



# Activity Report

For the period ending 30 June 2015

Western Areas is an Australian-based nickel miner listed on the ASX. The main asset is the 100% owned Forrestania Nickel Project, 400km east of Perth. Western Areas is Australia's second largest sulphide nickel miner producing approx. 25,000 tonnes per annum nickel in ore from the Flying Fox and Spotted Quoll mines.

Flying Fox and Spotted Quoll are two of the lowest cost and highest grade nickel mines in the world.

Western Areas is an active nickel explorer in Western Australia and holds significant exploration interests in Canada and Finland through shareholdings in Mustang Minerals and FinnAust Mining Plc.

The total Mineral Resource Estimate at Spotted Quoll now stands at 2.7Mt at an average grade of 5.7% nickel containing 150k nickel tonnes. The total Ore Reserve Estimate at Spotted Quoll comprises 2.7 Mt at 4.1% nickel containing approximately 110k nickel tonnes.

The total Massive Sulphide Mineral Resource Estimate at Flying Fox now stands at 1.9Mt at an average grade of 5.2% nickel containing 101k nickel tonnes. The total Ore Reserve Estimate at Flying Fox comprises 1.5Mt at an average grade of 4.2% nickel containing approximately 64k nickel tonnes.

The Cosmic Boy concentrator consistently produces around 25,000 tonnes per annum of nickel contained in concentrate.

Western Areas has offtake agreements with BHP Billiton for 12,000tpa nickel in concentrate and 13,000tpa with Jinchuan for a total 25,000tpa nickel in concentrate.

The Board remains focused on the core business of low cost, long life nickel production, new nickel discoveries and generating returns to shareholders.

**ASX code:** WSA

**Shares on issue:** 232.3m shares

**Market capitalisation:**

Approx A\$769m @ \$3.30 per share

Level 2, 2 Kings Park Road

West Perth, WA 6005

www.westernareas.com.au

## FULL YEAR GUIDANCE BEATEN ON ALL OPERATIONAL METRICS WITH LOWEST UNIT CASH COSTS FOR THE YEAR

Western Areas (WSA or the Company) is pleased to report another strong quarterly performance across the full suite of operational metrics including safety, costs and continued positive free cashflow generation. Full year guidance in all areas was beaten which includes production and unit cash cost metrics. The cashflow performance for the quarter and the full financial year continues to demonstrate the Company's resilience to the current low nickel price environment. **There were no lost time injuries for the quarter and the Company is proud to report a lost time injury frequency rate of ZERO.**

**Mill throughput at 157,913 tonnes was a record** for Western Areas and resulted in the highest quarterly production of the year at 6,676t of nickel in concentrate. Consequently, **full year production was 25,801t of nickel in concentrate which exceeded the full year guidance of 25,500t.** The mill's outperformance assisted in delivering the **lowest quarterly unit cash cost of production for the year at A\$2.19/lb.** Full year unit costs at **A\$2.31/lb, significantly better than the full year guidance range of A\$2.40/lb to A\$2.50/lb.**

The Company again generated free cashflow for the quarter despite the nickel price retreating to below US\$6.00/lb. The strong cashflow generated over the entire financial year has allowed the **Company to become debt free for the first time since 2004 with the repayment of A\$125m of convertible bonds on 2 July 2015.** Consolidated cash at bank (which includes FinnAust Mining) was A\$195.4m at 30 June 2015.

June quarter mine production was **131,545 tonnes of ore at an average grade of 5.0% for 6,565 nickel tonnes.** Full year mine production was 26,524 nickel tonnes which also exceeded full year guidance of 26,000 nickel tonnes.

### June Quarter 2015 Highlights:

1. Flying Fox mine production was **62,976t of ore mined at 4.9% for 3,076 nickel tonnes (6.8M lbs).**
2. Spotted Quoll mine production was **68,569t of ore at 5.1% for 3,489 nickel tonnes (7.7M lbs).**
3. **Mill throughput was 157,913t of ore** at an average grade of **4.7% nickel with recovery of 89.2%.**
4. **Pre-consolidated cash at bank (excluding FinnAust) increased by A\$3.0m to A\$193.7m** which includes the interim dividend payment of A\$6.7m and the impact of negative quotation period (QP) pricing.
5. **Agreement was reached to purchase the Cosmos Nickel Complex** from Xstrata Australasia Operations Pty Ltd (Glencore subsidiary) for A\$24.5m.
6. **The Mill Enhancement Recovery Project has been approved** by the Board with recoveries to increase 3% to 5% over the life of mine
7. **Flying Fox Resources and Reserves upgraded** (see Section 4).
8. New Morning/Daybreak shallow drilling intersected nickel sulphides including **6.7m @ 3.1% nickel (NMD 205) and 17.5m @ 2.8% nickel (NMD207).**
9. Planning for the major drilling program at the Western Gawler project in South Australia was completed. **Drilling commenced in July.**



## 1. CORPORATE AND FINANCING

### **Cashflow**

Pre-consolidated cash at bank was A\$193.7m at the end of the quarter, being an increase of A\$3.0m over the previous quarter figure of A\$190.7m. The consolidated group's cash position was A\$195.4m, which included the majority-owned FinnAust Mining Plc cash at bank of A\$1.6m. Group cash at bank plus nickel sales receivables was A\$211.8m, an increase of A\$5.9m over the March quarter. The consolidated group net cash position increased to A\$71.0m.

### **Dividend**

Western Areas paid a fully franked interim dividend of 3 cents per share (A\$6.7m) on 10 April 2015. A decision on the final dividend for FY16 will be announced as part of the full year financial results, which is expected to be announced on 20 August 2015.

### **Capital Management**

A single tranche of convertible bonds with a face value of A\$125m remained outstanding at 30 June 2015. The bonds matured post quarter end on 2 July 2015 and were repaid using existing cash reserves. This will result in a reduction of approximately A\$12.5m in borrowing costs for FY16 compared to FY15.

The Company is now debt free for the first time since 2004 which provides further balance sheet strength and ensures flexibility for future growth opportunities. Such disciplined growth will always be balanced with the Company's goal of maintaining its consistent track record of paying dividends to shareholders.

The \$125m ANZ loan facility remains fully undrawn and is not due to expire until March 2017. It provides a readily available and low cost debt financing option. The Company has commenced discussions to assess the optimum flexible funding package going forward.

### **Hedging**

When required and the pricing is supportive, the Company manages nickel sales price risk with a combination of short term quotation period (QP) hedging and a set limit of medium term nickel hedging. The policy allows the use of forward sales, bought options and collar style options:

- QP hedging is used to manage the risk of price fluctuations for nickel already shipped to offtake partners that is yet to have its nickel price finalised.
- Medium term hedging is used to manage the risk of nickel price fluctuations with a maximum 25% of expected nickel sales per month hedged out for a maximum of 12 months.

At quarter's end, the hedge book consisted of a small proportion of forecast US\$ sales. Details of hedges as at 30 June 2015 are as follows:

Hedging Details	FY 2016
<b>US\$ Hedging - Collar Options</b>	
US\$ Sold	\$30,000,000
Average US\$ FX Cap	\$0.8300
Average US\$ FX Floor	\$0.7195



## 2. MINE SAFETY AND ENVIRONMENT

### *Safety*

There were no lost time injuries (LTI) recorded for the quarter and the **LTI frequency rate dropped to ZERO at the beginning of April**. At the end of the quarter, the Company had operated 454 days without an LTI.

The achievement of this exceptional result is driven by every Western Areas employee and contractor alike, and is done so in an environment where the Company's reporting culture of hazard identification (lead indicators) have markedly increased. Whilst the Company applauds the LTI outcome, significant emphasis is placed on ensuring that complacency does not impact efforts across both lead and lag safety indicators, such as medically treated injuries and safety inspections.

Boart Longyear (surface diamond drilling contractor) achieved the significant milestone of **seven years LTI free operations in June**.

As part of continuously improving our emergency response procedures, an aerodrome emergency drill was conducted in early June. This multi-agency exercise involved around 50 people from the Emergency Response Team (ERT), local volunteer fire brigades and several St John Ambulance crews from the surrounding communities. The state of art fire simulator, supplied by Riklan Emergency Management Services, is purpose built and provided a realistic setting for the exercise. The site medical teams worked closely with the St John crews to manage large numbers of minor and major very realistic looking injuries. The ERT came away with a number of important lessons and will be working to integrate them into response times and training scenarios.



Aerodrome emergency drill exercise

### *Environment*

One environmental incident occurred during the quarter when a geophysical survey was conducted without obtaining the necessary ground disturbance approvals. The procedural non-compliance has been investigated and amended to ensure this type of incident is not repeated.

The environmental weed control and eradication program remains ongoing. Early rain has resulted in germination of weed species in a number of areas and early treatment helps control their establishment and spread.

An additional three recovery bores were installed at the Mossco Farm evaporation pond facility. These will be utilised to control any future groundwater mounding.



### ***Compliance and Approval***

New compliance actions undertaken during the quarter included:

1. Review of environmental requirements at the Cosmos Nickel Complex and strategy development to ensure regulatory compliance is achieved when the Company takes full ownership of the project; and
2. Update to internal ground disturbance procedures to ensure all contractors are included.

New approvals received during the quarter included:

1. Clearing permits for Cosmic Boy and North Ironcap exploration areas; and
2. Approval to construct the new Bioleach plant.

### ***Mine Rehabilitation***

The planting of seedlings and erosion control works were undertaken on the Spotted Quoll waste dump.

### ***Sustainability***

During the quarter, Western Areas entered into a five year agreement with the Department of Parks and Wildlife to support their Western Shield wildlife program. The program aims to recover native animal populations through broad scale baiting to reduce the threat of foxes and feral cats.

Western Areas continued its involvement with the Carbon Disclosure Project (CDP) by submitting carbon emissions data as a part of CDP's annual reporting requirements. The CDP provides carbon emissions and other environmental data to a range of stakeholders including investors.

### ***Community***

The Company held discussions with the Perth Zoo with a view to continuing sponsorship of the Western Quoll enclosure at the Zoo's nocturnal house.



Environmental Technicians Lauren Curlewis and Louise Pearman undertaking erosion control work and seedling planting on the Spotted Quoll waste dump.



### 3. MINE AND MILL PRODUCTION AND CASH COSTS

Tonnes Mined		2014/2015				YTD Total
		Sep Qtr	Dec Qtr	Mar Qtr	Jun Qtr	
<b>Flying Fox</b>						
Ore Tonnes Mined	Tns	65,097	64,122	72,144	62,976	264,339
Grade	Ni %	5.2%	4.9%	4.6%	4.9%	4.9%
Ni Tonnes Mined	Tns	3,384	3,114	3,330	3,076	12,904
<b>Spotted Quoll - Underground</b>						
Ore Tonnes Mined	Tns	68,446	68,324	70,590	68,569	275,929
Grade	Ni %	4.8%	5.1%	4.8%	5.1%	4.9%
Ni Tonnes Mined	Tns	3,276	3,483	3,372	3,489	13,620
<b>Total - Ore Tonnes Mined</b>	Tns	133,543	132,446	142,734	131,545	540,268
<b>Grade</b>	Ni %	5.0%	5.0%	4.7%	5.0%	4.9%
<b>Total Ni Tonnes Mined</b>	<b>Tns</b>	<b>6,660</b>	<b>6,597</b>	<b>6,702</b>	<b>6,565</b>	<b>26,524</b>

#### Flying Fox

##### **Production**

Flying Fox production was **62,976t of ore at an average grade of 4.9% nickel for 3,076 nickel tonnes**. Ore production was split between longhole stoping (62%), jumbo development (31%) and a combination of air-leg mining and narrow vein stoping (7%). Longhole production was predominantly from the 527 North, 410, 335 South and 285 longhole T5 stopes plus 700 and 685 T4 stopes. Air-leg and narrow vein stoping production was sourced from the 760, 750, and 730 levels which included some exploration air-leg rises and sludge drilling to firm up stoping blocks.

Stope grades were generally higher than planned for the quarter, due to ongoing positive reconciliation to reserve and scheduling differences associated with mine sequencing.

**Flying Fox full year production was 12,904 nickel tonnes mined at an average grade of 4.9% nickel.** Consistent with previous years, mine grade outperformed reserve grade through a combination of orebody extensions and excellent dilution control practices from an experienced and stable team of operators. **Flying Fox is now approaching two years LTI free.**

##### **Mine Development**

The Streeter Decline advanced 52m with other capital development (footwall drives plus stockpiles) in the 255 and 245 levels for a total of 401m. Capital vertical development involved three escape-way raisebores (total 49m) from the 255 to 195 levels.

A total of 89m of operating waste jumbo development was completed at the 255 and 245 levels, plus 34m of air-leg development from the 1070 diamond drill cuddy and 285 level. A total of 342m of jumbo ore development was completed at the 410, 295, 255, 245 and 230 levels, plus 23m of air-leg development from the 295 and 255 levels.



The start of the 295 SOD air-leg ore drive with face grade of 6.4% nickel

### ***Infrastructure***

The surface paste plant and associated reticulation boreholes and pipework, were successfully commissioned at the end of the quarter on schedule and on budget. The paste plant will allow more efficient filling of stope voids and reduce double-handling of waste material, whilst also providing an overall increase in ore extraction over the life of mine.



Commissioned Flying Fox Paste Fill Plant



### Spotted Quoll

#### **Production**

Spotted Quoll production was **68,569t of ore at an average grade of 5.1% nickel for 3,489 nickel tonnes**. Active main lode stoping levels were the 1065, 1050, 1035 (Block B), 1005 and 997 (Block C) levels, with ongoing stoping in the North Lode progressing to the 1220 level.

**Full year Spotted Quoll production was 13,620 nickel tonnes at an average grade of 4.9% nickel** which exceeded internal expectations. Similar to Flying Fox, due to the high grade nature of this style of deposit, positive reconciliation to reserve remains a feature. **Spotted Quoll is now over 4 years LTI free, which is an excellent achievement in the hard-rock underground mining sector.**

#### **Mine Development**

Total jumbo development for the quarter was 1,326m, which included 197m of capital development on the Hanna Decline and 676m of ore drive development.

The high grade ore drive single boom development averaged 168m per month for the quarter, for a total of 505m from the 920, 911, 901 and 890 levels. Three active single boom headings are scheduled to contribute approximately 5,000t per month of high grade ore during the September quarter.



Single boom 911 ore drive with face grade of 6.8% Ni

#### **Infrastructure**

The 790 level access was established during June, which will provide the breakthrough level for the planned surface to underground return air-way ventilation raisebore to be completed during FY16. This will provide life of mine ventilation requirements for Spotted Quoll.

#### **Cosmic Boy Nickel Concentrator**

Tonnes Milled and Sold		2014/2015				YTD Total
		Sep Qtr	Dec Qtr	Mar Qtr	Jun Qtr	
Ore Processed	Tns	153,474	152,407	145,933	157,913	609,727
Grade	%	4.7%	4.7%	4.7%	4.7%	4.7%
Ave. Recovery	%	90%	90%	90%	89%	90%
<b>Ni Tonnes in Concentrate</b>	<b>Tns</b>	<b>6,511</b>	<b>6,434</b>	<b>6,180</b>	<b>6,676</b>	<b>25,801</b>
Ni Tonnes in Concentrate Sold	Tns	6,648	6,246	6,452	6,690	26,036
<b>Total Nickel Sold</b>	<b>Tns</b>	<b>6,648</b>	<b>6,246</b>	<b>6,452</b>	<b>6,690</b>	<b>26,036</b>



During the June quarter, the **Cosmic Boy concentrator processed a record 157,913t of ore at an average grade of 4.7% nickel for a total of 43,336t of concentrate grading 15.4% nickel.** Consequently, 6,676 nickel tonnes were produced with a metallurgical recovery of 89.2% and excellent plant availability of 99%.

**Full year mill throughput was also a record at 609,727t of ore and exceeded design capacity by more than 10%. Full year production has exceeded the upper guidance range of 25,500 nickel tonnes in concentrate, delivering 25,801 nickel tonnes.** The level of plant availability and resulting throughput can be directly attributed to disciplined adherence to maintenance plans established from commissioning of the plant. The plant operations team has been extremely stable and innovative with the use of reagents and other key supply inputs, which have contributed to the outperformance. **The Cosmic Boy Concentrator team is over two years LTI free.**

Delivery of concentrate to BHP Billiton’s operations at Kambalda and Jinchuan’s smelter in China continued without disruption during the quarter. **A total of 43,624t of concentrate was delivered containing 6,690 nickel tonnes.** The concentrate stockpile at quarter end was 1,098t grading 14.7% nickel, containing 163 nickel tonnes. **Total concentrate deliveries for the FY15 were 176,363t of concentrate containing 26,036 nickel tonnes,** which was an increase of 299 nickel tonnes compared to FY14.

Stockpiles			Sep Qtr	Dec Qtr	Mar Qtr	Jun Qtr
Ore	Tns		118,561	98,602	95,399	69,031
Grade	%		4.0%	4.2%	4.2%	4.5%
Concentrate	Tns		1,752	2,644	1,240	1,098
Grade	%		14.3%	15.7%	14.5%	14.7%
<b>Contained Ni in Stockpiles</b>		<b>Tns</b>	<b>4,998</b>	<b>4,581</b>	<b>4,219</b>	<b>3,278</b>

At the end of the quarter, 69,031t of ore at an average grade of 4.5% nickel, containing over 3,115 nickel tonnes was stockpiled at both the mine ore pads and concentrator run-of-mine pad. This represents approximately one and a half months of mill feed which enables the selection of an optimal mill feed blend.

Construction of the main buildings comprising the replacement assay laboratory was completed, with all operating equipment successfully commissioned. A new control room was also installed and successfully commissioned at the Cosmic Boy Concentrator.



New Cosmic Boy Concentrator Control Room



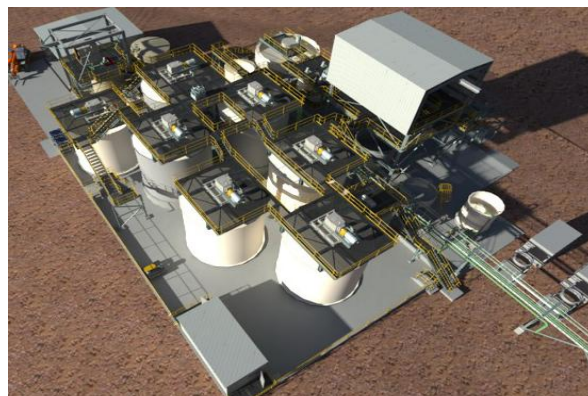


**Mill Enhancement Recovery Project**

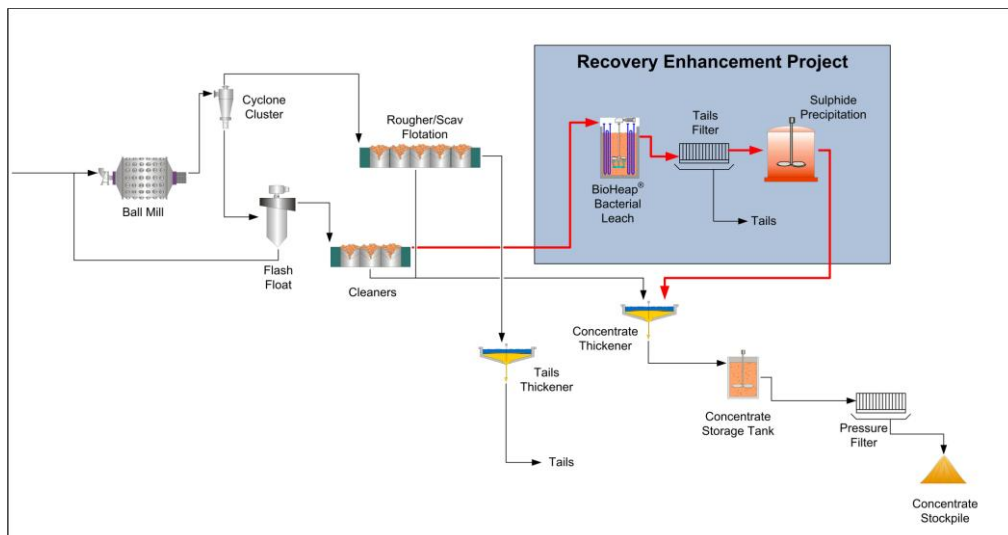
Subsequent to quarter end, the **Cosmic Boy Mill Recovery Enhancement Project (Mill Enhancement)** was approved by the Western Areas Board (refer to ASX announcement on 20 July 2015). GR Engineering was awarded the Mill Enhancement EPC contract under a Guaranteed Maximum Price arrangement. A summary of the keys aspects of this project are:

- Mill recoveries will increase between 3% to 5% over the life of mine;
- Up to an additional 1,200 nickel tonnes in concentrate recovered per annum;
- Estimated capital cost of A\$22m;
- Unit cash operating cost of A\$2.42/lb of nickel in concentrate;
- Construction time of 6 months and could commence from 1 July 2016; and
- Will employ Western Areas’ patented Bioleach technology.

The Board has taken a prudent approach to the capital spend given the current nickel price environment. The Company has committed to purchase the long lead items and complete detailed engineering which are expected to cost around A\$7.0m in the December quarter of FY16. Given the short construction time of six months, a decision to start construction is likely to be made later in the financial year, when consensus predictions have the nickel price trend improving towards the time the Mill Enhancement could commence. On this basis, the Company believes that the Mill Enhancement could commence the commissioning and ramp-up phase from 1 July 2016.



Schematic view of the Mill Enhancement plant



Mill Enhancement plant flow sheet



## Cash Costs

Financial Statistics		2014/2015				YTD
		Sep Qtr	Dec Qtr	Mar Qtr	Jun Qtr	
<b>Group Production Cost/lb</b>						
Mining Cost (*)	A\$/lb	1.82	1.55	1.64	1.62	1.66
Haulage	A\$/lb	0.06	0.06	0.06	0.05	0.06
Milling	A\$/lb	0.44	0.43	0.46	0.40	0.43
Admin	A\$/lb	0.20	0.21	0.18	0.14	0.18
By Product Credits	A\$/lb	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
<b>Cash Cost Ni in Con (***)</b>	<b>A\$/lb</b>	<b>2.50</b>	<b>2.23</b>	<b>2.32</b>	<b>2.19</b>	<b>2.31</b>
<b>Cash Cost Ni in Con/lb (***)</b>	<b>US\$/lb (**)</b>	<b>2.31</b>	<b>1.91</b>	<b>1.82</b>	<b>1.71</b>	<b>1.94</b>
<b>Exchange Rate US\$ / A\$</b>		<b>0.93</b>	<b>0.86</b>	<b>0.79</b>	<b>0.78</b>	<b>0.84</b>
(*) Mining Costs are net of deferred waste costs and inventory stockpile movements (**) US\$ FX for Relevant Quarter is RBA ave daily rate (Jun Qtr = A\$1:US\$0.7788) (***) Payable terms are not disclosed due to confidentiality conditions of the offtake agreements. Cash costs exclude royalties. Note: Grade and recovery estimates are subject to change until the final assay data are received.						

The unit cash cost of production of nickel in concentrate (excluding smelting/refining charges and royalties) was A\$2.19/lb (US\$1.71/lb), representing the lowest quarterly costs for FY15. This facilitated a full year unit cash cost of A\$2.31/lb, being significantly better than the upgraded guidance of A\$2.40/lb to A\$2.50/lb.

The main contributing factors to the continuing out-performance in costs relate to the combination of positive reconciliation to reserve (which includes minimising waste dilution), optimal mill feed blend, reductions in key contract costs and the continual focus on all costs principally at Forrestania.

By far the largest influence on costs during the June quarter, compared to the March quarter, was the record mill throughput and 9% additional nickel tonnes produced. The mill performance resulted in unit costs for processing and administration reducing as a consequence. Furthermore, mine tonnages were lower in the June quarter at Flying Fox, with higher grade to reserve being experienced. As the mining contract is mainly a variable pricing structure, the absolute mining costs for the quarter were lower than planned.

## 4. FORRESTANIA MINERAL RESOURCES AND ORE RESERVES

### Flying Fox

The 'Old Flying Fox' (OTZ) Resource was completed during the quarter with a total of **182,898t** of ore at a grade of **4.1% nickel** for **7,417 nickel tonnes**. The Flying Fox Ore Reserve was updated during the quarter, which included the OTZ Ore Reserve. This area is shown in the Flying Fox long section, Figure 1.

The **Flying Fox massive sulphide resource now stands at 1,955,667t of ore at a grade of 5.2% nickel for 101,493 nickel tonnes**.

The **Flying Fox massive sulphide reserve now stands at 1,525,506t of ore at a grade of 4.2% nickel for 64,146 nickel tonnes**. This represents an increase of 7,596 nickel tonnes (incorporating FY15 depletion of 12,904 nickel tonnes) compared with the ore reserve declared in the June 2014 Quarterly Report of 1.45Mt of ore at a grade of 3.9% nickel for 56,550t nickel tonnes. The replacement of depletion and additional nickel tonnage demonstrates the ongoing orebody extensions at Flying Fox, which have been a consistent feature for a number of years.



Resource extension testing of the T6 domain continued during the quarter with assay results pending. The last diamond hole targeting T6 is planned for the September quarter. The updated T6 resource model is expected to increase nickel tonnes for this domain (between T5 and T7).

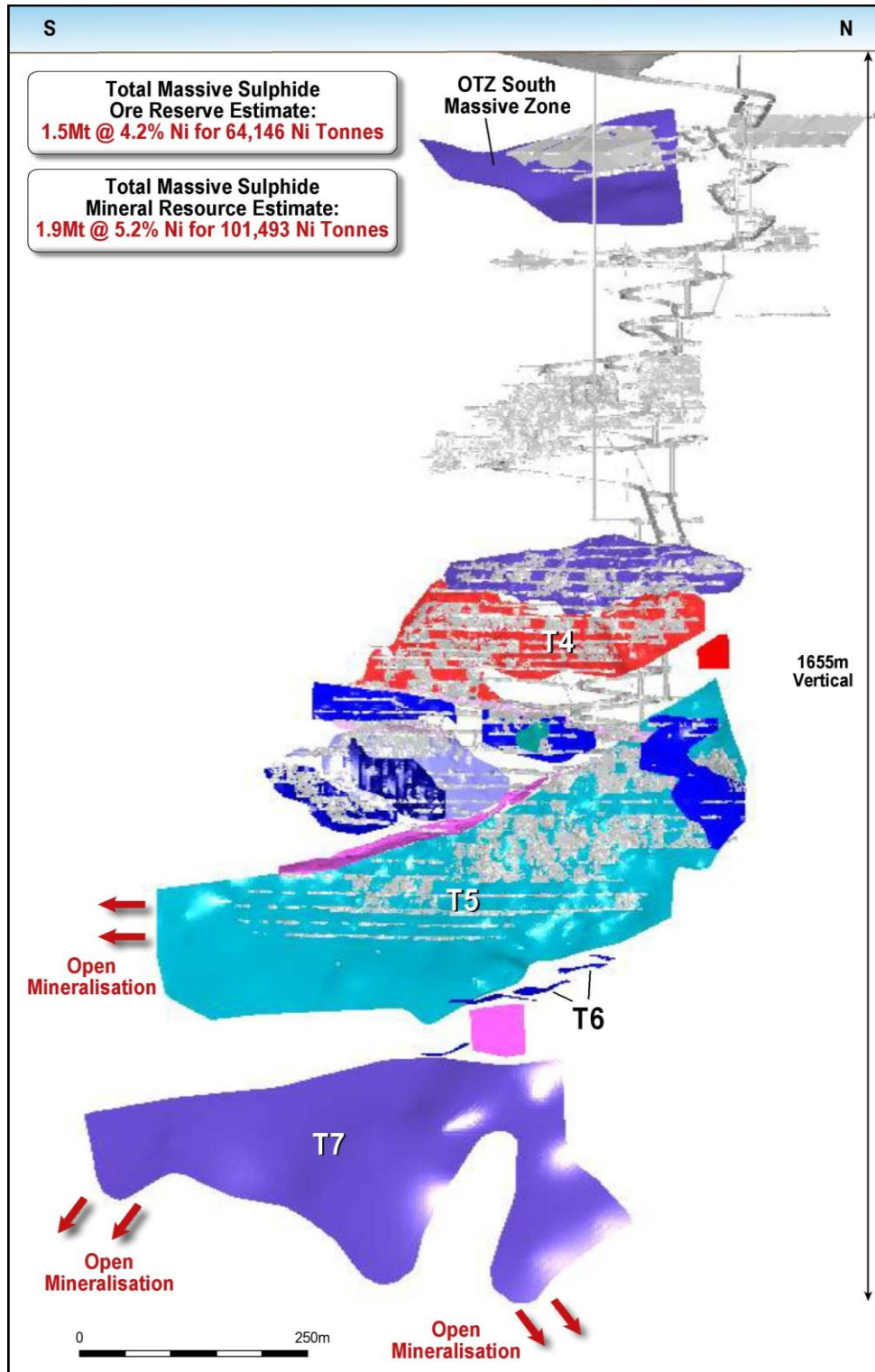


Figure 1: Schematic long section of Flying Fox orebody



**Spotted Quoll**

Underground resource extension drilling to test the Spotted Quoll Stage 2 southern boundary (600m RL) was commenced during the quarter, for a total of 728m drill metres. Two of the three drill holes were completed, resulting in 1.4m and 0.6m intersections of massive sulphide respectively. The assays for the holes are pending. Figure 2 below shows the long section of the Spotted Quoll mine illustrating the capital development and stoping areas.

The Spotted Quoll Mineral Resource Estimate now stands at 2,652,017t of ore at a grade of 5.7% nickel for 150,073 nickel tonnes.

The Spotted Quoll Ore Reserve Estimate was updated during the quarter and now stands at 2,705,273t of ore at a grade of 4.1% nickel for 110,147 nickel tonnes.

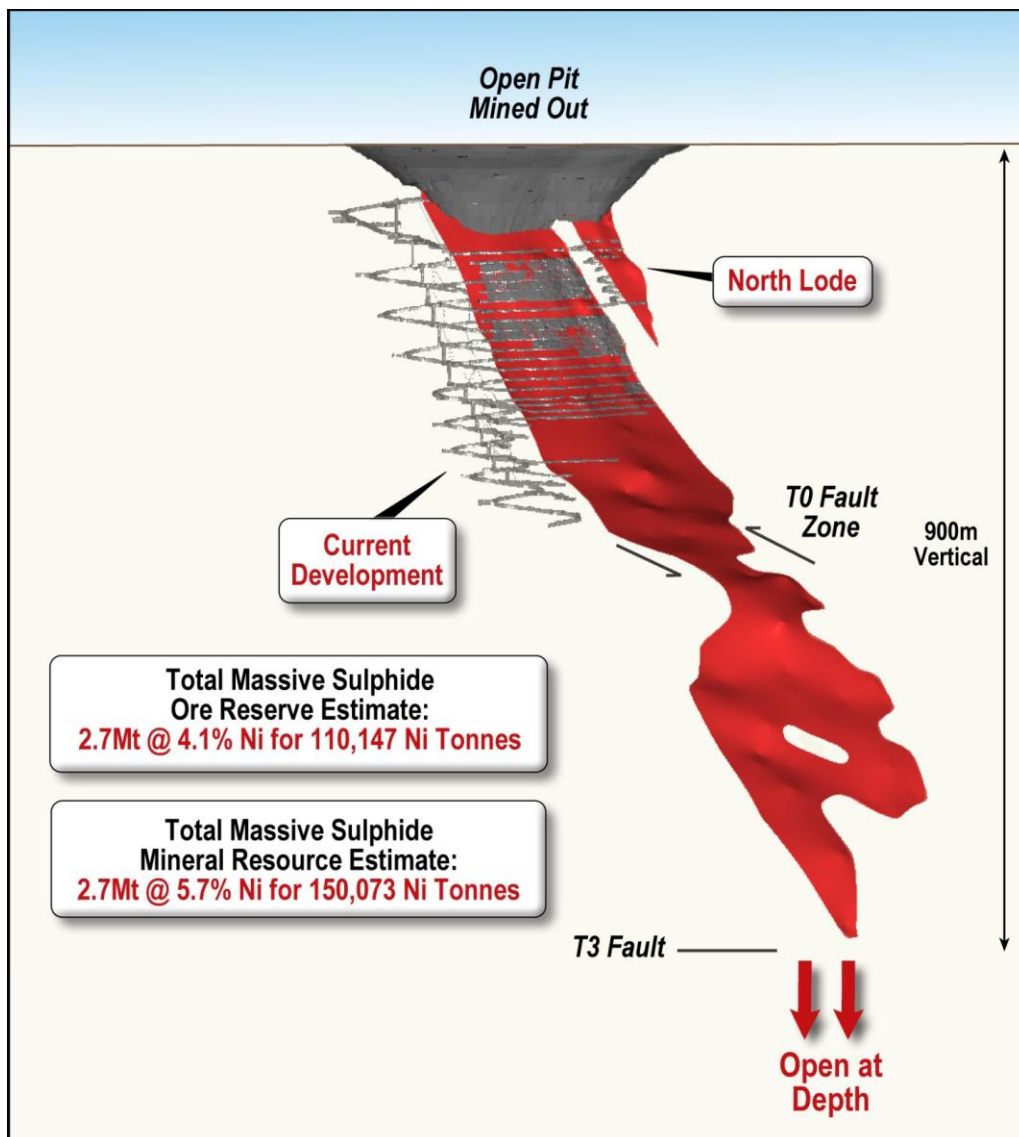
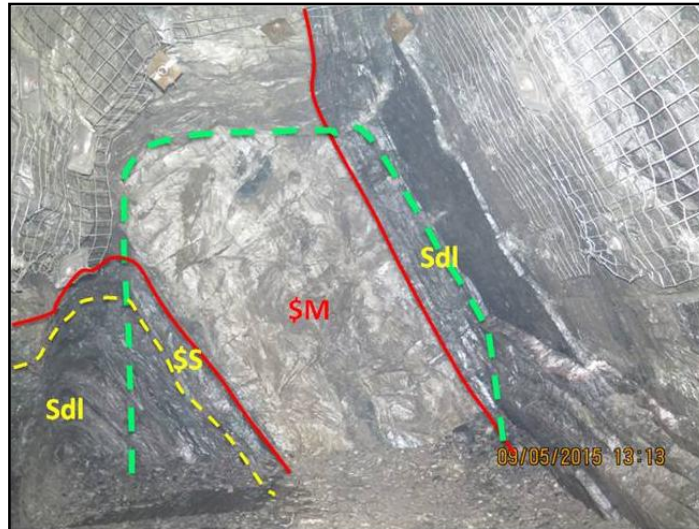


Figure 2: Spotted Quoll schematic with current resource and mining development



The following face photograph shows the Spotted Quoll mineralisation at the 901mRL ore drive face, with a tenor of 14.4% nickel over a true width of 2m and a diluted face grade of 10.5% nickel.



901 ore drive with a diluted face grade of 10.5% nickel

**New Morning / Daybreak**

Surface exploration drilling of the southern Daybreak orebody to assess open-pit potential continued during the quarter (see Figure 3). The drilling program results are summarised below:

- Drilling extended the Daybreak mineralisation by approximately 40m to the south;
- Reduced the non-mineralised gap between the Daybreak and New Morning orebodies; and
- Confirmed shallow mineralisation (average depth approximately 50m) of both orebodies.

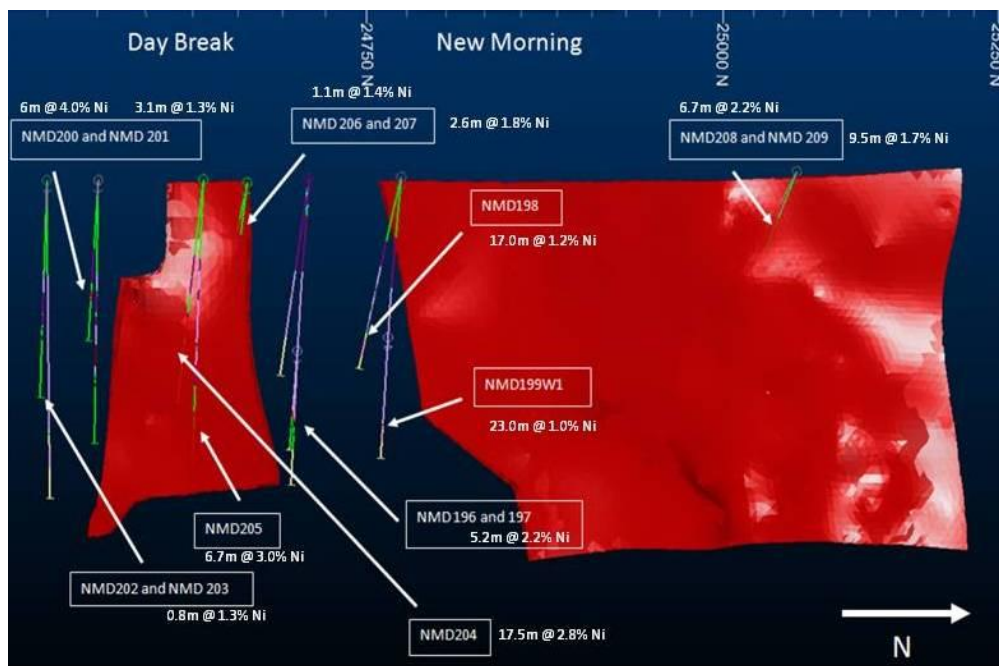


Figure 3: June quarter surface drilling with mineralised intersections

The Forrestania Mineral Resource and Ore Reserve Statements are included at the end of this report.



## 5. BIOHEAP

As part of the New Morning/Daybreak open-pit project, further samples of shallow transitional ore were received to evaluate the amenability for application of the BioHeap process, with results expected in the first half of FY16.

During the quarter, BioHeap received the final grant of Patent 011 for Australia. This patent protects the BioHeap leach process involving elevated pH conditions. The process was developed to significantly reduce acid consumption in the leach process.

BioHeap presented technical papers at the ALTA conference held in Perth. BioHeap continues to seek alliances and working relationships with research institutes, engineering firms and test work facilities. Several proposals were provided to potential clients during the quarter along with initial discussions with other companies who are interested in using the BioHeap technology.

## 6. AGREEMENT TO ACQUIRE THE COSMOS NICKEL COMPLEX

On 19 June 2015, the Company announced that, through its 100% owned subsidiary Australian Nickel Investments Pty Ltd, it had entered into a binding agreement to acquire the Cosmos Nickel Complex (CNC or the Project) from Xstrata Australasia Nickel Operations Pty Ltd (XNAO), a subsidiary of Glencore plc. The acquisition will provide Western Areas with substantial additional exploration upside and a potential second mining operation to sit alongside its premium mines and exploration opportunities at the Company's existing Forrestania Nickel Operation.

Acquisition highlights include:

- World class nickel belt which has yielded one of the highest grade nickel mines ever discovered and operated;
- Substantial exploration opportunities in areas which remain largely untested;
- Third potential underground mine with the undeveloped Odysseus high grade deposit hosting a total Mineral Resource of 7.3 million tonnes @ 2.4% nickel containing 174,000 tonnes of nickel;
- Extensive and well maintained operating infrastructure, including a 450ktpa concentrator, a new SAG mill and large accommodation village to support an early start-up;
- Consistent with Western Areas' core strengths – exploration, development, underground mining and conventional flotation utilising a well proven low cost operating model;
- Excellent timing in the commodity cycle with positive forward forecasts for nickel; and
- Acquisition price of A\$24.5m with A\$11.5m payable at transaction close and two deferred payments of A\$7m and A\$6m nine and eighteen months post-closing respectively.



450ktpa concentrator at Cosmos



The Company is currently working with XNAO to satisfy the conditions precedent to effect completion in the September quarter. At the same time, Western Areas has been enhancing its planning for day one activities, which include:

1. Establishing Western Areas safety, environmental, heritage, logistic and operating protocols at site;
2. Planning for surface geophysics and other exploration activities;
3. Reviewing XNAO data in order to commence studies associated with the Odysseus deposit; and
4. Establishing local relationships.

Readers of this report should refer to the ASX announcement on 19 June 2015 for more details.

## 7. EXPLORATION

During and shortly after the June quarter, exploration activities ramped up significantly. These activities included commencement of drilling in the tenements at the Western Gawler Project in South Australia, the acquisition of the Cosmos Nickel Complex, as well as the exploration activities undertaken at Forresteria and on the Southern Cross joint venture tenements.

### Forresteria Projects

Drilling continued at a number of prospect areas including Sibelius, Spotted Quoll South and Mt Hope prospects, (Figure 4). In addition, drilling commenced testing conductive anomalies identified from electromagnetic (EM) ground geophysical surveys which were undertaken in the previous quarter. These included Teddy Bear, Central Ultramafic Belt (CUB), and Cosmic Boy South. Drilling was also undertaken on the shallower portions of the New Morning mineralisation, as outlined in Section 4. EM surveys continued on the West Quest and South Quest areas/prospects. **It was also pleasing to acknowledge the significant milestone of a seven year LTI free period for drilling contractors Boart Longyear.**



Boart Longyear and Western Areas acknowledging 7 years LTI free milestone at Forresteria.

Planned September quarter exploration and drilling activities are proposed to continue at Spotted Quoll South within the Western Ultramafic Belt (WUB), on the CUB area (South Tetley) and EUB targets, including the Mt Hope and West Quest prospects. EM surveys over the EUB, CUB and Parker Dome prospect will continue.

Within the WUB (Figure 5), compilation of the work to date, south of the Spotted Quoll mine, indicated that this area warrants further testing as it has the potential to host channelised (mineralised) ultramafic rocks that may not have been intersected in the shallower drilling. Accordingly, a series of 800m to 1000m spaced



holes are currently in progress. Four holes (WBD213, 214A, 215 and BD058) have been completed to date, with no visible nickel sulphides identified. Initial geological logging indicates the target horizon was intersected as anticipated in the northern holes, but the southern holes intersected target horizon at a shallower depth. A full review of the data will be completed once all holes are completed and the results of the down-hole electromagnetic (DHEM) surveys are available.

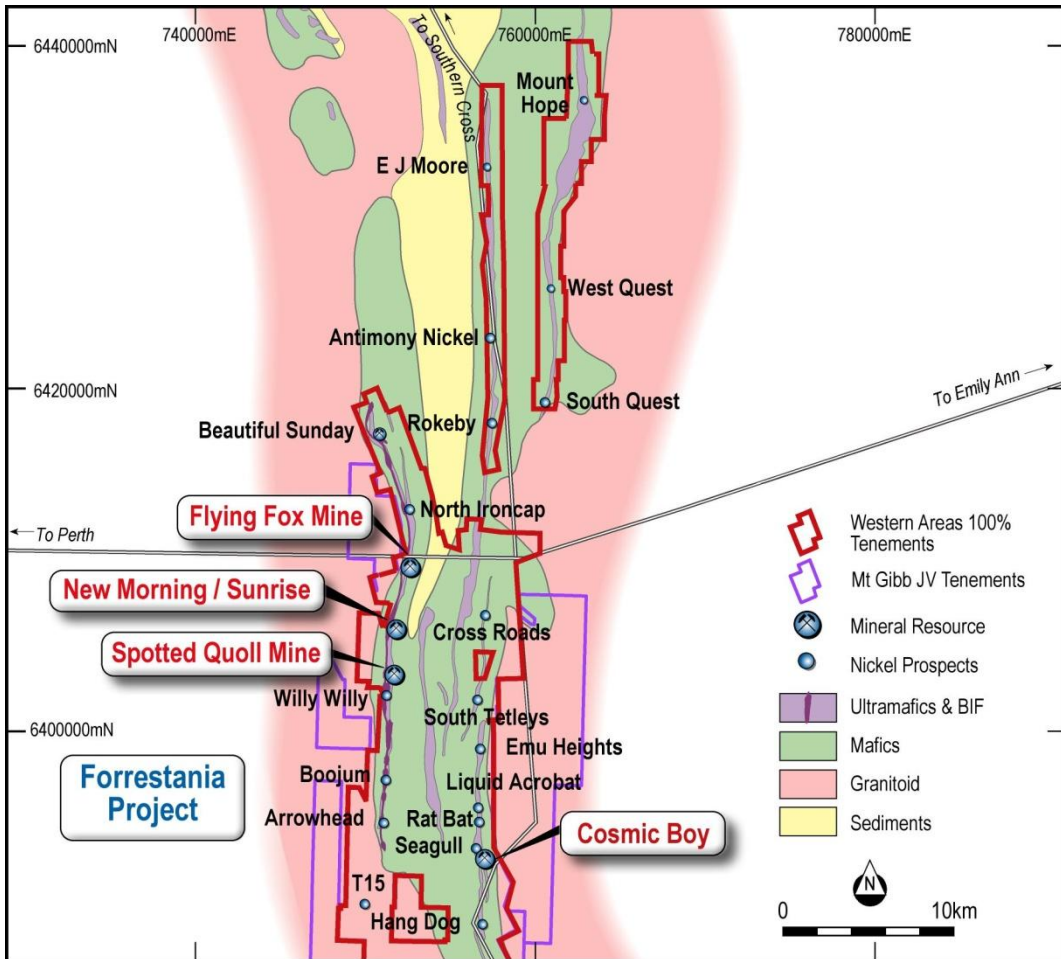


Figure 4: Plan showing Forrestania tenements, mines and key prospects

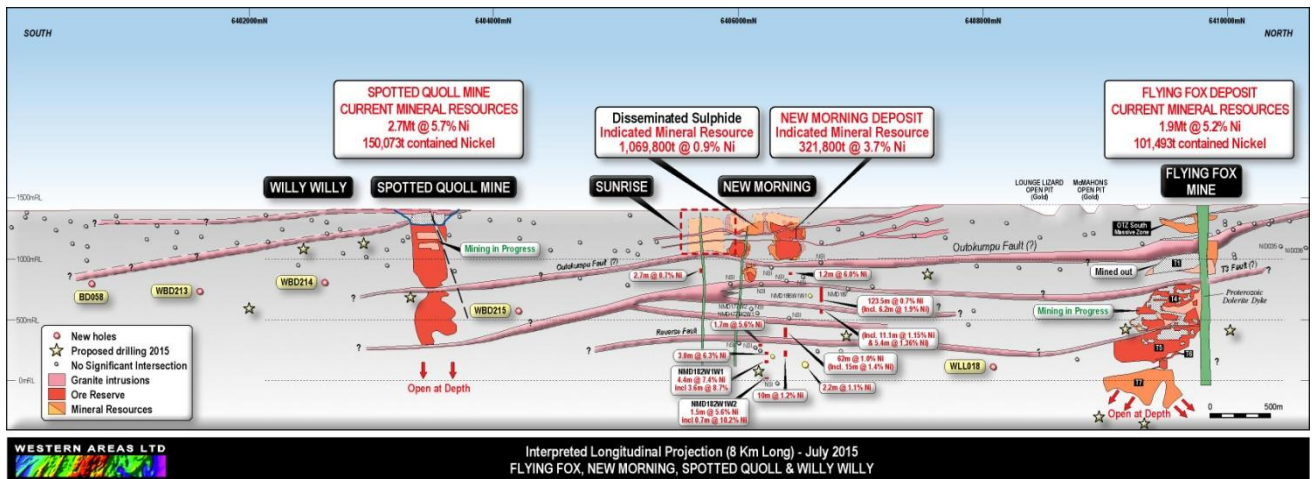


Figure 5: Interpreted long projection of the Western Belt footwall contact extending from south of Spotted Quoll to Flying Fox, showing new and planned drilling





HOLE ID	Easting	Northing	RL_MINE	DEPTH (m)	Type	DIP	Azimuth	INTERCEPTS FROM (m)
WBD213	752196	6401575	388.3	1054	RC / DD	-77	270	Assays Pending
WBD214A	752267	6402600	391.9	804	RC / DD	-70	270	Assays Pending
WBD215	752533	6404202	403.1	919	RC / DD	-76	270	Assays Pending
BD058	752140	6400670	390	736	RC / DD	-77	270	Assays Pending

**Eastern Ultramafic Belt (EUB)**

The prospectivity of the Mt Hope area, located approximately 30km northeast of Flying Fox, continues to be assessed (Figure 6). The area contains a significant volume of cumulate ultramafic rocks (known as the Mt Hope dunite) over a strike length of 8km. Previous work identified the upper cumulate contact as being prospective. Hole MHD036, drilled during the FY15 September quarter, returned **12m @ 1.1% nickel from 529m** close to the upper contact at 556m depth.

June exploration activities, including 9 drill holes, assessed the prospectivity of the upper contact, particularly above the recent intercept in MHD036.

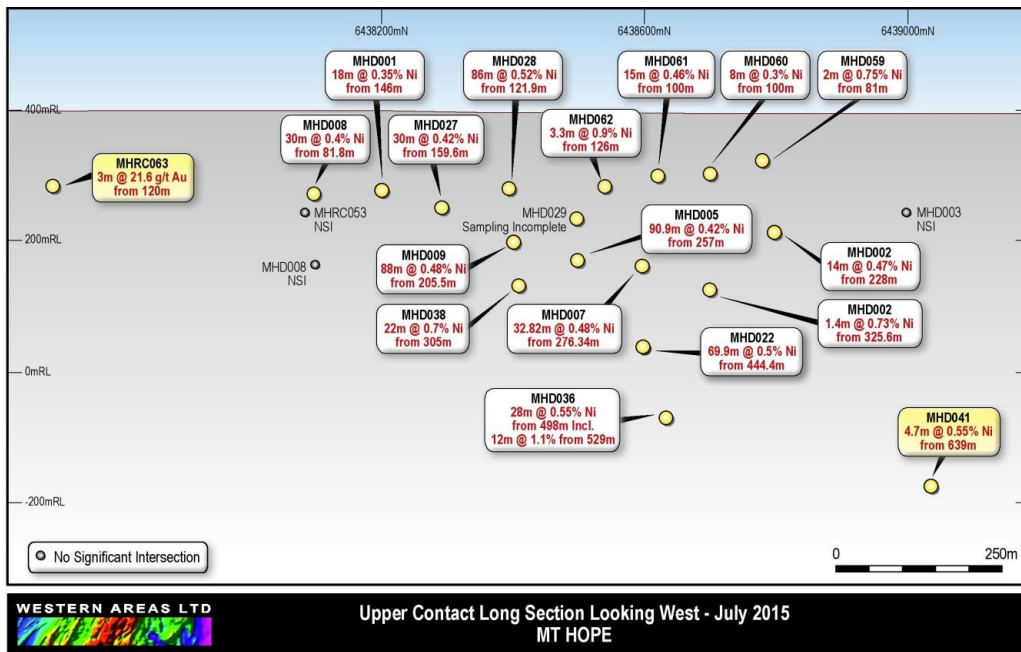


Figure 6: Interpreted long projection of the Mt Hope area

The program consisted of three diamond holes (MHD040 to 042) and six RC holes (MHRC063 to 67 and 57A). MHD041 tested the possible northerly plunge to the upper contact mineralisation. The hole intersected only weak mineralisation on the contact (4.7m @ 0.55% Ni from 639m). The data from these recent holes, together with the yet to be completed DHEM surveys, will be integrated and further drill testing to locate any associated massive sulphides will be conducted in the September quarter.

Interestingly, a 4m composite sample from **MHRC063 returned 4m @ 23.4g/t Au from 119m** (30g fire assay with ICP/AA finish). Subsequent to the end of the quarter, assay results from the 1m sampling from **MHRC063 returned 3m @ 21.7g/t Au from 120m (uncut), including 1m @ 47g/t Au from 121m** (30g fire assay with ICP/AA finish). The mineralisation is associated with strong shearing within ultramafic rocks. Further drilling will be conducted during the September quarter to determine the nature and extent of the gold mineralisation.



HOLE ID	Easting	Northing	RL_MINE	DEPTH (m)	Type	DIP	Azimuth	INTERCEPTS FROM (m)
MHD040	762953	6437102	393	258	RC / DD	-60	90	NSI
MHD041	762746	6438999	397	697	RC / DD	-60	90	4.7m @ 0.55% from 639m
MHD042	763415	6436900	390	130	RC	-60	90	NSI
<b>MHRC063</b>	<b>763151</b>	<b>6437701</b>	<b>385</b>	<b>164</b>	<b>RC</b>	<b>-60</b>	<b>90</b>	<b>3m @ 21.7g/t Au from 120m</b>
MHRC064	763467.829	6437114.055	384	147	RC	-60	90	6m @ 0.7% Ni from 69m
MHRC065	763028.134	6437102.968	393	110	RC	-60	90	NSI
MHRC066	763562.140	6436902.835	385	117	RC	-60	90	NSI
MHRC067	763002.525	6436806.990	404	159	RC	-60	90	NSI

### Geophysical Surveys

EM ground geophysical surveys were completed or in progress by quarter end. The majority of this work was completing coverage of an approximate 10km strike length of ultramafic stratigraphy in the West Quest and South Quest prospect areas. This area has not previously been surveyed with ground EM. Drill testing of anomalous conductive responses generated from the surveys was undertaken in the Teddy Bear, Central Ultramafic Belt (CUB) and Cosmic Boy South (Hang Dog) prospect areas. None of the conductors drill tested returned associated nickel sulphide mineralisation. Drill testing of conductive responses generated at the Mt Hope, West Quest and South Quest prospect areas will be evaluated in the September quarter.

## 7.1 AUSTRALIAN REGIONAL EXPLORATION

### ***Western Gawler Nickel-Copper Joint Venture (WSA earning up to 90% interest)***

During 2014, the Company executed separate Farm-in and Joint Venture Agreements with Gunson Resources Limited (now Strandline Resources Limited) and Monax Mining Limited. The Agreements provide a staged program for Western Areas to acquire up to a 90% interest in a number of key tenements within the Western Gawler region of South Australia. With a combined project area of approximately 2,746km<sup>2</sup>, WSA now holds a strategic land position in an area of increasing interest for gold and base-metal exploration.

Shortly after the end of the quarter, the Company announced the commencement of a major drill program at the Western Gawler Project (ASX release on 6 July 2015). Key highlights include:

- Detailed geological interpretation and target generation completed with high priority mafic-ultramafic intrusive complexes identified;
- Heritage agreements signed;
- Two month air-core/RC drilling program planned, comprising up to 10,000m;
- South Australian Government contributing up to A\$100k; and
- Up to A\$3m exploration program for the Western Gawler Project in FY16.

The project area covers a Proterozoic-aged, interpreted craton margin, with a long-lived and complex structural and intrusive history. The area is known to host mafic-ultramafic intrusive rocks, interpreted to be tectonically related to the Musgrave (Nebo/Babel and Succoth) and Albany-Fraser Orogens (Nova/Bollinger). The Company considers the area has the potential to host significant mafic-ultramafic, intrusive-related deposits (such as Eagle, Voisey's Bay, and Tamarack). These styles of deposit differ from the komatiitic-hosted deposits at Forrestania and Cosmos, with individual deposits being typically larger and poly-metallic (nickel, copper +/- PGEs).



The drilling program has been designed using results of the recently completed and reinterpreted airborne magnetic survey which highlighted numerous features that are interpreted to represent large mafic-ultramafic intrusions, in areas of known gabbroic rocks. These features have been ranked and prioritised based on a number of key criteria and their prospectivity will be evaluated in the upcoming drilling program.

Due to the variable depth of cover over the project area (minimal to 100m), air-core/RC drilling will be utilised for initial assessment of both specifically targeted features and the broader litho-geochemical and target generation work. The drilling will be partly funded (up to \$100,000) by the South Australian Government as part of the PACE Discovery Drilling 2015 program. Any positive results will be followed up with further RC and diamond drilling, and geophysics.

The air-core/RC drilling program, comprising up to 10,000m, will take approximately two months to complete.

WSA continues to enhance its relationships with the traditional owners and the Aboriginal Land Council, and ongoing dialogue may open new areas for access that will facilitate sustained exploration.



Board members of the Far West Coast Aboriginal Corporation and Western Areas and Monax Mining staff at the initial meeting held in Ceduna

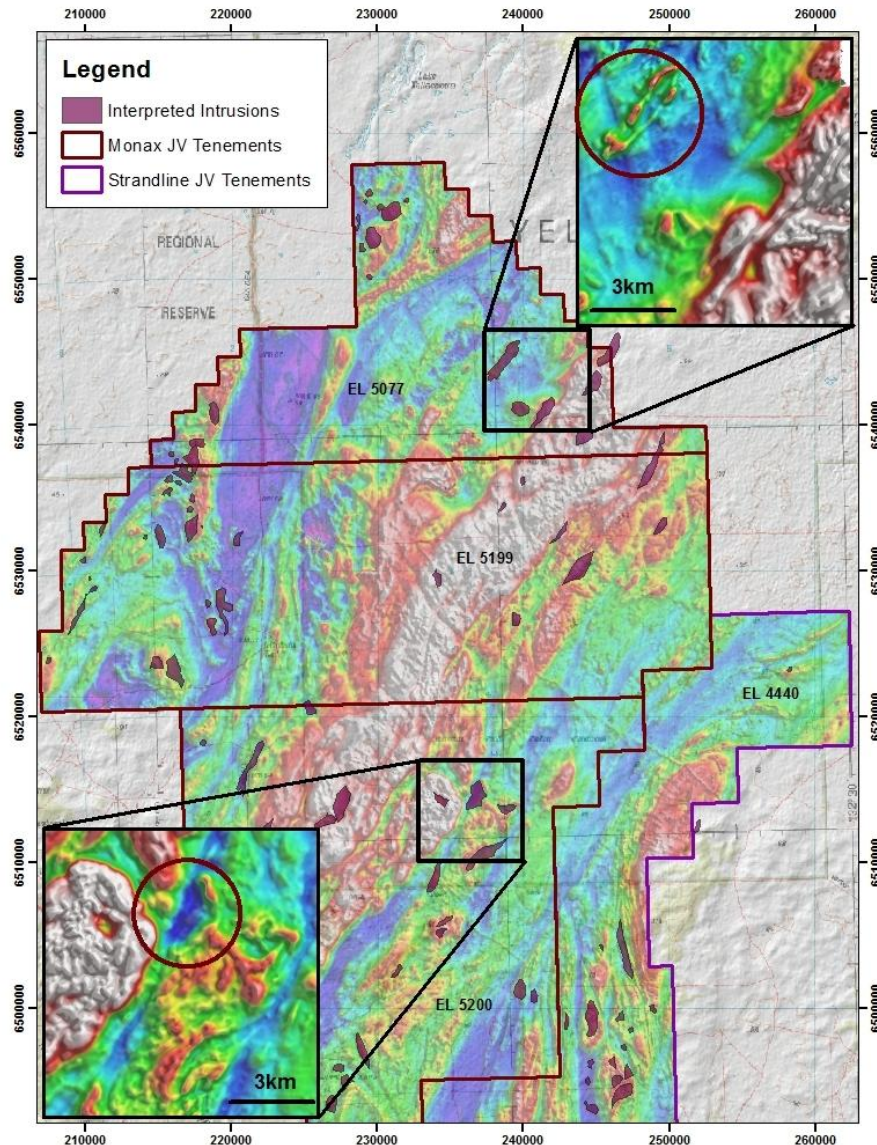


Figure 7: Western Gawler JV Project magnetic imagery (Colour RTP) highlighting two of the potential clusters "camps" of interpreted mafic-ultramafic intrusions

### ***Cosmos Nickel Complex***

Details on the agreement to acquire CNC are contained in Section 6 of this report. From an exploration perspective, the Company believes the CNC tenements host large, cumulative, ultramafic bodies associated with nickel sulphides, and accordingly is encouraged by the strong prospectivity of the area. The acquisition will provide substantial additional exploration opportunities, and the planning and scheduling of an extensive exploration effort which will commence on the closing of the acquisition is in progress. The proposed exploration will include application of the latest deep-sensing geophysical technology not previously utilised at Cosmos, which the Company believes will confirm and add to the targets identified during due diligence. The geophysical activities will be the first stage of a purpose-fit program that has been designed to be conducted over a 24 month period.

During the due diligence, the Company identified multiple exploration opportunities within the near mine areas (some with untested EM anomalies defined in previous work), as well as nickel sulphides identified at a number of new prospects. Drilling will commence with testing of the more advanced exploration targets, including Odysseus Far North and Miranda Well.

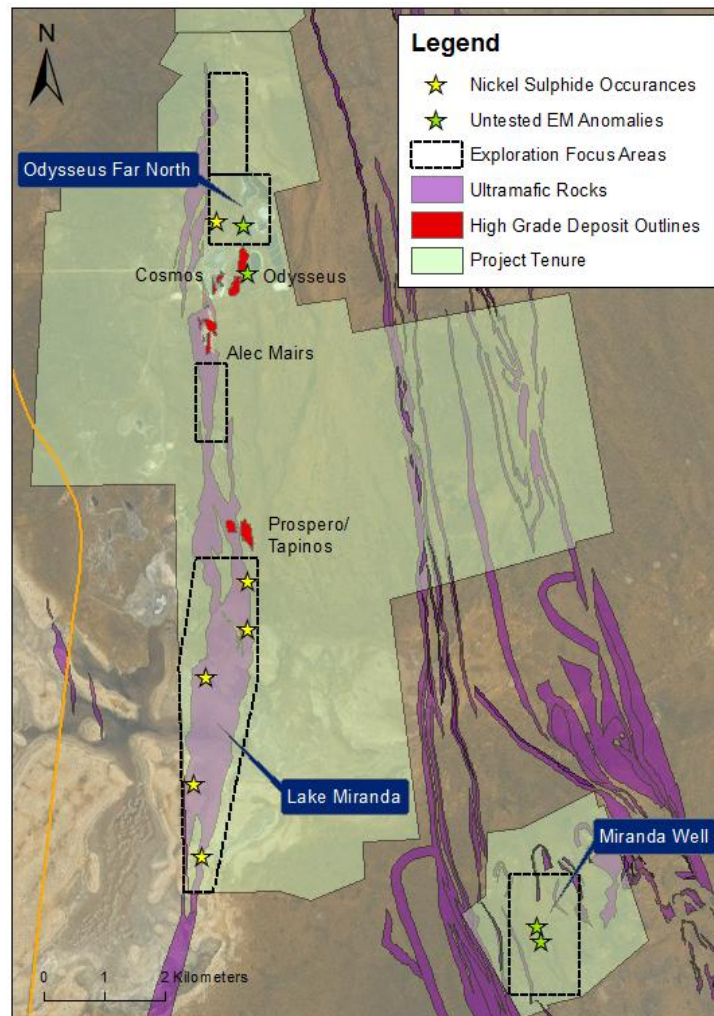


Figure 8: Cosmos Nickel Complex showing simplified geology, tenements and exploration focus areas.

### ***Southern Cross Goldfields Nickel Joint Venture (WSA 70% interest)***

Exploration activity within the Southern Cross Goldfields Nickel Joint Venture during the quarter included the successful completion of a helicopter-borne electromagnetic survey (VTEM) and auger drill geochemical sampling program (Figure 9). The primary objective has been to screen the sub-cropping stratigraphy for EM anomalies and to test these targets for surface expressions of nickel sulphide mineralisation.

The Perrinvale area is relatively unexplored for nickel sulphides and early indications suggest that the stratigraphy could be similar to that evident at the nearby Mt Alexander Nickel Project (BHPB/WSA JV). The sequence is believed to contain high volumes of high MgO ultramafics (that appear to be channelised), proximal to a felsic volcanic footwall sequence. Similar stratigraphy is seen in other highly prospective nickel terranes in Western Australia, and previous drilling at Mt Alexander by WMC/BHPB has intersected 14m @ 1.91% Ni and 0.75% Cu (including 4.1m @ 4.77% Ni and 1.68% Cu).

The UTS Geophysics VTEM survey (approximately 220 line km) successfully highlighted a number of EM anomalies, some of which are interpreted to represent more discrete targets that may be associated with nickel sulphide mineralisation. The areas of discrete EM anomalism are interpreted to be located within an ultramafic/sedimentary package, similar to that at Kambalda and in the west of the Mt Alexander project. In this type of geological environment, potentially channelised ultramafic flows tend to be sinuous, steeply



dipping and short in strike length, as suggested by the modelled conductors (Figure 9). The potential surface expressions of the EM anomalies are being tested by targeted auger geochemical sampling, whilst the broader stratigraphy is also being screened for indications of potential nickel sulphide mineralisation. The auger geochemistry work is on-going with approximately 682 samples collected to date. Assay results are currently pending, however any anomalous results will be followed up with RC drilling.

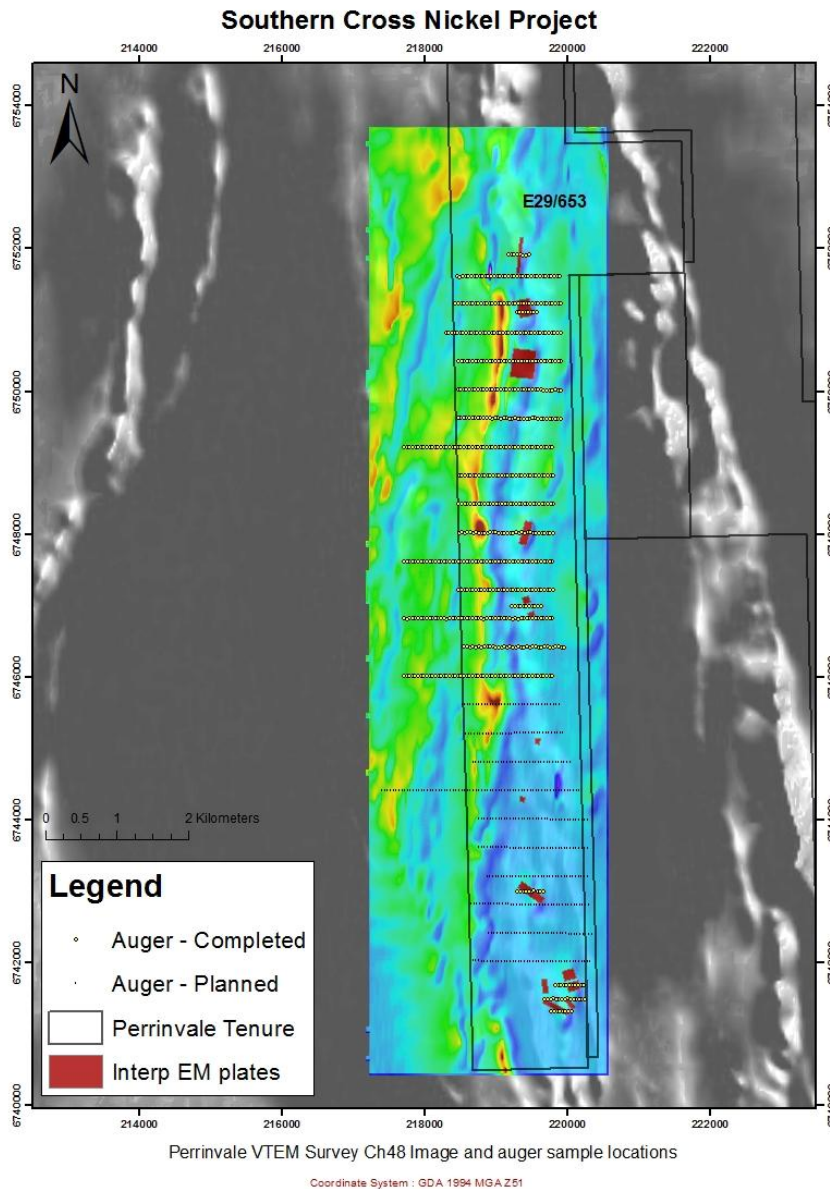


Figure 9: Work completed during the June quarter included a VTEM survey and an auger geochemical survey. Note the subtle EM response and short strike length of the modelled conductors. The EM anomalies are interpreted to be hosted within a thick ultramafic/sedimentary package.



## 8. FINNAUST MINING Plc (WSA 60%)

A 10 hole drilling program, focusing near the previously announced nickel mineralisation discovered in hole 14R306 at the Kelkka nickel/copper project, was completed during the quarter. More random massive sulphides with nickel and copper were identified, but no massive sulphide mineralisation was discovered (see figure below). Further, a total of 7 holes were surveyed using DHEM techniques, indicating some off-hole conductors, which are currently being interpreted. The project is now under full technical review before any further drilling is undertaken.

At Hammaslahti, previously identified mineralised outcrops were mapped during a recent field trip to the southern part of the Hammaslahti belt. This trip confirmed that the area requires a detailed outcrop mapping and sampling program and ground geophysics prior to further drilling. This will now form part of a full geological review of the Hammaslahti area with a view of extending the ground holdings to the south of the old mine area.

Target generation work continues in the Outokumpu area with a program to re-process the ZTEM data package from the area. Once finalised in the September quarter, a drill program will commence in the December quarter.

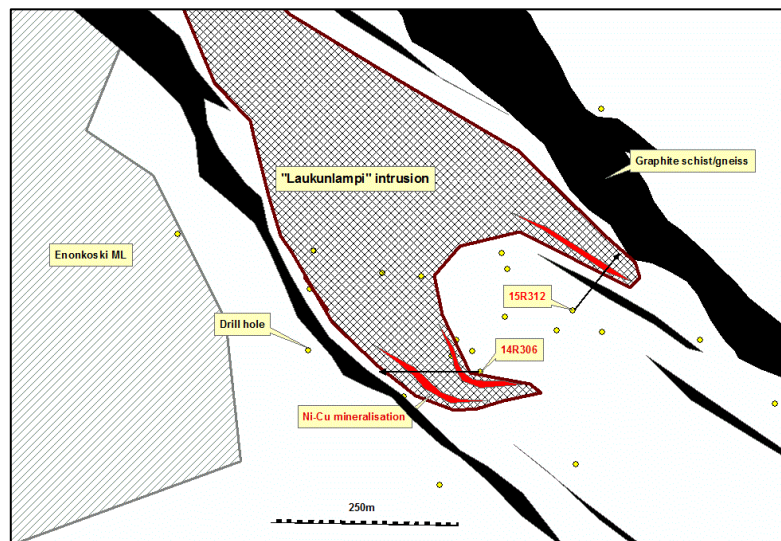


Figure 10: Simplified geology of the Ni-Cu mineralised Laukunlampi intrusion approximately 1km southeast of the old Enonkoski Ni-Cu mine



Massive Ni-Cu sulphide lumps in hole 15R312 drilled in late April 2015



-ENDS-

**For further details, please contact:**

Dan Lougher  
Managing Director & CEO, Western Areas Ltd  
Telephone +61 8 9334 7777  
Email: [dlougher@westernareas.com.au](mailto:dlougher@westernareas.com.au)

David Southam  
Executive Director, Western Areas Ltd  
Telephone +61 8 9334 7777  
Email: [dsoutham@westernareas.com.au](mailto:dsoutham@westernareas.com.au)

Shane Murphy  
FTI Consulting  
Telephone +61 8 9485 8888 / 0420 945 291  
Email: [shane.murphy@fticonsulting.com](mailto:shane.murphy@fticonsulting.com)

Or visit: [www.westernareas.com.au](http://www.westernareas.com.au)

**COMPETENT PERSON'S STATEMENT:**

The information within this report as it relates to exploration results, mineral resources, ore reserves and mine development activities is based on information compiled by Mr Charles Wilkinson, Mr Andre Wulfse and Mr Dan Lougher of Western Areas Ltd. Mr Wilkinson, Mr Wulfse and Mr Lougher are members of AusIMM and are full time employees of the Company. Mr Wilkinson, Mr Wulfse, and Mr Lougher have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.' Mr Wilkinson, Mr Wulfse and Mr Lougher consent to the inclusion in the report of the matters based on the information in the form and context in which it appears.

**FORWARD LOOKING STATEMENT:**

This release contains certain forward-looking statements including nickel production targets. Often, but not always, forward looking statements can generally be identified by the use of forward looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue", and "guidance", or other similar words and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production and expected costs.

Examples of forward looking statements used in this report include: "The Mill Enhancement Recovery Project has been approved by the Board with recoveries to increase 3% to 5% over the life of mine" and, "the Company believes that the Mill Enhancement could commence the commissioning and ramp-up phase from 1 July 2016" and, "The [Western Gawler] area is known to host mafic-ultramafic intrusive rocks, interpreted to be tectonically related to the Musgrave (Nebo/Babel and Succoth) and Albany-Fraser Orogens (Nova/Bollinger). The Company considers the area has the potential to host significant mafic-ultramafic, intrusive-related deposits (such as Eagle, Voisey's Bay, and Tamarack)".

This announcement does not include reference to all available information on the Company, the Forrestania Nickel Operation or Company subsidiary's and should not be used in isolation as a basis to invest in Western Areas. Potential investors should refer to Western Areas' other public releases and statutory reports and consult their professional advisers before considering investing in the Company.

For Purposes of Clause 3.4 (e) in Canadian instrument 43-101, the Company warrants that Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability.

THIS NEWS RELEASE IS NOT FOR DISTRIBUTION TO THE U.S. NEWSWIRE SERVICES OR FOR DISSEMINATION IN THE U.S





<b>Western Areas Ore Reserve / Mineral Resource Statement - Effective date 30th June 2015</b>					
<b>Deposit</b>	<b>Tonnes</b>	<b>Grade Ni%</b>	<b>Ni Tns</b>	<b>JORC Classification</b>	<b>JORC Code</b>
<b>Ore Reserves</b>					
1. Flying Fox Area	1,525,506	4.2	64,146	Probable Ore Reserve	2012
2. Spotted Quoll	338,860	4.4	14,961	Proved Ore Reserve	2012
	2,366,413	4.0	95,186	Probable Ore Reserve	2012
3. Diggers Area					
Digger South	2,016,000	1.4	28,950	Probable Ore Reserve	2004
Digger Rocks	93,000	2.0	1,850	Probable Ore Reserve	2004
<b>TOTAL ORE RESERVES</b>	<b>6,339,779</b>	<b>3.2</b>	<b>205,093</b>		
<b>Mineral Resources</b>					
1. Flying Fox Area					
T1 South	64,550	4.0	2,560	Indicated Mineral Resource	2004
	35,200	4.9	1,720	Inferred Mineral Resource	2004
T1 North	45,400	4.2	1,900	Indicated Mineral Resource	2004
	12,700	4.8	610	Inferred Mineral Resource	2004
OTZ Sth Massive Zone	20,560	4.1	843	Inferred Mineral Resource	2012
OTZ Sth Massive Zone	162,338	4.0	6,574	Indicated Mineral Resource	2012
T4 Massive Zone	140,864	5.6	7,904	Indicated Mineral Resource	2012
T5 Massive Zone + Pegs	1,202,180	6.1	73,354	Indicated Mineral Resource	2012
T6 and T7 Massive Zone	47,331	5.2	2,450	Indicated Mineral Resource	2012
	224,544	1.6	3,578	Inferred Mineral Resource	2012
Total High Grade	1,955,667	5.2	101,493		
T5 FF Disseminated Zone	197,200	0.8	1,590	Indicated Mineral Resource	2004
	357,800	1.0	3,460	Inferred Mineral Resource	2004
T5 LL Disseminated Zone	4,428,000	0.8	36,000	Indicated Mineral Resource	2004
Total Disseminated FF - LL	4,983,000	0.8	41,050		
Total Flying Fox - Lounge Lizard	6,938,667	2.1	142,543		
New Morning / Daybreak					
Massive Zone	321,800	3.7	12,010	Indicated Mineral Resource	2004
	93,100	3.5	3,260	Inferred Mineral Resource	2004
Disseminated Zone	1,069,800	0.9	9,650	Indicated Mineral Resource	2004
	659,200	0.9	5,780	Inferred Mineral Resource	2004
Total New Morning / Daybreak	2,143,900	1.4	30,700		
Spotted Quoll					
	284,047	6.5	18,459	Measured Mineral Resource	2012
	1,904,381	5.6	106,487	Indicated Mineral Resource	2012
	463,589	5.4	25,127	Inferred Mineral Resource	2012
Total Spotted Quoll	2,652,017	5.7	150,073		
Beautiful Sunday					
	480,000	1.4	6,720	Indicated Mineral Resource	2004
<b>TOTAL WESTERN BELT</b>	<b>12,214,584</b>	<b>2.7</b>	<b>330,036</b>		
2. Cosmic Boy Area					
Cosmic Boy	180,900	2.8	5,050	Indicated Mineral Resource	2004
Seagull	195,000	2.0	3,900	Indicated Mineral Resource	2004
<b>TOTAL COSMIC BOY AREA</b>	<b>375,900</b>	<b>2.4</b>	<b>8,950</b>		
3. Diggers Area					
Diggers South - Core	3,000,000	1.5	44,700	Indicated Mineral Resource	2004
Diggers South - Halo	4,800,000	0.7	35,600	Indicated Mineral Resource	2004
Digger Rocks - Core	54,900	3.7	2,030	Indicated Mineral Resource	2004
Digger Rocks - Core	172,300	1.1	1,850	Inferred Mineral Resource	2004
Digger Rocks - Halo	1,441,000	0.7	10,350	Inferred Mineral Resource	2004
Purple Haze	560,000	0.9	5,040	Indicated Mineral Resource	2004
<b>TOTAL DIGGERS AREA</b>	<b>10,028,200</b>	<b>1.0</b>	<b>99,570</b>		
<b>TOTAL MINERAL RESOURCES</b>	<b>22,618,684</b>	<b>1.9</b>	<b>438,556</b>		



## JORC 2012 TABLE 1 – Forrestania Exploration

## Section 1: Sampling Techniques and Data – Forrestania

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration targets were generally sampled using diamond drill (DD), where applicable with Reverse Circulation (RC) pre-collars to nominally between 100m and 200m depth). Holes were typically drilled perpendicular to the strike (north-south) of the stratigraphy, at angles ranging between 55° and 75°.</li> <li>Drill holes were located initially with hand held GPS and later surveyed by differential GPS. DD holes were used to obtain high quality samples that were fully oriented and logged for lithological, structural, geotechnical attributes. Each sample of diamond drill core submitted to ALS laboratories at Malaga, Perth was weighed to determine density by the weight in air, weight in water method. The balance used for these determinations was an EK-12KG electronic balance with an accuracy of +/- 0.001 Kg, the balance is regularly checked with 2kg, 5kg and 7kg standard weights. All sampling was conducted under WSA QAQC protocols which are in accordance with industry best practice.</li> <li>Diamond drill core (NQ2) is 1/4 core sampled on geological intervals (0.2m - 1.5m) to achieve sample weights under 2kgs. Samples were crushed, dried and pulverised (total prep) to produce a sub sample for analysis by 4 acid digest with an ICP/AES and FA/ICP (Au, Pt, Pd) finish. RC drilling is used to obtain 1m samples (or composited over 2 to 4m) from which 3kg is pulverised (total prep) to produce a sub sample for assaying as per DD samples.</li> </ul>
Drilling Techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>Diamond drilling comprises HQ and NQ2 sized core . The core was oriented using ACT II control panels and ACT III downhole units. Orientation spears are also used intermittently as a validation tool.</li> <li>Shallow drilling at New Morning was completed using PQ triple tube drilling).</li> <li>RC drilling comprises nominally 140mm diameter face sampling hammer drilling.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias.</li> </ul>	<ul style="list-style-type: none"> <li>Diamond core and RC recoveries are logged and recorded in the database. Overall recoveries are &gt;95% and there was no core loss issues or significant sample recovery problems. Core loss is noted where it occurs.</li> <li>Diamond core was reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the drillers. RC samples were visually checked for recovery, moisture and contamination.</li> <li>The bulk of drilling is by diamond core drilling, which has high recoveries. The massive sulphide style of mineralisation and the consistency of the mineralised intervals are considered to preclude any issue of sample bias due to material loss or gain.</li> <li>Drilling in the oxidised profile results in more incomplete core recoveries.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> </ul>	<ul style="list-style-type: none"> <li>Geotechnical logging was carried out on all diamond drill holes for recovery, RQD and number of defects (per interval). Information on structure type, dip, dip direction, alpha angle, beta angle, texture, shape, roughness and fill material is stored in the structure table of the database.</li> </ul>



Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc).</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>Logging of diamond core samples recorded lithology, mineralogy, mineralisation, structural, weathering, colour and other features of the samples. Core was photographed in both dry and wet form.</li> <li>All diamond drill holes were logged and photographed in full. RC holes are logged in full.</li> </ul>
Sub-sampling techniques and sampling preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Core was cut in quarters (NQ2) onsite using an Almonte automatic core saw. All samples were collected from the same side of the core.</li> <li>All samples in the New Morning Deeps Exploration target were taken from NQ diamond drill core.</li> <li>RC samples were collected on the rig using cone splitters. Composite samples are collected via riffle splitting or spearing to generate a single sample of less than 3kg.</li> <li>The sample preparation of diamond core follows industry best practice in sample preparation involving oven drying, coarse crushing of the half core sample down to ~10 mm followed by pulverisation of the entire sample (total prep) using Essa LM5 grinding mills to a grind size of 85% passing 75 micron.</li> <li>Field QC procedures involve the use of certified reference material as assay standards, along with blanks, duplicates and barren washes. The insertion rate of these averaged 1:20, with an increased rate in mineralised zones.</li> <li>Field duplicates were conducted on approximately 1 in 10 drill intersections. During assessment of mineralised areas 10% of samples were also selected for umpire sampling. All QAQC samples were returned within acceptable statistical ranges.</li> <li>Standards are inserted approximately every 20 samples or at least one every hole for both diamond and RC drilling. Duplicates are normally inserted every 20 samples in RC drilling and never with exploration diamond drilling. Blanks are inserted selectively in RC and diamond programs, at least one and sometimes two samples per hole or after massive sulphides or prominent mineralisation for regular monitoring and to detect smearing in the laboratory processing.</li> <li>The sample sizes are considered to be appropriate to correctly represent the sulphide based on: the style of mineralisation (disseminated sulphides), the thickness and consistency of the intersections, the sampling methodology and percent value assay ranges for the primary elements.</li> </ul>
Quality of assay data laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>All samples were subjected to ICP-AES analysis using nitric, perchloric, hydrofluoric and hydrochloride acid digest. Samples which assayed greater than 10000ppm Ni were treated to OG62 near total digest using the same 4 acids, suitable for silica based samples, and analysed using conventional ICP_AES analysis. Samples were routinely assayed for Au and PGE's using PGM-ICP23. Au samples reporting &gt;10g/t were assayed using Fire Assay and AAS finish.</li> <li>No Geophysical tools were used to determine any element concentrations relating to this exploration target estimate. A handheld NITON XRF instrument was used to determine the approximate nature of the mineralisation. Appropriate QAQC techniques were used to validate any portable XRF analysis. However,</li> </ul>



Criteria	JORC Code Explanation	Commentary
		<p>NITON XRF data is only used as an approximate guide. All reported intersections are gathered using industry best practice laboratory assay techniques.</p> <ul style="list-style-type: none"> <li>Standards and blanks were routinely used to access company QAQC (approx 1 std for every 12-15 samples). Duplicates were not taken in the Sunrise program. However, they are routinely taken (every 10th DD hole) within the nearby Flying Fox and Spotted Quoll Ni mines, which return accuracy and precision within acceptable limits.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Adrian Black of Newexco Pty Ltd (a member of the AIG), an independent exploration company, has visually verified significant intersections in diamond core.</li> <li>No holes were twinned in the recent drilling program.</li> <li>Primary data was collected using Excel templates utilising lookup codes, on laptop computers. All data was validated by the supervising geologist, and sent to Newexco for validation and integration into an SQL database.</li> <li>No adjustments were made to assay data compiled for this estimate.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Hole collar locations were surveyed using Western Areas surveyors under the guidelines of best industry practice. The Leica GPS1200 was used for all surface work has an accuracy of +/- 3cm.</li> <li>Elevation data were collected in AHD RL and a value of 1,000m was added.</li> <li>MGA94 Zone 50 grid coordinate system is used.</li> <li>The accuracy of the pillars used in WSA's topographical control networks operate within the Mines Regulations accuracy requirement of 1:5000 for control networks.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Drill holes were varied according to target type. Where initial drilling was undertaken holes are nominally 100m to 400m apart. Where mineralisation is identified holes are spaced at an approx. 50m (northing) x60m (relative level) grid.</li> <li>Sampling compositing has been applied to some of the RC sampling, following initial testing using a handheld NITON XRF instrument.</li> <li>Samples were composited to one metre lengths, making adjustments to accommodate residual sample lengths.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>The majority of the drill holes are orientated to achieve intersection angles as close to perpendicular as possible. The steep dipping nature of the stratigraphy at some targets (700 to 800) e.g. New Morning means this is not always achieved.</li> <li>No orientation based sampling bias has been observed in the data, intercepts are reported as downhole lengths.</li> </ul>
Sample Security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>All samples are prepared onsite under the supervision of Newexco/Western Area staff.</li> <li>All samples are collected in sealed task specific containers (Bulka bags – plastic pallets) and delivered from site to Perth and then the assay laboratory by transport contractor, NEXUS.</li> </ul>



Criteria	JORC Code Explanation	Commentary
Audits and Reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>Adrian Black of Newexco Pty Ltd (a member of the AIG), an independent exploration company, has reviewed the data and sampling techniques employed by WSA.</li> </ul>

## 2012 Edition JORC Code - Table 1

## Section 4 Estimation and Reporting Ore Reserves - Spotted Quoll

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	<ul style="list-style-type: none"> <li>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</li> <li>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</li> </ul>	<p>Western Areas Ltd (WSA) released the new Spotted Quoll (SQ) Mineral Resource estimate in the March 2015 Quarterly Report.</p> <p>The Mineral Resources estimate is inclusive of the Ore Reserves.</p>
Site visits	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<p>Spotted Quoll is an operating underground mine and the Competent Person carries out routine inspections of the mine-site and underground workings as part of his normal duties.</p> <p>WSA has established a fit-for-purpose data collection and record keeping system used by the technical staff to effectively manage the operation. This data is used in the present Ore Reserves estimation.</p> <p>Mine design and mining method is based primarily on the recommendations laid out in the original Feasibility study.</p>
Study status	<ul style="list-style-type: none"> <li>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</li> <li>The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</li> </ul>	<p>WSA completed a SQ Feasibility Study in November 2010 as a continuation of the Spotted Quoll open pit (release 15th of December 2010). Underground mining commenced on the 2nd of May 2010 with firing the first portal face. The Feasibility Study is still valid and has been updated with the experience gained.</p> <p>The current Ore Reserve estimation is an update of a pre-existing reserve using the new Mineral Resource, updated modifying factors, mine performance KPI's and a revised commodity price estimate.</p>
Cut-off parameters	<ul style="list-style-type: none"> <li>The basis of the cut-off grade(s) or quality parameters applied.</li> </ul>	<p>An Ore Reserve cut-off grade of 2% Ni for stopes and 1.5% Ni for ore drives was selected using industry standard methods that included the following criteria</p> <ul style="list-style-type: none"> <li>Minimum Head Grade fitting the Mill requirements.</li> <li>Ore Reserve average grade equal or greater than Life of Mine breakeven grade.</li> <li>Mean Arsenic concentration that enables production of a saleable concentrate</li> <li>Positive LOM NPV</li> <li>Maximise steady state production</li> <li>LOM Nickel price curve from USD6.50/lb @ FX0.80 to USD8.00/lb @ FX 0.75.</li> </ul> <p>Some of the key ore reserve assumptions are considered commercially sensitive, however as the mine has been in operation for some years the reserve cut off parameters are developed using historical operating performance and statistics. More details regarding cut off parameters are reported in the following sections.</p>
Mining factors or assumptions	<ul style="list-style-type: none"> <li>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</li> </ul>	<p>The mining method used is predominantly longhole stoping with a top down sequence and paste filling of resultant voids.</p> <p>The mining model used 5DPlanner and EPS Codes (CAE software house). Mining factors have been selected using</p>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</li> <li>The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</li> <li>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</li> <li>The mining dilution factors used.</li> <li>The mining recovery factors used.</li> <li>Any minimum mining widths used.</li> <li>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</li> <li>The infrastructure requirements of the selected mining methods.</li> </ul>	<p>historical performance data of the deposit, particularly:</p> <ul style="list-style-type: none"> <li>The Mineral Resource model used is the file mod_sq_mre_planning_1114.dtm in Datamine format (see Sections 1 to 3 of the Table 1 on the Mineral Resource market release).</li> <li>The minimum mining width is 1.0 metre.</li> <li>The max stable stope length is 20 metres with a stope height between 7 and 15 metres. Other geotechnical parameters are contained in the current Ground Control Management Plan.</li> <li>Stope Hanging Wall planned dilution is 0.75 metres and Foot Wall planned dilution is 0.3 metres.</li> <li>Stope Unplanned dilution (including hosting rock and paste dilution) is 4% of stope mass @ 0.4 Ni%.</li> <li>A halo of low grade material averaging 0.4% Ni is included in the block model around the ore body wire frames, extending 4 m in the hanging-wall and 4 m in the foot-wall. 0% Ni grade is assigned to the material outside the block model.</li> <li>Ore recoveries range from 98% in the stopes and 100% in the ore drives.</li> <li>Pillar factor for unplanned pillars is 0%.</li> <li>Production rates reflect current mining performances and practice.</li> <li>Standard SG for dilution is 2.8t/m<sup>3</sup>.</li> </ul> <p>No Inferred material has been utilised for the Ore Reserves estimation.</p> <p>Spotted Quoll is an operating mine with existing infrastructure and planned extensions included in the LOM plan.</p>
Metallurgical factors or assumptions	<ul style="list-style-type: none"> <li>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</li> <li>Whether the metallurgical process is well-tested technology or novel in nature.</li> <li>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</li> <li>Any assumptions or allowances made for deleterious elements.</li> <li>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</li> <li>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</li> </ul>	<p>The metallurgical factors used are from the existing Cosmic Boy Concentrator (CBC) using conventional nickel sulphide floatation techniques combined with historical operating performance data. These factors are considered commercially sensitive and may be made available on request.</p> <p>The metallurgical process is a conventional Nickel Sulphide floatation process with three stage crushing circuit and wet screening for size classification; single ball mill with cyclone size classification and two stage floatation circuits.</p> <p>The resultant concentrate is sold into existing off-take contracts with BHPB and Jinchuan.</p>
Environmental	<ul style="list-style-type: none"> <li>The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.</li> </ul>	<p>Spotted Quoll open pit mine received final environmental approval in October 2009. Approvals were provided under both Western Australian legislation; principally being Parts IV and V of the Environmental Protection Act 1986 (EP Act) and the Mining Act 1978 (M Act) and Commonwealth legislation being the Environment Protection and Biodiversity Conservation Act 1999, (EPBC Act). Environmental approval has also been received, to mine Nickel sulphide ore from the underground extension of the Spotted Quoll open cut mine under Western Australian legislation being principally Parts IV and V of the EP Act and the M Act. No further approval was required from the</p>



Criteria	JORC Code explanation	Commentary
		<p>Commonwealth for underground mining at Spotted Quoll.</p> <p>A list of Key State and Commonwealth approvals obtained for both the Spotted Quoll open pit and the underground operations may be made available by request.</p>
Infrastructure	<ul style="list-style-type: none"> <li>The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.</li> </ul>	<p>SQ is an operating mine with adequate infrastructure and planned future capital project extensions are included in the LOM plan.</p> <p>SQ is supplied by Western Power 33kV overhead power-line from the Bounty switchyard 60km to the north of SQ mine-site.</p> <p>Potable water is produced via RO plants located at CB concentrator and pumped via a pipeline to the mine-site. Process water is recycled from the mine dewatering network.</p> <p>Bulk material logistics is predominately via conventional truck haulage.</p> <p>Mine personnel reside at the nearby Cosmic Boy Village (529 rooms) and are predominately a FIFO (via CB airstrip) workforce with some minor DIDO.</p> <p>The mine-site is 80km to the east of the Hyden township and has two main gazetted gravel road accesses (east from Hyden and south from Varley).</p>
Costs	<ul style="list-style-type: none"> <li>The derivation of, or assumptions made, regarding projected capital costs in the study.</li> <li>The methodology used to estimate operating costs.</li> <li>Allowances made for the content of deleterious elements.</li> <li>The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co-products.</li> <li>The source of exchange rates used in the study.</li> <li>Derivation of transportation charges.</li> <li>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</li> <li>The allowances made for royalties payable, both Government and private.</li> </ul>	<p>Capital Underground Development costs are derived from the LOM plan based on existing contracts and historical performance and data.</p> <p>All other Capital costs are sourced as necessary via quotes from suppliers or technical studies.</p> <p>Mining, processing, administration, surface transport, concentrate logistics and state royalty costs are based on existing cost estimates.</p> <p>The nickel price and FX assumptions used were sourced from industry standard sources.</p> <p>Nickel price from USD6.50/lb @ FX0.80 to USD8.00/lb @ FX 0.75.</p> <p>Net Smelter Return (NSR) factors were sourced from existing concentrate off-take contracts.</p>
Revenue factors	<ul style="list-style-type: none"> <li>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</li> <li>the derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</li> </ul>	<p>These have been selected after consideration of historical commodity prices variations over time and the requirement for the Reserve to be robust to potentially volatile commodity price and foreign exchange conditions.</p> <p>The price setting mechanism for the sale of product subject to this report is traded openly on the London Metals Exchange ("LME").</p> <p>Potential penalties and net smelter revenue factors are included in the Smelter Return factor used. This factor is based on the historical data from previous FY's and is considered commercially sensitive by the company and may be made available on request.</p> <p>Two main selling contracts structures are currently used by Western Areas. One has copper as a co-product and the second doesn't have any co-product. Allowance for this selling parameter is included in the Smelter Return factor.</p>
Market assessment	<ul style="list-style-type: none"> <li>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the</li> </ul>	<p>The commodity subject to this report is traded openly on the London Metals Exchange ("LME").</p>



Criteria	JORC Code explanation	Commentary
	<p>future.</p> <ul style="list-style-type: none"> <li>A customer and competitor analysis along with the identification of likely market windows for the product.</li> <li>Price and volume forecasts and the basis for these forecasts.</li> <li>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</li> </ul>	<p>The Company has for many years maintained both long and short term off-take sales contracts with multiple customers, both locally and internationally.</p> <p>Existing contracts have been assessed for the sales volume assumptions.</p> <p>As the Company has been supplying multiple customers over a significant time period no acceptance testing has been assumed in the reserve development process.</p> <p>These contracts have fixed dates in which the contract itself is reviewed and/or expires. The assumption to extend these contracts and the current sold volumes to the end of LOM has been made in order to assess the Ore Reserve.</p> <p>Refer to the previous section for nickel price assumptions.</p>
Economic	<ul style="list-style-type: none"> <li>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> </ul>	<p>The Company has been operational for a significant period of time with contracts in place for ore mining, processing and concentrate haulage. Furthermore the operation, subject to this report, has an in-situ operating concentrator facility. As such the actual visible operating and contract rates (including rise and fall where appropriate) has been used in the NPV economic assessments. Figures are considered commercially sensitive by the company.</p> <p>The discount rate has been estimated as the weighted average cost of capital for the Company.</p>
Social	<ul style="list-style-type: none"> <li>The status of agreements with key stakeholders and matters leading to social license to operate.</li> </ul>	<p>All legal permits to mine Spotted Quoll have been obtained by Western areas following the paths described by the relevant laws with the participation of the local communities (see previous points).</p> <p>As a company policy (WSA-HR-POL-003), the relations with the local communities and territories are a key part of operational management.</p>
Other	<ul style="list-style-type: none"> <li>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</li> <li>Any identified material naturally occurring risks.</li> <li>The status of material legal agreements and marketing arrangements.</li> <li>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</li> </ul>	<p>It is noted that mining operations are an inherently risky business in which to operate, no other risk factors apart from the normal risk components included in all the above points and assumptions have been identified.</p>
Classification	<ul style="list-style-type: none"> <li>The basis for the classification of the Ore Reserves into varying confidence categories.</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> <li>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</li> </ul>	<p>Spotted Quoll has the following reserves at the 30 of June 2015:</p> <ul style="list-style-type: none"> <li>Proved Ore Reserves: 338,860 at 4.4% for 14,961 Ni tonnes</li> <li>Probable Ore Reserves: 2,366,413 ore tonnes at 4.0% Ni for 95,186 Nickel tonnes</li> </ul> <p>The ore reserve generated appropriately reflects the Competent Person's view of the deposit.</p>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Ore Reserve estimates.</li> </ul>	<p>Audits/Reviews of the present report have not been done because of the high confidence in the data used and the constant performance of the operation. A review may be done by external request.</p>





Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/confidence	<ul style="list-style-type: none"> <li>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</li> <li>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<p>The confidence in the present evaluation is based on Spotted Quoll being a well established operating mine with a mature performance database.</p> <p>The present estimation, for the nature of the commodity mined, refers to global market conditions (see above points for the assumptions).</p> <p>As is normal in mining operations, the key points that can have a significant impact on the performance of the Spotted Quoll Mine are the market conditions in general, and the Nickel price and the currency exchange rates in particular. All the other parameters are derived from sound historical production data.</p>

## 2012 Edition JORC Code - Table 1

### Section 4 Estimation and Reporting Ore Reserves - Flying Fox

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	<ul style="list-style-type: none"> <li>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</li> <li>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</li> </ul>	<p>Western Areas Ltd (WSA) undertook a review of the Flying Fox deposit (FF) during Financial year 2015 after the completion of the new drilling campaign. The underlying Mineral Resource was issued in March 2015 Quarterly Report.</p> <p>The Mineral Resources are reported inclusive of the Ore Reserves.</p>
Site visits	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<p>Flying Fox is an operating underground mine. The Competent Person carries out routine site visits of the deposit and its infrastructures as part of normal working duties.</p> <p>WSA set up a data collection and record system to manage Flying Fox operation from a technical and economical point of view. All these data are used in the present Ore Reserves estimation.</p> <p>Mine design and mining method is based primarily on the recommendations laid out in the updated Feasibility study.</p>
Study status	<ul style="list-style-type: none"> <li>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</li> <li>The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</li> </ul>	<p>WSA completed in 2004 a Feasibility Study for T1 and in 2006 the Feasibility Study for T5. This last study has been updated and kept alive with the current practice and data coming from the experience gained in 10 years of mining and recorded in the company system documents.</p> <p>The present Ore Reserves estimation is an update that considers the new Mineral Resources, the performance of the operation to date and a revised commodity price estimate.</p>
Cut-off parameters	<ul style="list-style-type: none"> <li>The basis of the cut-off grade(s) or quality parameters applied.</li> </ul>	<p>An Ore Reserve cut-off grade of 1.5% Ni was selected to obtain an Ore Reserve that fits the following criteria:</p>



Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>• Minimum Head Grade fitting the Mill requirements.</li> <li>• Ore Reserve average grade equal or greater than Life of Mine breakeven grade.</li> <li>• Mean Arsenic concentration that enables production of a saleable concentrate.</li> <li>• Positive LOM NPV</li> <li>• Maximise steady state production</li> <li>• LOM Nickel price curve from USD6.50/lb @ FX0.80 to USD8.00/lb @ FX 0.75.</li> </ul> <p>Some of the key ore reserve assumptions are considered commercially sensitive, however as the mine has been in operation for some years the reserve cut off parameters are developed using historical operating performance and statistics. More details regarding cut off parameters are reported in the following sections.</p>
<p>Mining factors or assumptions</p>	<ul style="list-style-type: none"> <li>• The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</li> <li>• The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</li> <li>• The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</li> <li>• The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</li> <li>• The mining dilution factors used.</li> <li>• The mining recovery factors used.</li> <li>• Any minimum mining widths used.</li> <li>• The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</li> <li>• The infrastructure requirements of the selected mining methods.</li> </ul>	<p>The mining method used is a mix of direct AVOCA, reverse AVOCA long-hole stoping with bottom up sequence and rock and cemented rock fill above the 425 level. A long-hole top down sequence and paste filling of resultant voids is used below the 425 level.</p> <p>Mining Model has been realised with 5DPlanner and EPS Codes (CAE software house). Mining factors have been selected using historical performance data of the deposit, particularly:</p> <ul style="list-style-type: none"> <li>• The Mineral Resource model used is the file ff_bm_all_11042015_single.dm in Datamine format that combines the Resources models for Flying Fox.</li> <li>• The minimum mining width is 3.0 metres in the central part of T5, 2.0 metres in the fringes of T5 and in OTZ Sth Massive Zone (Old Flying Fox) , 2.4m in T4 and.</li> <li>• The max stable stope length is 20 metres with a stope height between 8 and 17 metres. Other geotechnical parameters are contained in the current Ground Control Management Plan.</li> <li>• Stope Planned dilution is 0.5 metres in Hanging Wall and 0.25 metres in the foot Wall.</li> <li>• A halo of low grade material averaging 0.7% Ni is included in the block model around the ore body wire frames, extending 5 m in the hanging-wall and 5 m in the foot-wall. 0% Ni grade is assigned to the material outside the block model.</li> <li>• Stope Unplanned dilution (from hosting rock and fill) is 10% of stope mass @ 0.5 Ni%.</li> <li>• Standard SG for dilution is 2.8 t/m<sup>3</sup>.</li> <li>• Ore recoveries ranges from 40% to 98% in the stopes in function of the ground conditions, their location within the ore body, and extraction sequence; and 100% in the ore drives.</li> <li>• Pillar factor for unplanned pillars is 2%.</li> <li>• Production rates reflect current mining performances and practice.</li> </ul> <p>No Inferred material has been utilised for the Ore Reserves estimation.</p> <p>Flying Fox is an operating mine. All infrastructures (with the exception of future capital development and external plants) are present and utilised on site and allowance, based on technical studies, is made in the CAPEX expenditure of the Life of Mine for the new infrastructures.</p>



Criteria	JORC Code explanation	Commentary
Metallurgical factors or assumptions	<ul style="list-style-type: none"> <li>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</li> <li>Whether the metallurgical process is well-tested technology or novel in nature.</li> <li>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</li> <li>Any assumptions or allowances made for deleterious elements.</li> <li>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</li> <li>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</li> </ul>	<p>The metallurgical factors used are from existing Cosmic Boy concentrator conventional nickel sulphide flotation techniques and historical data. Figures used are considered commercially sensitive by the company and may be made available by request.</p> <p>The metallurgical process is a well tested technology for Nickel Sulphides recovery with three stages of fragmentation with wet screening for size classification, one milling stage with cyclone size classification and two stages of flotation including Arsenic rejection.</p> <p>The resultant concentrate is sold into existing off-take contracts with BHP and Jinchuan.</p>
Environmental	<ul style="list-style-type: none"> <li>The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.</li> </ul>	<p>The Flying Fox mining operations (FFO) operated by Western Areas Ltd (Western Areas), received final environmental approval to mine nickel sulphide ore as an underground operation in December 2004. Approvals were provided under Western Australian legislation; initially being the Mining Act 1978 (M Act) and later Part V of the Environmental Protection Act 1986 (EP Act). Since then, several other M Act approvals have been sought and received relating to the deepening of the Flying Fox mine and the extension of surface infrastructure required for mining operations. Additional approvals under Part V of the EP Act have also been sought in the form of Works Approvals and Prescribed Premises Licence amendments for various types of mining related infrastructure.</p> <p>Other relevant approvals from state and local government include endorsements to produce drinking water via reverse osmosis and store it onsite and licences to construct habitable buildings and construct and operate septic waste water treatment facilities.</p>
Infrastructure	<ul style="list-style-type: none"> <li>The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.</li> </ul>	<p>All necessary infrastructures for the Flying Fox mine are present and operational on site (not including future capital underground development and external plants). Allowance, based on technical studies, is made in the CAPEX expenditure of the Life of Mine for the new infrastructures planned in Life of Mine plan.</p> <p>FF is supplied by Western Power 33kV overhead power-line from the Bounty switchyard 60km to the north of SQ mine-site.</p> <p>Potable water is produced via RO plants located at CB concentrator and pumped via a pipeline to the mine-site. Process water is recycled from the mine dewatering network.</p> <p>Bulk material logistics is predominately via conventional truck haulage.</p> <p>Mine personnel reside at the nearby Cosmic Boy Village (529 rooms) and are predominately a FIFO (via CB airstrip) workforce with some minor DIDO.</p> <p>The mine-site is 80km to the east of the Hyden township and has two main gazetted gravel road accesses (east from Hyden and south from Varley).</p>
Costs	<ul style="list-style-type: none"> <li>The derivation of, or assumptions made, regarding projected capital costs in the study.</li> </ul>	<p>Capital Underground Development costs are derived from the LOM plan based on existing contracts and historical</p>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>The methodology used to estimate operating costs.</li> <li>Allowances made for the content of deleterious elements.</li> <li>The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co-products.</li> <li>The source of exchange rates used in the study.</li> <li>Derivation of transportation charges.</li> <li>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</li> <li>The allowances made for royalties payable, both Government and private.</li> </ul>	<p>performance and data.</p> <p>All other Capital costs are sourced as necessary via quotes from suppliers or technical studies.</p> <p>Mining, processing, administration, surface transport, concentrate logistics and state royalty costs are based on existing cost estimates.</p> <p>The nickel price and FX assumptions used were sourced from industry standard sources</p> <p>Nickel price from USD6.50/lb @ FX0.80 to USD8.00/lb @ FX 0.75.</p> <p>Net Smelter Return (NSR) factors were sourced from existing concentrate off-take contracts.</p>
Revenue factors	<ul style="list-style-type: none"> <li>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</li> <li>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</li> </ul>	<p>These have been selected after consideration of historical commodity prices variations over time and the requirement for the Reserve to be robust to potentially volatile commodity price and foreign exchange conditions.</p> <p>The price setting mechanism for the sale of product subject to this report is traded openly on the London Metals Exchange ("LME").</p> <p>Potential penalties and net smelter revenue factors are included in the Smelter Return factor used. This factor is based on the historical data from previous FY and is considered commercially sensitive by the company. Figures may be produced by request.</p> <p>Two main selling contracts structures are currently used by Western Areas. One has copper as a co-product and the second doesn't have any co-product. Allowance for this selling parameter is included in the Smelter Return factor.</p>
Market assessment	<ul style="list-style-type: none"> <li>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</li> <li>A customer and competitor analysis along with the identification of likely market windows for the product.</li> <li>Price and volume forecasts and the basis for these forecasts.</li> <li>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</li> </ul>	<p>The commodity subject to this report is traded openly on the London Metals Exchange ("LME").</p> <p>The Company has for many years maintained both long and short term offtake sales contracts with multiple customers, both locally and internationally.</p> <p>Existing contracts have been assessed for the sales volume assumptions.</p> <p>As the Company has been supplying multiple customers over a significant time period no acceptance testing has been assumed in the reserve development process.</p> <p>These contracts have fixed dates in which the contract itself is reviewed and/or expires. The assumption to extend these contracts and the current sold volumes to the end of LOM has been made in order to assess the Ore Reserve.</p> <p>For the Nickel price assumptions refer to the previous sections.</p>
Economic	<ul style="list-style-type: none"> <li>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> </ul>	<p>The Company has been operational for a significant period of time with contracts in place for ore mining, processing and concentrate haulage. Furthermore the operation, subject to this report, has an in-situ operating concentrator facility. As such the actual visible operating and contract rates (including rise and fall where appropriate) has been used in the NPV economic assessments. Figures are considered commercially sensitive by the company.</p> <p>The discount rate has been estimated as the weighted average cost of capital for the Company.</p>
Social	<ul style="list-style-type: none"> <li>The status of agreements with key stakeholders and</li> </ul>	<p>All legal permits to mine Flying Fox have been obtained by</p>



Criteria	JORC Code explanation	Commentary
	<p>matters leading to social licence to operate.</p>	<p>Western areas following the paths described by the relevant laws with the participation of the local communities (see previous points).</p> <p>As a company policy (WSA-HR-POL-003), the relations with the local communities and territories are a key part of operational management.</p>
Other	<ul style="list-style-type: none"> <li>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</li> <li>Any identified material naturally occurring risks.</li> <li>The status of material legal agreements and marketing arrangements.</li> <li>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</li> </ul>	<p>It is noted that mining operations are an inherently risky business in which to operate, no other risk factors apart from the normal risk components included in all the above points and assumptions have been identified.</p>
Classification	<ul style="list-style-type: none"> <li>The basis for the classification of the Ore Reserves into varying confidence categories.</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> <li>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</li> </ul>	<p>Flying Fox has the following Ore Reserves at the 30th of June 2015:</p> <p>Probable Ore Reserves of 1,525,506 ore tonnes at 4.2% for 64,146 Nickel tonnes</p> <p>Ore reserves derive entirely from Indicated Mineral Resource and the result appropriately reflects the Competent Person's view of the deposit.</p>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Ore Reserve estimates.</li> </ul>	<p>Audits/Reviews of the present report have not been done because of the high confidence in the data used and the constant performance of the operation. A review may be done by external request.</p>
Discussion of relative accuracy/confidence	<ul style="list-style-type: none"> <li>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</li> <li>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<p>The confidence in the present evaluation is from the fact that Flying Fox is a well establish operating mine with a sound performance database.</p> <p>The present estimation, for the nature of the commodity mined, refers to global market conditions (see above points for the assumptions).</p> <p>As is normal in mining operations, the key points that can have a significant impact on the performance of the Flying Fox Mine are the market conditions in general, and the Nickel price and the currency exchange rates in particular. All the other parameters are derived from sound historical production data.</p>



## 2012 Edition JORC Code Table 1 – Mineral Resource Estimation

## OTZ South Deposit

## Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> </ul>	<ul style="list-style-type: none"> <li>The OTZ deposit is defined by underground mapping and mining and underground and surface derived drilling. A total of 65 diamond drill hole/ore intersections were used during the modelling process over the past few months.</li> <li>A total of 199 composite samples were used for the resource estimation process.</li> </ul>
	<ul style="list-style-type: none"> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	<ul style="list-style-type: none"> <li>Sample representivity is assured by an industry standard internal QAQC program.</li> <li>All samples are prepared and assayed by an independent commercial laboratory whose instruments are regularly calibrated.</li> </ul>
	<ul style="list-style-type: none"> <li>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Diamond core is marked at 1 m intervals and sample lengths are typically of this length.</li> <li>Sample intervals are marked up by geologists based on observed geologic features.</li> <li>Sampled mineralisation intervals are sent to a commercial laboratory for crushing and grinding before assaying.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>Only diamond drill derived samples were used to design the geology and resource model.</li> <li>Drill diameters include HQ, NQ, NQ2 and BQ.</li> <li>The 2014 core is exclusively NQ2 diameter</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> </ul>	<ul style="list-style-type: none"> <li>Diamond core recoveries are logged and recorded in the database.</li> <li>The 95<sup>th</sup> percentile of the recoveries is 100%.</li> </ul>
	<ul style="list-style-type: none"> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	
	<ul style="list-style-type: none"> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>The resource is defined by diamond drilling which has high core recoveries.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> </ul>	<ul style="list-style-type: none"> <li>Downhole logs used in the MRE: <ul style="list-style-type: none"> <li>Structure: 13 fields including alpha angles</li> <li>Assay: up to 30 geochemical variables including Density</li> <li>Geology: Up to 40 fields</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>	<ul style="list-style-type: none"> <li>WSA core is photographed in both dry and wet form.</li> </ul>
	<ul style="list-style-type: none"> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>Total length is in excess of 2,000m.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> </ul>	<ul style="list-style-type: none"> <li>Diamond core is sampled as half core; cut by the field crew on site by diamond saw.</li> </ul>
	<ul style="list-style-type: none"> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> </ul>	<ul style="list-style-type: none"> <li>Only core samples used in the MRE.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	<ul style="list-style-type: none"> <li>The sample preparation of diamond core follows industry best practice involving oven drying, coarse crushing and pulverising.</li> </ul>
	<ul style="list-style-type: none"> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>	<ul style="list-style-type: none"> <li>WSA included field Ni standards ranging from 0.7% - 11.5% Ni that were routinely submitted with sample batches in order to independently monitor analytical performance. Standards were fabricated and prepared by Geostats Pty Ltd., using high – grade nickel sulphide ore.</li> </ul>
	<ul style="list-style-type: none"> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> </ul>	<ul style="list-style-type: none"> <li>Sample intervals are marked up by geologists based on observed geological contacts.</li> <li>WSA samples included field duplicates on a 10% by volume basis.</li> <li>All QAQC controls are reviewed after each submission. Notifications of failures are immediately sent to the Senior Geologist for resolution.</li> </ul>
	<ul style="list-style-type: none"> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>The sample sizes are considered to be appropriate on the following basis: the style of mineralisation (massive sulphide), the thickness and consistency of the intersections, the sampling methodology and percent value assay ranges for the primary elements. Pulp duplicates obtained from the primary lab were taken on a 10% by volume basis (underground only) and submitted to a secondary lab.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> </ul>	<ul style="list-style-type: none"> <li>All samples were assayed by an independent certified commercial laboratory. The laboratory used is experienced in the preparation and analysis of nickel sulphide ores.</li> <li>WSA Samples are analysed by ALS Chemex in Perth for Ag, Al, As, Co, Cr, Cu, Fe, Mg, Mn, Ni, Pb, S, Ti, Zn and Zr.</li> <li>Genalysis Laboratory Service (GLY) is the Umpire Laboratory used to check analysis on pulps provided by ALS.</li> <li>The principal analytical method used incorporated a four acid digest with conventional ICP-AES analysis, which also includes gravimetric analysis for determining specific gravity.</li> </ul>
	<ul style="list-style-type: none"> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> </ul>	<ul style="list-style-type: none"> <li>No Geophysical tools or handheld XRF instruments were used to determine any element concentrations that were subsequently used for MRE purposes.</li> </ul>
	<ul style="list-style-type: none"> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>Certified reference materials are included in all batches dispatched at an approximate frequency of 1 per 25 samples, with a minimum of two per batch.</li> <li>Field duplicates are inserted into submissions at an approximate frequency of 1 in 25, with placement determined by Nickel grade and homogeneity. Lab checks, both pulp and crush, are taken alternately by the lab at a frequency of 1 in 25.</li> <li>Accuracy and precision were assessed using industry standard procedures such as control charts and scatter plots.</li> <li>Evaluations of standards are completed on a monthly, quarterly and annual basis and summarised in QAQC reports.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> </ul>	<ul style="list-style-type: none"> <li>Geological interpretation using intersections peer viewed by site geologists.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>The use of twinned holes.</li> </ul>	<ul style="list-style-type: none"> <li>An extensive drilling campaign was undertaken in 2014 and the results were compared with earlier holes.</li> </ul>
	<ul style="list-style-type: none"> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	<ul style="list-style-type: none"> <li>All geological logging was carried out to a high standard using well established geology codes.</li> <li>All other data including assay results are imported via Datashed software.</li> <li>Drill holes, sampling and assay data is stored in a SQL Server database located in a dedicated data centre.</li> </ul>
	<ul style="list-style-type: none"> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>No adjustments were made.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> </ul>	<ul style="list-style-type: none"> <li>Downhole surveys completed using gyroscopic instrument on all resource definition and exploration holes. Underground drill hole collar locations verified via survey pickup.</li> </ul>
	<ul style="list-style-type: none"> <li>Specification of the grid system used.</li> </ul>	<ul style="list-style-type: none"> <li>A two point transformation is used to convert the data from MGA50 to mine grid and vice versa.</li> <li>MGA50 points: yd1=6409502.17, xd1=752502.175,yd2=6409397.856,xd2=753390.591</li> <li>Local points: ym1=28223.59,xm1=33528.771,ym2=28111.84,xm2=34415.995</li> </ul>
	<ul style="list-style-type: none"> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>The accuracy of the pillars used in WSA's topographical control networks is within the Mines Regulations accuracy requirement of 1:5000 for control networks.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>The resource surface area is approximately 10 hectares.</li> <li>There are approximately 65 pierce points within this surface area.</li> <li>Pierce point density is approximately 25nN by 25mE.</li> </ul>
	<ul style="list-style-type: none"> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> </ul>	<ul style="list-style-type: none"> <li>The available data (including mining related data) demonstrates sufficient and appropriate continuity for both geology and grade within the OTZ deposit to support the definition of a Mineral Resource as classified under the JORC Code (2012).</li> </ul>
	<ul style="list-style-type: none"> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Samples were composited to one metre lengths, making adjustments to accommodate residual sample lengths. A metal balance validation between the raw data and the composited data was undertaken with no material issues identified.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> </ul>	<ul style="list-style-type: none"> <li>The geological sequence at OTZ is interpreted as east-facing and dips moderately to steeply (35 to 65 degrees) west (100 degrees), being steeper near surface. All underground and grade control drilling was conducted from west to east. All Surface drilling was conducted from east to west. Most of the drilling was conducted from the foot wall i.e. from the west to the east.</li> </ul>
	<ul style="list-style-type: none"> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>No orientation based sampling bias has been observed in the data.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Sampling was done by company representatives or contracted geologists and transported to commercially independent laboratories for assay.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>Sampling techniques are regularly assessed and updated and stored on the company server. Management reviews of sampling practices are regularly undertaken.</li> </ul>





## Section 2: Reporting of Exploration Results (Criteria listed in Section 1, also apply to this section)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>Forrestania Nickel Operations comprises approximately 125 tenements covering some 900km<sup>2</sup> within the Central Yilgarn Province. The tenements include exploration licences, prospecting licences, general purpose leases, miscellaneous licences and mining leases.</li> <li>Western Areas wholly owns 106 tenements, 55 tenements of which were acquired from Outokumpu in 2002 and a further 51 tenements acquired from Kagara in March 2012 (some which are subject to various third party royalty agreements). The remainder of the tenements are subject to Joint Ventures, 14 tenements are part of the Mt Gibb JV where Western Areas has the right to earn 70% interest from Great Western Exploration (currently at 51% WSA) and the Lake King JV where Western Areas has earned a 70% interest from Swanoak Holdings.</li> <li>A number of the Kagara tenements are subject to third party royalty agreements.</li> <li>All the tenements are in good standing. Six tenements are pending grant.</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Western Areas has been exploring its wholly owned tenements since 2002. The tenements subject to the Kagara sale which took place in March 2012 were explored by Kagara since 2006 and LionOre and St Barbara prior to that time.</li> <li>Western Areas has managed both the Mt Gibb JV since 2009 (Great Western Exploration explored the ground prior to that time) and the Lake King JV since 2007 (A small amount of work carried out by WMC prior to that date).</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The deposits lie within the Forrestania Greenstone Belt, which is part of the Southern Cross Province of the Yilgarn Craton in Western Australia.</li> <li>The main deposit type is the komatiite hosted, disseminated to massive Nickel sulphide deposits, which include the Flying Fox and Spotted Quoll deposits which are currently being mined.</li> <li>The mineralisation occurs in association with the basal section of high MgO cumulate ultramafic rocks.</li> <li>The greenstone succession in the district also hosts a number of orogenic lode gold deposits of which Bounty Gold Mine is the biggest example.</li> <li>Some exploration for this style of deposit is undertaken by Western areas from time to time in the FNO tenements.</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>All drill hole data has been converted to a Mineral Resource and Exploration results are not reported.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>– downhole length and interception depth</li> <li>– hole length.</li> <li>• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	
Data aggregation methods	<ul style="list-style-type: none"> <li>• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>• Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>• Standard weighted averaging of drill hole intercepts were employed. No maximum or minimum grade truncations were used in the estimation.</li> <li>• The reported assays have been length and bulk density weighted. A lower arbitrary 0.5% Ni cut-off is applied, with no top cut applied. High grade intercepts internal to broader zones of mineralisation are reported as included intervals. A lower arbitrary 0.5g/t Au cut-off is applied, with no top cut applied. High grade intercepts internal to broader zones of mineralisation are reported as included intervals.</li> <li>• No metal equivalent values are used.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>• These relationships are particularly important in the reporting of Exploration Results.</li> <li>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>• If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>• The incident angles to mineralisation are considered moderate.</li> <li>• Due to the often steep dipping nature of the stratigraphy reported downhole intersections are moderately greater (m/1.5 ratio on average) than the true width.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>• The OZ south deposit is updip of the T4 deposits and is shown on the long section included in this report.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>• Exploration results are in themselves not reported here and have been converted to a Mineral Resource.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>• Multi-element analysis was conducted routinely on all samples for a base metal suite and potentially deleterious elements including Al, As, Co, Cr, Cu, Fe, Mg, Ni, S, Ti, Zn, Zr. All diamond core samples were measured for bulk density which range from 2.90 - 4.79g/cm<sup>3</sup> for values &gt;0.5% Ni.</li> <li>• Geotechnical logging was carried out on all diamond drill holes for recovery, defects and RQD.</li> <li>• Information on structure type, dip, dip direction alpha and beta angles, texture, shape, roughness and fill material is stored in the structural logs in the database.</li> </ul>
Further work	<ul style="list-style-type: none"> <li>• The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>• Exploration within the tenements continues to evaluate the prospective stratigraphic succession containing the cumulate ultramafic rocks using geochemical and geophysical surveys and drilling.</li> </ul>



### Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section)

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>Database validated by site geologists.</li> <li>Assay data in the form of csv files from the primary assay laboratory.</li> <li>Data validation is a fundamental part of the Acquire database and is implemented via referential integrity and triggers. Referential constraints ensure that, for example, Hole ID matches collar and downhole data. Triggers check criteria such as code validity, overlapping intervals, depth and date consistencies. All fields of code data have associated look-up table references. Data was further validated using Datamine validation tools during the MRE process.</li> </ul>
Site visits	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>The CP in this instance is a full time employee of WSA and undertakes regular site visits.</li> </ul>
Geological interpretation	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> </ul>	<ul style="list-style-type: none"> <li>The geological sequence at OTZ is interpreted as east-facing and dips moderately to steeply (35 to 65 degrees) west (100 degrees), being steeper near surface. From west to east the sequence comprises; <ul style="list-style-type: none"> <li>Footwall sedimentary rocks</li> <li>Lower ultramafic including lower cumulate and upper differentiated flows</li> <li>Sulphidic metasedimentary rocks</li> <li>Hanging wall mafic rocks</li> <li>Hanging wall ultramafic, and</li> <li>Hanging wall sedimentary rocks</li> </ul> </li> <li>About 240m below surface the sequence is offset by the gently west-dipping Outokumpu fault which has approximately 200m top-block –west displacement.</li> <li>The area has been intruded by granitoids.</li> <li>In general the geological model is considered robust. Key geological units are consistently represented in the drilling data and form geologically and geometrically reasonable shapes.</li> <li>The Outokumpu fault is an important structure that can be difficult to define, particularly in areas where the mineralised ultramafic contact intersects the fault. More drilling is planned when development nears the structure.</li> <li>The OTZ orebody that forms part of this reported resource was successfully mined between 1994 and 1997.</li> <li>Mining produced approximately 240,000 tonnes at an average grade of 3.2% Ni.</li> <li>WSA undertook an underground drilling program in 2014 to investigate areas of the Flying Fox that had been previously developed but not stoped.</li> <li>Based on this newly acquired data and supplemented by historical data, the orebody was remodelled.</li> <li>Three domains were modelled using Implicit and Explicit modelling techniques;</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>A massive sulphide domain to the south of a Proterozoic dyke.</li> <li>A massive sulphide domain to the south of the 1st domain.</li> <li>A disseminated sulphide domain to the south of the 2nd domain.</li> </ul>
	<ul style="list-style-type: none"> <li>Nature of the data used and of any assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>Litho geochemistry and stratigraphic interpretation have been used to assist the identification of rock types. No assumptions are made.</li> </ul>
	<ul style="list-style-type: none"> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> </ul>	<ul style="list-style-type: none"> <li>Multiple geological and internal resource estimates have been modelled and form the basis of the current model.</li> </ul>
	<ul style="list-style-type: none"> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> </ul>	<ul style="list-style-type: none"> <li>All of the mineral resource was designed within the modelled massive sulphide domain</li> <li>Faults and intrusive units were used when modelling the mineralised units and also used when classifying the deposit</li> </ul>
	<ul style="list-style-type: none"> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul style="list-style-type: none"> <li>The Outokumpu fault and intrusive units.</li> <li>The curvi-planar mineralization in the lower portions of the orebody.</li> <li>Dilution due to waste materials within the modelled massive sulphide.</li> <li>Misinterpretation of massive sulphide mineralization in proximity to the Outokumpu fault – the possibility of confusing flat-lying fault related lodes with moderately dipping lodes.</li> <li>Follow up infill drilling is planned when development reaches the desired drilling platform position.</li> </ul>
Dimensions	<ul style="list-style-type: none"> <li>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</li> </ul>	<ul style="list-style-type: none"> <li>The domain has a surface area of about 10 hectares and a volume of about 85,000 cubic metres.</li> <li>The mean thickness of the massive sulphide mineralisation is 1.8m with a maximum thickness of 8m.</li> </ul>
Estimation and modelling techniques	<ul style="list-style-type: none"> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</li> </ul>	<ul style="list-style-type: none"> <li>Statistical analysis of the Ni variable was completed on 154 samples in the OTZ dataset.</li> <li>A model of the square root of the variogram divided by the madogram suggested second order stationarity for Ni implying that the domain was appropriate for estimation.</li> <li>Declustering tests were performed however at the end of the process. It was decided against, given the evenly spaced data.</li> <li>The orientation of the orebody is at a northeast-southwest strike (15*), 40* dip to the southeast with no apparent plunge.</li> <li>Variography was completed in Supervisor software with Isatis for verification. The following parameters were used:</li> </ul>



Criteria	JORC Code explanation	Commentary																					
		<table border="1" data-bbox="936 342 1476 421"> <thead> <tr> <th></th> <th>Nugget</th> <th>Structure</th> <th>Sill</th> <th>Range 1</th> <th>Range 2</th> <th>Range 3</th> </tr> </thead> <tbody> <tr> <td>Ni</td> <td>0.17</td> <td>Sph</td> <td>0.26</td> <td>64</td> <td>65</td> <td>20</td> </tr> <tr> <td></td> <td></td> <td>Sph</td> <td>0.57</td> <td>122</td> <td>104</td> <td>28</td> </tr> </tbody> </table> <p>These parameters equate to Datamine angles ZXZ of (-75, 135, -45).</p> <ul style="list-style-type: none"> <li>• Ordinary Kriging (OK) and Inverse Distance (ID2) were applied to the Ni estimates.</li> <li>• Search distances were ellipsoid and based on ranges from the variogram model (125m, 100m and 50m).</li> <li>• Due to data density and variogram ranges only 1 pass was needed with a minimum of 10 samples and a maximum of 30.</li> </ul>		Nugget	Structure	Sill	Range 1	Range 2	Range 3	Ni	0.17	Sph	0.26	64	65	20			Sph	0.57	122	104	28
	Nugget	Structure	Sill	Range 1	Range 2	Range 3																	
Ni	0.17	Sph	0.26	64	65	20																	
		Sph	0.57	122	104	28																	
	<ul style="list-style-type: none"> <li>• The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> </ul>	<ul style="list-style-type: none"> <li>• The OTZ deposit was mined from 1994 to 1997 and related documentation and data is available.</li> <li>• This is the first time that a Mineral Resource Estimate commensurate with the major reporting codes has been reported.</li> </ul>																					
	<ul style="list-style-type: none"> <li>• The assumptions made regarding recovery of by-products.</li> </ul>	<ul style="list-style-type: none"> <li>• No by-products exist.</li> </ul>																					
	<ul style="list-style-type: none"> <li>• Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</li> </ul>	<ul style="list-style-type: none"> <li>• Only nickel was estimated – Arsenic concentrations are negligible and no other deleterious elements exist.</li> </ul>																					
	<ul style="list-style-type: none"> <li>• In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> </ul>	<ul style="list-style-type: none"> <li>• A block model was designed using Datamine software with the following parent cell dimensions;                             <ul style="list-style-type: none"> <li>• 5m Easting</li> <li>• 2.5m Northing</li> <li>• 0.5m RL</li> </ul> </li> <li>• Data spacing is roughly 25mN by 25mE.</li> <li>• Block cell size was selected on the basis of proposed mining method, narrow nature of the ore zone and data spacing.</li> </ul>																					
	<ul style="list-style-type: none"> <li>• Any assumptions behind modelling of selective mining units.</li> </ul>	<ul style="list-style-type: none"> <li>• No selective mining units were assumed in the estimate.</li> </ul>																					
	<ul style="list-style-type: none"> <li>• Any assumptions about correlation between variables.</li> </ul>	<ul style="list-style-type: none"> <li>• There is an assumed correlation between Ni% and density (SG), which has been quantified by a regression calculation and estimated in the block model.</li> </ul>																					
	<ul style="list-style-type: none"> <li>• Description of how the geological interpretation was used to control the resource estimates.</li> </ul>	<ul style="list-style-type: none"> <li>• Mineralised zones were digitised and polygons were snapped to both underground and surface drilling intercepts.</li> <li>• Only ore within the massive sulphide domain was estimated and reported.</li> </ul>																					
	<ul style="list-style-type: none"> <li>• Discussion of basis for using or not using grade cutting or capping.</li> </ul>	<ul style="list-style-type: none"> <li>• The dataset exhibited a Gaussian population distribution and a lack of high grade outliers and low coefficient of variation values suggest that top capping would likely not be required for the data and would not have a material effect on the overall grade estimate.</li> </ul>																					
	<ul style="list-style-type: none"> <li>• The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul style="list-style-type: none"> <li>• Estimation validation techniques include visual comparison of the composites and estimated blocks and swathe plots of the composite grades vs the grade of the block model.</li> <li>• Inverse distance to the power of 2 was compared to the Ordinary Kriged estimate which returned small differences on a local scale.</li> <li>• The global grade of the mined out area was compared</li> </ul>																					



Criteria	JORC Code explanation	Commentary
		<i>to the actual grade achieved and found to be within acceptable limits.</i>
Moisture	<ul style="list-style-type: none"> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul style="list-style-type: none"> <li>Tonnages were estimated on a dry basis.</li> </ul>
Cut-off parameters	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>The resource is reported above a 0.4% Ni cut-off grade.</li> </ul>
Mining factors or assumptions	<ul style="list-style-type: none"> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>No external dilution factors were applied as these will be estimated during the resource/reserve conversion process.</li> <li>Extraction will be by means of a combination of Airleg mining and longhole stoping.</li> </ul>
Metallurgical factors or assumptions	<ul style="list-style-type: none"> <li>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>Metallurgical extraction will be by means of standard flotation methods using the existing Western Areas metallurgical facility.</li> </ul>
Environmental factors or assumptions	<ul style="list-style-type: none"> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>No extraordinary environmental factors or assumptions were investigated.</li> <li>Western Areas has been successfully mining similar orebodies for many years without any significant environmental issues.</li> </ul>
Bulk density	<ul style="list-style-type: none"> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> </ul>	<ul style="list-style-type: none"> <li>The conventional ICP-AES analysis used for analysis at ALS also includes gravimetric analysis for determining specific gravity.</li> </ul>
	<ul style="list-style-type: none"> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</li> </ul>	<ul style="list-style-type: none"> <li>Bulk density has been determined using a nickel grade regression based formula.</li> <li>Core at OTZ is generally void of vugs, voids and other defects. Rocks are from Granulite facies sequence and faults have been annealed. Porosity is very low.</li> </ul>
	<ul style="list-style-type: none"> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul style="list-style-type: none"> <li>Density values in the model include both measured and calculated values determined from regression formulas with the Ni% in each domain.</li> </ul>
Classification	<ul style="list-style-type: none"> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> </ul>	<ul style="list-style-type: none"> <li>Resource classification is based on a combination of Geological knowledge and, Kriging Efficiency (KE) and Slope of Regression.</li> </ul>



Criteria	JORC Code explanation	Commentary												
	<ul style="list-style-type: none"> <li>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul style="list-style-type: none"> <li>The resource is classified as Indicated and Inferred. No blocks were classified as Measured.</li> <li>Risk related to historic (prior to 2014) data is mitigated by;                             <ul style="list-style-type: none"> <li>Approximately 30% by area of the Indicated non mined area has been supplemented by 2014 drilling.</li> <li>All core is stored at WSA and has been re-logged in accordance with WSA methods.</li> <li>No blocks are classed as Measured.</li> <li>Geology and grades are relatively consistent between the historic and recent drilling.</li> <li>A portion of the Resource orebody has been successfully mined and the block model grade and tonnages in the mined out area reconcile with the known grade and tonnages mined.</li> </ul> </li> <li>The definition of mineralised zones is based on a high level of geological understanding. It is believed that all relevant factors have been considered in this estimate, relevant to all available data.</li> <li>The result appropriately reflects the Competent Person's view of the deposit.</li> </ul>												
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<ul style="list-style-type: none"> <li>No external reviews have been undertaken to date.</li> </ul>												
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> <li>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul style="list-style-type: none"> <li>The geological and grade continuity of the overall deposit is well understood and reasonable variograms were modelled for all directions using all available data.</li> <li>Post processing block model validation was undertaken using geostatistical methods before the resource was reported.</li> <li>Kriged estimated average Ni grades correspond well to the composited grades.</li> <li>The statement relates to local estimates of tonnes and grade.                             <table border="1" data-bbox="938 1462 1469 1583"> <thead> <tr> <th>Category</th> <th>Tonnes (Mt)</th> <th>Ni%</th> <th>Ni Metal (Kt)</th> </tr> </thead> <tbody> <tr> <td>Indicated</td> <td>1.62</td> <td>4.05</td> <td>6.57</td> </tr> <tr> <td>Inferred</td> <td>0.21</td> <td>4.10</td> <td>0.08</td> </tr> </tbody> </table> </li> <li>A portion of the Resource orebody has been successfully mined and the block model grade and tonnages in the mined out area reconcile with the known grade and tonnages mined.</li> </ul>	Category	Tonnes (Mt)	Ni%	Ni Metal (Kt)	Indicated	1.62	4.05	6.57	Inferred	0.21	4.10	0.08
Category	Tonnes (Mt)	Ni%	Ni Metal (Kt)											
Indicated	1.62	4.05	6.57											
Inferred	0.21	4.10	0.08											