# Western Areas meets or exceeds all upgraded FY2016 guidance metrics following a strong final quarter

**June quarter 2016 highlights:**

- **ZERO lost time injuries (LTI's) for the quarter – now 820 days without an LTI.**
- **Unit cash cost of production of nickel in concentrate of A$2.25/lb, meeting the bottom end of FY16 guidance.**
- **Record monthly mill throughput in June and record annual throughput in FY16 of 616,279 ore tonnes.**
- **Record annual Spotted Quoll production of 15,175 nickel tonnes.**
- **Positive operational cashflow generated for the quarter.**
- **Consolidated cash at bank of A$76 million and debt free.**
- **Pre-feasibility study for Odysseus Project approved by the Board and commenced in May for delivery end 2016.**
- **Pre-drilling Heritage Surveys commenced at Cosmos with encouraging progress.**
- **Continued encouraging lithium assays from Forrestania including 21.5m @ 1.6% $Li_2O$.**

*Managing Director & CEO Mr Dan Lougher said the June quarter completed a strong operational performance over the year for the Company.*

*"It is pleasing to deliver positive results in line with or exceeding our guidance during what was a challenging nickel price environment for the year," Mr Lougher said.*

*"Our operations remain extremely resilient with positive operating cashflow and a workforce continuing to drive innovation and productivity improvements across the business."*

Western Areas ("WSA" or the "Company") (ASX: WSA) is pleased to report the results for the June 2016 Quarter and strong full year results on safety, costs and operational metrics. Full production statistics overleaf show that unit cash costs of production for the quarter remain low, with full year unit cash costs of A$2.26/lb, coming in at the bottom end of the upgraded FY16 guidance range of A$2.25/lb to A$2.45/lb.

Mine production has exceeded FY16 guidance (27,000t nickel guidance vs 27,607t nickel produced), driven by record annual production for the Spotted Quoll mine. Mill production was similarly strong setting a new full year record, with the June quarter the best for the year, despite a five day shutdown associated with Western Power grid upgrades.

Of most importance, there were no lost time injuries for the quarter and the Company is proud to continue to report a lost time injury frequency rate (LTIFR) of ZERO. WSA has now operated for over 2 years without an LTI.

The Company has also progressed a range of organic growth initiatives in line with previously outlined objectives at both Cosmos and Western Gawler.

On the corporate front, a A$75m capital raising ("raising") via a combined Placement (A$60m) and SPP (A$15m) was completed to strengthen the balance sheet, enabling the Company to remain debt free and have the flexibility to fund responsible growth capital.

Recent comments by the Government of the Philippines regarding stronger environmental controls being imposed on nickel laterite operators has contributed to a recent nickel price improvement. Furthermore, commodity market analysts are forecasting the nickel market will be in deficit by 70-75k nickel tonnes in 2016, which WSA believes may also be contributing to the price increase. Partially offsetting these gains has been a higher AUD than predicted.

## Production Overview

| Item | Units | Sep Q FY16 | Dec Q FY16 | Mar Q FY16 | Jun Q FY16 | YTD Total |
|---|---|---|---|---|---|---|
| Total Ore Mined | tonnes | 148,102 | 157,481 | 144,728 | **139,935** | **590,246** |
| Mine Grade | Ni % | 4.8% | 4.4% | 4.7% | **4.9%** | **4.7%** |
| **Total Nickel Mined** | **tonnes** | **7,060** | **6,917** | **6,798** | **6,832** | **27,607** |
| Ore Processed (Milling/Concentrator) | tonnes | 153,540 | 152,435 | 156,190 | **154,114** | **616,279** |
| Processed Grade | Ni % | 4.6% | 4.6% | 4.4% | **4.5%** | **4.5%** |
| Average Processing Recovery | % | 89% | 89% | 90% | **90%** | **90%** |
| **Total Nickel in Concentrate** | **tonnes** | **6,252** | **6,256** | **6,180** | **6,321** | **25,009** |
| **Total Nickel Sold** | **tonnes** | **6,233** | **6,281** | **6,011** | **6,268** | **24,793** |
| Contained Nickel in stockpiles | tonnes | 3,322 | 2,646 | 2,674 | **2,525** | |
| **Cash Cost Nickel in Concentrate**[1] | **A$/lb** | **2.26** | **2.24** | **2.27** | **2.25** | **2.26** |
| Cash Cost Nickel in Concentrate[1] | US$/lb | 1.64 | 1.61 | 1.64 | **1.68** | **1.64** |
| Exchange Rate | US$/A$ | 0.73 | 0.72 | 0.72 | **0.75** | **0.73** |
| **Realised Nickel Price** | **A$/lb** | **5.94** | **5.31** | **5.39** | **5.44** | **5.52** |

Note 1: Refer page 9 for composition of unit cash costs.

Western Areas (ASX:WSA) is Australia's highest grade, lowest cash cost nickel producer and its main asset, the 100% owned Forrestania Nickel Project, is located 400km east of Perth in Western Australia. Western Areas is also Australia's second largest sulphide nickel miner producing approximately 25,000 nickel tonnes per annum from its Flying Fox and Spotted Quoll mines - two of the lowest cost and highest grade nickel operations in the world.

An active nickel explorer at Cosmos and Western Gawler in Western Australia, the Company also holds significant exploration interests in Canada, Finland and Greenland through shareholdings in Mustang Minerals and FinnAust Mining Plc.

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. It has put in place the cost structure and capabilities to prosper throughout the cycle by adopting prudent capital management and an opportunistic approach. Its latest presentation can be found at **http://www.westernareas.com.au/investor-centre/corporate-presentations.html**.

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## Corporate and financing

***Cashflow***

Cash at bank was A$75.7m at the end of the quarter (March quarter A$42.5m). Cash at bank plus nickel sales receivables was A$92.1m at quarter end (March quarter A$56.4m).

The increase in cash followed completion of the A$75.0m raising (before costs) announced on 31 March 2016. As disclosed at the time of the raising, A$25.0m was utilised to repay the ANZ corporate facility and A$12.7m was used to pay the final (discounted) instalment due for the acquisition of Cosmos Nickel Complex ("Cosmos").

Notwithstanding the ongoing challenging nickel price environment during the June quarter, the Forrestania operations continued to generate positive operating cashflow, with additional benefits from the capital deferral program being fully implemented during the period. The measured approach to discretionary exploration expenditure extended into the quarter at both the Cosmos and Western Gawler projects.

***Capital Management***

Share Placement

On 31 March 2016 the Company completed an underwritten A$60.0m share placement. The equity raising was well supported, closing many times oversubscribed at an issue price of A$2.00/share, being a premium to the underwritten floor price. The placement funds settled in early April.

Share Purchase Plan (SPP)

In conjunction with the placement, an A$10.0m SPP was conducted during April, allowing retail shareholders to participate in the raising at the same price as the institutional and sophisticated investors. The SPP closed substantially oversubscribed and following careful consideration the SPP limit was increased to A$15.0 million. The funds raised via the SPP were well above the estimated proportion of retail ownership of Western Areas.

***Bank Facility***

The ANZ corporate loan facility of A$50.0m was undrawn at the end the quarter, following the repayment of A$25.0m.

***Hedging***

When pricing is supportive, the Company manages nickel price and foreign exchange risk with a combination of short term quotation period (QP) hedging and a set limit of medium term 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 solely of US$ foreign exchange contracts. No nickel was hedged at the end of the quarter. Details of hedging in place at quarter end are as follows:

| Hedging Details | FY 2017 |
|---|---|
| **US$ Hedging - Collar Options** | |
| US$ Sold | $15,000,000 |
| Average US$ FX Cap | $0.7500 |
| Average US$ FX Floor | $0.7000 |

***Corporate***

WSA continues to hold 37% of FinnAust Mining Plc (AIM:FAM.L), with WSA's investment having a value at 30 June 2016 of £8.3m. Western Areas monitors the exploration progress and activities at FinnAust's Greenland and Finland projects. Further details can be viewed on the FinnAust website at: www.finnaust.com.

## Mine safety and environment

***Safety***

The June quarter was another period of excellent safety performance. There were no LTIs recorded and the LTIFR rate remains at ZERO. Western Areas has now operated 820 days without an LTI and also reduced the rate of Total Recordable Injury Frequency Rate by 35% to 10.4 by the quarter end. A particularly pleasing outcome was achieved at Spotted Quoll and the Cosmic Boy Concentrator, which have both achieved a full year without a LTI or Medical Treatment Injury.

A Department of Mines and Petroleum (DMP) Psychological Social Harm Audit (which is now standard DMP procedure for fly-in fly-out operations) was conducted in April, which resulted in an excellent rating for the Company. As part of our commitment to continuous improvement in this area, emergency response co-ordinators have completed dedicated workplace mental health training to better equip our personnel.

**Emergency response team fire fighting training exercise**

***Environment***

Two very minor environmental incidents occurred during the quarter from exceeding Department of Water (DoW) hydro-carbon contaminant limits at the two mine-site wash-down bays. These incidents have been investigated and corrective actions have been implemented.

Ongoing environmental monitoring programs of the declared rare flora health adjacent to the Spotted Quoll mine operations and Western Quoll population surveys continued during the quarter. No negative impacts from operational activities were reported during the quarter and environmental weed and feral animal eradication programs were ongoing.

Seed collection for rehabilitation was conducted, with 9.5kg of seed being processed and stored which has the potential to produce approximately 50,000 plants and rehabilitate 45 hectares of land.

***Compliance and Approval***

A revision of the environmental operating licence with the Department Environment Regulation (DER) was completed during the quarter to streamline related conditions. Approval was given for an increase in the Cosmic Boy concentrator throughput from 600,000 tonnes per annum to 680,000 tonnes per annum.

***Sustainability***

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

***Community - Cosmos***

Western Areas continued to foster its relationship with members of the Tjiwarl native title claimant group which included a cross cultural awareness training programme held in the Perth corporate office and attended by senior management. In addition, nine traditional owners from the Tjiwarl group completed a heritage survey at Cosmos as part of the process to clear drill-hole locations for an upcoming surface exploration program. The Company continued its commitment to developing and maintaining a good working relationship with the Cosmos traditional owners.

**Heritage survey area on Lake Miranda at Cosmos**

## Mine and mill production and cash costs

| TONNES MINED | | 2015/2016 | | | | YTD |
|---|---|---|---|---|---|---|
| | | Sep Qtr | Dec Qtr | Mar Qtr | Jun Qtr | Total |
| **Flying Fox** | | | | | | |
| Ore Tonnes Mined | Tns | 67,400 | 76,163 | 62,017 | **68,161** | **273,741** |
| Grade | Ni% | 4.7% | 4.2% | 4.6% | **4.7%** | **4.5%** |
| Nickel Tonnes Mined | Tns | 3,155 | 3,183 | 2,876 | **3,218** | **12,432** |
| **Spotted Quoll – Underground** | | | | | | |
| Ore Tonnes Mined | Tns | 80,702 | 81,318 | 82,711 | **71,774** | **316,505** |
| Grade | Ni% | 4.8% | 4.6% | 4.7% | **5.0%** | **4.8%** |
| Nickel Tonnes Mined | Tns | 3,905 | 3,734 | 3,922 | **3,614** | **15,175** |
| **Total – Ore Tonnes Mined** | Tns | 148,102 | 157,481 | 144,728 | **139,935** | **590,246** |
| **Grade** | Ni% | 4.8% | 4.4% | 4.7% | **4.9%** | **4.7%** |
| **Total Nickel Tonnes Mined** | **Tns** | **7,060** | **6,917** | **6,798** | **6,832** | **27,607** |

## Flying Fox

### Mine Production

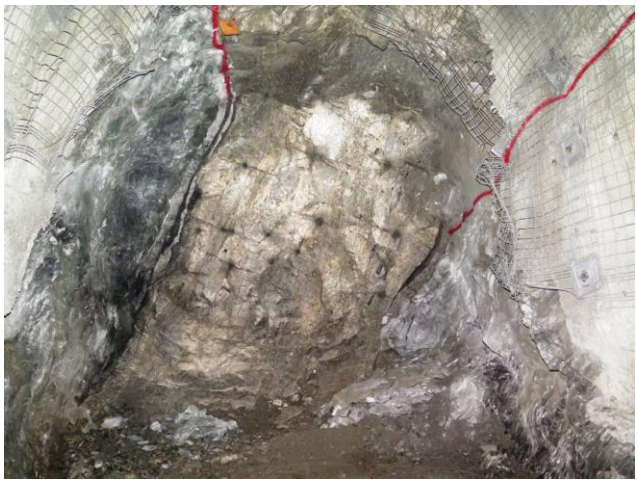
Flying Fox production was **68,161 tonnes of ore at an average grade of 4.7% nickel for 3,218 nickel tonnes,** being the highest nickel production quarter for the year. Ore production was predominately from long-hole stoping (85%) with the remainder from ore drive development, flat-back stoping and narrow vein long-hole stoping. Full year production was **273,741 tonnes of ore at an average grade of 4.5% nickel (12,432 nickel tonnes)**.

Longhole production was sourced from the following T5 longhole stopes 255, 285, 295, 335 (average 5.8% nickel grade) and 425 (average 6.3% nickel grade), plus the following T4 stopes 640 and 615 (average 7.2% nickel grade). A total of 29m of air-leg flat-back stoping was also completed at the 230 south level.

Paste-fill continued to perform well during the quarter with 19,641m$^3$ poured, which is an increase of 70% compared to the previous quarter, as paste-fill is now the primary back-fill material as planned.

### Mine Development

Total single-boom jumbo development for the quarter was 168m with 5m of lateral capital development at the 230 escape-way access, plus 42m of operating waste development in paste-fill (425, 335 and 425 levels) to facilitate slot drilling. A total of 120m of ore drive development was completed at the 425, 335, 230 and 200 levels.



**Massive ore in the 200 south ore drive with an average face grade of 5.0 % nickel**

## Spotted Quoll

### *Production*

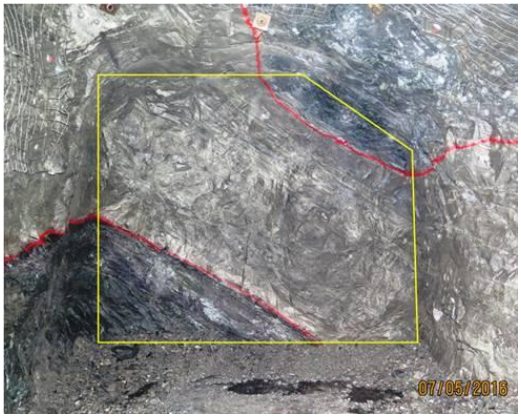
Spotted Quoll production was **71,774 tonnes of ore at an average grade of 5.0% nickel for 3,614 nickel tonnes.** This surpasses the quarter's target in nickel grade (5%) and nickel tonnes (7%). **Full year production was a record with 316,505 tonnes of ore at an average grade of 4.8% nickel (15,175 nickel tonnes).**

The main lode stoping areas for the quarter were 1140 (Block A), 1035 (Block B), 1005, 997 and 990 levels (Block C). Main load single boom stoping areas were in the 911 and 901 levels. A highlight for the quarter was the sustained high grade stoping of the 1140 level with quarterly production of 16,706 tonnes of ore at an average grade of 5.8% nickel for 960 nickel tonnes. The single-boom area opened up a second stoping front at the 901 level with the successful full extraction of the 901 panel 1 stope in early May.

### Mine Development

Total jumbo development for the quarter was 943m with 353m of lateral capital development between the 832 and 750 levels and 56m of operating waste development between the 1140 and 901 levels.

A total of 534m of ore drive development was completed which included 134m between the 955 and 932 levels and 400m of single-boom development between the 871 and 812 levels.




**Massive ore at the 862 ore drive (single-boom area) with an average grade of 8.0% nickel**

### Cosmic Boy Nickel Concentrator

| TONNES MILLED AND SOLD | | 2015/2016 Sep Qtr | Dec Qtr | Mar Qtr | Jun Qtr | YTD Total |
|---|---|---|---|---|---|---|
| Ore Processed | Tns | 153,540 | 152,435 | 156,190 | **154,114** | **616,279** |
| Grade | % | 4.6% | 4.6% | 4.4% | **4.5%** | **4.5%** |
| Ave. Recovery | % | 89% | 89% | 90% | **90%** | **90%** |
| **Nickel in Concentrate** | **Tns** | **6,252** | **6,256** | **6,180** | **6,321** | **25,009** |
| **Total Nickel Sold** | **Tns** | **6,233** | **6,281** | **6,011** | **6,268** | **24,793** |

**The Concentrator processed 154,114 tonnes of ore at an average grade of 4.5% nickel for a total of 40,885 tonnes of concentrate grading 15.5% nickel.** Consequently, 6,321 nickel tonnes were produced at a metallurgical recovery of 90% with plant availability of 96%. During April a planned five day power outage by Western Power took place as part of Western Power's asset management plan. Opportunistic maintenance was conducted on the concentrator during this period which will reduce the planned maintenance requirements during FY17.

The highest concentrator monthly throughput to date was achieved in June, with 55,386 tonnes of ore processed. The throughput increase has been a result of ongoing trials conducted to improve the grinding efficiency of the ball mill.

In addition, the Cosmic Boy concentrator processed an **annual record of 616,279 tonnes of ore at an average grade of 4.5% for the financial year.** This resulted in 162,038 tonnes of concentrate being produced grading 15.4% nickel and containing 25,009 tonnes of nickel. The plant recovery for the full year was 90% and the availability 98%.

**A total of 41,065 tonnes of concentrate was delivered for sale containing 6,268 nickel tonnes.** The concentrate stockpile at quarter end was 1,026 tonnes at an average grade of 14.8% nickel, containing 152 nickel tonnes.

**For the full year, a total of 162,643 tonnes of concentrate grading 15.2% nickel and containing 24,793 tonnes of nickel was sold** into the existing offtake contracts namely Jinchuan and BHP Nickel West (BHPNW).

The average realised nickel price for the quarter for deliveries to Jinchuan and BHPNW was A$5.44/lb (which includes quotational price adjustments up to 30 June 2016), being a marginal improvement from the March quarter price of A$5.40/lb. There will be adjustments to the realised nickel price for the June quarter based on the July nickel price average, due to final quotational price adjustments.

Other sales costs include royalties of A0.14/lb and concentrate transportation of A$0.30/lb in concentrate.

Anzac Day image of the Cosmic Boy Concentrator taken at dawn

| STOCKPILES | | Sep Qtr | Dec Qtr | Mar Qtr | Jun Qtr |
|---|---|---|---|---|---|
| Ore | Tns | 63,593 | 81,832 | 70,307 | **59,397** |
| Grade | % | 5.0% | 3.2% | 3.6% | **4.0%** |
| Concentrate | Tns | 806 | 310 | 1,009 | **1,026** |
| Grade | % | **17.6%** | **14.1%** | **14.6%** | **14.8%** |
| **Contained Nickel in Stockpiles** | **Tns** | **3,322** | **2,646** | **2,674** | **2,525** |

Ore stockpiles at the end of the quarter totalled 59,397 tonnes of ore at 4.0% nickel for 2,373 nickel tonnes, located at the mine ore pads and the concentrator run-of-mine pad. This represents approximately one month of mill feed which enables the selection of an optimal mill feed blend. The Company expects that mine ore production will match mill throughput rates going forward.

**Offtake Considerations**

During the quarter, the Company held discussions with Jinchuan and BHPNW regarding short-term (three months) concentrate requirements for their respective smelters. In order to meet an increased demand from BHPNW, it was agreed that the planned Jinchuan offtake sales for the September quarter would be re-directed to BHPNW on no worse terms to Western Areas. Normal Jinchuan shipments will recommence on 1 October 2016.

Consequently, the Company now expects the Jinchuan and the main BHPNW Offtake Agreements to expire towards the end of December 2016. Consistent with past practice, Western Areas will commence a formal tender process during the September quarter for offtake beyond CY16. This will involve discussions with both the incumbent partners whilst dealing with potential new partners whom have expressed interest in the highly sought after Western Areas concentrate.

In anticipation of offtake becoming available, the Company has been working with globally significant commodity companies on developing alternative markets to traditional smelters for nickel concentrates (for example roasting technologies). This has involved the delivery of small volumes of nickel concentrate for testing purposes with encouraging results. As the Company progresses the offtake tender process this year, updates in respect of these potential non-traditional markets and the tender progress will be provided.

Cash Costs

| FINANCIAL STATISTICS | | 2015/2016 Sep Qtr | Dec Qtr | Mar Qtr | Jun Qtr | YTD Total |
|---|---|---|---|---|---|---|
| Group Production Cost/lb | | | | | | |
| Mining Cost (*) | A$/lb | 1.58 | 1.63 | 1.66 | 1.60 | 1.62 |
| Haulage | A$/lb | 0.06 | 0.05 | 0.05 | 0.05 | 0.05 |
| Milling | A$/lb | 0.45 | 0.41 | 0.41 | 0.44 | 0.43 |
| Admin | A$/lb | 0.19 | 0.17 | 0.17 | 0.18 | 0.18 |
| By Product Credits | A$/lb | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) |
| **Cash Cost Ni in Con (***)** | **A$/lb** | **2.26** | **2.24** | **2.27** | **2.25** | **2.26** |
| **Cash Cost Ni in Con/lb (***)** | US$/lb | **1.64** | **1.61** | **1.64** | **1.68** | **1.64** |
| **Exchange Rate US$/A$** | US$/A$ | **0.73** | **0.72** | **0.72** | **0.75** | **0.73** |

**(*) 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$0.7455)**
**(***) Payable terms are not disclosed due to confidentiality conditions of the offtake agreements. Cash costs exclude royalties and concentrate logistics costs.**
**Note. Grade and recovery estimates are subject to change until the final assay data are received.**

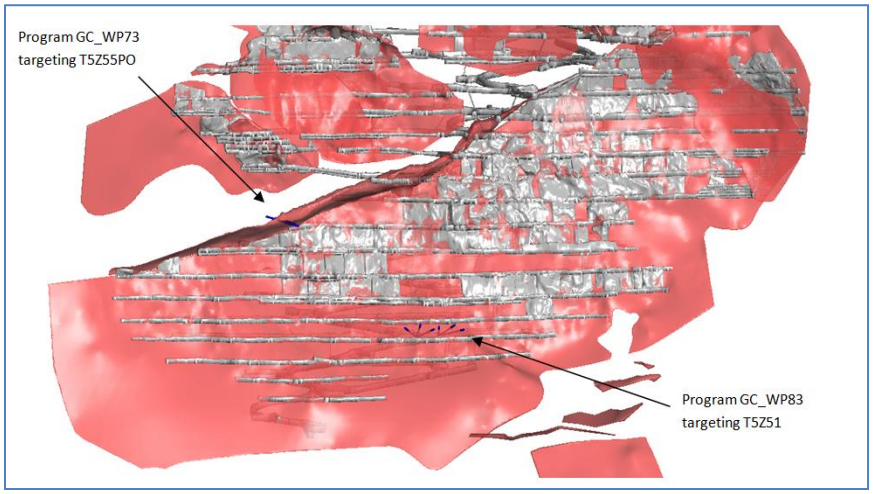
The unit cash cost of production of nickel in concentrate (excluding smelting/refining charges, concentrate logistic and royalties) was A$2.25/lb (US$1.68/lb) for the quarter. This result at the lower end of the full year guidance range has been achieved following significant cost reductions and positive ore tonnes and grade reconciliations above those used to generate the full year guidance range. The Company is maintaining focus on embedding cost reductions into the operation for the long term, across all cost centres in the business.

## Forrestania Mineral Resources and Ore Reserves

A full summary of the Company's Mineral Resource and Ore Reserve Statements are included at the end of this report.

***Flying Fox***

A total of 284.9m of grade control diamond drilling was completed from the 345 level (program GC_WP73 targeting a high grade mineralised pegmatite lode) and 245 level (program GC_WP83 targeting the main sub-vertical lode) as shown in the long section below. Remodelling of these two areas is currently in progress and an increase in nickel tonnes, relative to the current resource model, is expected for both areas.

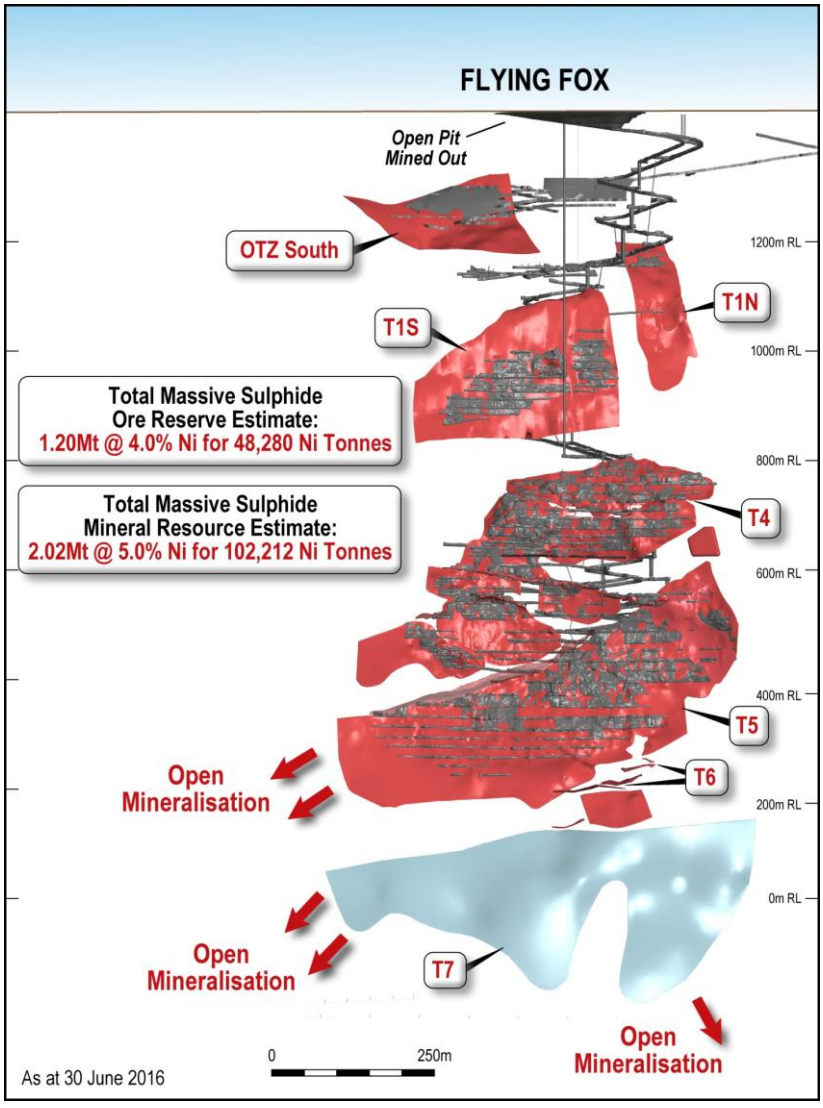


Significant drill intercepts are listed below.

| BHID | Interval m | Ni % | From (m) |
|---|---|---|---|
| LGC0327 | 6.33 | 7.9% | 23.1 |
| FGC0434 | 4.26 | 5.6% | 23.3 |
| FGC0435 | 3.30 | 4.2% | 29.4 |
| FGC0436 | 1.00 | 6.5% | 33.34 |

The total **Flying Fox massive sulphide ore reserve now stands at 1.20Mt of ore at a grade of 4.0% nickel for 48,280 nickel tonnes.**

The total **Flying Fox massive sulphide mineral resource now stands at 2.02Mt of ore at a grade of 5.0% nickel for 102,212 nickel tonnes.**




**Long Section of Flying Fox orebody**

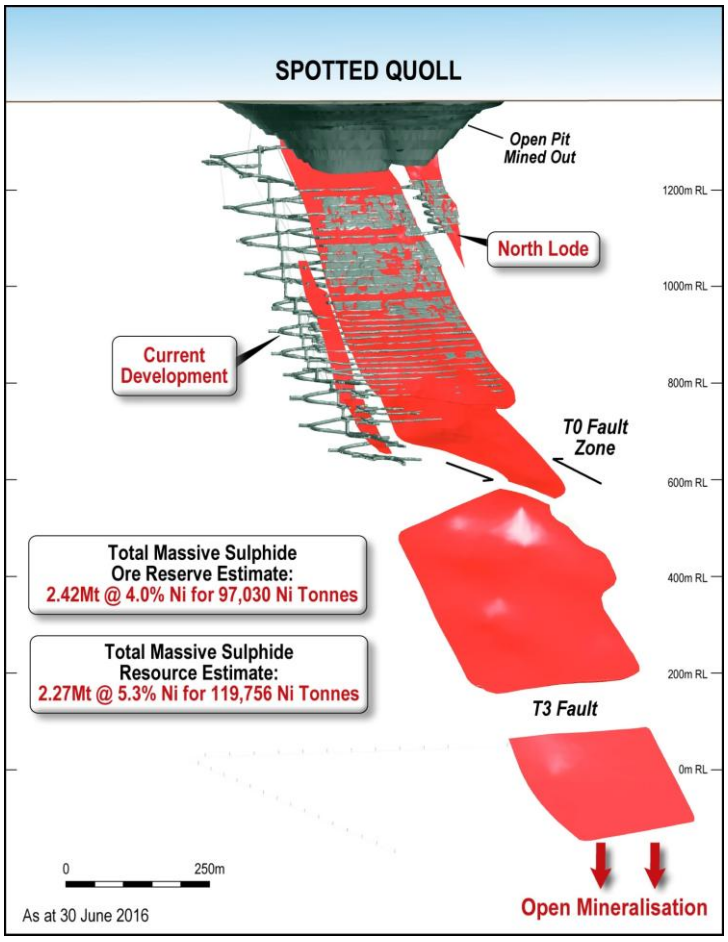
***Spotted Quoll***

A total of four grade control drill-holes (total 467.1m) were drilled from the 828m RL stockpile to confirm the current resource model in the southern portion of the ore body due to the presence of flat lying felsic intrusions in the 832 and 825 ore drives. The results, which are summarised in the table below, confirm the presence of ore 15m and 45m north of the current ore drive positions respectively.

| BHID | Interval (m) | Ni (%) | From (m) |
|---|---|---|---|
| SQUG073 | 3.1 | 7.3% | 79.8 |
| SQUG074 | 1.3 | 8.5% | 106.8 |
| SQUG075 | 6.1 | 8.1% | 103.7 |
| SQUG076 | 4.5 | 7.5% | 123.3 |

The **Spotted Quoll ore reserve now stands at 2.42Mt of ore at a grade of 4.0% nickel for 97,030 nickel tonnes.**

The **Spotted Quoll resource now stands at 2.27Mt of ore at a grade of 5.3% nickel for 119,756 nickel tonnes.**




**Long Section of Spotted Quoll orebody**

***New Morning/Daybreak***

The updated resource model of the New Morning/Daybreak deposits is expected to be finalised next quarter.

## Bioheap

***Mill Enhancement Recovery Project***

During the quarter all of the planned pre-construction activities were completed, which includes the majority of the detailed engineering and procurement of long-lead items. All of the long-lead items have been delivered to site.

***Nickel Sulphate***

During the quarter test-work was undertaken into the viability of generating nickel sulphates using the Mill Enhancement Recovery Project methodology, which could provide direct exposure to the nickel lithium battery market. A simple laboratory experiment produced nickel sulphate as shown below. Further work will be conducted to produce a higher purity product.

Recent analysis conducted by Macquarie Bank suggested that the nickel consumption for this style of product for direct application in vehicle batteries could increase from approximately 60,000 tonnes to over 150,000 tonnes of nickel by 2025. Importantly, the barriers to entry into being able to efficiently and economically produce high purity nickel sulphate are considered very high.

**Nickel sulphate produced by BioHeap.**

## Cosmos Nickel Complex ("Cosmos")

The update of the Odysseus Xstrata Scoping Study was completed early in the quarter. From the Scoping Study update, internally estimated operational and capital expenditure savings of greater than 30% against the earlier Xstrata results have been achieved, whilst the quality of the Odysseus orebody has been confirmed. Given the positive results, the Board approved the commencement of the Pre-Feasibility Study (PFS) in May. Completion of the PFS is expected before the end of the year, and will be of sufficient level of confidence to be suitable for public release.

On-site activity at Cosmos predominately comprised surface exploration drilling, plus hosting heritage inspections of proposed drill-hole locations in the Neptune project area. Cosmos will continue as an exploration platform for the next two quarters while the PFS is conducted.

Other highlights for the quarter include:

- Commencing metallurgy test work for the Odysseus orebodies;
- Continuing exploration surface drilling and geophysical works;
- Heritage surveys with the traditional owners, focussing on the southern leases; and
- Quarterly ground water monitoring and surface road-works.

View of the Cosmos mill at sunset

## Exploration

Exploration continued at Cosmos, Forrestania and Western Gawler Projects. St George Mining Limited (SGQ) advised during the quarter that they had intersected massive sulphides at Cathedrals and Strickland prospects on the Mt Alexander JV where WSA holds a 25% free carried interest in the Mt Alexander project and 3.5m ordinary shares of SGQ. Readers are referred to their announcements for details.

**Cosmos Nickel Complex ("Cosmos")**

Key highlights in the quarter include:

- Initial drilling and Down-hole Electro-Magnetics (DHEM) completed at Ulysses (adjacent to Odysseus);
- Near mine target generation activities and review continuing;
- DHEM surveys initiated; and
- Heritage activities undertaken in the Neptune area.

**Ulysses**

Exploration at Ulysses (Figure 1) continued targeting untested historical EM anomalies with the potential to extend the Odysseus ultramafic and disseminated nickel sulphides to the north. Drill hole WAD001a, a wedge from WAD001 (EOH 1,332.5m) at approximately 501.4m down hole, was completed for 1,170.3m. The drill hole successfully intersected the target area, but no ultramafics rocks, instead encountering pegmatite, mixed with intermittent rafts of felsic volcanic host rocks. Subsequent DHEM/DHMMR surveying of the drill hole indicates the source of the original EM targets are likely to be a combination of faults, and minor accumulations of barren stringer sulphide (pyrrhotite and chalcopyrite) within the pegmatites. WAD001 and WAD001a have confirmed the extensive nature of the pegmatite to the north of the Odysseus Complex.

This intrusion likely marks a regional scale structure with a potentially large offset. The possibility still remains that any ultramafic (and associated nickel mineralisation) may be offset or displaced from the main mineralised trend and, as such, remains a compelling target. A review and modelling of the felsic intrusives and structures in the area is underway to assess the potential for further mineralisation in the Ulysses area.

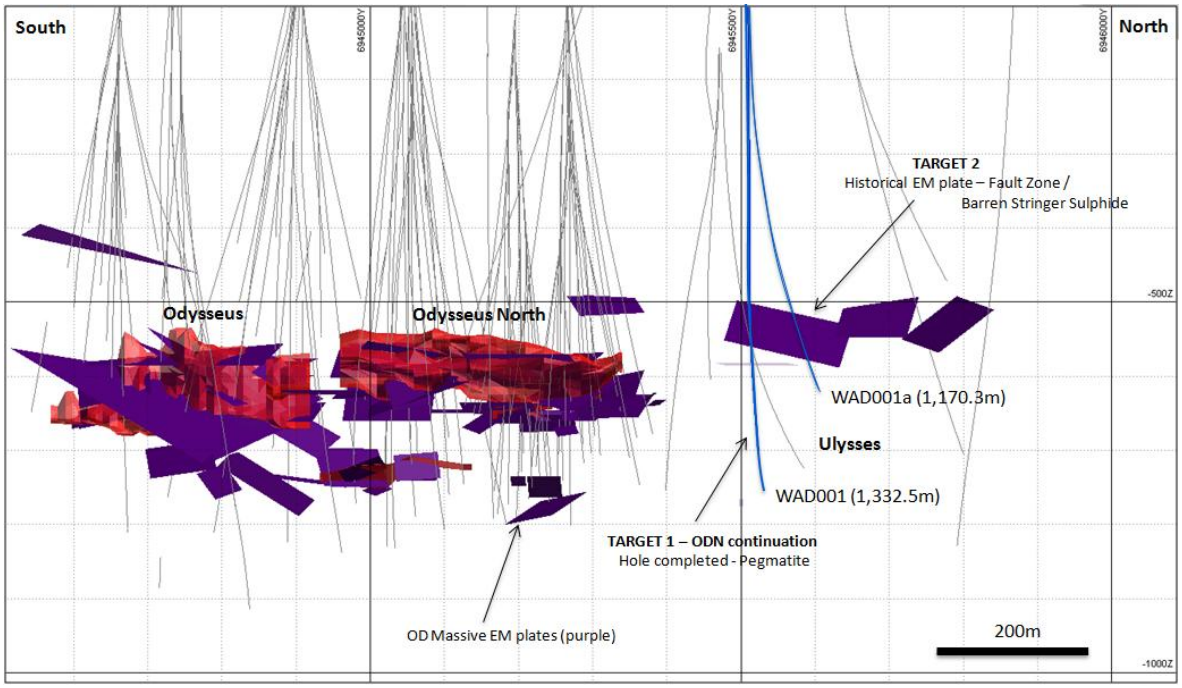



**Figure 1: Odysseus – Ulysses long section indicating the location of drill hole WAD001 and WAD001a**

### Down-hole Electro-Magnetics

Significant volumes of disseminated nickel sulphides, with zones of network textured sulphides, are located between the Cosmos/Alex Maires and the Prospero/Tapinos orebodies. Only about 30% of the basal contact of the main mineralisation trend has been tested by previous drilling. Some of the untested EM targets may represent accumulations of massive nickel sulphides.

Whilst most of the historic drill holes were routinely surveyed with DHEM, these surveys used technology that is more limited in capability and effectiveness than the modern, digital, three component DHEM instrumentation used today, particularly in the detection of highly conductive massive nickel sulphides. A detailed review of the near-mine and brownfield DHEM opportunities has highlighted a number of untested existing anomalies.

The application of three-component DHEM will aim to refine the known, untested EM anomalies, and to identify potential new high grade mineralisation along the near-mine corridor. Drilling activities aimed at cleaning out old drill holes and assisting with the DHEM surveys will begin early in the September quarter.

### Apollo

The Apollo area lies approximately 7km to the southeast of the main Cosmos nickel belt (Figure 2). The stratigraphy is genetically related to the 'Leinster Nickel Camp', which hosts BHPB's world class Perseverance/Rocky's Reward/Harmony ore bodies, and the smaller, but also significant, 'Camelot Nickel Camp'. The Camelot Nickel Camp is known to host significant volumes of high and low grade nickel sulphide mineralisation, in a series of deposits, and the prospective Camelot ultramafics have been interpreted to extend into the Apollo area.

Work during the quarter has been focused at interpreting the surface EM data acquired during the March quarter. Multiple strong and broad anomalous responses were identified, some of which have been drill tested previously and are interpreted to be associated with sulphidic black shale. A number of moderate to weak, short strike length anomalies were also detected, and some of these lie adjacent to the interpreted Camelot ultramafic stratigraphy and in areas of other known ultramafics. These anomalies have not been explained by previous drilling. Planning is now underway to test these anomalies and the ultramafic stratigraphy in the Apollo area.

**Neptune**

Exploration activities continued at Neptune and included a drilling focused heritage clearance survey, further geophysical review and exploration planning. The heritage survey was conducted around the Lake Miranda area in conjunction with the Tjiwarl Native Title Claimant group. The survey was focused on clearing specific drill sites and access routes for the planned Neptune drilling program. A total of 8 sites have been cleared for drilling, including key locations to test the **high priority MLEM anomalies that were defined in the previous phase of exploration** (Figure 2). The planned exploration program will include the first deep drilling to test the prospective ultramafics at depth and below the lake, and will also provide a platform for further down-hole geophysics (DHEM/DHMMR).

The Neptune area lies to south of the Prospero and Tapinos high grade nickel deposits, and is interpreted to contain the highest volume of cumulate ultramafics in the Cosmos Nickel Belt. This highly prospective area was significantly under explored by the previous owners and remains the number one priority for exploration at Cosmos. The recently completed Moving Loop Electro-Magnetic (MLEM) survey identified a number of highly ranked anomalies and these, along with nickel sulphides identified in historical drilling, are the focus for the planned exploration program.

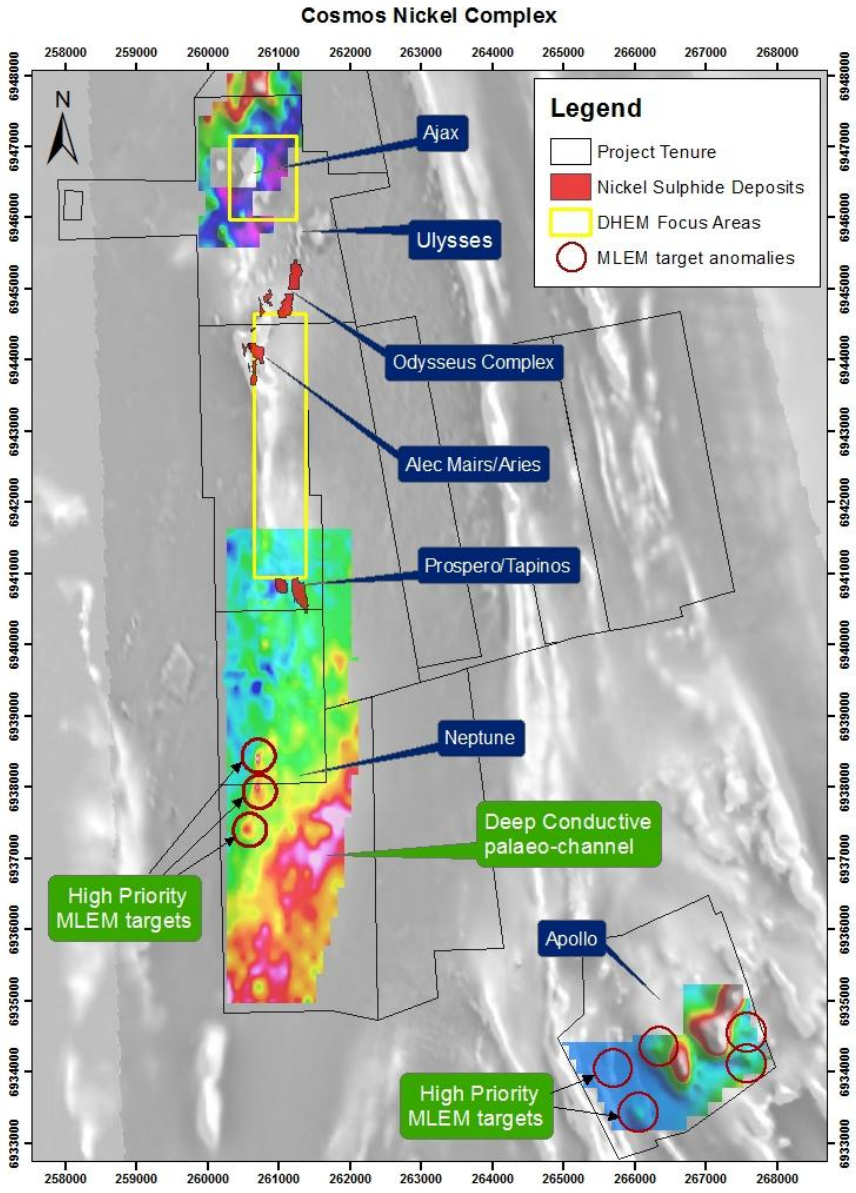



**Figure 2: Activity summary and exploration focus areas at the Cosmos Nickel Complex**

**Forrestania Projects**

Evaluation of specific prospect areas and the ultramafic stratigraphy for economic nickel sulphide mineralisation continued. In addition the review of the potential for pegmatite hosted style lithium mineralisation in the Forrestania tenements continued.

**Forrestania Nickel Exploration**

The main focus was within the Western Ultramafic Belt (WUB). A reinterpretation of the geology and structures across the WUB to the south of Spotted Quoll is continuing, with the overall aim of understanding how it relates to the Spotted Quoll mineralised system further to the north. In addition, a review of the potential for nickel mineralisation of the north-eastern portions of project area, such as Northern Estates and Parker Dome, is in progress. It is expected surface geophysical surveys (mainly EM) will be initiated in the September quarter.

**Forrestania Lithium Mineralisation**

The process to evaluate the lithium potential at Western Areas' Forrestania tenements and pursue options that will maximise the value of these assets to the Company continued during the June quarter. Further sampling of existing holes from the **South Ironcap area** again returned pegmatites containing elevated $Li_2O$ concentrations (see table below). The assay results have confirmed the southern deeper portions of the pegmatite, with wide widths (30-50m) over a strike length of at least 900m, at a depth of 150-200m below surface (Figure 3). Importantly the assay results also indicate the pegmatites are shallowing to the north, in SID030 and SID031, up to 340m north of SID014. This northern area will be drill tested in the coming quarter to confirm the nature and extent of the shallower pegmatites and potential for further lithium mineralisation.

| HOLE ID | Easting | Northing | RL | EOH(m) | Type | DIP | Azimuth | Width (m) | $Li_20$ % | From (m) |
|---|---|---|---|---|---|---|---|---|---|---|
| SID014 | 760431.7 | 6380128 | 429.3 | 281.2 | DD | -58 | 90 | 21.5 | 1.61 | 250.3 |
| SID018 | 760671.4 | 6379838 | 418.3 | 450.7 | DD | -70 | 86 | 23.6 | 1.36 | 178.4 |
| SID020A | 760881.4 | 6379526 | 409.1 | 285.0 | DD | -55 | 85 | 33.8 | 1.22 | 215.0 |
| SID021 | 760671.2 | 6379838 | 418.9 | 318.3 | DD | -54 | 87 | 7.1 | 0.79 | 274.0 |
| SID023 | 760719.2 | 6379711 | 420.9 | 351.3 | DD | -55 | 86 | 21.9 | 1.48 | 269.5 |
| SID025 | 760349.8 | 6380080 | 432.2 | 461.9 | DD | -63 | 89 | 2.0 | 0.40 | 105.6 |
| | | | | | | | | 2.5 | 0.89 | 137.4 |
| | | | | | | | | 6.7 | 1.82 | 183.5 |
| SID027 | 760239.5 | 6380285 | 427.6 | 396.4 | DD | -60 | 91 | NSI | | |
| SID029 | 760348.1 | 6380079 | 432.2 | 528.7 | DD | -72 | 91 | 5.7 | 1.43 | 177.5 |
| | | | | | | | | 1.5 | 0.74 | 188.8 |
| SID030 | 760241.4 | 6380283 | 427.6 | 290.5 | DD | -50 | 92 | NSI | | |
| SID031 | 760111.5 | 6380373 | 427.9 | 565.0 | DD | -65 | 88 | NSI | | |
| SID032 | 760242 | 6380165 | 431.2 | 469.0 | DD | -65 | 89 | 1.42 | 0.02 | 16.1 |
| | | | | | | | | 2.4 | 0.88 | 82.8 |
| | | | | | | | | 3.22 | 0.04 | 110.17 |
| | | | | | | | | 9.37 | 1.14 | 118.23 |

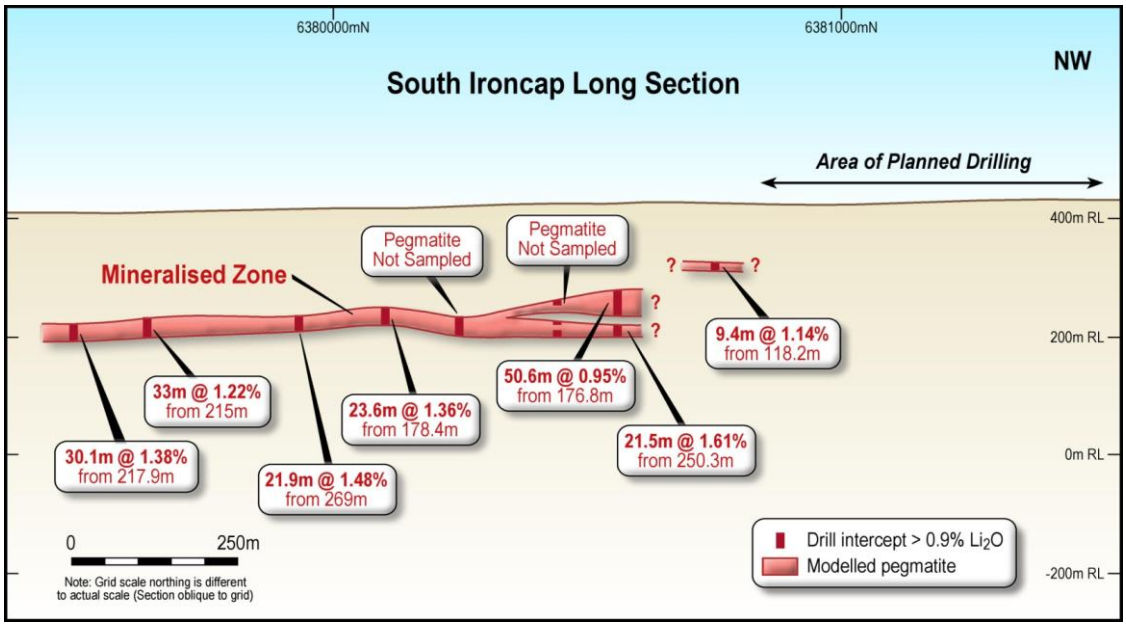



**Figure 3: Long Section of South Ironcap**

Western Areas holds a considerable extent of the Eastern Ultramafic Belt (EUB), some 170km in strike length, under licence. Work carried out to date indicates there are considerable volumes of pegmatite in the northern holding of this belt. However, these parts of the tenement holding have not been evaluated previously with regard to lithium. An assessment of this area will be undertaken in the September quarter.

**Western Gawler Nickel-Copper Joint Venture (WSA earning up to 100% interest)**

Exploration at the Western Gawler Project focused on target generation activities and preparation for the drilling program planned for next quarter.

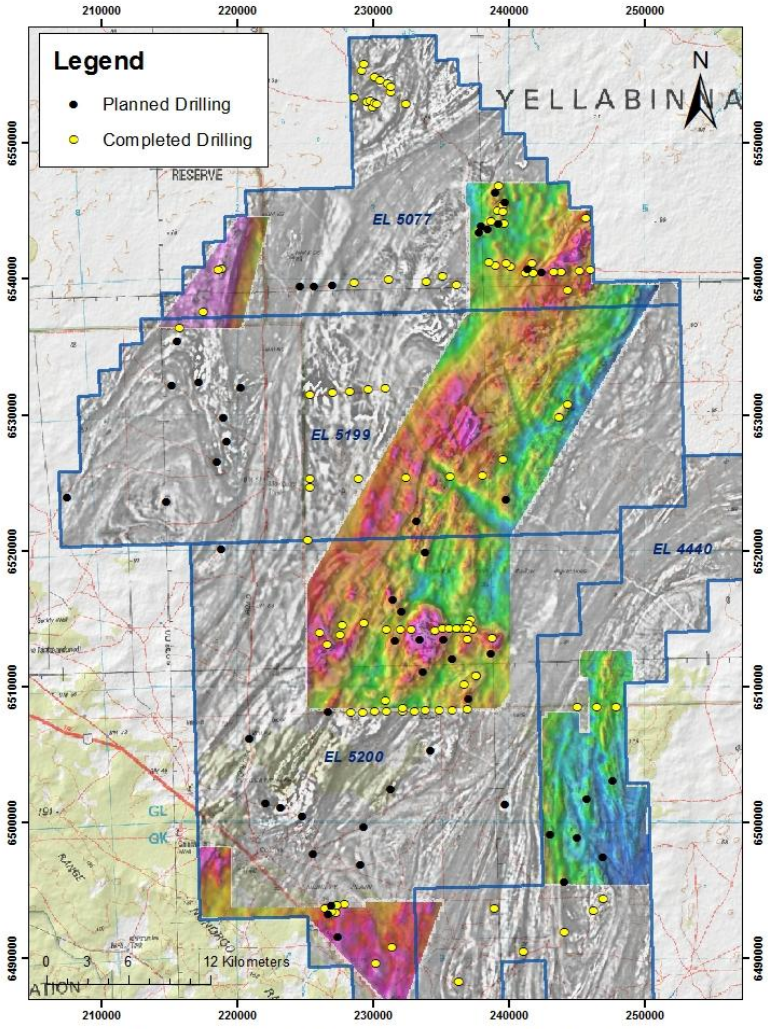
Key highlights include:

- Detailed surface gravity survey commenced; and
- Heritage clearance surveys completed

The Western Gawler region is known to host mafic-ultramafic intrusive rocks and determining the extent, exact age and prospectivity of these is the primary objective of the exploration activities. The results from the initial phase of exploration are very encouraging, with the identification of olivine gabbro-norite intrusive rocks and geochemical anomalism in a number of areas. The results confirm the initial observations regarding the prospectivity of the Western Gawler region for intrusive related nickel, copper and gold mineralisation. These types of mafic intrusives are well known for hosting significant nickel and copper orebodies in western and central Australia, including Nova-Bollinger and Nebo-Babel.

A detailed surface gravity survey commenced during the quarter, with the aim of generating new targets, and adding to the current project wide-geophysical datasets. Limited test work by Western Areas has shown that, in conjunction with detailed magnetics, the gravity surveys can help delineate features that may represent mafic/ultramafic intrusions. The current survey has been designed to cover key areas known to host prospective intrusions, and to extend the geological interpretation into unexplored areas. A number of features have already been identified and ranked for follow-up, and these will be tested, along with a number of other targets, in the up-coming drilling program. The planned target and reconnaissance drilling is shown on Figure 4.

WSA continues to enhance its relationships with the traditional owners and the Far West Coast Aboriginal Corporation (FWCAC), and during the quarter a heritage clearance survey was completed in support of the up-coming drilling program. The FWCAC has also been supporting the exploration program by assisting with rehabilitation activities in the Yellabinna Regional Reserve. Ongoing dialogue with the Aboriginal Land Council may also open new areas for access that will facilitate sustained exploration.




Western Gawler Project - Planned and completed drilling overlaying
Gravity (Coloured residual) and Magnetics (TMI RTP) imagery

Coordinate System - GDA 1994 MGAZ53

**Figure 4: Planned and completed drilling at Western Gawler**

**-ENDS-**

**COMPETENT PERSON'S STATEMENT:**

The information within this report as it relates to exploration results, mineral resources and ore reserves is based on information compiled by Mr Charles Wilkinson, Mr Andre Wulfse and Mr Marco Orunesu Preiata of Western Areas Ltd. Mr Wilkinson, Mr Wulfse and Mr Orunesu Preiata are members of AusIMM and are full time employees of the Company. Mr Wilkinson, Mr Wulfse and Mr Orunesu Preiata 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 Orunesu Preiata 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: "commodity market analysts are forecasting the nickel market will be in deficit by 70-75k nickel tonnes in 2016" and, "the Company now expects the Jinchuan and the main BHPNW Offtake Agreements to expire towards the end of December 2016" and, "The updated resource model of the New Morning/Daybreak deposits is expected to be finalised next quarter".

This announcement does not include reference to all available information on the Company, the Forrestania Nickel Operation or the Cosmos Nickel Complex 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**

# Western areas ore reserve / mineral resource statement – Effective date 30th June 2016

| | Tonnes | Grade Ni% | Ni Tonnes | Classification | JORC Code |
|---|---|---|---|---|---|
| **Ore Reserves** | | | | | |
| 1. Flying Fox Area | 1,200,080 | 4.0 | 48,280 | Probable Ore Reserve | 2012 |
| 2. Spotted Quoll Area | 236,950 | 4.2 | 9,940 | Proved Ore Reserve | 2012 |
| | 2,179,880 | 4.0 | 87,090 | 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 |
| **TOTAL FORRESTANIA ORE RESERVE** | **5,725,910** | **3.2** | **176,110** | | |
| **Mineral Resources** | | | | | |
| 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 | 55,779 | 5.9 | 3,290 | Indicated Mineral Resource | 2012 |
| 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 | 154,748 | 5.8 | 8,921 | Indicated Mineral Resource | 2012 |
| T5 Massive Zone + Pegs | 1,226,930 | 5.7 | 70,476 | Indicated Mineral Resource | 2012 |
| T6 Massive Zone | 47,840 | 5.3 | 2,525 | Indicated Mineral Resource | 2012 |
| T7 Massive Zone | 256,977 | 2.1 | 5,303 | Inferred Mineral Resource | 2012 |
| **Total High Grade** | **2,024,922** | **5.0** | **102,212** | | |
| T5 Flying Fox Disseminated Zone | 197,200 | 0.8 | 1,590 | Indicated Mineral Resource | 2004 |
| | 357,800 | 1.0 | 3,460 | Inferred Mineral Resource | 2004 |
| T5 Lounge Lizard Disseminated Zone | 4,428,000 | 0.8 | 36,000 | Indicated Mineral Resource | 2004 |
| **Total Disseminated Flying Fox/Lounge Lizard** | **4,983,000** | **0.8** | **41,050** | | |
| **Total FF/LL** | **7,007,922** | **2.0** | **143,262** | | |
| 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** | | |
| 2. Spotted Quoll Area | | | | | |
| Spotted Quoll | 616,537 | 5.7 | 35,370 | Measured Mineral Resource | 2012 |
| | 1,440,082 | 5.1 | 72,866 | Indicated Mineral Resource | 2012 |
| | 212,089 | 5.4 | 11,520 | Inferred Mineral Resource | 2012 |
| **Total Spotted Quoll** | **2,268,708** | **5.3** | **119,756** | | |
| Beautiful Sunday | 480,000 | 1.4 | 6,720 | Indicated Mineral Resource | 2004 |
| **Total Western Belt** | **11,900,530** | **2.5** | **300,438** | | |
| 3. 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 |
| **Total Cosmic Boy Area** | **375,900** | **2.4** | **8,950** | | |
| 4. 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 |
| **Total Diggers Area** | **10,028,200** | **1.0** | **99,570** | | |
| **TOTAL FORRESTANIA MINERAL RESOURCE** | **22,304,630** | **1.8** | **408,958** | | |
| 5. Cosmos Area | | | | | |
| AM5 | 479,914 | 2.6 | 12,430 | Indicated Mineral Resource | 2012 |
| | 26,922 | 1.9 | 509 | Inferred Mineral Resource | 2012 |
| AM6 | 1,704,548 | 2.7 | 45,171 | Indicated Mineral Resource | 2012 |
| | 329,443 | 2.5 | 8,203 | Inferred Mineral Resource | 2012 |
| Odysseus | 3,884,857 | 2.2 | 84,301 | Indicated Mineral Resource | 2012 |
| | 169,165 | 2.1 | 3,603 | Inferred Mineral Resource | 2012 |
| Odysseus North - Disseminated | 1,631,495 | 2.8 | 45,519 | Indicated Mineral Resource | 2012 |
| | 1,586,175 | 2.2 | 35,054 | Inferred Mineral Resource | 2012 |
| Odysseus North - Massive | 48,043 | 11.6 | 5,563 | Indicated Mineral Resource | 2012 |
| **Total Cosmos Area** | **9,860,562** | **2.4** | **240,353** | | |
| 6. Mt Goode Area | | | | | |
| Mt Goode | 13,563,000 | 0.8 | 105,791 | Measured Mineral Resource | 2012 |
| | 27,363,000 | 0.6 | 158,705 | Indicated Mineral Resource | 2012 |
| | 12,009,000 | 0.5 | 62,447 | Inferred Mineral Resource | 2012 |
| **Total Mt Goode Area** | **52,935,000** | **0.6** | **326,943** | | |
| **TOTAL COSMOS MINERAL RESOURCE** | **62,795,562** | **0.9** | **567,296** | | |
| **TOTAL WESTERN AREAS MINERAL RESOURCE** | **85,100,192** | **1.1** | **976,254** | | |

# JORC 2012 TABLE 1 – Forrestania Exploration

## Section 1: Sampling Techniques and Data – Forrestania

| Criteria | JORC Code Explanation | Commentary |
|---|---|---|
| Sampling techniques | • *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.*<br>• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>• *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.* | • *Exploration targets were generally sampled using diamond drill (DD), and where applicable with Reverse Circulation (RC) pre-collars to nominally between 100m and 200m depth), as well as RC only holes. Holes were typically drilled perpendicular to the strike (north-south) of the stratigraphy, at angles ranging between 55° and 75°.*<br>• *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.*<br>• *Diamond drill core (NQ2) is 1/4 and ½ 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 or ICP/MS 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.* |
| Drilling Techniques | • *Drill type (e.g. 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).* | • *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.*<br>• *Shallow drilling at New Morning was completed using PQ drilling.*<br>• *RC drilling comprises nominally 140mm diameter face sampling hammer drilling.* |
| Drill sample recovery | • *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>• *Whether a relationship exists between sample recovery and grade and whether sample bias.* | • *Diamond core and RC recoveries are logged and recorded in the database. Overall recoveries are >95% and there was no core loss issues or significant sample recovery problems. Core loss is noted where it occurs.*<br>• *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.*<br>• *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.*<br>• *Drilling in the oxidised profile results in more incomplete core recoveries.* |
| Logging | • *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.*<br>• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc).*<br>• *The total length and percentage of the relevant intersections logged.* | • *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.*<br>• *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.*<br>• *All diamond drill holes were logged and photographed in full. RC holes are logged in full.* |
| Sub-sampling techniques and sampling preparation | • *If core, whether cut or sawn and whether quarter, half or all core taken.*<br>• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* | • *Core was cut in quarters (NQ2) onsite using an Almonte automatic core saw. Sampling for lithium involves collection of half core. All samples were collected from the same side of the core.*<br>• *RC samples were collected on the rig using cone splitters. Composite* |

| Criteria | JORC Code Explanation | Commentary |
|---|---|---|
| | • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>• *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.*<br>• *Whether sample sizes are appropriate to the grain size of the material being sampled.* | *samples are collected via riffle splitting or spearing to generate a single sample of less than3kg.*<br>• *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.*<br>• *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.*<br>• *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.*<br>• *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.*<br>• *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.* |
| Quality of assay data laboratory tests | • *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*<br>• *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.*<br>• *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.* | • *All base metal samples were subjected to ICP-AES analysis using nitric, perchloric, hydrofluoric and hydrochloride acid digest. Samples which assayed greater than 10,000ppm 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 >10g/t were assayed using Fire Assay and AAS finish. Lithium samples were subject to four acid digest ICP-MS 48 element analysis - ME-MS61. Samples which assayed greater than 10,000ppm Li were treated to ME-ICP82b B/Li - $Na_2O_2$ Fusion - ICP High Grade. Selected samples with greater than 100ppm Ta and 500ppm Cs were subject to Lithium Borate Fusion - ME-MS85 with ICP-MS finish.*<br>• *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, NITON XRF data is only used as an approximate guide. All reported intersections are gathered using industry best practice laboratory assay techniques.*<br>• *Standards and blanks were routinely used to access company QAQC (approx 1 std for every 12-15 samples).* |
| Verification of sampling and assaying | • *The verification of significant intersections by either independent or alternative company personnel.*<br>• *The use of twinned holes.*<br>• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>• *Discuss any adjustment to assay data.* | • *Adrian Black of Newexco Pty Ltd (a member of the AIG), an independent exploration company, has visually verified significant intersections in diamond core.*<br>• *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.*<br>• *No adjustments were made to assay data compiled for this estimate.* |
| Location of data points | • *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.*<br>• *Specification of the grid system used.*<br>• *Quality and adequacy of topographic control.* | • *Hole collar locations were surveyed using Western Areas surveyors under the guidelines of best industry practice. The Leica GPS1200 was use for all surface work has an accuracy of +/- 3cm.*<br>• *Elevation data were collected in AHD RL and a value of 1,000m was added.*<br>• *MGA94 Zone 50 grid coordinate system is used.*<br>• *The accuracy of the pillars used in WSA's topographical control* |

| Criteria | JORC Code Explanation | Commentary |
|---|---|---|
| | | *networks operate within the Mines Regulations accuracy requirement of 1:5000 for control networks.* |
| Data spacing and distribution | • *Data spacing for reporting of Exploration Results.*<br>• *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.*<br>• *Whether sample compositing has been applied.* | • *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.*<br>• *Sampling compositing has been applied to some of the RC sampling, following initial testing using a handheld NITON XRF instrument.*<br>• *Samples were composited to one metre lengths, making adjustments to accommodate residual sample lengths.* |
| Orientation of data in relation to geological structure | • *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*<br>• *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.* | • *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 ($70^0$ to $80^0$) e.g. New Morning means this is not always achieved.*<br>• *No orientation based sampling bias has been observed in the data, intercepts are reported as downhole lengths.* |
| Sample Security | • *The measures taken to ensure sample security.* | • *All samples are prepared onsite under the supervision of Newexco/Western Area staff.*<br>• *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.* |
| Audits and Reviews | • *The results of any audits or reviews of sampling techniques and data.* | • *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.* |

# JORC 2012 TABLE 1 – Forrestania Exploration

## Section 2: Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| Mineral tenement and land tenure status | • *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.*<br>• *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.* | • *Forrestania Nickel Operations comprises approximately 125 tenements covering some 900km2 within the Central Yilgarn Province. The tenements include exploration licences, prospecting licences, general purpose leases, miscellaneous licences and mining leases.*<br>• *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, and the Lake King JV where Western Areas has earned a 70% interest from Swanoak Holdings.*<br>• *A number of the Kagara tenements are subject to third party royalty agreements.*<br>• *All the tenements are in good standing. Six tenements are pending grant.* |
| Exploration done by other parties | • *Acknowledgment and appraisal of exploration by other parties.* | • *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.*<br>• *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).* |
| Geology | • *Deposit type, geological setting and style of mineralisation.* | • *The FNO lies within the Forrestania Greenstone Belt, which is part of the Southern Cross Province of the Yilgarn Craton in Western Australia. The main deposit type is the komatiite hosted, disseminated to massive Nickel sulphide deposits, which include the Flying Fox and Spotted Quoll deposits which are currently being mined. The mineralisation occurs in association with the basal section of high MgO cumulate ultramafic rocks.*<br>• *The greenstone succession in the FNO district also hosts a number of orogenic lode gold deposits of which Bounty Gold Mine is the biggest example. Some exploration for this style of deposit is undertaken by Western areas from time to time in the FNO tenements.* |
| Drill hole Information | • *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:*<br>– *easting and northing of the drill hole collar*<br>– *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>– *dip and azimuth of the hole*<br>– *downhole length and interception depth*<br>– *hole length.*<br>• *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.* | • *See drill hole summary tables enclosed in the text.* |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| Data aggregation methods | • *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.*<br>• *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.*<br>• *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | • *Standard weighted averaging of drill hole intercepts were employed. No maximum or minimum grade truncations were used in the estimation.*<br>• *The reported assays have been length and bulk density weighted. A lower arbitrary 0.5% Ni (0.45% $Li_2O$) 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.*<br>• *No metal equivalent values are used.* |
| Relationship between mineralisation widths and intercept lengths | • *These relationships are particularly important in the reporting of Exploration Results.*<br>• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>• *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').* | • *The incident angles to mineralisation are considered moderate.*<br>• *Due to the often steep dipping nature of the stratigraphy reported downhole intersections are moderately greater (m/1.5 ratio on average) than the true width.* |
| Diagrams | • *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.* | • *Shown on the long section included in this report.* |
| Balanced reporting | • *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.* | • *All results are reported.* |
| Other substantive exploration data | • *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.* | • *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 and Si for New Morning.*<br>• *Information on structure type, dip, dip direction alpha and beta angles, texture, shape, roughness and fill material is stored in the structural logs in the database.* |
| Further work | • *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | • *Exploration within the tenements continues to evaluate the prospective stratigraphic succession containing the cumulate ultramafic rocks and other rock types for various styles of mineralisation using geochemical and geophysical surveys and drilling.*<br>• *At this stage of the exploration program, the nature of the geological model is evolving. Details of further work will be forthcoming as the project progresses.* |

# 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 | • *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.*<br>• *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.* | *Western Areas Ltd (WSA) undertook a review of the Flying Fox deposit (FF) during Financial year 2016 after the completion of the new drilling campaign. The underlying Mineral Resource was issued in March 2016 Quarterly Report.*<br><br>*The Mineral Resources are reported inclusive of the Ore Reserves.* |
| Site visits | • *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*<br>• *If no site visits have been undertaken indicate why this is the case.* | *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.*<br><br>*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.*<br><br>*Mine design and mining method is based primarily on the recommendations laid out in the updated Feasibility study.* |
| Study status | • *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.*<br>• *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.* | *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.*<br><br>*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.* |
| Cut-off parameters | • *The basis of the cut-off grade(s) or quality parameters applied.* | *An Ore Reserve cut-off grade of 1.5% Ni was selected to obtain an Ore Reserve that fits the following criteria:*<br>• *Minimum Head Grade fitting the Mill requirements.*<br>• *Ore Reserve average grade equal or greater than Life of Mine breakeven grade.*<br>• *Mean Arsenic concentration that enables production of a saleable concentrate from Forrestania.*<br>• *Positive LOM NPV*<br>• *Maximise steady state production*<br>• *LOM Nickel price curve from USD4.00/lb @ FX0.72 to USD6.00/lb @ FX 0.75.*<br><br>*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.* |
| Mining factors or assumptions | • *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).*<br>• *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.*<br>• *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.*<br>• *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).*<br>• *The mining dilution factors used.*<br>• *The mining recovery factors used.*<br>• *Any minimum mining widths used.*<br>• *The manner in which Inferred Mineral Resources are* | *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.*<br><br>*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:*<br>• *The Mineral Resource model used is in Datamine format. It combines the Resources models for Flying Fox mine and has been released in March 2016.*<br>• *The minimum mining width is 2.5 metres.*<br>• *The max stable stope length is 20 metres with a stope height between 8 and 17 metres along dip. Other geotechnical parameters are contained in the current Ground Control Management Plan.*<br>• *Stope Planned dilution is 0.5 metres in Hanging Wall and 0.25 meters in the foot Wall.* |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *utilised in mining studies and the sensitivity of the outcome to their inclusion.*<br>• *The infrastructure requirements of the selected mining methods.* | • *A halo of low grade material averaging 0.7% Ni is included in the block model around the ore body wire frames just for T5 area, extending 5 m in the hanging-wall and 5 m in the foot-wall. No low grade halo is assigned to the material outside the other parts of Flying Fox. 0% Ni grade is assigned to the material outside the block model.*<br>• *Stope Unplanned dilution (from hosting rock and fill) is 10% of stope mass @ 0 Ni%.*<br>• *Standard SG for dilution is 2.8 t/m$^3$.*<br>• *Ore recoveries ranges from 50% to 100% in the stopes in function of the ground conditions, their location within the ore body, and extraction sequence; and 100% in the ore drives.*<br>• *Pillar factor for unplanned pillars is 2%.*<br>• *Production rates reflect current mining performances and practice.*<br><br>*No Inferred material has been utilised for the Ore Reserves estimation.*<br><br>*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.* |
| Metallurgical factors or assumptions | • *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.*<br>• *Whether the metallurgical process is well-tested technology or novel in nature.*<br>• *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.*<br>• *Any assumptions or allowances made for deleterious elements.*<br>• *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.*<br>• *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?* | *The metallurgical factors used are from existing Cosmic Boy concentrator conventional nickel sulphide floatation techniques and historical data. Figures used are considered commercially sensitive by the company and may be made available by request.*<br><br>*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.*<br><br>*The resultant concentrate is sold into existing off-take contracts with BHP and Jinchaun.* |
| Environmental | • *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.* | *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.*<br><br>*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.* |
| Infrastructure | • *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.* | *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.*<br><br>*FF is supplied by Western Power 33kV overhead power-line from the Bounty switchyard 60km to the north of SQ mine-site.* |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | *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.*<br><br>*Bulk material logistics is predominately via conventional truck haulage.*<br><br>*Mine personnel reside at the nearby Cosmic Boy Village (529 rooms) and are predominately a FIFO (via CB airstrip) workforce with some minor DIDO.*<br><br>*The mine-site is 80km to the east of the Hyden township and has two main gazetted gravel road accesses (east from Hyden and south from Varley)* |
| Costs | • *The derivation of, or assumptions made, regarding projected capital costs in the study.*<br>• *The methodology used to estimate operating costs.*<br>• *Allowances made for the content of deleterious elements.*<br>• *The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co-products.*<br>• *The source of exchange rates used in the study.*<br>• *Derivation of transportation charges.*<br>• *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.*<br>• *The allowances made for royalties payable, both Government and private.* | *Capital Underground Development costs are derived from the LOM plan based on existing contracts and historical performance and data.*<br><br>*All other Capital costs are sourced as necessary via quotes from suppliers or technical studies.*<br><br>*Mining, processing, administration, surface transport, concentrate logistics and state royalty costs are based on existing cost estimates.*<br><br>*The nickel price and FX assumptions used were sourced from industry standard sources*<br><br>*Nickel price from USD4.00/lb @ FX0.72 to USD6.00/lb @ FX 0.75.*<br><br>*Net Smelter Return (NSR) factors were sourced from existing concentrate off-take contracts.* |
| Revenue factors | • *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.*<br>• *the derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.* | *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.*<br><br>*The price setting mechanism for the sale of product subject to this report is traded openly on the London Metals Exchange ("LME").*<br><br>*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.*<br><br>*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.* |
| Market assessment | • *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.*<br>• *A customer and competitor analysis along with the identification of likely market windows for the product.*<br>• *Price and volume forecasts and the basis for these forecasts.*<br>• *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.* | *The commodity subject to this report is traded openly on the London Metals Exchange ("LME").*<br><br>*The Company has for many years maintained both long and short term offtake sales contracts with multiple customers, both locally and internationally.*<br><br>*Existing contracts have been assessed for the sales volume assumptions.*<br><br>*As the Company has been supplying multiple customers over a significant time period no acceptance testing has been assumed in the reserve development process.* |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | *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.*<br><br>*For the Nickel price assumptions refer to the previous sections.* |
| Economic | • *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.*<br>• *NPV ranges and sensitivity to variations in the significant assumptions and inputs.* | *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.*<br><br>*The discount rate has been estimated as the weighted average cost of capital for the Company.* |
| Social | • *The status of agreements with key stakeholders and matters leading to social licence to operate.* | *All legal permits to mine Flying Fox have been obtained by Western areas following the paths described by the relevant laws with the participation of the local communities (see previous points).*<br><br>*As a company policy (WSA-HR-POL-003), the relations with the local communities and territories are a key part of operational management.* |
| Other | • *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:*<br>• *Any identified material naturally occurring risks.*<br>• *The status of material legal agreements and marketing arrangements.*<br>• *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.* | *It is noted that mining operations are an inherently risky business in which to operate, no other risk factors apart from the normal risk components included in all the above points and assumptions have been identified.* |
| Classification | • *The basis for the classification of the Ore Reserves into varying confidence categories.*<br>• *Whether the result appropriately reflects the Competent Person's view of the deposit.*<br>• *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).* | *Flying Fox has the following Ore Reserves at the 30th of June 2016:*<br><br>*Probable Ore Reserves of 1,200,080 ore tonnes at 4.0% for 48,280 Nickel tonnes*<br><br>*Ore reserves derive entirely from Indicated Mineral Resource and the result appropriately reflects the Competent Person's view of the deposit.* |
| Audits or reviews | • *The results of any audits or reviews of Ore Reserve estimates.* | *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.* |
| Discussion of relative accuracy/confidence | • *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.*<br>• *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.* | *The confidence in the present evaluation is from the fact that Flying Fox is a well establish operating mine with a sound performance database.*<br><br>*The present estimation, for the nature of the commodity mined, refers to global market conditions (see above points for the assumptions).*<br><br>*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.* |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | • *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.*<br>• *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.* | |

# JORC 2012 TABLE 1 – Cosmos Nickel Complex Exploration

## Section 1: Sampling Techniques and Data

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Sampling techniques* | • *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 down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* | • *Historical sampling has been completed by prior explorers*<br>• *The nature and type of sampling varies depending on the explorers sampling regime*<br>• *Survey specifications for the geophysical survey include:*<br>○ *Configuration: Moving in-loop / Fixed loop*<br>○ *Stations spacing: 100m / 200m*<br>○ *Line spacing: 200m / 400m*<br>○ *TX Loop size: 200mX200m, 400mX400m*<br>○ *TX Loop moves: 100m / 200m*<br>○ *TX Turn: 1*<br>○ *Components: B(x,y,z)*<br>○ *Bearing: E-W,*<br>○ *Frequency: 0.25Hz*<br>○ *Receiver: SMARTem24*<br>○ *Sensor: High Temp SQUID*<br>○ *Readings: Minimum 3 repeatable readings*<br>○ *Current: 75 amps*<br>○ *Datum/Proj: GDA94, MGA Zone 51*<br>• *Exploration targets were sampled using diamond drill (DD), and holes were typically drilled perpendicular to the strike (north-south) of the stratigraphy, at angles ranging between 55° and 80°.*<br>• *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.*<br>• *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.* |
| | • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* | • *All samples were prepared and assayed by independent commercial laboratories whose instruments are regularly calibrated*<br>• *Geophysical survey QC parameters were reviewed by independent supervising geophysicists from Newexco Services Pty Ltd* |
| | • *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.* | • *Diamond core is typically marked at 1m intervals*<br>• *Sample intervals marked up by geologists based on geology.*<br>• *Sampled mineralisation intervals are sent to a commercial laboratory for crushing and grinding before assaying.* |
| *Drilling techniques* | • *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).* | • *Diamond drilling techniques have been used at the CNC*<br>• *Historical data is derived from both surface and underground diamond drilling* |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Drill sample recovery* | • *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>• *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.* | • *Diamond core recoveries have been logged and recorded in the database*<br>• *Diamond core and RC recoveries are logged and recorded in the database. Overall recoveries are >95% and there was no core loss issues or significant sample recovery problems. Core loss is noted where it occurs.*<br>• *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.*<br>• *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.*<br>• *Drilling in the oxidised profile results in more incomplete core recoveries.* |
| *Logging* | • *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.* | • *All geological logging was carried out to a high standard using well established geology codes in LogChief software.*<br>• *All logging recorded Panasonic Toughbook PC logging.* |
| | • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* | • *Core is photographed in both dry and wet form and logging is done in detail* |
| | • *The total length and percentage of the relevant intersections logged.* | • *All diamond drill holes were logged and photographed in full.* |
| *Sub-sampling techniques and sample preparation* | • *If core, whether cut or sawn and whether quarter, half or all core taken.* | • *Diamond core is sampled as quarter core only; cut by the field crew on site by diamond saw.* |
| | • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* | • *Diamond drilling* |
| | • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* | • *The sample preparation of diamond core follows industry best practice involving oven drying, coarse crushing and pulverising.* |
| | • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* | • *The field crew prepares and inserts the QAQC certified reference materials into the relevant calico bags.*<br>• *OREAS and Geostats standards have been selected based on their grade range and mineralogical properties, with approximately 12 different standards used.* |
| | • *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.* | • *The bulk of the mineral resources are defined by diamond drilling which has high core recoveries.* |
| | • *Whether sample sizes are appropriate to the grain size of the material being sampled.* | • *All geological logging was carried out to a high standard using well established geology codes in LogChief software.* |
| *Quality of assay data and laboratory tests* | • *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* | • *All samples are assayed by independent certified commercial laboratories.*<br>• *The laboratories used are experienced in the preparation and analysis of nickel sulphide ores.* |
| | • *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.* | • *No Geophysical tools or handheld XRF instruments were used to determine any element concentrations that were subsequently used for MRE or exploration reporting purposes* |
| | • *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.* | • *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.*<br>• *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.* |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | • *Accuracy and precision were assessed using industry standard procedures such as control charts and scatter plots.*<br>• *Evaluations of standards are completed on a monthly, quarterly and annual basis using QAQCR.* |
| *Verification of sampling and assaying* | • *The verification of significant intersections by either independent or alternative company personnel.* | • *Geological interpretation using intersections peer viewed by prior company and WSA geologists.* |
| | • *The use of twinned holes.* | • *Not applicable* |
| | • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* | • *All primary geophysical data were recorded digitally and sent in electronic format to Newexco Services Pty Ltd for quality control and evaluation.*<br>• *All geological logging was carried out to a high standard using well established geology codes in LogChief software.*<br>• *All other data including assay results are imported via Datashed software.*<br>• *Drillholes, sampling and assay data is stored in a SQL Server database located in a dedicated data center.* |
| | • *Discuss any adjustment to assay data.* | • *none* |
| *Location of data points* | • *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.* | • *Downhole surveys completed using gyroscopic instrument on all resource definition and exploration holes. Underground drillhole collar locations verified via survey pickup.* |
| | • *Specification of the grid system used.* | • *A two point transformation is used to convert the data from AMG84_51 mine grid and vice versa.*<br>• *AMG84_51 points: easting = -250,000, northing = -6,900,000, elevation = 10,000.*<br>• *Mine grid points: easting = 250,000, northing = 6,900,000, elevation = -10,000.* |
| | • *Quality and adequacy of topographic control.* | • *The project area is flat and the topo data density is adequate for MRE purposes*<br>• *Collar positions were picked up by suitably qualified surface and underground surveyors* |
| *Data spacing and distribution* | • *Data spacing for reporting of Exploration Results.* | • *Not applicable* |
| | • *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.* | • *The available drill data demonstrates sufficient and appropriate continuity for both geology and grade within the CNC deposits to support the definition of Mineral Resources as classified under the JORC Code (2012).* |
| | • *Whether sample compositing has been applied.* | • *The drillhole samples were composited within some MREs to a regular downhole length of 1 m using the Straight compositing technique, following statistical analysis of the sample lengths.* |
| *Orientation of data in relation to geological structure* | • *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* | • *Not applicable* |
| | • *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.* | • *Not applicable* |
| *Sample security* | • *The measures taken to ensure sample security.* | • *Standard West Australian mining industry sample security measures were observed* |
| *Audits or reviews* | • *The results of any audits or reviews of sampling techniques and data.* | • *Geological interpretation and data validation completed by Resource and Mining Department geologists.* |

# JORC 2012 TABLE 1 – Cosmos Nickel Complex Exploration

## Section 2: Reporting of Exploration Results

(Criteria listed in Section 1, also apply to this section.)

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Mineral tenement and land tenure status</td><td>• 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.<br>• 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.</td><td>• Cosmos Nickel Complex comprises 26 tenements covering some 9,226Ha. The tenements include mining leases and miscellaneous licenses<br>• Western Areas wholly owns 23 tenements, which were acquired from Xstrata Nickel Australasia in October 2015. The remainder of the tenements (3) are subject to a Joint Venture with Alkane Resources NL, where Western Areas has earned 80.6% interest<br>• All tenements are in good standing</td></tr>
<tr><td>Exploration done by other parties</td><td>• Acknowledgment and appraisal of exploration by other parties.</td><td>• Historical nickel exploration has been completed by Glencore PLC, Xstrata Nickel Australasia and Jubliee Mines NL</td></tr>
<tr><td>Geology</td><td>• Deposit type, geological setting and style of mineralisation.</td><td>• The deposits form part of the Cosmos Nickel Complex, which lies within the Agnew-Wiluna Belt of the central Yilgarn Craton, Western Australia<br>• The deposit style is komatiite hosted, disseminated to massive nickel sulphides.<br>• The mineralisation typically occurs in association with the basal zone of high MgO cumulate ultramafic rocks.<br>• Many of the higher grade ore bodies in the Cosmos Nickel Complex also show varying degrees of remobilisation, and do not occur in a typical mineralisation profile</td></tr>
<tr><td>Drill hole Information</td><td>• 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:<br>– easting and northing of the drill hole collar<br>– elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar<br>– dip and azimuth of the hole<br>– down hole length and interception depth<br>– hole length.<br>• 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.</td><td>• Drill hole details;<br><table><tr><th>Hole ID</th><th>East</th><th>North</th><th>RL</th><th>Dip</th><th>Azi</th><th>Depth</th></tr><tr><td>WAD001</td><td>261510</td><td>6945520</td><td>481</td><td>-75</td><td>275</td><td>1,332.5m</td></tr><tr><td>WAD001a</td><td>261510</td><td>6945520</td><td>481</td><td>-75</td><td>275</td><td>1,170.3m</td></tr></table>• WAD001a was drilled as a wedge from WAD001 and was started at 501.4m down hole (668.9m of drill core)<br>• Exploration work has been completed by previous explorers and the reported results have been selected from the compilation of historical exploration data</td></tr>
<tr><td>Data aggregation methods</td><td>• 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.<br>• 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.<br>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</td><td>• Where mineralisation intersections have been quoted they represent prior exploration results sourced from a historical drill hole database<br>• Metal equivalents have not been used</td></tr>
<tr><td>Relationship between mineralisation widths and intercept</td><td>• These relationships are particularly important in the reporting of Exploration Results.<br>• If the geometry of the mineralisation with respect to the drill hole angle is</td><td>• Drill hole intersections may not be true widths</td></tr>
</table>

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *lengths* | *known, its nature should be reported.*<br>• *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').* | |
| *Diagrams* | • *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.* | • *Included within report* |
| *Balanced reporting* | • *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.* | • *Not applicable* |
| *Other substantive exploration data* | • *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.* | • *Included within report*<br>• *Geophysics* |
| *Further work* | • *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | • *Preliminary plans are included within the report*<br>• *Future explorations programs may change depending on results and strategy* |