

# DKM.asx Speculative Buy

\$0.32

21 Oct 2014 Share Price \$0.160 Price Target - 12 months

**Brief Business Description:** 

Recent IPO from Australian assets derived from South Boulder Mines. Duketon Project is the flagship project.

#### Hartleys Brief Investment Conclusion

Strong potential to grow nickel resources and make new nickel, gold and other base metal discoveries. Well funded for planned exploration. Great nickel and gold address, considered largely underexplored.

#### Chairman & MD

Seamus Cornelius (Non-Exec Chairman) Stuart Fogarty (Managing Director)

#### Top Shareholders

11.0%

#### Company Address

31 Ventnor Avenue West Perth, WA 6005

Resources - 1% Ni LC

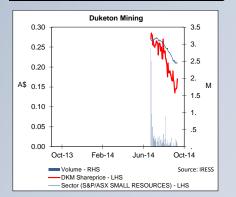
**Issued Capital** 82.5m - fully diluted 115.8m Market Cap A\$13.2m - fully diluted A\$18.5m Cash (est) A\$8.0m Debt (est) A\$0.0m EV A\$5.2m

EV - full diluted, option cash A\$1.7m Ni (%) Cu (%) Mt

1.9

1.7

0.4



#### Analyst

Mike Millikan

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Hartleys has completed a capital raising in the past 12 months for Duketon Mining Limited ("Duketon") for w hich it has earned fees. Hartleys has provided corporate advice within the past 12 months and continues to provide corporate advice to Duketon, for which it has earned fees and continues to earn fees. Hartleys has a beneficial interest in 3m DKM options.

# **DUKETON MINING LIMITED (DKM)**

## Focused Exploration with an Eye on Development

Duketon Mining listed on the ASX in August 2014, with its assets derived from the demerger of South Boulder Mines (STB).

The Duketon Project (100% DKM) is the Company's flagship project, and contains the advanced nickel prospects of Rosie and C2, along with emerging gold prospects of Terminator and Thompson Bore. The project lies ~80km north of Laverton, spanning a large contiguous landholding over the Archaean-aged Duketon Greenstone Belt of the Eastern Goldfields.

#### Proven nickel field with limited exploration outside Rosie & C2

The belt's prospectivity is confirmed by the discovery of nickel sulphide mineralisation at Rosie and C2. Rosie currently hosts a resource estimate of 1.94Mt grading 1.7% Ni, 0.4% Cu and 1.9g/t PGE for 33Kt of contained nickel, 8Kt of contained copper and 118Koz of platinum and palladium.

Both Rosie and C2 could provide near-term development opportunities for the Company. The deposits are located on a granted mining lease, but prior to committing to such development we would expect resource additions (larger critical mass), and an improved confidence in deposit metallurgy. Significant scope remains to grow nickel and copper resources at Rosie, as the deposit remains open along strike and at depth. Recently completed drilling at Rosie laterally extended nickel mineralisation in the northern and southern parts of the deposit, with new conductive horizons identified through DHEM to further test.

Nickel exploration upside is also expected along strike of the large C2 deposit (maiden resource pending) and in addition, less than 15% of the prospective contact of the +12km Bulge Ultramafic Complex has been explored to date, with numerous targets requiring follow-up. Recently completed drilling at Terminator, located ~1km along strike of C2 mineralisation intersected a new zone of nickel sulphides (2m @ 1.06% Ni, 0.08% Cu and 0.54g/t PGE) which requires further work.

#### Contiguous tenure to ~8Moz Regis Resources

There has been only limited gold exploration undertaken over the Duketon Mining ground for the last 10 years, but the Company's neighbour Regis Resources (RRL) has been highly successful during this period, defining close to 8Moz of gold. With numerous gold prospects already defined by the Company, within ~25km of Regis' processing infrastructure, Duketon remains well positioned to capitalise on any potential gold discovery.

One of the aims of the early exploration programs is to expand mineralisation at the Terminator and Thompson Bore gold prospects. The Company will also assess value add opportunities, such as PGE concentration to generate operating cashflows to assist in the Rosie development.

#### Well-Funded for Exploration – Initiate with a Speculative Buy

We derive a price target for DKM of 32cps, which is based largely on peer comparison and an assigned nominal exploration value (proven nickel and gold discoveries, large contiguous landholding to Regis Resources). With a current estimated cash position of ~\$8m, the Company remains well funded for planned exploration activities. We initiate coverage of Duketon Mining with a Speculative Buy recommendation.

# SUMMARY MODEL

Duketon Mining DKM			Sh	are Price \$0.160		
Key Market Information					Directors	
Share Price				\$0.160		
Market Capitalisation				\$13.2m	Seamus Co	ornelius (Non-E
Market Capitalisation - full dil.				\$18.5m	Stuart Foga	arty (Managing
Net Debt (cash)				-\$8.0m	Heath Helle	ewell (Non-Exec
Issued Capital				82.5m	Dennis Will	kins (Comp Sed
Options				33.3m	* subject to	shareholder ap
Issued Capital (fully diluted all op	tions)			115.8m		
EV				\$5.2m		
EV - full diluted, option cash				\$1.8m	Top Share	holders
Price Target				\$0.32	Directors	
Price Target Projects	Interest	Location	Comr	\$0.32	Directors	
Projects	Interest	Location				t Summary
Projects			Ni, Au,	nodity		t Summary
Projects  Duketon  Eastern Goldfields	100%	WA	Ni, Au, (	nodity Cu, PGE	Investmen	·
Projects  Duketon  Eastern Goldfields	100% 100%	WA WA	Ni, Au, (	modity Cu, PGE Cu, PGE	Investmen Strong pote	ential to grow ni
Projects  Duketon  Eastern Goldfields  The Lakes	100% 100%	WA WA	Ni, Au, ( Ni, Au, (	modity Cu, PGE Cu, PGE	Investmen Strong pote and other b	ential to grow ni
Projects  Duketon  Eastern Goldfields  The Lakes  Other minor interests	100% 100% 100%	WA WA WA	Ni, Au, o Ni, Au, o I P, base	modity Cu, PGE Cu, PGE K	Investmen Strong pote and other b	ential to grow ni pase metal disco . Great nickel a
Projects  Duketon Eastern Goldfields The Lakes Other minor interests - Cardabia	100% 100% 100%	WA WA WA	Ni, Au, o Ni, Au, o I P, base	modity Cu, PGE Cu, PGE K	Investmen Strong pote and other b exploration.	ential to grow ni pase metal disco . Great nickel a
Projects  Duketon Eastern Goldfields The Lakes Other minor interests - Cardabia - Pilgangoora	100% 100% 100% 20% 10%	WA WA WA WA	Ni, Au, ( Ni, Au, ( I P, base Au, Ni, oth	modity Cu, PGE Cu, PGE K e metals er minerals	Investmen Strong pote and other b exploration underexplo	ential to grow ni pase metal disco . Great nickel a red.
Projects  Duketon Eastern Goldfields The Lakes Other minor interests - Cardabia - Pilgangoora  JORC Resources	100% 100% 100% 20% 10%	WA WA WA WA	Ni, Au, ( Ni, Au, ( I P, base Au, Ni, oth	modity Cu, PGE Cu, PGE K e metals er minerals	Investmen Strong pote and other b exploration underexplo Newsflow	ential to grow ni pase metal disco . Great nickel a

1.7% Ni

32,700

1.0% Ni

C2 - Nickel

Resource pending

Total

na na na na na	na na na na	na na na na
na na	na na	na na
na	na	na
na	na	no
	Ha	ild
na	na	na
na	na	na
na	na	na
loss	loss	loss
na	na	na
loss	loss	loss
	na na loss na	na na na na loss loss na na

1.94

Oct-14 **Speculative Buy** 

**Company Details** 

Exec Chairman) 31 Ventnor Avenue Director) West Perth, WA 6005 +61 8 6315 1490 ec Director)\* +61 8 9322 7602 ecretary) pproval

www.duketonmining.com.au

m shs

nickel resources and make new nickel, gold coveries. Well funded for planned and gold address, considered largely

newsflow		Project
Q3 CY14	Rosie, Terminator, Thompson Bore	Duke
Q4 CY14	Rosie extension, Thompson Bore	Duke
Q4 CY14	Prelim. Met work - C2	Duke
Q4 CY14	Maiden C2 resource	Duke
Q1 CY15	Regional target testing	Duke

Olipaid Capital	140 (111)	Ψ (111)	AVEII	/0 OI U
Options				
FY17	0.00	0.0	nm	0.0%
FY18	2.55	0.9	0.350	3.1%
FY19	15.75	4.9	0.309	19.1%
FY20	15.00	3.0	0.200	18.2%
Total	33.30	8.8	0.263	40.4%

Recent IPO from Australian assets derived from South Boulder Mines. Duketon Project is the flagship project.

Analyst: Mike Millikan Phone: +61 8 9268 2805

Last Updated: 21/10/2014

Sources: IRESS, Company Information, Hartleys Research

# COMPANY OVERVIEW

Duketon Mining listed on the ASX in August 2014, and has the ticker DKM

Mostly nickel and gold exposure

DKM is focused predominantly on base and precious metal exploration within the Duketon Belt of WA

The Duketon Project is the Company's flagship project and it is 100%-owned

DKM's strategy is to grow shareholder value through exploration, definition and development of significant mineral resources

WA focused projects

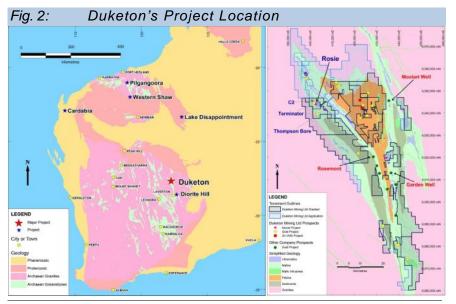
Duketon Mining Limited ("Duketon"), listed on the ASX in August 2014 [Ticker: "DKM"], and is focused predominantly on base and precious metal exploration within WA. The Company's assets are derived from the demerger of South Boulder Mines.

The Duketon Project (located ~80km north of Laverton) is the Company's flagship project, and contains the advanced nickel prospects of Rosie and C2, along with emerging gold prospects of Terminator and Thompson Bore. The project spans a large contiguous landholding of ~1,200km<sup>2</sup> of granted tenure (with a further 8 licence applications) which are 100%-owned.

Nickel sulphides were first discovered within the belt in 2006 at the C2 prospect, with higher grade mineralisation defined at Rosie in 2009. Rosie currently hosts a JORC-compliant resource estimate of 1.94Mt grading 1.7% Ni, 0.4% Cu and 1.9g/t PGE for 33Kt of contained nickel, 8Kt of contained copper and 118Koz of Pt+Pd, which remains open along strike and at depth. Nickel exploration upside is expected from high-grade extensions to the Rosie resource, along strike of the large C2 deposit (maiden resource pending) and along the +12km Bulge Ultramafic Complex which remains largely untested and highly prospective.

There has been only limited gold exploration undertaken over the Duketon ground in the last 10 years, but the Company's neighbour Regis Resources (RRL) has been highly successful during this period, defining close to 8Moz of gold. With numerous gold prospects already defined by the Company, within ~25km of Regis' processing infrastructure, Duketon remains well positioned to capitalise on any potential gold discovery.

Duketon's Key Projects Fig. 1: Commodity **Projects** Interest Location Ni, Au, Cu, PGE 100% WA **Duketon Eastern Goldfields** 100% WA Ni, Au, Cu, PGE The Lakes 100% WA Κ Other minor interests - Cardabia 20% WA P, base metals WA - Pilgangoora 10% Au, Ni, others



#### **DUKETON PROJECT**

#### Fig. 3: Duketon Project Snap Shot

#### **Duketon**

Assets derived from the demerger of South Boulder Mines

• Interest: 100%

Location: ~80km north of Laverton

Tenement coverage: +1,200km<sup>2</sup>

• Project stage: Advanced Stage Exploration

 Mineral Resources: 1.94Mt @ 1.7% Ni, 0.4% Cu and 1.9g/t PGE for 33Kt of contained nickel, 8Kt of contained copper and 118Koz of Pt+Pd (1.0% Ni cut off)

• Commodity Target: Nickel, Copper, PGE and Gold

Key Mineralised Zones: Rosie, C2, Terminator, Thompsons and others

Source: Duketon Mining Limited

# Background

Duketon Mining was formed in 2012 as a wholly-owned subsidiary of South Boulder Mines Ltd (South Boulder or STB) and remained a private entity until listing on the ASX on 4<sup>th</sup> August 2014. All of Duketon's assets are derived from South Boulder, obtained via demerger.

The Duketon Project (100%-DKM) covers ground within the considered highly prospective Duketon Greenstone Belt of Western Australia. The Belt has a rather complicated and fragmented early exploration history with multiple tenement holders at different time, and with effective exploration largely impacted by small exploration budgets, transported cover and deep weathering profiles. The project area is considered under explored.

South Boulder listed in 2003 with the Duketon ground and in early 2004, entered into a farm-out Joint Venture (JV) Agreement with Independence Group (Independence or IGO), whereby Independence could at the time earn an 70% interest in the nickel rights on the tenements. South Boulder was free carried to completion of a bankable feasibility study (BFS), which was to be completed within 5 years but extended through mutual agreement.

The JV was successful in discovering primary nickel sulphides at the C2 prospect in 2006 and in 2009 made the higher-grade nickel discovery at Rosie, both deposits are contained within the Bulge Ultramafic Complex. Given the timeframe required to deliver a BFS, IGO formally withdrew from the JV in early 2013. All rights reverted to South Boulder at this time and now forms part of the Duketon project portfolio.

# Basic Geology

The Duketon Greenstone Belt is dominated by a broad, complex north-northwest trending fold structure known as the Erlistoun Syncline. The core of this syncline is occupied by a felsic package of rocks of the Ingi-Jingi Felsic Volcanic Complex. The Ingi-Jingi Complex consists dominantly of rhyolitic and dacitic tuffs, and represents some of the youngest rocks within the belt. The western limb of the syncline is formed by a sequence of mafic and ultramafic rocks, and sediments. To the west of these rocks, the Granite Hills Batholith is bound by the Hootanui Fault. The north-eastern limb of the syncline is formed by a sequence of mafic volcanics.

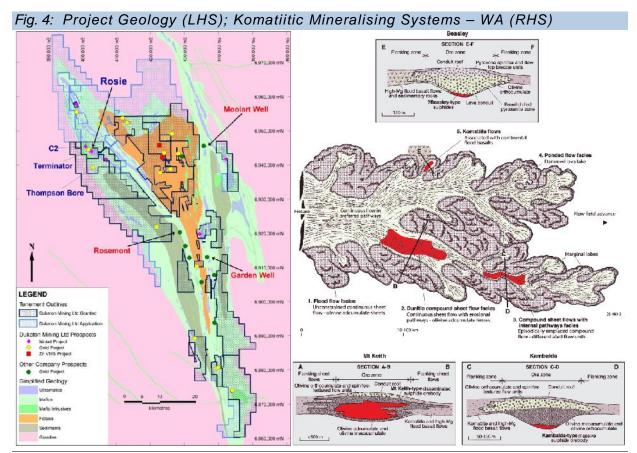
Granted tenure covers ~1,200km<sup>2</sup>

The Duketon
Greenstone Belt
contains prospective
geological sequences
and mineralised
structures considered
prospective for nickel
and gold

The Duketon Project is located within the Laverton Terrane

These mafics underlie the Ingi-Jingi Complex, and are intruded to the north by another granitiod batholith. The Bulge Ultramafics are an important member of the Duketon Greenstone Belt, consisting of a folded sequence (or complex) of ultramafic rocks containing an extensive sequence of komatiite lava flows.

Under the right conditions, nickel sulphides can pool at the base of these lava flows, forming lenses of mineralisation. A large proportion of these deposits occur on the "basal contact", that being the contact between the underlying basaltic rocks and overlying komatiite ultramafic. During formation these komatiite lavas incise the underlying rocks to form channels; it is these channel structures in the basal contact position which are being pursued in exploration. Once a nickel sulphide deposit (komatiite hosted) has been discovered and the channel host defined it is likely more zones of mineralisation can be found and will hopefully become orebodies.

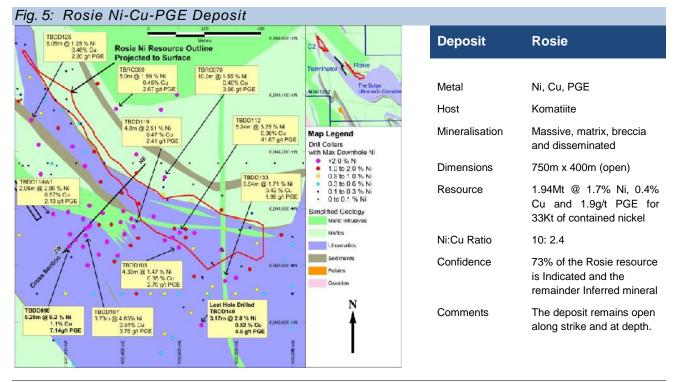


Source: Duketon Mining Limited; Geoscience Australia modified after Dowling & Hill (1998)

# Nickel Deposits – Rosie and C2

Both C2 and Rosie are komatiite-hosted nickel sulphide deposits The Duketon belt currently contains the nickel deposits of Rosie and C2, which are located ~2km apart. Both deposits are hosted within The Bulge Ultramafic Complex. The mineralisation at both the Rosie and C2 deposits are interpreted to be komatiitie-hosted nickel sulphide deposits, however Rosie has a relatively high copper and PGE values which are uncommon for a large proportion of the komatiitie nickel sulphide deposits of WA. Geochemically, the deposits appear to have similarities to the nickel deposits of the Collurabbie Greenstone Belt (Olympia) and the Mount Fisher Greenstone Belt (Musket, Cannonball and Camelwood) located to the north of the Duketon Greenstone Belt.

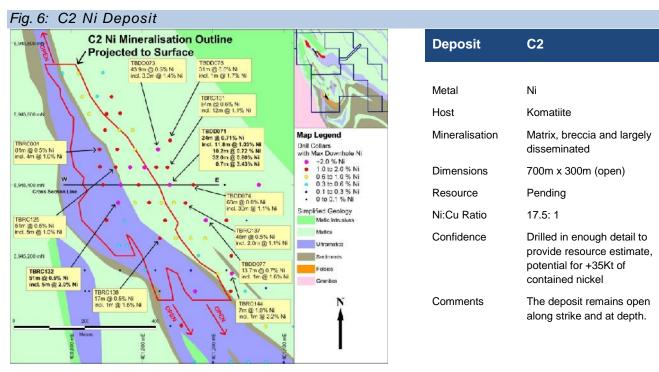
Rosie contains accumulations of highgrade nickel massive sulphide The Rosie mineralisation is characterised by accumulations of massive, matrix, breccia and disseminated Ni-Cu-PGE magmatic sulphides at the basal contact of a komatiite ultramafic rock, overlying a mafic pillow basalt footwall with a times a fine grained siltstone sediments which may also contain sulphides in varying amounts.



Source: Duketon Mining Limited

C2 is lower grade disseminated nickel sulphides

The C2 mineralisation comprises of disseminated and minor matrix and stringer sulphides and is considered to have potential to host massive sulphide mineralisation. A maiden resource estimate is pending.



Metallurgical testwork is expected to be completed before the end of the year

Rosie nickel deposit currently hosts a JORC-compliant resource estimate of 1.94Mt grading 1.7% Ni, 0.4% Cu and 1.9g/t PGE for 33Kt of contained nickel, 8Kt of contained copper and 118Koz of Pt+Pd

Both deposits remain open along strike and at depth

Some of the key objectives from the early exploration programs will be to add lateral extensions to the Rosie deposit, expand mineralisation at known prospects and discover new sources of mineralisation

A number of project tenements (~12 EL's), located in the west and south-west of the project area are subject to a royalty deed, namely a 2% NSR on all minerals to Franco-Nevada. However, Mining Lease M38/1252 (granted 19<sup>th</sup> November 2010 covering ~19km²), which contains Rosie, C2 and Terminator prospects are not subject to any royalty deeds. The Thompson Bore gold prospect is covered by ground subject to the 2% NSR Franco-Nevada deed.

No metallurgical testwork has as yet been reported but the Rosie deposit is expected to be amenable to conventional processing (crush, grind, float to generate a nickel concentrate). We would expected nickel recoveries in the order of +85% with high copper recoveries, but testwork will be required to determine this. The Rosie nickel deposit currently hosts a JORC-compliant resource estimate of 1.94Mt grading 1.7% Ni, 0.4% Cu and 1.9g/t PGE for 33Kt of contained nickel, 8Kt of contained copper and 118Koz of Pt+Pd, which remains open along strike and at depth. The potential credits at Rosie are considered highly valuable and worth pursuing.

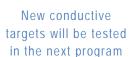
As part of the resource estimate for the C2 deposit (pending) basic metallurgical testwork is being undertaken. This testwork will be an important factor to ascertain whether the deposit may be economically mined and processed. The deposit is largely disseminated (generally low grade) with some zones of increased talc content. Talc has a tendency to float with sulphides, resulting in a concentrate that can be high in magnesia. The presence of magnesia can cause some issues during smelting which leads to nickel loss, so ideally low magnesia concentrates are considered more desirable. IGO described the C2 mineralisation as disseminated nickel sulphide with three major zones of continuity but did not (at the time) consider C2 to be economically viable and hence did not report a JORC-compliant resource estimate.

A key objective from the early exploration programs is to add lateral extensions to the Rosie high-grade zones through extensional drilling. Building critical mass will be an important step in the potential development of Rosie and other deposits within the area. A first phase program of three holes into Rosie were recently completed and returned results that included:

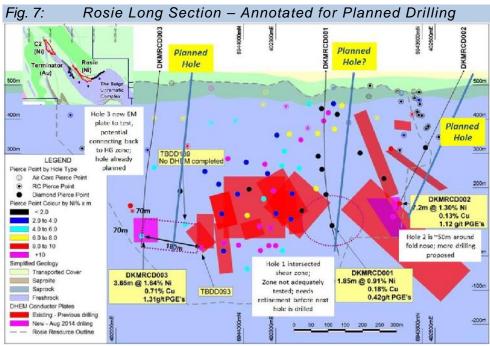
- DKMRCD001: 1.85m @ 0.91% Ni, 0.18% Cu and 0.42g/t PGE [<2 Ni%m];</li>
  - Hole encountered a sheared contact which made for difficult drilling conditions with the hole collapsing prior to completion of DHEM
  - o Zone still requires testing.
- DKMRCD002: 7.2m @ 1.30% Ni, 0.13% Cu and 1.12g/t PGE [9 Ni%m];
  - Hole further extended mineralisation which remains open to the southeast.
  - Follow-up drilling planned to be completed in the coming weeks.
- <u>DKMRCD003</u>: 3.65m @ 1.64% Ni, 0.71% Cu and 1.31g/t PGE [6 Ni%m]
  - o Hole extended mineralisation to the north-west remains open.
  - Identified a new conductor, which could potentially extend back towards the high grade intercepts which included a zone running +10 Ni%m (TBDD093).
  - Infill hole to test model proposed, potential to extend higher grade mineralisation some 180m.

The next drill program is set to commence in the coming weeks

dependent on clearance approvals (PoW), and final drill design around hole DKMRCD001.



Duketon will also assess value add opportunities, such as PGE concentration to generate operating cashflows to assist in the Rosie development



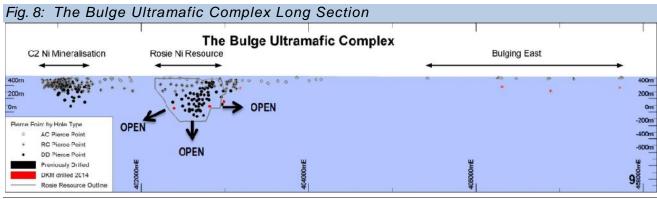
The next drill program is planned for this quarter (Q4 CY14), but timing is

Source: Duketon Mining Limited

In addition to extending high-grade mineralisation at Rosie, Duketon plans to find additional new sources of mineralisation (nickel and gold); further advance prospects such as C2 (nickel), Bulging East (nickel), Terminator (gold and nickel) and Thompson Bore (gold). The Company will also assess value add opportunities, such as PGE concentration to generate operating cashflows to assist in the Rosie development.

# The Bulge Complex – Largely Untested

The Bulge Ultramafic Complex is considered prospective for more nickel deposits. Limited exploration has to date been conducted outside of the C2 and Rosie nickel deposits. Further drilling is planned to test a number of prospects along the +12km long channel in late 2014/early 2015. We see strong potential for new discoveries to be made through systematic exploration.



Duketon has multiple nickel prospects outside of C2 and Rosie to systematically explore over time

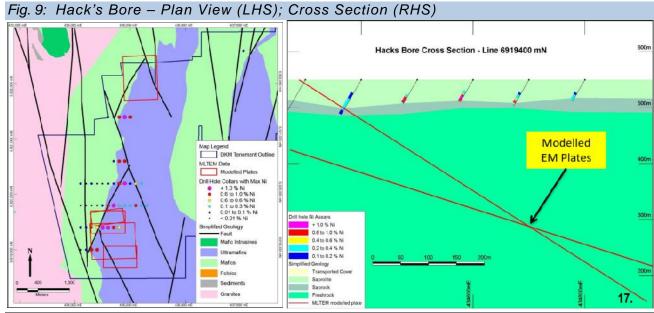
## Hack's Bore Nickel Prospect

Duketon's Hack's Bore prospect is located to the north (~7km) of Regis Resources' Garden Well (+3Moz), along a sheared ultramafic contact, which is the same host unit to Garden Well.

Previous aircore drilling (in 2007) at the prospect intersected shallow supergene nickel mineralisation (within a laterite profile), with drill results that included:

- 7m @ 1.33% Ni, 0.31% Co
- 5m @ 1.06% Ni, 0.05% Co
- 5m @ 0.99% Ni, 0.09% Co; and
- Hack's Bore provides walk-up drill targets
- 8m @ 0.93% Ni, 0.06% Co
- Anomalous copper was also identified.

Ground EM was conducted in 2008 and identified a number of conductive plates which were not followed up. Duketon has recently remodelled the survey data and refined a number of EM conductors which will now be tested by drilling. Prior to drilling detailed mapping will be used to define the basal contact position.



Highly prospective and sought-after gold address, with landholdings contiguous to Regis Resources' Duketon project area (+8Moz)

Terminator could provide a shallow gold development opportunity for Duketon, though at this stage it would appear to be small

New nickel
mineralisation has
been located on the
basal contact at
Terminator, some 1km
along strike of C2



Source: DKM

## Gold Prospects – Terminator and Thompson Bore

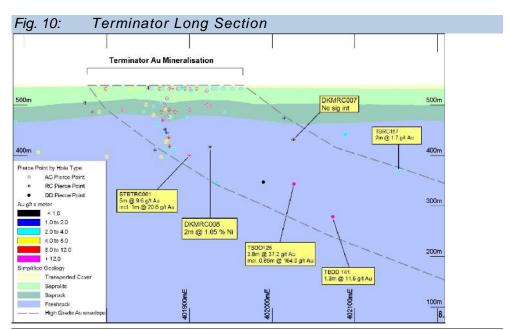
The Duketon Project is also highly prospective for gold and other base metals. The tenement package lies along strike and adjacent to Regis Resources' landholding from which ~8Moz of gold has been defined, including resources from operating gold mines at Rosemont, Garden Well and Moolart Well. In addition to high prospectivity the project area is well located with well-serviced and established infrastructure.

The Duketon Project contains numerous gold prospects with two of the most advanced being Terminator and Thompson Bore, both located on the western edge of the greenstone belt. Drilling results returned to date highlight the potential for both shallow open pit oxide ore and underground narrow high-grade ore.

The *Terminator Gold Prospect* was discovered during a geochemical aircore drilling program in September 2009. Significant results from drilling to date indicate the potential for delineating both broad shallow oxide and narrow high-grade primary gold zones. Some of the better results include:

- 64m @ 1.24g/t Au from surface; including 12m @ 4.13 g/t from surface;
- 60m @ 1.3g/t Au from 2m; including 10m @ 4.25 g/t from 3m;
- 12m @ 4.3g/t Au from 154m; including 1m @ 28.6g/t Au and
- 2.4m @ 59.8g/t Au from 218m; including 0.85m @ 164 g/t Au.

The Terminator prospect is not subject to any royalty deeds, as it is located within granted mining lease M38/1252. Recently completed drilling returned disappointing gold results, which was surprising as holes were planned to follow-up a previous high-grade intercept of 3.8m @ 37.2g/t Au. However, nickel sulphides were intersected (2m @ 1.06% Ni, 0.08% Cu and 0.54g/t PGE). Terminator is located ~1km along strike of C2 (same basal contact), and this result may potentially indicate that disseminated sulphide mineralisation is more extensive than previously thought. Duketon surveyed the completed holes with DHEM but no conductors were identified. Further work is warranted, and planned.



Thompson Bore is located to the south of the Rosie deposit within a granted exploration licence

Thompson Bore is generally low grade but has a number of higher grade zones and shows potential to be a large gold deposit The *Thompson Bore Prospect* was identified in the early 1990's as a gold anomaly in lag geochemical sampling. Several drill programs have been completed with best results from aircore drilling including:

10m @ 6.6g/t Au from 35m; including 2m @ 27.8 g/t Au and 1m @ 59 g/t Au from 44m.

Recently completed drilling by Duketon extended gold mineralisation at Thompson Bore. Drilling below the +700m long gold anomaly indicates that gold mineralisation extends to at least 110m depth and remains open. Better drilling result include:

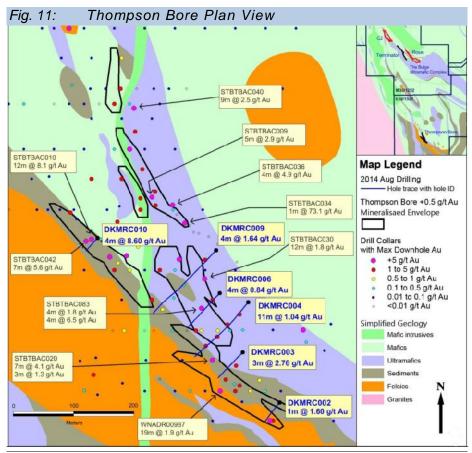
- 4m @ 8.61g/t Au from 34m;
- 3m @ 2.76g/t Au from 83m; and
- 11m @ 1.03g/t Au from 121m

Thompson Bore is generally low grade but has a number of higher grade zones and shows potential to be a large gold deposit (potential for a bulk tonnage gold deposit). Thompson Bore requires further drilling to test the extent of the mineralisation and move the deposit towards a maiden resource. Over 210 drill holes have now been completed over the prospect.

The Thompson Bore gold prospect is covered by a tenement (E38/1537) subject to the 2% NSR Franco-Nevada deed.



Source: DKM



# Other Base Metals – VMS Targets to Test

The Duketon project area also contains a package of rocks (felsic rocks) that have historically produced good-grade zinc, lead and copper mineralisation. Base metal exploration over the project area was conducted in the mid-1970's and early 1980's, locating evidence for volcanogenic massive sulphide (VMS)- style mineralisation. Some historical results of note include:

- 1m @ 12% Zn, 0.68% Pb and 7g/t Ag;
- 0.2m @ 9.6% Zn, 2.7% Pb, 4.7% Cu and 325g/t Ag; and
- 1m @ 1.5% Zn, 0.26% Pb and 9g/t Ag

Most of the initial prospecting has been focused on the discovery and testing of outcropping gossans. Exploration mostly relied on shallow geochemistry, gossan sampling, with the drilling of two mineralised occurrences with features typical of VMS occurrences. These two occurrences known as *Tuff Hill* and *Mason Hill* were interpreted to be part of a felsic volcanic pile. Anomalous gold grades were also reported. The area is considered to be amenable to ground EM and soil sampling, and the review of historical data is underway.

VMS deposits are considered attractive exploration targets, as they can offer high grades, be of significant size and being poly-metallic, offer multiple revenue streams, some of which become credits which can off-set operating costs. Typically these deposits cluster and the geology and complexity of some of Duketon's ground is considered favourable for more VMS mineralisation.

mineralisation

Favourable ground for

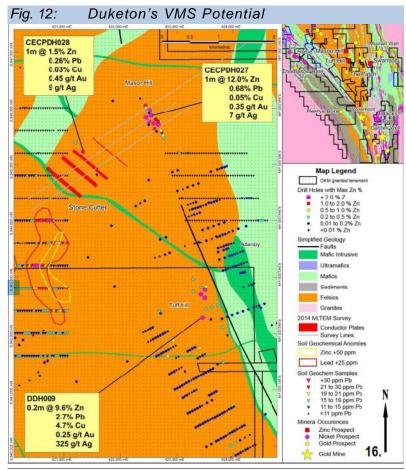
VMS style

Historical drilling has returned high-grade Zn, Cu and Ag mineralisation

Two confirmed occurrences at Mason Hill and Tuff Hill

VMS deposits tend to cluster and low-level exploration in search of these deposits will be considered

The Stone Cutter prospect contains untested EM conductors which will be followed up in early 2015



#### OTHER PROJECTS - AUSTRALIA

See http://duketonmining.com.au/projects/overview/

Duketon has additional projects within the Eastern Goldfields and the Company also has interests in other projects including Pilgangoora and Western Shaw in the northern Pilbara, and Cardabia in the western Gascoyne

#### Eastern Goldfields Other

Other projects are located within WA and are at this stage considered lower priority to the flagship Duketon Project

Duketon Mining holds other tenements within the Eastern Goldfields Province outside of the Duketon Greenstone Belt. These tenements include the Diorite Hill Project which is 100% owned and considered prospective for gold, nickel and platinum group elements.

Diorite Hill is located ~20 km east of Laverton. The project consists of one exploration licence application over the eastern margin of the Merolia Greenstone Belt of the Eastern Goldfields Mineral Province. The Merolia Belt lies immediately south of the Duketon Greenstone Belt. The licence covers the major portion of a large layered mafic-ultramafic intrusive sill complex. Previous exploration at the Diorite Hill sill complex has identified platinoid, nickel and gold mineralisation. Further work following up on this anomalism will be undertaken once tenure has been granted.

The other projects have low holding costs

# Minority Interest Projects

The Company holds a minority interest in the Cardabia, Pilgangoora and Western Shaw Projects all of which lie in the northern part of WA.

Duketon holds the Cardabia (20%) and Pilgangoora (10%) Projects with a free carry to a bankable feasibility stage. Cardabia is located 800 km south of Exmouth. This project is prospective for phosphate and base metals and managed by Strata Minerals Incorporated. Pilgangoora lies in the Northern Pilbara and is prospective for gold, nickel and pegmatitic related mineralisation. The project is managed by Lithex Resources Limited. Duketon also retains the tin, tantalum and lithium rights within the Western Shaw Project in the northern Pilbara. This project is managed by Atlas Iron Limited.

# **COMPARATIVES**

#### NICKEL COMPARATIVES

Selected ASX listed nickel peers are summarised in the below table.

DKM has a current market cap of ~A\$13m for an EV of ~A\$5m

TOT AN EV OF ~A\$5M

Cash of ~\$8m, provides good funding for ongoing exploration

Fig. 13: Selected AS	SX Listed Nic	ckel Peers		
Name	Status	Code	A\$m	EV
Sirius Resources	Expl	SIR	1181.2	920.2
Western Areas Ltd	Prod	WSA	1046.6	1036.3
Independence Group	Prod	IGO	995.6	967.6
Panoramic Resources	Prod	PAN	172.4	107.4
Mincor Resources	Prod	MCR	109.2	58.5
Poseidon Nickel Ltd	Expl	POS	99.2	99.6
Rox Resources	Expl	RXL	36.5	32.3
Matsa Resources Ltd	Expl	MAT	27.4	24.9
Seque Resources	Expl	SEG	21.9	19.9
Cassini Resources Ltd	Expl	CZI	21.7	14.2
Enterprise Metals Ltd	Expl	ENT	20.2	18.3
GME Resources Ltd	Expl	GME	14.3	12.8
Orion Gold	Expl	ORN	13.3	10.9
Duketon Mining	Expl	DKM	13.2	5.2
Buxton Resources Ltd	Expl	BUX	10.5	8.3
Winward Resources	Expl	WIN	10.1	9.1
St George Mining Ltd	Expl	SGQ	10.1	7.5
Redstone Resources Ltd	Expl	RDS	8.4	7.5
Boadicea Resource Ltd	Expl	BOA	6.4	3.7
Ram Resources Ltd	Expl	RMR	5.6	4.4
Rumble Resources Ltd	Expl	RTR	5.0	3.7
White Cliff Minerals Ltd	Expl	WCN	4.5	3.0
Classic Minerals	Expl	CLZ	4.0	3.7
Corazon Ltd	Expl	CZN	2.0	-0.2
Falcon Minerals Ltd	Expl	FCN	1.9	0.8

Source: IRESS, Hartleys Estimates; IGO has significant gold and other base metal assets



Source: IRESS prices @ close 20 Oct 2014

Currently trading well below of the median EV/Ni Ib metric for nickel companies on the ASX The majors involved in Australian nickel operations include BHP Billiton (Nickel West), Glencore (Murrin Murrin) and First Quantum (Ravensthorpe). The mid-tier and smaller Australian nickel operators include Western Areas, Independence Group, Panoramic Resources and Mincor, all of whom are mining nickel sulphides (and selling nickel concentrate). Sirius has a near-term development project in Nova-Bollinger and is currently forecast to be in production by mid-2016 (subject mining approvals and funding).

Even at a higher nickel lower cut (1% Ni) Duketon is currently trading at 7c per pound of nickel on an EV/Resource Ni lb basis, well below the median of 20c for a select sample of nickel companies.

Fig. 15:ASX Listed Nickel Producer Metrics – Excludes BHP Billiton

			Reser	rves					Re	sources	;			Me	etrics		Nicl	kel Producti	on
Code	EV	Mt	Ni%	Cu%	Ni Kt	CuKt								EV/Reserve Ni lb	EV/Resource Ni lb	Ni Kt	Cu Kt	Ni Grade %	Pay Cash Costs \$/lb Ni
SIR	920.2	13.1	2.1	0.9	273.0	112.0	14.3	2.3	0.9	325.0	134.0	2.4	343	1.5	1.28	26.0	11.0	2.0	2.30
WSA	1036.3	1.6	4.1	-	64.1	-	1.7	5.4	0.0	89.3	-	5.4	90	7.3	5.27	25.7	-	4.8	3.40
IGO	967.6	0.7	4.0	-	29.9	-	1.4	5.3	0.0	73.4	-	5.3	74	14.7	5.98	10.9	-	4.1	3.78
PAN	107.4	3.7	1.45	0.55	53.3	20.2	11.5	1.4	0.3	156.6	34.3	1.4	163	0.9	0.31	22.3	-	1.7	5.41
MCR	58.5	8.0	2.7	-	23.0	-	3.5	3.6	0.0	123.0	-	3.6	124	1.2	0.22	9.1	-	3.2	4.96
POS	99.6	-	-	-	-	-	36.4	0.9	0.0	342.1	-	0.9	328	-	0.13	-	-	-	-
RXL	32.3						3.6	2.0	0.0	72.1	0.0	2.0	72	-	0.20				
CZI	14.2	-	-	-	-	-	33.2	0.7	0.6	242.4	195.9	0.7	249	-	0.03	-	-	-	-
GME	12.8	-	-	-	-	-	75.7	1.0	0.0	761.5	-	1.0	765	-	0.01	-	-	-	-
DKM	5.2	-	-	-	-	-	1.9	1.7	0.4	32.7	8.0	1.9	36	-	0.07	-	-	-	-
CZN	-0.2	-	-	-	-	-	1.8	8.0	0.4	14.4	7.2	8.0	14.4	-	-0.01	-	-	-	-

Source: Company Reports, Hartleys Research Estimates, IRESS prices @ close 20 October 2014

Strong potential for DKM to increase in value as resources grow Rox Resources (RXL) is a potential analogue to Duketon Mining, though currently its nickel resources have twice the amount of contained nickel to Duketon (~33Kt of contained nickel (DKM) versus ~72Kt of contained nickel (RXL)). With a maiden resource pending for C2, DKM has the potential to match or exceed the RXL resource size, but we would expect C2 to have a much lower grade (likely less 1% Ni). RXL is currently trading around the nickel median of 20c/Ni lb, highlighting strong potential for DKM to increase in value as resources grow and the project is progressed towards development studies.

#### **RESERVES & RESOURCES**

A maiden Indicated and Inferred JORC resource for the Rosie deposit was released in late October 2012 by South Boulder's joint venture partner of the time Independence Group.

The deposit has been drilled from surface to a vertical depth of  $\sim$ 600m over a strike length of  $\sim$ 1.5km. Generalised drill hole spacing for the resource calculation is on 100m spaced sections or less. Approximately 73% of the resource has been classified as Indicated, with drill coverage of 50m x 50m or less (some zones drilled down to 30m x 30m in places). Mineralisation at Rosie remains open along strike and at depth.

DKM currently has a JORC resource of 1.94Mt @ 1.7% Ni, 0.4% Cu & 1.9g/t Pt+Pd (1% Ni cutoff)

Fig. 16: Rosie Ni-Cu-PGE Resource Estimate – Oct '12									
JORC Resource	Class	Mt	Ni%	Ni Kt	Cu%	Pt+Pd (g/t)			
Indicated	Fresh	1.38	1.7	23.7	0.4	1.8			
	Transitional	0.03	1.2	0.4	0.4	1.6			
	Sub-total	1.41	1.7	24.1	0.4	1.8			
Inferred	Fresh	0.52	1.6	8.4	0.4	2.2			
	Transitional	0.01	1.3	0.2	0.4	1.8			
	Sub-total	0.53	1.6	8.6	0.4	2.2			
TOTAL		1.94	1.7	32.7	0.4	1.9			

Source: Duketon Mining Limited; estimated at a 1%Ni lower cut

The Company currently has no ore reserves and the maiden resource estimate for C2 has not, as yet, been released (at the time of writing).

#### GEOGRAPHIC EXPOSURE

Duketon is currently focused on projects located within Western Australia.



WA focused exploration and potential future developments

# Focused on base and precious metal

exploration

#### **COMMODITY EXPOSURE**

Duketon is currently focused on base and precious metal exploration. The Company currently has no operating mines.

Commodity exposure is largely confined to **nickel**, gold, copper, and platinum group elements (PGE), but the Company's tenements are considered prospective for other base metals.

#### Nickel

Nickel is primarily mined from sulphide and laterite deposits.

Sulphide deposits are generally higher grade and have lower operating costs compared to laterite deposits, due mostly to the high processing costs associated (and technical issues) with laterites. Production globally is dominated by nickel sulphide mines, but due to the lack of recent major sulphide discoveries the proportion of nickel laterite mines is expected to increase over time.

Nickel sulphide deposits remain in short supply but in high demand. The larger nickel producers typically operate under a vertically integrated business model, which involves mining (ore), processing (concentrate), smelting (nickel matte) and then refining for the final nickel metal. For the smaller producers sales can be made along the beneficiation chain at prices benchmarked as a percentage against LME prices, with the final price paid dependent on nickel grade and level of impurities. The final price paid is normally confidential for producers selling concentrate but averages over 65% of the LME nickel price for better quality concentrates.

The nickel market remains volatile, but has still performed very well in 2014, thanks largely to Indonesian export bans on nickel pig iron (NPI) and expected reduced nickel output. However, the nickel market does remain in surplus with LME stocks increasing LME inventory at all-time highs (~359Kt), highlighting oversupply; calculated to be over 2 months of demand use. Chinese nickel stockpiles are not reflected on LME, also currently remain in surplus but are forecast to fall. Glencore's recent nickel market commentary (Oct '14), still reflects a near-term market balance moving to deficit in 2015; "provided the Indo ban on ore exports is sustained the nickel market is expected to revert to expanding deficits from early next year (2015)".

China's NPI production is forecast to fall from 510Kt Ni in 2013 to 330-370Kt Ni over the next few years. With nickel demand growth projected over 4%pa, the market is expected to revert to a deficit by early 2015, with annual deficits expected to be substantial in the medium term.

~66% of the primary nickel produced is used for stainless steel

China's NPI is forecast to fall from 510Kt of Ni in 2013 to <379Kt of Ni over the next few years

### Fig. 18:Nickel Supply/Demand (LHS); Nickel Demand by Sector (RHS)

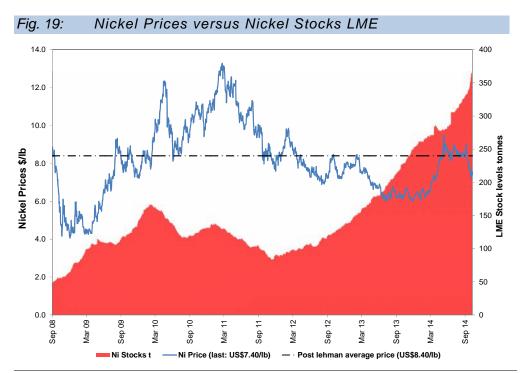


Source: Glencore data

Current nickel prices are just above US\$7.4/lb, and are expected to continue to improve over the longer term

Since the GFC the nickel price has averaged ~US\$8.40/lb

Prices have increased from US\$6.30/lb in early January to reach over US\$9.60/lb in mid-May; spot is currently trading around US\$7.42/lb (up 17% ytd). The consensus view for nickel is for continued price improvement, especially in the medium to longer term, as the tightness in smelter supply continues to be exasperated by dwindling good-quality nickel sulphide concentrates.

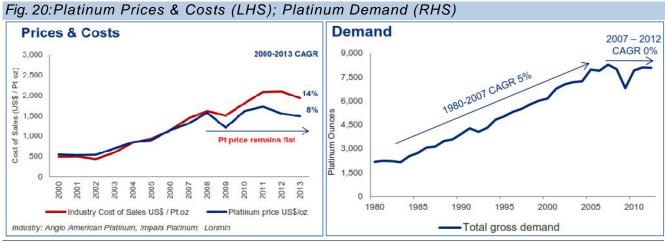


Source: London Metals Exchange (LME) from IRESS

The Rosie deposit contains PGE which may provide future credits if a viable nickel operation can be established

#### PGE – Platinum and Palladium

The Rosie deposit also contains PGE's, which may provide future credits if a viable nickel operation is established. The deposit already contains an estimated 50Koz of platinum (Pt) and 68Koz of palladium (Pd). Both Pt and Pd are highly ductile precious metals which are resistant to oxidation and high temperature corrosion. As well as being valuable metals for jewellery, they have widespread autocatalytic application.



Source: Anglo American Platinum data

Platinum prices on average have increased by 8% since 1997; however prices have been relatively flat for the last 5 years. The main reason for the price weakness has been the structural changes between supply and demand.



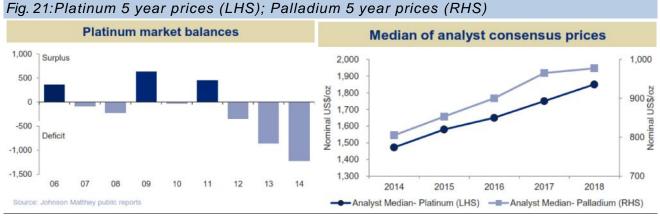
Recent low global growth (lower GDP) has impacted demand for platinum products, with some of the demand lost in part to substitution (ie less retail jewellery "upscaling" to platinum over gold). Mine production of platinum is dominated by operations in South African, which are at times, plagued by labour unrest and capacity rationalisation (fuelling supply risks).

However, even with supply risks, a number of operations adopted growth strategies to lower unit costs, which increased cumulative stocks. In addition to increased stock levels, recycling now contributes ~2Moz of platinum in the market (~25% of demand). The price difference between platinum and gold while it remains relatively narrow, does enable retailers to "up sell" to platinum in the jewellery industry.



The major platinum producers are Anglo American Platinum, Impala Platinum, Lonmin Platinum and Northam Platinum, which predominantly have operations within South Africa. There are also many small producers of PGE concentrates within South Africa (ie Aquarius Platinum (AQP)), with the concentrates purchased by smelters for feed stock.

Outside of the South African operations the Platinum majors have operations within Zimbabwe and PGMs are also extracted as by-products from the Canadian nickel operations of Glencore Xstrata and Vale. Outside of South African operations, Russia is a large producer of PGMs with Norilsk Nickel producing on an annual basis ~800Koz of platinum and some 2.6Moz of palladium.



Source: Anglo American Platinum after Johnson Matthey reports; analyst data 2014

In the medium
platinum prices are
expected to improve
as the market remains
in deficit

Recent commentary on the platinum market suggests short-term price weakness, given the global growth lookout (translating to weaker car sales and jewellery demand). Assumed South African Rand softening which provides opportunities to increase South African mining margins through increased supply (supply and demand imbalance). Platinum has a strong correlation to gold and poor recent gold price performance has also influenced platinum.

In the medium term, platinum prices are expected to recover, due largely to continued deficits (South African supply still ramping up after strikes and reduced capital spend to be addressed). Demand growth is forecast in autocatalysts (in particular) and is expected to improve in jewellery.

# DIRECTORS, SHAREHOLDERS

Fig. 22:Director and Management Holdings
Francis Synastys of Board and key management

Economic Exposure of Box	ard and key management			Total	
		Shares	Options	Economic	
		#	#	Exposure	
	Position			millions	rank
Directors					
Seamus Cornelius	Non-Exec Chairman	2,060,958	2,000,000	4,060,958	2
Stuart Fogarty	Managing Director	400,000	5,150,000	5,550,000	1
Heath Hellewell *	Non-Exec Director	0	0	0	4
Dennis Wilkins	Company Secretary	0	2,000,000	2,000,000	3
		2,460,958	9,150,000	11,610,958	

Source: Duketon Mining Limited; \* Appointed but subject to shareholder approval

## Directors (as summarised from the Company's website)

#### **Seamus Cornelius (Non-Executive Chairman)**

Mr Cornelius has 21 years of corporate experience in both legal and commercial negotiations. Mr Cornelius has been living and working as a corporate lawyer in China for 17 years. He has been based in Shanghai and Beijing since 1993. From 2000 to 2010 he was an international partner with one of Australia's leading law firms and specialized in dealing with cross border investments, particularly in energy and resources. Mr Cornelius has for many years advised large international companies on their investments in China and in recent years has advised Chinese state owned entities on their investments in natural resource projects outside of China including in Australia.

Small, focused management team

#### **Stuart Fogarty (Managing Director)**

Mr Fogarty has over 19 years of exploration experience with BHP Billiton and Western Mining Corporation. Until recently, he was BHP's Senior Exploration Manager for North and South America. Mr Fogarty has a very strong background in nickel exploration, having commenced his career at Kambalda Nickel in 1994. He has held senior roles with BHP including Senior Geoscientist for nickel exploration in the Leinster and Mt Keith region, Project Manager WA Nickel Brownfields and Regional Manager Australia – Asia where he was responsible for a \$100 million per annum exploration budget.

MD is an highly experience nickel geologist, having commenced his career at Kambalda in 1994

#### Heath Hellewell (Non-Executive Director) \*Subject to shareholder approval

Mr Hellewell is an exploration geologist with over 20 years of experience in gold, base metals and diamond exploration predominantly in Australia and West Africa. Most recently, Mr Hellewell was the co-founding Executive Director of Doray Minerals Limited (Doray), where he was responsible for the company's exploration and new business activities. Following the discovery of its Andy Well gold deposits in 2010, Doray was named "Gold Explorer of the Year" in 2011 by The Gold Mining Journal. In 2014 Mr Hellewell was the co-winner of the prestigious "Prospector of the Year" award, presented by the Association of Mining and Exploration Companies.

Mr Hellewell was also part of the Independence Group NL (IGO) team that identified and acquired the Tropicana project area, eventually leading to the discovery of the Tropicana and Havana gold deposits. Mr Hellewell is currently an independent Non-Executive Director of Core Exploration Ltd (CXO).

#### **Dennis Wilkins (Company Secretary)**

Mr Wilkins is the founder and principal of DWCorporate Pty Ltd, a leading privately held corporate advisory firm servicing the natural resources industry. Since 1994 he has been a director of, and involved in the executive management of, several publicly listed resource companies with operations in Australia, Papua New Guinea, Scandinavia and Africa. From 1995 to 2001 he was the Finance Director of Lynas Corporation Ltd during the period when the Mt Weld Rare Earths project was acquired by the group. He was also founding director and advisor to Atlas Iron Limited at the time of Atlas' initial public offering in 2006. Since July 2001 Mr Wilkins has been running DWCorporate Pty Ltd where he advises on the formation of, and capital raising for, emerging companies in the Australian resources sector.

#### **MAJOR SHAREHOLDERS \***

Top Shareholder

Fig. 23.

Board and Management currently hold ~11% of the ordinary shares.

Board and Management currently hold ~11% of the ordinary shares

	rig. 23. Top Stiateflolder		
	Shareholder	Number of Shares	% Issued Capital
1	HSBC CUSTODY NOM AUST LTD	7,781,972	9.43%
2	CORNELIUS LIAM RAYMOND	4,794,647	5.81%
3	CITICORP NOM PL	3,356,612	4.07%
4	RANGUTA LTD	2,898,547	3.51%
5	INC ATOC	2,282,853	2.77%
6	CHEUNG SHUN RES LTD	1,966,713	2.38%
7	ALPHA BOXER LTD	1,717,986	2.08%
8	JP MORGAN NOM AUST LTD	1,455,801	1.76%
9	MONTEZUMA MINING CO LTD	1,250,000	1.51%
10	PAN AUSTRLIA NOM PL	1,250,000	1.51%
11	KONGMING INV LTD	1,115,413	1.35%
12	NATIONAL NOM LTD	1,108,450	1.34%
13	PENNOCK PL	1,000,000	1.21%
14	BT PORTFOLIO SVCS WARRELL HLDGS S/F	1,000,000	1.21%
15	CORNELIUS SEAMUS	1,000,000	1.21%
16	YINGZHI LI	1,000,000	1.21%
17	ARADIA VENTURES PL J & A BROWN FAM	935,137	1.13%
18	BO JIANG	850,000	1.03%
19	ZERO NOM PL	835,989	0.98%
20	DUKETON CONSOLIDATED PL	805,744	0.98%
		38,405,864	46.48%

Source: Duketon Mining Limited

#### OPTIONS AND UNPAID CAPITAL

There are 33.3m options which have an average price of 26.3c.

Fig. 24: Options on issue or to-be-issued							
Unpaid Capital	No (m)	\$ (m)	Ave Pr	% Ord			
Options							
FY17	0.00	0.0	nm	0.0%			
FY18	2.55	0.9	0.350	3.1%			
FY19	15.75	4.9	0.309	19.1%			
FY20	15.00	3.0	0.200	18.2%			
Total	33.30	8.8	0.263	40.4%			

IPO raised A\$7m, with current estimated cash position of ~A\$8m

### RECENT EQUITY ISSUANCE

Duketon successfully listed on the ASX on the 4<sup>th</sup> August 2014, with the IPO raising A\$7m. The Company currently has 82.5m shares on issue with further options for 33.8m (average price of 26.4cps).

As at October 2014, the Company had cash and listed investments worth ~\$9m. The Company remains well funded for ongoing exploration and internal project studies.

# P&L, DEBT AND HEDGING

Given that Duketon is an emerging mineral explorer, its financial performance is a reflection of a company where funds raised are spent in search of mineral deposits.

The recent equity issuance provides funds for proposed exploration and for ongoing working capital.

#### RECOMMENDATION

Duketon is undertaking advanced-stage exploration focussing on the high-grade zones within the Rosie nickel deposit, and shallow mineralised zones within the C2 nickel deposit.

Lateral extensions to Rosie are a key focus area and further work at the C2 prospect will be subject to favourable metallurgical testwork and internal mining studies. Rosie contains a JORC-compliant resource estimate for ~33Kt of contained nickel, along with potential credits from copper (~8Kt) and PGE (118Koz Pt+Pd). Over 70% of the resource is Indicated, but metallurgical testwork is required and is expected to be completed by early 2015. The C2 deposit, is largely disseminated sulphide mineralisation but has potential to contain some higher grade zones, if a +30Kt of contained nickel can be defined at viable mining depths (ie shallow open pit) and favourable nickel recoveries (+80-90%), then the Duketon nickel inventory moves to +70Kt of contained nickel.

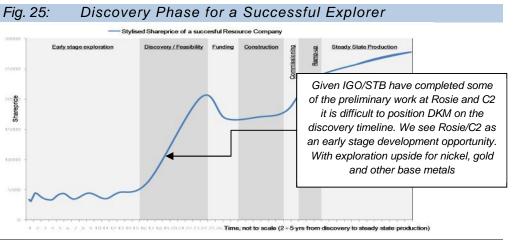
At this stage, we are of the opinion that the Company does not have the critical mass (resource size/potential mining inventory) for a viable project development, unless the maiden C2 resource exceeds expectations. In our opinion, a mining inventory of 70-100Kt of contained nickel will be required to justify a potential standalone operation or the transportation of ore to a third party concentrator (ie BHP NiWest's Leinster concentrator, which currently has idle capacity and is entertaining third part ore purchases (recent Poseidon Nickel (POS) deal). The Leinster Concentrator has capacity for ~3Mtpa and is currently <60% utilised. This mining inventory size would provide production of ~10Kt of nickel per annum over a 7 to 10 year period (dependent on resource conversion, final metallurgical testwork, etc.

At this stage we treat Duketon as an explorer with an eye on development. The Duketon Belt has proven nickel and gold endownment and through systematic exploration we expect the Company will have more drill success leading to resource extensions and new discoveries. On a peer comparison, Rox Resources Limited (RXL) is a good analogue, be it slightly more advanced in regards to metallurgical testwork progressing towards early development studies (scoping study soon to commence). RXL is currently trading on a EV/Resource metric of ~20c/lb Ni, which is more than double Duketon's trading range.

Duketon has proven deposits that can progress into the early development/feasiblitive stage, this is potentially the most rewarding part of the lifecycle but requires funding/derisking. We consider DKM to be a high risk/high reward investment given its early stage nature. We expect shareprice volatility.

Focus exploration to laterally extend Rosie, better define C2 and make new discoveries





Source: Hartleys Research

Hartleys 12-month DKM price target is A\$0.32 per share We have a preliminary price target assigned to Duketon Mining, based largely on peer comparison and exploration value (proven nickel and gold discoveries, large contiguous landholding to Regis Resources).

Our price target for DKM includes weighting for the peer comparison, nominal exploration value and a weighting for the current net cash backing.

Fig. 26: Price Target Methodology				
Price Target Methodology	Weighting	Spot	12 Month	
Peer comparison metric valuation	10%	\$0.14	\$0.28	
Nominal exploration value	80%	\$0.30	\$0.35	
Net cash backing	10%	\$0.10	\$0.10	
Risk weighted composite		\$0.27		
12 Months Price Target		\$0.32		
Shareprice - Last	\$0.160			
12 mth total return (% to 12mth target)	97%			

Source: Hartleys Estimate

	SIMPLE S	SIMPLE S.W.O.T. TABLE		
Rosie mineral resource likely to grow	Strengths	<ul> <li>Early and advanced stage exploration with multiple exploration and mining licence applications</li> <li>Mineral resource at Rosie remains open; pending resource for C2</li> <li>Highly prospective and large ground position</li> <li>Technical expertise in nickel exploration and development</li> <li>Tight capital structure highly leveraged to positive news</li> </ul>		
No reserves	Weaknesses	<ul> <li>Potentially requires additional higher grade exploration success</li> <li>Dependant on capital markets</li> <li>No reserves at Rosie or current resource at C2</li> <li>No metallurgical testwork released (as yet)</li> </ul>		
Exploration Upside	Opportunities	<ul> <li>Exploration Upside</li> <li>Diverse commodity exposure</li> <li>M&amp;A activity</li> </ul>		
	Threats	<ul> <li>Exploration Downside</li> <li>Exposure to commodity price decreases or closed capital markets</li> <li>Potential takeover</li> </ul>		
	Source: Hartlevs Research			

Source: Hartleys Research.

# RISKS

Key risks for Duketon include developing a project that will be economically viable, and obtaining funding for ongoing exploration. Weather, land access, metallurgical testwork, ore deposit delineating, retaining key people are all risks.

Assumption	Risk of not realising assumption	Downside risk to shareprice if assumption is incorrect	Comment
Timely land access	Low	Med	The Duketon Project is contained within crown land with no native title claims. Land access and approvals are at the mines department level, with program of work needing to be approved prior to exploration. Rosie, C2 and Terminator are located within a granted mining lease.
Funding for ongoing exploration	Low-Med	Med	We estimate DKM has a current cash position ~\$8m. To achieve the Company's medium term milestones it will require funding for further exploration and development studies. We expect this funding will be realised with minimal risk to the downside.
Preliminary Metallurgical testing	Low-Med	Med-High	No metallurgical testwork has as yet been released but is currently underway. Test work is needed to ensure favourable metallurgical recoveries to prove an economic reserve. Poor metallurgical results are a downside risk to the share price.
Feasible project development	Med	Med-High	No development studies have as yet commenced. We expect, given favourable metallurgical work that scoping activities will commence in the new year.
Commodity prices	Med	High	The project remains highly sensitive to commodity price movements and sentiment. The Company's exploration focus is Ni-Cu-PGE deposits, with commodity exposure to nickel, copper, PGE's, gold, along with others. The mineral field in which DKM is currently focused is greenfield, we view DKM as having a high exposure to underlying commodity prices

Source: Hartleys Research

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Note: personal email addresses of company employees are

structured in the following

manner:firstname\_lastname@hartleys.com.au

#### **Hartleys Recommendation Categories**

Buy	Shara price	annragiation	anticinated
Биу	Share price	appreciation	anticipateu.

Accumulate Share price appreciation anticipated but the risk/reward is not as attractive as a "Buy". Alternatively, for the share price to rise it may be contingent on the outcome of an uncertain or distant event. Analyst will often indicate a

price level at which it may become a "Buy".

Neutral Take no action. Upside & downside risk/reward is evenly

Reduce / It is anticipated to be unlikely that there will be gains over Take profits the investment time horizon but there is a possibility of

some price weakness over that period.

Sell Significant price depreciation anticipated.

No Rating No recommendation.

Share price could be volatile. While it is anticipated that, Speculative on a risk/reward basis, an investment is attractive, there Buy

is at least one identifiable risk that has a meaningful possibility of occurring, which, if it did occur, could lead to significant share price reduction. Consequently, the

investment is considered high risk.

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