20 February 2019

ANNUAL MINERAL RESOURCE AND ORE RESERVE STATEMENT

Independence Group NL ('IGO' or 'the Company') (ASX: IGO) is pleased to report Mineral Resource and Ore Reserve estimates as at 31 December 2018 as well as Exploration Results for the calendar year ending 2018. IGO last reported at the end of 2018 financial year and has now transitioned to a calendar year cycle for reporting of Mineral Resources and Ore Reserves to better align with internal planning work streams.

Full details of the Mineral Resource and Ore Reserve estimates, including JORC Code Table 1, can be found in the attached Report – Annual Update of Exploration Results, Mineral Resources and Ore Reserves as at 31 December 2018.

Highlights

- At 31 December 2018, IGO's total attributable Mineral Resources contained estimated metal contents of 302kt Ni, 107kt Cu, 9kt Co, and 2.31Moz Au. These estimates are inclusive of Ore Reserves.
- IGO's total attributable Ore Reserves as at 31 December 2018 contained estimated metal contents of 219kt Ni, 87kt Cu, 7kt Co and 1.12Moz Au.
- At the Nova Operation, life-of-mine grade control drilling to strategically de-risk the operation has been completed resulting in substantially all of the estimated nickel metal in the Ore Reserve now being in the highest confidence, JORC code, Proved Ore Reserve category.
- Ore Reserves at the Nova Operation have increased marginally to 219kt of nickel metal contained, compared to 216kt of nickel metal reported six months earlier and despite six months of mining depletion. The mine life for the Nova Operation remains at approximately eight years.
- At the Tropicana Gold Mine, additional drilling and feasibility study work in a first underground Ore Reserve at Boston Shaker of 320koz (100% basis). Approval of the study is expected in the first half of 2019 with commencement of the underground portal shortly thereafter. The total Tropicana Gold Mine Ore Reserve is 3.74Moz (100% basis).
- The Long Operation remains on care and maintenance and the Company is continuing to review strategic options for this asset.
- IGO has completed about 70% of the first phase of reconnaissance data collection on the extensive Fraser Range tenement package, with numerous geochemical and geophysical targets identified. These targets are being drill tested during 2019.
- IGO has further strengthened its exploration portfolio with the addition of a number of other belt-scale opportunities in highly prospective emerging mineral terranes.

Peter Bradford, IGO's Managing Director and CEO said: *"Over the past six months we have replaced mining depletion at our Nova Operation and delivered a marginal increase in contained metal in Ore Reserves despite six months of ore production resulting in mine life remaining at eight years.*

"Importantly, the work completed at the Nova Operation over the past few years to complete grade control drilling of the entire ore body, as well as all underground capital development, has significantly de-risked the project and delivered significant operational flexibility. The net result is a high degree of confidence in our scheduling and forecasting of future production.

"The Ore Reserve at Tropicana Gold Mine contains 3.74Moz for a mine life of eight years at planned expanded throughput rates. This incorporates a maiden underground Ore Reserve at Boston Shaker and we expect the Boston Shaker underground feasibility study to be completed and work to commence during the first half of this calendar year.

"Looking to the future, IGO has one of the most exciting exploration portfolios amongst our peers, which has been strategically and purposefully established over the last few years. These are truly belt-scale initiatives in highly prospective emerging terranes, each with the potential to deliver multiple tier one discoveries. Our aspiration, over the coming years, is to deliver a pipeline of organic growth opportunities by discovering the mines of the future."

Table 1: IGO Mineral Resource Estimate as at 31 December 2018

Year	Operation	Mass (Mt)	Grade Estimate				In situ Metal Estimates			
			Ni (%)	Cu (%)	Co (%)	Au (g/t)	Ni (kt)	Cu (kt)	Co (kt)	Au (koz)
2018	Nova	13.2	2.0	0.8	0.07	-	270	107	9	-
	Long	0.8	4.2	-	-	-	32	-	-	-
	Tropicana (30%)	40.9	-	-	-	1.76	-	-	-	2,310
	Total	**54.9**	Grades for totals are not additive				**302**	**107**	**9**	**2,310**

See Annual Update of Exploration Results, Mineral Resources and Ore Reserve Report as an appendix to this release.

Table 2: IGO Ore Reserve Estimate as at 31 December 2018

Year	Operation	Mass (Mt)	Grade Estimate				In situ Metal Estimates			
			Ni (%)	Cu (%)	Co (%)	Au (g/t)	Ni (kt)	Cu (kt)	Co (kt)	Au (koz)
2018	Nova	11.5	1.90	0.76	0.06	-	219	87	7	-
	Long	-	-	-	-	-	-	-	-	-
	Tropicana (30%)	19.7	-	-	-	1.77	-	-	-	1,122
	Total	**31.1**	Grades for totals are not additive				**219**	**87**	**7**	**1,122**

See Annual Update of Exploration Results, Mineral Resources and Ore Reserve Report as an appendix to this release.

Forward-Looking Statements

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning IGO's planned exploration program and other statements that are not historical facts. When used in this document, the words such as "could", "plan", "estimate", "expect", "intend", "may", "potential", "should", and similar expressions are forward-looking statements. Although the Company 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.

Competent Person Statements

Any references to IGO Mineral Resource and Ore Reserve estimates should be read in conjunction with IGO's Annual Update of Exploration Results, Mineral Resources and Ore Reserves dated 20 February 2019 (Annual Statement) and lodged with the ASX for which Competent Person's consents were obtained, which is also available on the IGO website. The Competent Person's consents remain in place for subsequent releases by the Company of the same information in the same form and context, until the consent is withdrawn or replaced by a subsequent report and accompanying consent.

The Company confirms that (i) it is not aware of any new information or data that materially affects the information included in the Annual Statement, (ii) all material assumptions and technical parameters underpinning the Mineral Resource and Ore Reserve estimates therein continue to apply and have not materially changed, and (iii) the form and context in which the Competent Person's findings are presented in the Annual Statement have not been materially modified.

-Ends-

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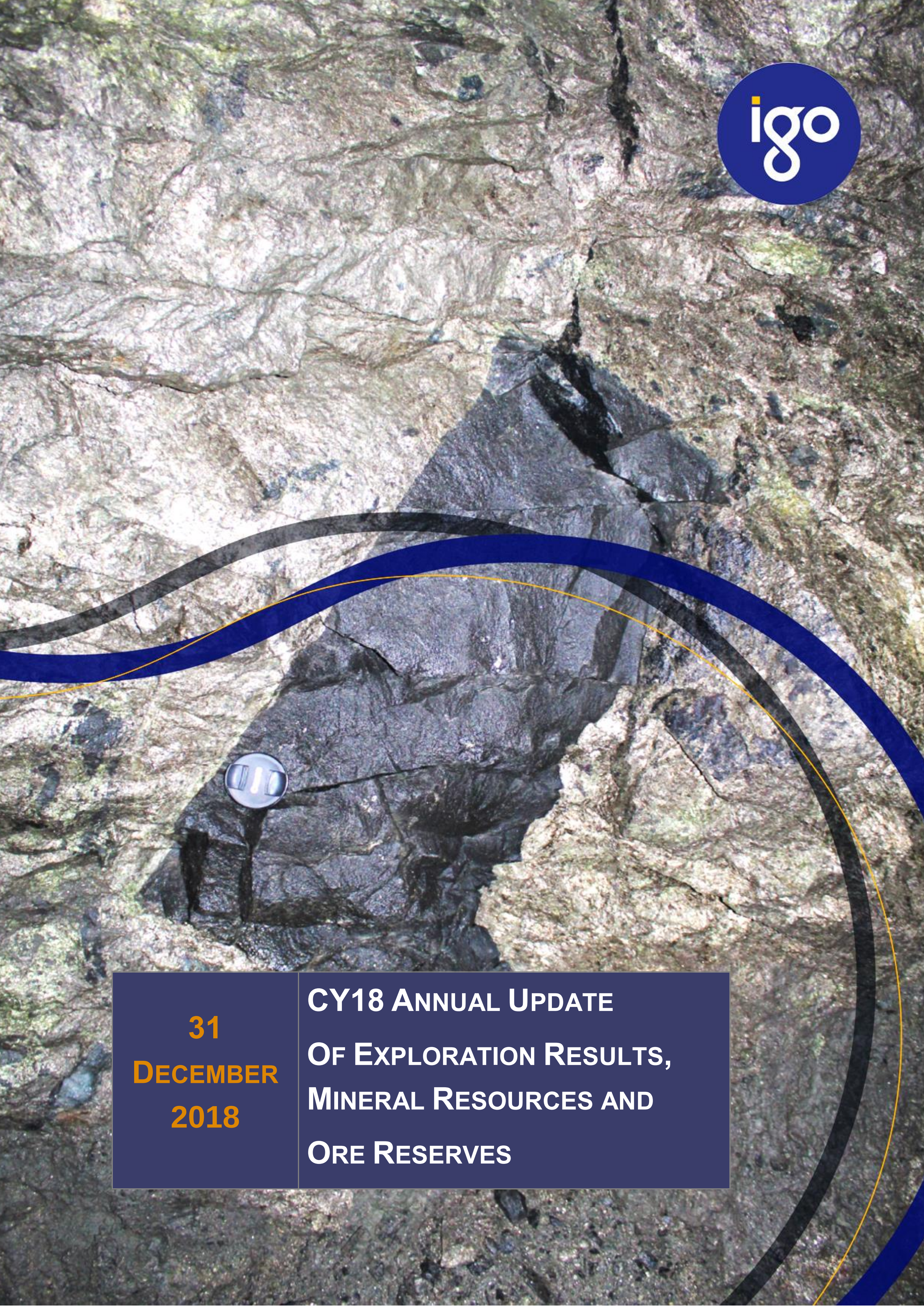


31 DECEMBER 2018

CY18 ANNUAL UPDATE OF EXPLORATION RESULTS, MINERAL RESOURCES AND ORE RESERVES

CONTENTS

FORWARD LOOKING STATEMENTS

This report contains forward-looking statements regarding future events, conditions and circumstances including but not limited to, statements regarding plans, strategies and objectives of management, anticipated construction timelines and expected costs and levels of production. Often, but not always, forward-looking statements can be identified using forward-looking words such as ‘may’, ‘will’, ‘expect’, ‘intend’, ‘plan’, ‘estimate’, ‘anticipate’, ‘continue’ and ‘guidance’, or similar words.

These forward-looking statements are not a guarantee of future performance and involve unknown risks and uncertainties, many of which are beyond IGO’s control, which may cause actual results and developments to differ materially from those expressed or implied. These risks include but are not limited to, economic conditions, stock market fluctuations, commodity demand and price movements, access to infrastructure, timing of approvals, regulatory risks, operational risks, reliance on key personnel, reserve and resource estimates, native title and title risks, foreign currency fluctuations, exploration risks, mining development, construction and commissioning risk.

Forward-looking statements in this report apply only at the date of issue. Subject to any continuing obligations under applicable law or regulations, IGO does not undertake to publicly update or revise any of the forward-looking statements in this report or to advise of any change in events, conditions or circumstances on which any such statement is based. Readers are cautioned not to place undue reliance on any forward-looking statements contained in this report.

Introduction

Independence Group NL (IGO) is a diversified mining and exploration company with a strategic focus on high quality assets aligned to energy storage and renewable energy. IGO is listed on the Australian Stock Exchange (ASX) and produces saleable nickel-copper-cobalt (Ni-Cu-Co) concentrates and gold (Au) bars from its mining interests in Western Australia. IGO also manages – through direct ownership and through Joint Venture (JV) agreements – extensive exploration tenure throughout Western Australia (WA) the Northern Territory (NT), South Australia (SA), Queensland (QLD) and Greenland. The exploration ground positions are highly prospective for base metals and gold. The figure below shows the key Fraser Range (WA) ground positions – other project areas are detailed in the Greenfields Exploration section of this report.

The primary purpose of this report is to provide the share market and IGO's stakeholders with the technical information that is material to the estimation of IGO's Mineral Resource estimates (MREs) and Ore Reserve estimates (OREs) as at 31 December 2018. Secondly, noteworthy exploration results from IGO's activities in the second half of CY18 are reported along with plans for exploration work in the next twelve months.

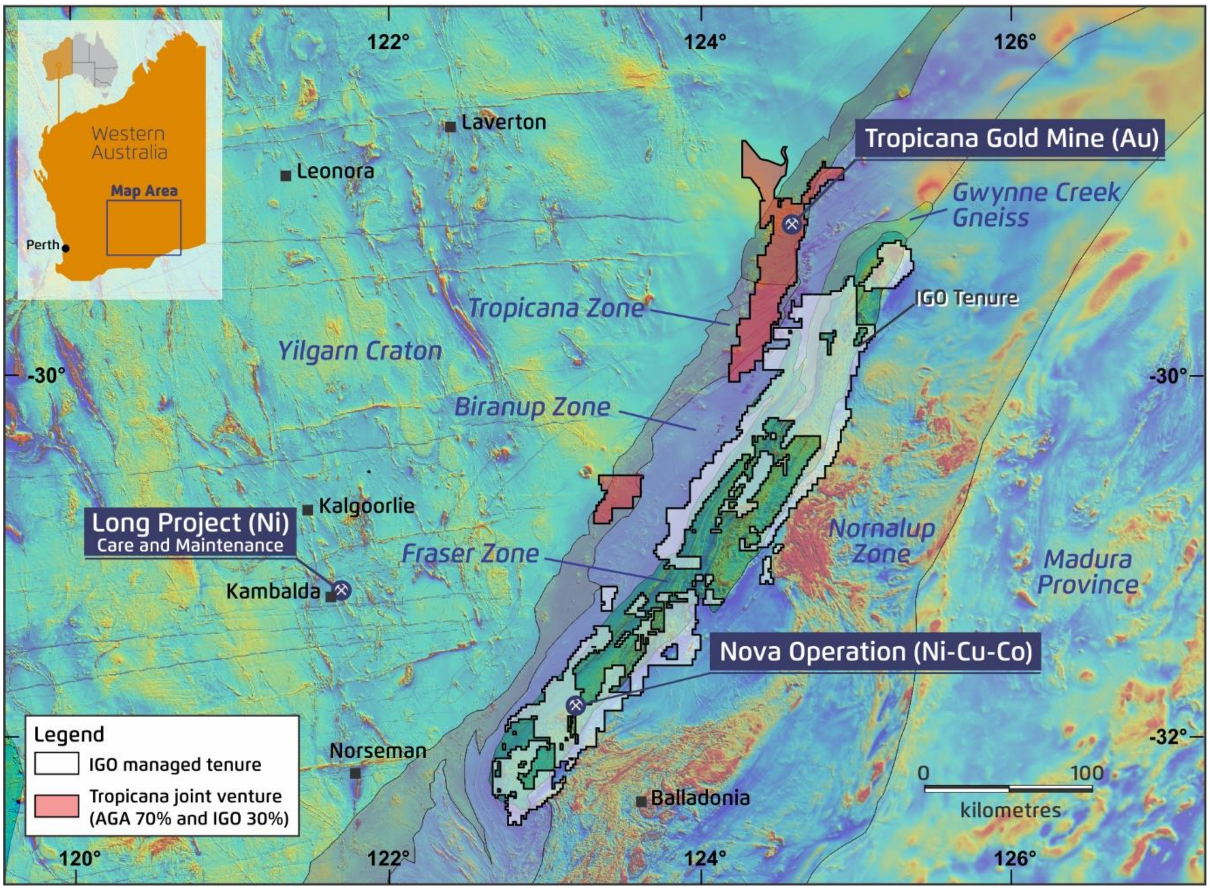
IGO previously reported its annual MRE-ORE update to the ASX as at 31 June 2018 but has elected to change the annual reporting to a calendar year basis to align reporting with IGO's Tropicana Gold Mine (TGM) partner (AngloGold Ashanti Australia – AGA) and IGO's internal budgeting and guidance process, that typically follow the estimation work as part of financial year planning for the next budget cycle.

IGO reports Exploration Results, MREs and OREs in accordance with the ASX listing rules and the requirements, and guidelines of the 2012 edition of the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves – the JORC Code.

At the end of CY18, MREs and OREs are reported from IGO's two 100%-owned WA base metal interests (Nova Operations and Long Project), and IGO's 30% interest in TGM.

The details of changes in estimates are included in the following sections of this report, along with the exploration results update relevant to each operation and for IGO's Greenfields exploration efforts.

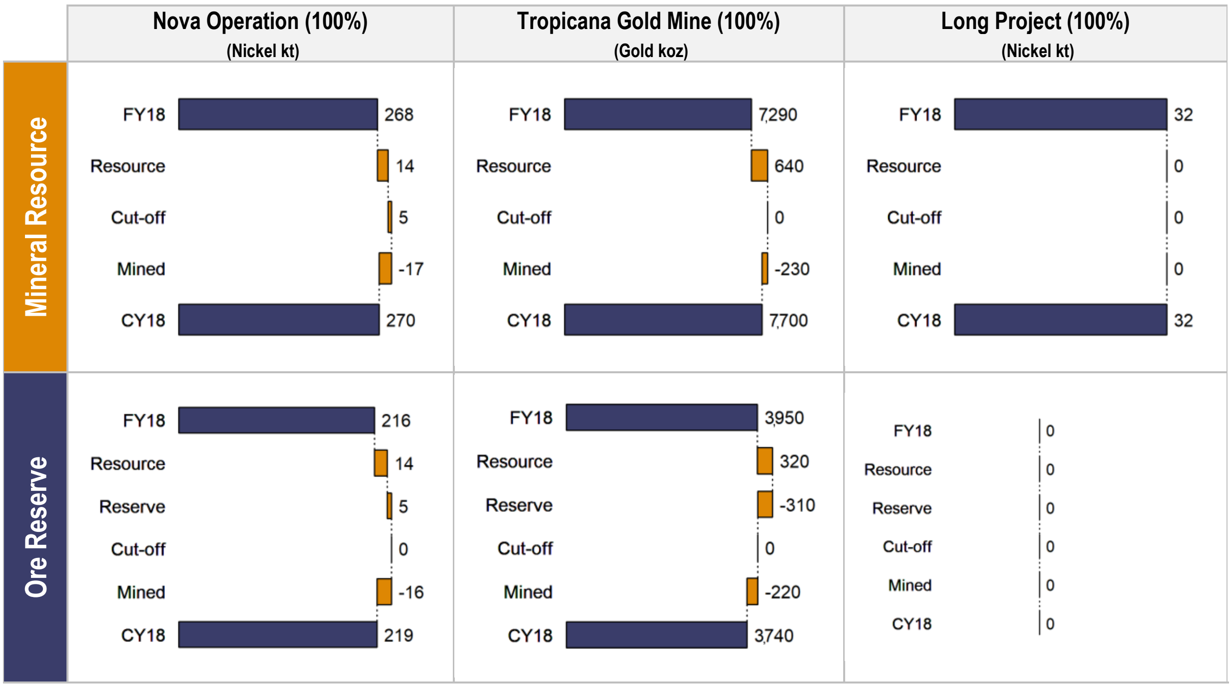
IGO's CY18 operations and Fraser Range exploration ground position over major structural regions and total magnetic intensity



MINERAL RESOURCES	Operation or Project	Mass (Mt)	Grade estimates Ni (%)	Cu (%)	Co (%)	Au (g/t)	*In situ* metal estimates Ni (kt)	Cu (kt)	Co (kt)	Au (koz)
FY18 30-6-2018	Nova Operation (100%)	13.1	2.0	0.8	0.07	…	268	109	9	…
	Long Project (100%)	0.8	4.2	…	…	…	32	…	…	…
	Tropicana Gold Mine (30%)	41.9	…	…	…	1.62	…	…	…	2,187
	End of FY18 Total	**55.8**	… Grades are not additive …				**300**	**109**	**9**	**2,187**
CY18 31-12-2018	Nova Operation (100%)	13.2	2.0	0.8	0.07	…	270	107	9	…
	Long Project (100%)	0.8	4.2	…	…	…	32	…	…	…
	Tropicana Gold Mine (30%)	40.9	…	…	…	1.76	…	…	…	2,310
	End of CY18 Total	**54.9**	… Grades are not additive …				**302**	**107**	**9**	**2,310**
CY18/FY18 (relative)	Nova Operation	101%	100%	100%	100%	…	101%	98%	100%	…
	Long Project	100%	100%	…	…	…	100%	…	…	…
	Tropicana Gold Mine (30%)	98%	…	…	…	109%	…	…	…	106%
	CY18/FY18	98%	… Grades are not additive …				101%	98%	100%	106%

ORE RESERVES	Operation or Project	Mass (Mt)	Grade estimates Ni (%)	Cu (%)	Co (%)	Au (g/t)	*In situ* metal estimates Ni (kt)	Cu (kt)	Co (kt)	Au (koz)
FY18 30-6-2018	Nova Operation (100%)	11.7	1.86	0.76	0.06	…	216	89	7	…
	Long Project (100%)	…	…	…	…	…	…	…	…	…
	Tropicana Gold Mine (30%)	19.5	…	…	…	1.89	…	…	…	1,185
	End of FY18 Total	**31.2**	… Grades are not additive …				**216**	**89**	**7**	**1,185**
CY18 31-12-2018	Nova Operation (100%)	11.5	1.90	0.76	0.06	…	219	87	7	…
	Long Project (100%)	…	…	…	…	…	…	…	…	…
	Tropicana Gold Mine (30%)	19.7	…	…	…	1.77	…	…	…	1,122
	End of CY18 Total	**31.1**	… Grades are not additive …				**219**	**87**	**7**	**1,122**
CY18/FY18 (relative)	Nova Operation	101%	102%	100%	100%	…	101%	98%	100%	…
	Long Project	…	…	…	…	…	…	…	…	…
	Tropicana Gold Mine (30%)	101%	…	…	…	94%	…	…	…	95%
	CY18/FY18	100%	… Grades are not additive …				100%	98%	100%	95%

Changes in principal estimated payable metal at end of CY18 compared to end of FY18 estimates

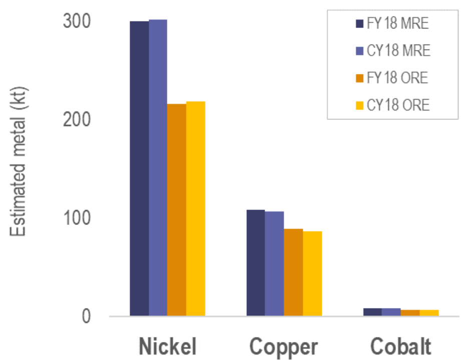


Note: Mined estimates are based on different cut-off critera for MRE and ORE depletions

Nova Operation

In CY18, IGO completed close-spaced 'grade-control' drill out of the Nova-Bollinger deposit, culminating in a final MRE for the Nova-Bollinger deposit and subsequent update of the ORE. Despite six months of mining and production there have been no material changes in the MRE or ORE as prior to depletion. The end of CY18 MRE has a marginally higher estimated tonnage than the end of FY18 estimate.

Nova Operation FY18 and CY18 total metal estimates



There was also a small increase in contained nickel metal due to changes in net-smelter-return (NSR) cut-off based on assumptions of higher metal prices in the updated model. The net changes in metal are summarised in the cascade chart on the previous page. The slight reduction in contained copper is a function of changes in the estimation process.

The total ORE of 11.5Mt at Nova Operation gives an effective 7.7-year mine life assuming an average ore processing rate of 1.5Mt/a.

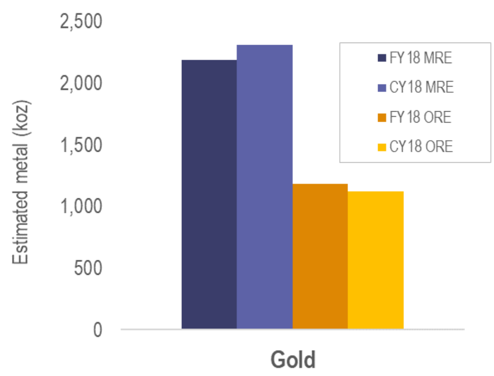
Long Project

Long Project's MRE remains unchanged as the mine is in care and maintenance. The total estimated in situ metal in the MRE at reporting cut-off is 32kt of nickel metal.

Tropicana Gold Mine

On 20 December 2018, IGO publicly reported a first underground MRE for the TGM's Boston Shaker zone and in this report, a first ORE is reported for the Boston Shaker Underground. Over the six months to the end of CY18, the TGM total MRE increased (inclusive of the ORE) by 410koz to 7,700koz, and the ORE decreased by 340koz to 3,740koz on a 100% reporting basis.

TGM's (30%) FY18 and CY18 total metal estimates



The increase in the MRE tonnage reflects the increases in underground MRE, while the decrease in the ORE is a predominantly a function of mining depletion of the open pit ORE.

Foreign exchange and metal prices

Metal prices and foreign exchange (FX) rates between the Australian dollar (A$) and United States dollar (US$) are critical for the economic evaluation of OREs and MREs and for establishing reporting cut-offs.

Nova Operation

Commodity price assumptions for the Nova Operation CY18 MRE and ORE are based on October 2018 forecasts, which are marginally more optimistic assumptions than that used for FY18 estimates. The assumptions are based on Consensus Economics (CE) data for base metal prices and Bloomberg data for FX rates as listed below for MREs and ORE.

Nova Operation's CY18 metal price assumptions

Payable metal	Mineral Resources		Ore Reserves	
	(US$/t)	(A$/t)	(US$/t)	(A$/t)
Nickel	17,130	23,150	15,690	20,120
Copper	6,860	9,270	6,680	8,560
Cobalt	60,560	81,840	52,150	66,860

- MRE FX of 0.74 A$/US$ rates are the 25th percentile Bloomberg forecasts
- MRE metal prices are the CE 75th percentile forecasts for cobalt and copper, and the 90th percentile forecast for nickel
- ORE FX of 0.78 is based the 50th percentile forecast
- ORE prices are CE 75th percentile forecasts for cobalt and copper, and the 75th percentile forecast for nickel

Long Project

Metal price assumptions are not applied for the Long Project MRE. This MRE cut-off is based on a ≥1% Ni grade block model estimate threshold, which was the cut-off grade applied for ore delivered to the concentrator before the mine was placed into care and maintenance in May 2018.

Tropicana Gold Mine

FX and metal price assumptions for the TGM are determined by IGO's JV partner AGA.

TGM's CY18 metal price assumptions

Assumption	Units	Mineral Resources	Ore Reserves
Gold price	US$/oz	1,400	1,100
	A$/oz	1,778	1,509
FX	A$/US$	0.79	0.73

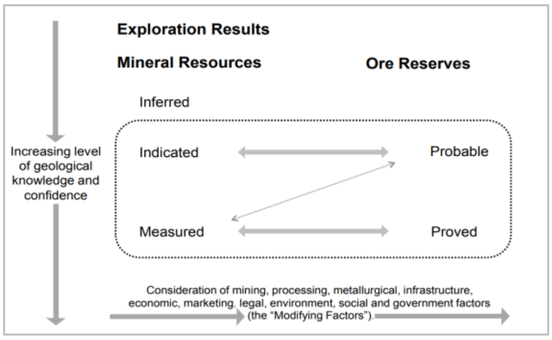
Note: for the Havana and Boston Shaker open pits at TGM, AGA has assumed a gold price of US$1,055/oz (A$1,370/oz), from the Long Island Study.

Corporate governance

IGO publicly reports results and estimates in accordance with ASX listing rules and JORC Code requirements.

MREs are reported in the JORC Code increasing confidence classes of Inferred, Indicated and Measured Resources, while OREs are reported in the increasing confidence classes of Proved or Probable Reserves, as depicted below.

JORC Code classification framework



Notes: Under the JORC Code, Exploration Results are the precursors to Mineral Resources, which in turn are the basis of Ore Reserve estimates. Only Indicated and Measured Resources can be converted to Ore Reserves through application of Ore Reserve 'Modifying Factors'. Measured Resources are usually converted to Proved Ore Reserves unless the confidence in a modifying factor, for example perhaps a high uncertainty in metallurgical recovery, results in the conversion of a higher confidence Measured Resource to lower confidence Probable Ore Reserve.

Public reporting governance

IGO's public reporting governance includes a chain of assurance measures. Firstly, IGO ensures that the Competent Persons responsible for public reporting:

- 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 considered 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.
- Have prepared supporting documentation for results and estimates to a level consistent with standard industry practices – including the JORC Code Table 1 Checklists for any results and/or estimates reported.

IGO also ensures that any publicly reported results and/or estimates are prepared using accepted industry methods and using IGO's corporate guidance for metal prices and FX rates. On operating mines, IGO ensures that the estimation precision is reviewed regularly through a reconciliation comparing the MRE and ORE forecasts to actual mine and process production results.

Estimates and results are also peer reviewed internally by IGO's senior technical staff before being presented to IGO's Board for approval and subsequent ASX reporting. Market sensitive or production critical estimates may also be audited by suitably qualified external consultants to ensure the precision and correctness of the reported information.

Nova Operation – diamond core drilling core yard 2018

Competent Persons

The table below is a listing of the names of the Competent Persons who are taking responsibility for reporting IGO's CY18 results and estimates.

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 CY18 results and estimates. Each Competent Person has provided IGO with a sign-off for the relevant information provided by each contributor in this report.

IGO Competent Persons responsible for the reporting of CY18 JORC Code estimates and results

Activity	Competent Person	Professional Association		IGO Relationship	Responsibility Activity
		Membership	Number		
Exploration Results	Ian Sandl	MAIG/RPGeo	2388	*General Manager Exploration* IGO Perth	IGO greenfield results
	Damon Elder	MAusIMM	208240	*Manager Mine Geology -TGM* AngloGold Ashanti Australia	TGM results
Mineral Resources	Mark Murphy	MAIG/RPGeo	2157	*Resource Geology Manager* IGO Perth	Long Project estimate
	Paul Hetherington	MAusIMM	209805	*Superintendent Geology* IGO Nova Operation	Nova Operation estimate
	Damon Elder	MAusIMM	208240	*Manager Mine Geology - TGM* AngloGold Ashanti Australia	TGM estimate
Ore Reserves	Greg Laing	MAusIMM	206228	*Superintendent Planning* IGO Nova Operation	Nova Operation estimate
	Steven Hulme	MAusIMM/CP	220946	*Integrated Planning Superintendent - TGM* AngloGold Ashanti Australia	TGM open pit estimate
	Jeff Dang	MAusIMM	307499	*Specialist Mining Engineer* AngloGold Ashanti Australia	TGM underground estimate
CY18 Report	Mark Murphy	MAIG/RPGeo	2157	*Resource Geology Manager* IGO Perth	Annual report compilation

- MAusIMM = Member of Australasian Institute of Mining and Metallurgy, MAusIMM/CP = MAusIMM and Chartered Professional MAIG/RPGeo = Member of Australian Institute of Geoscientists and Registered Professional Geoscientist
- Information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on the information compiled by the relevant Competent Persons listed above
- All IGO personnel are full-time employees of IGO; all AGA personnel are full time employees of AGA
- 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, 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
- 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 that could be perceived by investors as a material conflict of interest in preparing the reported information

Nova Operations run-of-mine pad and processing plant

Exploration summary

In 2018, IGO progressed its strategy to transition the business into a producer of metals and products that are in demand for the growing energy storage and clean energy industries, including the rapidly growing electric vehicle and transport market. The priority metals for this strategy are nickel, copper and cobalt, with other metals and minerals being investigated by IGO's exploration generative team. IGO will also continue to consider and maximise value from other metals, such as gold, especially if deposits are discovered or acquired on, or near, existing IGO mining operations, exploration concessions, or associated with ongoing exploration project generation programs.

Strategy and resources

IGO's exploration objective is to make mineral asset discoveries that are material to IGO within IGO's exploration portfolio – for example, another Nova-Bollinger equivalent deposit, or a second Tropicana Gold Mine. To achieve this, our plan is to develop and maintain a strong pipeline of project opportunities at different stages with the aim of having at least one feasibility project in the 'growth pipeline'.

IGO has reinvigorated its exploration team and expanded its capability with talented explorers that are well resourced and have a clear mandate and imperative to discover new deposits. At our major belt-scale exploration projects, IGO's emphasis has been shifting during the past year from a necessary period of regional data collection, to a focus on exploration and geoscience data interrogation, interpretation, generation of drill targets, and drill testing. Regional data gathering will continue in 2019 but at a more balanced level.

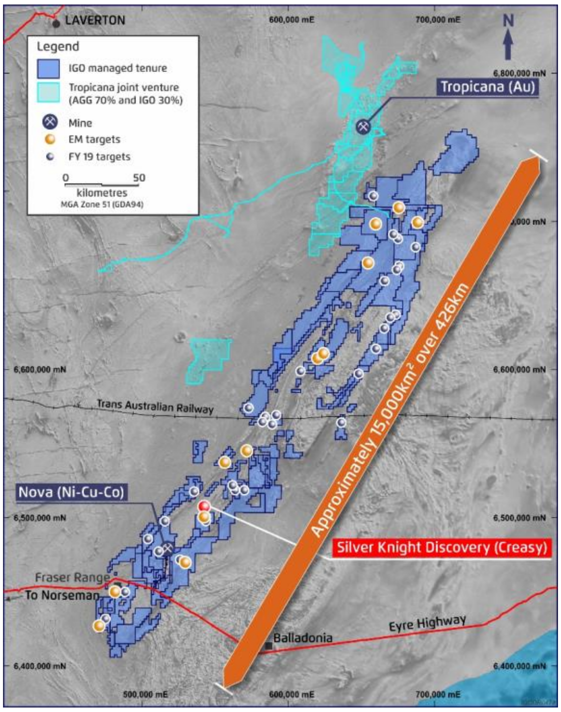
In 2018, IGO's exploration operating spend was ~A$45 million around IGO's mining operations and on regional tenements. For FY19, IGO has developed programs for a ~A$51 million total exploration spend.

Fraser Range

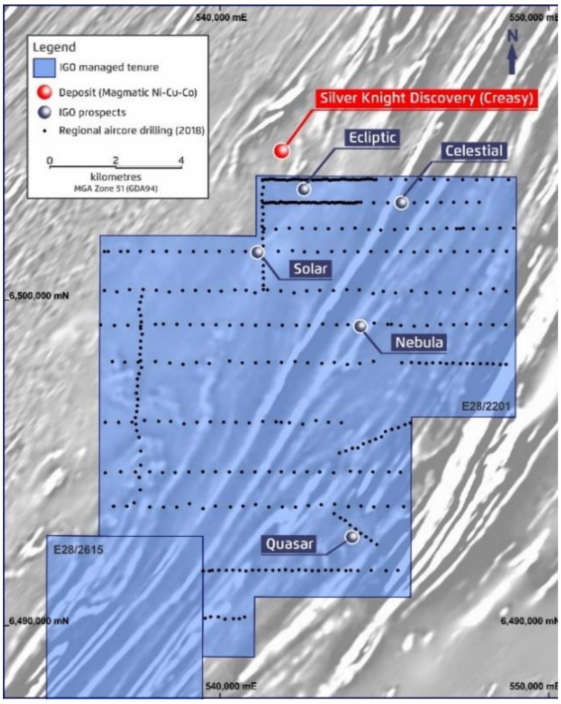
The Albany-Fraser Orogen in southern WA is prospective for base and precious metals. The majority of IGO's 2018 exploration expenditure was on the Fraser Range project including the Nova Operation mine lease. In the Fraser Range, IGO has consolidated a ground position of ~15,000km^2, including ten JVs. This includes tenure along trend of the Creasy Group's recent Silver Knight nickel-copper discovery.

IGO's 2018 exploration highlights included the detection of multiple airborne, ground and down-hole electromagnetic conductors along the belt with characteristics and geological settings permissive of massive sulphides. Other highlights include growing exploration evidence that there are many magmatic intrusions prospective for magmatic nickel-copper deposits present along the belt, notably in the highly prospective Widowmaker Prospect immediately adjacent to the Silver Knight discovery, where IGO has outlined five initial targets.

IGO's current Fraser Range ground position and targets



Widowmaker – drill targets for 2019



During the past year, IGO has reshaped its exploration portfolio in line with the Company's new strategy. New projects added to the portfolio, both in Australia and overseas, include the West Kimberley and Merlin Nickel JV options in WA, the Raptor nickel project in the NT, the Yeneena copper JV option in WA, and the Frontier copper JV option in Greenland. These new initiatives are described in detail later in this report.

Lake Mackay JV

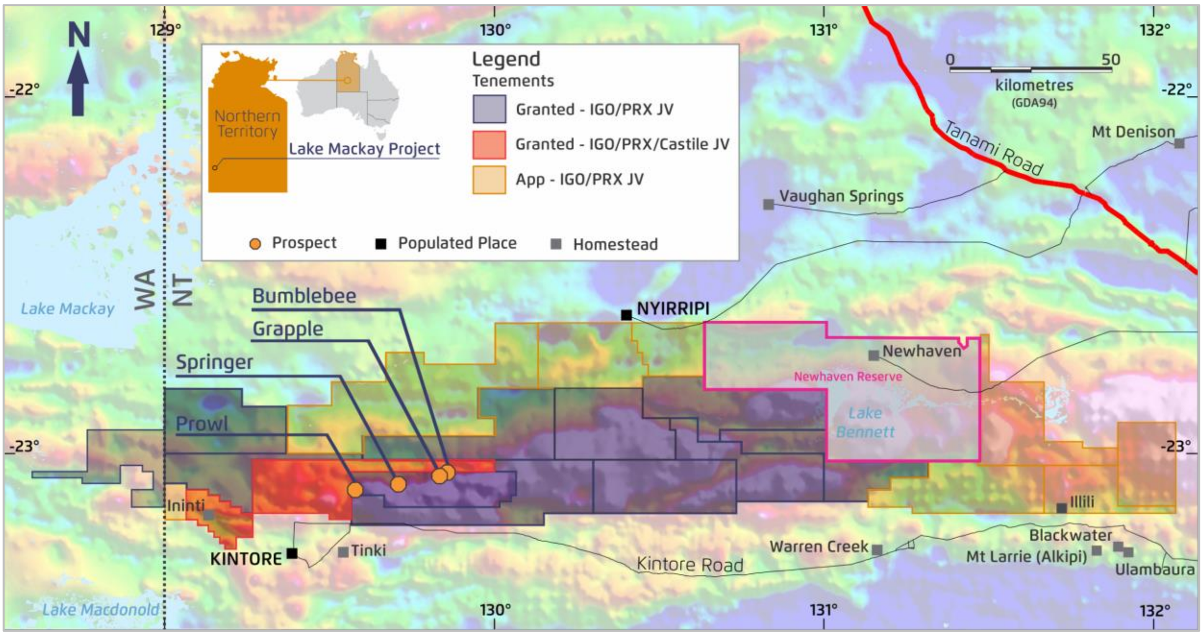
IGO's Lake Mackay JV with Prodigy Gold NL and Castile Resources Pty Ltd, is a belt-scale ground position of 12,958km^2 over a major tectonic suture between two crustal provinces in the Northern Territory of Australia. The belt is considered prospective for both precious and base metals. The project is ~400km northwest of Alice Springs near the WA border.

Prior to 2018, IGO's Lake Mackay exploration was constrained to just one tenement representing only ~4% of the project area. However, in late-2017, the granting of new tenements unlocked large areas for on-ground exploration in 2018. On a prospect scale, prospective soil anomalies have been defined and extensive airborne Spectrem electromagnetic (EM) surveys have been flown over most of the granted tenements.

The highlight of the Lake Mackay 2018 exploration was the identification of multiple polymetallic geochemical anomalies and prospects, and multiple bedrock EM conductors that are possibly indicative of massive sulphides. These targets will be drill tested in the upcoming field season which commences in March 2019.

Spectrem Air's AEM aircraft in operation at Lake Mackay

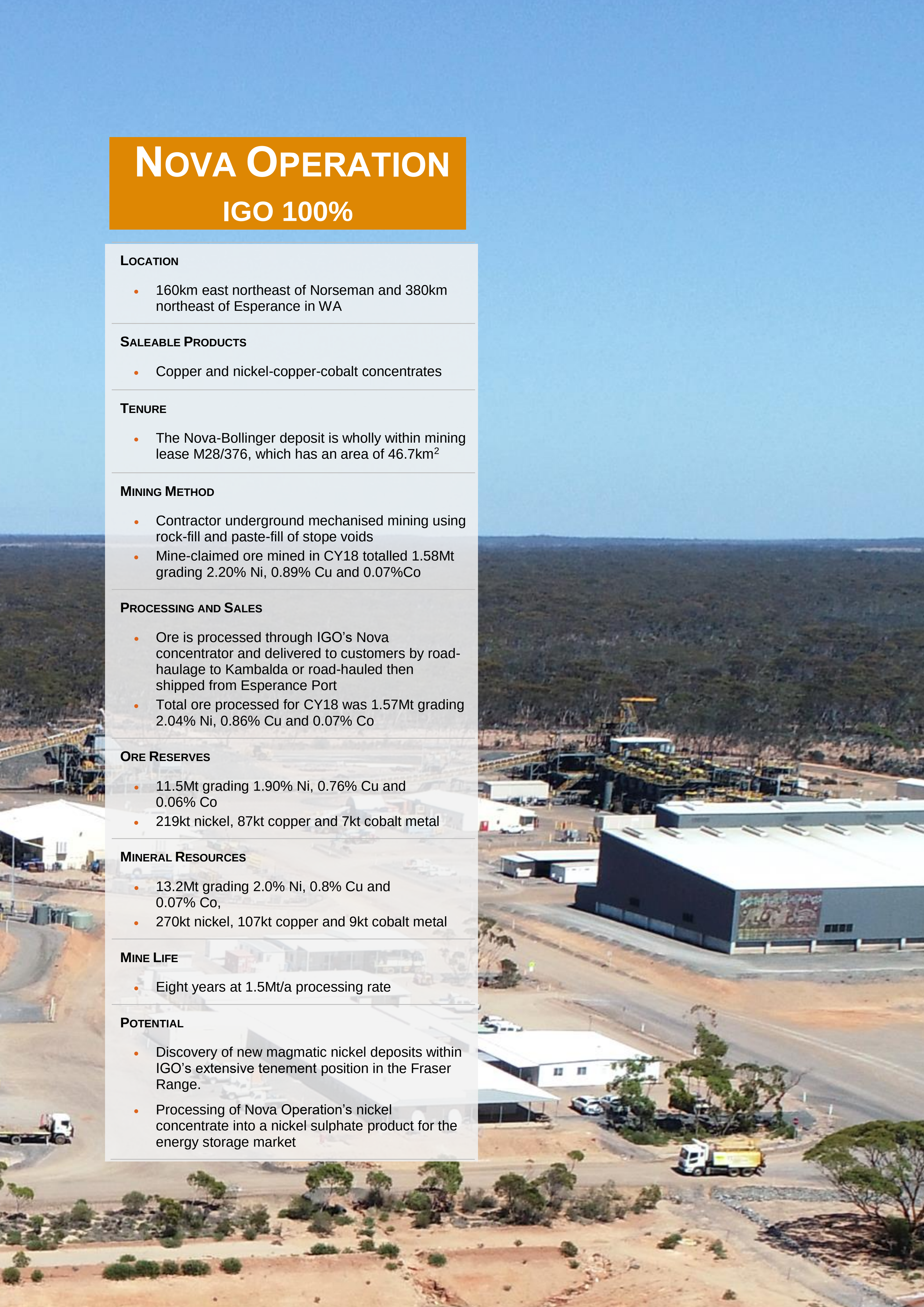
Lake Mackay Project tenements and prospects and gravity image



Near-mine exploration

In 2018, IGO completed a 58km^2 3D seismic survey over the Nova Operation mine lease to image the subsurface geology and identify potential Nova-like host intrusions and/or permissive structural target settings in the immediate mine area. Results are very positive and drill testing of multiple 3D seismic targets commenced in late-2018.

At the Tropicana Gold Mine, deep drilling tested underground extensional targets at Boston Shaker with significant gold intercepts returned from most of the holes. At the Long Nickel Project, the focus moved to the search for potential deeper and parallel deposits. Two target areas were drill tested, with assay results still pending. More details of IGO's near-mine exploration initiatives are included in the operation specific sections of this report.



Nova Operation

IGO 100%

Location

- 160km east northeast of Norseman and 380km northeast of Esperance in WA

Saleable Products

- Copper and nickel-copper-cobalt concentrates

Tenure

- The Nova-Bollinger deposit is wholly within mining lease M28/376, which has an area of 46.7km^2

Mining Method

- Contractor underground mechanised mining using rock-fill and paste-fill of stope voids
- Mine-claimed ore mined in CY18 totalled 1.58Mt grading 2.20% Ni, 0.89% Cu and 0.07%Co

Processing and Sales

- Ore is processed through IGO's Nova concentrator and delivered to customers by road-haulage to Kambalda or road-hauled then shipped from Esperance Port
- Total ore processed for CY18 was 1.57Mt grading 2.04% Ni, 0.86% Cu and 0.07% Co

Ore Reserves

- 11.5Mt grading 1.90% Ni, 0.76% Cu and 0.06% Co
- 219kt nickel, 87kt copper and 7kt cobalt metal

Mineral Resources

- 13.2Mt grading 2.0% Ni, 0.8% Cu and 0.07% Co,
- 270kt nickel, 107kt copper and 9kt cobalt metal

Mine Life

- Eight years at 1.5Mt/a processing rate

Potential

- Discovery of new magmatic nickel deposits within IGO's extensive tenement position in the Fraser Range.
- Processing of Nova Operation's nickel concentrate into a nickel sulphate product for the energy storage market

Introduction

The Nova Operation is at latitude 123.10’40”°E and longitude 31.48’50”°S in south eastern WA, ~160km by road east northeast of Norseman and ~380km directly northeast of the shipping port of Esperance.

The Nova zone of the Nova-Bollinger deposit was discovered in 2012 after targeting an area where a 1998 GSWA soil sample anomaly (271ppm Ni), which coincided with a 3km-long regional magnetics feature nicknamed ‘The Eye’. In 2013, the Bollinger Zone was discovered by drilling and tracking the thin mineralised conduit that trends east from the Nova Zone. The two zones are now recognised as the one Nova-Bollinger deposit.

The Nova Operation produced its first nickel and copper concentrates in October 2016.

Geology

Nova-Bollinger lies within the 425km 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. The Arid Basin forms the basement to the Fraser Zone and the Snowys Dam formation of the Arid Basin is the basement in the Nova-Bollinger area.

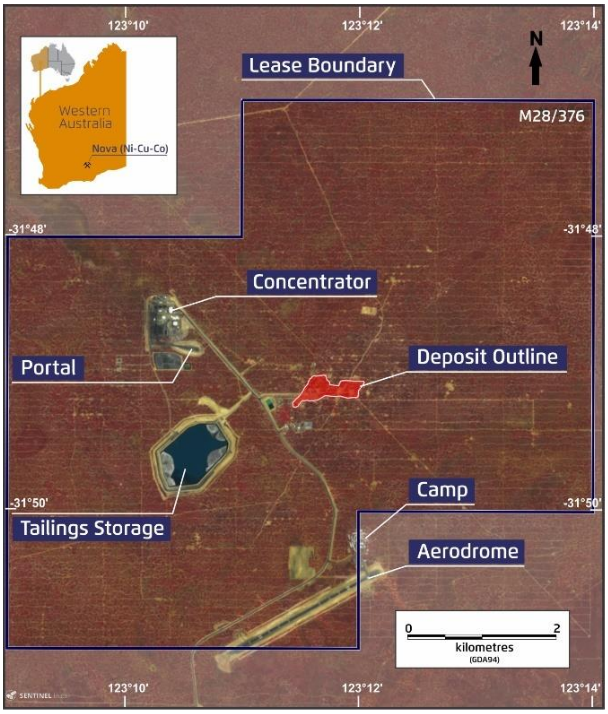
Mafic, ultramafic and granitic intrusions were emplaced in the region during the first phase of the Albany-Fraser Orogeny (~1.30Ga). Later, intense tectonic events (1.12-1.14Ga), metamorphosed the Fraser Zone rocks to granulite facies grade, and the zone is now characterised by gneissic fabrics, complex refolding and major mylonitic zones.

The rocks within the Nova-Bollinger area 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 and volcanoclastic rocks. The Nova-Bollinger mafic-ultramafic sill complex that hosts the Nova-Bollinger deposit, is a doubly plunging synformal structure, where a magnetite-bearing footwall gneiss has been identified as the reason behind ‘The Eye’ magnetic feature.

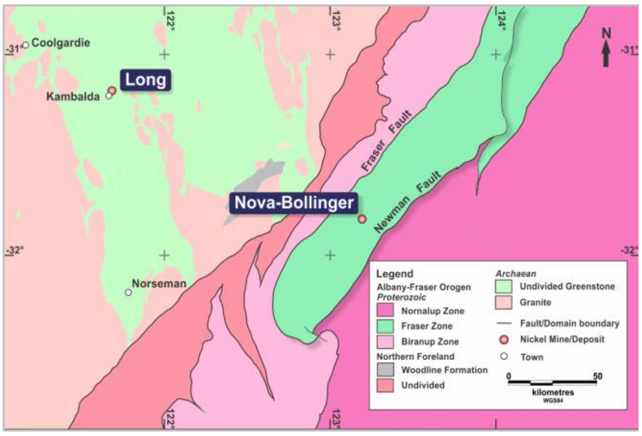
The Nova-Bollinger mafic-ultramafic sill complex is a dish-shaped package about 2.4km by 1.2km in plan and about 450m in thickness. The rocks of the complex range from peridotite to pyroxenite, to gabbronorite and norite, with both sharp and gradational contacts between different intrusive phases.

The mine area is covered by a <3m thick thin regolith and/or transported cover, with some of oxidation of sulphides in fresh rock down to ~20m.

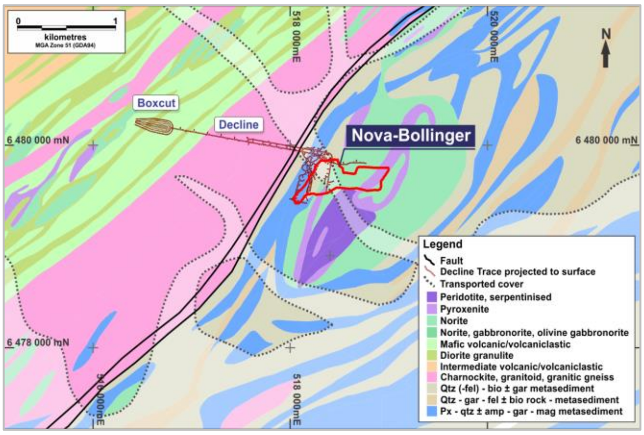
Satellite image of Nova Operation – December 2018



Nova-Bollinger regional geology map



Nova-Bollinger mine area geology map



Nova-Bollinger's mineralisation is spatially correlated to a mafic magmatic conduit known as the Nova Gabbro, from which sulphides are interpreted to have been precipitated and accumulated within the conduit and the fracture zones surrounding this source intrusion. The mineralisation is interpreted to have been emplaced in a dynamic environment, at peak metamorphism, with much of the mineralisation remobilised into structures and/or fracture zones surrounding the Nova Gabbro.

There are several mineralisation styles ranging from massive sulphide accumulations, breccias, net-textured zones (olivine + sulphide matrix), stringer-sulphides in metasediments, and disseminated and blebby textures in gabbroic units. The massive sulphide mineralogy is dominated by pyrrhotite (80-85%), minor pentlandite (10-15%) with lesser chalcopyrite (5-10%). Material concentrations (up to 5%) of magnetite also occur locally within massive sulphides. Cobalt is strongly and positively correlated with nickel as both elements are found concentrated in pentlandite.

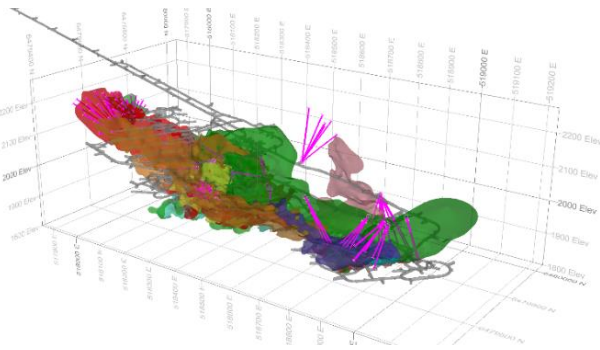
Mineral Resources

IGO's mine geologists have estimated the end of CY18 Nova-Bollinger MRE using routine industry methods of geological interpretation of drilling results, preparation of digital wireframes of the geology and mineralisation, and then estimating grades into digital block models using geostatistical methods. Full details are included in the Nova-Bollinger JORC Table 1 in the supplementary information of this report.

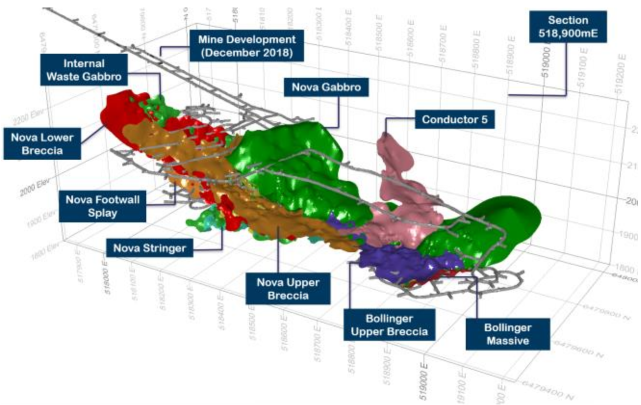
The Nova-Bollinger end of CY18 MRE is based on ~443km of surface and close-spaced underground drilling, which has tested the entire known deposit area on a nominal 12.5m by 12.5m pierce-point spacing. Most of this data is from high-recovery diamond core data with a smaller component of RC drilling (totalling 5km at the shallower western end of the deposit). The CY18 MRE was updated in November 2018 using all drill holes and assays available to September 2018, with the MRE depleted for mining to the end of CY18.

For the end of CY18 MRE update, IGO's geologists interpreted 22 distinct estimation zones using all the drilling information and confirmatory mapping from underground development. One of these zones is the waste halo that encompasses all other zones, which facilitates estimation of dilution grades in downstream ORE studies.

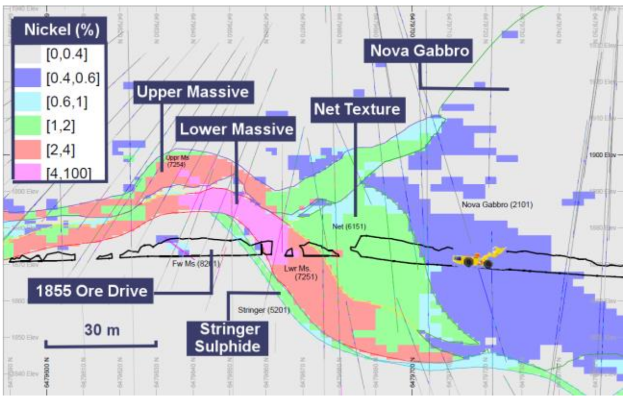
Additional drilling (magenta) included in the CY18 MRE update



Key estimation zones of the Nova-Bollinger 2018 MRE



Bollinger cross section – looking West on 518,900mE



The Nova-Bollinger end of CY18 MRE has been reported using an NSR cut-off grade of A$50/t, which includes the value of cobalt; considers all ex-mine gate costs and payabilities for concentrates; is based on FY19 price forecasts; uses operating metallurgical recovery values; and considers break-even processing costs, incremental stoping costs and royalties payable on production. The table on the following page details the end of FY18 and end of CY18 MREs for the Nova Operation.

Nova Operation – end of FY18 and end of CY18 Mineral Resources

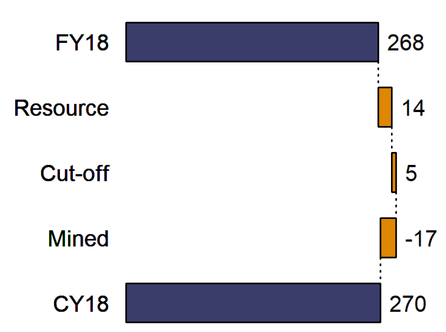
Source	JORC Class	FY18							CY18						
		Mass (Mt)	Nickel		Copper		Cobalt		Mass (Mt)	Nickel		Copper		Cobalt	
			%	kt	%	kt	%	kt		%	kt	%	kt	%	kt
Underground	Measured	11.9	2.1	256	0.90	104	0.07	9	12.5	2.1	261	0.8	104	0.07	9
	Indicated	1.1	0.9	10	0.39	4	0.04	0.4	0.6	1.0	6	0.4	2	0.04	0.2
	Inferred	0.1	0.6	0.4	0.2	0.1	0.02	<0.1	0.04	1.9	1	0.7	0.3	0.06	<0.1
	Subtotal	13.0	2.0	266	0.8	109	0.07	9	13.2	2.0	268	0.8	106	0.07	9
Stockpiles	Measured	0.1	1.7	2	0.7	1	0.07	0.1	0.1	2.1	1	0.9	1	0.08	0.1
Total	Measured	12.0	2.1	258	0.87	105	0.07	9	12.6	2.1	263	0.8	104	0.07	9
	Indicated	1.1	0.9	10	0.4	4	0.04	0.4	0.6	1.0	6	0.4	2	0.04	0.2
	Inferred	0.1	0.6	0.4	0.2	0.1	0.02	<0.1	0.04	1.9	1	0.7	0.2	0.06	<0.1
Nova Operation Total		**13.1**	**2.0**	**268**	**0.8**	**109**	**0.07**	**9**	**13.2**	**2.0**	**270**	**0.8**	**107**	**0.07**	**9**

- The end of CY18 MRE is reported using a A$50/t NSR cut-off based on higher metal prices than used for ORE
- Some averages and sums are affected by rounding
- Both MREs are inclusive of OREs and no Inferred Resources are considered excessively extrapolated

The most notable change in the end of CY18 update of the Nova-Bollinger MRE has been the conversion of most of the end of FY18 estimate to the highest confidence Measured Resource JORC Code classification. Only 0.6Mt remains in the Indicated Resource category, and an immaterial tonnage is in the Inferred class.

The cascade chart below demonstrates the main changes in the Nova Operation's MRE contained nickel metal from end of FY18 to end of CY18.

Mineral Resource nickel metal changes (kt)



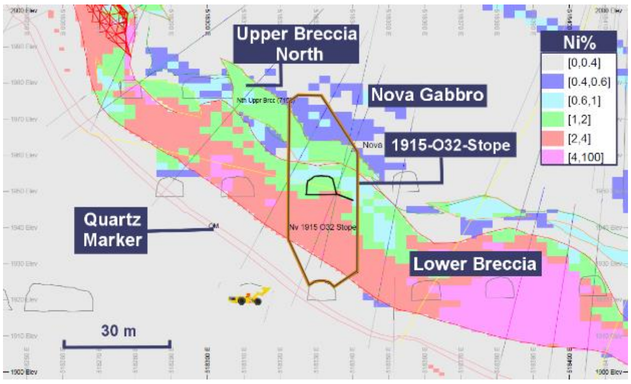
In terms of MRE in situ nickel metal, the infill drilling identified an additional 14kt of nickel metal, and a further 5kt of metal has been added to the MRE by changing the input price assumptions of the NSR reporting criterion. Mining depletion has resulted in extraction of 17kt of metal from the MRE (at A$50/t NSR cut-off) leaving 270kt of nickel metal in the MRE at the end of CY18.

Ore Reserves

Nova Operation's mine engineering staff prepared the Nova-Bollinger end CY18 ORE from the 2018 MRE model used to report the end of CY18 MRE. The estimate has been prepared using routine industry methods of coding the MRE block model with in situ A$/t NSR mining block values as discussed above, then preparing optimum stoping shapes using the industry standard stope optimiser (SO) software. The SO shapes were then used to produce final development and stope designs to construct an extraction schedule, generate a life-of-mine plan and financial model that demonstrate economic viability.

Full details of the ORE modifying factors applied are included in the relevant JORC Code Table 1 section for the Nova-Bollinger ORE in the supplementary information of this report.

Example stope – section 6,479,755mN looking north



Due to the variable geometries of the Nova-Bollinger mineralisation, different mining methods are used for ore extraction in different areas of the deposit.

In the thicker portions of the Nova and Bollinger areas, stopes up to 75m high are blasted and extracted using remotely controlled loaders. The stopes are then backfilled with paste which consists of non-sulphide process tailings mixed with a binder. The paste-fill cures to a strength that supports the stope walls allowing the mining of adjacent stopes. This mining method ensures full extraction of the ORE, while minimising ore dilution potential from stope wall and crown over-break.

In the Upper Nova Zone, where the mineralisation is narrower and more steeply dipping, long-hole stoping or modified Avoca methods are used for extraction, with the stopes backfilled with waste-rock (or cemented waste rock) to ensure post-mining wall stability. These methods have inherent higher mining dilution than the paste-fill approaches but are more cost and production-rate effective in the narrow and steeply dipping zones of mineralisation.

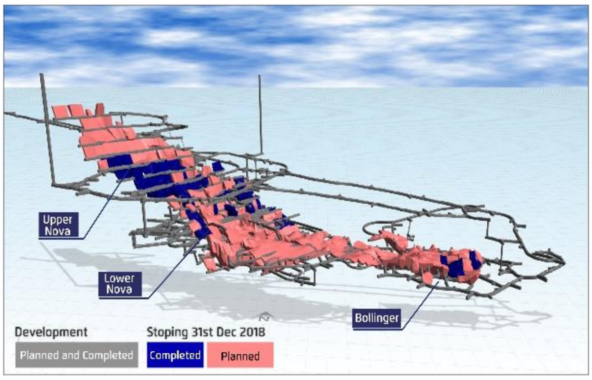
In the flat lying areas between Nova and Bollinger, the planned mining method is paste-filled inclined room and pillar mining with full pillar extraction. Access to these areas is being developed.

The end of CY18 Nova-Bollinger mine schedule indicates the last ore will be mined in FY26, giving Nova Operation a mine life of eight years from end of CY18 assuming a mining and processing rate of 1.5Mt/a.

The current mining rate targets ~130kt/month with a contractor mining fleet of six trucks, five loaders, and one to two development drills and two to three production drills.

The tabulation below is a listing for the end of FY18 and end of CY18 Ore Reserve estimates for Nova Operation, including the estimates of in situ payable metals (nickel, copper and cobalt).

Nova-Bollinger 31 Dec 2018 mining and plan

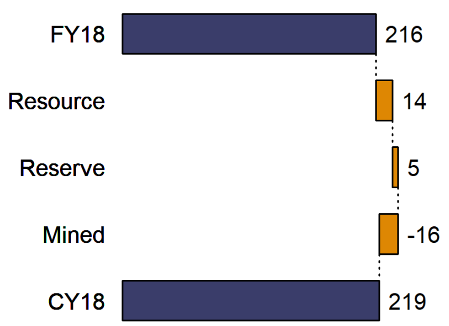


Nova Operation – end of FY18 and end of CY18 Ore Reserves

Source	JORC Class	FY18								CY18							
		Mass (Mt)	Nickel		Copper		Cobalt			Mass (Mt)	Nickel		Copper		Cobalt		
			%	kt	%	Kt	%	kt			%	kt	%	kt	%	kt	
Underground	Proved	10.2	1.93	197	0.79	80	0.07	7		11.3	1.91	215	0.76	86	0.06	7	
	Probable	1.3	1.34	18	0.57	8	0.04	1		0.2	1.26	2	0.46	1	0.04	<0.1	
	Subtotal	11.6	1.86	215	0.76	88	0.06	7		11.5	1.90	217	0.76	87	0.06	7	
Stockpiles	Proved	0.1	2.4	2	1.02	1	0.11	<0.1		0.1	2.11	1	0.86	1	0.08	<0.1	
Total	Proved	10.3	1.92	198	0.79	81	0.07	7		11.4	1.91	216	0.76	87	0.06	7	
	Probable	1.3	1.34	18	0.57	8	0.04	1		0.2	1.26	2	0.46	1	0.04	<0.1	
Nova Operation Total		**11.7**	**1.86**	**216**	**0.76**	**89**	**0.06**	**7**		**11.5**	**1.90**	**219**	**0.76**	**87**	**0.06**	**7**	

- Both FY18 and CY18 estimates are reported using NSR cut-off grades of A$27/t for development, A$63/t incremental stoping and A$102/t for full stoping costs
- Some averages and sums are affected by rounding
- An immaterial of Inferred Mineral Resources (<5kt) is include in the ORE for reasons of practicality of design

Ore Reserve nickel metal changes (kt)



The chart above demonstrates the main changes in the contained nickel metal in Nova Operation's ORE from end of FY18 to end of CY18.

There are three major changes in the ORE from the end of FY18 report:

- 16kt nickel metal mined (from 773kt ore)
- 5kt nickel metal from design improvements and optimisations
- 14kt nickel metal from MRE update and associated design updates

There is no change associated with mining factors as identical factors were utilised for end of FY18 and end of CY18. The end of CY18 ORE is estimated to contain 219kt of nickel metal, compared to the 216kt reported for end of FY18.

Concentrate loading at Nova Operation

Nova Mining Lease Exploration

IGO's exploration strategy on the Nova Operation's mining lease (the Mining Lease) is to apply the latest geophysical technologies and follow-up drilling to discover new massive sulphide deposits that are likely to be 300m or more from surface but close to the existing mine infrastructure. This approach is driven by the knowledge that in most intrusion-style nickel camps worldwide, new deposits were found within a few kilometres of the first discovery.

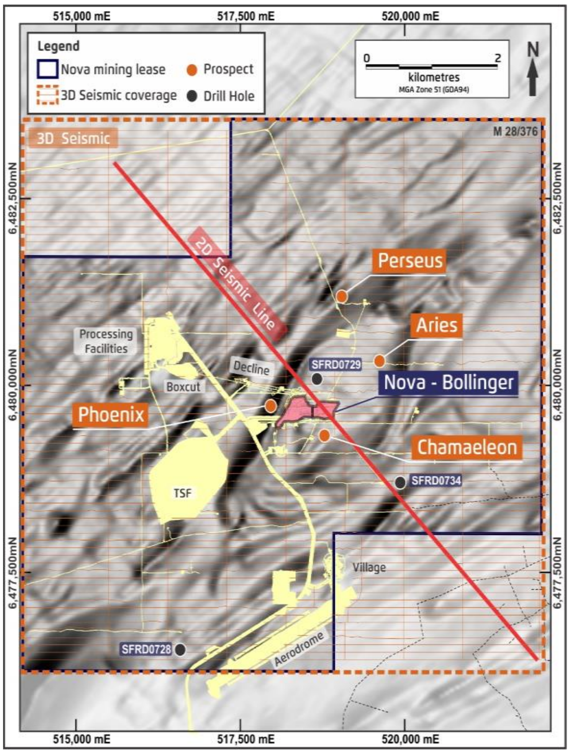
Since the completion of Australia's largest hard-rock 3D seismic survey on the Mining Lease in 2018, IGO has been processing and interpreting the 3D data. A ~20,000m exploration diamond drilling program commenced at the beginning of FY19 to test both historical and new targets generated from the high-resolution 3D seismic survey. In late 2018, the first two seismic targets were drilled with the results from both holes now being used to refine models and improve the understanding of the geology around the mine.

The deep penetrating LT-SQUID (Low Temperature-Superconducting Quantum Interference Device) survey, which is an EM method used to locate massive sulphides at depths up to and exceeding 1,000m from surface, was completed during the second Quarter of FY19. The final dataset is being interpreted and the results will be used to identify drill targets and enhance IGO's interpretation of the 3D seismic data.

Since the commencement of the Mining Lease exploration program, IGO have drilled or deepened 26 surface drill holes and three underground holes for a total of 14,643m of drilling on the Mining Lease. The drill holes were targeted at historically intersected ultramafic intrusions that are located outside of the 'Nova Eye', as well as untested parts of large EM conductors proximal to Nova-Bollinger. Two drill holes, SFRD0728 and SFRD0734 were the first to test deep seismic structures at 1,400m and 1,009m respectively.

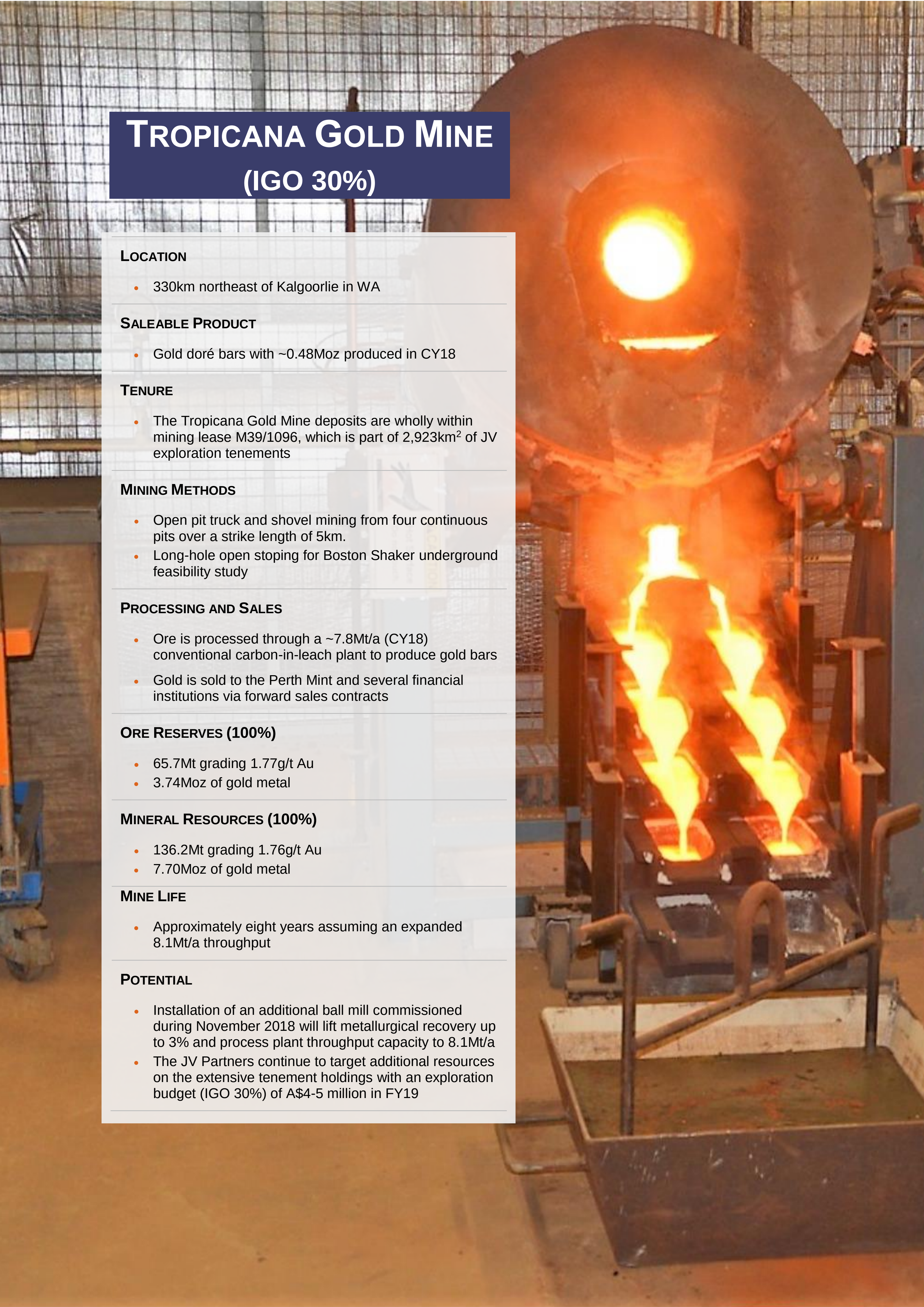
Disseminated and blebby three-phase (Fe-Ni-Cu) magmatic sulphides have been observed in core from previously known and newly identified mafic and ultramafic intrusions that occur across the Mining Lease.

Prospects and drill holes on the Nova Mining Lease



A geological and structural relogging of ~33,500m of historical drill core has been completed with the aim being to better understand the geology hosting the Nova-Bollinger deposit and to create a geological/structural model of the Mining Lease that incorporates the deeper seismic data. The combined geological model was delivered in December 2018 and conceptual drill targets are already being tested.

Diamond core drilling on Nova Mining Lease 2018



TROPICANA GOLD MINE (IGO 30%)

LOCATION

- 330km northeast of Kalgoorlie in WA

SALEABLE PRODUCT

- Gold doré bars with ~0.48Moz produced in CY18

TENURE

- The Tropicana Gold Mine deposits are wholly within mining lease M39/1096, which is part of 2,923km^2 of JV exploration tenements

MINING METHODS

- Open pit truck and shovel mining from four continuous pits over a strike length of 5km.
- Long-hole open stoping for Boston Shaker underground feasibility study

PROCESSING AND SALES

- Ore is processed through a ~7.8Mt/a (CY18) conventional carbon-in-leach plant to produce gold bars
- Gold is sold to the Perth Mint and several financial institutions via forward sales contracts

ORE RESERVES (100%)

- 65.7Mt grading 1.77g/t Au
- 3.74Moz of gold metal

MINERAL RESOURCES (100%)

- 136.2Mt grading 1.76g/t Au
- 7.70Moz of gold metal

MINE LIFE

- Approximately eight years assuming an expanded 8.1Mt/a throughput

POTENTIAL

- Installation of an additional ball mill commissioned during November 2018 will lift metallurgical recovery up to 3% and process plant throughput capacity to 8.1Mt/a
- The JV Partners continue to target additional resources on the extensive tenement holdings with an exploration budget (IGO 30%) of A$4-5 million in FY19

Introduction

The Tropicana Gold Mine (TGM) is at latitude 29°14’48”S and longitude 124°32’18”E, ~1,000km east northeast of Perth WA on the western edge of the Great Sandy Desert. TGM and the surrounding 2,923km^2 of exploration tenements are held in a 2002 JV agreement between IGO (30%) and JV manager AngloGold Ashanti Australia Limited (AGA) (70%).

AGA discovered the TGM deposits through targeting a historic WMC gold-in-soil anomaly, which was recorded in the GSWA open file records. With further work, the team interpreted that an inlier of Archean greenstone rocks occurred within the younger Proterozoic age Albany Frazer Zone, and that this inlier should be considered prospective for Yilgarn-style gold deposits.

In 2002, the first JV aircore drilling program tested the regolith below the unconformable cover in the TGM area, and intersected gold mineralisation, including one intercept of 7m grading 2.02g/t Au. The initial results were followed up by diamond core drilling in 2004 with a drill intersection of 13m grading 1.7g/t Au. Further drilling in 2005 intersected higher-grade mineralisation including 19m grading 4.7g/t Au. A RC follow-up program in the later part of 2005 defined continuous gold mineralisation over a 1km strike length over the Tropicana Zone. Drilling in 2006 discovered the Havana Zone, 1.5km south of Tropicana and then the Havana South and Boston Shaker zones. The known dimensions of mineralisation are now ~5km along strike and ~1.2km down dip.

Following several studies, the project was approved for mine development by the JV in late 2010 with the first gold poured in September 2013, then one million ounces of production by November 2015. Total TGM gold production between the end of FY18 and end of CY is ~0.48Moz.

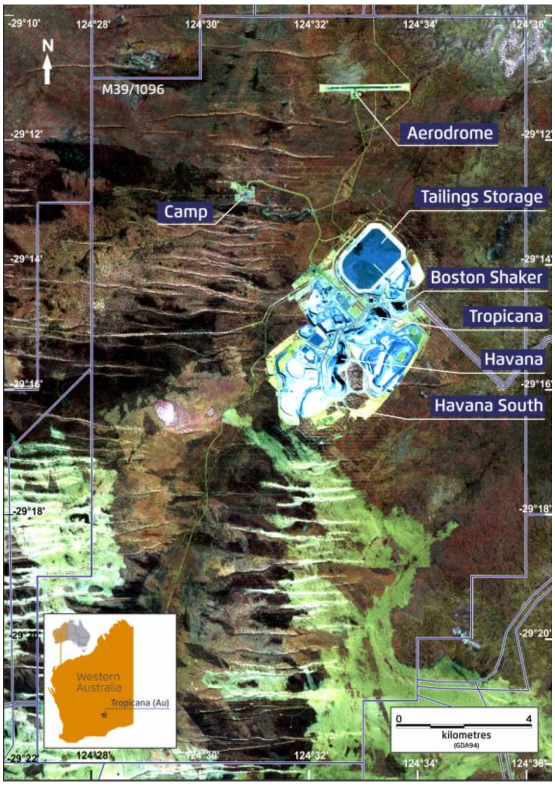
On-going extensional drilling continues around the TGM deposits with recent work focussing on the underground mine potential below the Havana and Boston Shaker open pits. In this report, the first underground TGM Ore Reserve is reported for the Boston Shaker deeps.

Geology and mineralisation

The TGM gold deposits are hosted in high metamorphic granulite-grade gneissic rocks in the shear-bounded Plumridge Terrain on the eastern edge of the Yilgarn Craton and within the western edge of the Proterozoic Albany-Frazer Zone. The TGM area is overlain by a 10-30m thick unconformable cover of Permian and Tertiary sedimentary rocks that have Tertiary lateritic weathering. In some areas there is a secondary cover of Holocene aeolian sands and colluvium.

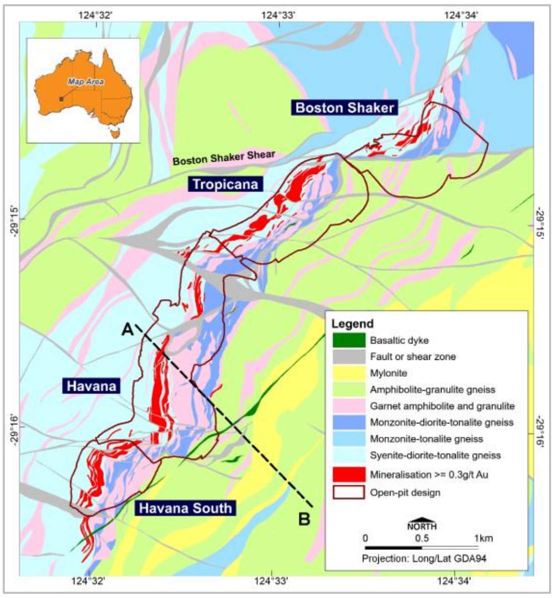
The Neoarchean Tropicana Gneiss of the Plumridge Terrain hosts the TGM gold mineralisation with the constituent garnet and quartz-feldspar gneisses interpreted to be the products of partial melting during peak metamorphism. The compositional bandings of the gneisses dip moderately to the east. The host rocks and gold mineralisation are cross-cut by 1.2Ga age (barren) basalt and dolerite dykes.

Satellite image of Tropicana Gold Mine December 2018



Notes: ESA false colour infrared image taken 17 June 2018

Geology plan of Tropicana Gold Mine



Notes: Modified from GSWA geological mapping

The 5km strike of gold mineralisation at TGM is subdivided into five shear-offset zones from north to south – Boston Shaker, Tropicana, Havana, Havana Deeps, and Havana South zones. The mineralised corridor is ~1.2km wide and up to 1.5km down dip to the current deepest drill intercepts. Within each zone the gold mineralisation trends north to northeast. Gold is concentrated in ~2m to ~50m thick subparallel layers within a 'favourable horizon' of the quartz-feldspar gneiss units. Geological studies concluded that the gold postdates the gneissic banding and the metamorphic thermal maximum event. High-grade mineralisation (>3g/t Au) lenses occur within the broader low-grade gold envelopes. The higher-grade mineralisation is associated with more closely spaced veins and sericite alteration.

Gold is spatially associated with greenschist facies biotite-pyrite alteration, where fine-grained disseminations of pyrite and gold replace metamorphic biotite and shears in amphibole minerals.

Havana Deposit geological cross section looking northeast

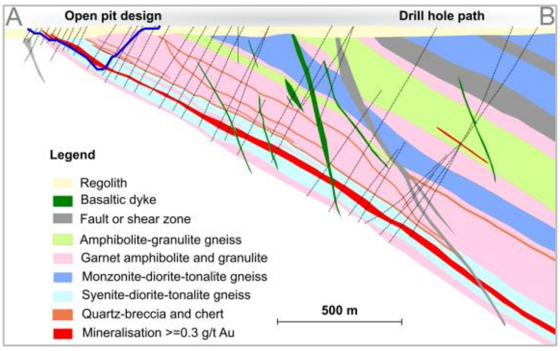
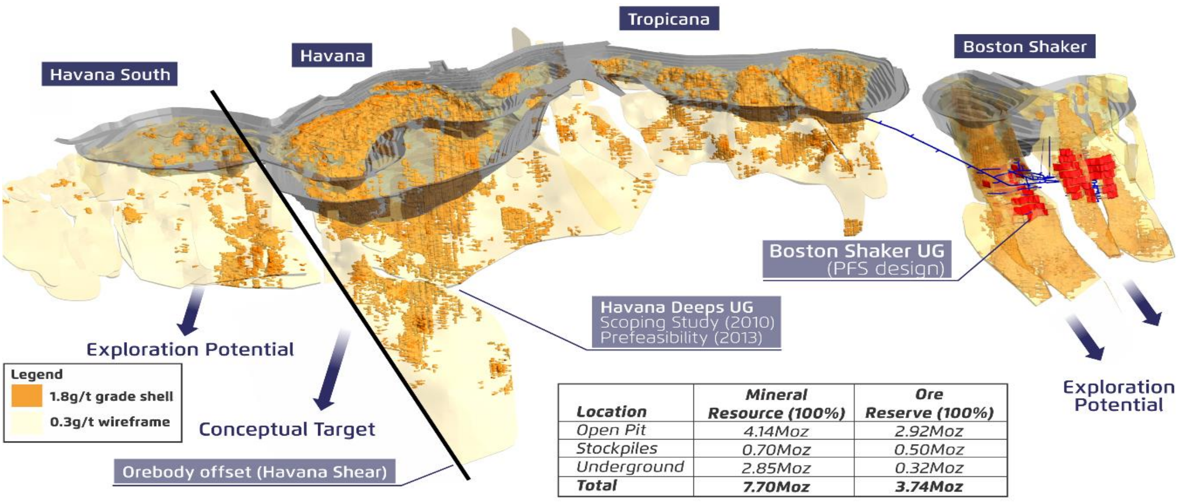


Image modified from Crawford, A.J. and Doyle, M.G (2016), Economic Geology vol.111 p.395-420

Perspective view of gold grade envelopes and CY18 pits and/or designs at Tropicana Gold Mine



Mineral Resources

The open pit and underground MREs for TGM were updated in 2018 using a total of 15,591 diamond core (DD) and RC drill holes for a total of ~1,189km of drilling (including ~408km of grade control RC drilling in 11,797 holes). The update includes 280 new DD drill holes for a total of ~75km.

AGA's geologists interpreted 24 geological domains and composited the drill hole data to 2m lengths for geostatistical analyses and grade estimation.

Full details regarding the sampling and MRE estimation are in JORC Table 1 in the supplementary information section of this report.

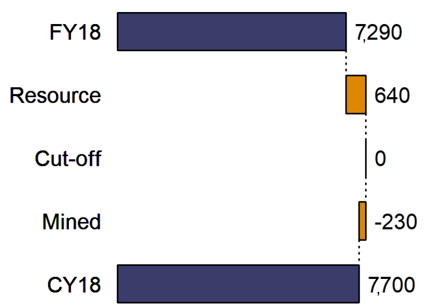
TGM – end of FY18 and end of CY18 MREs (100%)

Estimate	JORC Class	FY18			CY18		
		Mass (Mt)	Gold		Mass (Mt)	Gold	
			g/t	koz		g/t	koz
Open pit	Measured	8.9	1.34	390	6.5	1.29	270
	Indicated	84.3	1.58	4,290	75.5	1.50	3,640
	Inferred	9.2	1.17	350	5.6	1.31	240
	Subtotal	**102.4**	**1.53**	**5,020**	**87.6**	**1.47**	**4,140**
Underground	Measured	…	…	…	…	…	…
	Indicated	10.1	3.57	1,160	8.5	4.11	1,120
	Inferred	5.7	3.20	580	12.4	4.36	1,730
	Subtotal	**15.7**	**3.44**	**1,740**	**20.8**	**4.26**	**2,850**
Stockpiles	Measured	21.9	0.74	520	27.8	0.79	700
Total	Measured	30.8	0.92	910	34.3	0.88	970
	Indicated	94.3	1.80	5,450	84.0	1.76	4,760
	Inferred	14.9	1.95	930	17.9	3.41	1,970
	Total	**140.0**	**1.62**	**7,290**	**136.2**	**1.76**	**7,700**

- Open pit block MRE cut-off >0.4g/t Au for fresh rock, otherwise >0.3g/t Au and underground block MRE reporting cut-off >1.8g/t Au
- Some totals and averages are affected by rounding
- MREs are inclusive of OREs

The main changes in the TGM MREs from the end of FY18 and the end of CY18 in terms of contained gold metal are demonstrated in the cascade chart below.

MRE gold metal changes (koz) FY18 to CY18



Different gold prices have been applied by AGA for different parts of the MRE with an MRE-limiting pit optimisation shell based on a gold price of US$1,400/oz for the Havana South area. Havana and Boston Shaker MREs are limited by a US$1,055/oz shell (derived from the Long Island backfill mining study), and with Tropicana Zone MRE more conservatively reported within the current life-of-mine pit shell.

The main change in the open pit MRE is the 640koz increase due to exploration success. So, while mining depletion removed 230koz from the estimate, there was a 410koz net increase in the MRE contained metal for the end of CY18 estimate compared to the end of FY18 estimate.

Currently at TGM, higher-grade ore is processed when mined and lower grade ore is stockpiled for later treatment. This grade-streaming approach optimises cash flow but results in the creation of large stockpiles of lower grade ore, which will be processed after mining is complete (or rehandled for processing when there are ore shortages). Marginal grade mineralised material is also stockpiled, which may be processed at the end of the mine life should future gold prices and cost make this resource viable. Between end of FY18 and CY18 the TGM MRE-reportable stockpiles increased to ~28Mt (containing an estimated 700koz of gold) from the FY18-end total of ~22Mt (containing 520koz).

A significant part of the TGM underground MRE relates to the Boston Shaker underground, which was the subject of an ongoing FS for TGM's first underground mine. The Boston Shaker underground MRE comprises 5.1Mt of Indicated Mineral Resources grading 4.1g/t Au (670koz) and 7.5Mt of Inferred Mineral Resource grading 4.3g/t Au (1,040koz), for a total of 1,710Koz of gold in situ. The Boston Shaker zone end of CY18 MRE total of 19.7Mt grading 3.4g/t Au (2,150koz) constitutes 28% of the total TGM MRE in gold metal terms. In terms of estimated contained metal, the total TGM end of CY18 MRE of 136Mt (7,700koz) comprises 53% open pit resources, 37% underground resources and 10% in stockpiles.

The Indicated Resource of the Boston Shaker MRE is the basis of the Boston Shaker underground ORE discussed further below.

Ore Reserves

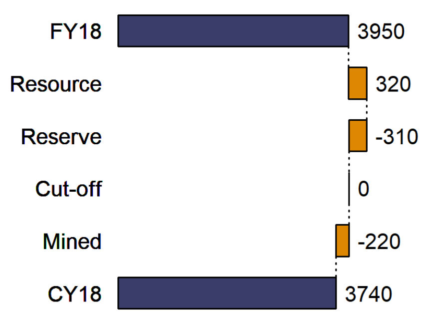
The TGM OREs are based on the life-of-mine schedule prepared by AGA in December 2018, using the open pit MRE model described above as the planning basis, and the recently completed Boston Shaker underground mine pre-feasibility study (PFS). The tabulation below is a listing of the end of FY18 and end of CY18 OREs for TGM on a 100% basis, and the cascade chart further below demonstrates the main changes in terms of gold metal since the end of FY18 ORE estimates.

Tropicana Gold Mine – FY18 v CY18 Ore Reserves

Estimate	JORC Class	FY18			CY18		
		Mass (Mt)	Gold		Mass (Mt)	Gold	
			g/t	koz		g/t	koz
Open pit	Proved	5.7	1.81	330	4.2	1.68	230
	Probable	47.5	2.13	3,260	43.2	1.94	2,690
	Subtotal	**53.2**	**2.10**	**3,590**	**47.4**	**1.91**	**2,920**
Underground	Proved	...	...	...	...	...	...
	Probable	...	...	...	2.7	3.65	320
	Subtotal	**...**	**...**	**...**	**2.7**	**3.65**	**320**
Stockpiles	Proved	11.7	0.95	360	15.5	1.01	500
Total	Proved	17.4	1.23	690	19.8	1.15	730
	Probable	47.5	2.13	3,260	45.9	2.04	3,010
	Total	**64.9**	**1.89**	**3,950**	**65.7**	**1.77**	**3,740**

- Open pit ORE block cut-off >0.7g/t Au for fresh rock, otherwise >0.6g/t Au
- Underground ORE block cut-off 3.17g/t Au
- Some totals and averages are affected by rounding – for example the Boston Shaker estimate is 316koz but has been rounded up to 320koz
- See the introductory section of this report for details of gold price and exchange rate assumptions

ORE gold metal changes (koz) FY18 to CY18



The main changes to the total TGM ORE since the FY18 public report is the 320koz increase in MRE considered for ORE conversion – all from the Boston Shaker underground ORE. However, 310koz of metal was deducted from the ORE due to the reduction in the depth and size of Boston Shaker open pit ORE (~210koz smaller), as underground mining was more profitable and a change in strategy from strip mining to higher-cost conventional mining approaches elsewhere in the mine to optimise cash flow. These changes were then reduced by the ~220koz of mining over the last six months of production leaving 3,740koz at the end of CY18

At TGM, open pit ore is mined using excavators and face shovels loading trucks from 10m and 15m bench heights, with a vertical advance rate of 90-120m per year in the mine schedule.

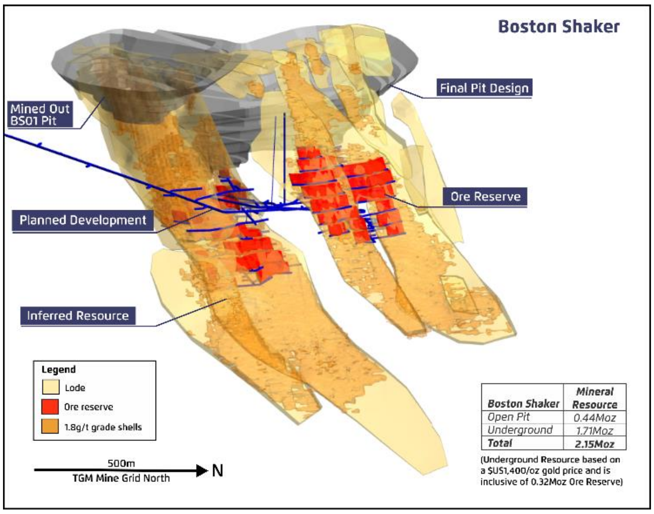
The mining exploitation method selected for the for Boston Shaker underground PFS was conventional long-hole open stoping, using jumbo drilling, boggers and 50t trucks as the mining equipment.

Exploration

In CY18, the underground potential down-dip of the Boston Shaker pit designs was tested by drilling on 100m×100m and 50m×25m grid spacings with totals of 8,667m of RC and 28,557m of DD drilled.

The 100m×100m spaced drilling has confirmed the underground mining potential at Boston Shaker Deeps, with mineralisation now extending to ~700m down dip from current open pit designs.

Boston Shaker underground PFS design



Greenfields exploration drilling completed on Tropicana tenements in CY18 included 29,484m of aircore and 12,532m of RC, and 2,855m of DD drilling designed to map basement geology and explore potential mineralised corridors identified in a regional structural reconstruction and interpretation.

All exploration programs are on track and budget with the CY18 (100%) spend being A$10.3 million. The JV exploration plan for FY19 continues to focus on Mineral Resource and Ore Reserve development near mine support, and Greenfields discovery.

Geomorphology in the Tropicana Gold Mine region

Long Project

IGO 100%

Location

- Approximately 60km south of Kalgoorlie in WA near Kambalda township

Saleable Product

- Nickel ore grading >1% Ni
- 169kt of ore mined in CY18 grading 3.2% Ni
- 5,454t of nickel metal

Tenure

- Mining leases and freehold land with a total area of 25.4km^2

Mining Methods

- Owner-operated underground mining using a variety of mechanised and hand-held (airleg) development, stoping and backfill methods

Processing and Sales

- Prior to care and maintenance, ore was sold through an offtake agreement to the nearby BHP Nickel West concentrator, where the ore was toll treated and a saleable nickel concentrate was produced

Ore Reserves

- No Ore Reserves while in care and maintenance

Mineral Resources

- 0.75Mt grading 4.2% Ni
- 32kt of in situ nickel metal

Mine Life

- Under care and maintenance

Potential

- Discovery of new deeper and/or parallel mineralised nickel sulphide deposits through testing of 3D seismic and surface geochemical anomalies using drilling from surface and/or underground locations

Introduction

IGO's Long Project is at latitude 31°10'48"S and longitude 121°40'48"E, on the western shore of salt Lake Lefroy, east of Kambalda in the Eastern Goldfields of WA.

The Long Project has had a 47-year exploration and mining history with the first nickel deposit in Kambalda discovered by Western Mining Corporation (WMC) in 1966 and the first ore production from the Long Shaft in 1979. When IGO acquired the Long Project from WMC in 2002, the mine had produced 4.5Mt of ore grading 3.7% Ni containing ~170,000t of nickel metal.

The Long Project comprises 25.4km^2 of mining tenements and IGO-owned freehold land. This tenure includes several of GoldFields Australia Pty Ltd (GoldFields) mining leases (total of 5.5 km^2), where IGO has nickel mining rights for a royalty for any ore mined.

Following acquisition of the Long Project in 2002, IGO discovered two new deposits (McLeay and Moran) which, with the pre-existing deposits (Long and Victor South), supported 16 years of continuous mining. IGO's total ore production to mine closure was ~3.5Mt grading 3.9% Ni containing ~137,000t of nickel metal. Combined with the WMC historic production, the total estimated nickel metal in ore mined over a 39-year mining history at Long Project is ~307,000t.

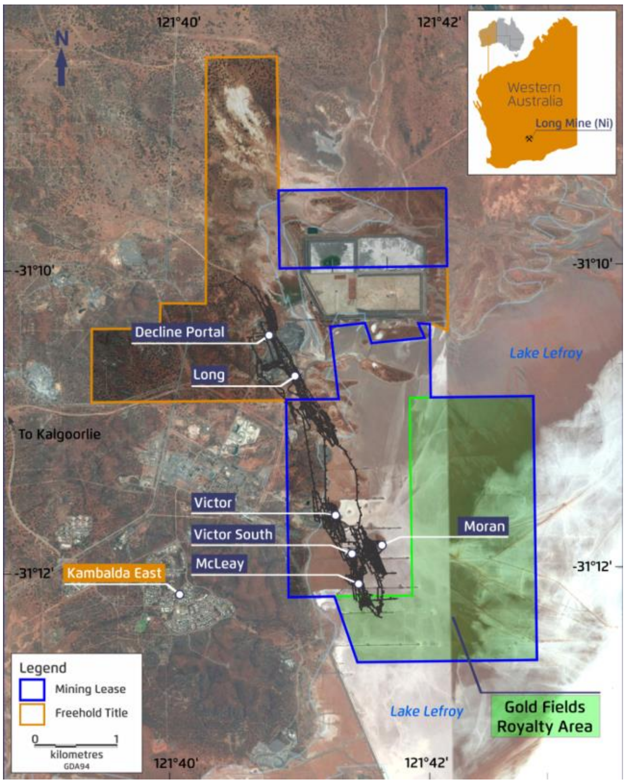
Mining ceased at the Long Project in May 2018 with the last ore hauled to the concentrator on 13 June 2018. The underground mine is now in care and maintenance, which involves continued dewatering, maintenance of the underground and surface infrastructure, and remedial surface rehabilitation work.

Geology and mineralisation

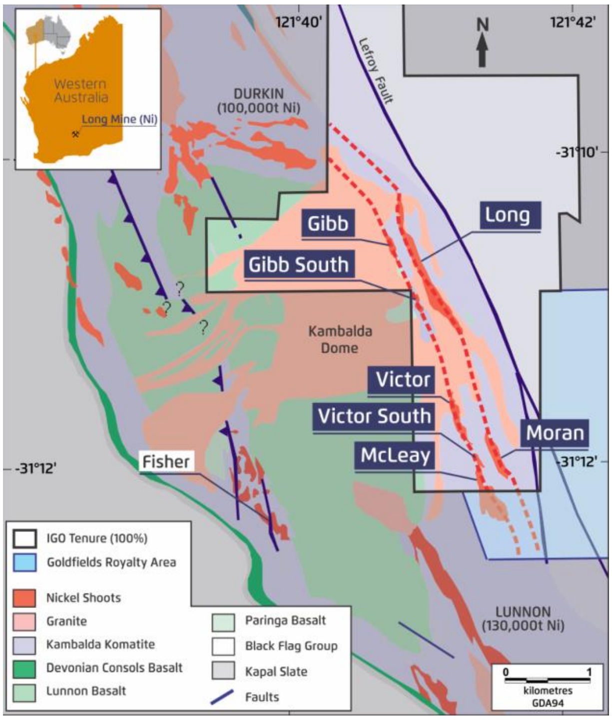
The Long Project's nickel deposits are in the southern part of the Norseman-Wiluna greenstone belt of the Yilgarn Craton in WA. The regional stratigraphic succession in the Kambalda area is characterised by komatiite to tholeiite and komatiite to felsic-volcanism.

Most nickel deposits in the region occur in the lower Kambalda Dome sequence at the base of ultramafic (komatiite) lava units, which are in contact with tholeiite basal units. The deposits are spatially distributed in an annular zone, found around a core of granitoid stock which intruded the area ~2.6Ga ago. Later, (barren) porphyry dykes from the stock have cross-cut the host rocks and mineralisation through most of the Long Project's deposits.

Long Project tenure and infrastructure map



Regional geology and nickel deposit locations

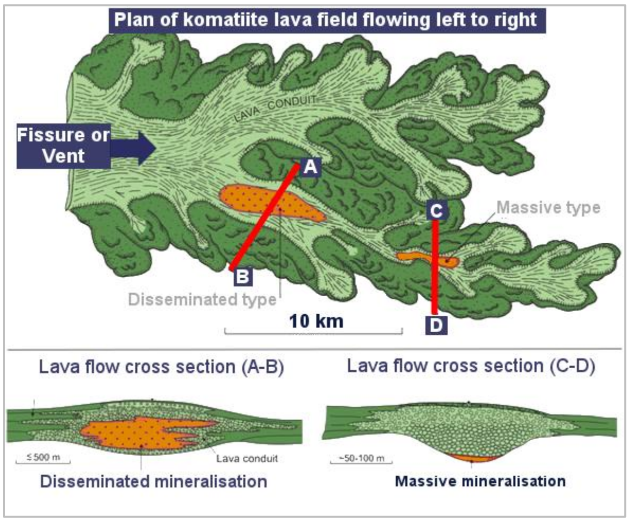


Since deposition and intrusion of the host sequences, the rocks of the Kambalda region have undergone four phases of deformation over a 300Ma period, with these events resulting in a north-northwest structural trend through the area, with folding and faulting, and metamorphism ranging from greenschist to amphibolite grade.

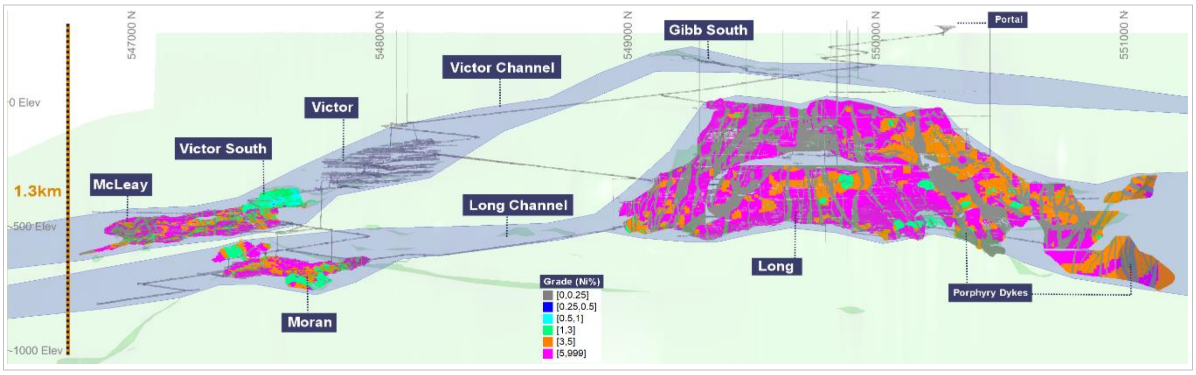
Kambalda-style nickel-sulphide deposits are found at the lava channel basal contacts and are typically up to 3km long, 50-300m wide, and ranging from 5m to 50m in true thickness. Tonnages range from 0.5-10Mt per deposit or deposit lense. Mineralisation usually grades upward from massive sulphides through to matrix textures then into disseminated mineralisation styles. Mineralisation is often remobilised into other structures resulting in mineralised lodes, known as surfaces, having a variety of dips and strikes within a single deposit area.

Long Project's deposits (Victor South, McLeay and Moran) are typical Kambalda-styles. The deposits have been interpreted to occur in two parallel lava channels that have eroded into a now steeply east dipping mafic basement. The Long and Moran deposits are interpreted to have formed in a deeper wider channel while the McLeay, Victor South and Gibb deposits are in a shallower (now upper) channel.

Lava-channel models for Kambalda-style nickel deposits



Long section projection looking west of interpreted lava channels and nickel deposits at Long Project



Mineral Resources

IGO's mine geologists prepared the Long Project's MREs using routine industry approaches of geological interpretation of drill results, preparation of digital wireframes of the geology and mineralisation and then estimating grades and density into digital block models using geostatistical methods. Details are included in the JORC Table 1 for the Long Project in the supplementary information of this report. The MRE was last updated in 2015 and then adjusted annually for mining depletions.

In June 2018, IGO completed an end-of-mining review of remnant MREs at the Long Project, which resulted in reclassification of remnant Measured Resources to lower confidence Indicated Resources, and declassification of some previously reported resource volumes that did not have reasonable expectations of eventual economic extraction as required by the JORC Code. As Long Project is in care and maintenance since end of FY18 there has been no change to the MREs for end of CY18.

Long Project – end of FY18 and end of CY18 MREs

Deposit	JORC Class	FY18			CY18		
		Mass (Mt)	Nickel		Mass (Mt)	Nickel	
			%	kt		%	kt
Long	Measured	…	…	…	…	…	…
	Indicated	0.13	5.34	7	0.13	5.34	7
	Inferred	0.24	4.8	12	0.24	4.8	12
	Subtotal	**0.37**	**5.0**	**18**	**0.37**	**5.0**	**18**
McLeay + Victor South	Measured	…	…	…	…	…	…
	Indicated	0.24	3.35	8	0.24	3.35	8
	Inferred	0.05	3.5	2	0.05	3.5	2
	Subtotal	**0.29**	**3.4**	**10**	**0.29**	**3.4**	**10**
Moran	Measured	…	…	…	…	…	…
	Indicated	0.04	3.75	2	0.04	3.75	2
	Inferred	0.05	3.6	2	0.05	3.6	2
	Subtotal	**0.09**	**3.7**	**3**	**0.09**	**3.7**	**3**
Total	Measured	…	…	…	…	…	…
	Indicated	0.40	4.01	16	0.40	4.01	16
	Inferred	0.35	4.4	15	0.35	4.4	15
Long Project Total		**0.75**	**4.2**	**32**	**0.75**	**4.2**	**32**

- Reported at a >1.0% Ni MRE block model cut-off grade
- Some averages and sums are affected by rounding
- No Inferred Mineral Resources are considered excessively extrapolated

No ORE is reportable for Long Project as no mine plan is currently in place to demonstrate economic viability of any part of the MRE.

Exploration and potential

In the first half of FY19, IGO focused on underexplored areas that exhibited the potential to host a new mineralised trend at Long Project.

Two work programs were executed as planned for the start of FY19. A single stratigraphic DD hole was drilled beneath Lake Lefroy that failed to intersect the prospective geological contact.

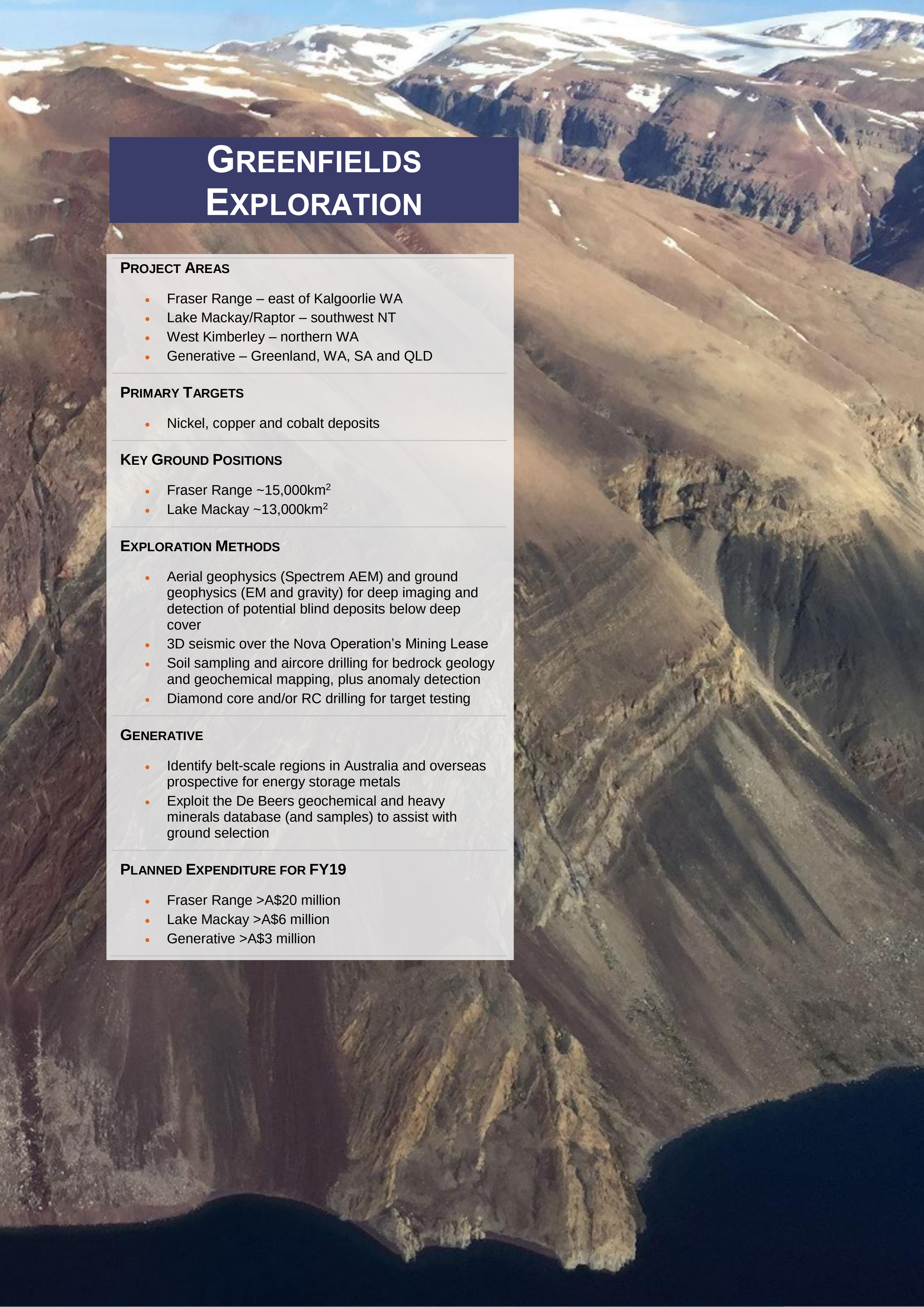
A second DD drill program was completed to test an underexplored area between the Lunnon and Victor-McLeay deposits. Disseminated to blebby nickel sulphides were intersected in drill hole LNSD-071 at 35m down hole. Assay results are pending. Down-hole EM surveys are planned in the second half of FY19 to determine whether follow-up drilling is required.

Hole details for LNSD-071 are:

- Collar at 6,548,021mN and 374,399mE
- Drilled -77° towards mine grid west
- Total depth 111.9m using NQ core

Blebby sulphides from LNSD-071 at 35m down hole

Diamond core drilling testing a stratigraphic target below Lake Lefroy in December 2018



Greenfields Exploration

Project Areas

- Fraser Range – east of Kalgoorlie WA
- Lake Mackay/Raptor – southwest NT
- West Kimberley – northern WA
- Generative – Greenland, WA, SA and QLD

Primary Targets

- Nickel, copper and cobalt deposits

Key Ground Positions

- Fraser Range ~15,000km^2
- Lake Mackay ~13,000km^2

Exploration Methods

- Aerial geophysics (Spectrem AEM) and ground geophysics (EM and gravity) for deep imaging and detection of potential blind deposits below deep cover
- 3D seismic over the Nova Operation's Mining Lease
- Soil sampling and aircore drilling for bedrock geology and geochemical mapping, plus anomaly detection
- Diamond core and/or RC drilling for target testing

Generative

- Identify belt-scale regions in Australia and overseas prospective for energy storage metals
- Exploit the De Beers geochemical and heavy minerals database (and samples) to assist with ground selection

Planned Expenditure for FY19

- Fraser Range >A$20 million
- Lake Mackay >A$6 million
- Generative >A$3 million

Introduction

Exploration discovery is core to IGO's business strategy to deliver a step-change in share value through organic growth. IGO believes in an in-house exploration approach that matches the entrepreneurial spirit and nimbleness of a junior exploration company, but with the science-driven approach and longer-term vision of a major. To achieve this, IGO has transformed its mining and exploration portfolio and ramped up its regional 'Greenfields' exploration activities in CY18.

IGO's exploration strategy is to discover mineral deposits that deliver high-margin long-life mines that have a company-expanding scale. IGO's exploration teams are searching for mineral deposits that are aligned to the emerging energy metals space, including magmatic nickel-copper-cobalt deposits (like IGO's Nova-Bollinger), sediment-hosted copper-cobalt deposits and iron oxide/sulphide copper-gold-(cobalt) deposits. The discovery of one or more of these deposits will enable IGO to develop large-scale business hubs centred on long-life mining and processing assets, which would be positioned in the bottom half of the industry cost curve.

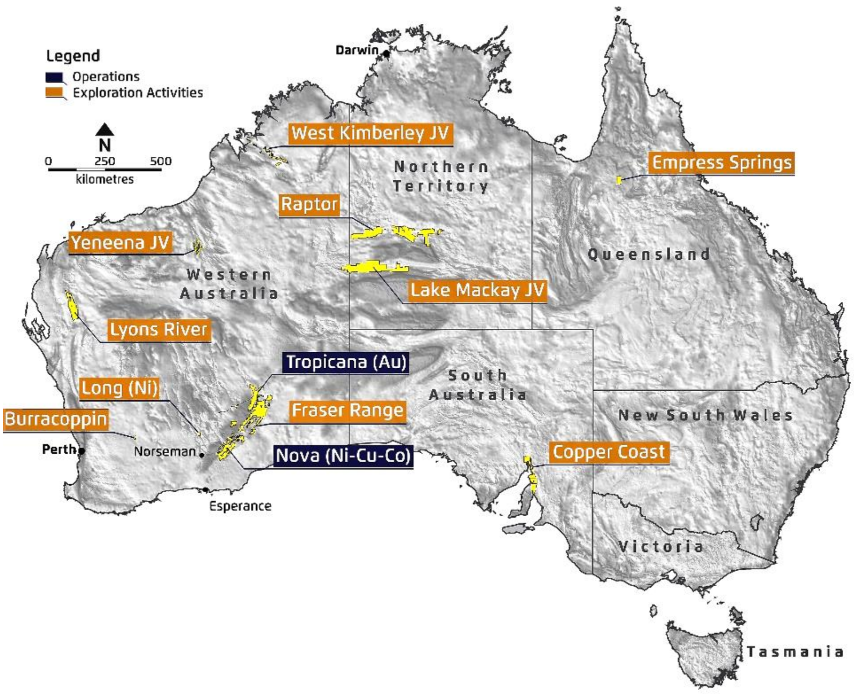
IGO differentiates itself from most other mining and exploration companies through:

- Exploration that focuses on 'belt-scale' projects in highly prospective emerging mineral terranes, preferably within more favourable investment jurisdictions in Australia and overseas. This focus not only includes underexplored belts where IGO can be a 'first mover' but also proven world-class terranes where new exploration opportunities can be realised in a one to three-year timeframe through the application of new ideas and/or technologies.
- Recognition that IGO's exploration team members are crucial to success. Over the last two years IGO has recruited a high-quality team, which now boasts some of the most successful and knowledgeable explorers in the business. Key members include; Mr Ian Sandl (formerly Teck Resources and BHP Minerals), Dr Paul Polito (formerly Anglo American), Dr Steve Beresford (formerly First Quantum Minerals and WMC), Dr Andrew Fitzpatrick (formerly Cameco and CSIRO) and Mr Graeme Cameron (formerly Quantum Pacific Exploration and Geoinformatics). IGO plans to be one of the world's most successful exploration teams, which will be measured by the ability of the team to deliver material discoveries.
- Using recent technologies and embedding research and development into the culture of IGO as key enablers to discoveries. To unlock new mineral discoveries, particularly under cover and in deep bedrock environments immediately around IGO's mining assets, IGO adopts the use of cutting-edge fit-for-purpose technologies and research to generate new data and develop new methodologies for targeting, vectoring towards, and directly detecting mineral deposits and their host geological environments.

IGO is also working closely with researchers and geoscientists at many organisations, including CSIRO, the CET (Centre of Exploration Targeting) at University of Western Australia and Curtin, the NT Geological Survey, the Geological Survey of WA, Geoscience Australia, and various consultancies. Research collaborations include applied research in exploration regolith geochemistry and mineral deposit studies.

In FY18, IGO's near mine and Greenfields exploration expenditure was A$45 million. The exploration expenditure for FY19 is expected to be at A$51 million.

IGO's Australian exploration projects and joint ventures



Fraser Range

The Fraser Range project, east of Norseman in WA, is an underexplored belt that is prospective for nickel-copper-cobalt magmatic sulphide, polymetallic sulphides (Cu-Zn-Ag-Au) and orogenic gold deposits. By the end of FY18, IGO had consolidated the largest ground position of any company in the Fraser Range with tenements totalling ~15,000km^2 through direct ownership or joint venture partnerships.

IGO's Fraser Range exploration has continued to focus on extensive geophysical data collection which has incorporated the powerful airborne electromagnetic (AEM) platform, Spectrem-Air, which has flown more than 40,000 line-km across the tenement package to date.

On the ground, IGO completed moving loop electromagnetic (MLEM) surveys using its in-house fluxgate system and more recently, using the deep-penetrating Low- and High-Temperature SQUID EM systems.

To complement the geophysical work, IGO is mapping the basement geology under extensive areas of transported cover using aircore drilling and, in the process, has identified many subsurface geochemical anomalies for follow-up surveys and/or drill testing in 2019 – refer to the anomaly map and tabulation of aircore drilling highlights on the following page. Since July 2018, IGO has completed 124km of aircore drilling.

Andromeda Prospect

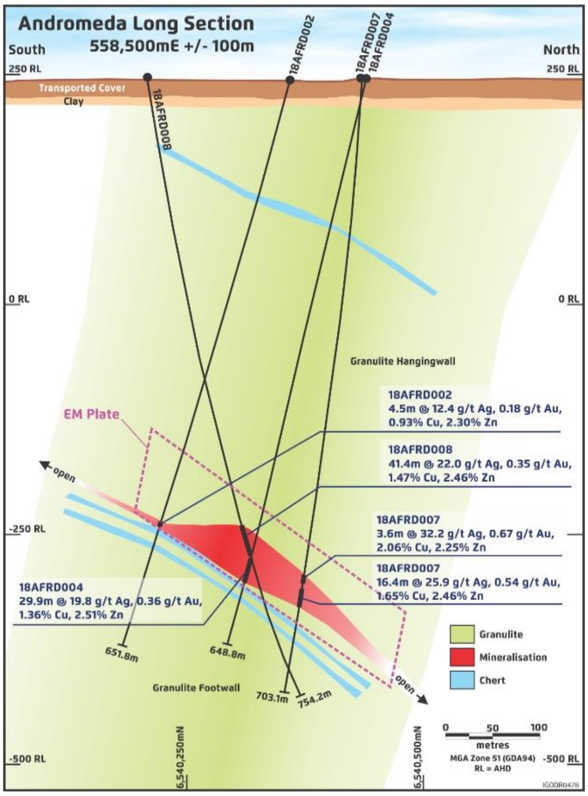
Since reporting the discovery of volcanic hosted massive sulphide (VHMS) mineralisation on IGO's Andromeda Prospect in July 2018, results have been received from two more diamond drill holes (18AFRD007 and 18AFRD008). Drill hole 18AFRD007 intersected two zones of mineralisation including an upper lens of 3.6m grading 2.06% Cu, 2.25% Zn, 0.67g/t Au and 32.2g/t Ag from 539.06m downhole, and a lower lens of 16.4m grading 1.65% Cu, 2.46% Zn, 0.54g/t Au and 25.9g/t Ag from 547.61m downhole – see the figure and tabulation to the right.

Drill hole 18AFRD008 aimed to test the width of the EM plate by drilling across the interpreted strike of the mineralisation, thus allowing better EM coupling and modelling for future drill programs. The drill hole appears to have intersected the contact between the footwall metasediments and the lower part of the mineralised lens in four places between 435.0m and 584.6m indicating that the Andromeda lens is at least 150m wide. Full details regarding the Andromeda drill intersections are included in the supplementary information of this report.

Other Fraser Range prospects

Towards the end of 2018, diamond drilling of geophysical conductors at three other Fraser Range prospects resulted in the 'technical' successes of intersecting disseminated to semi-massive iron sulphides (pyrrhotite) within a thick exhalative package comprising carbonate, grunerite BIF, garnet gneiss and meta-chert. These results not only confirmed that IGO's exploration methods are working, albeit the sulphides did not contain payable metals, but highlighted the potential for VHMS-style mineralisation in multiple locations with the belt.

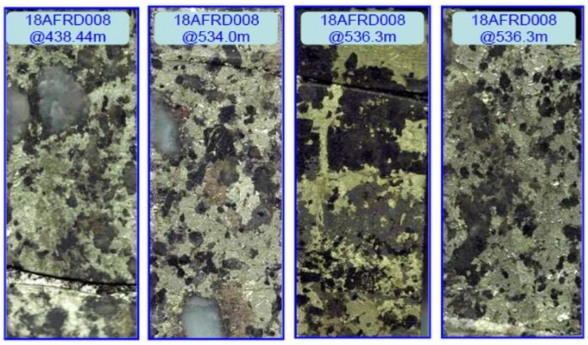
Andromeda cross section looking east



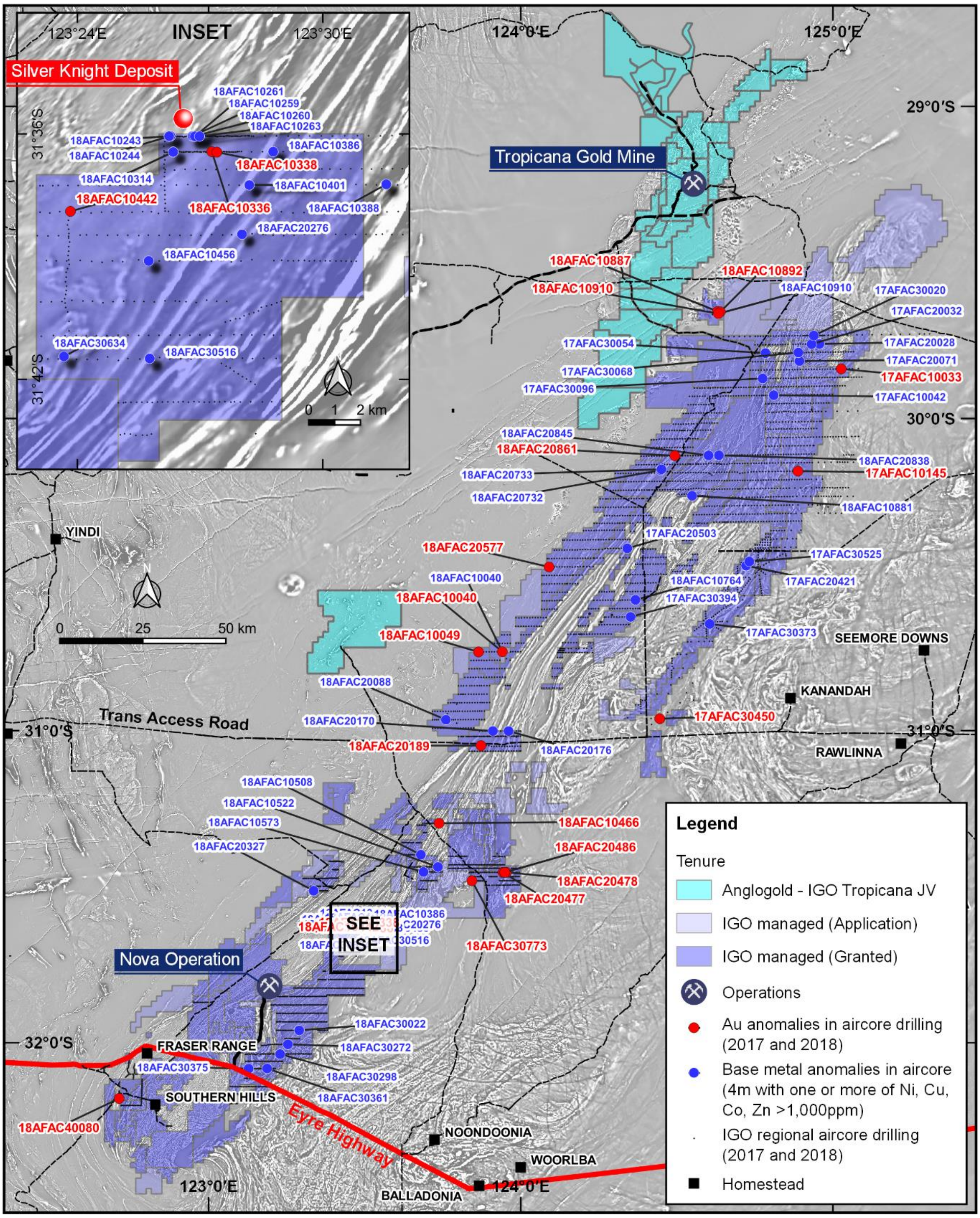
Andromeda diamond drilling significant intercepts

Hole ID	From (m)	To (m)	Width (m)	Cu (%)	Zn (%)	Au (ppm)	Ag (ppm)
18AFRD007	539.06	542.69	3.63	2.06	2.25	0.67	32.2
	547.61	564.00	16.39	1.65	2.46	0.54	25.9
18AFRD008	435.02	438.54	3.52	2.51	2.32	0.38	31.6
	499.57	504.24	4.67	0.63	1.92	0.38	12.1
	531.18	572.54	41.36	1.47	2.46	0.35	22.0
	576.70	584.55	7.85	0.77	2.11	0.68	13.3

VHMS mineralisation in drill hole 18AFRD008



Fraser Range aircore drilling locations and anomalous drilling results to date



Fraser Range significant base metal aircore intercepts – ranked increasingly by tenement number then nickel grade

Exploration Licence	Hole Identifier	Location (GDA, UTM Z51)			Aircore interval (m)			Grade (ppm)				
		East	North	AHD	From	To	Length	Ni	Cu	Co	Zn	Pb
E28/1475	18AFAC20733	639,673	6,662,339	256	34	51	17	**1,553**	58	177	108	2
	18AFAC20732	639,439	6,662,001	257	22	25	3	**2,090**	54	190	395	5
E28/1630	18AFAC20327	531,917	6,513,535	269	10	14	4	154	70	**1,330**	31	33
E28/2017	18AFAC10522	569,805	6,521,793	242	2	6	4	9	20	**1,150**	14	3
	18AFAC10508	564,637	6,526,171	217	18	38	20	**1,334**	20	87	56	3
	18AFAC10573	565,394	6,520,052	207	34	44	10	**3,182**	24	480	122	3
E28/2201	18AFAC30516	540,701	6,493,673	206	58	62	4	28	164	16	**1,230**	57
	18AFAC30634	537,389	6,493,775	239	46	50	4	32	**1,290**	26	140	97
	18AFAC10388	549,879	6,501,501	222	46	50	4	49	**1,120**	14	25	5
	18AFAC10401	544,582	6,501,492	240	62	66	4	784	**2,330**	772	11	11
	18AFAC10243	541,493	6,503,709	260	34	38	4	**1,200**	**1,390**	722	130	11
	18AFAC10244	541,545	6,503,719	261	34	42	8	**1,310**	591	153	118	8
	18AFAC10259	542,393	6,503,709	257	26	44	18	**1,594**	73	187	93	2
	18AFAC10314	541,649	6,502,997	256	26	45	19	**1,601**	744	68	17	3
	18AFAC20276	544,293	6,499,269	243	42	45	3	**1,607**	**1,271**	663	228	8
	18AFAC10260	542,443	6,503,704	257	26	36	10	**1,743**	136	336	113	4
	18AFAC10261	542,492	6,503,700	257	26	30	4	**1,870**	258	679	115	8
	18AFAC10456	540,681	6,498,078	254	42	54	12	**1,927**	60	285	413	2
	18AFAC10263	542,669	6,503,703	255	18	52	34	**1,940**	451	148	39	2
	18AFAC10401	544,582	6,501,492	240	54	62	8	**1,964**	112	**2,390**	138	6
	18AFAC10314	541,649	6,502,997	256	42	45	3	**2,753**	**1,460**	93	43	8
	18AFAC10401	544,582	6,501,492	240	58	62	4	**3,070**	182	**3,480**	28	4
	18AFAC10386	545,514	6,502,994	245	50	57	7	**4,624**	48	328	240	134
E28/2266	18AFAC10764	631,095	6,616,069	206	62	71	9	**1,906**	123	161	368	8
E28/2301	17AFAC20503	628,798	6,634,388	249	34	51	17	**2,652**	75	129	128	3
E28/2366	17AFAC30525	666,294	6,629,181	212	94	98	4	**2,993**	46	186	164	9
	17AFAC20421	665,284	6,627,744	210	114	120	6	**3,162**	72	253	181	12
E28/2367	17AFAC30373	653,768	6,607,210	206	114	117	3	61	**1,397**	13	417	5
E28/2419	18AFAC20170	586,917	6,569,941	256	6	10	4	11	68	**1,090**	43	2
	18AFAC20176	591,716	6,569,884	244	42	50	8	**1,170**	223	179	289	8
E28/2459	18AFAC10040	590,054	6,598,064	285	70	74	4	23	**1,090**	21	100	3
E28/2623	18AFAC20088	572,596	6,574,057	279	34	40	6	**1,513**	27	200	63	4
E28/2625	17AFAC30394	629,517	6,610,048	214	18	22	4	20	28	**1,220**	27	5
E39/1454	17AFAC30068	682,606	6,703,152	265	10	14	4	8	76	**2,420**	49	3
	17AFAC20071	682,884	6,700,134	255	34	39	5	**1,154**	48	129	110	15
	18AFAC10910	658,031	6,717,356	314	26	30	4	**1,200**	76	168	579	10
	17AFAC20032	686,739	6,706,083	235	34	48	14	**1,241**	26	189	105	6
	18AFAC10910	658,031	6,717,356	314	38	42	4	**1,270**	123	85	251	8
E39/1653	17AFAC20028	689,175	6,706,098	227	22	27	5	**1,222**	233	116	177	11
E39/1654	17AFAC30054	672,401	6,703,121	291	14	18	4	22	110	**1,890**	94	4
	17AFAC30020	687,490	6,709,105	239	34	50	16	**1,243**	255	157	66	7
	17AFAC30096	671,394	6,694,123	274	50	63	13	**1,386**	169	96	106	14
E39/1731	18AFAC20845	654,276	6,667,055	245	18	22	4	49	53	**1,110**	27	7
	18AFAC10881	648,990	6,652,794	226	62	66	4	**1,568**	120	93	50	7
	18AFAC20838	657,478	6,667,047	230	30	43	13	**1,755**	42	97	57	2
E39/1733	17AFAC10042	674,732	6,688,129	250	22	43	21	**1,560**	44	138	101	16
E69/2989	18AFAC30272	523,992	6,459,010	221	34	38	4	34	114	1,140	55	8
	18AFAC30298	521,612	6,455,552	217	30	34	4	45	**1,140**	41	50	13
	18AFAC30022	527,411	6,463,983	271	38	42	4	63	54	32	**1,110**	4
	18AFAC30361	517,686	6,450,465	239	50	55	5	330	502	261	**1,224**	216
E69/3052	18AFAC30375	512,095	6,450,418	253	10	14	4	8	325	**1,710**	210	3

Notes:1,000ppm = 0.1%

Lake Mackay

The Lake Mackay JV is 400km west-northwest of Alice Springs and extends across the NT/WA border. This is a belt-scale project with 8,529km^2 of granted tenements and 4,429km^2 of tenement applications covering the Southwestern Aileron Province and the Central Australian Suture.

IGO is the manager and operator of the project and has now completed the earn-in phase of the agreement with Prodigy Gold NL (Prodigy). IGO now holds a 70% JV interest and both partners will now fund their respective share of the work programs. IGO and Prodigy are presently in the sole funding period of the agreement with Castile Resources on EL29747 and EL31794.

RC drilling in FY17 led to the discovery of copper-gold (Zn-Pb-Ag-Co) mineralisation at the Grapple prospect, and follow-up diamond core drilling in CY18 intersected significant polymetallic mineralisation. Refer to IGO's ASX release on 15 November 2017.

In the first half of FY19, the Spectrem-Air AEM survey continued, with completion of the survey on 11 January 2019. The survey consisted of 14,951 line-km and included an area that was co-funded by the NT Government under the Geophysics and Drilling Collaboration Program. At the time of reporting, 55% of the survey had been interpreted with 39 AEM anomalies selected for ground MLEM surveys. The interpretation of the remaining 45% of the survey is continuing.

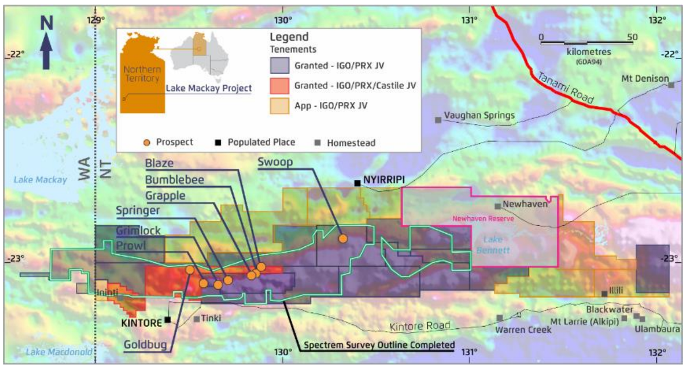
Eleven AEM targets were tested with 83 line-km of MLEM. Eight of these targets have conductors that could be associated with conductive massive sulphide mineralisation.

Soil sampling was completed over large areas of the project that had never been sampled. Analysis of the results has generated several styles of soil anomalies including orogenic gold targets, 'Grapple-style' copper-gold-cobalt targets and nickel-cobalt-manganese laterite targets.

Sacred site clearance surveys were undertaken to allow clearing of access tracks, ground geophysics and drilling over priority AEM and soil geochemical anomalies.

High priority targets from the MLEM and soil sampling will be systematically tested by prospecting and drilling in the 2019 field season that is anticipated to start in March. This will include the lateritic (Ni-Co-Mn) Grimlock Prospect.

Lake Mackay tenure, prospect and gravity image



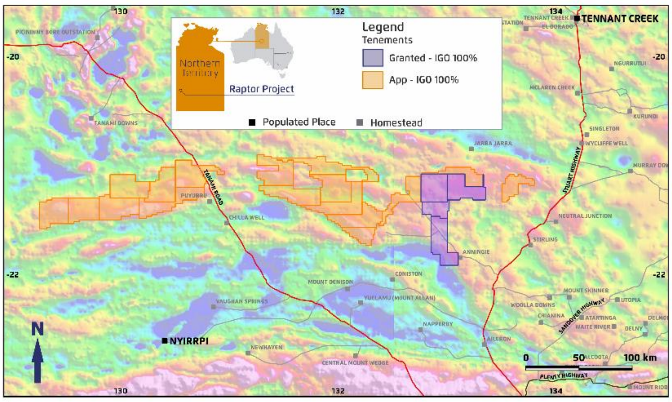
Raptor

The Raptor Project is ~350km northwest of Alice Springs in the NT. Raptor is 100% IGO-owned belt-scale ground position covering 14,450km^2 of outcropping to shallow-covered Palaeoproterozoic geology along the Willowra Gravity Ridge (WGR). IGO interprets that the WGR represents a palaeocratonic margin characterised by an extensive belt of mafic to ultramafic intrusions with potential to host magmatic nickel-copper-cobalt sulphide deposits, akin to the Fraser Range and IGO's Nova-Bollinger deposit.

In the first half of FY19 a 41,899 line-km aeromagnetic and radiometric survey, flown at a 100m flight line spacing, was completed over the central part of the project. This survey was co-funded by the NT Government under the Geophysics & Drilling Collaboration Program.

Four tenements covering 3,025km^2 on areas covered by perpetual pastoral leases have been granted. An 'on-country' meeting is scheduled with traditional owners in the second half of FY19 to discuss the remaining 16 tenements covering 11,525km^2.

Raptor Project tenure and gravity image



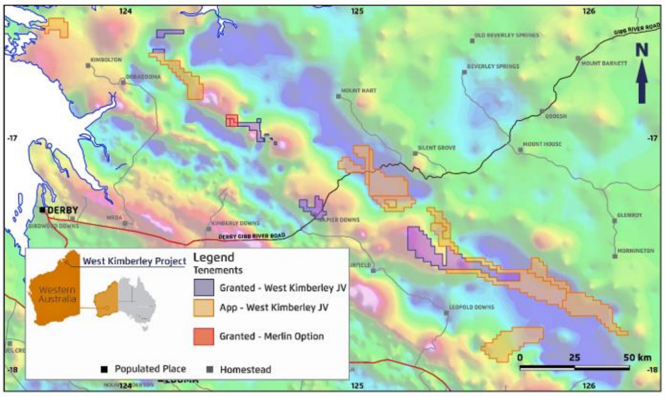
West Kimberley JV

The West Kimberley JV is ~150km northeast of Derby in WA. It is a belt scale project covering 2,220km^2 in the Palaeoproterozoic King Leopold Orogen on the western Kimberley Craton margin. The project includes the recently discovered Merlin polymetallic (Ni-Cu-Co-PGE) prospect, which confirms the belt is prospective for nickel sulphide mineralisation.

Agreements between IGO and Buxton Resources Limited (Buxton) were announced to the ASX on 29 November 2018. These agreements included an earn-in/JV to jointly explore the West Kimberley nickel belt and a subscription by IGO for A$4.1 million worth of Buxton shares to become a 15% shareholder in Buxton. Buxton will use the subscription funds to drill targets at Merlin, with IGO holding a two-year option for an earn-in/JV at Merlin over three tenements covering 29.6km^2. The option allows IGO to earn a 70% interest in the Merlin tenements by spending A$8 million over four years. Buxton would then be free carried through to completion of a Feasibility study.

Under the West Kimberly exploration JV agreement, IGO will explore the regional tenements that presently consist of nine granted tenements covering 490km^2 and 13 tenement applications covering 1,700km^2. IGO can earn an 80% interest in these regional tenements by spending A$3 million over a four-year period. Buxton will be free-carried through to completion of a Feasibility study on any viable discovery.

West Kimberley JV and gravity image



Example of geomorphology across the West Kimberley JV

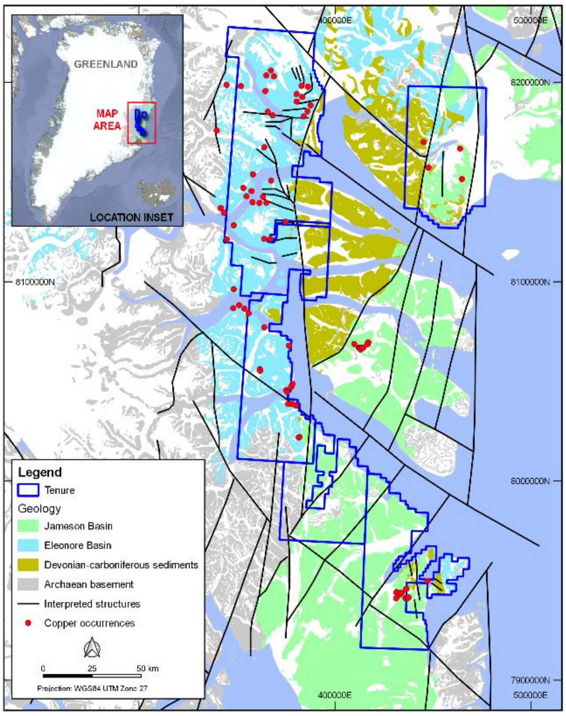
Generative exploration

During 2018, IGO's expanded project generation and evaluation team identified and progressed several new belt-scale nickel and copper sulphide opportunities, including the West Kimberley nickel-copper project in WA (described earlier), the Frontier copper-cobalt project in Greenland, and the Yeneena copper-cobalt project in the Paterson Province of WA.

Frontier Project

In July 2019, IGO entered into an option/JV arrangement for the Frontier Project in Greenland with Greenfields Exploration Ltd (Greenfields), a private Australian company. IGO can earn an 80% interest in ~13,000 km^2 of granted exploration licences through in-ground exploration expenditure with Greenfields the initial project manager. The Frontier Project is prospective for sediment-hosted copper-cobalt deposits in geological settings analogous to the Central African Copper Belt in Zambia and DRC, and the Zechstein Basin in Poland and Germany, which is host to the world's largest sediment-hosted copper deposit, the Kupferschiefer. A field visit to East Greenland by IGO Geologists in August 2018 confirmed prospective geology for sediment-hosted copper mineralization and reported widespread copper mineral occurrences. Follow-up work is currently being planned for the 2019 field season.

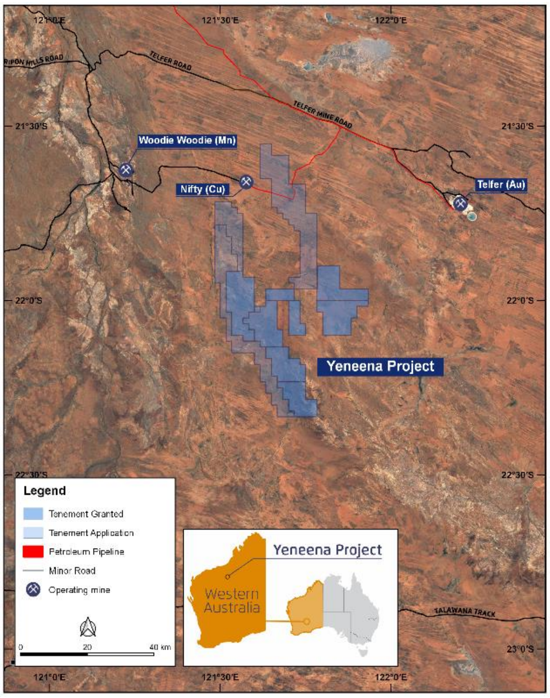
Copper occurrences located in the Frontier Project in 2018



Yeneena Project

The Yeneena Project comprises a large land position covering more than 1,100 km^2 across the highly prospective Paterson Province in West Australia, host to world-class copper deposits at the Nifty and Telfer mines, and to the Rio Tinto Winu discovery reported in press. Yeneena is a collaboration between IGO and Encounter Resources (ENR)[1]. Yeneena represents a compelling sediment-hosted copper-cobalt opportunity covering a 50km strike length of highly prospective stratigraphy. At several prospects within Yeneena, copper mineralisation is associated with strongly altered shales and carbonates.

Yeneena Project



De Beers Database

An important ongoing IGO generative exploration initiative is to capitalise on IGO's ownership of one of the largest competitive Australia-wide geochemical datasets and mineral sample collections, including the former De Beers heavy mineral concentrate and geochemical sample collection and associated database. IGO's primary goal is to leverage the data and samples to assist in our exploration efforts for key battery base metals (Ni-Cu-Co), and hard-rock lithium pegmatite deposits. IGO has allocated a robust budget for this initiative.

Other Opportunities

Other early-stage battery metal opportunities across Australia include lithium exploration along the eastern margin of the Carnarvon Basin at the Lyons River project, and copper exploration along the Torrens Hinge Zone within the Stuart Shelf, South Australia known as the Copper Coast Project.

In addition to battery metals, IGO is also involved in two early-stage gold JVs with Moho Resources – the Empress Springs project in the historically significant Croydon Goldfield in north QLD, and the Burracoppin Project in southwest WA. Moho are the project managers.

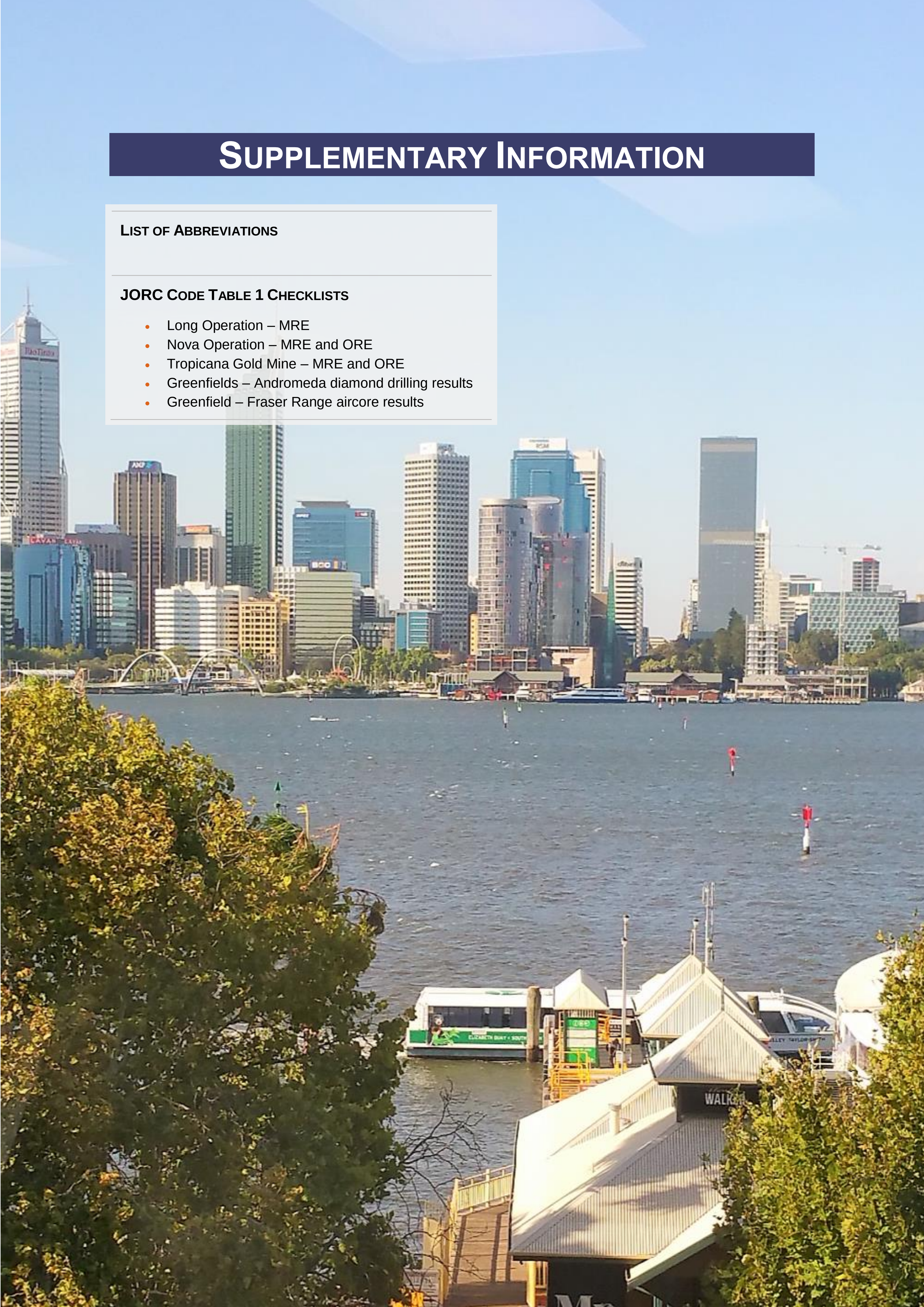
[1] Encounter and Independence to advance Paterson Copper-Cobalt Exploration – ASX 12 Nov 2018

SUPPLEMENTARY INFORMATION

LIST OF ABBREVIATIONS

JORC CODE TABLE 1 CHECKLISTS

- Long Operation – MRE
- Nova Operation – MRE and ORE
- Tropicana Gold Mine – MRE and ORE
- Greenfields – Andromeda diamond drilling results
- Greenfield – Fraser Range aircore results



Initialisms

Abbreviation	Explanation
3D	Three dimensional
AEM	Airborne electromagnetic (survey)
AGA	AngloGold Ashanti Australia
AHD	Australian height datum
ALS	ALS laboratory Perth
ALS	ALS laboratories
AMT	Audiomagnetotelluric (survey)
ASX	Australian Stock Exchange
BHP	BHP Nickel West
Buxton	Buxton Resources Limited
BV	Bureau Veritas Laboratory Perth
CE	Consensus Economics
CET	Centre for Exploration Targeting
Creasy	Creasy Group Pty Ltd
CRM	Certified reference material
CSIRO	Commonwealth Scientific and Industrial Research
CY18	2018 financial year
DD	Diamond core drill hole or diamond core drilling
DTM	Digital terrain model
EM	Electromagnetic survey
ENR	Encounter Resources Ltd
ESA	European Space Agency
FA-MS	Fire assay and mass spectroscopy chemical
FS	Feasibility study
FTP	File transfer protocol
FX	Foreign exchange A$:US$
FY18	2017 financial year
FY19	2019 financial year
Genalysis	Genalysis laboratory Perth
GFA	GoldFields Australia Pty Ltd
GSWA	Geological Survey of Western Australia
HARD	Half absolute relative difference
ICP-MS	Inductively couple plasma – mass spectrometry
ICP-OES	ICP optical emission spectroscopy
IGO	Independence Group NL
JORC	Joint Ore Reserves Committee
JV	Joint venture

Abbreviation	Explanation
LA-ICP-MS	Laser ablation ICP-MS chemical analysis
LOI	Loss on ignition analysis
LT-SQUID	Low temperature superconducting quantum
LUC	Local uniform conditioning
MAIG	Member of the Australian Institute of
MAusIMM	Member of the Australasian Institute of Mining
MGA	Map grid of Australia
MLEM	Moving loop electromagnetic (survey)
Moho	Moho Resources NL
MRE	Mineral Resource estimate
NSR	Net smelter return dollar per tonne value
NT	Northern Territory
ORE	Ore Reserve estimate
OTCPA	Ore tolling and concentrate purchase agreement
PAF	Potentially acid forming waste rock
PFS	Pre-Feasibility Study
Prodigy	Prodigy Gold NL
PSD	Particle size distribution
QLD	Queensland
RC	Reverse circulation percussion drilling
RL	Reduced level - elevation
RPGeo	Registered Professional Geoscientist
RQD	Rock quality designation (fractures per metre)
RTK-GPS	Real time kinematic global positioning system
SA	South Australia
SGS	SGS laboratory Perth
SIGM	St Ives Gold Mining Company
SMU	Selective mining unit
SO	Stope optimiser software
SSM	State survey mark
TGM	Tropicana Gold Mine
TMG	Tropicana Gold Mine grid
VHMS	Volcanic hosted massive sulphide deposit
WA	Western Australia
WMC	Western Mining Corporation
XRF	X-ray fluorescence analysis

Units of measurement

Unit	Explanation
A$	Australian dollars
US$	United States of America dollars
µm	Micrometre – one thousandth of a millimetre
g/t	Grams per tonne
Ga	Billions of years
km	Kilometres
km^2	Square kilometres
koz	Thousands of troy ounces
kt	Thousands of tonnes
line-km	Kilometres surveyed along survey lines
m	Metre
Ma	Millions of years
mE	Grid metres in the east direction
mElev	Grid metres in elevation
mN	Grid metres in the north direction
Moz	Millions of troy ounces
Mt	Millions of tonnes
Mt/a	Millions of tonnes per year
mX	Grid metres in the X-direction
mY	Grid metres in the Y-direction
mZ	Grid metres in the Z-direction
oz	Troy ounce (31.1035 grams)
ppb	Parts per billion
ppm	Parts per million
t	Tonne(s) dry

Symbols

Symbol	Explanation
%	Weight percent or percentage proportion
°	Degrees
~	Approximately
‘	Seconds
“	Minutes
±	Plus, and minus or above and below

Core diameters

Code	Diameter (mm)
HQ	63.5
BQTK	40.7
AQ	30.5
NQ2	50.6
NQ	47.6
LTK48	50.6
LTK60	50.6

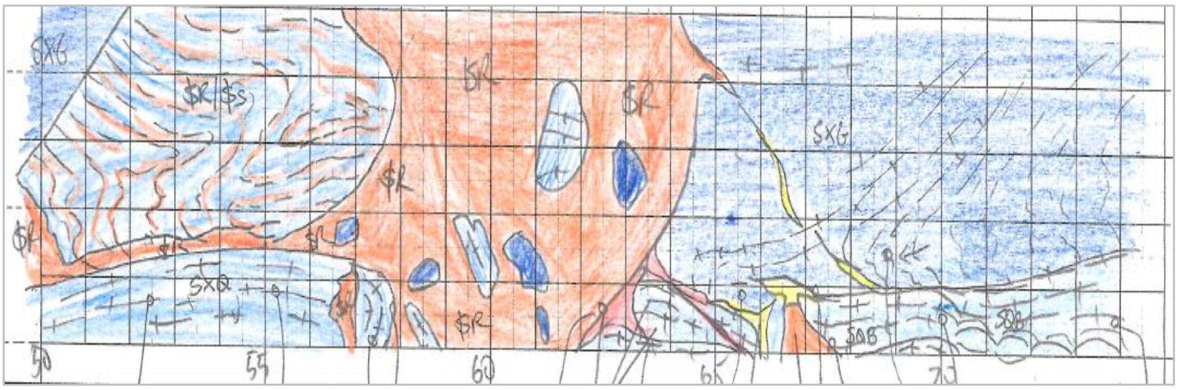
Chemical elements and compounds

Symbol	Element
Ag	Silver
Al	Aluminium
As	Arsenic
Au	Gold
B	Boron
Be	Beryllium
Bi	Bismuth
Ca	Calcium
Cd	Cadmium
Ce	Cerium
Co	Cobalt
Cr	Chromium
Cs	Caesium
Cu	Copper
Dy	Dysprosium
Er	Europium
Fe	Iron
Ga	Gallium
Gd	Gadolinium
Ge	Germanium
Hf	Hafnium
Hg	Mercury
Ho	Holmium
In	Indium
La	Lanthanum
Lu	Lutetium
$LiBO_3$	Lithium borate
Mg	Magnesium
Mo	Molybdenum

Symbol	Element
Na	Sodium
$NaNO_3$	Sodium nitrate
Nb	Niobium
Ni	Nickel
P	Phosphorus
Pb	Lead
Pd	Palladium
Pr	Praseodymium
Pt	Platinum
Rb	Rubidium
S	Sulphur
Sb	Antimony
Sc	Scandium
Se	Selenium
Si	Silica
Sm	Samarium
Sn	Tin
Sr	Strontium
Ta	Tantalum
Te	Tellurium
Th	Thorium
Ti	Titanium
Tl	Thallium
Tm	Thulium
U	Uranium
V	Vanadium
W	Tungsten
Y	Yttrium
Yb	Ytterbium
Zn	Zinc

NOVA OPERATION – SAMPLING TECHNIQUES AND DATA	
JORC Criteria	**Commentary**
Sampling techniques	• The Nova-Bollinger deposit has been sampled using diamond drill holes (DD) on a nominal 12.5m×12.5m grid spacing with a small number of reverse circulation percussion (RC) holes. • A total of 15 RC, 271 surface DD and 1,843 underground DD holes were drilled for 3,120m, 113,180m and 280,055m 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. • Representivity has been ensured by monitoring core recovery to minimise sample loss. • Sampling was carried out under IGO protocols and QAQC procedures consistent with good industry practices.
Drilling techniques	• DD accounts for 99% of the drilling in the Mineral Resource area and comprises BQTK (40.7mm diameter), NQTK (50.7mm diameter) or HQ (63.5mm diameter) sized core. • Surface drill hole pre-collar lengths range from 6m to 150m and hole lengths range from 50m 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 90m 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 $\geq$ 99% for both Nova and Bollinger and there are no core loss issues or significant sample recovery problems. • RC samples were visually checked for recovery, moisture and contamination. • For orientation marking purposes, the DD core from Nova and Bollinger was 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 DD resource definition drilling has very high 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 diamond drill holes for recovery, 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 appropriate to support any downstream studies. • 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 20m to 60m.

Geological wall mapping diagram in Nova underground



NOVA OPERATION – SAMPLING TECHNIQUES AND DATA (CONTINUED)	
JORC Criteria	**Commentary**
Sub-sampling techniques and sample preparation	• DD core from Nova-Bollinger was subsampled over lengths ranging from 0.3m 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 subsamples were collected from the same side of the core. • The sample preparation of DD core involved oven drying (4 to 6 hrs at 95°C), coarse crushing in a jaw-crusher to 100% passing 10 mm, then pulverisation of the entire crushed sample in Essa LM5 grinding mills to a particle size distribution of 85% passing 75 microns. • 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 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 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. The 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	• Surface drill hole samples – Samples collected using surface drilling have been analysed using a four-acid digest multi element suite with ICP-OES or ICP-MS reading (25g or 50g FA/MS for precious metals). – The acids used are hydrofluoric, nitric, perchloric and hydrochloric acids, suitable for silica-based samples. The digestion method approaches total dissolution for a sulphides and all but the most resistant silicate and oxide minerals. – Total sulphur from surface drill holes was assayed using a combustion furnace. • Underground drill hole samples – Samples collected from underground diamond drilling 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 XRF. – 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 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. • Field duplicates are inserted routinely at a rate of 1:20 samples and replicate results demonstrate good repeatability of results within the mineralised zones. • Laboratory quality control processes include the use of internal lab standards, certified reference materials (CRMs), blanks, and duplicates. • Umpire laboratory checks are routinely carried out on 5% of the total number of samples. The results returned to date have good precision as quantified by the half absolute relative difference (HARD) statistics. • 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 the results of blank assays indicate that any potential sample cross contamination has been minimised.
Verification of sampling and assaying	• Significant intersections in DD have been inspected and verified on multiple occasions by IGO's senior geological staff and Optiro MRE 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 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 Mineral Resource 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 SQL database server by the IGO 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 half detection limit text values to numeric values prior to grade estimation work.

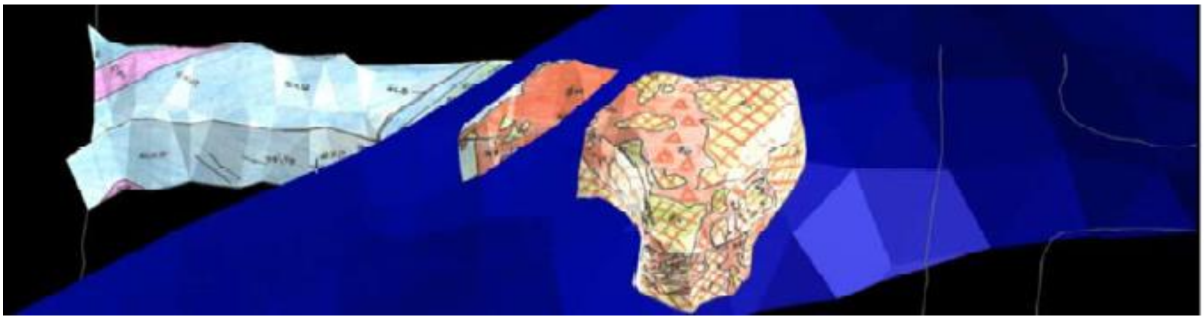
NOVA OPERATION – SAMPLING TECHNIQUES AND DATA (CONTINUED)	
JORC Criteria	**Commentary**
Location of data points	• The hole collar locations of surface holes were surveyed by Whelan's Surveyors of Kalgoorlie using RTK GPS equipment, which was connected to the state survey mark (SSM) network. • Survey elevation values are recorded in a modified AHD elevation where a constant of +2,000m was added to the AHD 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, 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. Stated accuracy is ±0.25° in azimuth and ±0.05° in inclination. • Down hole survey QC involved field calibration using a test stand. • Underground holes collar locations were surveyed using Leica TS15P total station units by IGO's mine surveyors. • 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 trace paths on 1m intervals relative to the collar azimuth and dip. The stated accuracy is ±0.2° in azimuth and ±0.1° in inclination. Only gyro and Deviflex data has been used for Mineral Resource work. • The grid system for Nova-Bollinger is 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 Mineral Resource estimation purposes.
Data spacing and distribution	• The nominal drill hole mineralisation pierce point spacing is 12.5 mN×12.5mE and is up to 40mN×40mE in several small areas yet to be infilled by grade control drilling, namely; a middle portion of the Conductor-5 domain and the Upper extent of Nova. • 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 MRE and ORE, and the classifications applied under the JORC Code. • For 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 based on oriented core indicates that the main sulphide controls are largely perpendicular to the average drill orientation. • Due to the constraints of infrastructure location a small number of holes are oblique to the C5 mineralisation at the northern margin of the deposit. • No orientation-based sampling bias is expected from the Mineral Resource drilling at Nova-Bollinger.
Sample security	• The sample chain-of-sample 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 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. • The risk of deliberate or accidental loss or contamination of samples is considered very low.
Audits or reviews	• A review of the sampling techniques and data was carried out by Optiro as part of prior resource estimates and onsite in September 2016. • An independent audit of the database was carried out in February 2018 by Optiro. • Optiro considers that the database is of sufficient quality for Mineral Resource estimation studies.
Mineral tenement and land tenure status	• Nova and Bollinger are located wholly within WA Mining Lease M28/376. This tenement is 100% owned by Independence Nova Pty Ltd. • The IGO tenements are within the Ngadju Native Title Claim (WC99/002). • There are no third-party rights or encumbrances on the Nova Operation. • Native title royalties on the nickel and copper production will apply based on the Ngadju Mining Agreement – details are commercially confidential. • The WA State royalties are paid in accordance with the Mining Act 1978 (WA). • IGO have provided written assurance that the tenement is in good standing and no known impediments exist. The tenement is held by Independence Nova Pty Ltd and expires on 14/08/2035.
Exploration done by other parties	• Exploration was undertaken at the Fraser Range area by Sirius Resources NL over a three-year period which resulted in the discovery of the Nova prospect in July 2012, with Bollinger discovered shortly after. • No previous systematic exploration was carried out in this area prior to the 2012 discovery.

NOVA OPERATION – SAMPLING TECHNIQUES AND DATA (CONTINUED)	
JORC Criteria	**Commentary**
Geology	• The global geological setting is a high-grade metamorphic terrane in the Albany Fraser mobile belt of Western Australia. • The Ni-Cu-Co deposits are 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 deposits are 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 a Mineral Resource estimate, 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. • Samples were aggregated into 1m long composites for Mineral Resource estimation work
Relationship between mineralisation widths and intercept lengths	• The Nova deposit is moderately east dipping in the west, flattening to shallow dipping in the east. • The Bollinger deposit is largely 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 length.
Diagrams	• Representative sections and plans are included in the body of this reports as well as in IGO's prior ASX releases of exploration results relating to Nova-Bollinger.
Further work	• Follow-up work on mineralised targets identified by Sirius Resources NL 200m to the south of the MRE area and targets to the west of Nova.

Diamond core hole intersection mineralisation in a Nova Operation's mine face

NOVA OPERATION – MINERAL RESOURCES	
JORC Criteria	**Commentary**
Database integrity	• All data entry is via direct entry into data electronic templates with lookup tables and fixed formatting used for logging, spatial and sampling data at Nova-Bollinger. • Data transfer and assay loading is electronic. • Sample numbers are unique and pre-numbered bags are 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 validate the data under the direction of the Acquire Database Administrator using IGO protocols. • The data for Nova-Bollinger is stored in a single database.
Site visits	• The Competent Person for the estimate is the Senior Resource geologist at Nova Operation and as such has detailed knowledge of the data collection, estimation, and reconciliation procedures for this estimate.
Geological interpretation	• The confidence in the geological interpretation of Nova-Bollinger is considered high in areas of close spaced drilling and is supported by an additional 1,060 underground holes totalling 176,913m drilled, since the last estimate reported in 2017. • Mining over 11 levels of ore development has added substantially to the geological understanding of the deposit. • Inferred Mineral resources make up a very small proportion of the tonnage (< 0.5%). These areas will be drilled by the end of CY18 and be resolved for the next MRE update. • 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 has a generally tabular geometry, with geological characteristics that define the mineralised domains. • The infill drilling has confirmed the outer bounds of the 2013 geological interpretations, but local complexity has been now identified and incorporated into the 2018 Mineral Resource estimate. • The current interpretation is geologically controlled, and supported by the new drilling and underground development, and is robust. • 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. • 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 infill drilling of Nova has confirmed the interpreted geological complexity, such as the pinch and swell nature of the mineralised domains, and the local effects of the intrusive gabbro units. • The spatial continuity of high and low MgO geological units has assisted in refining contact relationships.
Dimensions	• The Nova 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 (north) and 400m to 125m (east). • The Nova and Bollinger deposits are joined by an interpreted narrow east-west trending feeder zone that has a length of ~180m, thickness of 10m to 20m and north-south width of up to 80m.

3D mapping used to validate geological models at Nova Operation



NOVA OPERATION – MINERAL RESOURCES (CONTINUED)	
JORC Criteria	**Commentary**
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 (OK) routines implemented in Datamine Studio RM version 1.4.175.0. Block grades where then back calculated by dividing each accumulation by the density local estimates • The estimation drill hole sample data was coded for estimation domain using the three-dimensional wireframe interpretations prepared in LeapFrog Geo 4.2.3 software. • The drill 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 unfolding algorithm to optimise the grade connectivity in the often-undulating domain geometry. • For all domains, directional anisotropy axis semivariograms were interpreted using traditional experimental semivariograms or back-transformed normal-scores model interpretations. Semivariogram nugget effects were found to be low to moderate in the range of 6% to 20% of the data variance. The maximum range of grade continuity varied and was found to be deposit/domain dependant. Typically, maximum continuity ranges varied from 20m to 180m in the major direction dependent on mineralisation style. • Estimation sample searches were set to the ranges of the nickel accumulation variogram for each domain in the first sample pass and increased by factors for subsequent estimation passes. The maximum distance to nearest sample for any estimated block was 100 metres. The inferred portion of the MRE is <0.3% of the total tonnage, approximately 60% of the Inferred Mineral Resource is extrapolated greater than 30 metres beyond the data. • This estimate is an update of the prior Mineral Resource Estimates (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. • The accessory grades estimated in the update are Fe%, Mg% and S%. No specific acid-mine drainage variable has been estimated but sulphur can be used as a proxy where needed. • A single digital block model for Nova-Bollinger was prepared in Datamine Studio RM using a 6 mE×6mN×2mElv parent block size with sub-blocks permitted down to dimensions of 1.0 mE×1.0 mN×0.5mRL. • All block grade estimates were completed at the parent cell scale. Block discretisation was set to 6×6×2 nodes per block for all domains. • The dimensions of the sample search ellipse per domain was set based on the nickel variography parameters, due to the moderate to strong correlations between nickel with the other variables estimated. • Three estimation search passes were applied to each domain. The first estimation pass had ranges set to the nickel semi-variogram maximum with a requirement to find minimum of six and maximum of 36 samples for a block to be estimated. Sample selection was limited to three samples per hole. In the estimation second and third pass, a factor of two and 10 respectively were applied to the search ranges. • In the most of domains, most blocks were estimated in the first estimation pass (particularly for the main domains). However, some more sparsely-sampled domains were predominantly estimated on the second pass. • 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 IGO and Optiro for accuracy. • Refer further below to the item on estimation accuracy for model to mill reconciliation results.

NOVA OPERATION – MINERAL RESOURCES (CONTINUED)	
JORC Criteria	**Commentary**
Moisture	• The tonnages are estimated on a dry basis.
Cut-off parameters	• The Mineral Resource is reported using ≥50 A$/t Net-Smelter-Return (NSR) block cut-off as an approximate proxy for a break-even level between mining development cost and incremental stoping cost.
Mining factors or assumptions	• Mining of the Nova-Bollinger deposit 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 floatation flow sheet with recoveries from the two stages of concentrate generation (copper-cobalt and nickel-cobalt). • 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 potentially acid forming (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 bulk 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. 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. • 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 are reporting slightly lower than the measured results, which is expected given pycnometer readings do not provide an in situ bulk density. The density difference between methods is not considered to be material to the estimate. • The density ranges for the mineralised units are: Massive sulphides 2.0 g/cm^3 to 4.7g/cm^3 (average: 3.9g/cm^3), net textured sulphides 3.0 to 4.4 g/cm^3 (average: 3.6g/cm^3) and disseminated sulphides 2.5g/cm^3 to 4.6g/cm^3 (average: 3.5g/cm^3). • 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 Measured Mineral Resources are classified based on the high confidence in the geological and grade continuity, along with 12.5m×12.5m spaced drill hole density and information from 11 levels of ore mining in 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 at Nova 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 25m×25m spaced drilling. • The Inferred Mineral Resource category was applied to one isolated lens of mineralisation in the upper levels of Nova, the tonnage represents <0.3% 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 an elevated level of geological understanding producing a robust model of mineralised domains. This model has been confirmed by infill drilling and mine development exposure, which supported 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 Mineral Resource estimate 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 CY18 MRE has been undertaken by Optiro Pty Ltd., who have found no material issues with the estimation process.

NOVA OPERATION – MINERAL RESOURCES (CONTINUED)	
JORC Criteria	**Commentary**
Relative Accuracy/Confidence	• The MRE at Nova 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 Mineral Resource has a local level of accuracy which is suitable for achieving annual targets, while Measured Mineral Resource estimates are considered commensurate with meeting quarterly production targets. Inferred Mineral Resource are indicative of areas and tonnage that warrant further drill testing but are not suitable for ORE. • There has been no quantitative geostatistical risk assessment such that a rigorous confidence interval could be generated but the nature of the nickel/copper mineralisation is such that, at the grade control drill spacing, there is minimal risk to the schedule on a quarterly basis. • Production data has provided a satisfactory assessment of the actual accuracy compared to the estimate for development ore. • The Measured and Indicated Resources are considered suitable for ORE 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. • Total ore processed from Nova-Bollinger to 31 Dec 2018 has been ~2.68Mt grading 1.78% Ni, 0.75% Cu and 0.06% Co. • Mine-claimed ore from the model update is ~2.65Mt grading 1.98% Ni, 0.80% Cu, 0.064% Co, with ~65kt on ROM stockpiles on 31 Dec 2018. • Reconciliation factors (mill / MRE) for the project to date are therefore 104% for tonnage, 90% for nickel grade, 94% for copper grade and 94% for cobalt grade. • The reconciliation factors indicate that the updated Mineral Resource estimate may be an optimistic predictor of grade, however the six months trend has been closer to parity reconciliation on grades with the second half of FY18 reflecting ore mining from larger high-grade stopes in Central Nova and Bollinger, while the first half of the year was sourced from development and narrower stope in Upper Nova. There is a continued trend of improvement of reconciliation against the MRE.

NOVA OPERATION – ORE RESERVES	
JORC Criteria	**Commentary**
Mineral Resource estimate for conversion to Ore Reserves	• The MRE used for the Nova-Bollinger Ore Reserve estimate (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. • The MRE reported for CY18 is inclusive the CY18 ORE.
Site Visits	• The Competent Person for the estimate is the Superintendent Planning at Nova Operation and has detailed knowledge of the mining methods, costs, schedule and other material items relating to ORE work for this estimate.
Study Status	• The OREs have been designed based on the current operational practices of the operating mine. • All OREs were estimated by construction of three-dimensional mine designs using DESWIK.CAD software (Version 2018.2) and reported against the updated Mineral Resource block model. After modifying factors are applied, all physicals (tonnes, grade, metal, development and stoping requirements etc.) were input to the Nova Operation cost model where each stope was economically evaluated, and the total ORE 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 utilising a similar mining method • As Nova Operation is an ongoing concern the study level can be considered better than a FS level.
Cut-off parameters	• ORE block cut-off values are based on a net-smelter-return (NSR) values where the reporting NSR is defined as the net value A$ value per tonne of ore after consideration or all costs (mining, process, G&A, product delivery), metallurgical recoveries, sustaining capital, concentrate metal payabilites and treatment charges, transport costs and royalties. • The Resource model is evaluated against the NSR cut off value and mining areas (stopes and development) are designed for those areas above the NSR cut-off value. • 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$102/t for full stoping and A$63/t for incremental stoping. For development the NSR cut-off is A$27/t.

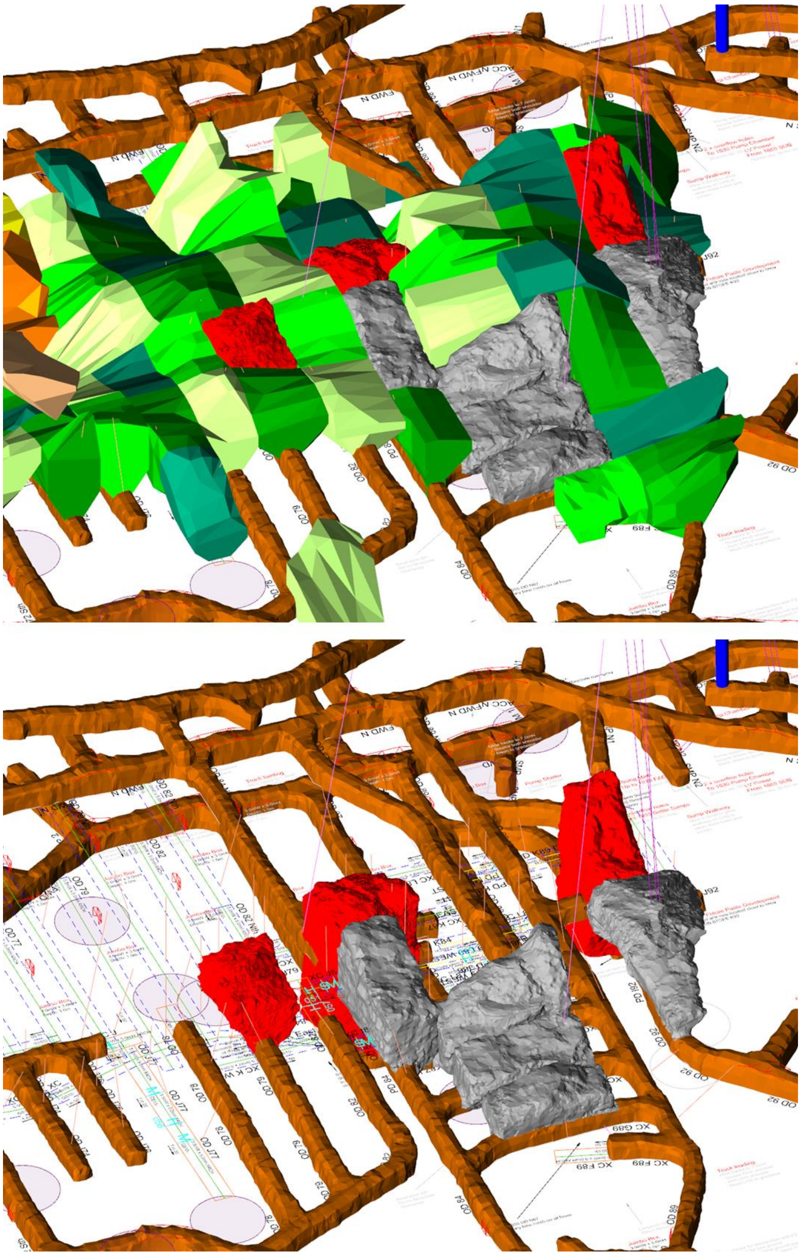
NOVA OPERATION – ORE RESERVES (CONTINUED)	
JORC Criteria	**Commentary**
Mining factors or assumption	• The mining method assumed for the ORE is long-hole sub-level open stoping, and sub level open stoping, which is considered appropriate for the for the style of mineralisation under consideration. • In some flat lying areas room and pillar mining has been considered in the ORE. • Geotechnical parameters are based on recommendations made in the Nova-Bollinger Feasibility Study prepared in 2014. No material geotechnical issues have been encountered in mining to date. • 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 on site. Modifying factors such as unplanned dilution (12% for long hole stoping depending on stope size and adjacent stope) and mining recovery (88%-95% for stoping,100% for development) are applied based on the chosen mining method. These modifying factors are based on reconciliations completed so far. • 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 design, this material has been assigned as dilution and has been included in the ORE. Inferred tonnage has been included up to 10% of total stope tonnage at grade, above 10% as zero grade as planned dilution in the ORE. The tonnage affected by this process is immaterial to the ORE.
Metallurgical factors or assumptions	• The metallurgical process for Nova-Bollinger ores is already established and is a process flow of crushing, grinding to nominally sub 105 microns, the differential froth-floatation of a nickel concentrate grading 13.5% Ni and 0.4% Co, and a copper concentrate grading 29% Cu. • The throughput rate assumed is 1.5Mt/a. • Metallurgical recovery values are based on the Nova 2015 optimisation study where the steady-state metallurgical recoveries to concentrates were forecast to be 88.5% for nickel and cobalt and 85% for copper. Current recoveries being achieved are at ~87% for both nickel and 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 mine 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, and chalcopyrite the payable mineral in the copper 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 (EPA) 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 the Nova Operation were submitted to the then DMP, 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 operation maintains a compliance register and an environmental management system to ensure it fulfils its regulatory obligations under the Nova EP 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 operation including mine portal and decline, ventilation systems and 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.

Stope production drilling in Nova underground

NOVA OPERATION – ORE RESERVES (CONTINUED)	
JORC Criteria	**Commentary**
Costs	• All major capital costs associated with the Nova operation infrastructure are already spent. Sustaining capital costs for the decline development and stope accesses are based on operational experience to date. • Operating costs for the ORE are based on budget estimates from a mining reputable contractor and experienced independent consulting firms. • 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. • Foreign exchange rates are based on in-house assessments of Bloomberg data with an assumption of 0.78 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 the value of copper in copper concentrate, with the latter applied to copper after the deduction of concentrate sales costs. • IGO also pays a royalty to the Ngadju people – details are commercially confidential
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$66,860/t for cobalt, A$8,560/t for copper and A$20,120/t for nickel metal, using the exchange rate discussed above for currency conversions from US$ 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 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 in majority of the economic inputs is high given the input sources at the time of the ORE study. • The confidence in metal prices and exchange rates is consistent with routine industry practices with the data derived from reputable forecasters. • The discount rate used for NPV calculations was 10% per annum and the NPV is strongly positive at the assumed payable metal prices.
Social	• The Nova deposit 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-Bollinger. • 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 life of mine.
Other	• There are no material naturally occurring risks associated with the Nova operation. • 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. • There are no unresolved third-party matters hindering the extraction of the ORE. • 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 ≥90% of the contained MRE tonnage is classified as Measured Resource have been classified as Proved Ore, those with ≥90% 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. • An immaterial tonnage of Inferred Mineral Resources (<5,000 t) has been included in the ORE for reasons of practicality and logicality, where isolated lenses of high-grade Inferred Mineral Resources of uncertain tonnage and grade occur within broader zones of lower grade Measured Mineral Resources. • 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 reviewing the CY18 ORE – no material issues were identified.

NOVA OPERATION – ORE RESERVES (CONTINUED)	
JORC Criteria	**Commentary**
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 OREs 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 10% 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. Investigations are ongoing into the possible sources of grade loss in the MRE model but at the time of reporting the mine dilution modelling approach accounts for this grade loss in the ORE.

Digital mine design – Nova Operation



TROPICANA GOLD MINE – SAMPLING AND DATA	
JORC Criteria	**Commentary**
Sampling techniques	• AngloGold Ashanti Australia (AGA) has used drilling and subsampling of the cuttings or cores as the data basis for the Mineral Resource estimates (MREs) of the Tropicana deposits. Details are given in the following subsection. • Drill hole spacings range from 25m×25m grids to 100m×100m grids, with most of the drilling of the open pit MRE on a 50m×50m spacing with 25m×25m testing the starter pits of the Tropicana and Havana initial pits, and the southern end of the Boston Shaker deposit. • A 100m×100m area of Havana was drilled out on a 10m×10m grid to validate the MRE model and optimise the grade control sample spacing. • The Boston Shaker underground MRE is drilled at 50m×25m in the upper levels and out to 100m×100m at deeper levels. • The underground MRE down-plunge extensions of Havana Deeps is tested using a 100m×100m grid. Deep +800m deep step-out holes have been drilled on nominal ~200m×100m to test the high-grade mineralisation of Havana Deeps. • All holes are drilled plunging towards the west to intersect the east dipping mineralised zones
Drilling techniques	• Reverse circulation (RC) percussion drilling using face-sampling bits (5¼ inch or 133mm diameter) has been used to collect samples from the shallower (up-dip) part of the deposits with a nominal maximum RC depth of 150m. • Diamond core drilling has been used for deeper holes, with diamond tails drilled from RC pre-collars. To control the deviation of deep DD holes drilled since 2011, many of these holes were drilled from short ~60m RC pre-collars or using 63.5mm (HQ) diameter core from surface. • Diamond core drilling for MRE definition is predominantly 47.6mm (NQ) diameter core, with a lesser number of holes drilled for collection of metallurgical and/or geotechnical data using 63.5mm (HQ2, HQ3) or 85mm (PQ) core diameters. • In fresh rock, cores are oriented wherever possible for collection of structural data. Prior to 2009, core orientations are made using the EzyMark tool with the Reflex Ace Tool replacing the system in later drilling programs.
Drill sample recovery	• RC recovery: − Prior to 2008 semi-quantitative assessment was made regarding RC sample recovery with recovery visually estimated as 25%, 50%, 75% or 100% of the expected mass volume of a 1m drilling interval. − Since 2008, AGA has implemented quantitative measure on every 25th interval where the masses of the sample splits are recorded and compared to the theoretical mass of the sampling interval for the rock type being drilled. − AGA found that overall recovery in the regolith was >80% and total recovery in fresh rock. • DD Recovery: − DD recovery has been measured as percentage of the total length of core recovered compared to the drill interval. − Core recovery is consistently high in fresh rock with minor losses occurring in heavily fractured ground or for DD drilling in the regolith. • The main methods to maximise recovery have been recovery monitoring as described above and diamond core drilling below ~150m depth. • No relationships have been noted between sample recovery and grade sample biases that may have occurred due to the preferential loss or gain of fine or course material are considered unlikely.
Logging	• RC cuttings and DD cores have been logged geologically and geotechnically with reference to AGA's logging standard library, to levels of detail that support MRE work, Ore Reserve estimation (ORE) and metallurgical studies. • Qualitative logging includes codes for lithology, regolith, and mineralisation for both RC and DD, with sample quality data recorded for RC such as moisture, recovery, and sub-sampling methods. • DD cores are photographed, qualitatively structurally logged with reference to orientation measurements where available. • Geotechnical quantitative logging includes QSI, RQD, matrix and fracture characterisation. • The total lengths of all drill holes have been logged.

Automated sample preparation equipment at Tropicana Gold Mine laboratory

TROPICANA GOLD MINE – SAMPLING AND DATA (CONTINUED)	
JORC Criteria	**Commentary**
Sub-sampling techniques and sample preparation	• RC – Primary splitting: – Prior to 2007 RC samples were collected from the cyclone stream using a tiered riffle splitter. From 2007 a static cone splitter was introduced and replaced riffle splitters on all rigs. – The RC sampling interval is generally 1m but from 2016, 2m intervals were introduced for RC pre-collars. – The splitters collected a ~12% split from the primary lot with two 12% splits collected – the first for laboratory submission and second as a reference or replicate. Most samples were collected dry with <2% of samples recorded as being split in moist or wet state. – The main protocol to ensure the RC samples were representative of the material being collected was monitoring of sample recovery and collection and assay of replicate samples. • DD – Primary sample: – DD cores are collected of intervals determined by geological boundaries but generally targeting a 1m length – All NQ cores have been half-core sampled with the core cut longitudinally with a wet diamond blade. – A few of the DD whole cores have been sampled from HQ3 cores drilled to twin RC holes in the regolith or for geotechnical or metallurgical testing. – In 2005, some 1,150m of cores drilled in the oxide zone were chisel split rather than wet-cut, but this poorer sub-sampling represents <0.01% of the core drilled. • Laboratory preparation: – Sample preparation has taken place at three laboratories since commencement of Mineral Resource definition drilling including SGS Perth (pre-2006), Genalysis Perth (2006 to April 2016) and SGS TGM onsite laboratory (2015 Boston Shaker samples and post-April 2016 to Dec 2017 samples), and SGS Perth from Jan 2018 onwards. – RC samples are oven dried then pulped in a mixer mill to a PSD of 90% passing 75 µm before subsampling for fire assay. – SGS prepared DD half-core samples by jaw-crushing then pulverisation of the whole crushed lot to a particle size distribution (PSD) of 90% passing 75 µm. A 50g subsample of the pulp was then collected for fire assay. – Genalysis prepared the samples in a Boyd crusher rotary splitter combo with nominally 2.5kg half-core lots crushed to <3mm then rotary split to ~1 kg before pulverisation and sub-sampling for fire assay. – At SGS Tropicana samples are processed in automated sample preparation system, where samples are crushed in a Boyd crusher to a PSD of 90% passing 2mm then subsampled using a linear sample divider to ~1kg. Samples with mass <800g are manually pulped in a LM2 mill to a PSD of 75 microns before sub-sampling for fire assay. – From May 2016, a jaw crusher has been used to crush half-core samples to a PSD of 100% passing 6mm allowing for diamond core processing at the SGS Tropicana lab. • Quality controls for representativity: – SGS inserted blanks and standards at a 1:20 frequency in every batch with a duplicate pulp collected for assay every 20th sample. Further repeats were also completed at a 1:20 frequency in a random manner. – Sieve checks were completed on 5% of samples to monitor PSD compliance. – Genalysis inserted blanks and standards in every batch and a duplicate pulp was collected for assay on every 25th sample and 6% of each batch was randomly selected for replicate analysis. Sieve checks were completed on 5% of samples to monitor PSD compliance. – Tropicana laboratory used barren basalt and quartz to clean equipment between routine samples. • Sample size versus grain size: – No specific heterogeneity tests have been completed but the sample sizes collected are consistent with industry standards for the style of mineralisation under consideration. – A 2008 sampling variability study found that 72% of the gold in the samples tested was in size fraction <300 µm, and that repeated sampling of the same lot have very low variance between replicates.
Quality of assay data and laboratory tests	• No geophysical tools were used to determine any element concentrations material to the MRE. • All MRE prepared pulps have undergone 50g fire assay which is considered a total assay for gold. • As discussed above all laboratories have used industry standard quality control procedures with standards used to monitor accuracy, replicate assay to monitor precision, blanks to monitor potential cross contamination and sieve tests to monitor PSD compliance. • AGA has also used other 'umpire' laboratories to monitor accuracy including Genalysis Perth (prior to November 2006), SGS Laboratory (from November 2006 to August 2007) and ALS Perth (since August 2007), with these check assaying campaigns coinciding with each MRE update. • AGA has reviewed the quality sample results on a batch by batch and monthly basis and has found that the overall performance of the laboratories used for MRE samples is satisfactory.

TROPICANA GOLD MINE – SAMPLING AND DATA (CONTINUED)	
JORC Criteria	**Commentary**
Verification of sampling and assaying	• Significant intersections of mineralisation are routinely verified by AGA's senior geological staff and have also been inspected by several independent auditors as describe further below. • Twin holes have been drilled to compare results from RC and DD drilling with the DD results confirming that there is no material down-hole smearing of grades in the nearby RC drilling and sampling. • All logging and sample data is captured digitally in the field using Field Marshall Software, prior to upgrade to Micromine's Geobank in 2016. Data is downloaded daily to the Tropicana Exploration Database (Datashed) and checked for accuracy, completeness and structure by the field personnel. • Assay data is merged electronically from the laboratories into a central Datashed database, with information verified spatially in Vulcan software. AGA maintains standard work procedures for all data management steps. • An assay importing protocol has been set up to ensure quality samples are checked and accepted before data can be loaded into the assay database • All electronic data is routinely backed up to AGA's server in Perth and provided to IGO via FTP transfer. • There have been no adjustments or scaling of assay data other than setting below detection limit values to half detection for MRE work.
Location of data points	• All completed drill hole collar locations of surface holes have been using RTK GPS equipment, which was connected to the state survey mark (SSM) network. • The grid system is GDA94 Zone 51 using AHD elevation datum. • Prior to 2007, drill hole path surveys have been completed on all holes using Eastman single shot camera tools, with down-hole gyro tools used for all drilling post 2007. • A digital terrain model was prepared by Whelan's Surveyors from aerial photography flown in 2007, which has been supplemented with collar data surveyed using RTK GPS. This model is considered to have centimetre-scale accuracy. • The MRE and ORE are on a local Tropicana Gold Mine grid (TMG), which is determined by a two-point transform as follows: – Point 1: ■ MGA Zone 51: 617.762.61mE = TMG: 50,000.00mE ■ MGA Zone 51: 6,727,822.78mN =TMG: 95,000.00mN ■ MGA elevation = TMG: MGA elevation + 2000m – Point 2: ■ MGA Zone 51: 688,473.50mE = TMG: 50,000.00mE ■ MGA Zone 51: 6,798,533.48mN = TMG: 195,000.00mN ■ MGA elevation = TMG: MGA elevation + 2000m
Data spacing and distribution	• The drill hole spacing nominally ranges from 25mN×25mE to 100mN×100mE (local grid) over most of the MRE area with a small area of 10mN×10mE used for grade control calibration work. • Most of the open pit MRE has been tested on a 50mN×50mE grid with closer spaced 25mN×25mE patterns in the upper parts of the deposit. • Open pit grade control is completed on a 12mN×12mE pattern. • The Boston Shaker underground MRE is drilled at 50mN×25mE in the upper levels and out to 100mN×100mE at deeper levels. • The Havana Deeps underground MRE has been drilled on a 100mN×100mE pattern. • Down-hole sample intervals are typically 1m with 2m compositing applied for MRE work. • 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 applied, and the JORC Code classification applied.
Orientation of data in relation to geological structure	• Most drill holes are oriented to intersect the shallowly east dipping mineralisation at a high angle and as such, a grade and or thickness bias introduced by the orientation of data in relation to geological structure is highly unlikely.
Sample security	• The chain-of-sample custody is managed by AGA. Samples were collected in pre-numbered calico bags, which are then accumulated into polyweave bags for transport from the collection site. • The accumulated samples are then loaded into wooden crates and road hauled to the respective laboratories (Perth) or processed onsite at TGM. • Sample dispatches are prepared by the field personnel using a database system linked to the drill hole data. • Sample dispatch sheet are verified against samples received at the laboratory and any missing issued 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 considered very low.
Audits or reviews	• Field quality control data and assurance procedures are review on a daily, monthly and quarterly basis by AGA field personnel and senior geological staff. • The field quality control and assurance of the sampling was audited by consultant Quantitative Geoscience in 2007 and 2009. The conclusion of the audit was that the data was suitable for MRE work. • In 2017, MRE consultants Optiro reviewed data collections and assay quality as part of an MRE review and found no issues.

TROPICANA GOLD MINE – EXPLORATION RESULTS	
JORC Criteria	**Commentary**
Mineral tenement and land tenure status	• The TGM MREs are located wholly within WA mining lease M39/1096, which commenced on 11 Mar 2015 and has a term of 21 years (expiry 10 Mar 2036). • TGM in a joint venture between AGA (70%) and IGO (30%) with AGA as manager. • Gold production is subject to WA State royalties of 2.5% of the value of gold value. • There are no material issues relating to native title or heritage, historical sites, wilderness or national parks, or environmental settings • The tenure is secure at the time of reporting and there are no known impediments to exploitation of the MRE and ORE and on-going exploration of the mining lease.
Exploration done by other parties	• AGA entered in to a JV with IGO in early 2002 with the main target of interest being a WMC gold soil anomaly of 31ppb, which was reporting in an WA government open file report. • Prior to the JV, the WMC soil sampling program was the only known exploration activity and the only dataset available were WA government regional magnetic and gravity data.
Geology	• TGM is on the western margin of a 700km long magnetic feature that is interpreted to the collision suture zone between the Archean age Yilgarn Craton to the west and the Proterozoic age Albany-Fraser Origan to the east of this feature. The gold deposits are hosted by a package of Archean age high metamorphic grade gneissic rocks. • Four distinct structural domains have been identified – Boston Shaker, Tropicana, Havana and Havana South, which represent the same mineral deposit offset by NE striking faults that post-date the mineralisation. • The gold mineralisation is hosted by a shallowly southwest dipping sequence of quartz-feldspar gneiss, amphibolite, granulite and meta-sedimentary chert lithologies. • The gold mineralisation is concentrated in a 'favourable horizon' of quartz-feldspar gneiss, with a footwall of garnet gneiss, amphibolite or granulite. • Mineralisation is characterised by pyrite disseminations, bands and crackle veins within altered quartz-feldspar gneiss. Higher grades are associated with close-spaced veins and sericite and biotite alteration. • Mineralisation presents as stacked higher grade lenses within a low-grade alteration envelope. Geological studies suggest the mineralisation is related to shear planes that post-date the development of the main gneissic fabric and metamorphic thermal maximum.
Drill hole information	• A summary of the many holes used to prepare the MRE is not practical for this public report. • The MRE gives the best-balanced view of all the drill hole information.
Data aggregation methods	• No drill hole intercepts are reported
Relationship between mineralisation width and intercept lengths	• All MRE drilling intersects the mineralisation at a high angle and as such approximates true thicknesses in most cases.
Diagrams	• IGO has included representative diagrams in the main body of the report and prior ASX public reports.
Balanced reporting	• The MRE is based on all available data and as such provides the best-balanced view of the TGM gold deposits.
Further work	• Exploration drilling is continuing the within the TGM tenement but no major MRE update is planned at the time of reporting.

Example drill core from Tropicana resource definition drilling

TROPICANA GOLD MINE – MINERAL RESOURCES	
JORC Criteria	**Commentary**
Database integrity	• AGA captures field data and drill hole logging directly in to handheld devices or laptop computers using Field Marshall and Geobank software. • The drill hole data is managed in DataShed software, which is an industry recognised system for management of geoscientific drill hole information. Logging, assays and survey information is loaded directly into Datashed using data import routines, with loading procedures incorporating quality control checking. • Data is validated 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.
Site visits	• The MRE Competent Person is site based and is actively involved in the management and supervision of the MRE work.
Geological interpretation	• To control the MRE process, three dimensional digital solids were prepared in LeapFrog software (Version 4.4) for the mineralised zones, dykes, shears and garnet (mostly hangingwall) gneiss. • Mineralised solids were prepared using a nominal ≥0.3g/t Au drill hole cut-off grade to encompass the gold mineralisation targeted for MRE. The dykes, shears and garnet gneiss solids were prepared from geological logging codes. Regolith units were prepared as digital surfaces below topography based on the geological logging. • The resulting MRE models encompass the mineralisation, the post-mineralisation barren dykes, the shears controlling higher grade mineralisation and the main waste rock units that are the footwall and hangingwall to the mineralisation.
Dimensions	• The open pit MRE is reported within an open pit Lerchs-Grossman-Analysis pit optimisation 'shell' based on a gold price of A$1,778/oz. (US$1,400 /oz), and life-of-mine pit designs. • This reporting shell has dimensions of approximately 4.7km along strike, up to 1km wide and up to 450m deep, spanning all the major deposits. • The underground MRE extends from the base of the open pit MRE below the open pit designs with plan extents in long dimension down dip to the SE by up to 900 m and up to ~200m wide. A smaller lode extends from the Havana South pit with down dip extents of ~200m and up to 200m wide. Other parts of the underground MRE are below the other pits.

Looking northeast along the strike of the Havana Pit

TROPICANA GOLD MINE – MINERAL RESOURCES (CONTINUED)

JORC Criteria	Commentary
Estimation and modelling techniques	• The TGM MRE excluding Boston Shaker, was updated in July 2018: – A single model was created to estimate both the open pit and underground MRE. – Has been estimated from the drill hole data available to 11 July 2018, which included 15,556 drill holes for a total of 1,172,907m of drilling of which, 1,285 holes were DD for 479,972m and 2,474 holes were RC for 284,552m. An additional 11,797 RC Grade Control holes were used in the estimate (408,383m). – The drill hole data was composited to 2m lengths within geological estimation domains using Vulcan software (Version 11.0.2). – Grade top-cut or caps were applied to the composites after examining cumulative probability plots of the data, and high-grade estimation limits were applied to limit the spatial spread of high grades in weakly mineralised domains. – The composite data was declustered in each estimation domain using cell declustering with varying cell sizes, to determine a stable declustered mean grade. – Gold continuity was interpreted for each estimation domain and grades for large panels were estimated using ordinary block kriging in Isatis software (Version 2018.1), with estimation panel dimension 24mE×36mN×10mElv. – A multi-pass search was used to account for the different drill hole spacings after incorporating the grade control drilling into the estimate. A short search-radius was used to estimate blocks in and around the grade control data, with an expanding search up to 120m×120m used for wider-spaced data. – Selective Mining Unit (SMU) grades were then estimated for each panel using the Local Uniform Conditioning method, where the SMU grade distribution within each panel is estimated through a change of support then the SMUs are localised using kriging so the distribution within the panel reflects the local grade trends in nearby data. The information effect of 12mE×12mN grade control information was accommodated in the change of support from panels to SMUs. – The SMU dimensions were set to prepare multiple SMUs per panel with SMU dimensions of 12mE×12mN×3.33mElv. The elevation heights nominally match the mining flitch heights applied at each area. – The estimate model was validated by comparing (input) data declustered means for each domain to the respective (output) block estimated grades both globally within each domain and locally using moving window 'swath-plot'. On screen visual inspections were also completed in plan and section to ensure that the grade trends observed in the data were acceptably reproduced in the estimates without over extrapolation in areas of sparse drilling. – Comparison of the open pit estimate forecasts to mine production indicates acceptable forecasting performance for monthly, quarterly and annual recompilation periods. • The Boston Shaker MRE was updated in January 2019: – A single model was created to estimate both the open pit and underground MREs. – Has been estimated from the drill hole data available to 22nd January 2019, which included 1,471 drill holes for a total of 191,340m. – Estimation parameters were kept consistent with the previous estimate (detailed above). • Sulphur is modelled as a secondary variable in all TGM MRE models.
Moisture	• Tonnages are estimated on a dry basis.
Cut-off parameters	• Open pit: – The open pit estimate is reported within a pit optimisation shell with an assumed gold prices of US$1,400/oz (A$1,778/oz) and cost assuming back-filling of pits ('Long Island Study'). – On the basis described above, and assuming lower processing costs and higher metallurgical oxide ore, the cut-off are ≥0.3g/t Au for oxide MREs and ≥0.4g/t Au for transitional and fresh MREs. • Underground: – The underground MRE cut-off grade is based on the assumptions of the Boston Shaker Pre-Feasibility Study (PFS) and uses a gold price of US$1,400/oz (A$1,778/oz) and underground mining and processing cost assumptions for fresh MRE. – The cut-off grade for reporting the underground MRE on this basis is ≥1.8g/t Au.
Mining factors or assumptions	• The mining factors and assumption for the open pit MRE is the current mining method of conventional truck and shovel mining with blasting of 10 m benches in Tropicana and Havana and blasting of 7.5 m benches in Boston Shaker. • Open pit ore is mined in three 1/3 blast height flitches, with ore predefined by 12mE×12mN RC grade control drilling and 1m downhole sampling. • The assumed open pit mining selectivity are the SMU dimensions assumed for the LUC estimates. • The assumption for the underground MRE is long-hole open stoping between 25m levels. • No MRE margin (extremal) dilution has been modelled in either estimate. • Eventual prospects of economic extraction for the open pit MRE have been assessed through pit optimisation studies and reporting the MRE within pit designs and a pit optimisation shell. • The Boston Shaker underground MRE is currently the focus of a FS into underground mining.

TROPICANA GOLD MINE – MINERAL RESOURCES (CONTINUED)	
JORC Criteria	**Commentary**
Metallurgical factors or assumptions	• The ore processing method at TGM is well-established with conventional, crushing, grinding then carbon-in-leach extraction of gold followed by electrowinning to produce gold doré bars. • An average metallurgical recovery as described in Section 4 further below, has been assumed for both the open pit and underground MREs based on metallurgical testing completed as part of the FS for the Havana Open Pit.
Environmental factors or assumptions	• TGM operates under an environmental management plan that meets or exceeds all statutory and legislative requirements. • Mined waste rock is disposed in waste dumps which are progressively rehabilitated as mining progresses with any potentially acid generating waste encapsulated in non-acid generating material. • A tailing storage facility is used to contain and capture process residues. • The mine produces rehabilitation plans for ongoing rehabilitation and mine closure plans, and the costs are included in the financial model.
Bulk density	• AGA routinely collects in situ bulk density measurements on ~10cm long core segments using the Archimedes principle method of dry weight versus weight in water. There are ~200,000 density measurements in the estimation database with ~98% of measurements from fresh rock and the remainder in the regolith or cover. • Measurements are collected over 1m to 5m intervals targeting intervals that are deemed representative of key lithologies in fresh rock. Density has been collected on core within the regolith from 'core-from-surface' drill holes, with the measurement method accounting for voids. • Depending on rock type density ranges of 1.89 t/m^3 to 2.18 t/m^3 in the saprolite and ranges from 2.56t/m^3 to 2.96 t/m^3 in the transitional and fresh rock domains. • Density is estimated by ordinary block kriging in the MREs apart from a few minor domains with sparse data (such as the regolith), where density is assigned as a mean of the data.
Classification	• The basis of classification of the TGM MREs into different JORC Code confidence categories is drill hole spacing as follows: • Open pit: − Measured Mineral Resources: average 25mE×25mN collar spacing − Indicated Mineral Resources: average 50mE×50mN collar spacing − Inferred Mineral Resources: average 100mE×100mN collar spacing (or less) when evidence of geological or grade continuity is sufficient to support grade estimation. • Underground: − Measured Mineral Resources: average 12.5mE×12.5mN intercept spacing − Indicated Mineral Resources: average 25mE×50mN intercept spacing − Inferred Mineral Resources: average 100mE×100mN collar spacing (or less) when evidence of geological or grade continuity is sufficient to support grade estimation. − The underground MRE has been filtered to remove isolated blocks that are unlikely to pay for development to be included in the mine plan. • AGA considers that the Measured Mineral Resources support mine planning with a 90% confidence interval of ±15% on tonnage or grade on a quarterly production basis, with Indicated Mineral Resources have the same confidence but applicable on an annual production basis. • The Competent Person considers this classification takes in to account all relevant factors such as data reliability, confidence in the continuity of geology and grades, and the quality, quantity and distribution of the data. • The classification reflects the view of the Competent Person reporting the estimate.
Audits or reviews	• The open pit MRE methodology was audited by MRE consultant Quantitative Geoscience in 2007, 2009 and 2011. • MRE consultants Golder Associates audited the 2015 estimate in 2015. • MRE consultants Optiro reviewed and endorsed the MRE prepared in November 2017. • AGA also conducts internal peer reviews on the completion of estimate updates.
Relative Accuracy/ Confidence	• AGA has carried out non-conditional simulation studies to confirm the relationship between drill spacing and 90% confidence interval assumptions and found the study results in agreement with the drill spacing classification criteria described above. • The trial grade 10mE×10mN control pattern drilled within an 100m×100m areas during the project FS has also confirmed the precision assumptions and confidence the MRE in that area • Mine reconciliation for the life-of-mine to date is satisfactory.

TROPICANA GOLD MINE – ORE RESERVES	
JORC Criteria	**Commentary**
Mineral Resource estimate for conversion to Ore Reserves	• The MRE used for the open pit ORE is described in the preceding sections of this JORC table 1. • The estimate used for the underground ORE study is the underground MRE described in the preceding sections of this JORC table 1. • The Tropicana MREs are reported inclusive of the open pit and underground OREs.
Site visits	• Open pit: – The Competent Person(s) for the open pit TGM ORE is based at site and has good knowledge of the operation and personnel providing key inputs to the estimate. • Underground: – The Competent Person(s) for the underground TGM ORE visits the site regularly and has good knowledge of the operation and personnel providing key inputs to the estimate.
Study status	• Open pit: – Mine design using current conventional mining methods and processing operations confirming that the mine plans are technically feasible and economically viable. • Underground: – The level of study for the underground ORE is commensurate with industry expectations of a PFS as described in the JORC Code, with all material Modifying Factors considered in the underground ORE. – Mine design using current conventional mining methods and processing operations confirming that the mine plans are technically feasible and economically viable.
Cut-off parameters	• Open pit: – The open pit ORE cut-off grade is reported within a pit design with an assumed gold price of US$1,100/oz (A$1,509/oz) and costs assuming back-filling of pits. – On the basis described above, the cut-off is ≥0.6g/t Au for oxide ORE and ≥0.7g/t Au for transitional and fresh ORE. • Underground: – The underground MRE cut-off grade is based on the assumptions of the Boston Shaker PFS and the net return of gold produced at the processing plant for each ore type, and uses a gold price of US$1,100/tr (A$1,509/tr). – The specific cut-offs for reporting the underground ORE are ≥3.17g/t Au for fresh rock. • Costs include processing and maintenance fixed and variable, general administration, ore premium including re-handle and overhaul, closure and all non-mining related stay-in-business capital expenses. Underground costs include development and stoping cost.
Mining factors or assumptions	• Open pit: – The open cut material is scheduled to be mined using conventional methods using a large hydraulic shovel/excavator fleet matched with large rear dump trucks. The pits are designed based on 10.0m to 12.5m benches. – Overall wall angles for the open pit designs range between ~36° for the footwall and 59° for the hangingwall. Conventional drill and blast techniques are used to break the rock. – Within the open pit resource model ore loss and dilution is accounted for in the selectivity of the SMU sizes volume, as such no further factors applied. • Underground: – The underground is designed using conventional longitudinal and transverse stoping method. The stopes are designed with a footwall angle of 40°. – Planned mining dilution for the underground operation has been designed into the mining shapes, with a further 10% unplanned dilution factor applied. – New infrastructure appropriate for an underground mine of the size and life of the underground ORE has been planned and costed. – Mining recovery of development ore is assumed to be 100% and production ore is assumed to be 95%. • Inferred Mineral Resources are excluded from both the open pit and the underground OREs.
Metallurgical factor or assumptions	• The metallurgical process for TGM's ores is established and is a process flow of crushing (grinding rolls), grinding, and the recovery of gold through carbon-in-leach and electrowinning to produce gold bars. • Gold recovery factors are based on extensive metallurgical testing and range from 92.5% recovery in mineralised transported material down to 89.9% recovery in fresh rock. • No deleterious elements are present in the ore. • In the project FS, pilot scale metallurgical testing was carried out on large diameter (122.6mm PQ) core collected in a spatially representative manner from the deposit. • To date metallurgical recoveries have been consistent with the forecasts from these studies. • As a gold mine, the gold doré bars produced are not subject to any specification requirements. • Installation of an additional ball mill, which is in progress is anticipated to improve metallurgical recovery by up to 3%.
Environmental	• TGM operates under an environmental management plan that meets or exceeds all statutory and legislative requirements. • Rock waste is disposed in waste dumps which are progressively rehabilitated as mining progresses with any potentially acid generating waste encapsulated in non-acid generating material. • A tailing storage facility is used to contain and capture process residues. • The mine produces rehabilitation plans for ongoing rehabilitation and mine closure plans, and the costs are included in the financial model.

TROPICANA GOLD MINE – ORE RESERVES (CONTINUED)	
JORC Criteria	**Commentary**
Infrastructure	• All major infrastructure required for mining and processing is in place. • The owner and contractor staffing are fully complete, with personnel sourced on a fly-in-out basis from Perth or Kalgoorlie. • No other significant infrastructure is anticipated and sustaining capital cost for infrastructure are included in the financial model.
Costs	• The capital cost of removing waste overburden are included in the evaluation of the applicable pit designs. • Mining operating costs are provided by the mining contractor and other costs are sourced from in the mine operating budget. • As discussed there are no deleterious elements and as such related costs are not relevant. • The source of A$:US$ exchange rates is AGA corporate guidance. • Transportation charges for gold doré bars is relatively minor and are charged on a contract basis with the refinery. • Treatment and refining charges are included in the refining contract and there are no specification ore penalties associated with treatment and refining. • WA State royalties are levied at 2.5% of the value of gold produced.
Revenue factors	• The assumption for gold prices for open pit and underground ORE is based on corporate guidance and assessment of historical prices. • The A$ to US$ exchange rate is also based on corporate guidance and assessment of historical exchange rates. • Refer to the body of this ASX public report for price and FX details.
Market assessment	• No market assessment has been completed for this ORE given the ready saleability of gold. • IGO's share of TGM's gold is sold to the Perth mint or through agreements with several financial institutions.
Economic	• The inputs into the economic analysis for the underground ORE update have already been described above under previous subsections. • The economic evaluation has been carried out on a real basis (adjusted for inflation) with rates provided by AGA corporate. • The confidence in majority of the economic inputs is high as TGM is an operating mine and as such, costs (operating and capital) are well understood. • The confidence in metal prices and exchange rates is consistent with routine industry practices with the data derived from reputable forecasters. • The discount rate used for NPV calculations is derived from the weighted average cost of capital in Australia.
Social	• TGM has all necessary agreements in place with key stakeholders and matters leading to social licence to operate.
Other	• There are no material naturally occurring risks associated with the TGM. • There are no material legal agreements or marketing arrangements not already discussed in prior subsections of this table. • There are no unresolved third-party matters hindering the extraction of the open pit or underground OREs. • Necessary government and statutory approvals are currently in application.
Classification	• The TGM open pit and underground OREs has been classified into Proved and Probable Ore Reserve as per the JORC Code classification based on the underlying MRE classification in the MRE model, with Measured Mineral Resources converted to Proved Ore Reserves, and Indicated Mineral Resources converted to Probable Ore Reserves. • The classifications applied to the estimate are consistent with the opinion of the Competent Person(s) reporting the both the open pit and underground ORE.
Audits or reviews	• The current open pit and underground OREs has been reviewed internally by AGA technical personnel.
Discussion of relative accuracy and confidence	• AGA has carried out simulation to quantify the confidence in the open pit and underground OREs – refer to the commentary at the end of Section 3 above. • The main driver of accuracy and confidence is the spacing of the pre-production drilling, which is captured in the MRE JORC Code classifications underpinning the underground OREs. • Confidence in the open pit and underground inputs is high given the mine is in operation and costs, prices and recoveries are well understood. • The open pit and underground ORE estimates are considered to have sufficient local accuracy to support mine planning and production schedules with Proved ORE considered a reliable basis for quarterly production targeting and Probable ORE 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 designs are consistent with what has been effective previously. • The mine to mill reconciliation data to date indicates the forecast precision of the open pit estimates is good with the ORE being slightly conservative.

LONG PROJECT – SAMPLING TECHNIQUES AND DATA	
JORC Criteria	**Commentary**
Sampling techniques	• The Mineral Resources at Long Project have been defined using conventional diamond core drilling (DD), and limited reverse circulation percussion (RC) drilling from surface, with all the pre-IGO data collected by Western Mining Corporation (WMC). • Since IGO's acquisition of the Long, all sampling has been by surface RC and surface and underground DD with drilling completed mostly from underground sites since 2003. • Refer to the subsections below for more details on drilling techniques. • Exploration work has been assisted by downhole electromagnetic (EM) surveys, which have been used to identify conductors that are potentially massive and matrix sulphide accumulations. • Seismic surveys (3D) have been also been used to help identify structures and geological units that may host nickel sulphide mineralisation.
Drilling techniques	• Drilling from WMC years of Mineral Resource definition is mainly ≈133mm diameter RC pre-collars drilled from surface with 47.6mm core diameter (NQ) tails. Underground DD consisted of core diameters including 30.5mm (AQ – Kempe), 35.6mm (LTK48), and 50.6mm (NQ2). • More recent DD drilling is mainly from underground sites and includes four core diameters including 40.7mm (BQTK), 43.9mm (LTK-60), 50.6mm (NQ2), and 63.5mm (HQ), with the largest diameter core used to improve core recovery in (expected) friable or broken ground conditions. • Core has not been oriented for Mineral Resource estimation work, but some holes have been oriented to assist capture of geotechnical data. • 2018 DD drilling was by NQ core.
Drill sample recovery	• RC recovery was recorded in a qualitative manner with recovery generally recorded as acceptable. • DD recovery has been measured as the percentage of the total length of core recovered compared to the drill advance interval. • Core recovery is consistently high in fresh rock (averaging >95%), with some core losses occurring in heavily fractured ground. • The main methods to maximise recovery have been recovery monitoring and use of large core diameters if broken ground conditions were expected. • Drill hole interval accuracy was monitored through reconstruction of the core into a continuous length and verification against the core blocks. • Rod counting was also used to verify the lengths drilled. • No relationships occur between sample recovery and grade. • Sample biases due to the preferential loss or gain of fine or coarse material are unlikely.
Logging	• RC cuttings and DD cores have been logged geologically and/or geotechnically with reference to standard logging schemes, to levels of detail that support Mineral Resource estimation, Ore Reserve estimation and metallurgical studies. • Qualitative logging for both RC and DD includes codes for lithology, oxidation (if any), veining and mineralisation. • Recent DD cores are photographed, qualitatively structurally logged with reference to orientation measurements where available. • Geotechnical quantitative logging of recent holes includes rock quality designation (RQD) and other fracture information. • The total lengths of all drill holes have been logged.

Sub-sampling techniques and sample preparation	• Only geological information was included from RC drilling and no RC sample grade information was used for MRE purposes. As such, the description of subsampling and preparation of RC samples is not material.
	• DD primary sampling:
	  − A geologist marked out DD core for sampling intervals based on geological units, with intervals ranging from 0.1m to 1.1m, with a target interval of 1m.
	  − The sample intervals were then cut in half longitudinally with a wet diamond blade, with the laboratory dispatch half collected from the same side of the core.
	  − For the few intervals of extremely broken core, the core was sampled by hand-picking representative fragments from the broken core interval to prepare a sub sample having approximately half the sample interval mass.
	  − Samples were collected in pre-numbered calico bags for laboratory dispatch.
	• Laboratory DD cut-core preparation:
	  − Core samples were oven dried then crushed in a jaw-crusher with recent core crushed to a particle size distribution (PSD) <6mm. The jaw-crush lot was then fine crushed to a PSD <2mm in a Boyd crusher-rotary splitter unit.
	  − The ≈ 750g subsample from the rotary splitter was the pulverised to a PSD of 90% passing 75 microns and a 400g subsample collected from the pulp into a paper packet.
	• Quality controls to ensure sample representativity included:
	  − Blanks and standards were inserted at 1:10 and 1:20 frequency respectively.
	  − Replicate samples were collected as ¼ core as field duplicates.
	  − Sieve tests were completed at the pulverisation stage to confirm PDS compliance.
	  − Monitoring of quality results confirmed the sample preparation was acceptable.
	• No specific heterogeneity tests have been carried out, but the Competent Person considers that the sub sample protocols applied, and masses collected are consistent with industry standards for the style of mineralisation under consideration.

LONG PROJECT – SAMPLING TECHNIQUES AND DATA	
JORC Criteria	**Commentary**
Quality of assay data and laboratory tests	• No geophysical tools were used to determine any element concentrations estimated in the Mineral Resource. • Samples were assayed by ALS Laboratories in Kalgoorlie and Perth, and Kalassay, where ~100g subsamples of the pulp subsamples described above were digested in a four-acid mixture and heated to dryness. • The digestion salts were then re-dissolved, and a solution prepared for ICP-OES analysis of elemental suite (Ni, Cu, As, S, Co, Cr, Fe, Mg and Zn). • The four-acid digestion is considered a total extraction for all but chromium in (acid resistant) chromite. • Quality control samples were included by the laboratory in the form of standards, blanks and replicates. Results of the quality samples were found to be acceptable albeit the variability between ½ and ¼ core replicates was high due to the high heterogeneity between what are compared specimens rather than replicates samples from the same (crushed or pulverised) lot. • The Competent Person considers that acceptable levels of precision and accuracy had been established and cross-contamination has been minimised.
Verification of sampling and assaying	• Sulphide drill intersections are visually conspicuous in the core and as such, assay results have been readily cross-verified by IGO's geologists through re-inspection of the core or core photographs. • No twin-holes have been drilled. • Recent drill hole sample number and logging information has been captured at source using laptop computers with standardised database templates to ensure consistent data entry. • Data (logs, sample dispatched, core photographs) is downloaded daily to the IGO's main acQuire database, which is an industry recognised tool management and storage of geoscientific data. • The system is backed up off site daily. • Assay data is merged electronically from the laboratories into IGO's main acQuire database, with information verified spatially in Surpac software. IGO maintains standard work procedures for all data management steps. • An assay importing protocol has been set up to ensure quality samples are checked and accepted before data can be loaded into the main database. • There have been no adjustments or scaling of assay data other than setting below detection limit values to half detection for Mineral Resource estimation.
Location of data points	• Drill hole collars: Older drill holes have been located by surveyors using the most precise survey equipment available at the time of survey. The collar locations of recent underground holes have located by the IGO Mine Survey staff using total station survey equipment to accuracy better than 1cm in three dimensions. Hole directions are aligned using surveyed back site/ fore sight string lines and downhole surveys using an 'Azimuth Aligner' tool. • Drill hole paths: Older drill hole paths were surveyed using down hole cameras (single and multi-shot) with readings taken at 15m or 30m down hole intervals. Recent hole paths have been surveyed using electronic tools (Reflex Ez-Track) that have a azimuth precision of ±0.35° and dip precision of ±0.25°. • The grid system for drilling and the Mineral Resource estimate is a local grid (KNO) that is a non-linear projection of MGA94 Zone 51 using an GDA94 elevation datum using the following two-point reference locations: – Point 1: ■ 374,308.6293 MGA east = 374,330.281 KNO east. ■ 6,549,570.006 MGA north = 549,509.534 KNO north. ■ 0.00 AHD = 2.89 KNO RL. – Point 2: ■ 375,848.772 MGA east = 375,850.233 KNO east. ■ 6,547,182.835 MGA north = 547,109.502 KNO north. ■ 0.00 AHD = 2.89 KNO RL. • All deposits considered for Mineral Resource estimation are 300m or more below surface, so the quality of the topographic control is not a material consideration.
Data spacing and distribution	• The data spacing for the Long, Victor South, and McLeay deposits is nominally a 20mY along strike spacing and a10mX pierce point spacing across the mineralisation trend. Some areas of greater geological complexity are tested on a 5mX×5mY spacing. • The data spacing for Moran is nominally a 20mY along strike spacing and 10mX pierce point spacing across the mineralisation trend. Some areas of greater geological complexity are tested on a 10mX×10mY spacing. • Down-hole sample intervals range from 0.1m to 1.1m with 1m compositing applied for Mineral Resource estimation work. • The Competent Person considers that these data spacings are sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedures used, and the JORC Code classification applied.

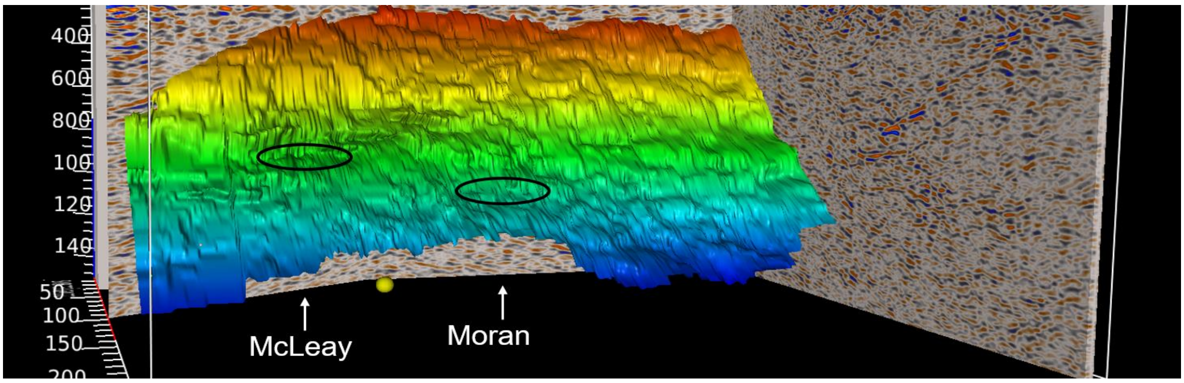
LONG PROJECT – SAMPLING TECHNIQUES AND DATA	
JORC Criteria	**Commentary**
Orientation of data in relation to geological structure	• Nearly all drill holes used for MRE are oriented to intersect the mineralisation at a high angle and as such, a grade bias possibly introduced by the orientation of data in relation to geological structure is unlikely. • Grade control holes that have been drilled along dip in pre-production, have only been used to determine the geometry of mineralisation with grade data from these holes not included in the Mineral Resource grade interpolations.
Sample security	• The sample custody is managed by IGO. • Cut-core (or RC) samples were collected in pre-numbered calico bags and stored securely on the mine-sites before being delivered to ALS laboratory in Kalgoorlie or Perth for sample preparation and assay. • Sample dispatches are prepared by IGO's field personnel and ALS has a sample tracing system that permits tracking of sample progress. • Sample dispatch sheets are verified against samples received at the laboratory and any missing issues such as missing samples and so on are resolved before sample preparation commences. • The second half (or ¼-core) samples are stored in IGO's secure sample facility in Kambalda. • The Competent Person considers that the likelihood of deliberate or accidental loss, mix-up or contamination of samples is considered very low.
Audits or reviews	• The database is audited annually by IGO's senior geologist to ensure the data meets IGO's standards expected for MRE work.

LONG PROJECT – EXPLORATION RESULTS	
JORC Criteria	**Commentary**
Mineral tenement and land tenure status	• The Long Project MREs are located within WA mining leases M15/1761, M15/1762, M15/1763, and M15/1515, with the later expiring on 12/12/2025 and three former expiring on 5/10/2025. • Some of the MRE are also located within Location 48, which is a non-crown (pre-WA Mining Act) freehold land. • M15/1515 is a joint venture (JV) tenement between IGO and St Ives Gold Mining Company (SIGM) who is a wholly owned by Gold Fields Australia; where the JV agreement allows IGO to explore and mine nickel ore on the tenement and SIGM is paid a royalty on the ore mined calculated from the Ore Tolling and Concentrate Purchase Agreement (OTCPA) with WMC. The OTCPA states IGO ore would be treated at the WMC Concentrator in Kambalda whereby IGO would be paid based on the percentage of nickel recovered from the nickel grade of the ore. • WA state royalties apply to any ore mined and processed at rates stipulated in the WA Mines Act. • The tenements are all in good standing at the time of reporting with no known material issues related to third parties, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.
Exploration done by other parties	• The Kambalda district in WA has a long history of prospecting, mining and exploration dating back to early gold discoveries in the region and the establish of the town of Kambalda in 1897. • In the mid-1960s WMC geologists recognised the sulphide gossans from specimens collected from Kambalda district, and follow-up drilling resulted in the discovery of the Lunnon Shoot nickel-sulphide deposit. This discovery signalled the onset of the nickel boom between 1966 and 1971 with the discovery of multiple deposits with over half recognised from their surface gossans or surface geochemistry. • Following a long hiatus, WMC focussed again in the Kambalda region in the early 1990s and was rewarded with discovery of more deposits (Mariners, Miitel and Coronet). From, 1971 to 2003, more deposits were discovered with most found through brownfield follow up of known mineralisation occurrences. • IGO acquired the Long Project from BHP Billiton Nickel West (formerly WMC) in 2002 and re-commissioned the Long Mine. Since then IGO's exploration teams discovered the McLeay deposit in 2005 and the Moran deposit in 2008.

Long Project – core yard

LONG PROJECT – EXPLORATION RESULTS (CONTINUED)	
JORC Criteria	**Commentary**
Geology	• The Kambalda nickel deposits are located 60 to 100km south of Kalgoorlie in Western Australia within the southern part of Archean age Norseman-Wiluna greenstone belt. • The regional stratigraphic succession is characterised by coeval komatiite/tholeiite and komatiite/felsic-volcanism. • Sulphidic flows and/or sulphide rich sediments are found as subtrates to some komatiite units, with the sulphide deposits presenting as ribbon-like shoots or as broad-shallow embayments in second order lava channels. • Most deposits are found in the lower Kambalda Dome sequence at the base of ultramafic (komatiite) lavas that are in contact with tholeiite basal units. Most deposits are distributed in an annular zone found around the core of granitoid stock that in intruded ≈2.6Ga ago. Later (barren) porphyry dykes from the stock cross cut the host rocks and mineralisation. • Since deposition/intrusion ≈2.7Ga ago, the rocks of the region have undergone four phases of deformation over a 300Ma period resulting in an NNW structural trend, folding and faulting. • The rocks have also been metamorphosed from greenschist to amphibolite grade. • The nickel-sulphide deposits are typically basal contact lodes up to 3km long and 50m to 300m wide but generally 5m to 50m thick with tonnages ranging from 0.5 Mt to 10Mt per deposit or deposit lense. Deposits typically grade upward from massive sulphide to matrix textures then into disseminated/blebby mineralisation. • The Long, McLeay, Moran and Victor South nickel sulphide deposits are typical of those found in the Kambalda region. • The Long Project has four main deposits found in two parallel lava channels. The Long and Moran deposits are in the Long Channel, and McLeay and Victor South in the Victor Channel. • The Victor South deposit is characterised by disseminated sulphides whereas the other three deposits are characterised by massive to semi-massive or matrix textures. The Victor Channel is also the host to the mined-out, Gibb, Gibb South and Victor deposits. • The major sulphides are pyrrhotite, pentlandite, pyrite and chalcopyrite.
Drill hole Information	• A summary of the many holes used to prepare the Mineral Resource estimates for Long Project is not practical for this public report. • The Mineral Resource estimates give the best-balanced view of all the drill hole information.
Data aggregation methods	• No drill hole related exploration results are included in this report. • No metal equivalent values are considered in the MRE.
Relationship between mineralisation widths and intercept lengths	• No drill hole related exploration assay results are included in this report. • All Mineral Resource drilling intersect the mineralisation at a high angle and as such approximate true thicknesses in most cases.
Diagrams	• Representative diagrams of the drilling and geometry Long, McLeay, Moran and Victor South deposits are included in the main body of this ASX public report.
Balanced reporting	• The Mineral Resource is based on all available data and as such provides the best-balanced view of the Long Project deposits.
Other substantive exploration data	• Information relating to other exploration data, such as density and metallurgical assumptions are detailed in Section 3 further below.
Further work	• Follow up down hole geophysics on FY19 drill holes.

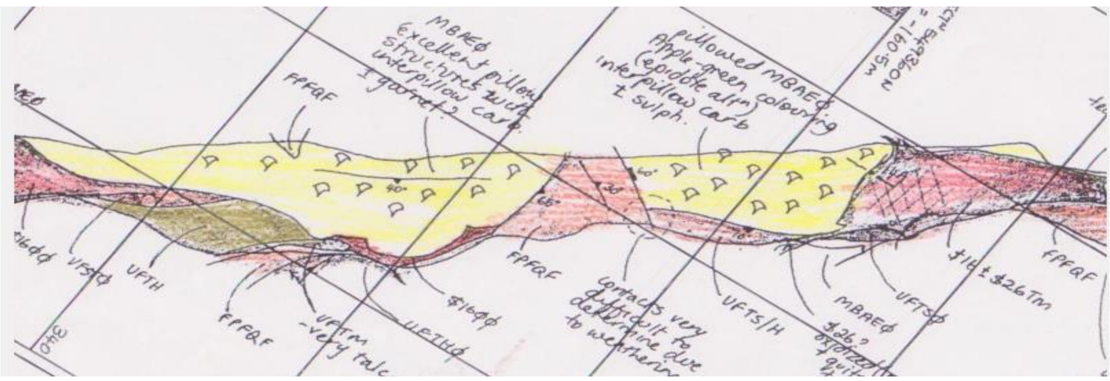
3D seismic survey interpretation of the ultramafic-basalt interface



LONG PROJECT – MINERAL RESOURCE ESTIMATION

JORC Criteria	Commentary
Database integrity	• IGO's geologist capture field data and drill hole logging directly in to handheld devices or laptop computers using standard logging templates. • Logging data is transferred daily to IGO's central acQuire database system which is an industry recognised software for management of geoscientific data. • All data is validated on site by IGO's geologists with quality samples checked and accepted before data is merged from laboratory digital assay reports in the central database. • Drill logs are printed from the database for further verification and the merged geology and assay results are then cross check spatially in Surpac mining software, with further checks against core photography or retained cores if required. • The Competent Person considers that there is minimal risk of transcription of keying errors between initial collection and the final data used for MRE work.
Site visits	• The Competent Person made a site visit to Long Project in May 2018 to discuss the methods of data collection, Mineral Resource estimation and remnant Mineral Resources with the (then) Long Operation technical staff. This visit included an inspection of the working areas of the mine and the mine infrastructure. • The Competent Person did not visit site for the 2018 drilling but has discussed and reviewed the results with the IGO's geologist supervising the exploration drilling.
Geological interpretation	• The data used for geological interpretation is from DD drilling and includes logging, assay results, which is augmented by underground exposure mapping to confirm the interpreted geological units and zones of mineralisation. • Lithological controls are used to interpret the footwall and hangingwall contracts of the Mineral Resource mineralisation and the cross-cutting waste dykes. • Barren (post-mineralisation) porphyry dykes have variable thicknesses and orientation and are modelled as three-dimensional digital solids that overprint the mineralisation solid in the MRE model. • In some areas, the MRE is offset on faults or porphyry dykes, with the assumption that grades are continuous across these post mineralisation structural breaks. • The interpreted geological controls described above are used to control the grade estimation process. • No alternative interpretations have been prepared or considered necessary. • The geological interpretation is considered to have moderate to high confidence in all deposits as the up dip and up plunge continuity is generally established by prior mining and down dip and down plunge geometry established by DD drilling.
Dimensions	• Long: − The major extent of Long deposit is (including mined out areas) ~2.6km down plunge, ~550m down dip with 25 ribbon-like lenses modelled that are typically ~1m to 3m in true thickness. − The MRE starts at ~300m below natural surface and extends to ~1,000m below surface. • McLeay: − The major extent of McLeay deposit is ~750m down plunge, ~140m down dip, with seven lenses modelled that are typically 1m to 3m in true thickness. − The MRE starts at ~650m below surface and extends ~1,000m below surface. • Victor South: − The major extent of Victor South deposit is ~200m down plunge, ~150m down dip with three ribbon-like lenses modelled that are typically ≈1m to 10m in true thickness. − The MRE starts ~600m below surface and extends ~850m below surface. • Moran: − The major extent of the Moran deposit is ~650m down plunge, ~120m down dip with three ribbon-like lenses that are typically ~1m to 5m in true thickness. − The MRE commences ~900m below surface and extends ~1,000m below surface.

Back mapping from Long deposit 10 Level September 1996



LONG PROJECT – MINERAL RESOURCE ESTIMATION (CONTINUED)	
JORC Criteria	**Commentary**
Estimation and modelling techniques	• Digital three-dimensional solids are prepared in Surpac software to encompass the interpreted MRE mineralisation using either a nominal ≥1.0% Ni drill hole grade cut-off in the massive sulphide rich deposits, or a ≥0.6% Ni drill hole grade cut-off for the disseminated mineralisation in the Victor South deposit. • For all models the estimated variables were nickel, copper and density for both ore and waste blocks. • Long estimation method: – For narrow zones of mineralisation in the Long deposit, a two-dimensional (2D) estimation method was applied whereby drill hole grade intervals are accumulated into a (grade × horizontal thickness × density) accumulation variables for each drill hole intercept of mineralisation, and the accumulations, thicknesses and density are estimated using ordinary kriging into 2D panels project in the plane of the mineralisation. – Panel grades and density for the nominal 10mY×8mZ panels are then back calculated from the accumulation and thickness estimates. – No grade top-cutting or capping has been applied. – Minimum number of samples was 6 and maximum sample was 24. The maximum search distance set for major axis was 200m and maximum vertical search distance was 1000m. • Victor South, McLeay and Moran estimation methods: – Estimates were using ordinary block kriging into three-dimensional block models with parent block grades estimated from 1m long drill hole composites within each estimation domain. – No grade top-cutting or capping has been applied. – Sample searches locally oriented to follow the local trends of the mineralisation in each estimation domain. – Estimation block sizes were set to parent dimensions of 10mY×4mY×4mZ, with sub blocks permitted down to dimensions of 5mY×0.5mY×0.5mZ for geological boundary resolution. – The parent block size is considered appropriated for the typical drill spacing of 20mE×10mE with some areas drilled out on a 5mE×5mN spacing. – Victor South - Minimum number of samples was 1 and maximum sample was 15. Maximum search distance was between 60m to 80m. – McLeay - Minimum number of samples was 1 and maximum sample was 19. Maximum search distance was 80m to 150m. – Moran - Minimum number of samples was 3 and maximum sample was 10. Maximum search distance was 150m. • There are no assumptions in any of the deposit estimates relating to by-products, deleterious elements, selective mining units or correlations between estimation variables. • The model estimates are validated by comparing model inputs (composites) to model outputs (panel or block estimates) on a global and moving window (swath-plot) basis for each estimation domain. • The models and composites are also inspected on-screen to confirm that the trends in the input data are reproduced as expected in the block or panel estimates. • Historical comparisons of Mineral Resource forecasts and actual production data indicated the grade estimation process is generally robust and insensitive to new data or mining depletions. Overall reconciliations are positive with more metal recovered than predicted by the models.
Moisture	• The MRE tonnages are estimated on a dry basis.
Cut-off parameters	• Apart from Victor South, where the disseminated-style of mineralisation is reported using a ≥0.6% Ni block model cut-off grade, Mineral Resources are reported using a ≥1.0% Ni.
Mining factors or assumptions	• The assumed mining methods vary depending on deposit-lens geometry and thickness with cut-and-fill, long hole stoping and airleg mining practices. • Minimum mining widths range from 1.2m to 4m and are dependent on mining method.
Metallurgical factors or assumptions	• IGO has sold ore from Long Project to BHP's nearby concentrator, which has processed ores from Kambalda-style deposits for over 30 years. • The expected metallurgical recovery is specified in sales contracts and the recovery behaviour of the deposits is well understood and not material to ore sales. • The current MRE assumes a similar contract can be established for exploitation. • Copper is a payable metal but not included in the Mineral Resource estimates.
Environmental factors or assumptions	• IGO's Long Project operates under an environmental management plan, which meets or exceeds legislative requirements. • Rock waste was trucked to surface waste dumps or used as stope backfill. • Environmental rehabilitation plans are in place and progressively executed, with costs included in the operational budget and forward plans. • Disposal of concentrator residues in a tailing storage facility on and adjacent BHP tenement is managed by BHP.

LONG PROJECT – MINERAL RESOURCE ESTIMATION (CONTINUED)	
JORC Criteria	**Commentary**
Bulk density	• In situ bulk density measurements from more recent drilling have been made on geologically representative sections of core from recent drilling with density determined using the Archimedes Principle (water-displacement) method to determine core volumes and weighing of the oven-dried core interval to determine the core masses. • Density is then calculated as mass/volume for each sample tested. • The rocks measured are fresh with no pore spaces that could soak up water and potentially bias the estimation method. • Where enough data is available density is estimated into the Mineral Resource estimates using the same methodology as used for grade variables described above. • For historic data where no measurement information is available, in situ density has been estimated using a linear regression function between density and nickel grade. This relationship is acceptable for MRE purposes due to the strong positive correlation between the nickel sulphides and density. • The porphyry intrusions are assigned a density of 2.7t/m^3, which is the average of the available density results for this rock type in the density database.

Classification	• The basis of classification of the Long Project estimates into different JORC Code confidence categories is based on drill hole spacing and/or proximity of mine development and assessment of reasonable expectation of economic extraction as follows:
	• Indicated Mineral Resources are allocated where the continuity in grade and geology can be assumed from geology mine level exposures with:
	  – Long, Victor South and McLeay having a drill spacing of 20mN×10mE grid (or closer).
	  – Moran having a drill spacing of 40mN×10mE grid (or closer).
	  – Reasonable expectations that that the Indicated Resources could be mined (where present) within or adjacent to existing workings, backfill and stopes at current or reasonably expected higher metal prices
	• Inferred Mineral Resources are allocated where the continuity of grade and geology can be implied from the drilling information available on a 40mN×40mE grid.
	• The Competent Person considers this classification considers all relevant factors such as data reliability, confidence in the continuity of geology and grades, and the quality, quantity and distribution of the data, and the ability to exploit the resources in or adjacent to existing mine workings.
	• The classification reflects the view of the Competent Person reporting the estimates.

Audits and Reviews	• An in-house review has been completed as part of the hand-over of responsibility for the estimates to a new Competent Person.
Relative Accuracy/ Confidence	• No geostatistical methods such as conditional simulation have been prepared to quantify the accuracy or precision of the estimates. • The Competent Person considers that the Measured and Indicated Mineral Resource estimates have local precision that is suitable for planning quarterly and annual targets respectively, and as such, suitable for Ore Reserve conversion. • Inferred Mineral Resource estimates have global estimation precision and are not suitable for Ore Reserve conversion. • The estimates are compared to the production a monthly, quarterly and annual basis, and results to date have been satisfactory and found to be marginally conservative.

Core logging at Long in 2016

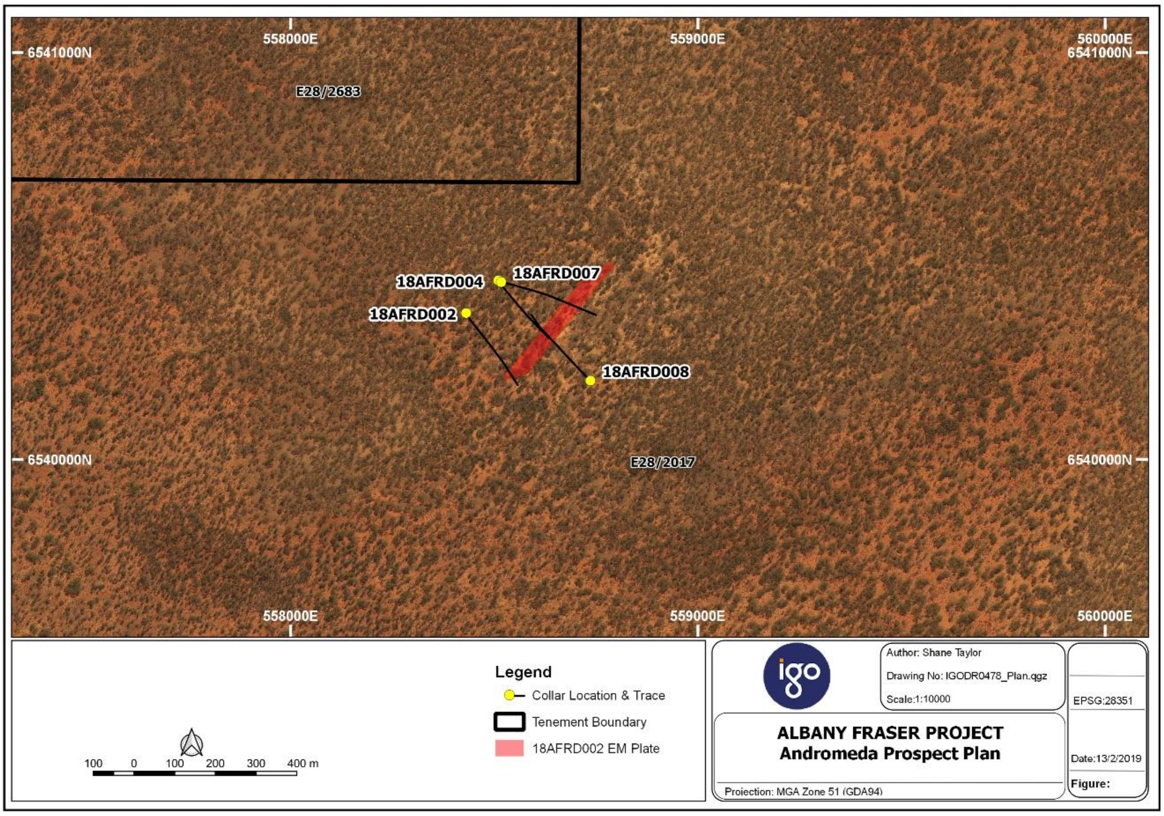
ANDROMEDA PROSPECT – SAMPLING TECHNIQUES AND DATA	
JORC Criteria	**Commentary**
Sampling techniques	• The Andromeda Prospect has been cored and sampled by diamond drilling (DD) programs as detailed in the following subsections.
Drilling techniques	• DD holes were drilled by a Mantis 1000 rig owned and operated by Wallis Drilling Pty Ltd. • Hole pre-collars were drilled by either 140mm diameter mud-rotary method or collared from surface with HQ-core (63.5mm diameter), which was then reduced to NQ2-core (50.6mm diameter) at a depth directed by the IGO geologist. • All core was oriented using Reflex Act III-N2 Ezy-Mark orientation tools.
Drill sample recovery	• For recovery checking and orientation marking purposes, the DD core was reconstructed into continuous runs in an angle iron cradle. • DD recoveries were quantified as the ratio of measured core recovered length to drill advance length for each core-barrel run. There were no material core-loss issues or poor sample recoveries over the sampled intervals. • 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, structures, weathering, colour and other features of the samples. • Quantitative logging was completed for geotechnical purposes. • The total lengths of all drill holes have been logged. • The logging is considered adequate to support any downstream estimation, mining and/or metallurgical studies.
Sub-sampling techniques and sample preparation	• The DD core was generally subsampled into half-core using an automated wet-diamond-blade core saw, except for hole 18AFRD002 where quarter core subsamples were cut from the half-core. All samples submitted for assay were selected from the same side of the core. • The primary tool used to ensure representative drill core assays was monitoring and ensuring near 100% core recovery. • Laboratory sample preparation of DD core involved oven drying (4-6 hrs at 95°C), coarse crushing in a jaw-crusher to 100% passing 10 mm, then pulverisation of the entire crushed sample in LM5 grinding robotic mills to a particle size distribution of 85% passing 75 μm, and collection of a 200g sub-sample. • Quality control procedures involved insertion of certified reference materials, blanks, and collection of duplicates at the pulverisation stage. • The results of duplicate sampling are consistent with satisfactory sampling precision.
Quality of assay data and laboratory tests	• No geophysical tools were used to determine any element concentrations. • Bureau Veritas 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 was achieved in the pulverisation stage. • Field duplicates, CRMs and blanks were routinely inserted at frequencies between 1:10 and 1:20 samples. • Laboratory quality control processes included the use of internal lab standards using certified reference materials (CRMs), blanks, 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 confirmed 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 core samples were analysed for a 63-element suite: − Fire assay of 40g charge with ICPMS finish – Au, Pd, Pt. − Laser ablation of fused bead with ICPMS finish – Ag, As, Be, Bi, Cd, Ce, Co, Cr, Cs, Cu, Dy, Er, Eu, Ga, Gd, Ge, Hf, Ho, In, La, Lu, Mn, Mo, Nb, Nd, Ni, Pb, Pr, Rb, Re, Sb, Sc, Se, Sm, Sn, Sr, Ta, Tb, Te, Th, Tl, Tm, U, V, W, Y, Yb, Zn, Zr. − XRF analysis of powder fused with lithium borate flux including 5% $NaNO_3$ – Al, Ba, Ca, Fe, K, Mg, Na, P, S, Si, Ti. − For mineralised intervals and their surrounds only, Cu and Zn were also analysed by XRF of powder fused with lithium borate flux including 5% $NaNO_3$ – these XRF analyses were used for all calculations of mineralised intervals. − Loss on ignition was determined by robotic thermo gravimetric analysis at 1000°C.
Verification of sampling and assaying	• Significant intersections were checked by senior IGO geological personnel. • 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 Geological Database Administrator. • Assay data were imported directly from the digital assay files provided by the contract analytical company Bureau Veritas Perth and were merged into IGO's acQuire SQL database by IGO's Geological Database Administrator. • Data is backed up regularly on off-site secure servers. • No geophysical or portable XRF results were used in the generation of the reported exploration results. • There have been no adjustments to the assay data.

ANDROMEDA PROSPECT – SAMPLING TECHNIQUES AND DATA	
JORC Criteria	**Commentary**
Location of data points	• The hole collar locations of surface holes were recorded using a Montana handheld GPS and averaging for 90 seconds. Expected accuracy is ±6m for easting and northing. • Down hole drill path gyroscopic surveys have been completed every 12m down hole using a north seeking Reflex Ez-Gyro. • The grid system is GDA94 Zone 51.
Data spacing and distribution	• The drilling is for exploration purposes and targets conductive plates generated from surface geophysics (moving loop EM and downhole EM). A line spacing is not relevant with only two drill holes reported. • Samples have been composited using length-weighted intervals for public reporting.
Orientation of data in relation to geological structure	• Drilling from the surface is generally designed to cross the steeply north dipping conductive plate at a high angle. However, 18AFRD008 was specifically designed to test the homogeneity of the mineralised zone and was at low angle to the conductive plate. • True-widths of the intervals are yet to be determined. • The possibility of bias in relation to orientation of geological structure is currently not known.
Sample security	• The chain-of-sample custody is managed by the IGO staff. • Samples were stored at the IGO's currently active mine site Nova Operation ("Nova") and the drill core was cut and sampled at the Nova 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 bulka bag and delivered to the Bureau Veritas-Perth by freight contractor McMahon Burnett. • A sample reconciliation advice is sent by Bureau Veritas Perth to IGO's Geological Database Administrator on receipt of the samples. • Sample preparation and analysis was completed at the laboratory of Bureau Veritas 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 at this stage in the program.

ANDROMEDA PROSPECT – EXPLORATION RESULTS	
JORC Criteria	**Commentary**
Mineral tenement and land tenure status	• The Andromeda Project is within WA exploration tenement E28/2017 which expires on 21 Sep 2021, at which time an extension of term application will be requested if deemed necessary. • E28/2017 is located partly within the proposed Lake Harris Nature Reserve (PNR91), 2km to the east of the Harris Salt Lake. E28/2017 is in good standing with no known impediments to continued exploration on the tenement. • Ponton Minerals Pty Ltd ('Ponton') and Independence Windward Pty Ltd ('Windward') – the latter a wholly owned subsidiary of IGO, entered into agreement covering the Andromeda Project in September 2016 with IGO being the tenement manager. • Following the takeover of Windward Resources Ltd in October 2016, IGO holds a 70% interest in this tenure pursuant to the Fraser Range Tenement Sale and Joint Venture Agreement (2013). IGO is the manager of the Joint Venture and shall free-carry the Creasy Entities to a bankable feasibility study, at which time the Creasy Entities may elect to contribute to the Mining Venture or receive a 2% NSR upon dilution below 5%.
Exploration done by other parties	• E28/2017 has historically been explored for gold and base metals. • Previous work on the tenements consisted of aeromagnetic/radiometric and DTM aeromagnetic/radiometric surveys, soil sampling, geological mapping, and ground EM surveys. • There has not been any previous drilling at the Andromeda Prospect.
Geology	• The project area is considered highly prospective for volcanogenic massive sulphide deposits, based on the recently discovered mineralisation. A similar mineralisation style has been recognised in adjacent tenements. • The region is also considered to have high potential for mafic or ultramafic intrusion related Ni-Cu-Co deposits, based on the discovery of Nova-Bollinger Ni-Cu-Co deposit 50km to the south of the tenement.
Drill hole Information	• The collar coordinates of the two drill holes reported are as follows: − Hole 18AFRD007: drilled at 558,517mE and 6,540,436mN. − Hole 18AFRD008: drilled at 558,736mE and 6,540,194mN. • Hole 18AFRD007 was drilled at a high angle to the mineralised zone and plunges at -69° towards a grid bearing of 103°. • Hole 18AFRD008 was drilled at a low angle to the mineralised zone that approximates its dip plane and plunges at -71° towards a grid bearing of 320°. • Both holes were collared from the surface with topographic elevations yet to be surveyed.
Data aggregation methods	• Significant drill hole intercept results have been reported using a combined >1.0% Zn + >1.0 % Cu cut-off with a maximum internal dilution of 2m below cut-off. • No capping or top-cutting of high grades were undertaken. • The intercepts are calculated on a length weighted basis. • Higher grade intercepts within lower grade halos are reported for transparency. • Metal equivalent grades were not reported.

ANDROMEDA PROSPECT – EXPLORATION RESULTS	
JORC Criteria	**Commentary**
Relationship between mineralisation widths and intercept lengths	• Only downhole intersection widths are provided as an understanding of the mineralisation geometry is at an early stage.
Diagrams	• A long section projection of exploration drill results in included in the body of the Public Report and a plan of the collar locations and hole paths of all DD drilling is included below.
Balanced reporting	• Results for the >1.0% Zn + >1.0% Cu grade are reported. • The remainder of the results are considered low grade.
Other substantive exploration data	• A surface EM survey and downhole EM surveys have identified three dimensional geophysical targets that are included in the diagrams in the body of this ASX release.
Further work	• Further drilling is underway to test the conductive plates generated from the EM surveys.

Andromeda Prospect drill hole collar plan



FRASER RANGE AIRCORE DRILLING RESULTS – SAMPLING TECHNIQUES AND DATA	
JORC Criteria	**Commentary**
Sampling techniques	• The sampling techniques used at Fraser range have been air core drilling as detailed in the following subsections.
Drilling techniques	• Aircore holes have been drilled by six rigs owned and operated by Wallis Drilling Pty Ltd. • Holes are NQ (47.6mm) diameter at a depth directed by IGO geologist and drilled using tungsten carbine air core bits. • All holes are vertical.
Drill sample recovery	• Sample recovery is not assessed and logged but noted if sample recovery is wet or dry to determine the potential sample smearing contamination • Down hole depths are checked against drill rod counts.
Logging	• Qualitative logging of chip and core included lithology, mineralogy, mineralisation, structural, weathering, colour and other features of the samples. • The total lengths of all drill holes have been logged. • The logging is considered adequate to support downstream exploration studies and follow-up drilling with RC or diamond core
Sub-sampling techniques and sample preparation	• Sample piles from typically 4m long composites are spear sampled with ~ 3kg collected in pre-numbered calico bags. • End of hole core plugs ranging from ~5-15cm are drilled where possible for bottom of hole analysis work. • The nature of the drilling method means representation is indicative with sampling aimed at finding anomalous concentrations rather than absolute values for MRE work. • At BV, the laboratory sample is over dried (4-6 hours at 95°C), coarse crushed in a jaw-crusher to 100% passing 10 mm, then the entire sample is pulverised in LM5 grinding robotic mills to a PSD of 85% passing 75 µm and collection of a 200g sub-sample. • Quality control procedures involve insertion of certified reference materials, blanks, and collection of duplicates at the pulverisation stage. • The results of duplicate sampling are consistent with satisfactory sampling precision.
Quality of assay data and laboratory tests	• No geophysical tools were used to determine any element concentrations. • BV laboratory 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 µm is achieved in the pulverisation stage. • Field duplicates CRMs routinely inserted in the routine sample stream at a frequency of 1:20 samples. • Blanks quality control samples are not used for exploration sampling. • Laboratory quality control processes include the use of internal lab standards using certified reference materials (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 core samples were analysed for a 63-element suite: – Inductively coupled plasma mass spectroscopy (ICP-MS) for Ag, As, Au, B, Be, Bi, Cd, Ce, Co, Cr, Cs, Ga, Hg, La, Mo, Nb, Pb, Pd, Pt, Rb, Sb, Sc, Se, Sr, Te, Th, U, W, Y and Zn. – Fire assay digestion and mass spectroscopy (FA-MS) for Au, Pd and Pt. – Laser ablation and ICP-MS (LA-ICP-MS) for Ag, As, Be, Bi, Cd, Ce, Co, Cr, Cs, Cu , Dy, Er, Eu, Ga, Gd, Ge, Hf, Ho, In, La, Lu, Mn , Mo, Nb, Nd, Pb, Pr, Rb, Sb, Sc, Se, Sm, Ta, Tb, Te, Th, Tl, Tm, U, Y, Yb and Zr – Fusion digestion and X-ray fluorescence (XRF) analysis of powder fused with lithium borate flux including 5% $NaNO_3$ – Al, Ba, Ca, Fe, K, Mg, Na, Ni, P, S, Si, Sn, Sr, Ti, V, W and Zn – The digestion methods can be considered near total for all elements • Loss on ignition (LOI) was determined by robotic thermo gravimetric analysis at 1000°C.
Verification of sampling and assaying	• Significant intersections were checked by the senior IGO geological personnel. • 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 Geological Database Administrator. • Assay data are imported directly from digital assay files from contract analytical company BV and are merged in the IGO 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	• The hole collar locations of surface holes were recorded using a Montana handheld GPS and averaging for 90s. Expected accuracy is ±6m for easting and northing. • Down hole surveys are not completed as holes are not used for MRE work. • The grid system is GDA94 Zone 51.

FRASER RANGE AIR CORE RESULTS – SAMPLING TECHNIQUES AND DATA (CONTINUED)	
JORC Criteria	**Commentary**
Data spacing and distribution	• Holes a drilled ~400m or 800m line spacing on east-west fences at a ~1.5km to 3.0km fence spacing north south • Samples have been composited using length-weighted intervals for public reporting.
Orientation of data in relation to geological structure	• The drilling from surface is designed to test the regolith and basement below cover – the orientation in relation to geological structure is not always known. • 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 the IGO staff. • Samples were stored at the IGO's currently active mine site Nova Operation and sampled in the field by IGO staff and contractors, at the time of drilling. • 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 BV by contractor freight McMahon Burnette. • A sample reconciliation advice is sent by the BV to IGO's Geological Database Administrator on receipt of the samples. • Sample preparation and analysis is completed at BV in 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.

FRASER RANGE AIR CORE RESULTS – EXPLORATION RESULTS	
JORC Criteria	**Commentary**
Mineral tenement and land tenure status	• The Fraser Range significant intercepts are in 19 exploration licences. The table below is a summary of the expiration dates, management and JV arrangements relating to these tenements.

Holder or JV	Tenement Number	Area (km^2)	Expiry Date	Comments
IGO/AGA	E39/1454	355	6/05/2022	IGO (30%) part of the Tropicana JV
IGO/Buxton	E28/2201	134	27/09/2022	IGO (90%) Buxton Resource (10%)
IGO/Carawine	E39/1733	238	18/11/2023	IGO (51%), Carawine Resources (49%) with IGO having the right to earn and additional 19%
	E69/3052	136	10/12/2022	
IGO/FraserX	E28/1630	152	1/10/2019	IGO (70%) FraserX Pty Ltd (30%)
IGO	E28/2623	274	4/01/2022	IGO (100%)
	E28/2625	112	5/01/2022	
	E28/2419	322	14/09/2021	
	E28/2459	44	2/11/2019	
IGO/Ponton JV	E69/2989	583	3/04/2023	IGO (70%) Ponton Mineral Pty Ltd (30%)
	E28/2017	199	21/09/2021	
IGO/Kamax	E28/2367	219	6/05/2020	IGO (70%) Kamax Resource Ltd (30%) – IGO may acquire an additional 5% by exercising option
IGO/GR/Kamax	E39/1653	69	19/04/2022	IGO (65%) Geological Resources Pty Ltd (20%) and Kamax (15%) – IGO may acquire an additional 5% by exercising option
IGO/NBX	E39/1654	119	22/04/2022	IGO (60%) NBX (30%) and Orion (10%) – IGO may acquire an additional 5% by exercising option
IGO/Rumble	E28/2366	139	17/08/2019	IGO has the right to earn 70%
IGO/Segue	E28/1475	208	16/11/2019	IGO (51%) Segue (49%) – IGO has the right to earn an additional 39% interest in the JV
	E28/2266	379	24/07/2023	
	E39/1731	594	23/09/2023	
IGO/Tasex	E28/2301	47	24/07/2023	IGO has the option to acquire an 80% interest in the tenements held by Tasex Geological Services Pty Ltd during first 2 years from the date of the Letter Agreement

	• IGO management has provided the Competent Person with written assurance that tenure for the exploration licences listed above was secure at the time of reporting and that there are no known impediments to obtaining an licence to operate or explore on the respective leases listed.
Exploration done by other parties	• There has been historical explored for gold and base metals by several junior explorers. Previous work on the tenements consisted of AEM-radiometric and DTM-AEM-radiometric, soil sampling, geological mapping, ground EM survey. • There has not been any drilling conducted.

FRASER RANGE AIR CORE RESULTS – EXPLORATION RESULTS	
JORC Criteria	**Commentary**
Geology	• The project area is considered highly prospective for VHMS deposits, based on the recently identified mineralisation. Similar mineralisation style is also identified in adjacent tenements. • The region is also considered by IGO and 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 aircore 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 >1000ppm 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 plan of significant intercepts and intercept table is included in the body of the ASX Public Report
Balanced reporting	• Results for >4m 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 not reported drill holes are included in the maps in the main body of this Public Report,
Other substantive exploration data	• Surface Moving Loop EM survey identified three dimensional geophysical targets that are included in the diagrams in the body of this ASX release.
Further work	• Further drilling is underway to test the conductive plates generated from the Surface Moving Loop EM surveys.

Aircore drilling on the Fraser Range in 2018