standard by qualified geologists who used well-established nickel host rock and wall rock geology codes. Logging was entered in spreadsheets with appropriate spreadsheet templates as a guide, or in LogChief software. Final logging was qualitative in terms of description, and quantitative for measures such as RQD and structure. All core was digitally photographed (high resolution) in both dry and wet forms. All holes were logged in full. Information on structure type, dip, dip direction, alpha and beta angles, texture, shape, roughness, and fill material was entered in structural logs stored in the database.
Sub-sampling techniques and sample preparation	 The diamond core was cut on site by experienced field technicians into quarter or half core samples. The samples were cut longitudinally using wetted diamond-tipped saws from the whole core, usually over 1m downhole intervals. All samples were core. The core samples were bagged into pre-numbered calico bags and accumulated into larger protective plastic bags before being dispatched by a reputable road transport contractor to the respective laboratories - IGL and ALS. Residual core was retained in core trays at the core yard on site. The quarter and half core samples were crushed and split by commercial laboratory staff. The samples were prepared at each laboratory using industry standard practice which involves: oven drying at 105°C for eight hours coarse crushing in a jaw crusher to a PSD of 100% passing 2 to 3mm pulverising to a PSD of 85% passing 75µm Both laboratories used certified methods and equipment that was regularly tested and cleaned with compressed air streams. Field technicians of Xstrata and later of WSA inserted quality QAQC CRMs every 20 samples. Xstrata and WSA both selected CRMs from reputable CRM providers, OREAS and Geostats, to monitor the accuracy of assaying with blind submissions of CRMs of known grade The CRMs were selected based on their grade range and mineralogical properties, with ~12 different CRMs used. The CRM grades ranged from waste to high grade. CRMs (to monitor accuracy) and blanks (to monitor for cross contamination in sample preparation) were inserted at a ratio of 1 per ~20 samples.



Section 1: Sampling techniques and data - Odysseus

JORC Criteria	Explanation
	 The QAQC procedures at the selected commercial laboratories also involved insertion of CRMs and blanks, and assay of duplicates collected at the coarse crush stage, pulverisation stage and assay stage. The laboratories regularly used barren quartz washes to clean the crushing and grinding equipment. The coarse sample fractions were kept at the laboratories for a period of three months before being discarded or sent to site. All assay pulps were securely stored on site at Cosmos.
Quality of assay data and laboratory tests	 All samples were assayed by independent, certified commercial laboratories using industry standard nickel sulphide analytical assay methods. The two most frequently used laboratories were ALS and IGL (both in Perth). The most common assay technique used was four-acid digest followed by an inductively coupled plasma atomic emission spectroscopy (ICP-AES) reading of the re-dissolved digestion salts. Hydrofluoric, nitric, perchloric and hydrochloric acids suitable for silica-based samples were used. The digestion approaches total dissolution for all but the most resistant silicate and oxide materials. Laboratory quality control processes included the use of internal standards to monitor accuracy, blanks to check for cross contamination, and duplicates to monitor precision. Field standards were included in all batches dispatched at a frequency of 1 per 20 samples, with a minimum of two standards included per batch. Xstrata and WSA prepared field replicates of either half or quarter core and inserted them into submissions at an approximate frequency of 1 in 25, with placement in the submission stream determined by the nickel grade and homogeneity of mineralisation. The laboratory took replicate splits - pulp and crush, alternately - at a frequency of 1 in 25. Accuracy and precision were assessed using industry standard procedures such as control charts and scatter plots and were found to be acceptable. If a sample result exceeded the pre-determined control limits and there was no obvious reason for poor performance, the laboratory was asked to repeat the affected batch. Handheld calibrated Niton portable X-ray fluorescence (pXRF) instruments were used to obtain preliminary semi-quantitative measurements prior to assay results being available but these measurements were not used for MRE work.
Verification of sampling and assaying	 Geological interpretation was peer viewed by senior geologists at WSA. There are no twinned drill holes. All geological logging was carried out to a high standard, using well-established geology codes, into LogChief software in accordance with standard operating procedures. All other data, including assay results provided by the laboratories, were captured in Microsoft Excel spreadsheets. Drill hole information, logging, sampling intervals and assay results were stored in an SQL server database (in a secure data centre). The data are managed by a reputable data management consultant (Rock Solid Data Management Services) which uses DataShed, a well-known geoscience data management system. No adjustments to assay data compiled for this MRE were made, other than conversion of detection limit text values to null values prior to MRE work.
Location of data points	 All drill hole paths were surveyed by a contractor, Downhole Surveys. Downhole Surveys used inertial navigation system (INS) gyroscopic instruments on all resource definition holes. This equipment is not affected by magnetic minerals or rocks. The survey coordinate system for data capture was Map Grid Australia 1994 (MGA94) Zone 51 grid, but estimates were prepared in a local coordinate system (mine grid) which uses Australian height datum (AHD) of 480m + 10,000m (total 10,480m). The project area is generally flat, and the topographical data available are adequate for MRE purposes. All collar positions were surveyed by qualified surveyors.
Data spacing and distribution	 The nominal data spacing for ODS was 41m along strike and 43m across strike, based on entry and exit points through the high-grade zones, where most of the mining will take place. The pierce point spacing and distribution are shown in the figures below, with the nominal data spacing for ODN is 35m along strike and 30m across strike and the nominal data spacing for ODN is 35m along strike and 30m across strike.



Section 1: Sampling techniques and data - Odysseus

JORC Criteria Explanation



- A closer drill spacing for ODN is appropriate because of the higher frequency of pegmatites.

- A nominal 1m sampling length has been applied for the MRE work, but shorter or longer samples are collected to terminate at important geological contracts.
- The Competent Person considers the sample spacing to be commensurate with that of Indicated and Inferred Mineral Resources, given the dominant type of mineralisation is Type 2 disseminated sulphide style.
- Type 2 disseminated mineralisation is assumed to be relatively homogenous within individual tenor zones.
- No internal waste zones other than the pegmatites are present.

Orientation of data in relation to geological structure	 Most of the drill holes are oriented to achieve intersection angles as close to perpendicular to the orebody as possible. Due to the styles and geometries of the mineralisation under consideration, orientation-based sampling bias is not expected.
Sample security	- Industry standard sample security measures used in the WA mining industry were adhered to.



Section 1: Sampling techniques and data – Odysseus

JORC Criteria	Explanation
	 Reputable contractors were used to transport samples from Cosmos to the commercial laboratories in Perth. The laboratories have their own internal sample security measures. The Competent Person considers that there is very low likelihood of deliberate or accidental contamination of samples in the MRE dataset as the chain of custody of samples is secure.
Audits or reviews	- No formal audits of the sampling techniques have been completed.

Section 2: Exploration Results

Section 2: Exploration Results – Odysseus

JORC Criteria	Explanation
Mineral tenement and land tenure status	 Cosmos comprises 21 tenements covering a total of 109km². The tenements include mining leases and miscellaneous licences. WSA (a wholly owned subsidiary of IGO) owns 18 tenements: 14 were acquired from Xstrata in October 2015 and four were acquired from Ramelius Resources in 2020. The remaining three tenements (M36/303, M36/329 and M36/330) were subject to a JV with Alkane Resources NL (Alkane). In April 2022, Alkane Resources Ltd's 19.4% interest in these tenements was transferred to Australian Nickel Investments (ANI), whereby ANI now holds 100% interest. At the time ANI was a wholly owned subsidiary of WSA. A key metric for tenements to be in good standing is that the minimum expenditure requirement must be met. All tenements are in good standing. Odysseus is located wholly within tenement M36/371, which is 100% owned by IGO and has an expiry date of 2041.
Exploration done by other parties	- Historical nickel exploration and mining was done by Glencore PLC, Xstrata, and JBM.
Geology	 The deposits form part of the Cosmos Nickel Complex, which lies within the Agnew-Wiluna Belt of the central Yilgarn Craton. The genetic formation model for the nickel mineralisation is the 'Kambalda-style' model where precipitation of nickel sulphides is interpreted to occur in channelised komatilitic lava flows and/or lava tubes. This model proposes two dominant deposit types – Type 1 and Type 2. 'Type 1' deposits are interpreted to have formed where the hottest lava in the centre of a lava channel thermally erodes into a sulphidic substrate and massive sulphides accumulate at the channel's base. This high-grade primary formation style is applicable to the Cosmos, Cosmos Deeps, AM1, AM2, parts of AM5 and the Odysseus Massive zones. Type 1 deposits are often subject to mobilisation into structural sites when massive sulphide bodies behave plastically or even re-melt under the high metamorphic temperatures and pressures that are generated by local or regional tectonic faulting and/or folding events. The Cosmos Deeps and the Odysseus Massive zone are examples of this remobilisation style. 'Type 2' deposits are interpreted to have formed from cooler and slower-flowing lavas than those for Type 1 deposits. In this model, the mineral olivine is envisaged to crystallise from these cooler lavas, with the olivine grains settling to the channel's base shortly after the precipitation of sulphides. In this model, the coeval sulphides crystallise between the olivine grains, giving rise to a disseminated to 'matrix' textured nickel sulphide mineralisation that builds up from the channel base. This style of mineralisation is applicable to the AM5, AM6 and Odysseus disseminated zones at Cosmos. The sulphide nickel assemblages at Cosmos are 'high tenor', meaning that the sulphides are dominated by the nickel-bearing mineral pentlandite (Pe). The sulphide assemblages also contain the sulphide mineral pyrrhottie (Po), with minor amounts of pyrite (Py) and chalcopyrite (Cpy),

Explanation

have been intruded along brittle fault structures.



JORC Criteria



	 The obstructed and offset by northeast striking faults now sealed with pegmatite. The entire ODN orebody is dextrally offset ~60m in relation to Odysseus and the dip is rotated 50° counter clockwise (now near horizontal). The sulphide body strikes north (355°) for 350m, plunges 7° north, spans a width of 135m, dips 5° west and reaches a maximum thickness of 70m. The overall volume of ultramafic rock hosting ODN is less than that at Odysseus, but it is more strongly mineralised. Sulphides consist of highly disseminated to net-textured pentlandite, with minor pyrrhotite and pyrite, best concentrated at 10-30m above the Cosmos ultramafic basal contact. Grain size exhibits a similar range in particle size to ODS (0.5 to 4mm) but with a higher population of coarse grain sizes. A high-grade core grading 2-4% Ni is at the centre of the deposit, with lower grade disseminated sulphides (0.5 to 1.5% Ni) flanking this core laterally and at the base. Overall nickel tenor is 20%, slightly higher than at Odysseus. The volume of pegmatite is greater at ODN than at ODS, and most prevalent in the southern portion of the zone thus influencing resource confidence. Further to this, ODN's south, southwest, and northeast boundaries are abruptly terminated by steeply dipping (to near vertical) pegmatite dykes whereas the Odysseus deposit boundaries often exhibit a gradual decline in sulphide volume, indicative of normal primary emplacement.
Drill hole Information	 There are too many holes to summarise and the MRE gives the best balanced and unbiased assessment of the estimate. The MRE is based on 4,468 composited assayed intersections derived from more than 79 surface and underground diamond drill holes over multiple domains and years of surface and underground drilling. All this information was considered material to the MRE.
Data aggregation methods	- Individual assays and exploration are not reported so data aggregation is irrelevant
Relationship between mineralisation widths and intercept lengths	- Drill hole intersections may not be true widths.
Balanced Reporting	- Exploration Results are not reported. The MRE gives the best and most balanced view of the drilling to date.
Other substantive exploration data	- There is no other substantive exploration data that are material to the MRE.
Diagrams	- Representative maps, sections and 3D images are included in the main body of the report.
Further work	- Grade control drilling is in progress and an MRE update is planned for CY23



JORC Criteria	Explanation
Database integrity	 Logging of drill hole data is captured in the field on dedicated laptops either using spreadsheets or LogChief software. Assay data in the form of text comma delimited '.csv' files from the primary assay laboratory ALS and the umpire assay laboratory (IGL) received by exploration are imported directly into DataShed. The database is currently managed by Rock Solid Data Management, an independent, specialised geoscientific database management company. The LogChief software provides the first level of data validation. It uses locked look-up tables for all data fields which have set codes attributed to them. The DataShed database uses validation look-up tables and trigger scripts to ensure all numeric, date and code information is correct. All QAQC controls are reviewed and actioned after each submission.
Site visits	- The Competent Person is an employee of IGO and has undertaken regular site visits over the last 5 years.
Geological interpretation	 The Odysseus deposit is hosted within an ultramafic unit and consists of disseminated nickel sulphide mineralisation as a high-grade core surrounded by medium-grade and low grade zones. Late-stage pegmatites have intruded above, below and crosscut the mineralisation. Three dimensional 3D digital domains defining concentrations of disseminated nickel sulphide mineralisation within the ultramafic unit hosting the ODS and ODN zones were constructed using Leapfrog and GOCAD 3D modelling software. The 3D domain modelling was parametrised to apply nickel grade cut-off values at thresholds of super high-grade (>3.5% Ni), high-grade (>1.5% Ni), medium-grade (>1% Ni) and low-grade (>0.4% Ni). The interval selection tool in Leapfrog software was used to sub-select each cut-off grade within the drill hole data for the ODN and ODS zones. 3D digital volumes were created in Leapfrog for each cut-off value for each zone, with each grade domain modelling tool in Leapfrog. To ensure the geometries of the modelled volumes honoured the geology of the ultramafic boundaries, and to remove any spurious mesh artefacts, additional polylines were added to the footwall and hangingwall surfaces of modelled grade shell as well as to the trend of each shell. Further fine-scale mesh edits were conducted in GOCAD software to ensure each grade domain was consistent. Each enclosing domain and any spurious overlaps were removed. The edited meshes were integrated into the Leapfrog models for final processing. This process ensured that the grade shells encasing higher grades were nested within domains of lower grades, with no overlaps between the grade shells. As a final step, each coursing as narrow lodes below the ultramafic boundary to remove any extensions beyond the ultramafic domain. Finally, zones of pegmatite which crosscut the domain were constrained to the ultramafic boundary to remove any extensions beyond the ultramafic domain. Finally, zones of massive sulp

boundaries. The zoning of disseminated deposits is well documented and related to primary and secondary mineralisation events. Weak to strong desulphidation during regional



JORC Criteria	Explanation
	metamorphism has resulted in partial alteration of sulphides to magnetite on a local scale, thereby increasing the tenor of the remaining sulphides. Planned follow-up work to further define these domains include x-ray diffraction (XRD) and core scanning.

- WSA also prepared a 3D digital geological model in Leapfrog comprising the following seven main lithological domains over a strike length of 3.5km:
 - Felsic Volcanic
 - Felsic Porphyry
 - Granite Pegmatite
 - Ultramafic
 - Sediments
 - Mafic
 - Granites
- The ODN and ODS zones, and the immediately surrounding wall rocks have been modelled to a level of confidence commensurate with the Mineral Resource classification applied and discussed later. Geological and grade continuity confidence has been substantially improved since the previous MRE by:
- >3,000m of surface diamond drilling
- Downhole geophysics, which confirmed the presence of massive sulphide mineralisation
- An FS, including metallurgical and geotechnical studies, and additional sampling and modelling
- An extensive independent structural modelling study that contributed to understanding the nature and orientation of the pegmatite intrusions that intersect ODS and ODN
- Mineral Resource and geological remodelling using the additional data captured by WSA's resource and geotechnical drilling and WSA studies while cross referencing and maintaining some of the assumptions (including grade zone cut-offs) used by the previous Competent Person.
- Current and historical exploration data previously reported by WSA and Xstrata were used for this estimate. All material assumptions are summarised in this table and in the report.
- The models were compared to the previously reported models at all stages of the process to ensure an appropriate level of consistency between the previous and the current interpretations.
- The continuity of grade and geometry is primarily influenced by intrusive late-stage barren pegmatite dykes which penetrate the host ultramafic rocks and crosscut mineralisation in some locations. These pegmatites have been carefully modelled using primarily implicit and explicit techniques where required. The grade was interpolated across the late-stage pegmatite boundaries, under the assumption that the intrusives have stoped out occupied fault zones, and the areas bound by pegmatites were reset to have zero nickel grade. The following table summarises the volume percentage of barren pegmatites by domain for the MRE and the previous MRE by Xstrata. The table shows ODN has a much higher proportion of barren pegmatites (21%) than ODS (3%) for the high-grade domain.

_		Estir	mation zone na	me and volume	e (m ³)
Zone	MRE modeller	Low	Medium	High	Super high
ODN	Xstrata	857,605	312,602	1,078,324	74,238
	IGO	852,257	375,200	1,114,938	64,829
	Increase	-1%	17%	3%	-15%
ODS	Xstrata	1,317,527	1,612,250	919,051	-



JORC Criteria	Explanation					
		IGO	1,463,565	1,221,881	1,572,991	-
	_	Increase	10%	-32%	42%	
	 Differences in the volume of pegmatites bet assumptions made during modelling of bot 			the existing MI	RE can be explained b	by changes in the modelling techniques applied and
Dimensions	68m, averaging 27m. Average grade and t	hickness increases dow 5m. The longest distanc to the north.	n plunge to the n	orth.		5m. The width of the deposit varies between 0.8 m and 0m. The width of the deposit varies between 0.8m and
Estimation and modelling techniques	 method was optimised which ensures all the zone, while keeping it as close to the intervention have lengths <0.5m. Continuity analyses (variography) for the new direction and continuity models for the three Nickel grade top-cut investigations were consection were low, the modeller conclude low to high-grade nickel domains had suffile This MRE is a revision of the MRE prepared The MRE zone volumetrics were compared techniques. ODN and ODS had not been mined at the time MRE model validation techniques applied in On-screen visual comparison of the compose appropriately reflected in the model's block Preparation of graphs of estimation pass nu passes having the highest confidence, and Preparing moving window swath plots where 	ng of estimation zone en lock modelling, including ical and geostatistical co niform 1m downhole len ne samples in a single d val as possible. This ens ckel grade and density of ee major, semi-major and mpleted using Supervise ed that top cuts were no ciently reduced the local d and signed off by cons l and reconciled to the X ime of the MRE. included: sites and estimated block grade and density estimumber versus percentag d tertial pass block estimute the local window com	velopes and geol g density and grad intinuity analysis. gths and coded w rill hole are to be sures no residual composites in eac d minor directions or's top-cut analysis t required to cont grade variability sultants Nick Jolle strata model and eks in section and nates. e estimated in ea ates having the lo posite grades or of	de estimation, a vith estimation a included in a co composites are th estimation do s of continuity. ses processes. rol the influence differences are plan to ensure ch pass to allow owest confidence density are com	zones from the 3D mir omposite by adjusting created that would of omain were prepared u After finding that the of e of extreme values du on behalf of Xstrata in e due to the new drillin that trends and bound w assessment of estim ce.	neralised and lithological wireframes. The compositing the composite lengths for each hole in each estimation therwise result in loss of the information of residuals that using Snowden Supervisor software to determine the coefficient of variation (CV) of the composites in each uring estimation. The underlying reason here is that the n 2012. Ig information and minor changes in modelling daries apparent in the input composites were nation confidence, with blocks being estimated in primary we block model estimates for the same window.



JORC Criteria

Explanation

- Preparing grade and tonnage comparisons of the MRE revised by WSA and the prior MRE prepared by Xstrata as shown in the table below.

Estimation parameters for composites and mean composites found						
Mineralised	Estimation	Composit	tes required			
Zone	Domain	Minimum	Maximum	Mean		
ODN	110	1	14	26.9		
	120	1	16	23.4		
	130	1	12	20.9		
ODS	200	1	11	28.6		
	210	1	10	29.7		
	220	1	13	27.8		

Reconciliation of Xstrata and WSA MREs for Odysseus Disseminated

Zone	JORC Class Es	Estimator	Mass	Nickel	
ZUNE	JUNU UIASS	LStimator	(Mt)	(%)	(kt)
ODS	Indicated	Xstrata	3.88	2.17	84.3
		IGO	4.02	2.11	84.8
	Inferred	Xstrata	0.17	2.13	3.6
		IGO	0.22	1.96	4.3
	Total ODS	Xstrata	4.05	2.17	87.9
		IGO	4.24	2.10	89.1
	ODS ratio	IGO/ Xstrata	105%	97%	101%
ODN	Indicated	Xstrata	1.63	2.79	45.5
		IGO	3.13	2.59	81.2





Section 3: Mineral Resources – Odysseus

JORC Criteria

Explanation

	Inferred	Xstrata	1.59	2.21	35.1
		IGO	0.23	2.71	6.1
	Total ODN	Xstrata	3.22	2.50	80.6
		IGO	3.35	2.60	87.3
	ODN ratio	IGO/ Xstrata	104%	104%	108%
OD all	Indicated	Xstrata	5.52	2.79	45.5
		IGO	7.15	2.59	81.2
	Inferred	Xstrata	1.76	2.21	35.1
		IGO	0.44	2.71	6.1
	Total ODN	Xstrata	7.27	2.50	80.6
		IGO	7.59	2.60	87.3
	OD all ratio	IGO/ Xstrata	104%	104%	108%

Reconciliation of Xstrata and IGO MREs for Odysseus Massive

Zone	JORC Class	Estimator	Mass	Nickel	
Zone			(Mt)	(%)	(kt)
ODM Indicated		Xstrata	-	-	-
		IGO	0.15	6.06	8.8
	Inferred	Xstrata	0.05	11.58	5.6
		IGO	0.12	11.58	14.0
	Total ODs	Xstrata	0.05	11.57	5.6
		IGO	0.27	8.44	22.8
	ODM ratio	IGO/ Xstrata	563%	73%	411%



JORC Criteria	Explanation
	 Compared to Xstrata's prior estimate, there is a 2.3% increase in the disseminated nickel tonnes and a 24% increase in the massive sulphide nickel tonnes. The increase in massive sulphide tonnes can be attributed to the modelling after drilling of nine surface holes for 7,160m following acquisition of the project from Xstrata. IGO prepared a conditional simulation as an additional validation technique to validate the MRE – see the section further below regarding precision and accuracy of the estimate Nickel is currently considered the only value product in saleable concentrates; however, further work is planned to quantify the value of cobalt. The ratio of iron to magnesium is recognised as influencing standard nickel floatation mill recoveries. Both elements have been interpolated into the block model and the ratio har been calculated for each parent block in preparation for further metaled using ID into the model (Fe, Mg, As, Co, Cr, Cu, S, Zn, MgO, Fe₂O₃). Some of these variables may not have any economic or metallurgical uses but they have been included as they have been requested by others, including Exploration Geologists in the past. A block model template was prepared that specified parent blocks of 10mE × 15mN × 5mRL for estimation and sub-blocks to minimum dimensions of 1.25mE by 2.5mN by 125mRL, so the model mould accurate fill the 3D wireframes prepared for each estimation domain. The estimation block size is nominally one quarter of the distance spacing between drill holes. Parent estimation was used, and sub cells were set at a maximum of 1/8, 1/6 and 1/4 of the parent cells. The drill hole spacing was nominally 41 by 43m for ODS and 35 by 30m for ODN. ODN bisseminated: 10mE by 15mN by 5mRL with the same expansion factor as above. ODN Massive: 25mE by 35mN by 15mRL with the same expansion factor as above. OD Massive: 25mE by 35mN by 15mRL with the same expansion factor as above. The minimum numbe
	Block estimation parameters - composites

block estimation parameters - composites					
Zone	Domain Code	Comp	osites	Mean	
	Code	Minimum	Maximum	wean	
ODN	110	1	14	26.9	
	120	1	16	23.4	
	130	1	12	20.9	



JORC Criteria	Explanation	
	ODS 200 1 11 28.6	
	210 1 10 29.7	
	220 1 13 27.8	
	 The average number of samples per estimated block was 22 for Inferred blocks and 24 for Indicated blocks. The average number of samples per estimated block was 20 and 27 for the high-grade cores of ODN and ODS, respectively. The bulk of the mine plan was sourced fro high-grade zones. No assumptions were made other than that the mineralisation in the disseminated is zoned and the outer low-grade shell may not convert to the Ore Reserve category a application of an appropriate Ore Reserve cut-off. There is a strong correlation between sulphur and nickel grade as well as density and grade as the percentage of nickel in the sulphide increases. Mineralised zones were digitised using explicit and implicit techniques by SRK Consulting. Strings were snapped to both underground and surface drilling intercepts using implicit and explicit techniques. Each wireframe is representative of a grade domain and compositing and estimating to ensure high grades were not smeared into the low-grade zones and vice versa. 	after
Moisture	- Tonnages were estimated on a dry basis. Moisture studies on trucked/hoisted ore have not been undertaken.	
Cut-off parameters	- The MRE is reported above a block estimated 1.5% Ni cut-off grade for all mineralised material and a minimum true thickness of 1.5 m for massive sulphides.	
Mining factors or assumptions	- Standard paste fill longhole stoping is assumed for the disseminated mineralisation and jumbo-operated room-and-pillar mining for the massive sulphide mineralisation. the commentary under Ore Reserves for more details.	Refer to
Metallurgical factors or assumptions	- Froth flotation recovery of sulphides is assumed for both the disseminated and massive sulphide material. Refer to the commentary under Ore Reserves for more details	S .
Environmental factors or assumptions	 Potential waste and process residue disposal sites were identified during a pre-feasibility study (PFS) and are unlikely to change from sites using during previous open of underground mining at Cosmos. Storage of potentially acid forming (PAF) material from development is the subject of investigation. Refer to the commentary under Oro Reserves for more details. 	cast and e
Bulk density	 Bulk densities are determined on site using water displacement methods and at the independent commercial laboratory using the pycnometer method. All data used in the MRE are from competent fresh rock and void spaces are not considered to have a material impact. Bulk densities are determined for each sample assayed and interpolated into the block model. 	
Classification	 Confidence in the MRE is dependent on the orientation and distribution of the barren pegmatites referred to previously. The pegmatites were previously modelled by Xs The digital 3D pegmatite model used for this MRE was prepared by consultant Ben Jupp from SRK Consulting as per methodology described above. The revised model was developed from first principles, was validated against Xstrata's pegmatite model and there are no material differences between the two pegmatite models. In early 2022, Cathy Barton (Senior Resource Geologist) now with IGO, and a specialist in geological modelling using Leapfrog, re-interpreted the pegmatite model after drilling of the AM6 zone up dip of the OD deposits. This revised model was validated against the SRK pegmatite model and found to be relatively consistent, except in southern portion of ODN, where the pegmatite is interpreted to stope out more of the mineralisation than the prior MRE model. Some of Mineral Resource in this area i classified as Inferred Mineral Resources. 	I, which r further the



JORC Criteria	Explanation
	 A resource definition drilling program underway, hich will also target this area. A final pegmatite model will be designed during 2023 at the end of 2022 which will be incorporated in the next MRE update. A classification schema consisting of an iterative scoring system of several metrics was coded into the model using the following parameters: Number of composites used to estimate grades into the blocks. Kriging Efficiency (KE), which is a measure of the degree of smoothing of estimated blocks compared to theoretical true blocks, with a value of unity (or 100%) indicating the estimates have achieved the true histogram of block grades. Search Volume (SV) or estimation pass number being primary, secondary, or tertiary. Kriging slope of regression (SOR), which is a measure of conditional bias, where a value of unity (or 100%) indicates there is no conditional bias of grade estimates relative to a cut-off considered. The result of this system is that each block in the MRE model has an associated relative QUALITY value and this metric used by the Competent Person as a guide to classify the blocks in accordance with the JORC Code. A QUALITY value >3.99 allowed the material to be classified as an Indicated Mineral Resource. Blocks having a QUALITY value <3.99 were classified as Inferred Mineral Resources or could not be classified as Mineral Resource. Blocks having a QUALITY value <3.99 were classified as an Inferred Mineral Resource and on the drill spacing is currently too wide and geological uncertainty is too high to enable classification of any part of the MRE as a Measured Mineral Resource. The definition of mineralised zones is based on a moderate level of geological understanding, and all relevant factors (relevant to all available data) have been considered. The geological and grade continuity of the domains is such that the Indicated Mineral Resources have a local level of accuracy which is suitable for mine planning and for achieving a
Audits or reviews	 The MRE has been independently audited by IGO's senior staff and its advising consultants (Snowden-Optiro) as part of IGO's acquisition of WSA. While these reviewers had some concerns regarding the confidence in the grade shell modelling and pegmatite modelling, they concluded that alternative interpretations were only likely to have a difference commensurate with what is normally expected for Indicated Mineral Resources – typically within ±15% relative on tonnage and grade on an annual production basis. SRK prepared the wireframe volumes used for estimation with internal peer revie.
Discussion of relative accuracy/ confidence	 Conditional simulation techniques were used to determine the relative accuracy of ODS, all tenor shells combined, within stated confidence limits. The E-type mean grade at zero cut-off was within 0.05% variance of the estimate, indicating the global grade is very robust (within 0.05% variance between the tested and the estimate grade) using 36 realisations. ODN is less robust – the mean E-type grade is 0.02% lower than the corresponding estimate at zero cut-off, suggesting a 1.2% estimation error, i.e., the reported global grade is 1.2% higher than the actual grade. The Indicated Mineral Resource Statement relates to local estimates. The Odysseus orebody has not been mined, but the prevailing MRE has been compared against previous estimates and the overall geometry and global grades are consistent. The following table summarises the domain wireframe volumes for the current MRE vs the pre-existing wireframe volumes for the same domains.
	Deposit Competent Person Low grade Medium grade High grade Super high grade volume (m ³) volume (m ³) volume (m ³)
	ODN Xstrata 857,605 312,602 1,078,324 74,238



	Relative difference	-1%	21%	3%	-13%
	Xstrata	1,317,527	1,612,250	919,051	na
ODS	IGOWSA	1,463,600	1,221,900	1,572,500	na
	Relative difference	11%	-24%	71%	na

- The result of this validation test shows that the previous and existing wireframe model volumes are similar for ODN. The gain in ODN medium-grade domain is offset to a degree by the loss in the ODN super high-grade domain. There is a material increase in the ODS high-grade domain, which can be partly attributed to a 'transfer' of material from the medium-grade domain to the high-grade domain and partly to changes to the pegmatite model.
- Additional Inverse Distance Squared estimates of nickel grade were also prepared for validation of the nickel kriging estimates, with both estimates using the same composite search and composite number controls. The difference between the average nickel grades globally is 1.6% relative with the kriging grade being higher. This validation step adds an additional level of confidence in the accuracy and precision of the kriging estimate.
- The Competent Person considers that the sample spacing is commensurate with requirements for classification of Indicated Mineral and Inferred Mineral Resources, given the dominant type of mineralisation, i.e., 'Type 2' disseminated sulphide.

Section 4: Ore Reserves

JORC Criteria	Explanation
Mineral Resource estimate for conversion to Ore Reserves	 The FY23 reported ORE is based on the Mineral Resource described in section 3 above and depleted against FY22 ORE [9]. Mineral Resources are reported inclusive of Ore Reserves.
Site visits	 The Competent Person conducted several site visits since 2015 and conditions were found to be in line with technical assessments incorporated in the ORE. The Competent Person accompanied specialist geotechnical and geological consultants on these visits to ensure continuity and clear understanding between disciplines. The Competent Person also conducted several visits in Australia and Canada to mines with similar geotechnical environment, mining methods and conditions.
Study status	 The ORE is predicated on a FS commissioned by WSA and completed in September 2018. The study is based on the current and well-established Australian and international mining practice, as assessed during various site visits to other operating mines carried out during the study. The finding of the FS was that Cosmos is technically achievable and an economically viable mining operation. -IGO is currently undertaking a comprehensive review of the Cosmos Project. This review is covering the mine plan and production schedule, development delays and the effect of higher capital and operating costs (17 July 2023 impairment announcement). This process may change the ORE reported in this report, but it is not currently advanced enough for IGO to provide a new Ore Reserve estimate which will be released around end of Q4 CY23.
Cut-off parameters	- Considering that the design cut-off parameters are variable and depend on multiple elements existing in the ore that drive metallurgical recoveries, a NSR approach was used to define the ore.



JORC Criteria	Explanation
	- The criterion to maximise nickel metal and revenue with a rougher and cleaner concentrate was used. The following assumptions were used:
	 Nickel price: US\$7.00/lb A\$:US\$ FX: 0.75 Target concentrate Ni grade: 16.5% MgO in concentrate: 10 to 12% Fe:MgO levels: 2.2 to 2.6.
	 The NSR value reflects the expected market conditions at the time of the concentrate delivery and is considered commercial sensitive. IGO has significant and recent experience in negotiating and operating these types of agreements, and it is considered that assumptions related to NSR are achievable in the market. Other cost assumptions were: WA State royalties: 2.5% Glencore matching rights of up to 7kt of Ni in concentrate per annum for a total of 50kt Ni in concentrate Total operating expenditure (OPEX) cost per tonne ore: A\$128.50 (NSR cut-off) Logistical costs per tonne concentrate:US\$85.20.
Mining factors or assumptions	 The mining method selected is top-down, longhole stoping with paste backfill, using a centre-out mining sequence. Average production levels when at steady state are 900kt pe year. Comprehensive geotechnical analysis and stress modelling have been conducted to determine appropriate excavation methods and sequence, stope sizes and ground control regimes and these have been incorporated in the mine design and costing. The studies were led by lain Thin (Principal Geotechnical Engineer, KSCA Geomechanics) and the elastic and plastic modelling was done using the FLAC® code (developed by Itasca Australia Pty Ltd). Geotechnical data were a combination of data collected by Dempers & Seymour Pty Ltd and Golder Associates Pty Ltd. All available historical data, including historical seismic database, were used in the geotechnical assessment, both for static and dynamic conditions. The geotechnical hole database was a combination of holes drilled under the previous owners and new holes drilled by WSA. The viability of the paste fill methodology was assessed by Outotec Australia. A default material density of 2.650^m with grade of 0% has been applied to rock where not density has not been estimated the MRE. Dilution factors have been applied based on the stoping method and location as follows: Hanging wall stopes wall extended 0.76m into waste Footwall stopes wall extended 0.76m into waste May Shing tonnage recovery factor has been applied to all stoping activities. The minimum mining width for stopes is 3m. The ORE has been estimated by including only tonnes within the mining shapes that have been categorised as at least Indicated Mineral Resources. However due to the presence of barren intrusive lithological units that are classified as Inferred Mineral Resources, the mine design accounts for these lengtred to maintain a consistent mining front to mitigate, as best possible, geotechnical risks due to the expected stress envi



JORC Criteria	Explanation
	 The underground mine design includes infrastructure suitable for the planned mining method and production rate, including an access decline, hoisting shaft, pump stations, underground workshop, underground sizer, and general mining infrastructure. Surface infrastructure is already present at site and allowance is made in the study to upgrade and refurbish the infrastructure to meet project targets.
Metallurgical factors or assumptions	 The metallurgical factors used are from extensive tests carried out during the feasibility study and historical data of the Cosmos concentrator. Figures used are considered commercially sensitive. The flow sheet, based on the mineralogical data and adopted for testwork, was like previous operations at Cosmos when Xstrata was treating ore from AM5, which is a disseminated sulphide similar to OD. It was also the basis for laboratory testing by Xstrata on OD ore in 2010 to 2012 and WSA testing during the 2016 PFS. The metallurgical process is a well-tested technology for recovery of nickel sulphides and comprises two stages of fragmentation with wet screening for size classification, one milling stage with cyclone size classification and two stages of floation (rougher and cleaner) with an intermediate regrinding stage. Recovery is related to the sulphur: nickel ratio. The rougher and cleaner combined average recovery is above 79%. For the purpose of the FS a smeltable concentrate with grade of 16.5% Ni and 10 to 12% MgO Fe:MgO levels from 2.2 to 2.6 was selected. OD concentrates are very clean wit no deleterious elements. No by-products were considered for the design of the ORE envelope due to their small impact (see following sections). Credits are allocated for cobalt in the financial model only, with an assumed price of US\$12.00/lb. Allowance is made for the refurbish and upgrade of the existing concentrator from its current capacity of 450kt/a to over 900kt/a.
Environmental	 All required environmental approvals have been obtained for the dewatering and refurbishment phases of the operation. Approvals for mining and processing did commence in Q4 2018 as supported by the DFS information, and specifications and will be in place prior to commencement of mining. The relevant environmental approvals are listed below. DWER: Prescribed Premises Licence Clearing Permit Groundwater Licences Groundwater Licence Operating Strategy DMIRS: Mining Proposals Mining Proposals Mining Proposals Mining Proposals
Infrastructure	 Surface infrastructure associated with the overall Cosmos operation includes a pre-existing processing plant, tailings storage facilities, camp, power stations, airstrip, workshops and offices. Refurbishment or upgrades for all these items have been fully designed, costed, and accounted for in the economic assessment. Studies for the refurbishments and/or upgrade of the current infrastructures have been carried out by well-established and recognised engineering firms. Cosmos mine site will be supplied by a local diesel/gas 20MW power station and an 11kV overhead powerline operated by WSA. Potable water is produced via reverse osmosis plants located at the Cosmos concentrator and pumped via a pipeline to the mine-site. Process water is recycled from the mine dewatering network. Bulk material logistics in and out from site is predominately via conventional truck haulage.



JORC Criteria	Explanation								
	 Mine personnel reside at the nearby Cosmos Village (520 rooms) and the workforce is predominantly a fly-in-fly-out (FIFO) via the Bellevue airstrip workforce with a minor component of drive-in-drive-out (DIDO). The mine site is 40km to the north of Leinster township and has one gravel access road that starts from the main gazetted paved road of the region (Goldfields Highway). 								
Costs	 Capital underground development costs are derived from the LOM plan based on current market data derived from a formal pricing exercise, carried out with well-established and recognised Australian mining contractors. All other capital costs are sourced as necessary via quotes from suppliers, or technical studies associated with the feasibility study. Mining, processing, administration, surface transport, concentrate logistics and state royalty costs are based on existing cost estimates and technical studies associated with the feasibility study. A closure cost allowance is included in the study. The nickel price and FX assumptions used were sourced from industry standard sources. Nickel price from US\$7.00/lb using an FX 0.75. State royalties at 2.5%. Glencore matching rights of up to 7kt of Ni in concentrate per annum for a total of 50kt Ni in concentrate. No other royalties specific to the mining tenement are applicable to the economic assessment. NSR factors reflect the expected market conditions at the time of the concentrate delivery. The NSR is considered commercial sensitive. 								
Revenue factors	 These have been selected after consideration of historical commodity prices variations over time and the requirement for the ORE to be robust to potentially volatile commodity price and FX conditions. Nickel is traded openly on the London Metals Exchange (LME). Potential penalties and NSR factors are included in the smelter return factor used. This factor is based on the expected market conditions at the time of the concentrate delivery Figures used are considered commercially sensitive. As part of the FS, various potential offtake parties were contacted and discussions held regarding potential offtake of the proposed OD concentrate. Based on the metallurgical specification of the concentrate WSA/ANI received indicative offers. The details of these offers were used in the economic model to determine the NSR. WSA has significant and recent experience in negotiating and operating these types of agreements, and it is considered that assumptions related to NSR are achievable in the market. No by-products were considered for the design of the ORE envelope due to their small impact (see following sections). Credits are allocated for cobalt in the financial model only, with an assumed price of US\$12.00/lb. 								
Market assessment	 Nickel is traded openly on the LME. The Company has maintained both long- and short-term offtake sales contracts with multiple customers, both locally and internationally, over many years. Existing contracts have been assessed for the sales volume assumptions. As the Company has been supplying multiple customers over a long time period, no acceptance testing has been assumed in the Ore Reserve development process. For the nickel price assumptions, refer to the previous sections. 								
Economic	 The economic analysis was conducted using a discounted cash flow model. Sensitivity analyses were carried out and produced the following ranges: Nickel price from US\$6.00/lb to US\$9.00/lb Exchange rate from 0.6 to 0.9 Discount rate from 6% to 8% The analysis delivered robust results as summarised in the following tables: 								



Section 4: Ore Reserves – Odysseus

JORC Criteria

Explanation

Pre-tax NPV sensitivit	v to nickel prices and	discount rates

			Nickel Price (US\$/Ib)									
			6.00	6.50	7.00	7.50	8.00	8.50	9.00			
			-20%	-13%	-7%	0%	7%	13%	20%			
	0.60	-20%	401	505	606	722	837	942	1,047			
Rate	0.65	-13%	309	405	509	605	712	808	905			
	0.70	-7%	230	319	416	505	604	694	783			
b	0.75	0%	162	244	326	418	511	594	678			
Exchange	0.80	7%	102	179	264	342	429	507	586			
Ĕ	0.85	13%	49	122	202	275	357	431	505			
	0.90	20%	2	71	146	216	293	363	432			

- The cobalt component on the NPV ranges from a minimum of A\$21 million for an exchange rate of 0.90 and US\$6.00/lb Ni price to a maximum of A\$32 million for an exchange rate of 0.60 and US\$9.00/lb Ni price.

	Pre-tax NPV sensitivity to nickei prices and discount rates										
	Nickel Price (US\$/Ib)										
		6.00 6.50 7.00 7.50 8.00 8.50 9.00									
				-20%	-13%	-7%	0%	7%	13%	20%	
	tte	6.0%	-14%	189	278	375	464	563	653	743	
		6.5%	-7%	175	261	354	441	536	623	710	
	un in	7.0%	0%	162	244	335	418	511	594	678	
	scc	7.5%	7%	149	229	317	397	486	567	648	
	Ō	8.0%	14%	137	214	299	377	463	541	619	
-	The cobalt component on the NPV ranges from a mini rate and US\$9.00/Ib Ni price.	mum of	A\$23 m	illion for	an 8.0%	discour	nt rate a	nd US\$6	.00/lb N	i price to	a maximum of A\$27 million for a 6.0% discount

 The current project review may produce different results from those contained in this section.
 All legal permits to mine OD have been obtained following the paths described by the relevant laws with the participation of local communities (see previous points). As a company policy, relationships with the local communities are a key part of operational management. The Cosmos Nickel Project falls entirely within the Tjiwarl Native Title area. The Company has an excellent working relationship with the Tjiwarl people. Numerous Aboriginal heritage surveys have been conducted over the wider Cosmos Project site since its inception. Several anthropological and archaeological sites have been identified as a result of these surveys but no sites affect, or are currently affected by, the mining and infrastructure holdings that form the Cosmos Project. Several Tjiwarl traditional owners are employed at Cosmos Nickel Operations as part of early works construction. IGO is in continuous dialogue with the Tjiwarl Aboriginal Corporation and has signed a Negotiation Protocol and commenced early discussions for a Mining Agreement.
- Mining is an inherently risky business in which to operate. No other risk factors apart from the normal risk components included in all the above points and assumptions have been identified.
 On 30 June 2023, OD had an estimated Probable Ore Reserve of 8.2Mt ore grading 2.01% Ni for 165.2kt of nickel <i>in situ</i> including stockpiles. The OREs are almost derived entirely from the Indicated Mineral Resource and the result appropriately reflects the Competent Person's view of the deposit. Less than 2% of material is classified as Inferred Mineral Resource. This material is included due to the geometry of the practical mining shapes created varying according to the shape of the resource model classification boundaries.



JORC Criteria	Explanation
Audits and reviews	- The project team is a mix of internal and external independent professionals. No formal external reviews were deemed necessary because the project team mainly comprises external (independent) parties.
Discussion of relative accuracy/ confidence	 The confidence on the study is driven by the high-quality work carried out and site visits conducted. As is normal in mining operations, the key points that can have a significant impact on the performance of the Cosmos mine are the market conditions in general, and the nickel price and the currency exchange rate in particular. All the other parameters are derived from sound historical production data, engineering studies and site visits to mines that operate in similar conditions both in Australia and abroad.



Cosmos: AM6 JORC Code Table 1

Section 1: Sampling techniques and data

Section 1 – Sampling techniques and data

JORC Criteria	Explanation
Sampling techniques	- Sampling of diamond core drilling is the sampling technique used to define the AM6 deposit – refer to following sections.
Drilling techniques	 Diamond drilling comprises HQ and NQ2 sized core drilled from both surface and underground. Core is oriented using the Boart Longyear TruCore orientation system.
Drill sample recovery	 Diamond core recoveries are logged and recorded in the database. Recoveries are based on the ratio of measured core recovered lengths to drill advance lengths for each corebarrel run. Overall recoveries for AM6 were >99% and there were no core loss issues or significant sample recovery problems. Core loss is noted where it occurs. Diamond core was reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the drillers. A relationship between sample recovery and grade was not established as there is minimal sample loss.
Logging	 All geological logging was completed by qualified geologists to a high standard using well-established nickel host rock and wall rock geology codes (in spreadsheets with appropriate spreadsheet templates as a guide or LogChief software, depending on the vintage). Final logging was qualitative for descriptive items, and quantitative for structure and geotechnical data. All core was photographed in both dry and wet forms using a high-resolution digital camera. All holes were logged in full. Information on structure type, dip, dip direction, alpha and beta angles, texture, shape, roughness, and fill material was entered in structural logs stored in the database.
Sub-sampling techniques and sample preparation	 The diamond core was sampled as whole, half and quarter core. Half and quarter core samples were prepared by cutting whole core longitudinally using a wetted diamond-encrusted blade. Samples were generally collected over 1m long intervals, except where shorter or longer samples were specified to terminate at important geological contacts. The core samples were collected into pre-numbered calico bags and compiled into sample dispatches in larger heavy- duty plastic bags for dispatch to the laboratory by a reputable road transport contractor. All samples are core. The core samples are crushed and split by independent commercial laboratory personnel (Intertek Genalysis and ALS Limited). The independent commercial laboratories prepared the samples using industry best practice, which involves oven drying at 105°C for 8 hours, coarse crushing (2 to 3mm) and pulverising (85% passing 75 µm) using certified methods and equipment that was regularly tested and cleaned. Xstrata's and WSA's field technicians inserted QAQC samples (either OREAS or Geostats CRMs), which were selected based on their grade range and mineralogical properties. The laboratory carried out routine internal QAQC, which included blanks to test for contamination. Standards and duplicates were inserted at a frequency of ~1 in every 25 samples. Eight QAQC samples were inserted for every 100 assay samples. Sample sizes were in accordance with industry standards and were appropriate to the grain size of the nickel-bearing material being sampled. Coarse fractions are kept at the laboratories for a period of three months or sent to site. All pulps are stored on site at Cosmos.
Quality of assay data and laboratory tests	- All samples are assayed by independent certified commercial laboratories using standard nickel sulphide analytical assay methods such as four-acid digest followed by an ICP- OES or -AES analysis.



Section 1 – Sampling techniques and data

JORC Criteria	Explanation
	 The laboratories used are experienced in the preparation and analysis of nickel sulphide ores. The samples collected were analysed using a four acid-acid digest multi-element suite with ICP-OES. The acids used were hydrofluoric, nitric, perchloric and hydrochloric acids suitable for silica-based samples. The digestion approaches total dissolution for all but the most resistant silicate and oxide materials. Laboratory quality control processes included the use of internal laboratory standards, blanks, and duplicates. No geophysical tools or pXRF instruments were used to determine any element concentrations that were subsequently used for MRE reporting purposes. Field standards were included in all batches dispatched at an approximate frequency of 1 per 25 samples, with a minimum of two standards included per batch. Field duplicates made up of either half core or quarter core were inserted into submissions at an approximate frequency of 1 in 25, with placement determined by nickel grade and homogeneity. The laboratories carried out laboratory checks - both pulp and crush, alternately - at a frequency of 1 in 25. Accuracy and precision were assessed using industry standard procedures such as control charts and scatter plots and found to be acceptable, or the laboratory was asked to repeat the affected batch. Evaluations of standards are completed on a monthly, quarterly, and annual basis using QAQC.
Verification of sampling and assaying	 All significant intersections were logged and verified by qualified geologists. No twinned holes were drilled by design but some pairs were closely spaced for the purpose of understanding certain mineralisation anomalies. All primary data were recorded digitally and sent in electronic format to the database administrator. All geological logging was carried out to a high standard using well established geology codes in Field Marshall software on a Panasonic TOUGHPAD notebook and later (from hole AMD678) using LogChief software. All other data, including assay results, were captured in Excel. Drill holes, sampling and assay data were stored in DataShed (and stored in West Perth). No adjustments to the assay data were made.
Location of data points	 Downhole surveys were completed using a gyroscopic instrument on all resource definition holes. Underground hole collar locations were verified via survey pickup. Most of surveys were done using a DeviFlex downhole survey instrument. Some of the earlier holes (prior to 2010) were surveyed by an independent surveyor (Downhole Surveys) using a north-seeking gyroscope. The AMG 84 Zone 51 grid coordinate system was used as a standard. Collar surveys were captured in mine grid coordinates using the following two point transformation calculation : MGA East = E' = (1)E - (0)N + (250135.63) MGA North = N' = (1)N + (0)E + (6900158.85999999) The project area is flat and the topographical data density is adequate for MRE purposes.
Data spacing and distribution	 Drill data spacing intersections are a nominal 30 m apart. The data spacing and distribution were sufficient to establish the degree of geological and grade continuity appropriate for the MRE procedure and the classification applied. Inferred and Indicated Mineral Resources were reported. More data is required for reporting of Measured Mineral Resources. A nominal 1m sample composite length has been applied for Mineral Resource reporting purposes.
Orientation of data in relation to geological structure	 Most of the drill holes were oriented to achieve intersection angles as close to perpendicular as possible. Geological structures that are not subparallel to the mineralisation were accounted for by cross drilling between surface and underground drilling at different angles. No orientation-based sampling bias was observed in the data.



Section 1 – Sampling techniques and data

JORC Criteria	Explanation
	- Intercepts were reported as downhole lengths unless otherwise stated.
Sample security	 Industry standard sample security measures used in the Western Australian mining industry were adhered to. Reputable contractors were used to transport samples from Cosmos to the commercial laboratories which have their own internal sample security measures.
Audits or reviews	 No formal audits of the sampling techniques have been carried out over recent years. The data were subject to QAQC procedures both on the mine and in the primary and umpire laboratories.

Section 2: Exploration Results

Section 2 – Exploration Results

JORC Criteria	Explanation
Mineral tenement and land tenure status	 The Cosmos Nickel Complex comprises 21 tenements covering a total of 102km². The tenements include mining leases and miscellaneous licences. WSA (a subsidiary of IGO) wholly owns 18 tenements: 14 tenements were acquired from Xstrata in October 2015 and four tenements were acquired from Ramelius Resources in 2020. The remaining three tenements (M36/303, M36/329 and M36/330) were subject to a JV with Alkane. In April 2022, the Alkane interest in these tenements (19.4%) was transferred ANI, whereby ANI now hold 100% interest. The key metric for tenements to be in good standing is that the minimum expenditure must be achieved. All tenements are in good standing. AM6 is on M36/127 which expires in 2031
Exploration done by other parties	- Historical nickel exploration has been completed by Glencore PLC, Xstrata, and JBM.
Geology	 The deposit forms part of the Cosmos Nickel Complex, which lies within the Agnew-Wiluna Belt of the central Yilgarn Craton. The genetic formation model for the Cosmos nickel deposit is the 'Kambalda-style' model where precipitation of nickel sulphides is interpreted to occur in channelised komatitic lava flows and/or lava tubes. This model proposes two dominant deposit types: Type 1 and Type 2. Type 1 deposits are interpreted to have formed where the hottest lava in the centre of a lava channel thermally erodes into a sulphidic substrate and massive sulphides accumulate at the channel base. This high-grade primary formation style is applicable to the Cosmos, Cosmos Deeps, AM1, AM2, parts of AM5 and the Odysseus Massive zones. The Type 1 deposits are often subject to mobilisation into structural sites when massive sulphide bodies behave plastically or even re-melt under the high metamorphic temperatures and pressures that are generated by local or regional tectonic faulting and/or folding events. The Cosmos Deeps and Odysseus Massive zone are likely examples of this remobilisation style. Type 2' deposits are interpreted to have formed from cooler and slower-flowing lavas than those envisaged for Type 1 deposits. In this model, the mineral olivine is envisaged to crystallise from these cooler lavas, with the olivine grains settling to the channel's base shortly after the precipitation of sulphides. In this model, the coeval sulphides crystallise between the olivine grains giving rise to a disseminated zones at Cosmos. The sulphide nickel assemblages at Cosmos are 'high tenor', meaning that the sulphides are dominated by the nickel-bearing mineral pentlandite (Pe). The sulphide assemblages also contain the sulphide mineral pyrrhotite (Po), with minor amounts of pyrite (Py) and chalcopyrite (Py), and in some places, small concentrations of rarer nickel sulphides such as valleriite and millerite. The mineralisation typically occurs in association with th



Section 2 – Exploration Results

JORC Criteria	Explanation
	 AM6 has a strike extent of approximately 400m and dips ~75° towards the east with a down dip extent of approximately 250m. The disseminated mineralisation of AM6 ranges ~2m to approximately 25m in true thickness. This geometry and dip of the mineralisation is influenced by multiple northeast trending faults, which truncate the AM6 mineralisation at its northern and southern extents. Similar to AM5 and Odysseus, younger pegmatite dykes cause the mineralisation to stope out, but in much lower volume than Odysseus.
Drill hole Information	 There are too many holes to summarise and the MRE gives the best balanced and unbiased assessment of the estimate. The MRE is based on 4,448 composited assayed intersections derived from over 101 surface and underground diamond core holes over multiple domains and years of surface and underground drilling. All information was considered material to the MRE.
Data aggregation methods	- No Exploration Results are being reported.
Relationship between mineralisation widths and intercept lengths	- No Exploration Results are being reported.
Balanced Reporting	- Exploration Results are not reported. The MRE gives the best and most balanced view of the drilling to date.
Other substantive exploration data	- No Exploration Results are being reported.
Diagrams	- Example maps and sections are included in the report.
Further work	- An exploration and drilling programme has been designed to test further extensions to AM6 and this programme is likely to commence in CY23

Section 3: Mineral Resources

Section 3 – AM6 – Mineral Resources

JORC Criteria	Explanation
Database integrity	 All logging data are entered in the field on dedicated laptops using either spreadsheets or LogChief software. Assay data in the form of .csv files from the primary assay laboratory ALS Chemex and the umpire assay laboratory Genalysis received by exploration are imported directly into DataShed. The database is currently administered by Rock Solid Data Management, an independent specialised database management company. The LogChief software provides the first level of data validation. It uses locked look-up tables for all data fields which have set codes attributed to them. The DataShed database uses validation look-up tables and trigger scripts to ensure that all numeric, date and code information is correct. All QAQC controls are reviewed and actioned after each submission.
Site visits	- The Competent Person is an employee of IGO and has undertaken regular site visits. Logging sheets were verified against the core. No issues were observed.
Geological interpretation	 The AM6 deposit is hosted within an ultramafic unit and consists of disseminated nickel sulphide mineralisation as a high-grade core surrounded by medium-grade and low-grade zones. The orebody is like AM5 which was being mined while some of the AM6 drilling was being undertaken.



Section 3 – AM6 – Mineral Resources

JORC Criteria	Explanation
	 SRK Consulting undertook 3D modelling of the AM5 and AM6 deposits using the Leapfrog Geo 3D modelling package. Modelling consisted of mineralisation envelopes for disseminated and massive sulphide mineralisation, interpreted north-south oriented fault structures and pegmatite intrusions. WSA updated the geological model for the purpose of MRE and the risk associated with the model being materially wrong is low. Surface and underground drill data obtained by Xstrata were used for this estimate. WSA has done surface drilling in the deposits associated with AM6 but all direct AM6 targeted drilling was undertaken by previous owners of the project. No major assumptions were made with respect to the drill data. The data were collected in accordance with standard industry practices. Several alternative iterations of grade estimations using linear techniques were completed and critically assessed before finalising the MRE. The models were compared to the previously reported models at all stages of the process to ensure an appropriate level of consistency between the previous (Xstrata) and current interpretations. The modelling mathodologies were similar enough for direct comparisons to be made. Geology is the overriding influencing factor in this MRE. A robust digital geological model created by SRK Consulting forms the basis of the estimate. Grade and geometry continuity at AM6 are primarily influenced by intrusive, barren pegmatite dykes that penetrate the host ultramafic rocks and cross cut mineralisation in some locations. The pegmatites were mainly observed to occur in the lower levels of the model area. Their abundance was observed to increase with depth (600mRL). The pegmatites were mainly observed to occur in the lower levels of the model area. Their abundance was observed to increase with depth (600mRL). The pegmatites were mainly observed to occur in the lower levels of the model area. Their abundance was observ
Dimensions	 The strike length of the AM6 disseminated block model is ~400m. The longest downdip distance is ~300m and the top of the deposit is ~900m below surface. Width is variable and ranges from ~10m to ~40m.
Estimation and modelling techniques	 The estimation was done using the following software packages: Leapfrog Geo Datamine Studio RM Snowden Supervisor Wireframing of grade and geological domains using underground and surface drilling was completed in Datamine and Leapfrog. Sample data were composited to 1m downhole lengths and flagged on domain codes generated from 3D mineralised wireframes and 3D lithological wireframes. Directional variography was performed for nickel for each of the domains using Snowden Supervisor software. All estimation was completed at the parent cell scale to avoid any potential geostatistical support issues. Top-cut investigations were completed using Supervisor's top-cut process and reviewing the Coefficient of Variation. Top-cuts were not applied during estimation (low- and high-grade nickel domains were used instead). This model is a revision of the Xstrata model. The resource model volumetrics were compared to the previous model. Differences are due to inclusion of additional data and varying modelling techniques.



JORC Criteria	Explanation
	 No mining data exists for the AM6 deposit; however, the adjacent deposit (AM5) was mined. Nickel is currently considered the only economic product that will be recovered. The Fe: Mg ratio is recognised as influencing standard nickel floation mill recoveries and both elements have been interpolated into the block model. The Fe: Mg ratio has been calculated for each parent block in preparation for further metallurgical work. Sulphur has been estimated into the block model. A proto model was constructed using parent blocks of 2mE by 5mN by 5mRL and sub-blocked to 0.005mE by 1.25mN by 1.25mRL. The block size was selected based on drill hole spacing, with domain geometry playing an important role. Width along the X axis is variable and Datamine's 'resolution-0' parameter was used to calculate the sub cell size in the easting direction exactly. Drill hole spacing varies but is nominally 35m along strike and 22 m down dip. Parent cell estimation was used to avoid any potential statistical support issues that may arise from using sub cells. The size of the search ellipse was based on the results of the kriging neighbourhod analysis (KN4) and the nickel variography for each domain. Three nested search passes we used, with most of the samples falling within the first two passes. The first pass was set at 79mX by 45mY by 29mZ, with the minimum and maximum number of samples from any borehole was set at 30. This prevents a disproportionate number of samples from any borehole was set at 30. This prevents a disproportionate number of samples from any borehole was set at 30. This prevents a disproportionate number of samples from any borehole was set at 30. This prevents a disproportionate number of samples from any borehole was set at 30. This prevents a disproportionate number of samples from any borehole was parental as density and grade as well as durity and grade as well was durity and grade as
	 Estimation validation techniques included: visual comparison of the composites and estimated blocks in section and plan graphs of estimation pass number versus percentage filled swath plots of the composite grades versus block model grades swath plots of kriging variance, kriging efficiency and slope of regression jack-knifing of the block model attributes to the informing drill hole followed by statistical analysis grade and tonnage comparisons of the current MRE and the previous MRE.
Moisture	- Tonnages were estimated on a dry basis.
Cut-off parameters	- The Mineral Resource is reported >1.0% Ni cut-off grade.

igo



igo

JORC Criteria	Explanation
Mining factors or assumptions	- The mining method selected is top-down, longhole stoping with paste backfill, with a centre-out mining sequence.
Metallurgical factors or assumptions	 The processing plant will consist of a tertiary crushing circuit to reduce the ore size to 12mm before ball milling to 80% passing 106µm. Froth flotation will then be used to separate the valuable minerals as a concentrate. The concentrate will be reground to 40µm in an IsaMill™ prior to cleaner flotation to produce final product concentrate. Ball mill comminutior and froth flotation are commonly used in mineral processing to treat nickel sulphide ores. The final concentrate will be filtered using a plate and filter and stored in the existing concentrate storage shed at Cosmos prior to being trucked to port at Geraldton for sale. The Competent Person has taken metallurgical factors into account when estimating including the nature of the ore and the influence of elements such as MgO and FeO.
Environmental factors or assumptions	 Potential waste and process residue disposal sites have been identified during a pre-feasibility study and are not expected to deviate significantly from previous sites used during previous open pit and underground mining at Cosmos. Tailings will be used for paste-fill underground, with the excess tailings being deposited in the existing tailings storage facility (TSF) along with the Odysseus tailings. Water will be recovered from the TSF or re-used in the processing plant.
Bulk density	 Bulk densities were determined by the independent laboratory using industry standard methods (pycnometer). All data used in the Mineral Resource estimate are from competent fresh rock. Void spaces within the mineralised zones are not material. A total of 3,679 composited pycnometer-derived specific gravity (SG) determinations were estimated into the block model.
Classification	 Mineral Resource classification is based on a combination of geological knowledge and confidence in the interpretation, data distribution, estimation passes, and KE, SOR kriging metrics. The mineralisation at AM6 is classified as Indicated and Inferred Mineral Resources under the guidelines of the JORC Code. No blocks were classified as Measured. The definition of mineralised zones is based on a high level of geological understanding by Xstrata and IGO geologists. All relevant factors have been considered in this estimate, relevant to all available data. The Mineral Resource estimate reflects the Competent Person's view of the deposit and the risks associated with the grade and structural continuity.
Audits or reviews	 The MRE has not been independently audited or reviewed in its entirety. The wireframe volumes used for estimation were prepared by SRK consulting
Discussion of relative accuracy/ confidence	 A well-established confidence algorithm was applied to the nickel estimate as a guide to classification. The algorithm ranks the following kriging quality parameters for each block: Number of samples used to estimate, KE, Search volume, and SOR for each block before a nominal classification code was applied. The classification code derived from the algorithm provides a guideline for further classification based on geological and mineralisation continuity. The CP considers that the sample spacing is commensurate with that of an Indicated and Inferred Resource given the dominant type of mineralisation, I.e., Type 2 disseminated sulphide. The MRE Statement relates to local estimates. The AM6 deposit has been mined but estimates have been compared against previous estimates and global grade estimates are consistent with production data.

Section 4: Ore Reserves

Section 4 – Ore Reserves

JORC Criteria	Explanation
Mineral Resource estimate for conversion to Ore Reserves	 The ORE Statement is based on the Mineral Resource declared as of 30 August 2020 by WSA (refer to Sections 1 to 3 therein) and depleted against FY22 ORE [9]. MREs are reported inclusive of OREs.
Site visits	- The Competent Person has conducted several site visits since 2015. The Competent Person found conditions to be in line with technical assessments incorporated in the ORE In addition to site visits related to the Pre-Feasibility Study (PFS), the Competent Person carries out routine site inspections as part of normal duties.
Study status	 The ORE is predicated on a PFS commissioned by ANI and completed in August 2020. The study is based on current and well-established Australian and international mining practice, as assessed during various site visits to CNO as well as other operating mines and in agreement with the OD Definitive FS released by WSA from 2018. The finding of the PFS was that CNO is an economically viable mining operation. IGO is currently undertaking a comprehensive review of the Cosmos Project. This review is covering the mine plan and production schedule, development delays and the effect of higher capital and operating costs (17 July 2023 impairment announcement). This process may change the ORE reported in this report, but it is not currently advanced enough for IGO to provide a new Ore Reserve estimate which will be released around end of Q4 CY23.
Cut-off parameters	 A cut-off grade (COG) approach was used to define the ore. The criterion to maximise nickel metal and revenue with a rougher and cleaner concentrate was used. The following initial assumptions were used: Nickel price US\$7.50/lb A\$: US\$ exchange rate 0.70 Target concentrate Ni grade 14.5% Starting NSR 75.5%. The NSR value reflects the expected market conditions at the time of the concentrate delivery (the Company regards this as commercially sensitive information). The Company has significant and recent experience in negotiating and operating these types of agreements, and considers the assumptions related to NSR are achievable in the market. Other costs assumptions were: WA State Royalties 2.5% Glencore matching rights of up to 7 kt of nickel in concentrate per annum for a total of 50 kt nickel in concentrate Total OPEX costs per tonne of ore A\$131.62 (including milling and site administration) Total CAPEX costs per tonne of ore (based on different initial cut-off grade) – from 37.9 to A\$69.4 Logistics costs per tonne of ore A\$12.50. The final COG was 1.6% Ni, and the final back-calculated costs were: Total OPEX cost per tonne or ex\$12.06 (including milling and site administration) Total CAPEX cost per tonne of ore A\$12.50.
Mining factors or assumption	- The mining method selected is top-down, longhole stoping with paste backfill, with a centre out mining sequence. AM6 will be mined in conjunction with Odysseus, at production rates up to 670,000t/a to feed a total of 900,000t/a (including OD) to the mill.



JORC Criteria	Explanation
	 Geotechnical analysis and plastic stress modelling have been conducted to determine appropriate excavation methods and sequence, stope sizes and ground control regimes, and these have been incorporated in the mine design and costing. The studies were led by Entech Pty Ltd, and the elastic and plastic modelling used the FLAC® code by ITASCA Australia Pty Ltd. Geotechnical data including historical seismic data, were used in the geotechnical assessment for static and dynamic conditions. The geotechnical datas including historical seismic data, were used in the geotechnical assessment for static and dynamic conditions. The geotechnical database was a combination of holes drilled under the previous owners. Outotec Australia assessed the viability of using paste fill methodology. LHC of 7% has been allowed for the paste mix design. A default material density of 2.65Um³ with grade of 0% has been applied where not defined by the resource model. Dilution factors have been applied based on the stoping method and location. Planned dilution: HW stopes wall extended 0.75m into waste, FW stopes wall extended 0.50m into waste Unplanned dilution for of % applied to all stoping activities, with 100% recovery to the ore drives. The minimum mining width for stopes is 3 m. Average drive sizes are 5.0mW × 5.0mH and 5.5mW × 5.5mH. The Ore Reserve has been estimated by including only tonnes within the mining shapes that have been categorised as at least Indicated Mineral Resources. However, due to the presence of barren intrusive lithological units that are classified as Inferred Mineral Resources, and for practicality of the stope shapes, the mine design accounts for these Inferred fornages to maintain a consistent mining from that mitigates, as best possible, the geotechnical risks due to the expected stress environment. In total, the Ore Reserve and economic model include less than 2% of Inferred material.
Metallurgical factors or assumptions	 The AM6 ore will be treated at the refurbished and upgraded Cosmos nickel concentrator. The refurbishment and expansion will be completed as part of the Odysseus implementation project. The processing plant will consist of a tertiary crushing circuit to reduce the ore size to 12mm before ball milling to P₈₀ 106 μm. Froth flotation will then be used to separate the valuable minerals as a concentrate. The concentrate will be reground to 40 μm in an IsaMill ™ prior to cleaner flotation to produce final product concentrate. Ball mill comminution and froth flotation are commonly used in mineral processing to treat nickel sulphide ores. The final concentrate will be filtered using a plate and filter and stored in the existing concentrate storage shed at CNO prior to being trucked to port at Geraldton for sale. Tailings will be used for paste-fill underground, with excess tailings deposited in the existing TSF (along with Odysseus tailings). Water will be recovered from the TSF for re-use in the processing plant.
Environmental	 All the relevant approvals to construct and operate the Odysseus mine before having been obtained before January 2019. These will be maintained and updated as the AM6 project progresses toward production. All required environmental approvals already obtained for Odysseus are valid for AM6. The existing Mining Proposal will be updated to include the additional small clearing area for the ventilation surface infrastructure before commencing mining at AM6. Based on the review of the environmental aspects related to AM6, no significant risks that could prevent development of AM6 proceeding have been identified. Further data will be acquired at Feasibility Study stage.





Section 4 – Ore Reserves

JORC Criteria	Explanation							
Infrastructure	 Surface infrastructure associated with the overall CNO includes a pre-existing processing plant, tailings storage facilities, camp, power stations, airstrip, workshops, and offices. Refurbishment or upgrades for all these items has been fully designed, costed, and accounted for in the economic assessment. This infrastructure will be shared between Odysseus and AM6. Studies for the refurbishment and/or upgrade of the current infrastructure have been carried out by well-established and recognised engineering firms and staged according to the LOM budget. The CNO site will be supplied by a local in house power station (diesel/gas; minimum supply of 20MW) and an 11kV overhead powerline. Potable water is produced via reverse osmosis plants located at the Cosmos nickel concentrator and pumped via a pipeline to the CNO site. Process water is recycled from the mine dewatering network. Bulk material logistics in and out of site is predominantly via conventional truck haulage. Mine personnel reside at the 520-room Cosmos Village. The workforce is predominantly a FIFO workforce, currently via the Leinster and Mt Keith airports and Bellevue airstrip in the future, with a minor component of the workforce being DIDO. The CNO site is 40km to the north of the Leinster township and has one gravel access road that starts from the region's main gazetted paved road (Goldfields Highway). 							
Costs	 Capital underground development costs are derived from the LOM plan based on current market data derived from the WSA/ANI database, and a formal pricing exercise carried out with well-established and recognised Australian mining contractors. All other capital costs are sourced as necessary via quotes from suppliers or technical studies associated with the PFS. Mining, processing, administration, surface transport, concentrate logistics and state royalty costs are based on existing cost estimates and technical studies associated with the FY21 Odysseus LOM budget. Closure cost allowance is included and covered as part of the Odysseus mine. The nickel price and FX assumptions used were obtained from industry standard sources, being: Nickel price US\$7.50/lb Exchange rate 0.75 State royalties 2.5%. Glencore matching rights of up to 7kt of Ni in concentrate per annum for a total of 50kt Ni in concentrate are applicable. No other royalties specific to the mining tenement are applicable to the economic assessment. NSR factors reflect the expected market conditions at the time of the concentrate delivery (the Company regards this as commercially sensitive information). 							
Revenue factors	 These have been selected after consideration of historical commodity price variations over time and the requirement for the Ore Reserve to be robust against potentially volatile commodity prices and FX conditions. The price setting mechanism for the sale of product subject to this report is traded openly on the LME. Potential penalties and NSR factors are included in the Smelter Return factor used. This factor is based on the expected market conditions at the time of the concentrate delivery. The Company regards this as commercially sensitive information. During the OD FS, WSA/ANI received indicative offers based on the metallurgical specification of the concentrate. The details of these offers were used in the economic model to determine the NSR for AM6. IGO has significant and recent experience in negotiating and operating these types of agreements, and considers the assumptions related to NSR are achievable in the market. No by-products were considered for the design of the ORE envelope due to their small impact. 							
Market assessment	 The commodity subject to this report is traded openly on the LME. The Company has for many years maintained both long term and short term offtake sales contracts with multiple customers, both locally and internationally. Existing contracts have been assessed for the sales volume assumptions. 							



Section 4 – Ore Reserves

Social

JORC Criteria	Explanation						
	 As the Company has been supplying multiple customers over a significant time period, no acceptance testing has been assumed in the Ore Reserve development process Nickel price assumptions are indicated in previous subsections. 						
	 The economic analysis was conducted using a discounted cashflow model. Sensitivity analysis was carried out using the following ranges: Nickel price from 6.00 to US\$9.00/lb Exchange rate from 0.6 to 0.9 						
	 Discount rate from 6% to 8%. The analysis delivered robust results summarised in the following tables: 						

Pre-tax NPV in A\$ sensitivity to nickel prices and exchange rates

						•		-	
			Nickel Price (US\$/Ib)						
			6.00	6.50	7.00	7.50	8.00	8.50	9.00
			-20%	-13%	-7%	0%	7%	13%	20%
	0.60	-20%	41	51	77	105	125	143	159
	0.65	-13%	41	44	67	93	113	130	145
Ă	0.70	-7%	20	22	43	67	85	100	114
FOREX	0.75	0%	4	6	25	47	64	78	90
ű.	0.80	7%	-8	-6	12	33	48	61	73
	0.85	13%	-17	-15	2	22	36	49	60
	0.90	20%	-24	-23	-6	13	26	38	49

Pre-tax NPV sensitivity to nickel prices and discount rates

			Nickel Price (US\$/Ib)						
			6.00	6.50	7.00	7.50	8.00	8.50	9.00
			-20%	-13%	-7%	0%	7%	13%	20%
te (6.0%	-14%	-2	15	33	55	73	88	103
Rate	6.5%	-7%	-3	14	31	51	68	83	96
Discount	7.0%	0%	-4	12	28	47	64	78	90
sco	7.5%	7%	-4	11	26	44	59	73	85
ö	8.0%	14%	-4	10	24	41	56	68	80

- The current project review may produce different results from those contained in this section.

- The AM6 deposit is located on M36/127 (expiry 19 April 2031), with infrastructure related to underground mine access, ore processing and storage located on M36/371 (expiry 03 March 2041). Both tenements are held by Australian Nickel Investments Pty Ltd.
 - Mining tenement conditions for M36/127 and M36/371 were reviewed and were considered standard. A Mining Proposal (MP) and a revision to the Mine Closure Plan (MCP) will be required for development of the AM6 deposit.
 - All legal permits to mine AM6 fall within the ones obtained by WSA for Odysseus following the paths described by the relevant laws with the participation of the local
 communities. As a company policy (CDMS-000610-Social Responsibility Policy), relationships with the local communities are a key part of operational management.
 - The CNO falls entirely within the Tjiwarl Native Title area. WSA has an excellent working relationship with the Tjiwarl people. Numerous Aboriginal heritage surveys have been conducted over the wider Cosmos project site since its inception. Several anthropological and archaeological sites have been identified as a result of these surveys, but no sites affect, or are currently affected by, the mining and infrastructure holdings that form the Cosmos project.



Section 4 – Ore Reserves

JORC Criteria	Explanation						
	- Several Tjiwarl traditional owners are employed at CNO as part of construction works. WSA is in continuous dialogue with the Tjiwarl Aboriginal Corporation and has signed a Negotiation Protocol and commenced early discussions for a Mining Agreement.						
Other	 It is noted that mining operations are an inherently risky business in which to operate. No other risk factors apart from the normal risk components included in all the above points and assumptions have been identified. 						
Classification	 On 30 of June 2023, AM6 had Probable Ore Reserves of 2.1Mt ore at 2.24% Ni for 47.1kt of nickel. Ore Reserves are derived entirely from the Indicated Mineral Resource and the result appropriately reflects the Competent Person's view of the deposit. Less than 2% of material is classified as Inferred. The inclusion is due to the geometry of the practical mining shapes created varying to the shape of the resource model classification boundaries. 						
Audits and reviews	- The project team is a mix of internal and external independent professionals. No formal external reviews were deemed necessary due to the nature of the project team that has a preponderant external component.						
Discussion of relative accuracy/ confidence	 The confidence on the study is driven by the high-quality work carried out and regular site visits conducted. The present estimation, for the nature of the commodity mined, refers to global market conditions (see above points for the assumptions). As is normal in mining operations, the key points that can have a significant impact on the performance of the Cosmos mine are the market conditions in general, and the nickel price and the currency exchange rate in particular. All the other parameters are derived from sound historical production data, engineering studies and site visits to mines that operate in similar conditions both in Australia and abroad. 						


Cosmos: AM5 JORC Code Table 1

Section 1: Sampling techniques and data

Section 1: Sampling techniques and data – AM5

JORC Criteria	Explanation
Sampling techniques	- Sampling of diamond core drilling is the sampling technique used to define the Alec Mairs 5 (AM5) deposit- refer to following sections
Drilling techniques	 Diamond drilling comprised HQ and NQ2 sized core. Core is oriented using the Boart Longyear TruCore orientation system.
Drill sample recovery	 Diamond core recoveries are logged and recorded in the database. Recoveries are based on the ratio of measured core recovered lengths to drill advance lengths for each corebarrel run. Overall recoveries are >99% and there were no core loss issues or significant sample recovery problems. Core loss is noted where it occurs. Diamond core was reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the drillers. There is no relationship between sample recovery and grade as there is minimal sample loss.
Logging	 All geological logging was carried out to a high standard using well-established nickel host rock and wall rock geology codes (in spreadsheets with appropriate spreadsheet templates as a guide or LogChief software.) Final logging is quantitative and core photography is done to a high standard in both dry and wet form. All holes are logged in full. Information on structure type, dip, dip direction, alpha and beta angles, texture, shape, roughness, and fill material is entered in structural logs stored in the database.
Sub-sampling techniques and sample preparation	 Diamond core is sampled as quarter or half core and cut (1m intervals) by experienced field crew on site by diamond tipped saws. All samples are core; samples are crushed and split by independent commercial laboratory personnel. Laboratories used are Intertek Genalysis and ALS Limited The independent commercial laboratories prepared the samples using industry best practice which involves oven drying at 105 degrees Celsius for 8 hours, coarse crushing (2-3mm) and pulverising (85% passing 75 µm) using certified methods and equipment that is regularly tested and cleaned. The field crew prepares and inserts QAQC standards every 20 samples or at least one every hole for short RC drilling. OREAS and Geostats standards have been selected based on their grade range and mineralogical properties, with approximately 12 different standards used. Standards and blanks are inserted approximately every 20 samples or at least one every hole for short RC drilling. QC procedures at the laboratories involve the insertion of standards, blanks, collection of duplicates at the coarse crush stage, pulverisation stage, assay stage and regular barren quartz washes. Coarse fractions are kept at the laboratories for a period of three months or sent to site. All pulps are stored on site at CNO.
Quality of assay data and laboratory tests	 All samples were assayed by independent certified commercial laboratories using standard nickel sulphide analytical assay methods. The two most common labs used were: ALS Global in Perth Intertek Genalysis in Perth The most common assay technique used was four-acid digest followed by an ICP-AES.





JORC Criteria	Explanation
	 Acids used were hydrofluoric, nitric, perchloric and hydrochloric acids suitable for silica- based samples. The digestion approaches total dissolution for all but the most resistant silicate and oxide materials Laboratory quality control processes include the use of internal laboratory standards, blanks, and duplicates. Field standards are included in all batches dispatched at an approximate frequency of 1 per 25 samples, with a minimum of two included per batch. Field duplicates made up of either half or quarter core are inserted into submissions at an approximate frequency of 1 in 25, with placement determined by nickel grade and homogeneity. Laboratory checks, both pulp and crush, are taken alternately by the laboratory at a frequency of 1 in 25. Accuracy and precision were assessed using industry standard procedures such as control charts and scatter plots and found to be acceptable. If a sample fell outside of the pre-determined control limits and there was no obvious reason for poor performance, then the laboratory was asked to repeat the affected batch. Handheld calibrated Niton XRF instruments are used to get preliminary semi-quantitative measurements prior to assays being available. No geophysical tools or handheld XRF instruments were used to determine any element concentrations that were subsequently used for MRE reporting purposes.
Verification of sampling and assaying	 All significant intersections were logged and verified by qualified geologists. No twinned holes were drilled by design but some pairs were closely spaced for the purpose of understanding certain mineralisation anomalies. All primary data were recorded digitally and sent in electronic format to the database administrator. All geological logging was carried out to a high standard using well established geology codes in Field Marshall software on a Panasonic TOUGHPAD notebook and later (from hole AMD678) using LogChief software. All other data, including assay results, are captured in Microsoft Excel. Drill holes, sampling and assay data were stored in DataShed (and stored at head office) No adjustments to the assay data were made.
Location of data points	 Downhole surveys were completed using a gyroscopic instrument on all resource definition holes. Underground hole collar locations were verified via survey pickup. Most surveys were done using a DeviFlex downhole survey instrument. Some of the earlier holes (prior to 2010) were surveyed by an independent surveyor (Downhole Surveys) using a north-seeking gyroscope. The AMG 84 Zone 51 grid coordinate system was used as a standard. Collar surveys were done in mine grid. The project area is flat and the topographical data density is adequate for Mineral Resource estimation purposes.
Data spacing and distribution	 Data spacing exceeded the required data spacing for the purpose of reporting Exploration Results. The data spacing and distribution are sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource estimation procedure and the classification applied. Inferred and Indicated Mineral Resources were reported, and more data is required for reporting of Measured Mineral Resources. A nominal 1m sample composite length has been applied for Mineral Resource reporting purposes.
Orientation of data in relation to geological structure	 Most of the drill holes were oriented to achieve intersection angles as close to perpendicular as possible. Geological structures that are not subparallel to the orebody were accounted for by cross drilling between surface and underground drilling at different angles. No orientation-based sampling bias was observed in the data. Intercepts were reported as downhole lengths unless otherwise stated.
Sample security	 Industry standard sample security measures used in the Western Australian mining industry were adhered to. Reputable contractors were used to transport samples from Cosmos to the commercial laboratories which have their own internal sample security measures.
Audits or reviews	- No formal audits of the sampling techniques have been carried out over recent years.



Section 1: Sampling techniques and data – AM5

JORC Criteria Explanation

- The data were subject to QAQC procedures both on the mine and in the primary and umpire laboratories.

Section 2: Exploration Results

Section 2: Exploration Results – AM5

JORC Criteria	Explanation
Mineral tenement and land tenure status	 The Cosmos Nickel Complex comprises 21 tenements covering a total of 102km². The tenements include mining leases and miscellaneous licences. Western Areas (subsidiary of IGO) wholly owns 18 tenements, with 14 acquired from Xstrata in October 2015, and an additional 4 tenements acquired from Ramelius Resources in 2020. The remaining three tenements (M36/303, M36/329 and M36/330) were subject to a Joint Venture with Alkane Resources NL. In April 2022, the Alkane Resources Ltd interest in these tenements (19.4%) was transferred to Australian Nickel Investments (ANI), whereby ANI now hold 100% interest. The key metric for tenements to be in good standing is that the minimum expenditure must be achieved. All tenements are in good standing. AM6 is on M36/127 which is held by Australian Nickel Investments Pty Ltd, has a total are of 606.24 ha and expires on 19 April 2031.
Exploration done by other parties	- Historical nickel exploration has been completed by Glencore Plc, Xstrata, and JBM.
Geology	 The deposit forms part of the Cosmos Nickel Complex, which lies within the Agnew-Wiluna Belt of the central Yilgam Craton, Western Australia. The genetic formation model for the Cosmos nickel deposit is the 'Kambalda-style' model where precipitation of nickel sulphides is interpreted to occur in channelised komatitic lava flows and/or lava tubes. This model proposes two dominant deposit types. 'Type 1' deposits are interpreted to have formed where the hottest lava in the centre of a lava channel thermally erodes into a sulphidic substrate and massive sulphides accumulate at the channel base. This high-grade primary formation style is applicable to the Cosmos, Cosmos Deeps, AM1, AM2, parts of AM5 and the Odysseus Massive zones. However, the Type 1 deposits are often subject to mobilisation into structural sites when massive sulphide bodies behave plastically or even re-melt under the high metamorph temperatures and pressures that are generated by local or regional tectonic faulting and/or folding events. Cosmos' Cosmos Deeps and the Odysseus Massive zone are likely examples of this remobilisation style. 'Type 2' deposits are interpreted to have formed from somewhat cooler and slower flowing lavas than those envisaged for Type 1 deposits. In this model, the mineral olivine is envisaged to crystallise from these cooler lavas, with the olivine grains settling to the channel's base shortly after the precipitation of sulphides. In this model the coeval sulphides crystallise to the AM5, AM6 and Odysseus disseminated to rens. Cosmos' deposit's sulphide nickel assemblages are 'high tenor' meaning that the sulphides are dominated by the nickel bearing mineral pentlandite (Pe). The sulphide assemblages also contain the sulphide mineral soft miler. The mineralisation is applicable to the AM5, AM6 and Odysseus disseminated area at Cosmos. Cosmos' deposit's sulphide nickel assemblages are 'high tenor' meaning that the sulphides are dominated by the nicke



Section 2: Exploration Results – AM5

JORC Criteria	Explanation	
	 AM5's base is coincident with the base of the lower ultramatic unit and comprises two sub-parallel steeply dipping and plunging lenses of mineralisation separated by a felsic volcanic. The AM5 massive mineralisation is interpreted to have been originally Type 1 basal primary style but has undergone subsequent folding and thrusting. Its massive mineralisation only averages ~1m in thickness, but in some tectonically induced overlapping locations, the average thickness increases to ~4m. 	
Drill hole information	- There are too many holes to summarise and the MRE gives the best balanced and unbiased assessment of the estimate.	
Data aggregation methods	No Exploration Results are being reported.	
Relationship between mineralisation widths and intercept lengths	- No Exploration Results are being reported.	
Balanced reporting	- Exploration Results are not reported. The MRE gives the best and most balanced view of the drilling to date.	
Other substantive exploration data	- No Exploration Results are being reported.	
Diagrams	- Maps and sections are included in the report.	
Further work	- Further exploration work is currently in the planning stage	

Section 3: Mineral Resources

JORC Criteria	Explanation
Database integrity	 All data are entered using either spreadsheets or Maxwell's LogChief software for logging of drill hole data in the field on dedicated laptops. Assay data in the form of .csv files from the primary assay laboratory ALS Chemex and the umpire assay laboratory Genalysis received by exploration are imported directly into DataShed. The database is currently administered by Rock Solid Data Management, who are based in WA and are an independent specialised database management company. The LogChief software provides the first level of data validation, using locked look-up tables for all data fields which have set codes attributed to them. The DataShed database uses validation look-up tables and trigger scripts to ensure that all numeric, date and code information is correct. All QAQC controls are reviewed and actioned after each submission.
Site visits	- The Competent Person is an employee of IGO with over 10 years' experience estimating nickel sulphide orebodies and has undertaken several site visits to the Cosmos site to assess and inspect core. No issues were observed.
Geological interpretation	 The AM5 deposit is hosted within an ultramatic unit and consists of disseminated nickel sulphide mineralisation as a high-grade core surrounded by medium-grade and low-grade zones. Portions of AM5 have been mined. Ben Jupp from SRK Consulting undertook 3D modelling of the AM5 and AM6 deposits using the Leapfrog Geo 3D modelling package. Modelling consisted of mineralisation envelopes for disseminated and massive sulphide mineralisation, interpreted north-south fault structures and pegmatite intrusions.



JORC Criteria	Explanation		
	 The resultant mineralisation and wall rock models were extensively validated by the Competent Person. One of the main validation tools was a comparison of the SRK model with the pre-existing Xstrata model. The two models compared favourably. WSA geologists have undertaken several studies and drilling campaigns of the greater Cosmos Nickel Complex since its acquisition and the geology of the AM5 deposit is well documented and understood. The geological model is robust enough for the purposes of Mineral Resource estimation and the risk associated with the model being materially wrong is low. Surface and underground drill data obtained by Xstrata were used for this estimate. WSA has done surface drilling in the orebodies associated with AM5 but all direct AM5 targeted drilling was undertaken by previous owners. No major assumptions were made with respect to the drill data. The data were collected in accordance with standard industry practices. Several alternative iterations of grade estimations using linear techniques were completed and critically assessed before finalising the Mineral Resource estimate. At all stages of the process the models were compared to the previously reported models to ensure an appropriate level of consistency between the previous (Xstrata) and the current interpretation. The modelling methodologies were similar enough for direct comparisons to be made. Geology is the overriding influencing factor in this Mineral Resource estimate. A robust digital geological model created by SRK forms the basis of the estimate. The pegmatites pinch and swell along strike/down dip and have a westerly dip of ~40°. The pegmatites inch and swell along strike/down dip and have a westerly dip of ~40°. The pegmatites have been carefully modelled using the vien modelling tool in Leapfrog tool using the 'CP lift 1° code and associated variants. The pegmatites are mainly bound by north-south trending, west d		
Dimensions	 The strike length of the AM5 disseminated block model is ~200m at the 9,628mRL. The longest downdip distance is ~500m and the top of the orebody is ~600m below surface. Width is variable and ranges between10m and ~120m. 		
Estimation and modelling techniques	 The estimation was done using the following main software packages: Leapfrog Geo Datamine Studio RM Snowden Supervisor Wireframing of grade and geological domains using underground and surface drilling was completed in Datamine and Leapfrog. Sample data were composited to 1m downhole lengths and flagged on domain codes generated from 3D mineralised wireframes and 3D lithological wireframes. Directional variography was performed for nickel for each of the domains using Snowden Supervisor software. All estimation was completed at the parent cell scale to avoid any potential geostatistical support issues. 		



JORC Criteria	Explanation
	- Top-cut investigations were completed using the top-cut analytical tool in Supervisor and no top-cuts were applied during estimation. Low-grade and high-grade nickel domains we
	used instead.
	- This model is the second Mineral Resource estimate for the AM5 nickel sulphide deposit. The first was done by Xstrata.
	- The resource model volumetrics were compared to the previous model. Variances are due to inclusion of additional data and varying modelling techniques.
	- The AM5 deposit was partially mined and production data is available.
	- Nickel is currently considered the only economic product that will be recovered.
	- The Fe: Mg ratio is recognised as influencing standard nickel flotation mill recoveries and both elements have been interpolated into the block model. The Fe: Mg ratio has been
	calculated for each parent block in preparation for further metallurgical work.
	- Sulphur has been estimated into the block model.
	 A proto model was constructed using parent blocks of 5mE × 5mN × 5mRL and sub-blocked to 0.005m × 1.25m × 1.25m.
	 The block size was selected on the basis of drill hole spacing and domain geometry.
	- Width along the X axis is highly variable and Datamine's 'resolution=0' parameter was used to calculate the sub cell size in the easting direction exactly.
	 Drill hole spacing varies but is nominally 20m along strike and the data is supplemented by data from ore drives in mined areas.
	 Parent cell estimation was used to avoid any potential statistical support issues that may arise from using sub cells.
	- The size of the search ellipse was based on the results of QKNA and the nickel variography for each domain. Three nested search passes were used with most of the samples
	falling within the first two passes. The first pass was set at 28mX × 21mY × 31mZ, with a minimum and maximum number of samples set at 4 and 36, respectively.
	- A maximum number of samples from any particular borehole was set at 30. This prevents a disproportionate number of samples from any borehole having an undue influence on the
	estimate.
	 No assumptions were made regarding the modelling of selective mining units.
	- Longhole stoping is the planned mining technique. Mining will be controlled by a cut-off grade and minimum mining width.
	- No correlation between geochemical elements other than sulphur and nickel was observed.
	 Mineralised zones were digitised using explicit and implicit techniques.
	- Each wireframe is representative of a grade domain and used in compositing and estimating to ensure high grades were not smeared into the low-grade zones and vice versa.
	- Five primary geological and geostatistical mineralised domains were modelled:
	- High grade (>2.0% Ni),
	- Mid-grade (<2.0% Ni),
	- Mid to low grade (< 1.5% Ni),
	- Low grade (<1.0%Ni), and
	- Massive sulphide domain.
	- Estimation validation techniques included:
	 visual comparison of the composites and estimated blocks in section and plan,
	- graphs of estimation pass number versus percentage filled,
	- swath plots of the composite grades vs block model grades,
	 and swath plots of kriging variance, kriging efficiency and slope of regression.
	- Jack-knifing of the block model attributes to the informing drill hole followed by statistical analysis
	- Grade and tonnage comparisons of the existing MRE and the previous MRE
Moisture	- Tonnages were estimated on a dry basis.
Cut-off parameters	- The Mineral Resource is reported above a 1.5% Ni cut-off grade for disseminated material and 1.0% Ni for massive sulphide material.



JORC Criteria Explanation	
Mining factors or assumptions	- The mining method selected is top-down, longhole stoping with paste backfill, with a centre-out mining sequence.
Metallurgical factors or assumptions	 The processing plant will consist of a tertiary crushing circuit to reduce the ore size to 12mm before ball milling to P80 106 µm. Froth flotation will then be used to separate the valuable minerals as a concentrate. The concentrate will be reground to 40 µm in an IsaMill[™] prior to cleaner flotation to produce final product concentrate. Ball mill comminution and froth flotation are commonly used in mineral processing to treat nickel sulphide ores. The final concentrate will be filtered using a plate and filter and stored in the existing concentrate storage shed at Cosmos prior to being trucked to port at Geraldton for sale. The Competent Person has taken metallurgical factors into account including the nature of the ore and the influence of elements such as MgO and FeO.
Environmental factors or assumptions	 Potential waste and process residue disposal sites have been identified during a pre-feasibility study and are not expected to deviate significantly from previous sites used during previous open pit and underground mining at Cosmos. Tailings will be used for paste-fill underground, with the excess tailings being deposited in the existing tailings storage facility (TSF) along with the Odysseus tailings. Water will be recovered from the TSF or re-used in the processing plant.
Bulk density	 Bulk densities were determined by the independent laboratory using industry standard methods (pycnometer). All data used in the Mineral Resource estimate are from competent fresh rock. Void spaces within the mineralised zones are not material. Over 4,000 composited pycnometer-derived specific gravity (SG) determinations were estimated into the block model.
Classification	 Mineral Resource classification is based on a combination of geological knowledge and confidence in the interpretation, data distribution, estimation passes, kriging efficiency (KE and slope of regression (slope) data analysis. The mineralisation at AM5 is classified as Indicated and Inferred Mineral Resources under the guidelines of the JORC Code. No blocks were classified as Measured Mineral Resource. The definition of mineralised zones is based on a high level of geological understanding by Xstrata and WSA geologists. All relevant factors have been considered in this estimate, relevant to all available data. The Mineral Resource estimate reflects the Competent Person's view of the deposit and the risks associated with the grade and structural continuity.
Audits or reviews	 The Mineral Resource estimate has not been independently audited or reviewed in its entirety. SRK prepared the wireframe volumes used for estimation, which were internally peer reviewed.
Discussion of relative accuracy/ confidence	 A well-established confidence algorithm was applied to the nickel estimate as a guide to classification. The algorithm ranks the following Kriging Quality parameters for each block: Number of composites found per each block estimate, Kriging efficiency, and Search pass number. Slope of regression was also reviewed for each block before a nominal classification code was applied. The classification code provides a guideline for further classification based on geological and mineralisation continuity. The Mineral Resource Statement relates to local estimates. The AM5 deposit has been mined and global grade estimates are consistent with production data.



Cosmos: Mt Goode JORC Code Table 1

Section 1: Sampling techniques and data

Section 1: Sampling techniques and data – Mt Goode

JORC Criteria	Explanation
Sampling techniques	 The Mt Goode deposit was defined by 97 diamond drill (DD) holes and 16 reverse circulation (RC) holes on a nominal 40 m grid spacing. The composite file used in the Mineral Resource estimate contained a total of 10,307 composites, split into 12 domains. Homestake Gold carried out exploration between 1997 and 200, but information on the sampling protocols employed are limited. Most of the data used in the Mineral Resource are from work carried out by Jubilee Mines NL. Jubilee used industry standard protocols. Sample representativity was assured by an industry standard QAQC program. All samples were prepared and assayed by an independent commercial laboratory whose instruments are regularly calibrated. Diamond core was marked at 1 m intervals and sample lengths are also typically 1 m. Sample boundaries were selected to match the geological, alteration and mineralisation boundaries. Sampled mineralisation intervals were sent to a commercial laboratory for crushing and grinding before assaying.
Drilling techniques	 Drilling was a mixture of RC and DD, with DD making up the main proportion of the resource. The DD comprised NQ2 and HQ sized core. All drilling was from surface and core was structurally oriented.
Drill sample recovery	 Most of the resource was defined by diamond drilling with high core recovery (>95% on average). Core recoveries are recorded in the database. Diamond core was reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths were checked against the depth given on the core blocks. The consistency of the mineralised intervals suggests there was no sample bias due to material loss or gain.
Logging	 All Homestake Gold diamond drill holes were re-logged by Jubilee Mines and selected intervals were resampled. All geological logging was carried out to a high standard using well-established geology codes. Geotechnical data, including joints, RQD and core quality, were recorded. From 2003 to 2005, all logging was recorded in hardcopy and TOUGHBOOK PCs. Core was photographed in dry and wet forms. All drill holes were logged in full.
Sub-sampling techniques and sample preparation	 Diamond core was cut by the field crew on site using either an Almonte or manual core saw. Ore zones were sampled as quarter core and the surrounding rock was sampled as half core – in both cases, the right-hand side piece of core was taken as the sample. The field crew prepared and inserted the QAQC certified reference materials into calico bags prepared for the sample string prior to core cutting. For ore zone sampling, the remaining quarter core was taken as the duplicate sample. To create a field duplicate, the core was cut again, into quarter core. Additional procedures were implemented for sampling ore zone batches to ensure confidence in the accuracy of sampling. The diamond core sampling method used by Homestake Gold is not known. The RC sampling method used by Homestake Gold is not known. The sample preparation of diamond core followed industry best practice, which involved oven drying, coarse crushing and pulverising.



JORC Criteria	Explanation
	 The sample preparation was carried out by a commercial certified laboratory. The sample preparation technique is well established and appropriate for nickel sulphide deposits. Selected Geostats and ORE certified reference materials were used to cover the known grade range. Field duplicates were routinely submitted to test sample precision. Blank samples were routinely submitted to test sample contamination. Pulp duplicates obtained from ALS Laboratories were sent to Genalysis for umpire check analysis. Sample representativity was assured through methods previously discussed. Laboratory QAQC as saying, external field duplicates and standards were stored in the database. All QAQC data were reviewed and reported on a monthly basis for nickel and copper. Validation failures highlighted via the nickel assaying were queried with the laboratory responsible, with explanations and corrective actions reported in the following month's QAQC report. The sample sizes were considered appropriate based on mineralisation style (disseminated nickel sulphide), thickness and consistency of the mineralised intersections, sampling methodology and per cent value ranges for the primary elements.
Quality of assay data and laboratory tests	 All samples were assyed by an independent certified commercial laboratory. The laboratory used is experienced in the preparation and analysis of nickel sulphide ores. Samples were analysed by ALS (Perth) for Ag, Al, As, Co, Cr, Cu, Fe, Mg, Mn, Ni, Pb, S, Ti, Zn and Zr. Genalysis (Maddington) was the umpire laboratory for multi-element (Ag, Al, As, Co, Cr, Cu, Fe, Mg, Mn, Ni, Pb, S, Ti, and Zn) umpire check analysis on pulps provided by ALS. Genalysis was selected because its laboratory can do low level PGM detection analysis and it performed well in the Geostats global round-robin laboratory rankings. The principal analytical method used was ME-ICP61s, which analyses 15 elements to provide data for geological, metallurgical, mining, and environmental modelling. The samples were analysed by three-acid digestion, HCI leach and a combination of inductively coupled plasma mass spectrometry (ICP-MS) and ICP-AES finishes. Base metals with concentrations exceeding 1% are assayed using OG62 analysis. Ore grade determinations (>1% trigger) are used for Ni, Cu, Pb and Zn, or when specified by Jubilee Mines' geologists. This method uses two-acid digestion with an Inductively coupled plasma (ICP) or AAS finish. The only information on analytical method for historical holes relates to holes drilled in the 2000 period. From the annual report, the method of analysis was multi-acid digestion with ICP-OES for determination of Ni, Cu, Co, Cr, Mg, Al and As in fresh samples, and Fe and Mn in oxide samples. Jubilee Mines re-assayed selected ore intercepts and found them to be comparable with historical intercepts. No geophysical tools or handheld XRF instruments were used to determine any element concentrations that were subsequently used for Mineral Resource estimation purposes. Certified reference materials were included in all batches dispatched at an approximate frequency of 1 per 25 samples. Field duplicates were collected frequently and duplicat
Verification of sampling and assaying	 Jubilee Mines resampled strategic intercepts to check grades and intercept widths in the Homestake Gold core. None of the holes in the recent drilling programs were twinned. The exploration department used Field Marshall software (Micromine) for in-field logging of drill hole data onto dedicated laptops. This software provides the first level of data validation – it uses locked look-up tables for data fields which have set code sets attributed to them. The SQL database uses validation look-up tables and trigger scripts to ensure that all numeric, date and code information is correct. The database rejects any duplications of the key sample number and hold number fields across a broader project area. Validation failures highlighted via the nickel assaying were queried with the laboratory responsible, with explanations and corrective actions reported in the following month's QAQC report.



Section 1: Sampling techniques and data - Mt Goode

Explanation

JORC Criteria

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	 No adjustments to assay data used for this Mineral Resource estimate were made.
Location of data points	 The method to determine collar surveys for historical drill holes is unknown, apart from two BERC generation holes which have been picked up by Cosmos Survey. Apart from these two holes, the exact locations of the drill holes are not known since the survey type was not described in the database and the holes could not be picked up after the Company's acquisition because the area had been rehabilitated. The original surfaced survey control was established by Spectrum Surveys (Kalgoorlie). Several DGPS stations installed have been used by survey and mining. Control has been checked by Jubilee Mines' surveyors traversing from Cosmos to Mt Goode using conventional traversing techniques. Survey control has been established to within industry standards, typically 1 in 500. The survey instrument used was a Leica TCRA11105 with instrument specifications for survey station control of 2mm + 2ppm and 5'. For collar pickup, the instrument specifications were 10mm + 2ppm and 5'. Interpretation of the collar position could be ±0.1m wit a 25mm centring error during normal pickup operations. The usual convention was to pick up the hanging wall side of the drill hole collar. Jubilee Mines' surface holes are initially oriented based on GPS and DGPS locations and compass set-up, using the AGD84 datum. After completion of the holes, the holes have been picked up by Jubilee Mines' surveyors or Spectrum Surveys using local survey control datum points installed by Spectrum Surveys. The downhole survey method used for historical holes is unknown (apart from BERC0319 – gyroscope). Jubilee Mines' downhole surveys were mostly done by gyroscope. A Gemcom database was defined to manage the data for Mineral Resource estimation. While the AMG location data provided are maintained, a transformation to mine grid for Northing and Easting was applied. No topographic control was applied.
Data spacing and distribution	 Drill holes were spaced at approximately 40m (Northing) by 40m grid for most of the Mineral Resource (split into Measured, Indicated and Inferred). The drill hole samples were composited to a regular downhole length of 1m in all 12 domains.
Orientation of data in relation to geological structure	 The Mt Goode deposit comprises 12 domains with varying strikes and dips as follows: Domains 1 and 2 strike 5°, dip ~76° east and plunge 40° towards the south. Domains 3 and 4 strike 140°, dip ~74° east and plunge 13° towards the southeast. Domains 5 and 6 strike 120° and dip ~80° southwest. Domains 7 and 8 strike 150° and dip ~47° northeast. Domains 9 and 10 strike 160°, dip ~72° and plunge 13° towards the southeast. Domains 11 and 12 strike 140° and dip ~75° northeast. Most of the drilling was conducted from east to west. No orientation-based sampling bias has been observed in the data.
Sample security	- All core samples were transported from site to Perth and then to the assay laboratory by an independent transport contractor.
Audits or reviews	- Detailed geological interpretation and data validation were provided by Digital Rock Services and independently reviewed by the Technical Services Group.

Section 3: Exploration Results

Section 2: Exploration Results - Mt Goode

JORC Criteria	Explanation
Mineral tenement and land tenure status	 The Cosmos Nickel Complex comprises 26 tenements covering 9,2262 ha. The tenements include mining leases and miscellaneous licences. The Company is 100% owner of 23 tenements which were acquired from Xstrata in October 2015. The remaining three tenements are subject to a joint venture with Alkane Resources NL (WSA's interest is 80.6%). All tenements are in good standing. Mt Goode is on M36/127 and M36/371
Exploration done by other parties	- Historical exploration done by JBM
Geology	 The deposit forms part of the Cosmos Nickel Complex, which lies within the Agnew-Wiluna Belt of the central Yilgarn Craton, Western Australia. The deposit style is komatile hosted, disseminated to massive nickel sulphides. The mineralisation typically occurs in association with the basal zone of high magnesium oxide (MgO) cumulate ultramafic rocks. Many of the higher-grade orebodies in the Cosmos Nickel Complex show varying degrees of remobilisation and do not occur in a typical mineralisation profile.
Drill hole Information	- No exploration results are being reported.
Data aggregation methods	- No exploration results are being reported
Relationship between mineralisation widths and intercept lengths	- No exploration results are being reported
Balanced Reporting	- No exploration results are being reported
Other substantive exploration data	No exploration results are being reported
Diagrams	- Included in report.
Further work	- An extensive exploration, resource definition and geotechnical drilling programme is currently being planned for the mount Goode deposit

Section 3: Mineral Resources

JORC Criteria	Explanation
Database integrity	 Data were entered using Field Marshall software (Micromine) for in-field logging onto dedicated laptops. Assay data in the form of text .csv and .sif files received by exploration from the primary assay laboratory (ALS Chemex) and the umpire laboratory (Genalysis) were imported directly into the database whenever possible. The Field Marshall software provides the first level of data validation – it uses locked look-up tables for data fields which have set code sets attributed to them.



JORC Criteria	Explanation
	- The SQL database uses validation look-up tables and trigger scripts to ensure that all numeric, date and code information is correct. The database rejects any duplications of the key sample number and hold number fields across a broader project area.
Site visits	- The Mineral Resource estimate was completed by site personnel at the time. The current Competent Person visited site during the WSA drilling campaign and verified that the drilling and sampling was being done in accordance with WSA protocols.
Geological interpretation	 The geological interpretation is considered sound, being based on drill hole spacing and the understanding of similar deposits in the Mt Goode metadunite area. The geological interpretation was created by Digital Rock Services on 40 m spaced sections and 20 m spaced flitch plans, using a defined geological coding system based on long-term exploration in the project area. The deposit lies in a southwest kink of a generally north-south striking western ultramafic and is bound to the east by a felsic porphyry. The disseminated nickel sulphide mineralisation is fine-grained lobate disseminated pentlandite grains. Subsequent serpentinisation has had an impact on the form, distribution, and liberation characteristics of these magmatic nickel sulphides. Lithogeochemistry and stratigraphic interpretation have been used to assist identification of rock types. The 0406 model was built on a new interpretation by Digital Rock Services which differed from the previous interpretation (John Hicks) with respect to the geometry of the main and footwall higher grade zones. The Digital Rock Services interpretation includes a more detailed analysis of the domains based on nickel grade and S: Ni ratios. These parameters suggested changes to the locations of the ore boundaries and geometry of the ore zone. The Mineral Resource estimate was based on a robust geological model which was created internally by the Technical Services Group. Domaining involved definition of the hanging wall and footwall contacts of the mineralised zone, which were used to constrain the boundaries of the low-grade halo and high-grade core. Boundaries for oxide and transitional material modelled from drill hole logging data were also used to subdomain the mineralisation. The modelling was completed with a level of confidence proportionate to the Mineral Resource classification. The extents of the geological model were constrained by drill hole intercepts and there was minimal extrapolation of the geological contin
Dimensions	- The strike length of the Mt Goode deposit varies considerably but is up to 525m in Domains 9 and 10. The largest distance from the top of mineralisation to the base (Domains 9 and 10) is approximately 560 m. The deposit width varies between domains from a minimum of 2m to a maximum of 4m, with a mean of 40m.
Estimation and modelling techniques	 Grade estimation for nickel and sulphur was done using the Ordinary Kriging method and GEMS v6.0 software. The method was considered appropriate due to the drill hole spacing and the nature of the mineralisation. All estimation was completed at the parent cell scale to avoid any potential geostatistical support issues. Sample data were composited to 1m downhole lengths and flagged on domain codes. Top-cut investigations were completed, and no top-cuts were applied based on grade distribution, coefficient of variation and the previous methodology used at Cosmos. Sample data were flagged using domain codes generated from Digital Rock Services' 3D mineralised wireframes based on 1.45% Ni (Low-grade halo) and 0.75% Ni (high-grade core). Directional variography was performed for nickel using Snowden Visor v6.00.16 software. Nugget values are typical for the mineralisation type (Ni = 20%-40% of the total variance). Continuity ranges for nickel varied from 50m to 90m in the direction of preferred mineralisation orientation. This Mineral Resource estimate was an update of a Mineral Resource estimate undertaken in June 2004 and was extensively validated against the June 2004 Mineral Resource estimate. No assumptions about recovery of by-products were made. There are no deleterious elements.



JORC Criteria	Explanation
	 A proto model was constructed using a 10mE × 20mN × 10mRL parent size. The model was built using a separate folder for each domain, which was then combined for reporting. Each block can then have multiple domains and grades. This eliminates grade bleeding into other domains as it honours the geological and grade continuities. Drill spacing varies but was nominally 40m × 40m. The size of the search ellipse was based on the nickel variography for each domain. Three search passes were used: the first and second passes vary between 60m × 90m × 20m and 90m × 130m × 40m in the X, Y and Z directions, respectively. The third pass used a search volume 80m × 120m × 26m and 150m × 160m × 52m in the X, Y and Z directions, respectively. No selective mining units were assumed in the estimate. No assumptions about correlation between variables were made. The geological interpretation was developed using geological, structural, and litho-geochemical elements. The extent of the ultramafic boundary, ductile and brittle deformation, and presence of felsic intrusives were used to refine the mineralised domains. The hanging wall and footwall mineralisation contacts, as well as the oxide/fresh surface were used as hard boundaries during the estimation process, and only blocks within th grade wireframes were informed with nickel grades. Geostatistical investigation for the grade distribution negated the requirement for grade cutting/capping. Estimation validation techniques included swath plots of the composite grades versus the grade of the block model, and visual checks of the kriging variance, kriging efficiency and slope of regression.
Moisture	- Tonnages were estimated on a dry basis.
Cut-off parameters	 The mineralisation envelope was determined using a 0.45% Ni cut-off for the low-grade halo and a 0.75% Ni cut-off for the high-grade core. Only material within a conceptual pit designed by IGO is reported The Mineral Resource is reported below at a lower cut off of <u>0.40% Ni grade on the assumption that mining will be</u> Open Pit . <u>Cut-off</u> Mass Ni Ni (Mt) (%) (kt) <u>0.4</u> 25.74 0.69 178
	- - Note: Block model used is xna_051_mtgoode_v1_bmf
Mining factors or assumptions	 Open pit mining is assumed Factors used for the pit optimisation and MSO are as follows: Metal Price and Exchange Rate of Consensus P90 Recovery +5% Payability +5% Opex -5%
Metallurgical factors or assumptions	 Conventional heap leach at CNO is assumed No metallurgical factors or assumptions were applied to the final grade reported. Metallurgical characteristics calculated in the block model are from information provided by Dunstan Metallurgical Services.



JORC Criteria	Explanation
	- Regression analysis was used to calculate the Estimated Sulphide Grade (SONI), Estimated Recovery and Estimated Concentrate Grade from the estimated nickel and sulphur grades. The estimated concentrate grade and recovery were included in the final block model.
Environmental factors or assumptions	- The Mount Goode area is adjacent to the existing Cosmos pit and within the mine infrastructure area. Proposed additional drilling in this area is the subject of a heritage survey.
Bulk density	 Bulk density was determined using the water immersion (1.5% of the measurements) and pycnometer (98.5% of the measurements) methods. Bulk density determination was derived from a mixture of solid and pulverised material. Both determination methods account for potential void spaces and moisture. Most of the assay intervals have pycnometer-derived bulk density measurements. Bulk density in the model was determined by an algorithm developed for the relationship between nickel grades and bulk density.
Classification	 The Mt Goode Mineral Resource was classified as Measured, Indicated, and Inferred on the basis of drill hole spacing, geological continuity and Kriging quality parameters. The definition of mineralised zones was based on a high level of geological understanding. All relevant factors have been considered in this estimate, relevant to all available data. The Mineral Resource estimate reflects the Competent Person's view of the deposit and the risks associated with the grade and structural continuity.
Audits or reviews	Multi-element variography review was undertaken by Snowden Mining Industry Consultants.
Discussion of relative accuracy/ confidence	 The geological and grade continuity of the Mt Goode deposit is well understood, and the mineralisation wireframes used to build the block model have been designed using all available drill data. Post-processing block model validation was extensively undertaken using geostatistical methods before the Mineral Resource was reported. The Mineral Resource Statement relates to local estimates of tonnes and grade. No production data were available for comparison (Mt Goode has not been mined). The WSA drilling campaign was done in 2021 and the geological logging and assay results compared favourably with nearby older holes and model variables.



Forrestania: Flying Fox JORC Code Table 1

Section 1: Sampling techniques and data

Section 1: Sampling techniques and data – Flying Fox

JORC Criteria	Explanation
Sampling techniques	 The Flying Fox deposit is sampled using diamond drilling (DD) on nominal 50m × 30m grid spacing. Grade control data, which include sludge drilling and short hole DD results as well as face mapping, are used to build the preliminary geological models. Only assay results (using an independent certified commercial laboratory) from DD holes are used to estimate grades into the resource block model. Handheld XRF spectrometers are used to gain a semi-quantitative nickel grade when core is first logged. These are replaced in the database by wet chemistry derived assay grades once received and are not used for resource estimation purposes. Samples are taken in accordance with well-established and properly documented company protocols. Sample representativity is assured by an industry standard internal QAQC program that includes certified reference standards, blanks, and replicate samples. QA results are routinely assessed by WSA Geologists and quality controls include re-assaying batches of samples if the QA results are not within predetermined precision, accuracy, and contamination thresholds. All samples are prepared and assayed by an independent commercial laboratory whose analytical instruments are regularly calibrated. Surface DD core is marked at 1m intervals and sample lengths are typically also 1m. Grade control drilling typically uses 0.5m sample lengths through the mineralised zone due to whole core sampling being carried out. Sample boundaries are selected to match the main geological and mineralisation boundaries. Sample d mineralisation intervals are sent to a commercial laboratory for crushing and grinding before assaying.
Drilling techniques	 DD comprises NQ2-sized core for underground and surface drilling and LTK-sized core for the grade control drilling. A standard tube is used in most cases unless core recovery issues are expected when a triple tube is used (typically in the oxidised zones). All surface drilled core is oriented using ACT II control panels and ACT III downhole units. Grade control drilling is not oriented.
Drill sample recovery	 Core recoveries are logged and recorded in the database. Overall recoveries are >99% and there are no core loss issues or significant sample recovery problems in the sulphide zone. DD core is reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the drillers. The bulk of the resource is defined by DD core drilling which has high core recoveries. The massive sulphide style of mineralisation and the consistency of the mineralised intervals are considered to preclude any issue of sample bias due to material loss or gain.
Logging	 Geological logging is carried out to a very high level of detail, and the logging is peer reviewed. Geotechnical data such as rock quality designation (RQD) and number of defects (per interval) are recorded. Information on structure type, dip, dip direction, alpha angle, beta angle, texture, shape, roughness, and fill material is captured. Logging of DD core and RC samples records lithology, mineralogy, mineralisation, structural data (DD holes only), weathering, colour, and other features of the samples. Core is photographed in both dry and wet form. All drill holes are logged in full. The Flying Fox database contains over 83,000 geological entries.
Sub-sampling techniques and sample preparation	 Core is cut in half on site (except for underground grade control core) by diamond saw blades. Surface derived drill holes are halved again with one quarter sent for assay and one quarter preserved as a geological archive. Underground exploration derived drilling core is not halved again. Half of the cut core is sent for assay and the other half is preserved as a geological archive.



JORC Criteria	Explanation
	 Underground grade control derived drilling core is not cut. Full core is sent for assay. All core is prepared and assayed by an independent commercial certified laboratory. Samples are crushed, dried, and pulverised to produce a sub-sample for analysis by four-acid digest with an ICP-AES finish. No non-core samples were taken for the purpose of this Mineral Resource estimate. The sample preparation of DD core follows industry best practice that involves oven drying, coarse crushing of the core sample down to ~10 mm followed by pulverisation of the entire sample (total prep) using LM5 grinding mills to a grind size of 90% passing 75 µm. Sample preparation is carried out by a commercial certified laboratory. The sample preparation technique is well established and appropriate for nickel sulphide deposits. Over and above the commercial laboratory's internal QAQC procedures, field Ni standards ranging from 0.7% to 11.5% to test assay accuracy are included. Duplicates are routinely submitted to test sample precision. Standards are fabricated and prepared by Geostats Pty Ltd, using high-grade nickel sulphide ore. Blank samples are routinely submitted to test for sample contamination. Pulp duplicates obtained from the primary laboratory are taken on a 10% by volume basis and submitted to a secondary laboratory as an additional QAQC check. Sample representativity is assured through the methods previously discussed. The site Geologists are responsible for the management of the quality assurance program, and assay results that do not conform are immediately brought to the attention of the relevant commercial laboratory so that remedial action can be taken. Typically, this type of action will involve re-assaying the relevant batch of samples. A monthly QAQC report is generated and distributed to the relevant stakeholders for review and follow-up action. The sample sizes are appropriate based on sty
Quality of assay data and laboratory tests	 All samples are assayed by an independent certified commercial laboratory experienced in the preparation and analysis of nickel sulphide ores. Samples are dissolved using four-acid digest (nitric, perchloric, hydrofluoric and hydrochloride acids) to destroy silica. Samples are analysed for Al (0.01%), As (5ppm), Co (1ppm), Cu (1ppm), Fe (0.01%), Cr (1ppm), Mg (0.01%), Ni (1ppm), S (0.01%), Ti (0.01%) and Zn (1ppm) using an ICP or AAS (typical detection limits in brackets). No geophysical tools or handheld XRF instruments were used to determine any element concentrations that were subsequently used for Mineral Resource estimate purposes. Standards and blanks were routinely used to assess company QAQC (123 in total 1 standard for every 15-20 samples). Duplicates were taken on a 10% by volume basis (on underground drilling only), and field-based umpire samples were assessed on a regular basis. Accuracy and precision were assessed using industry standard procedures such as control charts and scatter plots. In occasional cases where a sample did not meet the required quality threshold, the batch was re-analysed.
Verification of sampling and assaying	 Historically, Newexco Services Pty Ltd (Newexco) independently visually verified significant intersections in the DD core. No holes were twinned in the recent drilling programs. Primary data was collected using Excel templates using look-up codes on laptop computers. All data was validated by the supervising geologist and sent to Newexco for validation and integration into an SQL database. No adjustments were made to assay data compiled for this Mineral Resource estimate.
Location of data points	 Hole collar locations were surveyed. The Leica GPS1200 used for all surface work has an accuracy of +/- 3cm. A two-point transformation is used to convert the data from MGA50 to Local Grid and vice versa. Points used in transformation: MGA50 Points yd1='6409502.17' xd1='752502.175' yd2='6409397.856' xd2='753390.591' Local Grid Points ym1='28223.59'xm1='33528.771'ym2='28111.84'xm2='34415.995' The accuracy of the pillars used in WSA's topographical control networks is within the Mines Regulations accuracy requirement of 1:5,000 for control networks.





Section 1: Sampling techniques and data – Flying Fox

JORC Criteria	Explanation
Data spacing and distribution	 Drill holes were spaced at a124 15m (northing) × 15m grid for the areas that would be affected by mining in the next two years and nominally 30m × 30m for areas that will be affected by mining in the subsequent years. The extensive drill program, coupled with information derived from underground observations and previous open pit mining, has demonstrated sufficient and appropriate continuity for both geology and grade within the Flying Fox deposit to support the definition of Mineral Resources and Ore Reserves, and the classification applied under the JORC Code (2012). Samples were composited to 1m lengths, adjusting to accommodate residual sample lengths. A metal balance validation between the raw data and the composited data was undertaken, with no material issues identified.
Orientation of data in relation to geological structure	 The Flying Fox deposit strikes at 30° and dips nominally 65° east. All underground and grade control drilling was conducted from west to east. All surface drilling was conducted from east to west. No orientation-based sampling bias has been observed in the data.
Sample security	- All core samples were delivered from site to Perth and then to the assay laboratory by an independent transport contractor.
Audits or reviews	- The Flying Fox data is managed and certified offsite by an independent contractor.

Section 2: Exploration Results

Section 2: Exploration Results – Flying Fox

JORC Criteria	Explanation
Mineral tenement and land tenure status	 Forrestania Nickel Operation (FNO) comprises 93 tenements covering approximately 900 km2 within the Central Yilgarn Province. The tenements include Exploration Licences, Prospecting Licences, General Purpose Leases, Miscellaneous Licences and Mining Leases. All of these tenements are held by Western Areas Limited or its wholly owned subsidiary Western Areas Nickel Pty Ltd. Western Areas Limited is a wholly owned subsidiary of IGO Limited. Many of these tenements were acquired from Outokumpu in 2002 or from Kagara Nickel Pty Ltd in March 2012. Some tenements are subject to various third-party agreements. For tenement M77/544, Western Areas Nickel Pty Ltd holds all metal rights apart from gold. One tenement (E74/603) is held by Western Areas Limited and covers ground previously covered by 14 tenements within the Great Western Joint Venture (JV). At present, interest in the Great Western joint venture is 90% Western Areas Limited and 10% Great Western Exploration. Tenements E77/1400 and E77/2099 were sold to Kidman Resources in 2017 and are now held by MH Gold Pty Ltd (50%) and SQM Australia Pty Ltd (50%). Western Areas Limited retains nickel rights on these two tenements. All tenements are in good standing. Five tenements are pending grant.
Exploration done by other parties	 Western Areas (now a subsidiary of IGO) has been exploring its wholly owned tenements since 2002. The tenements subject to the Kagara sale which took place in March 2012 were explored by Kagara since 2006, and by LionOre and St Barbara prior to that time. Western Areas has managed both the Mt Gibb JV since 2009 (Great Western Exploration explored the ground prior to that time) and the Lake King JV since 2007 (a small amount of work was carried out by WMC prior to that date).
Geology	- The deposits lie within the Forrestania Greenstone Belt, which is part of the Southern Cross Province of the Yilgarn Craton in Western Australia. The main deposit type is the komatiite hosted, disseminated to massive nickel sulphide deposits, which include the Flying Fox and Spotted Quoll deposits. The mineralisation occurs in association with the basal section of high MgO cumulate ultramafic rocks.



Section 2: Exploration Results – Flying Fox

JORC Criteria	Explanation
	- The greenstone succession in the district also hosts several orogenic lode gold deposits, of which the Bounty Gold Mine is the largest example.
Drill hole Information	- The Mineral Resource estimate is based on over 7,000 geologic entries derived from over 1,000 surface and underground DD holes over multiple domains and years of surface and underground drilling. All this information can be considered material to the Mineral Resource estimate and the exclusion of a summary of the data does not detract from the understanding of the report.
Data aggregation methods	 Standard length-weighted averaging of drill hole intercepts was employed. No maximum or minimum grade truncations were used in the estimation. The reported assays have been length and bulk density weighted. A lower nominal 0.4% Ni cut-off is applied during the geologic modelling process and later during the Mineral Resource estimate reporting process. No top-cut is applied. High grade intercepts internal to broader zones of mineralisation are reported as included intervals. No metal equivalent values are reported.
Relationship between mineralisation widths and intercept lengths	 The incident angles to mineralisation are considered moderate. Due to the often steep-dipping nature of the stratigraphy, reported downhole intersections are moderately greater (m/1.5 ratio on average) than the true width.
Balanced Reporting	- The Mineral Resource of Flying Fox is the most balanced view of the deposit.
Other substantive exploration data	- Only Mineral Resource estimation results are reported.
Diagrams	- A diagram of Flying Fox mine is included in the main body of this report.
Further work	- Exploration within the FNO tenements continues to evaluate the prospective stratigraphic succession containing the cumulate ultramafic rocks using geochemical and geophysical surveys and drilling.

Section 3: Mineral Resources

Section 3: Mineral Resources – Flying Fox

JORC Criteria	Explanation
Database integrity	 All data has been recorded in Excel templates with reference look-up tables. All data is imported into an acQuire relational database. Data validation is a fundamental part of the acQuire database and is implemented via referential integrity and triggers. Referential constraints ensure that, for example, Hole ID matches collar and downhole data. Triggers check criteria such as code validity, overlapping intervals, depth, and date consistencies. All fields of code data have associated look-up table references. Data was further validated using Datamine validation tools during the Mineral Resource estimation process.
Site visits	- The Competent Person has made many site visits to the Flying Fox deposit, with the first visit in 2008.
Geological interpretation	 Due to the spacing of drilling and the understanding of similar deposits within the Forrestania Ultramafic Belt, the geological interpretation is sound. The deposit is mainly located along the traditional footwall of the basal ultramafic metasediment contact, which was the original locus for sulphide deposition from an overlying pile of komatiite flows. Subsequent metamorphism, deformation, and intrusion of granitoid sills have contributed to a complex setting, with mineralisation now occupying a possible shear zone. The geological model is updated daily by a team of Mine Geologists based on detailed underground mapping of ore drives. Lithogeochemistry and stratigraphic interpretation have been used to assist the identification of rock types. No assumptions are made.



JORC Criteria	Explanation
	 Alternative interpretations of the Mineral Resource were considered. The previous model as well as the grade control model for the upper levels was extensively validated against the current geological and resource model. Alternative interpretations of mineralisation do not differ materially from the current interpretation. WSA has successfully planned and reconciled the deposit using a similarly derived geological and resource model. The Mineral Resource estimate is based on a robust geological model which is regularly updated. The hanging wall and footwall contacts of the mineralised zone were modelle with a level of confidence commensurate with the Mineral Resource classification category. The extents of the geological model were constrained by drill hole intercepts and extrapolation of the geologic contacts beyond the drill data was minimal for the Indicated category. Key factors affecting geologic continuity relate to pervasive felsic intrusive units and faults in the deeper parts of the Flying Fox orebody. The nugget effect associated with nick mineralisation in these types of deposits affects the grade continuity. The geological discontinuities have been modelled and the grade discontinuities have been accounted for in the estimation modelling.
Dimensions	- The strike length of the Flying Fox deposit varies considerably but is up to 750m in the T5 deposit. Distance from the top of T4 to the base of T5 is approximately 550m. The mean width of the deposit is 2.2m.
Estimation and modelling techniques	 Grade and ancillary element estimation using Ordinary Kriging and Inverse Power Distance (IPD) was completed using Datamine Studio 3 software. The methods were considered appropriate due to drill hole spacing and the nature of mineralisation. All estimation was completed at the parent cell scale, thereby avoiding any potential geostatistical support issues. Sample data was composited to 1m downhole lengths and flagged on domain codes. Metal balance validation tests were performed on the composites to ensure zero residual Top-out investigations were completed and no top-cuts were applied based on grade distribution, Coefficient of Variation, and a comparative analysis of the underground data the drill data. Sample data was flagged using domain codes generated from 3D mineralised wireframes. Qualitative Kriging Neighbourhood Analysis was used to determine the optimum search neighbourhood parameters. Directional variography was performed for nickel and selected ancillary elements. Nugget values are typical for the type of mineralisation (Ni = 20%-40% of the total variance). Ranges of continuity for nickel vary from 20m to 60m in the direction of preferred orientation of mineralisation. Estimation validation techniques included swath plots of the gra of the composites vs the grade of the block model. This Mineral Resource estimate is an update of a previous Mineral Resource estimate. No assumptions were made about the recovery of by-products in this estimate. WSA currently does not have any off-lake agreements in place for by-products. No elements are deleterious elements in the Flying Fox deposit. A proto model was constructed using a 2mE × 5mN × 5mRL parent size, with sub-cells. The parent cell size was selected based on orebody geometry, drill spacing and selective mining unit. Thereafter, individual block models were designed for each of the structural domains. The dips of the structural domains





Section 3: Mineral Resources – Flying Fox

JORC Criteria	Explanation
	 Validation of the block model included comparing the volume of domain boundary wireframes to block model volumes. It also involved comparing block model grades with drill hole grades by means of swath plots showing easting, northing and elevation comparisons. Jack-knifing and visual grade validations were undertaken. Grade and tonnage reconciliation of the previous model has been closely monitored over the past 12 months of underground mining and found to be within acceptable thresholds. The assumptions and methodologies used during this estimation are very similar to that of the previous model. Visual validation of the block model vs the drill hole data was undertaken in Datamine and Leapfrog. Based on a thorough validation and verification exercise, WSA is satisfied that the estimate is robust.
Moisture	- Tonnages were estimated on a dry basis.
Cut-off parameters	- The mineral envelope was determined using a nominal 0.4% Ni grade cut-off. The Mineral Resource is reported at a 0.4% Ni cut-off, which is a reasonable representation of the mineralised material prior to the application of variable economic and mining assumptions and an Ore Reserve cut-off.
Mining factors or assumptions	- The Flying Fox deposit is currently being mined using longhole stoping methods. The mining method, which is unlikely to change, has been considered during the estimation process.
Metallurgical factors or assumptions	 Ore from the Flying Fox deposit is currently being processed on site, where nickel concentrate is produced using a three-stage crushing, ball mill, and flotation and thickener/filtration system.
Environmental factors or assumptions	- All waste and process residue are disposed of through the Cosmic Boy concentrator plant and its tailings dam. All site activities are undertaken in accordance with WSA's environmental policy.
Bulk density	 Bulk density has been determined using a tried and tested nickel grade regression-based formula. Core at Flying Fox is generally void of vugs, voids and other defects. Rocks are from the granulate facies sequence and faults have largely been annealed. Porosity is considered low. Mineralisation is mainly restricted to a single material type (massive sulphide).
Classification	 The Flying Fox Mineral Resource is classified as Indicated and Inferred based on geologic understanding, drill hole spacing, underground development and Kriging quality parameters. No blocks are classified as Measured. The definition of mineralised zones is based on a high level of geological understanding. The model has been confirmed by infill drilling, supporting the original interpretation. The Competent Person is confident that all relevant factors have been considered in this estimate, relevant to all available data. The Mineral Resource estimate appropriately reflects the view of the Competent Person.
Audits or reviews	- This Mineral Resource estimate has been internally reviewed and has not been externally reviewed.
Relative Accuracy/Confidence	 The geological and grade continuity of the Flying Fox deposit is well understood and the mineralisation wireframes used to build the block model have been designed using all available exploration and mining data. Furthermore, previous estimates of grades have been tested by routine reconciliation of stockpile and mill grades to the current grade control and previous resource models. Post-processing block model validation was extensively undertaken using geostatistical methods before the Mineral Resource was reported. The statement relates to global linear estimates of tonnes and grade. The grade tonnage summary by Class is given in the accompanying report. Tonnes and grade estimates within the blocks are consistent with past production data.



Section 4: Ore Reserves

Section 4: Ore Reserves – Flying Fox

JORC Criteria	Explanation
Mineral Resource estimate for conversion to Ore Reserves	 The Mineral Resource estimate is described in Section 3 of Table 1. The Mineral Resource estimate is based on results from the grade control drilling program completed and updated mining data. The Mineral Resource estimate is inclusive of the Ore Reserves.
Site Visits	 Flying Fox has been an operating underground mine since 2005. The Competent Person carries out routine inspections of the mine site and underground workings as part of normal duties. The Company established a fit-for-purpose data collection and record keeping system which is used by the technical staff to effectively manage the operation. This data is used in the current Ore Reserves estimation. Mine design and mining method is based primarily on back-analysis data of the current mining practice.
Study Status	 The Ore Reserves are based on current operational practices at the mine. The Ore Reserve estimate was reported against the updated Mineral Resource block model. The previous owner, WSA, completed a feasibility study for T1 in 2004 and feasibility study for T5 in 2006. The T5 study has been updated with information from current practice and data from 17 years of mining experience recorded in WSA's system documents. The current Ore Reserves estimation is an update that considers the new Mineral Resources, the performance of the operation to date and a revised commodity price estimate.
Cut-off parameters	 An Ore Reserve cut-off grade of 0.8% Ni was selected to obtain an Ore Reserve that fits the following criteria: Minimum head grade meets mill requirements. Ore Reserve average grade equals or exceeds the LOM breakeven grade. Mean arsenic concentration enables production of a saleable concentrate. Maintains a positive NPV over the Forrestania LOM. Maximises steady-state production. LOM nickel price curve from US\$9.65/lb to US\$8.63/lb and FX from 0.67 to 0.74 LOM Some of the key Ore Reserve assumptions are considered commercially sensitive. However, as the mine has been in operation for some years, the Ore Reserve cut-off parameters are developed using historical operating performance and statistics. More details regarding cut-off parameters are reported in the following sections.
Mining factors or assumption	 The mining method used is a mix of direct AVOCA, reverse AVOCA longhole stoping with a bottom-up sequence and rock and cemented rock fill above the 425 level, and a longhole top-down sequence and paste filling of resultant voids below the 425 level. The mining model used Datamine software Studio UG and Enhanced Production Scheduler (EPS). Mining factors are based on historical operational performance. The Mineral Resource model used is in Datamine format. The model is based on the resource model for Flying Fox mine and is described in Section 3 of Table 1. In areas outside the MRE model grade control model has been used in some locations. A 2.0m minimum mining width is used. The average length of stable stopes is 20m. The average stope height is between 8m and 17m. Other geotechnical parameters are contained in the current Ground Control Management Plan. The planned stope dilution is 0.5m (hanging wall) and 0.25m (footwall). The unplanned dilution (from host rock and paste) is 19.2% above the 345 lv and 28.6% below this level in weight at 0% Ni.



Section 4: Ore Reserves – Flying Fox

JORC Criteria	Explanation
	 The standard SG for dilution is 2.8t/m³. Ore recovery is 89% above the 345 lv and 84% below the 345 lv in the stopes and 100% in the ore drives. The pillar factor for unplanned pillars is 2%. Production rates reflect current mining performances and practice. No Inferred Mineral Resource material has been used in the conversion to Ore Reserves. Being an operating mine, all infrastructure (apart from future capital development and external plants) is present and used on site, and allowance for new infrastructure, based on technical studies, is made in the CAPEX of the LOM.
Metallurgical factors or assumptions	 The metallurgical factors used are based on existing conventional nickel sulphide flotation techniques used at the Cosmic Boy concentrator, and historical data. Figures are considered commercially sensitive and can be made available on request. The metallurgical process is a well-tested technology for recovery of nickel sulphides and comprises three stages of fragmentation with wet screening for size classification, one milling stage with cyclone size classification and two stages of flotation including arsenic rejection. A small stream of the flotation feed is sent to the hydrometallurgical section of the concentrator that uses BioHeap® technology to improve the overall recovery. A small stream of the mill feed will be sourced via magnetic separation of the scats rejected. The resultant concentrate is sold into existing offtakes contracts with BHP, Jinchuan, Glencore and Sumitomo Metal Mining.
Environmental	 The Flying Fox mining operations received final environmental approval to mine nickel sulphide ore as an underground operation in December 2004. Approvals were provided under Western Australian legislation, initially being the <i>Mining Act 1978</i> and later Part V of the <i>Environmental Protection Act 1986</i> (EP Act). Since then, several other Mining Act approvals relating to the deepening of the Flying Fox mine and the extension of surface infrastructure required for mining operations have been sought and received. Additional approvals under Part V of the EP Act have also been sought in the form of Works Approvals and Prescribed Premises Licence amendments for various types of mining-related infrastructure. Other relevant approvals from state and local government include endorsements to produce drinking water via reverse osmosis and store it on site, licences to construct habitable buildings, and licences to construct and operate septic wastewater treatment facilities.
Infrastructure	 Flying Fox is an operating mine with adequate infrastructure, and allowance for planned future capital project extensions is included in the LOM plan. Power for the site is supplied by Western Power via a 33kV overhead powerline from the Bounty switchyard (60km north of the site). Potable water is produced from reverse osmosis plants located at the Cosmic Boy concentrator and pumped via a pipeline to the site. Process water is recycled from the mine dewatering network. Transportation of bulk material is by conventional truck haulage. Mine personnel reside at the nearby Cosmic Boy Village (529 rooms) and are mainly a FIFO (via Cosmic Boy airstrip) workforce with a small component of DIDO. The mine site is 80km to the east of the Hyden township and has two main gazetted gravel road accesses (east from Hyden and south from Varley).
Costs	 Capital underground development costs are derived from the LOM plan and are based on existing contracts and historical performance data. All other capital costs are sourced as necessary via quotes from suppliers, or from technical studies. Operating costs (mining, processing, administration, surface transport, concentrate logistics and state royalties) are based on existing cost estimates. The nickel price and FX assumptions used were sourced from industry standard sources. LOM nickel price curve from US\$9.65/lb to US\$8.63/lb and FX from 0.67 to 0.74 LOM. NSR factors were sourced from existing concentrate offtake contracts.
Revenue factors	- These have been selected after consideration of historical commodity prices variations over time and the requirement for the Reserve to be robust to potentially volatile commodity price and FX conditions.





JORC Criteria	Explanation
	 The price setting mechanism for the sale of product subject to this report is traded openly on the LME. Potential penalties and NSR factors are included in the Smelter Return factor used. The Smelter Return is based on the historical data from previous FY's and is considered commercially sensitive by the company and may be made available on request. Two main selling contract structures are currently used by IGO. Both have co-product payable T&Cs. Allowance for this selling parameter is included in the Smelter Return factor
Market assessment	 Nickel is traded openly on the London Metal Exchange (LME). The Company has maintained long-term and short-term offtake agreements with multiple customers, both locally and internationally, over many years. The contracts have fixed dates on which they are reviewed and/or expire. The Ore Reserve estimate assumes these contracts and the current sold volumes will extend to the end of LOM. Existing contracts have been assessed for the sales volume assumptions. As the Company has been supplying multiple customers over a lengthy time period, no acceptance testing has been assumed in the Ore Reserve development process. Refer to the section above (Revenue factors) for nickel price assumptions.
Economic	 Having been operational for a long period of time, there are established contracts in place for ore mining, processing and concentrate haulage. Furthermore, the Forrestania operation has an operating concentrator facility on site. As such, the actual operating and contract rates (including rise and fall where appropriate) have been used in the NPV economic assessments. Figures are considered commercially sensitive. The discount rate has been estimated as the weighted average cost of capital.
Social	 All legal permits to mine Flying Fox have been obtained, following the paths described by the relevant laws with the participation of local communities (see previous points). As a company policy, relationships with local communities are a key part of operational management.
Other	- Other than risks inherent to all mining operations and the mining industry in general, there are no risk factors relevant to the Flying Fox operations and/or the estimation of Ore Reserves.
Classification	 As of 30 June 2023, the Flying Fox deposit has Probable Ore Reserves of 0.1Mt ore tonnes at 1.90% for 1.4 kt nickel tonnes including stockpiles. The Ore Reserve appropriately reflects the Competent Person's view of the deposit.
Audits and reviews	- Audits and/or reviews of the current Ore Reserve estimate have not been done because confidence in the data used and the continued performance of the operation is high.
Discussion of relative accuracy/ confidence	 The confidence in the current evaluation is based on Flying Fox being a well-established operating mine with a mature performance database. As is normal in mining operations, the key points that can have a significant impact on the performance of the Spotted Quoll operation are market conditions in general, and the nickel price and the currency exchange rate in particular. All the other parameters are derived from sound historical production data.



Forrestania: Spotted Quoll JORC Code Table 1

Section 1: Sampling techniques and data

Section 1: Sampling techniques and data – Spotted Quoll

JORC Criteria	Explanation
Sampling techniques	 The Spotted Quoll deposit was sampled using DD and RC drill hole on a nominal 50m by 30m grid spacing as well as underground channel sampling in a limited area. Although all available valid data was used to design the geological model, only DD hole data was used to estimate the grade and ancillary variables into the resource model. A total of 7,082 DD drill composites derived from approximately 700 drill holes were used to estimate the grades. This represents a drilling pattern smaller than 40m by 40m over the full extent of the deposit. Holes were generally drilled perpendicular (west) to the strike (north south) of the stratigraphy, at angles ranging between 60° and 75°. Closely spaced underground channel samples, where available, were used as part of the final block model validation process but were not used to estimate grades into the block model. Samples have been collected since discovery in 2007 in accordance with WSA protocols and sample representativity is assured by an industry standard QAQC program as discussed in a later section of this tabular summary. All samples are prepared and assayed by an independent commercial laboratory whose analytical instruments are regularly calibrated. DD core was marked at 1m intervals and sample lengths were typically also 1m. Sampling boundaries were selected to match the main geological and mineralisation boundaries. Core was cut in half by diamond saw blades and one half quartered, with a quarter stored for assay and a quarter preserved as a geological archive. Samples from reverse circulation (RC) drilling consisted of chip samples at 1m intervals from which 3kg was pulverised to produce a sub-sample for assaying as per the DD samples.
Drilling techniques	 DD comprises NQ2-sized core. The core was oriented using ACT II control panels and ACT III downhole units. RC drilling comprises 140mm diameter face sampling hammer drilling. A standard tube is used in most cases unless core recovery issues are expected when triple tube is used (typically in the oxidised zones).
Drill sample recovery	 DD core and RC recoveries are logged and recorded in the database. Overall recoveries are >95% and there are no core loss issues or significant sample recovery problems. DD core is reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the drillers. RC samples were visually checked for recovery, moisture, and contamination. The resource grades are derived from high quality DD core drilling, with core recoveries in excess of 95%. The massive sulphide style of mineralisation and the consistency of the mineralised intervals are considered to preclude any issue of sample bias due to material loss or gain.
Logging	 Geological and geotechnical logging was carried out on all DD drill holes for recovery, rock quality designation (RQD) and number of defects (per interval). Information on structure type, dip, dip direction, alpha angle, beta angle, texture, shape, roughness, and fill material are stored in the structure table of the database. Sufficient data has been collected and verified to support the current Mineral Resource estimate. Logging of DD core and RC samples recorded lithology, mineralogy, mineralisation, structural (DD only), weathering, colour, and other features of the samples. Core was photographed in both dry and wet form. All drill holes were logged in full of the collar position to the end of the hole position.



Section 1: Sampling techniques and data – Spotted Quoll

JORC Criteria	Explanation
Sub-sampling techniques and sample preparation	 Core is cut in half on site (with the exception of underground grade control core) by diamond saw blades. Surface derived drill holes are halved again, with one quarter sent for assay and one quarter preserved as a geological archive. Underground exploration derived drilling core is not halved again. Half of the cut core is sent for assay and the other half is preserved as a geological archive. Underground grade control derived drilling core is not cut. Full core is sent for assay. All core is prepared and assayed by an independent commercial certified laboratory. Samples are crushed, dried, and pulverised to produce a sub sample for analysis by four-acid digest with an ICP-AES finish. All samples were collected from the same side of the core. RC samples were collected using a riffle splitter. All samples were collected using a riffle splitter. All sample preparation of DD core follows industry best practice in sample preparation, involving oven drying, coarse crushing of the quarter core sample down to ~10mm, followed by pulverisation of the entire sample (total prep) using LM5 grinding mills to a grind size of 90% passing 75 µm. The sample preparation for RC samples is identical, without the coarse crush stage. WSA included field Ni standards ranging from 0.7% to 8.4% Ni that were routinely submitted with sample batches in order to independently monitor analytical performance. Standards were fabricated and prepared by Gannet Holdings, Perth, using high-grade nickel sulphide ore sourced from the Silver Swan mine. Field duplicates were staken on a 15% by volume basis. Duplicate quarter samples were sent to a commercial independent certified laboratory. The sample sizes are considered appropriate to correctly represent the sulphide mineralisation at Spotted Quoll based on the style of mineralisation, the thickness and consistency of the intersections, the sampling methodology an
Quality of assay data and laboratory tests	 All samples used in the Mineral Resource estimate were assayed by an independent certified commercial laboratory experienced in the preparation and analysis of nickel-bearing ores. Samples were dissolved using four-acid digest (nitric, perchloric, hydrofluoric and hydrochloride acids) to destroy silica. Samples were analysed for Al (0.01%), As (5), Co (1), Cu (1), Fe (0.01%), Cr (1), Mg (0.01%), Ni (1), S (0.01%), Ti (0.01%) and Zn (1) using Method ME-ICP61 (detection limit in brackets, values in parts per million (ppm) unless stated). All samples reporting >1% Ni were re-assayed by the OG62 method. No geophysical tools or handheld XRF instruments were used to determine any element concentrations that were subsequently used for Mineral Resource estimation purposes. Standards and blanks were routinely used to assess company QAQC (approx. 1 standard for every 12-15 samples). Duplicates were taken on a 15% by volume basis; field-based umpire samples were assessed on a regular basis. Accuracy and precision were assessed using industry standard procedures such as control charts and scatter plots. Results indicated no material issues associated with sample preparation and analytical error; in occasional cases where a sample did not meet the required quality threshold, the entire batch was re analysed.
Verification of sampling and assaying	 Newexco Services Pty Ltd (Newexco) independently visually verified significant intersections in most of the DD core. No holes were specifically twinned, but there are several holes near each other, and the resultant assays and geological logs were compared for consistency. Primary data was collected using Excel templates using look-up codes on laptop computers. All data were validated by the supervising geologist and sent to Newexco for validation and integration into an SQL database. No adjustments were made to assay data compiled for this estimate.
Location of data points	- Hole collar locations were surveyed by WSA surveyors. The Leica GPS1200 used for all surface work has an accuracy of +/- 3cm.



Section 1: Sampling techniques and data – Spotted Quoll

JORC Criteria	Explanation
	 A two-point transformation is used to convert the data from MGA50 to Local Grid & vice versa. Points used in transformation: MGA50 Points yd1='6409502.17' xd1='752502.175' yd2='6409397.856' xd2='753390.591' Local Grid Points ym1='28223.59'xm1='33528.771'ym2='28111.84'xm2='34415.995' The accuracy of the pillars used in WSA's topographical control networks is within the Mines Regulations accuracy requirement of 1:5,000 for control networks.
Data spacing and distribution	 Drill holes were spaced at an approx. 30m (northing) × 30m grid for the areas that will be affected by mining in the next two years and nominally 60m × 60m for areas that will be affected by mining in the subsequent years. The previous estimate and the extensive drill program, coupled with information derived from previous open pit and underground mining at Spotted Quoll, has demonstrated sufficient and appropriate continuity for both geology and grade within the deposit to support the definition of Mineral Resources, and the classification (Indicated and Inferred) applied. No material has been classified as Measured. Samples were composited to 1m lengths, adjusting to accommodate residual sample lengths.
Orientation of data in relation to geological structure	 The Spotted Quoll deposit strikes at approximately 030° and dips nominally 50° to the east. All drilling was conducted from east to west. Most of the drilling was conducted from the hanging wall, i.e., from the east to the west. Results from an independent structural study on the deposit along with historical regional and near-mine structural observations complemented the detailed structural core logging results to provide a geological model that was used with an appropriate level of confidence for the classification applied under the 2012 JORC Code. No orientation-based sampling bias has been observed in the data.
Sample security	- All core samples were delivered from site to Perth and then to the assay laboratory by an independent transport contractor.
Audits or reviews	 No formal external audit of the Mineral Resource has been undertaken to date. Independent consultants assisted with the geological and resource modelling. The sampling techniques are standard practice at IGO; these were implemented over seven years ago and have been subject to independent reviews during this time.

Section 2: Exploration Results

Section 2: Exploration Results – Spotted Quoll

JORC Criteria	Explanation
Mineral tenement and land tenure status	 Forrestania Nickel Operation (FNO) comprises 93 tenements covering approximately 900 km2 within the Central Yilgarn Province. The tenements include Exploration Licences, Prospecting Licences, General Purpose Leases, Miscellaneous Licences and Mining Leases. All of these tenements are held by Western Areas Limited or its wholly owned subsidiary Western Areas Nickel Pty Ltd. Western Areas Limited is a wholly owned subsidiary of IGO Limited. Many of these tenements were acquired from Outokumpu in 2002 or from Kagara Nickel Pty Ltd in March 2012. Some tenements are subject to various third-party agreements. For tenement M77/544, Western Areas Nickel Pty Ltd holds all metal rights apart from gold. One tenement (E74/603) is held by Western Areas Limited and covers ground previously covered by 14 tenements within the Great Western Joint Venture (JV). At present, interest in the Great Western joint venture is 90% Western Areas Limited and 10% Great Western Exploration. Tenements E77/1400 and E77/2099 were sold to Kidman Resources in 2017 and are now held by MH Gold Pty Ltd (50%) and SQM Australia Pty Ltd (50%). Western Areas Limited retains nickel rights on these two tenements.



JORC Criteria	Explanation
	- All tenements are in good standing.
	Five tenements are pending grant.
Exploration done by other parties	 Western Areas explored its wholly owned tenements since 2002. The tenements subject to the Kagara sale which took place in March 2012 were explored by Kagara since 2006, and by LionOre and St Barbara prior to that time. Western Areas has managed both the Mt Gibb JV since 2009 (Great Western Exploration explored the ground prior to that time) and the Lake King JV since 2007 (a small amount of work was carried out by WMC prior to that date).
Geology	 The Forrestania deposits lie within the Forrestania Greenstone Belt, which is part of the Southern Cross Province of the Yilgarn Craton in Western Australia. The main deposit type is the komatiite hosted, disseminated to massive nickel sulphide deposits, which includes the Flying Fox and Spotted Quoll deposits currently being mined. The mineralisation occurs in association with the basal section of high MgO cumulate ultramafic rocks. The greenstone succession in the district also hosts several orogenic lode gold deposits of which Bounty Gold Mine is the largest example. Some exploration for this style of deposit is undertaken by Western Areas from time to time in the FNO tenements.
Drill hole Information	- The Mineral Resource estimate is based on over 6,800 geologic entries derived from over 700 surface and underground DD holes over multiple domains and years of surface and underground drilling. All information was considered material to the Mineral Resource estimate and the exclusion of a summary of the data does not detract from the understanding of the report.
Data aggregation methods	 Standard length-weighted averaging of drill hole intercepts was employed. No maximum or minimum grade truncations were used in the estimation. The reported assays have been length and bulk density weighted. A lower nominal 0.4% Ni cut-off is applied during the geologic modelling process and later during the Mineral Resource estimate reporting process. No top-cut is applied. High grade intercepts internal to broader zones of mineralisation are reported as included intervals. No metal equivalent values are reported.
Relationship between mineralisation widths and intercept lengths	 The incident angles to mineralisation are considered moderate. Due to the often steep-dipping nature of the stratigraphy, reported downhole intersections are moderately greater (m/1.5 ratio on average) than the true width.
Diagrams	- Refer to figures in the report.
Balanced reporting	- Only Mineral Resource estimation results are reported.
Other substantive exploration data	 This is a Mineral Resource estimate summary and no Exploration Results are reported as such. Multi-element analysis was conducted routinely on all samples for a base metal suite and potentially deleterious elements, including AI, As, Co, Cr, Cu, Fe, Mg, Ni, S, Ti, Zn and Zr. All DD core samples were measured for bulk density which ranges from 2.90 to 4.79 g/cm³ for values >0.5% Ni. Geotechnical logging was carried out on all DD drill holes for recovery, defects, and rock quality designation (RQD). Information on structure type, dip, dip direction, alpha and beta angles, texture, shape, roughness, and fill material is stored in the structural logs in the database.
Further work	- Exploration within the Forrestania's tenements continues to evaluate the prospective stratigraphic succession containing the cumulate ultramafic rocks using geochemical and geophysical surveys and drilling.





Section 3: Mineral Resources

Section 3: Mineral Resources – Spotted Quoll

JORC Criteria	Explanation
Database integrity	 All data has been recorded in Excel templates with reference look-up tables. All data are imported into an acQuire relational database. Validation is a fundamental part of the acQuire data model and is implemented via referential integrity and triggers. Referential constraints ensure that, for example, Hole ID matches collar and downhole data. Triggers check criteria such as code validity, overlapping intervals, depth, and date consistencies. All fields of code data have associated look-up table references.
Site visits	- Andre Wulfse, who is the Competent Person, is the Group Resource Manager for Western Areas and has made many site visits to the Spotted Quoll deposit. His first visit to the deposit was in 2008.
Geological interpretation	 Confidence in the geological interpretation is high, due to the history of mining, the spacing of drilling and the understanding of similar deposits within the Forrestania Ultramatic Bett. The deposit is located within the traditional footwall of the basal ultramatic metasediment contact, which was probably the original locus for sulphide deposition from an overlyin pile of komatite flows. Subsequent metamorphism, deformation, and intrusion of granitoid sills has contributed to a complex setting, with mineralisation now occupying a possible shear zone within the footwall sediments, 15-20m (stratigraphical) beneat the basalfultramatic contact. The deposit is principally a body of matrix magmatic sulphide mineralisation in which the original pentlandite and pyrhotite assemblage thas been overprinted by arsenic-bearin assemblages dominated by gersdorffite and minor nickeline. Sulphide abundances of 20% to 90% are common. Mean nickel grades of ore intersections are in the order of 4% to 12% Ni. Lithogeochemistry and stratigraphic interpretation have been used to assist the identification of rock types. Alternative interpretations of the Mineral Resource were considered. In particular, the previous model and the grade control models were extensively validated against the current geological and resource model. WSA has successfully mined the deposit using a similarly derived geological and resource model. WSA has successfully mined the deposit using orientation in Zone 4. This caused a re-interpretation of Zone 4, introducing several structural offsets not previously modelled. This structural interpretation in Zone 4 found that the major structural orientations had changed from a predominantly shallow dipping westerly orientation in Zone 4. This caused a re-interpretation of Zone 4, introducing several structural offsets not previously modelled. This structural interpretation was reviewed and accepted by SRK in earl



Section 3: Mineral Resources – Spotted Quoll

JORC Criteria	Explanation
	 A core of massive, matrix and brecciated sulphides was constructed to define a hard geological boundary with associated higher grades. The high-grade core is a clearly define unit in both drill core and underground development with sharp contacts, whereas the outer domain can be less defined with gradational contacts. Key factors affecting continuity relate to pervasive felsic intrusive units and faults. The geological discontinuities have been modelled and the grade discontinuities have been accounted for in the estimation modelling.
Dimensions	 The strike length of the Mineral Resource is nominally 300m on average, with a range of 25m to 520m, depending on depth below surface. The nominal mean dip length is 1,500m. The elevation (RL) below the pre-existing pit is 1250mRL and the maximum depth of the Mineral Resource is 250mRL. The mean thickness of the mineralised zone is 3.1m, wit a maximum thickness of 13.4m.
Estimation and modelling techniques	 In addition to the major structural domains discussed previously, further subdomains for arsenic and nickel grade were identified in Zones 1-4 based on the updated structural interpretation and geological modelling of the ultramatic unit adjacent to the mineralisation. Six nickel subdomains and seven arsenic subdomains were defined, supported by material differences in the modelled mean grade between the domains. Grade and ancillary element estimation into the mineralised domains using Ordinary Kriging and Inverse Power Distance (IPD) was completed using Datamine and Supervisor software. The methods were considered appropriate due to drill hole spacing and the nature of mineralisation. Sample data was composited to 1m downhole lengths. Intervals with no assays were treated as null values. Top-cut investigations were completed, and top-cuts were applied to arsenic based on grade distribution and Coefficient of Variation. Nickel grades were not cut, except for a single composite outiler that was identified in Zone 3 via a swath plot which had an undue influence on the block grades in the area. The outile was cut form 16% Ni to 9% Ni in ine with the immediate surrounding samples. Sample, wireframe, and block model data were flagged using domain and weathering codes generated from 3D mineralised wireframes. Extensive Exploratory Data Analysis (EDA) was carried out on the raw and composite data in order to understand the distribution in preparation for estimation and to validate th composite data gains the raw data. EDA included Histograms, Log Probability plots and Mean and Variance plots for each of the domains and sub-domains. Qualitative Kriging Neighbourhood Analysis was used to determine the optimum search neighbourhood parameters. Directional variography was performed for nickel and selected ancillary elements. Nugget values are typical for the type of min



JORC Criteria	Explanation
	 Arsenic is considered a deleterious element as it can have an adverse effect on nickel recovery if not properly managed during the blending process. Arsenic was routinely assayed with nickel and was subsequently modelled and estimated into the block model using mutually exclusive domains to that of nickel. Other non-grade elements were estimated into the block model. The block model was constructed using a 2mE × 5mN × 5mRL parent size, with sub-cells. All estimation was completed at the parent cell scale, thereby avoiding any potential geostatistical support issues. The size of the search ellipse varies and is based on the drill hole spacing and domain dimensions. No selectivity was built into the model on the basis that full extraction of the ore zone using longhole and airleg stoping is expected. Known correlation between density and nickel grade was used to estimate to nnages. The geological interpretation was developed using geological, structural, and litho-geochemical elements. The geological framework associated with extrusive komatiite-hosted deposits, and the structural elements observed at the local and wider scale, were used to determine, and refine mineral domains. The hanging wall and footwall contacts of mineralisation were used as hard boundaries during the estimation process and only blocks within the geological wireframe were informed with nickel grades. Geostatistical and visual investigation of the grade distribution negated the need for grade cutting or capping. Validation techniques included comparing the volume of resource wireframes to block model volumes. It also involved comparing block model included comparing the volume of resource wireframes to block model volumes. Estimation validation techniques included swath plots of the grade of the composites vs the grade of the block model as shown below. Visual grade validations using Datamine, Supervisor and
Moisture	 Tonnages were estimated on a dry basis.
Cut-off parameters	 The outer halo mineral envelope was constructed using a nominal 0.8% Ni grade cut-off and the high grade core using massive, matrix and brecciated sulphides. The Mineral Resource is reported at a 0.4% Ni cut-off, which is a reasonable representation of the mineralised material prior to the application of economic and mining assumptions and an Ore Reserve cut-off. The Spotted Quoll mineralisation tenor is relatively high compared to other komatiite-hosted deposits, and hence the use of a lower cut-off grade is appropriate.
Mining factors or assumptions	 The Spotted Quoll deposit is currently being mined primarily using longhole stoping methods with paste fill. The mining method, which is unlikely to change, has been considered during the estimation process. The Mineral Resource was depleted against mining.
Metallurgical factors or assumptions	 Ore from the Spotted Quoll deposit is currently being processed on site, where nickel concentrate is produced using a three-stage crushing, ball mill, and flotation and thickener/filtration system. Arsenic rejection in the flotation circuit has been modelled based on current and historical operational performance.
Environmental factors or assumptions	 All waste and process residue will be disposed of through the Cosmic Boy concentrator plant and its tailings dam. All site activities will be undertaken in accordance with WSA's environmental policy.
Bulk density	 There is a strong correlation between nickel and bulk density at Forrestania and a robust nickel grade regression formula was used to estimate bulk density into the blocks. Core at Spotted Quoll is generally void of vugs, voids and other defects. Rocks are from the amphibolite facies and faults have largely been annealed. Porosity is considered low.





Section 3: Mineral Resources – Spotted Quoll

JORC Criteria	Explanation
	- The bulk density values were estimated into the block model using the same search parameters that were used to interpolate nickel within the geological domains.
Classification	 The Spotted Quoll Mineral Resource is classified as Indicated and Inferred on the basis of drill hole spacing and Kriging efficiency. Only blocks that are between existing ore drives are classified as Measured. The definition of mineralised zones is based on a high level of geological understanding. The model has been confirmed by infill drilling, supporting the original interpretations. All relevant factors have been considered in this estimate. The Mineral Resource Estimate appropriately reflects the view of the Competent Person who is now a full-time employee of IGO and has been working on the deposits since 2008, both as a consultant and an employee.
Audits or reviews	- No audit has been undertaken on the current Mineral Resource estimate to date, but the model was designed with the assistance of independent consultants.
Discussion of relative accuracy/ confidence	 The geological and grade continuity of the Spotted Quoll deposit is well understood, and the mineralisation wireframes used to build the block model have been designed using all available exploration and mining data. Post-processing block model validation was extensively undertaken using geostatistical methods. The Mineral Resource statement relates to local estimates of tonnes and grade. The Mineral Resource estimate was compared to the production grade control data. The upper section of the deposit has been mined by open pit methods and underground mining has been in place for over five years.

Section 4: Ore Reserves

Section 4: Ore Reserves – Spotted Quoll

JORC Criteria	Explanation
Mineral Resource estimate for conversion to Ore Reserves	 The Mineral Resource estimate is described in Section 3 of Table 1. The Mineral Resource estimate is based on results from the grade control drilling program completed and updated mining data. The Mineral Resource estimate is inclusive of the Ore Reserves.
Site visits	 Spotted Quoll has been an operating underground mine since 2010. The Competent Person carries out routine inspections of the mine site and underground workings as part of normal duties. The Company established a fit-for-purpose data collection and record keeping system which is used by technical staff to effectively manage the operation. These data are used in the current Ore Reserves estimation. The mine design and mining method are based on recommendations laid out in the updated feasibility study and back-analysis data from the current mining practice.
Study status	 The Ore Reserves are based on current operational practices at the mine. The Ore Reserve estimate was reported against the updated Mineral Resource block model. A feasibility study was completed in November 2010 under the previous owner (Western Areas Limited) as a continuation of the Spotted Quoll open pit (released 15 December 2010). Underground mining commenced on 2 May 2010 with firing of the first portal face. The feasibility study is still valid and has been updated with the operational experience gained. The current Ore Reserve estimate is an update that considers the new Mineral Resources, the performance of the operation to date and a revised commodity price estimate.

Section 4: Ore Reserves – Spotted Quoll

JORC Criteria	Explanation
Cut-off parameters	 A 1% Ni cut-off grade for Ore Reserve reporting was selected as it fits the following criteria: Minimum head grade meets mill requirements. Ore Reserve average grade equals or exceeds the LOM breakeven grade. Mean arsenic concentration enables production of a saleable concentrate. Maintains a positive NPV over the Forrestania LOM. Maximises steady-state production. LOM nickel price curve from US\$9.65/lb to US\$8.63/lb and FX from 0.67 to 0.74 LOM. Some of the key Ore Reserve assumptions are considered commercially sensitive. However, as the mine has been in operation for some years, the Ore Reserve cut-off parameters are developed using historical operating performance and statistics. More details regarding cut-off parameters are reported in the following sections.
Mining factors or assumptions	 The mining method used is predominantly longhole stoping with a top-down sequence and paste filling of resultant voids. The mining model used Datamine software 5D Planner and Enhanced Production Scheduling (EPS). Mining factors are based on historical operational performance. The Mineral Resource model used is in Datamine format. The model is based on the resource model for Spotted Quoll mine and is described in Section 3 of Table 1. A 3.0 m minimum mining width is used. The average length of stable stopes is between 10m and 30m. The average stope height is between 7m and 15m. Other geotechnical parameters are contained in the current Ground Control Management Plan. The planned dilution (from host rock and paste) is 8.0% in weight at 0% Ni. The standard SG for dilution is 0.5m (hanging wall) and 0.1–0.2m (footwall). Unplanned dilution (from host rock and paste) is 8.0% in weight at 0% Ni. The standard SG for dilution is 2.8t/m³. A grade of 0% Ni is assigned to all material outside the block model. Ore recovery is 98%, and metal recovery is 98%. The pillar factor for unplanned pillars is 0%. Production rates reflect current mining performances and practice. No Inferred Mineral Resource material has been used in the conversion to Ore Reserves. Being an operating mine, all infrastructure (apart from future capital development and external plants) is present and used on site, and allowance for new infrastructure, based on technical studies, is made in the CAPEX of the LOM.
Metallurgical factors or assumptions	 The metallurgical factors used are based on existing conventional nickel sulphide flotation techniques used at the Cosmic Boy concentrator, and historical data. Figures are considered commercially sensitive and can be made available on request. The metallurgical process is a well-tested technology for recovery of nickel sulphides and comprises three stages of fragmentation with wet screening for size classification, one milling stage with cyclone size classification and two stages of flotation including arsenic rejection. A small stream of the flotation feed is sent to the hydrometallurgical section of the concentrator that uses BioHeap® technology to improve the overall recovery. A small stream of the mill feed will be sourced via magnetic separation of the scats rejected. The resultant concentrate is sold into existing offtakes contracts with BHP, Jinchuan, Glencore and Sumitomo Metal Mining.
Environmental	- The Spotted Quoll open pit mine received final environmental approval in October 2009. Approvals were provided under both Western Australian legislation, principally being Parts IV and V of the <i>Environmental Protection Act 1986</i> (EP Act) and the <i>Mining Act 1978</i> , and Commonwealth legislation, being the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act). Environmental approval to mine nickel sulphide ore from the underground extension of the Spotted Quoll open cut mine has also been







JORC Criteria	Explanation
	granted under Western Australian legislation, being principally Parts IV and V of the EP Act and the Mining Act. No further approval was required from the Commonwealth for underground mining at Spotted Quoll. - A list of key State and Commonwealth approvals obtained for both the Spotted Quoll open pit and the underground operations can be made available on request.
Infrastructure	 Spotted Quoll is an operating mine with adequate infrastructure, and allowance for planned future capital project extensions is included in the LOM plan. Power for the site is supplied by Western Power via a 33kV overhead powerline from the Bounty switchyard (60km north of the site). Potable water is produced from reverse osmosis plants located at the Cosmic Boy concentrator and pumped via a pipeline to the site. Process water is recycled from the mine dewatering network. Transportation of bulk material is by conventional truck haulage. Mine personnel reside at the nearby Cosmic Boy Village (529 rooms) and are mainly a FIFO (via Cosmic Boy airstrip) workforce with a small component of DIDO. The mine site is 80km to the east of the Hyden township and has two main gazetted gravel road accesses (east from Hyden and south from Varley).
Costs	 Capital underground development costs are derived from the LOM plan and are based on existing contracts and historical performance data. All other capital costs are sourced as necessary via quotes from suppliers, or from technical studies. Operating costs (mining, processing, administration, surface transport, concentrate logistics and state royalties) are based on existing cost estimates. The nickel price and FX assumptions used were obtained from industry standard sources. LOM nickel price curve from US\$9.65/lb to US\$8.63/lb and FX from 0.67 to 0.74 LOM. NSR factors were sourced from existing concentrate offtake contracts.
Revenue factors	 Revenue factors have been selected after consideration of historical commodity prices variations over time and the requirement for the Ore Reserve to be robust against potentially volatile commodity price and FX conditions. The product is traded openly on the LME. Potential penalties and net smelter revenue factors are included in the smelter return factor used. The smelter return is based on the historical data from previous financial years. It is considered commercially sensitive and can be made available on request. Two main selling contracts structures are currently used; both have co-product payable T&Cs. Allowance for this selling parameter is included in the smelter return factor.
Market assessment	 Nickel is traded openly on the LME. The Company has maintained long-term and short-term offtake agreements with multiple customers, both locally and internationally, over many years. The contracts have fixed dates on which they are reviewed and/or expire. The Ore Reserve estimate assumes these contracts and the current sold volumes will extend to the end of LOM. Existing contracts have been assessed for the sales volume assumptions. As the Company has been supplying multiple customers over a lengthy time, no acceptance testing has been assumed in the Ore Reserve development process. Refer to the section above (Revenue factors) for nickel price assumptions.
Economic	 Having been operational for a long period of time, there are established contracts in place for ore mining, processing and concentrate haulage. Furthermore, the Forrestania operation has an operating concentrator facility on site. As such, the actual operating and contract rates (including rise and fall where appropriate) have been used in the NPV economic assessments. Figures are considered commercially sensitive. The discount rate has been estimated as the weighted average cost of capital.
Social	 All legal permits to mine Spotted Quoll have been obtained, following the paths described by the relevant laws with the participation of local communities (see previous points). As a company policy, relationships with local communities are a key part of operational management.



Section 4: Ore Reserves – Spotted Quoll

JORC Criteria	Explanation
Other	- Other than risks inherent to all mining operations and the mining industry in general, there are no risk factors relevant to the Spotted Quoll operations and/or the estimation of Ore Reserves.
Classification	 On 30 June 2023, the Spotted Quoll deposit has Probable Ore Reserves of 0.4 Mt grading 3.17% Ni for 12.0kt nickel tonnes. The Ore Reserve appropriately reflects the Competent Person's view of the deposit.
Audits or reviews	- Audits and/or reviews of the current Ore Reserve estimate have not been done because confidence in the data used and the continued performance of the operation is high.
Discussion of relative accuracy/ confidence	 The confidence in the current evaluation is based on Spotted Quoll being a well-established, operating mine with a mature performance database. As is normal in mining operations, the key points that can have a significant impact on the performance of the Spotted Quoll operation are market conditions in general, and the nickel price and the currency exchange rate. All the other parameters are derived from sound historical production data.



Forrestania: New Morning/Daybreak JORC Code Table 1

Section 1: Sampling techniques and data

Section 1: Sampling techniques and data – New Morning/Daybreak

JORC Criteria	Explanation
Sampling techniques	- NMDB was sampled using diamond drill and reverse circulation (RC) drilling on various grid spacings as shown below for the main and hangingwall mineralisation.
Drilling techniques	 Diamond drilling comprised NQ2 sized core. The core was oriented using ACT II control panels and ACT III downhole units. RC drilling comprised 140 mm diameter face sampling hammer drilling. RAB holes were used to assist in geological domain analysis but were not used for Mineral Resource estimation purposes.
Drill sample recovery	 Diamond core and RC recoveries were logged and recorded in the database. Overall recoveries were >99% and there were no core loss issues or significant sample recovery problems. Diamond core was reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths were checked against the depth given on the core blocks and driller routinely carried out rod counts. RC samples were visually checked for recovery, moisture, and contamination. A short-hole diamond drilling program was specifically designed and drilled in 2015 to test the mineralisation in the oxidised zone. These holes were drilled using large diameter barrels with triple tubes to avoid core loss. The holes are shown below. The resource grades were derived from diamond core drilling with core recoveries in excess of 99%. The style of mineralisation and the consistency of the mineralised intervals were considered to preclude any issue of sample bias due to material loss or gain.
Logging	 Geological and geotechnical logging was carried out on all diamond drill holes for recovery, RQD and number of defects (per interval). Information on structure type, dip, dip direction, alpha angle, beta angle, texture, shape, roughness and fill material are stored in the structure table of the database. Sufficient data were collected and verified to support the current Mineral Resource estimate. Logging of diamond core and RC samples recorded lithology, mineralogy, mineralisation, structural (diamond drill holes), weathering, colour and other features of the samples. Core was photographed in dry and wet forms. All drill holes were logged in full, from the collar position to the end-of-hole position.
Sub-sampling techniques and sample preparation	 Samples have been collected since discovery in 2007 in accordance with the Company's protocols and sample representativity is assured by an industry standard QAQC program. The diamond drill core was marked at 1 m intervals and sample lengths were typically also 1 m. Sampling boundaries were selected to match the main geological and mineralisation boundaries. Core was cut in half by diamond saw blades and one half was quartered. One quarter was stored for assay and one quarter preserved as a geological archive. All samples were collected from the same side of the core. RC samples were collected using a riffle splitter. All samples in the mineralised zones were dry. The sample preparation of diamond core follows industry best practice in sample preparation: oven drying, coarse crushing of the quarter core sample down to ~10 mm, followed by pulverisation of the entire sample (total prep) using LM5 grinding mills to a grind size of 90% passing 75 micron. The sample preparation for RC samples is identical, without the coarse crushing stage. The Company included field Ni standards ranging from 0.7% Ni to 8.4% Ni that were routinely submitted with sample batches to independently monitor analytical performance.



JORC Criteria	Explanation
	 Standards were fabricated and prepared by Gannet Holdings, Perth, using high-grade nickel sulphide ore sourced from the Silver Swan mine. Standards were supplied in 55 g sealed foil sachets. Field duplicates were taken on a 15% by volume basis. The Company sent duplicate quarter samples to a commercial independent certified laboratory. The sample sizes are considered appropriate to correctly represent the sulphide mineralisation based on the style of mineralisation, thickness and consistency of the intersections, sampling methodology and percentage value assay ranges for the primary elements.
Quality of assay data and laboratory tests	 All samples used in the Mineral Resource estimate were assayed by an independent certified commercial laboratory. The Company uses a laboratory experienced in the preparation and analysis of nickel-bearing ores. Samples were crushed, dried and pulverised (total prep) to produce a subsample for analysis by four-acid digest with an ICP-AES and FA-ICP (Au, Pt, Pd) finish. Samples from RC drilling consisted of chip samples at 1 m intervals from which 3 kg was pulverised to produce a subsample for assaying as per the diamond drill samples. Samples were dissolved using nitric, perchloric, hydrofluoric and hydrochloride acid digest to destroy silica. Samples were analysed for Al(0.01%), As(5 ppm), Co(1 ppm), Fe(0.01%), Cr(1 ppm), Mg(0.01%), Ni(1 ppm), S(0.01%), Ti(0.01%) and Zn(1 ppm) using Method ME-ICP61 (detection limit in brackets). All samples reporting >1%Ni were re-assayed by the OG62 method. No geophysical tools or handheld XRF instruments were used to determine any element concentrations that were subsequently used for Mineral Resource estimation purposes. Standards and blanks were routinely used to assess company QAQC (approx. 1 standard for every 12–15 samples). Duplicates were taken on a 15% by volume basis, field-based umpire samples were assessed on a regular basis. Accuracy and precision were assessed using industry-standard procedures such as control charts and scatter plots. Results indicated no material issues associated with sample preparation and analytical error. In occasional cases where a sample did not meet the required quality threshold, the entire batch was re analysed.
Verification of sampling and assaying	 Newexco Services Pty Ltd (Newexco) visually verified significant intersections in most of the diamond drill core. Holes in the deepest domain were essentially twinned by drilling from two opposing directions as shown in the following figure. Primary data were collected using Excel templates and look-up codes, on laptop computers. All data were validated by the supervising geologist and sent to Newexco for validation and integration into an SQL database. No adjustments to assay data compiled for this Mineral Resource estimate were made.
Location of data points	 Hole collar locations were surveyed by WSA surveyors. The Leica GPS1200 used for all surface work has an accuracy of +/- 3cm. A two-point transformation is used to convert the data from MGA50 to Local Grid & vice versa. Points used in transformation: MGA50 Points yd1='6409502.17' xd1='752502.175' yd2='6409397.856' xd2='753390.591' Local Grid Points ym1='28223.59'xm1='33528.771'ym2='28111.84'xm2='34415.995' The accuracy of the pillars used in WSA's topographical control networks is within the Mines Regulations accuracy requirement of 1:5,000 for control networks.
Data spacing and distribution	 Nominal drill density is as follows: Mod_nmdb_shallow_0818 Along strike = 48m Along dip = 45m Mod_nmdb_deep_0916 Indicated Along strike = 15m Indicated Along strike = 60m


Section 1: Sampling techniques and data - New Morning/Daybreak

JORC Criteria	Explanation				
	 Inferred Along dip = 100m Samples were composited to 1 m lengths, with adjustments made to accommodate residual sample lengths. A total of 1,138 holes (including deflections and rotary air blast (RAB) holes) were used to design and constrain the geological wireframes. Of this total, 119 holes have been drilled since the previous Mineral Resource estimate as shown below (new holes shown in red). Holes were generally drilled perpendicular (west) to the strike (north to south) of the stratigraphy, at angles ranging between 60° and 90°. The mean dip of the holes into the shallowest domain is 63° and the mean azimuth is 244° 				
Orientation of data in relation to geological structure	 The NNDB deposit strikes at approximately 280° and dips nominally 75° to the east. All drilling was conducted from east to west. Most of the drilling was conducted from the hanging wall, i.e., from east to west. Results from an independent structural study on the deposit, along with historical regional and near-mine structural observations, complemented the detailed structural core logging results to provide a geological model that was used with an appropriate level of confidence for the classification applied under the 2012 JORC Code. No orientation-based sampling bias has been observed in the data. 				
Sample security	- All core samples were delivered from site to Perth and then to the assay laboratory by an independent transport contractor.				
Audits or reviews	 No formal external audit of the Mineral Resource estimate has been undertaken to date. Independent consultants assisted with the geological and Mineral Resource modelling. The sampling techniques are the Company's standard practice; they were implemented more than seven years ago and have been subject to independent reviews during this time. 				

Section 2: Exploration Results

Section 2: Exploration Results – New Morning/Daybreak

JORC Criteria	Explanation				
Mineral tenement and land tenure status	 Forrestania Nickel Operations (FNO) comprises approximately 125 tenements covering some 900 km2 within the Central Yilgarn Province. The tenements include exploration licences, prospecting licences, general purpose leases, miscellaneous licences and mining leases. The Company wholly owns 106 tenements: 55 tenements were acquired from Outokumpu in 2002 and the remaining 51 tenements were acquired from Kagara in March 2012 (some tenements are subject to various third-party royalty agreements). The remainder of the tenements are subject to joint ventures: 14 tenements are part of the Mt Gibb JV where the Company has the right to earn 70% interest from Great Western Exploration (currently at 51% WSA) and the Lake King JV where the Company has earned a 70% interest from Swanoak Holdings. All tenements are in good standing. Six tenements are pending grant. 				
Exploration done by other parties	 The Company has been exploring its wholly owned tenements since 2002. The tenements subject to the Kagara sale which took place in March 2012 were explored by Kagara since 2006 (and by Lionore and St Barbara prior to that time). The Company has managed both the Mt Gibb JV since 2009 (Great Western Exploration explored the ground prior to that time) and the Lake King JV since 2007 (a small amount of work carried out by WMC prior to that date). 				
Geology	- The Forrestania deposits lie within the Forrestania Greenstone Belt, which is part of the Southern Cross Province of the Yilgarn Craton in Western Australia.				





JORC Criteria	Explanation				
	 The main deposit type is the komatiite hosted, disseminated to massive nickel sulphide deposits, which includes the Flying Fox and Spotted Quoll deposits currently being mined. The mineralisation occurs in association with the basal section of high MgO cumulate ultramafic rocks. The greenstone succession in the district also hosts several orogenic lode gold deposits of which Bounty Gold Mine is the largest example. Some exploration for this style of deposit is undertaken by Western Areas from time to time in the FNO tenements. 				
Drill hole Information	- This is a Mineral Resource Estimate summary, and no Exploration Results are reported.				
Data aggregation methods	 This is a Mineral Resource Estimate summary, and no Exploration Results are reported. No metal equivalent values are used. 				
Relationship between mineralisation widths and intercept lengths	 This is a Mineral Resource estimate summary, and no Exploration Results are reported. The incident angles to mineralisation are considered moderate. Due to the often-steep-dipping nature of the stratigraphy, reported downhole intersections are moderately greater (m/1.5 ratio on average) than the true width. 				
Diagrams	- Refer to figures in the report.				
Balanced reporting	- Only Mineral Resource estimation results are reported.				
Other substantive exploration data	 This is a Mineral Resource estimate summary, and no Exploration Results are reported as such. Multi-element analysis was conducted routinely on all samples for a base metal suite and potentially deleterious elements, including AI, As, Co, Cr, Cu, Fe, Mg, Ni, S, Ti, Zn and Zr. All DD core samples were measured for bulk density which ranges from 2.90 to 4.79 g/cm³ for values >0.5% Ni. Geotechnical logging was carried out on all DD drill holes for recovery, defects, and rock quality designation (RQD). Information on structure type, dip, dip direction, alpha and beta angles, texture, shape, roughness, and fill material is stored in the structural logs in the database. 				
Further work	- This is a Mineral Resource estimate summary, and no Exploration Results are reported.				

Section 3: Mineral Resources

JORC Criteria	Explanation				
Database integrity	 All data were recorded in Excel templates with reference look-up tables. All data were imported into an AcQuire relational database. Validation is a fundamental part of the AcQuire data model and was implemented via referential integrity and triggers. Referential constraints ensure that, for example, Hole ID matches collar and downhole data. Triggers checked criteria such as code validity, overlapping intervals, depth and date consistencies. All fields of code data had associated look-up table references. 				
Site visits	- •The Competent Person is an employee of the Company and undertakes regular site visits.				
Geological interpretation	- The nickel deposits of the project area are of the komatiitic type with massive and/or matrix sulphides at the base of olivine cumulate (peridotite) sequences in preferred lava pathways.				





JORC Criteria	Explanation				
	 The MNDB deposit is principally a massive to matrix style body of pyrrhotite-pyrite-pentlandite-violarite +/- chalcopyrite with sulphides abundances of 50%95% and specific gravities of 3.5-4.0. Average nickel grades of ore intersections typically range over a 2%6% Ni with locally higher grades. The body lies at or adjacent to the contact between the footwall metasedimentary rocks and the lowermost member of the overlying ultramafic sequence. The sulphide body has a visibly sharp contact with the enclosing country rocks, although nickel sulphide grades can carry into granitoid intrusives, footwall metasediments and low to high Mg ultramafic rocks. There is supergene alteration of pentlandite to violarite in several intersections with a variable pentlandite: violarite ratio. Recent shallow driling has confirmed that nickel mineralisation extends to at least 15 m below surface. The deposit is near the contact of the basal ultramafic: metasediment contact, which was probably the contact at out be basal ultramafic contact. Disseminated nickel sulphides botstol in the basal contact, are developed in places above the basal ultramafic contact above and marginal to the massive sulphide shoots/pods. The mineralisation comprises <5%-20% disseminated nickel sulphides occur near the hanging wall contact of the lower ultramafic unit about 100 m above the massive sulphides. This unit consists of two lodes separated by ultramafic cumulates. The lodes have a strike length of 220 m and 120 m, respectively. They are shown below (looking north) in the urderlave to some of the main lookel in red. Confidence in the geological interpretation is high due to the history of adjacent mining of two deposits that are similar in nature, the drill spacing, and the understanding of similar deposits with the formation at forwall metased section solids. Confidence in the geological model intramafic basel.				
Dimensions	 The deposit commences close (within 10 m) to surface with variable mineralisation over a strike length of about 650 m oriented along 003 trend (changing to 035 at 25,081mN). Massive mineralisation widths are <1 m to approximately 10 m true thickness. The southern Daybreak zone is cut by a 5–20 m wide east–west trending Proterozoic dolerite dyke centred on 24,762mN. 				





JORC Criteria	Explanation					
Estimation and modelling techniques	 The model being reported here (mod_nmdb_mre_1122) is an update of mod_nmdb_shallow_1017 and mod_nmdb_deep_0916 previously reported Hard boundary geological domains were designed using implicit and explicit modelling techniques. Grade and anollary element estimation in the mineralised domains using Ordinary Kriging and Inverse Power Distance (IPD) was completed using Datamine [™] RM (Version 112.94.0) and Supervisor software (Version 8.14). The methods were considered appropriate due to drill hole spacing and the nature of mineralisation. Sample data were composited to 1 m downhole lengths. Intervals with no assays were excluded from the Mineral Resource estimate. Top- cut investigations were completed, and no top-cuts were applied based on grade distribution and Coefficient of Variation. Sample, wireframe and block model data were flagged using domain and weathering codes generated from 3D mineralised wireframes. Extensive Exploratory Data Anaysis (EDA) was carried out on the raw and composite data to understand the distribution in preparation for estimation and to validate the composite data based on analysis (QNA) was carried out on the raw and composite data barried. Qualitative Kriging Neighbourhood Analysis (QNA) was used to determine the optimum search neighbourhood parameters. Directional variography was performed for nickel and and selected ancillary elements. Nugget values vary with each domain – transitional material in the ubper Domain are approximately 42 m and 49 m for the first and second structure, respectively. Corresponding variances are 29° and 56°, respectively. This Mineral Resource estimate is an update of a Mineral Resource estimate that was previously reported and was validated against the same The commensional block models constrained representing the domains were designed for estimation purposes. Block sizes vary for ea					

JORC Criteria	Explanation			
	 Second pass: 7 Third pass: 5. Maximum number of samples from any borehole is 5. No selectivity was built into the model on the basis that full extraction of the ore zone is assumed for both open pit and underground mining. No known correlation between variables other than the close correlation between density and nickel grade. The geological interpretation was developed using geological, structural and litho-geochemical elements. The geological framework associated with extrusive komatilte-hosted deposits, and the structural elements observed at the local and wide scales, were used to determine and refine mineral domains. The hanging wall and footwall contacts of mineralisation were used as hard boundaries during the estimation process and only blocks within the geological wireframe were informed with nickel grades. Validation of the block model included comparing the volume of resource wireframes to block model volumes. It also involved comparing block model grades with drill hole grades by means of swath plots showing easting, northing and elevation comparisons. Estimation validation techniques (example shown below) included swath plots of the grade of the composites. Visual grade validations using Datamine, Supervisor and Leapfrog were undertaken. 			
Moisture	- Tonnages were estimated on a dry basis.			
Cut-off parameters	- Only material within a high level Mine Optimisation Study has been reported.			
Mining factors or assumptions	 Open pit mining was not considered as an option after the pit optimisation study suggested that the bulk of the material may not be amenable to processing at this stage and more work is required to determine whether the oxide component can be processed off site. Underground mining is assumed, with cut and fill being the preferred methodology for transitional material and longhole stoping for fresh material. The following factors were assumed Metal Price and Exchange Rate of Consensus P90 Recovery +5% Payability +5% Opex - 5% 			
Metallurgical factors or assumptions	 Conventional nickel sulphide flotation recovery techniques, like the adjacent Flying Fox and Spotted Quoll mines will be used for primary and secondary material. Oxide material is not reported 			
Environmental factors or assumptions	 All waste and process residue will be disposed of through the Cosmic Boy concentrator plant and its tailings dam. All site activities will be undertaken in accordance with the Company's environmental policy. 			
Bulk density	 There is a strong correlation between nickel grade and bulk density at Forrestania and testwork at New Morning resulted in a robust nickel grade regression formula to estimulate density into the blocks. Core from New Morning primary zone is generally void of vugs, voids and other defects. The bulk density values were estimated into the block model using the same search parameters that were used to interpolate nickel grade within the geological domains. 			
Classification	 The New Morning Mineral Resource is classified as Indicated and Inferred based on drill hole spacing, Slope of Regression and geological and metallurgical understanding of the various domains and weathering profiles. There is insufficient confidence in the data to classify any of the material as Measured Mineral Resource. 			





JORC Criteria	Explanation			
	 The model has been confirmed by infill drilling, supporting the original interpretations. All relevant factors have been considered in this estimate. The Mineral Resource estimate appropriately reflects the view of the Competent Person who is a fulltime employee of the Company and has been working on the deposits since 2008, both as a consultant and an employee. 			
Audits or reviews	- No audit has been undertaken on the current Mineral Resource estimate to date, but the model was designed with the assistance of independent consultants.			
Discussion of relative accuracy/ confidence	 The geological and grade continuity of the New Morning deposit is well understood, and the mineralisation wireframes used to build the block model have been designed using all available exploration and mining data. Post-processing block model validation was extensively undertaken using geostatistical methods. The Mineral Resource Statement relates to local estimates of tonnes and grade. No production data are available for New Morning. The adjacent Spotted Quoll mine has an extensive history of open pit and underground mining. 			



Forrestania: Diggers JORC Code Table 1

Section 1: Sampling techniques and data

Section 1: Sampling techniques and data – Diggers

JORC Criteria	Explanation The Diggers deposit was sampled using diamond drill and reverse circulation (RC) drilling on various grid spacings. - Diamond drilling comprised predominantly NQ2 sized core. - RC drilling comprised 140 mm diameter face sampling hammer drilling. - RAB holes, drilled by AMAX in 1971 to 1978, were used to assist in geological domain analysis and only used for Mineral Resource estimation purposes if there was no obvious bias between the AMAX campaign and the succeeding drill campaigns.				
Sampling techniques					
Drilling techniques					
Drill sample recovery	 Diamond core and RC recoveries were logged and recorded in the database. Of the 28,916 recoveries recorded in the Diggers database, a total of 26,841 (93%) recorded core recovery percentages more than 99% A total of 329 (1%) records do not have associated recoveries Diamond core was reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths were checked against the depth given on the core blocks and driller routinely carried out rod counts. 				
Logging	 Geological and geotechnical logging was carried out on most drill holes for recovery, RQD and number of defects (per interval). Information on structure type, dip, dip direc alpha angle, beta angle, texture, shape, roughness, and fill material is stored in the structure table of the database. Sufficient data were collected and verified to support the current Mineral Resource estimate. Logging of diamond core and RC samples recorded lithology, mineralogy, mineralisation, structural (diamond drill holes), weathering, colour and other features of the sample. Wet and dry core photographs taken by during the WSA drill campaign are available. Drill holes were logged in full, from the collar position to the end-of-hole position. 				
Sub-sampling techniques and sample preparation	 Field data relevant to the Digger South and Digger Rocks deposits have been collected by several explorers since 1972. In addition to exploration samples taken by the explorers, mining took place by Outokumpu from 1992 to 1995 during which time additional data was collected. At least 65% ("SED" series) of the assay data used for the MRE is from the WSA drilling campaign Core was cut in quarters using a diamond saw blade and marked in 1m interval lengths. 1m quarter core samples were sent to the lab for assay Sample boundaries were selected to match the main geological and mineralisation boundaries RC samples were collected using a riffle splitter All samples in the mineralised zones were dry The nature and quality of the sample types discussed here are standard practice in the mining industry and are considered appropriate by the CP Measures taken to ensure sampling representativity includes field standards and duplicates inserted at 1 in 10 to 1 in 100 by Outokumpu. They also inserted barren BIF samples at 1 in 10 samples to check for sample contamination. WSA included field Ni standards ranging from 0.7% Ni to 8.4% Ni that were routinely (1 in 10) submitted with sample batches to independently monitor analytical performance. The sample preparation of diamond core follows industry best practice in sample preparation: oven drying, coarse crushing of the quarter core sample down to ~10 mm, follower by pulverisation of rRC sample (total prep) using LMS grinding mills to a grind size of 90% passing 75 micron. The sample preparation for RC sample is identical, without the coarse crushing stage. Standards were fabricated and prepared by Gannet Holdings, Perth, using high-grade nickel sulphide ore sourced from the Silver Swan mine. 				



Section 1: Sampling techniques and data – Diggers

JORC Criteria	Explanation				
	 The sample sizes are considered appropriate to correctly represent the sulphide mineralisation based on the style of mineralisation, thickness and consistency of the intersections, sampling methodology and percentage value assay ranges for the primary elements. 				
Quality of assay data and laboratory tests	 The drilling history of Diggers spans over 50 years of different owners and drilling campaigns Each campaign has used a different assay technique and different element suite. Within the estimation domains, only nickel is fully assayed. Years Company Assay method 1972-1978 Amax Perchloric AAS finish 1981-1989 MetalsX Aqua Regia AAS finish 1991-1999 Outokumpu Total acid ICP finish Outokumpu U Total acid ICP finish Outokumpu U Total acid ICP finish Outokumpu used Rapley Wilkinson Laboratories, Perth WSA samples were sent to ALS in Perth which specialises in the preparation and analysis of nickel-bearing ores. WSA samples were sent to ALS in Perth which specialises in the preparation and analysis of nickel-bearing ores. Samples were finish Outoris, Derthoric, hydrofluoric and hydrochloride acid digest to destroy silica. Samples were analysis as per the diamond drill samples. Samples were reatived, dried and provide and hydrochloride acid digest to destroy silica. Samples were analysis of Minod ME-LCPE1 (detection limit in brackets). All samples reporting >1%Ni were re-assayed by the OG62 method. No geophysical tools or handheld XFR instruments were were used to determine any element concentrations that were subsequently used for Mineral Resource estimation purpos				
Verification of sampling and assaying	 Newexco Services Pty Ltd (Newexco) visually verified significant intersections during the WSA drilling campaign SRK reviewed nickel continuity across all assay methods and reports an acceptable level of correspondence between methods Copper showed an order of magnitude low bias in all non WSA assays and the early data was therefore excluded from the estimation. Primary data were collected using Excel templates and look-up codes, on laptop computers. All data were validated by the supervising geologist and sent to Newexco for validation and integration into an SQL database. No adjustments to assay data compiled for this Mineral Resource estimate were made. 				



Section 1: Sampling techniques and data – Diggers

JORC Criteria	Explanatior	1				
Location of data points	- Downhole survey methods for the various drilling campaigns are summarised below:					
		Company/ Operator	Drill hole No.	Downhole Survey technique	1	
		AMAX	SED 1-77A	Eastman single shot camera or acid etch surveys.		
			SED 2,7, 28, 31B	Gyroscope (re-entry of holes)	-	
		Metals Ex	SED 78-93	Mostly Eastman (magnetic) single-shot camera		
		Outokumpu	SED 94-144	Mostly gyroscope, minor Eastman		
			SED 145-146	Maxibor		
			SED 147-147B	Gyroscope and Eastman		
			SED148-160	Maxibor		
			SED 161-172	Gyrocscope		
			SED 173	Maxibor		
			SED 174	Gyroscope		
			SED 175-183	Eastman		
		_	SED 184	Maxibor		
			SED 185-198	Eastman		
		Western Areas NL	SED199A-200A	GYRO (Humphreys Gyro, Surtron)	-	
			SED201-245	GYRO (North-seeking by DHS)		
	- A two-p - M - L - The ac - Sample	point transformation is used to conv //GA50 Points yd1='6391359.283' x .ocal Grid Points ym1='9985.901'xm curacy of the pillars used in WSA's as were composited to 1 m lengths,	ert the data from MGA50 to L d1='757450.815' yd2='639184 11='38272.928'ym2='10510.6 topographical control network adjusted to accommodate res	41'xm2='38159.302' s is within the Mines Regulations accu sidual sample lengths.	transformation: uracy requirement of 1:5,000 for control networks.	
Data spacing and distribution	- A two-p - M - L - The ac - Sample - Indicate	point transformation is used to conv //GA50 Points yd1='6391359.283' x .ocal Grid Points ym1='9985.901'xm curacy of the pillars used in WSA's as were composited to 1 m lengths,	ert the data from MGA50 to L d1='757450.815' yd2='639184 11='38272.928'ym2='10510.6 topographical control network adjusted to accommodate res	ocal Grid & vice versa. Points used in 82.305' xd2='757328.627' 41'xm2='38159.302' s is within the Mines Regulations acco	transform uracy requ	



Section 1: Sampling techniques and data – Diggers

JORC Criteria	Explanation		
Orientation of data in relation to geological structure	 The one limb of the deposit strikes at approximately 334° and the second limb strikes at approximately 8° degrees The dip is nominally 58° to the east. Most of the drilling was conducted from the hanging wall, i.e., from east to west. 		
Sample security	- All core samples were delivered from site to Perth and then to the assay laboratory by an independent transport contractor.		
Audits or reviews	 No external audit of the Mineral Resource estimate has been undertaken to date. Independent consultants assisted with the geological and Mineral Resource modelling 		

Section 2: Exploration Results

Section 2: Exploration Results – Diggers

JORC Criteria	Explanation
Mineral tenement and land tenure status	 Forrestania Nickel Operation (FNO) comprises 93 tenements covering approximately 900 km2 within the Central Yilgarn Province. The tenements include Exploration Licences, Prospecting Licences, General Purpose Leases, Miscellaneous Licences and Mining Leases. All of these tenements are held by Western Areas Limited or its wholly owned subsidiary Western Areas Nickel Pty Ltd. Western Areas Limited is a wholly owned subsidiary of IGO Limited. Many of these tenements were acquired from Outokumpu in 2002 or from Kagara Nickel Pty Ltd in March 2012. Some tenements are subject to various third-party agreements. For tenement M77/544, Western Areas Nickel Pty Ltd holds all metal rights apart from gold. One tenement (E74/603) is held by Western Areas Limited and covers ground previously covered by 14 tenements within the Great Western Joint Venture (JV). At present, interest in the Great Western joint venture is 90% Western Areas Limited and 10% Great Western Exploration. Tenements E77/1400 and E77/2099 were sold to Kidman Resources in 2017 and are now held by MH Gold Pty Ltd (50%) and SQM Australia Pty Ltd (50%). Western Areas Limited retains nickel rights on these two tenements. All tenements are in good standing. Five tenements are pending grant.
Exploration done by other parties	 The Company has been exploring its wholly owned tenements since 2002. The tenements subject to the Kagara sale which took place in March 2012 were explored by Kagara since 2006 (and by Lionore and St Barbara prior to that time). The Company has managed both the Mt Gibb JV since 2009 (Great Western Exploration explored the ground prior to that time) and the Lake King JV since 2007 (a small amount of work carried out by WMC prior to that date).
Geology	 The Forrestania deposits lie within the Forrestania Greenstone Belt, which is part of the Southern Cross Province of the Yilgarn Craton in Western Australia. The main deposit type is the komatiite hosted, disseminated to massive nickel sulphide deposits, which includes the Flying Fox and Spotted Quoll deposits currently being mined. The mineralisation occurs in association with the basal section of high MgO cumulate ultramafic rocks. The greenstone succession in the district also hosts several orogenic lode gold deposits of which Bounty Gold Mine is the largest example. Some exploration for this style of deposit is undertaken by Western Areas from time to time in the FNO tenements.
Drill hole Information	- This is a Mineral Resource Estimate summary, and no Exploration Results are reported.



Section 2: Exploration Results – Diggers

JORC Criteria	Explanation
Data aggregation methods	 This is a Mineral Resource Estimate summary, and no Exploration Results are reported. No metal equivalent values are used.
Relationship between mineralisation widths and intercept lengths	 This is a Mineral Resource estimate summary, and no Exploration Results are reported. The incident angles to mineralisation are considered moderate. Due to the often-steep-dipping nature of the stratigraphy, reported downhole intersections are moderately greater (m/1.5 ratio on average) than the true width.
Diagrams	- No Exploration results are reported
Balanced reporting	- Only Mineral Resource estimation results are reported.
Other substantive exploration data	- This is a Mineral Resource estimate summary, and no Exploration Results are reported as such.
Further work	

Section 3: Mineral Resources

Section 3: Mineral Resources – Diggers

JORC Criteria	Explanation
Database integrity	 Missing intervals, missing assays, interval overlaps, duplicate intervals were checked during import from the supplied database into the modelling software (Leapfrog Edge) All data were recorded in Excel templates with reference look-up tables. All data were imported into an AcQuire relational database. Validation is a fundamental part of the AcQuire data model and was implemented via referential integrity and triggers. Referential constraints ensure that, for example, Hole ID matches collar and downhole data. Triggers checked criteria such as code validity, overlapping intervals, depth and date consistencies. All fields of code data had associated look-up table references.
Site visits	- The Competent Person is an employee of the Company and undertakes regular site visits. SRK did not visit site for the purpose of this MRE.
Geological interpretation	 SRK prepared the 3D geological models of Diggers deposit to better understand the structure and local controls on nickel mineralisation prior to nickel estimation domain creation. SRK divided the geology of the deposit into six broadly north—south to north—northwest trending lithological domains including footwall and hanging wall mafic volcanics, footwall sediments, ultramafic and three discrete narrow sedimentary packages (ranging from 0.5–20 m thickness) internal to the ultramafics (Figure 1). Units were modelled as steeply west to south-southwest dipping (~60–70°), which is consistent with previous modelling of Diggers. A fold was modelled within the sedimentary package to the south of the Digger Pit (Figure 2). This fold geometry was not previously captured within the 2008 Diggers geological model. The current interpretation is effectively an alternative interpretation compared to the previous 2008 model. During estimation a trend surface through the central HG mineralisation was used to orient variography and search neighbourhoods.
Dimensions	- The maximum extents of the mineralisation are approximately 1200m along strike, up to 500m down dip and between 2m and 50m across strike.



	<u>Evelopeire</u>
JORC Criteria	Explanation
Estimation and modelling techniques	 Ordinary kriging estimates using single pass searches were used. Estimation block size is 5m x 10m x 5m ((X,Y,Z). A maximum 16 composite search, a maximum 32 composite search and a maximum 24 sample 102 were all run on all elements and all domains. Nearest neighbour runs were also completed on nickel only for The North Main HG and South Main HG primarily to facilitate de-clustered composite swath plots production. The 16 maximum set adopted as the final estimate on the basis the smoothing was reduced, conditional biased increased with the resulting block variability being fit for global grade tonnage assessment at the estimated SMU block size while retaining a degree of local accuracy suitable for mine planning. Maximum extrapolation distances are in the order of 50m. Check estimates using alternative search parameters as well as an alternative estimation method (ID2) were completed. Comparisons were made to the previous 2008 Mineral Resource model. No saleable by products are assumed. In addition to nickel, estimates have been completed for arsenic, iron, sulphur, magnesium and copper. Ni is the only revenue element estimated and hence no correlations are assumed for revenue elements. For metallurgical purposes a correlations for sulphur and Iron with Nick have been used where iron and sulphur sampling is incomplete. The biggers estimation domains were prepared in Leapfrog using its vein modelling tool. The domains were created using nickel cut-off grades >0.75%, Ni with a low-grade Hal Domain (Halo) defined as >0.25%, Ni. No compositing was applied for the initial domain creation process. A total of 12 HG domains along the north-south strike of the host ultramafic package were interpreted. All the HG domain boundaries were limited to the new fault interpretation except for the norther met of Domain 7 as there was insufficient drill hole data to support the interpretation of faults in the order form. For nickel and sulph
Moisture	- Dry bulk density was used.
Cut-off parameters	 The MRE is only reported within shapes designed by planning engineers during a cut back Pit Optimisation and underground Mine Scheduling Optimisation (MSO) study The Revenue Factor 1.0 shell was used for reporting A nominal cut off of 0.5% Ni was applied to material within the mining shapes
Mining factors or assumptions	 Only material within shapes designed by IGO planning engineers during a high level mining study are reported A combination of open pit (cut back on an existing pit) and underground mining is assumed Pit optimisations were completed on Net Smelter Return basis and back calculations show nominal cutoffs of 0.49% Ni for Fresh material and 0.71% Ni for Transitional material A weighted average of 0.5% Ni was applied to the material within the mining shapes Factors used for the pit optimisation and MSO are as follows:



Section 3: Mineral Resources – Diggers

JORC Criteria	Explanation
	 Metal Price and Exchange Rate of Consensus P90 Recovery +5% Payability +5% Opex -5% Geotech assumptions for the cut back open pit are high level with pit slopes of 30 degrees for oxide and 45 and 50 degrees for transition and fresh material respectively.
Metallurgical factors or assumptions	 The North deposit was mined and processed between 1993 and 1999. For the South deposit the floatation process selected in the 2011 feasibility study reportedly had a metallurgical recovery which varied across the 3 metallurgical domains averaging 75%. The major hurdle in the 2011 feasibility study for improved Ni recoveries was suppression of the MgO in the concentrate product. Any decrease in MgO grade in the concentrate reduces the Ni recoveries requiring a trade-off of recovery versus acceptable MgO grade. At the time (2011) the resulting concentrate product was not covered under Western Areas existing offtake agreements due to elevated MgO. Biological heap leaching was also being investigated at the time (2011) As an initial test the Leach and Float scenario was run, but only negligible amount of leach material was modelled, so leach "ore" was treated as waste and only Fresh material is reported within the cut back
Environmental factors or assumptions	 All waste and process residue are assumed to be disposed of through the Cosmic Boy concentrator plant and its tailings dam. All site activities will be undertaken in accordance with the Company's environmental policy.
Bulk density	- Approximately 2200 dry density measurements calculated by the water immersion method are available across the HG LG and waste. These vary greatly in the distribution with the majority being in the South. Density is estimated from these samples in the south but assigned as a default average value in the North. Attempted correlations with nickel are not considered reliable.
Classification	 Classification for nickel, iron and sulphur is based on visual assessment of a combination of drill spacing and magnitude of the block kriging slope of regression (KSOR). Indicated Mineral Resources have been assigned where the data spacing is approximately 25 m and Inferred Resources where spacing is approximately 50 m.
Audits or reviews	- No audits or reviews have been completed on the estimate.
Discussion of relative accuracy/ confidence	 No statistical or geostatistical procedures have been applied to quantify relative accuracy. The estimate is considered a global model in that it is suitable for long to medium term mine planning and has been designed to produce grade and tonnage curves that reflect an appropriate level of block variability. It is not suitable for grade control (Local) short term planning activities. Total historic production details are available but are difficult to reconcile to the model due to unknown and fluctuating production cut offs





Nova-Bollinger JORC Code Table 1

Section 1: Sampling techniques and data

Section 1: Sampling techniques and data – Nova-Bollinger

JORC Criteria	Explanation
Sampling techniques	 The Nova-Bollinger Deposit (Nova-Bollinger) has been sampled using diamond drill holes (DD) on a nominal 12.5 metres easting (mE) by 12.5 metres northing (mN) grid spacing with a much lesser length of reverse circulation (RC) drilling. The CY21 MRE incorporates drilling completed up to 2 July 2020. A total of 11 RC, 248 surface DD and 1,865 underground DD holes were drilled for 2,148m metres, 105,373m and 278,950m, respectively. The holes drilled from surface are generally oriented towards grid west, but the plunge angles vary to optimally intersect the mineralised zones. The underground infill drilling took place from the hangingwall and footwall mine infrastructure. DD core drilling has been used to obtain high quality samples that were logged for lithological, structural, geotechnical, density and other attributes. The RC drilling was completed in dry ground with generally good sample recovery. Sample representativity has been ensured by monitoring core recovery to minimise sample loss. Sampling was carried out under IGO protocols and quality control and quality assurance (QAQC) procedures consistent with good industry practices.
Drilling techniques	 DD accounts for 99% of the drilling in the MRE area and comprises 40.7 millimetre (mm) diameter core (BQTK), 50.6mm NQ2 or 63.5mm HQ core. Surface drill hole pre-collar lengths range from 6 to 150m and hole lengths range from 50 to 1,084m. Where possible, the core was oriented using Camtech or Reflex Act III orientation tools. RC percussion drilling used a 140mm diameter face-sampling hammer drilling with RC representing 1% of the total drilling database. RC hole lengths range from 90 to 280m.
Drill sample recovery	 DD recoveries are quantified as the ratio of measured core recovered lengths to drill advance lengths for each core-barrel run. RC recoveries are logged qualitatively from poor to good. Overall DD recoveries are on average ³ 99% for both the Nova and Bollinger areas and there are no core loss issues or significant sample recovery problems logged. RC samples were visually checked for recovery, moisture, and contamination. For orientation marking purposes, the DD core from the Nova and Bollinger areas were reconstructed into continuous runs on an angle iron cradle. Down hole depths are checked against the depth recorded on the core blocks and rod counts are routinely carried out by the drillers to ensure the marked core block depths were accurate. There is no relationship between sample recovery and grade as there is minimal sample loss. The bulk of the Nova-Bollinger DD resource definition drilling has almost complet core recoveries. A sample bias due to preferential loss or gain of material is unlikely given the high core recovery.
Logging	 Geotechnical logging at Nova-Bollinger was carried out on all DD holes for recovery, rock quality designation (RQD) and number of defects (per interval). Information on structure type, dip, dip direction, alpha angle, beta angle (oriented core only), texture, shape, roughness, and fill material details are stored in the structure table of the database. The information collected is considered appropriate to support any downstream studies by the Competent Person. Qualitative logging of DD core and RC samples at Nova and Bollinger included lithology, mineralogy, mineralisation, structure (DD only), weathering, colour, and other features of the samples. All DD core ore has been photographed in wet condition. Quantitative logging has been completed for geotechnical purposes. The total lengths of all drill holes have been logged except for rock-roller DD pre-collars that have lengths not logged for the intervals from surface to 20 to 60m.



Section 1: Sampling techniques and data – Nova-Bollinger

JORC Criteria	Explanation
Sub-sampling techniques and sample preparation	 DD core from Nova-Bollinger was subsampled over lengths ranging from 0.3 to 1.3m using an automatic diamond-blade core saw as either whole core (BQTK infill), half-core (BQTK, NQ2 for resource definition) or quarter core (HQ for metallurgical drilling). All DD subsamples were collected from the same side of the core. The sample preparation of DD core involved oven drying (four to six hours at 95 degrees Celsius – °C), coarse crushing in a jaw-crusher to 100% passing 10mm, then pulverisation of the entire crushed sample in Essa LM5 grinding mills to a PSD of 85% passing 75 microns (µm). The sample preparation for RC samples was similar but excluded the coarse crush stage. QC procedures involve insertion of certified reference materials, blanks, collection of duplicates at the coarse crush stage, pulverisation stage, assay stage, and barren quartz washes of equipment every 20 samples. The insertion frequency of quality control samples averaged 1:15 to 1:20 in total, with a higher insertion ratio used in mineralised zones. For RC samples, duplicates were collected from the 1m routine sample intervals using a riffle splitter. The primary tool use to monitor drill core representativeness was monitoring and ensuring near 100% core recovery. While no specific heterogeneity testing has been completed on the mineralisation, sample sizes are appropriate to correctly represent the sulphide mineralisation based on the style of mineralisation (massive sulphides), the thickness and consistency of the intersections, the sampling methodology and percent value assay ranges for the primary elements. The results of duplicate sampling are consistent with satisfactory sampling precision.
Quality of assay data and laboratory tests	 MinAnalytical Laboratory Service Australia Pty Ltd was used for all assaying of the surface drill hole samples. IGO used the same laboratory for a period of approximately four months for underground samples, however the majority of MRE samples were assayed by Bureau Veritas (BV). Intertek-Genalysis (Intertek) and ALS were used for check-assay work. All laboratories are based in Perth WA and are accredited with NATA and ISO certified for the key analytes relevant and processes to the MRE work. Surface drill hole samples: Samples collected using surface drilling were analysed using a four-acid digest multi element suite with ICP-OES or ICP mass spectroscopy (ICP-MS) finish, and with 25 gram (g) charge or 50g charge fire assay (FA) and ICP-MS read for precious metals. The acids used were hydrofluoric, nitric, perchloric and hydrochloric acids, suitable for silica-based samples. The digestion method approaches total dissolution all but the most resistant silicate and oxide minerals. Total sulphur from surface drill holes was determined using a combustion furnace. Underground drill hole samples: Samples collected from underground DD have been analysed by mixing ~0.33g of the pulp with a flux of lithium-borate and sodium nitrate and cast to form a glass bead which has been analysed by X-ray fluorescence (RRF). A pre-oxidation stage has been used to minimise the loss of volatiles in fusion. The digestion method is considered a total dissolution. No geophysical tools were used to determine any element concentrations. The laboratory completed sample preparation checks for PSD compliance as part of routine internal quality procedures to ensure the target PSD of 85% passing 75µm is achieved in the pulverisation stage. Field duplicates are inserted routinely at rate of 1:20 samples and replicate results demonstrate good repeatability of results within the mineralised zo



JORC Criteria	Explanation
	- The results of the CRMs confirm that the laboratory sample assay values have good accuracy and the results of blank assays indicate that any potential sample cross contamination has been minimised.
Verification of sampling and assaying	 Significant intersections from DD have been inspected and verified on multiple occasions by IGO's senior geological staff and Optiro's independent review consultants. The current mine development has intersected the mineralisation and the mine exposures are consistent with the observations from drilling intersections. Two PQ and one HQ metallurgical DD holes have been drilled at Nova since March 2013 and the logging of these holes is consistent with the geological and mineralisation domain interpretations from the MRE definition drilling. Three holes have been twinned. The twin hole results confirmed the prior hole geology. Primary data for both areas has been directly entered into an 'acQuire' database via data entry templates on 'Toughbook' laptop computers. The logging has been validated by onsite geology staff and loaded into a structured query language (SQL) database server by IGO's Database Administrator. Data is backed up regularly in off-site secure servers. No adjustments or calibrations were made to any assay data used in either estimate, other than conversion of detection limit text values to half-detection limit numeric values prior to MRE work.
Location of data points	 The collar locations of surface holes were surveyed by Whelan's Surveyors of Kalgoorlie who used real-time kinematic (RTK) global positioning system (GPS) equipment, which was connected to the state survey mark (SSM) network. Survey elevation values are recorded in a modified Australian Height Datum (AHD) elevation where a constant of 2,000m was added to the AHD reduced level (RL) for the mine coordinate grid. The expected survey accuracy is ± 30mm in three dimensions. Down hole drill path surveys have been completed using single shot camera readings collected during drilling at 18m down hole, then every 30m down hole. Gyro Australia carried out gyroscopic surveys on surface holes using a Keeper high speed gyroscopic survey tool with readings every 5m after hole completion. Expect survey accuracy is ± 0.25° in azimuth and ±0.05° in inclination. Down hole survey QAQC working involved field calibration using a test stand. Underground holes collar locations were surveyed by IGO's mine surveyors using Leica TS15P total station units. The underground drill hole paths were surveyed using reflex single shot surveys with readings taken every 30m down hole. The final down hole survey for underground holes was by Deviflex (non-magnetic strain gauge) electronic multi-shot and Minnovare Azimuth Aligner tools that survey hole paths on 1m intervals relative to the collar azimuth and dip. The expected accuracy is ±0.2° in azimuth and ±0.1° in inclination. Only gyro and Deviflex data has been used for MRE work. The grid system for Nova-Bollinger is Map Grid Australia (MGA) Zone 51 projections and a modified AHD94 datum (local RL has 2,000m added to value). Local easting and northing coordinates are in MGA. The topographic surface for Nova-Bollinger is a 2012 Lidar survey with 50cm contours, which is acceptable for mine planning and MRE purposes.
Data spacing and distribution	 The nominal drill hole mineralisation pierce point spacing is 12.5mN by 12.5mE. The drilling and mine development into the mineralised domains for Nova-Bollinger has demonstrated sufficient continuity in both geological and grade to support the definition of Mineral Resources and Reserves, and the classifications applied under the JORC Code. For MRE grade estimation purposes samples have been composited to a target of a one metre length for both deposits, with an optimised compositing approach used to ensure that no residual samples are created.
Orientation of data in relation to geological structure	 Both Nova and Bollinger have been drilled from surface and underground locations on a variety of orientations designed to target the mineralised zones at the nominal spacing whilst maintaining reasonable intersection angles. Structural logging of oriented core indicates that the main sulphide controls are usually perpendicular to the average drill orientation. Due to the constraints of infrastructure location a small number of holes are oblique to the Conductor 5 (C5) mineralisation at the northern margin of the deposit.





Section 1: Sampling techniques and data - Nova-Bollinger

JORC Criteria	Explanation
	- The Competent Person considers that there is no material level of orientation-based sampling bias in the CY21 Nova-Bollinger MRE.
Sample security	 The sample chain-of-custody is managed by IGO. Samples for Nova-Bollinger are stored on site and collected by reputable road haulage contractor (McMahon Burnett Transport) and delivered to their depot in Perth, then to the main assay laboratory. Whilst in storage, samples are kept in a locked yard. Tracking sheets are used to track the progress of batches of samples. A sample reconciliation advice is sent by the laboratories to IGO on receipt of the samples and any issues are resolved before assaying work commences. The Competent Person considers that risk of deliberate or accidental loss or contamination of samples is low.
Audits or reviews	 A review of the sampling techniques and data was carried out by Optiro Consultants (Optiro) as part of prior MRE and onsite in September 2016. An independent audit of the database was carried out in February 2018 by Optiro. Optiro has provided confirmation that it considers that the MRE database is of sufficient quality for MRE studies.

Section 2: Exploration Results

Section 2: Exploration Results - Nova-Bollinger

JORC Criteria	Explanation
Mineral tenement and land tenure status	 The Nova-Bollinger Deposit is wholly within WA Mining Lease M28/376. This tenement is 100% owned by IGO Nova Pty Ltd – a wholly owned subsidiary of IGO. The tenement is held by IGO Nova Pty Ltd and expires on 14/08/2035. The IGO tenements are within the Ngadju Native Title Claim (WC99/002). There are no third-party rights or encumbrances on Nova. Native title royalties are outlined in the Ngadju Mining Agreement. The WA State royalties are paid in accordance with the Mining Act 1978 (WA). IGO has provided the Competent Person with written assurance that the tenement is in good standing and no known impediments exist.
Exploration done by other parties	 Sirius explored for base metal deposits in the Fraser Range area over a three-year period and discovered the Nova area of the Nova-Bollinger deposit July 2012, with Bollinger discovered shortly after. No previous systematic exploration was carried out in this area prior to the 2012 discovery.
Geology	 The global geological setting is the high-grade metamorphic terrane of the Albany Fraser mobile belt of Western Australia. The Ni-Cu-Co Nova-Bollinger Deposit is hosted by Proterozoic age gabbroic intrusions that have intruded a metasedimentary package within a synformal structure. The sulphide mineralisation is interpreted to be related to the intrusive event with mineralisation occurring in several styles including massive, breccia, network texture, blebby and disseminated sulphides. The main sulphide mineral is pyrrhotite, with nickel and cobalt associated with pentlandite and copper associated with chalcopyrite. The deposit is analogous to many mafic hosted nickel-copper deposits worldwide such as the Raglan, Voisey's Bay in Canada, and Norilsk in Russia.
Drill hole Information	 As this is an advanced stage report related to an MRE in production, it is impractical to list drill information for the numerous drill holes used in the estimate. Representative intercepts have been reported in previous IGO Public Reports.
Data aggregation methods	- No drill hole related exploration results are included in this Public Report for the Nova-Bollinger MRE.



Section 2: Exploration Results – Nova-Bollinger

JORC Criteria	Explanation	
	- Samples were aggregated into 1m long (optimised) composites for MRE work.	
Relationship between mineralisation widths and intercept lengths	 The Nova area of Nova-Bollinger is moderately east dipping in the west, flattening to shallow dipping in the east, while the Bollinger area of the deposit is more flat lying. Due to the style of mineralisation under consideration there is no expectation of sampling bias due to the relationship between drill hole interception angle with the mineralisation and the intersection length. 	
Balanced Reporting	- The MRE gives the best and most balanced view of the drilling and sampling to date.	
Other substantive exploration data	- For this active mine there is no other substantive exploration data material to the MRE.	
Diagrams	- Representative sections and plans are included in the body of this report as well as in IGO's prior ASX releases of exploration results relating to Nova-Bollinger.	
Further work	- The MRE is closed off in all directions and no further drilling is planned for the MRE.	

Section 3: Mineral Resources

Section 3: Mineral Resources - Nova-Bollinger

JORC Criteria	Explanation
Database integrity	 All data entry used for logging, spatial and sampling data at Nova-Bollinger has been via direct entry into electronic templates that have lookup tables and fixed formatting. Data transfer and assay loading has been electronic. Sample numbers are unique and pre-numbered bags were used. IGO's data management procedures make transcription and keying errors unlikely, and digital merging by unique sample number keys reduces the risk of data corruption. IGO's geological staff have validated the data under the direction of the Acquire Database Administrator using IGO's protocols. The data for the Nova-Bollinger MRE is stored in a single acQuire database.
Site visits	- The Competent Person for the MRE is the former Geology Superintendent for Nova and as such has detailed knowledge of the data collection, estimation, and reconciliation procedures for this MRE.
Geological interpretation	 The confidence in the geological interpretation of Nova-Bollinger is considered high in areas of close-spaced drilling. Nearly full development of the mine has added substantially to the geological understanding of the deposit through mapping of drives and cross cuts. Inferred Mineral resources make up a very small proportion of the tonnage (<0.4%). Core samples taken for petrography and litho-geochemical analysis have been used to identify and define the rock type subdivisions applied in the interpretation process. The assumptions made are that zones of similar sulphide have a spatial association that allows them to be interpreted as continuous or semi-continuous (dependent on setting). There are also assumptions that the breccia zones can have variable continuity due to the internal nature of the domains, with this variability accounted for in the estimation methodology. The Nova-Bollinger deposit is generally tabular geometry, with geological characteristics that define the mineralised domains. The current interpretation is geologically controlled and supported by the new drilling and underground development. Geological controls and relationships were used to define grade estimation domains with hard boundary constraints applied on an estimation domain basis. The Nova-Bollinger breccia zones have mixed grade sample populations due to spatial mixing of massive sulphides and mineralised clasts within these domains.





JORC Criteria	Explanation			
	 MgO-Ni grade relationships are interpreted to be influences on local grade estimates and the estimation domaining has addressed these controls in the resource estimation process. The spatial continuity of high and low magnesia geological units has assisted in refining contact relationships. 			
Dimensions	 The Nova area mineralisation commences from 40m below surface and extends to 470m below surface. The Nova area extents are ~650m (northeast to southwest) and ~300m (northwest to southeast). The Bollinger mineralisation abuts the Nova zone and starts at ~360m below surface (highest point) and extends to ~425m below surface. Bollinger has areal extents of ~300m long (north) and ranges from 125m to 400m wide (east). The Nova and Bollinger zones are joined by an interpreted narrow east-west trending feeder 'Mid' zone that has a length of ~180mm, thickness of 10 to 20m and north-south width of up to 80m. 			
Estimation and modelling techniques	 Metal accumulations (grade × density) for Ni, Cu, Co, Fe, Mg, S and in situ density were estimated into the Nova-Bollinger digital block model using the Ordinary Block Kriging (OBK) routines implemented in Datamine version 1.6.87.0. Block grades were then back calculated by dividing each accumulation by the density for local estimates. The estimation dill hole sample data from each domain was then composited a target of a one metre downhole length using an optimal best fit method, to ensure no short residuals were created. The influence of high-grade distribution outliers was assessed to be negligible, and no top cuts have been applied to the final estimate. Estimates were prepared using Datamine's dynamic anisotropy algorithm to optimise the grade connectivity in the often-undulating domain geometry. For all domains, directional anisotropy axis semivariograms were interpreted using traditional experimental as environes and variance. The maximum frage of facts continuity varied and was found to be deposit/domain dependant. Typically, maximum continuity ranges varied from 20 to 160m in the major direction dependent on mineralisation style. Estimation sample searches were set to the ranges of the oraly estimated form 20 to 160m in the major direction dependent on mineralisation style. Estimation passes. The maximum distance to nearest sample for any estimated block was 100m. The inferred portion of the MRE is <0.3% of the total tonnage, approximately 60% of the inferred Mineral Resource is extrapolated greater than 30m beyond the data. This estimate is an update of the prior MREs for Nova-Bollinger. Reconciliation information is largely based on results of processing ore from development headings and stopes. Refer to the item on accuracy further below for reconciliation factors. The main by-product of the nickel and copper co-products is cobalt. Cobalt value is dependent on any off-take agreement and may realise a credit.			



JORC Criteria	Explanation					
	 No assumptions regarding selective mining units were made in this estimate. Strong positive correlations occur between nickel, sulphur, iron, and cobalt, with copper sometimes not as strongly correlated. The correlation between nickel and copper is variable with domain and mineralisation style. All variables have been estimated within the nickel domains. The geological interpretation modelled the sulphide mineralisation into geological domains at Nova- Bollinger. The deposit framework incorporates gabbroic intrusives, high and low magnesium intrusive units, deformation partitioning, folding, sulphide remobilisation, brecciation and replacement. These form a complex deposit where geological relationships are used to define mineralisation domain geometries and extents. Grade envelopes are not applied, apart from reference to the natural ≥0.4% Ni cut-off that appears to define the extents of the global mineralised system. The boundaries of mineralised domains were set to hard boundaries to select sample populations for variography and estimation. The statistical analyses of the drill hole sample populations in each domain generally have low coefficients of variation with no extreme values that could potentially cause local grade biases during estimation. Validation of the block model volumes was carried out using a comparison of the domain wireframes volumes to the block model volumes. Grade/density validation included comparing the respective domain global mean grades of block model grades to the estimation drill hole composites, and moving window mean grade comparisons using swath plots within northing, easting, and elevation slices. Visual validation was completed on screen to review that the input data grade trends were consistent with the output block estimate trends. The final mine depleted estimates were reported out of two different software systems and checked by both the Competent Person and IGO senior technical staff for a					
Moisture	- The tonnages are estimated on a dry basis.					
Cut-off parameters	- The MRE is reported using ≥ A\$58.5/t NSR block cut-off as a proxy for a break-even level between mining development cost and incremental stoping cost.					
Mining factors or assumptions	- Mining of Nova-Bollinger is, and will be, by underground mining methods including mechanised mining, open stoping and/or paste backfill stoping.					
Metallurgical factors or assumptions	 The ore processing method at Nova-Bollinger is well-established with a crushing, grinding and flotation flow sheet with metals recovered to either a nickel-copper-cobalt concentrate or a copper rich concentrate. Metallurgical recovery values are sourced from the modelling from the project-to-date processing where the steady-state metallurgical recoveries were modelled as a function of grade with mean values, with a pattern of decreasing metallurgical recovery with decreasing head grade. For the total MRE the recovery ranges from 85 to 89% for all payable metals. 					
Environmental factors or assumptions	 All necessary environmental approvals have been received. Sulphide tails are being pumped to a specific waste storage facility and non-sulphide tails are used in paste backfill. Rock wastes are stored in a conventional waste dump, with the mine closure plan specifying all rock waste to be transferred back to underground at mine closure. For the waste dump at surface, any PAF waste is tipped on a prepared pad of inert waste, then encapsulated in inert waste at the end of the mine life. 					
Bulk density	 In situ density measurements were carried out on 43,209 core samples using the Archimedes Principle method of dry weight versus weight in water. The use of wax to seal the core was trialled but was shown to make less than 1% difference between measurements on the same core sample. Density standards were used for QAQC using an aluminium billet and pieces of core with known values. Pycnometer density readings (from sample pulps) were carried out for 21,632 samples by assay laboratories to accelerate a backlog of density samples. 					







JORC Criteria	Explanation				
	 A comparison of 263 samples from holes that that had both methods carried out showed an acceptable correlation coefficient of 0.94 but also that the pycnometer results were reporting slightly lower density than the measured results, which is expected given pycnometer readings do not provide an in situ bulk density. The density difference between methods was not considered to be material to the MRE. The density ranges for the mineralised units are: Massive sulphides 2.0 to 4.7 grams per cubic centimetre (g/cm³) – average: 3.9g/cm³), net textured sulphides 3.0 to 4.4g/cm3 (average: 3.6g/cm3) and disseminated sulphides 2.5 to 4.6g/cm3 (average: 3.5g/cm3). The host geology comprises high grade metamorphic rocks that have undergone granulite facies metamorphism. The rocks have been extensively recrystallised and are very hard and competent. Vugs or large fracture zones are generally annealed with quartz or carbonate in breccia zones. Porosity in the mineralised zone is low. As such, voids have been accounted for in all but the pycnometer density measurements. Missing density measurements were imputed using a multiple element regression on a domain basis. Correlations between density and all elements were assessed for each domain and appropriate elements chosen for use in a multiple regression formula that was subsequently used to calculate the density for any missing values prior to estimation of in situ bulk density using OBK. 				
Classification	 The Nova-Bollinger MRE is classified based on the high confidence in the geological and grade continuity, along with 12.5 by 12.5m spaced drill hole density and information from mine development. Estimation parameters, including conditional bias slope of regression have also been utilised during the classification process, along with the assessment of geological continuity. The Indicated Mineral Resource is classified based on high confidence geological modelling using the knowledge gained from the close spaced infill drilling to update the mineralisation domains in areas of 25 by 25m spaced drilling. The Inferred Mineral Resource category was applied to isolated lenses of mineralisation in the upper levels of Nova, the tonnage represents <0.4% of the total MRE. The input data is comprehensive in its coverage of the mineralisation and does not favour or misrepresent in situ mineralisation. Geological control at Nova-Bollinger consists of a primary mineralisation event modified by metamorphism and structural events. The definition of mineralised zones is based on a high level of geological understanding producing a robust model of mineralised domains. This model has been confirmed by infill drilling and mine development exposures, which confirm the initial interpretation. The validation of the block model has confirmed satisfactory correlation of the input data to the estimated grades and reproduction of data trends in the block model. The MRE appropriately reflects the view of the Competent Person. 				
Audits or reviews	 This is an update of the prior estimate for Nova-Bollinger and has been extensively reviewed internally by IGO geologists. An independent external review of all aspects of the MRE was undertaken by Optiro Pty Ltd. during 2018, no material issues with the estimation process were found. 				
Relative Accuracy/Confidence	 The MRE for Nova-Bollinger has been estimated using standard industry practices for the style of mineralisation under consideration. The geological and grade continuity of the domains is such that the Indicated MRE has a local level of accuracy which is suitable for achieving annual targets, while Measured MREs are considered commensurate with meeting quarterly production targets. Inferred MRE is indicative of areas and tonnages that warrant further drill testing but are not suitable for Ore Reserve estimation. There has been no quantitative geostatistical risk assessment such that a rigorous confidence interval could be generated but the nature of the mineralisation is such that, at the grade control drill spacing, there is minimal risk to the extraction schedule on a quarterly basis. Production data has provided a satisfactory assessment of the actual accuracy compared to the estimate for development and stoping ore. The Measured and Indicated Resources are considered suitable for Ore Reserve conversion studies and should provide reliable (±15%) estimates for quarterly and annual production planning, respectively. The Inferred Mineral Resource estimates identify one area that requires further drilling and assessment before it can be considered for mine planning. 				

Section 3: Mineral Resources – Nova-Bollinger

JORC Criteria	Explanation				
	 Total ore processed from Nova-Bollinger to 30 June 2023 has been ~9.7Mt grading 1.97% Ni, 0.82% Cu and 0.07% Co. Mine-claimed ore from the model update is ~9.5Mt grading 2.16% Ni, 0.87% Cu, 0.07% Co, with ~20kt on ROM stockpiles on 30 June 2023 Reconciliation factors (mill / MRE) for the project to date are therefore 103% for tonnage, 91% for nickel grade, 95% for copper grade and 100% for cobalt grade. The reconciliation factors indicate that the MRE may be an optimistic predictor of grade, however there is a continued trend of improvement of reconciliation against the MRE. 				

Section 4: Ore Reserves

Section 4: Ore Reserves – Nova-Bollinger

JORC Criteria	Explanation			
Mineral Resource estimate for conversion to Ore Reserves	 The MRE used for the Nova-Bollinger ORE is the estimate described in the section above relating to Mineral Resources. The MRE model was coded with in situ NSR values that account for corporate directed metal prices, metallurgical recovery and all costs associated with sale of concentrates from the mine gate. Separate NSR values were applied for MRE and ORE work with more optimistic metal prices assumed for the MRE NSR values to generate the ORE model. The MRE reported for FY23 is nominally inclusive of the FY23 ORE, except for where the ORE includes dilution below MRE reporting cut-off. 			
Site Visits - The Competent Person for the estimate is IGO's Principal Mining Engineer and has detailed knowledge of the mining methods, costs, schedule, and ott to ORE work for this estimate, with previous position being the site-based role of Superintendent Planning. The Competent Person's most recent visit t February 2023.				
Study Status	 The ORE has been designed based on the current operational practices of the operating mine. All ORE were estimated by construction of three-dimensional mine designs using DESWIK.CAD software – Version 2022.2, (Deswik) and reported against the updated MRE block model. After modifying factors are applied, all physicals (tonnes, grade, metal, development, and stoping requirements etc.) were input to Nova cost model where each stope was economically evaluated, and the total reserve was evaluated to assess its economic viability. Previous mine performance has demonstrated that the current mining methods are technically achievable and economically viable. The modifying factors are based on historical data, with the current mining methods planned to continue for future mining. As Nova is an ongoing concern the study level can be considered better than a Feasibility Study level. 			
 ORE cut-off values are based on NSR values where the reporting NSR is defined as the net value A\$ value per tonne of ore after consideration of all consideration of all consideration and admiration, product delivery), metallurgical recoveries, sustaining capital, concentrate metal payabilities and treatment charges, transport of The ORE model is evaluated against the NSR cut-off value and mining areas (stopes and development) are identified and designed for those areas about the A\$ value per tonne of ore after consideration of all constrained. All designed stopes and development are then assessed individually to verify that they are above the NSR cut-off and can be economically mined. The NSR cut-off are A\$147/t for full stoping and A\$79/t for incremental stoping. For development, the NSR cut-off is A\$38/t. 				
Mining factors or assumption	 The mining methods assumed for the ORE are long-hole sub-level open stoping and sub level open stoping, which is considered appropriate for the for the style of mineralisation under consideration. In some flat lying areas inclined room and pillar mining has been considered in the ORE. Geotechnical parameters are based on recommendations made in the Nova-Bollinger FS prepared in 2014. No material geotechnical issues have been encountered in mining to date. 			



JORC Criteria	Explanation				
	 Three-dimensional mine designs are designed based on known information about the mineralised zones based on physical characteristics and the geotechnical environment. The designs are consistent with what has been in practice with ore loss and dilution modifying factors based on MRE to plant reconciliation results. The reconciliation factors are applied directly onto the in situ grades of the MRE model to generate the ORE model, to generate tonnes and grade estimates expected to be delivered to the processing plant (1.0218× for density, 0.9127× for Ni grade, 0.9329× for copper grade and 1.0071× for cobalt grade). A minimum mining width of 3.0m was used for all stoping. Current infrastructure supports mining of the ORE. Any additional capital required has been included in the cost model. In cases where Inferred Mineral Resources are present in a mine design, this material has been assigned as dilution and has been included in the ORE. Inferred Mineral Resources may be included in up to 5% of the total stope tonnage at the Inferred Resource grade but when tonnage of Inferred Resources is above 5% in a design, the entire stope has been excluded from ORE. However, the total Inferred Mineral Resource tonnage included in the ORE by this process is immaterial to the ORE (<2kt ore). 				
Metallurgical factors or assumptions	 The metallurgical process for Nova-Bollinger ores is well established and is a process flow of crushing, grinding to nominally sub 105 µm, the differential froth-flotation of a nickle concentrate grading 13.5% Ni, 0.7% Cu and 0.5% Co, and a copper concentrate grading 29% Cu with 1.1% Ni. The throughput rate assumed is 1.6Mt/a. Metallurgical recovery values are based on the Nova 2014 FS testwork and are dependent on grade. Current recoveries being achieved are at ~87% for nickel and at ~88% for copper. No deleterious elements are materially present in the ore albeit, concentrate penalties apply on the nickel concentrate when the Mg:Fe ratio is outside certain limits. This ratio is managed in the mill feed planning through blending of high magnesium ores as required. No specific minerals are required for the saleable concentrates, which are primarily composed of pyrrhotite (gangue), with pentlandite the payable mineral in the nickel concentrate. Cobalt is strongly correlated with pentlandite. 				
Environmental	 The Nova-Bollinger deposit was discovered in July 2012 and studies were initiated shortly afterwards to establish baseline environmental conditions. The Nova project self-referred to the Environmental Protection Authority and in August 2014 received confirmation that the operation could be adequately managed under WA Mining Act provisions. Following the granting of mining tenure, Mining Proposals for Stage 1 and Stage 2 of Nova were submitted to the then Department of Mines and Petroleum, approved at the end of 2014, enabling construction to begin in January 2015. All necessary operational licences were secured including clearing permits and groundwater extraction. A tailings storage facility has been constructed to contain the sulphide bearing wastes from the processing operation and non-sulphide tailings are pumped to the paste-fill plant and then into completed stopes as paste fill. Potentially acid-generating mine development rock (containing >0.6% S) is either used as rock-fill in some completed stopes or encapsulated in non-acid generating rock in the mine waste dump. Nova maintains a compliance register and an environmental management system to ensure it fulfils its regulatory obligations under the Nova Environmental Protection Act licence. A mine closure plan is in place to address full rehabilitation of the site once mining activities are completed. 				
Infrastructure	 All major infrastructure required for the mining, processing and sale of concentrates is in place and operational including mine portal and decline, ventilation systems, paste plant, water bore field, tailing storage facility, process plant and power plant, sealed road to the main access highway, accommodation camp for IGO and contractors and all-weather air strip with 100-seat jet capacity. The owner and contractor personnel are sourced from Perth and work on a fly-in-out basis. 				
Costs	- All major capital costs associated with Nova infrastructure are already spent. Sustaining capital costs for the decline development and stope accesses are based on operational experience to date.				





JORC Criteria	Explanation			
	 Operating costs for the ORE are based on budget estimates from a reputable mining contractor and experienced independent consulting firms, and historical operating costs. No allowances have been made for deleterious elements as Nova's concentrates are clean and generally free of deleterious metals at concentrations that would invoke penalty clauses. Product prices assumed for the ORE are discussed further below. FX rates are based on in-house assessments of Bloomberg data with an assumption of 0.75 A\$/US\$ Concentrate transport costs have been estimated by a logistics consultant with shipping cost from Esperance estimated by an experienced shipping Broker. Treatment and refining charges, applicable to offshore shipments, are based on the confidential terms of sales contracts. Allowances have been made for WA state royalties, with a 2.5% royalty applicable to the sale price of nickel and cobalt in the nickel concentrate, and a 5% royalty applicable to copper after the deduction of concentrate sales costs. IGO also pays a royalty to the Ngadju traditional owners. 			
Revenue factors	 Head grades and concentrate produced is determined by the mine plan. NSR values per mined block were calculated by IGO from the cost and revenue inputs. Treatment, refining, and transport assumptions are discussed under costs (above) Commodity prices are based on IGO in-house assessments of Consensus Economics data with prices of A\$73,020/t for cobalt, A\$10,230/t for copper and A\$24,940/t for nickel metal, using the exchange rate discussed above for currency conversions from US\$ prices. Different metal prices have been assumed for MRE and ORE reporting, refer to the discussion in the main report. 			
Market assessment	 The inputs into the economic analysis for the Ore Reserve update have already been described above under previous subsections. The economic evaluation has been carried out on a nominal basis (no adjustment for inflation) on the basis that saleable product values will be correlated with inflation. The confidence of the economic inputs is high given the input sources at the time of the Ore Reserve study. The confidence in metal prices and exchange rates is consistent with routine industry practices with the data derived from reputable forecasters. 			
Economic	 The discount rate used for NPV calculations was 8% per annum and the NPV is strongly positive at the assumed payable metal prices with a mine life of 3.5 years. This ORE is supported by a full financial model and evaluation completed for FY23, with the following sensitivities: NPV ~ \$1.1B Revenue: 10% change ~+18% impact to NPV OPEX: 10% change ~-7% impact to NPV CAPEX: 10% change ~-0.5% impact to NPV Discount rate: 10% change ~-2% impact to NPV 			
Social	 Nova-Bollinger was discovered in July 2012 and development of the site commenced in January 2015 following regulatory approval in December 2014. IGO's operations are also managed under a Mining Agreement with the Ngadju people, who are the traditional owners and custodians of the land occupied by Nova. WA Mining lease M28/376 covers all the Nova mining, process, and support infrastructure. IGO has all the necessary agreements in place with key stakeholders and has both statuary and social licence to continue operation of Nova for the LOM. 			
Other	 There are no material naturally occurring risks associated with Nova. There are no material legal agreements or marketing arrangements not already discussed in prior sub sections. All necessary government and statutory approvals are in place. 			





Section 4: Ore Reserves – Nova-Bollinger

JORC Criteria	Explanation		
	 There are no unresolved third-party matters hindering the extraction of the Ore Reserve. Additional water bores are required to ensure water security and exploration for an additional bore field in in progress. 		
Classification	 The ORE has been classified into the Proved and Probable Ore Reserve JORC Code classes based on the underlying Mineral Resource classification in the Mineral Resource model, with Indicated Mineral Resources converted to Probable Ore Reserves. Due to the large dimensions of many stopes, the same stope can contain more than one MRE class. As such, stopes where ≥95% of the contained MRE tonnage is classified as Measured Resource have been classified as Proved Ore, those with ≥95% Measured plus Indicated Resource classified as Probable Ore Reserve. In development, Measured Resources have been converted to Prove Reserves and Indicated Resource converted to Probable Ore Reserves as per stoping above. The classifications applied to the estimate are consistent with the opinion of the Competent Person reporting the ORE. 		
 Audits and reviews The estimate has been reviewed internally by Nova's senior mine engineering staff and IGO's Perth office technical staff. Mine planning consultants Deswik have independently reviewed the ORE for end of CY19 with no material issues identified. The process undertaken for e substantially similar. 			
Discussion of relative accuracy/ confidence	 No statistical or geostatistical studies, such as conditional simulations, have been completed to quantify the uncertainty and confidence limits of the estimates. Confidence in ORE inputs is generally high given the mine is in full operation and costs, prices, recoveries and so on are well understood. The ORE estimates are considered to have sufficient local accuracy to support mine planning and production schedules with Proved Ore Reserves considered a reliable basis for quarterly production targeting and Probable Ore Reserves reliable for annual production targets. Confidence in the mine design and schedule are high as mining rates and modifying factors are based on actual site performance. Mine design is consistent with what has been effective previously. The shortfall in nickel grade reconciliation, described above in relation to the MRE, is currently accommodated in the mine planning dilution assumptions where zero grade dilution is applied to planned over-break. ORE to Actual reconciliation continues to perform well with this approach. 		



Exploration Results Update





IGO Limited (IGO) is an ASX 100 listed Company focused on creating a better planet for future generations by discovering, developing and delivering products critical to clean energy.

Who We Are

We are a purpose-led organisation with strong, embedded values and a culture of caring for our people and our stakeholders, and believe we are Making a Difference by safely, sustainably and ethically delivering the products our customers need to advance the global transition to decarbonisation.

Through our upstream mining and downstream processing assets, IGO is enabling future-facing technologies, including the electrification of transport, energy storage and renewable energy generation.

IGO's nickel business includes the Nova Operation (Nova) and Forrestania Operation (Forrestania) and the Cosmos Project (Cosmos), all of which are located in Western Australia (WA). Nova and Forrestania are operating underground mining and processing operations, while the Cosmos Project is currently under development.

Our lithium interests are held via our 49% interest in Tianqi Lithium Energy Australia Pty Ltd (TLEA), an incorporated joint venture with Tianqi Lithium Corporation (Tianqi). TLEA owns upstream and downstream lithium assets, including a 51% stake in the Greenbushes Lithium Mine (Greenbushes) and a 100% interest in a downstream processing refinery at Kwinana in WA to produce battery grade lithium hydroxide (LiOH).

IGO is also focused on discovering the mines of the future and has an enduring commitment to investing in exploration to ensure the world has a sustainable supply of clean energy metals into the future.

Acknowledgements

IGO would like to acknowledge and pay respects to Traditional Owner groups whose land we are privileged to work on, and whose input and guidance we seek and value within the operation of our business. We acknowledge the strong, special physical and cultural connections to their ancestral lands.

Effective Date

This report is effective for all results received as of 1 April 2023.

Forward-Looking Statements Disclaimer

This document includes forward-looking statements including, but not limited to, statements of current intention, statements of opinion and expectations regarding IGO's present and future operations, and statements relating to possible future events and future financial prospects, including assumptions made for future commodity prices, foreign exchange rates, costs, and mine scheduling. When used in this document, the words such as "could", "plan", "estimate", "expect", "intend", "may", "potential", "should" and similar expressions are forwardlooking statements. Although IGO believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.

IGO makes no representation, assurance or guarantee as to the accuracy or likelihood of fulfilment of any forward-looking statement or any outcomes expressed or implied in any forward-looking statement. The forward-looking statements in this document reflect expectations held at the date of this document. Except as required by applicable law or the Australian Securities Exchange (ASX) Listing Rules, IGO disclaims any obligation or undertaking to publicly update any forward-looking statements or discussions of future financial prospects, whether because of new information or of future events.



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Section 1

Introduction





Introduction

IGO is an Australian producer and explorer of metals, minerals and products vital to the global clean energy transition, that has been listed on the ASX for over 20 years.

IGO's strategic focus is on in-demand products containing three critical metals needed in very large volumes for renewable energy generation, energy storage and electric vehicles – nickel, lithium and copper.

Either through 100% ownership or through Joint Ventures (JVs), IGO produces saleable base metal and lithia concentrates from its mining interests in WA as located on the accompanying map – Figure 1 on page eight. As also shown on the map, IGO manages, through direct ownership or JV, extensive geological belt-scale exploration tenure positions throughout WA, the Northern Territory (NT), South Australia (SA) and New South Wales (NSW). These exploration projects are highly prospective for nickel (Ni) ± lithium (Li) ± copper (Cu) ± cobalt (Co) ± gold (Au) ± Rare Earth Elements (REE) and ± Platinum Group Elements (PGE).

The purpose of this report is to provide IGO investors and stakeholders with technical information in relation to IGO's exploration activities completed and exploration results received as of 1 April 2023, which covers all exploration activities during the 2022 calendar year (CY22), and to provide some insights into IGO's planned future exploration activities.

Corporate Governance



Corporate Governance

IGO reports its exploration results in accordance with ASX listing rules and the requirements of the 2012 edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves, which is known as the JORC Code. IGO's public reporting governance ensures that the Competent Persons as defined in the prevailing JORC Code responsible for Public Reports:

- are current members of a professional organisation that is recognised in the JORC Code framework
- have sufficient mining industry experience that is relevant to the style of mineralisation and reporting activity to be a Competent Person as defined in the JORC Code
- have provided IGO with a written sign-off on the results and estimates that are reported, stating that the report agrees with supporting documentation regarding the results or estimates prepared by each Competent Person; and
- have prepared supporting documentation for results and estimates to a level consistent with normal industry practices, including the JORC Code Table 1 Checklists for any results reported.

IGO additionally ensures that any publicly reported Exploration Results as defined in the JORC Code are prepared using accepted industry methods.

JORC Code Competent Persons

Table 1 below is a listing of the names of the Competent Persons who are taking responsibility for reporting IGO's CY22 Exploration Results. This Competent Person listing includes details of professional memberships, professional roles, and the reporting activities for which each person is accepting responsibility for the accuracy and veracity of IGO's CY22 Exploration Results. Each Competent Person in the table below has provided IGO with a sign-off for the relevant information provided by each contributor in this report.

Competent Person	Professional association		IGO relationship	Activity
	Membership	Number	and role responsibility	responsibility
Mr Ian Sandl	MAIG/RPGeo	2388	General Manager - Exploration	Exploration Results for the Paterson and Kimberley Projects
Mr Ian Gregory	MAIG	3147	Exploration Manager - Brownfields	Exploration Results for the Western Gawler and Forrestania Projects
Dr Ben Cave	MAusIMM	318334	Senior Technical Geologist	Exploration Results for the Fraser Range and Silver Knight Projects

Information in this report that relates to Exploration Targets or Exploration Results is based on the information compiled by Mr Ian Sandl and Mr Ian Gregory who are Members of the Australian Institute of Geoscientists (MAIG) and Dr Ben Cave who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM), all of whom are full-time employees of IGO. Mr Sandl, Mr Gregory and Dr Cave have provided IGO with written confirmation that they have sufficient experience that is relevant to the styles of mineralisation and types of deposits, and the activity being undertaken with respect to the responsibilities listed against each professional above, to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves – the JORC Code (2012 Edition). Mr Sandl, Mr Gregory and Dr Cave have additionally provided IGO with:

- proof of their current membership to their respective professional organisation as listed above
- a signed consent to the inclusion of information for which each person is taking responsibility in the form and context in which it appears in this report, and that the respective parts of this report accurately reflect the supporting documentation prepared by each Competent Person for the respective responsibility activities listed above; and
- confirmation that there are no issues other than those listed above could be perceived by investors as a material conflict of interest in preparing the reported information.

Mr Sandl, Mr Gregory and Dr Cave are minor shareholders in IGO and may receive a bonus based on IGO exploration success criteria.

Exploration Summary

Strategy

Project Selection and Portfolio Development



Exploration Summary

Over CY22, IGO continued to progress its business strategy of transitioning into a significant explorer and producer of the high demand metals and minerals for the growing clean energy industry sectors, such as the rapidly expanding electric vehicle and energy storage markets.

IGO's current priority strategic focus metals are nickel, copper and lithium. However, other clean energy sector metals and minerals are also being assessed and, in some cases, targeted for exploration by IGO's Generative team. Additionally, IGO continues to consider and maximise value from other high value commodities, such as gold (Au), especially where deposits may be opportunistically discovered on IGO's exploration or mining tenure.

Strategy

IGO's core exploration strategy focuses on discovering mineral deposits close to our existing mining and processing operations, and in greenfield environments, to discover deposits of a scale that would result in transformational value creation and sustainable growth for IGO and its shareholders. To achieve these goals, over the last five years IGO has purposefully developed a comprehensive near-mine (also known as Brownfields) and Greenfields exploration strategy, which has involved establishing a best-in-class exploration team, along with building an extensive exploration portfolio of geological belt-scale projects, as depicted in Figure 1 and Figure 2. Additionally, IGO's ongoing exploration investment of 75 million Australian Dollars (A\$75M) in the 2023 financial year (FY23) is commensurate with its ambitions and the high-quality of its exploration ground positions. With this strategy and execution plan now well established, IGO considers it is very well positioned to deliver material discoveries over the medium to long-term.





IGO's disciplined approach to exploration is designed to maximise the chances of success and the potential for material value generation for its shareholders. IGO's investment in exploration and discovery is guided by the key imperatives of commodity and deposit style targeting, accessing the most prospective terranes for inclusion in the portfolio, and both in-house technical excellence in exploration targeting geoscience and operational excellence in project execution.



Project Selection and Portfolio Development

IGO's selection of key geological terranes for targeting deposit styles is based on the application of leading generative geoscience, prospectivity assessments and rigorous ranking. IGO's exploration portfolio comprises multiple orogenic belt-scale projects in the most prospective underexplored terranes within Australia, providing the opportunity to make multiple Tier-1 and Tier-2 discoveries.



Figure 2: IGO Operations, projects, and exploration tenure

Australia's craton margins and Proterozoic basins overlain on a gravity intensity image.
MAGMATIC NICKEL (±COPPER ± COBALT ± PLATINUM GROUP ELEMENTS)

IGO's belt-scale Ni-Cu-Co sulphide projects are all within Proterozoic orogenic belts and Archaean greenstone belts that contain extensive potentially sulphide hosting mafic-ultramafic intrusive and extrusive suites, which are recognised by their high regional gravity and distinctive magnetic responses. These projects occur within the Yilgarn Craton of WA and along the margins of major Archaean cratons or interpreted palaeo-Archaean craton margins within Australia, as depicted in Figure 2 on page nine.

IGO's target greenstone belts for komatiitic nickel sulphide discoveries include:

- the Cosmos Belt, which is an area of proven endowment that hosts IGO's Odysseus and Mount Goode nickel sulphide deposits; and
- the Forrestania Belt, which is also a region with proven endowment, hosting IGO's Flying Fox and Spotted Quoll nickel sulphide mines.

IGO's target orogenic belts for ortho-magmatic Ni-Cu-Co sulphide discoveries include:

- the Fraser Range portion of WA's Albany Fraser Orogen, which is a region of proven endowment that hosts IGO's Nova-Bollinger Deposit (Nova-Bollinger) and Silver Knight Deposit (Silver Knight) Ni-Cu-Co sulphide deposits
- WA's Halls Creek and King Leopold Orogens of the East and West Kimberley regions. The East Kimberley hosts the Savannah Ni-Cu-Co mine, and the Wunaanin Miliwundi Ranges in the West Kimberley is an emerging nickel belt following the 2015 discovery of high-grade Ni-Cu sulphides at the Merlin Prospect
- the Western Gawler margin in SA, which includes IGO's Mystic nickel oxide and Sahara nickel sulphide discoveries; and
- The Raptor and Irindina projects in the NT straddle parts of the North Australian palaeocratonic margin along the Willowra gravity ridge in the Aileron Province, and in the East Arunta, respectively. IGO considers that both these early-stage greenfield projects are prospective for medium to long-term ortho-magmatic Ni-Cu sulphide discoveries.

SEDIMENT-HOSTED COPPER

IGO's focus on discovering sediment-hosted copper deposits has resulted in land positions in WA and SA, which have similar geology to the Central African Copperbelt.

IGO's target areas in CY22 included:

- The Paterson Province in WA, which hosts the Telfer gold-copper and Nifty copper mining operations and two significant recent discoveries – the Winu and Havieron copper-gold-silver (Cu-Au-Ag) deposits
- The Copper Coast Project in the Adelaide Rift Basin of SA, which has a long history of sediment-hosted copper deposit discoveries across the region, including Mount Gunson, Burra and Elizabeth Creek; and
- the Frontier Project in central eastern Greenland, where IGO's initial exploration confirmed the presence of sediment hosted copper mineralisation.

HARDROCK LITHIUM

IGO's 2021 calendar year (CY21) entry into the lithium industry has seen IGO increase its exploration focus on this critical clean energy metal. In CY22, IGO increased geoscientific studies on Greenbushes to develop a focused exploration model that will assist IGO in exploring for like deposits in Australia and worldwide.

IGO has found direct acquisition of belt-scale lithium exploration opportunities to be difficult since much of the targeted tenure in the belts of interest to IGO are generally held by numerous well-funded junior explorers. To gain exploration access to key areas of interest, IGO has entered into arrangements with multiple partners to secure access to high priority tenement packages. This includes tenements around Greenbushes and Mount Holland.

Sometimes when entering into earn-in and JV agreements, IGO has also subscribed for share equity in the JV partner to achieve an ideal JV structure that not only gives IGO access to the land for exploration, but also positions IGO on the JV partner's share register should a material discovery be made on the JV tenure.

TECHNOLOGY AND GEOSCIENCE

For calendar year 2023 (CY23), IGO's exploration strategy leverages the depth of geoscience excellence in its best-inclass exploration team, who also have a strong exploration execution capability to deliver discoveries. Geophysics and geochemistry are core in-house capabilities where leading technologies are deployed as both screening and discovery tools. Technology and innovation, coupled with proprietary inhouse databases and targeted research collaborations, are also key enablers to drive IGO's discovery success.

CY23 EXPLORATION FOCUS

IGO's exploration team is wholly focused on the timely discovery of profitable, high-value clean energy sector metal and mineral deposits. As part of the effort, IGO employs an Exploration Value Chain process that not only considers the potential magnitude of mineralisation and the probability of success to prioritise exploration investment, but also the key Environmental, Social and Governance factors in the value equation. IGO's FY23 total exploration budget of A\$75M is weighted towards discoveries in the Fraser Range, Paterson and Kimberley regions. However, with the acquisition of Western Areas Limited (WSA) in June 2022, exploration spending is now also shifting to brownfields exploration at Forrestania and Cosmos, providing more balance to the portfolio. Exploration activity is now also increasing in the Raptor and Copper Coast regions following a year of pursuing acquisition of regional data in these areas.

Exploration Results

Brownfields Nickel Exploration Brownfields Lithium Exploration Greenfields Nickel Exploration Greenfields Copper Exploration Greenfields Rare Earth Element Exploration



Exploration Results

The following is a snapshot of the CY22 results from IGO's extensive exploration project portfolio, starting with the brownfields projects, and then covering the various greenfields projects. It also provides some insights into the forward project plans for CY23.

Brownfields nickel

This section details the nickel-focused Exploration Results returned from IGO's CY22 activities around IGO's nickel producing operations - Nova and Forrestania.

NOVA NEAR MINE

Within the Nova Near Mine tenure, which includes the tenements M28/376, E28/2177, E28/1932, E69/2989 and E69/3645 depicted in Figure 3, IGO's exploration team has identified a number of targets. Exploration in CY22 focused on the Chimera target with several diamond drill (DD) holes drilled into the target, and while no economically significant results were observed, a further four DD holes are planned for CY23 to fully test this target with an innovative downhole geophysical platform. In addition to Chimera, a single DD hole is proposed at the Hercules target.

CHIMERA

In CY22, IGO drill tested the Chimera target a 3.0 by 0.8 kilometre (km) mafic-ultramafic (MUM) intrusive complex located 9km to the southwest of Nova (Figure 3). The Chimera target sits beneath a highly conductive paleochannel that acts to limit the effectiveness of surface-deployed, Moving-Loop Electromagnetic (MLEM) methods. Despite the hindrance of the conductive cover, the geological and geochemical features from air core (AC) then DD have provided enough encouragement for further exploration. Further exploration at Chimera is being guided by a three dimensional (3D) targeting model constructed from AC and DD drilling previously completed at the target, by IGO (Figure 5). Proposed drill testing in CY23 will provide platforms for downhole geophysical surveying that will screen the Chimera target for Nova-Bollinger sized massive sulphide systems, which typically exceed 10 million tonnes (Mt) of resources.





Figure 4: Chimera drill core 22AFDD110 Box 104

Minor net-texture Ni-Cu-Co sulphide mineralisation from drill hole 22AFDD110 into the Chimera Intrusive Complex. Assay results for the interval are 0.38metres (m) grading 0.46% Ni, 0.44% Cu, 0.05% Co (true width unknown), from 404.4m. Core diameter HQ (63.5millimetres (mm)).



Figure 5: Chimera 3D model

3D model of the Chimera intrusion (looking down and towards the northwest) showing previously drilled DD holes and proposed CY23 drilling.

SILVER KNIGHT PROJECT AREA

The Silver Knight Project Area (SKPA) includes the three tenements (E28/2065, E28/2018 and E28/2201) that surround Silver Knight and covers an interpreted >30km of geological strike. Several prospective Ni-Cu-Co sulphide-bearing intrusions occur within the SKPA, the highest priority being the Silver Knight Intrusive Complex (SKIC), which hosts Silver Knight (Figure 6).

The SKIC is a large, MUM intrusive complex, containing blebby to massive sulphides of low to high nickel and copper tenor. At least four distinct intrusions make up the SKIC and each is considered prospective for massive nickel sulphides, and hereinafter are referred to as 'target horizons' (Figure 7). These target horizons include the Silver Knight horizon, which hosts Silver Knight (Figure 8), the Lens N1 target (Figure 9), the Lens S1 target, and several other exploration targets. The T5-Quokka, Leopard and Firehawk target horizons host several additional exploration targets (Figure 7). A pseudo 3D seismic survey was completed over much of the SKPA in CY22 (Figure 6). This survey has identified the SKIC extending over 4,700m in strike, 600 to 2,600m in width, and between 300 to 1,000m thick (Figure 7). The seismic data, along with other geophysical and geological drill hole datasets, have been utilised to construct the 3D targeting model of the SKIC (Figure 7). This 3D model of the SKIC will be used to target favourable sites for massive Ni-Cu-Co sulphide accumulations.

In CY22, the following exploration targets were drill tested: Silver Knight South (incorporating Lens S1 and Lens N1), Silver Knight Seismic, Leopard and Firehawk. In CY23, IGO proposes to drill test the M11, O10 and P13 Mag targets, Lens N4, Firehawk Basin, Firehawk Embayment, Firehawk Westend Pinch Point, T5 Drain Quokka and Red Queen Targets (Figure 6 and Figure 7).



Figure 6: SKPA prospects and tenure for CY23 to CY24 exploration

SKPA drill targets for CY23 to calendar year 2024 (CY24) exploration, shown on a regional total magnetic intensity (TMI), first vertical derivative image (1VD)



Figure 7: The Silver Knight Intrusive Complex intrusion model

The SKIC 3D intrusion model (looking downward and towards the northeast) showing previous drilling, modelling of Silver Knight (including the Lens S1 and Lens N1 targets), the SKAV(100% IGO), and exploration targets within different target horizons of the SKIC. Additonally, Figure 7a depicts shows an inset of Nova-Bollinger to aid in the appreciation of the exploration potential in the SKIC and two dimensional (2D) section planes of cross-section A (Figure 13 on page 21), B (Figure 9 on page 16), C (Figure 8 on page 16), D (Figure 16 on page 22) and E (Figure 17 on page 22).



Cross-section (Section C - shown on Figure 7 on page 10) looking northeast through the Silver Knight. This section additionally shows a two 2D slice (inline) of pseudo-3D seismic data, modelled SKIC, exploration targets, previous drilling and modelled major faults. The insert shows cross-section of the thickest portion of Nova-Bollinger to aid in the appreciation of the exploration potential in the SKIC. Projection Map Grid Australia (MGA) Zone 51 Geographic Datum Australia 1994 (GDA94); elevations are Australian Height Datum (AHD).



Cross-section (Section C - shown on Figure 7) looking northeast through the Silver Knight. This section additionally shows a 2D slice (inline) of pseudo-3D seismic data, modelled SKIC, exploration targets, previous drilling and modelled major faults. The inset shows cross-section of the thickest portion of Nova-Bollinger to aid in the appreciation of the exploration potential in the SKIC. Projection MGA Zone 51 GDA94; Elevations are relative to AHD.

Since IGO's acquisition of the Silver Knight in July 2021, a total of 6,442m of DD and reverse circulation (RC) drilling has been completed to test several shallow conceptual Ni-Cu-Co sulphide exploration targets around Silver Knight.

The exploration drilling intersected massive Ni-Cu-Co sulphides at the modelled positions at the Lens S1 and Lens N1 targets (Figure 10); previously referred to as Silver Knight South. Importantly, this drilling has joined previous drilled massive sulphide intersections drilled by the Creasy Group entity Great Southern Nickel Limited (GSN) that were thought to be small pods, into two distinct northwest to southeast striking lenses (Figure 11 and Figure 12). Assay results from IGO's CY22 drilling include 21.2m (true width 8.5m) grading 4.86% Ni, 2.14% Cu, 0.16% Co from 71.14m (22SKDD111) at Lens N1, and 10.1m (true width 5m) grading 5.91% Ni, 2.2% Cu, 0.19% Co from 56.51m (22SKDD114) at Lens S1. Further assay results are reported in Table 3 on page 54 are also shown in Figure 11 and Figure 12 on page 13. Following the successful drilling of the Lens S1 and Lens N1 targets, several shallow massive Ni-Cu-Co sulphide targets such as Lens N2 and Lens N4 have been identified in close to Silver Knight (Figure 6, Figure 7 and Figure 11), and these are proposed to be tested in CY23.



Figure 10: 22SDDD11 Ni-Cu-Co mineralisation in drill core

Lens N1 Target, 21.2m interval (true width 8.5m) of semi-massive to massive Ni-Cu-Co sulphide mineralisation in 22SKDD111. Core diameter HQ. Assay results for the interval indicated the sulphides are of high grade; 21.2m grading 4.86% Ni, 2.14% Cu, 0.16% Co from 71.14m.





Figure 11: Silver Knight Lens Targets and drilling to CY22 end. Projection MGA Zone 51 with elevations in AHD.



Figure 12: Silver Knight drill collar locations and basement geology

Plan view with drilling (IGO and GSN), Silver Knight mineralisation limits,, solid rock geology, and Lens S1 and Lens N1 Ni-Cu-Co Potential Mineralisation. Projection MGA Zone 51.



M11, O10 and P13 Magnetic Targets

The shallow massive sulphide mineralisation intersected in CY21 at Silver Knight, and Lens S1 and Lens N1 targets, are blind to the surface EM techniques commonly used to explore for massive sulphide system, due to the orientation of mineralisation and the highly conductive underlying metasediments. However, due to their high proportion of magnetic minerals such as pyrrhotite and shallow depths they have associated positive magnetic anomalies. Several magnetic high targets have been identified that are consistent with these signatures, with the M11 (Figure 9), P13 (Figure 9) and O10 (Figure 13 on page 16) magnetic targets proposed for drill testing in CY23.

Leopard Target Horizon

The Leopard Target Horizon (Figure 7) is an intrusive horizon interpreted to extend over 3,400m in strike and is located deeper, but immediately west of the Silver Knight Target Horizon (Figure 8).

Thin intervals of semi-massive and massive sulphide (Figure 14) have been intersected (see Table 3 on page 54 for full JORC Code details) at the Leopard Target (within the Leopard Target Horizon) along a traceable contact for over 500m. No thickening of the mineralisation has been encountered through this drilling or interpreted from other datasets, and as such no further work is planned here in CY23. However, the M11 Mag target likely occurs within the Leopard Target Horizon (Figure 9) and is proposed to be tested in CY23.

Firehawk Target Horizon

The Firehawk Target Horizon (Figure 7) is an intrusive horizon, interpreted to extend over 4,600m in strike (open to SW and NE) and is located immediately west of both the Leopard and Silver Knight target horizons (Figure 8).

Historic drill testing (representing <10% of the known prospective Firehawk Target Horizon) encountered thin intervals of net-texture to semi-massive Ni-Cu-Co sulphides

towards the base of the SKIC (Figure 15; Table 3 on page 54). This drill testing was conducted prior to the acquisition of the seismic dataset. The addition of the seismic dataset has opened exploration upside, with a number of new targets designed to test potential massive sulphide traps in the Firehawk Target Horizon. Three high priority targets such as Firehawk West End Pinch Point, Firehawk Embayment and Firehawk Basin (Figure 7 and Figure 9) are scheduled to be tested in CY23. These highly regarded targets represent different trap types with potential to host massive sulphides.

T5 - Quokka Target Horizon

The T5 - Quokka Target Horizon (Figure 7) is a mineralised horizon where previous drilling has encountered thin intervals of net-texture to semi-massive Ni-Cu-Co sulphides towards the base of the SKIC. Previous MLEM surveys were thought to have screened this prospective horizon, however the addition of the seismic dataset has opened new exploration potential, beyond the limits of ground EM, and along strike where no ground EM has been completed. Several targets are designed to test interpreted traps that have the potential to host massive sulphide. Three high-priority targets including P13 Mag, T5 Drain and Quokka (Figure 7 on page 15, Figure 16 and Figure 17 on page 17) are scheduled to be tested in CY23.

Red Queen Target

The Red Queen Target is located 8km northeast of Silver Knight (Figure 6 on page 14) and is interpreted to represent an extension of the SKIC T5 - Quokka Target Horizon. Previous DD at Red Queen had encountered a prospective magmatic sulphide-bearing mafic-ultramafic intrusion that exhibits textural and lithological features indicative of a productive Ni-Cu-Co sulphide hosting intrusion. MLEM has been completed over much of the Red Queen Target, and several bedrock conductors, likely representing stratigraphic conductors, have been defined. Nevertheless, the presence of a mineralised mafic-ultramafic intrusion demands further work in CY23 to CY24 to place these bedrock conductors in a better context and to determine if massive sulphides are present.



Cross-section (Section A - shown on Figure 7) looking northeast through the O10 Mag Target. This section additionally shows a 2D slice (inline) of pseudo-3D seismic data, modelled SKIC, exploration targets, previous drilling and modelled major faults. The inset shows cross-section of the thickest portion of Nova-Bollinger to aid in the appreciation of the exploration potential in the SKIC. Projection MGA Zone 51 GDA94; Elevations are relative to AHD.





Figure 14: SKDD080 minor massive sulphides intersected in the Leopard Horizon

Minor semi-massive to massive Ni-Cu-Co sulphide mineralisation from drill hole SKDD080 into the Leopard Target Horizon. Assay results for the interval indicated the sulphides are of low grade; 0.96m grading 1.67% Ni, 0.57% Cu, 0.13% Co (true width unknown), from 261.0m. Core diameter NQ (47.6mm).

Figure 15: SKDD081 minor massive sulphides intersected in the Firehawk Horizon

Minor net-texture to semi-massive Ni-Cu-Co sulphide mineralisation from drill hole SKDD081 into the Firehawk Target Horizon. Assay results for the interval indicated the sulphides are of moderate grade; 1.04m grading 0.76% Ni, 0.25% Cu, 0.07% Co (true width unknown), from 918.71m. Core diameter NQ.



Cross-section (Section D - shown on Figure 7) looking northeast through the T5 Drain drill target. This section additionally shows a 2D slice (inline) of pseudo-3D seismic data, modelled SKIC, exploration targets, previous drilling (if present) and modelled major faults. The insert shows cross-section of the thickest portion of Nova-Bollinger to aid in the appreciation of the exploration potentia in the SKIC. Projection MGA Zone 51 GDA94; Elevations are relative to AHD.



Cross-section (Section E - shown on Figure 7) looking northeast through the Quokka Prospect. This section additionally shows a 2D slice (inline) of pseudo-3D seismic data, modelled SKIC, exploration drill targets, previous drilling (if present) and modelled major faults. The insert shows cross-section of the thickest portion of Nova-Bollinger to aid in the appreciation of the exploration potential in the SKIC. Projection MGA Zone 51 GDA94; Elevations are relative to AHD.



FORRESTANIA PROJECT

Exploration at the Forrestania Project, covering approximately (~) 1,100km² (Figure 18), is focused on the discovery of additional near-mine, high-tenor, komatilitic-hosted, nickel sulphide mineralisation to extend the mine life of Forrestania.

The Forrestania Greenstone Belt forms the southern extension of the Southern Cross Greenstone Belt, a 400km long arcuate belt of ~2.9Ga greenstone sequences bounded by Archaean granite-gneissic units of the Yilgarn Craton.

The Forrestania Greenstone Belt comprises two main lithological associations; a lower sequence of basalt-ultramafic-Banded Iron Formation (BIF) ± metasediments, and an upper sequence of predominately finely laminated siltstones, shales and felsic metasediments. Up to six belts of ultramafic rock-types are recognised in the lower association, and the strike length of individual belts ranges from 20 to 90km. The ultramafic belts comprise komatiite sequences that show a wide variety of volcanic flow facies environments, including thick sequences of olivine adcumulate to mesocumulate hosted nickel deposits (Eastern Ultramafic Belt; hosting the Fireball, Diggers and Cosmic Boy deposits), channelised flow sequences with bounding flanking flow facies (Western Ultramafic Belt; hosting the Flying Fox, Spotted Quoll, New Morning/Daybreak and Willy Willy deposits and prospects), and thin spinifextextured flow units (Eastern Ultramafic Belt; hosting the Hang Dog and Emu Heights prospects). The ultramafic belts have mostly steep dips, some of which are locally overturned such as the Eastern Ultramafic Belt south of the Purple Haze Prospect. Five of the six ultramafic belts face west, with only the western belt facing east. Nickel deposits and occurrences are restricted to the Eastern and Western Ultramafic belts.

IGO's exploration activities throughout CY22 focused on exploring the Western Ultramafic Belt, the Eastern Ultramafic Belt and the Parker Dome Corridor. DD programs and follow-up down hole electromagnetic (DHEM) were completed at Turkish Delight (Parker Dome), West Quest (Eastern Ultramafic Belt) and Spotted Quoll North prospects.

Spotted Quoll North

Drilling and follow-up DHEM of the Spotted Quoll North structural target did not intersect significant nickel mineralisation or detect any DHEM anomalism. Drill hole WBD222 was designed to test the flexure of the ultramafic/ metasediment contact and determine if the nickel sulphide mineralisation has potential to extend north of the known Spotted Quoll Mineral Resource. Unless pending assay results indicated material non-visible mineralisation has been intersected, the target is now considered fully tested.

Turkish Delight

Encouraging disseminated nickel sulphide mineralisation was intersected at the Turkish Delight EM target, which is 70km north of the Cosmic Boy Concentrator in the Parker Dome Prospect. DD intersected 2.3m grading 0.94% Ni from 75.1m (refer to Table 5 on page 63 for JORC Code details). However, IGO found that the source of the electromagnetic (EM) conductor was a nickel barren sulphide zone at 214m. The disseminated nickel sulphide mineralisation is the most significant nickel mineralisation drilled to date in the Parker Dome corridor. Further RC drill testing is planned for CY23 to determine the source of the disseminated nickel sulphides.

West Quest

Drilling at West Quest, which is 30km north of the Cosmic Boy Concentrator, intersected encouraging disseminated nickel sulphides (1.8m grading 1.12% Ni from 375.5m (WQD009) and 1.85m grading 1.2% Ni from 394.15m in drill hole WQD010. Both intercepts were within a thick sequence of moderately high magnesia (MgO) cumulate ultramafics. The targeted EM conductors were explained by the presence of two hangingwall BIF horizons containing barren stringer sulphides. The Type 2 komatiitic mineralisation intersected is a strong vector to the presence of Type 1 channel facies nickel mineralisation. Further geochemical modelling and drill testing is planned.

Carstairs

IGO completed a total of 79 AC and four RC drill holes for a total of 4,233m drilling at the Carstairs Prospect, with this drilling a partially concealed ultramafic corridor that has a coincident magnetic and anomalous nickel geochemical response with encouraging Ni/Cr ratios less than unity (>1) fertility indicators present. Follow-up RC drill testing is planned in CY23.

Other exploration activities at Forrestania were focused on completing mechanised drill site and track rehabilitation activities across several locations, including New Morning, Takeshi, Hatters Hill and Parker Dome prospects (Figure 18 on page 24). A three-day heritage survey was conducted with the Ballardong People in two areas of interest at New Morning and Carstairs (Figure 19), while a six-day heritage survey with the Marlinyu Ghoorlie People in support of future drilling activities within the Parker Dome area was also completed.

Heritage survey plans were submitted to the Ballardong and the Marlinyu Ghoorlie groups to cover CY23 exploration programs across Diggers, Purple Haze and South Ironcap prospects to the south, and Mt Hope and Central Belt prospects to the north (Figure 19 on page 25). Spring flora/fauna surveys were completed for the same areas covered by the heritage surveys.

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Figure 19: Southern Forrestania 2022-2023 Ballardong heritage survey areas

Brownfields Lithium Exploration

The first exploration undertaken by IGO for hard rock lithium deposits commenced in CY22 around Greenbushes and Forrestania.

BRIDGETOWN-GREENBUSHES PROJECT (VENUS JV)

The Bridgetown-Greenbushes project is immediately east of Bridgetown in WA and extends north and west to abut the Greenbushes mining leases (Figure 20). IGO and Venus Metals Corporation (Venus) entered into a farm-in and JV agreement in June 2022, with IGO managing the project. The Venus JV is focused on lithium pegmatite and magmatic nickel exploration, with soil geochemical results generated by Venus indicating the potential for both deposit types across the southern part of the project¹.

IGO commenced landholder engagement in mid-CY22 and completed a roadside soil sampling program across the north-eastern part of the tenement package. The survey was designed to identify lithium pegmatite and magmatic nickel targets, and to provide a baseline dataset for soil geochemistry across multiple regolith types. The survey did not find any new lithium or nickel anomalies; however, further soil sampling is scheduled for CY23.

Consultants, Sinclair Geoscience were contracted to develop and complete a litho-structural framework interpretation of the Southwest Terrane using open-source magnetic, radiometric and gravity data.



Figure 20: Greenbushes brownfields exploration tenements

¹ Venus Metals ASX Release on 27 June 2022 "IGO Farm-in JV/Placement Bridgetown Greenbushes Exploration"

FORRESTANIA PROJECT

In CY22, the Forrestania Project continued to show promise as a potential host of world-class lithium deposits. For example, the Forrestania Greenstone Belt hosts Covalent Lithium's giant Earl Grey Deposit that is 50km north of the Cosmic Boy Concentrator.

South Ironcap Prospect

A lithium-rich pegmatite occurs on IGO's tenure at South Ironcap Prospect, 8km south of the Cosmic Boy Concentrator (Figure 22 on page 27). The South Ironcap pegmatite was identified in the Eastern Ultramafic Belt (EUB) through historic nickel exploration programs. Initial resampling of historical drill core has shown encouraging lithium potential (Figure 21 on page 26 and Figure 24 on page 29). Large areas of the pegmatite system remain untested, and flora/fauna and heritage surveys are underway to allow access for further drill testing. An extensive soil sampling program is now planned across the South Ironcap area and the broader Forrestania tenure.

IGO retains 100% ownership of the lithium rights across the Forrestania Project's 1,100km² of tenure following the exit of the WesCEF lithium JV in 2022. IGO is committed to further exploration to fully understand the prospectivity of the region and potential for lithium discoveries.



Figure 21: SID022 spodumene bearing pegmatite at South Ironcap Prospect

Core photography of spodumene bearing pegmatite, core diameter is 50.6mm (NQ2).

Disclaimer: Visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analyses where concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations.



Figure 22: Forrestania simplified geology nickel and lithia deposits



Figure 23: Southern Ironcap interpretive geology

Greenfields Nickel

IGO has a strong pipeline of greenfield nickel projects at various project stages across Australia. This section provides a summary of results from CY22 for these projects.

FRASER RANGE PROJECT

The Fraser Range Project in WA is a belt-scale project that is highly prospective for high-value magmatic Ni-Cu-Co sulphide discovery. IGO entered the Fraser Range in 2015 through the acquisition of Sirius Resources' Fraser Range assets, which included Nova that is now mining and processing Nova-Bollinger. Following the transaction, IGO commenced the consolidation of exploration ground surrounding Nova and the greater Fraser Range and has set about systematically exploring the belt. In July 2021, IGO acquired 100% of Silver Knight (~33km northeast of IGO's Nova infrastructure) and formed a JV (IGO 65%: Creasy Group 35%) with the Creasy Group over a portfolio of exploration tenements around Silver Knight. The Nova-Bollinger and Silver Knight discoveries, along with other known magmatic Ni-Cu sulphide occurrences in the Fraser Range such as Legend Mining's Mawson Deposit, provide proof of the fertility of the region for more discoveries, and IGO's exploration team is convinced that considerable exploration upside exists in the Fraser Range for further Ni-Cu-Co sulphide discoveries.

In CY23 and CY24, IGO proposes to DD test a number of nickel and copper targets across the Fraser Range, including EM conductors and geochemical anomalies (Figure 24). Targeted AC drilling and/or MLEM surveys are also planned over coincident geophysical, geochemical and/or geological anomalies to generate further targets for DD testing in the near future.



Figure 24: Fraser Range tenure high priority exploration areas for CY23 and CY24

KIMBERLEY PROJECT

IGO's WA Kimberley Project includes two belt-scale regions that are highly prospective for magmatic Ni-Cu-Co sulphide deposits (Figure 25). These Paleoproterozoic orogenic belts are the West Kimberley's Wunaamin Miliwundi Range (King Leopold Orogen) and the East Kimberley's Halls Creek Orogen. Both belts contain known magmatic Ni-Cu-Co sulphide deposits including Panoramic Resources Limited's Savannah Mine in the East Kimberley, and the more recently discovered Merlin Ni-Cu-Co prospect in the West Kimberley².

IGO considers the Kimberley to be underexplored for Ni-Cu-Co sulphide deposits on the basis that most historical exploration has focused on only the limited extents of the Sally Malay

Suite around the Savannah Mine. IGO has identified several other prospective intrusive suites in both the East and West Kimberley that have yet to be tested with modern exploration techniques that are typically used to discover Ni-Cu-Co sulphide deposits.

In the past four years, IGO has consolidated 13,665km² of exploration tenure in the East and West Kimberley, making IGO the dominant Ni-Cu-Co sulphide explorer in the region. IGO is using previously acquired high resolution airborne electromagnetic (AEM), magnetic and radiometric data to better interpret the prospectivity of the East and West Kimberley. In CY22, IGO identified a lithium opportunity at the Olympio Prospect that warrants follow up exploration efforts.



Figure 25: Kimberley Project tenure and prospects

² Buxton Resources ASX announcement 26 November "New Nickel Province Confirmed at Double Magic Ni-Cu Project"



Osmond Valley Area

The Osmond Valley Project in the East Kimberley is a JV with private company, Beau Resources Pty Ltd and covers an exposed window of older Proterozoic metasedimentary rocks called the Winnama Formation which is not exposed anywhere else in the East Kimberley. These older rocks were subject to exploration for Ni-Cu-Co sulphides in the 1970s by Australian Anglo American Ltd (AAAL). Nickel enriched gossans were discovered within the Osmond Valley, however, due to the challenging terrain, the EM systems utilised were unsuccessful in testing the targets. IGO is the first explorer to test Osmond Valley using modern exploration methods. In CY21, IGO digitised historic exploration results for the area, reprocessed hyperspectral information, and acquired modern multiclient AEM and radiometric data. These datasets resulted in IGO identifying several prospects in the Osmond Valley. For example, the extensive geochemical dataset led to the identification of five distinct mafic intrusions along different trends. Two of these intrusions are considered more prospective for Ni-Cu mineralisation due to having higher degrees of crustal contamination.

In CY22, IGO completed an infill geochemical sampling program across the more 'prospective' mafic suites and several copper anomalies which appear to represent hydrothermal copper (Figure 26).



Figure 26: Osmond Valley CY21 and CY22 exploration work

Molly Target

The Molly Target was identified in 2021 during a regional 200 by 50m spaced geological and geochemical sampling program. Molly is composed of extensive malachite mineralisation hosted in a range of rock types but appears spatially related to the Winnama Formation and the McHale Granodiorite. A ground electromagnetic survey in CY21 discovered a 1,000 Seimen (S) conductive target. Infill geochemical sampling and geological mapping in CY22 (Figure 27) identified additional copper mineralisation including:

- mafic and ultramafic hosted gossans and malachite bearing outcrops of the Sally Downs Supersuite. Some nickel anomalism is indicated by geochemical and portable X-ray fluorescence (pXRF) analyses
- minor malachite staining occurs in felsic and intermediate phases of the McHale intrusion, commonly associated with epidote alteration and quartz veining; and
- gossanous (goethite, limonite and hematite ± malachitebearing) outcrops often associated with quartz veins are hosted within the metasedimentary Winnama Formation.

In CY23, the 1,000S conductor at Molly will be tested with DD where the copper anomalism is most concentrated.



Figure 27: Osmond Valley CY22 exploration work at Molly



Quick Shears Area

A ground EM survey was completed over a 6 by 4km area in CY22. One discrete plate with a conductance of 12,000S has been modelled. This EM plate has a well constrained strike length of ~280m, a depth extent of ~80m, dips at ~60° to the southwest, and a depth to top of plate of 200m. The conductor provides an excellent fit to the field data. This discrete, high conductance EM plate is located 12.5km along strike from Merlin and is an attractive drill target. Planning is underway to drill test this anomaly in CY23.

Sentinel Area

The Sentinel Project in the West Kimberley is part of IGO's JV with Buxton Resources Limited (Buxton) and is a priority exploration area due to the presence of voluminous folded sills of the prospective Ruins Dolerite Intrusive Suite, which hosts the Merlin Deposit. IGO surveyed the Sentinel area in calendar year 2019 (CY19) and CY21 using several high-resolution geophysical techniques, including a Spectrem AEM survey. Several anomalies have been identified. During CY22, IGO investigated 39 anomalies with geological mapping, surface geochemical sampling, ground EM surveys and DD (Figure 28).



Figure 28: Sentinel Project CY22 prospects and exploration

Skarloey Prospect

Skarloey encompasses multiple 2019 SPECTREM airborne EM anomalies. Mapping and rock chip sampling by Buxton and IGO has confirmed the presence of Ruins Dolerite in the area.

In CY21, IGO collected and geochemically analysed rock chip specimens near the Skarloey SPECTREM anomalies and found sheared ultramafic rock types in exposures at the anomaly locations. A fixed loop EM and MLEM survey detected multiple, low conductance plates at shallow depths, and one discrete, high conductance (9,000S) conductor.

A zinc (Zn) and copper rich gossan along the contact between Ruins Dolerite and Marboo Formation meta-sedimentary rocks coincides with this high conductance EM plate. Drill hole 22WKDD001 tested this anomaly and intersected 1.03m of massive sulphide assaying 1.24% Cu and 0.85% Zn (Figure 29). These sulphides explain the ground EM target.



Figure 29: Sentinel CY22 drilling cross section 22WKDD001 testing a 9,000S conductor

Topham Target

The Topham Cu-Pb target was discovered by Buxton using rock chip sampling in 2018. IGO's CY19 SPECTREM AEM survey detected a string of EM anomalies east of the Topham area which coincide with multiple Cu-Pb-Zn anomalous gossans. Rock chip specimen, WK05242, represents a malachite-stained quartz vein occurring 140m from a SPECTREM anomaly and assayed 0.91% Cu and 0.25% Pb. Rock chip specimen, WK05216, represents a foliated siltstone containing oxidised blebs of sulphide, and assayed 12.05% Pb, 0.21% Zn and 635ppm Cu³. An in-fill rock chip sampling and mapping program in CY22 identified an extension to the prospective Ruins Dolerite unit, with anomalous Ni and Cu. IGO intends completing a ground EM survey to test the AEM anomalism at Topham this field season.

Colemans Prospect

The Colemans Prospect incorporates multiple gold prospects that were worked by historic miners across the centre of Sentinel. Rock chip samples of quartz veins contain moderate gold grades; however, these are narrow and not strike extensive. Samples of mafic intrusions reveal that the Ruins Dolerite at Colemans have a similar geochemical signature to the host rocks at the Merlin nickel prospect however there are no AEM anomalies in the area to follow up⁴. Further work is required at Colemans to quantify the economic potential of the gold mineralisation.

Yampi Area

IGO was granted permission to access the Yampi Military zone to conduct exploration on the Yampi Area. Helicopter traversing enabled rapid mapping and sampling of targets identified in aeromagnetic data and Geological Survey of WA (GSWA) mapped Ruins Dolerite (prospective mafic/ultramafic intrusive suite).

A total of 584 helicopters assisted mapping and pXRF points were recorded at the Yampi Project area during the CY22 field season. ALS Laboratory results received from surface rock chip sampling revealed anomalous copper and gold results from the Kate area from a quartz vein along strike from Dreadnoughts Chianti Prospect.

A HeliTEM survey completed across half of the Yampi Project tenure detected multiple AEM anomalies. Priority 1 anomalies coincide with outcropping Ruins Dolerite at the Duck target and are themselves coincident with a ferruginous-zinc-copper gossan that requires infill traversing to delineate the extent of the gossan. Priority 2 and 3 anomalies exist undercover and along strike from outcropping Ruins Dolerite. Ground EM will be required to define the source of these anomalies if there is no explanation in the outcropping mafic intrusives that appear to be the host.

Regional Exploration

IGO flew an AEM survey over areas of favourable geology in the West Kimberley where no previous EM data existed. Anomalous results generated from this new data will be followed up in due course. In addition to the systematic exploration activities completed at Osmond Valley, Sentinel and Yampi, IGO continues to liaise and build relationships with various Native Title groups and Pastoral Station owners that are impacted by our exploration efforts.

Thirty-two tenements were granted to IGO in CY22, with 30 of these in the East Kimberley. Multiple work areas have been identified for ground exploration and appropriate applications for work permits have been submitted that when granted will allow IGO to obtain heritage guidance from various Native Title groups. Completed heritage surveys from late CY22 will set the stage for the start of field activities for CY23.

³ Buxton ASX announcement 22 November 2021 "Update on West Kimberley JV - Sentinel Project"

⁴ Buxton Resources ASX announcement 26 November 2015 "New Nickel Province Confirmed at Double Magic Ni-Cu Project"

WESTERN GAWLER PROJECT

The Western Gawler Project in SA lies within the Fowler Domain of the Gawler Graton. The Fowler Domain is an orogenic belt of Proterozoic Age, overlain by recent sedimentary cover, which is known to host mafic and ultramafic intrusive rocks. Similar orogenic belts in Australia have proven to contain significant mafic-ultramafic related intrusive nickel and copper deposits including Nova-Bollinger and Nebo-Babel in WA. The Fowler Domain is considered an underexplored region with significant potential to host large-scale economic mineral deposits.

The Western Gawler Project has a consolidated project area of 11,455km² extending over 270km of strike (Figure 30). This project incorporates the Iluka Joint Venture Project (IGO 75%) and IGO 100% owned tenure. IGO, previously managed by WSA, has applied a systematic approach to evaluate targets under cover, using modern geophysical techniques and targeted drilling campaigns.

The potential for magmatic-hosted Ni-Cu mineralisation within the Fowler Domain was recognised some time ago and was confirmed in 2020 with the discovery of thick magmatic sulphide zones in DD at the Sahara prospect. Key intercepts include 104.4m grading 0.21% Ni and 0.12% Cu including 34m grading 0.29% Ni and 0.17% Cu (refer to Table 6 on page 64 for full JORC Code details).



Iluka JV (IGO 75% interest)

IGO is in a Farm-in and JV with Iluka (Eucla Basin) Pty Limited, a 100% owned subsidiary of Iluka Resources Limited. The Iluka tenements comprise eight tenements covering 7,149km².

Air-core Drilling

In CY22, IGO completed 72 AC drill holes at Firefly and LP1 for 2,950m. This drilling program followed on from an AC campaign in November 2021, when 183 holes for 8,384m were drilled. These drilling programs aimed to define the mafic-ultramafic stratigraphy and identify elevated nickel and copper anomalism that may indicate the presence of primary sulphide mineralisation at the Sahara, Firefly and LP1 targets.

AC drilling 1,500m northeast of Sahara intersected multiple geochemical anomalies including 3m grading 529ppm Cu (21WGAC0940) and 3m grading 0.23% Ni (21WGAC0949).

This zone, located on the margin of a gravity anomaly demonstrates that prospective ultramafic host-rocks occur north of Sahara and is a focus for additional work.

At Firefly, AC drilling following up primary Ni-Cu sulphides in 21WGDD019, intersected anomalous copper along the eastern flank of a pyroxenite intrusion. Better assays include 16m grading 593ppm Cu (21WGAC997). Several additional zones of anomalous nickel were identified.

Two AC traverses were completed across LP1, identifying prospective mafic host units. 22WGAC1107 recorded maximum downhole results of 0.44% Ni and 656ppm Cu.



Surface Geochemistry

A soil orientation survey was completed across Sahara, Firefly, Splendour and Meredith prospects during CY22 to determine whether surface geochemistry could detect mineralisation and basement rock types. In the northern part of the tenement package, the surveys demonstrated that the chosen methods were able to detect mafic intrusions as well as nickel and copper anomalies.

Figure 32: Western Gawler Project surface geochemistry sampling



Research Projects

Several research projects were completed or in progress during CY22. A magneto-telluric (MT), passive Seismic and Magnetic Modelling Study was completed as part of the Accelerated Discovery Initiative co-funded by the SA Government and Department of Mines. The MT and passive seismic projects are a collaboration between IGO and the University of Adelaide. The Magnetic modelling study is investigating the influence of magnetic remanence in the Fowler Domain with the aim being to identify links between magnetisation and mineralisation. This project is a collaboration between IGO and CSIRO.

The modelled, high quality MT data show a very resistive lithosphere and upper crust (Figure 32). Major faults are represented by more conductive zones. However, results from the passive seismic survey are inconclusive and further data analysis is required before advancing this survey method. The magnetic remanence study highlights the complex nature of the magnetisation in the Fowler Domain and is interpreted to reflect numerous deformation and metamorphic events.



Figure 33: Sahara-Firefly MT traverse two-dimensional resistivity section to 20km depth



Mystic Prospect (IGO 100%)

The Mystic Prospect presents a dual opportunity for exploration success, high-grade nickel oxide near surface, and nickel sulphides at depth.

The Mystic Nickel Oxide Zone was discovered by WSA in 2018 during regional AC. Drill hole 18WGAC353 intersected 2m grading 1.42% Ni from 56m within weathered ultramafic. Follow up AC returned 18m grading 2.06% Ni (including 5m grading 4.29% Ni) from 54m (19WGAC944). High-grade nickel oxide (>2%) develops in the lower saprolite zone. The saprolite is overlain by sediments of the Eucla Basin to depth ranging from 20 to 40m. The presence of nickel and copper-bearing primary sulphide mineralisation was confirmed at Mystic in 2020 within drill hole 20WGDD001 which intersected a 2.05m disseminated sulphide zone assaying 0.3% Ni, 0.14% Cu and 294ppm Pt+Pd (2PGE), (from 109m). Mineralisation is hosted within cumulate ultramafic intrusive rocks.



An AC drilling program in late-CY22 extended drilling coverage over a 7km corridor north from Mystic. Seven holes for 507m were completed, identifying a 150m wide zone of mineralisation, including 18m grading 2.25% Ni (22WGAC1123) (See cross-section - Figure 34).

RAPTOR PROJECT

The Raptor Project is a belt-scale Paleoproterozoic magmatic Ni-Cu sulphide project which has undergone little modern exploration. Raptor has similar geology to IGO's Fraser Range and Kimberley projects; the Project complements IGO's exploration portfolio as a first mover, long-term project in a less mature, but highly prospective terrain. IGO are targeting a continent-scale paleo-craton margin and coincident regional gravity high, known as the Willowra Gravity Ridge in the Aileron Province (Figure 35). This geophysical feature is similar in scale to the Fraser Zone of the Albany Fraser Orogen. Access to the opportunity has been secured through open staking on a 100% IGO-owned basis.

Previous explorers in the area focused mainly on gold. Extensive vacuum and rotary air blast drilling had been completed historically, but most of the samples collected were only assayed for gold and arsenic. IGO's review of NT Government open file data reports found that one company had analysed for a broader suite of elements in the mid-1990s and identified mafic and ultramafic rocks in the area. That company reported an intercept of 4m grading 1.35% Ni and 0.21% Cu from 39m in a metagabbro⁵. This result at the Osprey target may demonstrate that the processes required to potentially form world-class magmatic Ni-Cu-Co mineralisation has occurred in the Raptor area.

On-ground exploration is yet to commence due to the need to secure agreements with Traditional Owner groups prior to the granting of tenements. Negotiations continue in FY23.

In the meantime, IGO has proactively sought to collect and interpret airborne geophysical data. This includes 100m-spaced aeromagnetic and radiometric survey and a pilot HeliTEM EM survey collaboratively funded with the Northern Territory Geological Survey (NTGS) as part of their 'Resourcing the Territory' initiative.

During CY22, the first pilot airborne EM survey covering 548km² at 100m spacing around the Kestrel target was successfully completed, with follow-up targets currently being generated. Historical drilling in the Kestrel area recorded intercepts of 5m at 0.73% Ni and 0.38% Cu from 24m in meta-peridotite⁶.

A second pilot EM survey covering 1,495km² is planned for CY23 in the area around the Osprey target. These EM surveys will fast-track future exploration once on-ground access is granted.



Figure 35: Raptor Project tenure over gravity image highlighting the Willowra Gravity Ridge

⁵ Edwards SE and Kellow M, 1996. Annual Report for the Period 13 September 1994 to 12 September 1995, Tanami Project, EL6743, 6744 and 6745. Sons of Gwalia Limited. Open File Company Report, Northern Territory Geological Survey, CR1996-0011.

⁶ Nugus M and Kellow, 1995. Annual Report for the Period 31 December 1994 to 30 December 1995, Tanami Project, EL's 7632, 7633. Sons of Gwalia Limited. Open File Company Report, Northern Territory Geological Survey, CR1996-0114.

IRINDINA PROJECT

The 100% IGO-owned Irindina Project is northeast of Alice Springs (Figure 36) in the Aileron and Irindina Provinces of central Australia. The Irindina Province lies on a large gravity anomaly (Figure 36) that IGO interpret to be caused by widespread and dense mafic intrusions. The geological setting at Irindina is similar to the Fraser Range and Kimberley projects, being a long-lived craton margin prospective for high value mafic-ultramafic intrusion-hosted magmatic Ni-Cu-Co massive sulphide deposits.

Historical exploration west of the project area led to the discovery of several outcropping Ni-Cu prospects in maficultramafic rocks. The best drill intercept from this work was 9m at 0.48% Ni and 0.3% Cu⁷. In contrast, the east of the Project area lies largely undercover and has seen little exploration providing an opportunity for discovery.

A similar exploration strategy to the Raptor Project is being adopted at Irindina. Airborne geophysics are currently being flown whilst land access agreements that will allow on-ground exploration are being negotiated with local Traditional Owners. In CY22, IGO completed a 100m spaced 1,114km² AEM and radiometric survey over the east of the Irindina Project. This survey was be co-funded by the NTGS as part of their 'Resourcing the Territory' initiative. Detailed aeromagnetic surveys better define intrusions, as their geophysical signatures are harder to detect in wider-spaced regional survey data. The new survey results will be interpreted to delineate magnetic geophysical signatures related to mafic intrusions that lie under shallow cover. With this information, IGO can develop a better understanding of the volumetric distribution of mafic intrusions and plan advanced exploration programs such as soil sampling, ground EM surveys and drilling.



Figure 36: Irindina Project tenure over gravity imagery and major topographic features

7 Mithril Resources Ltd, 2009. Quarterly report for the period ending 30 September 2009. Australian Stock Exchange announcement: MTH, 30 October 2009.



BROKEN HILL PROJECT (IMPACT JV)

The Impact Minerals Limited (Impact) Broken Hill Project is primarily defined by tenement EL7390 (67km²) that is along the southern margin of the Proterozoic Southern Curnamona Province that is considered highly prospective for orthomagmatic Ni-Cu-Coand platinum group element (PGE) deposits. At their closest point, the broader package of tenements is just 3.5km from the Broken Hill lead-zinc-silver (Pb-Zn-Ag) camp (pre-mining estimate of 150Mt grading >20% Pb+Zn) which has been mined near continuously since 1885. Unsurprisingly, a deposit of this size has dominated the exploration history and paradigms of the region and as such, much of the work completed has been in search for further Pb-Zn-Ag resources. However, the region is also considered highly prospective for magmatic Ni-Cu-Co-Pt-Pd-Au(-Ag) sulphide mineralisation, which has received comparatively very limited work.

The Curnamona Province is a large stable block of Proterozoic rock which straddles the NSW and SA border. Basement metasediments of the Willyama Supergroup (1,720 to 1,640Ma) have been routinely deformed and are intruded by 825Ma ultramafic rocks of the Gairdner-Willouran Large Igneous Province. This Large Igneous Province, which likely stretched across a large portion of the Rodinian Supercontinent generating large amounts of mafic magmatism, is associated with the formation of the World-class Jinchuan Ni-Cu-PGE deposit in China (>500 Mt grading 1.2% Ni, 0.7% Cu and 0.4g/t PGE). The best examples of these age mineralised intrusions outside of China are arguably found within the Impact tenure in Broken Hill and are seen as a series of mafic-ultramafic sills and dykes. Six prospects have been defined on the Impact tenure. Excluding the Little Broken Hill Gabbro, they have all received varying levels of historic exploration, including surface sampling, drilling and numerous geophysical surveys. Since 2013, Impact have continued to explore the intrusions, with efforts focused largely at Platinum Springs, Red Hill, and Rockwell. This has included some 149 drill holes (AC, RC and DD), AEM and limited ground EM and DHEM. This work has demonstrated proof of process including the presence of large prospective ultramafic intrusions with abundant high tenor sulphide formation, regional structural complexity, and the presence of productive host rocks with ample volatile and sulphur sources.

In CY22, IGO carried out a combination of fixed and MLEM deploying high-temperature superconducting quantum interference device (usually abbreviated to SQUID) EM sensors to screen across the project portfolio. One target worthy of subsequent drill testing was identified (Plat-A-8000S), which was subsequently diamond drilled. This drilling encountered a mixture of meta-mafic gneiss 'Wilyama Metadolerite' and 'Thackaringa Group' Meta-Sediments. At target depth, a zone of heavily disseminated to semi-massive pyrrhotite, pyrite and minor chalcopyrite was encountered hosted in a quartz vein within sheared meta-sediments. This explained the conductor and was confirmed by subsequent DHEM.

In CY23, a small EM program is being carried out to complete the screening of the project portfolio.

Greenfields Copper Exploration

IGO's copper exploration project portfolio is not as developed as the nickel portfolio, being mainly early-stage projects in WA, SA and the NT. This section provides details about IGO's CY22 results and exploration approach.

PATERSON PROJECT

The Paterson Project in WA has been formed through JV agreements with Encounter Resources Limited (Encounter), Cyprium Metals Limited (Cyprium) and Antipa Minerals Limited (Antipa), and additionally with the staking of 100% IGOowned tenements. The combined tenure is now a belt-scale opportunity to find and develop Tier-1 sediment-hosted Cu-Co and intrusion-related sediment-hosted Cu-Au deposits (Figure 37). The Paterson Project covers a Neoproterozoic basin that was progressively filled by a complex succession of basal clastic sandstones, carbonaceous to pyritic shales and siltstones, and platform carbonates comparable to those found in the Central African Copperbelt, where oxidised metalrich brines ascended along basin margin faults to form giant sediment-hosted Cu-Co deposits. These rocks host the Nifty Deposit and other copper prospects, including Maroochydore, Rainbow and BM1. Later, granitic magmatism has resulted in the formation of a series of Cu-Au deposits such as Telfer and Winu, with each deposit estimated to contain over 2Mt of copper in situ.



Figure 37: Paterson Project tenure and regional deposits CY22 was a busy year for IGO's exploration team within the Paterson. A total of 228 AC holes were drilled for 22,272m, together with nine DD holes for 5,490m. This drilling was augmented by 2,113 fine fraction soil samples, 530 rock chip samples, and three mapping campaigns covering a combined area in excess of 1,600km². Completion of high-quality primary geophysical datasets over the Paterson Project was a key focus. To this end, more than 12,805 line-km of aeromagnetic data on 100m-spaced flight lines, a total of 5,345 line-km of airborne gravity data on 400m-spaced flight lines, a further 1,410 ground station gravity readings on a 600 by 600m grid, and 4,762 line-km of time-domain AEM data on 250m-spaced flight lines was collected. These regional datasets were augmented by an 1,157 line-km airborne MT survey, soundings along an 11km long seismic line, and target-specific MLEM and gradient array/pole dipole induced polarisation (GA/DP IP) surveys. The overriding objective of these programs was targeted data acquisition to develop a comprehensive 3D model of the basin architecture and to then implement a mineral systems approach integrated with empirical data to generate targets (Figure 38).



Figure 38: Paterson Province data syntheses layers

PATERSON PROJECT (ENCOUNTER JV)

IGO has managed the Paterson (Yeneena) Project Farm-in with Encounter since April 2021. The Farm-in covers 12 tenements (1,448km²) in the southwestern Yeneena Basin. Previously, six regional ground MT lines had been completed to gain a high-resolution understanding of the subsurface architecture to a depth of 10km. These were supplemented by a regional airborne MT survey during CY22; although at lower resolution and only penetrating to 2km, this permitted interpolation of major structures and folds between the ground MT lines. Together with the primary geophysical datasets, this has enabled IGO to break the regional stratigraphy into a series of sub-basins that comprise shallow water carbonates and sandstones transitioning to deeper water shales and separated by structural highs (Figure 39). Gaps in the primary geophysical database, especially in the northwest of the Farm-in tenure, were closed during CY22 by an aeromagnetic survey for 2,956 line-km on 100m-spaced flight-lines and a time-domain AEM survey on 250m-spaced flight-lines. Furthermore, an 11km long seismic line survey was undertaken in conjunction with the University of WA. This seismic survey imaged a carbonate platform spalling debris flows into deeper water shales, which in turn abut a basement high of the Rudall Metamorphic Complex; the contacts between these units are potential sites for fluid flow and trapping leading to copper mineralisation. The now complete primary geophysical dataset, in conjunction with logging and multi-element geochemistry from the CY21 regional AC program, was used to further assess sedimentary facies variations within the sub-basins. Detailed mapping and rock chip sampling took place over ~600km² of outcrop with measurements taken of fold axes and shear zones. A total of six DD holes for 3,989m were drilled into two sub-basins to test the stratigraphy at intersections with the extrapolated mapped structures. At EB01, three holes collared through reducing carbonaceous shales to terminate in oxidised sandstones. These holes confirmed the expected facies variations within the sub-basin, however evidence of fluid flow was limited and generally restricted to weak shear zones. A further three holes were drilled at ET01; one went through a sandstone-siltstone offshore bar sequence, whereas the other two were

dominated by interbedded marls and reduced shales. Overall, the drilling program confirmed that the integrated geophysical, geochemical, and geological datasets can establish the architecture of the sub-basins and be used to target prospective trap sites for ascending cupriferous fluids.

An AC drilling program comprising 16 holes for 1,495m took place in the central part of the Farm-in. This was an adjunct to the CY21 regional drilling program and confirmed the boundaries of a further shale-rich sub-basin buttressed by a shallow water carbonate platform to the east. A feature of the CY21 and CY22 regional AC programs was the casing of 93 holes for subsequent hydrogeochemical sampling. IGO has pioneered the use of hydro-geochemistry elsewhere to track dispersion plumes from orebodies using techniques developed in collaboration with the CSIRO.



Figure 39: Subdivision of Yeneena Basin architecture based on mapping and geophysics

PATERSON PROJECT (CYPRIUM JV)

IGO manages exploration over an additional 2,298km² of tenure in the north-western Yeneena Basin through its Farmin with Cyprium. The primary target is Nifty-style Cu-Co mineralisation that occurs at structurally controlled sandstoneshale/carbonate contacts and in other favourable tectonostratigraphic settings.

Building on the success of the Yeneena Project MT surveys, IGO completed five ground MT lines in CY21 to image the subsurface architecture to a depth of 10km. This coverage was supplemented in the southernmost part of the tenure by the CY22 regional airborne MT survey. Gaps in the primary geophysical database were closed during CY22 by an aeromagnetic survey for 9,852 line-km on 100m-spaced flight lines, the time-domain AEM survey on 250m-spaced flight lines, and a ground gravity survey with readings taken at 1,410 stations on a 600 by 600m grid. The MT dataset is being integrated with the now complete gravity, magnetic and AEM dataset to build a 3D model of the basin architecture and guide future exploration.

Three AC drilling programs comprising 161 holes for 17,140m were finished during CY22. Drilling to the west of Nifty intersected an unmineralised carbonaceous shale succession. Previously, in CY21, low-level Au-Cu mineralisation (up to 0.7 parts per million (ppm) Au) had been intersected in five holes testing a series of conductive folds and relay fault structures located 15-20km southeast of Warrabarty. Follow-up drilling during CY22 discovered further low-level Au-Cu mineralisation, including 6m grading 0.54% Cu in 22PTAC099 (from 138m downhole) and 4m grading 0.27ppm Au in 22PTAC0104 (from 139m downhole). The Cu-Au mineralisation occurs on both limbs of the fold axis as well as the axial plane (Figure 40); the mineralisation remains open along strike and at depth.

As with the Yeneena Farm-in, the 3D geological and structural modelling from integrated geophysical, geochemical and geological datasets was used to break the regional stratigraphy into a series of sub-basins separated by structural highs. Three DD holes for 1,501m were drilled into a newly identified sub-basin located 8km to the east of Nifty. Two holes successfully reached the Proterozoic bedrock beneath more than 160m of Permian cover; both proceeded through a dolostone sequence characterised by common microbial mounds. A 25m wide zone of pervasive silicification and weak calc-silicate alteration was intersected by 22PTDD009 (from 420m downhole) and developed along the contact of the carbonate platform with deeper water sediments.

The regional fine fraction soil sampling program completed over the Cyprium tenure in late CY21 had delineated a 4 by 6km zone of anomalous copper and other elements near the Rainbow prospect. With the geophysical database now complete, modelling of this area has commenced and generated new drilling targets for the coming field season.

IGO have leveraged off the historic drill core and chips at the Nifty Mine. More than 12km of regionally representative historic DD core and 29km of RC chips have been relogged, re-assayed and analysed for their petrophysical properties. The goal of this work is to fully characterise the Throssell Range stratigraphy and generate a comprehensive multi-element database that can be used to vector towards further copper mineralisation. In addition, this core library, together with the core drilled during CY21 and CY22, supports ongoing research by several Master's Degree students, a PhD and a Post-Doctoral study on topics ranging from the depositional environment of the basin sediments and sequence stratigraphy to using geochronology to constrain depositional ages, deformational events and paragenesis of the mineralisation. This work is essential to developing an understanding of how the basin has evolved with time and which structures and events control the mineralisation.



Figure 40: Paterson Project AC Cu-Au intercepts on the limbs and axis of a conductive fold in E45/2415 (SkyTEM conductivity image), underlain by greyscale magnetic image
PATERSON PROJECT (ANTIPA JV)

IGO assumed management of the Paterson Farm-in Agreement with Antipa during March 2022, having completed an initial A\$4M of exploration expenditure within 1.5 years. This Farm-in covers 14 tenements (1,648km²) in the eastern Yeneena Basin where significant volumes of granite intrude the sandstoneshale-carbonate basement rocks. Large, intrusion-related sediment-hosted, Cu-Au deposits occur at Telfer, Winu, Calibre, Minvari and Havieron within the same stratigraphic package. The Farm-in includes the Reaper, Poblano and Serrano prospects that occur within a 1.8km-long by 500m-wide northnorthwest trending zone. Wide-spaced RC drilling at Serrano in 2019 discovered mineralisation that included 4m grading 8.1g/t Au and 0.23% Cu (from 194m downhole) in quartzsulphide veined metasediments⁸. AC drilling at Poblano in 2020 returned 45m grading 0.12g/t Au (from 24m downhole) and 4m grading 0.31g/t gold (from 80m downhole), with mineralisation remaining open along strike in both directions and at depth⁹.

An airborne gravity gradiometry survey comprising 5,345 linekm with a flight line spacing of 400m was flown over 12 of the 14 tenements to complete primary data acquisition during CY22 (Figure 41). Integration of the new gravity data with the existing AEM and EM datasets has identified two coincident gravity and magnetic high targets. Within the greater Paterson, both the Minyari and Havieron deposits are also characterised by coincident magnetic-gravity anomalies. When combined with ground-truthing provided by logging and multi-element analyses from the CY21 and CY22 AC drilling programs, the now complete primary geophysical database can be used to subdivide the metasediments into sandstone, shale and carbonate domains that have undergone complex folding and are separated by major faults. The interaction and 3D architecture of these structural elements is key to generating further high-priority targets.

Infill fine fraction soil sampling was completed over the CY21, Cu-Au soil anomalies discovered to the north of Minyari (14 by 6km footprint) and south of Grey (9 by 4km footprint). Assays from these 2,113 samples now define continuous narrow belts of multi-element anomalism. A 51-hole AC drilling program for 3,637m was completed over the more deeply covered area between these soil anomalies at an ~400m by 1,400m spacing. Twenty-four of these holes were cased for later hydrogeochemical sampling. Elevated Au and intrusionrelated Au-Cu pathfinder elements were reported in four holes, with chips from 22PTAC0225 returning 8m grading 0.25ppm Au (from 44m downhole) in altered metasediments. These programs highlight the strong structural control of Cu-Au mineralisation in this complex area, which is also adjacent to one of the newly recognised coincident magnetic-gravity highs.

Nearby at Grey, a gradient array/pole dipole induced polarisation survey over quartz-sulphide veined metasediments that reported 3m grading 197g/t Ag, 0.9% Cu and 0.2 g/t Au in 19EPC0032 (from 66m down-hole) found no significant accumulation of disseminated sulphides to 120m depth¹⁰.

In late-2021, Antipa were successful with a WA Government Exploration Incentive Scheme application for DD testing of two Havieron look-alike magnetic targets within the northernmost tenement of the Paterson Project, located 15km along strike from the Winu Deposit. A heritage survey to enable this drilling and testing of nearby structural corridors was completed in late CY22.





⁸ Antipa Minerals, ASX report entitled "Zones of copper-gold mineralisation identified", lodged on 18 October 2019.

⁹ Antipa Minerals, ASX report entitled "Antipa delivers strong results from multiple prospects on 100% owned ground", lodged on 22 November 2019.

¹⁰ Antipa Minerals, ASX report 5 March 2021 "Target generation air core drill programme extends Poblano mineralised gold zone by 500 metres"

TARCUNYAH (100% IGO)

IGO commenced CY22 with three 100% owned tenements covering part of the Tarcunyah Group metasediments adjacent to the southwest of the Yeneena Basin. An extensive and detailed mapping program covering ~1,000 km² was completed and supplemented by 91 rock chip samples. No evidence for the passage of significant cupriferous brine or base metal mineralisation was found in two tenements, nor were the appropriate structures for fluid migration or sedimentary facies to generate trap sites for a Tier-1 sediment-hosted copper deposit. The two non-prospective tenements and part of the third were relinquished.

COPPER COAST PROJECT

The Copper Coast Project is located along the eastern margin of the Gawler Craton in SA. West of the Torrens Hinge Zone, crystalline Paleoproterozoic and Mesoproterozoic basement rocks are known to host iron oxide copper-gold (IOCG) mineralisation like Olympic Dam, while to the east the Neoproterozoic sediments of the Adelaide Geosyncline (or 'Rift') are prospective for sediment-hosted copper deposits. The Copper Coast Project comprises 12 granted 100% IGO Exploration Licences (EL6307 through 6312, EL6550, EL6551 and EL6561 through EL6564), covering ~7,521km². IGO considers the Copper Coast Project represents a significant belt-scale opportunity to discover and develop a Tier-1 sediment-hosted copper deposit, such as the giant Kamoa-Kakula deposit on the margin of the Central African Copper Belt, which is currently being developed by Ivanhoe Mines. During CY22, IGO completed a SA Government co-funded DD program (four holes for 2,731m), a co-funded 2D seismic geophysical survey (two traverses for 58 line-km) and commenced a regional hydrogeochemical sampling program. Drilling intersected a reduction-oxidation (REDOX) front at the unconformity between reduced mudstone and oxidised conglomerate, providing evidence of permissive stratigraphy:

- mudstone / siltstone \rightarrow reduced trap / seal
- conglomerate \rightarrow permeable reservoir / aquifer; and
- arenitic sandstone and / or basalt → possible source of oxidised fluids.

While hole CCDD07 (Figure 42) displayed evidence of fluid flow and alteration, the limited metre-scale permeability of the oxidised fluid into the overlying reduced mudstones is currently considered the main barrier to a substantial volume of fluid flow required for deposit formation at this location. Moving forward, locating where mechanisms, either structural or stratigraphic, exist to dramatically increase the permeability of the reduced mudstones/siltstones will be the key to finding focused economic mineralisation at Copper Coast. Understanding and modelling the 3D basin architecture will be crucial in identifying these mechanisms, and thus targets, towards discovering a sediment-hosted copper deposit. To this end, work has commenced on the integration of the geological and geophysical database to build a belt-scale 3D model. This model will be used to identify highly prospective areas for copper mineralisation and reduce search space.



Figure 42: CCDD07 core displaying REDOX unconformity

REDOX front at unconformity between reduced mudstone and oxidised conglomerate in CCDD07 (NQ diameter).

FRONTIER PROJECT (GREENLAND)

The Frontier Project in central East Greenland, in partnership with private company Greenfields Exploration Ltd (Greenfields), was relatively unexplored prior to IGO's first field program in 2018.

The Eleonore Bay Supergroup (EBS) within central East Greenland (Figure 43) forms a 14km-thick cyclical succession of shallow water sediments transitioning to carbonate-platform deposits. The sediments were laid down at 900 to 670 million year (Ma) ago in the Neoproterozoic and subsequently overlain by a tillite succession contemporaneous with the 663Ma Marinoan glaciation event. The EBS is an allochthonous terrane, interpreted to have been detached from Rodinia during the Caledonian orogeny (466 to 360Ma) and transported 200 to 400km westward. This movement was associated with regional metamorphism, heating and moderate to weak deformation of the rocks. Within this package of sediments are three main target horizons considered prospective for a Tier 1 sedimenthosted copper deposit.

Two reconnaissance programs assessed prospectivity across a wide area in 2018 to 2019. From these programs, and using remote sensing data, the search space for copper mineralisation was significantly reduced. The highest priority area of interest, following the 2019 reconnaissance program, was identified as Strindberg Land North, where stratabound and structurally controlled copper mineralisation was discovered. Copper sulphides (mainly chalcocite) were mapped within two 1.5 to 3m thick beds of the lower Kap Petersens Formation. Rock chip sampling of mineralised siltstone identified an area of surface copper mineralisation extending over 5.5 by 1.7km. No fieldwork was carried out during CY20 and CY21 due to COVID-related travel restrictions. During this time, IGO revisited all historical data and built a 3D geological model of the Strindberg Land North region, which further reduced the search space to camp-scale areas of interest for follow-up work. Chalcocite in rock chips from the earlier field campaigns across the Strindberg Land North prospect area were sampled and dated to understand the age and genesis of mineralisation and to test whether this mineralisation was closely related to diagenesis or later orogenesis. Using a combination of SHRIMP II dating on chalcocite and xenotime minerals (the latter being texturally coeval with the chalcocite), it was determined that the chalcocite mineralisation was predominantly diagenetic.

During July and August 2022, an intensive mapping and sampling campaign was completed across the Strindberg Land North areas of interest. About 150km² was mapped, with 469 rock samples collected and 1,410 portable X-ray florescence analysis carried out in the field. Sampling focused on obtaining representative and relatively systematic coverage across the area to investigate for signs of large-scale fluid flow and aid with geochemical characterisation of the sediments. The interpretation of geological, structural and geochemical data collected was integrated into a 3D geological model update to assess for Tier 1 sediment-hosted copper targets. From this, it was determined the Project did not meet the internal criteria required to warrant further investment and IGO exited the JV with Greenfields in late 2022.



Figure 43: Rock chip sampling locations over Stringbergland North

LAKE MACKAY JV PROJECT

Lake Mackay is a JV between IGO, Prodigy Gold NL (Prodigy) and, in parts, Castile Resources Pty Ltd. The project tenure covers 10,854km² straddling the NT-WA border. Granted tenure at Lake Mackay is primarily northwest to northeast of Kintore in the NT.

After restructuring the original JV agreement in May 2022, IGO now holds a 70% interest over base metal tenements, whilst retaining up to 30% interest over gold tenements.

The Project has the potential to deliver a wide range of mineralisation styles. This has been demonstrated by the discovery of multiple mineralisation styles by IGO and Prodigy, including Bumblebee, Grapple and Phreaker (Cu-Au-Ag-Co), Grimlock and Swoop (Ni-Co), and Arcee and Goldbug (Au) prospects. Prior ASX announcements have reported significant drill hole intersections from Lake Mackay including:

- Bumblebee: 7m grading 3.2% Cu, 3.3g/t Au, 37.7g/t Ag, 0.9% Pb, 1.3% Zn and 0.08% Co¹¹
- Grapple: 11.4m grading 0.8% Cu, 7.9g/t Au, 20.7g/t Ag, 1.1% Zn, 0.5% Pb and 0.1% Co¹²
- Phreaker: 17.5m grading 2.13% Cu, 0.21g/t Au and 9g/t Ag from 575.2m down hole¹³
- Arcee: 8m grading 4.9g/t Au¹⁴
- Goldbug: 16m grading 1.15g/t Au¹⁵

IGO considers Lake Mackay a first-mover opportunity in an underexplored belt that is prospective for copper and gold deposits. Before IGO's involvement, Lake Mackay was largely devoid of any systematic geochemical exploration, with no modern AEM completed prior to IGO's 2018 survey. IGO's regional ultra-low detection fine-fraction soil sampling programs, combined with ground MLEM surveys, have led to the discovery of most of the known base and precious metal occurrences in the region.

In CY22, as part of the restructured JV agreement, Prodigy sole funded the drilling of two DD holes at the Phreaker prospect, and in the west of the Project area, 25 RC holes at the Arcee Prospect and three gold-in-soil anomalies.

The Phreaker DD holes were designed to intersect the modelled EM plate down-plunge of high-grade mineralisation previously reported in hole 21PHDD002. Drill hole PRDD2202 intersected the modelled EM plate above and along strike of the high-grade zone. This hole contained encouraging base metal results of 5.6m grading 0.23% Cu, 0.35% Zn, 1.2g/t Ag and 0.18g/t Au from 545m¹⁶. Drill hole PRDD2203 intersected mineralised zones similar but with higher tenor to those reported in hole PRDD2202, yielding several narrow intercepts of polymetallic mineralisation, including 2.3m grading 1.14% Cu, 0.97% Zn, 9.1g/t Ag and 0.11g/t Au from 739.8¹⁷.



Figure 44: Diamond drill core from PRDD2203

50mm diameter (NQ2) diamond drill core from PRDD2203 at 714m depth showing a high-grade interval of pyrrhotitedominant semi-massive sulphide mineralisation with visible chalcopyrite and sphalerite.

Disclaimer: Visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analyses where concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations.

- ¹¹ ABM Resources ASX announcement 6 October 2015, "Announcing the Bumblebee Gold-Copper-Silver-Lead-Zinc-Cobalt Discovery"
- ¹² Prodigy Gold ASX announcement 18 September 2017 "Lake Mackay JV Grapple Prospect Drilling Update"
- ¹³ Prodigy Gold ASX announcement 26 May 2021 "Exceptional high grade copper intersections at the Phreaker Prospect within Lake Mackay JV"
- ¹⁴ Prodigy Gold ASX announcement 16 October 2019 "Lake Mackay JV Update: New Gold Prospect Identified"
- ¹⁵ Prodigy Gold ASX announcement 18 January 2021 "Lake Mackay JV: Bedrock Gold intersected at Goldbug Prospect"
- ¹⁶ Prodigy Gold ASX announcement 8 August 2022 "Lake Mackay Drilling Results"
- ¹⁷ Prodigy Gold ASX announcement 6 February 2023 "Lake Mackay Drilling Results"

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Greenfields Rare Earth Element Exploration

LAKE CAMPION PROJECT

In CY22, IGO acquired the Lake Campion REE Project in the Wheatbelt Region of WA. The project consists of 21 tenements and covers an area of 2,680km² across the Wheatbelt inland of Perth (Figure 45). Lake Campion is focused on exploring a conceptual paleochannel-related regolith-hosted rare earth model, developed through the collation and assessment of regional geochemical and hydrogeochemical datasets. This assessment indicated that REE-enriched felsic intrusive and regionally acidic and hypersaline groundwater have resulted in REE-enriched groundwater. Exploration in CY22 focused on developing an understanding of paleochannel geometry, the impact of active faults on groundwater flux, and further development of the conceptual genetic model.

A project-wide passive seismic survey was completed in late CY22. Over 1,200 passive seismic measurements were collected to generate a model of regional paleochannels and identify targets for ionic adsorption of REE and REE phosphate mineralisation. The method was effective at imaging active fault zones and deep "inset valleys", both of which represent potential target areas for groundwater-regolith interaction (Figure 46). Target generation and drill planning commenced in late CY22.



Figure 45: Lake Campion hydrogeochemical and rock chip assay REE data from the Lake Campion Project





Figure 46: Lake Campion contouring of passive seismic data showing clear vertical offset along active faults

Summary and Conclusions

CY22 was a watershed year for IGO Exploration, with new komatiite and South Australian nickel projects entering the portfolio for the first time via the acquisition of WSA, new lithium projects around Greenbushes and at Forrestania, and with IGO's pre-existing portfolio also delivering encouraging results on several projects.

Highlights include the exploration results around Silver Knight, including the pseudo-3D seismic survey results, and the initial drilling results to-date, which show encouragement for further exploration.

Both nickel and lithium exploration at Forrestania, a new brownfields project for IGO, are starting to demonstrate the excellent potential of the area to host new discoveries for the future.

And across IGO's other projects, from early-stage greenfield projects like Raptor, to major mid-life projects the Paterson copper project, and to advanced prospects like the South Ironcap lithium prospect, there remains many discovery opportunities, and exploration is continuing in 2023 to test these projects further and to ultimately delineate new orebodies for IGO to develop into mines.



Fraser Range/Silver Knight Significant Drilling Intercepts

Table 1: Chimera Prospect significant drilling intercepts

Drill hole name		Intercept (m)		Assay results						
	From	То	Length	Ni (%)	Cu (%)	Co (%)	Zn (%)	S (%)		
22AFDD110	404.39	404.77	0.38	0.46	0.44	0.05	0.01	6.04		
21AFDD112W1	844.70	845.00	0.30	0.47	0.02	0.12	0.01	3.03		
	849.00	851.00	2.00	0.46	0.02	0.13	0.01	1.95		
21AFDD102	1,019.90	1,020.20	0.30	0.51	0.49	0.12	0.00	13.40		

Table 2: Chimera Prospect significant intercept collar details

Drill hole name	(GDA9	Collar 4 MGA Zone 5	1, AHD)	Azimuth (°)	Dip (°)	Total Depth (m)	Tenement	Comment
	mE	mN	mAHD					
22AFDD110	510,480	6,473,900	311	234	-67	1,244.4	E69/3645	Drilled 2022
21AFDD112W1	511,206	6,474,604	304	125	-65	1,328.6	E28/2177	Drilled 2021
21AFDD102	510,960	6,474,550	305	226	-68	1,222.0	E28/2177	Drilled 2021
22AFDD102	509,923	6,473,425	305	315	-60	521.0	E69/3645	Drilled 2022; No significant assay
22AFDD103	510,487	6,473,533	307	134	-59	594.7	E69/3645	Drilled 2022; No significant assay
22AFDD109	511,440	6,474,750	305	240	-68	1,752.7	E28/2177	Drilled 2022; No significant assay
21AFDD112	511,206	6,474,604	304	125	-65	1,237.0	E28/2177	Drilled 2021; No significant assay
22AFDD104	511,671	6,474,765	300	135	-59	326.1	E28/2177	Drilled 2022; No significant assay

larget	Hole name		Intercept (m)	Assay results				
		From	То	Length	Ni (%)	Cu (%)	Co (%)	S (%)	
Lens S1	21HMDD06	47.00	48.00	1.00	0.48	0.22	0.02	2.14	
		50.00	54.00	4.00	2.45	0.66	0.08	15.23	
		56.00	57.00	1.00	0.64	0.16	0.02	4.03	
		59.00	60.00	1.00	0.47	0.27	0.02	2.73	
		66.00	67.00	1.00	1.00	0.47	0.04	6.47	
		70.00	71.00	1.00	1.31	0.21	0.05	8.94	
		75.00	76.00	1.00	0.46	2.11	0.02	5.06	
	22SKDD104	75.00	82.00	7.00	4.92	2.06	0.16	28.79	
	22SKRC001	53.00	62.00	9.00	2.89	1.23	0.09	17.77	
		81.00	83.00	2.00	0.70	0.37	0.02	3.85	
	22SKRC002	42.00	44.00	2.00	1.39	0.14	0.07	8.49	
		77.00	85.00	8.00	4.95	2.18	0.15	29.44	
	22SKRC003	53.00	55.00	2.00	2.82	0.28	0.09	14.70	
		57.00	59.00	2.00	1.08	0.08	0.04	6.28	
	22SKRC004	53.00	68.00	15.00	2.35	1.09	0.08	15.21	
	22SKRC005	54.00	57.00	3.00	0.91	0.33	0.03	5.46	
		60.00	62.00	2.00	1.31	0.74	0.05	7.74	
		69.00	76.00	7.00	5.52	1.71	0.18	32.63	
	22SKRC006	42.00	55.00	13.00	2.97	1.33	0.12	18.13	
		57.00	60.00	3.00	0.43	2.01	0.02	4.17	
		62.00	71.00	9.00	2.90	1.86	0.10	18.13	
		74.00	85.00	11.00	5.50	1.68	0.17	33.63	
	22SKRC008	61.00	70.00	9.00	3.19	1.02	0.10	19.56	
		73.00	75.00	2.00	0.61	0.20	0.02	3.85	
	22SKRC060	48.00	63.00	15.00	3.31	1.20	0.11	19.44	
		77.00	78.00	1.00	0.49	0.24	0.02	2.47	
	22SKRC061	72.00	79.00	7.00	1.87	0.87	0.06	10.01	
		103.00	105.00	2.00	2.51	0.85	0.08	14.57	
	22SKRC062	41.00	42.00	1.00	0.60	1.99	0.03	6.00	
		69.00	70.00	1.00	0.43	0.33	0.02	2.40	
		75.00	77.00	2.00	0.77	0.31	0.02	4.12	
	22SKRC063	55.00	58.00	3.00	1.42	0.38	0.05	7.01	
	22SKRC064	105.00	110.00	5.00	2.60	0.69	0.08	15.03	
		112.00	114.00	2.00	0.55	0.25	0.02	3.55	
	22SKRC065	55.00	61.00	6.00	2.62	0.87	0.09	15.43	
		74.00	76.00	2.00	0.60	0.29	0.02	3.08	
		78.00	82.00	4.00	0.59	0.26	0.02	3.07	
	22SKRC066	97.00	101.00	4.00	2.31	0.86	0.07	13.09	
		106.00	110.00	4.00	0.75	0.20	0.03	4.03	
	22SKRC067	70.00	91.00	21.00	4.63	1.43	0.15	27.32	
		98.00	100.00	2.00	3.00	1.06	0.10	17.52	
	22SKRC068	96.00	99.00	3.00	0.55	0.39	0.02	3.90	

Target	Hole name		Intercept (m)	Assay results				
		From	То	Length	Ni (%)	Cu (%)	Co (%)	S (%)	
Lens S1	22SKRC069	79.00	81.00	2.00	0.73	0.17	0.03	4.77	
		95.00	96.00	1.00	0.78	0.24	0.03	5.86	
	22SKRC070	65.00	67.00	2.00	0.62	0.19	0.02	3.91	
		87.00	88.00	1.00	0.41	0.22	0.02	4.36	
	22SKRC071	93.00	99.00	6.00	4.49	1.19	0.14	25.16	
		102.00	103.00	1.00	0.50	0.25	0.02	1.84	
	22SKRC072	87.00	90.00	3.00	0.76	0.10	0.03	4.81	
	22SKRC073	69.00	81.00	12.00	5.11	2.12	0.16	29.95	
	22SKRC074	85.00	88.00	3.00	0.96	0.30	0.04	5.35	
	22SKRC075	61.00	63.00	2.00	1.10	0.20	0.04	5.78	
	SKDD011	55.00	55.90	0.90	3.85	1.66	0.12	21.28	
		64.60	77.00	12.40	5.31	2.02	0.17	26.50	
	SKDD016	46.90	59.40	12.50	1.84	1.02	0.07	10.81	
		62.80	72.90	10.10	6.23	1.79	0.20	33.42	
		81.80	84.00	2.20	3.14	0.53	0.10	17.12	
	SKDD027	74.00	74.30	0.30	1.03	0.24	0.04	5.93	
	SKDD033	55.00	65.80	10.80	5.22	2.12	0.16	25.79	
		74.80	75.80	1.00	0.49	0.34	0.02	3.08	
	SKDD055	92.80	100.60	7.80	5.21	1.68	0.15	26.06	
		74.80	75.80	1.00	0.49	0.34	0.02	3.08	
	SKDD056	44.10	44.70	0.60	7.59	1.42	0.25	36.59	
		47.10	47.40	0.30	0.59	1.02	0.02	3.26	
		103.50	103.80	0.30	0.48	0.33	0.02	3.20	
	SKDD057	72.20	72.80	0.60	2.56	0.10	0.07	19.49	
		77.30	78.10	0.80	0.99	0.14	0.04	7.67	
	SKRC080	84.00	95.00	11.00	3.92	1.31	0.12	22.89	
	SKRC084	69.00	75.00	6.00	4.10	0.81	0.12	21.00	
		92.00	93.00	1.00	0.62	0.24	0.02	7.00	
	SKRC153	50.00	55.00	5.00	0.86	0.18	0.03	4.78	
		65.00	77.00	12.00	1.12	0.47	0.04	6.98	
		82.00	84.00	2.00	1.04	0.64	0.04	6.88	
	SKRC154	50.00	64.00	14.00	3.72	2.00	0.12	22.37	
		73.00	74.00	1.00	0.53	0.63	0.02	3.81	
	SKRC157	67.00	68.00	1.00	0.55	0.27	0.02	4.13	
	SKRC172B	34.00	39.00	5.00	1.02	0.56	0.04	7.03	
		81.00	82.00	1.00	1.91	0.22	0.06	8.73	
		98.00	100.00	2.00	0.51	0.15	0.02	2.54	
ilver Knight	SKDD028	362.56	362.84	0.28	0.45	0.05	0.02	5.33	
	SKDD085	71.15	71.67	0.52	0.44	0.11	0.04	7.94	
	SKDD052	291.70	292.00	0.30	0.17	1.93	0.01	3.74	
		328.57	328.87	0.30	0.89	0.13	0.03	5.12	

Target	Hole name		Intercept (m))	Assay results				
		From	То	Length	Ni (%)	Cu (%)	Co (%)	S (%)	
Leopard	SKDD039	184.00	184.40	0.40	0.52	0.18	0.02	2.91	
		188.00	189.00	1.00	0.44	0.16	0.02	2.18	
		215.53	216.32	0.79	0.44	0.20	0.02	3.91	
		222.00	223.00	1.00	0.46	0.12	0.02	2.30	
		229.00	229.70	0.70	0.59	0.16	0.02	3.44	
		238.73	239.03	0.30	1.16	0.08	0.05	9.67	
		241.00	241.30	0.30	0.48	0.29	0.02	3.83	
		275.00	276.05	1.05	0.46	0.13	0.02	2.54	
		288.00	289.00	1.00	0.42	0.12	0.02	1.84	
		348.00	349.00	1.00	0.42	0.15	0.01	1.70	
	SKDD053	296.40	298.50	2.10	1.08	0.55	0.03	5.50	
		301.00	302.00	1.00	0.40	0.13	0.02	1.95	
		308.59	309.01	0.42	0.42	0.09	0.02	1.58	
		331.00	331.37	0.37	0.41	0.11	0.01	1.56	
		332.24	336.00	3.76	0.50	0.22	0.02	2.10	
		345.08	347.00	1.92	0.43	0.13	0.01	1.75	
		356.00	357.00	1.00	0.43	0.16	0.02	2.01	
	SKDD095	346.09	346.51	0.42	0.45	0.07	0.02	2.19	
		589.97	590.34	0.37	0.58	0.39	0.02	3.55	
		612.00	613.28	1.28	0.37	0.76	0.02	1.84	
		644.42	645.04	0.62	0.42	0.30	0.02	3.60	
		645.04	645.34	0.30	1.24	0.20	0.07	9.54	
		652.40	652.60	0.20	0.51	1.70	0.04	5.47	
		661.00	662.00	1.00	0.46	0.16	0.02	3.33	
Firehawk	SKDD081	914.09	914.65	0.56	0.45	0.21	0.04	6.80	
		918.71	919.75	1.04	0.77	0.25	0.07	>10.00	
		924.46	925.22	0.76	0.54	0.15	0.05	8.20	
		933.61	934.00	0.39	0.44	0.13	0.04	7.68	
Leopard	SKDD088	755.60	755.94	0.34	0.76	0.28	0.04	6.88	
	SKDD065	311.00	312.00	1.00	0.58	0.21	0.02	2.93	
		340.00	342.00	2.00	0.45	0.26	0.02	1.44	
		343.00	344.00	1.00	0.44	0.13	0.02	1.32	
		356.00	357.00	1.00	0.42	0.13	0.02	1.40	
	SKDD080	261.00	261.96	0.96	1.67	0.57	0.13	28.83	
		261.96	263.00	1.04	0.26	0.40	0.02	5.57	
		314.88	315.43	0.55	0.21	4.20	0.02	4.66	
		325.00	326.00	1.00	0.42	0.16	0.02	2.02	
Firehawk	SKDD092	1,024.00	1,025.00	1.00	0.41	0.20	0.04	7.50	
Leopard	SKDD041	524.00	525.00	1.00	0.41	0.13	0.02	1.79	
		609.00	610.00	1.00	0.41	0.09	0.02	1.61	
		669.00	669.60	0.60	0.60	0.27	0.03	5.28	

Target	Hole name		Intercept (m)	Assay results				
		From	То	Length	Ni (%)	Cu (%)	Co (%)	S (%)	
Silver Knight	SKDD046	145.00	146.00	1.00	0.23	0.79	0.02	3.62	
Leopard	22SKDD101	247.00	247.55	0.55	0.47	0.19	0.05	15.60	
		255.30	255.64	0.34	0.43	0.14	0.04	13.60	
		300.84	301.14	0.30	1.07	0.28	0.08	16.55	
		301.14	301.47	0.33	0.10	0.69	0.01	1.90	
	22SKDD110	215.83	216.15	0.32	0.59	0.55	0.08	22.30	
		254.55	255.38	0.83	0.16	0.43	0.02	6.04	
		313.22	313.68	0.46	2.60	0.14	0.08	16.95	
		315.45	316.67	1.22	0.75	0.08	0.03	3.75	
		417.90	419.08	1.18	0.43	0.15	0.02	1.38	
Silver Knight	SKDD087	215.64	216.00	0.36	0.77	0.18	0.03	5.89	
	SKDD067	276.42	278.00	1.58	0.13	0.69	0.01	2.89	
		278.96	279.34	0.38	1.58	0.09	0.14	22.60	
		280.00	281.00	1.00	0.60	0.08	0.06	9.76	
		306.00	307.00	1.00	0.50	0.21	0.05	15.41	
		392.57	394.00	1.43	0.44	0.16	0.02	1.34	
		406.00	407.00	1.00	0.41	0.07	0.02	1.42	
		559.59	559.86	0.27	0.12	1.78	0.01	3.71	
Leopard	SKDD093	477.00	478.00	1.00	0.44	0.10	0.03	2.59	
		590.00	590.71	0.71	0.41	0.18	0.02	3.84	
T5-Quokka	20AFDD105	156.35	160.50	4.15	0.51	0.16	0.02	1.82	
Leopard	22SKDD102	238.00	238.30	0.30	0.66	0.06	0.05	7.99	
		269.17	269.63	0.46	0.90	0.21	0.05	8.87	
		291.60	292.00	0.40	0.60	0.22	0.06	12.65	
		325.40	326.00	0.60	0.40	0.16	0.02	3.82	
	SKDD089	337.74	337.96	0.22	1.25	0.36	0.08	>10.00	
	SKDD082	253.56	253.84	0.28	0.81	0.38	0.08	>10.00	
		261.71	261.89	0.18	0.24	0.77	0.03	6.08	
		325.00	326.00	1.00	0.12	0.47	0.02	2.68	
		340.93	341.10	0.17	1.07	0.49	0.09	>10.00	
		453.27	453.45	0.18	0.47	0.14	0.03	6.91	
		471.44	471.76	0.32	2.04	0.27	0.13	>10.00	
		471.76	472.69	0.93	0.64	0.25	0.05	8.88	
T5-Quokka	SKDD084	204.43	204.77	0.34	0.89	0.36	0.05	8.77	
	SKDD086	135.60	135.80	0.20	0.13	1.31	0.02	2.25	
Lens 1	22SKDD108	81.50	81.88	0.38	0.96	0.34	0.07	20.30	
		90.98	92.00	1.02	0.66	0.60	0.03	8.75	
		93.00	95.00	2.00	0.46	0.20	0.02	5.73	
	22SKDD111	52.70	64.34	11.64	1.90	0.94	0.07	12.32	
		71.14	92.35	21.21	4.86	2.14	0.16	31.74	
		77.00	77.31	0.31	0.61	0.31	0.02	2.88	

Target	Hole name		Intercept (m)		Assay	results	
		From	То	Length	Ni (%)	Cu (%)	Co (%)	S (%)
Lens 1	22SKDD106	90.35	90.70	0.35	3.07	1.83	0.07	15.95
	22SKDD114	56.51	66.62	10.11	5.91	2.20	0.19	37.22
		93.34	93.88	0.54	6.10	1.06	0.19	37.50
		112.36	113.23	0.87	0.41	0.20	0.01	2.76
	22SKDD112	58.15	58.60	0.45	1.12	0.42	0.04	6.56
		61.40	61.70	0.30	0.52	0.60	0.02	4.03
		65.55	65.88	0.33	2.18	0.06	0.07	9.24
		71.22	71.52	0.30	2.46	0.76	0.08	12.55
		76.16	78.31	2.15	5.71	1.85	0.17	34.14
		79.60	80.22	0.62	2.01	1.68	0.07	9.24
		80.92	81.22	0.30	1.50	1.86	0.05	6.14
		83.43	84.58	1.15	3.11	0.88	0.09	17.66
		85.28	85.76	0.48	1.03	5.81	0.05	8.70
	SKDD010	128.42	129.00	0.58	1.84	0.12	0.14	28.04
		141.63	141.82	0.19	0.57	0.21	0.05	7.61
	SKDD061	50.96	51.96	1.00	2.10	0.15	0.07	>10.00
		54.80	56.04	1.24	1.25	0.83	0.05	11.20

Tenement ID	Drilled by	Hole Type	Hole Name		ollar location MGA Zone 51	, AHD)	Plung	Plunge (°)		Plunge (°)		Plunge (°)		Plunge (°)		Plunge (°)		Comments
				mE	mN	mAHD	Azim.	Dip	(m)									
E28/2065	GSN	DD	SKDD003	541,681	6,504,369	262	125	-65	216.5	Drilled 2016; No Sig intercepts								
			SKDD010	541,653	6,504,818	262	159	-69	444.3	Drilled 2018								
			SKDD011	541,764	6,504,726	260	140	-80	97.1	Drilled 2018								
			SKDD014	541,655	6,504,816	262	124	-58	201.2	Drilled 2018; No Sig intercepts								
			SKDD016	541,778	6,504,715	260	130	-80	148.9	Drilled 2018								
			SKDD021	541,640	6,504,763	262	133	-80	168.71	Drilled 2018; No Sig intercepts								
			SKDD022	541,587	6,504,740	263	134	-80	246.7	Drilled 2018; No Sig intercepts								
			SKDD023	542,700	6,504,029	251	129	-60	396.2	Drilled 2018; No Sig intercepts								
			SKDD024	542,457	6,504,238	255	128	-70	703.4	Drilled 2019; No Sig intercepts								
			SKDD025	540,916	6,504,220	260	130	-60	750.7	Drilled 2019; No Sig intercepts								
			SKDD026	540,270	6,503,203	266	130	-60	519.5	Drilled 2019; No Sig intercepts								
			SKDD027	541,753	6,504,667	262	235	-77	135.3	Drilled 2018								
			SKDD028	541,186	6,503,995	283	130	-59	501.3	Drilled 2018								
			SKDD029	540,235	6,502,551	263	132	-60	186.0	Drilled 2019; No Sig intercepts								
			SKDD030	541,360	6,505,175	266	131	-59	750.2	Drilled 2018; No Sig intercepts								
			SKDD032	543,005	6,504,299	250	131	-60	264.4	Drilled 2018; No Sig intercepts								
			SKDD033	541,772	6,504,651	261	235	-72	155.9	Drilled 2018								
			SKDD034	540,961	6,504,199	260	133	-59	111.2	Drilled 2019; No Sig intercepts								

Tenement ID	Drilled by	Hole Type	Hole Name		ollar location MGA Zone 51	, AHD)	Plung	ge (°)	Total Depth	Comments
				mE	mN	mAHD	Azim.	Dip	(m)	
E28/2065	GSN	DD	SKDD036	541,688	6,504,361	262	233	-70	486.6	Drilled 2019; No Sig intercepts
			SKDD037	542,086	6,504,570	286	268	-60	140.9	Drilled 2019; No Sig intercepts
			SKDD038	542,039	6,504,568	259	268	-60	112.0	Drilled 2019; No Sig intercepts
			SKDD039	541,200	6,504,309	265	129	-60	498.6	Drilled 2019
			SKDD041	540,983	6,504,584	263	128	-59	748.7	Drilled 2019
			SKDD042	541,834	6,504,348	261	268	-61	270.4	Drilled 2019; No Sig intercepts
			SKDD043	541,912	6,504,347	260	271	-61	237.0	Drilled 2019; No Sig intercepts
			SKDD044	541,805	6,503,997	260	130	-60	204.0	Drilled 2019; No Sig intercepts
			SKDD045	541,992	6,504,349	260	269	-60	219.3	Drilled 2019; No Sig intercepts
			SKDD046	541,563	6,504,206	262	132	-60	300.1	Drilled 2019
			SKDD047	542,267	6,504,957	258	271	-60	350.0	Drilled 2019; No Sig intercepts
			SKDD048	542,254	6,504,720	256	269	-60	381.3	Drilled 2019; No Sig intercepts
			SKDD049	542,201	6,504,238	259	267	-61	381.1	Drilled 2019; No Sig intercepts
			SKDD050	542,119	6,504,159	261	270	-60	261.5	Drilled 2019; No Sig intercepts
			SKDD051	541,652	6,505,129	263	131	-59	440.5	Drilled 2019; No Sig intercepts
			SKDD052	541,324	6,504,205	263	129	-59	441.4	Drilled 2019
			SKDD053	541,080	6,504,409	262	129	-59	597.2	Drilled 2019
			SKDD055	541,792	6,504,633	261	235	-68	288.5	Drilled 2018
			SKDD056	541,772	6,504,621	261	233	-65	195.3	Drilled 2018
			SKDD057	541,793	6,504,575	262	233	-66	288.2	Drilled 2018
			SKDD060	541,875	6,504,572	261	235	-65	132.4	Drilled 2019; No Sig intercepts
			SKDD061	541,849	6,504,554	261	234	-65	183.4	Drilled 2019
			SKDD062	541,831	6,504,542	261	238	-65	267.1	Drilled 2019; No Sig intercepts
			SKDD065	541,133	6,504,432	264	132	-59	630.3	Drilled 2019
			SKDD066	540,855	6,502,738	260	217	-70	160.2	Drilled 2019; No Sig intercepts
			SKDD067	541,124	6,504,575	263	131	-58	730.6	Drilled 2019
			SKDD071	541,476	6,504,654	265	131	-61	321.2	Drilled 2019; No Sig intercepts
			SKDD072	540,492	6,502,839	263	285	-60	180.1	Drilled 2019; No Sig intercepts
			SKDD075	540,497	6,502,797	262	251	-70	213.3	Drilled 2019; No Sig intercepts
			SKDD076	541,851	6,504,497	261	235	-65	150.5	Drilled 2019; No Sig intercepts
			SKDD077	541,874	6,504,514	261	235	-65	165.4	Drilled 2019; No Sig intercepts
			SKDD078	541,896	6,504,531	261	235	-65	111.4	Drilled 2019; No Sig intercepts
			SKDD079	541,651	6,504,046	260	329	-57	299.9	Drilled 2019; No Sig intercepts
			SKDD080	540,944	6,504,534	262	110	-53	702.0	Drilled 2019
			SKDD081	540,263	6,505,028	269	130	-75	1001.8	Drilled 2019
			SKDD082	541,187	6,504,896	268	130	-60	779.8	Drilled 2019
			SKDD083	541,532	6,503,973	258	130	-60	308.8	Drilled 2019; No Sig intercepts
			SKDD084	542,820	6,503,929	249	310	-70	393.3	Drilled 2019
			SKDD085	541,630	6,503,895	258	127	-60	171.9	Drilled 2019
			SKDD086	541,439	6,504,059	260	127	-58	310.9	Drilled 2019
			SKDD087	541,316	6,504,418	266	130	-61	546.4	Drilled 2019

Tenement ID	Drilled by	Hole Type	Hole Name		ollar location MGA Zone 51	, AHD)	Plung	ge (°)	Total Depth	Comments
				mE	mN	mAHD	Azim.	Dip	(m)	
E28/2065	GSN	DD	SKDD088	540,646	6,504,790	266	130	-70	1008.4	Drilled 2019
			SKDD089	541,110	6,504,764	265	130	-60	750.2	Drilled 2019
			SKDD090	540,275	6,504,427	265	24	-60	189.3	Drilled 2019; No Sig intercepts
			SKDD091	541,441	6,504,781	265	128	-59	490.4	Drilled 2019; No Sig intercepts
			SKDD092	540,275	6,504,427	266	18.5	-56	1260.5	Drilled 2019
			SKDD093	540,978	6,504,711	266	131	-60	789.2	Drilled 2019
			SKDD095	540,944	6,504,534	262	125	-59	702.0	Drilled 2019
28/2065	GSN	RC	SKRC001	541,720	6,504,336	262	130	-60	204.0	Drilled 2016; No Sig intercepts
			SKRC080	541,743	6,504,613	261	133	-80	155.0	Drilled 2018
			SKRC084	541,761	6,504,597	261	133	-80	119.0	Drilled 2018
			SKRC110	542,580	6,504,136	254	131	-60	149.0	Drilled 2018; No Sig intercepts
			SKRC111	541,680	6,504,097	261	129	-60	203.0	Drilled 2018; No Sig intercepts
			SKRC112	541,440	6,504,310	262	132	-62	419.9	Drilled 2018; No Sig intercepts
			SKRC124	542,821	6,503,928	249	131	-60	285.3	Drilled 2018; No Sig intercepts
			SKRC153	541,788	6,504,706	260	130	-80	95.0	Drilled 2018
			SKRC154	541,768	6,504,723	260	130	-80	100.0	Drilled 2018
			SKRC157	541,736	6,504,684	262	127	-82	110.0	Drilled 2018
			SKRC159	541,317	6,503,899	258	131	-61	191.0	Drilled 2018; No Sig intercept
			SKRC160	541,068	6,504,103	261	131	-61	179.0	Drilled 2018; No Sig intercept
			SKRC162	540,820	6,504,305	260	132	-61	756.7	Drilled 2018; No Sig intercept
			SKRC172B	541,758	6,504,633	261	130	-80	110.0	Drilled 2018
			SKRC188	541,763	6,504,565	261	130	-80	120.0	Drilled 2022; No Sig intercept
			SKRC189	541,433	6,505,100	264	0	-90	210.0	Drilled 2018; No Sig intercept
			SKRC190	542,132	6,503,831	256	0	-90	168.0	Drilled 2018; No Sig intercept
			SKRC191	541,688	6,504,090	261	105	-55	126.0	Drilled 2018; No Sig intercepts
			SKRC192	541,842	6,504,235	261	130	-60	120.0	Drilled 2018; No Sig intercepts
			SKRC193	541,592	6,504,442	264	132	-62	389.3	Drilled 2018; No Sig intercept
			SKRC194	541,472	6,504,543	266	130	-61	470.0	Drilled 2018; No Sig intercepts
			SKRC195	541,253	6,504,465	265	108	-58	651.3	Drilled 2018; No Sig intercepts
			SKRC209	543,126	6,504,196	249	129	-61	202.0	Drilled 2018; No Sig intercepts
			SKRC210	542,882	6,504,398	251	130	-60	220.0	Drilled 2018; No Sig intercepts
			SKRC213	541,348	6,504,645	265	133	-61	680.0	Drilled 2018; No Sig intercepts
			SKRC214	541,958	6,505,119	261	270	-60	158.0	Drilled 2019; No Sig intercepts
			SKRC215	542,039	6,505,119	260	270	-60	190.0	Drilled 2019; No Sig intercept
			SKRC216	542,116	6,505,119	259	270	-60	180.0	Drilled 2019; No Sig intercept
			SKRC217	542,199	6,505,119	258	270	-60	130.0	Drilled 2019; No Sig intercept
			SKRC218	542,279	6,505,119	256	270	-60	157.0	Drilled 2019; No Sig intercept
			SKRC220	542,039	6,505,039	261	270	-60	142.0	Drilled 2019; No Sig intercept
			SKRC221	542,119	6,505,039	260	270	-60	130.0	Drilled 2019; No Sig intercept
			SKRC222	542,199	6,505,039	259	270	-60	130.0	Drilled 2019; No Sig intercept
			SKRC223	542,279	6,505,039	257	270	-60	130.0	Drilled 2019; No Sig intercepts

Гenement D	Drilled by	Hole Type	Hole Name		ollar location MGA Zone 51	, AHD)	Plunge (°)		Total Depth	Comments
				mE	mN	mAHD	Azim.	Dip	(m)	
28/2065	GSN	RC	SKRC225	542,079	6,504,959	260	270	-60	110.0	Drilled 2019; No Sig intercepts
			SKRC226	542,159	6,504,959	260	270	-60	130.0	Drilled 2019; No Sig intercepts
			SKRC227	542,099	6,504,879	259	270	-60	120.0	Drilled 2019; No Sig intercepts
			SKRC228	542,179	6,504,879	259	270	-60	150.0	Drilled 2019; No Sig intercepts
			SKRC229	542,259	6,504,879	259	270	-60	150.0	Drilled 2019; No Sig intercepts
			SKRC230	542,079	6,504,799	258	270	-60	100.0	Drilled 2019; No Sig intercepts
			SKRC231	542,159	6,504,799	257	270	-60	120.0	Drilled 2019; No Sig intercept
			SKRC232	542,239	6,504,799	258	270	-60	120.0	Drilled 2019; No Sig intercept
			SKRC233	542,099	6,504,719	257	270	-60	100.0	Drilled 2019; No Sig intercept
			SKRC234	542,179	6,504,719	257	270	-60	160.0	Drilled 2019; No Sig intercept
			SKRC235	542,059	6,504,639	258	270	-60	100.0	Drilled 2019; No Sig intercept
			SKRC236	542,119	6,504,639	258	270	-60	120.0	Drilled 2019; No Sig intercept
			SKRC237	542,199	6,504,639	256	270	-60	180.0	Drilled 2019; No Sig intercept
			SKRC238	542,176	6,504,559	257	270	-60	180.0	Drilled 2019; No Sig intercept
			SKRC239	541,958	6,504,479	260	270	-60	180.0	Drilled 2019; No Sig intercept
			SKRC240	542,039	6,504,479	259	270	-60	190.0	Drilled 2019; No Sig intercept
			SKRC241	542,119	6,504,479	258	270	-60	180.0	Drilled 2019; No Sig intercept
			SKRC242	542,199	6,504,479	257	270	-60	200.0	Drilled 2019; No Sig intercept
			SKRC243	542,060	6,504,399	259	270	-60	200.0	Drilled 2019; No Sig intercep
			SKRC244	, 542,159	6,504,399	258	270	-60	200.0	Drilled 2019; No Sig intercep
			SKRC245	542,059	6,504,239	261	270	-60	200.0	Drilled 2019; No Sig intercep
			SKRC246	541,990	6,504,079	261	270	-60	199.0	Drilled 2019; No Sig intercep
			SKRC247	542,099	6,504,079	261	270	-60	200.0	Drilled 2019; No Sig intercep
			SKRC248	, 541,979	6,503,999	259	270	-60	200.0	Drilled 2019; No Sig intercep
			SKRC249	542,099	6,503,999	259	270	-60	200.0	Drilled 2019; No Sig intercep
			SKRC250	542,119	6,505,279	258	270	-60	180.0	Drilled 2019; No Sig intercep
			SKRC251	542,200	6,505,279	257	270	-60	140.0	Drilled 2019; No Sig intercep
			SKRC252	542,039	6,505,199	259	270	-60	190.0	Drilled 2019; No Sig intercept
			SKRC253	, 542,119	6,505,199	258	270	-60	170.0	Drilled 2019; No Sig intercept
			SKRC254	542,198	6,505,199	257	270	-60	160.0	Drilled 2019; No Sig intercept
			SKRC256	541,717	6,504,480	262	270	-60	200.0	Drilled 2019; No Sig intercep
			SKRC257	541,799	6,504,479	261	270	-60	160.0	Drilled 2019; No Sig intercept
			SKRC258	541,858	6,504,399	261	270	-60	200.0	Drilled 2019; No Sig intercept
			SKRC259	541,959	6,504,399	260	270	-60	200.0	Drilled 2019; No Sig intercep
			SKRC260	541,880	6,504,159	261	270	-60	200.0	Drilled 2019; No Sig intercep
			SKRC261	542,169	6,504,479	257	0	-90	136.0	Drilled 2019; No Sig intercep
			SKRC262	542,661	6,504,191	253	0	-90	148.0	Drilled 2019; No Sig intercep
			SKRC264	541,551	6,504,346	264	0	-90	130.0	Drilled 2019; No Sig intercep
			SKRC265	541,044	6,503,997	259	0	-90	118.0	Drilled 2019; No Sig intercept
28/2065	IGO	DD	21HMDD006	541,784	6,504,709	260	130	-80	90.0	Drilled 2021
			22SKDD101	541,155	6,504,472	264	130	-64	422.2	Drilled 2022

Tenement ID	Drilled by	Hole Type	Hole Name		ollar location MGA Zone 51	, AHD)	Plung	ge (°)	Total Depth	Comments
				mE	mN	mAHD	Azim.	Dip	(m)	
E28/2065	IGO	DD	22SKDD102	541,323	6,504,488	267	310	-70	395.9	Drilled 2022
			22SKDD103	541,870	6,505,202	260	130	-65	200.0	Drilled 2022; No Sig intercepts
			22SKDD104	541,782	6,504,662	261	230	-65	100.0	Drilled 2022
			22SKDD105	541,774	6,504,679	261	225	-65	351.8	Drilled 2022
			22SKDD106	541,701	6,504,625	262	42	-60	150.0	Drilled 2022
			22SKDD107	541,830	6,504,639	261	220	-65	219.8	Drilled 2022; No Sig intercepts
			22SKDD108	541,800	6,504,620	261	200	-65	201.5	Drilled 2022
			22SKDD109	541,877	6,504,540	261	270	-65	159.8	Drilled 2022; No Sig intercepts
			22SKDD110	541,330	6,504,370	260	310	-69	433.0	Drilled 2022
			22SKDD111	541,820	6,504,710	260	270	-60	200.0	Drilled 2022
			22SKDD112	541,778	6,504,676	260	40	-78	200.0	Drilled 2022
			22SKDD113	542,044	6,504,586	260	309	-75	1,390.9	Drilled 2022; No Sig intercepts
			22SKDD114	541,779	6,504,628	261	27	-63	150.0	Drilled 2022
			22SKDD115	541,710	6,506,600	260	127	-76	1,589.9	Drilled 2022; No Sig intercepts
E28/2065	IGO	RC	22SKRC001	541,779	6,504,628	261	27	-63	150.0	Drilled 2022
			22SKRC002	541,785	6,504,659	261	230	-65	103.0	Drilled 2022
			22SKRC003	541,795	6,504,660	260	230	-65	121.0	Drilled 2022
			22SKRC004	541,760	6,504,715	260	0	-90	82.0	Drilled 2022
			22SKRC005	541,780	6,504,700	260	0	-90	97.0	Drilled 2022
			22SKRC006	541,799	6,504,683	260	0	-90	91.0	Drilled 2022
			22SKRC008	541,757	6,504,732	260	130	-80	84.0	Drilled 2022
			22SKRC059	541,767	6,504,632	261	270	-75	67.0	Drilled 2022; No Sig intercepts
			22SKRC060	541,781	6,504,631	261	270	-75	91.0	Drilled 2022
			22SKRC061	541,795	6,504,631	261	270	-75	121.0	Drilled 2022
			22SKRC062	541,773	6,504,620	261	270	-75	98.0	Drilled 2022
			22SKRC063	541,780	6,504,619	261	270	-75	122.0	Drilled 2022
			22SKRC064	541,796	6,504,620	261	270	-75	134.0	Drilled 2022
			22SKRC065	541,772	6,504,607	261	270	-75	98.0	Drilled 2022
			22SKRC066	541,787	6,504,607	261	270	-75	122.0	Drilled 2022
			22SKRC067	541,778	6,504,595	261	270	-75	122.0	Drilled 2022
			22SKRC068	541,792	6,504,595	261	270	-75	134.0	Drilled 2022
			22SKRC069	541,779	6,504,582	261	270	-75	116.0	Drilled 2022
			22SKRC070	541,794	6,504,581	261	270	-75	125.0	Drilled 2022
E28/2065	IGO	RC	22SKRC071	541,779	6,504,667	260	230	-65	110.0	Drilled 2022
			22SKRC072	541,850	6,504,680	260	240	-60	116.0	Drilled 2022
			22SKRC073	541,741	6,504,620	261	55	-68	98.0	Drilled 2022
			22SKRC074	541,717	6,504,611	262	90	-60	104.0	Drilled 2022
			22SKRC075	541,733	6,504,592	262	90	-60	104.0	Drilled 2022
			22SKRC076	541,801	6,504,537	261	270	-70	122.0	Drilled 2022; No Sig intercepts

Tenement ID	Drilled by	Hole Type	Hole Name	-	ollar location MGA Zone 51	, AHD)	Plunge (°)		Total Depth	Comments
				mE	mN	mAHD	Azim.	Dip	(m)	
E28/2201	IGO	DD	20AFDD103	541,214	6,503,622	255	148	-74	372.0	Drilled 2020; No Sig intercepts
			20AFDD104	541,636	6,503,019	253	150	-74	372.8	Drilled 2020; No Sig intercepts
			20AFDD105	542,249	6,503,723	253	129	-74	359.1	Drilled 2020
			20AFDD106	542,646	6,503,719	249	129	-74	247.1	Drilled 2020; No Sig intercepts
E28/2201	IGO	RC	19AFRC2002H	541,295	6,503,684	255	0	-90	120.0	Drilled 2019; No Sig intercepts
			19AFRC2005	541,570	6,503,383	253	152	-59	282.0	Drilled 2019; No Sig intercepts
			19AFRC2006	542,115	6,502,578	251	150	-60	354.0	Drilled 2019; No Sig intercepts

Forrestania Significant Drilling Intercepts

Table 5: Forrestania significant drilling intercepts

			Collar location (GDA94 MGA Zone 50, AHD)			Intercept (m)			Assay Results					
Prospect	Hole	Hole name												
·	Туре		mE	mN	mElv	From	То	Length	Ni (ppm)	Ag (ppm)	Co (ppm)	Cu (ppm)	Zn (ppm)	Au (ppb)
Parker Dome	RC	PDRC034	766733	6464481	384	31	32	1	66	0.01	18	94	63	1,395
						35	36	1	33	0.06	9	25	29	6,120
						61	62	1	12	0.09	48	50	57	1,080
Carstairs	AC	CSAC034	758377	6377908	376	16	32	16	5,675	0.04	2,218	83	198	1.7
		CSAC072	757396	6378994	465	32	36	4	75	0.07	17	23	44	282
		CSAC074	758428	6378073	511	28	32	6.6	6,360	0.16	349	3	101	3
	RC	CSRC009	757159	6378208	390	24	36	12	5,800	0.07	372	47	164	<1
West Quest	DD	WQD009	761425	6430093	391	375.50	377.30	1.80	11,200	0.30	196	970	48	40
		WQD010	761000	6429890	390	394.15	396.00	1.85	12,000	0.07	251	269	49	<1
Turkish Delight	DD	PDD001	761284	6463654	419	75.10	77.40	2.3	0.94	0.33	578	8	204	<1

Western Gawler significant Drilling Intercepts

Table 6: Western Gawler Significant drilling intercepts

				Collar locatior 4 MGA Zone 5		In	tercept (m)		Assay	results	
Prospect	Туре	Drill hole name	mE	mN	mAHD	From	То	Length	Ni (ppm)	Cu (ppm)	Co (ppm)	2PGE (ppb)
Sahara	DD	20WGDD0005	305,078	6,603,313	213	145.65	250.07	104.42	0.21	1225	163	30
	AC	21WGAC940	305,458	6,603,800	214.03	48	51	3	102	529	25	-
		21WGAC949	306,374	6,604,227	202.02	51	54	3	2290	12	220	16
Firefly	AC	21WGAC997	306,332	6,600,250	218.95	6	22	16	256	593	71	21
LP1	AC	22WGAC1107	306,742	6,601,115	205.52	21	27	6	1011	72	610	4
Mystic	DD	20WGDD001	236,835	6,508,622	71	110.25	112.3	2.05	3000	1431	160	294
		20WGDD003*	236,507	6,508,652	69	42.00	66.00	22	22400	11	656	16
	AC	19WGAC444*	235,618	6,508,754	59	54	72	18	20600	53	830	14
			including			66	71	5	42900	18	450	10
		22WGAC1122*	236,565	6,508,664	60	54	69	15	19110	28	503	-
		22WGAC1123*	236,520	6,508,636	60	51	69	18	22530	88	1170	12
		22WGAC1124*	236,470	6,508,664	60	51	69	18	15750	50	343	7
	RC	18WGAC353*	236,593	6,508,754	65	55	57	2	14400	100	1820	51

*Mystic Oxide Zone Assay Results

Paterson Project Significant Drilling Intercepts

Table 7: Paterson Project Significant drilling intercepts

			Collar location (GDA94 MGA Zone 51, AHD)			Intercept (m)			Assay results		
Tenement	Туре	Drill hole name	mE	mN	mAHD	From	То	Length	Au* (ppb)	Cu (ppm)	
E45/2415	AC	22PTAC0099	348,752	7,643,220	254	138	144	6		5398	
		22PTAC0104	346,636	7,643,899	254	139	143	4	265	189	
		22PTAC0106	346,834	7,643,100	255	108	121	13	15	1372	
		22PTAC0108	346,488	7,643,099	256	152	153	1		1090	
		22PTAC0134	347,364	7,646,759	248	134	135	1		1045	
		22PTAC0147	343,049	7,651,160	250	38	39	1	261	48	
E45/3918	AC	22PTAC0225	418,912	7,653,500	260	44	52	8	253	28	
			,	, ,				1			

*Values below detection limit are not listed

Silver Knight JORC Code Table 1

Section 1: Sampling Techniques and Data

JORC Criteria	Explanation						
Sampling techniques	 Within E28/2065 (which includes the SKAV to which IGO has the rights to mine), Silver Knight and exploration targets have been drill tested and sampled by GSN and IGO by RC and DD methods. 						
	 RC drilling by GSN was predominately for resource purposes, with lesser drilled for exploration purposes; holes were typically drilled on section lines that are rotated ~40° clockwise from the regional grid. IGO completed RC drilling at variable directions to evaluate the GSN resource model and for exploration purposes. 						
	 IGO and GSN completed DD with variable directions drilled for exploration and resource evaluation purposes, including some DD being sampled for metallurgical testing and geotechnical purposes. 						
	- Within E28/2201, IGO completed RC and DD drilling at variable directions for exploration purposes.						
	- Reported exploration results incorporates RC and DD drill hole information as detailed in the following subsections.						
Drilling	IGO :						
techniques	- RC:						
	- RC holes were drilled by truck mounted rigs owned and operated by Frontline or Jarahfire Drilling.						
	 IGO conducted RC drilling from surface, at variable spacings and plunges to evaluate the GSN resource model (within SKAV) and for exploration purposes. 						
	- Samples were collected from 114 to 142mm diameter (4.5 to 5.6 inch) holes which were drilled using face-sampling bits.						
	- DD:						
	- DD holes were drilled by truck mounted rigs owned and operated by DDH1 Drilling Pty Ltd.						
	 Holes were collared from surface with either PQ-core (85mm diameter) or PQ rock-rolled, which was then reduced to HQ-core and NQ, drilled to depths directed by the IGO geologist. 						
	- All HQ and NQ core was oriented using a REFLEX ACT III-H orientation tool.						
	GSN:						
	- RC:						
	 In the SKAV, GSN conducted RC drilling from surface, predominantly on a nominal 25mE by 25mN grid spacing on a section line that was rotated ~40° clockwise from the regional grid. 						
	 Outside the SKAV, GSN conducted RC drilling from surface, at variable spacings and plunges for exploration purposes. 						
	- Typically, RC drill hole paths generally plunge 80° towards 130°, with a few vertical holes.						
	 Samples were collected from 114 to 142mm diameter (4.5 to 5.6 inch) holes which were drilled using face-sampling bits. Three different drilling contractors completed the drilling. 						
	- DD:						
	- GSN completed DD drilling collared at surface on variables spacings and plunges.						
	 A variety of core diameters were drilled including HQ, HQ3 (61.1mm), NQ, NQ2 (50.6mm) and PQ3 (83.0mm) diameters. The majority of core was HQ diameter. 						
	- Metallurgical samples were collected using the triple tube method to maximise sample recovery.						
	- Some core was oriented to facilitated structural analysis.						

JORC Criteria	Explanation							
Drill sample	IGO:							
recovery	- RC:							
	- Within the SKAV, IGO logged qualitative recovery for RC drilling and additionally weighed selected samples as a p for recovery over 1m down hole intervals.							
	- IGO recorded that 100% of samples collected by RC occurred in dry ground and drilling conditions.							
	- Sample recoveries from IGO RC drilling is deemed acceptable for the purposes of reporting of exploration results as per the JORC Code classification.							
	- DD:							
	 Sample recovery for the DD core loss was recorded by the drillers with any core loss intervals noted on annotated wooden blocks inserted into the core boxes by the driller. 							
	- For recovery checking and orientation marking purposes, the DD core was reconstructed into continuous runs in an angle iron cradle.							
	- DD down hole depths were checked against the depth recorded on the core blocks, and rod counts were routinely carried out and marked on the core blocks by the drillers to ensure the marked core block depths were accurate.							
	GSN:							
	- RC:							
	- GSN logged qualitative recovery for RC drilling and additionally weighed the samples received at the laboratory as a proxy for recovery over 1m down hole intervals.							
	- GSN recorded that 98.9% of samples collected by RC occurred in dry ground and drilling conditions.							
	 IGO is yet to fully review the recovery information but accepts GSN conclusions of acceptable recovery for the purposes of the reporting of exploration results as per the JORC Code classification. 							
	- DD:							
	- DD core loss was recorded by the drillers with any core loss intervals noted on annotated wooden blocks inserted into the core boxes by the driller.							
	- For recovery checking and orientation marking purposes, the DD core was reconstructed into continuous runs in an angle iron cradle.							
	 DD down hole depths were checked against the depth recorded on the core blocks, and rod counts were routinely carried out and marked on the core blocks by the drillers to ensure the marked core block depths were accurate. 							
Logging	IGO:							
	- Qualitative logging of RC chips and DD core included lithology, mineralogy, mineralisation, weathering, colour, and other features of the samples.							
	- DD core was additionally logged in a quantitative manner in terms of structure and geotechnical parameters.							
	- The total lengths of all drill holes have been logged (unless stated otherwise).							
	- Photographs of all DD trays are taken and retained on file with the original core trays stored in the core library at the 100% IGO owned Nova.							
	- All RC chip trays are retained at the 100% IGO owned Nova.							
	- The logging is considered adequate to support downstream exploration studies and follow-up drilling.							
	GSN:							
	- Qualitative logging of RC chips and DD core included lithology, mineralogy, mineralisation, weathering, colour, and other features of the samples.							
	- DD core was additionally logged in a quantitative manner in terms of structure and geotechnical parameters.							
	- The total lengths of all drill holes have been logged (unless stated otherwise).							
	 Photographs of all DD trays are taken and retained on file with the original core trays stored in the core library at the 100% IGO owned Nova. 							
	- All RC chip trays are retained at the Creasy Group's Perth Warehouse.							
	- The logging is considered adequate to support downstream exploration studies and follow-up drilling.							

Sub-sampling techniques and sample preparation IGO - RC: - RC samples were collected from a splitter (riffle, static cone, and rotary cone) that collected a 3 to 5kg split of primary lot from each downhole sampling interval. - IGO collected RC sub-samples in the field using labelled calico bags to denote the sample depth. Two comport calico bag samples were collected for each metre drilled with the second set of bags labelled with a "D" to do the duplicate sample. - Calico samples were collected as either 1m samples or 2m composites where static cone splitting devices we used to composite and reduce the sample weight. The samples were then transferred to a pre-numbered cal sequence and packaged for dispatch.	f the
 RC samples were collected from a splitter (riffle, static cone, and rotary cone) that collected a 3 to 5kg split of primary lot from each downhole sampling interval. IGO collected RC sub-samples in the field using labelled calico bags to denote the sample depth. Two comport calico bag samples were collected for each metre drilled with the second set of bags labelled with a "D" to detend the duplicate sample. Calico samples were collected as either 1m samples or 2m composites where static cone splitting devices we used to composite and reduce the sample weight. The samples were then transferred to a pre-numbered calical context. 	f the
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used to composite and reduce the sample weight. The samples were then transferred to a pre-numbered cal	
 "D" calico bags were used in the case of duplicate/replicate samples for quality assurance and quality control (QAQC) purposes. 	
 Samples containing significant sulphide mineralisation were vacuum sealed into pre-purchased vacuum seal using a LAVA V.1200 vacuum sealing machine immediately after collection to delay the oxidation of sulphide r prior to arriving at the laboratory. 	0
- RC samples were collected from what was deemed by IGO geologists to be dry ground conditions.	
 The laboratory sample (ALS Perth laboratory) is oven dried (12 hours at 100°C), followed by coarse crushing crusher to 100% passing 10mm, then pulverisation of the entire crushed sample in low Cr-steel pulverising bc a particle size distribution (PSD) of 85% passing 75µm. A 300g sub-sample pulp sample is then split to serve analysis lot. 	wls to
 Quality control procedures involve insertion of certified reference materials, blanks, and collection of duplicat pulverisation stage. 	es at the
- The results of quality control sampling are consistent with satisfactory sampling precision.	
- DD:	
 DD core was generally subsampled into half-core using an automated wet-diamond-blade core saw. All samp submitted for assay were selected from the same side of the core. Exceptions were for duplicate samples of intervals, where quarter-core subsamples were cut from the half-core and for whole core samples submitted some holes, such as metallurgical testing samples. 	selected
- The primary tool used to ensure representative drill core assays was monitoring and ensuring near 100% core	ecovery.
 The nature of the drilling method means representation is indicative with sampling aimed at finding anomalou concentrations rather than absolute values for Mineral Resource estimation (MRE) work. 	S
 The laboratory sample is oven dried (12 hours at 100°C), followed by coarse crushing in a jaw-crusher to 100 passing 10mm, then pulverisation of the entire crushed sample in low Cr-steel pulverising bowls to a PSD of 8 passing 75µm. A 300g sub-sample pulp sample is then split to serve as the analysis lot. 	
 Quality control procedures involve insertion of certified reference materials, blanks, and collection of duplicat pulverisation stage. 	es at the
- The results of quality control sampling are consistent with satisfactory sampling precision.	

JORC Criteria	Explanation							
	GSN:							
	- RC:							
	 GSN collected RC sub-samples in the field using static cone splitting devices, with a nominal sampling interval of 1m down hole. IGO's review of GSN's length data confirmed the majority of RC intervals were 1m, with a few longer intervals of 2m and 3m sampled, presumably in waste zones. 							
	 The average mass split was 1 to 3kg – IGO is yet to review GSN's mass data with respect to expected in situ mass for given hole diameter, but the range is deemed acceptable for the purposes of the reporting of exploration results as per the JORC Code classification. 							
	- GSN states that RC samples were predominately collected from what was deemed by GSN to be dry ground.							
	- At Intertek Genalysis Laboratory (IGL) in Perth, GSN's RC samples were dried in a laboratory over for 12 hours at 105°C							
	- The samples were then crushed to a PSD of 10% passing 10mm in diameter.							
	- A 300g lot was then split from the crushed lot and pulverised to a PSD of 95% passing 75µm.							
	 GSN did not describe the crushing, grinding and splitting equipment used but IGO accepts that it is likely industry standard equipment is installed at the primary laboratory. 							
	 Quality control procedures involve insertion of certified reference materials, blanks, and collection of duplicates at th pulverisation stage. 							
	 GSN's MRE consultant prepared scatterplots of original versus replicate field samples for RC and the results generally demonstrate good precision for nickel grade. No information was presented for copper or cobalt. IGO is yet to review in detail the duplicate precision of field and laboratory duplicates but has accepted the precision appears reasonable for the purposes of the reporting of exploration results. 							
	- DD:							
	 GSN sampled DD core using a target sample length of 1m over the same geology, but with sampling intervals varied to truncate at geological contact of interest. 							
	- Sample lengths ranged from 0.01m to 1.6m with samples typically greater than 0.5m.							
	 The DD core was cut at GSN's field facility using a wetted diamond encrusted blade, with half core samples in most instances but with whole core submitted for some holes, such as metallurgical testing samples. 							
	 GSN does not detail the laboratory preparation for DD samples but based on the laboratory codes in the database provided IGO has assumed the DD samples underwent the same preparation protocol as described above for RC samples. 							
	- GSN adopted industry normal quality control methods as per the RC samples.							
	 The primary tool GSN used to monitor sample representativeness was monitoring and ensuring near 100% recovery. GSN also applied industry normal sampling protocols to ensure rig-splitters were cleaned regularly and dispatch samples bagged correctly in a manner that avoided potential cross contamination and any sample mix-ups between samples. 							
	 While no specific heterogeneity testing has been completed on the mineralisation, sample sizes are appropriate to correctly represent the sulphide mineralisation based on the style of mineralisation (massive sulphides), the thickness and consistency of the intersections, the sampling methodology and percent value assay ranges for the primary elements. 							
	- IGO considers that GSN's results of duplicate sampling are consistent with satisfactory sampling precision.							

JORC Criteria	Explanation
Quality of assay	IGO:
lata and laboratory ests	- No geophysical tools were used to determine any element concentrations.
	 ALS Limited - Perth completed sample preparation checks for particle size distribution compliance as part of routin internal quality procedures to ensure the target PSD of 85% passing 75µm is achieved in the pulverisation stage.
	 Field duplicates, certified reference materials (CRMs) and blanks were routinely inserted at frequencies between 1: and 1:20 samples for DD sample streams.
	- Laboratory quality control processes include the use of internal lab standards using CRMs and duplicates.
	 CRMs used to monitor accuracy have expected values ranging from low to high grade, and the CRMs were inserted randomly into the routine sample stream to the laboratory.
	- The results of the CRMs confirm that the laboratory sample assay values have good accuracy and results of blank assays indicate that any potential sample cross contamination has been minimised.
	- Following sample preparation and milling, RC, and DD samples:
	 Underwent four-acid digestion, with ICP-AES finish was employed for Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sr, Th, Ti, Tl, U, V, W and Zn.
	 Underwent fusion methods for complete decomposition prior to four-acid digestion. In samples with sulphide contents less than 4%, lithium borate was used as the flux agent and in samples with greater than 4% sulphides, sodium peroxide was used as the flux agent.
	 Following fusion, the silicate disks were dissolved in a four- acid solution and analysed by ICP-AES was employed f AI, Fe, Na, Ti, Ba, K, P, Ca, Cr, Mg, Mn, Si, and Sr, or,
	 ICP-MS techniques were employed for Ba, Ce, Cr, Cs, Dy, Er, Eu, Ga, Gd, Hf, Ho, La, Lu, Nb, Nd, Pr, Rb, SM, Sn, Sr, Tb, Th, Tm, U, V, W, Y, Yb and Zr.
	- Pt, Pd and Au were analysed by fire assay and ICP-AES.
	- The digestion methods can be considered near total for all elements.
	- Loss on ignition (LOI) was determined by robotic thermos-gravimetric analysis at 1,000°C.
	GSN:
	- GSN despatched DD and RC samples to IGL in Perth, WA, for sample preparation and analysis.
	 No geophysical tools, spectrometers or handheld XRF instruments were used for assays related to the MRE, albeit handheld XRF was used identify potentially anomalous samples in the logging process.
	 Following sample preparation to a pulp, an aliquot of pulp (mass not reported by GSN) was digested using a four- acid digestion, which is considered a total analysis digestion with the principal sulphide and oxide Ni-Cu-Co bearin minerals at Silver Knight.
	- The redissolved digestion salts were then analysed through ICP-OES or alternatively ICP-MS.
	- Gold and platinum group metals were also assayed by the fire assay method.
	- GSN's laboratory quality control processes include the use of CRMs, blanks, and duplicates.
	 GSN concluded that all quality control checks were acceptable. IGO is has verified and generally accepts GSN's quality control conclusions for the purposes of the reporting of exploration results.

JORC Criteria	Explanation
Verification of	IGO:
sampling and assaying	- Significant intersections were checked by senior IGO geological personnel.
	 There are several twin and scissor DD and RC twin holes that have been drilled and IGO, based on the mineralisation model, considered these twins demonstrated good continuity.
	 The logging has been validated by an IGO on-site geologist and compiled onto the IGO acQuire SQL drill hole database by IGO's Geological Database Administrator (DBA).
	 Assay data are imported directly from digital assay files from contract analytical company ALS (Perth) and are merged in the Company acQuire SQL drill hole database by IGO's DBA.
	- Data is backed up regularly in off-site secure servers.
	- No geophysical or pXRF results are used in exploration results reported.
	- There have been no adjustments to the assay data.
	GSN:
	- Significant intersections from DD have been inspected and verified by GSN senior geological staff and by senior IGO geological personnel.
	 There are several twin and scissor DD and RC twin holes that have been drilled and GSN considered these twins demonstrated 'good continuity' in the overlying Silver Knight. IGO generally agrees with GSN's conclusion that there is reasonable continuity between nearby holes in Silver Knight.
	 IGO, since acquisition, has been re-loading all primary data files into an IGO acQuire drill hole database system from the various contract analytical companies used by GSN.
Location of	IGO:
data points	- Surface hole collar locations were surveyed using a Leica DGPS unit with an expected accuracy of ±10cm for easting, northing and elevation.
	- Drill path gyroscopic surveys were completed with the following methods:
	 RC holes other than with a plunge of -90° were surveyed using a Reflex Gyro Sprint tool (or Reflex EZ-Shot tool) at 6m downhole to confirm rig set up then subsequently at 18m downhole intervals to the final hole depth.
	- RC holes with a plunge of -90° were surveyed using a Reflex Gyro Sprint tool at 5m intervals.
	- DD holes were surveyed at 0m and at subsequent 18m downhole intervals to final hole depth using a Reflex Gyro Sprint IQ tool.
	- The grid system is GDA94/MGA Zone 51 using the AHD for elevation.
	GSN:
	 Independent consultants working for GSN on their MRE state that surface collar coordinates were surveyed using DGPS equipment. However, IGO found that several drill holes appear to still have nominal elevations with respect to the topography surfaces. As such, IGO manually adjusted these collars to the digital topography. However, IGO has accepted the precision is reasonable for the purposes of the reporting of exploration results.
	 Independent consultants working for GSN on their MRE state a high quality down hole gyroscopic tool was used to determine the drill path of the RC and DD holes. No details of equipment are described. IGO has accepted the information is reasonable for the purposes of the reporting of exploration results, especially given the shallow overall depth of the drillholes drilled within the SKAV by GSN.
	- The grid system used for the drilling is MGA94 Zone 51; the elevation system is not stated but is consistent with and presumed to be by IGO as AHD.

JORC Criteria	Explanation						
Data spacing and	IGO:						
distribution	- RC:						
	- The RC drilling targeted geological targets with irregular orientations and distributions, as such the drilling patterns are at variables spacings and plunges.						
	- All samples have been composited using length-weighted intervals for Public Reporting.						
	- DD:						
	- The DD drilling targeted geological targets with irregular orientations and distributions, as such the drilling patterns are at variables spacings and plunges.						
	- All samples have been composited using length-weighted intervals for Public Reporting.						
	GSN:						
	- RC:						
	 Within the SKAV, the nominal drill hole mineralisation pierce point spacing is 25m by 25m on section grid lines oriented 40° clockwise from MGA94 Zone grid easting. Outside the SKAV, RC drilling was conducted by drilling at variables spacings and plunges targeting geological features. 						
	- All samples have been composited using length-weighted intervals for Public Reporting.						
	- DD:						
	- The DD drilling targeted geological targets with irregular orientations and distributions, as such the drilling patterns are at variables spacings and plunges.						
	- All samples have been composited using length-weighted intervals for Public Reporting.						
Orientation of data in relation to	 The orientation of the sulphide mineralisation at Lens S1 and Lens N1 that IGO is reporting at Silver Knight South is near-vertical and orientated ~NW-SE. 						
geological structure	IGO:						
	 RC and DD drilling by IGO was conducted at various orientations and dips and aimed to try and intersect mineralisation as perpendicular to strike as possible, however due to the steep nature of the sulphide mineralisation and its location shallowly below surface, it unavoidably intersected the mineralisation at low core angles (not true widths). 						
	GSN:						
	 RC drilling by GSN was mainly conducted at steep dips 80° towards the southeast (130°), as such the drilling angle and orientation were poorly aligned to test the mineralised zone reported here. 						
	 DD drilling by GSN was conducted at various orientations and dips and provides a better representation of the geology in the data, however due to the steep nature of the sulphide mineralisation and its location shallowly below surface, it unavoidably intersected the mineralisation at low core angles (not true widths). 						
	 The orientation of other sulphide mineralisation reported (T5-Quokka Target Horizon, Leopard Target Horizon, Firehawk Target Horizon, and Silver Knight Target Horizon) is largely unknown and as such IGO and GSN, RC and DD drilling, is not considered to be representative of true widths. 						

JORC Criteria	Explanation							
Sample security	IGO:							
	- The chain-of-sample custody is managed by the IGO staff.							
	 Samples were stored at the IGO's currently active mine site Nova and sampled in the field by IGO staff and contractors, at the time of drilling. 							
	- The DD core was wet cut using a diamond bland and sampled at Nova by IGO staff and contractors.							
	 RC chips and DD core samples were placed in pre-numbered calico bags and further secured in green plastic sample bags with cable ties. The samples are further secured in a bulk bag and delivered to the ALS-Perth by contractor freight McMahon Burnette. 							
	- A sample reconciliation advice is sent by ALS-Perth to IGO's DBA on receipt of the samples.							
	 Any inconsistences between the despatch paperwork and samples received is resolved with IGO before sample preparation commences. 							
	- Sample preparation and analysis is completed at the one laboratory – ALS-Perth.							
	- The risk of deliberate or accidental loss or contamination of samples is considered very low.							
	GSN:							
	- The sample chain-of-custody was managed by GSN.							
	- Samples were stored on site and collected by a road haulage contractor and delivered to their depot in Perth, then to the main assay laboratory.							
	- The Competent Person considers that risk of deliberate or accidental loss or contamination of samples is low.							
Audits or reviews	IGO:							
	- No specific external audits or reviews have been undertaken.							
	GSN:							
	 GSN's MRE consultant reviewed GSN's drilling and sampling procedures in 2018 and concluded that the methods applied by GSN were consistent with industry norms. 							
	 IGO reviewed the site, residual drill core and RC cuttings as part of its acquisition due diligence in 2020 and found the physical residual information also consistent with industry norms for the style of deposit under consideration. 							

Section 2: Exploration Results

JORC Criteria	Explanation			
Mineral tenement and land tenure status	 Silver Knight is wholly within WA Mining has total area of 6,153ha. 	Lease application M28/	395, which was applied for	by GSN on 20 July 2018, and
	 The mining lease application is over part Nickel Pty Ltd, which expires on 12 June 			
	- The M28/395 application is within Ngad	ju Native Title Claim (Wo	C99/002).	
	 Under the terms of the agreement betw eight coordinates listed in the image bel which is effectively a volume, has been Silver Knight exploration camp. 	ow (MGA Zone 51 and A	Australian Height Datum (AF	HD)). This Exclusive Area,
	Point of Standard	s the right to direct IGO	r 2	
	 Outside the SKAV, within E28/2065, IGO listed in the table below. 		into a JV arrangement. Det	ails of the agreement are
	- Significant intercepts are also reported a of the agreement are listed in the table l		vithin the table below. Tenu	re shown in Figure 6. Details
	Joint venture	Tenement	Expiry	Area (km2)
	IGO (65%)/ Creasy Group (35%)	E28/2065	12/06/2024	321.8
	IGO (90%)/ Buxton 10% Free Carried	E28/2201	27/09/2024	134.4
Exploration done by other parties	 Prior explorers, Homestake Gold in JV w some limited drilling completed on a pro Creasy Group subsidiary, Ponton Minera E28/1723 but surrendered the tenure in 	spect 4km northwest of ls, subsequently acquire	f Silver Knight. ed the tenure over Silver Kr	ight in 2007 as tenement
	 E28/2065, just prior to the discovery of Buxton Resources, prior to forming a JV follow-up sporadic RC drilling on E28/2. 	Nova-Bollinger. with IGO in 2016 on E28		

JORC Criteria	Explanation	
Geology	- The regional geology setting is a high-grade metamorphic terrane in the Albany Fraser belt of WA.	
	- Gabbroic intrusions have intruded a metasedimentary package within the belt that are host to the Ni-Cu-Co mineralisation.	
	- The deposits are analogous to many mafic hosted Ni-Cu deposits worldwide.	
	 The sulphide mineralisation is interpreted to be related to the intrusive event with mineralisation occurring in several styles including massive, semi-massive, breccia, network texture, blebby and disseminated sulphides. 	
	- The fresh main sulphide mineral is pyrrhotite, with nickel and cobalt associated with pentlandite and copper associated with chalcopyrite. Secondary sulphide minerals are violarite and pyrite/marcasite.	
	 The region is considered by IGO to have the potential to host mafic or ultramafic intrusion related Ni-Cu-Co deposits based on the discovery of Nova-Bollinger Ni-Cu-Co Deposit and volcanic massive sulphide deposit based on IGO's Andromeda exploration prospect. 	
Drill hole Information	- Given the significant drilling that has taken place by GSN and IGO to define Silver Knight, it is impractical to list all holes within the SKAV. All RC and DD drilling holes completed outside the SKAV are listed in Table 3 and Table 4.	
	- Within the SKAV, all RC and DD holes by GSN and IGO that were used to define the reported Lens S1 and Lens N1 new zones of mineralisation around Silver Knight are given within Table 3 and Table 4.	
	 A 3D image of the drill hole locations relative to the interpreted sulphide mineralisation at Lens N1 and Lens S1 is included in the main body of the ASX announcement (Figure 11). 	
Data aggregation	- Significant drill hole intercept results have been reported using a cut-off of >0.4% Ni or Cu with a maximum of 1m internal waste.	
methods	- No capping or top-cutting of high grades were undertaken.	
	- The intercepts are calculated on a length weighted basis.	
	- Holes included on Figure 12 that do not appear in Figure 11 or Table 3 are not considered part of the newly defined Ni-Cu-Co sulphide zones (Lens S1 and Lens N1) outlined in this exploration report, as such are not included for practical purposes.	
	- Metal equivalent grades were not reported.	
Relationship between mineralisation widths and intercept lengths	 An understanding of the orientation of the mineralisation has been gained from structures measured in orientated DD cores, and modelling intersections in 3D utilising manual wireframing of intersections honouring structural trends measured in the core. 	
	 Due to the orientation of the reported Ni-Cu-Co sulphide mineralisation (near vertical at Lens S1 and Lens N1; unknown for other reported mineralisation) and drilling angles used (-60° to -90°) it is highly unlikely that the downhole intersections are representative of true widths of intersection. 	
	- Where true widths are known they are reported in the text with downhole TW suffixes.	
	- Where true width is not known they are indicated as not being true widths.	
	- Data in the tables is reported at not being true widths as is highlighted in the table.	
Balanced Reporting	 All drillholes that were used to define the reported two new Ni-Cu-Co sulphide zones (Lens S1 and Lens N1) are reported within this report regardless of if the constraining points depict a positive (significant intercept) or negative (no significant intercept) result. These points are clearly shown in Figure 11. 	
	 GSN holes used to define Silver Knight, shown on Figure 2 as Silver Knight Sulphide wireframe, that was reported by IGC in January 2021 and were not used to define the two new Ni-Cu-Co sulphide zones reported within this report, have not been reported as it is not practical to report these results, and they do not pertain to the results reported in this report. 	
	 IGO holes that infill the GSN holes used to define Silver Knight (shown on Figure 11 as Silver Knight Sulphide wireframe) that was reported by IGO in January 2021 and were not used to define the two new Ni-Cu-Co sulphide zones reported within this report, have not been reported as it is not practical to report these results, and they do not pertain to the results reported in this report. 	
	 All drillholes that are outside the SKAV are reported within this report regardless of if the constraining points depict a positive (significant intercept) or negative (no significant intercept) result, allowing assessment of mineralisation encountered and reported in the significant intercepts table (Table 3 and Table 4) and shown on Figure 7. 	
	- All drill results provided in this table represent the intervals as sampled and assayed.	
	- The exploration results reported give the best and most balanced view of the drilling and sampling as possible.	
Other substantive exploration data	- All material data has been included.	
Diagrams	 Representative diagrams of the Silver Knight drilling, geological interpretations and reporting constraints are included in the main body of this Public Report. 	
Further work	- IGO completed metallurgical testing on the fresh massive sulphide intervals from DD cores from 21HMDD006 and 22SKDD104.	
	- Several shallow and deep massive Ni-Cu-Co sulphide targets have been identified in close proximity to Silver Knight (Figure 6), and these are planned to be tested in CY23 and CY24.	

Fraser Range JORC Code Table 1

Section 1: Sampling Techniques and Data

JORC criteria	 Explanation Sampling techniques used in the Fraser Range Project in CY22 and reported here are DD methods, as detailed in the following subsections. 		
Sampling techniques			
Drilling techniques	DD:		
	- DD holes were drilled by truck mounted rigs owned and operated by DDH1 Drilling Pty Ltd.		
	 Holes were collared from surface with either PQ-core or PQ rock-rolled, which was then reduced to HQ-core and subsequently NQ2-core at depths directed by the IGO geologist. 		
	- All HQ and NQ core was oriented using REFLEX ACT III-H or N2 Ezy-Mark orientation tools.		
	RC:		
	 RC holes were drilled by a truck mounted rig owned and operated by Frontline, from surface, at variable spacings and plunges for exploration purposes. 		
	- Samples were collected from 114 to 142mm diameter (4.5 to 5.6 inch) holes which were drilled using face-sampling bits.		
Drill sample recovery	RC:		
	- Sample recovery for the RC drilling was logged qualitatively and recorded.		
	- IGO recorded that 100% of samples collected by RC drilling occurred in dry ground and drilling conditions.		
	 Sample recoveries from IGO RC drilling is deemed acceptable for the purposes of reporting of exploration results as per the JORC Code classification. 		
	DD:		
	 Sample recovery for the DD core loss was recorded by the drillers with any core loss intervals noted on annotated wooden blocks inserted into the core boxes by the driller. 		
	 For recovery checking and orientation marking purposes, the DD core was reconstructed into continuous runs in an angle iron cradle. 		
	 DD down hole depths were checked against the depth recorded on the core blocks, and rod counts were routinely carried out and marked on the core blocks by the drillers to ensure the marked core block depths were accurate. 		
Logging	- Qualitative logging of RC chips and DD core included lithology, mineralogy, mineralisation, weathering, colour, and other features of the samples.		
	- DD core was additionally logged in a quantitative manner in terms of structure and geotechnical parameters.		
	- The total lengths of all drill holes have been logged (unless stated otherwise).		
	 Photographs of all DD trays are taken and retained on file with the original core trays stored in the core library at the 100% IGO owned Nova. 		
	- All RC chip trays are retained at the 100% IGO owned Nova.		
	- The logging is considered adequate to support downstream exploration studies and follow-up drilling.		

JORC criteria	Explanation			
Sub-sampling	RC:			
techniques and sample preparation	 RC samples were collected from a splitter (static cone) that collected a 2-5kg split of the primary lot from each downhole sampling interval. 			
	 Calico samples were collected as 1m samples where static cone splitting devices were used to composite and reduce the sample weight. The samples were then transferred to a pre-numbered calico bag sequence and packaged for dispatch. 			
	- RC samples were collected from what was deemed by IGO geologists to be dry ground conditions.			
	 The laboratory sample (ALS Perth laboratory) is oven dried (12 hours at 100°C), followed by coarse crushing in a jaw- crusher to 100% passing 10mm, then pulverisation of the entire crushed sample in low chrome-steel pulverising bowls to a PSD of 85% passing 75 microns. A 300g sub-sample pulp sample is then split to serve as the analysis lot. 			
	- Quality control procedures involve insertion of certified reference materials, blanks, and collection of duplicates at the pulverisation stage.			
	- The results of quality control sampling are consistent with satisfactory sampling precision.			
	DD:			
	 DD core was generally subsampled into half-core using an automated wet-diamond-blade core saw. All samples submitted for assay were selected from the same side of the core. Exceptions were for duplicate samples of selected intervals, where quarter-core subsamples were cut from the half-core and for whole core samples submitted for some holes, such as metallurgical testing samples. 			
	 The primary tool used to ensure representative drill core assays was monitoring and ensuring near 100% core recovery. 			
	 The nature of the drilling method means representation is indicative with sampling aimed at finding anomalous concentrations rather than absolute values for MRE work. 			
	 The laboratory sample is oven dried (12 hours at 100°C), followed by coarse crushing in a jaw-crusher to 100% passing 10mm, then pulverisation of the entire crushed sample in low Cr-steel pulverising bowls to a PSD of 85% passing 75 microns. A 300g sub-sample pulp sample is then split to serve as the analysis lot. 			
	- Quality control procedures involve insertion of certified reference materials, blanks, and collection of duplicates at the pulverisation stage.			
	- The results of quality control sampling are consistent with satisfactory sampling precision.			
Quality of assay	- No geophysical tools were used to determine any element concentrations.			
data and laboratory tests	 ALS Limited - Perth completed sample preparation checks for PSD compliance as part of routine internal quality procedures to ensure the target particle size distribution of 85% passing 75µm is achieved in the pulverisation stage. 			
	 Field duplicates, CRMs and blanks were routinely inserted at frequencies between 1:10 and 1:20 samples for DD and RC sample streams. 			
	- Laboratory quality control processes include the use of internal lab standards using CRMs and duplicates.			
	 CRMs used to monitor accuracy have expected values ranging from low to high grade, and the CRMs were inserted randomly into the routine sample stream to the laboratory. 			
	- The results of the CRMs confirm that the laboratory sample assay values have good accuracy and results of blank assays indicate that any potential sample cross contamination has been minimised.			
	- Following sample preparation and milling, DD and RC samples were analysed for:			
	- Lithium borate fusion and four-acid digestion, with ICP-AES finish for AI, Fe, Na, Ti, Ba, K, P, Ca, Cr, Mg, Mn, Si and Sr, or,			
	- ICP-MS finish for Ba, Ce, Cr, Cs, Dy, Er, Eu, Ga, Gd, Hf, Ho, La, Lu, Nb, Nd, Pr, Rb, SM, Sn, Sr, Ta, Tb, Th, Tm, U, V, W, Y, Yb and Zr.			
	 Four- acid digestion of samples, with ICP-AES finish was employed for Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sr, Th, Ti, Tl, U, V, W and Zn. 			
	- Pt, Pd and Au were analysed by fire assay and ICP-AES finish.			
	- The digestion methods can be considered near total for all elements.			
	- LOI was determined by robotic thermos-gravimetric analysis at 1,000°C.			

JORC criteria	Explanation		
Verification of	- Significant intersections were checked by senior IGO geological personnel.		
sampling and assaying	- No twinned holes were completed.		
	The logging has been validated by an IGO on-site geologist and compiled onto the IGO acQuire SQL drill hole database by IGO's DBA.		
	- Assay data are imported directly from digital assay files from contract analytical company ALS-Perth and are merged in the Company acQuire SQL drill hole database by IGO's Geological Database Administrator.		
	- Data is backed up regularly in off-site secure servers.		
	- No geophysical or portable XRF results are used in exploration results reported.		
	- There have been no adjustments to the assay data.		
Location of data points	 Surface hole collar locations were surveyed using a handheld Garmin global positioning system (GPS) unit, averaging for 90 seconds, with an expected accuracy of ±6m for easting and northing with elevation also recorded and later adjusted using surveyed topography. 		
	 Drill path gyroscopic surveys were completed at either 10 or 12m intervals down hole using a north seeking REFLEX GYRO SPRINT-IQ for DD holes and Reflex EZ-Shot for RC holes. 		
	- The grid system is GDA94/MGA Zone 51 using the AHD for elevation.		
Data spacing and distribution	 The DD and RC drilling targeted conductive plates generated from surface geophysics (moving loop EM) and/or anomalous geochemistry generated from AC and soil sampling. 		
	- The DD and RC drilling targeted geological targets with irregular orientations and distributions, as such the drilling patterns are at variables spacings and plunges.		
	- All samples have been composited using length-weighted intervals for Public Reporting.		
Orientation of data	- DD and RC drilling from the surface when targeting conductive plate targets is designed to cross at high angles.		
in relation to geological structure	- True widths of the intervals are often uncertain as the drilling is aimed at finding anomalies, not MRE definition.		
	- The possibility of bias in relation to orientation of geological structure is currently unknown.		
Sample security	- The chain-of-sample custody is managed by IGO staff.		
	- Samples were stored at the IGO's currently active mine site Nova and sampled in the field by IGO staff and contractors a the time of drilling.		
	- The DD core was wet cut using a diamond bland and sampled at Nova by IGO staff and contractors.		
	 RC chips and DD core samples were placed in pre-numbered calico bags and further secured in green plastic sample bags with cable ties. The samples are further secured in a bulk bag and delivered to the ALS - Perth by contractor freight McMahon Burnette. 		
	- A sample reconciliation advice is sent by ALS-Perth to IGO's DBA on receipt of the samples.		
	 Any inconsistences between the despatch paperwork and samples received is resolved with IGO before sample preparation commences. 		
	- Sample preparation and analysis is completed at the one laboratory – ALS-Perth.		
	- The risk of deliberate or accidental loss or contamination of samples is considered very low.		
Audits or reviews	- No specific external audits or reviews have been undertaken.		

Section 2: Exploration Results

JORC criteria Mineral tenement and land tenure status	 Explanation The Fraser Range significant intercepts are in two exploration licences. The table below is a listing of the expiration dates, management and JV arrangements relating to these tenements. 				
		Joint venture	Tenement	Expiry	Area (km2)
		IGO (70%)/ Creasy Group (30%)	E28/2177	02/04/2023	180.8
		IGO (100%)	E69/3645	06/01/2025	14.6
Exploration done by other parties	-	 There has been historical regional exploration for gold and base metals by the Companies listed above. Previous work on the tenements consisted of aeromagnetic/radiometric and digital terrain model (DTM) aeromagnetic/radiometric/DTN surveys, soil sampling, geological mapping, and ground EM surveys. 			
	-	There has been previous sporadic AC,	RC and diamond drilling o	conducted.	
Geology	-	The regional geology setting is a high-	grade metamorphic terra	ne in the Albany Fraser belt	of WA.
	-	Gabbroic intrusions have intruded a me	etasedimentary package	within the belt, and they ho	st Ni-Cu-Co mineralisation.
	-	The deposits are analogous to many m	afic hosted Ni-Cu deposi	its worldwide.	
	-	 The sulphide mineralisation is interpreted to be related to the intrusive event with mineralisation occurring in several styles, including massive, breccia, network texture, blebby and disseminated sulphides. 			
	-	- The main sulphide mineral is pyrrhotite, with nickel and cobalt associated with pentlandite and copper associated with chalcopyrite.			
	 The region is considered by IGO to have the potential to host mafic or ultramafic intrusion related Ni-Cu-Co deposits based on the discovery of Nova-Bollinger Ni-Cu-Co deposit and volcanic massive sulphide deposit based on IGO's Andromeda exploration prospect. 				
Drill hole Information	-	Location details of significant intercept of the drill hole locations relative to the announcement (Figure 5).			-
Data aggregation methods	-	Significant drill hole intercept results had consideration.	ave been reported using a	a cut-off of >0.4% Ni or Cu	with no internal dilution
	-	- No capping or top-cutting of high grades were undertaken.			
	-	The intercepts are calculated on a leng	th weighted basis.		
	-	Holes included on maps and diagrams	without significant values	s are not considered for follo	ow up assessment.
	-	Metal equivalent grades were not repo	rted.		
Relationship between mineralisation widths and intercept lengths	- Only downhole intersection widths are provided due to the nature of the drilling – any relationships between width and intercept lengths are likely coincidental.				
Diagrams	- A 3D image of the drill hole locations relative to the interpreted sulphide mineralisation is included in the main body of the ASX announcement (Figure 5).				
Balanced reporting	-	Drill intercepts having lengths >0.3m (t are listed in the main body of this Publ		more of nickel or copper va	lues greater than 0.4% grade
	-	The remainder of the results are consid- included in the maps in the main body	-	n. Drill hole locations of not r	eported drill holes are
	-	All drill results provided in this table rep	present the intervals as sa	ampled and assayed.	
Other substantive exploration data	- No other material exploration data is reportable in this announcement.				
Further work	-	Further drilling is underway to test the follow-up anomalous geology generate		ated from the Surface Movir	ng Loop EM surveys and to

Forrestania Project JORC Code Table 1

JORC Criteria	Explanation			
Sampling techniques	- Sampling techniques used in the Forrestania Project in CY22 and reported here are reverse circulation percussion drilling			
	- (RC) Aircore (AC) and diamond drilling (DD) methods, as detailed in the following subsections.			
Drilling techniques	DD:			
	- DD holes were drilled using truck mounted diamond rigs.			
	 Diamond drilling comprises HQ and NQ2 sized core. Holes were collared from surface with either PQ-core or PQ rock-rolled, which was then reduced to HQ-core (63.5mm diameter) and subsequently NQ2-core at depths directed by the IGO geologist. 			
	RC:			
	- RC holes were drilled by a truck mounted RC rig from surface, at variable spacings and for exploration purposes. Samples were collected from 114 to 142mm diameter (4.5 to 5.6 inch) holes which were drilled using face-sampling bits.			
	AC:			
	- A truck-mounted AC rig is used with a 3-inch diameter face sampling hammer drilling or AC bit.			
	- Exploration targets are tested AC. Holes were drilled between 60 to 90°.			
Drill Sample Recovery	DD:			
	- Overall recoveries are >95% and there was no core loss issues or significant sample recovery problems.			
	- Core loss is noted where it occurs.			
	- Diamond core was reconstructed into continuous runs on an angle iron cradle for orientation marking.			
	 Depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the drillers and marked on the core blocks by the drillers to ensure the marked core block depths were accurate. 			
	- Drilling in the oxidised profile results in more incomplete core recoveries.			
	 DD down hole depths were checked against the depth recorded on the core blocks, and rod counts were routinely carried out and marked on the core blocks by the drillers to ensure the marked core block depths were accurate. 			
	- Diamond core recoveries have been logged and recorded in the database.			
	 RC recoveries are logged and recorded in the database and RC samples were visually checked for recovery, moisture and contamination. 			
Logging	DD:			
	 Geological logging is recorded and validated in 'Ocris' Logging Software (Toughbook platform) & stored in a Datashec database. 			
	- Drill core is logged for lithology, mineralogy, mineralisation, weathering, fabric, grainsize, colour, structure, and other relevant features.			
	- Geotechnical logging was not completed due to the nature of drill method.			
	 Photographs of all DD trays are taken and retained on file with the original core trays stored in the core library at the 100% IGO owned Forrestania Operation. Core is photographed both in wet and dry form. 			
	- All holes have been logged from the surface to the end of hole.			
	AC/RC:			
	 Geological logging is recorded and validated Ocris Logging Software (Toughbook platform) & stored in a Datashed database. 			
	- Drill chips are logged for lithology, mineralogy, mineralisation, weathering, fabric, grainsize, colour and other relevant features.			
	- All AC/RC chip trays are retained at the 100% IGO owned Forrestania Operation.			
	- The logging is considered adequate to support downstream exploration studies and follow-up drilling.			
	- All holes have been logged from the surface to the end of hole.			

JORC Criteria	Explanation			
Sub-sampling techniques and sample preparation	 RC samples were collected on the rig using cone splitters. Composite samples are collected via riffle splitting or spearing to generate a single sample of less than 3kg. 			
	 Calico samples where collected as 1m samples where static cone splitting devices were used to composite and reduce the sample weight. The samples were then transferred to a pre-numbered calico bag sequence and packaged for dispatch. 			
	 The laboratory sample (ALS Perth laboratory) is oven dried (12 hours at 100°C), followed by coarse crushing in a jaw- crusher to 100% passing 10mm, then pulverisation of the entire crushed sample in low chrome-steel pulverising bowls to a PSD of 85% passing 75 microns. A 300g sub-sample pulp sample is then split to serve as the analysis lot. 			
	 Quality control procedures involve insertion of certified reference materials, blanks, and collection of duplicates at the pulverisation stage. 			
	- The field crew prepares and inserts the QAQC certified reference materials into the relevant calico bags.			
	 OREAS and Geostats standards have been selected based on their grade range and mineralogical properties, with approximately 12 different standards used. 			
	- The results of quality control sampling are consistent with satisfactory sampling precision.			
	- Standards and blanks are inserted approximately every 20 samples or at least one every hole for both diamond and RC drilling.			
	DD:			
	 DD core was generally subsampled into half-core using an automated wet-diamond-blade core saw. All samples submitted for assay were selected from the same side of the core. 			
	- Exceptions were for duplicate samples of selected intervals, where quarter-core subsamples were cut from the half-core.			
	- The primary tool used to ensure representative drill core assays was monitoring and ensuring near 100% core recovery.			
	 The laboratory sample is oven dried (12 hours at 100°C), followed by coarse crushing in a jaw-crusher to 100% passing 10mm, then pulverisation of the entire crushed sample in low Cr-steel pulverising bowls to a particle size distribution (PSD) of 85% passing 75 microns. A 300g sub-sample pulp sample is then split to serve as the analysis lot. 			
	- Quality control procedures involve insertion of certified reference materials, blanks, and collection of duplicates at the pulverisation stage.			
	- The results of quality control sampling are consistent with satisfactory sampling precision.			
Quality of assay data	- All samples are assayed by independent certified commercial laboratories.			
and laboratory tests	- The laboratories used are experienced in the preparation and analysis of nickel sulphide ores.			
	 ALS Limited - Perth completed sample preparation checks for PSD compliance as part of routine internal quality proceduresto ensure the target particle size distribution of 85% passing 75µm is achieved in the pulverisation stage. 			
	 Field duplicates, CRMs and blanks were routinely inserted at frequencies between 1:10 and 1:20 samples for DD and RC sample streams. 			
	- Laboratory quality control processes include the use of internal lab standards using CRMs and duplicates.			
	 CRMs used to monitor accuracy have expected values ranging from low to high grade, and the CRMs were inserted randomly into the routine sample stream to the laboratory. 			
	- The results of the CRMs confirm that the laboratory sample assay values have good.			

JORC Criteria	Explanation		
Verification of sampling and assaying	- The logging has been validated by an IGO on-site geologist and compiled onto the IGO Datashed drill hole database by IGO's consulting DBA.		
	 No geophysical tools or handheld XRF instruments were used to determine any element concentrations that were subsequently used for MRE or exploration reporting purposes. 		
	- No twinned holes were completed.		
	 Assay data are imported directly from digital assay files from contract analytical company ALS-Perth and are merged in the drill hole database by IGO's Geological Database Consultant. 		
	- Data is backed up regularly in off-site secure servers.		
	- No geophysical or portable XRF results are used in exploration results reported.		
	- There have been no adjustments to the assay data.		
Location of data points	 Surface hole collar locations and elevation data were surveyed by the rig supervising geologist using a handheld Garmin GPS unit with an average read time of 90 seconds. The expected location accuracy is ±6m for easting and northing, with elevation also recorded and later adjusted using surveyed topography. 		
	- Downhole Survey Data is collected using a digital Reflex survey tool.		
	- MGA94 Zone 50 grid coordinate system is used.		
Orientation of data in	- True widths of the intervals are often uncertain as the drilling is aimed at finding anomalies not for MRE work.		
relation to geological structure	- The possibility of bias in relation to orientation of geological structure is currently unknown.		
	- The majority of the drill holes are drilled at 60° to achieve the best possible intersection angle in steeply dipping terrane.		
	- Heritage and/or environmental constraints may prevent some ideal drilling solutions.		
	- No orientation-based sampling bias has been observed in the data, intercepts are reported as down-hole lengths.		
	AC/RC Drilling:		
	 The majority of the AC/RC drill holes are drilled at 60 degrees to optimise the range of lithologies or cross section of stratigraphy sampled in areas that are steeply dipping. 		
Sample security	- The chain-of-sample custody is managed by the site-based staff.		
	- All samples are captured and prepared for transport onsite under the supervision of site staff.		
	- A sample reconciliation advice is sent by ALS-Perth to the DBA on receipt of the samples.		
	 Any inconsistences between the dispatch paperwork and samples received is resolved before sample preparation commences. 		
	- Sample preparation and analysis is completed at the one laboratory – ALS-Perth.		
	- The Competent Person considers that the risk of deliberate or accidental loss or contamination of samples is considered very low.		
Audits or reviews	- No specific external audits or reviews have been undertaken.		
Paterson JORC Code Table 1

Section 1: Sampling Techniques and Data

JORC Criteria	Explanation
Sampling techniques	- Sampling included in this public report for the Paterson Project is from air core drilling (AC).
Drilling techniques	- All AC holes have been drilled by a Mantis 300 rig owned and operated by Wallis Drilling Pty Ltd.
	- All AC holes are drilled with NQ diameter tungsten carbide AC bits to depths directed by an IGO geologist.
	- All AC holes are vertical.
Drill sample recovery	- AC sample recovery has not been quantitively assessed, however the visual condition of the cuttings, their dry or wet condition and any potential smearing contamination are recorded at the time of drilling by IGO geologists at 1m intervals.
	- AC down hole depths are checked against drill rod counts.
Logging	- Qualitative logging of AC cuttings included lithology, mineralogy, mineralisation, weathering, colour, and other features of the samples.
	- The total lengths of all holes drilled have been recorded.
	 Logging at site is entered directly into a notebook computer running acQuire and uploaded weekly to IGO's SQL database.
	- All AC chip trays and bottom of hole core samples are retained at the IGO's Midvale storage facility.
	 The logging is considered adequate to support downstream exploration studies and follow-up drilling with RC or diamond core.
Sub-sampling techniques and	 Sample piles representing intervals of one AC metre are spear sampled to accumulate 4m composite samples for analysis, with a total 2 to 3kg collected into pre-numbered calico bags.
sample preparation	- Base of hole or 1m re-samples were obtained by spear sampling single sample piles and collecting a total 2 to 3kg into pre-numbered calico bags.
	- These methods of sampling are considered acceptable for prospectivity assessment but not MRE work.
	- The nature of the drilling and sampling method means representativity is only indicative, with the sampling aimed at finding anomalous concentrations rather than quantifying absolute values.
	 The laboratory sample preparation is by oven drying (4 to 6 hours at 95°C), coarse crushing in a jaw-crusher to 100% passing 10mm, then pulverisation of the entire crushed sample in LM5 grinding robotic mills to a PSD of 85% passing 75mm. A 200g sub-sample is split from the pulp to serve as the analysis source sample.
	 Quality control procedures involve insertion/collection of CRMs, blanks, and duplicates at ~20 sample intervals in the field, and further collection of duplicates at the pulverisation stage.
	- The results of quality control sampling are consistent with satisfactory sampling precision for the planned purpose of anomaly detection.

JORC Criteria	Explanation				
Quality of assay	- No geophysical tools or XRF equipment has been used to determine any reported element concentrations.				
data and laboratory tests	 ALS-Perth completed sample preparation checks for particle size distribution compliance as part of routine internal quality procedures to ensure the target PSD of 85% passing 75mm is achieved in the pulverisation stage. 				
	- Field duplicates and CRMs were routinely inserted in the routine AC sample stream at a frequency of 1:20 samples.				
	- Laboratory quality control processes include the use of internal lab standards using CRMs and duplicates.				
	 CRMs used to monitor accuracy have expected values ranging from low to high grade, and the CRMs were inserted randomly into the routine sample stream to the laboratory. 				
	- The results of the CRMs confirm that the laboratory sample assay values have good accuracy and results of blank assays indicate that any potential sample cross contamination has been minimised.				
	- Following sample preparation and milling, all 4m composite AC samples were analysed for a 53-element suite:				
	 Aqua regia digest of a 25g subsample followed by ICP-MS finish for Ag, Al, As, Au, B, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, Hg, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Pd, Pt, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, TI, U, V, W, Y, Zn and Zr. 				
	- The digestion method is not considered total for some analysed elements but is appropriate to anomaly detection.				
	- Following sample preparation and milling, all 1m AC samples were analysed for a 63-element suite + LOI:				
	 Four acid digest of a 25g subsample followed by an ICP-MS finish for Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Ge, Hf, Ho, In, K, La, Li, Lu, Mg, Mn, Mo, Na, Nb, Nd, Ni, P, Pb, Pr, Rb, Re, S, Sb, Sc, Se, Sm, Sn, Sr, Ta, Tb, Te, Th, Ti, Tl, Tm, U, V, W, Y, Yb, Zn and Zr. 				
	- Fire assay of a 30g subsample with inductively coupled plasma atomic emission spectroscopy finish for Au, Pd and Pt.				
	- This digestion method is considered near total for the analysed elements.				
	- LOI was determined by robotic thermos-gravimetric analysis at 1000°C.				
Verification of	- No twinned holes were completed.				
sampling and assaying	- The logging has been validated by an IGO geologist at the Rig and subsequently entered into the IGO acQuire SQL drill hole database by IGO's DBA.				
	 Assay data are imported directly from digital assay files sent by ALS-Perth and are merged into IGO's acQuire/SQL drill hole database by IGO's DBA. 				
	- All digital data is backed up regularly in off-site secure servers.				
	- There have been no adjustments to the assay data.				
Location of data points	 Surface hole collar locations were surveyed by the rig supervising geologist using a handheld Garmin GPS unit with an average read time of 90 seconds. The expected location accuracy is ±6m for easting and northing, with elevation also recorded and later adjusted using surveyed topography. 				
	- The grid system is GDA94/MGA Zone 51 using the AHD for elevation.				
Data spacing and	- AC drill holes were typically spaced 400 or 800m apart along subparallel interdune tracks separated by 400 to 2,000m.				
distribution	- The drill hole spacing was reduced to 200m along track in some areas of greater interest.				
	- Drill hole separation is considered appropriate for exploration but not for resource estimation.				
	- All Public Report samples have been composited using length-weighted intervals.				
Orientation of data in relation to geological	 AC drilling is designed to test the regolith and prospective basement below cover – the orientation of the drill hole with regard to geological structures in the basement is generally unknown. 				
structure	- The true widths of the intervals are uncertain where the orientation of the basement structures is unknown.				
	- The possibility of bias in relation to orientation of basement geological structures is usually unknown.				
Sample security	- The chain-of-sample custody to ALS-Perth is managed by the IGO staff.				
	 Sealed samples were stored at IGO managed field camps for up to two weeks prior to transport to ALS-Perth by Bishops Transport. 				
	- A sample reconciliation advice is sent by the ALS-Perth to IGO's Geological Database Administrator on receipt of the samples.				
	 Any inconsistences between the despatch paperwork and samples received is resolved with IGO before sample preparation commences. 				
	- Sample preparation and analysis is completed only at ALS-Perth.				
	- The risk of deliberate or accidental loss or contamination of samples is considered very low.				
Audits or reviews	- No specific external audits or reviews have been undertaken.				

Section 2: Exploration Results

JORC Criteria	Explanation					
Mineral tenement and land tenure status	- The Paterson Project Cu and Au	intercepts provided in this repo	rt are in two exploration lice			
	Farm-in	Tenement	Expiry	Area (Graticule blocks)		
	IGO / Cyprium Metals	E45/2415	25/08/2023	60		
	IGO / Antipa Minerals	E45/3918	23/04/2023	91		
	 Exploration activities on tenemer IGO is required to sole spend A\$ 			ement are managed by IGO;		
	 Exploration activities on tenements within the IGO-Antipa Farm-in and Joint Venture agreement are managed by IGO; IGO is required to sole spend A\$30M by January 2027 to earn a 70% interest in the JV. 					
	 At the time of reporting the tenu obtaining future licences for furt 		known impediments to furt	her exploration activities or		
Exploration done by other parties	 Historical exploration for gold an Resources Ltd, BHP Minerals Ltd listed above. 	-				
	 Previous work on the tenements sampling and geological mapping 			I radiometric surveys, soil		
	 Historic drilling has included AC, on the areas from which results a 		es; none of these drilling pr	ograms have been focussed		
Geology	 The regional geology comprises Neoproterozoic siliciclastic (sandstone, siltstone, shale) and carbonate rocks of the Yeneena Basin (Paterson Province) in WA. 					
	 The Neoproterozoic rocks have undergone greenschist facies metamorphism, are extensively faulted and folded, and are intruded by several suites of gabbroic dykes and sills of different ages; basement rocks in the IGO-Antipa Farm-in are also intruded by a series of granitic intrusions. 					
	- The geologic setting is analogous to that of sediment-hosted copper-cobalt deposits in the Central African Copperbelt and also the nearby intrusion-related sediment-hosted copper-gold Telfer and Winu deposits.					
	- The sulphide mineralisation comprises pyrrhotite and chalcopyrite occurring as disseminations within the meta- sedimentary host rocks and within quartz-carbonate veins.					
	 IGO consider the region is prosp and Maroochydore deposits) and Winu, Minyari and Haveiron depo 	l intrusion-related sediment-ho				
Drill hole Information	- A plan view of the AC drill holes i	s provided in the body of this re	eport.			
	- The drill hole spacing is considered appropriate for exploration but not for resource estimation.					
Data aggregation	- Cut off grades of 100ppb Au and	1000ppm Cu were used to con	npile Table 7.			
methods	- No capping or top-cutting of hig	h grades were undertaken.				
	- Significant intercepts are calcula	ted on a length weighted basis.				
	- Holes included on maps and diag	grams without significant values	s are not considered for follo	ow up assessment.		
Relationship between	- Downhole intersection widths in	vertical AC drill holes are provid	ded.			
mineralisation widths and intercept lengths	- The true widths of the intervals a	are uncertain because the orien	tation of basement structur	res is unknown.		
Diagrams	- A plan view of significant interce	pts is included in the body of th	nis report.			
Balanced reporting	- Only AC drill holes returning ano	malous Cu or Au values are repo	orted in Table 7.			
	,	 These Cu-Au values are considered indicative. 				
	- The remainder of the results are	considered low grade or barrer	1.			
	- Drill hole locations of low grade of	-		dy of this Public Report.		
Other substantive exploration data	- All material data has been discus					
Further work	- Further drilling is planned to follo	w-up and extend the area of ar	nomalous Cu-Au values.			

Kimberley JORC Code Table 1

Section 1: Sampling Techniques and Data

JORC Criteria	Explanation				
Sampling techniques	- Sampling techniques used in the Kimberley Project in CY22 have been rock chip specimen collection DD as detailed in the following subsections.				
	- Rock Chip Specimens:				
	- Specimens collected from surface by IGO's Exploration Geologists.				
	- Specimens are collected as grab samples of pieces hammered from outcrops and placed into pre-numbered calico bags.				
	- From 5 to10 calico bags are placed into one larger polywoven bag and sent to ALS Laboratory in Wangara, Perth for preparation and assay.				
Drilling techniques	DD:				
	- DD holes were drilled by truck-mounted rigs owned and operated by DDH1 Drilling Pty Ltd.				
	 Holes were collared from surface with either PQ-core or PQ rock-rolled, which was then reduced to HQ-core and subsequently NQ2-core at depths directed by the IGO geologist. 				
	- All HQ and NQ core was oriented using REFLEX ACT III-H or N2 Ezy-Mark orientation tools.				
Drill sample recovery	 Sample recovery for the DD core loss was recorded by the drillers with any core loss intervals noted on annotated wooden blocks inserted into the core boxes by the driller. 				
	- For recovery checking and orientation marking purposes, the DD core was reconstructed into continuous runs in an angle iron cradle.				
	- DD down hole depths were checked against the depth recorded on the core blocks, and rod counts were routinely carried out and marked on the core blocks by the drillers to ensure the marked core block depths were accurate.				
Logging	- Qualitative logging of DD core included lithology, mineralogy, mineralisation, structural, weathering, colour, and other features of the samples.				
	- The total lengths of all drill holes have been logged (unless stated otherwise in the main body of this ASX announcement).				
	- Photographs of all DD trays are taken and retained on file with the original core trays stored on plastic pallets at IGO Ltd's facility in Broome.				
	- The Competent Persson considers that logging is adequate to support downstream exploration studies and follow-up drilling.				
Sub-sampling techniques and sample preparation	 The DD core was generally subsampled into half-core using an automated wet-diamond-blade core saw. Exceptions were for duplicate samples of selected intervals, where quarter-core subsamples were cut from the half-core. All samples submitted for assay were selected from the same sector of the core. 				
	- The primary tool used to ensure representative drill core assays was monitoring and ensuring near 100% core recovery.				
	 The nature of the drilling method means representation is indicative with sampling aimed at finding anomalous concentrations rather than absolute values for MRE work. 				
	 The laboratory sample is oven dried (12 hours at 100°C), followed by coarse crushing in a jaw-crusher to 100% passing 10 mm, then pulverisation of the entire crushed sample in low Cr-steel pulverising bowls to a PSD of 85% passing 75 microns. A 300g sub-sample pulp sample is then split to serve as the analysis lot. 				
	- Quality control procedures involve insertion of certified reference materials, blanks, and collection of duplicates at the pulverisation stage.				
	- The Competent Person considers that the results of quality control sampling are consistent with satisfactory sampling precision.				

JORC Criteria	Explanation				
Quality of assay	- No geophysical tools were used to determine any element concentrations.				
data and laboratory tests	 ALS Limited -Perth completed sample preparation checks for particle size distribution compliance as part of routine internal quality procedures to ensure the target particle size distribution of 85% passing 75 microns is achieved in the pulverisation stage. 				
	- CRMs were routinely inserted in the routine rock chip sample stream and into the core sample stream at a frequency of 1:25 samples.				
	- Field duplicates, CRMs and blanks were routinely inserted at frequencies between 1:10 and 1:20 samples for DD sample streams.				
	- Laboratory quality control processes include the use of internal lab CRMs and duplicates.				
	 CRMs used to monitor accuracy have expected values ranging from low to high grade, and the CRMs were inserted randomly into the routine sample stream to the laboratory. 				
	 The Competent Person considers that the results of the CRMs confirm that the laboratory sample assay values have good accuracy and results of blank assays indicate that any potential sample cross contamination has been minimised. 				
	Following sample preparation and milling, rock chip samples and DD samples were analysed for 64 elements (i.e., Ag, Al, As, Au, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Ge, Hf, Ho, In, K, La, Li, Lu, Mg, Mn, Mo, Na, Nb, Nd, Ni, P, Pb, Pd, Pr, Pt, Rb, Re, S, Sb, Sc, Se, Si, Sm, Sn, Sr, Ta, Tb, Te, Th, Ti, TI, Tm, U, V, W, Y, Yb, Zn, and Zr) at ALS laboratories. Analyses completed include a 60 element multi-acid (HF-HNO3-HCIO4) digestion with HCL leach, combined with ICP-AES/MS finish (ME-MS61r); determination of Si via 15g pXRF scan of pulverised sample (pXRF-34); Au, Pt, Pd for mafic lithologies is determined via super-trace 30g fire assay with ICP-AES finish (PGM-ICP23).				
	- The digestion methods can be considered near total for all elements.				
	- LOI was determined by robotic thermos-gravimetric analysis at 1000°C.				
Verification of	- All Significant intersections were checked by the senior IGO geological personnel.				
sampling and assaying	- No twinned holes were completed.				
	- The logging has been validated by an IGO on-site geologist and compiled into the IGO acQuire SQL drill hole database by IGO's DBA.				
	- Assay data are imported directly from digital assay files from contract analytical company ALS-Perth and are merged in the Company acQuire SQL drill hole database by IGO's DBA.				
	- Data is backed up regularly in off-site secure servers.				
	- No geophysical or pXRF results are used in exploration results reported.				
	- There have been no adjustments to the assay data.				
Location of data points	 Surface hole collar locations were surveyed using a handheld Garmin GPS unit and averaging for 90 seconds with an expected accuracy of ±6m for easting and northing with elevation also recorded and later adjusted using surveyed topography. 				
	 Surface rock chip samples were surveyed using a single point measurement using a handheld Garmin GPS unit and provide an accuracy of ±10m for easting and northing with elevation also recorded and later adjusted using surveyed topography. 				
	 Drill path gyroscopic surveys were completed at either 18m intervals down hole using a north seeking REFLEX GYRO SPRINT-IQ for DD holes. 				
	- The grid system is GDA94/MGA Zone 51 using the AHD for elevation.				
Data spacing and distribution	 Rock chip specimens were collected as dictated by the geologist, with traverses used to target geological, geochemical, or geophysical targets. 				
	 The DD drilling tested conductive targets generated from surface geophysics (moving loop EM) and/or anomalous geochemistry generated from rock chip sampling. 				
	- All samples have been composited using length-weighted intervals for Public Reporting.				
Orientation of data in	- DD from the surface when targeting conductive plate targets is designed to cross at high angles.				
relation to geological structure	- True widths of the intervals are often uncertain as the drilling is aimed at finding anomalies not for mineral resource definition work.				
	- The possibility of bias in relation to orientation of geological structure is currently unknown.				

JORC Criteria	Explanation				
Sample security	- The chain-of-sample custody is managed by the IGO staff.				
	- Samples were stored at IGO's locked facility in Broome and sampled in the field by IGO staff and contractors, at the time of drilling.				
	- The DD core was wet cut using a diamond blade and sampled at IGO's Broome Facility by IGO staff and contractors.				
	 Samples were placed in pre-numbered calico bags and further secured in green plastic sample bags with cable ties. The samples are further secured in a bulk bag and delivered to the ALS-Perth by contractor freight Bishops Transport. 				
	- A sample reconciliation advice is sent by ALS-Perth to IGO's Geological Database Administrator on receipt of the samples.				
	 Any inconsistences between the despatch paperwork and samples received is resolved with IGO before sample preparation commences. 				
	- Sample preparation and analysis is completed at the one laboratory – ALS-Perth.				
	- The Competent Person considers that the risk of deliberate or accidental loss or contamination of samples is considered very low.				
Audits or reviews	- No specific external audits or reviews have been undertaken.				

Section 2: Exploration Results

JORC Criteria	Explanation The Kimberley significant intercepts are from one WA exploration licence. The table below is a listing of the expiration dates, management and JV arrangements relating to these tenements.					
Mineral tenement and land tenure status						
	Joint venture	Tenement	Expiry	Area (km2)		
	IGO (80%) / Buxton Resources (20%)	E 04/2408	02/04/2026	202.4		
Exploration done by other parties	There has been historical reginal exploration for gold and base metals by explorers since the 1920's. Previous work on the tenements consisted of AEM surveying, rock chip sampling, geological mapping, and ground EM survey.					
	There had been no exploration for Ni-Cu sulphide mineralisation within the Ruins Dolerite suite prior to the discovery of Merlin by Buxton in 2015.					
Geology	The regional geology setting is a low-grade metamorphic terrane in the Wunaamin-Miliwundi Orogeny of WA.					
	Gabbroic intrusions which have intruded a metasedimentary package within the belt are host to Ni-Cu-Co mineralisation.					
	The deposits are analogous to many mafic hosted nickel-copper deposits worldwide.					
	The sulphide mineralisation is interpreted to be related to the intrusive event with mineralisation occurring in several styles including massive, breccia, network texture, blebby and disseminated sulphides.					
	The main sulphide mineral is pyrrhotite, with nickel and cobalt associated with pentlandite and copper associated with chalcopyrite.					
	The region is considered by IGO to have the potential to host mafic or ultramafic intrusion related Ni-Cu-Co deposits based on the discovery of Merlin Deposit by Buxton and volcanic massive sulphide deposit based on historic drill intercepts along strike from IGO's tenure.					

JORC Criteria	Explanation				
Logging	 Qualitative logging of DD core included lithology, mineralogy, mineralisation, structural, weathering, colour, and other features of the samples. 				
	- The total lengths of all drill holes have been logged.				
	- Photographs of all DD trays are taken and retained on file with the original core trays stored on plastic pallets at IGO's facility in Broome.				
	- The Competent Persson considers that logging is adequate to support downstream exploration studies and follow-up drilling.				
Drill hole Information	- Location details of significant intercept holes are tabulated in the body of the ASX Public Report.				
Data aggregation methods	- Significant drill hole intercept results have been reported using a combined >1,000ppm cut-off for key elements with no internal dilution consideration.				
	- No capping or top-cutting of high grades were undertaken.				
	- The intercepts are calculated on a length weighted basis.				
	- Holes included on maps and diagrams without significant values are not considered for follow up assessment.				
	- Metal equivalent grades were not reported.				
Relationship between mineralisation widths and intercept lengths	 Only downhole intersection widths are provided due to the nature of the drilling – any relationships between width and intercept lengths are likely coincidental. 				
Diagrams	- A cross section of significant intercepts and intercept table is included in the body of the ASX Public Report.				
Balanced reporting	 Drill intercepts having lengths >4m (or other and with one or more Ni, Cu, Co, and Zn values greater than 1,000ppm grade) are listed in the main body of this Public Report. 				
	- The remainder of the results are considered low grade or barren.				
	- Drill hole locations of barren drill holes are included in the maps in the main body of this Public Report.				
	- All drill results provided in this table represent the intervals as sampled and assayed.				
Other substantive exploration data	- No other substantive exploration data is reportable in this announcement.				
Further work	 Further drilling is planned to test the conductive plates generated from the Surface Moving Loop EM surveys and to follow-up anomalous geology generated by rock chip sampling and DD. 				

Western Gawler JORC Code Table 1

Section 1: Sampling Techniques and Data

JORC Criteria	Explanation				
Sampling techniques-	 Exploration targets were tested and sampled from DD core, and holes were mostly drilled perpendicular to the strike (NE-SW) of the stratigraphy. 				
	- Drill holes were located with handheld GPS.				
	 DD holes were used to obtain high quality samples that were fully oriented and logged for lithological, structural, geotechnical attributes. Each sample of diamond drill core submitted to ALS laboratories at Malaga, Perth. 				
	- All sampling was conducted under QAQC protocols which are in accordance with industry best practice.				
	- DD core (NQ2, 50.3) is 1/4 core sampled on geological intervals (0.2 to 1.5m) to achieve sample weights under 3kgs.				
	- Samples were crushed, dried and pulverised (total prep) to produce a sub sample for analysis by 4 acid digest with an ICP/MS and fire assay/ICP (Au, Pt, Pd) finish.				
	- AC/RC Drilling				
	- Drilling is used for sampling RC or AC face samples, collected on 1m intervals.				
	- Each 1m sample interval is split to ~3kg using a rig mounted rotary splitter.				
	- When required, samples are composited using a sample spear at 3m intervals for assay.				
Drilling techniques	DD				
	- Exploration targets are tested using DDH drilling.				
	- Holes were drilled between 60 to 90°.				
	- A track mounted Sandvik DDH rig is used.				
	 Holes were collared from surface with either PQ-core or PQ rock-rolled, which was then reduced to HQ-core and subsequently NQ2-core at depths directed by the site geologist. 				
	- All HQ and NQ core was oriented using REFLEX ACT III-H or N2 Ezy-Mark orientation tools.				
	AC/RC Drilling				
	- Exploration targets are tested using AC and RC drilling. Holes were drilled between 60 to 90°.				
	- A truck-mounted AC rig is used with a 3-inch diameter face sampling hammer drilling or AC bit.				
Drill sample recovery	DD				
	- Diamond core recoveries have been logged and recorded in the database.				
	- Diamond core are logged and recorded in the database.				
	- Overall recoveries are >95% and there was no core loss issues or significant sample recovery problems.				
	- Core loss is noted where it occurs.				
	- Diamond core was reconstructed into continuous runs on an angle iron cradle for orientation marking.				
	- Depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the drillers.				
	- Drilling recoveries are digitally logged, recorded, and captured within the project database.				
	- Overall recoveries are >95% and there has been no significant loss of sample material due to ground or drilling issues.				
	- Each individual sample is visually checked and logged for recovery, moisture, and contamination.				
	- The style of expected mineralisation and the consistency of the mineralised intervals are expected to preclude any issue of sample bias due to material loss or gain.				

JORC Criteria	Explanation				
Logging	DD				
	 Geological logging is recorded and validated in 'Ocris' Logging Software (Toughbook platform) & stored in an Acquire database. 				
	- Drill core is logged for lithology, mineralogy, mineralisation, weathering, fabric, grainsize, colour, structure, and other relevant features.				
	- Geotechnical logging was not completed due to the nature of drill method.				
	- Core is photographed both in wet and dry form.				
	- All holes have been logged from the surface to the end of hole.				
	- Petrology is used to verify the field geological logging.				
	AC/RC				
	- Geological logging is recorded and validated Ocris Logging Software (Toughbook platform).				
Sub-sampling	DD				
techniques and sample preparation	- Diamond core is sampled as either quarter or half core; cut by ALS-Perth.				
	- Sample preparation follows industry best practice involving oven drying, coarse crushing and pulverising.				
	- The field crew prepares and inserts the QAQC certified reference materials into the relevant calico bags.				
	 OREAS and Geostats standards have been selected based on their grade range and mineralogical properties, with ~12 different CRMs used. 				
	- Standards and Blanks are inserted with ~25 samples.				
	AC/RC				
	- The drill samples were collected every metre on the drill rig using a rotary splitter.				
	- When required, composite samples are taken using a sampling spear.				
	 Field QC procedures involve the use of certified reference material as assay standards, along with blanks, duplicates and barren washes. The insertion rate of these averaged 1:20, with an increased rate in mineralised zones. 				
	 Field duplicates are conducted on ~1 in 25 drill intersections. 				
	 The sample sizes are considered to be appropriate to correctly represent the geological model based on the style of mineralisation, the thickness and consistency of the expected intersections, the sampling methodology and percent value assay ranges for the primary elements. 				
Quality of assay	- All samples are processed by ALS Minerals (Australian Laboratory Services P/L) in Perth, WA.				
ata and laboratory tests	 All drill samples are subjected to ICP-MS (ME-MS61 and ME-MS61r for selected EOH samples) analysis using nitric, perchloric, hydrofluoric and hydrochloride acid digest. 				
	- All samples are also assayed for PGE's using PGM-ICP23.				
	- Standards and blanks are routinely used to assess company QAQC (~1 standard for every 25 to 50 samples).				
	- Certified reference materials are included in all batches dispatched at ~1 per 25 samples, with a minimum of two per batch.				
	 Field duplicates are inserted into submissions at ~1 in 25, with placement determined by Nickel grade and homogeneity Lab checks, both pulp and crush, are taken alternately by the lab at a frequency of 1 in 25. 				
	- Accuracy and precision were assessed using industry standard procedures such as control charts and scatter plots.				
	- Evaluations of standards are completed on a monthly, quarterly, and annual basis using QAQCR software.				
	- Laboratory quality control processes include the use of internal lab CRMs and duplicates.				
	- CRMs used to monitor accuracy have expected values ranging from low to high, and the CRMs were inserted randomly into the routine sample stream to the laboratory.				
	- The Competent Person considers that the results of the CRMs confirm that the laboratory sample assay values have good accuracy and results of blank assays indicate that any potential sample cross contamination has been minimised.				

JORC Criteria	Explanation				
Verification of	- All Significant intersections were checked by the senior IGO geological personnel.				
sampling and assaying	- No twinned holes were completed.				
	- Primary data was collected using Ocris logging software spreadsheets, on Toughbook computers.				
	- All data is validated by the supervising geologist and sent to the Database Manager for further validation and integration into an Acquire database.				
	- Assay data are imported directly from digital assay files from contract analytical company ALS-Perth and are merged in the Company drill hole database by the Database Administrator.				
	- Data is backed up regularly in off-site secure servers.				
	- No geophysical or portable XRF results are used in exploration results reported.				
	- There have been no adjustments to the assay data.				
Location of	- Drill holes were located using handheld GPS.				
data points	- Elevation data is captured with handheld GPS, and cross referenced with local topographical maps.				
	- Downhole Survey Data is collected using a digital Reflex survey tool.				
	- MGA94 Zone 53 grid coordinate system is used.				
Data spacing and	DD				
distribution	- Drill holes are located and specifically planned according to target location and stratigraphic location.				
	- Drillhole spacing at Mystic varies according to the nature of the target type.				
	 The DD drilling tested conductive targets generated from surface geophysics (moving loop EM) and/or anomalous geochemistry generated from previous drilling. 				
	AC/RC				
	- Air-core drilling is spaced in accordance with the target size and area requiring testing.				
	- All samples have been composited using length-weighted intervals for Public Reporting.				
Orientation of data in	- True widths of the intervals are often uncertain as the drilling is aimed at finding anomalies not for MRE work.				
relation to geological structure	- The possibility of bias in relation to orientation of geological structure is currently unknown.				
	- The majority of the drill holes are drilled at 60° to achieve the best possible intersection angle in steeply dipping terrane				
	- Heritage and/or environmental constraints may prevent some ideal drilling solutions.				
	- No orientation-based sampling bias has been observed in the data, intercepts are reported as down-hole lengths.				
	AC/RC Drilling				
	 The majority of the drill holes are drilled vertically which may reduce range of lithologies or cross section of stratigraphy sampled in areas that are steeply dipping. 				
Sample security	- The chain-of-sample custody is managed by the site-based staff.				
	- All samples are captured and prepared for transport onsite under the supervision of site staff.				
	- A sample reconciliation advice is sent by ALS-Perth to the DBA on receipt of the samples.				
	 Any inconsistences between the despatch paperwork and samples received is resolved before sample preparation commences. 				
	- Sample preparation and analysis is completed at the one laboratory – ALS-Perth.				
	- The Competent Person considers that the risk of deliberate or accidental loss or contamination of samples is considered very low.				
Audits or reviews	- No specific external audits or reviews have been undertaken.				

Section 2: Exploration Results

JORC Criteria	Explanation					
Mineral tenement and land tenure status	 The West Gawler Project significant intercepts are from two WA exploration licence. The table below is a listing of th expiration dates, management and JV arrangements relating to these tenements. 					
		Joint venture	Tenement	Expiry	Area (units)	
		IGO (75%) / Iluka (Eucla Basin) (25%)	EL5878	19/10/2027	1922km2	
		IGO (100%)	EL6249	03/04/2035	904km2	
Exploration done by other parties	_	 The project area was originally explored by BHP Billiton as part of its extensive gold, titanium, iron, and nickel target generation work, and more recently by Gunson Resources Limited (nickel), Equinox (base metals and gold) and lluka Resources Ltd (mineral sands). It is deemed that the previous exploration was of variable effectiveness. 				
	-	The SA Government has performed widely spaced stratigraphic diamond drilling along a number of traverses in the tenure.				
	-	The success rate of historical RC drilling is low, while the AC and DD was effective.				
	-	Gravity, MT and AEM< have been used in	selective locations wi	thin the project area.		
	-	The historical geophysics is deemed to h	ave been effective.			
Geology	-	The Western Gawler Project lies within th	e Fowler Domain of we	estern SA.		
	-	The Fowler Domain is a Mesoproterozoic lithologies and younger felsic, mafic, and	0	ed of medium to high metan	norphic grade basement	
	-	Similarly aged terranes globally contain s	ignificant accumulatior	ns of nickel and copper sulp	hides.	
	-	Whilst not primary target types, the area skarn related mineralisation.	may also be prospectiv	ve for orogenic gold, iron ore	e copper gold (IOCG) and	
Logging	-	Qualitative logging of DD core included liferatures of the samples.	thology, mineralogy, m	ineralisation, structural, wea	thering, colour, and other	
	-	The total lengths of all drill holes have be	en logged.			
	-	Photographs of all DD trays are taken and	d retained on file with t	he original core trays stored	at Forrestania Minesite in W	
	-	The Competent Persson considers that log	ging is adequate to supp	port downstream exploration	studies and follow-up drilling.	

JORC Criteria	Explanation
Drill hole Information	- All collar related information pertaining to the location of reported assay results in this report are tabled below.
Data aggregation methods	- Standard weighted averaging of drill hole intercepts were employed. No maximum or minimum grade truncations were used in the estimation.
	- The reported assays have been length weighted. A lower arbitrary 0.2% Ni cut-off is applied, with no top cut applied.
	- High grade intercepts internal to broader zones of mineralisation are reported as included intervals.
	- Metal equivalents have not been used.
	- The intercepts are calculated on a length weighted basis.
	- Holes included on maps and diagrams without significant values are not considered for follow up assessment.
	- Metal equivalent grades were not reported.
Relationship between mineralisation widths and intercept lengths	- Only downhole intersection widths are provided due to the nature of the drilling – any relationships between width and intercept lengths are likely coincidental.
Diagrams	- A cross section of significant intercepts and intercept table is included in the body of the ASX Public Report
Balanced reporting	- All relevant assays have been reported.
	- Drill hole locations of barren drill holes are included in the maps in the main body of this Public Report.
	- All drill results provided in this table represent the intervals as sampled and assayed.
Other substantive exploration data	- No other substantive exploration data is reportable in this announcement.
Further work	- Exploration within the Western Gawler Project is ongoing.
	- At this stage of the exploration program, the nature of the geological model is evolving. Details of further work and will be forthcoming as the project progresses.

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Abbreviations

2D	Two dimensional
2PGE	Platinum + palladium
3D	Three dimensional
AAAL	Anglo American Australia Limited
AC	Air core
AEM	Aeromagnetic (survey)
AHD	Australian Height Datum
ALS	ALS Laboratory Perth WA
Antipa	Antipa Minerals Limited
ASX	Australian Securities Exchange
BIF	Banded iron formation
Buxton	Buxton Resources
Cosmos	Cosmos Project
CRM	Certified Reference Material
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CY19	Calendar year 2019 or 31 December 2019
CY21	Calendar year 2021 or 31 December 2021
CY22	Calendar year 2022 or 31 December 2022
CY23	Calendar year 2023 or 31 December 2023
CY24	Calendar year 2024 or 31 December 2024
Cyprium	Cyprium Metals Limited
DBA	Database administrator (geological)
DD	Diamond core drilling or drill hole
DHEM	Down hole electromagnetic (survey)
DTM	Digital terrain model
EBS	Eleonore Bay Supergroup
Encounter	Encounter Resources Limited
EM	electromagnetic (survey)
EUB	Eastern Ultramafic Belt
Forrestania	Forrestania Operation

FY22	Financial year 2022 or 30 June 2022
FY23	Financial year 2023 or 30 June 2023
GDA94	Geographic Datum Australian (1994)
GPS	Global positioning system
GSN	Great Southern Nickel Ltd
HQ	63.5mm diameter diamond drill core
ICP-AES	Inductively coupled plasma (flame ignition) and atomic absorption spectroscopy analysis
ICP-MS	Inductively coupled plasma and mass spectroscopy analysis
ICP-OES	Inductively coupled plasma and optical emission spectroscopy analysis
IGL	Intertek Genalysis Laboratory
IGO	IGO Limited
Impact	Impact Minerals Limited
IOGC	Iron ore copper gold deposit
JORC Code	Australasian Code for the Reporting of Exploration Results Mineral Resource and Ore Reserves
JV(s)	Joint Venture(s)
LOI	Loss on ignition analysis
MAIG/ RPGeo	Member of the Australian Institute of Geoscientists and Registered Professional Geoscientist
MAusIMM	Member of the Australasian Institute of Mining and Metallurgy
MGA	Map Grid Australia
MLEM	Moving loop electromagnetic survey
MRE	Mineral Resource Estimate
MT	Magneto-telluric survey
MUM	Mafic to ultramafic rock
Ni-Cu-Co	Nickel copper and cobalt (deposit or mineralisation)

Nova	Nova Operation
NQ	47.6mm diameter diamond core
NQ2	50mm diameter diamond drill core
NSW	New South Wales
NT	Northern Territory
NTGS	Northern Territory Geological Survey
Nova- Bollinger	Nova-Bollinger Deposit
PGE	Platinum group element(s)
PQ	85mm diameter diamond drill core
Prodigy	Prodigy Gold NL
PSD	Particle size distribution
QAQC	Quality control and quality assurance procedures and/or samples
RC	Reverse circulation percussion drilling
REDOX	Reduction-oxidation chemical boundary
REE	Rare earth elements
SA	South Australia
SKAV	Silver Knight Agreement Volume
Silver Knight	Silver Knight Deposit
SKIC	Silver Knight Igneous Complex
SKPA	Silver Knight Project Area
Tianqi	Tianqi Lithium Corporation
ТМІ	Total magnetic intensity
TW	True width
TLEA	Tianqi Lithium Energy Australia
Venus	Venus Metals Corporation
VD	First vertical derivative
WA	Western Australia
WSA	Western Areas Limited

Units

°C	Degrees Celsius
μm	Microns
A\$	Australian dollars
g	Gram(s)
Ga	Billions of years
ha	Hectare(s)
kg	Kilograms
km	Kilometres
km²	Square kilometres
Line- kilometres	Kilometres of survey lines
М	Millions
m	Metre(s)
Ма	Millions of years
mAHD	Metres AHD
mE	Metres easting
mm	Millimetre(s)
mN	Metres northing
Mt	Millions of tonnes
mZ	Metres elevation
ppm	Parts per million
S	Siemens conductance

Symbols

%	Weight percent or percent proportion
0	Degrees
±	Above and below or plus and minus
0	At grade(s) or grading
~	Approximately
Ag	Silver
Au	Gold
Со	Cobalt
Cu	Copper
Li	Lithium
Li ₂ O	lithia
LiOH	lithium hyrdoxide
MgO	Magnesia
Ni	Nickel
Pb	Lead
Pd	Palladium
Pt	Platinum
Zn	Zinc





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