



## FY18 ends with strongest mining and cashflow quarter & Odysseus DFS update

### June Quarter 2018 Highlights:

- One lost time injury, resulting in a LTIFR of 0.91
- Mine production of 6,381 and 24,442 nickel tonnes for the quarter and FY18 respectively
- Mill production 5,368 and 21,060 nickel tonnes for the quarter and FY18 respectively
- Unit cash cost of nickel in concentrate of A\$2.80/lb and full year of A\$2.63/lb
- Strongest quarter of cash flow generation with cash at bank increasing by A\$15.9m to A\$151.6m
- Mill Recovery Enhancement Project (MREP) commissioned with first product to specification produced
- Early capital works program of A\$32.0m at Odysseus commenced with major contracts awarded
- Significant definitive feasibility study (DFS) progress for the now larger Odysseus Project at Cosmos
- More encouraging exploration results at the Neptune prospect at Cosmos

*Managing Director, Mr Dan Lougher, said the June quarter was about delivering guidance and focussing on the next generation of organic growth projects.*

*"Pleasingly the MREP delivered its first product to the high-grade specification of between 45-50% nickel, with go forward efforts now focussed on ramping up volumes."*

*"The commencement of early works and the awarding of major contracts at Odysseus were significant milestones for the Company. The DFS remains on schedule for delivery late September and our expectation is that Odysseus will have a mine life in excess of 10 years."*



Western Areas ("WSA" or the "Company") (ASX: WSA) is pleased to report its strongest quarter of cashflow generation for the year with cash at bank increasing by A\$15.9m to A\$151.6m, after capital expenditure, feasibility study and exploration costs of A\$12.5m. With cash and receivables of A\$172.0m, no debt and a substantial equity investment in Kidman Resources Limited, the Company's balance sheet is in a strong position to assist with its organic growth plans.

It was a solid finish to the year, being the highest quarter of mine production and all FY18 guidance metrics achieved against the updated figures from March. This included nickel in full year concentrate production of 21,060 nickel tonnes, despite an unplanned Western Power infrastructure outage which halted mill production for nearly 2 days in June.

The increased level of activity at Cosmos with exploration and Odysseus early works saw camp infrastructure reinvigorated with 120 rooms being made available. The Odysseus DFS progressed well with several workstreams now complete. A new major workstream centred on shaft haulage using specialist shaft designer, RSV. The DFS is expected to be released late September, which is planned to be followed by an optimisation study, focussed on assessing options to include the adjacent orebodies at AM5 and AM6 (which contain over 60kt of nickel classified in the Indicated Category) into the production profile. With Odysseus now having an expected mine life greater than 10 years, the potential addition of AM5 and AM6 would make Odysseus one of the few long-life, high grade nickel sulphide mines currently being developed. A new long section for the Odysseus project is detailed later in the report.

The MREP produced small batches of the new nickel sulphide product to specification, grading between 45-50% nickel. With specification now achieved, the next step is ramping up production and ironing out minor technical issues that are usual for the start-up of a new hydrometallurgical facility. Capital works have also commenced on constructing new filtration and bagging facilities to ultimately allow the product to be sold into separate, new offtake contracts. Construction of these new facilities is expected to be completed by the end of the September quarter.

The nickel market remains volatile from a pricing standpoint with outside geo-political factors putting downward pressure on the nickel price post quarter-end, from a recent three year high in June. Nickel fundamentals continue to be extremely robust, with supply deficits continuing, as evidenced by the sharp decline in LME stockpiles to around 262kt, versus a peak of approximately 465kt in June 2015. Furthermore, high grade stainless steel demand in China remains strong, with our offtake partner, Tsingshan Group, continuing to expand production of high nickel content stainless steel.

# ACTIVITY REPORT

For the period ending 30 June 2018

WESTERN AREAS LTD



## Production Overview

Item	Unit	2017/2018				FY18 Total
		Sep Qtr	Dec Qtr	Mar Qtr	Jun Qtr	
Total Ore Mined	tonnes	139,451	143,476	163,479	160,714	607,120
Mine Grade	Ni %	4.2%	4.2%	3.8%	4.0%	4.0%
<b>Total Nickel Mined</b>	<b>tonnes</b>	<b>5,855</b>	<b>5,970</b>	<b>6,236</b>	<b>6,381</b>	<b>24,442</b>
Ore Processed (Milling/Concentrator)	tonnes	154,872	161,218	148,083	152,425	616,598
Processed Grade	Ni %	4.0%	4.0%	3.9%	4.0%	4.0%
Average Processing Recovery	%	87%	86%	86%	89%	87%
<b>Total Nickel in Concentrate</b>	<b>tonnes</b>	<b>5,338</b>	<b>5,527</b>	<b>4,827</b>	<b>5,368</b>	<b>21,060</b>
<b>Total Nickel Sold</b>	<b>tonnes</b>	<b>5,348</b>	<b>5,275</b>	<b>4,750</b>	<b>5,176</b>	<b>20,549</b>
Contained Nickel in Stockpiles	tonnes	3,585	3,717	4,311	4,755	
Cash Cost Nickel in Concentrate	A\$/lb	2.49	2.50	2.71	2.80	2.63
Cash Cost Nickel in Concentrate	US\$/lb	1.97	1.92	2.13	2.12	2.03
Exchange Rate	US\$/A\$	0.79	0.77	0.79	0.76	0.77
<b>Net Nickel Price (before payability applied)</b>	<b>A\$/lb</b>	<b>6.43</b>	<b>7.22</b>	<b>7.80</b>	<b>8.71</b>	<b>7.63</b>

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 22,000 to 25,000 nickel tonnes in ore 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 Australia, the Company also holds significant exploration interests in Canada through shareholdings in Grid Metals (formerly Mustang Minerals). Additionally the Company has exposure to the emerging lithium market via its shareholding in Kidman Resources Ltd.

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

Strong free cashflow for the quarter of A\$15.9m was achieved mainly due to a higher average (pre-payable deduction) nickel price for the quarter of A\$8.71/lb (March quarter A\$7.80/lb). The highest free cashflow quarter for FY18 included expenditure for our organic growth projects, including the Cosmos early works program and a ramp up of exploration activities. Cash at bank was A\$151.6m (March quarter A\$135.7m), while cash at bank plus nickel sales receivables totalled A\$172.0m (March quarter A\$154.1m).

Capital and mine development expenditure was A\$8.5m (March quarter A\$11.6m). Consistent with guidance, capital expenditure at Forresteria reduced during the quarter, however exploration expenditure increased by A\$1.8m to A\$3.0m, as previously delayed projects commenced. Feasibility study costs were A\$0.9m.

### 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 where the nickel price is yet to be finalised; and
- 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 period of between 12 to 18 months.

Details of hedging in place at quarter end are as follows:

Hedging Details - FY 2019			
Nickel Hedging - Collar Options		US\$ Hedging - Collar Options	
Ni Tonnes Hedged	3,600	US\$ Hedged	30,000,000
Average Floor	US\$13,167 / tn	Average Put	US\$0.7883
Average Cap	US\$15,587 / tn	Average Call	US\$0.7373

### Kidman Resources Limited (Kidman)

The Company owns 17.4m shares in Kidman with a market value of A\$32.4m based on Kidman's closing share price at 29 June 2018 of \$1.86 (A\$35.8m at 31 March 2018).

### Guidance

The Company is pleased to report it achieved full year guidance metrics recently updated in the March Quarterly report.

Category	Updated FY18 Guidance	Actuals FY18
Mine Production (Nickel tonnes in Ore)	23,500 to 25,000	24,442
Nickel tonnes in Concentrate Production	Around 21,000	21,060
Unit Cash Cost of Production (Nickel in Concentrate)	A\$2.40/lb to A\$2.65/lb	A\$2.63/lb
Sustaining and Mine Development Capital Expenditure	A\$30.0m to A\$36.0m	A\$34.8m
Mill Recovery Enhancement Project	A\$14.0m	A\$14.0m
Feasibility Studies & Odysseus Early Works	A\$3.0m	A\$2.9m
Exploration	A\$7.0m to A\$9.0m	A\$8.1m

Consistent with prior years, FY19 guidance will be provided with the full year financial results announcement, currently scheduled for 22 August 2018.

## Mine safety and environment

### Safety

One Lost Time Injury (LTI) was recorded in May, resulting in a LTIFR of 0.91 and Total Recordable Injury Frequency Rate of 8.23. The LTI was recorded in May due to a rolled ankle in March, which subsequently required an operation in May to fully heal the injury.

Emergency response training focused on open circuit breathing apparatus, hazardous materials, bush firefighting and vehicle rescue. Four first aid courses were conducted during the quarter.

A specialised contractor introduced injury prevention and injury management protocols across the workforce that included a 'warm to work' campaign and voluntary baseline health measurements.



ETRT training using the 'jaws-of-life'



New Toyota 4wd ambulance

### Environment

#### Forrestania (FNO)

No reportable environmental incidents were recorded during the quarter.

The annual rehabilitation program involved a successful seed collection program with approximately 34,000 seedlings delivered to a central wheat-belt nursery for seedling propagation (increase of 50% compared to last year). The seeds were returned to FNO in June 2018 and transferred to the local hot-house facility prior to planting in three selected areas.

A waste characterisation programme commenced to determine the risk profile of the waste rock dumps with samples collected from all FNO waste dumps. The analysis will be completed in the following quarter with results incorporated into the next iteration of the Mine Closure Plan, due in September 2019.

#### Cosmos

No reportable environmental incidents were recorded during the quarter.

In January, stage one dewatering of the Cosmos open pit commenced with water discharging to a network of evaporation ponds. The dewatering programme initiated an expanded compliance monitoring programme including water quality and groundwater levels, with new water level data loggers installed on each monitoring bore to improve the monitoring network around the ponds. A network of seepage recovery bores surrounding the water management ponds were refurbished and recommissioned to manage groundwater levels.

Tjiwarl heritage monitors continued to oversee a number of exploration drilling programmes and the Company continued its excellent working relationship with the Tjiwarl people.

# ACTIVITY REPORT

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WESTERN AREAS LTD



Colm Harkin (Senior Environmental Advisor) accepting seedling delivery from Dustin McCreery (Chatfields nursery owner)



Two rehabilitation contractors working nearby the Spotted Quoll open-pit

## Mine and mill production statistics and cash costs

TONNES MINED		2017/2018				FY18 Total	
		Sep Qtr	Dec Qtr	Mar Qtr	Jun Qtr		
<b>Flying Fox</b>							
Ore Mined	tonnes	60,890	65,681	66,858	67,236	260,665	
Grade	Ni%	4.1%	3.7%	3.7%	3.9%	3.9%	
<b>Flying Fox Nickel Mined</b>		<b>tonnes</b>	<b>2,510</b>	<b>2,453</b>	<b>2,466</b>	<b>2,625</b>	<b>10,054</b>
<b>Spotted Quoll</b>							
Ore Mined	tonnes	78,561	77,795	96,621	93,478	346,455	
Grade	Ni%	4.3%	4.5%	3.9%	4.0%	4.2%	
<b>Spotted Quoll Nickel Mined</b>		<b>tonnes</b>	<b>3,345</b>	<b>3,517</b>	<b>3,770</b>	<b>3,756</b>	<b>14,388</b>
<b>Total Ore Mined</b>		<b>tonnes</b>	<b>139,451</b>	<b>143,476</b>	<b>163,479</b>	<b>160,714</b>	<b>607,120</b>
<b>Grade</b>		<b>Ni%</b>	<b>4.2%</b>	<b>4.2%</b>	<b>3.8%</b>	<b>4.0%</b>	<b>4.0%</b>
<b>Total Nickel Mined</b>		<b>tonnes</b>	<b>5,855</b>	<b>5,970</b>	<b>6,236</b>	<b>6,381</b>	<b>24,442</b>

### Flying Fox

#### *Mine Production*

Production was the highest quarter for FY18 with **67,236 tonnes of ore at an average grade of 3.9% nickel for 2,625 nickel tonnes**. Ore production was predominately (84%) derived from long-hole stoping (LHS) with 13% from ore drive development and 3% from flat-back stoping.

LHS production was sourced solely from the T5 area, namely from the 455, 385 (11.2kt @ 5.0% Ni), and 215 (7.0kt @ 4.4% Ni) stopes, with flat-back stoping at the 460 level.

Associated paste-filling of stope voids resulted in 16,700m<sup>3</sup> of paste poured.

## *Mine Development*

Total single-boom jumbo development was 296m, which included:

- 95m of lateral capital development at the 200 level to access the T6 orebody and 370 footwall drive extension;
- 15m of operating waste development at the 200 and 180 levels;
- 41m in paste-fill (425, 370, 255, and 215 levels) to facilitate slot drilling; and
- 145m of ore drive development at the 410, 370, 200 and 180 levels, which produced just over 8.8kt at 3.9% Ni for 309 nickel tonnes.

No vertical capital development was undertaken during the quarter.



370 S1 ore drive with an average face grade of 7.6% nickel

## Spotted Quoll

### *Mine Production*

Spotted Quoll production was **93,478 tonnes of ore at an average grade of 4.0% nickel for 3,756 nickel tonnes**. Ore production was sourced predominately from LHOS (75%) with the remainder from ore drive development.

The 'twin-boom area' (TBA) completed the 1020 and 944 levels, with ongoing production from the 932 level and successful opening of the 1215 and 675 levels.

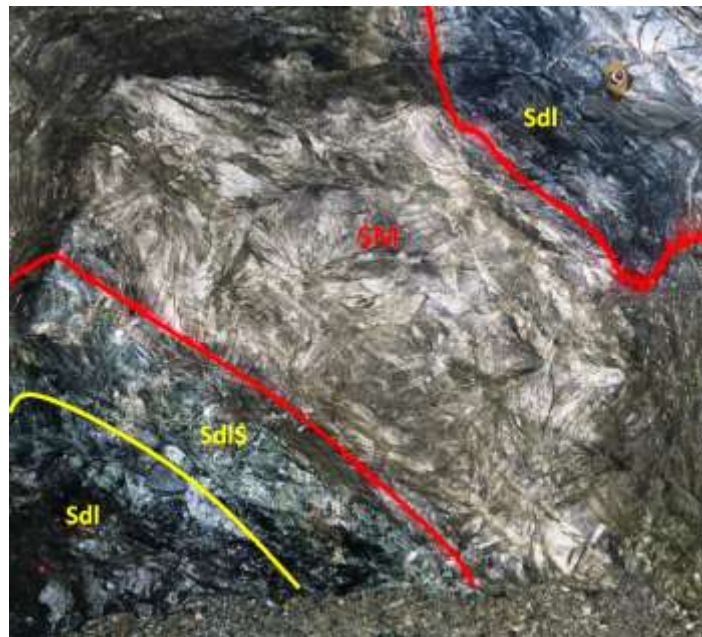
The 'single-boom area' (SBA) completed the 881 and 841 levels, with ongoing production from the 871, 862, 852 842, 833 and 804 levels, and successful opening of the 837 and 832 levels mid-quarter.

### *Mine Development*

Total jumbo development for the quarter was 1,240m, which included 200m of capital decline development. During the quarter, 354m of lateral capital development and 253m of operating waste development occurred, which included 100m of paste-fill development to facilitate slot drilling.

The 'Stage 2' 610 and 595 ore drive levels were established from the 600 level off the main decline, with 155m of the 627 ore drive developed by quarter end.

A total of 280m of SBA ore drive development was completed between the 777 and 757 levels, including development at the 770 level over 15m past the northern ore reserve boundary (1.6kt at 4.9% Ni).



770 Level (4.0m wide x 3.5m high 'shanty' profile) with an average face grade of 5.7% nickel

## ***Infrastructure***

The initial primary surface fan electrical and mechanical commissioning was completed with final commissioning planned for the September quarter.

The primary underground magazine explosive storage licence was approved in late June with commissioning planned for early in the September quarter.



Primary surface fans installed at Spotted Quoll

# ACTIVITY REPORT

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WESTERN AREAS LTD



## Cosmic Boy Nickel Concentrator

TONNES MILLED AND SOLD		2017/2018				FY18 Total
		Sep Qtr	Dec Qtr	Mar Qtr	Jun Qtr	
Ore Processed – Mined Ore	tonnes	141,151	136,816	144,925	152,425	575,317
Ore Sorter & Low Grade Stockpile	tonnes	13,721	24,402	3,158	0	41,281
<b>Total Ore Milled</b>	<b>tonnes</b>	<b>154,872</b>	<b>161,218</b>	<b>148,083</b>	<b>152,425</b>	<b>616,598</b>
Grade	%	4.0%	4.0%	3.9%	4.0%	4.0%
Ave. Recovery	%	87%	86%	86%	89%	87%
<b>Nickel in Concentrate Produced</b>	<b>tonnes</b>	<b>5,338</b>	<b>5,527</b>	<b>4,827</b>	<b>5,368</b>	<b>21,060</b>
<b>Nickel in Concentrate Sold</b>	<b>tonnes</b>	<b>5,348</b>	<b>5,275</b>	<b>4,750</b>	<b>5,176</b>	<b>20,549</b>

The Cosmic Boy Concentrator processed 152,425 tonnes of ore at an average grade of 4.0% nickel for a total of 35,740 tonnes of concentrate grading 15.0% nickel. This resulted in 5,368 nickel tonnes produced at a metallurgical recovery of 89% with average concentrator availability of 98%.

During the quarter a planned maintenance shutdown of 18 hours was required to conduct routine maintenance on process pumps, flotation cells and the ball mill. The quarter was also adversely affected by two major unplanned events, being a near-by bush-fire in May (26.5 hours) and a re-closer failure at Western Power's Bounty switchyard in June (38.5 hours) for a total of 65 hours downtime. Despite these setbacks, it was pleasing to meet the FY18 guidance updated in March.

A total of 35,231 tonnes of concentrate was delivered for sale containing 5,176 nickel tonnes.

Other sales unit costs during the quarter were royalties at A\$0.27/lb and transportation of A\$0.42/lb in concentrate.

### Stockpiles

Ore stockpiles at the end of the quarter totalled **135,793 tonnes of ore at 3.2% nickel for 4,307 nickel tonnes** representing more than two months of mill feed, thereby enabling the selection of an optimal mill feed blend.

The concentrate stockpile at quarter end was 2,972 tonnes at an average grade of 15.1% nickel, containing 448 nickel tonnes.

STOCKPILES		2017/2018			
		Sep Qtr	Dec Qtr	Mar Qtr	Jun Qtr
Ore	tonnes	102,290	108,950	127,504	135,793
Grade	%	3.4%	3.1%	3.1%	3.2%
Concentrate	tonnes	453	1,829	2,426	2,972
Grade	%	14.5%	15.7%	14.7%	15.1%
<b>Contained Nickel in Stockpiles</b>	<b>tonnes</b>	<b>3,585</b>	<b>3,717</b>	<b>4,311</b>	<b>4,755</b>



# ACTIVITY REPORT

For the period ending 30 June 2018

WESTERN AREAS LTD



## Cash Costs

FINANCIAL STATISTICS		2017/2018				YTD
		Sep Qtr	Dec Qtr	Mar Qtr	Jun Qtr	
<b>Group Production Cost/lb</b>						
Mining Cost (*)	A\$/lb	1.75	1.81	1.89	2.03	1.87
Haulage	A\$/lb	0.06	0.07	0.07	0.07	0.07
Milling	A\$/lb	0.51	0.47	0.57	0.52	0.52
Admin	A\$/lb	0.20	0.18	0.21	0.21	0.20
By Product Credits	A\$/lb	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
<b>Cash Cost Ni in Con (***)</b>	<b>A\$/lb</b>	<b>2.49</b>	<b>2.50</b>	<b>2.71</b>	<b>2.80</b>	<b>2.63</b>
<b>Cash Cost Ni in Con (***)</b>	<b>US\$/lb(**)</b>	<b>1.97</b>	<b>1.92</b>	<b>2.13</b>	<b>2.12</b>	<b>2.03</b>
<b>Exchange Rate US\$ / A\$</b>		<b>0.79</b>	<b>0.77</b>	<b>0.79</b>	<b>0.76</b>	<b>0.77</b>

(\*) Mining Costs are net of deferred waste costs and inventory stockpile movements.

(\*\*) US\$ FX for Relevant Quarter is RBA average daily rate (Jun Qtr = A\$1:US\$0.76).

(\*\*\*) Payable terms are not disclosed due to confidentiality conditions of the offtake agreements. Cash costs exclude royalties and concentrate logistics costs.

The unit cash cost of production of nickel in concentrate (excluding smelting/refining charges, concentrate logistics and royalties) was A\$2.80/lb (US\$2.12/lb). The quarter on quarter increase in mining cost per pound primarily relates to both underground mines increasing the proportion of ore development drive production tonnes (versus cheaper stoping tonnes), as development of Spotted Quoll Stage Two mining areas are sequentially brought online and ore development drives required at Flying Fox as new production stopes are established. Furthermore, contractual rise and fall charges are generally trending higher across the operation as they are calculated with reference to recent increases in oil, consumables, foreign exchange and wages costs.

Year to date the unit cash cost of production was A\$2.63/lb (US\$2.03/lb), within the FY18 guidance range provided.



Panorama of Cosmic Boy mill and the new MREP facility

## Forrestania Mineral Resources and Ore Reserves

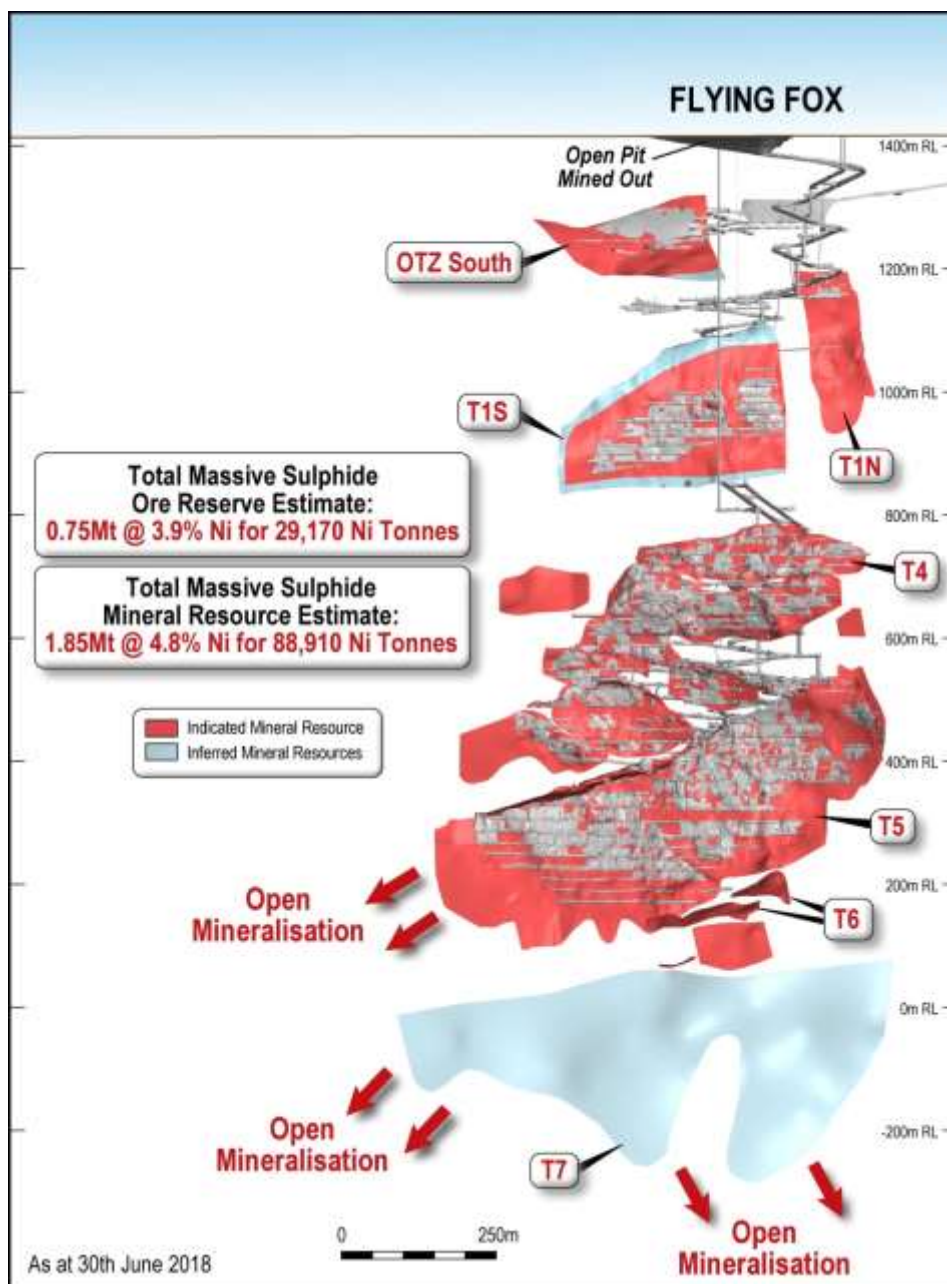
A full summary of the Company's Mineral Resource and Ore Reserve estimates is included at the end of this report.

### *Flying Fox*

The total current Flying Fox **Massive Sulphide Mineral Resource**, including depletion to the end of June 2018, stands at **1.85Mt of ore at a grade of 4.8% Ni for 88,910 nickel tonnes**.

The Flying Fox **Massive Sulphide Ore Reserve**, including depletion to the end of June 2018, stands at **0.75Mt of ore at a grade of 3.9% Ni for 29,170 nickel tonnes**.

A summary of the drilling activity below the Ore Reserve is summarised in the Exploration section.



# ACTIVITY REPORT

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WESTERN AREAS LTD

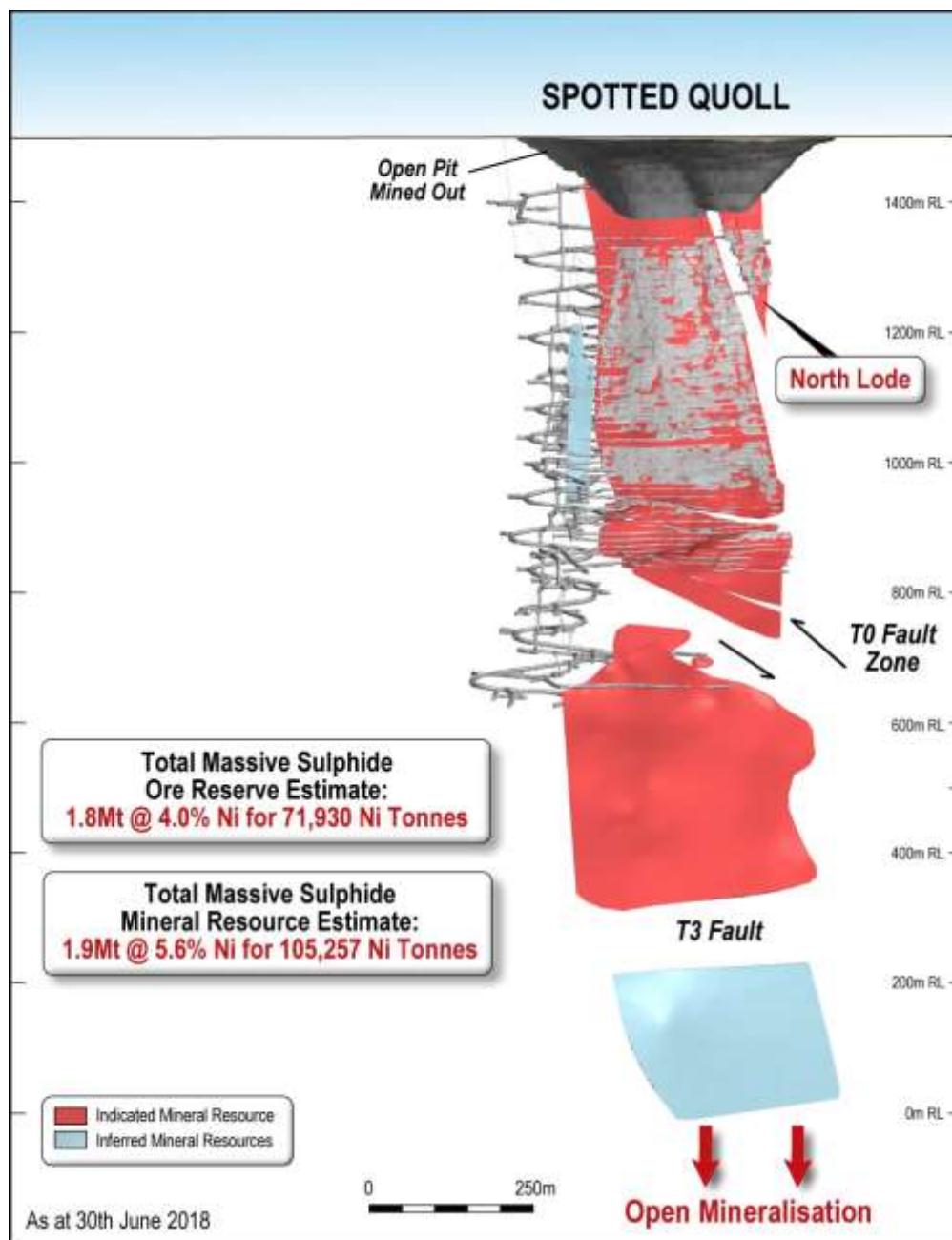


## Spotted Quoll

No resource holes were drilled during the quarter, but the first set of resource extension holes are being planned for FY19. Extensional resource drilling has not been completed since the underground Ore Reserve was completed many years ago.

The total Spotted Quoll **Mineral Resource**, including depletion to the end of June 2018, stands at **1.9Mt of ore at a grade of 5.6% Ni for 105,257 nickel tonnes**.

The Spotted Quoll **Ore Reserve**, including depletion to the end of June 2018, stands at **1.8Mt of ore at a grade of 4.0% Ni for 71,930 nickel tonnes**.





## Growth Projects

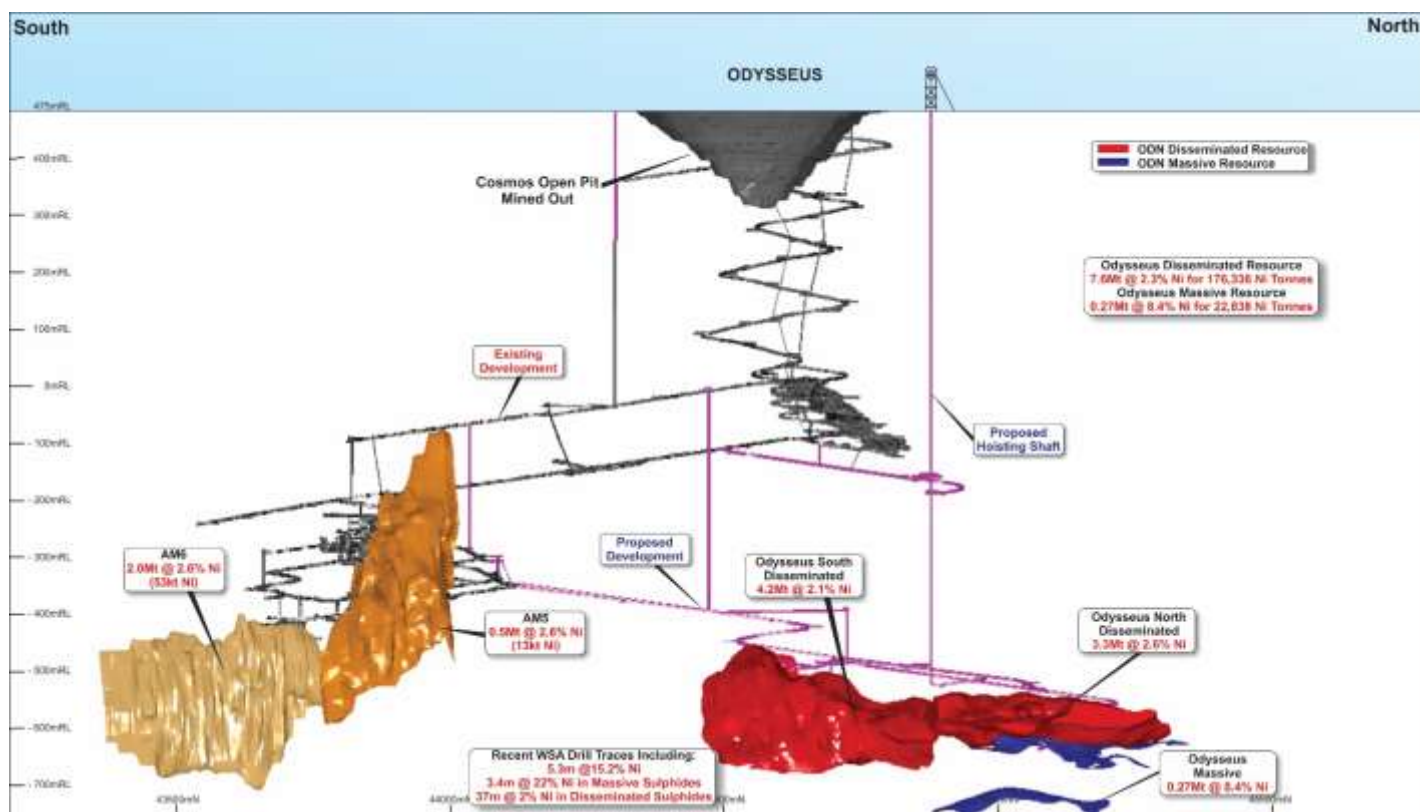
### Odysseus Definitive Feasibility Study (“DFS”) at Cosmos

The DFS progressed well during the quarter with various decline and shaft access scenarios investigated, based on the selection of a 900ktpa steady state ore production rate, which will result in a minor expansion to the concentrator versus the PFS assumption of 750ktpa. The increase in ore throughput, total nickel production and mine life to beyond 10 years, will mean Odysseus will be one of the largest, new, high grade underground nickel sulphide operations being developed in the coming years. Odysseus also dovetails well with the forecast lift in nickel demand associated with the ramp-up in modelled electric vehicle battery production beyond 2020.

The base case mine development design option locates the hoisting shaft centrally between the orebodies and an interim mid-shaft loading level is currently being considered to assist the initial mine development program. During April, benchmarking visits were conducted by the project team to several underground mining operations in Canada which provided invaluable data for the DFS.

The DFS remains on schedule to be completed in the September quarter. Post completion of the DFS, optimisation studies will be commenced to review the potential to bring on additional nickel ore located at the adjacent AM5 and AM6 deposits, which currently contain 65kt of contained nickel, classified in the Indicated category. Should mining of these orebodies be feasible, there is potential for significant mine life extensions beyond the DFS plans.

The long section below depicts the current mining methodology, updated from the model included in the PFS. The major changes, in addition to the shaft haulage detailed above, include using ‘top-down mining’, as opposed to ‘bottom-up mining’ and the take-off point for the new underground decline development commencing closer to AM5, rather than expanding the central decline from a position above Odysseus.



## Odysseus Early Capital Works

On 10 April 2018, the Company announced the approval and commencement of an early works capital program at Odysseus totalling A\$32m to be completed over an 18-month period. Since the announcement, progress has been swift with a number of significant work packages tendered and awarded within budget. Some of the key events included:

- Refurbishment of the existing water management ponds commenced (WMP 1 to 5) using a local indigenous earthmoving contractor, with WMP1 complete by quarter end;
- The existing Cosmos village (520 room) was upgraded to 120 room ready capacity for contractors and employees (reached a peak of 80 on-site in June);
- MACA was mobilised to site in early June and commenced earthworks and construction of the two new WMP's 8 and 9; and
- In late May an order was placed to manufacture a specialised, custom-made, bore-hole pump, capable of pumping 100 litres per second (500m head) that will dewater the decline and associated underground workings.

Pumping from the Cosmos open-pit continued and, by quarter end, had dropped the water level 8.5m, with an average pumping rate of over 45 litres/sec, discharging to WMP 6 and 7.

Some images of the early works program are shown below.



Lining WMP 2 – installing the geotextile underlay in preparation for the HDPE liner



HDPE pipe ready to weld along existing ponds



WMP 6 and 7 in foreground with WMP 8 cleared in the background



Scrapers operating in WMP 8

## **Mill Recovery Enhancement Project (MREP)**

The Company announced in April that construction and commissioning of MREP had been completed on time and within budget. Following this, the MREP ramp up continued during the quarter which allowed the plant to gradually increase the run time to enable the leaching conditions be maintained.

Other main activities during the quarter included:

- Bacterial farm run in continuous mode to generate the required rate of bacterial inoculum for the leach circuit;
- Main leach tanks have been operating at design temperatures;
- Slurry commissioning for the residue filter completed; and
- Sulphide precipitation circuit commenced production of nickel sulphide, with grades around 48% Ni.

The small batches of nickel sulphide product are currently being blended with the existing concentrate from the Cosmic Boy Mill and sold into the existing offtake agreements with Tsingshan and BHP Nickel West. With the design product specification now being achieved, efforts are focussed on ramping up volumes and resolving minor technical issues normally encountered when starting a new hydrometallurgical facility.

The Company has finalised plans to include an additional process step to enable separate bagging of the high grade nickel sulphide concentrate, to separately sell into a new offtake agreement targeting EV battery pre-cursor suppliers or producers. This work is scheduled for completion during the September quarter.



MREP in operation at night

## **New Morning/Daybreak Project**

During the quarter, an infill, reverse-circulation (RC) and diamond drilling program sourced drill-core and rock-chip samples, for use in metallurgical leaching test-work of the two main hanging-wall disseminated orebodies, located east of the main basal lode.

Environmental approvals associated with the project continued during the quarter involving stygofauna sampling, waste characterisation sampling, hydrological and geotechnical reviews, and regulator engagement for planned flora and fauna surveys.

Following completion of an internal scoping study, the current target is to complete a feasibility study towards during FY19. Once complete it is anticipated the study will be released to the market.

## Exploration

### Overview

The Company undertook a significant increase in exploration activity in the June quarter, with an ongoing drilling campaign across several tenements at Western Gawler, the recommencement of drilling at Neptune as part of the Phase 2 work program at Cosmos and underground exploration drilling at FNO. Coupled with these drilling programs, a strong emphasis was also placed on geophysical surveying and data processing, with electromagnetic surveying completed at Cosmos (down-hole EM), Western Gawler (Surface Moving Loop EM) and Forresteria (heli-borne EM).

St George Mining completed a major drilling programme at Mt Alexander, with work focused on the Stricklands and Investigators prospects. Tenement E29/638 is in joint venture between St George Mining (SQG 75%) and Western Areas (WSA 25% free-carried).

Kidman Resources Limited continued exploration activities for lithium-bearing pegmatites across the quarter, incorporating planning for upcoming soil programmes.

Exploration highlights over the quarter include:

- Commencement of Phase 2 drilling at Neptune.
- Delineation of additional accumulations of disseminated nickel sulphides at Neptune, down-plunge from earlier Phase 1 drilling, with highlighted intersections including 108.4m @ 0.80% Ni in WCD013.
- Confirmation of additional localised stringer to massive sulphide intervals at Neptune, including 0.55m @ 6.83%Ni within WCD011.
- Successful completion of a SkyTEM312 HP heli-borne, regional airborne electromagnetic survey at Parker Dome (FNO), with Western Areas being the first company in Australia to use this new low frequency 12.5 Hz system.
- Identification of additional Moving Loop EM conductors across the Thunderdome prospect (Western Gawler), with recently completed drill-holes confirming that this corridor is host to numerous mafic and ultramafic intrusive bodies.

### Cosmos

Drilling activities recommenced in the June quarter, with Phase 2 work at Neptune well advanced, comprising an initial planned 9,000m drilling program designed to test the down-dip and along strike, channelised target environment, interpreted to extend south from Prospero. This corridor is considered highly prospective for its potential to host significant accumulations of nickel sulphides. An additional reverse circulation (RC) drilling campaign, targeting several high-priority gold targets, also commenced towards the end of the reporting period.

### ***Exploration at Neptune***

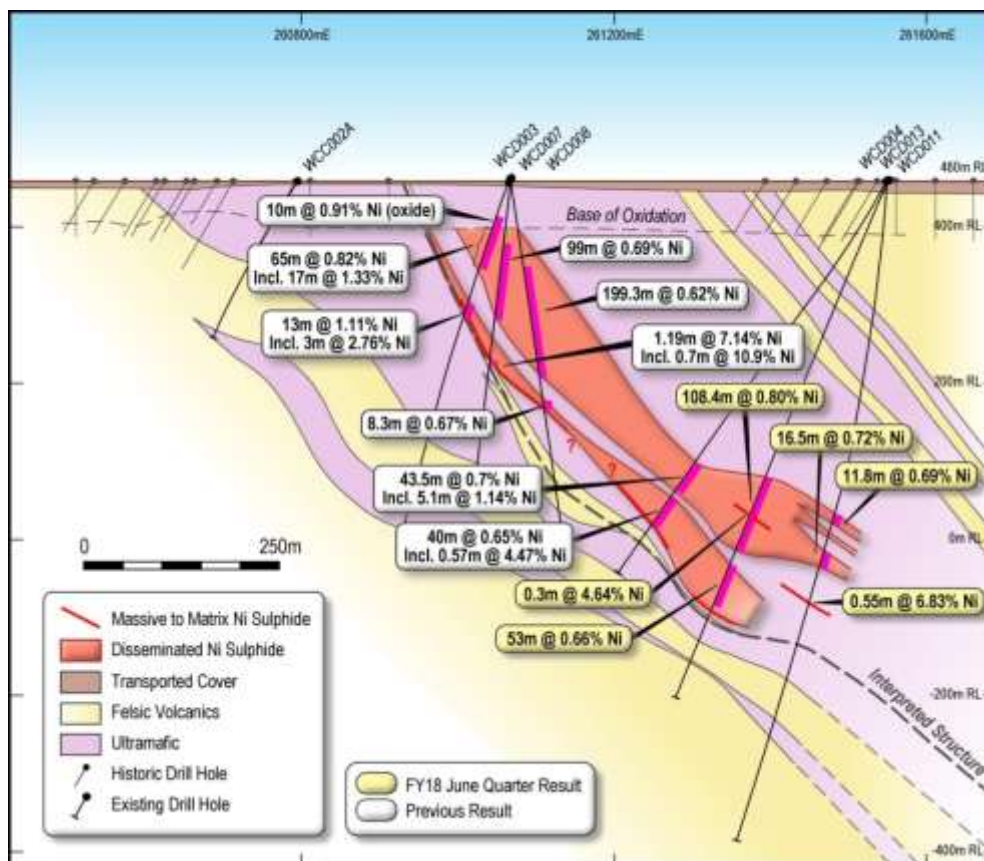
The Neptune project is located approximately 2km south of the Prospero high grade nickel mine and is interpreted to contain the highest volume of cumulate ultramafic bodies within the Cosmos Nickel Complex. The mineralised channel that hosts the Prospero and the Alec Mairs deposits (AM1, 2, 5 and 6) has the potential to extend towards, and link with, the mineralisation observed at Neptune.

Drilling recommenced in April, initially starting with one drill rig and moving to a second rig during May. A total of seven diamond holes (for 5,990m) was completed in the June quarter, with work focusing on a 1.5km corridor extending north towards 6939000mN. Drilling as part of the Neptune Phase 2 program has centred on testing this 1.5km long north-south striking zone, targeting the interpreted location of the ultramafic basal contact environment, commencing from

the 0m RL position (460m below surface). This program also aimed to test the down-plunge potential for mineralisation extending laterally from previously reported Phase 1 results, including 199m @ 0.62% Ni (within WCD008).

The Phase 2 program has been successful in identifying further accumulations of nickel sulphide mineralisation, with highlights for the quarter including:

1. Return of results from the first two holes (WCD011 and WCD013), with confirmation that mineralisation extends an additional 200m down-dip, including 108.4m @ 0.80% Ni in WCD013 (see section below);
2. Confirmation that this corridor continues to possess the potential to host accumulations of stringer to massive sulphides, with elevated assay results including 0.55m @ 6.83% Ni within WCD011; and
3. Geological logging completed on drill-holes WCD016 and WCD017 (400m to the north) confirming the extension of thick sequences of cumulate ultramafic-hosted disseminated sulphides, with assays pending (see long section).



Neptune interpreted cross section 6938500mN



# ACTIVITY REPORT

For the period ending 30 June 2018

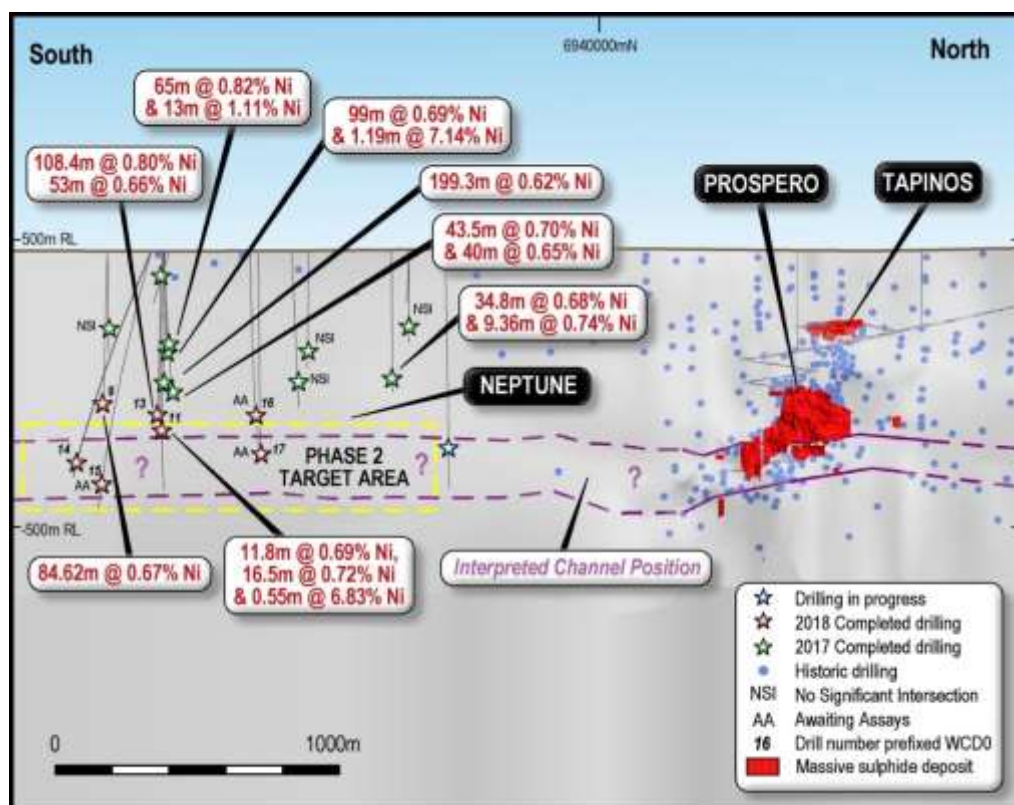
WESTERN AREAS LTD



Exploration Results Nickel – Neptune June 2018										
HOLEID	Easting	Northing	RL	EOH	Type	Dip	Azimuth	Width (m)	Ni %	FROM (m)
WCD011	261552	6938491	460	882.58	DD	-82	264	1.05	1.27	311.8
	including							0.2	3.54	311.8
	and							11.8	0.69	443.2
								5	0.58	467
								16.5	0.72	491.5
								0.55	6.83	559.2
								1.4	1.03	567.1
								1	1.31	591
WCD012	261552	6938491	460	65.4	DD	-67	268	Hole abandoned		
WCD013	261552	6938491	460	723.8	DDH	-67	268	11.5	0.74	346
	and							3	0.95	371
	and							6	0.66	403
	and							108.4	0.8	415
	including							0.3	4.64	472.55
	including							26	0.98	490
	and							53	0.66	540
								10.3	0.71	600

The Company is encouraged by these results with Neptune Phase 2 entering an important stage, as drill targeting advances northwards and down-plunge, testing for the presence of additional disseminated, stringer and massive nickel sulphide accumulations.

Down-hole EM (DHEM) investigations continued, with a total of six surveys completed. Although the predominantly disseminated nature of mineralisation at Neptune is not amenable to detection with EM, the potential for off-hole conductors associated with a rapid transition from disseminated to massive sulphides over short distances (as has been observed in other mineralised domains at Cosmos, including Odysseus) requires ongoing persistence with DHEM surveying.



Neptune interpreted Long section (Looking West)

## ***Forrestania***

Ongoing exploration work programs progressed throughout the June quarter, with a focus on drilling and geophysical surveys covering the northern group of tenements, centred on Parker Dome. Additional programs testing the potential for extensions of mineralisation at the Flying Fox deposit were also initiated in FY18.

## ***Exploration at Parker Dome***

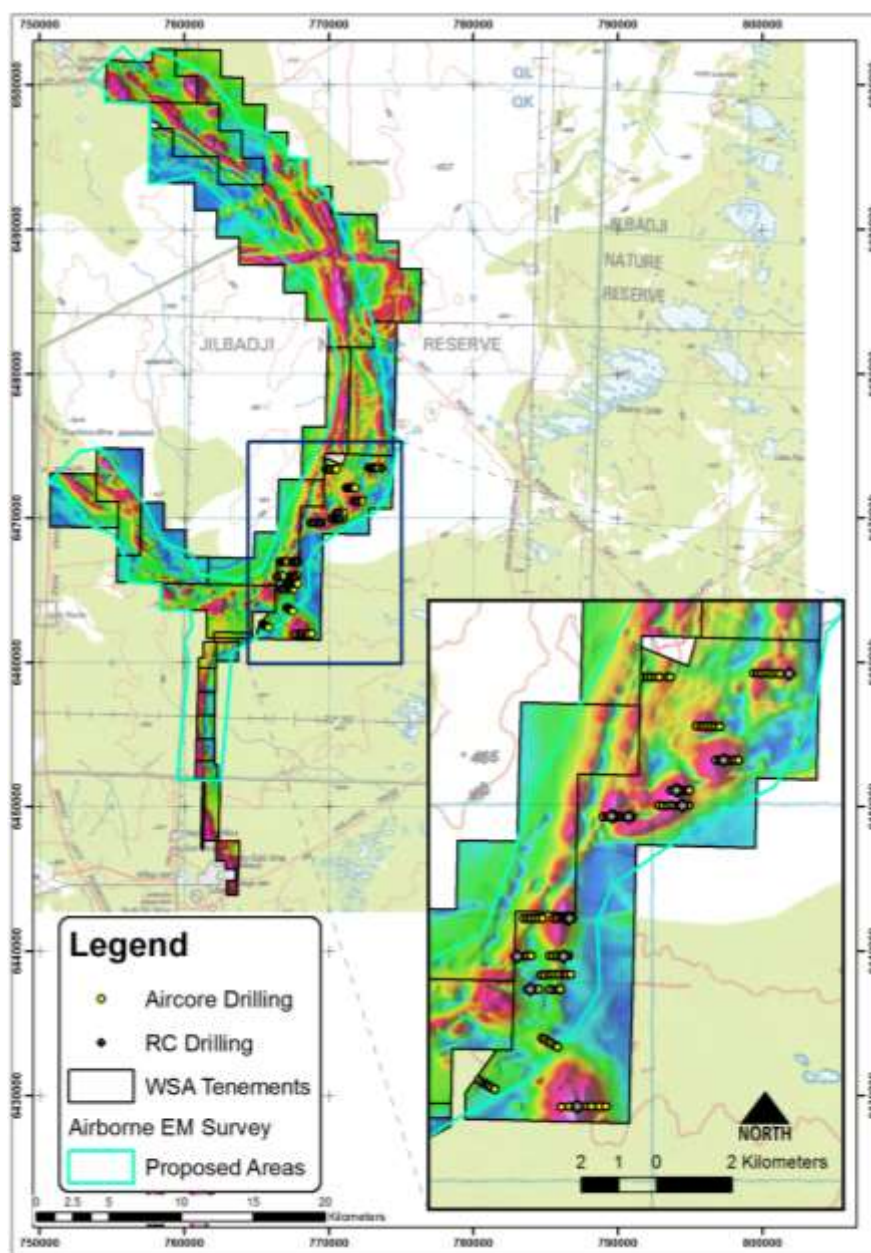
All results from the March quarter RC drilling campaign were returned during the reporting period. This program was designed to follow up on testing ultramafic units intersected in an earlier air-core drilling campaign and to test beneath anomalous nickel values interested within the saprolitic profile. Although anomalous values were not identified, thicker sequences of ultramafic rocks were intersected than previously noted from air-core drilling. Combined with observed cumulate textures and localised favourable Ni/Cr ratios (>1), these observations are supportive of this area being prospective for fertile ultramafic bodies that may host accumulations of nickel sulphide.

In the June quarter, as part of a broader strategy to assess the regional prospectivity of the northern Forrestania package of tenements (incorporating Parker Dome), the Company executed two key geophysical programs aimed at efficiently assessing shallow base metal and gold opportunities. The first work-stream involved merging, image reprocessing and enhancing of the existing mosaic of magnetic surveys across the region into a new set of imaged layers. This work will allow the Company to advance detailed structural and lithostratigraphic interpretations into FY19. The Company also engaged the services of SkyTEM to conduct a 1,400 line kilometre heli-borne regional EM survey. Western Areas became the first company in Australia to use SkyTEM's high-power, low frequency (12.5Hz) SkyTEM312 HP system. This innovative system, which combines high current and low frequency provides a regional-scale screening tool for identifying shallow bedrock conductors through conductive overburden.



## Exploration at Flying Fox

An underground exploration drilling and DHEM program commenced a Flying Fox in March, as part of the Company's ongoing strategy to identify additional resources and reserves proximal to current operations. The specific aim of this program is to assess the potential for the down-plunge extension of the Flying Fox mineralised channel below existing mine workings. Work continued into the June quarter, with one hole complete (LUG088) and a second hole (LUG087) approaching target by the end of the reporting period for a total of 1,734m drilled. LUG088 successfully intersected the faulted basal contact, however no accumulation of nickeliferous sulphides was encountered. Down-hole EM (DHEM) surveys will be carried out on completion of these first two holes.



Parker Dome – June Quarter Airborne Electromagnetic Survey Location

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

The Western Gawler Project lies within the Fowler Domain of western South Australia. The Fowler Domain is a Proterozoic aged orogenic belt overlain by recent sedimentary cover, which is known to host mafic and ultramafic intrusive rocks. Similarly aged orogenic belts in Australia contain significant mafic-ultramafic related intrusive nickel and copper deposits including Nova-Bollinger and Nebo-Babel. The Company's exploration strategy is to explore for these deposits through systematic evaluation of targets which lie below cover sequences, using modern geophysical techniques and targeted drilling campaigns.

Results of exploration completed to date have identified the presence of mafic-ultramafic intrusive rocks (including olivine gabbro-norites) and associated geochemical anomalism, confirming the prospectivity of the Western Gawler region for intrusive-related base metals and structurally associated, hydrothermal gold mineralisation. During the year, ongoing surface electromagnetic (EM) programs identified anomalous bedrock conductors which, in conjunction with existing magnetics and gravity datasets, have allowed planned drilling programs to evolve from a regional approach to more focused, prospect-scale targeting.

Key highlights for the quarter include:

- Completion of an additional 149 air-core drillholes (for 9,221m), testing multiple targets including Thunderdome;
- Encouraging results at Thunderdome with anomalous copper and platinum group elements (PGE) assays returned;
- Completion of a Moving Loop EM (MLEM) survey across multiple target areas, with anomalies identified within the Beyond Thunderdome Prospect; and
- Final stages of planning to support an upcoming heli-borne EM Survey.

### **Air-Core Drilling**

A regional-scale air-core programme continued during the quarter to test recently defined MLEM anomalies and a number of prospect-scale targets. In total, 149 holes were completed (9,221m) testing prospects including Thunderdome, Morrowland, Crack in the Earth and Citadel. Drilling at Thunderdome has confirmed the presence of several discrete mafic intrusive bodies over a 10km-long trend. Drilling targeted four subtle EM anomalies coincident with these defined mafic intrusive bodies, intersecting anomalous copper and PGE values associated with low levels of sulphides. Elevated values including 0.36% Cu within 18WGAC250 and 250ppb Pt+Pd within 18WGAC227 (table attached). Additionally, at Mystic, prospective mafic-ultramafic host rocks were identified to coincide with subtle EM anomalies. Target areas at Thunderdome and Mystic will be a priority focus for follow-up work programmes into FY19.

Exploration Results - Western Gawler June Quarter

HOLEID	Easting	Northing	RL	EOH	Type	DIP	Azimuth	Width (m)	Cu %	Ni %	Pt+Pd (ppb)	FROM (m)
18WGAC215	218379	6527781	63	72	AC	-90	0	1	0.1	0.02	3	66
18WGAC227	218716	6525836	61	57	AC	-90	0	1	0.02	0.02	250	52
18WGAC243	217305	6533118	68	43	AC	-90	0	1	0.04	0.02	206	36
18WGAC249	217240	6534780	68	48	AC	-90	0	4	0.16	0.02	13	41
18WGAC250	217310	6534878	68	37	AC	-90	0	5	0.24	0.04	9	30
18WGAC250	including							1	0.36	0.04	12	33

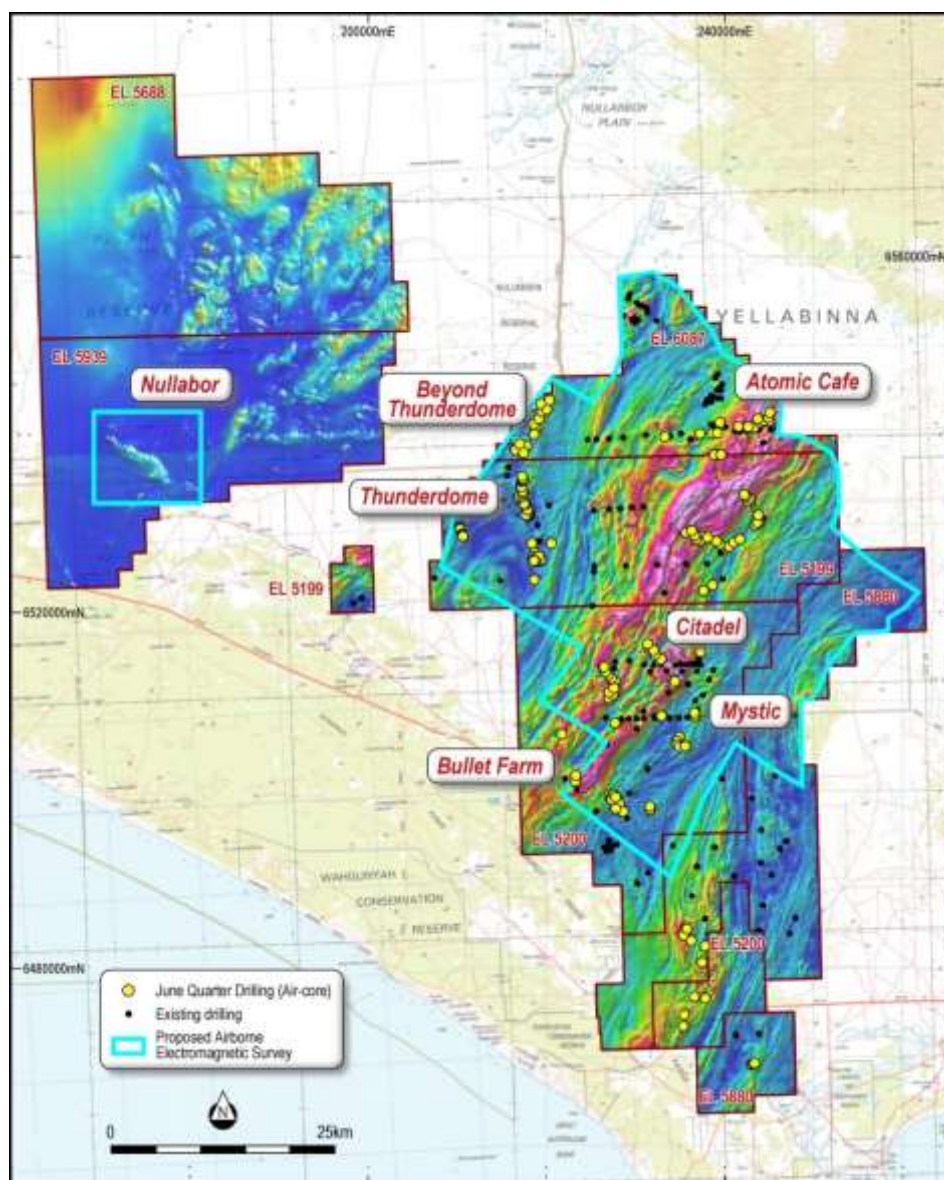


## Moving Loop EM Survey

High-powered, surface MLEM surveying continued into the June quarter, testing across high priority aeromagnetic and gravity features interpreted as possible mafic-ultramafic intrusions. Surveying was completed across five prospect areas, including, Morrowland, Crack in the Earth and Citadel, with no bedrock anomalies identified. At Beyond Thunderdome, two anomalies were detected which are coincident with magnetic features that warrant drill testing. This current round of MLEM was completed in June, with all results now compiled and ready to be incorporated into the next round of drill targeting.

## Airborne EM (Advanced Planning)

Planning in the reporting period was completed to support a regional-scale, heli-borne electromagnetic (SkyTEM 312 HP) survey, scheduled to commence early in the September quarter. This survey will follow on from the survey undertaken across the Parker Dome project area at Forrestania and will cover five key prospect areas for a total area of 1,400 km<sup>2</sup>.



Western Gawler – June Quarter Drilling Activity

# ACTIVITY REPORT

For the period ending 30 June 2018

WESTERN AREAS LTD



-ENDS-

## COMPETENT PERSON'S STATEMENT:

The information within this report as it relates to mineral resources, ore reserves and exploration results is based on information compiled by Mr Andre Wulfse, Mr Marco Orunesu Preiata and Mr Graeme Gribbin of Western Areas Ltd. Mr Wulfse and Mr Orunesu Preiata are members of AusIMM and are full time employees of the Company. Mr Gribbin is a member of AIG and a full time employee of Western Areas. Mr Wulfse, Mr Orunesu Preiata and Mr Gribbin 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 Gribbin, 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.

These forward-looking statements are subject to a variety of risks and uncertainties beyond the Company's ability to control or predict which could cause actual events or results to differ materially from those anticipated in such forward-looking statements. Western Areas Ltd undertakes no obligation to revise these forward-looking statements to reflect subsequent events or circumstances.

Examples of forward looking statements used in this report include, but are not limited to: "The DFS is expected to be released late September, which is planned to be followed by an optimisation study, focussed on assessing options to include the adjacent orebodies at AM5 and AM6 (which contain over 60kt of nickel classified in the Indicated Category) into the production profile", and "Capital works have also commenced on constructing new filtration and bagging facilities to ultimately allow the product to be sold into separate, new offtake contracts. Construction of these new facilities is expected to be completed by the end of the September quarter.", and "Odyssey also dovetails well with the forecast lift in nickel demand associated with the ramp-up in modelled electric vehicle battery production beyond 2020".

This announcement does not include reference to all available information on the Company, the Forrester 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.

# ACTIVITY REPORT

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## Western Areas ore reserve / mineral resource statement – Effective date 30th June 2018

	Tonnes	Grade Ni%	Ni Tonnes	Classification	JORC Code
<b>Ore Reserves</b>					
1. Flying Fox Area	749,600	3.9	29,170	Probable Ore Reserve	2012
2. Spotted Quoll Area	89,600	3.8	3,450	Proved Ore Reserve	2012
	1,708,500	4.0	68,480	Probable Ore Reserve	2012
3. Diggers Area					
Digger South	2,016,000	1.4	28,950	Probable Ore Reserve	2004
Digger Rocks	93,000	2.0	1,850	Probable Ore Reserve	2004
<b>TOTAL FORRESTANIA ORE RESERVE</b>	<b>4,656,700</b>	<b>2.8</b>	<b>131,900</b>		
<b>Mineral Resources</b>					
1. Flying Fox Area					
T1 South	132,279	4.6	6,085	Indicated Mineral Resource	2012
	55,219	3.9	2,154	Inferred Mineral Resource	2012
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	191,535	5.5	10,580	Indicated Mineral Resource	2012
T5 Massive Zone + Pegs	901,865	5.6	50,177	Indicated Mineral Resource	2012
T6 Massive Zone	75,707	5.2	3,905	Indicated Mineral Resource	2012
T7 Massive Zone	256,977	2.1	5,303	Inferred Mineral Resource	2012
Total High Grade	1,852,259	4.8	88,910		
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	6,835,259	1.9	129,960		
2. New Morning / Daybreak					
Massive Zone	340,126	3.3	11,224	Indicated Mineral Resource	2012
	78,067	3.9	3,025	Inferred Mineral Resource	2012
Disseminated Zone	3,318,468	1.2	41,181	Indicated Mineral Resource	2012
	2,496,658	1.3	32,498	Inferred Mineral Resource	2012
Total New Morning / Daybreak	6,233,319	1.4	87,928		
3. Spotted Quoll Area					
Spotted Quoll	367,880	5.9	21,595	Measured Mineral Resource	2012
	1,322,173	5.6	73,525	Indicated Mineral Resource	2012
	181,013	5.6	10,137	Inferred Mineral Resource	2012
Total Spotted Quoll	1,871,066	5.6	105,257		
Beautiful Sunday	480,000	1.4	6,720	Indicated Mineral Resource	2004
Total Western Belt	15,419,644	2.1	329,865		
4. 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		
5. 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		
<b>TOTAL FORRESTANIA MINERAL RESOURCE</b>	<b>25,823,744</b>	<b>1.7</b>	<b>438,385</b>		
6. 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 South Disseminated	4,016,949	2.1	84,767	Indicated Mineral Resource	2012
	219,641	2.0	4,302	Inferred Mineral Resource	2012
Odysseus North - Disseminated	3,128,943	2.6	81,156	Indicated Mineral Resource	2012
	225,248	2.7	6,111	Inferred Mineral Resource	2012
Odysseus North - Massive	145,830	6.1	8,836	Indicated Mineral Resource	2012
	124,900	11.2	14,002	Inferred Mineral Resource	2012
Total Cosmos Area	10,402,338	2.6	265,487		
7. 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		
<b>TOTAL COSMOS MINERAL RESOURCE</b>	<b>63,337,338</b>	<b>0.9</b>	<b>592,430</b>		
<b>TOTAL WESTERN AREAS MINERAL RESOURCE</b>	<b>89,161,082</b>	<b>1.2</b>	<b>1,030,815</b>		



## JORC 2012 TABLE 1 – Cosmos Nickel Complex Exploration

### Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration targets were tested and sampled from diamond drilling (DD) core, and holes were mostly drilled perpendicular to the strike (north-south) of the stratigraphy, at angles ranging between -55° and -85°. Owing to drill collar availability, two holes were drilled at oblique azimuths (up to 40°) to the orebody strike (WCD014 and WCD015).</li> <li>Drill holes were located initially with hand held GPS and later surveyed by differential GPS. DD holes were used to obtain high quality samples that were fully oriented and logged for lithological, structural, geotechnical attributes. Each sample of diamond drill core submitted to ALS laboratories at Malaga, Perth was weighed to determine density by the weight in air, weight in water method. All sampling was conducted under WSA QAQC protocols which are in accordance with industry best practice.</li> <li>Diamond drill core (NQ2) is 1/4 core sampled on geological intervals (0.2m - 1.5m) to achieve sample weights under 2kgs.</li> <li>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.</li> </ul>
	<ul style="list-style-type: none"> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	<ul style="list-style-type: none"> <li>All samples were prepared and assayed by independent commercial laboratories whose instruments are regularly calibrated</li> <li>Geophysical survey QC parameters were reviewed by independent supervising geophysicists from Newexco Services Pty Ltd</li> </ul>
	<ul style="list-style-type: none"> <li>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Diamond core is typically marked at 1m intervals</li> <li>Sample intervals marked up by geologists based on geology.</li> <li>Sampled mineralisation intervals are sent to a commercial laboratory for crushing and grinding before assaying.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>Diamond Drilling utilized a UDR1200 rig</li> <li>Diamond drilling comprises HQ and NQ2 sized core.</li> <li>Historical data is derived from both surface and underground diamond drilling</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>Diamond core recoveries have been logged and recorded in the database</li> <li>Diamond core are logged and recorded in the database. Overall recoveries are &gt;95% and there was no core loss issues or significant sample recovery problems. Core loss is noted where it occurs.</li> <li>Diamond core was reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the drillers.</li> <li>RC recoveries are logged and recorded in the database and RC samples were visually checked for recovery, moisture and contamination. Drilling close to the lake shore for the Neptune drilling resulted in high water flows which reduced the sample size and loss of fines from the sample.</li> <li>The drilling by diamond core method has high recoveries. The massive sulphide style of mineralisation and the consistency of the mineralised intervals are considered to preclude any issue of sample bias due to material loss or gain.</li> <li>Drilling in the oxidised profile results in more incomplete core recoveries.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> </ul>	<ul style="list-style-type: none"> <li>All geological logging was carried out to a high standard using well established geology codes in LogChief software.</li> <li>All logging recorded in a Panasonic Toughbook PC.</li> </ul>



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Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>	<ul style="list-style-type: none"> <li>Core is photographed in both dry and wet form and logging is done in detail.</li> </ul>
	<ul style="list-style-type: none"> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>All diamond drill holes were logged and photographed in full. RC holes are logged in full.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> </ul>	<ul style="list-style-type: none"> <li>Diamond core is sampled as quarter core only; cut by the field crew on site by diamond saw.</li> </ul>
	<ul style="list-style-type: none"> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> </ul>	<ul style="list-style-type: none"> <li>RC samples were collected on the rig using cone splitters. Composite samples are collected via riffle splitting or spearing to generate a single sample of less than 3kg.</li> </ul>
	<ul style="list-style-type: none"> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	<ul style="list-style-type: none"> <li>Sample preparation follows industry best practice involving oven drying, coarse crushing and pulverising.</li> </ul>
	<ul style="list-style-type: none"> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>	<ul style="list-style-type: none"> <li>The field crew prepares and inserts the QAQC certified reference materials into the relevant calico bags.</li> <li>OREAS and Geostats standards have been selected based on their grade range and mineralogical properties, with approximately 12 different standards used.</li> </ul>
	<ul style="list-style-type: none"> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> </ul>	<ul style="list-style-type: none"> <li>Standards and blanks are inserted approximately every 20 samples or at least one every hole for both diamond and RC drilling.</li> </ul>
	<ul style="list-style-type: none"> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>All geological logging was carried out to a high standard using well established geology codes in LogChief software.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> </ul>	<ul style="list-style-type: none"> <li>All samples are assayed by independent certified commercial laboratories.</li> <li>The laboratories used are experienced in the preparation and analysis of nickel sulphide ores.</li> </ul>
	<ul style="list-style-type: none"> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> </ul>	<ul style="list-style-type: none"> <li>No Geophysical tools or handheld XRF instruments were used to determine any element concentrations that were subsequently used for MRE or exploration reporting purposes.</li> </ul>
	<ul style="list-style-type: none"> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>Certified reference materials are included in all batches dispatched at an approximate frequency of 1 per 25 samples, with a minimum of two per batch.</li> <li>Field duplicates are inserted into submissions at an approximate frequency of 1 in 25, with placement determined by Nickel grade and homogeneity. Lab checks, both pulp and crush, are taken alternately by the lab at a frequency of 1 in 25.</li> <li>Accuracy and precision were assessed using industry standard procedures such as control charts and scatter plots.</li> <li>Evaluations of standards are completed on a monthly, quarterly and annual basis using QAQCR.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> </ul>	<ul style="list-style-type: none"> <li>Geological interpretation using intersections peer viewed by prior company and WSA geologists.</li> </ul>
	<ul style="list-style-type: none"> <li>The use of twinned holes.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable</li> </ul>
	<ul style="list-style-type: none"> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	<ul style="list-style-type: none"> <li>All primary geophysical data were recorded digitally and sent in electronic format to Newexco Services Pty Ltd for quality control and evaluation.</li> <li>All geological logging was carried out to a high standard using well established geology codes in LogChief software.</li> <li>All other data including assay results are imported via Datashed software.</li> <li>Drillholes, sampling and assay data is stored in a SQL Server database located in a dedicated data center.</li> </ul>
	<ul style="list-style-type: none"> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>none</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches,</li> </ul>	<ul style="list-style-type: none"> <li>Downhole surveys completed using the Axis "Champ Gyro™" north seeking gyroscopic instrument on all resource definition and Exploration diamond</li> </ul>

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Criteria	JORC Code explanation	Commentary
	<i>mine workings and other locations used in Mineral Resource estimation.</i>	<i>holes. Exploration RC holes were surveyed down-hole using an Eastman single shot camera.</i>
	<ul style="list-style-type: none"> <li><i>Specification of the grid system used.</i></li> </ul>	<ul style="list-style-type: none"> <li><i>MGA94 Zone 51 grid coordinate system is used.</i></li> <li><i>A two point transformation is used to convert the data from AMG84_51 mine grid and vice versa.</i></li> </ul>
	<ul style="list-style-type: none"> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li><i>The project area is flat and the topographic data density is adequate for MRE purposes</i></li> <li><i>Collar positions were picked up by suitably qualified surface and underground surveyors</i></li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Drill hole spacing at Neptune is varied according to nature of target type. Where initial drilling was undertaken holes are nominally 250m to 400m apart. Where mineralisation is identified holes are spaced at an approx 100m to 200m spacing.</i></li> <li><i>For other projects, drill spacing will vary based on the target being tested.</i></li> </ul>
	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Samples are collected at 1m intervals (Diamond and Aircore) and 4m composites (RC)</i></li> </ul>
	<ul style="list-style-type: none"> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Sampling compositing has been applied to some of the RC sampling (2m to 4m). Where significant results are intersected, RC samples will be broken into 1m intervals.</i></li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> </ul>	<ul style="list-style-type: none"> <li><i>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° to 80°) means this is not always achieved.</i></li> </ul>
	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li><i>No orientation based sampling bias has been observed in the data, intercepts are reported as downhole lengths.</i></li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Standard West Australian mining industry sample security measures were observed.</i></li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Adrian Black of Newexco Pty Ltd (a member of the AIG), an independent exploration company, has reviewed the data and sampling techniques employed by the Company.</i></li> </ul>

## JORC 2012 TABLE 1 – Cosmos Nickel Complex Exploration

### Section 2: Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Cosmos Nickel Complex comprises 26 tenements covering some 9,226Ha. The tenements include mining leases and miscellaneous licenses</i></li> <li><i>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</i></li> <li><i>All tenements are in good standing</i></li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Historical nickel exploration has been completed by Glencore PLC, Xstrata Nickel Australasia and Jubilee Mines NL</i></li> </ul>

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Criteria	JORC Code explanation	Commentary																																																																																																																																																																	
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The deposits form part of the Cosmos Nickel Complex, which lies within the Agnew-Wiluna Belt of the central Yilgarn Craton, Western Australia</li> <li>The deposit style is komatiite hosted, disseminated to massive nickel sulphides.</li> <li>The mineralisation typically occurs in association with the basal zone of high MgO cumulate ultramafic rocks.</li> <li>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</li> </ul>																																																																																																																																																																	
Drill hole Information	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:                             <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>Drill hole summary details supporting reported intersections from the Neptune Project are captured in the enclosed table.</li> </ul> <table border="1"> <thead> <tr> <th>HOLEID</th> <th>Easting</th> <th>Northing</th> <th>RL</th> <th>EOH Depth (m)</th> <th>Type</th> <th>DIP</th> <th>Azimuth</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td rowspan="6">WCD011</td> <td>261552</td> <td>6938491</td> <td>460</td> <td>882.58</td> <td>DDH</td> <td>-82</td> <td>264</td> <td rowspan="6">Complete</td> </tr> <tr> <td colspan="8">including</td> </tr> <tr> <td colspan="8">and</td> </tr> <tr> <td colspan="8">and</td> </tr> <tr> <td colspan="8">and</td> </tr> <tr> <td colspan="8">and</td> </tr> <tr> <td>WCD012</td> <td>261552</td> <td>6938491</td> <td>460</td> <td>65.4</td> <td>DDH</td> <td>-67</td> <td>268</td> <td>Hole Abandoned</td> </tr> <tr> <td rowspan="6">WCD013</td> <td>261552</td> <td>6938491</td> <td>460</td> <td>723.8</td> <td>DDH</td> <td>-67</td> <td>268</td> <td rowspan="6">Complete</td> </tr> <tr> <td colspan="8">and</td> </tr> <tr> <td colspan="8">and</td> </tr> <tr> <td colspan="8">and</td> </tr> <tr> <td colspan="8">including</td> </tr> <tr> <td colspan="8">and including</td> </tr> <tr> <td>WCD014</td> <td>261791</td> <td>6938458</td> <td>460</td> <td>982.6</td> <td>DDH</td> <td>-55</td> <td>232</td> <td>Complete</td> </tr> <tr> <td>WCD015</td> <td>261791</td> <td>6938458</td> <td>460</td> <td>864.1</td> <td>DDH</td> <td>-68.5</td> <td>220</td> <td>Complete</td> </tr> <tr> <td>WCD016</td> <td>261410</td> <td>6938800</td> <td>460</td> <td>747.8</td> <td>DDH</td> <td>-68</td> <td>268</td> <td>Complete</td> </tr> <tr> <td>WCD017</td> <td>261620</td> <td>6938828</td> <td>460</td> <td>834.9</td> <td>DDH</td> <td>-85.5</td> <td>95</td> <td>Complete</td> </tr> <tr> <td>WCD018</td> <td>261350</td> <td>6939475</td> <td>460</td> <td>762.7</td> <td>DDH</td> <td>-82</td> <td>265</td> <td>In Progress</td> </tr> </tbody> </table>	HOLEID	Easting	Northing	RL	EOH Depth (m)	Type	DIP	Azimuth	Comments	WCD011	261552	6938491	460	882.58	DDH	-82	264	Complete	including								and								and								and								and								WCD012	261552	6938491	460	65.4	DDH	-67	268	Hole Abandoned	WCD013	261552	6938491	460	723.8	DDH	-67	268	Complete	and								and								and								including								and including								WCD014	261791	6938458	460	982.6	DDH	-55	232	Complete	WCD015	261791	6938458	460	864.1	DDH	-68.5	220	Complete	WCD016	261410	6938800	460	747.8	DDH	-68	268	Complete	WCD017	261620	6938828	460	834.9	DDH	-85.5	95	Complete	WCD018	261350	6939475	460	762.7	DDH	-82	265	In Progress
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Data aggregation methods	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>Standard weighted averaging of drill hole intercepts were employed. No maximum or minimum grade truncations were used in the estimation.</li> <li>The reported assays have been length and bulk density weighted. A lower arbitrary 0.5% Ni cut-off is applied, with no top cut applied. High grade intercepts internal to broader zones of mineralisation are reported as included intervals.</li> <li>Metal equivalents have not been used</li> </ul>																																																																																																																																																																	
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect</li> </ul>	<ul style="list-style-type: none"> <li>Drill hole intersections may not be true widths</li> </ul>																																																																																																																																																																	

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Criteria	JORC Code explanation	Commentary
	<p>to the drill hole angle is known, its nature should be reported.</p> <ul style="list-style-type: none"> <li>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').</li> </ul>	
Diagrams	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>Included within report</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>All relevant assay results have been reported</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>Included within report</li> <li>Geophysics</li> <li>Information on structure type, dip, dip direction alpha and beta angles, texture, shape, roughness and fill material is stored in the structural logs in the database.</li> </ul>
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Preliminary plans are included within the report</li> <li>Future explorations programs may change depending on results and strategy</li> </ul>



## JORC 2012 TABLE 1 – Forrestania Exploration

### Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration targets were sampled using Reverse Circulation (RC) drilling methods and holes were typically drilled close to perpendicular to the strike (north-northeast – south-southwest) of the stratigraphy, at dip angles ranging between -60° and -90°.</li> <li>Drill holes were located initially with hand held GPS and later surveyed by differential GPS. Samples were submitted to ALS laboratories at Malaga, Perth. All sampling was conducted under WSA QAQC protocols which are in accordance with industry best practice.</li> </ul>
	<ul style="list-style-type: none"> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	<ul style="list-style-type: none"> <li>All samples were prepared and assayed by independent commercial laboratories whose instruments are regularly calibrated</li> <li>Geophysical survey QC parameters were reviewed by independent supervising geophysicists from Newexco Services Pty Ltd</li> </ul>
	<ul style="list-style-type: none"> <li>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>A KWL 350 rig with Atlas Copco 2100CFM / 800PSI Booster / Auxiliary was used.</li> <li>RC drilling comprises nominally 140mm diameter face sampling hammer drilling</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>RC recoveries are visually estimated and logged and recorded in the database along with comments relating to moisture and contamination.</li> <li>The style of mineralisation and the consistency of the mineralised intervals are considered to preclude any issue of sample bias due to material loss or gain.</li> <li>Drilling in the oxidised profile results in more incomplete core recoveries.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> </ul>	<ul style="list-style-type: none"> <li>All geological logging was carried out to a high standard using well established geology codes in LogChief software.</li> <li>All logging recorded in a Panasonic Toughbook PC.</li> </ul>
	<ul style="list-style-type: none"> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>	<ul style="list-style-type: none"> <li>Drill chips are logged for lithology, mineralogy, alteration, weathering, fabric type and intensity, grainsize, colour and other relevant properties.</li> </ul>
	<ul style="list-style-type: none"> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>All holes are logged from surface to end of hole.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable owing to drilling method.</li> </ul>
	<ul style="list-style-type: none"> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> </ul>	<ul style="list-style-type: none"> <li>RC samples were collected on the rig using cone splitters. Composite samples are collected via riffle splitting or spearing to generate a single sample of less than 3kg</li> </ul>
	<ul style="list-style-type: none"> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	<ul style="list-style-type: none"> <li>Sample preparation follows industry best practice involving oven drying, coarse crushing and pulverising.</li> </ul>
	<ul style="list-style-type: none"> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>	<ul style="list-style-type: none"> <li>The field crew prepares and inserts the QAQC certified reference materials into the relevant calico bags.</li> <li>OREAS and Geostats standards have been selected based on their grade range and mineralogical properties, with approximately 12 different</li> </ul>

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Criteria	JORC Code explanation	Commentary
		standards used.
	<ul style="list-style-type: none"> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> </ul>	<ul style="list-style-type: none"> <li>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. Blanks are inserted selectively in RC and diamond programs, at least one and sometimes two samples per hole for regular monitoring and to detect smearing in the laboratory processing.</li> </ul>
	<ul style="list-style-type: none"> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Based on the grain size of the target style of mineralisation, sample sizes are considered appropriate.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> </ul>	<ul style="list-style-type: none"> <li>All samples are assayed by independent certified commercial laboratories.</li> <li>The laboratories used are experienced in the preparation and analysis of nickel sulphide ores.</li> </ul>
	<ul style="list-style-type: none"> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> </ul>	<ul style="list-style-type: none"> <li>No Geophysical tools or handheld XRF instruments were used to determine any element concentrations that were subsequently used for MRE or exploration reporting purposes.</li> </ul>
	<ul style="list-style-type: none"> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>Certified reference materials are included in all batches dispatched at an approximate frequency of 1 per 25 samples, which also equates to at least 1 per drill-hole.</li> <li>Lab checks, both pulp and crush, are taken alternately by the lab at a frequency of 1 in 25.</li> <li>Accuracy and precision were assessed using industry standard procedures such as control charts and scatter plots.</li> <li>Evaluations of standards are completed on a monthly, quarterly and annual basis using QAQR.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> </ul>	<ul style="list-style-type: none"> <li>Geological interpretation using intersections peer viewed by prior company and WSA geologists.</li> </ul>
	<ul style="list-style-type: none"> <li>The use of twinned holes.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable.</li> </ul>
	<ul style="list-style-type: none"> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	<ul style="list-style-type: none"> <li>All primary geophysical data were recorded digitally and sent in electronic format to Newexco Services Pty Ltd for quality control and evaluation.</li> <li>All geological logging was carried out to a high standard using well established geology codes in LogChief software.</li> <li>All other data including assay results are imported via Datashed software.</li> <li>Drillholes, sampling and assay data is stored in a SQL Server database located in a dedicated data center.</li> </ul>
	<ul style="list-style-type: none"> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> </ul>	<ul style="list-style-type: none"> <li>Drill holes were located using a hand held GPS.</li> </ul>
	<ul style="list-style-type: none"> <li>Specification of the grid system used.</li> </ul>	<ul style="list-style-type: none"> <li>MGA94 Zone 51 grid coordinate system is used.</li> <li>A two point transformation is used to convert the data from AMG84_51 mine grid and vice versa.</li> </ul>
	<ul style="list-style-type: none"> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>The project area is flat and the topographic data density is adequate for MRE purposes</li> <li>Collar positions were picked up by suitably qualified surface and underground surveyors.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>Drill hole spacing at Parker Dome is varied according to the nature of target type. Along east-west oriented drill traverses, drill-hole spacing varied between 100 – 200m, based on the nature of the test target.</li> </ul>
	<ul style="list-style-type: none"> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable. The drilling program at Parker Dome is at an early target generation and testing stage. No resource estimations are being considered at this time.</li> </ul>
	<ul style="list-style-type: none"> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>4m sampling compositing has been applied down-hole for all RC holes, and</li> </ul>



Criteria	JORC Code explanation	Commentary
		<i>pending the final returned results, 1m sample intervals would be completed where significant results are received.</i>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> </ul>	<ul style="list-style-type: none"> <li>Based on our current geological understanding of the stratigraphy at Parker Dome, the majority of the drill holes are orientated to achieve intersection angles as close to perpendicular as possible. The variable and steep dipping nature of the stratigraphy at some locations (-70° to -80°) means this is not always achieved.</li> </ul>
	<ul style="list-style-type: none"> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>No orientation based sampling bias has been observed in the data, intercepts are reported as downhole lengths.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Standard West Australian mining industry sample security measures were observed</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>Adrian Black of Newexco Pty Ltd (a member of the AIG), an independent exploration company, has reviewed the data and sampling techniques employed by the Company.</li> </ul>

## JORC 2012 TABLE 1 – Forrestania Exploration

### Section 2: Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>Forrestania Nickel Operations comprises approximately 125 tenements covering some 900km<sup>2</sup> within the Central Yilgarn Province. The tenements include exploration licences, prospecting licences, general purpose leases, miscellaneous licences and mining leases.</li> <li>Western Areas wholly owns 106 tenements, 55 tenements of which were acquired from Outokumpu in 2002 and a further 51 tenements acquired from Kagara in March 2012 (some which are subject to various third party royalty agreements). The remainder of the tenements are subject to Joint Ventures.</li> <li>A number of the Kagara tenements are subject to third party royalty agreements.</li> <li>All the tenements are in good standing. Six tenements are pending grant.</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Western Areas has been exploring its wholly owned tenements since 2002. The tenements subject to the Kagara sale which took place in March 2012 were explored by Kagara since 2006 and Lion Ore and St Barbara prior to that time.</li> <li>Western Areas has managed the Mt Gibb JV since 2009 (Great Western Exploration explored the ground prior to that time).</li> <li>Kidman Resources Limited has entered into a Farm-in and Joint Venture with Western Areas, with a Stage 1 opportunity to earn in to 50% lithium rights.</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The 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.</li> <li>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.</li> </ul>
Drill hole information	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>No additional drilling was completed for the quarter.</li> </ul>

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Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>– hole length.</li> <li>• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	
Data aggregation methods	<ul style="list-style-type: none"> <li>• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>• Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>• Standard weighted averaging of drill hole intercepts were employed. No maximum or minimum grade truncations were used in the estimation.</li> <li>• The reported assays have been length and bulk density weighted. A lower arbitrary 0.5% Ni cut-off is applied, with no top cut applied. High grade intercepts internal to broader zones of mineralisation are reported as included intervals. An arbitrary 0.1ppm Au cut-off has been applied for significant reported Au intersections, with no top cut applied.</li> <li>• Metal equivalents have not been used</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>• These relationships are particularly important in the reporting of Exploration Results.</li> <li>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>• If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>• Drill hole intersections may not be true widths</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>• No significant results reported for this quarter.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>• No significant results have been returned for this quarter.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>• Included within report</li> <li>• Information on structure type, dip, dip direction alpha and beta angles, texture, shape, roughness and fill material is stored in the structural logs in the database.</li> </ul>
Further work	<ul style="list-style-type: none"> <li>• The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>• Follow-up work is at the planning stage, with diagrams outlining this work to be captured in future reports.</li> <li>• Future explorations programs may change depending on results and strategy.</li> </ul>





## JORC 2012 TABLE 1: – Western Gawler Joint Venture

### Section 1: Sampling Techniques and Data

Criteria	JORC Code Explanation	Comment
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Air-core (AC) drilling is used for sampling.</li> <li>Each sample interval is split to approximately 3kg using a rig mounted rotary splitter.</li> <li>Each sample is sent for analysis to ALS Global laboratories in Perth, Western Australia.</li> <li>The sample is pulverised in the laboratory (total prep) to produce a sub sample for assaying.</li> <li>All sampling was conducted using WSA QAQC sampling protocols which are in accordance with industry best practice.</li> </ul>
Drilling Techniques	<ul style="list-style-type: none"> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>Exploration targets are tested using AC drilling. Holes were typically drilled vertically.</li> <li>A truck-mounted air-core rig is used with a 3 inch diameter face sampling hammer drilling or Air-Core bit.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias</li> </ul>	<ul style="list-style-type: none"> <li>Drilling recoveries are digitally logged, recorded and captured within the project database.</li> <li>Overall recoveries are &gt;95% and there has been no significant loss of sample material due to ground or drilling issues.</li> <li>Each individual samples are visually checked for recovery, moisture and contamination.</li> <li>The style of expected mineralisation and the consistency of the mineralised intervals are expected to preclude any issue of sample bias due to material loss or gain.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc)</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>Geological logging is recorded and validated in excel spreadsheets (Toughbook platform)</li> <li>Drill chips are logged for lithology, mineralogy, mineralisation, weathering, fabric, grainsize, colour and other relevant features.</li> <li>Geotechnical logging was not completed due to the nature of drill method.</li> <li>All holes have been logged from the surface to the end of hole.</li> <li>Petrology is used to verify the field geological logging.</li> </ul>
Sub-sampling techniques and sampling preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>The drill samples were collected every metre on the drill rig using a rotary splitter.</li> <li>No composite samples are taken.</li> <li>Field QC procedures involve the use of certified reference material as assay standards, along with blanks, duplicates and barren washes. The insertion rate of these averaged 1:20, with an increased rate in mineralised zones.</li> <li>Field duplicates are conducted on approximately 1 in 25 drill intersections.</li> <li>The sample sizes are considered to be appropriate to correctly represent the geological model based on: the style of mineralisation, the thickness and consistency of the expected intersections, the sampling methodology and percent value assay ranges for the primary elements.</li> </ul>

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Criteria	JORC Code Explanation	Comment
Quality of assay data laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>All samples are processed by ALS Minerals (Australian Laboratory Services P/L) in Perth, Western Australia</li> <li>All drill samples are subjected to ICP-MS (ME-MS61) analysis using nitric, perchloric, hydrofluoric and hydrochloride acid digest.</li> <li>All samples are also assayed for PGE's using PGM-ICP23</li> <li>Standards and blanks are routinely used to assess company QAQC (approx 1 standard for every 25-50 samples).</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Primary data was collected using validated excel spreadsheets, on Toughbook computers.</li> <li>All data is validated by the supervising geologist, and sent to WSA Perth for further validation and integration into a Microsoft Access database.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Drill holes were located using hand held GPS.</li> <li>Elevation data is captured with hand held GPS, and cross referenced with local topographical maps (DMP produced), SRTM data and recently captured DTM models (where covered by the Aeromagnetic Surveys – Thomson Aviation).</li> <li>MGA94 Zone 53 grid coordinate system is used.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Drill holes are located and specifically planned according to target location and stratigraphic location.</li> <li>Samples are collected every metre down hole.</li> <li>Sample compositing has not yet been applied, but may do so depending on the assay information required.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>The majority of the drill holes are drilled vertically which may reduce range of lithologies or cross section of stratigraphy sampled in areas that are steeply dipping.</li> <li>Heritage and/or environmental constraints may prevent some ideal drilling solutions.</li> <li>No orientation based sampling bias has been observed in the data, intercepts are reported as down-hole lengths.</li> </ul>
Sample Security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>All samples are captured and prepared for transport onsite under the supervision of WSA staff.</li> <li>All samples are collected in sealed task specific containers (Bulka bags – plastic pallets) and delivered from site to Perth and then the assay laboratory via WSA staff.</li> </ul>
Audits and Reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>Adrian Black of Newexco Pty Ltd (a member of the AIG), an independent exploration company, has reviewed the data and sampling techniques employed by WSA.</li> </ul>

## JORC 2012 TABLE 1 – Western Gawler Joint Venture

### Section 2: Reporting of Exploration Results

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

Criteria	JORC 2012 Explanation	Comment
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> </ul>	<ul style="list-style-type: none"> <li>The Western Gawler Project comprises 6 exploration licenses covering some 4,448km<sup>2</sup>, of which 5 are held 100% WSA. (EL 6087(formerly EL 5077), EL 5199, EL5200, EL5688 and EL5939)</li> <li>A sixth license EL 5880 (formerly EL 4440) is operated under the Strandline Resources Ltd / Western Areas Ltd Farm-In and Joint Venture (JV) Agreement.</li> </ul>

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Criteria	JORC 2012 Explanation	Comment																																																						
	<ul style="list-style-type: none"> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</li> </ul>																																																							
Exploration done by other parties.	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>The project area was originally explored by BHP Billiton as part of its extensive gold, titanium, iron and nickel target generation work, and more recently by Gunson Resources Limited (Nickel), Equinox (Base Metals and Gold) and Iluka Resources Ltd (Mineral Sands). It is deemed that the previous exploration was of variable effectiveness.</li> <li>The South Australian Government has performed widely spaced stratigraphic diamond drilling along a number of traverses in the tenure</li> <li>The success rate of historical RC drilling is low, while the AC and Diamond drilling was effective.</li> <li>Gravity, Magneto Tellurics and Airborne Electro-magnetics have been used in selective locations within the project area.</li> <li>The historical geophysics is deemed to have been effective.</li> </ul>																																																						
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The Western Gawler Project lies within the Fowler Domain of western South Australia. The Fowler Domain is a Mesoproterozoic orogenic belt comprised of medium to high metamorphic grade basement lithologies and younger felsic, mafic and ultramafic intrusives.</li> <li>Similarly aged terranes globally contain significant accumulations of nickel and copper sulphides.</li> <li>Whilst not primary target types, the area may also be prospective for orogenic gold, IOCG and skarn related mineralisation.</li> </ul>																																																						
Drill hole Information	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:                             <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<table border="1"> <thead> <tr> <th>HOLEID</th> <th>Easting</th> <th>Northing</th> <th>RL</th> <th>FOH Depth (m)</th> <th>Type</th> <th>DIP</th> <th>Azimuth</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>18WGAC215</td> <td>218379</td> <td>6527781</td> <td>63</td> <td>72</td> <td>AC</td> <td>-90</td> <td>0</td> <td>Complete</td> </tr> <tr> <td>18WGAC237</td> <td>218716</td> <td>6525836</td> <td>61</td> <td>37</td> <td>AC</td> <td>-90</td> <td>0</td> <td>Complete</td> </tr> <tr> <td>18WGAC243</td> <td>217305</td> <td>6533118</td> <td>68</td> <td>43</td> <td>AC</td> <td>-90</td> <td>0</td> <td>Complete</td> </tr> <tr> <td>18WGAC249</td> <td>217240</td> <td>6534780</td> <td>68</td> <td>48</td> <td>AC</td> <td>-90</td> <td>0</td> <td>Complete</td> </tr> <tr> <td>18WGAC250</td> <td>217310</td> <td>6534828</td> <td>68</td> <td>37</td> <td>AC</td> <td>-90</td> <td>0</td> <td>Complete</td> </tr> </tbody> </table>	HOLEID	Easting	Northing	RL	FOH Depth (m)	Type	DIP	Azimuth	Comments	18WGAC215	218379	6527781	63	72	AC	-90	0	Complete	18WGAC237	218716	6525836	61	37	AC	-90	0	Complete	18WGAC243	217305	6533118	68	43	AC	-90	0	Complete	18WGAC249	217240	6534780	68	48	AC	-90	0	Complete	18WGAC250	217310	6534828	68	37	AC	-90	0	Complete
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Data aggregation methods	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>Where assays results have been reported, they represent a single sampling interval (1m). In this case, no compositing has been used.</li> <li>No metal equivalents have been used.</li> </ul>																																																						
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable</li> </ul>																																																						
Diagrams	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional</li> </ul>	<ul style="list-style-type: none"> <li>Refer to Table for location coordinates relating to the reported elevated intervals.</li> </ul>																																																						

# ACTIVITY REPORT

For the period ending 30 June 2018

WESTERN AREAS LTD



Criteria	JORC 2012 Explanation	Comment
	views.	
Balanced reporting	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>No significant material results to report.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>Multi-element analysis was conducted routinely on all samples for a base metal and PGM suite and potentially deleterious elements.</li> </ul>
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration within the Western Gawler Project is ongoing.</li> <li>At this stage of the exploration program, the nature of the geological model is evolving. Details of further work and will be forthcoming as the project progresses.</li> </ul>