



28 November 2014

## INDEPENDENCE DELIVERS POSITIVE OPTIMISATION STUDY FOR STOCKMAN COPPER-ZINC PROJECT

Independence Group NL (“the Company”) (ASX:IGO) is pleased to announce the results of the 2014 Optimisation Study of its 100% owned Stockman Copper-Zinc Project (“the Stockman Project” or “the Project”) in North-Eastern Victoria.

### Highlights

- **Optimisation Study confirms attractive base case project**
- **Annual average payable metal production of 15,000t Cu, 26,000t Zn & 0.4Moz Ag**
- **Increased Ore Reserve will provide a 10 year project life**
- **Pre-production capital of \$202M**
- **Maximum cash down (initial + working capital) of \$233M**
- **Average annual free cash flow from operations (pre-tax) of \$64M per year**
- **Net cash flow (after capital, tax and royalties) of \$270M**
- **C1 cash costs of \$1.30/lb Cu (US\$1.09/lb Cu)**

The Optimisation Study has incorporated the 2013 Feasibility Study to further de-risk and improve the Project returns, along with incorporating the overarching conditions of the recently released positive Ministerial Assessment issued by the Victorian Minister for Planning. The scope of the Project encompasses concurrent development of the two underground deposits to feed a central 1.0Mtpa differential flotation concentrator that would produce an average of approximately 140,000tpa of copper and zinc concentrates over a project life of approximately ten years. The concentrate products would be exported to customer smelters in the southern Asia region.

The key outcomes of the 2014 Optimisation Study are summarised in the table below:

Item	2014 Optimisation Study	
Average annual metal production (payable)	15,100 t Cu	26,300 t Zn
	441,300 oz Ag	5,700 oz Au
Life of mine C1 cash costs	US\$1.09/lb Cu	\$1.30/lb Cu
Pre-production capital	\$202M	
Net operating cashflow (post-tax) <sup>(1)</sup>	\$529M	
Net operating cashflow less capital (post-tax) <sup>(1)</sup>	\$270M	
Internal Rate of Return (post tax) <sup>(1)</sup>	18%	

(1) At IGO Ore Reserve metal price assumptions of US\$6,591/t Cu, US\$2,979/t Zn, US\$20.17/oz Ag and US\$1,146/oz Au and an A\$:US\$ exchange rate of 0.84.

Independence Group NL Managing Director, Peter Bradford, said “*The Stockman Project represents a viable development project for the Company that has been significantly de-risked with the completion of the Optimisation Study and recent Ministerial Assessment approval. The operating skills and capital requirements sit comfortably within the capabilities of the Company, which remains committed to advancing the Project to the next milestone gating decision. The Company will continue to advance the Project with the critical path being to secure a range of licenses from the Commonwealth and the various Victorian decision making authorities, which could take 12-18 months.*”

Under the Victorian system the Ministerial conditions provide an overarching guide to the Decision Making Authorities (“DMAs”), but are not binding. Therefore, the Company needs to advance securing these licenses to further de-risk the Project before the IGO Board makes any project sanction decision. Although the full licensing process could take an estimated twelve to eighteen months, it is expected that the critical elements will be

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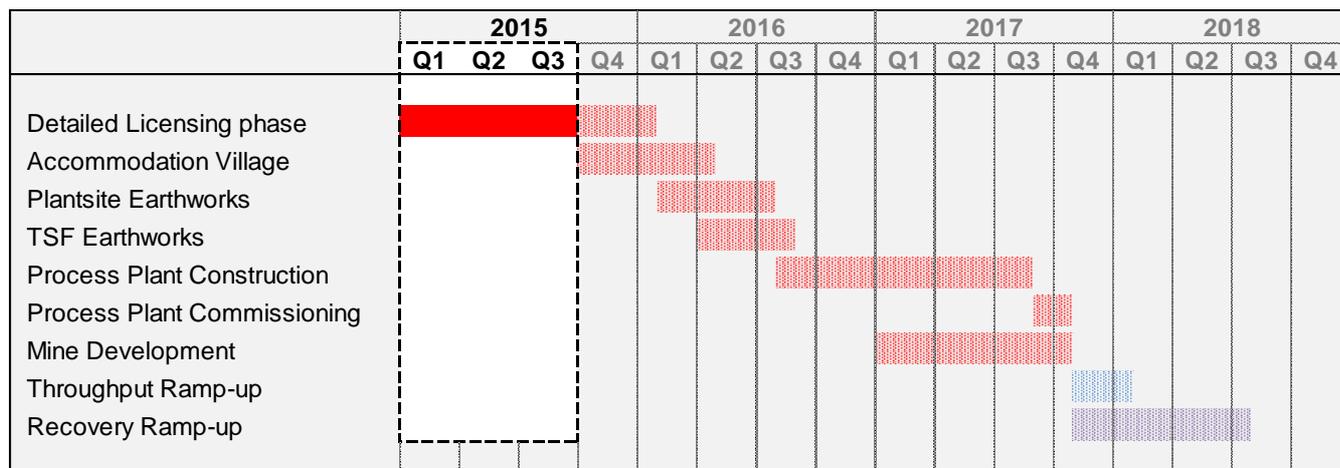
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secured by October 2015. It would be at this milestone the Company would make a decision, in the context of the markets at that time, on whether or not to advance to engineering, procurement and construction activities.



The initial critical path (red) Detailed Licensing phase

On completion of the proposed work programme, the Project would be further de-risked, such that, subject to market conditions and IGO Board approval, engineering, procurement and construction activities could commence.

Further detail on the Stockman Project is contained in the background information attached to this announcement.

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**Note:** All currency amounts in this announcement are Australian Dollars unless otherwise noted



## ATTACHMENT

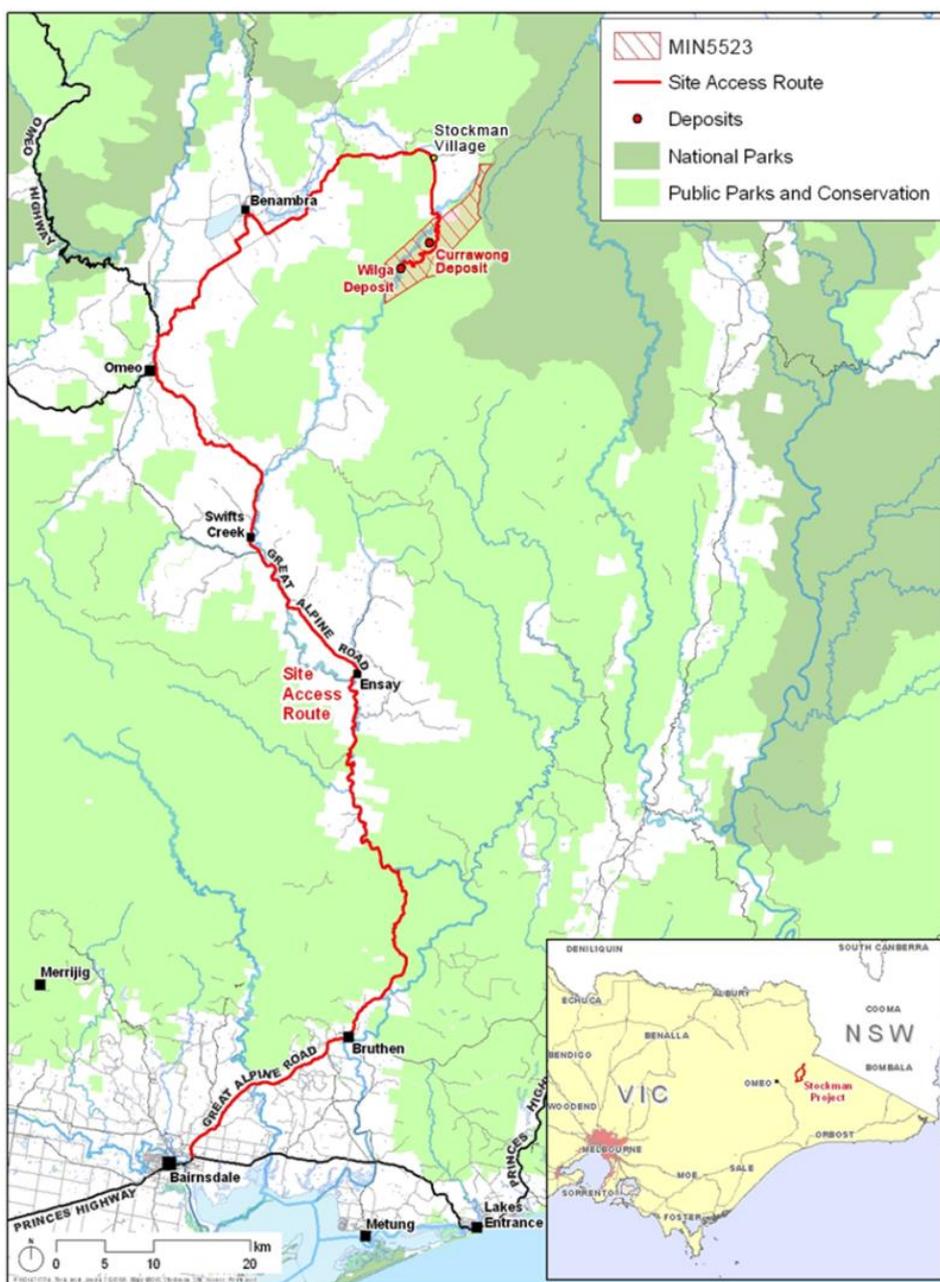
### STOCKMAN PROJECT OPTIMISATION STUDY BACKGROUND INFORMATION

#### Location

The Project is situated on the sloping Eastern Highlands of Victoria at elevations between 650 and 1200 metres, located approximately 460 kilometres by road north-east of Melbourne.

The town of Omeo is approximately one hour by road from the Project. Greater Omeo has a population of approximately 470 and provides a range of government and commercial services including a district hospital, police station and emergency services base.

The Project encompasses two copper-zinc-lead-silver-gold deposits, Wilga and Currawong, which were discovered in 1978 and 1979. The larger Currawong deposit is undeveloped, whilst the Wilga deposit was previously mined between 1992 and 1996.



Location map including the Mining Tenement MIN5523



## Permitting and Tenure

The Stockman project has extensive granted tenure as shown in the table below:

Tenement	Name	Area (ha)
MIN5523	MIN - Mining Licence	4,244
EL5045	EL - Exploration Licence	25,200
EL5391	EL - Exploration Licence	17,100
EL5392	EL - Exploration Licence	27,600
EL5463	EL - Exploration Licence	52,200
<b>Total</b>		<b>126,344</b>

MIN5523 is a granted mining licence that covers the Wilga and Currawong deposits and several exploration prospects. The existing Tailings Storage Facility ("TSF"), currently managed by the State of Victoria, is not included in MIN5523 and will be secured under a separate Infrastructure Mining Licence.

## Permitting

The Victorian Minister for Planning's positive assessment of the Stockman Environmental Effects Statement ("EES") and Inquiry Panel report was released on 30 October 2014 and represents a major project milestone.

The assessment report was also provided at the same time to the Commonwealth Minister for Environment for his consideration under the Environment Protection and Biodiversity Conservation Act. The Federal decision is expected to be announced by early 2015.

The Victorian Minister's assessment concluded;

*"In relation to both the relevant legislation and policy framework and the project's overall benefits, the potentially significant environmental effects and risks of the Stockman Project are acceptable, provided the appropriate mitigation and management measures, consistent with the findings of this Assessment and the Inquiry Report, are implemented.*

*The Stockman Project will provide a net benefit to the State of Victoria, having regard to both long term and short term economic, environmental and social considerations.*

*The Stockman Project should proceed in a manner consistent with this Assessment, including the following responses to the recommendations of the Inquiry."*

Our review of the Minister's Assessment document has shown that there are no material requirements in the proposed conditions beyond those proposed by Independence. The specific detail of the various licenses that are required for project operations will now be scoped and agreed with Government agencies. It is expected that detailed licensing will take approximately fifteen months.

## Mineral Resources

The Mineral Resource Statement has remained unchanged from that most recently reported in August 2014 (IGO ASX release 28th August 2014), and is shown below.

The Currawong Mineral Resource estimate is based on 230 drill holes for approximately 66,000m of predominantly diamond drilling on nominal 25m x 25m spacing. The Wilga resource estimate is based on 261 holes for approximately 26,700m of predominantly diamond drilling also on nominal 25m x 25m spacing.

**Stockman Project – June 2014 Mineral Resource Statement**

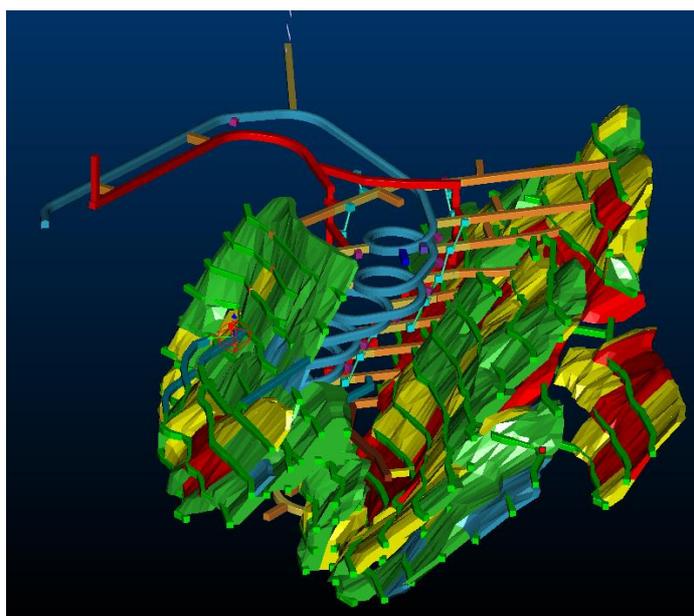
	Tonnes (Mt)	Cu %	Zn %	Ag g/t	Au g/t
<b>Currawong</b>					
Measured	-	-	-	-	-
Indicated	9.58	2.0	4.2	42	1.2
Inferred	0.78	1.4	2.2	23	0.5
<b>sub total</b>	<b>10.33</b>	<b>2.0</b>	<b>4.0</b>	<b>40</b>	<b>1.1</b>
<b>Wilga</b>					
Measured	-	-	-	-	-
Indicated	2.99	2.0	4.8	31	0.5
Inferred	0.67	3.7	5.5	34	0.4
<b>sub total</b>	<b>3.66</b>	<b>2.3</b>	<b>4.9</b>	<b>32</b>	<b>0.5<sup>3</sup></b>
<b>Grand Total</b>	<b>13.97</b>	<b>2.1</b>	<b>4.3</b>	<b>38</b>	<b>1.0<sup>3</sup></b>

## Notes:

1. All Mineral Resources tonnes have been rounded to the nearest one thousand tonnes and grade to the nearest 1/10<sup>th</sup> percentage/gram per tonne.
2. Mineral Resources include massive sulphide and stringer sulphide mineralisation. Massive sulphide Mineral Resources are geologically defined; stringer sulphide resources are reported above cut-off grades of 0.5% Cu.
3. Gold (Au) grades for Wilga are all inferred due to paucity of Au grade data in historic drilling.
4. Block modelling used ordinary kriging grade interpolation methods within wireframes for all elements and density.
5. Mining depletion as at end of historic mine life (1996) has been removed from the Mineral Resource estimate for Wilga.
6. Mineral Resources are inclusive of Ore Reserves.
7. The Competent Persons statement is incorporated in the JORC Code (2012) Competent Persons Statements section of this report.
8. See IGO's ASX Release of 28 August 2014 for JORC Code (2012) Table 1 Parameters.

**Mining method**

The Stockman Project would employ conventional mechanised sublevel open stoping with cemented paste backfill as the primary mining method. The key mining fleet would consist of modern hydraulic development jumbo's and long hole stope drills, 17t capacity loaders, 50t to 60t dump trucks, as well as a variety of ancillary equipment.



*Currawong mine layout showing all planned development and stopes*



The Wilga deposit has an existing decline access that was partially refurbished in 2011 and remains accessible reducing the pre-production development requirements significantly. Typical decline access will be 5.5m wide by 5.8m high.

Ground conditions are generally good and water ingress is low. Both the Currawong and Wilga deposits are relatively shallow for underground mines and therefore the haulage and ventilation requirements are modest and development lead times short.

## Ore Reserves

An updated Ore Reserve estimate has been completed as part of the 2014 Optimisation Study. It has been estimated on a Net Smelter Return (“NSR”) basis with payable metals being copper, zinc, silver and gold, to estimate the mine-gate value of ore. The Ore Reserve table including a comparison to the previous June 2014 Ore Reserve Declaration is shown below.

### Stockman Project – November 2014 Ore Reserves Statement (and June 2014 comparison)

Deposit	Class	Ore Reserve 28 November 2014					Ore Reserve 30 June 2014				
		Tonnes (Mt)	Cu %	Zn %	Ag g/t	Au g/t	Tonnes (Mt)	Cu %	Zn %	Ag g/t	Au g/t
Currawong	Proved	-	-	-	-	-	-	-	-	-	-
	Probable	7.4	2.1	4.3	40	1.2	7.3	2.2	4.1	40	1.2
<b>sub total</b>		<b>7.4</b>	<b>2.1</b>	<b>4.3</b>	<b>40</b>	<b>1.2</b>	<b>7.3</b>	<b>2.2</b>	<b>4.1</b>	<b>40</b>	<b>1.2</b>
Wilga	Proved	-	-	-	-	-	-	-	-	-	-
	Probable	1.6	2.1	5.6	31	0.5 <sup>3</sup>	1.1	2.5	5.3	30	0.5 <sup>3</sup>
<b>Sub total</b>		<b>1.6</b>	<b>2.1</b>	<b>5.6</b>	<b>31</b>	<b>0.5<sup>3</sup></b>	<b>1.1</b>	<b>2.5</b>	<b>5.3</b>	<b>30</b>	<b>0.5<sup>3</sup></b>
<b>Grand Total</b>		<b>9.0</b>	<b>2.1</b>	<b>4.5</b>	<b>39</b>	<b>1.1<sup>3</sup></b>	<b>8.4</b>	<b>2.3</b>	<b>4.3</b>	<b>39</b>	<b>1.1<sup>3</sup></b>

Notes:

- All Ore Reserves tonnes are rounded to the nearest one hundred thousand tonnes and grade to the nearest 1/10<sup>th</sup> percentage/gram per tonne.
- Gold (Au) grades are Inferred at Wilga due to a paucity of gold assays in historic drilling. Revenue from Au in the Wilga ore was included in the estimation of the Ore Reserve. The contribution to Revenue of this Au was estimated to be \$8.65 per gram of Au *in situ*. This inclusion was not material to the value of the mining envelopes considered and did not warrant downgrading of any portion of the Ore Reserve attributable to Wilga. The contribution from Wilga represents 18% of the total Ore Reserve.
- Historic mining depletion for Wilga has been removed from the Ore Reserve estimate.
- The Competent Persons statement is provided under the Competent Persons section at the end of this report.
- JORC (2012) Table 1 Checklist of Assessment and Reporting Criteria is attached in Appendix 1 of this release.

## Metallurgy and Processing

The Stockman concentrator would be designed for a nominal throughput rate of 1.0Mtpa and uses standard industry technologies to produce a saleable copper and zinc concentrates.

The process is summarised as:

- three stage crushing circuit;
- ball mill and IsaMill grinding circuit;
- differential copper - zinc flotation circuit;
- concentrate thickening and filtration;
- concentrate storage, blending and containerised transport to port; and
- tailings thickening and paste backfill manufacture &/or sub-aqueous TSF disposal.

The crushing and grinding circuit are capable of producing a fine primary grind (P80 = 25µm) whilst concentrate regrinds (P80 = 15µm) are required to liberate the minerals for efficient recovery and rejection of gangue minerals.



The flotation circuit would also use a standard approach to differentially float the chalcopyrite minerals from the sphalerite minerals in the copper circuit, and then float the sphalerite minerals in the zinc circuit. The copper circuit would consist of rougher/scavenger flotation, regrinding of the rougher/scavenger concentrate and two stages of cleaning (with the first stage in open circuit). The zinc circuit would consist of rougher/scavenger flotation, regrinding of the rougher/scavenger concentrate and three stages of cleaning (with the first stage in open circuit).



*An illustration of the proposed Stockman processing plant*

Testwork demonstrated that both the zinc concentrate and copper concentrate would have normal properties with good thickening, filtration and materials handling characteristics. Likewise, the tailings, despite the fine grind, can be classified, thickened and filtered to high densities that are appropriate for use as underground paste backfill. Tailings settle rapidly in a sub-aqueous discharge TSF.

Extensive metallurgical testwork has been undertaken resulting in a high degree of process certainty. Life of mine recovery to concentrate is estimated to be 81.5% for copper and 76.4% for zinc. Silver recovery across both the copper and zinc concentrates averages 59% life of mine, and gold recovery into the copper concentrate averages 21% life of mine. Opportunity exists to do further work to enhance silver and gold recoveries.

The concentrate specifications are readily acceptable to market with concentrate grades of 21% Cu and 50% Zn respectively and low to negligible penalty elements.

## Infrastructure

The site is well serviced by State and Shire road networks. The final approximately 15 kilometres of road to the Project site is unsealed and would require widening. Onsite, only minor upgrades are required to existing roads linking the Wilga deposit to the main Currawong area.

Power would be generated onsite via an island-mode gas-fired station with 16MW of installed capacity. Natural gas (CNG or LNG) would be trucked to site. It is planned to contract out the power supply to a third-party under a Build-Own-Operate arrangement.

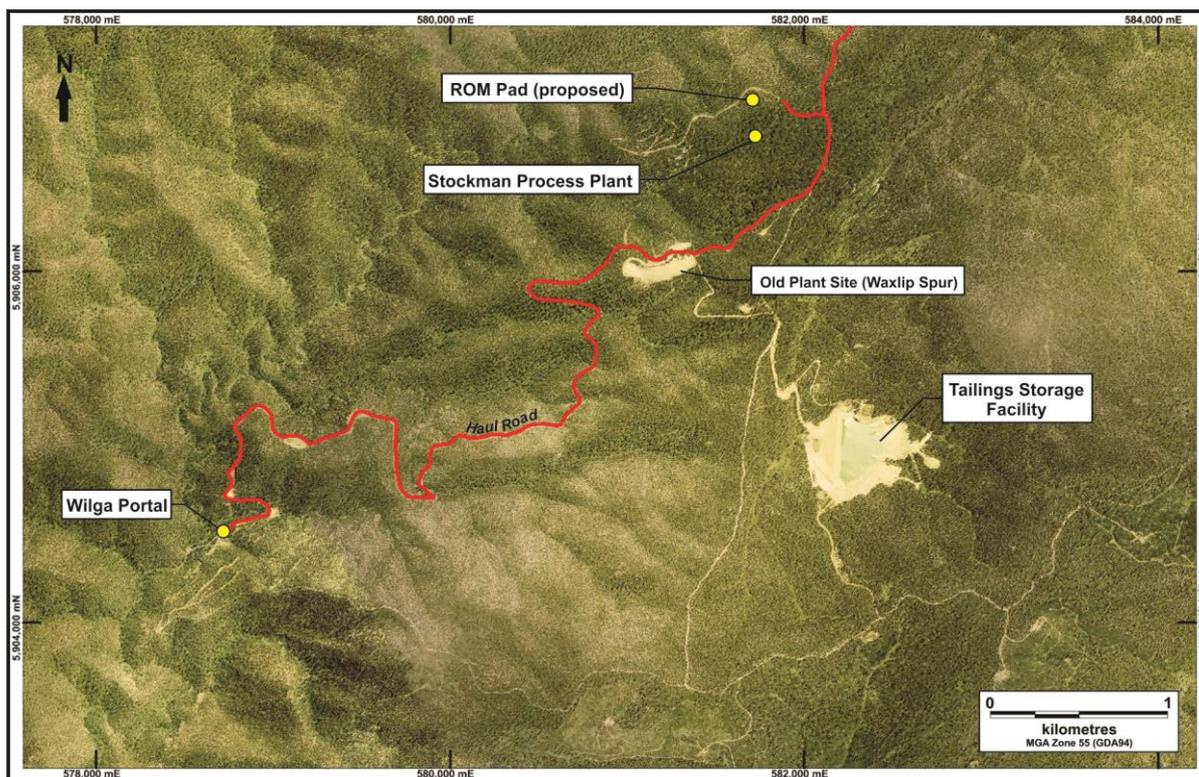
The site water balance is near neutral. A potential borefield has been identified some 33 kilometres from site on the plains surrounding the Benambra Township, which can be readily developed if required. A substantial capacity of water currently exists in the TSF and numerous options for supplemental water supply exist between these two locations.

It is planned to expand and re-use the existing TSF near the proposed Currawong plant site. The TSF was built in 1992, contains some 700,000t of Wilga tailings and is designed as a modern water retaining structure. The available monitoring data for the existing TSF suggests that it has performed to design, and post rehabilitation water quality has shown substantial improvement to near-natural background levels without active treatment. Currently tenure to the TSF is held by the State and approval will be sought to carry out detailed site investigations to verify the quantitative and observational monitoring data.

It is expected that approximately 50% of tailings will be used to make a cemented paste backfill for use in supporting underground mined voids, and the other 50% will be stored in the TSF.

A 170-room village is proposed to be established on freehold land approximately 10 kilometres from Currawong. It is planned to operate the project on a drive-in/drive-out rostered basis. It is expected that the majority of the workforce will live in regional areas.

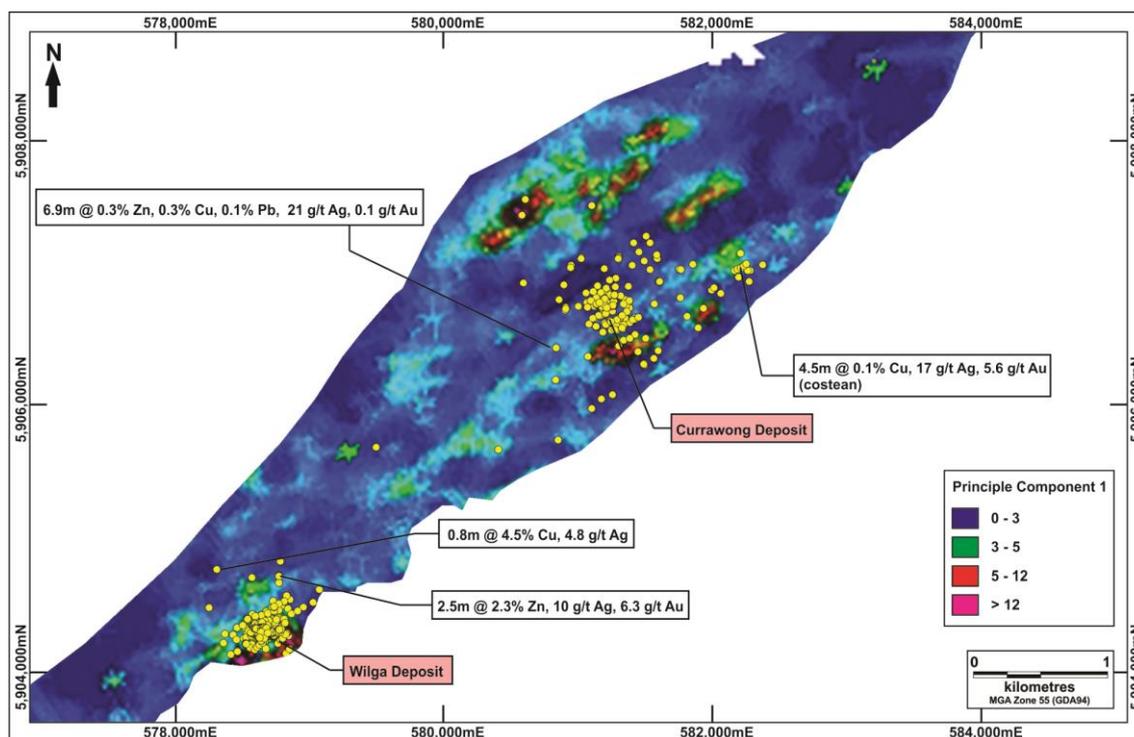
Site infrastructure would include administration offices, workshops, stores, explosives magazines, fuel storage and an assay laboratory.



*Stockman project site showing areas – Wilga, Currawong and TSF*

## Exploration

Significant exploration potential exists on the Project with the vast majority of drilling completed during the 2013 Feasibility Study having been focused on resource definition. The extensive tenure of the Stockman Project hosts several prospects that require additional exploration.



**Project area showing drill hole collars and geochemical surface signatures. Note the highlighted isolated anomalous assay results and significant surface geochemical anomalies that are yet to be drill tested.**

Recent discoveries include the Bigfoot and Eureka prospects which are not included in the Mineral Resource. As both prospects are close to the planned Currawong decline access, they have the potential to be included into the Project with minimal extra capital development. Bigfoot especially is an exciting discovery, as it has precious metals values well in excess of either Wilga or Currawong and provides a potential target for further high-NSR value exploration.

Due to the rugged and steep topography, airborne geophysical techniques only provide limited usefulness, but the combination of surface geochemistry and surface and downhole Electro Magnetic has been shown to be very effective at locating mineralisation. Key learnings from 2013 exploration work programs have been that all known mineralisation is overlain by an identifiable geochemical signature, and to date, all significant geochemical signatures that have been drill tested have intersected mineralisation. Several significant geochemical signatures remain to be properly drill tested.

## Capital costs

The maximum cash negative position of the Project is estimated at \$233M (initial capital expenditure plus working capital). The costs are inclusive of all infrastructure and indirect costs required for the Project and includes a contingency of approximately \$20M. The nominal engineering accuracy of the estimate is  $\pm 15\%$ .

The basis of the capital estimation includes the following:

- Owner-operator workforce and leased mobile plant;
- Engineering, Procurement and Construction (“EPC”) construction model for non-mining infrastructure;
- Owner-operator processing facilities and workforce with leased mobile plant;
- Build-Own-Operate third-party power supply (\$/kWh basis);
- Leased buildings and contract operated village (\$/man-day basis);
- Contract concentrate road haulage, portside aggregation and ship loading (\$/t basis); and
- Expansion and upgrading of existing TSF.

The table below shows a breakdown of the life of mine capital estimation for both the 2013 Feasibility Study (“2013 FS”) and 2014 Optimisation Study (“2014 OS”). The maximum cash down statistic represents the pre-



production capital plus working capital. It should be noted that the 2013 Feasibility Study did not contemplate standard leasing arrangements as a financing tool, thus all 2013 Feasibility Study costs shown are as direct capital expenditure.

Capital Costs	Units	2014 OS	2013 FS
Plant	\$M	140	158
Infrastructure	\$M	46	102
Paste backfill plant	\$M	13	16
Mining	\$M	40	71
Rehabilitation & other	\$M	19	10
Total Capital	\$M	259*	\$359
Maximum cash down	\$M	233	324

\* rounding errors may occur in the summation of the parts – totals are correct.

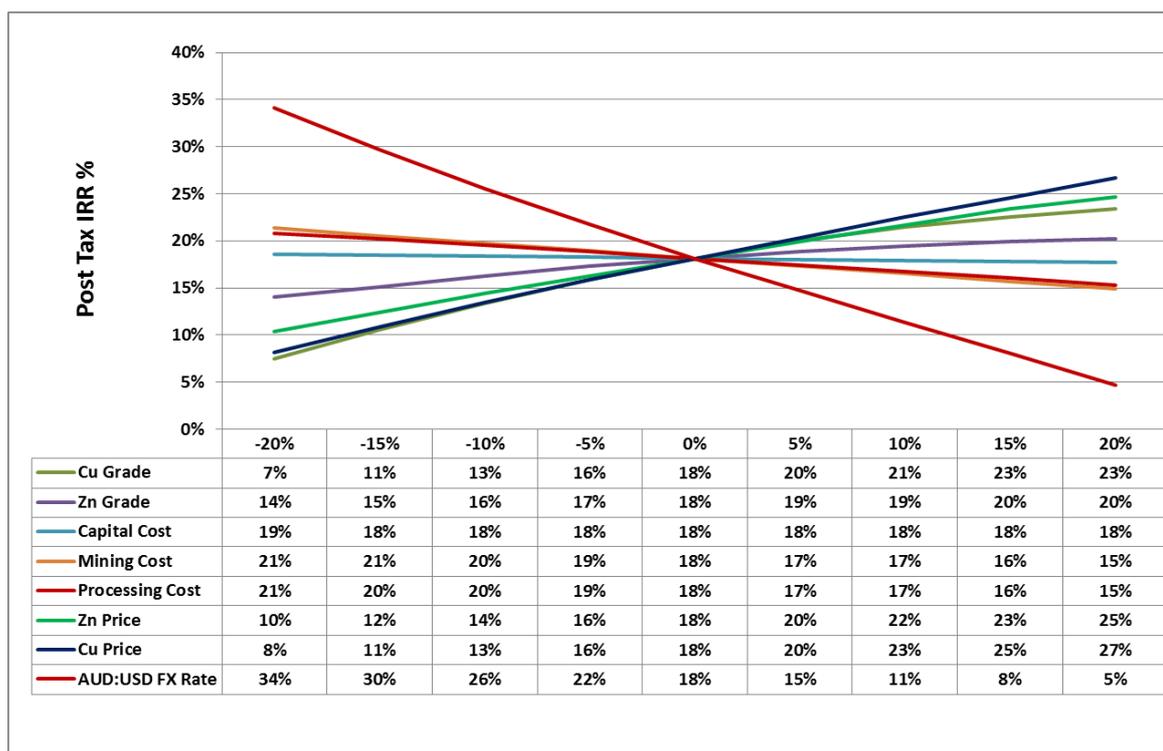
### Operating costs

The average total operating costs for the Project are estimated at approximately \$169/t of ore. The operating costs were developed in conjunction with the project design criteria, process flow sheet, mass and water balance, mechanical and electrical equipment lists, and labour costs data. The estimation includes payment of leasing costs as operating costs. The breakdown for both the 2013 Feasibility Study (2013 FS) and 2014 Optimisation Study (2014 OS) are shown in the table below on a “tonnes of ore basis”.

Operating Costs	Units	2014 OS	2013 FS
Mining	\$/t ore	46	44
Mine geology	\$/t ore	3	1
Processing & TSF	\$/t ore	40	38
G&A	\$/t ore	14	17
<b>subtotal on-site</b>	<b>\$/t ore</b>	<b>103</b>	<b>100</b>
Road haulage & handling	\$/t ore	17	15
Shipping	\$/t ore	12	8
Treatment charges / Refining charges	\$/t ore	38	16
<b>subtotal off-site</b>	<b>\$/t ore</b>	<b>66</b>	<b>38</b>
<b>Total operating cost</b>	<b>\$/t ore</b>	<b>169</b>	<b>138</b>

### Project business case

The Stockman Project represents a substantial base metals project, producing readily marketable products, in a low-risk jurisdiction. The operating skills and capital requirements sit comfortably within the capabilities of Independence. Significant value has been added to the Project with the completion of the 2014 Optimisation Study and the recent Ministerial Approval. The Project economics are most sensitive to revenue inputs (metal prices, exchange rate, TC/RCs) and capital cost as shown in the graph below. The Project is therefore relatively highly leveraged to the future rising zinc price forecast by most industry analysts.



*Sensitivities of the Projects IRR (post tax) on revenue inputs.*

## Work program

Following receipt of the positive Ministerial Assessment on 30 October 2014, Independence has reviewed the ministerial conditions and found that they are generally in accordance with the triple bottom line (i.e. economic, social and environmental) operating regime proposed in the EES. The Commonwealth assessment is based upon the documentation submitted for the Victorian EES, and a decision is expected by early 2015.

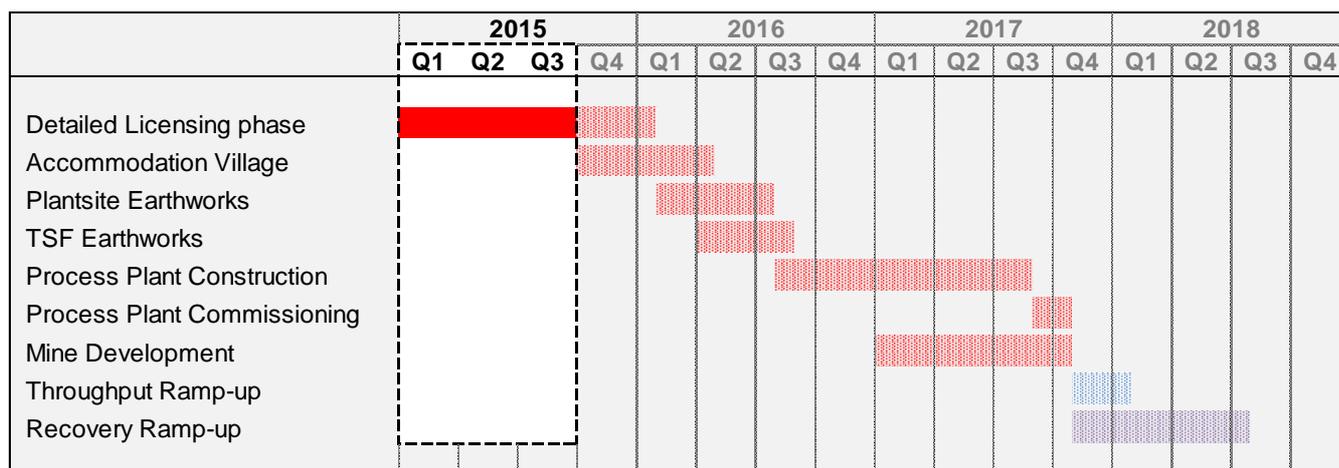
The Project now enters a detailed licencing phase where a variety of department-specific permits and approvals will be progressed with the various Victorian State Decision Making Authorities (“DMAs”) in relation to the key project elements shown in the table below. Independence will progress the permitting tasks that add value to the Project by shortening the overall implementation as the activities are on the critical path and materially decreasing project risk.

Typically, ministerial conditions are generalised in scope thus it is imperative to ensure DMA agreement with the translation of those requirements into specific Acts, regulation and policy which will provide clarity to the licencing prerequisites and deliverables. It is also important to ensure that both State and Commonwealth requirements are satisfied by the same set of deliverables.

The majority of critical path permitting tasks are associated with the TSF including:

- detailed site investigations of the existing impoundment;
- design and performance criteria of the new structure;
- the downstream water quality and biodiversity monitoring program; and
- vegetation clearance offsets.

The estimated duration of the licencing period is shown on the summary schedule below. As the Victorian licencing system does not incorporate statutory timelines the estimate may vary. A progress review of the Project (i.e. a stage-gate assessment with an explicit outcome of continue, recycle or stop) will be undertaken before any engineering, procurement or construction activities are commenced.



Initial critical path (red) Detailed Licensing phase

The initial critical path (red) Detailed Licensing phase is highlighted above. A “stage-gate” progress review will be made of the Project and licensing progress prior to any further internal works approvals.

### Key project data

The table below presents the life of mine production schedule for the Stockman Project

Physicals	Units	Total	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year
			1	2	3	4	5	6	7	8	9	10
Ore Processed	'000 t	<b>9,018</b>	787	1,003	990	1,011	1,015	900	1,000	1,028	804	480
<b>Concentrate hauled</b>												
Cu concentrate hauled	'000 wmt	<b>829</b>	73	88	100	103	106	85	103	73	56	42
Zn concentrate hauled	'000 wmt	<b>695</b>	63	97	85	82	79	75	65	73	50	24
<b>Concentrate shipped</b>												
Payable Cu in Cu concentrate	'000 t	<b>149</b>	13	16	18	18	19	16	18	14	10	7
Payable Ag in Cu concentrate	'000 oz	<b>4,136</b>	301	528	532	495	521	486	437	429	264	142
Payable Au in Cu concentrate	'000 oz	<b>56</b>	3	6	6	8	9	5	6	6	4	2
Payable Zn in Zn concentrate	'000 t	<b>259</b>	23	38	32	30	30	28	24	28	19	8
Payable Ag in Zn concentrate	'000 oz	<b>206</b>	11	0	0	0	2	5	27	58	69	34

The table below presents key project physical and financial data showing the comparison between the 2013 Feasibility Study (2013 FS) and the 2014 Optimisation Study (2014 OS).

Item	Material	Units	2014 OS	2013 FS
<b>Production</b>				
Annualised mining & processing rate	Ore	Mtpa	1.0	1.0
LOM (incl. ramp-up)	Duration	Years	10.1	9.1
LOM mining & processing	Ore	Mt	9.0	8.4
LOM head grade	Ore	% Cu	2.1	2.2
	Ore	% Zn	4.5	4.3



Item	Material	Units	2014 OS	2013 FS
	Ore	g/t Ag	39	39
	Ore	g/t Au	1.1	1.1
LOM production	Cu concentrate	dmt	746,600	724,400
	Cu concentrate grade	% Cu	21	21
	Cu rec. into Cu conc.	%	81.5	80.4
	Cu metal (payable)	dmt	148,600	144,100
	Zn concentrate	dmt	620,300	549,800
	Zn concentrate grade	% Zn	50	50
	Zn rec. into Zn conc.	%	76.4	76.4
	Zn metal (payable)	dmt	258,800	228,800
	Silver metal (payable)	oz	4,341,800	4,122,100
	Gold metal (payable)	oz	55,900	44,300
Average annual production (payable)	Cu metal	dmt	15,100	15,900
	Zn metal	dmt	26,300	25,200
	Silver metal	oz	441,300	453,700
	Gold metal	oz	5,700	4,900
<b>Metal prices</b>				
Average LOM Cu	USD	t	6,591	8,069
Average LOM Zn	USD	t	2,979	2,072
Average LOM Ag	USD	oz	20.17	32.32
Average LOM Au	USD	oz	1,146	1,687
Exchange rate	ratio	AUD:USD	0.84	1.05
<b>Treatment &amp; refining charges (LOM)</b>				
Copper conc. - treatment charge	USD	dmt conc.	89.18	65.00
Copper conc. - refining charge	USD	lb payable	0.089	0.065
Zinc - treatment charge	USD	dmt conc.	310.77	133.62
Silver - refining charge	USD	oz payable	0.35	0.40
Gold - refining charge	USD	oz payable	4.00	5.00
<b>Operating Costs</b>				
Mining		\$/t ore	46.29	44.32
Mine geology		\$/t ore	3.10	1.09
Processing & TSF		\$/t ore	40.01	37.81
G&A		\$/t ore	13.66	16.99
Road haulage & handling		\$/t ore	16.56	14.61
Shipping		\$/t ore	11.65	7.50
Treatment charges / Refining charges		\$/t ore	38.18	16.05
Total Op. Cost		\$/t ore	169.44	138.36



Item	Material	Units	2014 OS	2013 FS
<b>Capital Costs</b>				
Maximum cash down	with leasing	\$M	233	324
Plant	with leasing	\$M	140	158
Infrastructure	with leasing	\$M	46	102
Paste backfill plant	with leasing	\$M	13	16
Mining	with leasing	\$M	40	71
Rehabilitation & other	with leasing	\$M	19	10
Total Capital	with leasing	\$M	259	n/a
Total Capital	without leasing	\$M	324	359
<b>Financials</b>				
Net operating cashflow	pre tax	\$M	654	541
	post tax	\$M	529	473
Internal Rate of Return (IRR)	pre tax	%	25	10
	post tax	%	18	7
Average annual operational cashflow	pre tax	\$M	64	55
	post tax	\$M	51	48
LOM net cashflow (after capital)	pre tax	\$M	396	182
	post tax	\$M	270	116
Payback period	start of processing	Years	3.3	5.3
NPV <sub>10%</sub>	pre tax	\$M	146	0
NPV <sub>7.5%</sub>	pre tax	\$M	191	32
NPV <sub>5%</sub>	pre tax	\$M	246	71
C1 - cash cost	net of by-products	\$/lb Cu	1.30	1.63
C2 - cash cost	net of by-products	\$/lb Cu	2.20	2.71
C3 - total cost	net of by-products	\$/lb Cu	2.34	2.83

**Note:** All currency amounts in this table are Australian Dollars unless otherwise noted.

### **Competent Persons Statements**

The information in this report that relates to the Stockman Mineral Resources is based on information compiled by Mr Bruce Kendall who is a member of the Australian Institute of Geoscientists and is a full-time employee of the Company. Mr Kendall has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration, and the activity which he is undertaking, to qualify as a Competent Person as defined in the 2012 edition of the JORC Code. Mr Kendall consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to the Stockman Project Ore Reserves is based on information compiled by Mr Geoff Davidson. Mr Davidson is a Consultant for Mining And Cost Engineering Pty Ltd and is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Davidson has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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'. Mr Davidson consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

### **Forward Looking Statements**

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Independence Group NL's planned exploration program and other statements that are not historical facts. When used in this document, the words such as "could," "plan," "estimate," "expect," "intend," "may," "potential," "should," and similar expressions are forward-looking statements. Although Independence Group NL believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these Forward Looking statements.

Appendix 1 follows on next page.

**APPENDIX 1**

## JORC Code, 2012 Edition – Table 1

## Section 1 Sampling Techniques and Data

Criteria	Commentary
<b>Sampling techniques</b>	A total of 37 additional diamond drill holes were drilled at Currawong since the previous resource estimate in 2011. An additional 34 diamond drill holes were drilled into Wilga, from both surface and underground. A total of 13,803.8m of additional drilling has been completed at Currawong and Wilga as part of the 2011/2012 drilling program. All new holes at Wilga were infill holes. New holes at Currawong were a mixture of infill and extension drilling with a maximum drill spacing of 25m X 25m. Only diamond drilling has been utilised for resource estimation at Stockman. Sampling of mineralised zones was predominantly half core with a nominal 1m sample length.
	Diamond drilling is solely used at Stockman to ensure a high quality of sampling. All sampling and check sampling is conducted to industry best practice in accordance with IGO QAQC protocols.
	The 2010-2012 drilling campaigns included a combination of sawn half-core NQ or quarter-core HQ, with a typical sample length of 1m. A minimum sample length of 0.15m and maximum sample length 1.5m in mineralised domains were adjusted to geological boundaries. All massive sulphide intercepts have been sampled and sampling generally extends 10m into waste rock. All drill core to be sampled from the Jabiru Metals Ltd (Jabiru) and Independence Group NL (IGO) holes, was marked up by the geologist. The sampling book was filled out detailing the from and to depths for each sample, the corresponding sample numbers as well as which standard to insert at which point and where to insert blank samples. Field technicians cut the core using an Almonte automated core cutting machine. The core was systematically cut 1cm off the orientation line to allow the orientation line to remain in the core tray. JML and IGO samples were cut, dried and pulverised for analysis by 4 acid digest, ICP/OES (Cu, Pb, Zn, Ag, Fe, S) and fire assay FA/AAS (Au) at and independent laboratory. Historic sampling involved crushing, with a sub-sample pulverised, followed by three or four acid digest with AAS or ICP determination. All samples apart from the WMC samples were prepared and analysed at independent laboratories. WMC and Denehurst did not routinely analyse for Au.
<b>Drilling techniques</b>	All JML and IGO holes were diamond drilled for the entire hole using a combination of HQ and NQ core sizes. Historical holes were principally diamond drilling with the exception of several RC precollars drilled by Denehurst and Austminex. None of the RC samples have been used in the resource estimates. The surface diamond drilling is a mixture of HQ, NQ and BQ core sizes, with BQ occurring only in the older WMC holes. The historic underground holes at Wilga were drilled LTK46 (Ø = 35.6mm).
<b>Drill sample recovery</b>	Drill sample recovery is logged and recorded by field technicians and subsequently entered into the acQuire database. Core sample recovery was good to excellent. Some lost core intervals have been recorded, particularly where structures such as faults or underground workings (Wilga) were intersected by the drilling. These intervals do not affect the resource estimate.
	The diamond drill core is reconstructed in the core yard as part of the orientation process and metre marks are checked against driller's depth blocks.
	One small area of poor sample recovery at Wilga has been identified and isolated. This area corresponds with the presence of chalcocite and its classification has been downgraded to Inferred. Recent core recoveries are reviewed annually to ensure there are no new areas of poor sample recovery. There is no evidence of bias or preferential loss or gain of material in samples except for the chalcocite zone mentioned above.
<b>Logging</b>	Entire holes were logged and photographed by the various companies completing the drilling programs. Geological and geotechnical logging is very thorough and more than adequate for resource estimation. Logging has previously been on paper logs, which were data entered and then loaded into the Acquire database. Paper logs were scanned and stored on the IGO Perth server. Starting in 2011, drillholes have been logged straight into a digital format via Acquire data entry objects which were then uploaded directly into the database. Acquire data entry objects have built-in rules that allow for validation of data as it is logged.
	Detailed logging routinely consisted of lithology, alteration, mineralisation, veining, structure, deformation and oxidation state and was recorded using the JML logging codes. JML/IGO core has been photographed both wet and dry. Historical geological codes were converted to JML codes in 2008.
	All drill holes were logged in full.
<b>Sub-sampling techniques and sample preparation</b>	Mostly cut half-core samples of NQ, BQ and LTK46, or quarter-core samples of HQ varying in length up to 1.3m in the massive sulphide and adjusted to geological boundaries. Some quarter-core NQ samples by Austminex where core was needed for metallurgical testwork. The JML/IGO drilling campaigns included a combination of cut half-core NQ or quarter-core HQ, with a typical sample length of 1m. A minimum sample length of 0.3m and maximum sample length 1.5m in mineralised domains were adjusted to geological boundaries. All massive sulphide intercepts have been sampled and JML/IGO sampling generally extends 10m into waste rock. The samples were routinely taken from the same side of the core in relation to the orientation lines.
	No non-core samples were taken in the 2010-2012 JML/IGO drilling.
	Samples from the 2010-2012 JML/IGO diamond drillholes were sent to Genalysis Adelaide for sample preparation and analysis. Sample preparation consisted of drying the core for 8 hours at 121°C then jaw crushing to a nominal minus 10mm size. Pulverising then occurred in a LM5 pulverising machine for 5 minutes to 85% passing 75 microns. The entire sample undergoes pulverising in the LM5 machines,



Criteria	Commentary
	<p>resulting in no coarse rejects, only bulk pulp rejects. The sample preparation technique is normal industry practice and is considered suitable for Stockman samples.</p> <p>Quality control procedures during JML/IGO sampling included the insertion of certified reference standards and blanks (1 in 20 samples) as well as the inclusion of barren quartz washes between every sample. Historic drilling contained very little QAQC work.</p> <p>Apart from 62 duplicate samples collected by Macquarie Resources there were no field duplicates collected prior to the JML/IGO programs. JML/IGO field duplicates were taken during the 2010-2012 drilling campaigns. In addition, pulp repeats, bulk pulp repeats and cross lab pulp checks were completed on ~5% of the samples. All these quality control measures confirmed that sampling and sub-sampling techniques used were appropriate for the style of mineralisation and that samples were representative of the in situ material.</p> <p>The sample size is considered appropriate for massive sulphide mineralisation.</p>
<b>Quality of assay data and laboratory tests</b>	<p>All samples were crushed and a sub-sample pulverised followed by three or four acid digest with AAS or ICP determination. All samples apart from the WMC samples were prepared and analysed at independent laboratories. The assay techniques by JML/IGO are for total digestion of the sulphides and are considered appropriate for this type of mineralisation. For the JML/IGO drill programs, all samples were assayed at Genalysis Adelaide Laboratory using a 4 acid ore grade digest with an ICP-OES finish. Au was assayed using a fire assay 50g charge. Lower detection limits were to 50ppm for Cu, Pb, Zn, 1ppm/5ppm for Ag and 0.005ppm for Au.</p> <p>No geophysical or handheld XRF instrument data were used in this resource estimate.</p> <p>In comparison with modern requirements, minimal quality control procedures were adopted by companies completing the drilling programs before JML (eg. inclusion of only 17 field standards, 62 duplicates, 84 external laboratory checks in total). This shortfall was recognised by JML and more rigorous check sampling programs were implemented. For the JML/IGO drill programs, comprehensive QAQC programs were completed following company QAQC guidelines, which include the insertion of standards, blanks, duplicates and cross-lab checks. Results indicate that sample contamination is kept at a minimum and that assay values are within acceptable accuracy. In 2011, IGO also implemented particle sizing checks to be completed at the laboratory on 10% of the samples submitted for assay. These tests were to determine the pulverising quality of the samples.</p>
<b>Verification of sampling and assaying</b>	<p>All significant intersections were verified by alternative company personnel. No independent personnel verified any intersections.</p> <p>A total of 10 holes were drilled as twin holes by JML/IGO (4 at Wilga and 6 at Currawong). These showed that there was no bias between the twin and original holes but they did indicate that the degree of sulphide development is quite variable even over short distances. Consequently metal grades are quite variable also.</p> <p>An acQuire database was used by JML/IGO which includes all drilling information. Data are entered into the database mainly through acQuire data entry objects which have the required filters and validation rules built in. Data entry objects with built in validation tables are used to capture collar information, survey information (single shot), sampling information, geotech, and all geological logging information. Excel spreadsheets are used to capture downhole survey (multi-shot) data, surveyed collars and density information. All data entry objects and Excel spreadsheets were sent to the Database Administrator in Perth for uploading into acQuire. Assays received from laboratories were imported by the Database Administrator using customised acQuire importers thus alleviating any data entry mistakes.</p> <p>No adjustments were made to any assay data used in this estimate.</p>
<b>Location of data points</b>	<p>Most historic drillhole collar positions were surveyed by licensed or company surveyors. The JML/IGO (2008-2012) drillhole collar positions were located using RTK GPS equipment with a horizontal accuracy of +/-10mm and a vertical accuracy of +/-20mm.</p> <p>Historical drilling includes generally good quality surveys using downhole camera shots at about 30m intervals. Initial JML/IGO downhole surveys were taken by the drillers every 30m using the ORI-Shot digital camera. The results from the downhole camera were checked at the end of every hole and prior to uploading into the acQuire database. In addition, at the end of hole, a multi-shot survey was taken which recorded a reading every 6m. These multi-shot surveys were transferred to the site geologists digitally at the end of every hole, and then uploaded into the acQuire database.</p> <p>Since 2008, all drilling information has been converted into Stockman Regional Grid (SRG). This grid was created by JML in 2008 and extends over the Currawong and Wilga deposits. All holes were collar surveyed in MGA94 grid and transformed to SRG in MapInfo using transformation ties.</p> <p>Topographic surface is a DTM created from height measurements collected during an aeromagnetic survey during 2008. All historical drillhole collars were surveyed by a surveyor and all JML/IGO drillhole collars were surveyed up with an RTK GPS with a nominal height accuracy of +/-20mm.</p>
<b>Data spacing and distribution</b>	<p>No exploration results are included in this report.</p> <p>Diamond drill coverage in the massive sulphide at Wilga and Currawong is on a nominal 25x25m pattern. In the stringer sulphide lenses of both deposits, drillhole spacing ranges from 25x25m to 50x50m. Minimum hole spacing ~10m and maximum hole spacing ~70m. In general, drillhole spacing of less than 50x50m is classed as Indicated whereas drillhole spacing greater than this is classed as Inferred. No part of the resource at Currawong is classified Measured due to the nominal required drillhole spacing of 25x25m in the massive sulphide, as well as existence of multiple generations of drilling. The data spacing and distribution is more than sufficient to establish geological and grade continuity appropriate for the Mineral Resource estimation procedure and classification applied.</p> <p>Drillholes were composited to 1m downhole with length and density weighting. Face sampling at Wilga and</p>



Criteria	Commentary
	recent probe drillholes at Wilga were not used for grade interpolation nor were the down plunge holes at Currawong.
<b>Orientation of data in relation to geological structure</b>	<p>Surface drilling intersects the massive sulphide lenses almost perpendicular to the lens orientation at both Currawong and Wilga. The underground fan drilling at Wilga has some intercepts that are almost dip parallel. Some sample bias will occur in the Wilga deposit due to this fan drilling orientation but most of the affected area has already been mined and is excluded from the resource estimate. Two down-plunge or down-dip holes were drilled at Currawong however these were excluded from the estimate. They were drilled to detect offsetting faults, cross-cutting intrusions and test the grade continuity along strike. In the resource estimate they were used solely for geometry purposes. No down-plunge or down-dip holes were drilled at Wilga.</p> <p>Three of the 2012 stringer drillholes at Wilga were drilled at low angles to the mineralisation due to the lack of more appropriate drilling locations. These holes also do not represent a large volume of the resource estimate and are not considered material.</p>
<b>Sample security</b>	Drill core was transported from the drilling site to the Stockman core yard by JML/IGO personnel on a daily basis. All samples are stored in the Stockman core yard which is either manned or locked at all times. They are then transported to the assay laboratory in Adelaide using Toll IPEC. All deliveries are tracked using consignment numbers. Once they are received at the laboratory, the samples are reconciled against the sample despatch.
<b>Audits or reviews</b>	<p>The Stockman database was rigorously checked during a data compilation and validation stage in 2008. Since then, routine validation of the database has been conducted in-house.</p> <p>M Wild (IGO Principal Resource Geologist) completed an onsite review of drilling and sampling techniques in February, 2012. The procedures in place were considered to be of a suitable standard for the drilling data to be included in this resource estimate.</p> <p>In addition, laboratory audits were completed for the Genalysis Adelaide Laboratory by B Kendall (IGO Principal Geologist – Advanced Projects) in February 2010, and by M Wild (IGO Principal Resource Geologist) and K Kitchen (Stockman Senior Project Geologist) on the 29th February, 2012. No major issues were identified during these visits.</p>

## Section 2 Reporting of Exploration Results

Criteria	Commentary
<b>Mineral tenement and land tenure status</b>	<p>The Currawong and Wilga deposits are both within MIN5523 held by Stockman Project Pty Ltd, a wholly owned subsidiary of IGO. There are no native title claims registered over the lease, but an agreement is in place with a previous claimant group that makes provision for both the previous claimants and/or other indigenous groups who may assert an interest in the future. The tenement is located on crown land administered by the Department of Sustainability &amp; Environment. The area is rugged and heavily forested with no significant heritage sites identified.</p> <p>The tenure was secure at the time of this report. No significant impediments are believed to exist.</p>
<b>Exploration done by other parties</b>	Exploration at the Stockman Project was initially carried out by WMC in the early 1970s, WMC discovered both Currawong and Wilga deposits. Subsequent exploration has been completed by Macquarie Resources, Denehurst, Austminex, JML and IGO.
<b>Geology</b>	Currawong and Wilga are V(H)MS style deposits, occurring as polymetallic (pyrite-sphalerite-chalcopyrite) massive sulphide lenses with stringer feeder zones within a volcano-sedimentary succession. Wilga is a single stratabound lens whereas Currawong comprises multiple stratabound lenses with a series of faults offsetting and stacking the lenses.
<b>Drill hole Information</b>	There are no exploration results reported for the immediate Currawong and Wilga areas.
<b>Data aggregation methods</b>	There are no exploration results reported for the immediate Currawong and Wilga areas.
<b>Relationship between mineralisation widths and intercept lengths</b>	There are no exploration results reported for the immediate Currawong and Wilga areas.
<b>Diagrams</b>	There are no exploration results reported for the immediate Currawong and Wilga areas.
<b>Balanced reporting</b>	There are no exploration results reported for the immediate Currawong and Wilga areas.
<b>Other substantive exploration data</b>	There are no exploration results reported for the immediate Currawong and Wilga areas.
<b>Further work</b>	No further work is planned.

## Section 3 Estimation and Reporting of Mineral Resources

Criteria	Commentary
<b>Database integrity</b>	An acquire database is used by IGO which includes all drilling information. Data are entered into the database mainly through acquire data entry objects which have the required filters and validation rules built in. Data entry objects are used to capture collar information, survey information (single shot), sampling



Criteria	Commentary
	<p>information, geotech, and all geological logging information.</p> <p>Excel spreadsheets are used to capture downhole survey (multi-shot) data, surveyed collars and density information.</p> <p>All data entry objects and Excel spreadsheets were sent to the JML/IGO Database Administrator in Perth for uploading into acQuire. Assays received from laboratories were imported by the Database Administrator using customised acQuire importers thus alleviating any data entry mistakes.</p> <p>The acQuire database for the Stockman Project is exported to an Access database for resource estimation work.</p> <p>Ongoing data validation checks include visual checks in Surpac of collar, downhole surveys as well as checks between logging and assays received. Most of the data validations occur during the importing process and are built in to the acQuire database.</p>
<b>Site visits</b>	<p>The competent person for this report, Bruce Kendall (IGO Principal Geologist - Advanced Projects) was employed at the Stockman Project as Project Manager until January 2012. Whilst at the Stockman Project, he was closely involved in the planning and management of the drilling programs. Another site visit by Bruce Kendall was conducted in August 2012, where the resource estimate was reviewed. There has been no further drilling since that date.</p>
<b>Geological interpretation</b>	<p>Confidence in the geological interpretation for Wilga is high, with the mineralisation and geological setting being simple and the availability of underground drilling, mapping and plans confirming the interpretation. Currawong is more structurally complex and whilst confidence in the geological interpretation is good, additional drilling and further data review may result in modifications to the detail of the geological model, but this is unlikely to have an impact on the estimate.</p> <p>Thorough geological logging of all drill holes formed the basis of the geological interpretations. East-West sections were used to create mineralisation wireframes of both deposits. Several of the mineralisation wireframes were also constrained by shear planes, particularly at Currawong. At Wilga, historic backs mapping of development drives has been used to confirm mineralisation boundaries.</p> <p>The confidence in the geological interpretation, in particular of the mineralisation domain, is high. All infill drilling completed has supported the current geological interpretation. It is thought that any alternative interpretations will not have an impact on this estimate.</p> <p>Both deposits have been modelled using the massive sulphide as the main geological constraint. The main factors controlling continuity at Currawong are a series of post-mineralisation faults which are interpreted as disrupting the lenses. Controls on stringer mineralisation are essentially independent of the host sequences and lithology was not used to constrain the resource estimation for the stringer mineralisation.</p> <p>At Wilga, minor structures within the massive sulphide have been mapped which affect the distribution of the high grade copper massive sulphide, otherwise this is a continuous lens. At Currawong, faulting has controlled the geometry of the Currawong mineralisation. Some stacking may be the result of early growth faults during the formation of the massive sulphide lenses. Observed D2 shearing has dislocated many lenses and appears to be responsible for the termination of some. The extent of the D3 faulting is less certain but is thought to terminate the down dip portion of some lenses.</p>
<b>Dimensions</b>	<p>Currawong (Main Lens) is approximately 300m long, 240m wide (down-dip), up to 35m thick and located 100-300m below surface. Wilga is about 400m long, 220m wide (down-dip), up to 35m thick and located 50-150m below surface.</p>
<b>Estimation and modelling techniques</b>	<p>Ordinary kriging was used for grade estimation utilising Surpac software (v6.2) for Cu%, Pb%, Zn%, Fe%, Ag ppm, Au ppm and As ppm. Bulk density values were interpolated as for the other elements. Search parameters were based on variogram models for each element and density (variography also completed using Surpac v6.2 software). The various mineralisation wireframes were intersected with the drillholes in the database and the resulting intervals were written to tables in the Access database. Density weighted 1m composites were created using the lens coding as the control with a minimum passing of 50%. Grade estimation was constrained to the massive sulphide lens and stringer sulphide lens wireframes. At Wilga and Currawong, additional, internal subdomains of high grade Cu and Zn (Cu&gt;1.2%, Zn&gt;3%) were included in the massive sulphide lenses. No dilution was included in the resource models for Wilga or Currawong. Grade estimation for Au at Wilga may not be reliable due to a paucity of Au assays in the historic sample data and so Au is classified as Inferred at Wilga. Mild top-cut grades have been used for some elements where required.</p> <p>For Currawong, variography was performed on the M Lens massive sulphide (the largest of the massive sulphide lenses) and the kriging parameters obtained from M Lens variography were applied to the other massive sulphide and all the subordinate sulphide lenses. This approach was used as all the massive sulphide lenses are interpreted to be originally part of the same massive sulphide horizon which has subsequently been structurally disturbed into the different lenses. Variography for the stringer domain was conducted on the main stringer zone.</p> <p>For Wilga, variography was conducted on the main massive sulphide lens (most massive sulphide mineralisation is within the one lens) and the main stringer zone.</p> <p>Variography was conducted on Cu, Pb, Zn, Ag, Au, As and Fe as well as density.</p> <p>There is a 10% increase in global tonnage compared with the previous 2011 estimate due to additional drilling at both deposits. The grades remained consistent with the previous estimate.</p> <p>No assumptions were made regarding the recovery of by-products.</p> <p>As part of this estimate, the deleterious element As was estimated along with the economic elements. Fe was also estimated as it is important from a metallurgical perspective.</p> <p>Currawong 10mX, 10mY, 10mZ parent cell size as this is approximately ½ the average drill hole spacing. At Wilga 10mX, 10mY, 5mZ parent cell size was used as this is approximately ½ the average drill hole spacing. For both deposits, subcelling to 1.25m in all directions was used to ensure adequate delineation of</p>



Criteria	Commentary
	<p>mineralisation boundaries. The size of the search ellipses was determined from the variography for each element.</p> <p>No selective mining units were assumed in this estimate.</p> <p>Correlation matrices were produced for each separate mineralisation domain. In general, As, Ag, Au and Pb display good positive correlations in all mineralisation styles. Grades were interpolated independently into the block model, assuming no correlation with each other, and based on variography for each element.</p> <p>The individual massive sulphide and stringer sulphide wireframes were used to code the block model with a unique identifier. The composite files for each domain were then used to estimate only the blocks which were attributed the same zone coding.</p> <p>No cut-off grades have been applied to the massive sulphide outer boundary but cut-off grades were applied to help delineate the high grade Cu mineralisation (1.2%Cu) and the high grade Zn mineralisation (3%) within the massive sulphide zones for both deposits. Cut-off grades were also used to delineate the stringer mineralisation at both Wilga and Currawong. These cut-off grades were 0.5% Cu or 2% Zn.</p> <p>Mild top-cut grades have been used for elements where the Co-efficient of Variation was &gt; 1.0. The top-cut grades were determined from disintegration points on log probability plots. (Currawong massive sulphide 8% Pb, 10g/t Au, no top-cut for Zn, Ag or Cu; Currawong stringer sulphide 3% Pb, 13.9% Zn, 106g/t Ag, 10g/t Au, no top-cut for Cu; Wilga massive sulphide 26% Cu, 4% Pb, 31% Zn, 110g/t Ag, 2.6g/t Au; Wilga stringer sulphide 15% Cu, 1% Pb, 11% Zn, 120g/t Ag, 0.95g/t Au). A geological constraint (the massive sulphide zone) has been used as it is stable and will not vary over time, unlike cut-off grades. Mineralisation within both the massive sulphide and stringer lenses has been reported.</p> <p>Initial visual validation was completed by comparing drillhole assays with modelled values. A comparison was also completed to ensure the volumes of the wireframes closely resembled the block modelled volumes. The interpolated block grades were compared to the composited sample data and the declustered sample data (obtained via a nearest neighbour model created in Surpac) for each of the lenses by easting and by elevation to check if any model bias has been introduced.</p>
<b>Moisture</b>	Tonnages have been estimated using densities some of which were dry (those analysed at external laboratories) and others that contained natural moisture. The natural moisture of the Stockman massive sulphides is typically low (<0.5%).
<b>Cut-off parameters</b>	<p>No cut-off grades have been applied to the massive sulphide outer boundary but cut-off grades were applied to help delineate the high grade Cu mineralisation (1.2% Cu) and the high grade Zn mineralisation (3% Zn) within the massive sulphide zones for both deposits. Cut-off grades were also used to delineate the stringer mineralisation at both Wilga and Currawong. These cut-off grades were 0.5% Cu or 2% Zn.</p> <p>Mild top-cut grades have been used for elements where the Co-efficient of Variation was &gt; 1.0. The top-cut grades were determined from disintegration points on log probability plots. (Currawong massive sulphide 8% Pb, 10g/t Au, no top-cut for Zn, Ag or Cu; Currawong stringer sulphide 3% Pb, 13.9% Zn, 106g/t Ag, 10g/t Au, no top-cut for Cu; Wilga massive sulphide 26% Cu, 4% Pb, 31% Zn, 110g/t Ag, 2.6g/t Au; Wilga stringer sulphide 15% Cu, 1% Pb, 11% Zn, 120g/t Ag, 0.95g/t Au). A geological constraint (the massive sulphide zone) has been used as it is stable and will not vary over time, unlike cut-off grades. Mineralisation within both the massive sulphide and stringer lenses has been reported.</p>
<b>Mining factors or assumptions</b>	<p>Mining of the Currawong and Wilga deposits is planned to occur using underground mechanised mining techniques.</p> <p>No assumptions regarding minimum mining width or dilution have been made. The resource estimate is undiluted.</p>
<b>Metallurgical factors or assumptions</b>	A detailed metallurgical testwork program has been completed using samples from drill holes drilled during the period 2008-2011. Results indicate all styles of mineralisation are amenable to being recovered by flotation with no issues apparent due to deleterious elements.
<b>Environmental factors or assumptions</b>	Investigations are ongoing into suitable waste and tailings disposal options for the Stockman Project. A preferred option for both tailings and waste was selected as part of the Feasibility Study. Although these are yet to be approved by the regulating authorities, they have been fully informed of the preferred option.
<b>Bulk density</b>	<p>Many samples had measured densities using either water immersion or air pycnometer techniques. All JML/IGO samples were measured for density using water immersion techniques. For those samples with no density measurement, a calculated density was applied to the sample. The assays for Cu, Pb, Zn and Fe were compared with the measured densities and a second power regression curve developed for each deposit and for each mineralisation style. Densities were used in the sample compositing. Tonnages have been estimated using densities some of which were dry (those analysed at external laboratories) and others that contained natural moisture, expected to be &lt;1%.</p> <p>No samples were sealed prior to bulk density determination due to low porosity in the mineralised zones.</p> <p>Density was kriged into the block model in a similar method as was used for all other elements. However, a density regression formula was required in order to assign densities to historical samples which did not already have a density measurement. This was achieved in excel by ascertaining a multi element regression formula based on the existing assays and their corresponding measured densities.</p>
<b>Classification</b>	Classification was based on sample density and confidence in the geometry of the lenses. All of the major massive sulphide lenses in both deposits were classified as Indicated. Stringer sulphide was classified as Indicated or Inferred or sometimes left as Unclassified if there is limited repeatability across sections. Generally, where the sample density was 50x50m or less the resource was classified as Indicated, where the spacing was greater than 50x50m the resource was classified as Inferred. The Au grades at Wilga are considered Inferred due to a paucity of gold assays in the historic drilling data.



Criteria	Commentary
	The classification has taken into account the quality, quantity and distribution of the input data. In addition, the high confidence in the geological interpretation and modelling parameters were taken into account. The Mineral Resource estimate reflects the Competent Person's view of the Currawong and Wilga deposits.
<b>Audits or reviews</b>	No audits or reviews have been completed on this particular Mineral Resource Estimate. The previous estimate (2011) was reviewed by Cube Consulting Pty Ltd and several recommendations were implemented in this update. No significant issues were identified.
<b>Discussion of relative accuracy / confidence</b>	The 2009 and 2011 resource estimates were independently reviewed and the classification and resource estimation method of Ordinary Kriging were deemed to be appropriate. The same estimation methods including recommendations made during previous reviews were implemented in this resource estimation. The 2012 Mineral Resource estimate correlates well with previous resource estimates. There are no known significant factors that might impact the accuracy and confidence of the estimate. Mineralisation has been classified as Indicated and Inferred. No mineralisation has been classified as Measured. The statement relates to global estimates of tonnes and grade. No production data are available for Currawong as it has not been mined previously. There is a slight discrepancy between the historic total reported tonnes mined at Wilga (956kt) and the calculated tonnes mined using the volumes of underground void models (802kt), with the reported tonnes being greater. During 2012, Wilga was re-opened and all voids above the current water table checked to see if the wireframes were accurate. Below the water table several holes were drilled to test for the presence of voids which were not indicated by the void wireframes, in areas of high grade. Although some discrepancies were identified they do not entirely account for the difference. The difference, since revision of the void model after probe drilling and access to the underground workings down to the water table, is 154kt, only 4.2% of the Wilga resource tonnage. This Mineral Resource estimate assumes the void model as being correct and the resource model was depleted accordingly.
<b>Resource Model Numbers</b>	CU_RSC_2012_07 and WG_RSC_2012_07

## Section 4 Estimation and Reporting of Ore Reserves

Criteria	JORC Code explanation
<b>Mineral Resource estimate for conversion to Ore Reserves</b>	Mineral Resource estimates were created using Ordinary Kriging. Variography was completed on Cu, Pb, Zn, Fe, Ag, As, Au and density The Mineral Resources reported are inclusive of the Ore Reserves. The Mineral Resource estimate was completed in June 2012 and covers both Wilga and Currawong deposits. This Ore Reserve was derived from resource block model currawong_2012.mdl and resource block model wilga_2012.mdl.
<b>Site visits</b>	The site was visited by Mr Geoff Davidson in August 2008. During the site visit diamond drill core for Currawong was inspected, visits were made to the existing TSF of Lake St Barbara, the old plant site at Waxlip spur, existing Wilga portal and site of the proposed Currawong portal.
<b>Study status</b>	This Ore Reserve was based on designs and estimates consistent with a detailed Feasibility Study. The costs were derived from Vendor estimates specific to the project and are considered to be within +/- 15% order of accuracy. A detailed mine plan was developed from which a practical mining schedule was determined. Standard modifying factors associated with the selected mining method have been applied. The mining method will use long hole stoping techniques to recover economic mineralisation. Amongst others, the study included geotechnical analysis of the mine openings and detailed analysis and design of the paste backfill and its application in the mining method.
<b>Cut-off parameters</b>	The Net Smelter Return (NSR) method was used to determine the economic cut-off for the mineralisation. The NSR values were calculated on a 'mine gate' sale basis and incorporate metal pricing current at the time. The NSR value was adjusted for transport costs, port handling charges and TC/RC on all payable metals. Payable metals are copper, zinc, gold and silver. The cut-off NSR value was determined from the site operating costs including mining, processing and site administration and overhead costs. The cut-off was estimated to be between \$97 and \$105 per tonne processed. An incremental cut-off of \$60 per tonne was also estimated as a subset of these costs and represented the minimum value of material economic to process once delivered to the surface stockpile.
<b>Mining factors or assumptions</b>	The Ore Reserve was determined by digitising practical stope wireframes around contiguous blocks of Indicated material above the cut-off value. The wireframes include a nominal 0.5 m of unplanned mining dilution from over-break. An additional 2% dilution was included for all stopes due to fall off from paste walls. A further 2% dilution allowance was applied to secondary stopes which will have more than one exposed wall of paste backfill during mining. A nominal 5% ore loss was applied to account for losses such as under-break, unrecovered bridges and toe, ore lost due to excessive dilution from fall dirt. In addition, any development outside the stope wireframes which reported an average value above an incremental NSR cut-off of \$60 per tonne was also included in the Reserve. The Ore Reserves for both Currawong and Wilga were determined on the basis of long hole open stoping using cemented paste backfill. This mining method and associated parameters used to estimate the Ore Reserve were deemed to be appropriate for the nature and geometry of the deposits at Currawong and Wilga. Stope spans and other ground support requirements were determined from analysis conducted by



Criteria	JORC Code explanation
	<p>geotechnical consultants Mining One Pty Ltd. Grade control methods would entail methods used by Independence Group NL (IGO) at their existing operations in WA and will include stope definition diamond drilling, face and stockpile sampling.</p> <p>The Mineral Resource model was originally prepared and reported by IGO geologists in accordance with the JORC Code (2004), and was recently updated to comply with the JORC Code (2012) reporting requirements. Ordinary Kriging was used to estimate the grade of key elements such as Cu, Zn, Au, Ag, Pb and Fe within wireframe constraints.</p> <p>Sufficient detailed analysis was carried out to provide confidence in key assumptions such as stability of stope spans and mining rate. Recent testwork of the paste backfill using cycloned tailings to remove the ultrafine fraction of the tailings stream has demonstrated over time (260 days) that a number of 4% binder mixes can achieve acceptable early strengths, good long terms strengths with no signs to date of fill degradation. The next and final tests will be at 365 days due in February 2015.</p> <p>The total dilution (planned plus unplanned) included in the stope wireframes was estimated to be 14% at grades reported from the Mineral Resource model and within the diluted stope wireframe envelopes. The mining method requires total extraction within the stoping envelope; therefore, no losses will occur from sterilisation of ore in pillars. A nominal 5% ore loss was applied for reasons as described above. An approximate minimum mining width of 3 m (true width) was used when creating the stope wireframes.</p> <p>The underground capital infrastructure will include decline access and primary ventilation shafts and tunnels as well as services infrastructure such as electrical distribution, air and water reticulation, dewatering facilities, communications, and workforce refuge chambers. In addition, a backfill paste plant will need to be constructed and paste reticulated throughout the stoping areas of the Currawong mine. At Wilga, tailings filter cake will be trucked to from Currawong to a surface stockpile adjacent to the portal where it will be used to produce paste on surface, then pumped into the mine and reticulated throughout the workings.</p> <p>Inferred Mineral Resources were not included in the Ore Reserve.</p> <p>The Wilga Ore Reserve was derived from the Indicated Mineral Resource. The Indicated classification was based on the confidence in copper, zinc and silver grades; however, gold grades within these blocks were considered to be Inferred due to a paucity of gold assays in historic drilling. Revenue from gold in the Wilga ore was included in the estimation of the Ore Reserve. The contribution to Revenue of this gold was estimated to be \$8.65 per gram of gold in situ and within the mining envelope. This inclusion had no material impact to the value of the mining envelopes considered and did not warrant downgrading of any portion of the Ore Reserve attributable to Wilga. The tonnage contribution from Wilga represents 18% of the total Ore Reserve tonnage.</p>
<p><b>Metallurgical factors or assumptions</b></p>	<p>The metallurgical process will use differential flotation to produce separate concentrates of copper and zinc minerals. The method is commonly used throughout the world for the style of mineralisation that exists at Stockman and is currently being used at IGO's Jaguar operations.</p> <p>Numerous composite samples have undergone batch testing. The samples tested were selected from different geological domains from both Currawong and Wilga deposits. Geo-metallurgical algorithms were developed for the mineralisation at Stockman; therefore, recoveries vary depending on the combination of minerals present in the feed at any increment in time.</p> <p>The life of mine average recoveries for copper concentrate were as follows:  Copper = 81.5%  Silver = 40.7%  Gold = 20.4%</p> <p>The life of mine average recoveries for copper concentrate were as follows:  Zinc = 76.4 %  Silver = 18.5%</p> <p>Metallurgical test work has demonstrated that marketable concentrates of both copper and zinc can be produced from both deposits. Marketable electrolytic grade zinc concentrates are produced from both deposits when treating lower lead grade feeds (&lt;1% Pb). Arsenic is low (&lt;0.25%), iron is acceptable (8-10%), lead relatively low (&lt;2%) and silica is also acceptable (&lt;1.5%)</p> <p>The penalty element assays were generally low, but where slightly elevated, remained in the negotiable range for settlement. Deductions for penalty elements were applied in the cash flow model in the periods where threshold values were exceeded. The life of mine estimated cost of penalties represents &lt; 1% of the project operating cost.</p> <p>Locked cycle tests, which are designed to simulate a continuous and stable condition of the proposed flotation process, were conducted on a range of composited samples considered to be representative of the various types of mineralisation, including a blend representative of the first 5 years production. Locked cycle test results by previous owners observed similar results to those conducted by IGO.</p> <p>Bulk flotation testwork was carried out on ten 50 kg samples as part of the 2014 EFS. The testwork demonstrated the geo-metallurgical algorithms to be reliable.</p> <p>Economic concentrations of minerals were defined by their intrinsic value derived through beneficiation to produce concentrates within marketable specifications. The commercial value was determined through the application of an economic cut off, as described above. No other mineralogical specifications were applied in determining the Ore Reserve however charges were applied to the concentrate product where the estimated level of penalty elements exceeded threshold levels. These penalty elements included Zn and Pb for Copper concentrate and Fe for Zinc concentrate.</p>
<p><b>Environmental</b></p>	<p>No permanent waste rock landforms will be created during operations. All material determined to be potential acid forming (PAF) or containing soluble metals will be either returned underground as backfill for workings or disposed of sub-aqueously in the tailings storage facility (TSF).</p> <p>Tailings produced from on-site processing will be either returned to the underground workings as backfill or disposed of in an approved TSF. The existing decommissioned TSF will be reinstated to accept the tailings</p>



Criteria	JORC Code explanation
	<p>from operations. The proposed TSF has been designed in accordance with the Australian National Committee on Large Dams (ANCOLD) guidelines. Detailed geotechnical and hydrogeological assessment of the proposed TSF impoundment is still to be carried out to validate the design parameters. No material changes to the design parameters are anticipated.</p> <p>Water produced from dewatering the underground workings will be treated and recycled for use in the mining or processing operations. Surplus water will be discharged into the TSF.</p> <p>An Environment Effects Statement (EES) was compiled as a requirement of the Victorian state government project approval process. The project also triggers Commonwealth assessment which utilises the Victorian EES via a State-Federal bilateral agreement. The EES prepared for the Stockman base metals project provides a comprehensive and integrated assessment of the potential environmental, social and economic impacts of project implementation. Technical studies conducted for the project provided confidence that the project can be implemented in a way that is consistent with relevant Victorian and Commonwealth government environmental and social policy objectives.</p> <p>Project licensing and approval, including permitting of the TSF is subject to a favourable assessment by the Victorian Minister for Planning of the EES and approval by the federal Environment Minister under the EPBC Act. The Victorian Minister for Planning has provided a positive assessment of the EES and associated Inquiry Panel report. The approval process by the federal Environment Minister is still in progress.</p> <p>There are no known impediments to the outstanding portions of the approval process; however, the review and approval process is still in progress and project development will be subject to the conditions placed on the project by respective regulators.</p> <p>Under the Victorian permitting system, the Ministerial Assessment provides overarching guidance for the various Decision Making Authorities (DMAs) that actually issue the operational licenses i.e. the various State government agencies that regulate such things as land clearing, mining operations, workplace safety, water usage &amp; discharge, etc. The DMAs are not legally bound by the Ministerial Assessment but must consider the Assessment in their decisions.</p>
<b>Infrastructure</b>	<p>The project will be supported by limited existing infrastructure. The project is currently serviced by an existing access road which will be upgraded to accommodate increased traffic and concentrate transport.</p> <p>Telecommunications are available within the wider area which will need to be upgraded to bring these services to the site. Power will be generated on site using natural gas sourced from the Victorian natural gas infrastructure. Water balance modelling has indicated the project will have a near neutral requirement for supplemental water; however, contingent sources of groundwater have been identified beneath the Benambra plains and various locations adjacent to the site access road. The availability of labour is limited in the immediate area and an accommodation village will be constructed to house a drive-in drive-out workforce with most personnel expected to commute from regional population centres.</p> <p>IGO currently holds the mining lease on which the Stockman project is located (MIN5523). Land access to other support infrastructure is the subject of various draft agreements and Memoranda of Understanding (MOU's) with respective land holders. The site for the TSF is currently located within an Exploration Exemption area and application to have this lifted will be subject to approval of the proposed facility by state and federal regulators. Any new tenement covering the current Exploration Exemption area, if granted, would be as a separate tenement to MIN5523. There are no known impediments to the granting of this license.</p>
<b>Costs</b>	<p>Capital costs for the project were based on budget quotations provided by potential vendors based on design and scope specific to the project. Where vendor quotations were not available, cost estimates were provided by consultants with expertise in their specific field or were built-up from first principals based on IGO operational experience.</p> <p>Mining capital and operating costs were estimated from first principals using vendor quotations for materials and equipment running costs. Productivities were based on internal industry experience.</p> <p>Labour costs were based on an assessment of similar mining projects within Victoria.</p> <p>Provision was made within the cash flow analysis for the penalties applied to deleterious elements in excess of the limits proposed by independent metal traders.</p> <p>Road transport costs and port handling charges were based on vendor quotations specifically for the project scope of work. Sea freight charges were based on market assessment by logistics consultants with expertise in this industry.</p> <p>Treatment charges, refining costs and element penalties were based on forecasts provided by recognised market analysts.</p> <p>Victorian government standard state royalties were applied to Copper, Zinc and Silver. No royalty was applied to Gold. Under Part 2, Section 7 of the Mineral Resources Development Regulations 2002, State royalties do not apply to gold.</p> <p>No third party royalties are applicable to this project.</p>
<b>Revenue factors</b>	<p>The project head grade was determined on a month by month basis from a detailed schedule of mining of the Ore Reserve. The schedule incorporated a logical development and extraction sequence of the Ore Reserve and utilised productivity rates considered to be commensurate with Australian industry standards.</p> <p>Provision was made within the cash flow analysis for the penalties applied to deleterious elements in excess of the limits proposed by independent metal traders.</p> <p>Transport costs, port handling charges and sea freight charges have been discussed in the section on Costs. Smelter recoveries, treatment charges, refining costs and element penalties were based on budget quotations provided by recognised metal traders and were in line with standard contracts for copper and zinc concentrates. Consideration was also given to existing contracts in place at the IGO's Jaguar operations.</p> <p>The commodity prices and exchange rates used for the cash flow model were applied as real pricing and were based on forecast pricing provided by recognised market analysts. The project is therefore leveraged to the rising future zinc price forecast by most industry analysts.</p> <p>The average Life of Mine metal prices and foreign exchange rate used in the cash flow model included the</p>



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	<p>following:            Copper \$US 6,591 per tonne of copper metal            Zinc \$US 2,979 per tonne of zinc metal            Gold \$US 1,146 per ounce troy of gold            Silver \$US 20.17 per ounce troy of silver            Exchange rate of \$0.84 \$AU per \$US            The cash flow was modelled in real terms and no price or cost escalation was applied.</p>
<b>Market assessment</b>	<p>In its September 2014 "Q3 2014 Global copper long-term outlook", Wood Mackenzie forecast the need for a long-term incentive price of US\$3.50/lb Cu (in 2014 dollars) to encourage sufficient investment in mine capacity to ensure the market does not slip into structural deficit. This equates to a tonnage price of US\$7,700/t Cu (in 2014 dollars).            In its September 2014 "Q3 2014 Global zinc long-term outlook", Wood Mackenzie forecast the need for a long-term incentive price to encourage mine development to address market deficits. For the period between 2013 to 2035 Wood Mackenzie has forecast the price to average US\$2997/t (in 2014 dollars).</p>
<b>Economic</b>	<p>A detailed cash flow model was created using the design case commodity pricing described above. The cash flow included detailed schedule of Capital and Operating cost expenditures for each of the project cost centres. Revenue from product sales were modelled by shipment with 90% payable in the month of loading and the balance paid the following month. Typical off take contracts were incorporated in the cash flow and were based on input parameters determined by recognised market analysts. The cash flow was modelled in real terms, hence no price or cost escalation was applied. A discount rate of 10% was applied to determine a Net Present Value (NPV) from the project cash flow.            The cash flow analysis demonstrated a positive return for the project with a pre-tax internal rate of return of 25%.            Input costs were considered to be accurate to within +/- 15%. Costs were taken either directly from vendor quotes or consultant estimates for specific scopes of work. Mining costs were developed from first principals on an owner operator basis.            Various sensitivity analyses were carried out on the cash flow model. Key parameters were varied by +/- 15%. These parameters included process plant feed grade, capital and operating costs, metal prices, foreign exchange rate. The results were evaluated on the basis of pre-tax NPV. All parameters tested returned a positive NPV over the range.</p>
<b>Social</b>	<p>There are currently no Native Title claims or determinations over the Stockman project area. A license for the mining lease has been granted.            A program of community engagement has been undertaken and will continue through the life cycle of the project. This has included the establishment of a "shop front" to facilitate two-way communications with the public. No material objections to the project have been received throughout the community engagement process and the general consensus is one of positive economic benefit to the local community.            An MOU has been executed between IGO and the East Gippsland Shire Council. The MOU commits both parties to working in collaboration to identify and progress opportunities that will deliver social and economic development benefits for the region whilst, through endeavouring to maximise the efficiency and robustness of the project's operations, not compromising or placing an unnecessary financial burden on IGO as a company with obligations to its shareholders.</p>
<b>Other</b>	<p>IGO currently holds the mining lease on which the Stockman project is located. Land access to other support infrastructure is the subject of various draft agreements and MOU's with respective land holders. The site for the proposed TSF is currently located in an Exploration Exemption area. An application for an Infrastructure Mining Licence will be made following project approval by IGO. There are no known impediments to the granting of this license.            The project is located in state forest and prone to bushfires. Analysis of the risk has been undertaken by independent consultants WSP and mitigation measures recommended including the establishment of fire protection zones and fire-resistant construction materials. In addition, procedures and training for bushfire events will be implemented as part of the project Work Plan and procedures.            Land access agreements and MOU's for required external infrastructure have been tabled in draft form to the following stakeholders:            Local pastoralist for land access to the Stockman Village site and a potential borefield site.            East Gippsland Shire Council for road improvements and maintenance, land (road verge) access for a potential borefield pipeline and high voltage underground power cable.            The project will require vegetation offsets for ground required to be disturbed for construction and mining. These offsets have largely been identified and secured in part or subject to a draft heads of agreement with existing land holders. There are no known impediments to securing the final calculated offsets required for the project.            The Victorian Minister for Planning's positive assessment of the Stockman Environmental Effects Statement (EES) and Inquiry Panel report was released on 30 October 2014. The Minister's Assessment contains no unexpected conditions that are material to the project. The specific detail of the various licenses that are required for project operations will now be scoped and agreed with Government agencies. It is expected that detailed licensing will take approximately 12 months.            The Victorian Minister for Planning's assessment report was also provided at the same time to the Commonwealth Minister for Environment for his consideration under the Environment Protection and Biodiversity Conservation (EPBC) Act. The Federal decision is expected to be announced by early 2015, and no significant issues are foreseen.            There are currently no unresolved matters with third parties.</p>
<b>Classification</b>	<p>The Ore Reserve was classified in accordance with the guidelines in the JORC Code (2012). Standard modifying factors and conversions were applied as described above. All Indicated Mineral Resource within</p>



Criteria	JORC Code explanation
	<p>the mining envelope was converted to Probable Ore Reserve. No known issues existed at the time which required the levels of confidence of the Ore Reserve to be downgraded. The Mineral Resource does not contain any material classified as Measured and therefore no material could be considered for classification as Proved Ore Reserve.</p> <p>Gold (Au) grades are Inferred at Wilga due to a paucity of gold assays in historic drilling.</p> <p>The Ore Reserve estimation and classification methods used are considered by the Competent Person to be appropriate for the style and nature of the deposit.</p>
<b>Audits or reviews</b>	<p>The Ore Reserve estimate has been subject to internal peer review.</p>
<b>Discussion of relative accuracy/confidence</b>	<p>The Ore Reserve is a global estimate derived from the global Stockman Mineral Resource.</p> <p>The Stockman Ore Reserve was classified as Probable only and includes only Mineral Resources classified as Indicated. No downgrading was applied to economic material within the mining envelope. The accuracy of the Ore Reserve is reflected in the classification of the Ore Reserve and the classification of the underlying Mineral Resources upon which it is based.</p> <p>A sensitivity analysis was conducted on the cash flow model over a +/-15% range of variability of key parameters including Cu and Zn grade, capital and operating cost, Cu and Zn price and exchange rate. The results were evaluated on the basis of pre-tax cash flow. All parameters tested returned a positive pre-tax cash flow over the range.</p> <p>The nature of the deposit is such that the economic mining envelope is dependent on metal price and foreign exchange assumptions. Material changes in price assumption could alter the outcome of the Ore Reserve estimate.</p> <p>Discrepancy exists between the historical tonnes reported as mined at Wilga (circa 956 kt) and those accounted for in current digital wireframe of the workings (circa 802 kt). The reason for the discrepancy remains unclear and reconciliation between the digital model and the actual mined areas is ongoing, subject to further drilling or access to areas of the workings that are currently flooded. This discrepancy represents &lt;2% of the Ore Reserve and was not considered material to the viability of the project.</p> <p>Gold (Au) grades are classified as Inferred at Wilga due to a paucity of gold assays in historic drilling.</p> <p>Vendor quotation used in the cost estimates were requested on the basis of +/-10% to 15% accuracy.</p> <p>Revenue assumptions were based on real forward pricing calculated by combining Consensus forecasts (sourced from eight separate banks &amp;/or research firms) and Wood Mackenzie forecasts. Forecast periods varied across the sources, ranging from two years to eight years. Where the project life exceeded a reasonable number of available forecasts, the last period price was held constant (or "flat-lined") in the cash flow model to the end of the project.</p> <p>The Life of Mine (LoM) average forward copper pricing (US\$6,591/t) is 11% below the September 2014 long term forecast copper pricing by Wood Mackenzie which covers the mine production period (US\$7,446/t).</p> <p>The LoM average forward zinc pricing (US\$2,979/t) is 1% below the September 2014 long term forecast zinc pricing by Wood Mackenzie which covers the mine production period (US\$3,020/t).</p> <p>The foreign exchange rate used the IGO-derived consensus rate calculated by combining forecasts from three separate bank &amp;/or research firm's forecasts. As with the copper and zinc pricing, the foreign exchange rate was flat-lined from the last period forecast to the end of the project.</p>