ASX RELEASE

26 July 2018

ANNUAL MINERAL RESOURCE AND ORE RESERVE

Independence Group NL ('IGO' or 'the Company') (ASX: IGO) reports the annual update of IGO's Mineral Resources and Ore Reserves as well as an update on Exploration activities for the 2018 financial year.

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 30 June 2018.

Highlights

- At 30 June 2018, IGO's total Mineral Resources from all operations, contained combined estimated metal contents of 300kt Ni, 109kt Cu, 9kt Co, and 2.2Moz Au. These estimates are inclusive of Ore Reserves.
- IGO's total Ore Reserves as at 30 June 2018 contained estimated metal contents of 216kt Ni, 89kt Cu, 7kt Co and 1.2Moz Au.
- Substantially all of the life-of-mine grade control drilling has been completed over the Nova and Bollinger deposits resulting in 96% of the nickel metal in the resource now being classified as Measured Mineral Resource and 92% of the reserve in Proven Ore Reserve categories.
- Underground drilling at Nova is now focussed on exploration drilling targeting additional orebodies at Nova.
- At Tropicana, the Boston Shaker drilling has been completed and prefeasibility work is progressing to schedule. An update on the Tropicana Mineral Resource and Ore Reserves capturing this work is scheduled at the end of CY18.

Peter Bradford, IGO's Managing Director and CEO said: *"IGO is in a unique position at the Nova Operation with 96%[1] of the Mineral Resource now classified as Measured and 92%[1] of the Ore Reserve classified as Proved. These are the highest confidence JORC Code categories and represent a significant step in de-risking future production from Nova. There are few mining operations which effectively have their life-of-mine profile at such a low-risk resource classification. By taking these steps, the Company can now focus on both optimising the value of the resource and delivering discovery of additional mineralisation at Nova.*

"We have seen a decrease in the Ore Reserve metal at the Nova Operation of approximately 11%[2] compared to the previous Ore Reserve statement. Although this is a reduction in metal, the team has done a great job in optimising the life-of-mine plan to drive additional value.

[1] Based on nickel metal for the Nova Operation
[2] Based on nickel metal comparing FY18 to FY17 Ore Reserve (excluding mining depletion for FY18)

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"We are confident that additional discoveries will be made at Nova and on the Fraser Range which will drive future value. Exploration underground drilling has commenced targeting the Phoenix prospect from underground positions at Nova.

"At Tropicana, the drilling has been completed for the Boston Shaker prefeasibility. Results to-date are encouraging. The study schedule remains on track for delivery of an updated Mineral Resource and Ore Reserve for Boston Shaker by end of CY18."

Table 1: IGO Mineral Resource Estimate as at 30 June 2018

Year	Operation	Tonnes (Mt)	Grade Estimate				In situ Metal Estimates			
			Ni (%)	Cu (%)	Co (%)	Au (g/t)	Ni (kt)	Cu (kt)	Co (kt)	Au (koz)
2018	Nova	13.1	2.0	0.8	0.07	-	268	109	9	-
	Long	0.8	4.2	-	-	-	32	-	-	-
	Tropicana (30%)	41.9	-	-	-	1.62	-	-	-	2,187
	Total	55.8	Grades for totals are not additive				300	109	9	2,187

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 30 June 2018

Year	Operation	Tonnes (Mt)	Grade Estimate				In situ Metal Estimates			
			Ni (%)	Cu (%)	Co (%)	Au (g/t)	Ni (kt)	Cu (kt)	Co (kt)	Au (koz)
2018	Nova	11.7	1.86	0.76	0.06	-	216	89	7	-
	Long	-	-	-	-	-	-	-	-	-
	Tropicana (30%)	19.5	-	-	-	1.89	-	-	-	1,185
	Total	31.2	Grades for totals are not additive				246	89	7	1,185

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

Future Reporting Timetable

For future reporting of Mineral Resources and Ore Reserves, IGO will shift from annual reporting with an effective date of 30 June to an effective date of 31 December. This change is to ensure better alignment with the IGO planning calendar.

-Ends-

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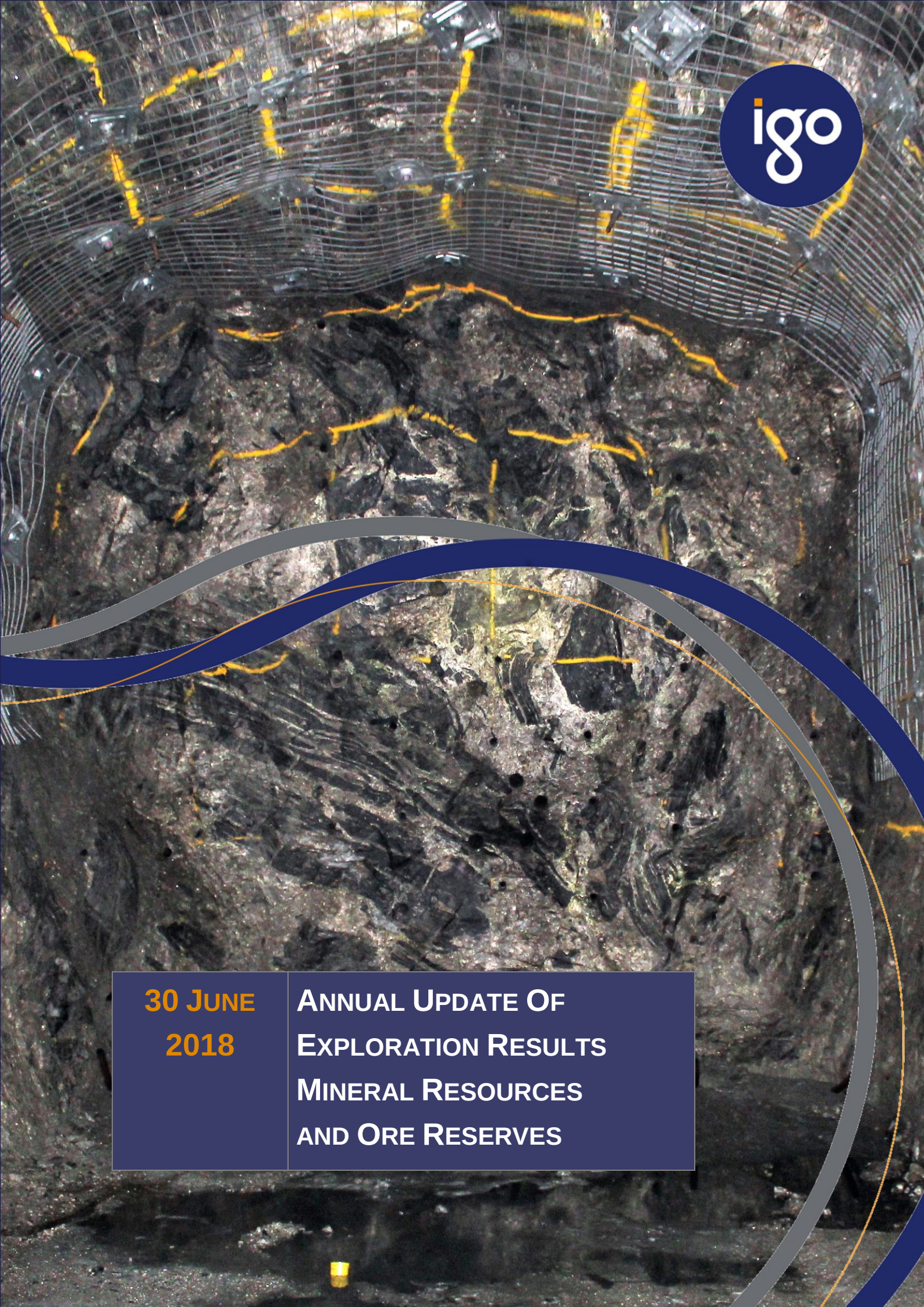


30 JUNE 2018

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 Australian Stock Exchange (ASX) listed mining and exploration company that produces saleable nickel-copper-cobalt (Ni-Cu-Co) concentrates and gold (Au) bars from its mining interests in Western Australia - refer to the figure below for the operation locations for FY18. IGO also manages or has significant joint venture (JV) interests in extensive exploration ground positions in Western Australia and the Northern Territory, both of which are highly prospective for base metals and gold.

The main purpose of this report is to provide the market and IGO's stakeholders with the technical information that is material to the estimation of IGO's Mineral Resources and Ore Reserves for the financial year ending 30 June 2018 (EOFY18). Also included in this report, are noteworthy results of IGO's exploration activities in the 2018 financial year (FY18) and summaries of IGO's exploration plans for the 2019 financial year (FY19).

IGO reports Exploration Results, Mineral Resource estimates (MREs) and Ore Reserve estimates (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, which is known as the JORC Code.

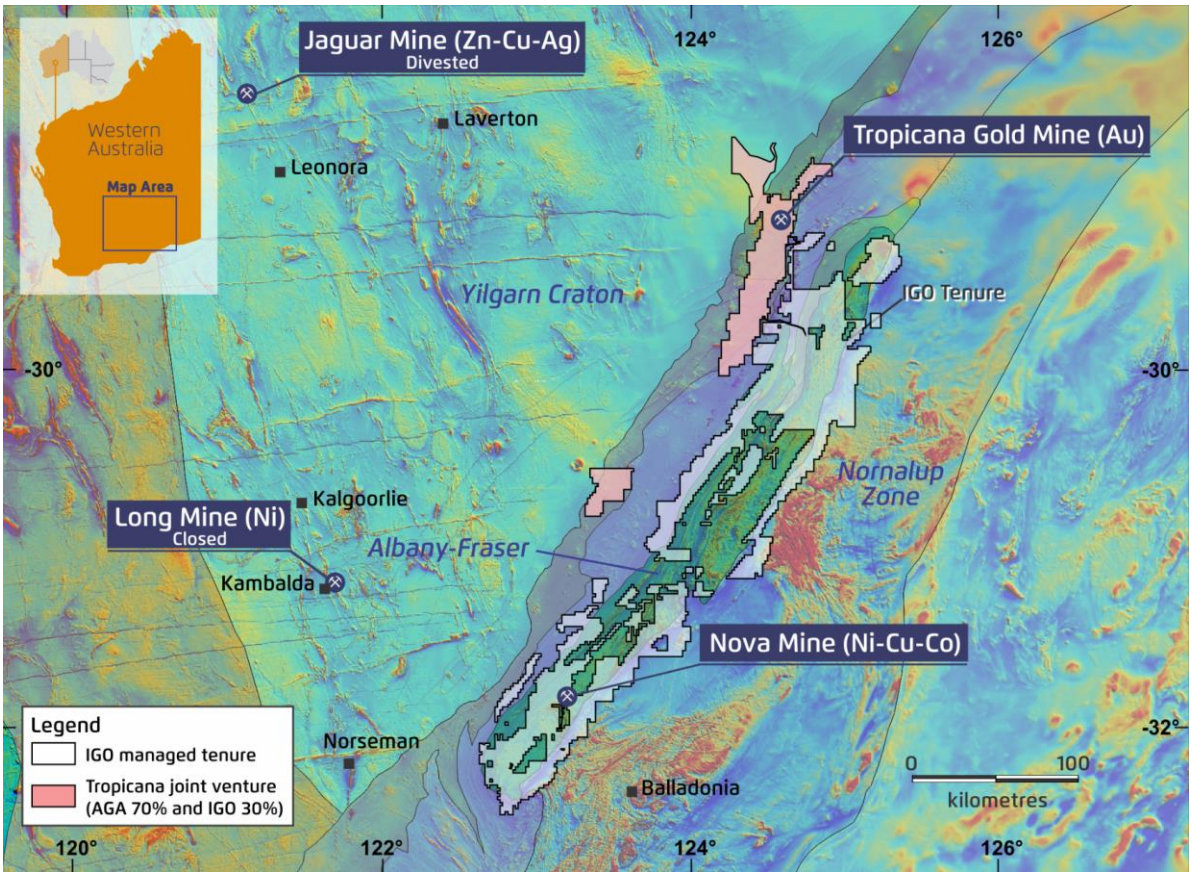
EOFY17 and EOFY18 estimates

At the EOFY17, IGO reported MREs and OREs from its three West Australian base metal mining operations (Nova, Jaguar and Long), IGO's 30% interest in the Tropicana Gold Mine (Tropicana), and the Stockman base metals project in New South Wales[1].

During FY18, IGO divested two mineral assets, the Stockman Project[2] and the Jaguar Operation[3]. Additionally, Long Operation was placed into care and maintenance with the final depletion of the Ore Reserves at the end of May 2018. Updated estimates were also prepared for both the Tropicana and Nova Operation.

These FY18 events have resulted in significant changes to IGO's overall MRE and ORE grade, tonnage and metal estimates for EOFY18 as detailed on the tabulation atop the next page of this report.

IGO FY18 operations and WA exploration ground position over major structural regions and total magnetic intensity



[1] Mineral Resources and Ore Reserves Update (ASX 23-Oct-17)
[2] Completion of Stockman Project Divestment (ASX 8-Dec-17)
[3] Jaguar Divestment Completed (ASX 1-Jun-18)

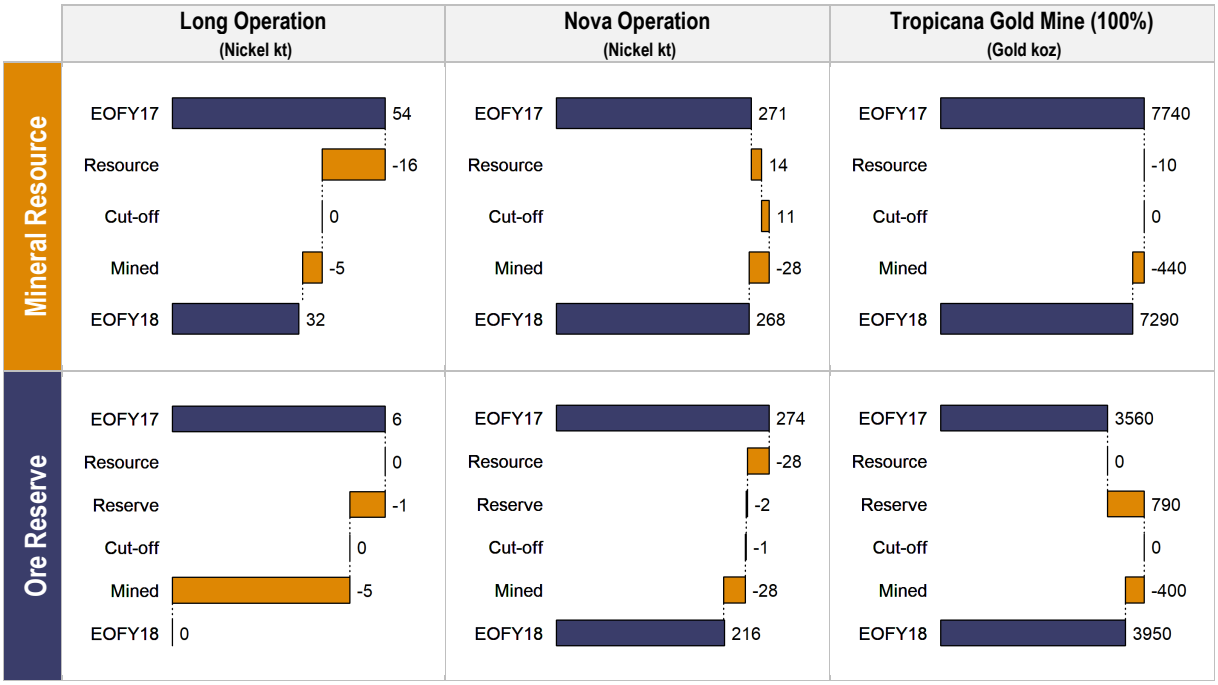
IGO total Mineral Resources – EOFY17 and EOFY18

EOFY	Operation or Project	Mass (Mt)	Grade estimates						*In situ* metal estimates					
			Ni (%)	Cu (%)	Co (%)	Zn (%)	Ag (g/t)	Au (g/t)	Ni (kt)	Cu (kt)	Co (kt)	Zn (kt)	Ag (Moz)	Au (koz)
2017	Nova	11.4	2.4	1.0	0.08	…	…	…	271	113	9	…	…	…
	Long	1.2	4.6	…	…	…	…	…	54	…	…	…	…	…
	Tropicana 30%	42.4	…	…	…	…	…	1.7	…	…	…	…	…	2,322
	Jaguar	6.5	…	0.9	…	5.6	85	0.4	…	55	…	364	18	90
	Stockman	14.0	…	2.1	…	4.3	38	1.0	…	287	…	599	17	437
	EOFY 2017	**75.5**	Grades for totals are not additive						**325**	**455**	**9**	**963**	**35**	**2,849**
2018	Nova	13.1	2.0	0.8	0.07	…	…	…	268	109	9	…	…	…
	Long	0.8	4.2	…	…	…	…	…	32	…	…	…	…	…
	Tropicana 30%	41.9	…	…	…	…	…	1.62	…	…	…	…	…	2,187
	Jaguar	…	…	…	…	…	…	…	…	…	…	…	…	…
	Stockman	…	…	…	…	…	…	…	…	…	…	…	…	…
	EOFY 2018	**55.8**	Grades for totals are not additive						**300**	**109**	**9**	**…**	**…**	**2,187**

IGO total Ore Reserves – EOFY17 and EOFY18

EOFY	Operation or Project	Mass (Mt)	Grade estimates						*In situ* metal estimates					
			Ni (%)	Cu (%)	Co (%)	Zn (%)	Ag (g/t)	Au (g/t)	Ni (kt)	Cu (kt)	Co (kt)	Zn (kt)	Ag (Moz)	Au (koz)
2017	Nova	13.3	2.06	0.83	0.07	…	…	…	274	110	9	…	…	…
	Long	0.2	3.64	…	…	…	…	…	6	…	…	…	…	…
	Tropicana 30%	17.1	…	…	…	…	…	1.94	…	…	…	…	…	1,067
	Jaguar	2.4	…	0.66	…	6.71	100	0.47	…	16	…	161	8	36
	Stockman	9.0	…	2.10	…	4.53	39	1.08	…	189	…	408	11	311
	EOFY 2017	**41.9**	Grades for totals are not additive						**280**	**315**	**9**	**568**	**19**	**1,414**
2018	Nova	11.7	1.86	0.76	0.06	…	…	…	216	89	7	…	…	…
	Long	…	…	…	…	…	…	…	…	…	…	…	…	…
	Tropicana 30%	19.5	…	…	…	…	…	1.89	…	…	…	…	…	1,185
	Jaguar	…	…	…	…	…	…	…	…	…	…	…	…	…
	Stockman	…	…	…	…	…	…	…	…	…	…	…	…	…
	EOFY 2018	**31.2**	Grades for totals are not additive						**216**	**89**	**7**	**…**	**…**	**1,185**

EOFY17 to EOFY18 – key changes in principal payable metal



In FY18 IGO divested both the Stockman Project and the Jaguar Operation for (predominantly) cash considerations. These divestments have reduced IGO's total MRE tonnage to 55.8Mt at EOFY18, down from a total of 75.5Mt at EOFY17. Zinc and silver metal are also no longer part of IGO's metal production portfolio. The IGO ORE total is similarly reduced, with a total of 31.2Mt at EOFY18 compared to the 41.9Mt total at EOFY17.

An end of mining review of the 'reasonable expectations of eventual economic extraction' of the MRE at Long, concluded that for EOFY18 reporting 16kt of nickel metal should be declassified from the JORC Code reportable MRE. Similarly, with no mine plan in place to demonstrate economic viability, the small tonnage of remnant reserves at Long have been reclassified as resources with no ORE reportable at EOFY18.

At Nova Operation, the grade control drill-out of the Nova-Bollinger deposit combined with a change in cut-off grade to net-smelter-return (*NSR*) reporting, added ~22kt of nickel metal to the EOFY17 MRE. These increases have offset much of the 28kt of nickel metal in mining depletion. There has also been a significant decrease in the Nova ORE due to both the alignment of the mine planning estimate with the current MRE model (28kt), and mining depletion (28 kt).

IGO's 30% share of the Tropicana MRE has decreased to an EOFY18 metal content of 2,187koz from 2,849koz at EOFY17 predominantly due to mining depletion of 0.44Moz. In contrast, IGO 30% share of the Tropicana ORE has increased to 1,185koz at EOFY18 from 1,411koz at EOFY17 due to changes in the mine designs and schedule adding to the reserves. More details relating the EOFY18 estimates are can be found in the operation-specific sections of this report.

Foreign exchange and metal prices

Specification of metal prices and foreign exchange (Fx) rates is critical for the economic evaluation reserves and for establishing reporting cut-offs. In February 2018, IGO's business development group selected prices and FX rates, based on Consensus Economics (CE) data for base metal prices and Bloomberg data for FX rates as listed below for MREs and ORE.

EOFY18 MRE Fx and metal price assumptions

Payable Metal	Metal Price			Fx (A$/US$)
	Unit	(US$/t)	(A$/t)	
Cobalt	$/t	55,790	74,390	0.75
Copper	$/t	6,810	9,080	0.75
Nickel	$/t	15,390	20,520	0.75
Gold	$/oz	1,400	1,817	0.77

- Gold prices and Fx rates for Tropicana determined by AGA
- Other Fx rates are the 25th percentile Bloomberg forecasts at the end of February 2018
- Base metal prices are CE 75th percentile forecasts for cobalt and copper, and the 90th percentile forecast for nickel

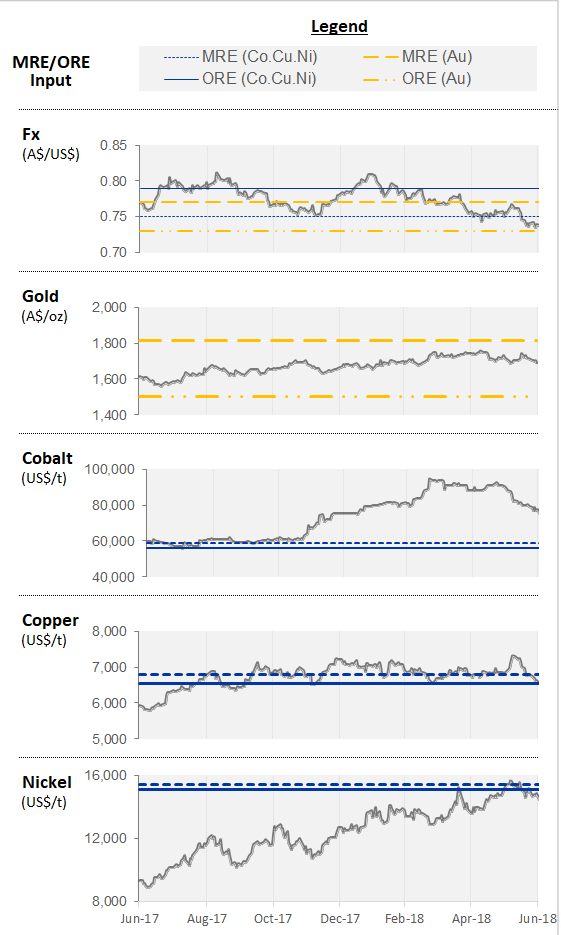
EOFY18 ORE FX metal price assumptions

Payable Metal	Metal Price			Fx (A$/US$)
	Unit	(US$/t)	(A$/t)	
Cobalt	$/t	46,510	58,870	0.79
Copper	$/t	6,540	8,280	0.79
Nickel	$/t	15,110	19,130	0.79
Gold	$/oz	1,100	1,500	0.73

- Gold prices and Fx rates for Tropicana are determined AGA
- Other Fx rates are the 50th percentile Bloomberg forecasts at the end of February 2018
- Base metal prices are CE 50th percentile forecasts for cobalt and copper and 75th percentile for nickel

The charts below depict the daily FY18 price trends, Fx and payable metals of interest with the IGO FY18 metal prices plotted as horizontal reference lines.

Fx and metal prices assumptions and FY18 market trends



Notes: FX rates trends from the Reserve Bank of Australia and gold price trends are averages from the Perth Mint data. Base metal prices are from the London Metal Exchange data.

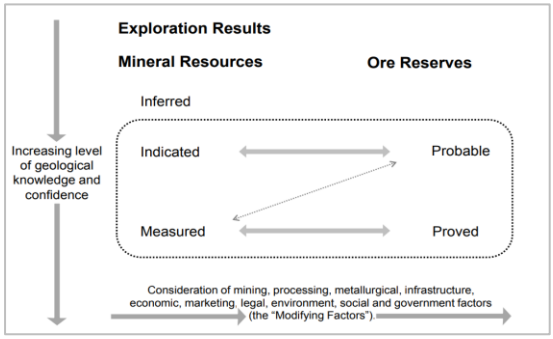
Apart from cobalt, where prices spiked significantly in late 2017, the metal prices selected for MRE and ORE evaluations are generally consistent with the FY18 metal price trends.

Corporate governance

As discussed above, 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 normal 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 foreign exchange 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.

Long Operation – Victor Decline – May 2018

IGO laboratory inspection June 2018 – sample drying

Competent Persons

The table atop the next page of this report lists names of the Competent Persons (as defined by the JORC Code) who are taking responsibility for reporting IGO's EOFY18 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 EOFY18 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 for EOFY18 Estimates and Results

Activity	Competent Person	Professional Association		IGO Relationship	Responsibility Activity
		Membership	Number		
Exploration Results	Ian Sandl	MAIG/RPGeo	2388	*IGO General Manager Exploration*	IGO greenfield results
	Damon Elder	MAusIMM	208240	*Manager Mine Geology - Tropicana* AngloGold Ashanti Australia	Tropicana Gold Mine results
Mineral Resources	Mark Murphy	MAIG/RPGeo	2157	*IGO Resource Geology Manager*	Long Operation estimate
	Paul Hetherington	MAusIMM	209805	*IGO Senior Resource Geologist* Nova Operation	Nova Operation estimate
	Damon Elder	MAusIMM	208240	*Manager Mine Geology - Tropicana* AngloGold Ashanti Australia	Tropicana Gold Mine estimate
Ore Reserves	Greg Laing	MAusIMM	206228	*IGO Superintendent Planning* Nova Operation	Nova Operation estimate
	Andrew Bridges	MAusIMM	300976	*Manager Open Pit Strategy - Tropicana* AngloGold Ashanti Australia	Tropicana Gold Mine estimate
EOFY18 Report	Mark Murphy	MAIG/RPGeo	2157	*IGO Resource Geology Manager*	Annual report compilation

- MAusIMM = Member of Australasian Institute of Mining and Metallurgy and 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

IGO Board visit to Nova Operation in FY18

Exploration summary

In FY18, IGO instigated a new corporate strategy to transition IGO into a producer of metals and products that are in demand for the growing energy storage industry, such as the rapidly growing electric vehicle market. The priority metals for this strategy are nickel, copper and cobalt, with other energy-storage metals and minerals being considered in IGO's exploration generative teams. IGO will also continue to consider and maximise value from other metals, such as gold, if deposits are discovered or acquired on existing concessions or within exploration project generative programs established over the last few years.

Strategy and resources

IGO's immediate exploration goal is to make a 'Tier-1' mineral asset discovery within IGO's exploration portfolio – for example a second Nova-Bollinger equivalent deposit or perhaps a second Tropicana. From there, the long-term exploration plan is to develop a strong pipeline of growth opportunities, aiming to have at least one feasibility project in the growth pipeline.

Over the last few years, IGO established a new exploration team of talented explorers that are well resourced and have a clear mandate and imperative to discover new deposits. IGO's exploration emphasis has shifted over the past year from a focus on regional data collection, to a more geoscience-driven focus of interpretation, targeting, and drill testing. Regional data gathering will continue in FY19 but at a reduced level.

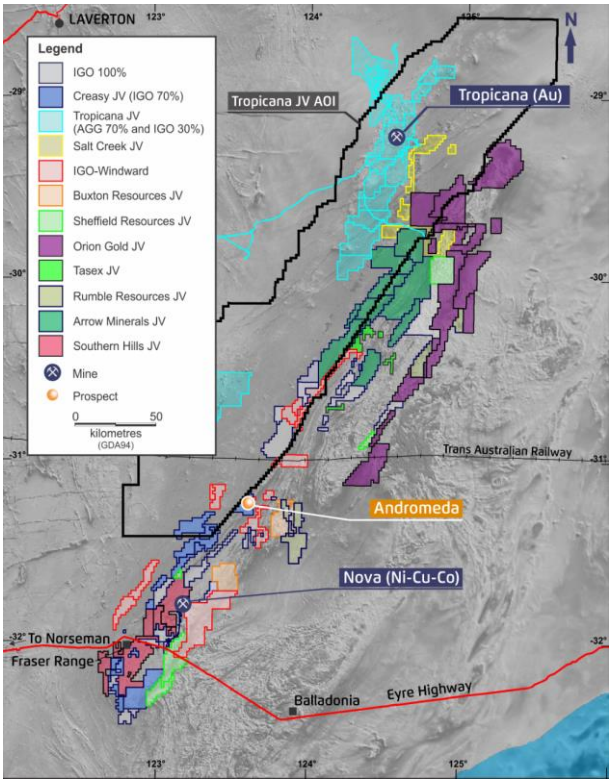
In FY18 IGO spent ~A$45 million on exploration around IGO's operations and on regional tenements. For FY19, IGO has developed programs for a ~A$51 million spend.

Fraser Range

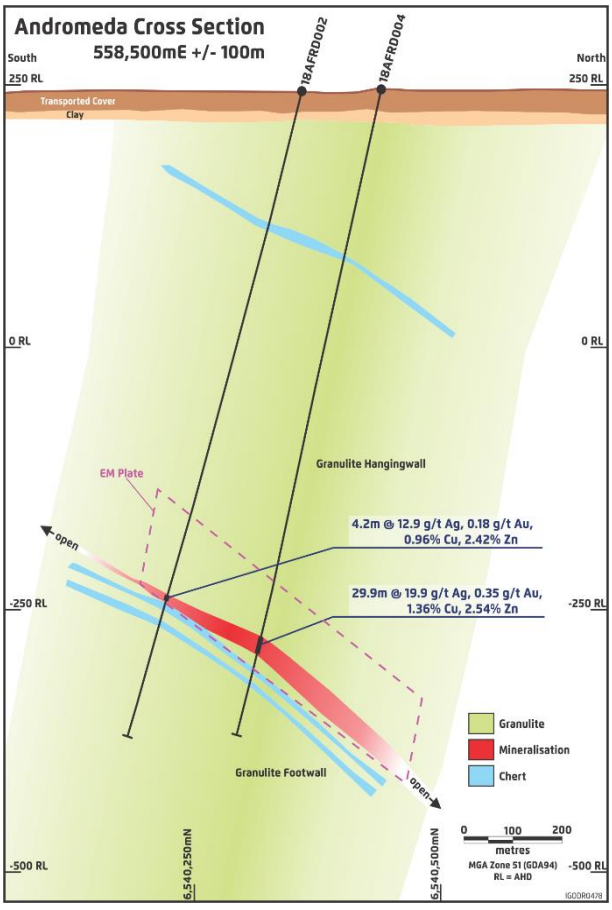
The Albany-Fraser belt in WA is prospective for base and precious metals. The bulk of IGO's FY18 exploration expenditure was on the Fraser Range project including the Nova Operation mine lease. In the Fraser Range, IGO has consolidated a ground position of ~14,000km^2, including ten JVs.

IGO's FY18 exploration highlights included sourcing a specialist geophysical aircraft contractor (Spectrem-Air) from South Africa to begin 23,000line-km of aerial electromagnetic (EM) surveys over IGO's Fraser Range ground positions. Other highlights include the growing exploration evidence that multiple magmatic intrusions that are prospective for magmatic nickel-copper deposits are present in the belt, and thick massive sulphide drill intersections at the Andromeda Project, which is 50km northeast of Nova Operation.

EOFY18 IGO's Albany-Fraser belt ground position



Andromeda Prospect – polymetallic drill intersections



Lake Mackay JV

IGO's Lake Mackay JV with Prodigy Gold NL and Castile Resources Pty Ltd, is a belt-scale ground position of 12,833km^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.

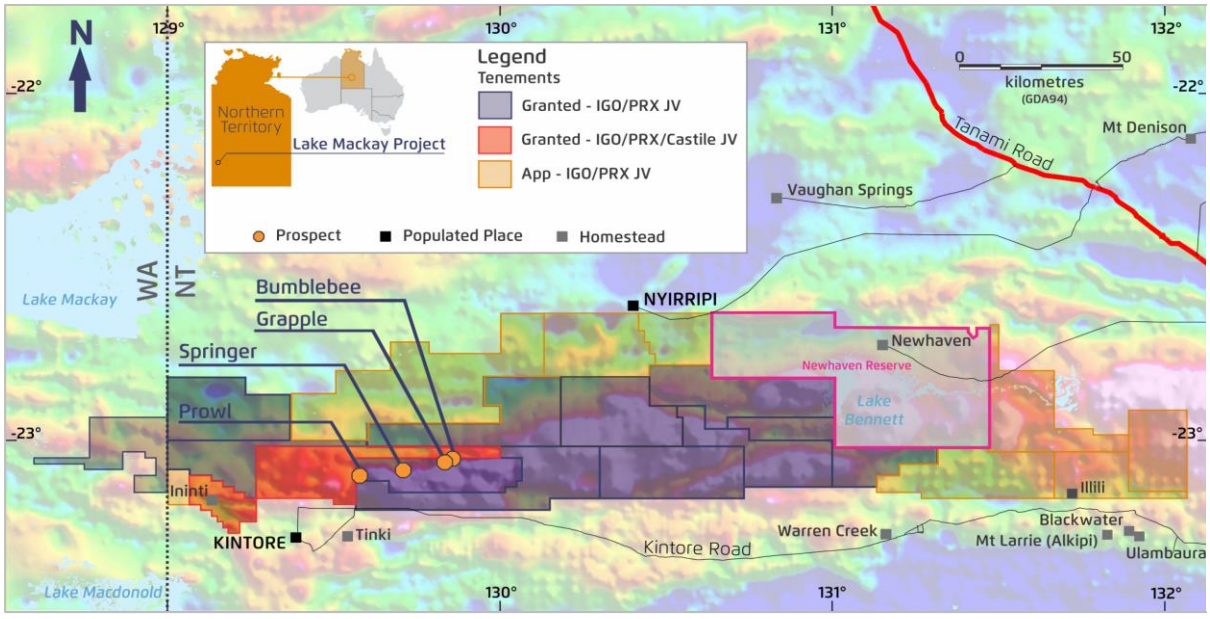
During early FY18, IGO's Lake Mackay exploration was constrained to just one tenement representing only ~4% of the project area. However, in late 2017, the granting of new tenements unlocked large areas for on-ground exploration in FY19.

On a prospect scale, prospective soil anomalies have been defined and orientation airborne Spectrem EM surveys have been flown over known mineralised trends, as a precursor to more extensive surveys which commenced just prior to the end of FY18.

The highlight of Lake Mackay FY18 exploration was the results from a six-hole diamond core program that targeted the depth extents of shallow RC drilling results from 2016 at the Grapple Prospect. Sulphides were intercepted in all holes with a best result of 11.4m grading 7.9g/t Au, 20.7g/t Ag, 0.8% Cu and 1.1% Zn[4].

Spectrem Air's EM aircraft in operation

Lake Mackay Project tenements and prospects



Near-mine exploration

In FY18, IGO completed a 58km^2 3D seismic survey over the Nova Operation mine lease to image the subsurface geology and identify potential Nova-like intrusives in the immediate area. Results will be received in early FY19. At Tropicana deep drilling tested underground, extensional targets with significant intercepts returned from several holes. At the Long Operation the focus has moved to the search for potential deeper and parallel deposits. More details of IGO's near-mine exploration initiatives are included in the operation specific sections of this report.

[4] ABU: Lake Mackay JV – Final Grapple Diamond Drilling Results (ASX 15-Nov-17)

LONG OPERATION

IGO 100%

LOCATION

Approximately 60km south of Kalgoorlie in Western Australia near the town of Kambalda

SALEABLE PRODUCT

Nickel ore grading >1% Ni
169kt of ore mined in FY18 grading 3.2% Ni containing 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

Ore has been sold through an offtake agreement to the nearby BHP concentrator, where the ore is toll treated and a saleable nickel concentrate is produced

ORE RESERVES

No Ore Reserves

MINERAL RESOURCES

0.75Mt grading 4.2% Ni containing 32,000t 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 Operation is on the western shore of the Lake Lefroy, east of Kambalda in the Eastern Goldfields of Western Australia. The underground mine access is via the Victor Decline portal that is at latitude 31°10'48"S and longitude 121°40'48"E, and at ~390m above mean sea level.

The Long Operation has a 47-year mineral 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 Long Operation from WMC in 2002, the mine had produced 4.5Mt of ore grading 3.7% Ni containing ~170,000t of nickel metal.

The Long Operation comprises 25.4km^2 of mining tenements and IGO-owned freehold land. This tenure includes several of Gold Fields Australia Pty Ltd (Gold Fields) 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 Operation 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 the 39-year mining history of Long Operation is ~307,000t.

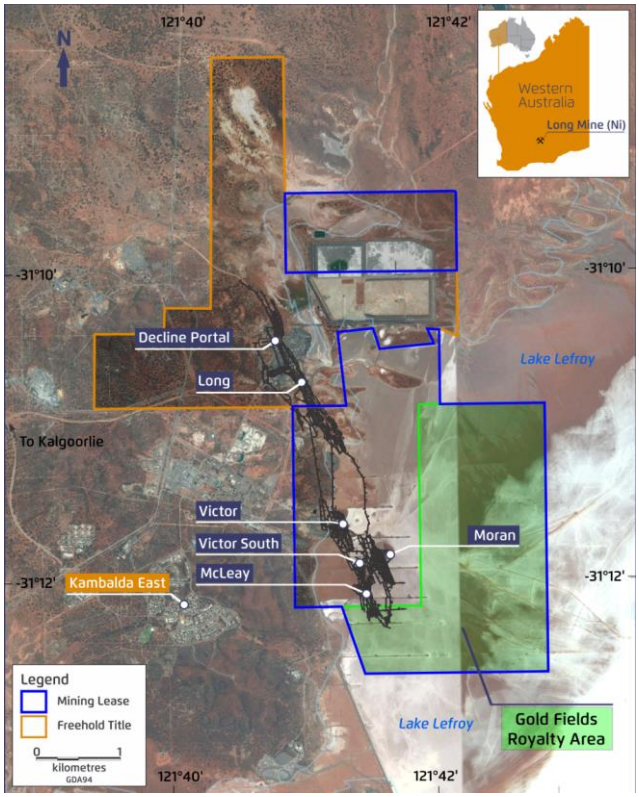
Mining ceased at the Long Operation in May 2017 with the last ore hauled to the concentrator on 13 June 2017. The mine is now in care and maintenance, which involves continued dewatering, maintenance of the underground and surface infrastructure, and remedial surface rehabilitation work. BHP has also placed part of the Kambalda concentrator on care and maintenance.

Geology and mineralisation

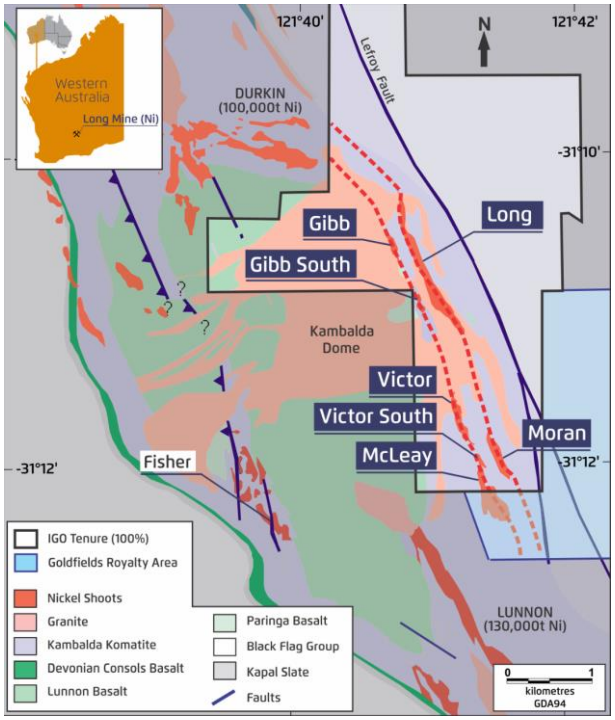
The Long Operation's nickel deposits are in the southern part of the Norseman-Wiluna greenstone belt of the Yilgarn Craton in Western Australia. The regional stratigraphic succession in the Kambalda area is characterised by komatiite to tholeiite and komatiite to felsic-volcanism.

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 Operation's deposits.

Long Operation tenure and infrastructure map



Regional geology and nickel deposit locations

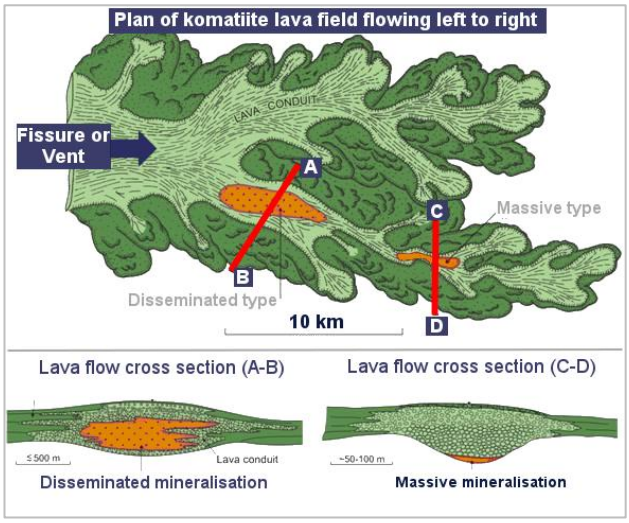


Since deposition and intrusion of the host sequences, the rocks of the Kambalda region have undergone four phases of deformation over a 300Ma period, with these events resulting in a north northwest structural trend through the area, with folding and faulting, and metamorphism ranging from greenschist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

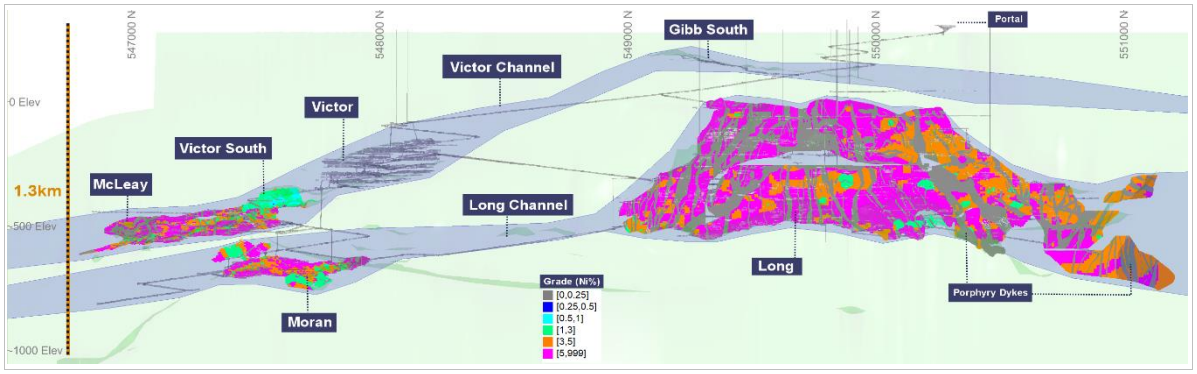
Kambalda-style nickel-sulphide deposits are found at the basal contacts and are typically up to 3km long, 50m to 300m wide, and ranging from 5m to 50m in true thickness. Tonnages range from 0.5–10Mt per deposit or deposit lense. Mineralisation usually grades upward from massive sulphides through to matrix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

Long Operation'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 channel.

Lava-channel models for Kambalda-style nickel deposits



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



Mineral Resources

IGO's geologists prepared the Long Operation'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 Long Operation in the supplementary information. The MRE was last updated in 2015 and then adjusted annually for mining depletions.

In mid-June 2018, IGO completed an end-of-mining review of remnant Mineral Resources at the Long Operation, 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. The areas declassified were generally in the historic WMC mining areas where mining records were uncertain and geotechnical stability is expected to be highly problematic for any mining method.

Long Operation – EOFY17 and EOFY18 Mineral Resources

Deposit	JORC Class	EOFY17			EOFY18		
		Mass (Mt)	Nickel		Mass (Mt)	Nickel	
			%	kt		%	kt
Long	Measured	0.10	5.39	3	…	…	…
	Indicated	0.30	5.11	14	0.13	5.34	7
	Inferred	0.40	4.7	17	0.24	4.8	12
	Subtotal	**0.70**	**4.9**	**33**	**0.37**	**5.0**	**18**
McLeay + Victor South	Measured	0.10	6.35	4	…	…	…
	Indicated	0.20	3.01	7	0.24	3.35	8
	Inferred	0.10	3.5	2	0.05	3.5	2
	Subtotal	**0.30**	**3.70**	**12**	**0.29**	**3.4**	**10**
Moran	Measured	0.10	7.99	5	…	…	…
	Indicated	0.04	3.38	1	0.04	3.75	2
	Inferred	0.10	3.7	2	0.05	3.6	2
	Subtotal	**0.20**	**5.28**	**8**	**0.09**	**3.7**	**3**
Total	Measured	0.20	6.59	12	…	…	…
	Indicated	0.50	4.11	22	0.40	4.01	16
	Inferred	0.50	4.5	20	0.35	4.4	15
Long Operation Total		**1.20**	**4.6**	**54**	**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 excessive extrapolated

The cascade chart to the right demonstrates the changes in Long Operation's MRE from EOFY17 to EOFY18. Most of the MRE decrease for the year (16kt of nickel metal) is due to the end-of-mine review and declassification of resources considered not to have reasonable expectations of eventual economic exploitation. There are no changes in the MRE related to cut-off grade.

Mining for FY18 represented a 5.4kt reduction in MRE nickel metal, with 32kt of nickel metal in the MRE at EOFY18.

Truck exiting the Long Operation's Victor Decline

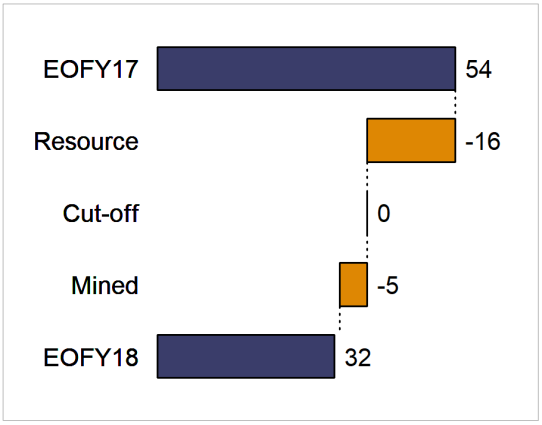
Ore Reserves

Under the JORC Code framework, Ore Reserves are derived from Mineral Resources based on studies that demonstrate the resources can be economically extracted after the application of the Modifying Factors.

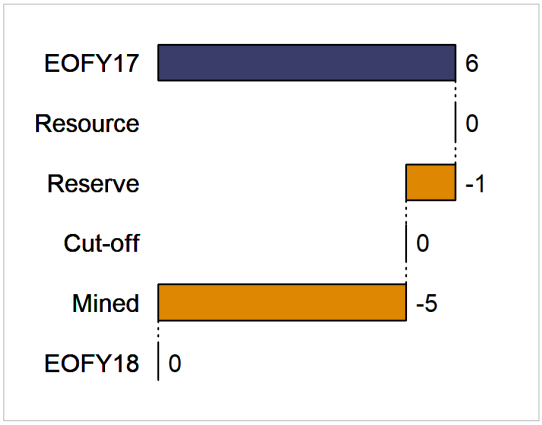
As Long Operation has been placed into care and maintenance and there is no mine plan to demonstrate the economic viability of remnant reserves, a small tonnage of remnant reserves that were not mined before mine closure has been reclassified as Mineral Resources for EOFY18 reporting.

The cascade chart to the right demonstrates the FY18 changes in the Long Operation ORE, with no ORE reported for Long Operation at EOFY18.

Mineral Resource nickel metal changes (kt)



Ore Reserve nickel metal changes (kt)



Exploration and potential

The 0.75Mt of remnant MRE at the Long Operation, containing an estimated 32kt of nickel metal, is approximately equally divided between Inferred Resources at the northern end of the Long deposit and in Indicated Resources in and around the mined areas and often backfilled workings of all three deposits. The estimate does not include mineralisation in ground support 'X-pillars'.

In the case of the Inferred Resources more drilling, and in some instances mine development, is required to increase confidence for Ore Reserve conversion studies. For the Indicated Resources, IGO's in-house studies have demonstrated that much of the Indicated Resources are not viable at current nickel prices but may be viable should future prices increase to more economically attractive levels.

In FY18, IGO completed a ground EM survey and following-up drilling of the Long North target, but drilling did not intersect any noteworthy mineralisation.

In FY19, IGO's exploration focus is the discovery of a new mineralised body within Long Operation's prospective tenure. IGO's geologists have developed new geological concepts to test, including the drill testing of a previously unrecognised mineralised trend and testing of 3D seismic reflector targets below Lake Lefroy. The planned FY19 exploration expenditure for these programs is ~$A2 million.

NOVA OPERATION

IGO 100%

LOCATION

160km east northeast of Norseman and 380km northeast of Esperance in Western Australia

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

Ore mined FY18 was 1.52Mt grading 1.80% Ni, 0.74% Cu and 0.06%Co

PROCESSING AND SALES

Ore is processed through the IGO's Nova concentrator and delivered to customers by road-haulage to Kalgoorlie or road-hauled then shipped from Esperance Port

Total ore processed for FY18 was 1.43Mt grading 1.83% Ni, 0.75% Cu and 0.06% Co

ORE RESERVES

11.7Mt grading
1.86% Ni, 0.76% Cu and 0.06% Co containing
216kt Ni, 89kt Cu and 7kt Co metal

MINERAL RESOURCES

13.1Mt grading
2.03% Ni 0.83% Cu and 0.07% Co,
268kt Ni, 108kt Cu and 9kt Co metal

MINE LIFE

8 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 in south eastern WA, ~160km by road east northeast of Norseman and ~380km northeast of Esperance. The underground mine portal is at latitude and longitude 123.10'40"°E and 31.48'50"°S.

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) 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.

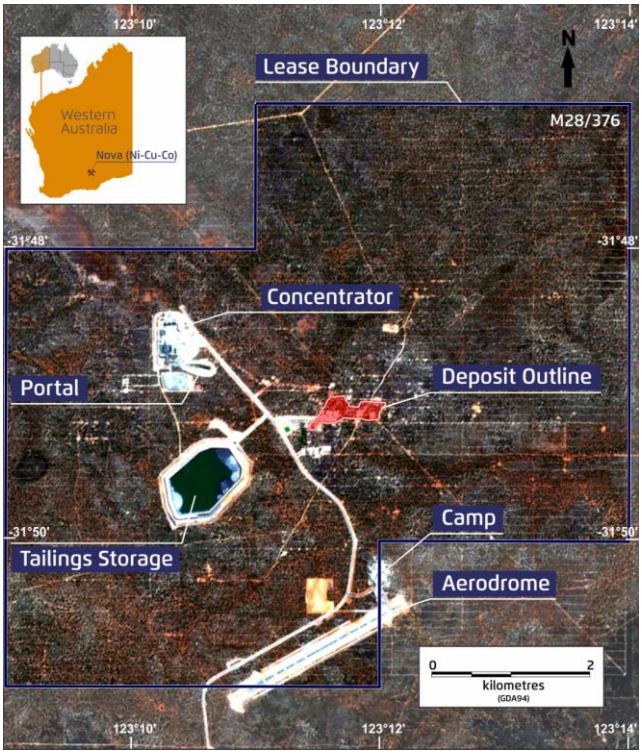
Mafic, ultramafic and granitic intrusions were emplaced in the region during the first phase of the Albany-Fraser Orogeny (1.35–1.26Ga). Later, intense tectonic events between 1.85 –1.14Ga ago, metamorphosed the Fraser Zone rocks to granulite facies grade, and the zone is now characterised by gneissic fabrics, complex refolding and major mylonitic zones.

The rocks within the Nova-Bollinger mine 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.

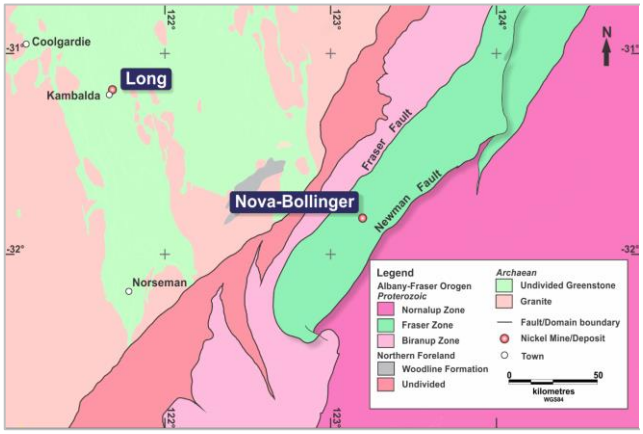
The Nova-Bollinger mafic-ultramafic sill complex, is a dish-shaped package about 2.4km by 1.2km in plan and about 450m in thickness. The rocks of the complex range from peridotite to pyroxenite, to gabbronorite and norite, with both sharp and gradational contacts between different intrusion phases.

The mine area is covered by a thin, generally <3m thick regolith and transported cover.

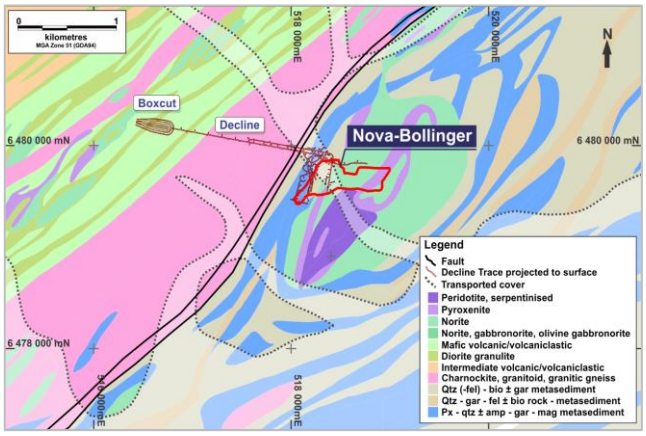
Satellite image of Nova Operation – May 2018



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 into 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%), then pentlandite (10–15%) with lesser chalcopyrite (5–10%). Material concentrations (up to 5%) of magnetite also occur locally within massive sulphides. Cobalt is strongly correlated with nickel as both elements are found concentrated in pentlandite.

Mineral Resources

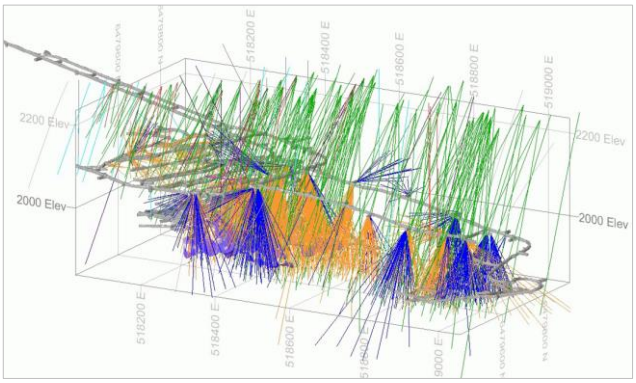
IGO's geologists have estimated the EOFY18 Nova-Bollinger MRE using routine industry methods of geological interpretation of drilling results, preparation of digital wireframes of the geology and mineralisation, and then estimating grades into digital block models using geostatistical methods. Full details are included in the Nova-Bollinger JORC Table 1.

The Nova-Bollinger EOFY18 MRE is based on ~396km of surface and close-spaced underground drilling, which has tested almost the entire known deposit area on a nominal 12.5m by 12.5m pierce-point spacing. Most of this data is high-recovery diamond core data with a smaller component of RC drilling (totalling 5km at the shallower western end of the deposit). The EOFY18 MRE was updated in March 2018 using all drill holes and assays available to January 2018, with the MRE depleted for mining to EOFY18.

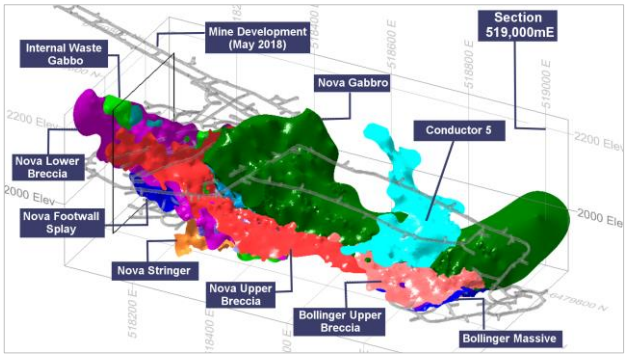
For the 2018 MRE update, IGO's geologists interpreted 21 distinct estimation zones using all the drilling information and confirmatory mapping from underground development. One of these zones is the waste halo that encompasses all other zones, which facilitates estimation of dilution grades in downstream ORE studies.

The EOFY17 MRE was reported using a 0.6% NiEq (nickel equivalent) cut-off grade, which was based on IGO's FY17 forecasts of metal prices and Fx rates, and metallurgical recovery values from a 2015 optimisation study[5].

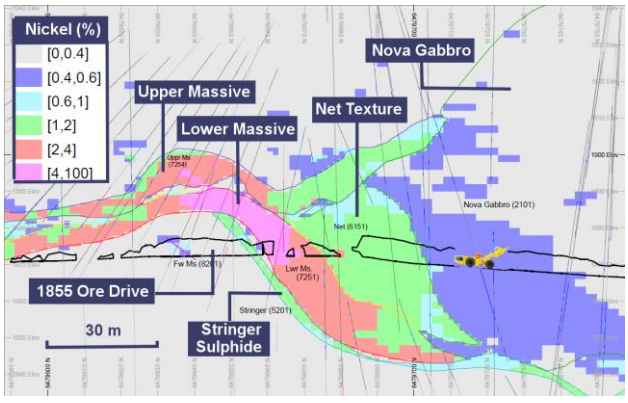
Drilling used for the Nova-Bollinger March 2018 MRE update



Key estimation zones of the Nova-Bollinger 2018 MRE



Bollinger cross section – looking West on 518,900mE



For the EOFY18 estimate, IGO has changed the MRE cut-off grade reporting criterion to a NSR value. The EOFY18 NSR reporting cut-off of A$50/t for the MRE, includes the value of cobalt, considers all ex-mine gate cost and payabilities for concentrates, is based on FY18 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 EOFY17 and EOFY18 MREs for Nova Operation.

[5] Nova Optimisation Study (ASX 14-Dec-15)

Nova Operation – EOFY17 and EOFY18 Mineral Resources

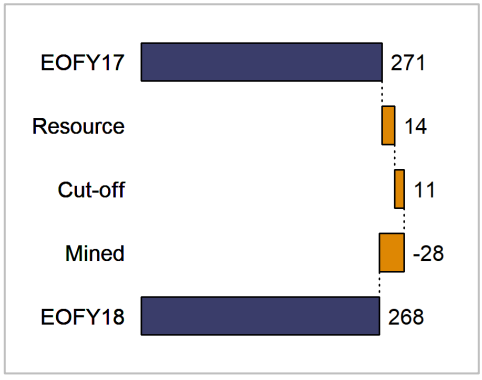
Source	JORC Class	EOFY17							EOFY18						
		Mass (Mt)	Nickel		Copper		Cobalt		Mass (Mt)	Nickel		Copper		Cobalt	
			%	kt	%	kt	%	kt		%	kt	%	kt	%	kt
Underground	Measured	5.2	2.63	137	1.10	57	0.08	4	11.9	2.15	256	0.88	104	0.07	9
	Indicated	4.5	2.50	112	1.02	45	0.09	4	1.1	0.88	10	0.39	4	0.04	0.4
	Inferred	1.7	1.3	22	0.6	10	0.05	1	0.1	0.6	0.4	0.2	0.1	0.02	0.02
	Subtotal	**11.4**	**2.4**	**271**	**1.0**	**113**	**0.08**	**9**	13.0	2.0	266	0.8	109	0.07	9
Stockpiles	Measured	…	…	…	…	…	…	…	0.1	1.66	2	0.68	1	0.07	0.1
Total	Measured	5.2	2.63	137	1.10	57	0.08	4	12.0	2.15	258	0.87	105	0.07	9
	Indicated	4.5	2.50	112	1.02	45	0.09	4	1.1	0.88	10	0.39	4	0.04	0.4
	Inferred	1.7	1.3	22	0.6	10	0.05	1	0.1	0.6	0.4	0.2	0.1	0.02	0.02
Nova Operation Total		**11.4**	**2.4**	**271**	**1.0**	**113**	**0.08**	**9**	13.1	2.0	268	0.8	109	0.07	9

- The EOFY17 MRE was reported using a 0.6% NiEq cut-off grade where NiEq = ({Cu% × 0.89} × {US$6,420/US$16,420}) + Ni%×0.88
- The EOFY18 MRE is reported using a A$50/t NSR cut-off based on higher metal prices than used for ORE – see JORC Table 1 for details
- Some averages and sums are affected by rounding
- Mineral Resource estimates are inclusive of Ore Reserve estimates and no Inferred Resources are considered excessively extrapolated

The most notable change in the 2018 update of the Nova-Bollinger MRE has been the conversion of most of the EOFY17 estimate to the highest confidence Measured Resource JORC Code classification. Only 1.1Mt 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 EOFY17 to EOFY18.

Mineral Resource nickel metal changes (kt)



In terms of MRE in situ nickel metal, the infill drilling identified an additional 13kt of nickel metal based on the FY17 0.6% NiEq cut-off grade, and a further 9kt of metal has been added to the MRE by changing the cut-off criterion to the $A50/t NSR cut-off from the 0.6% NiEq cut-off. Mining depletion has resulted in extraction of 28kt of metal from the MRE leaving 266kt of nickel metal in the MRE at EOFY18.

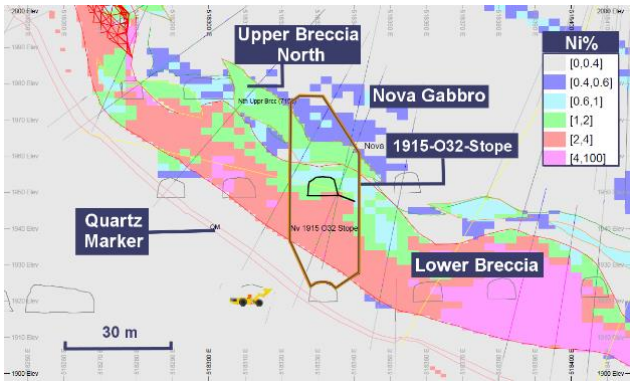
Ore Reserves

The Nova Operation's mine engineering team has prepared the Nova-Bollinger EOFY18 ORE from the 2018 MRE model used to report the EOFY18 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 mineable stope optimiser (MSO) software.

The MSO shapes were then used to prepare final development and stope designs and generated a life-of-mine plan and financial model that demonstrates 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 ore of the central Nova area, stopes up to 75m high are blasted and extracted using remotely controlled loaders. These 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 target Ore Reserve, while minimising ore dilution from potential stope wall and crown over break.

In the Upper Nova Zone, where the mineralisation is narrower and steeply dipping, long-hole stoping or Avoca

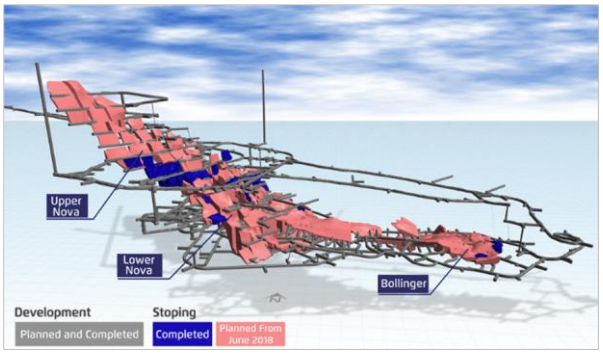
methods are used for extraction, with the stopes backfilled with waste-rock (or cemented waste rock) to ensure post-mining wall stability. These methods have inherent higher mining dilution than the paste-fill approaches but are more cost and production-rate effective in the narrow and steeply dipping zones of mineralisation. In the flat lying areas yet to be accessed in central Nova, the extraction method planned is room-and-pillar mining.

The EOFY18 Nova-Bollinger mine schedule indicates last ore extraction in the first half of FY26, giving Nova Operation a mine life of ~8 years from EOFY18 assuming a mining and processing rate of ~1.5Mt/a.

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

The tabulation below is a listing for the EOFY17 and EOFY18 Ore Reserve estimates for Nova Operation, including the estimates of in situ payable metals (nickel, copper and cobalt).

Nova-Bollinger life-of-mine development and stoping plan

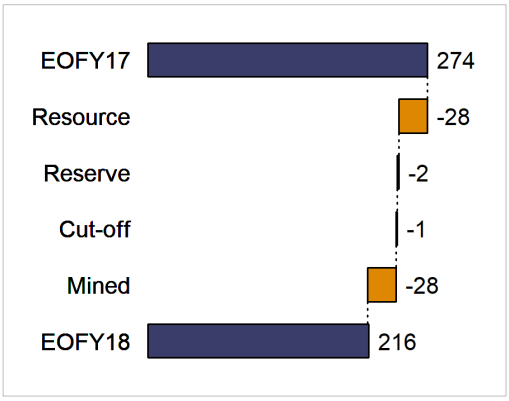


Nova Operation – EOFY17 and EOFY18 Ore Reserves

Source	JORC Class	EOFY17 Mass (Mt)	EOFY17 Nickel %	EOFY17 Nickel kt	EOFY17 Copper %	EOFY17 Copper kt	EOFY17 Cobalt %	EOFY17 Cobalt kt	EOFY18 Mass (Mt)	EOFY18 Nickel %	EOFY18 Nickel kt	EOFY18 Copper %	EOFY18 Copper kt	EOFY18 Cobalt %	EOFY18 Cobalt kt
Underground	Proved	…	…	…	…	…	…	…	10.2	1.93	197	0.79	80	0.07	7
	Probable	13.3	2.06	274	0.83	110	0.07	9	1.3	1.34	18	0.57	8	0.04	1
	Subtotal	**13.3**	**2.06**	**274**	**0.83**	**110**	**0.07**	**9**	11.6	1.86	215	0.76	88	0.07	7
Stockpiles	Proved	…	…	…	…	…	…	…	0.1	1.66	2	0.68	1	0.07	0.1
Total	Proved	…	…	…	…	…	…	…	10.2	1.93	198	0.79	81	0.07	7
	Probable	13.3	2.06	274	0.83	110	0.07	9	1.3	1.34	18	0.57	8	0.04	1
Nova Operation Total		**13.3**	**2.06**	**274**	**0.83**	**110**	**0.07**	**9**	11.7	1.86	216	0.76	89	0.06	7

- EOFY17 ORE reported using NSR cut-off grades of A$30/t for development, A$61 /t incremental stoping and A$92/t for full stoping costs
- EOFY18 ORE 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

Ore Reserve nickel metal changes (kt)



The chart ab9ve demonstrates the main changes in the contained nickel metal Nova Operation's ORE from EOFY17 to EOFY18.

The major change in the ORE from EOFY17 is the 28kt reduction in contained nickel that is a function of basing the ORE on the 2018 MRE model, rather than EOFY16 MRE, which was the basis of the EOFY17 ORE.

There are some further small reductions in contained nickel metal due to changes in design assumptions and increases in costs. The EOFY18 ORE is estimated to contain 216kt of nickel metal, compared to the 274kt reported EOFY17.

Loading Nova concentrate – Esperance Port

Exploration

IGO's exploration strategy on the Nova Operation's mining lease is to use 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 are close to the existing mine infrastructure. This approach is driven by the knowledge that in most intrusion-style nickel camps worldwide, multiple deposits have been found within a few kilometres of the first discovery.

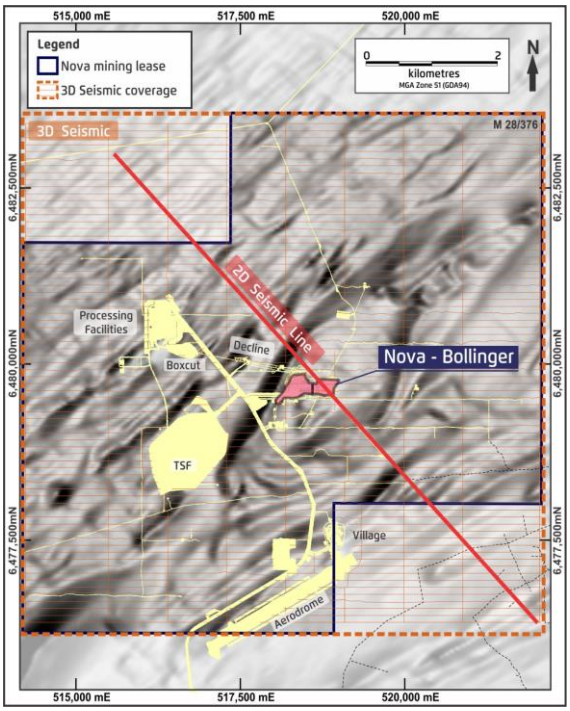
In FY18, IGO spent ~A$9 million on near-mine exploration on the Nova Operation's mine lease with much of this spent on Australia's largest ever hard-rock 3D seismic survey. This survey imaged ~300 cubic kilometres (58km^2 at surface) of geology across the mine lease. The data is currently being processed and will be used in collaboration with other geophysical methods to model deep geological architecture and mineralisation controls in the area. Targets generated from the 3D datasets will be drill tested in due course. A 3D AMT (audiomagnetotelluric) survey and multiple drill holes up to 1.2km deep were completed during FY18 to complement and aid the interpretation of the seismic data. A core relogging programme is also planned in FY19 to calibrate the mine lease stratigraphy and geochemistry that will assist in the interpretation of seismic reflectors across the mine lease.

In FY19, IGO plans to spend ~A$8–12 million on near-mine exploration drilling and a deep penetration Low Temperature-Superconducting Quantum Interference Device-Electromagnetic (LT-SQUID-EM) survey to further compliment the seismic data and test for mineralisation. The SQUID tool is a very sensitive, ground-based magnetometer used to measure extremely subtle magnetic fields, such as those generated by massive sulphides at depths above and exceeding 1,000m from surface.

A deep diamond core drilling program comprising approximately 20,000m of drilling will be completed in FY19. This drilling will test new targets from the deep-imaging surveys, as well as 'orphaned' intersections in existing drill holes. These orphaned intercepts are narrow, blebby to massive nickel-copper sulphide intervals in Nova-type intrusions that are within hundreds of metres of the Nova-Bollinger deposit, but have yet to be tested for possible extensions with close-spaced drilling.

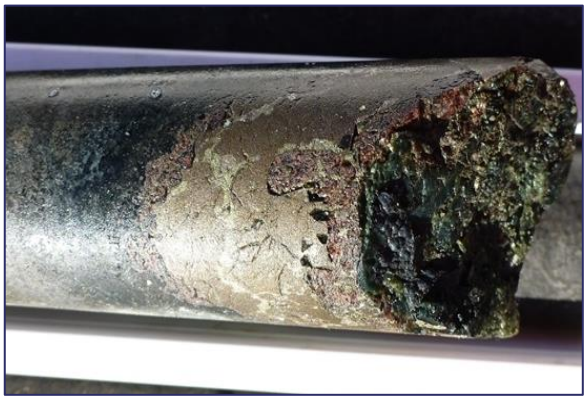
The Nova-Bollinger deposit will continue to be used as IGO's 'natural laboratory' to better understand nickel-copper sulphide mineralisation controls and detectability, and the intrusion architecture in the Fraser Range. To this end, IGO has initiated several research and development efforts including research by CSIRO, the University of Western Australia, Curtin University and selected contractors with specialist skill sets.

3D seismic coverage over Nova mine lease



'Vibroseis' seismic survey trucks on Nova mine lease

'Orphaned' massive sulphide intercept 400m south of Nova



TROPICANA GOLD MINE
(IGO 30%)

LOCATION

330km northeast of Kalgoorlie in Western Australia

SALEABLE PRODUCTS

Gold doré bars with ~0.47Moz produced in FY18

TENURE

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

MINING METHOD

Open pit mining from four continuous pits over a strike length of 5km.

PROCESSING AND SALES

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

ORE RESERVES (100%)

64.9Mt grading 1.89g/t Au containing
3.95Moz of gold metal

MINERAL RESOURCES (100%)

139.7Mt grading 1.62g/t Au containing
7.29 Moz of gold metal

MINE LIFE

~8-years assuming an expanded 8.2Mt/a throughput

POTENTIAL

Installation of an additional ball mill during CY2018/19 will lift metallurgical recovery by ~3% and process plant throughput capacity to 8.2Mt/a

The JV Partners continue to target additional resources on the extensive tenement holdings with an exploration budget (IGO30%) of A$4–5 million for FY19

Introduction

Tropicana is on the western edge of the Great Sandy Desert in WA, ~1,030km east northeast of the state capital Perth, and ~330km northeast of the mining town of Kalgoorlie, at latitude 29°14'48"S and 124°32'18" E. Tropicana and the surrounding 2,923km^2 of exploration tenement holdings are held in a 2002 joint venture (JV) agreement between IGO (30%) and AngloGold Ashanti Australia Limited (AGA) who is JV manager (70%).

AGA's exploration teams initiated the discovery of the Tropicana deposits through targeting a historic WMC gold-in-soil anomaly, which was found in the Geological Survey of WA (GSWA) open file records. With further work, the team developed of an interpretation that an inlier of Archean greenstone rocks occurred within the younger Proterozoic age Albany Frazer Zone, and that this inlier are should be considered prospective for Yilgarn-style gold deposits.

In 2002, the JV's first air-core drilling program tested the regolith below the unconformable cover in the Tropicana area, and intersected gold mineralisation, including one intercept of 7m grading 2.02g/t Au. These initial results were followed up by diamond core drilling in 2004 with a drill intersection of 13m grading 1.7g/t Au and 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. More drilling in 2006 discovered the Havana Zone, 1.5km south of Tropicana and then the Havana South and Boston Shaker zones. The total strike length of mineralisation is now ~5km and ~1.2km down dip.

Following several phases of feasibility studies, the project was approved in late 2010 with the first gold poured in September 2013, then one million ounces of production by November 2015. Total mine gold production to EOFY18 is ~0.47Moz.

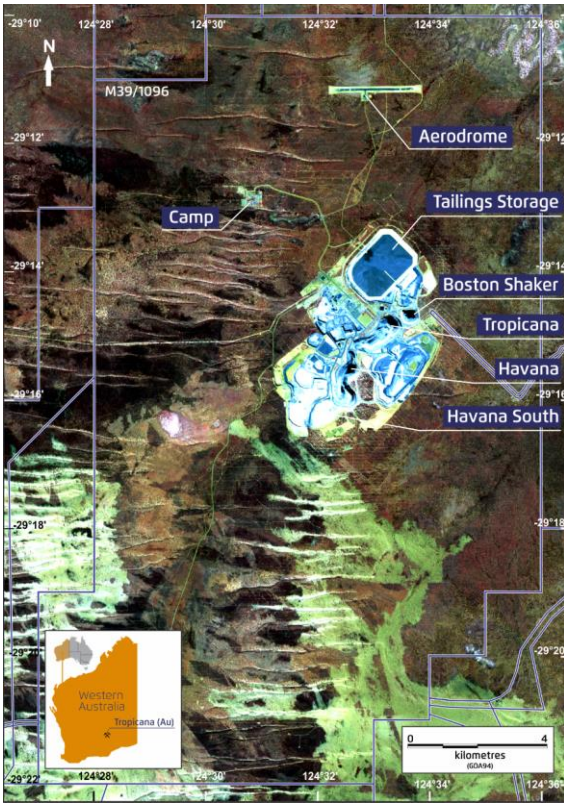
On-going extensional drilling has continued around the deposit with recent work focussing on the underground mine potential below the Havana and Boston Shaker open pits.

Geology and mineralisation

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

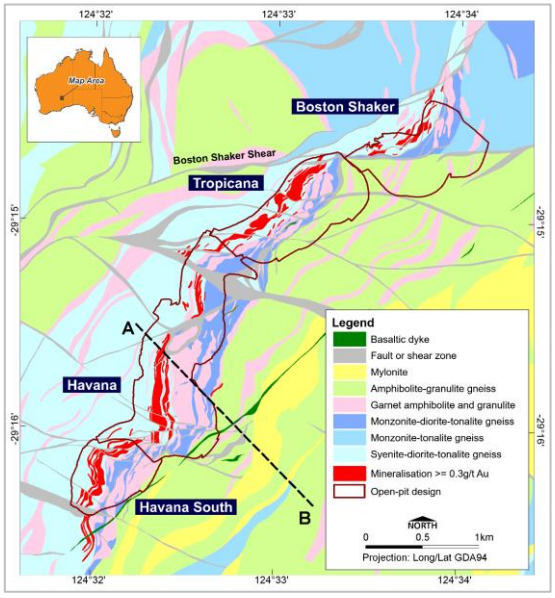
The Neoarchean Tropicana Gneiss of the Plumridge Terrain hosts the Tropicana gold mineralisation with the constituent garnet and quartz-feldspar gneisses interpreted to be the products of partial melting during peak metamorphism. The compositional bandings of the gneisses dip moderately to the east.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

Satellite image of Tropicana Gold Mine June 2018



Notes: European Space Agency, Sentinel Satellite false colour infrared image taken 17 June 2018.

Geology plan of the Tropicana Gold Mine



Notes: Modified from geological mapping or the GSWA

The 5km strike of gold mineralisation at Tropicana is subdivided into five shear-offset zones from north to south – Boston Shaker, Tropicana, Havana, Havana Deeps, and Havana South. The mineralised corridor

is ~1.2km and the 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 the 'favourable horizon' of the quartz-feldspar gneiss units. The mineralisation postdates the gneissic banding. 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 tenor 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

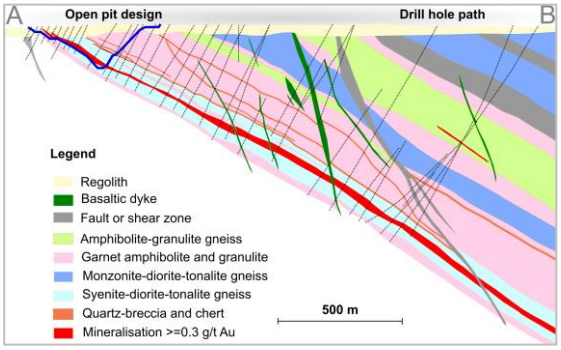
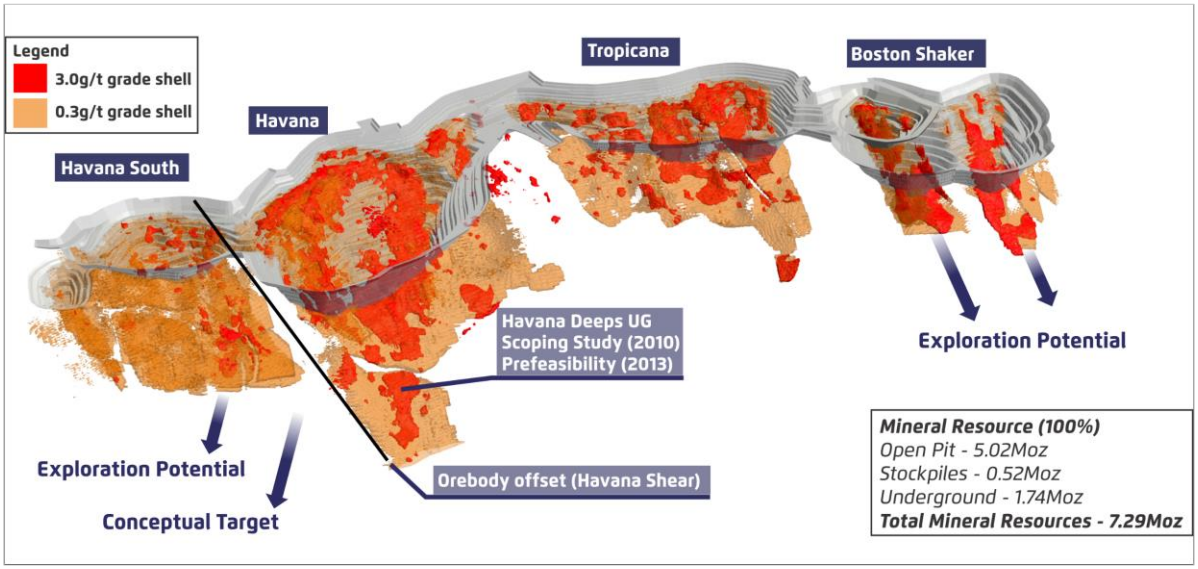


Image modified from Crawford, A.J. and Doyle, M.G (2016), Economic Geology vol.111 p.395-420

Perspective view of gold grade shells and EOFY18 pits at Tropicana Gold Mine



Mineral Resources

The open pit MRE for Tropicana was updated in December 2017 using a total of 3,945 drill holes for a total of 757,684m of drilling. The update included 279 new drill holes for a total of 54,753m. 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 at the end of this report.

AGA uses a 'recoverable-resource' grade estimation method known as Local Uniform Conditioning (LUC) to estimate gold grades. This method is widely used in the mining industry to provide reliable estimates for grade-streaming in open pit mine planning. The MRE listing to right is a comparison of EOFY17 and EOFY18 MREs reported on a 100% basis.

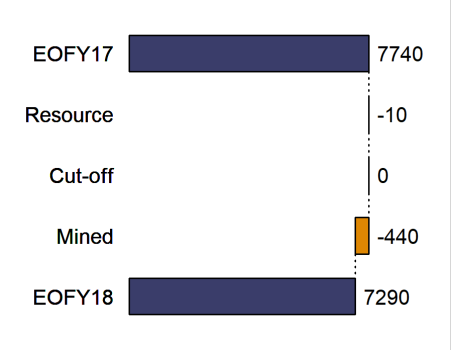
Tropicana – EOFY17 and EOFY18 Mineral Resources (100%)

Estimate	JORC Class	EOFY17 Mass (Mt)	EOFY17 Gold g/t	EOFY17 Gold koz	EOFY18 Mass (Mt)	EOFY18 Gold g/t	EOFY18 Gold koz
Open pit	Measured	6.1	1.94	380	8.8	1.34	390
	Indicated	79.1	1.61	4,080	84.1	1.58	4,290
	Inferred	22.3	1.32	940	9.2	1.17	350
	Subtotal	**107.5**	**1.56**	**5,400**	**102.1**	**1.53**	**5,020**
Underground	Measured	…	…	…	…	…	…
	Indicated	6.8	3.38	730	10.1	3.57	1,160
	Inferred	11.9	3.15	1,210	5.7	3.20	580
	Subtotal	**18.6**	**3.23**	**1,940**	**15.7**	**3.44**	**1,740**
Stockpiles	Measured	15.2	0.82	400	21.9	0.74	520
Total	Measured	21.3	1.14	780	30.7	0.92	910
	Indicated	85.8	1.74	4,810	94.2	1.80	5,450
	Inferred	34.2	1.95	2,150	14.9	1.95	930
Tropicana Gold Mine		**141.3**	**1.70**	**7,740**	**139.7**	**1.62**	**7,290**

- Open pit block cut-off >0.4g/t Au for fresh rock, otherwise >0.3g/t Au
- Underground block cut-off >2.0g/t Au
- Resource estimates are inclusive of Ore Reserve estimates

The main changes in the Tropicana MRE from EOFY17 and EOFY18 in terms of contained gold metal are demonstrated in the cascade chart below.

Mineral Resource gold metal changes (koz)



The main change in the MRE over FY18 is the mining depletion with 440koz extracted. There was a 20koz decrease due to higher costs assumptions used in the MRE-limiting optimisation shell.

Currently at Tropicana 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 is also stockpiles, which may be processed at the end of the mine life should future gold prices and cost make this resource viable. In FY18 the stockpiles increased to ~22Mt (containing 520koz) from the EOFY17 total of ~15Mt (containing 400koz).

Ore Reserves

The Tropicana OREs is based on the life-of-mine schedule prepared by AGA in December 2017, using the MRE model described above as the planning basis.

AGA has prepared the Tropicana Gold Mine open-pit ORE using routine industry practices of coding the MRE model with modifying factors applied for costs, metal prices, recoveries, geotechnical conditions and preparing optimised pit shells (using the Lerchs-Grossmann pit optimisation algorithm) that serve as guides to the final mine designs and mine schedules. Open pit mining is carried out using excavators and face shovels loading trucks with a combination of 10m and 15m bench heights, with a vertical advance rate of 90–120m per year in the mine schedule. Studies into definition of an underground ORE were completed in 2010 and again in 2013 but were found to be marginally economic at gold prices prevailing at the time of the respective studies. As such, no ORE is reported from the underground MRE at this time.

The tabulation below left of this page is a listing of the EOFY17 and EOFY18 OREs for Tropicana on a 100% basis.

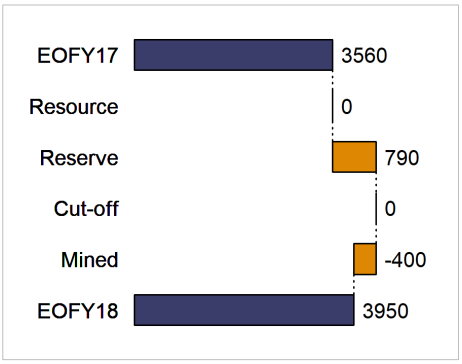
Tropicana – EOFY17 and EOFY18 Ore Reserves

Estimate	JORC Class	EOFY17			EOFY18		
		Mass (Mt)	Gold		Mass (Mt)	Gold	
			g/t	koz		g/t	koz
Open pit	Proved	4.4	2.31	330	5.7	1.80	330
	Probable	43.0	2.13	2,950	47.5	2.13	3,260
	Subtotal	**47.4**	**2.15**	**3,280**	**53.2**	**2.10**	**3,590**
Underground	Proved	…	…	…	…	…	…
	Probable	…	…	…	…	…	…
	Subtotal	**…**	**…**	**…**	**…**	**…**	**…**
Stockpiles	Proved	9.5	0.93	290	11.7	0.96	360
Total	Proved	14.0	1.37	620	17.4	1.23	690
	Probable	43.0	2.13	2,950	47.5	2.13	3,260
Tropicana Gold Mine		**57.0**	**1.94**	**3,560**	**64.9**	**1.89**	**3,950**

- Open pit block cut-off >0.7g/t Au for fresh rock, otherwise >0.6g/t Au

The main changes in the Tropicana ORE from EOFY17 and EOFY18 in terms of contained gold metal are demonstrated in the cascade chart to the below.

Ore Reserve gold metal changes (koz)



The main changes in the ORE for EOFY18 have been increases in the reserve base of 830kz due to changes in estimation methodology, new pits and commitment to the 'Long Island' pit backfilling method for future mining. Around half this gain has been offset by mining depletion of 400koz leaving 3.94Moz of gold in the ORE at EOFY18.

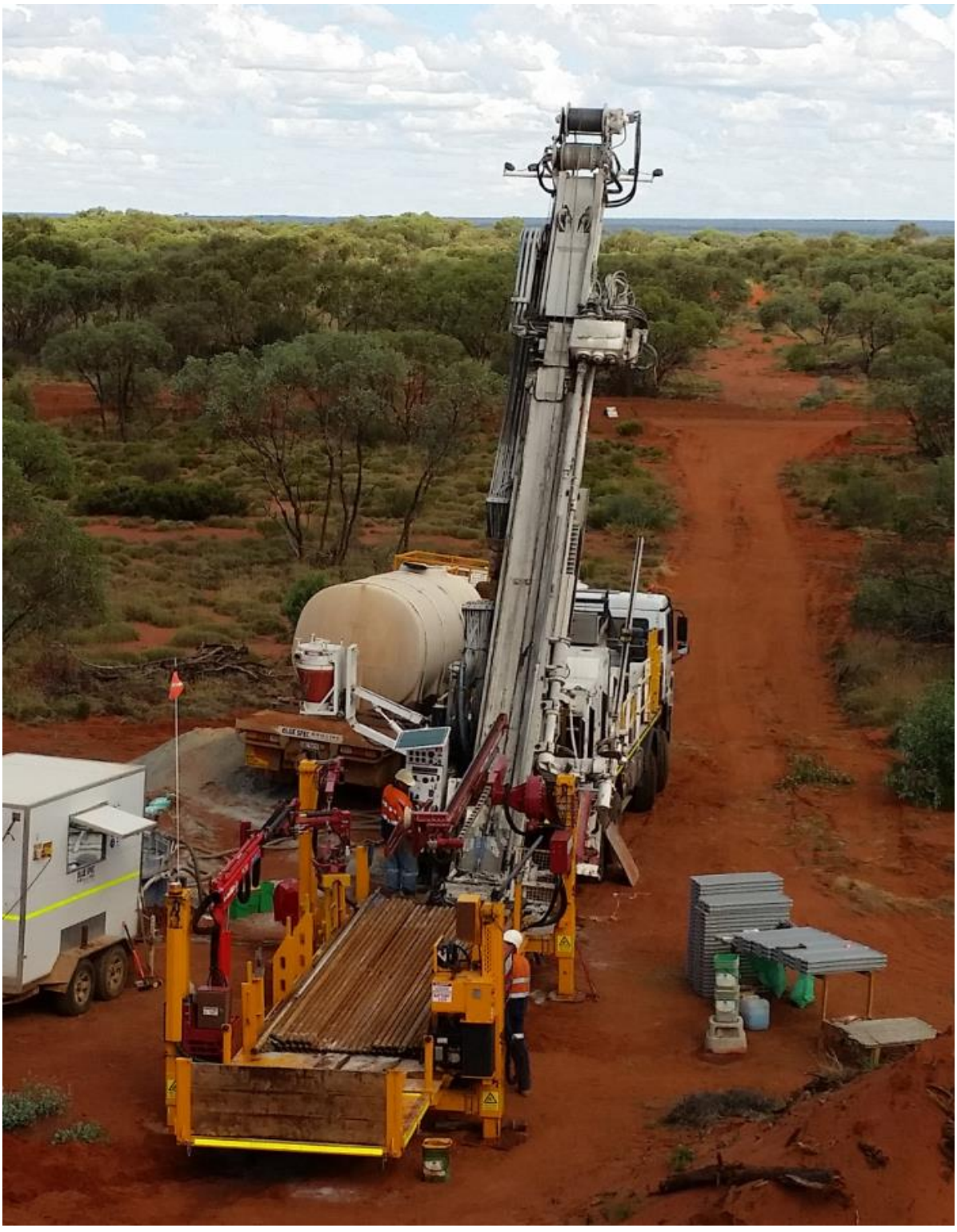
Exploration

In FY18, drilling on a 100m×100m and 50m×25m pierce-point patterns tested the underground potential down-dip of the Boston Shaker pit designs for totals of 12,996m of RC and 30,090m of diamond core drilling.

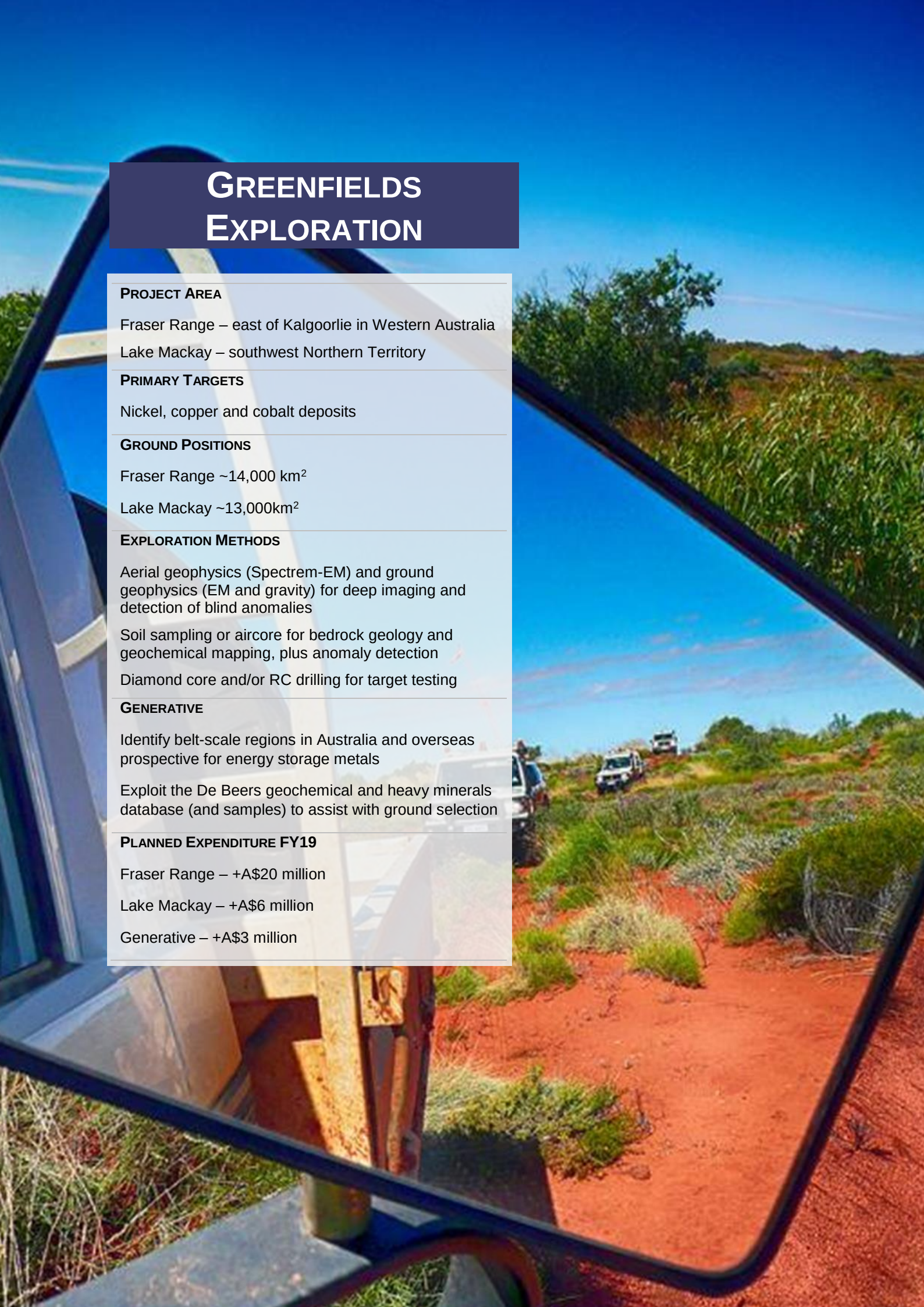
The 100m×100m drilling has confirmed underground mining potential at Boston Shaker Deeps, with mineralisation now extending to ~700m down dip from Long Island pit designs.

Greenfields exploration drilling completed on Tropicana tenements in FY18 included 39,760m of aircore and 14,908m of RC, and 4,671m of diamond core drilling designed to map basement geology and explore potential mineralised corridors identified in regional structural reconstruction and interpretation work. All exploration programs on track and budget with FY18 (100%) spend of A$10.3 million. The JV exploration plan for FY19 continues to focus on resource and reserve development support near mine, and greenfields discovery work.

Exploration drilling at Tropicana Gold Mine



GREENFIELDS EXPLORATION



PROJECT AREA

Fraser Range – east of Kalgoorlie in Western Australia

Lake Mackay – southwest Northern Territory

PRIMARY TARGETS

Nickel, copper and cobalt deposits

GROUND POSITIONS

Fraser Range ~14,000 km^2

Lake Mackay ~13,000km^2

EXPLORATION METHODS

Aerial geophysics (Spectrem-EM) and ground geophysics (EM and gravity) for deep imaging and detection of blind anomalies

Soil sampling or aircore 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 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 and is the fundamental focus to drive step-change value creation through organic growth. IGO believes in an 'in-house' exploration approach that matches the entrepreneurial spirit and nimbleness of a junior with the science-driven approach and longer-term vision of a major. During FY18, IGO transformed its mining and exploration portfolio and ramped up its regional 'greenfields' exploration activities.

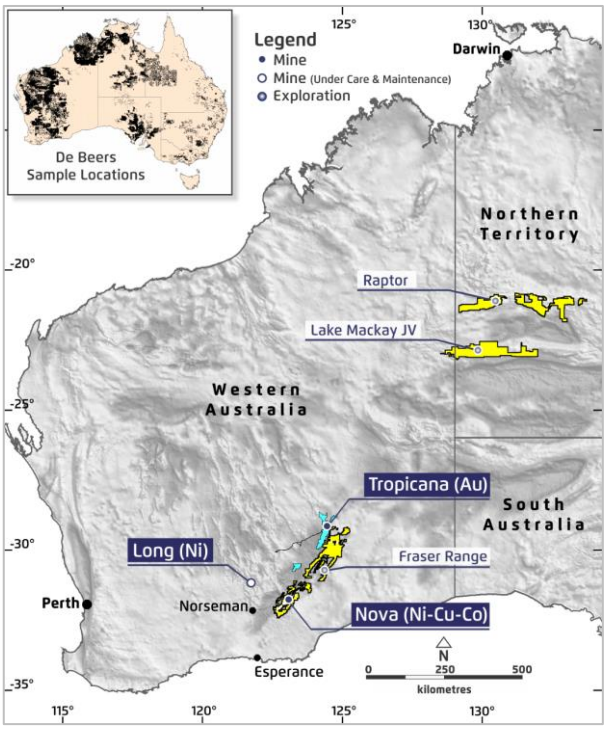
IGO's exploration strategy is the discovery of mineral deposits that deliver high-margin, long mine life and company expanding scale. IGO exploration targets deposit styles that are aligned to the emerging energy metals space and include magmatic Ni-Cu-Co sulphide deposits, such as at Nova-Bollinger, sediment-hosted Cu-Co sulphide deposits and iron oxide/sulphide Cu-Au(-Co) deposits. The discovery of these deposit types will enable IGO to develop large-scale business hubs centred on long-life mining and processing assets, which are positioned in the bottom half of the industry cost curve.

IGO sets itself apart from most other mining companies through:

- Focussing on belt-scale projects in highly prospective emerging mineral terranes, preferably within the favourable investment jurisdictions in Australia and overseas. This focus not only includes underexplored belts where IGO can be a 'first mover' but by also targeting proven world-class terranes where new exploration opportunities can be realised in a 1–3-year timeframe through the application of new ideas and technologies.
- We recognise that our people are key to IGO's success. During FY17 and FY18 IGO established a new high-quality exploration 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 to deliver material discoveries.
- Embracing recent technologies and embedding research and development into the culture of IGO as a key enabler to discoveries. A key to unlocking new mineral discoveries, particularly under cover and in deep bedrock environments immediately around our mining assets, is the use of cutting-edge fit-for-purpose technologies and research to generate new data and develop new methodologies for targeting, vectoring towards, and direct 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 UWA 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.

Australian projects and De Beers sampling coverage



In FY18 IGO spent ~A$45M on exploration both Near Mine and Greenfields. The exploration expenditure for FY19 is expected to be ~A$51.

Fraser Range

The Fraser Range, east of Norseman in Western Australia, is an underexplored belt that is prospective for nickel-copper-cobalt magmatic sulphide, polymetallic sulphide (Cu-Zn-Ag-Au) and orogenic gold deposits. In FY18 IGO consolidated the largest ground position of any company in the Fraser Range, with EOFY18 exploration access to tenements totalling ~14,000km^2 by IGO direct ownership or through joint venture agreements with other explorers.

Importantly, IGO has the significant exploration advantage of owning Nova Operation in the Fraser Range, which not only offers an infrastructure platform to facilitate rapid execution of exploration programmes, but also gives IGO's explorers the use of the Nova-Bollinger deposit as a 'natural laboratory' for testing the effectiveness of various geoscientific and geophysical exploration methods. From these calibration experiments, IGO can (and has) developed confidence as to which methods used to explore for Nova-Bollinger type deposits will likely be successful, whether the deposits to be discovered are proximal to the Nova Operation or occur elsewhere in the Fraser Range, or in analogous belts worldwide.

Over FY18, IGO's Fraser Range exploration focussed on extensive geophysical data collection including surveying the region with the world's most powerful airborne electromagnetic (AEM) system – Spectrem.

On the ground, IGO completed high-resolution gravity surveys, moving loop electromagnetic (MLEM) surveys and more recently, surveys using the deep-penetrating Low-Temperature SQUID EM system. IGO uses the gravity and magnetic data to map out prospective mafic and ultramafic units, structural mapping and for identifying local magnetic and/or density anomalies.

To complement the FY18 geophysical work, IGO has mapped the basement geology under extensive areas of transported-cover using aircore drilling and in parallel, identified many subsurface geochemical anomalies for follow-up surveys and/or drill testing in FY19. Since May 2017, 138km of aircore drilling has been completed. Combined with the geophysics, more than 20 new 'first-order' geophysical and/or aircore anomalies are now ready for follow-up in FY19.

IGO also drill tested several Fraser Range targets in FY18 including the Andromeda prospect, where diamond core drill testing (hole 18AFRD004) of a strong downhole EM anomaly intersected 29.9m grading 1.36% Cu, 2.51% Zn, 0.35g/t Au and 19.9g/t Ag mineralisation from 548.1m downhole. The intersection of mineralisation occurred in a breccia with pyrrhotite-chalcopyrite-sphalerite matrix enclosing sub angular quartz clasts, which are up to 4cm in diameter. Additionally, there are clasts up to 15m in length that have finer grained and laminated, sphalerite-dominant sulphides, which may represent assimilated remnants of VHMS-style mineralisation.

Chalcopyrite and sphalerite occurs with abundant pyrrhotite in all three holes completed to date at Andromeda, with assays pending for the third hole. In the first hole (18AFRD002) drilling intersected 4.2m grading 0.96%Cu, 2.42%Zn, 12.9g/t Ag, and 0.18g/t Au from 510.55m downhole. A fourth hole is in progress targeting an EM conductor 'plate'. Full details regarding the Andromeda drill intersections are included in the JORC Table 1 for greenfields exploration in the supplementary information of this report.

Diamond drill testing of geophysical conductors at two other prospects in FY18 resulted in the 'technical' successes of intersecting iron sulphides (pyrrhotite) in metasediments. These results confirmed that IGO's exploration approach is working, albeit the results for these prospects were for sulphides that did not contain payable metals.

In FY19, IGO has plans to drill another 155km of aircore to continue basement mapping and anomaly identification, drill testing of the over 20 regional targets identified in the FY18 programs, as well as flying another 45,000line-km of AEM surveys. At least two MLEM crews will be also working full time to define new geophysical targets. Follow-up drilling on the Andromeda Prospect is currently still in progress to test the extent of massive sulphide mineralisation.

Andromeda diamond drill core from hole 18AFRD004

Notes: Pyrrhotite-dominated massive Fe-Cu-Zn sulphide mineralisation in a quartz breccia bounding a clast of finer grained and laminated rock characterised by higher sphalerite content. Core is NQ diameter (47.6mm).

Lake Mackay

The Lake Mackay JV (with Prodigy Gold and Castile Resources) is located ~1,000km south of Darwin in the Northern Territory. Like the Fraser Range, Lake Mackay is prospective for base and precious metals. IGO is project manager and has an option to earn 70% of the project through exploration expenditure.

In FY18, the Lake Mackay ground position expanded from one granted tenement in FY17 to approximately 7,600km^2 of granted exploration licences and a further approximately 5,400km^2 of licence applications. The project covers an unexplored Proterozoic terrane, characterised by polymetallic base and precious metal mineral systems.

RC drilling in FY17 led to the discovery of copper-gold (zinc-lead-silver-cobalt) mineralisation at the Grapple prospect and follow-up diamond core drilling in FY18 intersected significant polymetallic mineralisation, with a highlight being hole 17GRDD001 intersecting 11.4m grading 7.9g/t Au, 21g/t Ag, 0.8% Cu, 1.1% Zn, 0.5% Pb and 0.1% Co from 284.9m, and 14.4m grading 1.8g/t Au, 6.0 g/t Ag, 1.1% Cu and 0.03% Co from 348m[6].

Elsewhere on the Lake Mackay project, regional soil sampling programs and follow-up prospect-scale geological mapping and rock sampling have delivered encouraging polymetallic geochemical anomalies for follow-up in FY19. Additionally, ongoing regional Spectrem AEM surveys are finding anomalies for ground EM follow-up and drilling in FY19 on the large swath of recently granted tenements across the project area.

Generative exploration

During FY18, IGO's expanded the project generation and evaluation team, have rapidly identified several and progressed two new belt-scale opportunities for IGO – the Raptor Project in the Northern Territory, and the Frontier Project in Greenland.

The Raptor Project comprises 20 large 100% IGO-owned Exploration Licence applications covering approximately 14,450km^2 of outcropping to shallow-covered Palaeoproterozoic geology known as 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 Ni-Cu-Co sulphide deposits, akin to the Fraser Range and IGO's Nova deposit. In FY19, IGO plans to fly detailed aeromagnetic and radiometric surveys in collaboration with the Northern Territory Geological Survey. Most of the project area falls within Aboriginal freehold land and hence access will require agreement with Traditional Owners.

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 ~13,000km^2 of granted exploration licences via in-ground expenditure with Greenfields the project manager. The Frontier Project is prospective for sediment-hosted Cu-Co 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 the host to the world's largest sediment-hosted copper deposit, the Kupferschiefer.

Another generative exploration initiative is to capitalise on IGO's ownership of some of the largest competitive Australia-wide geochemical databases and mineral sample collections, including the former De Beers heavy mineral concentrate and geochemical sample collection and associated database. The primary goal is to leverage the data and samples to assist in our exploration efforts for Ni, Cu and Co, but also for hard-rock lithium deposits. A significant budget (~A$1M) has been allocated for this purpose, including a range of technical people resources.

Aircore drilling on the Fraser Range in FY18

[6] ABU: Lake Mackay JV – Final Grapple Diamond Drilling Results (ASX 15-Nov-17)

Supplementary Information

Type	Abbreviation	Explanation
Initialisms	3D	Three dimensional
	AEM	Airborne electromagnetic (survey)
	AGA	AngloGold Ashanti Australia
	AMT	Audiomagnetotelluric (survey)
	ASX	Australian Stock Exchange
	BHP	BHP Nickel West
	CE	Consensus Economics
	EM	Electromagnetic survey
	EOFY17	End of financial year 2017
	EOFY18	End of financial year 2018
	FX	Foreign exchange A$:US$
	FY17	2017 financial year
	FY18	2018 financial year
	GSWA	Geological Survey of Western Australia
	IGO	Independence Group NL
	JORC	Joint Ore Reserves Committee
	LUC	Local uniform conditioning
	MAIG	Member of the Australian Institute of Geoscientists
	MAusIMM	Member of the Australasian Institute of Mining and Metallurgy
	MLEM	Moving loop electromagnetic (survey)
	MRE	Mineral Resource estimate
	MSO	Minable stope optimiser software
	ORE	Ore Reserve estimate
	RPGeo	Registered Professional Geoscientist
	SQUID	Superconducting quantum interference device
	Tropicana	Tropicana Gold Mine
	WMC	Western Mining Corporation
Symbols	°	Degrees
	‘	Seconds
	“	Minutes
	%	Weight percent or percentage proportion
	~	Approximately
	Ag	Silver
	Au	Gold
	Co	Cobalt
	Cu	Copper
	Ni	Nickel
	Zn	Zinc
Units	A$	Australian dollars
	g/t	Grams per tonne
	Ga	Billions of years
	km	Kilometres
	km^2	Square kilometres
	koz	Thousands of troy ounces
	kt	Thousands of tonnes
	m	Metre
	Ma	Millions of years
	Moz	Millions of troy ounces
	Mt	Millions of tonnes
	Mt/a	Millions of tonnes per year
	NiEq	Nickel equivalent– nickel a nickel equivalent copper value
	oz	Troy ounce (31.1035 grams)
	ppm	Parts per million
	t	Tonne(s)
	µm	Micrometre – one thousandth of a millimetre
	US$	United States of America dollars

LONG OPERATION – SAMPLING TECHNIQUES AND DATA	
JORC Criteria	**Commentary**
Sampling techniques	• The Mineral Resources at Long Operation 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 operation, 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.
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 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 Mineral Resource estimation 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 OPERATION – 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 industry standard Downhole Surveys 'Azimuth Aligner'. • 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.

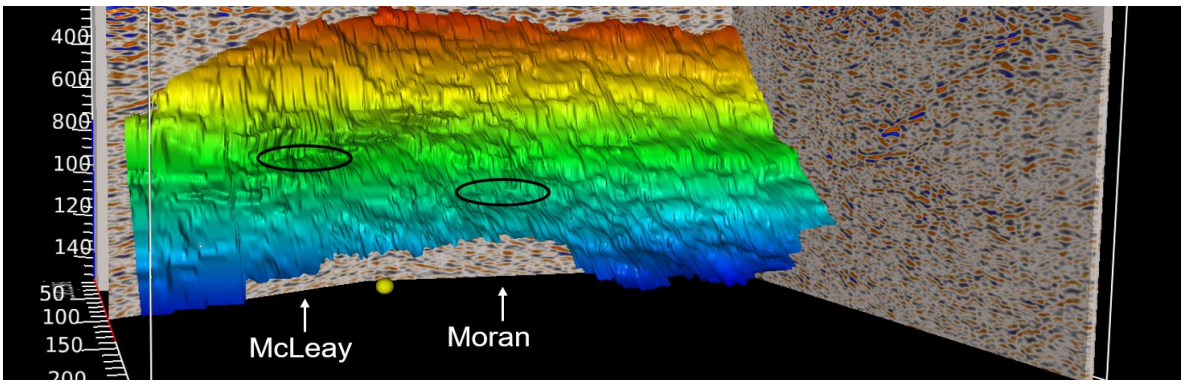
LONG OPERATION – SAMPLING TECHNIQUES AND DATA	
JORC Criteria	**Commentary**
Orientation of data in relation to geological structure	• Nearly all drill holes used for Mineral Resource estimation are oriented to intersect the mineralisation at a high angle and as such, a grade bias possibly introduced 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 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 Mineral Resource estimation work.

LONG OPERATION – EXPLORATION RESULTS	
JORC Criteria	**Commentary**
Mineral tenement and land tenure status	• The Long Operation Mineral Resources 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 Mineral Resources are also located within Location 48, which is a non-crown (pre-WA Mining Act) lease. • 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 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, Miitell 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 Operation from BHP Billiton Nickel West (formerly WMC) in 2002 and re-commissioned the moth-balled Long Mine. Since then IGO's exploration teams discovered the McLeay deposit in 2005 and the Moran deposit in 2008.

Long operation – core yard

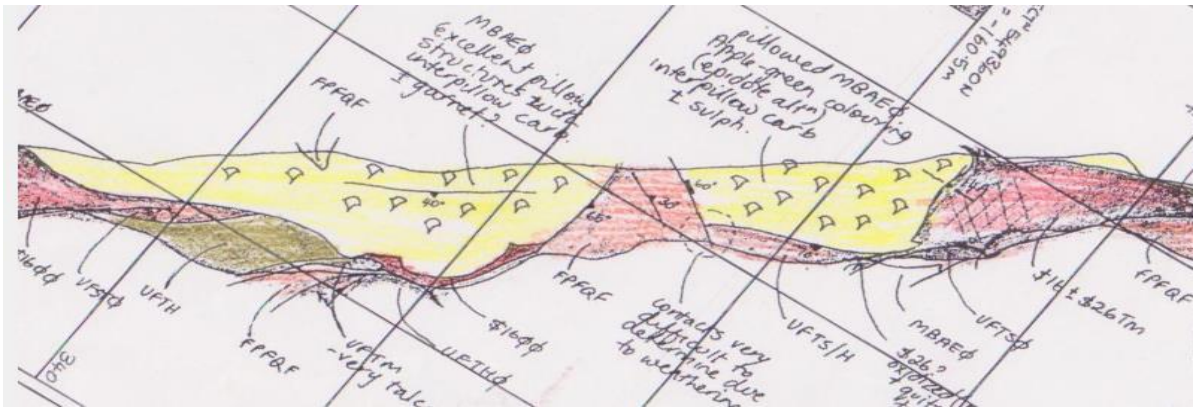
LONG OPERATION – EXPLORATION RESULTS (CONTINUED)	
JORC Criteria	**Commentary**
Geology	• The Kambalda nickel deposits are located 60 to 100km south of Kalgoorlie in Western Australia within the southern part of Archean age Norseman-Wiluna greenstone belt. • The regional stratigraphic succession is characterised 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 a 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 lenses. 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 Operation 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 Operations 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 Mineral Resource estimate.
Relationship between mineralisation widths and intercept lengths	• No drill hole related exploration 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 Operation 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	• Drill testing of seismic targets and a possible parallel lode structure is planned for FY19.

3D seismic survey interpretation of the ultramafic-basalt interface



LONG OPERATION – 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 edspatially 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 Mineral Resource estimation work.
Site visits	• The Competent Person made a site visit to Long Operation in May 2018 to discuss the methods of data collection, Mineral Resource estimation and remnant Mineral Resources with the Long Operation technical staff. This visit included an inspection of the working areas of the mine and the mine infrastructure.
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 Mineral Resource model. • In some areas, the Mineral Resource 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 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 Mineral Resource starts at ≈300m below natural surface and extends to ≈1,000m below surface. • McLeay: – The major extent of McLeay is ≈750m down plunge, ≈140m down dip, with seven lenses modelled that are typically 1m to 3m in true thickness. – The Mineral Resource starts at ≈650m below surface and extends ≈1,000m below surface. • Victor South: – The major extent of Victor South is ≈200m down plunge, ≈150m down dip with three ribbon-like lenses modelled that are typically ≈1m to 10m in true thickness. – The Mineral Resource starts ≈600m below surface and extends ≈850m below surface. • Moran: – The major extent of this deposit is ≈650m down plunge, ≈120m down dip with 3 ribbon-like lenses that are typically ≈1m to 5m in true thickness. – The Mineral Resource commences ≈900m below surface and extends ≈1,000m below surface.

Back mapping from Long Operation 10 Level September 1996



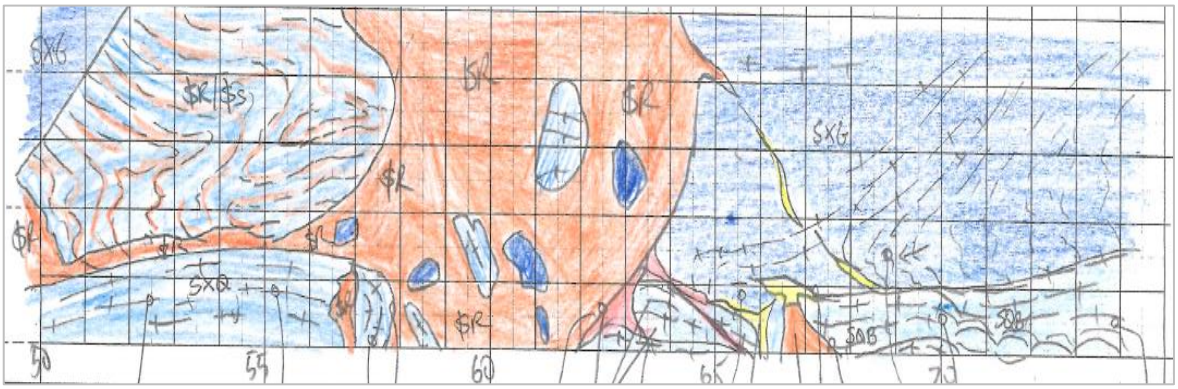
LONG OPERATION – MINERAL RESOURCE ESTIMATION (CONTINUED)	
JORC Criteria	**Commentary**
Estimation and modelling techniques	• Digital three-dimensional solids are prepared in Surpac software to encompass the interpreted Mineral Resource mineralisation using either a nominal ≥1.0% Ni drill hole grade cut-off 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 Mineral Resource 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 Operation to BHP Billiton Nickel West's nearby concentrator, which has processed ores from Kambalda-style deposits for over 30 years. • While the expected metallurgical recovery is specified in sales contracts, but the recovery behaviour of the deposits is well understood and not material to ore sales. • The current Mineral Resource 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 Operation operates under and environmental management plat, which meets or exceeds legislative requirements. • Rock waste is trucked to surface waste dumps or used as stope backfill. • Environmental rehabilitation plans are in place and progressively executed, with costs included in the Operation's budget and forward plans. • Disposal of concentrator residues in a tailing storage facility on and adjacent BHP tenement is managed BHP.

LONG OPERATION – 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 sufficient 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 Mineral Resource estimation purposes due to the strong positive correlation between the nickel sulphides and density. • The porphyry intrusions are assigned a density of 2.7t/m3, 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 Operation 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 reasonable expect 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 takes into 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, 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 Long Operation 2016

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 (RC) holes. • A total of 15 RC, 271 Surface DD and 1712 Underground DD holes were drilled for 3,120m, 113,180m and 267,378m 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), NQ2 (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 ≥ 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 (DDH 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 representivity 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	• 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 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	• Optiro's consultants have inspected and verified significant intersections in DD on multiple occasions as part of the on-site collaborative Mineral Resource estimation process. • 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.

Primary igneous layering in mineralised gabbro in the Bollinger Net zone

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 ±0.25o in azimuth and ±0.05o 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 Mineral Resources and Reserves, 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 Nickel Project. • Native title royalties on the nickel and copper production will apply as outlined in the Ngadju Mining Agreement. • 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.

NOVA OPERATION – EXPLORATION RESULTS	
JORC Criteria	**Commentary**
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.
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 predominantly 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 releases of exploration results relating to Nova-Bollinger.
Further work	• The grade control drill out from underground diamond drill platforms will continue at least until the end of July 2018 to infill and test for extensions of mineralisation. • 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 are used for logging, spatial and sampling data at Nova-Bollinger. • All 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 FY18 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 is 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 ≈180mm, 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	• Concentrations of Ni%, Cu%, Co%, Fe%, Mg%, S% were estimated into the Nova-Bollinger digital block model using the Ordinary Block Kriging (OK) routines implemented in GEOVIA Surpac (6.7.3). • 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 by cutting the composited data at the 97.5 percentile and running two estimates on the key domains using the cut data and then the uncut data. The resulting difference was negligible, and no top cuts have been applied to the final estimate. • A dynamic anisotropy sample search approach was applied during estimation 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% – 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 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 <0.5% of the total tonnage, approximately 60% of the Inferred Mineral Resource is extrapolated greater than 30 metres beyond the data. • Nova has been updated using data from 1,060 infill underground holes (for 176,913m of diamond drilling), in addition to the 215 surface holes for 85,829m drilled by Sirius up to 2014, along with mapping data from ore drive development on 11 levels. • 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 Surpac using a 3 mE×3mN×2mElv parent block size with sub-blocks permitted down to dimensions of 1.5 mE×1.5 mN×1.0mRL. • All block grade estimates were completed at the parent cell scale. Block discretisation was set to 3×3×2 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. • Two 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 6 and maximum of 30 samples for a block to be estimated. Sample selection was limited to 3 samples per hole. In the estimation second pass, the search ranges were doubled. • 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/cm3 to 4.7g/cm3 (average: 3.9g/cm3), net textured sulphides 3.0 to 4.4 g/cm3 (average: 3.6g/cm3) and disseminated sulphides 2.5g/cm3 to 4.6g/cm3 (average: 3.5g/cm3). • The host geology comprises high grade metamorphic rocks that have undergone granulite facies metamorphism. The rocks have been extensively recrystallised and are very hard and competent. • Vugs or large fracture zones are generally annealed with quartz or carbonate in breccia zones. Porosity in the mineralised zone is low. As such, voids have been accounted for in all but the pycnometer density measurements. • The bulk density values were calculated 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 each block based on the OK elements.
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 <0.5% 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 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 Mineral Resource 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 Reserve estimation. • 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 Reserve conversion studies and should provide reliable (± 15%) estimates for quarterly and annual production planning respectively. • The Inferred Mineral Resource estimates identify one area that requires further drilling and assessment before it can be considered for mine planning. • Total ore processed to FY 2018 was 1.43Mt grading 1.83% Ni, 0.75% Cu and 0.06% Co. • Total ore mined from the MRE model according to mine surveys volumes was 1.47Mt grading 1.89% Ni, 0.80% Cu, 0.06% Co, with 0.10Mt on ROM stockpiles EOFY18. • Reconciliation factors (mill / mine-claimed) for the 12 months of FY18 therefore 97% for tonnage, 96% for nickel grade, 93% for copper grade and 95% for cobalt grade. 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.

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 EOFY18 is inclusive the EOFY18 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 Ore Reserves have been designed based on the current operational practices of the operating mine. • All Ore Reserves were estimated by construction of three-dimensional mine designs using DESWIK.CAD software 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 reserve was evaluated to assess its economic viability. • Previous mine performance has demonstrated that the current mining methods are technically achievable and economically viable. The modifying factors are based on historical data utilising a similar mining method • As Nova Operation is an ongoing concern the study level can be considered better than a Feasibility Study 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 $A102/t for full stoping and $A63/t for incremental stoping. For development the NSR cut-off is $A27/t.

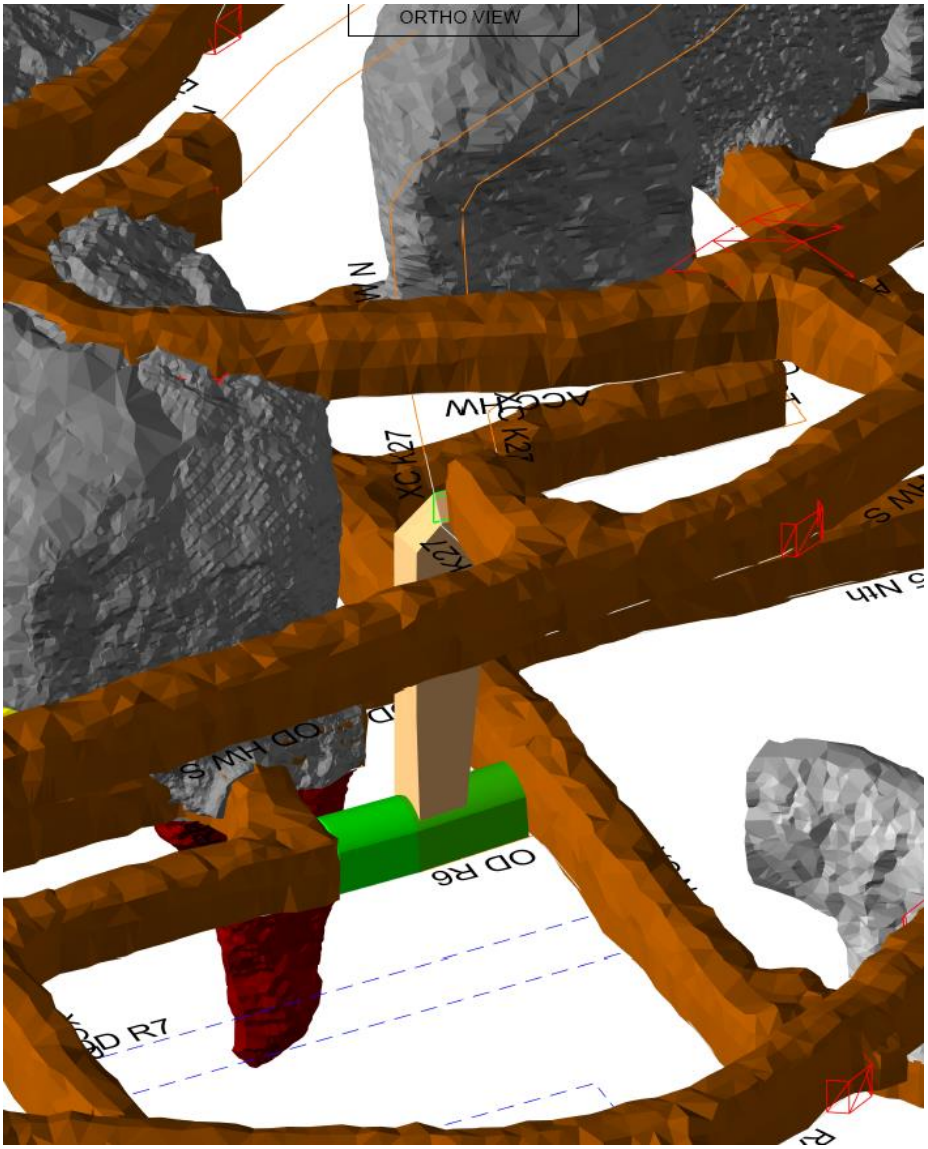
NOVA OPERATION – ORE RESERVES (CONTINUED)	
JORC Criteria	**Commentary**
Mining factors or assumption	• The mining method assumed for the Ore Reserve is long-hole sub-level open stoping, and also sub level open stoping, which is considered appropriate for the for the style of mineralisation under consideration. • 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. • Any Inferred Mineral Resource have been excluded from 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 ae 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. • 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. • Potentially acid-generating mine development rock (containing >0.7% 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 in now 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. • No other significant infrastructure is anticipated other than a minor bore field expansion.

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 0.79 $A/$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 $A58,510/t for cobalt, A$8,280/t for copper and A$19,130/t for nickel metal, using the exchange rate discussed above for currency conversions from $US prices. Different metal prices have been assumed for MRE and ORE reporting refer to the discussion in the main report.
Market assessment	• The inputs into the economic analysis for the Ore Reserve update have already been described above under previous subsections. • The economic evaluation has been carried out on a nominal basis (no adjustment for inflation) on the basis that saleable product values will be correlated with inflation. • The confidence in majority of the economic inputs is high given the input sources at the time of the Ore Reserve study. • The confidence in metal prices and exchange rates is consistent with routine industry practices with the data derived from reputable forecasters. • The discount rate used for NPV calculations was 8% 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 the traditional owners and custodians of the land occupied by Nova. • WA Mining lease M28/376 covers all the Nova mining, process and support infrastructure. • IGO has all the necessary agreements in place with key stakeholders and has both statuary and social licence to continue operation of Nova for the 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 Reserve. • Additional water bores are required to ensure water security and exploration for an additional bore field in in progress.
Classification	• The Ore Reserve has been classified into the Proved 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 at > 90% of the contained MRE tonnage is classified as Measured Resource have been classified as Proved Ore, those with less than 90% Measured Resource are classified as Probable Ore Reserve. In development, Measured Resources have been converted to Proved Reserves and Indicated Resource converted to Probable Ore Reserves. • The classifications applied to the estimate are consistent with the opinion of the Competent Person reporting the Ore Reserve.
Audits and reviews	• The estimate has been reviewed internally by Nova's senior mine engineering staff and IGO's Perth office technical staff. • No independent external reviews have been completed.

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 Reserve inputs is generally high given the mine is operation and costs, prices, recoveries and so on are well understood. • The Ore Reserve estimates are considered to have sufficient local accuracy to support mine planning and production schedules with Proved Ore Reserves considered a reliable basis for quarterly production targeting and Probable Ore Reserves reliable for annual production targets. • Confidence in the mine design and schedule are high as mining rates and modifying factors are based on actual site performance. Mine design is consistent with what has been effective previously. • Mine reconciliation data indicates the ORE tonnage and overstates payable metal grades by a few percent for the past 12 months. The grade reconciliation is increasing closer to parity over the last six months as larger higher-grade stopes have come into production. The estimated over break for the last 12 months is 5% on ORE designs.

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 MREs 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 resource model and optimise the grade control sample spacing. • 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 Mineral Resource 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) ore 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 programmes.
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 and 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.

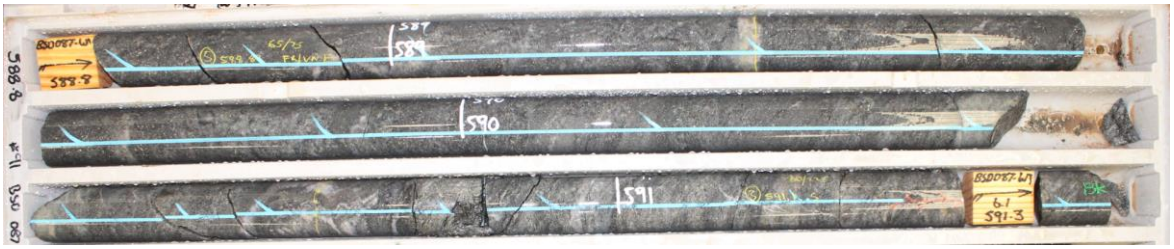
Automated sample preparation equipment at Tropicana Gold Mine laboratory

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 riffles 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 MRE definition drilling including SGS Perth (pre- 2006), Genalysis Perth (2006 to April 2016) and Tropicana site laboratory (2015 Boston Shaker samples and post-April 2016 samples) – RC samples were over dried then pulped in a mixer mill to a PSD of 90% passing 75 microns 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 microns. 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. – Samples less with mass <800g submitted to Tropicana laboratory are pulped in a LM2 mill to a PSD of 75 microns before sub-sampling for fire assay. Samples with larger masses are crushed in a Boyd crusher to a PSD of 90% passing 2mm then subsampled using a linear sample divider. – From May 2016, a jaw crusher has been used to crush half-core samples to a PSD of 100% passing 6mm. • 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 microns, 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 Mineral Resource 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 Mineral Resource estimation 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 number data is captured digitally in the field using Field Marshall Software (upgrade to Micromine Geobank in 2016). Data is downloaded daily to the AGA exploration server 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 routine backed up to AngloGold'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 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. • The Havana Deeps area 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 procedures applied, and the JORC Code classification applied.
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 Tropicana). • 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 AngloGold field personnel and senior geological staff. • The field quality control and assurance of the sampling was audited by consultant QG in 2007 and 2009. The conclusion of the audit was that the data was suitable for MRE work. • In 2017, 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 Tropical Gold Mine Mineral Resources 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). • Tropicana Gold Mine in a joint venture between AngloGold (70%) and IGO (30%) with AngloGold 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 Mineral Resource and Ore Reserve and on-going exploration of the mining lease. There have been no adjustments or scaling of assay data other than setting below detection limit values to half detection for MRE work.
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	• The Tropicana Gold Mine 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 SW dipping sequence of quartz-feldspar gneisses, amphibolites, granulites, meta-sedimentary cherts. • The gold mineralisation is concentrated in a 'favourable horizon' of quartz-feldspar gneisses, 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 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 hole used to prepare the Mineral Resource estimate is not practical for this public report. The Mineral Resource estimate give the best-balanced view of all the drill hole information. • Details of selected drill holes from Boston Shaker Deeps are tabulated in the main body of this report.
Data aggregation methods	• Intercepts reported for Boston Shaker Deeps are reported as length-weighted intercepts • No metal equivalent values are considered in the MRE or drill results.
Relationship between mineralisation width and intercept lengths	• All Mineral Resource 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 Tropicana gold deposits. • High-grade intercepts reported for Boston Shaker deeps are indicative of areas that may be attractive for underground ORE work.
Further work	• Exploration drilling is continuing the within mine tenement, but no material MRE update is planned at the time of reporting. • Greenfields exploration is continuing on the wider JV tenement holdings.

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 travels to site regularly and is actively involved in the management and supervision of the MRE work for several years. • The exploration results Competent Person is site based and has intimate knowledge of the drilling and data collection processes.
Geological interpretation	• To control the MRE process, three dimensional digital solids were prepared in LeapFrog software 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 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 (LGA) pit optimisation 'shell' based on a gold price of $A1,817/tr.oz. ($US1,400 /tr.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 Havana Open Pit 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 Mineral Resource 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 Open Pit MRE: – Has been estimated from the drill hole data available to 16 Jan 2017, which included 3,666 drill holes for a total of 702,961m of drilling of which, 1,101 holes were DD for 387,191m and 2,421 holes were RC for 278,683m. A further 144 holes of RC with DD holes totalled 37,087m of drilling. – The December 2017 update included 279 new holes (170 RC and 109 DD) for an additional 54,753m of drilling compared to the prior estimate. – The drill hole data was composited to 2m lengths within geological estimation domains using Vulcan software. – No grade top-cut or caps were applied to the composites, but 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 commensurate with the drill spacing (25mE×25mN or 50mE×50mN and planned kriging panel height (10m for Havana and Tropicana, 7.5m for Boston Shaker) – Gold continuity was interpreted for each estimation domain and grades for large panels were estimated using ordinary block kriging in Isatis software, with estimation panel dimension 30mE×45mN×10mElv used for Havana and Tropicana, and panels of 15mE×30mN×7.5mElv for Boston Shaker. – Sample searches were oriented down dip with a 120mX×120mY×20mZ search used for mineralised domains and 120mX×120mY×30mZ search in waste domains. A minimum of 8 and maximum of 32 samples were required for a panel grade to be estimated. A second pass search was then applied to address blocks not estimated or >1% negative kriging weights with the maximum number of samples reduced to 12. – 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 10mE×15mN×3.33mElv for Havana and Tropicana and 5mE×7.5mN×2.5mElv for Boston Shaker. 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 MRE forecasts to mine production indicates acceptable forecasting performance for monthly, quarterly and annual recompilation periods. • The Underground MRE: – Is estimated in a separate model from the Open Pit with the model oriented to follow the 30° east dip of mineralisation. – The estimate has been prepared using Ordinary Block Kriging in Isatis software into block dimensions 10mX×10mY×2mZ in the rotated coordinates. – Drill hole data were composited to 2m prior to estimation with no-top cuts applied – The model was validated in an equivalent manner to the Open Pit estimates. – There has been no mining of the Underground MRE to compare to the estimate to production. – There are no assumptions relating to deleterious elements of non-grade variables of economic significance. Gold and density are the only relevant variables.
Moisture	• Tonnages are estimated on a dry basis
Cut-off parameters	• Open pit: – The open pit MRE is reported within a pit optimisation shell with an assumed gold prices of $US1,400/oz ($A1,817/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 assumptions of a pre-feasibility study completed in 2013 which used a gold price of $US1,400/oz ($A1,817/oz) and underground mining and process cost assumptions for fresh MRE. • The cut-off grade for reporting the Underground MRE on this basis is ≥2.0g/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 20m 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 an optimisation shell. • Eventual prospects of economic extraction for the underground MRE have been demonstrated in the 2013 study, albeit the project development is not currently economical attractive at current metal prices and costs.

TROPICANA GOLD MINE – MINERAL RESOURCES (CONTINUED)	
JORC Criteria	**Commentary**
Cut-off parameters	• Open pit: – The open pit MRE is reported within a pit optimisation shell with an assumed gold prices of $US1,400/oz ($A1,817/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 assumptions of a pre-feasibility study completed in 2013 which used a gold price of $US1,400/oz ($A1,817/oz) and underground mining and process cost assumptions for fresh MRE. – The cut-off grade for reporting the Underground MRE on this basis is ≥2.0g/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 20m 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 an optimisation shell. • Eventual prospects of economic extraction for the underground MRE have been demonstrated in the 2013 study, albeit the project development is not currently economical attractive at current metal prices and costs.
Metallurgical factors or assumptions	• The ore processing method at Tropicana Gold Mine is well-established with conventional, crushing, grinding then carbon-in-leach extraction of gold followed by electrowinning to produce gold 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 Feasibility Study for the Havana Open Pit.
Environmental factors or assumptions	• Tropicana Gold Mine 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/m3 to 2.18 t/m3 in the saprolite and ranges from 2.56t/m3 to 2.96 t/m3 in the transitional and fresh rock domains. • Density is estimated by ordinary block kriging in the Mineral Resource estimates 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 Tropicana estimates into different JORC Code confidence categories is drill hole spacing as follows: – 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 • AGA considers that the MRE supports mine planning with a 90% confidence interval of ±15% on tonnage or grade on a quarterly production basis, with Indicated 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.

TROPICANA GOLD MINE – MINERAL RESOURCES (CONTINUED)	
JORC Criteria	**Commentary**
Audits or reviews	• The open pit MRE methodology was audited by consultants QG in 2007, 2009 and 2011. • Consultants Golder Associates audited the 2015 estimate in 2015. • Consultants Optiro reviewed and endorsed the current Mineral Resource Estimate in November 2017. • AGO 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 Feasibility Study has also confirmed the precision assumptions and confidence the Mineral Resource estimate 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 ORE study is the open pit MRE described in the preceding sections of this JORC Table 1. • The open pit MRE is reported inclusive of the ORE. • No ORE has been estimated from the underground MRE.
Site visits	• The Competent Person for the ORE visits site several times per year and as such, has a good knowledge of the operation and has regular contact with personnel providing key inputs to the estimate.
Study status	• The level of study for the ORE estimate is commensurate with industry expectations of a Pre-Feasibility Study as described in the JORC Code, with all material Modifying Factors considered in the ORE. • Current mining and processing operations confirming that the mine plans are technically feasible and economically viable.
Cut-off parameters	• The ORE reporting cut-offs are determined based on the net return of gold produced at the processing plant for each ore type. • The specific cut-offs for reporting the ORE are ≥0.6g/t Au for oxide and ≥0.7g/t AU for transitional and fresh rock.
Mining factors or assumptions	• The mining method for the ORE is open pit mining with conventional excavators and trucks with blasting on 10m benches in Tropicana and Havana and 7.5m in Boston Shaker. Ore is mined in three 1/3 bench height flitches. • Inter-ramp pit slope angles are assumed range from 35° on the footwall and 67° on the hangingwall in both oxide and fresh rock, with some variation for different rock. • The Ore Reserve is reported within operation designs that have been prepared using the Mineral Resource model described above, geotechnical inputs and financial assumptions discussed below. • Grade control RC drilling is completed on a 12mE×12mN pattern prior to ore mining. • No mining dilution has been applied as the LUC model incorporates internal dilution. • Mining recovery of ore is assumed to be 100% • Mine designs assume a minimum working face of 50m to 80m at the base of pits. • Inferred MREs are excluded from the ORE with the total in-pit Inferred Resource being <0.3% of the Ore reserve and as such, is not material to the mine viability. • No new infrastructure is required to support the operating mine methods.
Metallurgical factor or assumptions	• The metallurgical process for Tropicana ores is well 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. The plant upgrade of a second ball mill is expected to increase recovery to 92% in fresh rock. • No deleterious elements are present in the ore. • In the project Feasibility Study Pilot scale test work was carried out on large diameter (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.
Environmental	• Tropicana Gold Mine 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 the 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. • Western Australian State royalties are levied at 2.5% of the value of gold produced.
Revenue factors	• The assumption for gold prices for the Ore Reserve is $US1,100/oz based on corporate guidance and assessment of historical prices. • The $A:$US exchange rate is 0.73, also based on corporate guidance and assessment of historical exchange rates.
Market assessment	• No market assessment has been completed for this ORE– gold is sold to the Perth mint or through agreements with several financial institutions
Economic	• The inputs into the economic analysis for the ORE 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 Tropicana 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. • Sensitivity studies have been completed on inputs such a mining and processing costs, gold price and discount rate. NPV has the greatest sensitivity to gold price with an estimated 30,000 troy ounces lost from the ORE for a 10% reduction in gold price.
Social	• Tropicana Gold Mine has all necessary agreements in place with key stakeholders and matters leading to social licence to operate.
Other	• There are no known material naturally occurring risks associated with the Tropicana Gold Mine. • 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.
Classification	• The ORE has been classified into Proved and Probable JORC Code classes 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 reporting the Ore Reserve. • There is no portion of Probable Ore Reserves derived from Measured Mineral Resources.
Audits or reviews	• A Mineral Resource and ORE audit was completed in 2017 by consultants Optiro and no material recommendations came from the audit. • The current ORE has been reviewed internally by AGA personnel.
Discussion of relative accuracy and confidence	• AGA has carried out simulation studies to quantify the confidence in the ORE – refer to the commentary at the end of the Mineral Resource section 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 Ore Reserve estimates. • Confidence in ORE inputs is generally high given the mine is operation and costs, prices, recoveries and so on are well understood. • The ORE are considerate 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 designs are consistent with what has been effective previously. • The mine to mill reconciliation data to date indicates the forecast precision of the estimates is good with the ORE is slightly conservative.

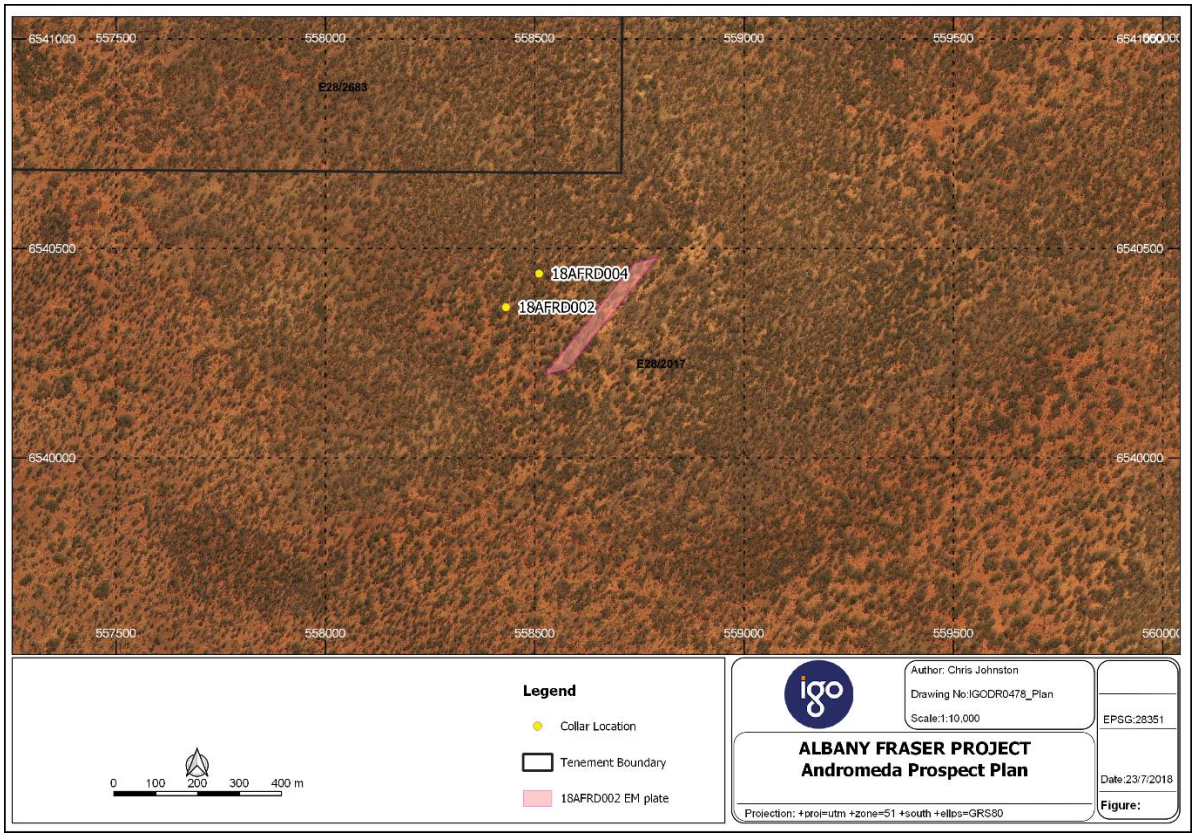
ANDROMEDA PROSPECT – SAMPLING TECHNIQUES AND DATA	
JORC Criteria	**Commentary**
Sampling techniques	• The sampling techniques used at Andromeda Prospect have been diamond core drilling (DD) as detailed in the following subsections.
Drilling techniques	• DD holes have been drilled by a Mantis 1000 rig 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 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 is reconstructed into continuous runs on an angle iron cradle. • DD recoveries are quantified by as the ratio of measured core recovered lengths to drill advance lengths for each core-barrel run. There were no material core-loss issues or poor sample recoveries over the sampled intervals. • Down hole depths are checked against the depth recorded on the core blocks and rod counts are routinely carried out and marked on the core blocks by the drillers to ensure the marked core block depths were accurate.
Logging	• Qualitative logging of DD core included lithology, mineralogy, mineralisation, structural, weathering, colour and other features of the samples. • Quantitative logging has been 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-cores using automatic wet-diamond-blade core saw, except for hole AFRD002, where quarter core subsamples were cut from the half-core. All sample submitted for assay were selected from the same side of the core. • The primary tool used to monitor drill core representivity was monitoring and ensuring near 100% core recovery. • The 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 microns 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. • 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 is achieved in the pulverisation stage. • The Company inserts field duplicates, CRMs and blanks routinely at a rate between 1:10 and 1:20 samples. • Laboratory quality control processes include 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 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.
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 Bureau Veritas (Perth) and are merged in the Company acQuire SQL drill hole database by IGO's Geological Database Administrator. • Data is backed up regularly in off-site secure servers. • No geophysical or portable XRF results are used in exploration results reported. • There have been no adjustments to the assay data.
Location of data points	• 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 the two drill holes reported. • Samples have been composited using length-weighted intervals for public reporting.

ANDROMEDA PROSPECT – SAMPLING TECHNIQUES AND DATA (CONTINUED)	
JORC Criteria	**Commentary**
Orientation of data in relation to geological structure	• The drilling from surface is designed to cross the steeply north dipping conductive plates at a high angle. • 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 are 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 bulk bag and delivered to the Bureau Veritas-Perth by contractor freight McMahon Burnette. • A sample reconciliation advice is sent by the Bureau Veritas-Perth to IGO's Geological Database Administrator on receipt of the samples. • Sample preparation and analysis is completed at the one the laboratory 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	• Andromeda Project is within WA Mining tenement E28/2017 that expires on 21 Sep 2021, at which time an extension of term application will be requested if deemed necessary. • E28/2017 is located partially within the Proposed Lake Harris Nature Reserve (PNR91) and within 2km east of the Harris Salt Lake. E28/2017 is in good standing and no known impediments exists to continued exploration on the tenement. • Ponton Minerals Pty Ltd ('Ponton') and Independence Windward Pty Ltd ('Windward') – 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 Independence Group 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 historical been explored for gold and base metals. • Previous work on the tenements consisted of aeromagnetic/radiometric and DTM Aeromagnetic / Radiometric / DTM surveys, soil sampling, geological mapping, ground EM survey. • There has not been any previous drilling conducted within the Andromeda Prospect.
Geology	• The project area is considered highly prospective for volcanogenic massive sulphide 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, located 50km south of tenement E28/2017.
Drill hole Information	• The collar coordinates the xx drill holes reported are as follows: – Hole 18AFRD002: drilled at 558,431mE and 6,540,360mN – Hole 18AFRD004: drilled at 558,510mE and 6,540,440mN • Both holes are drilled on the same dip and trend orientation of a -70° plunge towards grid bearing 141° • Both holes are collared from 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 or + >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.
Relationship between mineralisation widths and intercept lengths	• Only downhole intersection widths are provided as mineralisation given the understanding of the geometry of the mineralisation is at an early stage.
Diagrams	• A representative plan view with the reported intercepts labelled is included below this table.
Balanced reporting	• Results for the >1.0% Zn+ >1.0% Cu grade were reported. • The remainder of the results are considered low grade.

ANDROMEDA PROSPECT – EXPLORATION RESULTS	
JORC Criteria	**Commentary**
Other substantive exploration data	• Surface EM survey and downhole EM surveys 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 – MGA94 grid Zone 51



Andromeda Cross Section Looking West