



Poseidon Nickel Limited

Nickel Ready to Go with Bonus Gold

Initiation of coverage

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Nickel Ready to Go, Cash at the Ready Served with Bonus Gold

Poseidon Nickel's (POS) 100%-owned suite of robust, integrated nickel (Ni) assets are in WA's well-established Goldfields Ni belt. With a significant nickel resource base, the ability to restart assets quickly at low capital cost, established processing facilities and strong exploration opportunities, POS represents an outstanding play on increasing Ni prices. The Windarra gold project adds high-margin gold exposure with strong near-term cash flow.

Black Swan Project: Near-Term Low-Cost Start Up – High-Grade Ni Potential

Black Swan has existing processing facilities and resource base with a low start-up capital cost. Ni prices rising to ~US\$8/lb would see Black Swan in its existing form drive a robust project which could be in production within 12 months of deciding to restart. A focussed campaign of drilling already underway at the Golden Swan discovery within the Black Swan channel is targeting the definition of additional high-grade Ni. Success at Golden Swan could support a Black Swan restart earlier amid lower Ni prices by contributing to lower operating costs, longer mine life and/or expanded production.

Lake Johnston: Loads of Exploration Potential

Lake Johnston has the established infrastructure and a small resource in place and represents another strong exploration play. Further drilling and a consolidated mine plan will realise its full potential.

Windarra: Nickel Mine Plan, Gold Option

Windarra Nickel is an established Ni project which has been mined historically and has a mine plan in place. There are strong proximal exploration plays, and the ore has qualities to make it attractive to third-party processors. The Windarra gold project represents the potential to process gold tailings and is a low-cost option in today's strong gold price environment.

Skilled Mgmt Team with Strong Ni Background

With Peter Harold recently appointed as CEO, POS's management team has lengthy and valuable experience in the Australian Ni industry, allowing the assets to be brought to their full potential.

Ni Market: Medium- to Long-Term Strength

Nickel is key to the stainless-steel and battery markets. The use of high-quality Ni in electric vehicle batteries represents the long-term driver for demand and price upside.

Valuation: A\$0.15 – Black Swan Holds the Key

The key to our valuation is the restart of Black Swan. Lake Johnston exploration success and re-start adds significant value, while Windarra gold is a near term, strong cash flow generating project.



Poseidon Nickel owns 100% of the Black Swan, Windarra and Lake Johnston nickel assets located in Western Australia's Goldfields nickel province.

The Windarra gold project adds near-term cash flow potential. Poseidon is in a strong financial position with \$20m net cash at 30 June 2020.

Stock	POS.AX
Price	A\$0.03
Market cap	A\$85m

Company data

Net cash (30/6/20)	A\$19.7m
Shares on issue	2.6B
Options Outstanding	Nil
Code ASX	POS
Primary exchange	ASX

Next steps

Definition of high-grade Golden Swan deposit

Windarra gold project

Restart Black Swan project

Further exploration – all three projects

POS share price – 1 Year



Investment Thesis: A Nickel Option with a Gold Kicker

Poseidon Nickel's (POS) portfolio of nickel (Ni) assets represent Ni price optionality. Existing infrastructure at two of the three assets and a 395,000t resource give low-capital-cost, fast start-up options. The Ni market is leveraged to the take-up of electric vehicles, as high-quality Ni is a vital input into lithium-ion batteries. This represents upside to the pricing of the commodity over the medium to long term. Additionally, the Windarra gold project offers short-term cash flow generation, where the gold price can be locked in and high margins generated.

Recent Events

- June 2020, Windarra project: Gold tailing scoping study released
- April 2020, Black Swan project: High-grade Ni discovery at Golden Swan 7.6m @ 8.8% Ni inc 2.1m @ 15.9% Ni
- March 2020, Black Swan project: Golden Swan massive sulphide intersection
- March 2020, Black Swan project: 106% upgrade of Ni reserve to 6.880 Ni tonnes at Silver Swan
- March 2020, Windarra project: Windarra intersects 5m @ 0.75% Ni from 12m depth
- November 2019, Black Swan project: Significant Ni intercepts at Black Swan Underground
- November 2019: Peter Harold appointed CEO; Derek La Ferla appointed Independent Chairman
- September 2019, Black Swan project: Black Swan Underground drilling update
- August 2019, Black Swan project: Silver Swan indicated and inferred resource upgraded to 16,030 tonnes of Ni metal @ 9.5% Ni

Potential Near-Term Catalysts and Timing

- Ongoing: Exploration success – all three projects; Ni price increases
- Q3 2020: Golden Swan high-grade Ni drilling campaign
- Q4 2020: DFS completion and approval of Windarra gold project
- Q4 2021: Commencement of Windarra gold project
- TBA: Approval of restart of Black Swan
- TBA: Offtake agreements for Ni production
- TBA: Potential processing of third-party ores at Black Swan/Lake Johnston

Valuation – A\$0.15 – Black Swan the Key Asset

Risks and Sensitivities

Key project risks are:

- project delays/cancellations: delays in recommencing Black Swan and Windarra gold; delays in commencing operations at Lake Johnston
- poor exploration results
- extended period of low Ni prices
- capital cost increases for projects.

Key pricing and valuation sensitivities are:

- commodity prices: the Ni price and the gold price (any hedging of the gold price will decrease this sensitivity)
- exchange rates: US\$/A\$
- project commencements: commencement of Black Swan and Windarra Gold
- costs: operating and capital cost changes
- the discount rate

Financials – Strong Cash Position

POS is in a very strong financial position with net cash of \$19.7m.

Nickel Mining in WA – An Established World-Class Nickel Province

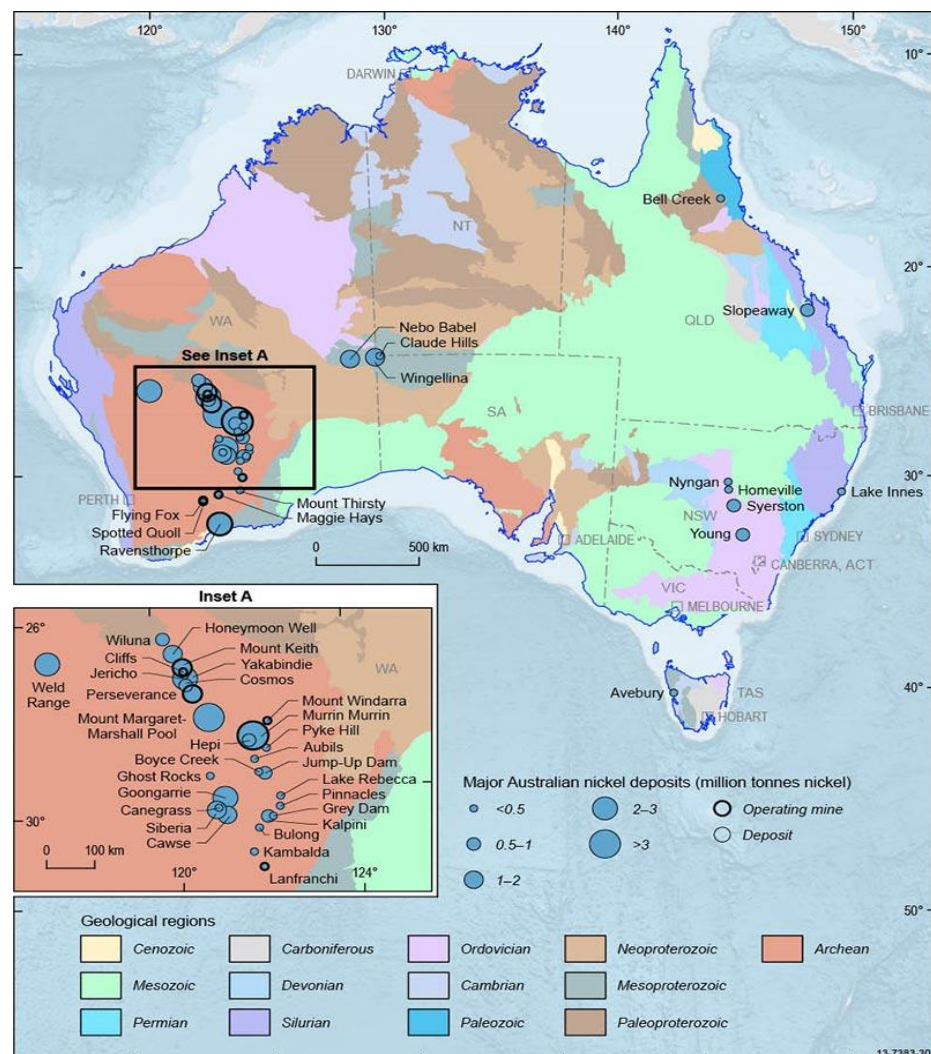
All of POS's Ni assets are located in Western Australia (WA), where Ni has been mined since the late 1960s. Australia has one of the largest holdings of economic Ni resources in the world with approximately 25% of global resources.

The regulation of mining in WA is well established and transparent. Once approved, mining tenure is secure. Approval processes can be complex and take time, environmental obligations are quite strict, and Native Title requirements need to be strictly adhered to, but all processes are well understood by the mining industry. Australia's ranking in the World Bank's 'Ease of Doing Business Index' is 14, putting it comfortably in the top quartile.

Ni is commonly present in two principal ore types – sulphide and laterite ores. Some of the world's largest Ni sulphide and lateritic deposits occur in Australia, predominantly in WA, which holds about 90% of the country's economic Ni resources. **Sulphide ores** are made up of compounds of sulphur chemically bound to a metal and are typically derived from volcanic or hydrothermal processes. About 40% of known Ni resources are found in sulphides. **Laterite ores** are formed near the surface following extensive weathering and occur abundantly in tropical climates around the equator or arid regions of central WA or southern Africa. Approximately 60% of known Ni resources are found in laterites. Most of Australia's Ni resources are located in laterite deposits (such as Murrin and Ravensthorpe in WA).

POS projects are Ni sulphide ores consisting of both **massive sulphide** and **disseminated** deposits. Massive sulphide deposits are those that consist almost entirely of sulphides. Disseminated deposits consist of clots or patches of sulphides. The proportion of sulphide minerals, and therefore the metal grades, are generally higher in massive sulphide deposits. Disseminated is typically low-grade, high-volume ore which presents as a smear of nickel.

Exhibit 1 – A snapshot of WA's Nickel Province



Source: Geoscience Australia

Asset Portfolio: Several Attractive Options on Improving Ni Market

Overview of the Portfolio: Combined Resource – 395,530 Tonnes of Contained Ni

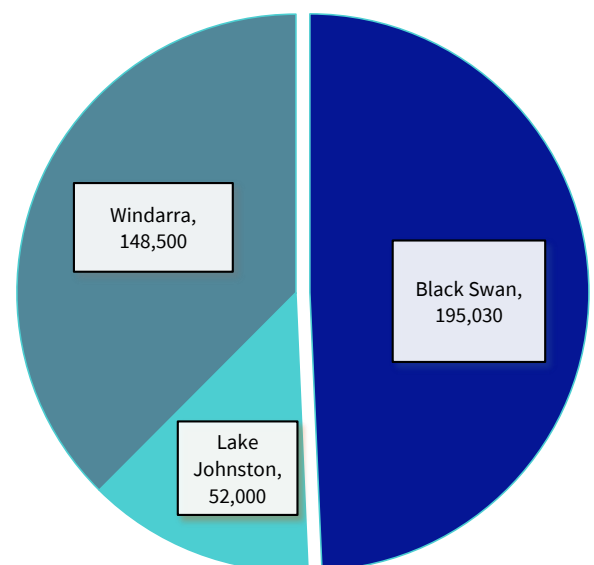
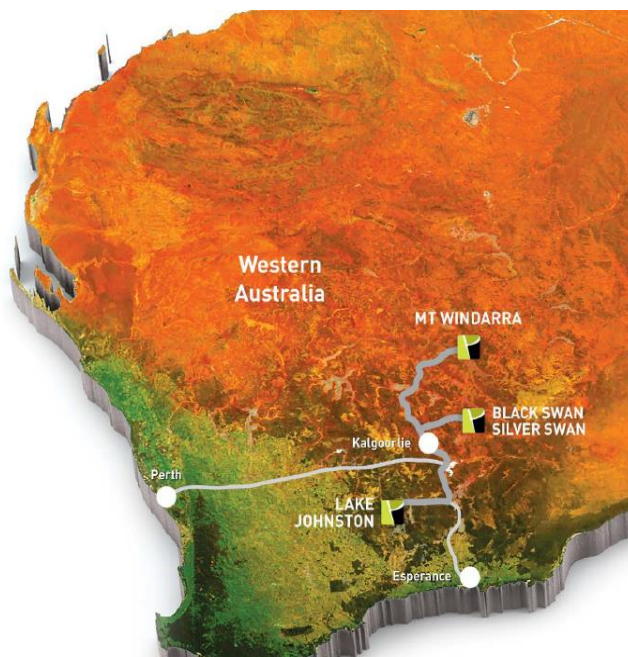
POS presents several attractive options on an improving Ni market. The portfolio has a mix of existing mine and processing capacity as well as material exploration upside which could lead to mine life extension and/or new economic orebodies.

The **Black Swan project** is located some 50km northeast of Kalgoorlie, in a prime mining location with strong regional infrastructure and a skilled labour and contracting workforce available. Black Swan's processing plant previously operated at over 2mtpa rates and produced over 15kt of contained Ni in concentrate. Black Swan has a strong history of producing a high grade Ni concentrate and represents a low-capital-cost, rapid-entry option into an improving Ni market, with a number of exploration opportunities that have strong potential to add to the project's mine life.

The **Windarra Nickel project** sits some 250km due north of Black Swan in WA's Mt Margaret Goldfields, about 25 km west of Laverton. The project, in a well-established mining precinct, is well serviced by regional infrastructure with a skilled labour and contracting workforce available. Since 2008, POS has completed over 550 drill holes for ~70km of drilling on the project to bring the historic mine resources into JORC-compliant status and has discovered a new resource at Cerberus. Additionally, POS has delineated a 183 koz **gold resource** within the Mt Windarra tailings. A Pre-Feasibility Study (PFS) has been completed on the gold tailings project and POS is progressing into a Definitive Feasibility Study (DFS).

The **Lake Johnston project** represents a strong exploration play both locally and regionally. The project is located approximately 440km east of Perth and some 250km southwest of Black Swan. The site has existing mining, processing, office, workshop, and accommodation infrastructure and is accessed by the Hyden–Norseman road. Operations were historically managed on a fly-in/fly-out (FIFO) basis from the onsite airstrip. The project has approved exploration and mining leases located on vacant crown land. The existing 1.5Mtpa processing facility at Emily Ann underwent a \$7 million refurbishment in 2011. The Maggie Hays Ni mine and Emily Ann orebody have both been re-evaluated and have discovered additional resources. POS's Abi Rose discovery was made with POS using modern exploration and assessment techniques.

Exhibit 2 – POS project locations and Ni resources (tonnes): Black Swan (Ni), Windarra (Ni + gold), Lake Johnston



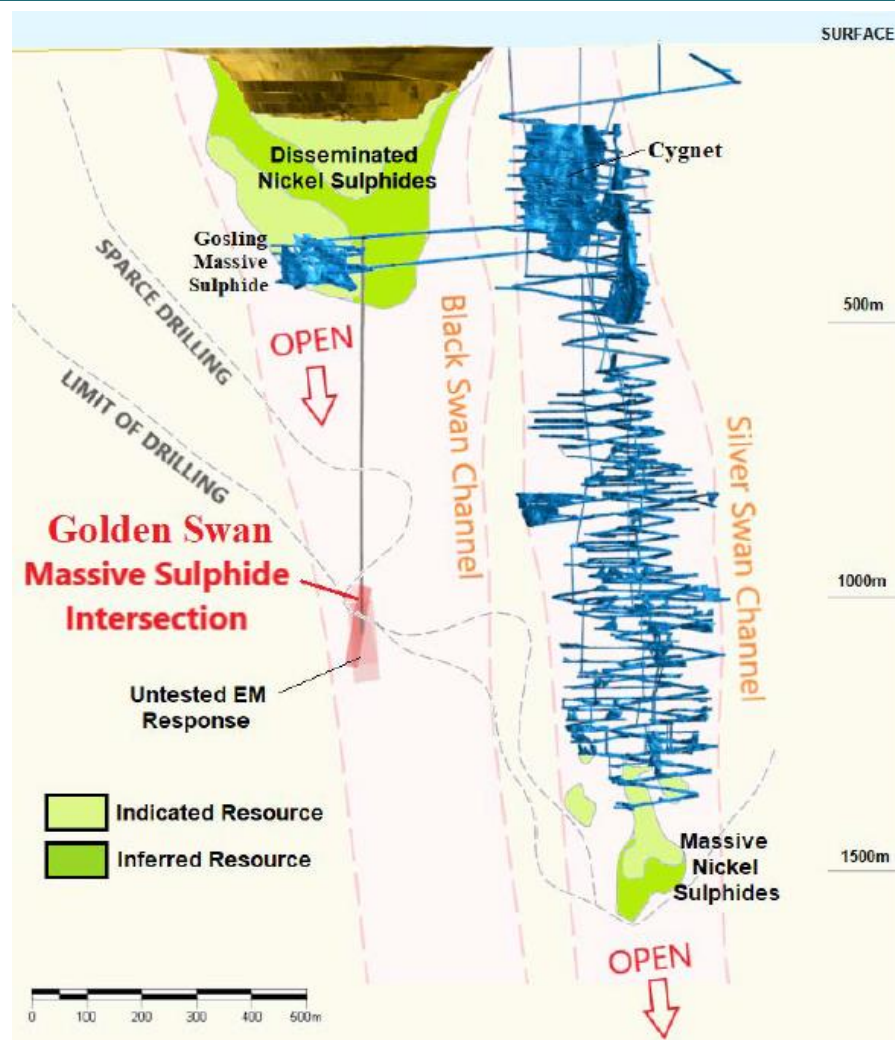
Source: POS.

Black Swan – Ready to Go; Highly Leveraged to Exploration Success and an Improved Nickel Market

The Black Swan project represents POS's nearest-term Ni play. The project includes the Black Swan, Silver Swan, Golden Swan and Cygnet deposits, all of which offer exploration and resource expansion opportunities (Exhibit 3 shows the project's resource area). A Feasibility Study (FS), completed on the asset in 2018, concluded that Black Swan is capable of a quick restart when the Ni price is consistently above US\$8.00/lb and processing 1mtpa. The current Ni price sits at around US\$5.80, having sustained pressure from Nickel Pig Iron (NPI) supplies into the market. We expect the Ni price to increase as demand for Ni into the battery market increases substantially over time (Refer to Ni market segment later in this report for more detailed analysis of the Ni market).

As part of the plan to restart Black Swan, POS is progressing local and regional exploration, focusing particularly on the high-grade Golden Swan discovery. The strategy is to support a substantial increase in annual production, lowering of operating costs and/or extension of the project mine life through the application of state-of-the-art Ni exploration techniques. The Company has a history of finding new Ni orebodies through the application of leading-edge technology.

Exhibit 3 – Project mineralisation and resource area (resource area defined in green)



Source: POS.

Project resources and reserves

The Black Swan project contains:

- resources of 195,000t of contained Ni (see Exhibit 4)
- reserves of 28,300t of contained Ni (see Exhibit 5).

The Black Swan project consists of four broad geologically based mineralised areas: Black Swan, Golden Swan, Silver Swan and Cygnet. The resource estimate covers the main Black Swan deposit as well as the deeper Silver Swan deposit. Further drilling and analysis of the deposit has been conducted since the resources and reserves were announced, and there is significant potential for these to increase.

The resource was used as the basis for the 2018 FS which has defined a restart of the Black Swan mine (see next section for details).

Exhibit 4 – Black Swan project – mineral resource estimate: 195,030t contained Ni

Nickel Sulphide Resources	Mineral Resource Category												
	INDICATED			INFERRED			TOTAL						
	Tonnes	Ni%	Ni Metal	Tonnes	Ni%	Ni Metal	Tonnes	Ni%	Ni Metal	Co%	Co Grade	Cu%	Cu Metal
	(Kt)	Grade	(t)	(Kt)	Grade	(t)	(Kt)	Grade	(t)	Grade	(t)	Grade	(t)
Black Swan	9,600	0.68	65,000	21,100	0.54	114,000	30,700	0.58	179,000	0.01	4,200	NA	-
Silver Swan	108	9.4	10,130	61	9.7	5,900	168	9.5	16,030	0.19	316	0.4	679
TOTAL	9,708		75,130	21,161		119,900	30,868		195,030		4,516		679

Source: POS.

Exhibit 5 – Black Swan project – ore reserve estimate: 28,300t contained Ni

Nickel Sulphide Reserves	ORE RESERVE	
	PROBABLE	
Silver Swan Underground	5.2	6,800
Black Swan Open pit	0.63	21,500
Total	0.81	28,300

Source: POS.

Feasibility Study (FS) – supporting a project restart at the right nickel price

POS completed a FS in July 2018, assessing the potential restart of the Silver Swan underground, Black Swan open pit mine and processing plant at Black Swan.

The study was initiated to update previously completed studies including an analysis of the geological model, resource model, geotechnical studies, a re-design of the mining methodologies used for the orebody and an analysis of the necessary work required to restart the process plant and infrastructure.

The FS found that the project's resource and reserve support a 3.5-year project, producing ~7,500t of Ni concentrate pa. The operations can be restarted within 12 months of project authorisation.

Estimated costs of the project from the FS

- Development capital cost of A\$30m, working capital of A\$25m
- C1 cash cost of US\$3.18/lb: operating cash costs including mining, processing, geology, OHSE, site G&A, concentrate transport, royalties, less by-product credits divided by Ni in concentrate produced (100% payable basis)
- All-in sustaining cost of production (AISC) of US\$5.10/lb payable equivalent (C1 cash costs plus mine development and sustaining capital on a payable basis)
- Breakeven Ni price for the project (including capital): US\$5.91/lb

Status of the assets and plans for restarting the project

The Black Swan processing facility has been on care & maintenance (C&M) and all assets remain in reasonable condition. Some deterioration of the plant is evident and previously stockpiled Ni ore has been tested to determine Ni recovery and concentrate quality. Safety works on the processing facility have been completed and the ladderway rehabilitation in Silver Swan underground has been ~85% completed.

The basis of the FS is that ore previously mined and currently stockpiled at Black Swan will be processed at Black Swan. Combined mill feed is anticipated by POS to average 1.1 million tonnes per annum compared to process plant capacity of 2.2 million tonnes (representing upside expansion potential).

POS has conducted further drilling to improve the resource definition. Although not included in the DFS numbers, the subsequent drilling results show substantial upside potential to the project.

Tenure and approvals

The majority of operating licences necessary to restart operations at Black Swan are in good standing.

Mining and processing

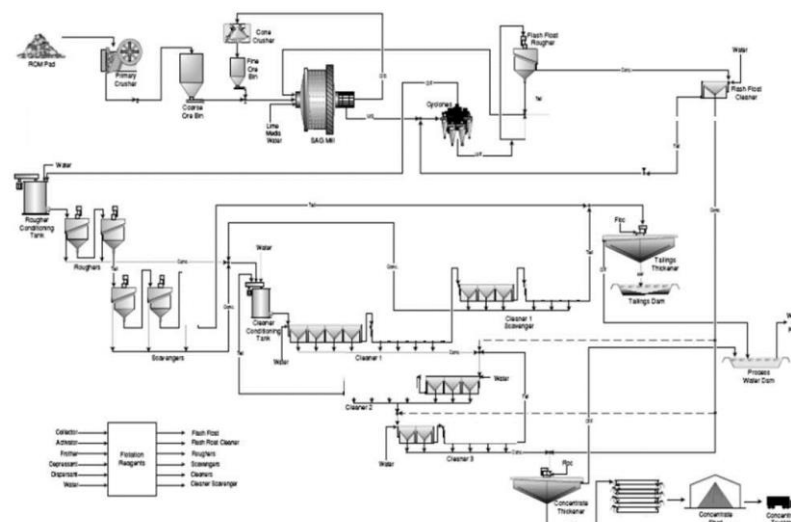
Mining

The Black Swan mine is a continuation of a straightforward open-cut mine, continuing on from the existing pit. Silver Swan is a continuation of an existing underground mine, with further extension of the decline to access the resource. The proposed underground mining method is the Avoca method.

Processing

The Black Swan processing plant employs industry-standard flotation circuit to produce a Ni concentrate that could be sold to local Ni smelters/refiners such as BHP Nickel West or to overseas buyers (smelters and traders). The concentrate is expected to be of commercial quality. Excess capacity exists in the processing facility (approximately 1mtpa), which could allow POS to process third-party ores via a tolling agreement or mine gate purchasing.

Exhibit 6 – Black Swan processing plant



Source: POS.

Tailings management

An existing tailings dam is in place to store tailings.

Key site infrastructure

The key site infrastructure and facilities which are already in place include:

- Black Swan processing plant and admin facilities
- power supply – the project is connected to grid power with other options being considered
- water supply
- communications – broadband and 4G
- tailings facility.

Black Swan – exploration and growth options

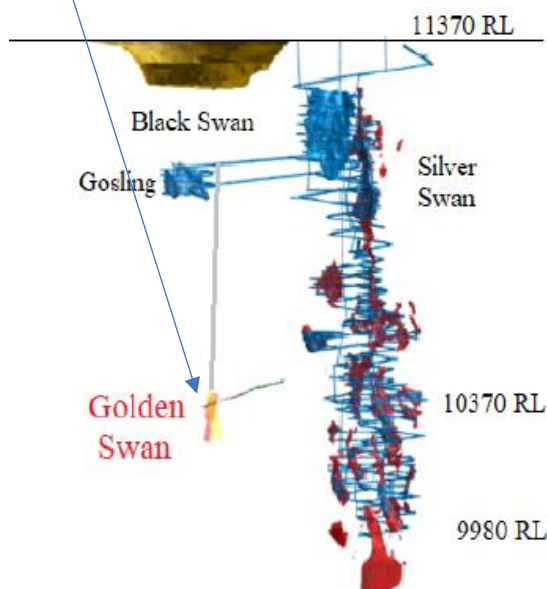
The Black Swan project includes multiple high-quality exploration and resource expansion options. The Black Swan project offers potential expansion of production and mine-life extension opportunities.

Option 1: Golden Swan massive sulphide – high grade and low impurity – a high-quality opportunity

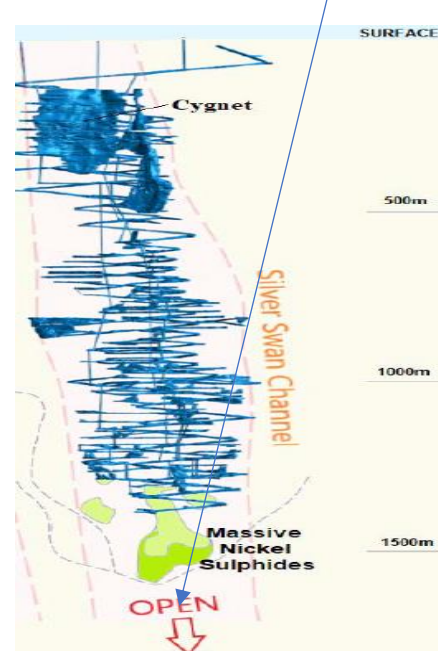
The maiden drill hole at Golden Swan discovered high-grade Ni massive sulphides in the Black Swan channel adjacent to Silver Swan. A total interval of 23.1m @ 4.0% Ni and 0.4% copper (Cu) was obtained from the drilling results, a result that is extremely encouraging. The Ni content is as good as the best ore in the neighbouring Silver Swan while the arsenic content is only one-fifth. The upper or lower limits of the mineralisation is not known yet, so the planned electro-magnetic (EM) survey will determine whether the mineralisation extends upward towards the Gosling deposit. Drilling has commenced on Golden Swan post COVID-19 restrictions being eased. The exploration will be assisted with the installation of fixed loop EM to improve resolution of broader zones of potential.

Exhibit 7 – Golden Swan (LHS) Cygnet and Silver Swan Massive Sulphide (RHS)

Golden Swan Discovery (~1000m depth)



Silver Swan potential open at below 1500m



Source: POS

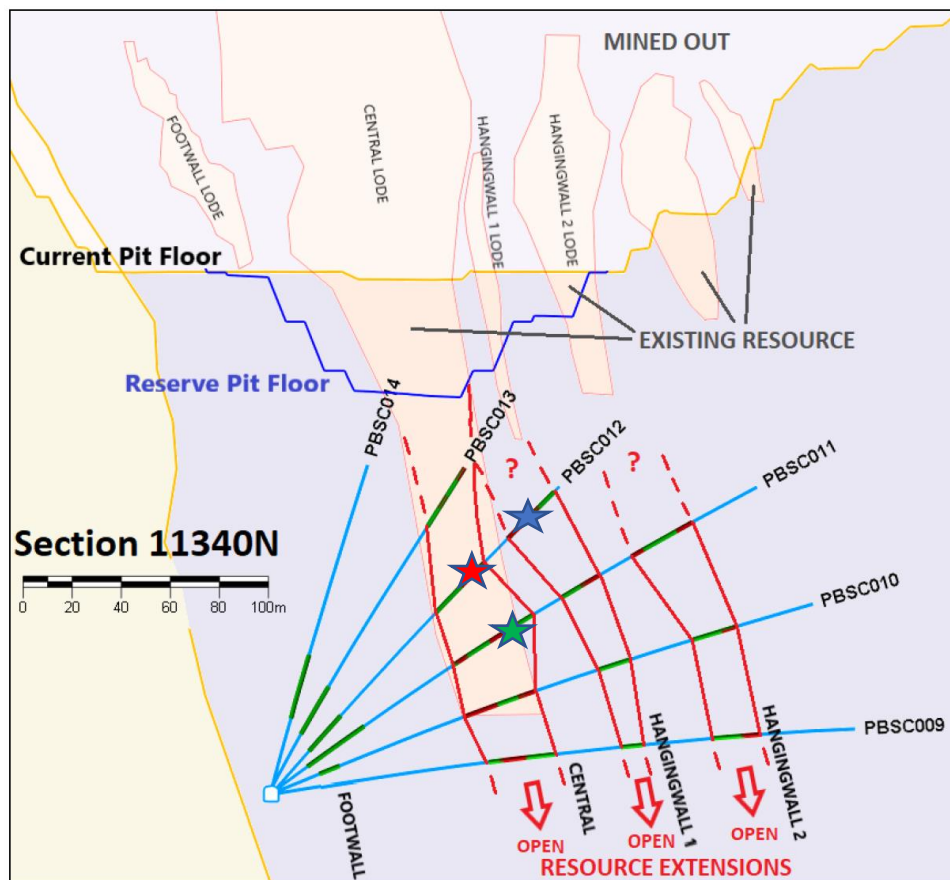
Option 2: Black Swan disseminated – more nickel below the existing pit

A 14-hole, 2,481m underground trial drilling in 2019 discovered multiple higher-grade zones featuring:

- 28m @ 0.95% Ni **including 13.5m @ 1.27% Ni** (PBSC012: blue star in Exhibit 8)
- 31.5m @ 1.00% Ni **including 18.0m @ 1.20% Ni** (PBSC012: marked with red star)
- 28.5m @ 1.07% Ni **including 6m @ 1.61% Ni and 7.5m @ 1.31% Ni** (PBSC011: marked with green star)

The mineralisation is in close proximity to the current Silver Swan workings and evidence suggests it continues beyond the current Black Swan mineral resource. Exploration in this area presents POS with a significant opportunity beyond the current mine plan.

Exhibit 8 – Black Swan disseminated prospects



Source: POS.

Option 3: Cygnet disseminated – making the most of existing nickel

The Cygnet massive sulphide orebody has been mined out, but a significant disseminated deposit remains in the wall of the mine. The mine is on C&M and POS will investigate the opportunity to include the mineralisation in the next resource calculation (see Exhibit 8 above).

Option 4: Silver Swan massive sulphide – high grade and remains open below current resource – strong expansion and mine life extension opportunity

The Silver Swan massive sulphide deposit is an important component of the resource and reserve for the Black Swan restart project, with the 2019 drilling programme increasing the resource by 30% and the reserve by 106%.

Importantly, the deposit remains open below the current resource and presents POS with a strong opportunity to explore the deposit further and expand the resource. Successful results from the exploration of this deposit will present POS with options to increase the level of production of Black Swan and/or extend the mine life.

History of Black Swan

Silver Swan commenced in 1996, with the processing facility decommissioned in 2007. Black Swan began in 2004 and operated until 2009 when it was put into C&M due to poor Ni prices created by the GFC. Late 2006 saw the Black Swan plant upgraded to 2.15mtpa. In 2007 Norilsk Nickel acquired Black Swan via the purchase of Lion Ore Mining. In 2014 POS purchased Black Swan from Norilsk as Norilsk exited the Australian Ni sector. In 2018, after a feasibility study, \$75m was raised to restart production.

Windarra Project – Nickel Prospectivity and Low-Risk Cash from Gold

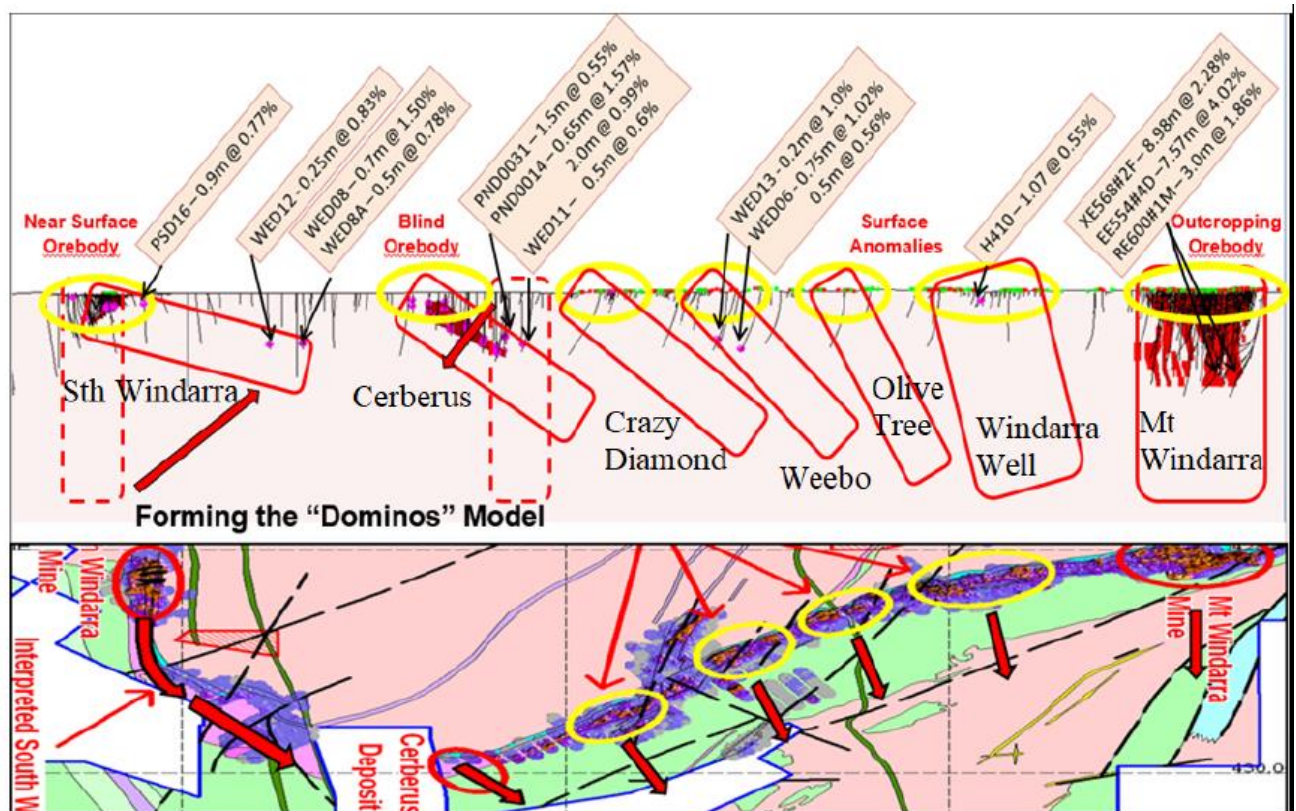
The Windarra project represents a strong opportunity to expand the Ni inventory and examine the options of processing the ore commercially. The project also presents a near-term, low-capital opportunity to generate cash flow from reprocessing gold tailings located at the project, and to take advantage of high gold prices.

Windarra Nickel comprises three main tenements:

- Mt Windarra and South Windarra, the original Ni deposits for POS in the 1960s
- Cerebus, a project discovered by POS in 2008.

There has been 8 mt of ore mined out of Windarra, producing 84,000 t of Ni. The main focuses going forward for the Windarra project are the Cerebus deposit and exploration of the Crazy Diamond prospect and other identified Ni targets.

Exhibit 9 – Windarra Nickel projects



Source: POS.

Project resources and reserves

The Windarra deposit consists of three broad geologically based mineralised areas: Mt Windarra, South Windarra and Cerebus. There is a recent exploration focus lying between Cerebus and Mt Windarra at Crazy Diamond.

The details of the resource are in Exhibit 10. In summary, the Mt Windarra underground mine remnants contains resources of 71,500 t of contained Ni and the Cerebus deposit a resource of 69,000 t of contained Ni.

Exhibit 10 – Windarra Nickel project – mineral resource estimate: 148,500t contained

Nickel Sulphide Resources	Mineral Resource Category												
	INDICATED			INFERRED			TOTAL						
	Tonnes	Ni%	Ni Metal	Tonnes	Ni%	Ni Metal	Tonnes	Ni%	Ni Metal	Co%	Co Grade	Cu%	Cu Metal
	(Kt)	Grade	(t)	(Kt)	Grade	(t)	(Kt)	Grade	(t)	Grade	(t)	Grade	(t)
Mt Windarra	922	1.56	14,000	3,436	1.66	57,500	4,358	1.64	71,500	0.03	1,200	0.13	5700
South Windarra	772	0.98	8,000	-	-	-	772	0.98	8,000	NA	-	NA	-
Cerberus	2,773	1.25	35,000	1,778	1.91	34,000	4,551	1.51	69,000	NA	-	0.08	3600
TOTAL	4,467		57,000	5,214		91,500	9,681		148,500				9,300

Source: POS.

Exploration to expand nickel inventory and medium-term commercialisation

The exploration program at the Crazy Diamond Prospect intersected both gold and Ni. The Crazy Diamond Prospect is the next komatiite channel to the north of POS's Cerberus Discovery. Ni was intersected in a 5m zone 10m below the surface and is a Kambalda style mineralisation which is usually cheaper and simpler to explore. The recent success at Crazy Diamond confirms prospectivity.

A small group of selected samples were assayed for gold resulting in 1m @ 0.51 g/t Au from 30m and 2m @ 0.45 g/t Au from 33m. Additional intersections >0.1 g/t Au also occurred.

Additional assaying of samples will be undertaken based upon a detailed structural interpretation of the prospect with more of a focus on potential gold mineralisation. This will then be combined with POS's existing gold dataset to assist further exploration.

The early exploration results have confirmed that Windarra has exploration potential for both gold and Ni. The Windarra mining region represents a strong medium-term play.

Tenure and approvals

All operating licences necessary to restart operations at Windarra are in good standing.

Mining and processing

Mining

The Cerebus mine has full mine development plans in place, with Mt Windarra's mine decline having been partially refurbished in 2011 (but has since reflooded). Both developments are underground mines.

Processing

There are no processing facilities at Windarra. However, the ore properties would make ideal feed for blends of ore for potential processors such as BHP's Mt Keith concentrator some 300 km to the north.

Processing the ore at POS's Black Swan plant would require a Ni price of US\$10/lb to be economic due to the distance involved in transporting the ore.

Tailings management

An existing tailings dam is in place to store tailings.

Key site infrastructure

The key site infrastructure and facilities include:

- underground facilities at Mount Windarra (to be dewatered)
- full mine plan at Cerebus
- power supply – the project needs to be reconnected to the grid
- water supply
- tailings facility

Windarra Gold Tailings Project – Low-Cost Short-Term Cash Flow Option

The high gold price environment has allowed POS to study the viability of reprocessing the tailings from old gold workings at Windarra and extracting the valuable remnant gold (and silver by-product). The project is low technical risk, low capital and operating cost framework, and has attractive project economics. A PFS has been completed and the strong results have allowed the company to proceed with a more detailed DFS which will be completed in Q4 CY2020.

The Windarra gold project offers POS a low-cost option that can generate strong cash flows in a short time frame.

Project resources and reserves – recently upgraded – 2012 JORC compliant

Exhibit 11 – Windarra gold project – mineral resource estimate: 179,000oz gold (Au)

Gold Resources	INDICATED				
	AU (oz)	Ag (g/t)	As (ppm)	Cu (ppm)	Ni (%)
North Dam	91,000	1.9	1,770	360	0.1
South Dam	14,000	0.6	630	369	0.26
Total	105,000	1.6	1,540	360	0.13

Gold Resources	INDICATED			
	AU (oz)	As (ppm)	Cu (ppm)	Ni (%)
Central Dam	74,000	435	270	0.3

Source: POS.

Pre-Feasibility Study (PFS) – low capital option

The Windarra gold project aims to produce approximately 44,000 oz gold. The project has a proposed capital cost of A\$25m and is of low technical risk. The project is based on simple hydraulic mining of the tailings and straightforward processing of the gold at a rate of 1.5mtpa to recover approximately 42% of the in-situ gold in the tailings. The AISC of the project is estimated to be A\$1291/oz.

The current gold price is A\$2500/oz (the price on which the project is based). The project will run for approximately three years based on processing the resource of 4.5mt in the North and South Dam.

POS anticipates the plant could be repurposed for Ni processing at the end of the gold project.

The project is low risk and low cost and capitalises on the high A\$ gold price. The gold price can also be very easily locked in for the project via the use of hedging, giving a guaranteed cash flow. The PFS estimates net cashflows for the project of A\$30.4m and a payback of 15 months.

Tenure and approvals

As part of the proposed DFS, POS will work with the WA State Government and other regulatory authorities to determine the most appropriate approval pathway to develop the gold tailings project. POS has recently secured a three-year extension (to June 2023) to an environmental works approval for the project. The approval permits the depositing of gold and Ni tailings into the South Windarra open pit, with the concurrent extraction of raw water required for processing. The Company is engaging with the relevant government departments to obtain an amendment to the works approval in order to reflect the deposition of gold tailings only.

Mining and processing

Mining

The gold tailings will be mined via hydraulic mining which is able to recover 100% of the contained gold. This mining system uses high-pressure water cannons on the tailings for onsite collection and transmission of the slurry, via a pipeline, to the tailings processing facility. The mine operations will be a phased approach, with the North tailings dam mined first followed by the South tailings dam, with the water sourced from the disused South Windarra open pit mine, located approximately 17km to the south of the tailings dams.

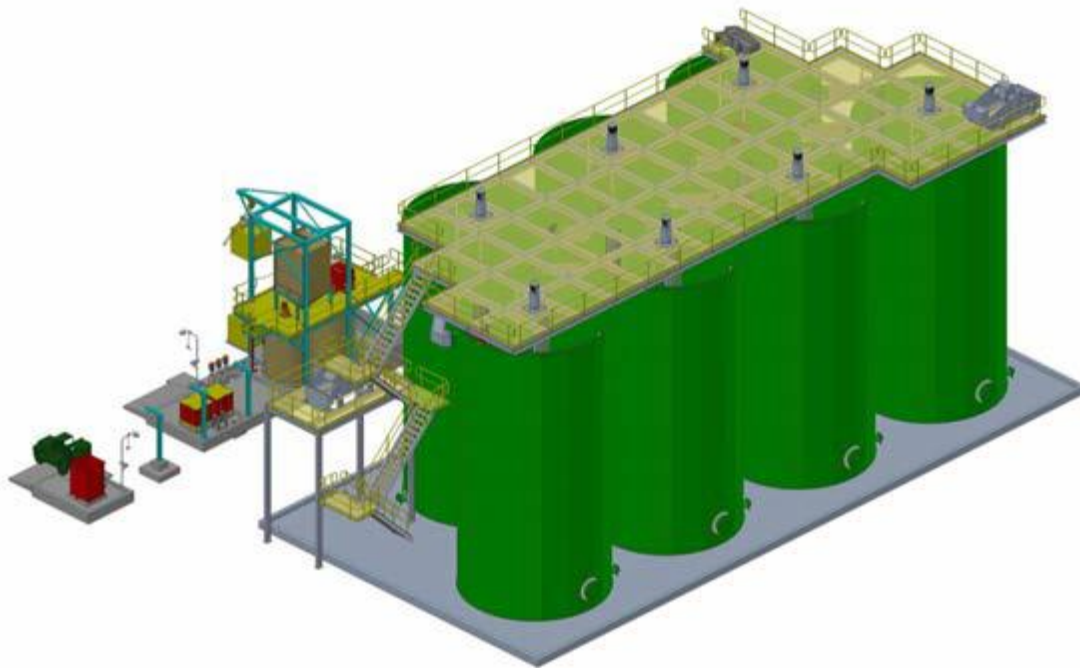
Processing

The plant is a cyanidation leach process which is a standard processing system in the gold mining industry. The capacity of the plant will be 1.5 million tonnes per annum. The processing circuit includes the following major areas:

- pre-leach thickener
- leach and adsorption
- carbon elution
- carbon regeneration
- services and reagents.

The planned recovery of gold through the plant is 42.3%.

Exhibit 12– Windarra Gold Processing Plant



Source: POS.

Tailings management

Tailings will be deposited into the South Windarra pit.

Key site infrastructure proposed

The key site infrastructure and facilities include:

- high-power water guns for hydraulic mining
- processing plant
- power supply – on-site generator
- water supply from South Windarra pit
- South Windarra pit for tailings.

History of Windarra

In 1969, a prospector with POS discovered the Poseidon Ni deposits at Mt Windarra and pegged some 40 claims in the area for the company.

Ni world-wide was in high demand and low supply due to the Vietnam war and the discoveries created one of the largest minerals booms the Australian Stock Exchange had ever seen.

In 1971 Mt Windarra opened and produced 1mt of 10% Ni in concentrate over the next few years. The price of Ni fell in the mid-70s and POS was de-listed. WMC took over Windarra and operated it until 1991, closing and rehabilitating it in 1994.

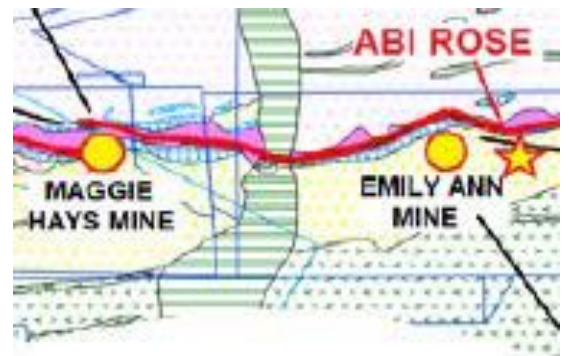
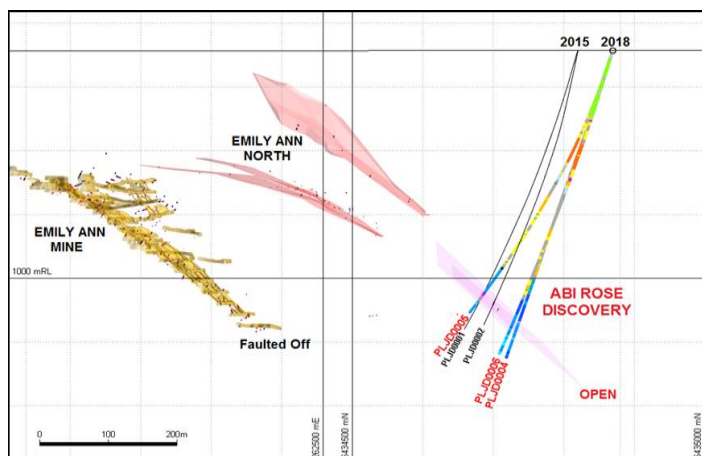
In 2006 the rights and obligations for Windarra were passed to Niagara. In 2007 Niagara was renamed Poseidon Nickel. In 2008, POS raised \$50m for the refurbishment of Windarra Underground, but when the GFC struck, Windarra was placed on C&M. In late 2010 Ni prices improved, and POS raised a further \$20m to develop Windarra.

Lake Johnston – Exciting Exploration Opportunities with Existing Infrastructure

Lake Johnston has historical Ni production in 2001–2014 from the Maggie Hays and Emily Ann deposits. POS has discovered a new orebody, Abi Rose, which sits outside the historical exploration area. POS is currently reviewing a new geological model, with the potential to provide a larger-scale project above the existing infrastructure of 1.5mtpa.

Lake Johnston represents another strong opportunity to expand the Ni inventory and examine the options for processing the ore commercially.

Exhibit 13 – Lake Johnston – Abi Rose discovery and historical mine locations Emily Ann and Maggie Hays



Source: POS.

Project resources and reserves

The Lake Johnston deposit consists of three broad geologically based mineralised areas (see Exhibit 13):

- Emily Ann: mined out
- Maggie Hays: 52,000t of Ni resource
- Abi Rose: the exploration focus; requires more exploration and modelling in order to establish a resource.

Exhibit 14 – Lake Johnston Nickel Project – mineral resource estimate: 52,000t contained Ni

Nickel Sulphide Resources	Mineral Resource Category												
	INDICATED			INFERRED			TOTAL						
	Tonnes	Ni%	Ni Metal	Tonnes	Ni%	Ni Metal	Tonnes	Ni%	Ni Metal	Co%	Co Grade	Cu%	Cu Metal
	(Kt)	Grade	(t)	(Kt)	Grade	(t)	(Kt)	Grade	(t)	Grade	(t)	Grade	(t)
Maggie Hays	2,600	1.6	41,900	900	1.17	10,100	3,500	1.49	52,000	0.05	1,800	0.1	3,400

Source: POS.

Exploration to prove geological model with prospects to expand capacity

The drilling program to date at Abi Rose has consisted of six holes, all of which have successfully intersected Ni (with copper) and confirmed that mineralisation continues within and outside the limits of historical exploration and is open at depth. POS has interpreted that there are intrusives of Ni and copper within the system that add an extra dimension to the standard komatiite hosted sulphide system.

The drilling completed in 2018 intersected massive nickel-copper bearing sulphides including:

- 1.54m @ 1.82% Ni & 0.18% Cu from 465.7m
- 1.54m @ 3.39% Ni & 0.37% Cu from 450m
- 0.18m @ 7.89% Ni & 0.19% Cu from 465m.

The exploration results along with other geological evidence prove that POS's interpretation of the geological model is correct. Approvals are in place to undertake expanded exploration drilling which will target the strike extent and locate the source of the intrusive style of mineralisation discovered at Abi Rose. The implications of this model from the geological evidence gathered to date suggest that the Abi Rose mineralisation represents a conduit through which Ni-copper sulphides have travelled and that the Emily Ann Ni deposit is the upper continuation of this conduit. Abi Rose, and in turn Emily Ann, are now interpreted to have been fed from a deeper magmatic source to the north.

Abi Rose has the potential to significantly expand the resource of Lake Johnston and lead to a larger-scale project beyond the current facilities of 1.5mtpa.

Tenure and approvals

All operating licences necessary to restart operations at Lake Johnston are in good standing.

Mining and processing

Mining

The Lake Johnston project was successfully mined over a period of 13 years using standard underground mining techniques, with POS expecting Abi Rose to be mined in a similar manner.

Processing

Mining was ceased at Lake Johnston in 2014 and the plant placed on C&M. The processing plant is a standard float and concentrate Ni plant as commonly used throughout the WA sulphide Ni belt. The processing plant has capacity to process 1.5mtpa of Ni ore.

Tailings management

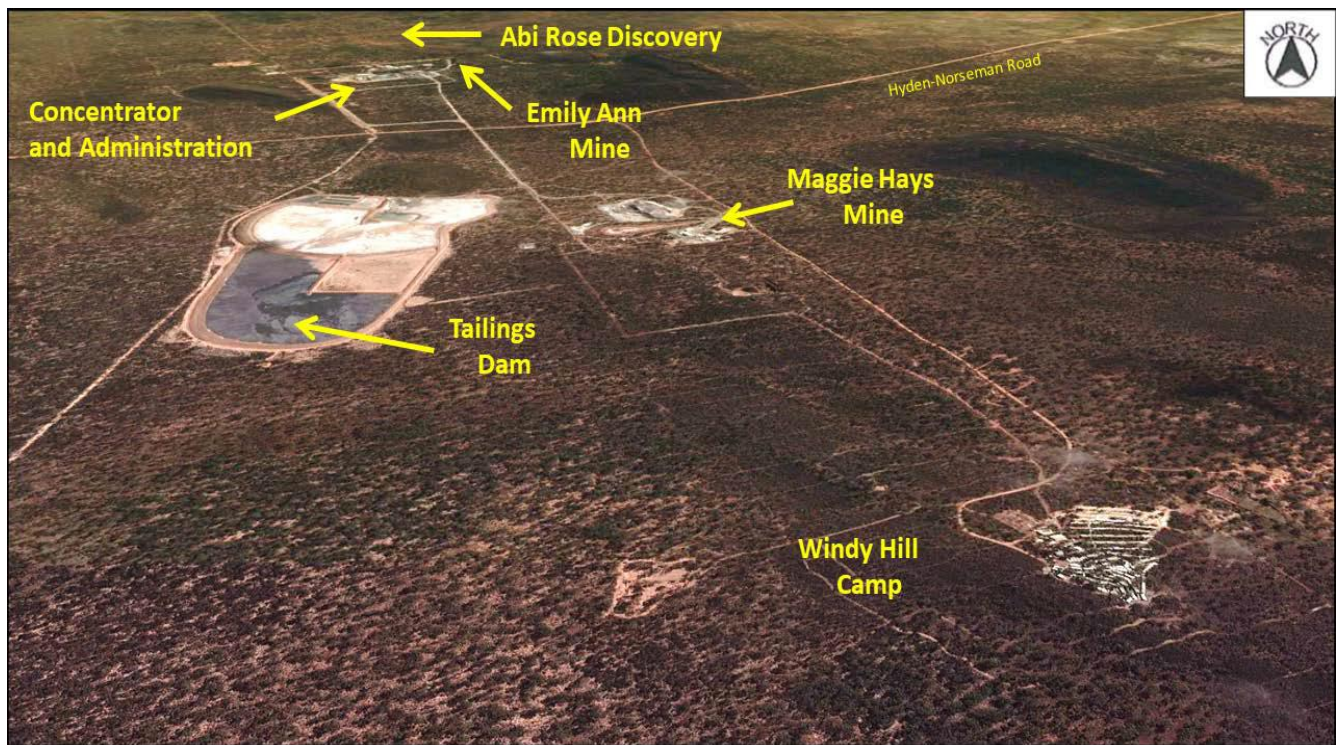
An existing tailings dam is in place to store tailings.

Key site infrastructure

The key site infrastructure and facilities in place include:

- concentrator and administration block
- tailings facility
- airstrip
- on-site power reticulation (the diesel generators have been moved)
- accommodation camp.

Exhibit 15 – Lake Johnston operations overview



Source: POS.

History of Lake Johnston

In 1995 the Maggie Hays deposit at Lake Johnston opened. In 2006 Maggie Hays was upgraded from a 500kt plant to 1.5mtpa. In 2014, POS purchased Lake Johnston from Norilsk Nickel. In 2016, high-grade sulphide was discovered at Abi Rose.

The Nickel Market: Battery Demand Requires Quality Ni; Demand from Electric Vehicles Continues to Look Strong

What is Nickel and What Is It Used For?

Ni is a silvery-white metal that has relatively low electrical and thermal conductivities, has strength and toughness at elevated temperatures, is easily shaped into thin wires and flat sheets and is capable of being magnetised. More than 80% of Ni production is used in alloys. When alloyed with other elements, Ni imparts toughness, strength, resistance to corrosion and various electrical, magnetic and heat-resistant properties.

About 65% of world Ni output is consumed in the manufacture of stainless steel, which is used widely in the chemical, motor vehicles, and construction industries and in consumer products such as sinks, cooking utensils, cutlery and whitegoods. The key growth area for Ni is for its use in the cathode materials for rechargeable lithium-ion batteries, used extensively in the electric vehicle (EV) market. Other minor uses for Ni include jewellery and medical applications, such as artificial hips and knees.

Nickel Is a Relatively Small Market

The global Ni demand is around 2.4mtpa. This relatively small size (compared, for example, to global copper demand of around 26mtpa) makes the Ni market open to volatility and large swings in price. Shifts in demand and supply conditions can also have significant effects on the levels of stocks in the market, which are relatively small also.

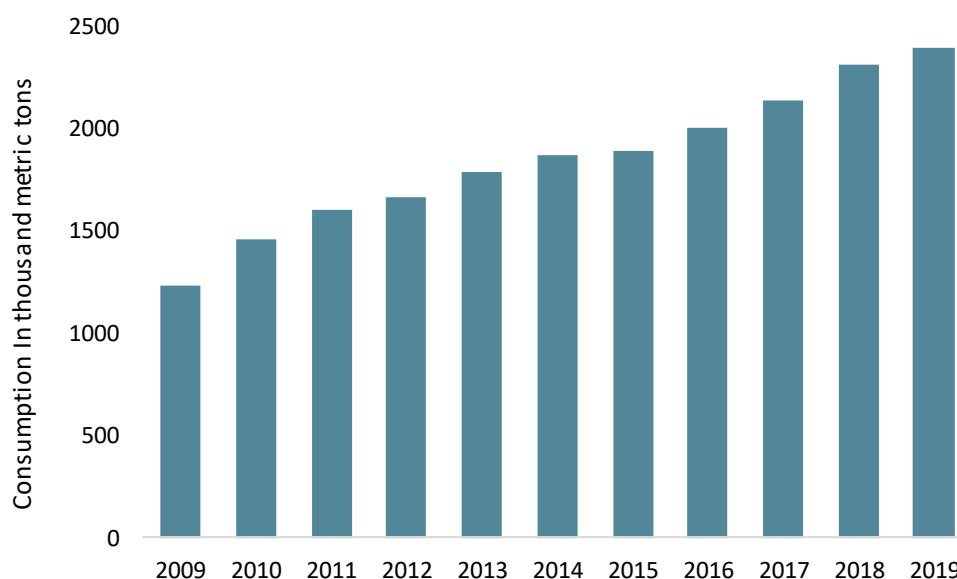
What's Been Happening in the Nickel Market?

A quick look back at 2019

Demand

Global Ni demand was around 2.4mt in 2019, an increase of about 4% over 2018, lower than in the previous three years (when demand grew by an average of 7% per year). This was largely because of a slowdown in demand growth from the stainless-steel sector in 2019. Chinese stainless-steel demand remained strong, but demand growth slowed in the rest of the world. There was also a slowing in the growth of demand for Ni relating to nickel ion batteries due mainly to lower EV sales growth following the Chinese government's withdrawal of EV subsidies.

Exhibit 16 – Global nickel demand, 2009–2019



Source: Statista.

Supply

The main supply issue hitting the Ni market in 2019 was the situation regarding Indonesian supply. In September, Indonesia announced it would stop exporting unprocessed Ni in January 2020 (two years earlier than expected), creating supply shortage fears in the market. Indonesia was the world's biggest Ni exporter, mining a quarter of the global supply in 2019.

The other key factor affecting supply of Ni is Chinese Nickel Pig Iron (NPI). Chinese NPI producer's source low grade ore from predominantly the Philippines and Indonesia, and upgrade it using blast furnaces. The NPI is then sold to stainless-steel producers and competes directly with Ni supply sourced from higher-grade primary mine supplies such as Australian nickel sulphide producers. NPI is high on the cost curve for Ni due to high costs associated with production, shipping the ore and dealing with a large level of waste. NPI producers tend to enter the market in times of extreme price hikes and continue to produce beyond their marginal cost of production before exiting the market, usually leaving a drag on prices.

LME stocks

The London Metal Exchange (LME) is the primary indicator for the level of stock of Ni. The Ni stock level began 2019 at around 205kt. Fears that the market could face supply shortages caused a sharp drawdown of exchange stocks. LME stocks, which had stood at 152.7kt at the end of September, decreased to 64.5kt by December.

Prices

Ni prices saw little upside in the first half of 2019, but this changed in the third quarter of the year as the Indonesian government brought forward its export ban on unprocessed ores to 2020. Rumours and reports that such a move was being contemplated first emerged in early August, which caused the price to begin its rally. The LME Ni cash price averaged US\$6.10/lb in July but reached an average of US\$8/lb in September following confirmation from the Indonesian government that the ban had been brought forward. Prices fell back in Q4 but remained elevated compared to recent annual averages. The 2019 annual average price was the highest since 2014.

The Nickel Market in 2020 and Beyond

The First Half of 2020

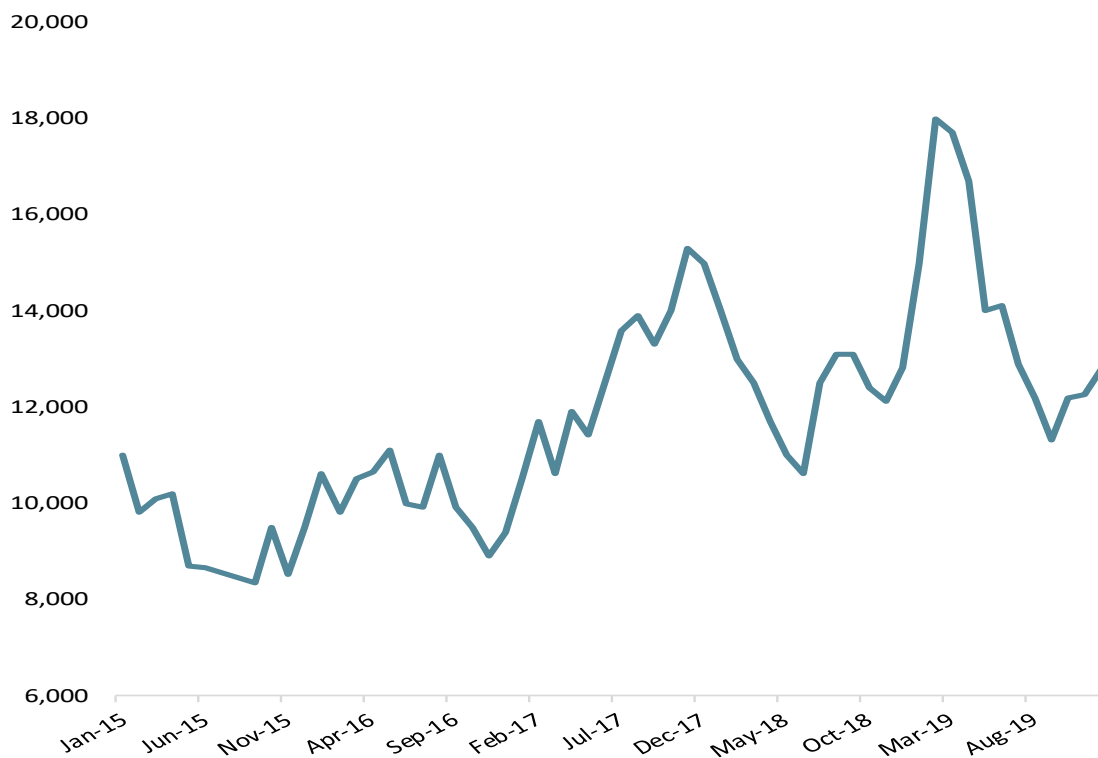
The Ni price in the first three months of 2020 came under pressure, declining from US\$6.35/lb to around US\$5/lb. The supply side of the market became the focus as the fallout of the Indonesian export ban was not considered to be a dramatic as first envisaged.

Chinese NPI producers sustained supply into the market as they continued to source low-grade Ni from the Philippines and work through their own stockpiles.

The price has recovered to around US\$12,500/t (US\$5.65/lb) in the second quarter, with the NPI situation remaining a concern to the market in the short term.

The LME stockpiles increased from their low of 64,000t in December to around 230,000t in March and remained steady through June. While the market has steadied, prices remain at the lower end on a historical basis.

Exhibit 17 – Ni price – 5 years (US\$/tonne)



Source: Factset.

Exhibit 18 – Ni LME stocks –5 years (tonnes)



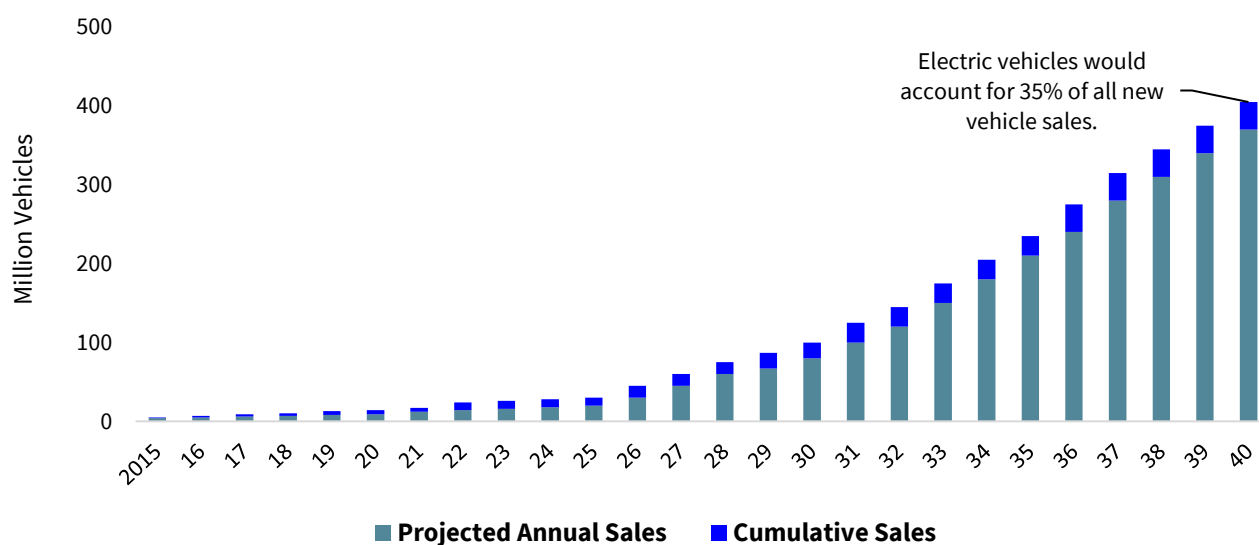
Source: Factset.

What Will Drive the Nickel Market Going Forward?

Ni plays a crucial role in the manufacture of stainless steel and therefore stainless steel is core to Ni demand. Chinese consumption of stainless steel continues to be the driver of the growth of demand, and consensus forecasts have growth of stainless demand to continue at around 4-5% pa over the next decade.

The key however to a structural increase in the price of Ni is the demand for EVs.

Exhibit 19 – Projected EV Sales



Source: Bloomberg, Marklines

The push for automotive electrification is set to provide a dramatic upside to Ni. Nickel, used in the cathode materials for lithium-ion batteries, is being consumed in increasingly large quantities. Its outlook is supported not only by the rapid volume growth of the EV market, but also owing to the increased intensity of use of Ni, as part of efforts to improve the energy density of batteries and extend driving range. It is reasonable to consider a significant increase in Ni use in batteries, and that it will grow significantly from current levels of around 3-4% of Ni demand.

Nickel sulphate is the key raw material for the Ni in lithium-ion batteries and producing this will require an increase in the supply of Class I material. Nickel sulphate is made by refining nickel-containing intermediate feed sources into a high-quality product in crystal form by removing the impurities that are typically found in the intermediate feed sources. Nickel sulphide producers such as those out of Australia produce high-quality Ni with a reasonably low amount of impurities, making them ideal for battery supply. Demand for Ni in lithium-ion batteries will soon make batteries the second-largest end-use application for nickel. One of the key issues for the Ni industry going forward will be how to supply the material that the battery industry will require.

Primary Ni demand from the battery sector grew more slowly in 2019 than in 2018, due mainly to lower EV sales growth following the Chinese government's withdrawal of EV subsidies. The long-term outlook for Ni demand in batteries however remains strong.

The Nickel Price Going Forward – Forecasts

We expect the Ni market will be stronger going forward given the increase in demand from the battery market. Our price assumption for 2020 is US\$6/lb. We expect the price to increase to US\$7/lb in 2022 and then rise steadily at 2.5% pa going forward. Our forecast Ni prices are discussed in further detail in the valuation section of the report.

Valuation: Black Swan Holds the Key – Exploration Success to Drive Longer-Term Value; Valuation A\$0.15

Valuation Methodology

We value POS at A\$0.15. We have valued POS using a sum of the parts methodology, valuing Black Swan, Windarra Gold and Lake Johnston on a risked NPV basis. Windarra Nickel does not have an existing processing plant on site and as such we have valued Windarra on a multiple of its resource and its exploration potential. We note the potential to use the Gold Plant for Ni production at Windarra and await further confirmation of the plans for the processing of Ni at Windarra before applying an NPV to it. We see a number of potential scenarios for share price upside driven primarily by exploration success.

Exhibit 20 – Valuation Summary

VALUATION	A\$m	EQUITY VALUE A\$/SHARE	Valuation Methodology
Black Swan	\$253.2	0.10	Risked NPV
Lake Johnston	\$85.0	0.03	Risked NPV
Windarra Gold	\$20.8	0.01	Risked NPV
Windarra Nickel	\$35.3	0.01	EV/Resource plus Exploration Spend
ENTERPRISE NPV	\$394.3	0.15	
Add: Cash	\$45.2	0.02	Cash at 30 June 2020
Less: Debt	\$25.1	-0.01	Convertible Note payout value
EQUITY VALUE PRE SG&A	\$414.4	0.16	
SG&A	\$15.2	-0.01	NPV of Corporate Costs
EQUITY VALUE	\$399.2	0.15	

Source: MST est

EV/Resource – Peer Average Multiple sees A\$0.09 Valuation

A common comparison for mining companies is Enterprise Value / Resource. POS has several peers in the Australian market that are reasonably comparable, and POS is trading at a significant discount to those peers despite having a larger resource than some of them. Exploration success leading to higher grades and / or a confirmed start of the Black Swan project should see a lift in this multiple. Valued on a peer average, POS EV/ Resource Valuation is \$232m share value which translates to A\$0.09 per share. We discuss this in further detail later in this section of the report.

Exploration Success at Black Swan Key Driver of Valuation

The current asset suite has a resource base of 395kt of Ni. This compares favourably to peers Mincor and Panoramic. Black Swan is the largest contributor to that resource but sits at a relatively low grade. Per the 2018 DFS, the current grade supports a restart of Black Swan, but only enables the plant to run at half of its capacity. A Ni price of US\$8.00/lb is required to make the decision to restart.

An increase in resources at higher grade could drive an increase in annual production, extend the mine life and lower operating costs. Capital costs of Black Swan are relatively fixed due to the existing plant. The combination of lowered cost and increased annual production leaves a lower required Ni price to restart the project. Golden Swan holds the key to short-term exploration upside, with initial drilling results of 4% Ni (compared to resource grade of Black Swan of 0.58%). POS is currently drilling Golden Swan. Further Golden Swan high-grade results could lead to the construction of an exploration drive from Silver Swan to Golden Swan to enable a full drill out of the prospect and a resource estimate.

Core Assumptions in our Valuation: Project Progress, Nickel Price, Costs

The key driver of the valuation is the restart of the Black Swan project.

We have assumed that all projects are funded by cash and debt.

Exhibit 21 -Core Modelling Assumptions

CORE ASSUMPTIONS	
Price and Currency	
AUD/ USD	0.70
Nickel Price US\$/lb	6.00
Gold Price US\$/oz	1,800
Cost and Financing	
Discount Rate Nickel Projects %	10%
Discount Rate Gold Projects %	8%
Inflation %	2.5%
Interest on Cash %	1%
Interest on Borrowings %	6%
Modelling	
Depreciation	LOM
Taxation Rate	30%

Source: POS, MST estimates.

Nickel price assumptions

We have a view that the Ni price will continue to increase over the next decade. We base this assumption on the demand from electric vehicles and the subsequent pull through of demand for Ni to enhance battery life.

Our base price assumption is US\$6/lb and hold that for the first 2 years, then increasing the price at 5%per annum onwards.

Gold Price Assumptions

We have assumed a spot price for gold, using US\$1800/oz.

Black Swan Project: base-case assumptions

Our base case assumes that:

- the Black Swan project is restarted and with a lower cost base than is currently set out in the DFS and at a higher operational rate (due to excess capacity in the processing plant).
- Our cost estimate starts at US\$3.18/lb and decreases to US\$2.75/lb in the 3rd year of operation. This assumption has been driven by what we anticipate exploration success in the Golden Swan deposit, lifting the grade of the project and ramping up the production levels and increasing the ability to process low-grade stockpile
- there is an exploration drive constructed to Golden Swan and a subsequent resource and reserve
- the exploration programme across Golden Swan, Black Swan, and Silver Swan continues and that there is sufficient exploration success to drive a 10-year project for Black Swan
- annual production starting at 8.8ktpa
- \$54m in initial Capex is assumed for Black Swan and Golden Swan with a further \$25m in Working Capital as per the DFS, and sustaining capital of \$5m p.a.
- the restart decision is made in 12 months' time and the construction takes an additional 12 months.
- the project is risked 75%

Windarra gold project: base-case assumptions

The PFS has demonstrated a robust project. Our base case assumes that:

- the DFS is completed and a decision is made to proceed by the end of CY2020
- the construction period is 12 months and production commences at the start of CY2022
- spot gold prices are used and funded by debt / gold loan
- capex of A\$27m
- mine life is 3 years
- 44koz of gold produced
- Project is risked at 100%

Lake Johnston Project: base-case assumptions

Lake Johnston Ni is longer-term asset and will require exploration success in order to restart. Our base case assumes that:

- exploration success increases resources and drives decision to re start Lake Johnston
- Lake Johnston begins production in FY2024, with a refurbished plant
- capex of A\$50m
- mine life of 10 years
- annual production of 9ktpa
- project is risked at 50%

Windarra Nickel Valuation

Windarra Ni represents another strong exploration target for POS. We consider the project to be less advanced than Black Swan and Lake Johnston given the lack of on-site processing facilities and that the underground mine requires de watering. We expect POS to conduct an extensive exploration programme on the asset over the next few years. We have valued the asset conservatively and expect upside in the valuation through further exploration success.

- Valuation is based on an EV/Resource multiple currently ascribed to POS by the market
- We have added a further \$6m to the valuation representing our estimate of exploration spend for the next 2-3 years.

Valuation Upside: A Number of Potential Scenarios

POS has significant potential for upside. We assume exploration success in our valuation, however we have been conservative with Ni grade and mine life. Further exploration success could lead to increases in grade and mine life extension above our current expectations. The key driver of valuation is Black Swan, which also holds the majority of the resource. Exhibit 22 and Exhibit 23 show the potential increase in valuation from higher grades and mine life extension at Black Swan.

Exhibit 22 – Valuation sensitivity to change in Ni grade

NICKEL GRADE % CHANGE RELATIVE TO BASE CASE GRADE				
-40%	-20%	0%	20%	100%
0.13	0.14	0.15	0.17	0.21

We have included a scenario where Ni grade is increased by 100%. As Poseidon's resources are relatively low grade at the present, a significant high grade discovery may have the potential to double the overall grade of the resource.

Source: MST estimates.

Exhibit 23 – Valuation sensitivity to increase in mine life

Valuation impact from mine life extension above base case			
2 years	5 years	8 years	10 years
0.17	0.19	0.20	0.21

Source: MST estimates.

An Alternative Look at Valuation: Peer Comparisons

A common tool used to assess the value of mining companies in their pre-production phase is to compare the enterprise value (EV) to the resource base in order to see what value the market places on the company's resource and its potential. We have compared POS with a selection of four Australian listed Ni peers in order to compare its relative EV/Resources multiple.

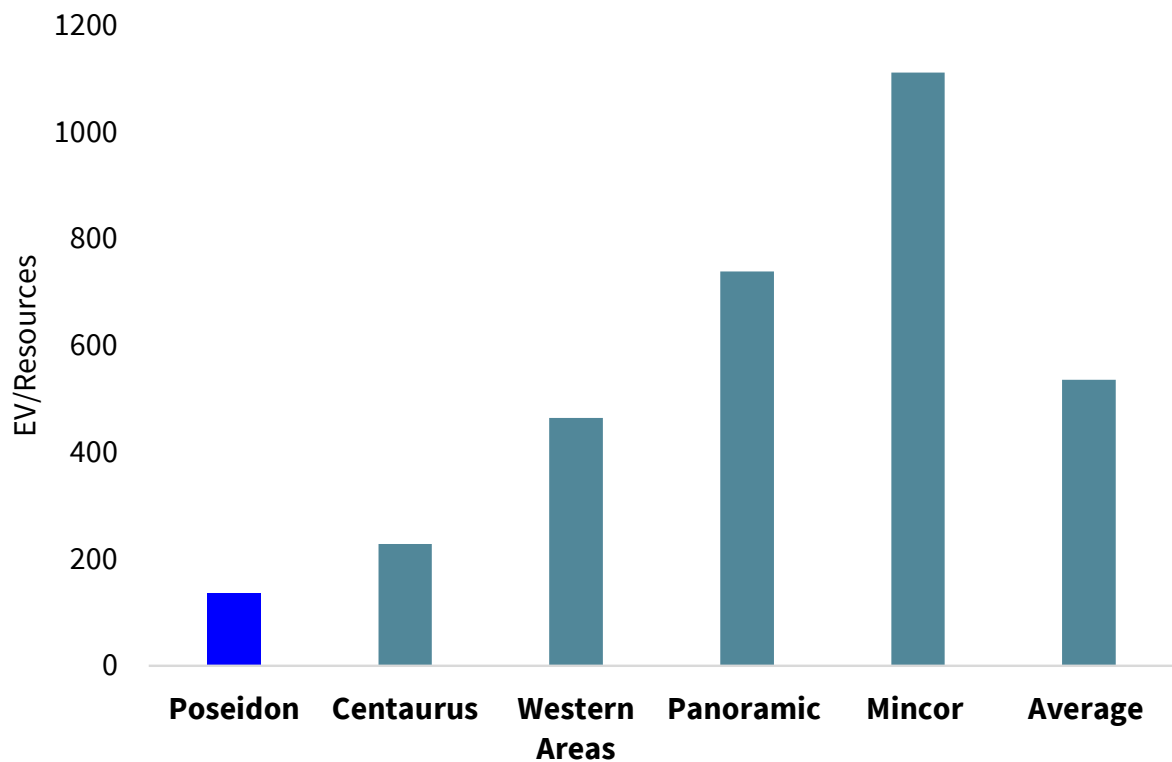
A low EV/Resources multiple when compared with peers

POS is at an EV/Resources multiple significantly below the average of the peer group. POS's current EV is A\$54m. If a peer average EV/Resources multiple is applied to POS, the EV for POS would be some A\$212m (total value 232m inc. cash) or around A\$0.09 per share, around 3x higher than its current share price. We see successful exploration as the key to drive the multiple higher.

It should be noted that due to the different natures of the ore bodies, the comparative stages of development and relative cost bases and Ni grade, this comparison is not a precise one. However, it gives a good indication of relative value and acts as a cross check to the NPV valuation derived. Panoramic Resources and Mincor Resources are the most comparable to POS given they are in pre-production stages with mine restarts planned.

- **Panoramic Resources** is a WA Ni miner which recently suspended operations at its Savannah Ni mine, predominantly due to COVID issues. Panoramic has raised capital recently and has A\$31m in cash. Panoramic has a smaller resource than POS but with a higher grade and could restart the mine relatively quickly.
- **Mincor Resources** has a smaller resource than POS but at a higher grade. A definitive feasibility study (DFS) completed in March 2020 for the company's mine restart plan outlined an initial five-year mining operation delivering 71kt of nickel-in-ore.
- **Centaurus Metals** is at an earlier stage, having recently announced the maiden resource for its project in Brazil. The project is at a higher average grade than POS.
- **Western Areas** is a producing company, which we have included to demonstrate a multiple paid for a small- to mid-cap nickel producer in WA.

Exhibit 24 – EV/Resources – selected nickel companies



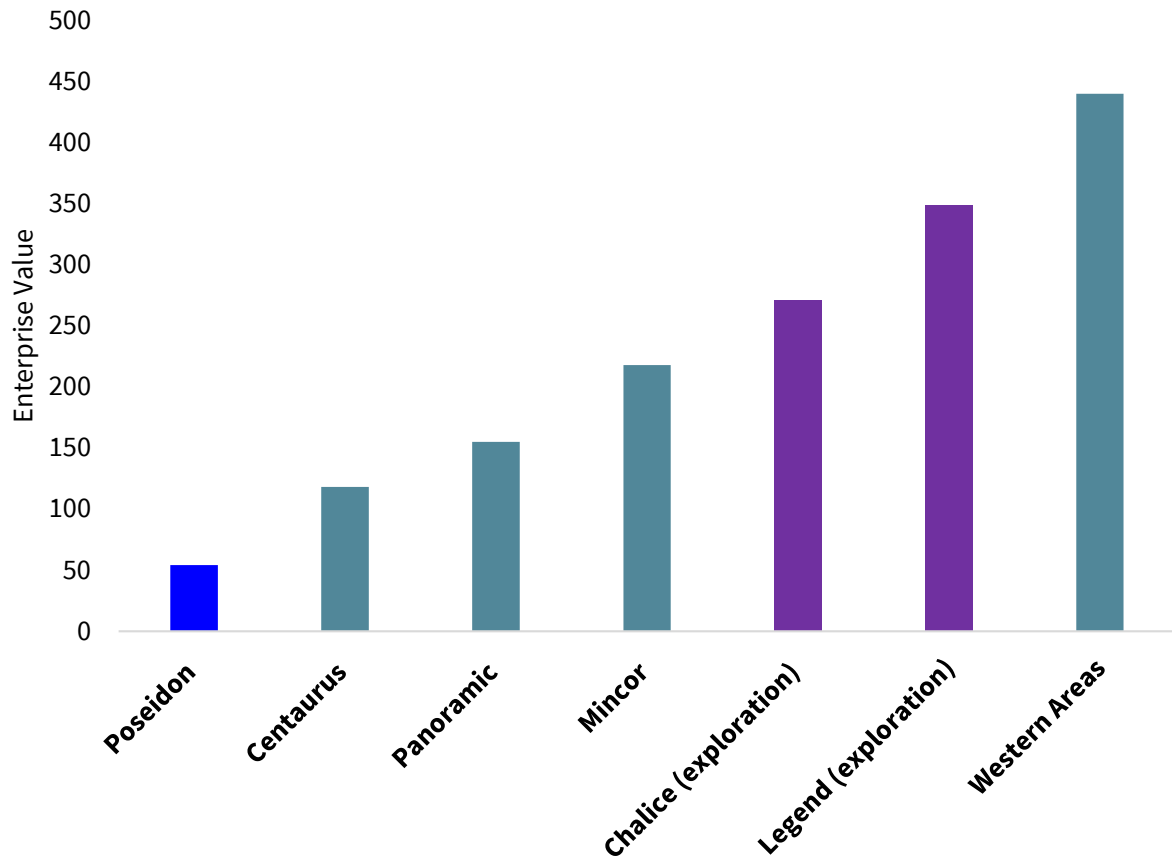
Source: Company information, MST estimates.

Exhibit 25 – Nickel resources, reserves and nickel grade – selected nickel companies

Company Name	Enterprise Value (A\$m)	Nickel Resources (t)	Average Nickel Grade %	EV/Resource	Nickel Reserves (t)	Processing Plant
Poseidon	54	395,530	0.90%	137	28,300	Yes
Centaurus	118	517,500	1.08%	228	0	No
Western Areas	440	947,882	1.10%	464	264,240	Yes
Panoramic	155	209,800	1.56%	739	151,000	Yes
Mincor	218	196,000	3.80%	1112	65,400	Yes
Average	197	453,342	1.69%	536	101,788	

Source: Company information.

Exhibit 26 – Enterprise value (A\$m) – selected nickel companies (including exploration companies)



Source: Company information, Factset

What would drive an increase in EV/Resources?

A number of events could create value within POS and drive its multiple higher.

Exploration success – short term

As shown above with the examples of Chalice and Legend, value is attributed to strong exploration success. The primary exploration target at Golden Swan is very prospective with the initial drilling result being a high-grade Ni result. Further success at Golden Swan should attract an increase in the multiple paid for POS.

Exploration success – longer term

POS's assets present multiple exploration opportunities. Success over time should increase the multiple paid for POS.

Overall increase in grade of deposit

As discussed above, higher-grade deposits are attributed a higher multiple. Panoramic, Mincor and Centaurus all have a higher average grade than POS, contributing to a higher multiple. Once again, further success at the Golden Swan deposit would lead to an increase in the overall grade based on the initial success.

Reduction of operating cost base

The DFS for the Black Swan project notes a C1 cash cost of US\$3.18/lb. This is 35% higher when compared to Mincor's C1 cash cost of US\$2.35. The Black Swan project's cost can be lowered via higher average grades or increased tonnes processed through the mills (or both). Lowering the operating cost base may increase the multiple paid for the stock.

Confirmation of restart of the project

The Black Swan project will take around 12 months to bring into production. This is a short time frame in terms of mining projects due to the existing mine and processing facilities. However, the current Ni price does not support the decision to restart the mine. The market has no certainty as to the start of the project. This compares to Mincor and Panoramic where there is more visibility to the start of projects. A confirmation of restart due to lower operating costs, higher production and higher grades or a combination of any of those would likely lead to higher multiples.

Increase in resource base/mine life

Exploration success would lead to a higher resource. Higher grades would also lead to an increase in the quality of the resource. An increase in the resource size with the same multiple applied would likely lead to an increase in share price and EV, while an increase in multiple due to the increase to the resource would add further value. An increase in resource base could also lead to an extension in mine life and higher valuation.

Further comparison – the value of exploration success

POS has a number of exploration opportunities at its three assets. The primary focus will be the Golden Swan deposit, where the initial hole drilled returned 23.1m @ 4.0% Ni and 0.4% Cu including 7.6m @ 8.8% Ni. Drilling has recommenced at Golden Swan.

Ni drilling success has been rewarded by the market – we highlight two companies in particular that have been well supported by the market for exploration success.

Legend Mining (LEG.ASX) – market cap A\$350m

Legend has had exploration success at its Mawson project in South Australia. It has completed the first phase of a diamond drilling programme and has multiple intercepts with:

- best grades to date - 4.5m @ 3.05% Ni, 2.32% Cu, 0.19% Co from 103.7m
- best intercept to date - 19.8m @ 2.71% Ni, 1.79% Cu, 0.13% Co from 227.8m.

POS's initial results compare favourably to Legend's. Legend has conducted a substantial drilling campaign and has more substance to its results than there are at Golden Swan. Drilling success has seen its market cap increase from around A\$58m in May 2019 to A\$350m currently.

Chalice Gold Mines (CHN.ASX) – market cap A\$350m

The first drill hole at the Julimar Project in Western Australia intersected a broad zone of Ni, copper and palladium mineralisation of 25m @ 2.02% Ni, 0.88% Cu, 8.50g/t Pd and 0.91g/t Pt from 46m. The company continued its drilling programme intersecting further Ni and palladium.

Although Chalice's deposit is not a direct comparison to POS, it does have high Ni value and demonstrates the value placed on exploration success by the market, with its market cap increasing significantly from ~A\$60m at the end of 2019 to ~\$350 million currently.

Key Sensitivities: Ni Prices, Costs, Capex and USD

The key sensitivity is the Ni price. The valuation is also sensitive to changes in capital and operating costs and the US\$ exchange rate.

The key sensitivities, including discount rate, are set out in Exhibits 27–29.

Exhibit 27 – Valuation sensitivity: Ni price

NICKEL PRICE				
-20%	-10%	Base Case	+10%	+20%
0.09	0.12	0.15	0.18	0.21

Source: MST estimates.

Exhibit 28 – Valuation sensitivity: USD exchange rate

USD				
\$0.50	\$0.60	\$0.70	\$0.80	\$0.90
0.22	0.18	0.15	0.13	0.11

Source: MST estimates.

Exhibit 29 – Sensitivity: Operating costs and capex

		CAPITAL COST				
		-10%	-5%	0%	5%	10%
OPERATING COST	-10%	0.20	0.19	0.19	0.19	0.19
	-5%	0.18	0.18	0.17	0.17	0.17
	0%	0.15	0.15	0.15	0.15	0.14
	5%	0.13	0.13	0.12	0.12	0.12
	10%	0.09	0.09	0.09	0.09	0.08

Source: MST estimates.

Positive Catalysts for the Share Price

Key drivers of share price upside

Golden Swan exploration

The Golden Swan prospect is a potential high-grade Ni deposit. Exploration success at Golden Swan could lead to an enhanced Black Swan project and significant valuation upside.

DFS Windarra gold project and approval of project

The DFS for the Windarra gold project will provide further detailed analysis of the project and will lead to likely approval of the project. The short lead time to development of the project and low capital cost could lead to valuation upside.

Exploration success at Lake Johnston/Windarra Nickel

POS is leveraged to exploration success. The Lake Johnston and Windarra projects both have exploration potential. Exploration success at either project accelerates the potential to develop the project and add to valuation.

Approval of restart of Black Swan

The restart of Black Swan could be triggered by either significant exploration success or higher Ni prices, either of which represents upside for POS.

Ni price increases

POS is directly leveraged to higher Ni prices. A sustainable increase in the Ni price would accelerate the potential start of Black Swan in particular, even without exploration success.

Other potential share price catalysts

Exploration success at other Black Swan deposits

Silver Swan, Cygnet and Black Swan disseminated present further exploration potential beyond the highly prospective Golden Swan.

Offtake agreements for Ni production

Any agreements to purchase Ni from POS is a positive indication of the Ni market's acceptance the product.

Potential processing of third-party ores at Black Swan/Lake Johnston

Black Swan and Lake Johnston have processing facilities. Any agreements to process third-party ore could generate cash at high margins.

Gold price increase

Increased gold prices would make the Windarra gold project a higher-value project.

Risks to the Share Price and Valuation

Key risks to share price

Disappointing Golden Swan exploration results

As the key to exploration success, any disappointing result in the Golden Swan exploration programme could lead to delays in the Black Swan project development.

Delays in Black Swan Project

As one of the key drivers of valuation, any delays in the commencement of the Black Swan project would be negative for the valuation.

Extended period of low Ni prices

As the key driver of POS's valuation, Ni prices are the key to valuation. Extended periods of low Ni prices could delay projects, even with exploration success.

Lower gold prices

Lower gold prices may delay or cancel the Windarra gold project, reducing the valuation.

Disappointing exploration at Windarra Nickel/Lake Johnston

As longer-term drivers of value, any disappointing exploration results at Lake Johnston/Windarra could lead to a decrease in share price/valuation.

Other potential risks to share price and valuation

Capital cost increases for projects

Capital cost increases lead to direct valuation decreases. Capital costs at the POS projects are relatively low, and therefore have a lesser effect on valuation but can be negative to stock sentiment.

Operating cost increases

Any increase in operating costs has a direct negative effect on valuation.

Appreciating A\$ vs US\$

An increasing A\$ against the US\$ leads to a decreased A\$ Ni price, reducing cashflow and valuation.

Financials – A Strong Starting Position, with net \$20m in Cash

POS is in a strong financial position.

The company has a net cash position of A\$20m. MST has assumed the cash can be utilised to fund an extensive exploration programme, which we estimate to be approximately A\$5m a year. MST has assumed the Black Swan project is funded by debt.

The Windarra gold project may be funded by a gold loan, without any need to use any of the company's cash position, but we have assumed cash and debt for the funding.

POS has a US\$17.5m convertible note which matures on 30 September 2020. It is highly likely the convertible note will be repaid at maturity, without a replacement financing facility. A payment of A\$25.1 million is forecast at maturity.

We have assumed that any further projects such as Lake Johnston or Windarra Nickel can be funded from Black Swan cash flow or via debt funding.

POS has at 30 June 2019 ~ A\$30.6m in accumulated tax losses, these losses have been applied to earnings, with cash tax being paid from FY2025 going forward.

Project cash flow and EBITDA

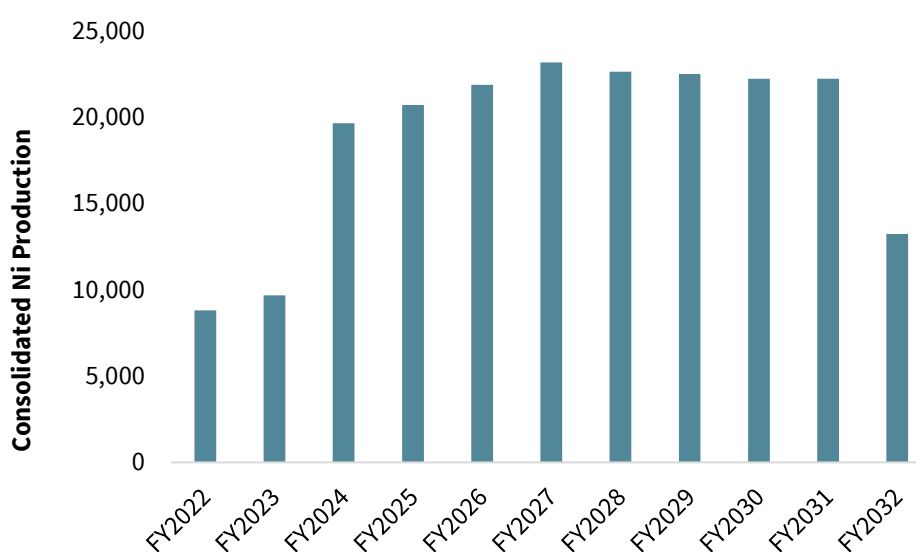
On our assumptions, the Black Swan project will commence production in mid CY2022 and ramp up to full production in CY2023. We have assumed the capital expenditure for the project will be spent in CY2021. The first full year of production is assumed to be CY2023.

We have assumed full gold production at Windarra will start from the beginning of CY2022.

Black Swan is a relatively low-cost project, which will generate EBITDA margins of +30% on our estimates.

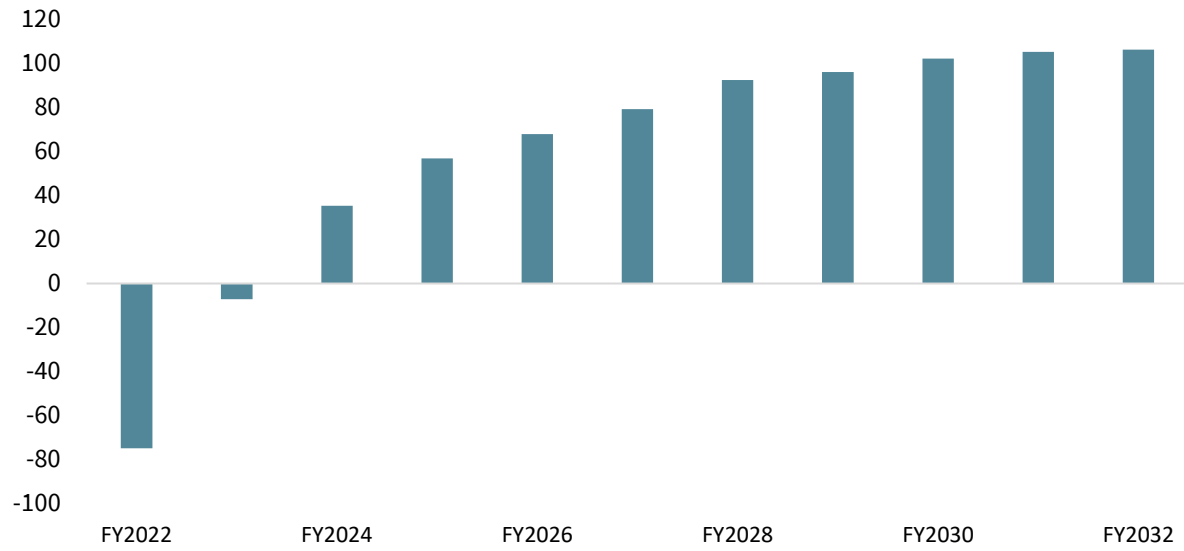
We have assumed the Lake Johnston project commences production by FY2024 on the assumption of exploration success.

Exhibit 30 – POS Forecast Consolidated Ni Production Annual Tonnes



Source: MST estimates.

Exhibit 31 – POS Forecast Cash Flow \$Am



Source: MST estimates.

Financial Statements

Exhibit 32 – Summary financial statements

KEY MODEL ASSUMPTIONS	FY19A	FY20E	FY21E	FY22E	FY23E	FY24E	FY25E
Nickel Production tonnes							
Black Swan				8,800	9,680	10,648	11,713
Lake Johnston						9,000	9,000
Gold Production koz							
Windarra				6.8	16.5	14.2	6.8
AUD/USD				0.70	0.70	0.70	0.70
Price							
Nickel US\$				6.00	6.00	6.30	6.62
Gold US\$				1,800	1,800	1,800	1,800
PROFIT AND LOSS STATEMENT A\$'000	FY19A	FY20E	FY21E	FY22E	FY23E	FY24E	FY25E
Revenue	366	624	0	142,166	179,612	328,850	341,091
Operating Costs	-10,358	-12,267	-2,081	-98,901	-120,123	-223,290	-208,725
EBITDA	-9,992	-11,019	-2,081	43,265	59,488	105,560	132,366
Depreciation	-43	-43	-2,482	-22,644	-25,668	-36,168	-28,273
EBIT	-10,035	-11,062	-4,563	20,621	33,820	69,391	104,093
Net Interest	-460	-250	-4,869	-7,439	-10,560	-9,031	-6,683
Profit before Tax	-10,495	-11,312	-9,432	13,182	23,260	60,360	97,410
Tax Expense	0	0	0	0	0	0	0
NPAT	-10,495	-11,312	-9,432	13,182	23,260	60,360	97,410
BALANCE SHEET A\$'000	FY19A	FY20E	FY21E	FY22E	FY23E	FY24E	FY25E
Cash	25,133	45,222	7,052	37,573	53,737	102,393	179,968
Trade and other receivables	1,312	1,312	1,312	1,312	1,312	1,312	1,312
Other investments - term deposits	35,012	12	12	12	12	12	12
Current Assets	61,457	46,546	8,376	38,897	55,061	103,717	181,292
PP&E	24,744	24,823	97,291	118,416	142,748	111,580	88,432
Exploration and Evaluation Expenditure	60,946	63,842	69,044	74,350	79,762	85,283	90,913
Other Assets/Investments	3,500	3,500	3,500	3,500	3,500	3,500	3,500
Non-Current Assets	89,190	92,165	169,835	196,266	226,010	200,362	182,845
Total Assets	150,647	138,711	178,211	235,163	281,071	304,079	364,137
Trade and payables	2,254	2,254	2,254	2,254	2,254	2,254	2,254
Employee benefits	115	115	115	115	115	115	115
Provisions	3,500	3,500	3,500	3,500	3,500	3,500	3,500
Current Liabilities	5,869	2,369	2,369	2,369	2,369	2,369	2,369
Loans and borrowings	23,142	26,018	74,950	118,720	141,368	104,016	66,664
Convertible note derivative	1,108	1,108	1,108	1,108	1,108	1,108	1,108
Provisions	46,418	46,418	46,418	46,418	46,418	46,418	46,418
Non-Current Liabilities	70,668	73,544	122,476	166,246	188,894	151,542	114,190
Total Liabilities	76,537	75,913	124,845	168,615	191,263	153,911	116,559
Share Capital & Reserves	228,798	228,798	228,798	228,798	228,798	228,798	228,798
Accumulated losses	-154,688	-166,000	-175,432	-162,250	-138,990	-78,630	18,780
Total Equity	74,110	62,798	53,366	66,548	89,808	150,168	247,578
CASH FLOW STATEMENT A\$'000	FY19A	FY20E	FY21E	FY22E	FY23E	FY24E	FY25E
Operating Cash Flow	-9,418	-1,158	-1,629	43,336	59,864	106,097	133,390
Capex	-2,374	-12,098	-80,152	-49,076	-55,412	-10,520	-10,756
Other Investments	-35,012	35,000	0	0	0	0	0
Investing Cash Flow	-37,386	22,902	-80,152	-49,076	-55,412	-10,520	-10,756
Equity Issued	70,915	0	0	0	0	0	0
Debt Issued (Repaid) and Interest	-1,026	-1,655	43,611	36,261	11,712	-46,920	-45,059
Financing Cash Flow	69,889	-1,655	43,611	36,261	11,712	-46,920	-45,059
Change in Cash Balance	23,085	20,089	-38,170	30,520	16,164	48,656	77,575
Opening Cash Balance	2,048	25,133	45,222	7,052	37,573	53,737	102,393
Final Cash Balance	25,133	45,222	7,052	37,573	53,737	102,393	179,968

Source: MST estimates.

Environmental, Social and Governance (ESG)

ESG factors play an integral role in many investors' decision-making. POS's overall ESG profile is strong and has processes in place to ensure that all key ESG factors are covered for a company of its current small size. The board, however, lacks the appropriate level of independent directors and it would be appropriate to appoint at least one more independent director. It is not uncommon for a company of POS's size to have a small board, but it would be in the interest of minority shareholders to have additional independence on the board.

Environmental – POS's Nickel and Gold Projects

The assessment of POS's environmental credentials falls into two categories:

- environmental assessment of the nickel and gold projects
- environmental assessment of POS's key product, nickel.

Assessment of the POS projects

All extractive industries have an impact on the environment. All of POS's projects have been operating mines, and as a result have affected their environment, particularly with relation to the tailings facilities and waste rock disposal. For POS, the environmental impact associated with the restarting of operations is relatively less than for new operations, as waste and tailings are incremental and are adding to existing facilities as opposed to starting with new operations. Modern environmental conditions placed on miners in WA naturally reduce the level of environmental harm from mining operations relative to older ones. POS will need to manage several key areas correctly to minimise environmental damage from the restarting of projects: the management of water, tailings and waste.

Water management

Water is a key input into the processing plants, and in the case of the Windarra gold project, the hydraulic mining of the tailings. Water is also a scarce commodity in WA and has to be managed carefully. POS will use existing water infrastructure from within its projects, and in the case of the Windarra gold project will use water that is sitting within the disused open pit operation. The recycling of water will be key to all operations.

Tailings management

A key to the process is safe management of tailings. All of POS's operations have existing tailings storage facilities which can be used for the start-up of operations, minimising the environmental footprint. The Windarra gold operation will utilise the old pit for the disposal of tailings.

Waste management

Waste rock areas already exist in the POS projects, allowing the projects to have a lower environmental impact than new operations. The processing of the Windarra gold tailings will involve the use of cyanide and mercury. Mercury will be removed. Cyanide will be destroyed in accordance with the International Cyanide Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold.

Assessment of POS's primary product – nickel

The environmental assessment of POS's key product, Ni, is generally positive. A number of factors influence this. Firstly, Ni is a major input into the production of stainless steel. While stainless steel has a significant carbon footprint, sulphide Ni's use in the stainless-steel process creates far less carbon production than the input from NPI, due to significant extra processing in the NPI process and use of polluting blast furnaces. Also, stainless steel has environmental benefits due to its properties of reducing corrosion and its value in the food and medical industries.

The key environmental benefit of Ni is due to the major worldwide push to promote electric vehicles (EVs) as a way of cutting emissions from fossil-fuelled vehicles. This will lead to increased primary Ni consumption in lithium-ion batteries as motor vehicle manufacturers gradually phase out fossil-fuelled vehicles. Government incentives and

regulations have steered battery producers towards higher-energy-density batteries and longer-range options and Ni-bearing cathodes are expected to be the dominant technologies going forward.

Social

The social aspects of POS's business are key to operating successfully in the community and give the Company a licence to operate. For the upcoming projects POS will take steps to:

- promote diversity and develop inclusiveness
- where possible and practical, employ local businesses and contractors for its work
- adopt a zero-harm approach to safety
- be involved in local community groups
- pay wages that are fair and reasonable.

The construction and continuing operations of POS's projects will stimulate regional economies and generate important export revenue for Australia.

Governance

POS's governance is documented in its Corporate Governance Statement. Key elements are:

- The company applies the ASX Corporate Governance Council Principles and Recommendations.
- The board's qualifications are appropriate for the business.
- The board has four members, consisting of three non-executive and one executive member. Two non-executive directors have recently retired / resigned from the board (one independent, one non-independent). The chairman is the only independent director and the two other non-executive directors represent the two largest shareholders, Black Mountain and the Forrest Family Investments company, Mindaroo (who combined own approximately 37% of the company).
- The board has adopted a remuneration structure, risk assessment and policies that are predominantly in line with market practices.
- Due to the current small size of the company, separate risk, nominations, remuneration and audit committees have not been created on the board.

Details of the POS board members are in Exhibit 34.

Exhibit 33 – Board of Directors

Directors		Skills						
Name	Position	Independent	Length of Service	Capital Markets	Resources Industry	Mining / Geology	Finance / Accounting	Listed Company
Derek La Ferla	Non-Executive Chairman	YES	1 YEAR	YES	YES	NO	YES	YES
Peter Harold	CEO	NO	1 YEAR	YES	YES	YES	NO	YES
Felicity Gooding	Non-Executive Director	NO	2 YEARS	YES	YES	YES	YES	NO
Dean Hildebrand	Non-Executive Director	NO	NEW	YES	YES	NO	YES	NO

Source: POS.

The policies and procedures adopted by the board are appropriate for a company of POS's size and stage of development but will need to evolve as the Company grows.

The board at this point lacks a level of independence and has over representation from its two largest shareholders. It would be appropriate for the board to appoint another independent director. As POS grows and becomes more complex, more board directors with mining experience will be required.

Poseidon has 2 major shareholders in Black Mountain holding 20.8% and Mindaroo at 17.9%.

Management – Major Nickel Industry Experience

Peter Harold – Managing Director & CEO

Peter Harold is a process engineer with over 30 years' corporate experience in the minerals industry, specialising in finance, marketing, business development and general corporate activities. He was until recently the Managing Director of Panoramic Resources, a company he co-founded with a \$3 million IPO in 2001. Peter steered Panoramic through the financing and development of the Savannah Nickel Project in the East Kimberley and the acquisition and restart of the Lanfranchi Nickel Project near Kambalda, with the company reaching a market capitalisation of \$1.2 billion in 2007. He was more recently involved in bringing the Savannah Project out of C&M and back into production. Peter has extensive experience in base metal mining project feasibility studies, financings, developments, operations and marketing.

Brendan Shalders – Chief Financial Officer & Joint Company Secretary

Brendan Shalders is a Chartered Accountant who commenced his career at KPMG. He was a Managing Director at FTI Consulting for nearly three years. Having held senior finance roles in both advisory and corporate settings, he has over 16 years' experience in corporate finance, accounting, risk management and business development, predominantly within the mining and mining services industries.

Steve Warriner – Chief Geologist

Steve Warriner has over 25 years of experience in the resource/mining industry, working throughout WA and overseas. Since joining POS in 2007, Steve has been instrumental in developing the company's resource and reserve base at the Mt Windarra, Lake Johnston and Black Swan operations. Steve has held senior management and consulting positions in a number of ASX-listed companies including Western Metals, Barrick Gold, WMC Resources and Fox Resources.

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