ACTIVITY REPORT

For the period ending 30 June 2021



HIGHEST NICKEL PRODUCTION QUARTER FOR THE YEAR AT FORRESTANIA

Western Areas ("WSA" or the "Company") (ASX: WSA) is pleased to provide the June Quarterly Activity report.

JUNE QUARTER 2021 HIGHLIGHTS

- Forrestania mine production of 4,911 nickel tonnes in ore, up 16% on March quarter and highest for the year. FY21 total of 16,812 tonnes.
- Mill production of 4,622 nickel tonnes in concentrate, up 8% quarter on quarter and also highest for the year. FY21 total within guidance at 16,180 tonnes.
- Unit cash cost of nickel in concentrate lowest for the year at A\$3.84/lb, down 6% on prior quarter. FY21 total A\$4.23/lb, reporting within guidance.
- Operating cash flow of A\$23m with cash at bank of \$151.1m and no drawn debt.
- Timing variance of final export shipment to China leaving port post 30 June has resulted in the provisional payment of A\$12m being received in July. This will report into the September quarter.
- Odysseus underground development advancing with total mine development of 1.2km into both north and south declines to access the two Odysseus ore bodies.
- First ore from Odysseus on target for the September quarter.
- Mt Goode scoping study commenced. The Mt Goode deposit at Cosmos containing a significant nickel resource.
- Commenced commissioning of demonstration scale, heap leach plant at Forrestania, following completion of construction on time and budget.

Western Areas Managing Director, Mr Dan Lougher, said that the close of the financial year had seen significant momentum across all key projects and workstreams for Western Areas, including another uplift in operating performance at Forrestania.

"Our Forrestania operations have had their best quarter on both production and costs for the year, and delivered within updated guidance after overcoming some operational difficulties earlier in the financial year. As Odysseus increasingly takes the lead in Western Areas, we have several projects underway to ensure Forrestania remains a strong contributor to the Company in the years ahead, as mining at Flying Fox winds down. We've shown this with the commissioning of the demonstration scale heap leach pad, as well as ongoing study work for an underground mine at New Morning.

"At Odysseus, our new long life mine continues to advance towards production of first ore in this September quarter, which will mark a very significant milestone in its expected 10 plus year mine life. Odysseus remains one of the few long dated supplies of nickel sulphide to enter the market in the coming years, as the EV market continues to drive nickel demand for delivery into the EV battery supply chain."

Pre-production activities at Odysseus for the quarter comprised further lateral jumbo development of 1,230m, including 455m in the Odysseus decline to access the respective orebodies and 775m of infrastructure development. Backreaming of the hoisting shaft first leg (5.7m diameter) has now advanced by 413m (total 630m), with earthworks ahead of the erection of the winder house also completed. Surface infrastructure continues to progress, with significant procurement activity undertaken for power and accommodation.

Forrestania produced the best quarter for the financial year, with the highest production at the lowest unit cost, representing the benefit of fixed costs being spread over the higher production volumes, with nickel grades remaining broadly similar to the prior quarter. The Cosmic Boy Concentrator also returned the highest nickel recovery (90%) of the year, further enhancing the cost profile.

At Forrestania, a 20,000t demonstration heap leach plant was completed on time and on budget, with commissioning commenced during the quarter. Alongside this, the New Morning Feasibility Study continued to advance, with mine and surface layout designs completed and the study now evaluating two alternative mining methods in advance of mining cost estimation.

The average realised nickel price increased to A\$10.42/lb for the quarter and averaged A\$10.06/lb for the full year. The nickel market continues to show signs of tight supply, with both the stainless steel market and EV battery metals demand remaining elevated.



PRODUCTION OVERVIEW

lan	l lm:4		VTD Total				
Item	Unit	Sep Qtr	Dec Qtr	Mar Qtr	Jun Qtr	YTD Total	
Total Ore Mined	tonnes	137,280	124,459	117,613	143,503	522,855	
Mined Grade	Ni %	3.0%	2.8%	3.6%	3.4%	3.2%	
Total Nickel Mined	tonnes	4,147	3,518	4,236	4,911	16,812	
Ore Processed (Milling/Concentrator)	tonnes	148,801	145,996	139,025	147,236	581,058	
Processed Grade	Ni %	3.0%	2.9%	3.5%	3.5%	3.2%	
Average Processing Recovery	%	85%	84%	89%	90%	87%	
Total Nickel in Concentrate	tonnes	3,756	3,535	4,267	4,622	16,180	
Total Nickel Sold	tonnes	4,064	3,336	3,962	4,147	15,509	
Contained Nickel in Stockpiles	tonnes	3,099	2,633	2,429	2,772		
Cash Cost Ni in Concentrate (ex MREP)	A\$/lb	4.44	4.72	4.00	3.80	4.20	
Total Cash Cost Ni Conc (inc. MREP)	A\$/lb	4.46	4.67	4.07	3.84	4.23	
Total Cash Cost Ni Conc (inc. MREP) US\$		3.17	3.41	3.15	2.96	3.16	
Exchange Rate	US\$/A\$	0.71	0.73	0.77	0.77	0.75	
Realised Nickel Price (before payability)	A\$/lb	9.28	10.52	10.07	10.42	10.06	

Western Areas is an Australian based nickel sulphide miner, supplying local and international smelter and refinery operators with high grade nickel concentrates. Its main production asset, the 100%-owned Forrestania Nickel Operation, is located 400km east of Perth in Western Australia. Western Areas is Australia's second largest independent sulphide nickel miner, producing approximately 16,000 to 17,000 nickel tonnes in concentrate per annum from its Flying Fox and Spotted Quoll mines - two of the highest grade nickel mines in the world.

The Company's key growth project is the long-life Odysseus mine located at the Cosmos Nickel Operation. With a mine life in excess of ten years and expected low operating cost, the Odysseus mine will underpin the Company's nickel production well into the future.

The Company is an active explorer across its significant tenement holding at Forrestania, Cosmos and Western Gawler in Australia. The Company also holds a 19.9% interest in Panoramic Resources Ltd, the owner of the Savanah Nickel mine in Western Australia, and exploration interests in Canada via a 10.6% holding in Grid Metals Corp (TSXV:GRDM). Additionally, the Company has exposure to the emerging lithium market via an exploration joint venture with Wesfarmers Chemicals Energy and Fertilizers (WES CEF) across Forrestania's northern tenements.

The Board remains focused on the core business of economic, 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 strict cost control. Its latest Company presentation can be found at https://www.westernareas.com.au/investor-centre/presentations.

The announcement was authorised for release by the MD/CEO and CFO. For further details, please contact:

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CORPORATE AND FINANCING

FY21 GUIDANCE OUTCOMES

The Company is pleased to have delivered into the updated guidance range issued on release of the Company's half year results in February. Production and costs in the first half of the financial year were impacted by unexpected mining-related issues, the ability for the team to reorganise the mine plans and deliver a strong turn-around in the second half of the financial year was a pleasing outcome. Lower spend at Odysseus related to timing changes in scheduled works, mostly for the shaft installation works, while Forrestania mine development overspend primarily related to the unplanned Flying Fox rehabilitation works.

Category	Market Guidance	Actuals FY21
Nickel Tonnes in Concentrate Production	16,000 to 17,000	16,180
Unit Cash Cost of Production (Nickel in Concentrate)	A\$3.75/lb to A\$4.25/lb	A\$4.23/lb
Forrestania Mine Development	A\$25m to A\$30m	A\$34.5m
Forrestania Capital Growth	A\$7m to A\$10m	A\$9.0m
Odysseus Development	A\$90m to A\$110m	A\$84.0m
Exploration & Feasibility Study	A\$14m to A\$17m	\$15.8m

CASHFLOW

Cash at bank at quarter end was A\$151.1m (Mar Q - A\$152.8m). Operating cashflow for the quarter was A\$23.0m (Mar Q – A\$9.3m) as a result of achieving the highest quarterly nickel sales tonnage for the year and a strengthening nickel price. The operating cashflow and final cash balance was impacted by a timing variance related to the final export shipment to China leaving port after 30 June 2021. The provisional payment for this sale (A\$12m) would normally have been received inside the quarter but was received in July and will be accounted for in the September quarter cashflow.

Capital expenditure for the quarter was mainly invested into the ongoing development of the Company's key long-life nickel production asset at the Cosmos Nickel Operation. Surface infrastructure construction and underground mine development activity continues to accelerate as the Company approaches first underground ore production scheduled for later this September guarter. At Forrestania, sustaining underground mine capital expenditure continued to fall as sustaining capital activities at current mining levels were effectively completed. Other capital works at Forrestania were primarily related to advancing life extension projects, such as the scat heap leach trial programme that was completed and commissioned during the June guarter.

The significant cashflow items for the quarter included:

- Odysseus mine development and shaft haulage equipment construction expenditure of A\$27.2m (Mar Q -A\$22.6m);
- Sustaining mine development at Forrestania continued to reduce to A\$3.1m (Mar Q A\$7.7):
- Other capital expenditure at Forrestania of A\$3.1m, primary related to the scat heap leach trial; and
- Exploration and Feasibility expenditure of A\$4.0m.

SHARE PURCHASE PLAN

During the guarter the Company successfully closed the SPP announced on 9 March 2021. The SPP was extremely well supported by eligible shareholders, with the full target amount raised of A\$15 million. The Board offers its thanks to all shareholders that supported the SPP.

BANK FINANCE

In December 2020, the Company announced a credit approved term sheet to establish a secured A\$75m Revolving Credit Facility ("RCF") with Commonwealth Bank of Australia ("CBA"). Western Areas consistently works with its lenders to prudently ensure banking facilities provide financial flexibility and working capital options to the Company



as it continues to develop the Odysseus mine at the Cosmos operations. Finalisation of the facility has taken longer than anticipated due to the Company's other capital management workstreams completed in the second half of the financial year. Fully executed documentation and financial close for the RCF is now expected during the September quarter.

INVESTMENT IN PANORAMIC RESOURCES

The Company owns a strategic 19.9% of Panoramic Resources Limited ("Panoramic"). At 30 June 2021, the investment was valued at A\$61.2m. The investment continues to provide Western Areas with strategic optionality and exposure to Panoramic's significant nickel, copper and cobalt resources.

HEDGING

When pricing is supportive, the Company manages nickel price and foreign exchange risk with a combination of shortterm 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 and foreign exchange fluctuations, with a maximum 50% of expected nickel sales per month hedged out for a period of 12 to 18 months.

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

Hedging Details – FY22								
Nickel Hedging	– Collar Options		US\$ Hedging – Collar Options					
Nickel Tonnes Hedged	1,200		US\$ Hedged	\$37,500,000				
Average Call	US\$19,000		Average Call	US\$0.785				
Average Put	US\$17,250		Average Put	US\$0.735				

MINE SAFETY AND ENVIRONMENT

SAFETY

The Company's Lost Time Injury Frequency Rate (LTIFR) decreased from 0.67 to 0.63, and the Total Recordable Injury Frequency Rate (TRIFR) decreased from 16.74 to 12.50. The TRIFR includes all recordable injuries that require medical assessment, medical treatment, restricted duties, or result in lost time across the Company.

Forrestania (FNO)

No Lost Time Injuries (LTI) were recorded during the quarter and consequently the LTIFR reduced to zero, which is a very pleasing result. The TRIFR decreased from 12.34 to 8.58.

Key health and safety initiatives during the quarter included blood glucose testing, cholesterol testing and back care workshops. In addition, a Mental Health and Wellbeing Management Plan was also created following a mental health workplace audit by DMIRS.

As part of ongoing COVID-19 planning, a drive-in Health Assessment Screening Procedure was developed for personnel at both mines, which was assisted by the development of a mobile QR code, enabling personnel to complete their health assessment via mobile.



Emergency Response Team (ERT) training focused on confined space rescue / open circuit breathing apparatus and road crash rescue.



ERT Team

Cosmos (CNO)

No LTIs were recorded during the quarter and the LTIFR reduced from 2.76 to 2.50. The TRIFR decreased from 24.85 to 17.48.

CNO responded to COVID-19 risks with innovative online health screening protocols, risk assessments and a flu vaccination program. The Safety Management System documentation is being continuously improved, including hygiene risk management, with several other management plans also progressed.

The ERT increased by 30% during the quarter to a total of 15 personnel, with training exercises including BG4, fire and vertical rescue.

CNO installed centrally located, chilled water fountains and refurbished the recreational room, barbecue area and multi-sports court, plus upgraded the gym lighting and equipment. To complement these initiatives, specialist exercise physiologists commenced on-site.

ENVIRONMENT

Neither operation had a reportable environmental incident during the quarter, and the environmental team completed all required compliance monitoring and reporting.

Forrestania (FNO)

Environmental compliance was maintained throughout the quarter with one incident reported involving a minor saline water discharge from a disused water tank.

The annual FNO rehabilitation program was completed, including the rehabilitation of 16.4ha within the Cosmic Boy sandpit (6.2ha) and the Lounge Lizard East sandpit (4.6ha), both recontoured to promote natural revegetation. vegetation is expected due to adequate topsoil volumes. narrow plots and plentiful rain received directly after the earthworks. The remaining 5.6ha of the Lounge Lizard West sandpit was direct seeded by a specialist contractor using



Seeding of sand-pits



provenance native seed. Vegetation surveys of previously rehabilitated plots will continue, including the Flying Fox and Spotted Quoll waste rock dumps, to monitor performance.

Approvals for the New Morning project commenced during the quarter, with the Federal Environmental Protection and Biodiversity Conservation Act (EPBC) referral submission and a regulator pre-referral meeting with the state Office of Environmental Protection Act (EPA) Services.

Cosmos (CNO)

Environmental compliance was maintained during the quarter with no reportable incidents throughout the year.

All Western Areas exploration drill pads were rehabilitated during April and the annual weed management program, comprising 35ha across the mining area, topsoil stockpiles and accommodation village, was completed in June. A new recyclable waste laydown yard was constructed, with scrap metal, copper cable and poly pipe collected and removed from site for recycling.

Groundwater management improvements resulted in the decommissioning of up to 90% of the recovery network and receding groundwater levels associated with groundwater mounding.

The prescribed premises license for crushing and screening was received and approvals for the concentrator, TSF uplift and power station upgrade commenced.

Engagement with the Tjiwarl Aboriginal Corporation continued, with several heritage agreement meetings held.

MINE AND MILL PRODUCTION STATISTICS AND CASH COSTS

Towns and and	11-24	2020/2021					
Tonnes mined	Unit	Sep Qtr	Dec Qtr	Mar Qtr	Jun Qtr	YTD Total	
Flying Fox							
Ore Mined	tonnes	44,359	38,255	41,909	51,950	176,473	
Grade	Ni%	2.9%	2.5%	3.8%	3.7%	3.3%	
Flying Fox Nickel Mined	tonnes	1,269	939	1,601	1,930	5,739	
Spotted Quoll							
Ore Mined	Tonnes	92,921	86,204	75,704	91,553	346,382	
Grade	Ni%	3.1%	3.0%	3.5%	3.3%	3.2%	
Spotted Quoll Nickel Mined	Tonnes	2,878	2,579	2,635	2,981	11,073	
Total Ore Mined	Tonnes	137,280	124,459	117,613	143,503	522,855	
Grade	Ni%	3.0%	2.8%	3.6%	3.4%	3.2%	
Total Nickel Mined	Tonnes	4,147	3,518	4,236	4,911	16,812	

FLYING FOX

Mine Production

Production was 51,950 tonnes of ore at an average grade of 3.7% nickel for 1,930 nickel tonnes. Ore production was sourced predominately (82%) from long-hole stoping with the remainder (18%) from ore drive development. Stoping production was sourced primarily from the T5 area, comprising stopes at the 385, 345, 200, and 160 levels with associated higher grades plus the 180 level (T6 orebody).



Mine Development

Total jumbo development was 428m, which included 84m of capital development (155 to 110 levels), 159m of operating waste development and paste-fill development (110, 130, 160, 180, 200 and 345 levels) and 185m of ore drive development (180, 150, 130 and 110 levels).

Infrastructure

There was no capital infrastructure works undertaken during the guarter in line with expectations.







130 North ore drive (4.0mW x 4.5mH) with a face grade 2.2% Ni

SPOTTED QUOLL

Mine Production

Production was 91,553 tonnes of ore at an average grade of 3.3% nickel for 2,981 nickel tonnes. Ore production was sourced predominately from long-hole stoping (76%) with the remainder (24%) from ore drive development. While an improved performance was reported for the quarter, nickel production is still being impacted by lower grades due to pegmatite intrusions, resulting in increased dilution in the active mining areas.

In the 'twin-boom area' (TBA), the 490 and 415 northern level slots were successfully opened, with production continuing from the 580 to 415 levels (ten ore drives).

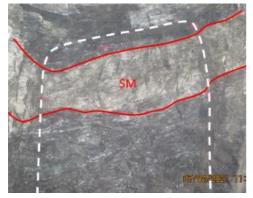
The 'single-boom area' (SBA) saw continued production from the 838 to the 737 levels (eight ore drives).

Mine Development

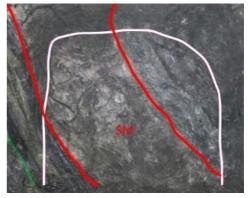
Total jumbo development was 587m, which included 93m of operating waste and 188m of paste-fill to facilitate slot drilling. There was a total of 306m of ore drive development, which included 276m between the 'Stage 2' 395 and 375 levels and 30m between the SBA 839 and 770 levels respectively.

Infrastructure

The capital service bore holes were extended to the 390 level, which included 32m of capital paste and rising main casing.



SBA 788 south ore drive (3.5mW x 3.5mH) with a face grade 3.6% Ni



TBA 395 ore drive (4.5mW x 4.5mH) with a face grade 4.0% Ni



COSMIC BOY NICKEL CONCENTRATOR

Tannaa millad	Unit		VID Total				
Tonnes milled	Unit	Sep Qtr	Dec Qtr Mar Qtr		Jun Qtr	YTD Total	
Total Milled Ore	tonnes	148,801	145,996	139,025	147,236	581,058	
Grade	%	3.0%	2.9%	3.5%	3.5%	3.2%	
Ave. Recovery	%	85%	84%	89%	90%	87%	
Nickel in Concentrate Produced (i)	tonnes	3,756	3,535	4,267	4,622	16,180	
Nickel in Concentrate Sold	tonnes	4,064	3,336	3,962	4,147	15,509	

Includes MREP Nickel tonnes produced. (i)

The Cosmic Boy Concentrator processed 147,236 tonnes of ore at an average grade of 3.5% nickel for a total of 33,429 tonnes of concentrate grading 13.8% nickel, resulting in 4,622 nickel tonnes produced at a recovery of 90.3% and an average concentrator availability of 98.8%. The increase in recovery was a result of the continued higher head grades from both mines. Maintenance works included a major planned 24-hour shutdown.

A total of 30,086 tonnes of concentrate was delivered for sale during the quarter, containing 4,147 nickel tonnes, inclusive of the MREP product. A further 5,030 tonnes of concentrate were delivered to Esperance Port ready for shipment in the first week of July (includes the unshipped 820 tonnes at year end).

Other unit sales costs for the guarter were royalties at A\$0.32/lb and concentrate transport of A\$0.59/lb nickel in concentrate delivered to customers.

The concentrator processed 581,058 tonnes of ore at an average grade of 3.2% nickel for the financial year. A total of 114,780 tonnes of concentrate grading 14.1% nickel, resulting in 16,180 nickel tonnes produced at a recovery of 87.0% including product from MREP.

Stockpiles

Ore stockpiles at the end of the quarter totalled 43,320 tonnes of ore at 3.1% nickel for 1,333 nickel tonnes, representing just less than one month of concentrator feed. The concentrate stockpile at Forrestania was 4,777 tonnes at an average grade of 14.5% nickel, containing 694 nickel tonnes. A further 5,486 tonnes of concentrate at an average grade of 13.3% nickel delivered to Esperance Port ready for shipment in early July.

Stockpiles	Unit	Sep Qtr	Dec Qtr	Mar Qtr	Jun Qtr
Ore	tonnes	78,615	60,659	43,103	43,320
Grade	%	3.4%	3.4%	3.5%	3.1%
Concentrate	tonnes	2,575	3,911	6,367	10,263
Grade	%	15.9%	15.2%	14.4%	13.9%
Contained Nickel in Stockpiles	tonnes	3,096	2,633	2,429	2,772



Cash Costs

Financial Statistics	Unit	YTD Total				
rinancial Statistics	Unit	Sep Qtr	Dec Qtr	Mar Qtr	Jun Qtr	TID Iotal
Group Production Cost/lb						
Mining Cost (*)	A\$/lb	3.24	3.46	2.95	2.83	3.09
Haulage	A\$/lb	0.08	0.09	0.07	0.07	0.08
Milling	A\$/lb	0.83	0.85	0.72	0.66	0.76
Admin	A\$/lb	0.29	0.32	0.26	0.24	0.27
Flotation Cash Cost Ni in Con (***)	A\$/lb	4.44	4.72	4.00	3.80	4.20
Total Cash Cost Ni in Con (***) incl MREP	A\$/lb	4.46	4.67	4.07	3.84	4.23
Cash Cost Ni in Con/lb (***)	US\$/lb(**)	3.17	3.41	3.15	2.96	3.16
Exchange Rate US\$ / A\$		0.71	0.73	0.77	0.77	0.75

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

Note: Grade and recovery estimates are subject to change until the final assay data are received.

The June quarter flotation cash cost of nickel per pound was A\$3.80/lb. The total cash cost of production for nickel in concentrate, including MREP (but excluding smelting/refining charges, concentrate logistics and royalties), was A\$3.84/lb (US\$2.96/lb). The significant quarter on quarter improvement in unit cost of production was primarily due to the increase in ore production and milling throughput rates. The increased productivity, coupled with maintenance of the second half head grade and recoveries, resulted in a significant lift in overall nickel production. The increased throughput rates naturally provide a lower average cost per ore tonne, as the fixed costs of the operation are spread over a higher production tonnage. Heading forward, unit rates will continue to vary quarter on quarter relative to head grade and throughput rates.

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 Flying Fox high grade mineral resource and ore reserve estimates (depleted for mining) at the end of the financial year are as follows.

- Mineral Resource: 1.03 million tonnes of ore at a grade of 3.7% nickel for 38,823 tonnes of nickel; and
- Ore Reserve: 0.19 million tonnes of ore at a grade of 3.2% nickel for 6,140 tonnes of nickel.

A comparison of the new mineral resource estimate (MRE) and the previous MRE, depleted to June 30th 2021, is shown below:

Model Version	Tonnes (Mt)	Grade (Ni%)	Ni Tonnes	
New	1.03	3.7	38,823	
Old	1.10	3.7	41,116	
Variance	(0.07)	-	(2,293)	

The decrease in ore tonnes is mainly due to the reduction in the ore thickness from the latest grade control drilling, in addition to the removal of sterilised mining areas since the previous MRE.

^(**) US\$ FX for Relevant Quarter is RBA average daily rate (Jun Qtr = A\$1:US\$0.77)

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

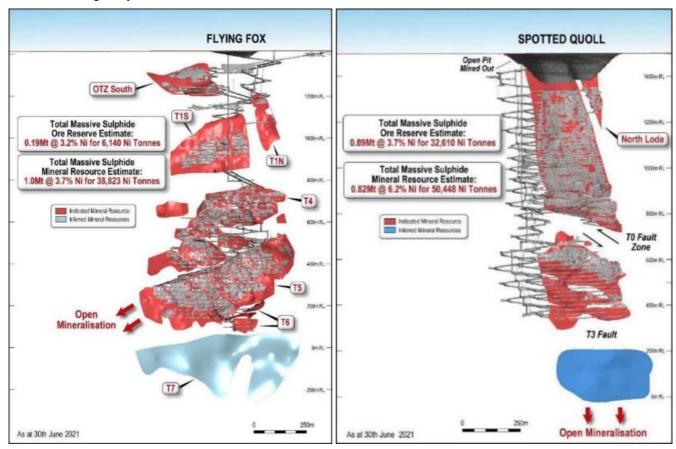


A comparison of the new and the previous Reserve estimates, depleted to June 30th 2021, is shown below:

Model Version	Tonnes	Grade (Ni%)	Ni Tonnes
New	193,000	3.2	6,140
Old	268,600	3.0	8,140
Variance	(75,600)	0.2	(2,000)

The decrease in ore tonnes is a direct reflection of the new MRE.

The longitudinal section below shows the Flying Fox mine with mineral resources and ore reserves depleted for mining production during the year:



SPOTTED QUOLL

The Spotted Quoll high grade mineral resource and ore reserve estimates (depleted for mining) at the end of the financial year are as follows:

- Mineral Resource: 0.82Mt at a grade of 6.2% Ni for 50,448 nickel tonnes; and
- Ore Reserve: 0.89Mt of ore at a grade of 3.7% Ni for 32,610 nickel tonnes.

A comparison of the new MRE and the previous MRE, depleted to June 30th 2021, is shown below:

Model Version	Tonnes (Mt)	Grade (Ni%)	Ni Tonnes
New	0.82	6.2	50,448
Old	0.90	5.9	52,687
Variance	(80.0)	0.3	(2,239)

The decrease in the ore tonnage and increase in grade is mainly due to an updated structural interpretation of the deeper portions of the orebody (Stage 2), which is the dominant mining area. Structures change from a predominantly



shallow dipping, westerly orientation seen in Stage 1, to a predominantly steep dipping, north-south striking orientation. These structures are closely associated with pegmatite intrusions.

A comparison of the new and the old Reserves, depleted to June 30th 2021, is shown below:

Model Version	Tonnes	Grade (Ni%)	Ni Tonnes
New	888,100	3.7	32,610
Old	859,400	4.1	35,450
Variance	(28,700)	(0.4)	(2,840)

The increase in ore tonnes is a direct result of the new MRE, and the Reserve grade reflects new mining modifying factors for the life of mine. The main change in the modifying factors is an increase in planned dilution, due to the increased structural complexity, and the influence of the pegmatite intrusives on the ore zones.

The longitudinal section above shows the Spotted Quoll mine with Mineral Resources and Ore Reserves depleted for mining production during the year:

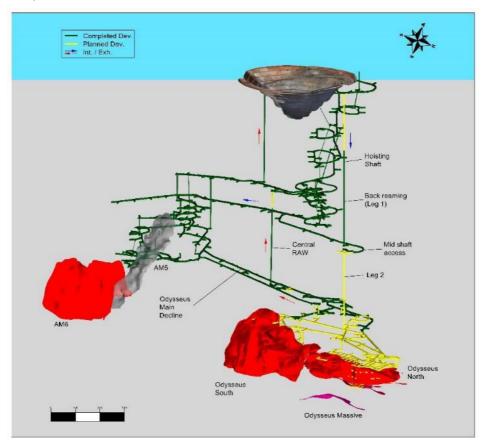
GROWTH PROJECTS

COSMOS OPERATIONS

Odysseus Mine Development

Total lateral jumbo development was 1,230m, which included 455m in the Odysseus decline (north 191m and south 264m) to access the respective orebodies and 775m of return airway (RAW), pump station 4, service bay, access to rock-sizer chamber, level 15 access (first development ore) plus associated stockpiles.

The raise-bore contractor began back-reaming of the underground central return-airway raise-bore, with 330m completed (total 400m).



Odysseus 3D schematic showing completed and planned development



Surface Infrastructure

The contract to extend and install new overhead power lines at CNO was executed during the quarter, with construction to commence in August. The life-of-mine power supply study was completed and commercial negotiations are planned for the September guarter.

The gas spur re-connection between the power station and the Goldfield Gas Pipeline (GGP) has commenced and is scheduled for completion by mid-August. The power station contractor also completed the infrastructure necessary for dual fuel operation.

Fabrication and assembly of the twin 850kW primary ventilation fans continued and transformer cuddies will be excavated in the Stockpile 4 adit to the open-pit early in the September quarter.

The additional changeroom and laundry buildings were procured, as part of the mining contractor changeroom upgrade, and contracts for the engineering, fabrication and construction of the paste and refrigeration plants were awarded.



Aerodrome runway seal removal



Temporary power station commissioned

Hoisting Shaft Project

The Early Contractor Involvement (ECI) process with the shaft equipping contractor commenced, with focus on optimising the construction strategy, schedule and minimising costs. Detailed engineering by several consultants is ongoing, with expected completion by December.

Phase one of the bulk earthworks package was completed, with the area around the winder backfilled, levelled and compacted in preparation for the winder house construction.

Back-reaming of the hoisting shaft first leg (5.7m diameter) advanced 413m (total 630m), with back-reaming rates adversely impacted by harder than expected ground resulting in more frequent cutter changes.

Preparations for the re-erection of the winder house are ongoing, with the contractor mobilised to site in early July. The associated building and overhead crane registration are on track.

Due diligence of the various equipment suppliers for the underground materials handling system commenced, with ongoing DMIRS discussions regarding the necessary permits for the rock hoisting system.



Winder house and raker leg foundations and services culverts complete



Final earthworks under way



AM6 Feasibility Study (FS)

Metallurgical optimisation

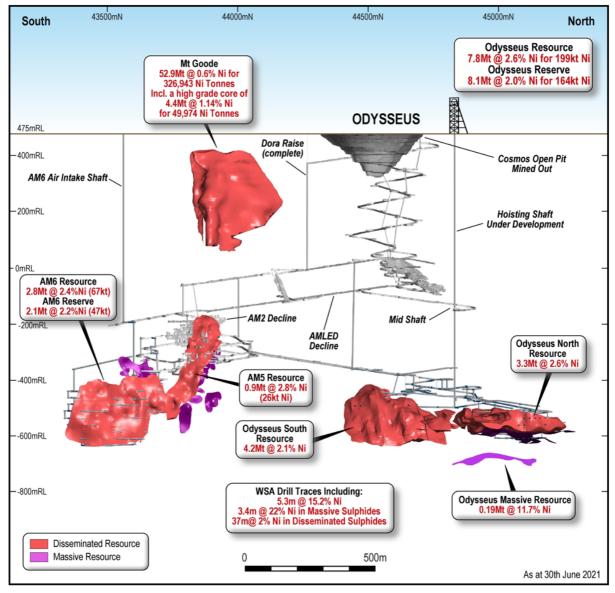
Assay results received to date from the eight resource/metallurgical diamond drill holes have re-confirmed the overall grade of the medium and high-grade portions of the AM6 resource. The metallurgical grade-recovery test work results to date are highly encouraging, with material increases in nickel recovery of ~10%.

The above information will provide valuable inputs into the full FS for the AM6 deposit, which commenced in the March quarter.

Mt Goode Scoping Study (SS)

During the quarter, a Scoping Study (SS) commenced on the Mt Goode deposit, which sits adjacent to the Cosmos deposit and is located directly above the AM5/6 deposits. The Mt Goode deposit has a Mineral Resource of **53Mt at 0.6% nickel grade containing 326,943 tonnes of nickel** and is situated on a granted Mining Lease that is part of the Cosmos Nickel Operation. The study will focus on surface and underground mining options at Mt Goode as well as a range of processing throughput and concentrate specification scenarios.

The scoping study builds on previous work on the project that included mining, geotechnical, hydrology and metallurgical studies.



Odysseus long-section with AM6 and Mt Goode

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FORRESTANIA OPERATIONS

Mill Recovery Enhancement Project (MREP)

The MREP combined nickel production was 174 nickel tonnes (sulphide precipitate and cyclone underflow).

Mill Scats Heap Leach Project (MSP)

The 20,000t demonstration heap leach pad was completed on time and on budget, with commissioning commenced in the quarter. The demonstration heap leach will provide the test data to evaluate a full-scale heap leach of the remaining scats (290kt @ 1.5% nickel for over 4kt nickel).



Scats heap leach trial

New Morning Feasibility Study

The mine and surface layout designs were completed and the study will progress two alternate mining methods for mine cost estimation (top-down paste-fill and bottom-up rock-fill and cemented rock fill (CRF)). Mine design physicals for both methods were sent to a tier-one mining contractor for initial mining cost estimates in June.

The underground mine is approximately 370m deep, with ore drive strike lengths up to 550m accessed from a single cross-cut.



EXPLORATION

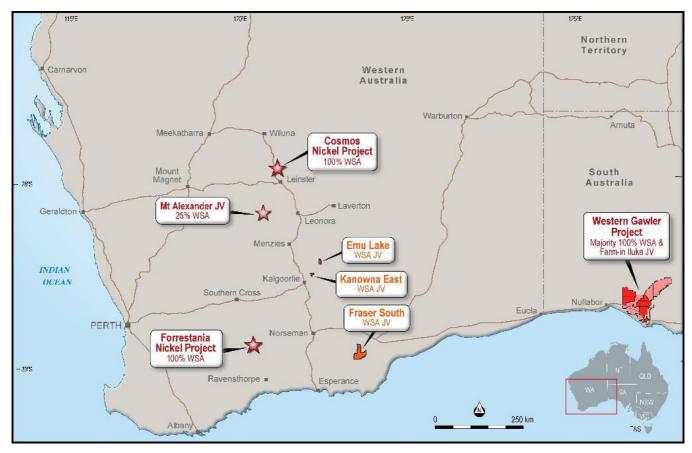
OVERVIEW

The Company engaged across a diverse range of new and existing exploration targeting ventures in the June quarter.

At Forrestania, new exploration target areas were identified within 2km of the Spotted Quoll Mine corridor, where targets were identified by recent 2D seismic surveying within the Takashi Ultramafic Belt.

At Cosmos, recently completed underground exploration drilling has confirmed the potential for the Alec Mairs (AM6) deposit to extend south from the existing resource, with additional drilling required to determine continuity with the Penelope prospect further to the south.

Within the Western Gawler project in South Australia, drilling over a 1km strike length has now been completed at the Sahara prospect, with elevated sulphide accumulation (>2% sulphides) now observed over a 750m strike length, with the system still open to the south.



Western Areas Exploration Projects

COSMOS

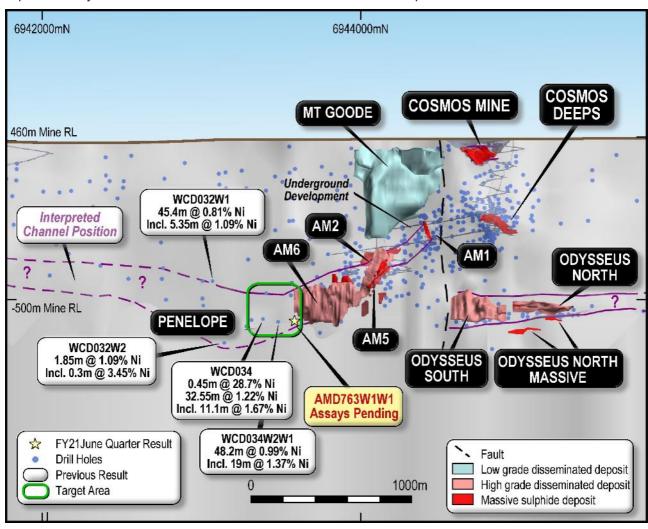
The Company has identified a 2.5km corridor extending between Prospero-Tapinos and Alec Mairs (AM6) that is of notable exploration significance, with historic drilling intersecting both low-grade disseminated (Mt Goode style) and higher grade, basal-contact-proximal (Alec Mairs style) nickel sulphide mineralisation. The corridor extending south from AM6 towards Penelope represents a significant opportunity to identify and delineate additional nickel sulphide accumulations within proximity to existing and planned underground infrastructure.

Penelope

One underground exploration hole, incorporating two wedges, was completed for the quarter, with drill hole AMD763W1W1 successfully intersecting the basal contact. This hole was designed to test the southern known extremity of the Alec Mairs (AM6) mineral system and its potential continuity with the Penelope prospect. Drill hole



AMD763W1W1 intersected a 6m wide (down-hole) interval containing 3-20% disseminated to stringer sulphides (pentlandite - pyrrhotite), hosted within a serpentinised, mesocumulate ultramafic. Assay results are still pending. The presence of a mineralised corridor immediately south of AM6 is promising. Additional underground drilling will be required to fully delineate the nature of mineralisation between Penelope and AM6.



Cosmos Long Section (Looking West)

FORRESTANIA

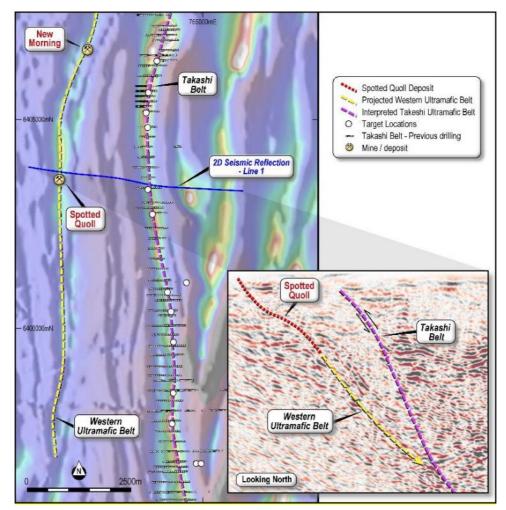
Takashi Ultramafic Belt

In 2020, the Company completed a series of 2D seismic survey lines (covering a total of 22.9 line kms). The survey comprised two east-west lines (9.5km and 5.8km in length) located just north of the Spotted Quoll Mine, spaced 400m apart, together with a third tie-line (7.6km length) running north-south.

Apart from imaging the Western Ultramafic Belt (WUB), the southern-most 9.5km east-west seismic line also successfully imaged key structural and stratigraphic corridors that appear to represent the upper portion of the Takashi Ultramafic Belt to the east. In collaboration with Hi-Seis, geological interpretation of the seismic profile suggests that the Takashi Belt may represent a faulted, thrust repeat of the WUB, increasing the potential for this belt to host nickel sulphide mineralisation.

Planning was completed in June in preparation for an RC drilling campaign designed to test a 10km strike length section of the Takashi Belt, with drilling commencing in late June. The Company believes that the proximity of this target to the operating Spotted Quoll Mine, coupled with the new geological interpretation made possible from the recently completed seismic survey, represents a significant new exploration opportunity at Forrestania.





Takashi Ultramafic Belt and 2D Seismic Reflection Target Locations

Parker Dome

Representing the far northern continuation and potential extension of the Forrestania Nickel Belt, the Parker Dome region, whose southern extents are located approximately 45km north of the Flying Fox Mine, represents an exploration opportunity within a significantly under-explored greenstone sequence. The Company has the dominant tenure holding across the southern and eastern portions of the dome, with the district considered highly prospective for both base metals and gold.

Following the completion of a regionally extensive aircore drilling program in the March quarter, all remaining assay results have now been returned from the program. Drill hole PDAC213, testing along the far southern margin of the dome, returned one discrete Au interval of 1m @ 1.75g/t Au (from 43m) associated with kaolinitic to goethite rich clays and quartz veining. All remaining aircore holes returned no significant results.

	Exploration Results – Parker Dome: June Quarter 2021										
HOLE ID	Easting	Northing	RL	ЕОН	Туре	Dip	Azi	Width (m)	Ni %	Au g/t	From (m)
PDAC213	766683	6464507	420	60	AC	-60	292	1.00	-	1.75	43

In May, and extending through into June, a targeted reverse circulation (RC) drilling program was undertaken. The program was designed to test several electromagnetic conductors identified from a 2018 high-power, low frequency (12.5Hz) airborne EM survey (SkyTEM312 system). In total, 21 holes were completed for 3,314m. Several holes intersected thick ultramafic sequences with variable sulphides (trace to 2%). Assay results are pending for the entire program, with results anticipated in the September quarter.



METAL HAWK FARM-IN AND JOINT VENTURE

The Company executed a Farm-in and Joint Venture agreement with Metal Hawk Ltd in September 2020, incorporating three project areas, earning in to all non-gold interests at Kanowna East (including tenure extending to within 12km of the Silver Swan/Black Swan nickel mine), all non-gold commodities at Emu Lake (incorporating tenure 10km along strike from the high-tenor Binti nickel prospect) and all commodities at Fraser South. The Fraser South project incorporates a portfolio of greenfield tenements interpreted to be positioned over the southern structural extension of the Fraser Zone component of the broader Albany-Fraser Orogen.

Emu Lake

The Emu Lake project is defined by two exploration licenses extending over 16.5km strike length and is located approximately 35km east of Black Swan/Silver Swan. Additionally, the southern edge of the project lies 5km north of the Binti Binti Gossan deposit. The project area is significantly under-explored, with only the extreme southern margin of the project drill tested.

Throughout the June quarter, drill planning was completed, with a 110 hole regionally extensive aircore drilling program designed. The program seeks to define and delineate key stratigraphic corridors within the Emu Lake prospect, which will allow subsequent ground electromagnetic surveying to be placed in geological context. The Company plans to complete a heritage survey and commence drilling within the September guarter.

WESTERN GAWLER (SOUTH AUSTRALIA)

Iluka Farm-in and Joint Venture (WSA 75% earn in) EL 5675, EL 5878, EL 5879, EL 6251 and EL 6379.

The Company has previously reached a significant milestone within its Farm-In and Joint Venture with Iluka, with the successful completion of Stage 2 earn-in achieved during the September 2020 quarter, resulting in the Company earning 75% interest in the project (excluding minerals sands).

The Joint Venture continued to gain momentum, with diamond drilling at Sahara, Firefly and F1-7 targets completed during the June Quarter. This exciting phase of exploration has extended the mineralised footprint at Sahara to over 1km. Zones of sulphide development were also intersected at Firefly and F1-7 prospects that warrant follow-up drill programs. This work has further enhanced the prospectivity of the broader Sahara project area and demonstrates its potential to host a large-scale deposit.

During the quarter, the Company was successfully awarded two South Australian Government Accelerated Discovery Initiative (ADI) grants. The first set of funding (\$300,000) provides support for the completion of two drill holes at Sahara, 2km along strike from the discovery drill section, and detailed core scanning. The second grant provides cofunding for a regionally extensive Magnetotelluric (MT), Passive Seismic and Magnetic Modelling Study (for \$90,000 ADI funding). The Company wishes to acknowledge the Department of Mines and the SA Government for the significant funding under the ADI Scheme, and general ongoing support for the projects.

Sahara Overview Drilling Update (EL 5878)

The discovery of thick accumulations of nickel and copper-bearing sulphides within gabbronorite intrusive host rocks at Sahara in 2020 vindicated the Company's long-held view of the potential for the Fowler Domain to host significant occurrences of magmatic base-metal sulphide mineralisation.

The key objectives of the current drilling program at Sahara are:

- To test for evidence of a Ni-Cu-PGE mineral system south of Sahara and determine whether a magma conduit may be present in order to guide further exploration efforts,
- Drill test the Fixed Loop Electromagnetic (FLEM) channelised anomaly, identified to the south of Sahara, extending to a depth of between 200-300m.
- To utilise all drillholes as downhole EM platforms to vector towards zones of significant sulphide accumulation.

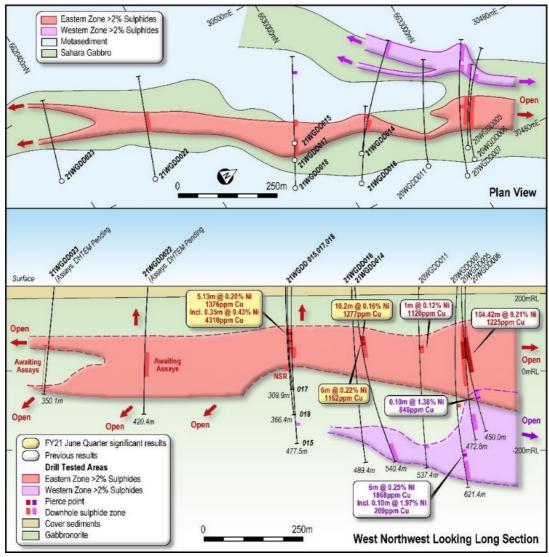
Sahara Drilling Update

A total of six drillholes were completed for the quarter at Sahara (21WGDD0015 – 21WGDD0018; 21WGDD0022 – 21WGDD0023) with a seventh drillhole in progress (21WGDD0024). Drilling has now intersected elevated sulphide accumulations (>2% sulphide zones) in excess of 750m along strike at Sahara, with the system remaining open to the south.



In addition, a detailed airborne magnetic survey was flown during the quarter to provide high-resolution magnetic imagery over the broader project area.

Exploration Results – Sahara: June Quarter 2021													
HOLE ID	Easting	Northing	RL	ЕОН	Туре	Dip	Azi	Width (m)	Ni %	Cu (ppm)	Pt + Pd (ppb)	Co (ppm)	From (m)
21WGDD0014	304978	6603062	215	540.4	DD	-62	295	10.20	0.16	1277	30	117	142.80
		í	and					6.00	0.22	1162	49	176	156.00
		inc	uding					0.25	0.09	4270	0	77	158.90
		í	and					3.70	0.24	817	21	183	168.30
		inc	uding					1.85	0.20	1131	9	138	170.15
21WGDD0015	304907	6602916	215	477.5	DD	-60	288.7	0.10	0.15	1310	8	121	178.35
21WGDD0017	304963	6602886	215	309.9	DD	-60	290	5.13	0.20	1376	23	179	137.87
		inc	uding					0.35	0.43	4310	19	379	137.87
	and						4.13	0.16	1461	15	143	164.40	
	including						1.05	0.24	2380	26	215	164.40	
	including							0.95	0.24	2780	25	187	167.58



Sahara Interpreted Geology Plan and Long Section

ACTIVITY REPORT For the period ending 30 June 2021



Recent drilling at Sahara has identified that mineralisation is focused along two trends (Western and Eastern Zone), hosted within an intrusive (gabbronorite), separated by a central metasedimentary unit.

A brief geological summary of the June quarter drilling is presented below.

21WGDD0015 - This drill hole was completed 250m southwest along strike from 21WGDD0014. Drilling intersected 0.5-5% sulphide mineralisation (from 161-210m depth), including 0.1m @ 0.15 Ni% and 1,310 ppm Cu (from 178.35m depth). Downhole EM surveying identified a discrete 50mx50m off-hole conductor modelled at 1,200 Siemens, directly below the drillhole. 21WGDD0017 tested this zone (see results below).

21WGDD0016 - Designed to test down-dip of 21WGDD0014 (with results for 21WGDD0014 contained within the March Quarter report). Owing to a deviation in the pre-collar, the hole drilled beneath the planned target. Intermittent sulphides (0-2%) were intersected from 165m to 473.65m at the lower metasediment contact. No significant assay results were returned.

21WGDD0017 - Designed to test the discrete 50mx50m conductor obtained from DHEM within drillhole 21WGDD0015. This drill hole successfully intersected a broad 78m wide mineralised zone (3-20% sulphides) from 129.82-208.85m depth, consistent with the modelled EM target. Significant results include 5.13m @ 0.2%Ni and 1,376ppm Cu (from 137.87m depth) and 4.13m @ 0.16% Ni and 1,461ppm Cu (from 164.4m depth).

21WGDD0018 - Testing for a mineralised down-dip extension from 21WGDD0017, intersecting trace sulphide mineralisation from 83-236m downhole. Assays and DHEM survey results are pending.

21WGDD0022 - Testing a further 400m south from 21WGDD0018, successfully intersecting the eastern sulphide zone downhole from 205.07-288.73m depth. Sulphides observed typically range between 1-10% (pyrite, pyrrhotite, pentlandite), including a 0.4m thick 60% sulphide breccia zone from 266.6m depth. Localised breccia zone accumulations of this nature are highly encouraging, suggesting the system may be approaching and vectoring towards a more fertile part of the magmatic complex. Assays and DHEM survey results are pending.

21WGDD0023 - Testing an additional 250m south of 21WGDD0022, extending drilling coverage to approximately1km along strike. Trace level sulphides were encountered from 185m to 350.9m (EOH). Assays and DHEM survey results are pending.

Drilling continues at Sahara in the current quarter, with the completion of two, 700m ADI co-funded drillholes located 2km south of the discovery section. Further drilling will be guided by structural interpretation and downhole EM surveying planned in the coming quarter.

Firefly

One diamond drill hole was completed at the Firefly prospect (21WGDD0019 for 288.5m), targeting a co-incident Ni-Cu aircore anomaly. Significantly, drilling intersected three, narrow 10cm wide zones comprising up to 30% nettextured sulphides within a magnetic gabbro intrusive unit. The presence of sulphides confirms the Firefly Intrusive has reached sulphide saturation and, therefore, capable of hosting significant sulphide accumulations.

F1-7 South

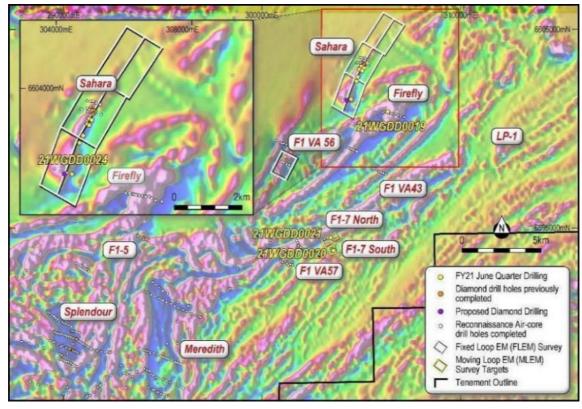
One diamond drillhole was completed at F1-7 South (21WGDD0020 for 219.6m), designed to test a shallow, flat-lying conductor (100-200 Siemens) measuring 300mx400m. Drilling intersected 1% pyrite at the target plate depth from 82-101.3m. Downhole EM surveying will be completed to identify any off-hole conductors.

F1-7 North

One diamond drill hole was also completed at F1-7 North (21WGDD0021 for 267.5m) testing a steeply dipping, low conductance EM target (50-100 Siemens) with dimensions of 600mx800m. Encouragingly, a 7.8m interval of disseminated to stringer sulphides (2-8% pyrite - chalcopyrite) was intersected from 87.1m at the EM plate target depth. The sulphides are associated with leucosomes within banded amphibolite and metapelites.



Assays for drillholes 21WGDD0019 - 21WGDD0021 are expected to be returned in the September quarter.



Sahara - Firefly Regional Targets

Western Gawler (WSA 100%) EL 5688, EL 5939, EL 6087, EL 6248, EL 6249

Mystic Nickel Zone

No work was completed at Mystic during the quarter. DHEM surveying of 20WGDD0012 and 20WGDD0013 was postponed to the September Quarter due to survey crew availability.

-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 is a Fellow of AusIMM, Mr Orunesu Preiata is a member of AusIMM and Mr Gribbin is a member of AIG. Mr Wulfse, Mr Orunesu Preiata and Mr Gribbin are all full time employees 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.

Examples of forward looking statements used in this report include: "At Odysseus, our new long life mine continues to advance towards production of first ore in this September quarter, which will mark a very significant milestone in its expected 10 plus year mine life. Odysseus remains one of the few long dated supplies of nickel sulphide to enter the market in the coming years, as the EV market continues to drive nickel demand for delivery into the EV battery supply chain", and, "Zones of sulphide development were also intersected at Firefly and F1-7 prospects that warrant follow-up drill programs. This work has further enhanced the prospectivity of the broader Sahara project area and demonstrates its potential to host a large-scale deposit".

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.

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



WESTERN AREAS ORE RESERVE AND MINERAL RESOURCE STATEMENT

		Tonnes	Grade Ni%	Ni Tonnes	Classification	JORC Cod
Ore Reserves						
1. Flying Fox Area		193,000	3.2	6,140	Probable Ore Reserve	2012
2. Spotted Quoll Area		888,100	3.7	32,610	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
TO	TAL FORRESTANIA ORE RESERVE	3,190,100	2.2	69,550		
I. Cosmos area						
	Odysseus South	4,483,700	1.9	85,620	Probable Ore Reserve	2012
	Odysseus North	3,651,900	2.2	78,900	Probable Ore Reserve	2012
	AM6	2,098,500	2.2	47,100	Probable Ore Reserve	2012
	TOTAL COSMOS ORE RESERVE	10,234,100	2.1	211,620		
TOTAL W	ESTERN AREAS ORE RESERVE	13,424,200	2.1	281,170		
Mineral Resources	ESTERN AREAS ONE RESERVE	10,727,200		201,110	ı	
. Flying Fox Area						
. r rymig r oxr tou	T1_T6 Massive Zone	776,389	4.5	35,052	Indicated Mineral Resource	2012
	T7 Massive Zone	259,568	1.5	3,771	Inferred Mineral Resource	2012
	Total High Grade	1,035,957	3.7	38,823	s.rsasrar recodifice	1
	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	4,983,000	0.8	41,050	managara minanan nagaara	
	Total Flying Fox/Lounge Lizard	6,018,957	1.3	79,873		1
. New Morning / Daybre		5,5 : 5,5 5 :				
g, ,	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		., ,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		1
•	Spotted Quoll	672,396	6.4	43,220	Indicated Mineral Resource	2012
	·	146,678	5.0	7,228	Inferred Mineral Resource	2012
	Total Spotted Quoll	819,074	6.2	50,448		1
	Beautiful Sunday	480,000	1.4	6,720	Indicated Mineral Resource	2004
	Total Spotted Quoll/Beautiful Sunday	1,299,074	4.4	57,168		1
1. 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	2,704,500	1.4	37,570	Indicated Mineral Resource	2004
	Digger South - Core	362,700	1.2	4,530	Inferred Mineral Resource	2004
	Digger Rocks - Core	282,940	1.7	4,790	Indicated Mineral Resource	2004
	Digger Rocks - Core	50,600	1.3	670	Inferred Mineral Resource	2004
	Purple Haze	560,000	0.9	5,040	Indicated Mineral Resource	2004
	Total Diggers Area	3,960,740	1.3	52,600		
TOTAL	L FORRESTANIA MINERAL RESOURCE	17,887,990	1.6	286,519		
6. Cosmos Area		1	1			
	AM5	895,815	2.6	23,635	Indicated Mineral Resource	2012
		31,376	6.6	2,082	Inferred Mineral Resource	2012
	AM6	2,648,508	2.5	65,361	Indicated Mineral Resource	2012
		116,416	1.7	2,001	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	70,106	12.6	8,814	Indicated Mineral Resource	2012
		124,900	11.2	14,002	Inferred Mineral Resource	2012
	Total Cosmos Area	11,477,902	2.5	292,231		
'. Mt Goode Area		1	1			
	Mt Goode	13,563,000	8.0	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		
	TAL COSMOS MINERAL RESOURCE	64,412,902	1.0	619,174		
	TERN AREAS MINERAL RESOURCE	82,300,892	1.1	905,693		



JORC 2012 TABLE 1 - FLYING FOX MINERAL RESOURCE ESTIMATION

SECTION 1: SAMPLING TECHNIQUES AND DATA

Criteria	JORC Code Explanation	Commentary
Sampling techniques	 Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. 	 The Flying Fox (FF) Deposit is sampled using diamond drilling (DD) on nominal 50 x 30m grid spacing. Grade control data which includes sludge drilling and short hole diamond drilling results as well as face mapping are used to build the preliminary geological models. Only assay results from an independent certified commercial laboratory from DD holes are used to estimate grades into the resource block model. Handheld XRF Spectrometers are used to gain a semi – quantitative Nickel grade when core is first logged. These are replaced in the database by wet chemistry derived assay grades once received and are not used for resource estimation purposes.
	 Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	 Samples are taken in accordance with well-established and properly documented company protocols Sample representivity is assured by an industry standard internal QAQC program that includes certified reference standards, blanks and replicate samples. QA results are routinely assessed by WSA Geologists and Quality Controls include re-assaying of batches of samples if the QA results are not within pre-determined precision, accuracy and contamination thresholds. All samples are prepared and assayed by an independent commercial laboratory whose analytical instruments are regularly calibrated.
	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.	 Surface Diamond drill (DD) core is marked at 1m intervals and sample lengths are typically of this length. Grade Control drilling is typically 0.5m sample lengths through the mineralised zone due to whole core sampling Sample boundaries are selected to match the main geological and mineralisation boundaries. Sampled mineralisation intervals are sent to a commercial laboratory for crushing and grinding before assaying
Drilling techniques	 Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, 	 Diamond drilling comprised NQ2 sized core for underground and surface drilling and LTK sized core for the grade control drilling. Standard tube is used in most cases unless core recovery issues are expected when triple tube is used. This is typically in the oxidised zones All surface drilled core is oriented using ACT II control panels and ACT III downhole units. Grade control drilling is not oriented



	whether core is oriented and if so, by what method, etc).	
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. 	Core recoveries are logged and recorded in the database. Overall recoveries are >95% and there are no core loss issues or significant sample recovery problems in the sulphide zone.
	 Measures taken to maximise sample recovery and ensure representative nature of the samples. 	 Diamond core is 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.
	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.	 The bulk of the resource is defined by diamond core drilling which has high core 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.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. 	 Geological logging is carried out to a very high level of detail which is peer reviewed Geotechnical data such as RQD and number of defects (per interval) are recorded. Information on structure type, dip, dip direction, alpha angle, beta angle, texture, shape, roughness and fill material is captured.
	 Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. 	Logging of diamond core and RC samples records lithology, mineralogy, mineralisation, structural data (DDH only), weathering, colour and other features of the samples. One is a beta warded in both decord weathern.
	The total length and percentage of the relevant intersections logged.	 Core is photographed in both dry and wet form. All drillholes are logged in full. The Flying Fox database contains over 83,000 geological entries.
Sub-sampling techniques and	If core, whether cut or sawn and whether quarter, half or all core	Core is cut in half on site (with the exception of underground grade control core) by diamond saw blades
sample preparation	taken.	 Surface derived drill holes are halved again with one quarter sent for assay and one quarter preserved as a geological archive
		 Underground exploration derived drilling core is not halved again. Half of the cut core is sent for assay with the other half preserved as a geological archive
		 Underground grade control derived drilling core is not cut. Full core is sent for assay.
		 All core is prepared and assayed by an independent commercial certified laboratory. Samples are crushed, dried and pulverised to produce a sub sample for analysis by 4 acid digest with an ICP/AES finish
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	No non-core samples were taken for the purpose of this MRE.
	For all sample types, the nature, quality, and appropriateness of the sample preparation technique.	■ The sample preparation of diamond core follows industry best practice in involving oven drying, coarse crushing of the core sample down to ~10 mm followed by pulverization of the entire sample (total prep) using LM5 grinding mills to a grind size of 90% passing 75 microns. Sample preparation is carried out by a commercial certified laboratory.
		The sample preparation technique is well established and appropriate for Ni sulphide deposits.



	 Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 	 Over and above the commercial laboratory's internal QAQC procedures, WSA includes field Ni standards ranging from 0.7% - 11.5% to test assay accuracy Duplicates are routinely submitted by WSA to test sample precision Standards are fabricated and prepared by Geostats Pty Ltd., using high – grade nickel sulphide ore. Blank samples are routinely submitted by WSA to test sample contamination Pulp duplicates obtained from the primary lab are taken on a 10% by volume basis and submitted to a secondary lab as an additional QAQC check
	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.	 Sample representatively is assured through the methods previously discussed The Project Geologists are responsible for the management of the quality assurance program and assay results that do not conform are immediately brought to the attention of the relevant commercial laboratory so that remedial action can be implemented. Typically, this type of action will involve re assaying the relevant batch of samples. A monthly QAQC report is generated and distributed to the relevant stakeholders for review and follow up action
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The sample sizes are considered to be appropriate on the following basis: the style of mineralisation (massive sulphide), the thickness and consistency of the intersections, the sampling methodology and percent value assay ranges for the primary elements.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. The nature, quality and appropriate is considered appropriate in the second partial or total.	 All samples are assayed by an independent certified commercial laboratory. The laboratory used by WSA is experienced in the preparation and analysis of nickel sulphide ores. Samples are dissolved using nitric, perchloric, hydrofluoric and hydrochloride acid digest to destroy silica. Samples are analyzed for Al (0.01%), As (5ppm), Co (1ppm), Cu (1ppm), Fe (0.01%), Cr (1ppm), Mg (0.01%), Ni (1ppm), S (0.01%), Ti (0.01%) and Zn (1ppm) using an ICP or Atomic Absorption finish (typical detection limits in brackets).
	■ For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	No Geophysical tools or handheld XRF instruments were used to determine any element concentrations that were subsequently used for MRE purposes.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Standards and blanks were routinely used to assess company QAQC (approx. 1 standard for every 15-20 samples). Duplicates were taken on a 10 % by volume basis (on underground drilling only), field-based umpire samples were assessed on a regular basis. Accuracy and precision were assessed using industry standard procedures such as control charts and scatter plots. In occasional cases where a sample did not meet the required quality threshold, the batch was re-analyzed.



Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. 	Historically, Newexco Services Pty Ltd independently visually verified significant intersections in the diamond core.
	The use of twinned holes.	No holes were twinned in the recent drilling programs.
	 Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. 	 Primary data was collected using Excel templates utilising lookup codes, on laptop computers. All data was validated by the supervising geologist, and sent to Newexco for validation and integration into an SQL database.
	Discuss any adjustment to assay data.	No adjustments were made to assay data compiled for this MRE.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down- hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. 	 Hole collar locations were surveyed by WSA surveyors. The Leica GPS1200 used for all surface work has an accuracy of +/- 3cm.
	Specification of the grid system used.	 A two-point transformation is used to convert the data from MGA50 to Local Grid & vice versa. Points used in transformation: MGA50 Points yd1="6409502.17" xd1="752502.175" yd2="6409397.856" xd2="753390.591"Local Grid Points ym1="28223.59"xm1="33528.771"ym2="28111.84"xm2="34415.99 5"
	 Quality and adequacy of topographic control. 	 The accuracy of the pillars used in WSA's topographical control networks is within the Mines Regulations accuracy requirement of 1:5000 for control networks.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Drillholes were spaced at an approx. 15m (northing) x 15m grid for the areas that will be affected by mining in the next two years and nominally 30m by 30m for areas that will be affected by mining in the subsequent years.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	■ The extensive drill program coupled with information derived from underground observations and previous open pit mining has demonstrated sufficient and appropriate continuity for both geology and grade within the Flying Fox Deposit to support the definition of Mineral Resources and Reserves, and the classification applied under the JORC Code (2012).
	 Whether sample compositing has been applied. 	 Samples were composited to one metre lengths, making adjustments to accommodate residual sample lengths. A metal balance validation between the raw data and the composited data was undertaken with no material issues identified.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The Flying Fox deposit strikes at 030 degrees and dips nominally 65 degrees east. All underground and grade control drilling was conducted from west to east. All Surface drilling was conducted from east to west.
	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.	No orientation-based sampling bias has been observed in the data.



Sample security	The measures taken to ensure sample security.	 All core samples were delivered from site to Perth and then to the assay laboratory by an independent transport contractor.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	The FF data is managed and certified offsite by an independent contractor.

SECTION 2: REPORTING OF EXPLORATION RESULTS - FLYING FOX

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

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 Forrestania Nickel Operations comprises approximately 125 tenements covering some 900km2 within the Central Yilgarn Province. The tenements include exploration licences, prospecting licences, general purpose leases, miscellaneous licences and mining leases. Western Areas wholly owns 106 tenements, 55 tenements of which were acquired from Outokumpu in 2002 and a further 51 tenements acquired from Kagara in March 2012 (some which are subject to various third-party royalty agreements). The remainder of the tenements are subject to Joint Ventures, 14 tenements are part of the Mt Gibb JV where Western Areas has the right to earn 70% interest from Great Western Exploration (currently at 51% WSA) and the Lake King JV where Western Areas has earned a 70% interest from Swanoak Holdings. A number of the Kagara tenements are subject to third party royalty agreements. All the tenements are in good standing.
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	Western Areas has been exploring its wholly owned tenements since 2002. The tenements subject to the Kagara sale which took place in March 2012 were explored by Kagara since 2006 and Lionore and St Barbara prior to that time. Western Areas has managed both the Mt Gibb JV since 2009 (Great Western Exploration explored the ground prior to that time) and the Lake King JV since 2007 (A small amount of work was carried out by WMC prior to that date)
Geology	Deposit type, geological setting and style of mineralisation.	 The deposits lie 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. The mineralisation occurs in association with the basal section of high MgO cumulate ultramafic rocks. The greenstone succession in the district also hosts a number of orogenic lode gold deposits of which Bounty Gold Mine is the biggest example.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar 	The MRE is based upon over 7,000 geologic entries derived from over 1,000 surface and underground diamond holes over multiple domains and years of surface and underground drilling. All of this information can be considered material to the MRE and the exclusion of a summary of the data does not detract from the understanding of the report.



	 elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 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. 	
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. 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. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	 Standard length weighted averaging of drill hole intercepts was employed. No maximum or minimum grade truncations were used in the estimation. The reported assays have been length and bulk density weighted. A lower nominal 0.4% Ni cut-off is applied during the geologic modelling process and later during the MRE reporting process. No top cut is applied. High grade intercepts internal to broader zones of mineralisation are reported as included intervals. No metal equivalent values are reported.
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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'). 	 The incident angles to mineralisation are considered moderate. Due to the often-steep dipping nature of the stratigraphy reported down hole intersections are moderately greater (m/1.5 ratio on average) than the true width.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to Figures in the text
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or	Only Mineral Resource Estimation results are reported.



	widths should be practiced to avoid misleading reporting of Exploration Results.	
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	 Multi-element analysis was conducted routinely on all samples for a base metal suite and potentially deleterious elements including Al, As, Co, Cr, Cu, Fe, Mg, Ni, S, Ti, Zn, Zr. All diamond core samples were measured for bulk density which range from 2.90 - 4.79g/cm3 for values >0.5% Ni. Geotechnical logging was carried out on all diamond drill holes for recovery, defects and RQD. Information on structure type, dip, dip direction alpha and beta angles, texture, shape, roughness and fill material is stored in the structural logs in the database.
Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	Exploration within the FNO tenements continues to evaluate the prospective stratigraphic succession containing the cumulate ultramafic rocks using geochemical and geophysical surveys and drilling.

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES – FLYING FOX

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

Criteria	JORC Code Explanation	Commentary
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	 All data has been recorded in Excel templates with reference lookup tables. All data is imported into an AcQuire relational database
	Data validation procedures used.	 Data validation is a fundamental part of the AcQuire database and is implemented via referential integrity and triggers. Referential constraints ensure that, for example, Hole ID matches collar and downhole data. Triggers check criteria such as code validity, overlapping intervals, depth and date consistencies. All fields of code data have associated look-up table references. Data was further validated using Datamine validation tools during the MRE process.
Site visits	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	 Andre Wulfse who is the Competent Person is the Group Resource Manager for Western Areas and has made many site visits to the Flying Fox Deposit. His first visit to the deposit was in 2008.
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	 Due to the spacing of drilling and the understanding of similar deposits within the Forrestania Ultramafic Belt, the geological interpretation is considered to be sound. The deposit is mainly



		located along the traditional footwall of the basal ultramafic metasediment contact, which was the original locus for sulphide deposition from an overlying pile of Komatiite flows. Subsequent metamorphism, deformation and intrusion of granitoid sills have contributed to a complex setting, with mineralisation now occupying a possible shear zone. The geological model is updated on a daily basis by a team of mine geologists based on detailed underground mapping of ore drives.
	 Nature of the data used and of any assumptions made. 	 Lithogeochemistry and stratigraphic interpretation have been used to assist the identification of rock types. No assumptions are made.
	The effect, if any, of alternative interpretations on Mineral Resource estimation. The effect, if any, of alternative interpretations on Mineral Resource estimation.	Alternative interpretations of the mineral resource were considered. In particular the previous model as well as the grade control model for the upper levels was extensively validated against the current geological and resource model. Alternative interpretations of mineralisation do not differ materially from the current interpretation. WSA has successfully planned and reconciled the deposit using a similarly derived geological and resource model.
	The use of geology in guiding and controlling Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation.	■ The Mineral Resource Estimate is based upon a robust geological model which is regularly updated. The hanging wall and footwall contacts of the mineralised zone were modelled with a level of confidence commensurate with the resource classification category. The extents of the geological model were constrained by drillholes intercepts and extrapolation of the geological contacts beyond the drill data was minimal for the Indicated category.
	The factors affecting continuity both of grade and geology.	Key factors affecting geologic continuity relate to pervasive felsic intrusive units and faults in the deeper parts of the FF orebody. The nugget effect associated with Ni mineralisation in these types of deposits affects the grade continuity. The geological discontinuities have been modelled and the grade discontinuities have been accounted for in the estimation modelling.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	The strike length of the Flying Fox deposit varies considerably but is up to 750 m in the T5 deposit. Distance from the top of T4 to the base of T5 is approximately 550m. The mean width of the deposit is 2.2m The strike length of the Flying Fox deposit varies considerably but is up to 750 m. The mean width of the deposit is 2.2m
Estimation and modelling techniques	■ The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	 Grade and ancillary element estimation using Ordinary Kriging and Inverse Power Distance (IPD) was completed using DatamineTM Studio 3 software. The methods were considered appropriate due to drill hole spacing and the nature of mineralisation. All estimation was completed at the parent cell scale thereby avoiding any potential geostatistical support issues. Sample data was composited to 1m downhole lengths and flagged on domain codes. Metal balance validation tests were performed on the composites to ensure zero residuals. Top cut investigations were completed and no top cuts were applied on the basis of grade distribution, Coefficient of Variation and a comparative analysis of the underground data vs the drill data.



	 Sample data was flagged using domain codes generated from 3D mineralised wireframes. Qualitative Kriging Neighborhood Analysis was used to determine the optimum search neighborhood parameters. Directional variography was performed for Ni and selected ancillary elements. Nugget values are typical for the type of mineralisation (Ni = 20%-40% of the total variance). Ranges of continuity for Ni vary from 20m to 60m in the direction of preferred orientation of mineralisation. Estimation validation techniques included swathe plots of the grade of the composite's vs the grade of the block model.
 The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. 	This MRE is an update of an MRE that was undertaken in 2014 and was extensively validated against the 2014 MRE.
The assumptions made regarding recovery of by-products.	No assumptions were made about the recovery of by products in this estimate. WSA currently doesn't have any off-take agreements in place for by-products.
 Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). 	No elements are considered to be deleterious elements in the Flying Fox deposit
In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	 A proto model was constructed using a 2mE x 5mN x 5mRL parent size, with sub cells. The parent cell size was selected on the basis of orebody geometry, drill spacing and SMU. Thereafter individual block models were designed for each of the structural domains. The dips of the wireframes of the structural domains were used to optimally fill the wireframes with blocks. Drill spacing varies but is nominally 30m by 30m in areas that will be affected by mining in the next two years and 60m by 60m in subsequent areas. The size of the search ellipse was based on the drill hole spacing and structural domain dimensions. Search neighborhoods
 Any assumptions behind modelling of selective mining units. 	varied according to the structural domain No selective mining units were assumed in the estimate. Mining is mainly by longhole stoping and stope dimensions are largely determined by the nature of the equipment used. A global grade and width cut off is applied at the mine planning stage.
 Any assumptions about correlation between variables. 	 No assumptions were made about correlation between variables. Apart from a strong correlation between Ni% and bulk density, no other interelement correlations are observed.
 Description of how the geological interpretation was used to control the resource estimates. 	■ The geological interpretation was developed using geological, structural and lithogeochemical elements. The geological framework associated with extrusive komatiite hosted deposits, and the structural elements observed at the local and wide scale were used to determine and refine mineral domains. The hangingwall and footwall contacts of mineralisation were used as hard boundaries during the estimation process and only blocks with the geological wireframe were informed with Ni grades.
 Discussion of basis for using or not using grade cutting or capping. 	Geostatistical and visual investigation of the grade distribution negated the need for grade cutting or capping.



	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	 Validation of the block model included comparing the volume of domain boundary wireframes to block model volumes. It also involved comparing block model grades with drill hole grades by means of swathe plots showing easting, northing and elevation comparisons. Jacknifing and visual grade validations were undertaken. Grade and tonnage reconciliation of the previous model has been closely monitored over the past 12 months of underground mining and found to be within acceptable thresholds. The assumptions and methodologies used during this estimation are very similar to that of the previous model. Visual validation of the block model vs the drillhole data was undertaken in Datamine and Leapfrog Based on a thorough validation and verification exercise, WSA is satisfied that the estimate is robust.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	■ Tonnages were estimated on a dry basis.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	■ The mineral envelope was determined using a nominal 0.4% Ni grade cut-off. The resource is reported at a 0.4% Ni cut-off which is a reasonable representation of the mineralised material prior to the application of variable economic and mining assumptions and a reserve cut-off
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	The Flying Fox deposit is currently being mined using long hole stoping methods. The mining method which is unlikely to change has been taken into account during the estimation process.
Metallurgical factors or assumptions	■ The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an	Ore from the Flying Fox deposit is currently being processed on site, where Nickel concentrate is produced using a three-stage crushing, ball mill, and flotation and thickener/filtration system.



	explanation of the basis of the metallurgical assumptions made.	
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	All waste and process residue are disposed of through the Cosmic Boy concentrator plant and its tailings dam. All site activities at site are undertaken in accordance with WSA's environmental policy.
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	Bulk Density has been determined using a tried and tested Ni grade regression-based formula.
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.	Core at Flying Fox is generally void of vugs, voids and other defects. Rocks are from the granulate facies sequence and faults have largely been annealed. Porosity is considered low.
	 Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	As discussed previously, mineralisation is mainly restricted to a single material type (Massive Sulphide)
Classification	The basis for the classification of the Mineral Resources into varying confidence categories. The basis for the classification of the Mineral Resources into varying confidence categories.	The Flying Fox Mineral Resource is classified as Indicated and Inferred on the basis of geologic understanding, drillhole spacing, underground development and Kriging quality parameters. No blocks were classified as Measured.
relative confidence in tonnage/gra estimations, reliability of input data confidence in continuity of geology and metal values, quality, quantity and distribution of the data). • Whether the result appropriately	been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity	The definition of mineralised zones is based on a high level of geological understanding. The model has been confirmed by infill drilling, supporting the original interpretation. It is believed that all relevant factors have been considered in this estimate, relevant to all available data.
	reflects the Competent Person's view	The Mineral Resource Estimate appropriately reflects the view of the Competent Person.



Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	This MRE has internally reviewed and has not been externally reviewed
Discussion of relative accuracy/ confidence	■ Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	The geological and grade continuity of the Flying Fox deposit is well understood and the mineralisation wireframes used to build the block model have been designed using all available exploration and mining data. Furthermore, previous estimates of grades have been tested by routine reconciliation of stockpile and mill grades to the current grade control and previous resource models. Post processing block model validation was extensively undertaken using geostatistical methods before the resource was reported.
	■ The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used	 The statement relates to global linear estimates of tonnes and grade. The grade tonnage summary by Class is given in the accompanying report
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	Tonnes and grade estimates within the blocks are consistent with past production data.

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES - FLYING FOX

Criteria	JORC Code Explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	 Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves. 	 Western Areas Ltd (WSA) undertook a review of the Flying Fox deposit (FF) during Financial year 2021 after the completion of the new grade control drilling campaign and updated mining production data. The underlying Mineral Resource is issued in June 2021 Quarterly Report. The Mineral Resources are reported inclusive of the Ore Reserves.
Site visits	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	 Flying Fox is an operating underground mine since 2005. The Competent Person carries out routine site visits of the deposit and its infrastructures as part of normal working duties. WSA set up a data collection and record system to manage Flying Fox operation from a technical and economical point of view. All these data are used in the present Ore Reserves estimation. Mine design and mining method is based primarily on the recommendations laid out in the updated Feasibility study and back analysis data from the current mining practice.
Study status	The type and level of study undertaken to enable Mineral	WSA completed in 2004 a Feasibility Study for T1 and in 2006 the Feasibility Study for T5. This last study has been updated and



	Resources to be converted to Ore Reserves. The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	kept alive with the current practice and data coming from the experience gained in 17 years of mining and recorded in the company system documents. The present Ore Reserves estimation is an update that considers the new Mineral Resources, the performance of the operation to date and a revised commodity price estimate.
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied. The basis of the cut-off grade(s) or quality parameters applied.	 An Ore Reserve cut-off grade of 1.5% Ni was selected to obtain an Ore Reserve that fits the following criteria: Minimum Head Grade fitting the Mill requirements. Ore Reserve average grade equal or greater than Life of Mine breakeven grade. Mean Arsenic concentration that enables production of a saleable concentrate. Positive Forrestania LOM NPV Maximise steady state production LOM Nickel price curve from USD6.00/lb @ FX0.75 to USD9.00/lb @ FX 0.75. Some of the key ore reserve assumptions are considered commercially sensitive, however as the mine has been in operation for some years the reserve cut off parameters are developed using historical operating performance and statistics. More details regarding cut off parameters are reported in the following sections.
Mining factors or assumptions	 The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc. The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling. The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). The mining dilution factors used. The mining recovery factors used. Any minimum mining widths used. 	 The mining method used is a mix of direct AVOCA, reverse AVOCA long-hole stoping with bottom up sequence and rock and cemented rock fill above the 425 level. A long-hole top down sequence and paste filling of resultant voids is used below the 425 level. Mining Model has been realised with StudioUG and EPS Codes (Datamine software house). Mining factors have been selected using historical performance data of the deposit, particularly: The Mineral Resource model used is in Datamine format. It combines the Resources models for Flying Fox mine and released in June 2021 Quarterly report. The minimum mining width is 1.8 metres. The max stable stope length is up to 20 metres with a stope height between 8 and 17 metres along dip. Other geotechnical parameters are contained in the current Ground Control Management Plan. Stope Planned dilution is built in the stope design, and on average is 0.5 metres in Hanging Wall and 0.25 meters in the foot Wall. 0.4%Ni grade assigned to the material outside the block model. Stope Unplanned dilution (from hosting rock and fill) 6.0% in weight at 0 Ni%. Standard SG for dilution is 2.8 t/m3.



- The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.
- The infrastructure requirements of the selected mining methods.
- Ore recovery is 98% in the stopes; and 100% in the ore drives.
- Pillar factor for unplanned pillars is 2%.
- Production rates reflect current mining performances and practice.
- No Inferred material has been utilised for the Ore Reserves estimation.
- Flying Fox is an operating mine. All infrastructures (with the exception of future capital development and external plants) are present and utilised on site, and allowance, based on technical studies, is made in the CAPEX expenditure of the Life of Mine for the new infrastructures.

Metallurgical factors or assumptions

- The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.
- Whether the metallurgical process is well-tested technology or novel in nature.
- The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.
- Any assumptions or allowances made for deleterious elements.
- The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.
- For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?

- The metallurgical factors used are from existing Cosmic Boy concentrator conventional nickel sulphide floatation techniques and historical data. Figures used are considered commercially sensitive by the company and may be made available by request.
- The metallurgical process is a well tested technology for Nickel Sulphides recovery with three stages of fragmentation with wet screening for size classification, one milling stage with cyclone size classification and two stages of flotation including Arsenic rejection. A small stream of the flotation feed is sent to the Hydrometallurgical section of the concentrator that uses the BioHeap® technology to improve the overall recovery
- The resultant concentrate is sold into existing off-takes contracts with BHP, Jinchuan, Glencore and Sumitomo Metal Mining.

Environmental

- The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.
- The Flying Fox mining operations (FFO) operated by Western Areas Ltd (Western Areas), received final environmental approval to mine nickel sulphide ore as an underground operation in December 2004. Approvals were provided under Western Australian legislation; initially being the Mining Act 1978 (M Act) and later Part V of the Environmental Protection Act 1986 (EP Act). Since then, several other M Act approvals have been sought and received relating to the deepening of the Flying Fox mine and the extension of surface infrastructure required for mining operations. Additional approvals under Part V of the EP Act have also been sought in the form of Works Approvals and Prescribed Premises Licence amendments for various types of mining related infrastructure.
- Other relevant approvals from state and local government include endorsements to produce drinking water via reverse osmosis and store it onsite and licences to construct habitable buildings and construct and operate septic waste water treatment facilities.



Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	 All necessary infrastructures for the Flying Fox mine are present and operational on site (not including future capital underground development and external plants). Allowance, based on technical studies, is made in the CAPEX expenditure of the Life of Mine for the new infrastructures planned in Life of Mine plan. Flying Fox is supplied by Western Power 33kV overhead powerline from the Bounty switchyard 60km to the north of the minesite. Potable water is produced via RO plants located at CB concentrator and pumped via a pipeline to the mine-site. Process water is recycled from the mine dewatering network. Bulk material logistics is predominately via conventional truck haulage. Mine personnel reside at the nearby Cosmic Boy Village (529 rooms) and are predominately a FIFO (via CB airstrip) workforce with some minor DIDO. The mine-site is 80km to the east of the Hyden township and has two main gazetted gravel road accesses (east from Hyden and south from Varley)
Costs	 The derivation of, or assumptions made, regarding projected capital costs in the study. The methodology used to estimate operating costs. Allowances made for the content of deleterious elements. The derivation of assumptions made of metal or commodity price(s), for the principal minerals and coproducts. The source of exchange rates used in the study. Derivation of transportation charges. The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. The allowances made for royalties payable, both Government and private. 	 Capital Underground Development costs are derived from the LOM plan based on existing contracts and historical performance and data. All other Capital costs are sourced as necessary via quotes from suppliers or technical studies. Mining, processing, administration, surface transport, concentrate logistics and state royalty costs are based on existing cost estimates. The nickel price and FX assumptions used were sourced from industry standard sources Nickel price from USD6.00/lb @ FX0.75 to USD9.00/lb @ FX 0.75. Net Smelter Return (NSR) factors were sourced from existing concentrate off-take contracts.
Revenue factors	 The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. the derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and coproducts. 	 These have been selected after consideration of historical commodity prices variations over time and the requirement for the Reserve to be robust to potentially volatile commodity price and foreign exchange conditions. The price setting mechanism for the sale of product subject to this report is traded openly on the London Metals Exchange ("LME"). Potential penalties and net smelter revenue factors are included in the Smelter Return factor used. This factor is based on the historical data from previous FY and is considered commercially sensitive by the company. Figures may be produced by request.



		Two main selling contracts structures are currently used by Western Areas. Both have co-product payable T&Cs. Allowance for this selling parameter is included in the Smelter Return factor.
Market assessment	The demand, supply and stock situation for the particular	The commodity subject to this report is traded openly on the London Metals Exchange ("LME"). The commodity subject to this report is traded openly on the London Metals Exchange ("LME").
	commodity, consumption trends and factors likely to affect supply and demand into the future.	The Company has for many years maintained both long and short term offtake sales contracts with multiple customers, both locally and internationally.
	A customer and competitor analysis along with the identification of likely	 Existing contracts have been assessed for the sales volume assumptions.
	market windows for the product. Price and volume forecasts and the basis for these forecasts.	 As the Company has been supplying multiple customers over a significant time period no acceptance testing has been assumed in the reserve development process.
	 For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract. 	These contracts have fixed dates in which the contract itself is reviewed and/or expires. The assumption to extend these contracts and the current sold volumes to the end of LOM has been made in order to assess the Ore Reserve.
	The installation and the second is such that	For the Nickel price assumptions refer to the previous sections. The Common has been appretional for a similar and a few prices.
Economic	 The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. NPV ranges and sensitivity to variations in the significant 	The Company has been operational for a significant period of time with contracts in place for ore mining, processing and concentrate haulage. Furthermore, the operation, subject to this report, has an in-situ operating concentrator facility. As such the actual visible operating and contract rates (including rise and fall where appropriate) has been used in the NPV economic assessments. Figures are considered commercially sensitive by the company.
	assumptions and inputs.	The discount rate has been estimated as the weighted average cost of capital for the Company.
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	 All legal permits to mine Flying Fox have been obtained by Western areas following the paths described by the relevant laws with the participation of the local communities (see previous points).
		 As a company policy (COR-HRM-POL-1122 -Social Responsibility Policy), the relations with the local communities and territories are a key part of operational management.
Other	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:	It is noted that mining operations are an inherently risky business in which to operate, no other risk factors apart from the normal risk components included in all the above points and assumptions have been identified.
	 Any identified material naturally occurring risks. 	
	 The status of material legal agreements and marketing arrangements. 	
	■ The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes	



Classification	anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent. The basis for the classification of the Ore Reserves into varying confidence categories. Whether the result appropriately reflects the Competent Person's view of the deposit. The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if	 Flying Fox has the following Ore Reserves at the 30th of June 2021: Probable Ore Reserves of 193,000 ore tonnes at 3.2% for 6,140 Nickel tonnes Ore reserves derive entirely from Indicated Mineral Resource and the result appropriately reflects the Competent Person's view of the deposit.
Audits or reviews	 any). The results of any audits or reviews of Ore Reserve estimates. 	 Audits/Reviews of the present report have not been done because of the high confidence in the data used and the constant performance of the operation. A review may be done by external request.
Discussion of relative accuracy / confidence	 Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. Accuracy and confidence discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of 	 The confidence in the present evaluation is from the fact that Flying Fox is a well establish operating mine with a sound performance database. The present estimation, for the nature of the commodity mined, refers to global market conditions (see above points for the assumptions). As is normal in mining operations, the key points that can have a significant impact on the performance of the Flying Fox Mine are the market conditions in general, and the Nickel price and the currency exchange rates in particular. All the other parameters are derived from sound historical production data.



the estimate should be compared with production data, where available.

JORC 2012 TABLE 1 - SPOTTED QUOLL MINERAL RESOURCE ESTIMATE

SECTION 1: SAMPLING TECHNIQUES AND DATA

Criteria	JORC Code Explanation	Commentary
Sampling techniques	 Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. 	 The Spotted Quoll Deposit was sampled using diamond drill (DD) and reverse circulation holes (RC) on a nominal 50 x 30m grid spacing as well as underground channel sampling in a limited area. Although all available valid data was used to design the geological model, only diamond hole data was used to estimate the grade and ancillary variables into the resource model. A total of 7,082 diamond drill composites derived from approximately 700 drillholes were used to estimate the grades. This represents a drilling pattern smaller than 40m by 40m over the full extent of the deposit. Holes were generally drilled perpendicular (west) to the strike (north-south) of the stratigraphy, at angles ranging between 60° and 75°. Closely spaced underground channel samples, where available, were used as part of the final block model validation process but were not used to estimate grades into the block model.
	 Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	 Samples have been collected since discovery in 2007 in accordance with Western Areas Ltd protocols and sample representivity is assured by an industry standard QAQC program as discussed in a later section of this tabular summary. All samples are prepared and assayed by an independent commercial laboratory whose analytical instruments are regularly assistant.
	 Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g., 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information. 	 Diamond drill (DD) core was marked at 1m intervals and sample lengths were typically of this length. Sampling boundaries were selected to match the main geological and mineralisation boundaries. Core was cut in half by diamond saw blades and one half quartered, with a quarter stored for assay and a quarter preserved as a geological archive. 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. Samples from reverse circulation (RC) drilling consisted of chip samples at 1m intervals from which 3 kg was pulverised to produce a sub sample for assaying as per the DD samples.
Drilling Techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc)	 Diamond drilling comprises NQ2 sized core. The core was oriented using ACT II control panels and ACT III downhole units.



	and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	 RC drilling comprises 140mm diameter face sampling hammer drilling. Standard tube is used in most cases unless core recovery issues are expected when triple tube is used. This is typically in the oxidised zones
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. 	 Diamond core and RC recoveries are logged and recorded in the database. Overall recoveries are >95% and there are no core loss issues or significant sample recovery problems.
	 Measures taken to maximise sample recovery and ensure representative nature of the samples. 	 Diamond core is reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the drillers. RC samples were visually checked for recovery, moisture and contamination.
	 Whether a relationship exists between sample recovery and grade and whether sample bias occurs 	 The resource grades are derived from high quality diamond core drilling with core recoveries in excess of 95%. 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.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	 Geological and geotechnical logging was carried out on all diamond drillholes for recovery, rock quality designation (RQD) and number of defects (per interval). Information on structure type, dip, dip direction, alpha angle, beta angle, texture, shape, roughness and fill material are stored in the structure table of the database. Sufficient data has been collected and verified to support the current Mineral Resource Estimate.
	 Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) 	 Logging of diamond core and RC samples recorded lithology, mineralogy, mineralisation, structural (DD only), weathering, colour and other features of the samples. Core was photographed in both dry and wet form.
	The total length and percentage of the relevant intersections logged.	All drillholes were logged in full from the collar position to the end of the hole position.
Sub-sampling techniques and sampling preparation	If core, whether cut or sawn and whether quarter, half or all core taken. If core, whether cut or sawn and whether quarter, half or all core taken.	 Core is cut in half on site (with the exception of underground grade control core) by diamond saw blades Surface derived drill holes are halved again with one quarter sent for assay and one quarter preserved as a geological archive Underground exploration derived drilling core is not halved again. Half of the cut core is sent for assay with the other half preserved as a geological archive Underground grade control derived drilling core is not cut. Full core is sent for assay. All core is prepared and assayed by an independent commercial certified laboratory. Samples are crushed, dried and pulverised to produce a sub sample for analysis by 4 acid digest with an ICP/AES finish All samples were collected from the same side of the core.



	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	 RC samples were collected using a riffle splitter. All samples in the mineralised zones were dry.
	 For all sample types, the nature, quality and appropriateness of the sample preparation technique. 	 The sample preparation of diamond core follows industry best practice in sample preparation involving oven drying, coarse crushing of the quarter core sample down to ~10mm, followed by pulverisation of the entire sample (total prep) using LM5 grinding mills to a grind size of 90% passing 75 micron. The sample preparation for RC samples is identical, without the coarse crush stage.
	 Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 	 WSA included field Ni standards ranging from 0.7% - 8.4% Ni that were routinely submitted with sample batches in order to independently monitor analytical performance. Standards were fabricated and prepared by Gannet Holdings, Perth, using high-grade nickel sulphide ore sourced from the Silver Swan mine. Standards were supplied in 55g sealed foil sachets.
	 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. 	 Field duplicates were taken on a 15% by volume basis. Duplicate quarter samples were sent to a commercial independent certified lab.
	 Whether sample sizes are appropriate to the grain size of the material being sampled. 	The sample sizes are considered to be appropriate to correctly represent the sulphide mineralisation at Spotted Quoll based on the style of mineralisation, the thickness and consistency of the intersections, the sampling methodology and percent value assay ranges for the primary elements.
Quality of assay data laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. The nature, quality and appropriate assaying and laboratory procedures used and whether the technique is considered partial or total.	 All samples used in the Mineral Resource Estimate were assayed by an independent certified commercial laboratory. The laboratory used by WSA is experienced in the preparation and analysis of nickel-bearing ores. Samples were dissolved using nitric, perchloric, hydrofluoric and hydrochloride acid digest to destroy silica. Samples were analysed for Al(0.01%), As(5), Co (1), Cu(1), Fe(0.01%), Cr(1),Mg(0.01%),Ni(1), S(0.01%), Ti(0.01%) and Zn(1) using Method Me-ICP61 (detection limit in brackets, values in ppm unless stated). All samples reporting > 1% Ni were re-assayed by the OG62 method.
	■ For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	No geophysical tools or handheld XRF instruments were used to determine any element concentrations that were subsequently used for Mineral Resource Estimate purposes.
	 Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable 	 Standards and blanks were routinely used to assess company QAQC (approx. 1 standard for every 12-15 samples). Duplicates were taken on a 15% by volume basis, field-based umpire samples were assessed on a regular basis.



	levels of accuracy (ie lack of bias) and precision have been established.	 Accuracy and precision were assessed using industry standard procedures such as control charts and scatter plots. Results indicated no material issues associated with sample preparation and analytical error; in occasional cases where a sample did not meet the required quality threshold, the entire batch was re analysed.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	 Newexco Services Pty Ltd (Newexco) has independently visually verified significant intersections in most of the diamond core.
	The use of twinned holes.	No holes were specifically twinned, but there are several holes in close proximity to each other and the resultant assays and geological logs were compared for consistency.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	 Primary data was collected using Excel templates utilising look-up codes, on laptop computers. All data was validated by the supervising geologist, and sent to Newexco for validation and integration into an SQL database.
	Discuss any adjustment to assay data.	No adjustments were made to assay data compiled for this estimate.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down- hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. 	 Hole collar locations were surveyed by WSA surveyors. The Leica GPS1200 used for all surface work has an accuracy of +/- 3cm.
	Specification of the grid system used.	 A two-point transformation is used to convert the data from MGA50 to Local Grid & vice versa. Points used in transformation: MGA50 Points yd1="6409502.17" xd1="752502.175" yd2="6409397.856" xd2="753390.591"Local Grid Points ym1="28223.59"xm1="33528.771"ym2="28111.84"xm2="34415.99 5"
	 Quality and adequacy of topographic control. 	 The accuracy of the pillars used in WSA's topographical control networks is within the Mines Regulations accuracy requirement of 1:5000 for control networks.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Drillholes were spaced at an approx. 30m (northing) x30m grid for the areas that will be affected by mining in the next two years and nominally 60m by 60m for areas that will be affected by mining in the subsequent years.
	 Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. 	■ The previous estimate and the extensive drill program coupled with information derived from previous open pit and underground mining at Spotted Quoll has demonstrated sufficient and appropriate continuity for both geology and grade within the deposit to support the definition of Mineral Resources, and the classification (Indicated and Inferred) applied. No material has been classified as Measured.
	Whether sample compositing has been applied.	 Samples were composited to 1m lengths, making adjustments to accommodate residual sample lengths.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	 The Spotted Quoll deposit strikes at approximately 030° and dips nominally 50° to the east. All drilling was conducted from east to west. Most of the drilling was conducted from the hanging wall i.e. from the east to the west.



	 Results from an independent structural study on the deposit along with historical regional and near-mine structural observations complemented the detailed structural core logging results to provide a geological model that was used with an appropriate level of confidence for the classification applied under the 2012 JORC Code.
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.	No orientation-based sampling bias has been observed in the data.
The measures taken to ensure sample security.	All core samples were delivered from site to Perth and then to the assay laboratory by an independent transport contractor.
Audits or Reviews	 No formal external audit of the Mineral Resource has been undertaken to date. Independent consultants assisted with the geological and mineral resource modelling.
The results of any audits or reviews of sampling techniques and data.	The sampling techniques are standard practice at WSA; these were implemented over seven years ago and have been subject to independent reviews during this time.

SECTION 2: REPORTING OF EXPLORATION RESULTS – SPOTTED QUOLL

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

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 Forrestania Nickel Operations (FNO) comprises approximately 125 tenements covering some 900km2 within the Central Yilgarn Province. The tenements include exploration licences, prospecting licences, general purpose leases, miscellaneous licences and mining leases. Western Areas wholly owns 106 tenements, 55 tenements of which were acquired from Outokumpu in 2002 and a further 51 tenements acquired from Kagara in March 2012 (some which are subject to various third-party royalty agreements). The remainder of the tenements are subject to Joint Ventures, 14 tenements are part of the Mt Gibb JV where Western Areas has the right to earn 70% interest from Great Western Exploration (currently at 51% WSA) and the Lake King JV where Western Areas has earned a 70% interest from Swanoak Holdings.
		 A number of the Kagara tenements are subject to third party royalty agreements. All the tenements are in good standing. Six tenements are pending grant.
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	 Western Areas has been exploring its wholly owned tenements since 2002. The tenements subject to the Kagara sale which took place in March 2012 were explored by Kagara since 2006 and LionOre and St Barbara prior to that time.
		 Western Areas has managed both the Mt Gibb JV since 2009 (Great Western Exploration explored the ground prior to that



		time) and the Lake King JV since 2007 (a small amount of work carried out by WMC prior to that date).
Geology	 Deposit type, geological setting and style of mineralisation. 	The deposits lie 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.
		The greenstone succession in the district also hosts a number of orogenic lode gold deposits of which Bounty Gold Mine is the largest example.
		Some exploration for this style of deposit is undertaken by Western Areas from time to time in the FNO tenements.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: 	terial The MRE is based upon over 6,800 geologic entries derived from over 700 surface and underground diamond holes over multiple domains and years of surface and underground drilling. All of
	 easting and northing of the drill hole collar 	understanding of the report.
	 elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar 	
	dip and azimuth of the holedown hole length and interception depth	
	 hole length. 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. 	
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high 	 Standard length weighted averaging of drill hole intercepts was employed. No maximum or minimum grade truncations were used in the estimation. The reported assays have been length and bulk density weighted.
	grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts	A lower nominal 0.4% Ni cut-off is applied during the geologic modelling process and later during the MRE reporting process. No top cut is applied. High grade intercepts internal to broader zones of mineralisation are reported as included intervals.
	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.	No metal equivalent values are reported. • No metal equivalent values are reported.



Relationship between mineralisation widths and intercept lengths	 The assumptions used for any reporting of metal equivalent values should be clearly stated. These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there 	 The incident angles to mineralisation are considered moderate. Due to the often-steep dipping nature of the stratigraphy, reported down hole intersections are moderately greater (m/1.5 ratio on average) than the true width.
	should be a clear statement to this effect (eg 'down hole length, true width not known').	
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to figures in the report
Balanced reporting	 Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	Only Mineral Resource Estimation results are reported.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	 This is a Mineral Resource Estimate summary and no exploration results are reported as such. Multi-element analysis was conducted routinely on all samples for a base metal suite and potentially deleterious elements including Al, As, Co, Cr, Cu, Fe, Mg, Ni, S, Ti, Zn, Zr. All diamond core samples were measured for bulk density which range from 2.90 - 4.79g/cm3 for values >0.5% Ni. Geotechnical logging was carried out on all diamond drill holes for recovery, defects and RQD. Information on structure type, dip, dip direction alpha and beta angles, texture, shape, roughness and fill material is stored in the structural logs in the database.
Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 Exploration within the FNO tenements continues to evaluate the prospective stratigraphic succession containing the cumulate ultramafic rocks using geochemical and geophysical surveys and drilling.



SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES – SPOTTED QUOLL

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

Criteria	JORC Code Explanation	Commentary
Database Integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	 All data has been recorded in Excel templates with reference look-up tables. All data are imported into an acQuire relational database.
	Data validation procedures used.	 Validation is a fundamental part of the acQuire data model and is implemented via referential integrity and triggers. Referential constraints ensure that, for example, Hole ID matches collar and downhole data. Triggers check criteria such as code validity, overlapping intervals, depth and date consistencies. All fields of code data have associated look-up table references.
Site visits	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. 	Andre Wulfse who is the Competent Person is the Group Resource Manager for Western Areas and has made many site visits to the Flying Fox Deposit. His first visit to the deposit was in 2008.
	 If no site visits have been undertaken indicate why this is the case. 	Not applicable.
Geological interpretation	Confidence in (or conversely, the uncertainty) of the geological interpretation of the mineral deposit.	 Confidence in the geological interpretation is high, due to the history of mining, the spacing of drilling and the understanding of similar deposits within the Forrestania Ultramafic Belt. The deposit is located within the traditional footwall of the basal ultramafic metasediment contact, which was probably the original locus for sulphide deposition from an overlying pile of komatiite flows. Subsequent metamorphism, deformation and intrusion of granitoid sills has contributed to a complex setting, with mineralisation now occupying a possible shear zone within the footwall sediments, 15-20m (stratigraphical) beneath the basalt/ultramafic contact. The deposit is principally a body of matrix magmatic sulphide mineralisation in which the original pentlandite and pyrrhotite assemblage has been overprinted by arsenic-bearing assemblages dominated by gersdorffite and minor nickeline. Sulphide abundances of 20% to 90% are common. Mean nickel grades of ore intersections are in the order of 4% to 12% Ni.
	 Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. 	 Lithogeochemistry and stratigraphic interpretation have been used to assist the identification of rock types. Alternative interpretations of the Mineral Resource were considered. In particular, the previous model and the grade control models were extensively validated against the current geological and resource model. Alternative interpretations of mineralisation do not differ materially from the current interpretation.



		 WSA has successfully mined the deposit using a similarly derived geological and resource model which is subject to monthly mill-to-face grade and tonnage reconciliation.
	The use of geology in guiding and controlling Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation.	 The Spotted Quoll geological model was updated for this annual MRE. It was constructed using the Leapfrog Geological Modelling tools, the well-known broad lithological units were defined using either the deposit tool or the vein modelling tool. Updates to the structural interpretation in zone 4 found that the major structural orientations had changed from a predominantly shallow dipping westerly orientation in zone 1-3 to a predominantly steep dipping N-S striking orientation in zone 4. This caused a re-interpretation of zone 4, introducing a number of structural offsets not previously modelled. This structural interpretation was reviewed and accepted by SRK in early 2021 The hanging wall and footwall contacts of the various mineralised domains were modelled with a level of confidence commensurate with the resource classification category applied. The extents of the geological model were constrained by drillhole intercepts and extrapolation of the geological contacts beyond the drill data was minimal for the Indicated category. Felsic intrusions cross-cutting the orebody were modelled by applying the Leapfrog vein modelling tool using Interp1 lithological codes commencing with "6". Late-stage intrusions of granodiorites, granites and pegmatites showing little to no evidence of ductile deformation exploit three main structural orientations: subvertical units striking N-S, gently west dipping units and moderately east dipping units. An early-stage felsic porphyry intrusion displaying features of strong ductile deformation was modelled in Zone 4 through to Zone 6, subparallel to footwall sediment bedding and existing mineralisation. Occurrences of all stages of felsic intrusions were observed to increase in abundance below Zone 3 (750 mRL). An outer ore halo was constructed using a grade cut-off of Ni>0.8% for a total of 6 zones. The modelling of the outer halo is less accurate in areas where there is no face sampling, as the gradational
	The factors affecting continuity both of grade and geology.	 Key factors affecting continuity relate to pervasive felsic intrusive units and faults. The geological discontinuities have been modelled and the grade discontinuities have been accounted for in the estimation modelling.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise),	■ The strike length of the Mineral Resource is nominally 300m on average, with a range of 25m to 520m, depending on depth below surface. The nominal mean dip length is 1500m.
	plan width, and depth below surface	The RL below the pre-existing pit is 1250mRL and the maximum depth of the Mineral Resource is 250mRL. The mean thickness of



	to the upper and lower limits of the Mineral Resource.	the mineralised zone is 3.1m, with a maximum thickness of 13.4m.
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, method was chosen include a description of computer software and parameters used and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	 In addition to the major structural domains discussed previously, further subdomains for arsenic and nickel grade were identified in Zones 1-4 based on the updated structural interpretation and geological modelling of the ultramafic unit adjacent to the mineralisation. Six nickel subdomains and seven arsenic subdomains were defined, supported by material differences in the modelled mean grade between the domains. Grade and ancillary element estimation into the mineralised domains using Ordinary Kriging and Inverse Power Distance (IPD) was completed using Datamine™, and Supervisor software. The methods were considered appropriate due to drill hole spacing and the nature of mineralisation. Sample data was composited to 1m downhole lengths. Intervals with no assays were treated as null values. Top-cut investigations were completed and top-cuts were applied to Arsenic on the basis of grade distribution and Coefficient of Variation. Nickel grades were not cut with the exception of a single composite outlier that was identified in Zone 3 via a swath plot. Which had an undue influence on the block grades in the rea. The outlier was cut from 16% NI to 9% Ni in line with the immediate surrounding samples. Sample, wireframe and block model data were flagged using domain and weathering codes generated from 3D mineralised wireframes. Extensive Exploratory Data Analysis (EDA) was carried out on the raw and composite data in order to understand the distribution in preparation for estimation and to validate the composite data against the raw data. EDA included Histograms, Log Probability plots and Mean and Variance plots for each of the domains and sub domains. Qualitative Kriging Neighbourhood Analysis was used to determine the optimum search neighbourhood parameters. Directional variography was performed for Ni and selected ancillary elements. Nugget values are typical for the type of mineralisation (Ni = 20% - 40% o
	■ The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	 This MRE is an update of an MRE that was previously reported and was validated against the same. In the two zones with a significant proportion of unmined blocks remaining, Zone 3 and Zone 4, a validation test was run where the reconciled stope data was compared to the model grades diluted by using the mined stope CMS volumes. This indicates that in an area of Zone 3 where there is sparse drilldata data, the model may overcall the nickel grade and this area has been identified as a priority for additional sampling. In addition, a single composite nickel grade outlier (SQUG161 from 179.2 m to 179.65 m grading at 16.1% Ni) was identified in Zone 3 via swath plot, which was



	likely contributing to the grade being overstated in this part of the model due to the lack of data in the area. The single outlier was top-cut to 9% Ni, which is in line with the immediate surrounding samples. In areas of Zone 4 where there is sparse sample data, the model performs very well against the reconciled data. Swath plots and other validation techniques are reasonable through this area
The assumptions made regarding recovery of by-products.	 No assumptions were made about the recovery of by products in this estimate. WSA currently does not have any offtake agreements in place for the sale of discrete by-products.
Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).	 Arsenic (As) is considered a deleterious element as it can have an adverse effect on the recovery of Ni if not properly managed during the blending process. As was routinely assayed with Ni and was subsequently modelled and estimated into the block model using mutually exclusive domains to that of Ni. Other non-grade elements were estimated into the block model.
In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	 The block model was constructed using a 2mE x 5mN x 5MRL parent size, with sub cells. All estimation was completed at the parent cell scale, thereby avoiding any potential geostatistical support issues. The size of the search ellipse varies and is based on the drillhole spacing and domain dimensions.
Any assumptions behind modelling of selective mining units.	 No selectivity was built into the model on the basis that full extraction of the ore zone using longhole and airleg stoping is expected
Any assumptions about correlation between variables.	Known correlation between Density and Ni grade was used to estimate tonnages.
Description of how the geological interpretation was used to control the resource estimates.	 The geological interpretation was developed using geological, structural and lithogeochemical elements. The geological framework associated with extrusive komatiite-hosted deposits, and the structural elements observed at the local and wider scale, were used to determine and refine mineral domains. The hanging wall and footwall contacts of mineralisation were used as hard boundaries during the estimation process and only blocks within the geological wireframe were informed with Ni grades.
Discussion of basis for using or not using grade cutting or capping.	 Geostatistical and visual investigation of the grade distribution negated the need for grade cutting or capping.
The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	 Validation of the block model included comparing the volume of resource wireframes to block model volumes. It also involved comparing block model grades with drill hole grades by means of swathe plots showing easting, northing and elevation comparisons. Estimation validation techniques included swathe plots of the grade of the composites vs the grade of the block model as shown below.



		■ Visual grade validations using Datamine™, Supervisor and Leapfrog were undertaken.
		 Validation of reconciled stope data against mined stope CMS volumes was undertaken and the results overall indicated that the estimate is robust.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnages were estimated on a dry basis.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied. The basis of the adopted cut-off grade(s) or quality parameters applied.	 The outer halo mineral envelope was constructed using a nominal 0.8% Ni grade cut-off and the HG core using massive, matrix and brecciated sulphides. The Mineral Resource is reported at a 0.4% Ni cut-off for Indicated and 0% Ni for Inferred, which is a reasonable representation of the mineralised material prior to the application of economic and mining assumptions and an Ore Reserve cut-off. The Spotted Quoll mineralisation tenor is relatively high compared to other komatiite-hosted deposits, and hence the use of a lower cut-off grade is appropriate.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	 The Spotted Quoll deposit is currently being mined primarily using longhole stoping methods with paste fill. The mining method, which is unlikely to change, has been taken into account during the estimation process. The Mineral Resource was depleted against mining.
Metallurgical factors or assumptions	■ The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	 Ore from the Spotted Quoll deposit is currently being processed on site, where Nickel concentrate is produced using a three-stage crushing, ball mill, and flotation and thickener/ filtration system. Arsenic rejection in the flotation circuit has been modelled based on current and historic operational performance.



Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	 All waste and process residue will be disposed of through the Cosmic Boy concentrator plant and its tailings dam. All site activities will be undertaken in accordance with WSA's environmental policy.
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	There is a strong correlation between Ni and bulk density at Forrestania and a robust Ni grade regression formula was used to estimate bulk density into the blocks. There is a strong correlation between Ni and bulk density at Forrestania and a robust Ni grade regression formula was used to estimate bulk density into the blocks.
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.	Core at Spotted Quoll is generally void of vugs, voids and other defects. Rocks are from the amphibolite facies and faults have largely been annealed. Porosity is considered low.
	 Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	The bulk density values were estimated into the block model using the same search parameters that were used to interpolate Ni within the geological domains.
Classification	The basis for the classification of the Mineral Resources into varying confidence categories. The basis for the classification of the Mineral Resources into varying confidence categories.	 The Spotted Quoll Mineral Resource is classified as Indicated and Inferred on the basis of drillhole spacing and Kriging efficiency. Only blocks that are between existing ore drives are classified as Measured.
	Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, and confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	 The definition of mineralised zones is based on a high level of geological understanding. The model has been confirmed by infill drilling, supporting the original interpretations. All relevant factors have been considered in this estimate.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The Mineral Resource Estimate appropriately reflects the view of the Competent Person who is a full-time employee of Western Areas and has been working on the deposits since 2008, both as a consultant and an employee.



Audits or reviews	 The results of any audits or reviews of Mineral Resource estimates. 	No audit has been undertaken on the current MRE to date, but the model was designed with the assistance of independent consultants.
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	 The geological and grade continuity of the Spotted Quoll deposit is well understood and the mineralisation wireframes used to build the block model have been designed using all available exploration and mining data. Post-processing block model validation was extensively undertaken using geostatistical methods.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	The Mineral Resource statement relates to local estimates of tonnes and grade.
	 These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	The MRE was compared to the production grade control data. The upper section of the deposit has been mined by open pit methods and underground 0mining has been in place for over five years.

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES - SPOTTED QUOLL

Criteria	JORC Code Explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	 Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore 	 Western Areas Ltd (WSA) undertook a review of the Spotted Quoll deposit (SQ) during Financial year 2021 after the completion of the new grade control drilling campaign and updated mining data. The underlying Mineral Resource is issued in June 2021 Quarterly Report. The Mineral Resources estimate is inclusive of the Ore Reserves.
Site visits	Reserves. Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case.	Spotted Quoll is an operating underground mine since 2010. The Competent Person carries out routine inspections of the minesite and underground workings as part of his normal duties.
		 WSA has established a fit-for-purpose data collection and record keeping system used by the technical staff to effectively manage the operation. This data is used in the present Ore Reserves estimation.
		Mine design and mining method is based primarily on the recommendations laid out in the updated Feasibility study and back analysis data from the current mining practice.



Study status	 The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered. 	 WSA completed a SQ Feasibility Study in November 2010 as a continuation of the Spotted Quoll open pit (release 15th of December 2010). Underground mining commenced on the 2nd of May 2010 with firing the first portal face. The Feasibility Study is still valid and has been updated with the experience gained. The present Ore Reserves estimation is an update that considers the new Mineral Resources, the performance of the operation to date and a revised commodity price estimate.
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied. The basis of the cut-off grade(s) or quality parameters applied.	 An Ore Reserve cut-off grade of 2% Ni was selected to obtain an Ore Reserve that fits the following criteria: Minimum Head Grade fitting the Mill requirements. Ore Reserve average grade equal or greater than Life of Mine breakeven grade. Mean Arsenic concentration that enables production of a saleable concentrate Positive Forrestania LOM NPV Maximise steady state production LOM Nickel price curve from USD6.00/lb @ FX0.75 to USD9.00/lb @ FX 0.75. Some of the key ore reserve assumptions are considered commercially sensitive, however as the mine has been in operation for some years the reserve cut off parameters are developed using historical operating performance and statistics. More details regarding cut off parameters are reported in the following sections.
Mining factors or assumptions	 The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc. The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling. The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). The mining dilution factors used. 	 The mining method used is predominantly longhole stoping with a top down sequence and paste filling of resultant voids. The mining model used 5DPlanner and EPS Codes (Datamine software house). Mining factors have been selected using historical performance data of the deposit, particularly: The Mineral Resource model used is in Datamine format. It combines the Resources models for Spotted Quoll mine and has been released in June 2021 Quarterly report. The minimum mining width is 2.0 metre. The average stable stope length is between 10 and 30 metres with a stope height between 7 and 15 metres. Other geotechnical parameters are contained in the current Ground Control Management Plan. Stope planned dilution is built in the stope shapes, on average 0.50 metres in Hanging Wall and from 0.1 to 0.2 metres in Foot Wall at 0 Ni%. Stope Unplanned dilution (from hosting rock and paste dilution) varies between 22.5% to 30% at 0 Ni%. 0% Ni grade is assigned to the material outside the block model. Ore recoveries range from 50% to 100% in relation to the position, and metal recovery ranges from 90% to 100%.



	 The mining recovery factors used. Any minimum mining widths used. The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion. The infrastructure requirements of the selected mining methods. 	 Pillar factor for unplanned pillars is 0%. Production rates reflect current mining performances and practice. Standard SG for dilution is 2.8t/m3. No Inferred material has been utilised for the Ore Reserves estimation. Spotted Quoll is an operating mine. All infrastructures (with the exception of future capital development and external plants) are present and utilised on site, and allowance, based on technical studies, is made in the CAPEX expenditure of the Life of Mine for the new infrastructures.
Metallurgical factors or assumptions	 The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. Whether the metallurgical process is well-tested technology or novel in nature. The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. Any assumptions or allowances made for deleterious elements. The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications? 	 The metallurgical factors used are from existing Cosmic Boy concentrator conventional nickel sulphide floatation techniques and historical data. Figures used are considered commercially sensitive by the company and may be made available by request. The metallurgical process is a well tested technology for Nickel Sulphides recovery with three stages of fragmentation with wet screening for size classification, one milling stage with cyclone size classification and two stages of flotation including Arsenic rejection. A small stream of the flotation feed is sent to the Hydrometallurgical section of the concentrator that uses the BioHeap® technology to improve the overall recovery The resultant concentrate is sold into existing off-takes contracts with BHP, Jinchuan, Glencore and Sumitomo Metal Mining.
Environmental	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	 Spotted Quoll open pit mine received final environmental approval in October 2009. Approvals were provided under both Western Australian legislation; principally being Parts IV and V of the Environmental Protection Act 1986 (EP Act) and the Mining Act 1978 (M Act) and Commonwealth legislation being the Environment Protection and Biodiversity Conservation Act 1999, (EPBC Act). Environmental approval has also been received, to mine Nickel sulphide ore from the underground extension of the Spotted Quoll open cut mine under Western Australian legislation being principally Parts IV and V of the EP Act and the M Act. No further approval was required from the Commonwealth for underground mining at Spotted Quoll. A list of Key State and Commonwealth approvals obtained for both the Spotted Quoll open pit and the underground operations may be made available by request.
Infrastructure	 The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk 	 Spotted Quoll is an operating mine with adequate infrastructure and planned future capital project extensions are included in the LOM plan.



	commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	 Spotted Quoll is supplied by Western Power 33kV overhead power-line from the Bounty switchyard 60km to the north of mine-site. Potable water is produced via RO plants located at CB concentrator and pumped via a pipeline to the mine-site. Process water is recycled from the mine dewatering network. Bulk material logistics is predominately via conventional truck haulage. Mine personnel reside at the nearby Cosmic Boy Village (529 rooms) and are predominately a FIFO (via CB airstrip) workforce with some minor DIDO. The mine-site is 80km to the east of the Hyden township and has two main gazetted gravel road accesses (east from Hyden and south from Varley)
Costs	 The derivation of, or assumptions made, regarding projected capital costs in the study. The methodology used to estimate operating costs. Allowances made for the content of deleterious elements. The derivation of assumptions made of metal or commodity price(s), for the principal minerals and coproducts. The source of exchange rates used in the study. Derivation of transportation charges. The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. The allowances made for royalties payable, both Government and private. 	 Capital Underground Development costs are derived from the LOM plan based on existing contracts and historical performance and data. All other Capital costs are sourced as necessary via quotes from suppliers or technical studies. Mining, processing, administration, surface transport, concentrate logistics and state royalty costs are based on existing cost estimates. The nickel price and FX assumptions used were sourced from industry standard sources Nickel price from USD6.00/lb @ FX0.75 to USD9.00/lb @ FX 0.75. Net Smelter Return (NSR) factors were sourced from existing concentrate off-take contracts.
Revenue factors	 The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. the derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and coproducts. 	 These have been selected after consideration of historical commodity prices variations over time and the requirement for the Reserve to be robust to potentially volatile commodity price and foreign exchange conditions. The price setting mechanism for the sale of product subject to this report is traded openly on the London Metals Exchange ("LME"). Potential penalties and net smelter revenue factors are included in the Smelter Return factor used. This factor is based on the historical data from previous FY's and is considered commercially sensitive by the company and may be made available on request. Two main selling contracts structures are currently used by Western Areas. Both have co-product payable T&Cs. Allowance for this selling parameter is included in the Smelter Return factor.
Market assessment	The demand, supply and stock situation for the particular commodity, consumption trends and The demand, supply and stock situation for the particular situation for the particular for	The commodity subject to this report is traded openly on the London Metals Exchange ("LME"). The commodity subject to this report is traded openly on the London Metals Exchange ("LME").



	factors likely to affect supply and demand into the future. A customer and competitor analysis along with the identification of likely market windows for the product. Price and volume forecasts and the basis for these forecasts. For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	 The Company has for many years maintained both long and short term off-take sales contracts with multiple customers, both locally and internationally. Existing contracts have been assessed for the sales volume assumptions. As the Company has been supplying multiple customers over a significant time period no acceptance testing has been assumed in the reserve development process. These contracts have fixed dates in which the contract itself is reviewed and/or expires. The assumption to extend these contracts and the current sold volumes to the end of LOM has been made in order to assess the Ore Reserve. Refer to the previous section for nickel price assumptions.
Economic	 The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. NPV ranges and sensitivity to variations in the significant assumptions and inputs. 	 The Company has been operational for a significant period of time with contracts in place for ore mining, processing and concentrate haulage. Furthermore, the operation, subject to this report, has an in-situ operating concentrator facility. As such the actual visible operating and contract rates (including rise and fall where appropriate) has been used in the NPV economic assessments. Figures are considered commercially sensitive by the company. The discount rate has been estimated as the weighted average cost of capital for the Company.
Social	 The status of agreements with key stakeholders and matters leading to social licence to operate. 	 All legal permits to mine Spotted Quoll have been obtained by Western areas following the paths described by the relevant laws with the participation of the local communities (see previous points). As a company policy (COR-HRM-POL-1122 -Social Responsibility Policy), the relations with the local communities and territories are a key part of operational management.
Other	 To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: Any identified material naturally occurring risks. The status of material legal agreements and marketing arrangements. The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent. 	It is noted that mining operations are an inherently risky business in which to operate, no other risk factors apart from the normal risk components included in all the above points and assumptions have been identified.



Classification	 The basis for the classification of the Ore Reserves into varying confidence categories. Whether the result appropriately reflects the Competent Person's view of the deposit. The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any). 	 Spotted Quoll has the following reserves at the 30th of June 2021: Probable Ore Reserves: 888,100 ore tonnes at 3.7% Ni for 32,610 Nickel tonnes The ore reserve generated appropriately reflects the Competent Person's view of the deposit.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	Audits/Reviews of the present report have not been done because of the high confidence in the data used and the constant performance of the operation. A review may be done by external request.
Discussion of relative accuracy/confidenc e	 Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. Accuracy and confidence discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	 The confidence in the present evaluation is based on Spotted Quoll being a well established operating mine with a mature performance database. The present estimation, for the nature of the commodity mined, refers to global market conditions (see above points for the assumptions). As is normal in mining operations, the key points that can have a significant impact on the performance of the Spotted Quoll Mine are the market conditions in general, and the Nickel price and the currency exchange rates in particular. All the other parameters are derived from sound historical production data.



JORC 2012 TABLE 1 – FORRESTANIA EXPLORATION

SECTION 1: SAMPLING TECHNIQUES AND DATA

Criteria	JORC Code Explanation	Commentary				
Sampling techniques	 Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. 	 Exploration targets were tested and sampled by aircore (AC) and reverse circulation drilling (RC), and holes were mostly drilled perpendicular to the strike (north-south) of the stratigraphy. Drill holes were located initially with hand held GPS and later surveyed by differential GPS. AC samples are 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. Diamond drill core (NQ2) is 1/4 core sampled on geological intervals (0.2m - 1.5m) to achieve sample weights under 2kgs. Samples were crushed, dried and pulverised (total prep) to produce a sub sample for analysis by 4 acid digest with an ICP/AES and FA/ICP (Au, Pt, Pd) finish. 				
	 Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	 All samples were prepared and assayed by independent commercial laboratories whose instruments are regularly calibrated. 				
	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.	 Sampled mineralisation intervals are sent to a commercial laboratory for crushing and grinding before assaying. AC and RC holes were sampled initially as 4m composites, with follow up 1m samples captured pending the return of significant assay results. 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. 				
Drilling techniques	■ Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	 RC Drilling utilized a T450 Historical data is derived surface RAB, Aircore, Reverse Circulation and Diamond drilling 				
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. 	 Drilling recoveries are digitally logged, recorded, and captured within the project database. Diamond core recoveries have been logged and recorded in the database 				



	 Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	 Diamond core are logged and recorded in the database. Overall recoveries are >95% and there was no core loss issues or significant sample recovery problems. Core loss is noted where it occurs. Diamond core was reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the drillers.
		 RC recoveries are logged and recorded in the database and AC samples were visually checked for recovery, moisture and contamination.
		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.
		Drilling in the oxidised profile results in more incomplete core recoveries.
Logging	Whether core and chip samples have been geologically and geotechnically	Geological logging is recorded and validated in Ocris software (Toughbook platform)
	logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and	Drill chips are logged for lithology, mineralogy, mineralisation, weathering, fabric, grainsize, colour and other relevant features.
	metallurgical studies.	 Geotechnical logging was not completed due to the nature of drill method.
	 Whether logging is qualitative or quantitative in nature. Core (or 	All holes have been logged from the surface to the end of hole.
	costean, channel, etc) photography.	Petrology is used to verify the field geological logging.
	The total length and percentage of the relevant intersections logged.	 Core is photographed in both dry and wet form and logging is done in detail.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Diamond core is sampled as quarter core only; cut by the field crew on site by diamond saw.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	 AC and 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.
	For all sample types, the nature, quality and appropriateness of the	 Sample preparation follows industry best practice involving oven drying, coarse crushing and pulverising.
	 sample preparation technique. Quality control procedures adopted for all sub-sampling stages to 	The field crew prepares and inserts the QAQC certified reference materials into the relevant calico bags.
	maximise representivity of samples. • Measures taken to ensure that the	OREAS and Geostats standards have been selected based on their grade range and mineralogical properties, with
	sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	 approximately 12 different standards used. Standards and blanks are inserted approximately every 20 samples or at least one every hole for both diamond, RC and AC drilling.
	 Whether sample sizes are appropriate to the grain size of the material being sampled. 	All geological logging was carried out to a high standard using well established geology codes in Ocris software.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and	All samples are assayed by independent certified commercial laboratories.



	whether the technique is considered partial or total.	The laboratories used are experienced in the preparation and analysis of nickel sulphide ores.
	■ For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	No Geophysical tools or handheld XRF instruments were used to determine any element concentrations that were subsequently used for MRE or exploration reporting purposes.
	 Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory 	 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.
	checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	 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.
		 Accuracy and precision were assessed using industry standard procedures such as control charts and scatter plots.
		Evaluations of standards are completed on a monthly, quarterly, and annual basis using QAQCR.
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. 	 Geological interpretation using intersections peer viewed by prior company and WSA geologists.
	The use of twinned holes.	Not applicable for this program
	 Documentation of primary data, data entry procedures, data verification, data storage (physical and 	 All primary geophysical data were recorded digitally and sent in electronic format to Newexco Services Pty Ltd for quality control and evaluation.
	electronic) protocols.	 All geological logging was carried out to a high standard using well established geology codes in Ocris software.
		 All other data including assay results are imported via Datashed software.
		 Drillholes, sampling and assay data is stored in a SQL Server database located in a dedicated data center.
	 Discuss any adjustment to assay data. 	■ none
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down- hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. 	■ Downhole surveys completed using the Reflex "Gyro Sprint-IQ™" north seeking gyroscopic instrument on all resource definition and Exploration diamond holes. Exploration RC holes were surveyed down-hole using an Eastman single shot camera. Underground drill-hole collar locations verified via survey pickup.
	Specification of the grid system used.	 MGA94 Zone 51 grid coordinate system is used. A two-point transformation is used to convert the data from AMG84_51 mine grid and vice versa.
	 Quality and adequacy of topographic control. 	Elevation data is captured with hand held GPS, and cross referenced with local topographical maps (DMP produced), SRTM data and recently captured DTM models from recently flown aerial photo surveys.
		 Collar positions were picked up by suitably qualified surface and underground surveyors



Data spacing and distribution	Data spacing for reporting of Exploration Results.	Drill holes are located and specifically planned according to target location and stratigraphic location.
	 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. 	Samples are collected at 1m intervals (Diamond) and 4m composites (RC and AC).
	Whether sample compositing has been applied.	Not applicable
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Most of the drill holes are orientated to achieve intersection angles as close to perpendicular as possible.
	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.	No orientation-based sampling bias has been observed in the data, intercepts are reported as downhole lengths.
Sample security	The measures taken to ensure sample security.	Standard West Australian mining industry sample security measures were observed.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	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.

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	 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. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 Forrestania Nickel Operations comprises approximately 125 tenements covering some 900km2 within the Central Yilgarn Province. The tenements include exploration licences, prospecting licences, general purpose leases, miscellaneous licences and mining leases. 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. Several the Kagara tenements are subject to third party royalty agreements. All the tenements are in good standing. Six tenements are pending grant.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Western Areas has been exploring its wholly owned tenements since 2002. The tenements subject to the Kagara sale which took



		 place in March 2012 were explored by Kagara since 2006 and Lion Ore and St Barbara prior to that time. Western Areas has managed the Mt Gibb JV since 2009 (Great Western Exploration explored the ground prior to that time). Kidman Resources Limited has entered a Farm-in and Joint Venture with Western Areas, with a Stage 1 opportunity to earn in to 50% lithium rights.
Geology	Deposit type, geological setting and style of mineralisation.	 The FNO lies within the Forrestania Greenstone Belt, which is part of the Southern Cross Province of the Yilgarn Craton in Western Australia. The main deposit type is the komatiite hosted, disseminated to massive Nickel sulphide deposits, which include the Flying Fox and Spotted Quoll deposits which are currently being mined. The mineralisation occurs in association with the basal section of high MgO cumulate ultramafic rocks. The greenstone succession in the FNO district also hosts a number of orogenic lode gold deposits of which Bounty Gold Mine is the biggest example. Some exploration for this style of deposit is undertaken by Western areas from time to time in the FNO tenements.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 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. 	■ Drill hole summary details supporting reported intersections from the Parker Dome prospect are captured in the enclosed table. HOLE ID Easting Northing RL Depth Type DIP Azimuth
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. 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 	 Standard weighted averaging of drill hole intercepts were employed. No maximum or minimum grade truncations were used in the estimation. 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. Metal equivalents have not been used



	such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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'). 	■ Drill hole intersections may not be true widths
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	■ Included within report
Balanced reporting	 Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	All relevant assay results have been reported
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	 Included within the report Geophysics Information on structure type, dip, dip direction alpha and beta angles, texture, shape, roughness and fill material is stored in the structural logs in the database
Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 Preliminary plans are included within the report Future explorations programs may change depending on results and strategy



JORC 2012 TABLE 1: WESTERN GAWLER JOINT VENTURE

SECTION 1: SAMPLING TECHNIQUES AND DATA

Criteria	JORC Code Explanation	Commentary					
Sampling techniques	 Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information. 	 Exploration targets were tested and sampled from diamond drilling (DD) core, and holes were mostly drilled perpendicular to the strike (NE-SW) of the stratigraphy. Drill holes were located with handheld 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. All sampling was conducted under WSA QAQC protocols which are in accordance with industry best practice. Diamond drill core (NQ2) is 1/4 core sampled on geological intervals (0.2m - 1.5m) to achieve sample weights under 3kgs. Samples were crushed, dried and pulverised (total prep) to produce a sub sample for analysis by 4 acid digest with an ICP/MS and FA/ICP (Au, Pt, Pd) finish. 					
Drilling Techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	 Exploration targets are tested using DDH drilling. Holes were drilled between 60-90 degrees. A track-mounted Sandvik DDH rig is used Diamond drilling comprises PQ2, HQ3 and NQ2 sized core. 					
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias 	 Diamond core recoveries have been logged and recorded in the database Diamond core are logged and recorded in the database. Overall recoveries are >95% and there was no core loss issues or significant sample recovery problems. Core loss is noted where it occurs. 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. 					



		The drilling by diamond core method has high recoveries.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) The total length and percentage of the relevant intersections logged. 	 Geological logging is recorded and validated in 'Ocris' Logging Software (Toughbook platform) & stored in an Acquire database. Drill core is logged for lithology, mineralogy, mineralisation, weathering, fabric, grainsize, colour, structure, and other relevant features. Geotechnical logging was not completed due to the nature of drill method. Core is photographed both in wet and dry form. All holes have been logged from the surface to the end of hole. Petrology is used to verify the field geological logging.
Sub-sampling techniques and sampling preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 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 Whether sample sizes are appropriate to the grain size of the material being sampled. 	 Diamond core is sampled as either quarter or half core; cut by ALS Perth . Sample preparation follows industry best practice involving oven drying, coarse crushing and pulverising. The field crew prepares and inserts the QAQC certified reference materials into the relevant calico bags. OREAS and Geostats standards have been selected based on their grade range and mineralogical properties, with approximately 12 different standards used. Standards and Blanks are inserted approximately every 25 samples.
Quality of assay data laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. 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. 	 All samples are processed by ALS Minerals (Australian Laboratory Services P/L) in Perth, Western Australia All drill samples are subjected to ICP-MS (ME-MS61 and ME-MS61r for selected EOH samples) analysis using nitric, perchloric, hydroflouric and hydrochloride acid digest. All samples are also assayed for PGE's using PGM-ICP23 Standards and blanks are routinely used to assess company QAQC (approx 1 standard for every 25-50 samples). 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. 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. Accuracy and precision were assessed using industry standard procedures such as control charts and scatter plots. Evaluations of standards are completed on a monthly, quarterly and annual basis using QAQCR.



Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 Primary data was collected using Ocris logging software spreadsheets, on Toughbook computers. All data is validated by the supervising geologist and sent to WSA Perth for further validation and integration into an Acquire database.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	 Drill holes were located using hand held GPS. Elevation data is captured with handheld GPS, and cross referenced with local topographical maps, Downhole Survey Data is collected using a digital Reflex survey tool, MGA94 Zone 53 grid coordinate system is used.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied. 	 Drill holes are located and specifically planned according to target location and stratigraphic location. Drillhole spacing at Mystic varies according to the nature of the target type.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	 The majority of the drill holes are drilled at 60 degrees to achieve the best possible intersection angle in steeply dipping terrane. Heritage and/or environmental constraints may prevent some ideal drilling solutions. No orientation-based sampling bias has been observed in the data, intercepts are reported as down-hole lengths.
Sample Security	The measures taken to ensure sample security.	All samples are captured and prepared for transport onsite under the supervision of WSA staff.
Audits and Reviews	The results of any audits or reviews of sampling techniques and data.	Adrian Black of Newexco Pty Ltd (a member of the AIG), an independent exploration company, has reviewed the data and sampling techniques employed by WSA.



SECTION 2: REPORTING OF EXPLORATION RESULTS

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

Criteria	JORC Code Explanation	Commentary							
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, 	 The Western Gawler Project comprises 6 exploration licenses covering some 4,448km2, of which 5 are held 100% WSA. EL 6087(formerly EL 5077), EL6248 (formerly EL 5199), EL6249 (formerly EL5200), EL5688 and EL5939 Licence EL 5880 (formerly EL 4440) is operated under the Strandline Resources Ltd / Western Areas Ltd Farm-In and Joint 							
	wilderness or national park and environmental settings. 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.	Venture (JV) Agreement. The Fowler JV Project consists of 5 exploration licenses under a Farm In and Joint Venture Agreement (FIJVA) between Iluka (Eucla Basin) Pty Limited and Western Areas Limited, all of which all are held by Iluka (Eucla Basin) Pty Limited. EL5878, EL5879, EL6251, EL5675 and, EL5452.							
Exploration done by other parties.	 Acknowledgment and appraisal of exploration by other parties. 	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.							
		 The South Australian Government has performed widely spaced stratigraphic diamond drilling along a number of traverses in the tenure 							
		The success rate of historical RC drilling is low, while the AC and Diamond drilling was effective.							
		 Gravity, Magneto Tellurics and Airborne Electro-magnetics have been used in selective locations within the project area. 							
		The historical geophysics is deemed to have been effective.							
Geology	Deposit type, geological setting and style of mineralisation.	 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. Similarly aged terranes globally contain significant accumulations of nickel and copper sulphides. Whilst not primary target types, the area may also be prospective for orogenic gold, IOCG and skarn related mineralisation. 							
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: 	All collar related information pertaining to the location of the reported assay results are included within the exploration results table contained within the body of this report.							
	Easting and northing of the drill hole collar	EOH HOLEID Easting Northing RL Depth Type DIP Azimuth (m)							
	elevation or RL (Reduced Level –	21WGDD0015 304907 6602916 215 477.5 DD -60 288.7							
	elevation above sea level in metres) of the drill hole collar	21WGDD0016 305038 6603032 215 489.4 DD -60 295							
	dip and azimuth of the hole	21WGDD0017 304963 6602886 215 309.9 DD -60 290 21WGDD0018 304969 6602879 215 366.4 DD -65 295							
		21WGDD0019 306306 6600844 215 288.5 DD -60 99.7							



	down hole length and interception	21WGDD0020	303573	6593830	156	219.6	DD	-80	315
	depth hole length.	21WGDD0021	303401	6594507	170	267.5	DD	-65	322
		21WGDD0022	304786	6602573	215	420.4	DD	-56.7	284.7
	If the exclusion of this information is justified on the basis that the	21WGDD0023	304685	6602356	215	350.1	DD	-55	285
	information is not Material and this	21WGDD0024	304459	6601435	215	153.7	DD	-60	288.7
	exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	Datum MGA9	4 (Z53)						
Data aggregation methods	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.	 Standard wemployed. used in the The reported arbitrary 0.0 grade interest 	No maxi estimati ed assay 2% Ni cu cepts int	imum or non. on. s have be t-off is ap ernal to b	ninimu en leng plied, v roader	m grade oth weig vith no	trunc ihted. top cu	ations A lowe t applie	were r ed. High
	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.	reported as • Metal equiv				ed			
	 The assumptions used for any reporting of metal equivalent values should be clearly stated. 								
Relationship between mineralisation	 These relationships are particularly important in the reporting of Exploration Results. 	■ Drill hole in	tersection	ons may n	ot be t	rue wid	ths		
widths and intercept lengths	 If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 								
	• If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').								
Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	■ Included wi	thin rep	ort					
Balanced reporting	 Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	All relevant	assay r	esults hav	ve been	report	ed		



Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Multi-element analysis is conducted routinely on all samples for a base metal and PGM suite and potentially deleterious elements.
Further work	 The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 Exploration within the Western Gawler Project is ongoing. 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.