An Australian gold miner - for global investors

Annual Strategy Day - August 2019

NORTHERN STAR
RESOURCES LIMITED

Acknowledgement of Country

Ngala kaaditj Whadjuk Noongar moort keyen kaadak nidja boodja

We acknowledge Whadjuk Noongar people as the original custodians of the land on which we meet today.

We pay our respects to their elders past, present and future.

Annual Strategy Day Agenda

Time	Minutes	Agenda	Speaker
09:30 - 09:45	15	Registration & Acknowledgment to Country	
09:45 - 09:50	5	Introduction	Luke Gleeson - Investor Relations & Business Development
09:50 - 10:10	20	NST Strategy/Vision and Gold Macro Landscape	Bill Beament - Executive Chairman
10:10 - 10:30	20	Company Performance, Achievements & Outlook	Stuart Tonkin - Chief Executive Officer
10:30 - 10:45	15	Financial Strength & Business Focus	Ryan Gurner - Chief Financial Officer
10:45 - 11:10	25	ESG & Culture	Bill Beament - Executive Chairman Peta Slocombe - Executive Manager - Capability and Culture Guy Singleton - Social Responsibility & External Relations Manager
11:10 - 11:50	40	Resources/Reserves and Exploration Pogo Geological Presentation	Michael Mulroney - Chief Geological Officer Darren Cooke - Principal Geologist - Pogo Integration
11:50 - 12:10	20	Coffee Break	
12:10 - 12:25	15	Operational Capability	Luke Creagh - Chief Operating Officer
12:25 - 13:00	35	Asset Overview	Luke Creagh - Chief Operating Officer
13:00 - 13:15	15	Summary and Recap	Bill Beament - Executive Chairman
13:15 - 13:30	15	Question and Answers	Executive Team

Resources & Reserves and Forward Looking Statements

Mineral Resources and Ore Reserves

The Mineral Resources and Ore Reserves information reported in accordance with the 2012 edition of the Joint Ore Reserves Committee's Australasian Code for Reporting of Mineral Resources and Ore Reserves ("JORC Code") in this presentation for all the Company's projects is extracted from the reports entitled "Resource and Reserve Update" dated 1 August 2019, available at www.nsrltd.com and www.asx.com. For the purposes of ASX Listing Rule 5.23, Northern Star confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. Northern Star confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

The information in this announcement relating to the Pogo mine's mineral resources for the period before 16 October 2018 is reported in accordance with the requirements applying to foreign estimates in the ASX Listing Rules and, as such, is not reported in accordance with the JORC Code. The information is extracted from the ASX announcement entitled "Northern Star acquires Pogo Gold Mine in Alaska" dated 30 August 2018. The Pogo resources mentioned in this announcement for the period before 16 October 2018 are estimated as at 31 December 2017 and according to the Canadian NI 43-101 standards, but are not fully compliant with those standards. A cautionary statement in respect of such resources appears in the Company's ASX announcement dated 30 August 2018.

The information in this announcement relating to the Pogo mine's reserves for the period before 1 August 2019 is reported in accordance with the requirements applying to foreign estimates in the ASX Listing Rules and, as such, is not reported in accordance with the JORC Code. The information is extracted from the ASX announcement entitled "Northern Star acquires Pogo Gold Mine in Alaska" dated 30 August 2018. The Pogo reserves mentioned in this announcement for the period before 1 August 2019 are estimated as at 31 December 2017 and according to the Canadian NI 43-101 standards, but are not fully compliant with those standards. A cautionary statement in respect of such reserves appears in the Company's ASX announcement dated 30 August 2018.

Forward Looking Statements

Northern Star Resources Limited has prepared this announcement based on information available to it. No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness or correctness of the information, opinions and conclusions contained in this announcement. To the maximum extent permitted by law, none of Northern Star Resources Limited, its directors, employees or agents, advisers, nor any other person accepts any liability, including, without limitation, any liability arising from fault or negligence on the part of any of them or any other person, for any loss arising from the use of this announcement or its contents or otherwise arising in connection with it.

This announcement is not an offer, invitation, solicitation or other recommendation with respect to the subscription for, purchase or sale of any security, and neither this announcement nor anything in it shall form the basis of any contract or commitment whatsoever. This announcement may contain forward looking statements that are subject to risk factors associated with gold exploration, mining and production businesses. It is believed that the expectations reflected in these statements are reasonable but they may be affected by a variety of variables and changes in underlying assumptions which could cause actual results or trends to differ materially, including but not limited to price fluctuations, actual demand, currency fluctuations, drilling and production results, Resource and Reserve estimations, loss of market, industry competition, environmental risks, physical risks, legislative, fiscal and regulatory changes, economic and financial market conditions in various countries and regions, political risks, project delay or advancement, approvals and cost estimates.

*All currency conversions in this document were converted at a spot conversion rate of USD:AUD of 0.70

† GDX 5Yr Average is sourced from Bloomberg; all erroneous data points have been removed

^ Source Credit Suisse: Global universe of publicly traded gold producers with market capitalisation >$500M as at 3 July 2019

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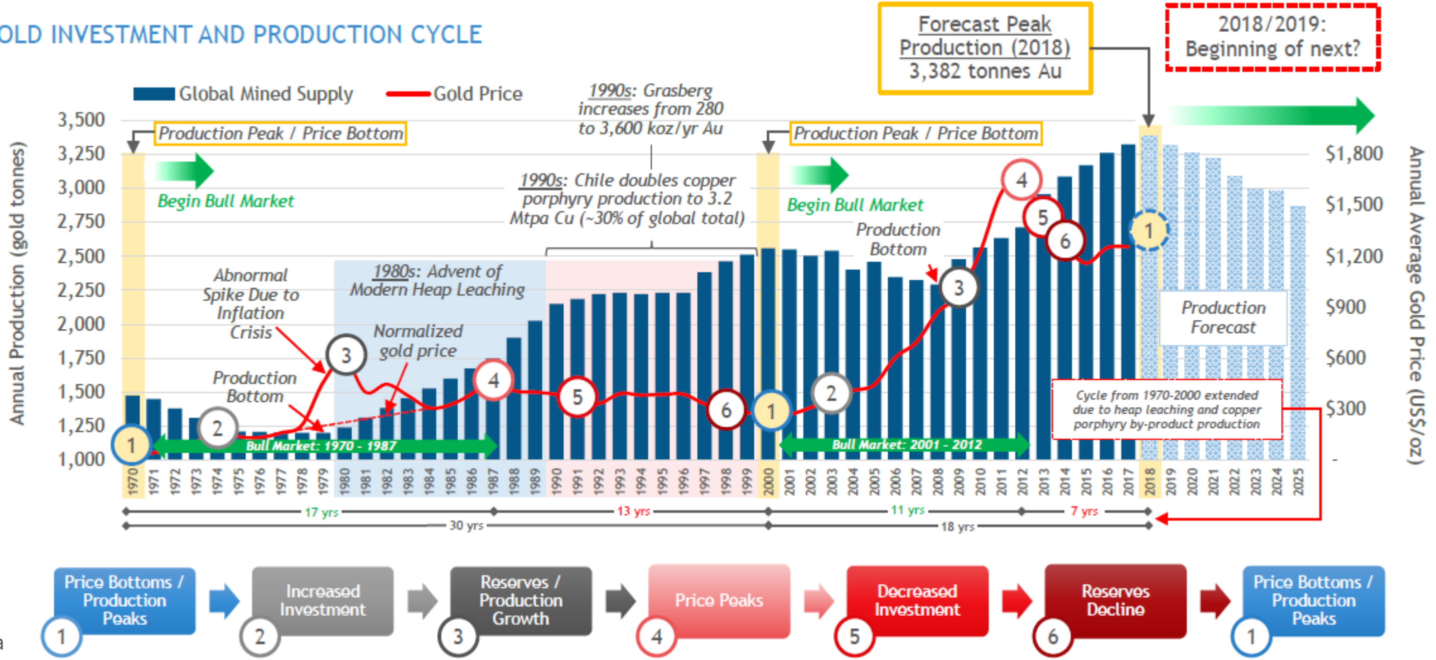
NST Strategy/Vision and Gold Macro Landscape

Golden Investment & Production Cycle Since 1970

- Historically, gold production peaks have coincided with the beginning of multi-year bull markets
- Gold production last peaked in 2000/2001 and marked the beginning of what was a long, robust, sustained bull market ending in 2012
- Prior to 2000, gold production had peaked in 1970, again coinciding with a multi-year robust bull market for gold

- A production peak in 2018 would be a strong indicator that we have reached the end of the current cycle and a new cycle is emerging

GOLD INVESTMENT AND PRODUCTION CYCLE



Source:
National Bank of Canada

History Repeats

Comparison of Market Environment: 2000 vs. 2018

Does It "Feel" Like we are Back at the Beginning?

2000	2018
▪ Equity markets at all-time highs	▪ Equity markets at all-time highs
▪ Dot-com boom underway	▪ Weed/crypto/block chain/FANG boom underway
▪ USD amidst 5+ year bull run	▪ USD amidst 5+ year bull run
▪ Gold price near multi-year lows	▪ Gold price near multi-year lows
▪ Gold production near all-time highs	▪ Gold production near all-time highs
▪ Investor sentiment toward gold industry very bearish	▪ Investor sentiment toward gold industry very bearish
▪ Preceded by periods of significant quantitative easing in the 90s	▪ Preceded by periods of significant quantitative easing after the financial crisis

Current market environment is very similar to 2000

Source:
National Bank of Canada

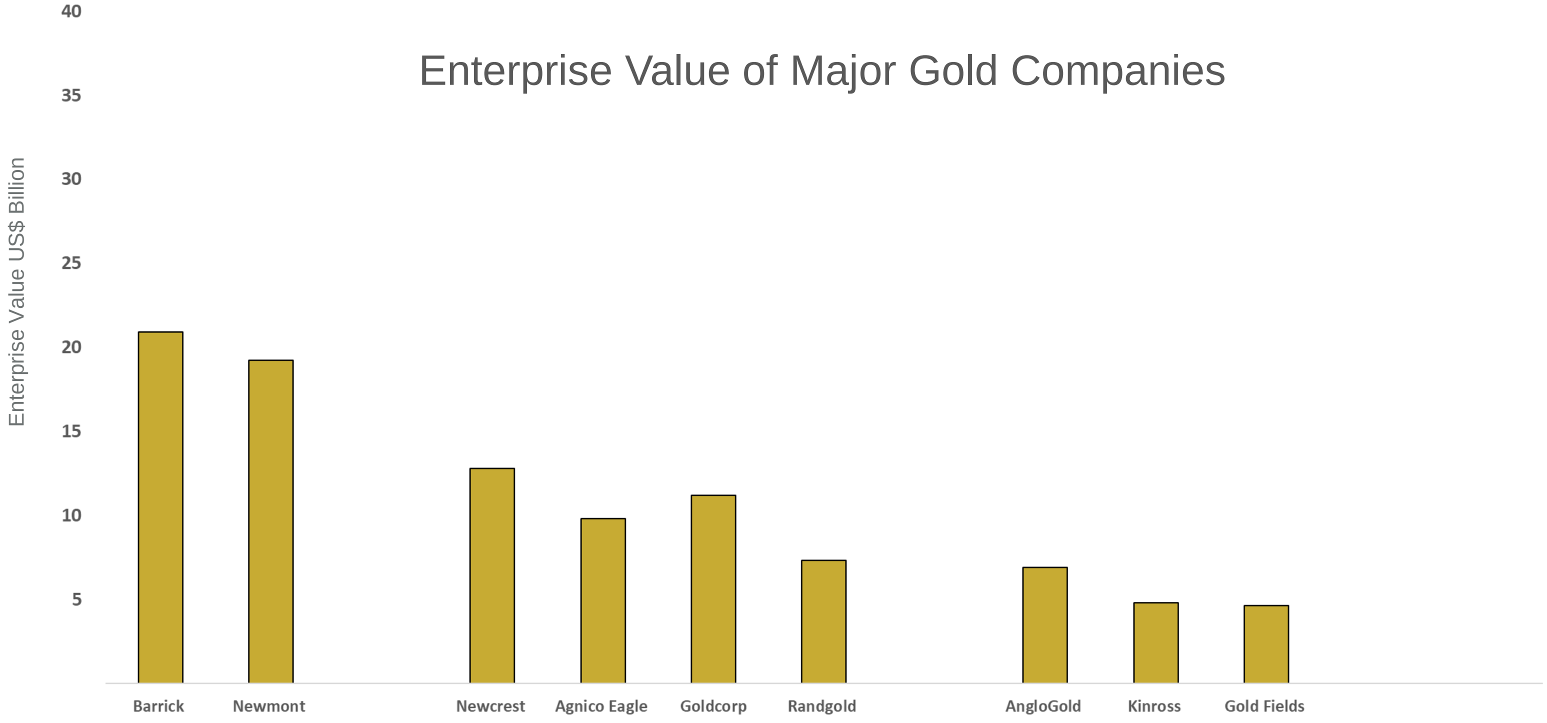
History Repeats

*"'It is clear to everyone that the **industry needs consolidation**,' said Newmont's chairman Ronald Cambre. 'The gold mining industry needs to reduce gold production when prices are low, to make more disciplined investment decisions and to provide marketing support for gold,' he said." (Globe & Mail, June 22, 2000)*

*"'**The industry needs M&A**,' Mr. Boyd [Agnico Eagle CEO] said in an interview at the company's Toronto headquarters. '**There's just too few high-quality opportunities left and far too many players**.'"*
(Globe & Mail, Oct. 22, 2018)

Global Gold Landscape December 2018

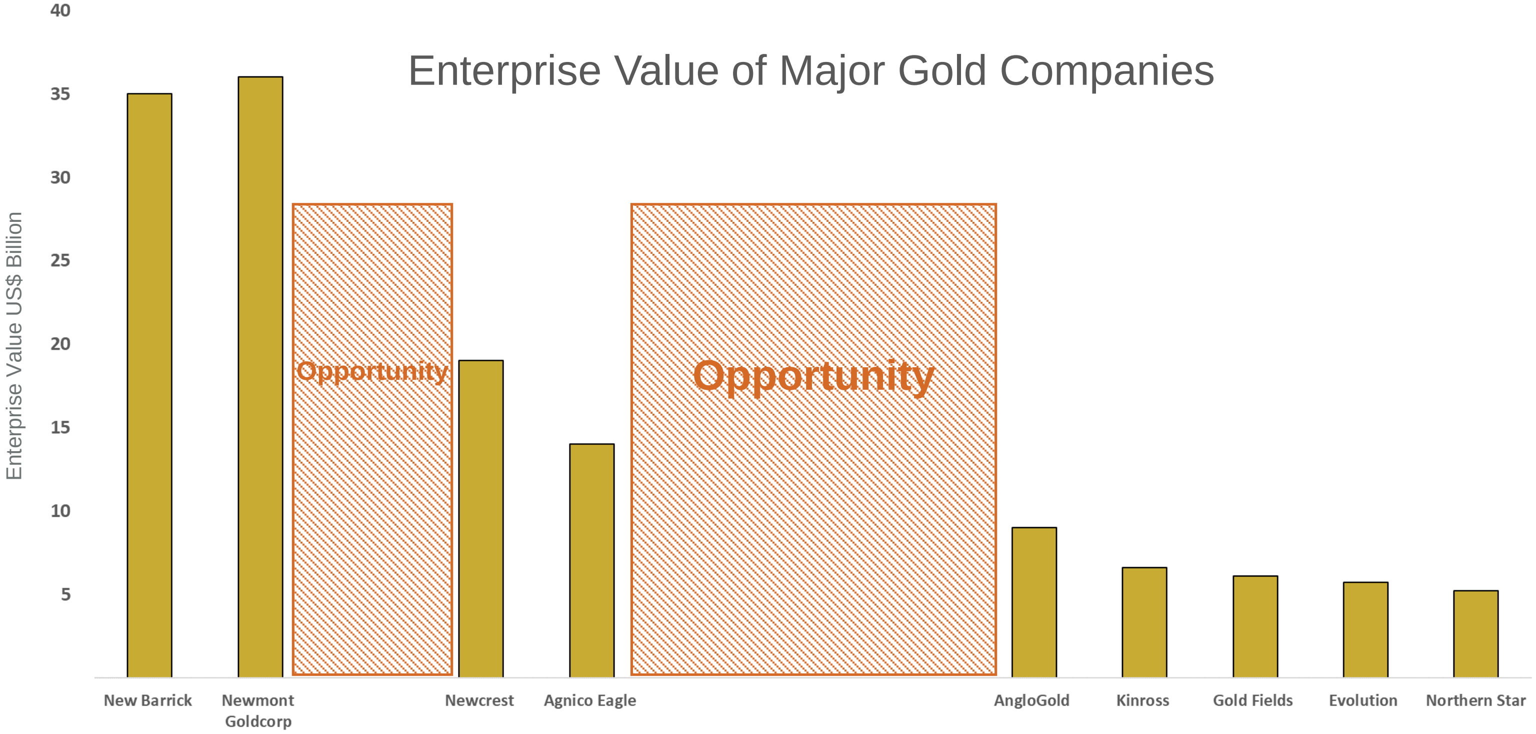
- There has been significant change in the gold landscape since the commencement of industry consolidation



* Data sourced from S&P Global Market Intelligence, Bloomberg & Company public reports

Opportunity in Current Global Gold Landscape

- There is a significant value opportunity left behind following this consolidation

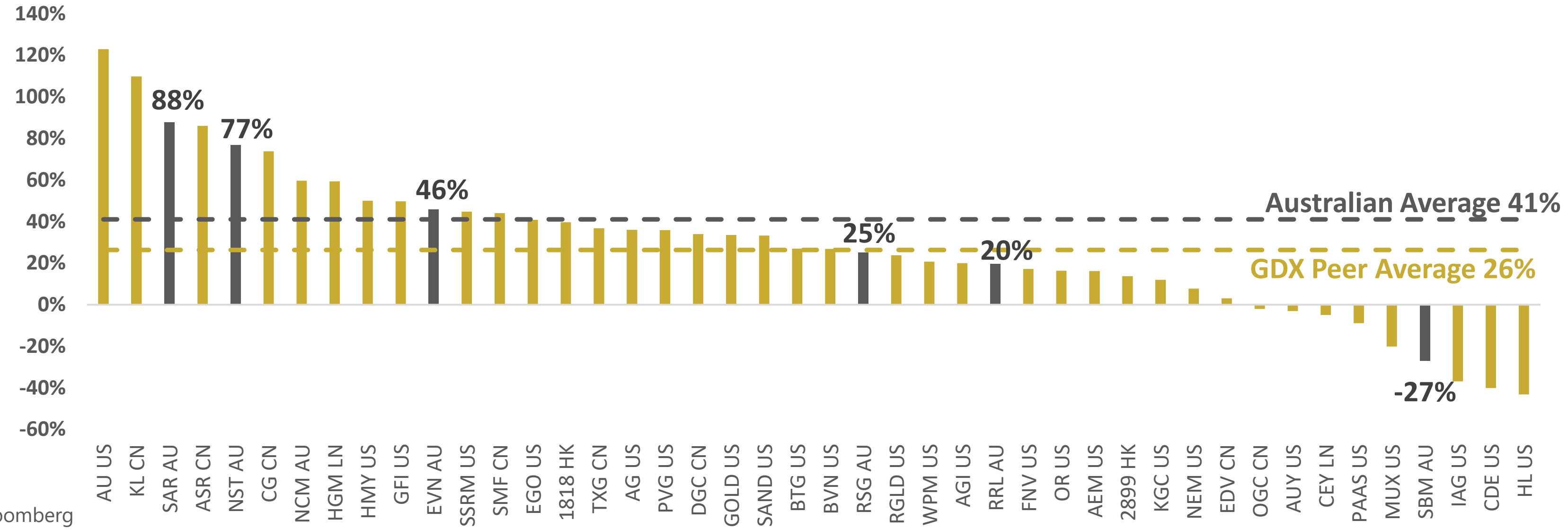


* Data sourced from S&P Global Market Intelligence & Company public reports (EV’s as of 1/8/19)

Gold sector backdrop

- The Australian peer group has again delivered superior returns compared to the GDX peer group with an average share price performance of +41%, outstripping the GDX peer average of +26%
- Over the past 12 months we have seen the Australian producers move to higher weightings in the Van Eck GDX index, this reweighting has been driven by superior free cashflow generation
- This outperformance has seen Australians now trade on comparable multiples to their GDX peers

GDX Gold Constituents last 12 month price performance



Source: Bloomberg

Gold Sector performance – What drove the outperformance

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Northern Star's share price performance of 107% ranks 3 out of 36 in the peer group^ and is significantly better than the median of (10%)

- The top 10 performing companies have exhibited the following vs. the group median over the past 3 years
  1. Higher production growth
  2. Consistent operational results
  3. Larger reserve and resource delineation
- Operational outperformance has led to significant increases in NAVPS and CFPS
- The top performers tend to be in low sovereign risk jurisdictions, have lower AISC, higher divided yield and currently trade at a premium A B C

Summary of Northern Star vs. global peers – last 3 years[2]

			Top 10 median	Bottom 10 median	Global median	Northern Star[3]	Northern Star vs. global peers
Δ Current vs. 3 years ago[1]	**Δ in operating metrics**						
	Gold production	1	18%	(1%)	2%	54%	✓
	Hit annual prod. guidance?	2	3/ 3	2/ 3	3/ 3	3/ 3	✓
	AISC		(9%)	15%	0%	6%	✗
	Gold P&P reserves	3	6%	(16%)	1%	144%	✓
	Gold M&I&I resources	3	12%	14%	9%	122%	✓
	Δ in financial metrics						
	NAVPS		42%	(39%)	6%	96%	✓
	CFPS		25%	(28%)	12%	50%	✓
Current	**Current operating metrics**						
	# of producing mines		4	4	4	4	~
	Avg. country credit rating	A	Aa2	A2	A3	Aaa	✓
	2019 E gold production (koz)		771	407	517	830	✓
	2019E AISC (US$/ oz)	B	$705	$1,014	$913	$774	✓
	Dividend yield	B	0.6%	0.0%	0.5%	1.6%	✓
	Net debt / 2019E EBITDA	B	0.1x	1.4x	0.4x	(0.3x)	✓
	Current trading multiples						
	P/ NAV	C	1.3x	0.9x	1.1x	1.6x	✓
	P / 2019E CF	C	11.6x	5.7x	7.3x	12.7x	✓

Source: Credit Suisse, Market data as at 3-Jul-19, S&P Global Market Intelligence.
(1) Production and AISC Δ based 2016A-2019E period. Production guidance, gold reserves & resources Δ based on 2015A-2018A period. NAVPS and CFPS Δ based on 3-Jul-16 – 3-Jul-19 period.
(2) Δ in production and R&R adjusted for companies with acquisitions including Kirkland (Newmarket), Eldorado (Integra), Alamos (Richmont), Centerra (Thompson Creek and AuRico), SSR (Claude). Excludes Δ in production and R&R for companies who have recently closed acquisitions including Northern Star (Pogo), Hecla (Klodex), Barrick (Randgold) and Newmont (Goldcorp).
(3) Northern Star's relative changes shown on AUD basis unless otherwise stated.

Northern Star Resources - Enacting the strategy

- NST has delivered and has now fully completed five consecutive Company strategies since 2010, well ahead of time. Pogo acquisition completes this 3 Year Vision

The What

Jundee & Kalgoorlie
Tier 1 Assets

3 Year Vision
A global mid-cap and ASX 100 sustainable gold producer focused on superior shareholder value creation

NST Internal Strategy

Pogo Acquisition
Tier 1 Assets

The How

Establish concentrated centres to maximise profitable organic growth

- Organically growing production volumes of existing sites by progressing near mine exploration and developing additional production fronts
- Greater operating efficiencies and increased asset utilisation through scale
- Growing resources and reserves, and extending mine life

Develop functional disciplines and corporate capabilities to meet stakeholder expectations

- Meet the increasing stakeholder expectations arising as a result of our growth
- Retain our social licence to operate
- Strengthen systems and processes to manage risk, deliver efficiencies and enable greater effectiveness

Find new concentrated centres through discovery or acquisition

- Retain a peer-leading balance sheet and sizeable financing facilities
- Maintain an active business development pipeline to identify acquisition opportunities
- Pursue greenfield exploration through a variety of entrepreneurial modes
- Remain nimble, flexible and ready to grow

Attract, develop and retain a talented and engaged workforce, supported by a strong, values-based culture

Safety | Teamwork | Accountability | Respect | Results

ESG a rapidly developing new focal point for investors

- Over US$19T of global funds under management now has an ESG filter to the investment process

Environmental Compliance

- Zero significant incidents or regulator fines
- Portfolio of assets in good standing

Transparency

- Sustainability reporting, disclosures, ESG roadshows
- CY Reporting change highlighting focus

Climate Change

- Effective risk management
- Water, carbon, temperature, energy

Diversity

- 17% CY18 female participation above industry average

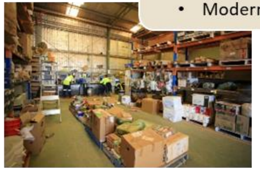
SUSTAINABILITY

Management System

- Well established and compliant
- Long-term teams, highly capable

Human Rights

- Modern Slavery Statement released



Stakeholder Engagement

- Zero stakeholder complaints
- Expanded Aboriginal Ranger Program

Governance

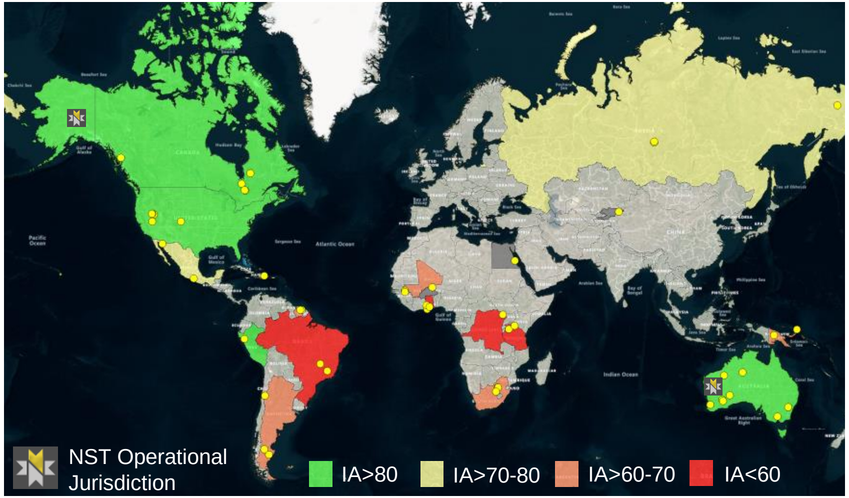
- Board-level ESG and Safety Committee
- Senior reporting structure

Growth in Tier-1 Jurisdictions

- Global Investors value mining exposure in Tier-1 jurisdictions, great for Australian Resources
- Globally there are only 18 mines producing over 300kozpa in Tier-1 mining jurisdictions (Australia, US and Canada)
- There is a global trend of diminishing mine lives, declining head grade, increased political risk and larger multi billion dollar capex requirements in Tier 2, 3 and 4 jurisdictions
- NST operates three Tier-1 projects located in Tier-1 jurisdictions and they have low capital intensity

LOCATION OF DEPOSITS WITH +300Koz PRODUCTION IN CY2018

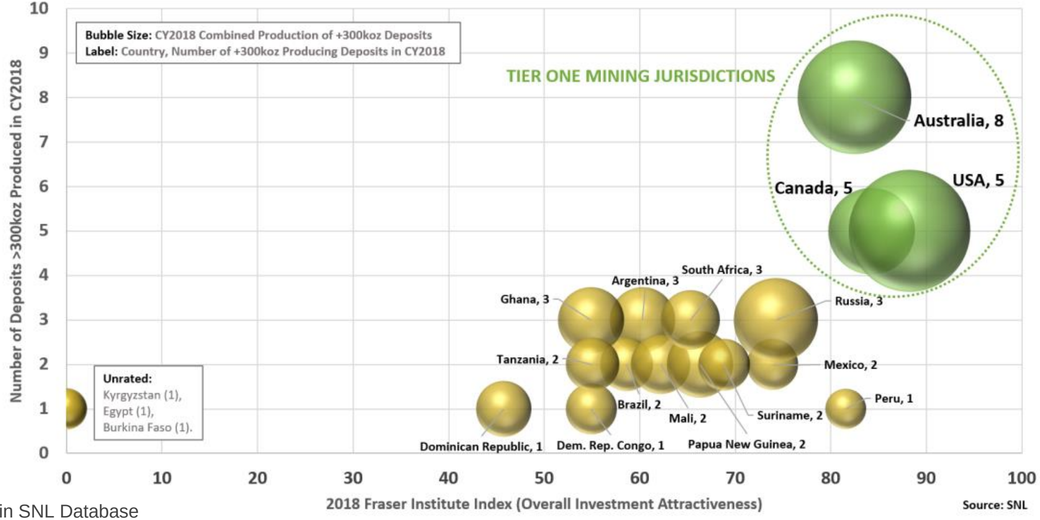
(Country coded with 2018 Fraser Institute Investment Attractiveness 'AI' Rank)



Deposits with +300koz Production in 2018 | IA Not Reported | No Deposits +300koz in SNL Database

CY2018 +300Koz PRODUCING DEPOSITS & JURISDICTION INVESTMENT ATTRACTIVENESS

(Fraser Institute)

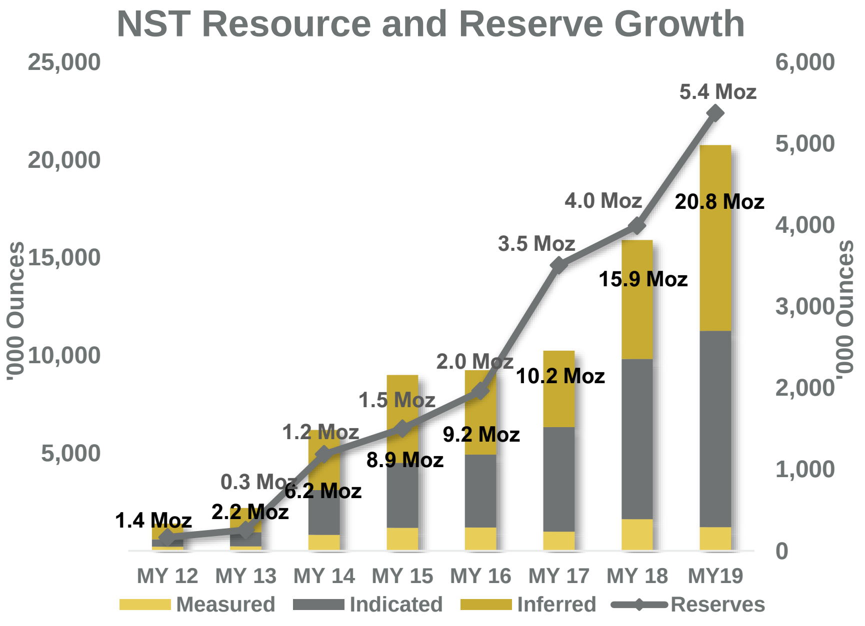


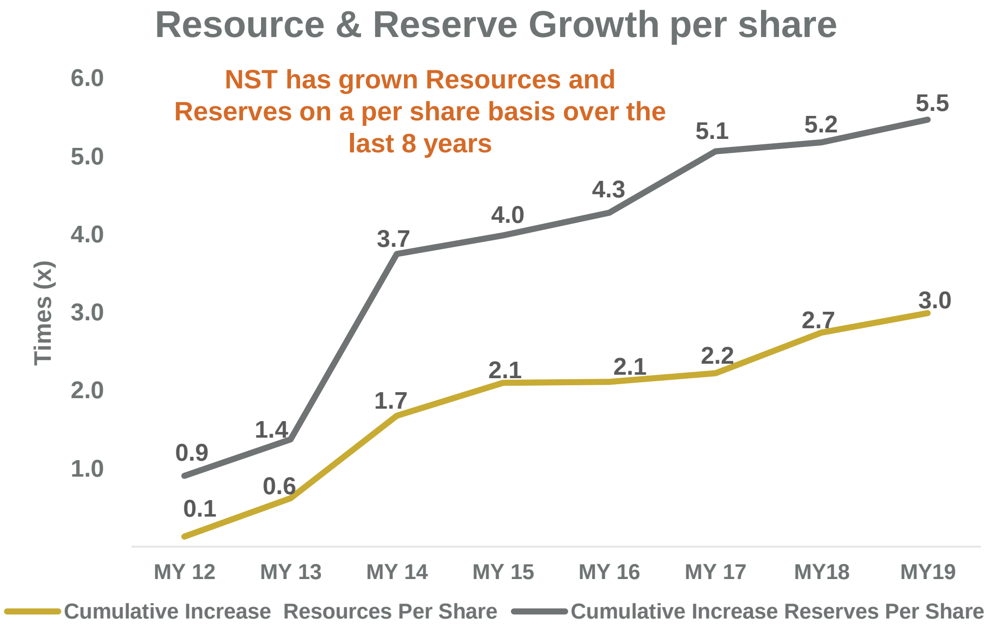
How will NST capitalise on this gold macro environment

- We have a clear roadmap and strategy in place
- Exceptional balance sheet and funding capability to fuel further growth
- Continue growing inventory, production and free cashflow through acquisition and investment in Tier-1 assets in Tier-1 jurisdictions
- The team has in-built capacity to oversee production well in excess of 1Mozpa and comfortably manage five to seven major operations
- Ensure margins remain at ~50% on AISC, retaining NST's position in the lowest-cost quartile globally
- Capitalise on and expand our key competitive advantage of underground expertise
- Maintain our licence to operate by investing in, and earning the respect of, the communities in which we live and work

Delivering Reserve and Resource Growth per share

- Through value accretive organic and inorganic growth NST has been able to successfully grow Resource and Reserve life on a per share basis for its Shareholders
- NST announced a 31% increase in Resources to 20.8Moz at 4.1gpt (grade up 46%) and a 35% increase in Reserves to 5.4Moz at 4.4gpt (grade up 16%), including a maiden Reserve at Pogo of 1.5Moz





The NST business model generating superior returns

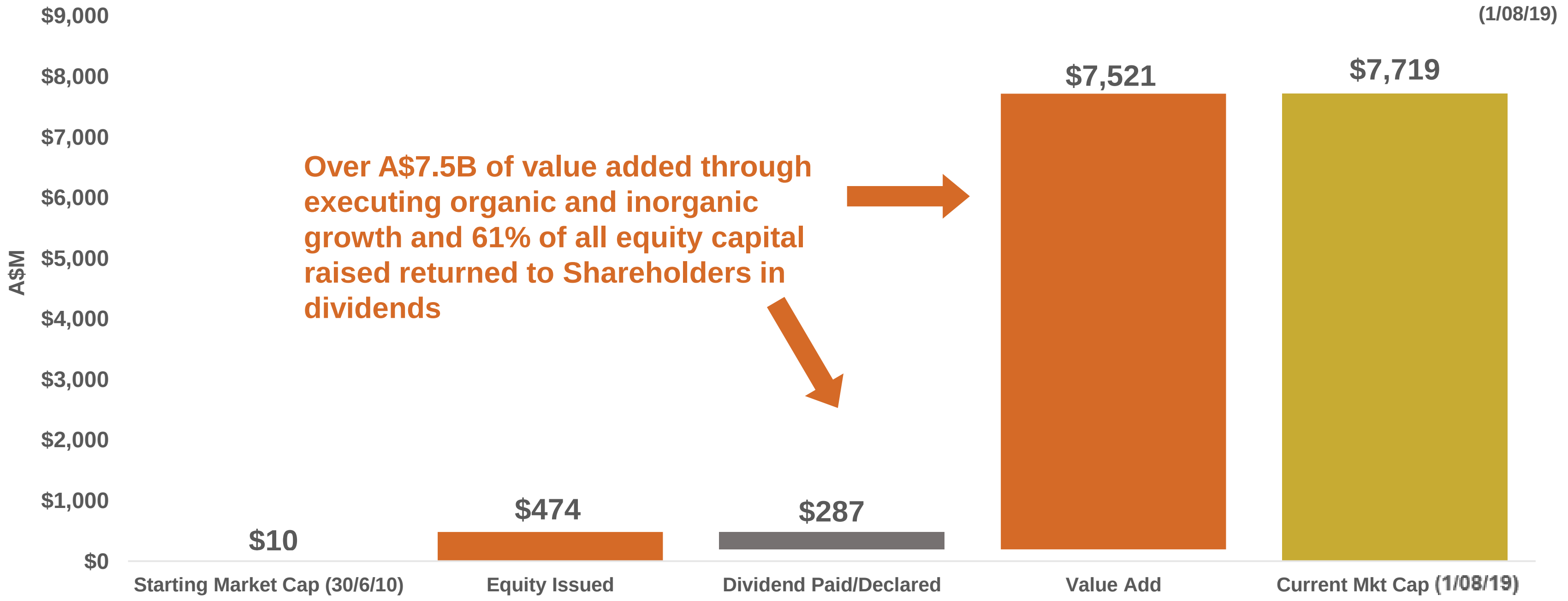
- NST has delivered sector leading returns at its Kalgoorlie and Jundee mines since taking ownership in 2014
- The proven NST integration and operating business model is currently being implemented at the Pogo operation with the aim to deliver similar returns over the coming years as all other past acquisitions achieved
- This highly successful track record gives confidence and backs the logic on why to continue growing the business

Operation	Increases to Reserves [1]	Production Growth [2]	Avg Site EBITDA Margin [2]	Internal Rate of Return IRR	Avg Return on Equity [2]	Avg Return on Invested Capital [2]	Broker NAV at acquisition [3]	Current NAV Value Uplift since acquisition [4]
Kalgoorlie Ops	468% ✓	135% ✓	51% ✓	90% ✓	49% ✓	65% ✓	A$118M ✓	607% ↑
Jundee	617% ✓	27% ✓	54% ✓	107% ✓	60% ✓	91% ✓	A$111M ✓	1,227% ↑
Operation	**Increases to reserves**	**Production Growth**	**Avg Site EBITDA Margin**	**Internal Rate of Return IRR**	**Avg Return on Equity**	**Avg Return on Invested Capital**	**Broker NAV at acquisition**	**Current NAV Value Uplift since acquisition**
Pogo	Maiden Reserve of 1.5Moz ✓	NST has a considerable opportunity to deliver similar returns ✓ Pogo creates a massive opportunity for further organic growth and superior Shareholder returns ✓					A$647M ✓	Opportunity for further significant value creation at Pogo

1. Calculated by dividing current Reserves by acquired Reserves at time of acquisition
2. Calculated from the first full fiscal year of ownership FY2015 to FY2018
3. Data abstracted from broker reports from covering brokers at time of acquisition
4. Data abstracted from most current broker reports from current covering broker universe

Value Creation – delivering returns to Shareholders

- NST's strategy of balancing organic growth with well executed M&A has generated over A$7.5B of value for Shareholders since the first acquisition in 2010 and <6% of this value uplift has been from equity raised
- This strategy has been achieved through operational excellence, investing heavily into exploration, growing production, optimising assets and financially disciplined inorganic growth; NST has returned 61% of all equity capital raised in the form of dividends to its Shareholders



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Company Performance, Achievements & Outlook

FY2019 Company Highlights

- Safety Performance - 75% reduction in TRIFR to 3.7 (sector 9.6) CY2018
- Standalone CY2018 Sustainability Report highlighting ESG performance
- Invested in Capability & Culture – Leadership to Graduates & Apprentices
- Invested in Innovation & Business Improvement – Equipment, Processes
- Pogo Acquisition and Integration – 28 Sep 2018
  - JORC Resource of 5.95Moz at 9.6gpt and maiden Reserve of 1.5Moz at 7.5gpt
  - Mining method change to Longhole Stoping, New fleet and Owner mining conversion
- Kalgoorlie Operations - 5 years of NST ownership
  - Record Physicals – 340koz sold, KB record of 2.04Mt processed
  - NSMS Owner mining conversion at South Kalgoorlie
- Jundee Operations – 5 years of NST ownership
  - Record Physicals – 299koz sold, 2.1Mt UG ore mined
  - Commencement of open pit mining at Ramone 20 months from discovery

FY2020 Production and Cost Guidance

- Group production 800,000-900,000oz at AISC A$1,200-A$1,300/oz
  - Growth capital non-sustaining of A$116 million – Pogo, Jundee and Moonbeam Growth
  - Exploration record spend of A$76 million – Pogo, Jundee and South Kalgoorlie
  - Second half of FY20 is forecasted to be stronger than the first half, driven by Pogo

FY2020	Production		AISC	
Guidance Range	Oz	Oz	A$/oz	A$/oz
Jundee	260,000	280,000	1,115	1,195
Kalgoorlie Operations	340,000	380,000	1,260	1,370
Pogo	200,000	240,000	1,210	1,320
NST TOTAL	800,000	900,000	1,200	1,300

Core Values - Our Decision Compass

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SAFETY
It matters and starts with you.

TEAMWORK
Together we can.

ACCOUNTABILITY
The responsibility lies with you.

RESPECT
To get it you must give it.

RESULTS
We deliver on our promises.

Zero harm
Continuous improvement

One Team
No blame or excuses

Role clarity
“Extreme ownership”

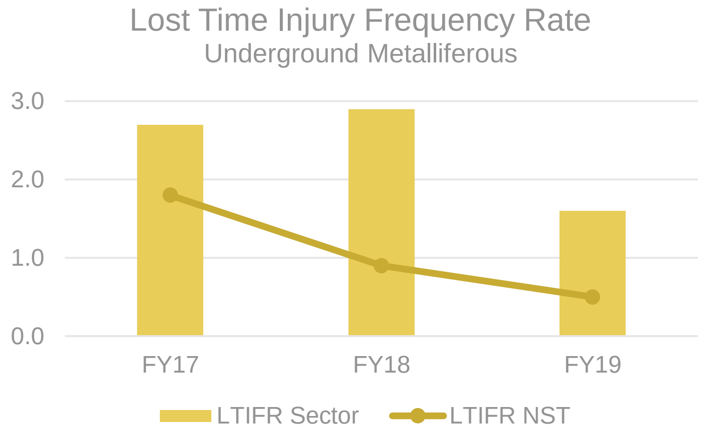
Listen to learn
Respect all diversity

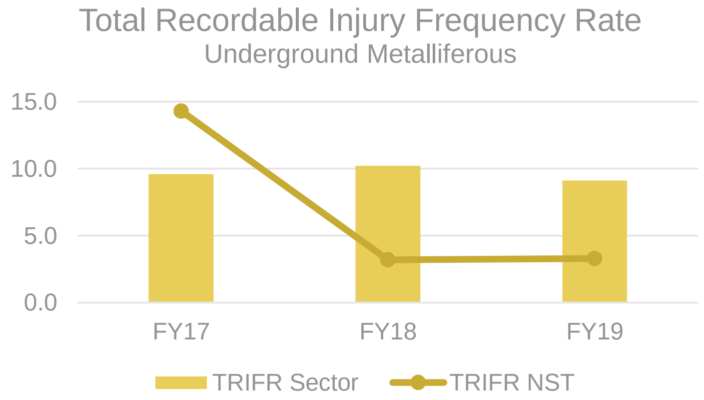
Clear metrics
Do what we say we’ll do

STARR
It’s what we stand for.

NST Safety Performance leading the sector

- FY2019 NST again delivered significant improvement in reducing LTIFR rate by 45% to 0.5 (sector LTIFR of 1.6) and TRIFR maintained at 3.3 (sector TRIFR is 9.1)
- Safety Management is integrated into all Leadership roles and we empower our staff to continually improve our practices to deliver sustainable results
- Our engaged workforce focuses on Leading Indicators of Hazard Identification and Rectification as a foundation of NST safety culture and behaviours





Pogo acquisition - consistent with previous 3 Year Vision

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3 Year Vision
A global mid-cap and ASX100 sustainable gold producer focused on superior shareholder value creation

Establish concentrated centres to maximise profitable organic growth

- Organically growing production volumes of existing sites by progressing near mine exploration and developing additional production fronts
- Greater operating efficiencies and increased asset utilisation through scale
- Growing resources and reserves, and extending mine life

Develop functional disciplines and corporate capabilities to meet stakeholder expectations

- Meet the increasing stakeholder expectations arising as a result of our growth
- Retain and strengthen our social license to operate
- Streamline systems and processes to manage risk, deliver efficiencies and enable greater effectiveness

Find new concentrated centres through discovery or acquisition

- Retain a peer-leading balance sheet and sizeable financing facility
- Maintain an active business development pipeline to identify acquisition opportunities
- Pursue greenfield exploration through a variety of entrepreneurial modes

Remain nimble, flexible and ready to grow

POGO GOLD MINE

COMMODITY	JURISDICTION	PROJECT STAGE	SCALE	MINING METHOD	MINING & MET METRICS	GEOLOGY & MINE LIFE	HISTORIC OWNERSHIP
✓ *Gold*	✓ *Tier -1* ✓ *USA* ✓ *Alaska*	✓ *Producing Asset*	✓ *Size & Potential*	✓ *UG* ✓ *Standard mining method*	✓ *High Grade* ✓ *Simple Metallurgy*	✓ *Vein hosted* ✓ *Significant Upside*	✓ *Global Majors*
	▪ *Established Stable Mining Jurisdiction;* ▪ *Established legislative framework;* ▪ *Majors with assets in Alaska include Kin, Teck & Barrick*	▪ *In operation since 2006.* 	▪ *271koz produced in CY2017 @ AISC of US$882/oz;* ▪ *Average annual production of ~300koz since 2006*	▪ *Standard Cut & Fill mining method;* ▪ *Shallow – deepest workings 500m below surface.*	▪ *Average grade of 13.6g/t since 2006;* ▪ *Ave met recovery of 88%.*	▪ *Moderately dipping quartz vein hosted;* ▪ *Continuous structure;* ▪ *Significant intersections outside of resource.*	▪ *Sumitomo Metal Mining Co., Ltd (85% JV interest and the mine operator)* ▪ *Sumitomo Corporation (15% JV interest)*

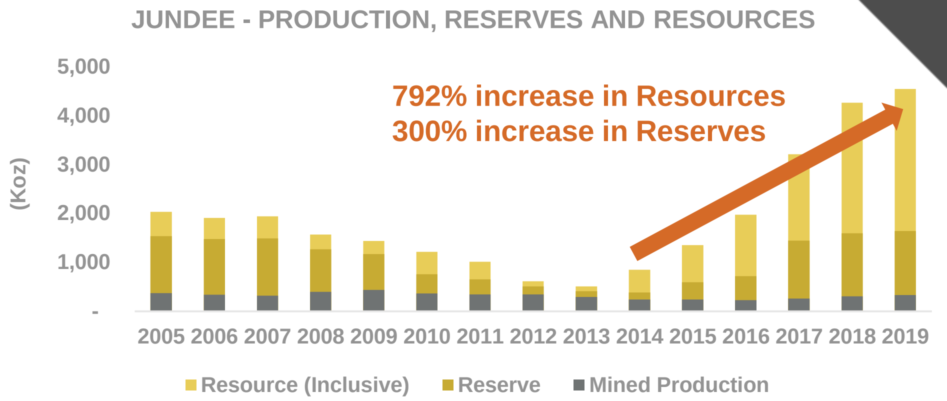
A business model that delivers Shareholder returns

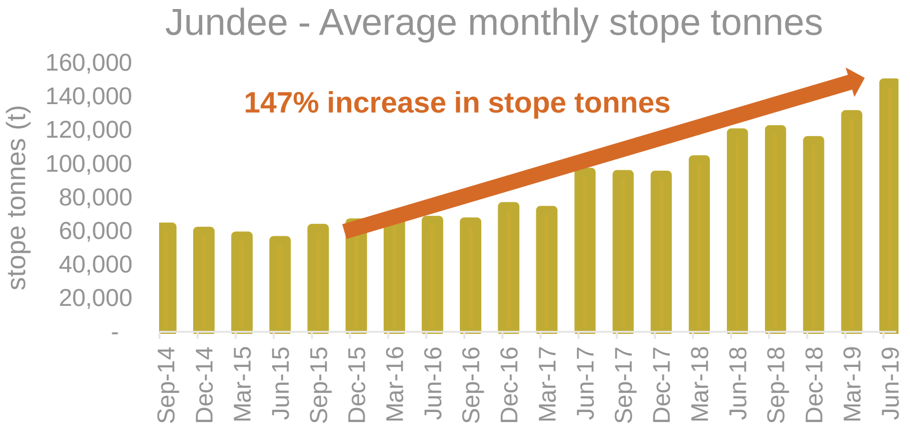
A Reliable and Proven Strategy to Maximise Value which has been in place for 9 years on NST Assets

Initiative	Description
Pay-off Acquisition	▪ Maximise operational cashflow to recover acquisition purchase price and strengthen balance sheet for future growth ▪ De-risk acquisition exposure, demonstrate to Shareholders financial discipline, establish self-funding assets
Optimise Operations	▪ Rationalise and standardise mining fleet, personnel and assets across the Company ▪ Increase productivity levels and mining physicals which will improve production profile, project margins and profit.
Extend Mine Life	▪ Convert more resources into reserves and extend known resources through targeted drilling ▪ Re-evaluate known mineralisation / deposits that are currently not in a resource or reserve category ▪ Enable site teams to take calculated risks and test theories/targets
Improve Financial Metrics	▪ Review all supply contracts and leverage off combined Company buying power – cost outs ▪ Implement strategies to reduce the total site cost per ounce, fixed, variable, dependent and discretionary spend
Upside Opportunities	▪ Organically grow production by leveraging off "sunk" capital/infrastructure and mining profitable incremental ounces ▪ Evaluate the exploration potential of the highly prospective tenement package, greenfield and brownfields ▪ Evaluate nearby tenements and pursue regional consolidation

Case Study – Jundee delivering superior organic growth

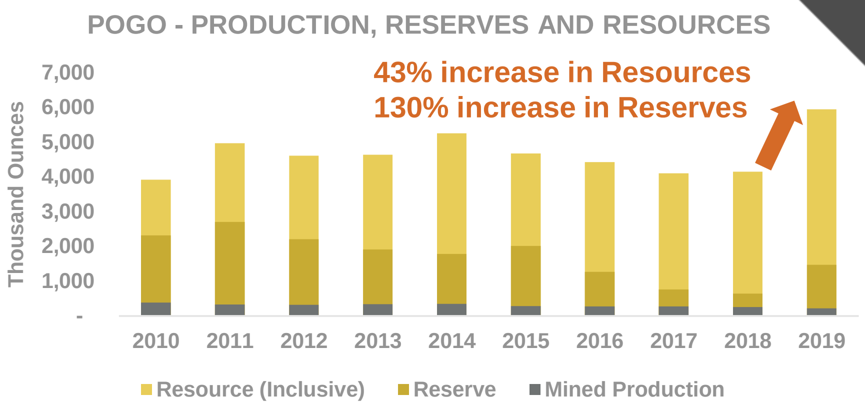
- Integrated NST Culture and Strategy to ensure aligned activity at Jundee
- Investment in drilling to grow Resources and convert Reserves for LOM visibility
- Develop capital declines to open multiple production fronts and establish UG Diamond Drill platforms
- Renegotiate contracts and align objectives of suppliers, contractors and service providers
- Drive Productivity improvements by addressing mine constraints and milling bottlenecks
- Grow production efficiently and sustainably focused on margin
- Explore regional opportunities that add synergies to concentrated centre

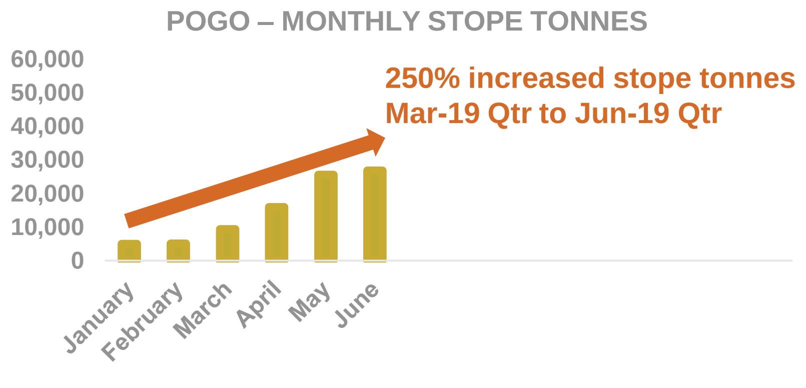




Case Study – Pogo journey underway

- Integrating NST Culture and Strategy to ensure aligned activity at Pogo
- Significant investment in drilling, so far Reserves increased to 1.5Moz at 7.5gpt underpinning mine-life visibility
- Significant investment in capital development to establish diamond drill platforms and open production fronts
- Mining method changing to longhole stoping to increase productivity and substantially lower unit mining cost per tonne
- Renegotiating contracts to align supplier objectives and reset cost base
- NSMS Owner Mining conversion to ensure deliberate and direct control
- Range tested mill to +1Mtpa and identified bottlenecks to scope engineering studies





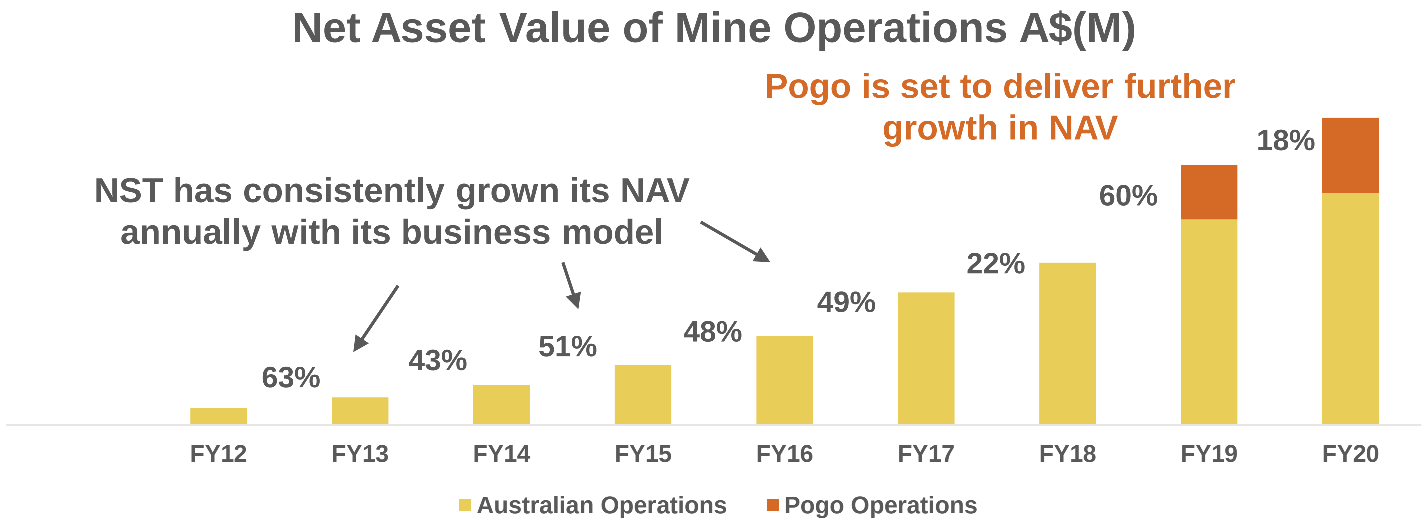
A business model that delivers Shareholder returns

Progress on executing NST Strategy at Pogo is **well underway** to Maximise Value for a long-life Asset

Initiative	Description
Pay-off Acquisition	▪ Maximise operational cashflow to recover acquisition purchase price and strengthen balance sheet for future growth ▪ **De-risk acquisition exposure, demonstrate to Shareholders financial discipline, establish self-funding assets**
Optimise Operations	▪ **Rationalise and standardise mining fleet, personnel and assets across the Company** ▪ **Increase productivity levels and mining physicals which will improve production profile, project margins and profit.**
Extend Mine Life	▪ **Convert more resources into reserves and extend known resources through targeted drilling** ▪ **Re-evaluate known mineralisation / deposits that are currently not in a resource or reserve category** ▪ **Enable site teams to take calculated risks and test theories/targets**
Improve Financial Metrics	▪ **Review all supply contracts and leverage off combined Company buying power – cost outs** ▪ **Implement strategies to reduce the total site cost per ounce, fixed, variable, dependent and discretionary spend**
Upside Opportunities	▪ **Organically grow production by leveraging off "sunk" capital/infrastructure and mining profitable incremental ounces** ▪ **Evaluate the exploration potential of the highly prospective tenement package, greenfield and brownfields** ▪ Evaluate nearby tenements and pursue regional consolidation

The NST business model delivers value

- NST continues to deliver sector leading returns to its Shareholders by growing mine lives and continually optimising its assets through the adaptation of the NST business model and growing Net Asset Value across its Tier-1 assets
- The recent acquisition of the world class Pogo mine adds the next leg of organic growth potential



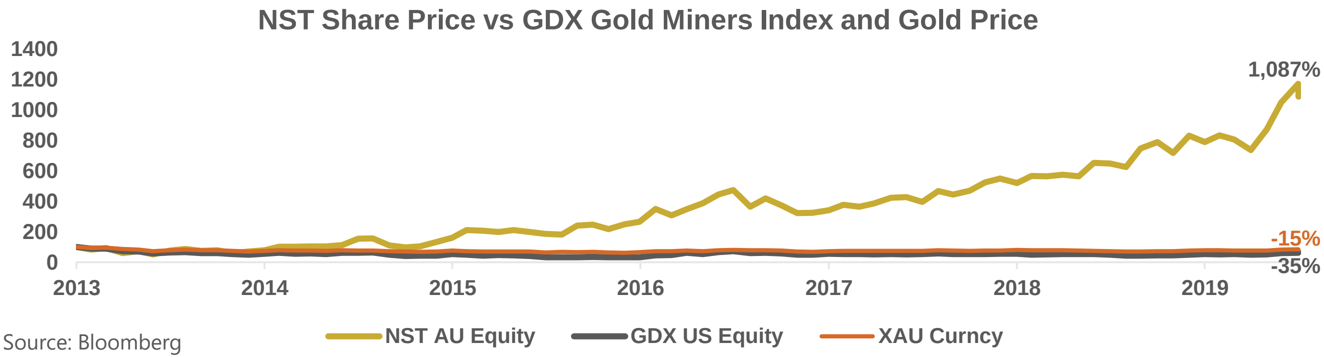
Source: Data sourced from all available broker reports

NORTHERN STAR
RESOURCES LIMITED

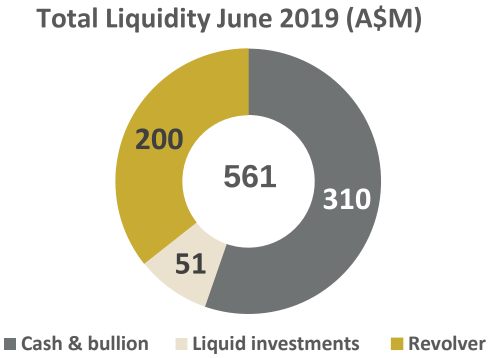
Financial Strength & Business Focus

Company Overview

Stock code (ASX) :	**NST**
Share price as at 1 August 2019:	A$12.07
Market capitalisation (1 Aug 2019) (639.6 million shares on issue):	A$7.7B (US$5.4B)
Cash, bullion & investments as at 30 June 2019	A$361M (US$253M)
Corporate Bank debt	Nil
Enterprise value	A$7.5B (US$5.3B)
3 month average daily turnover	~A$38M
Substantial Shareholders: BlackRock	12.7%
Van Eck	11.8%

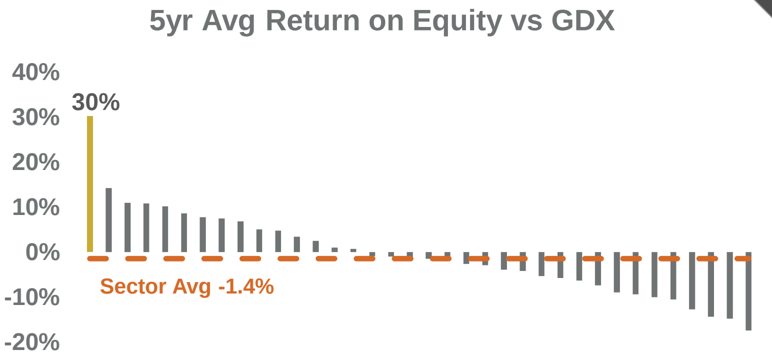


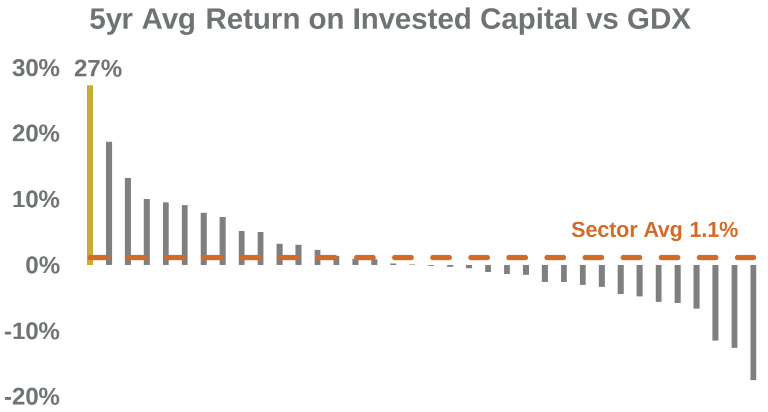
Source: Bloomberg



Best in Class Returns & Capital Management

- Consistent superior returns delivered to Shareholders; 5 year TSR of 853%[1]
- Sector leading 5 year average Return on Equity of 30% and Return on Invested Capital of 27%
- Demonstrated history of cash generation built from executing the NST business model
- Strong and flexible balance sheet has been pivotal in executing organic investment and inorganic opportunities
- Liquidity of A$561M at 30 June 2019, excluding 106kozs of gold contained in stockpiles and circuits
- Dividend Policy of 6% of revenue; since 2013 NST has returned 61% of total paid up capital via fully franked dividends (A$287M)



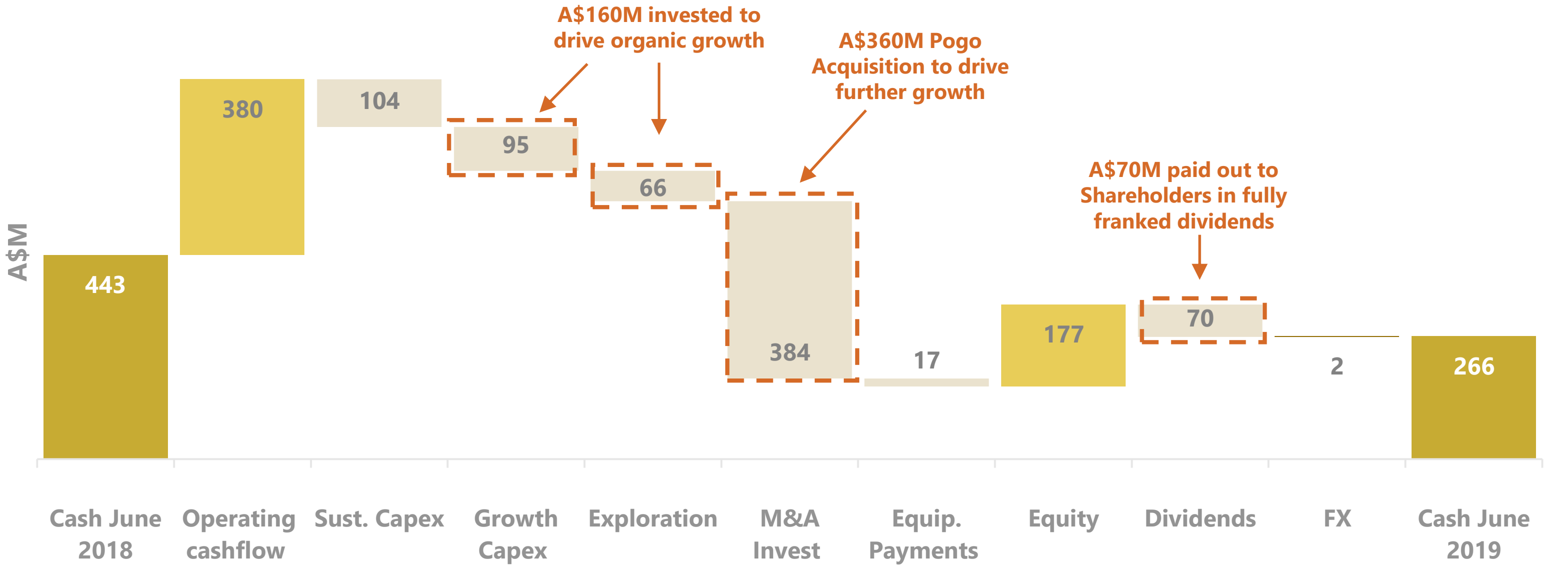


1. Simple Total Shareholder Return (TSR) from 1 July 2014 to 1 August 2019 from dividends and capital growth

Source: Bloomberg

FY2019 - A year of investment for future growth

- NST's investments in FY2019 has set the business up for further growth across its Tier-1 assets



Organic Growth Capex/Exploration

- A$95M invested in growth capex
- Exploration investment
- Past 5 years NST has invested A$267M in Exploration
- Reserves & Resources growth
- Organic production growth

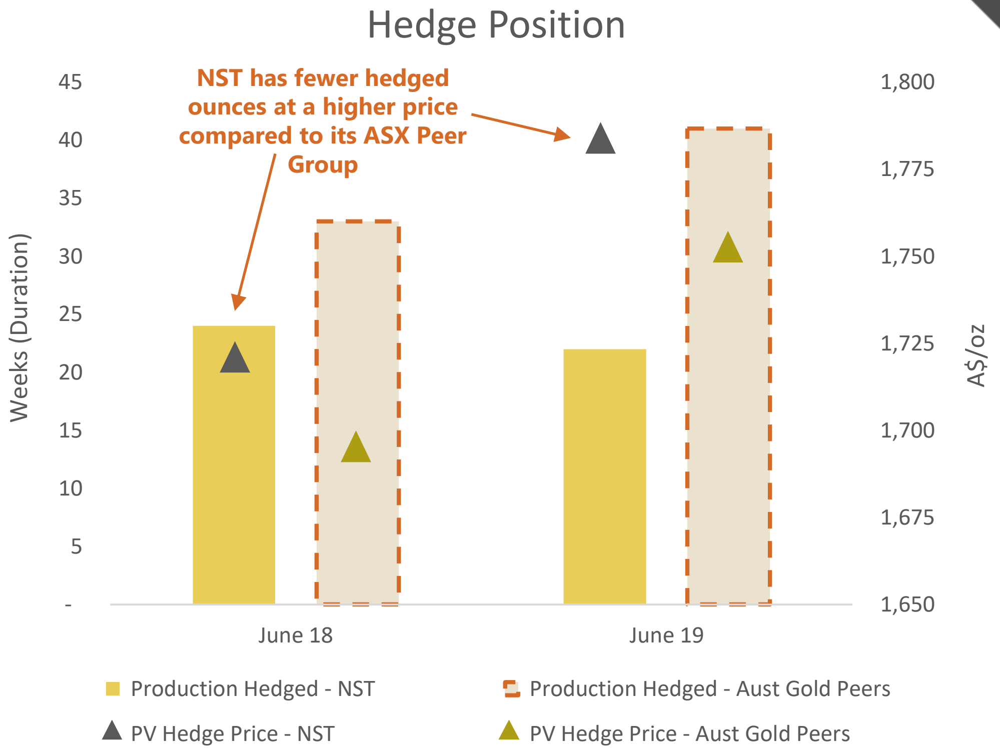
Inorganic Growth M&A

- US$260M (A$360M) Pogo acquisition
- FY2020 Pogo guidance 200koz-240kozs AISC US$850-US$925/oz 1.5MOz Reserve at 7.5gpt

NST well positioned to leverage current gold price strength

- Current hedge book offers significant upside to record gold price versus the peer group
- Use hedging to protect key investment decisions
- Disciplined & consistent approach
- NST Hedge Policy framework guides minimum and maximum committed hedge percentage levels against an annual forecast:

	Min.	*Max.*
12 months	20%	40%
13-24 months	10%	30%
25-36 months	0%	25%

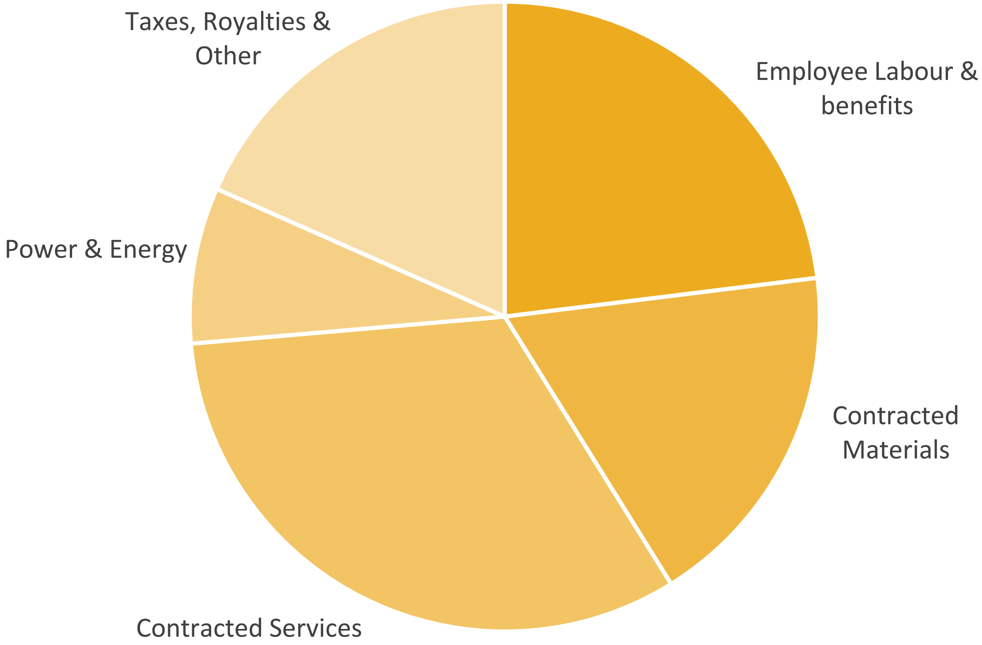


Source: Noah's Rule, August 2019. Peer Group of 16 ASX Listed Gold Companies. PV refers to Present Value

Cost focused business with competitive advantages

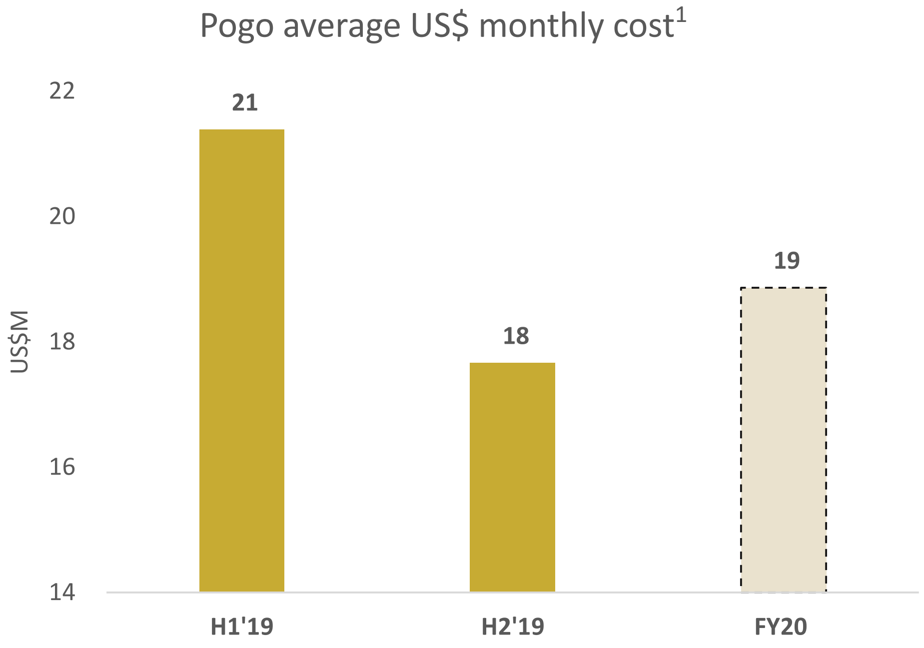
- NST proactively manage input costs and continues to competitively test market for cost reductions
- Last 5 years have realised A$118M of cost reductions on contracted services/materials
- Another A$29M will be realised during FY2020, with a further A$50M of spend targeted for review in FY2020
- A$171M of total Australian operations spent with suppliers in regional areas; ~50% of spend at Pogo originates in Alaska
- Direct employee labour & benefits comprise ~24% of NST operating costs
- Operational employee pay model directly aligned to safety and productivity metrics
- Diesel comprises less than 3% of total operating cost profile

FY2019 Group Operating Costs[1]



1. Includes Pogo operating costs since acquisition, 28 September 2018 and Group taxes. Excludes capital.

Cost transition at Pogo taking shape



- Demobilised mining contractor in Jan 2019
- Significant fleet investment in 2H FY2019
- Further costs improvements will remain a focus in FY2020
- FY2020 monthly costs expected to be slightly higher than 2H FY2019 due to significant improvement in operational physicals, leading to increased gold production

1. Includes site operating expenditure, sustaining and growth capital, excludes exploration, inventory movements and corporate cost allocation.

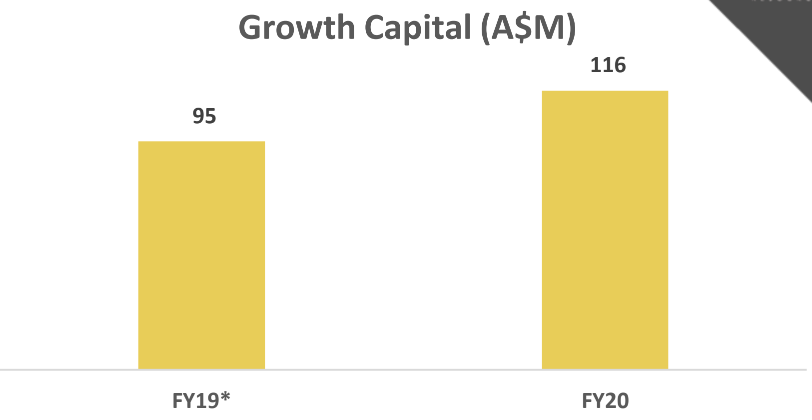
Capital investment for production growth

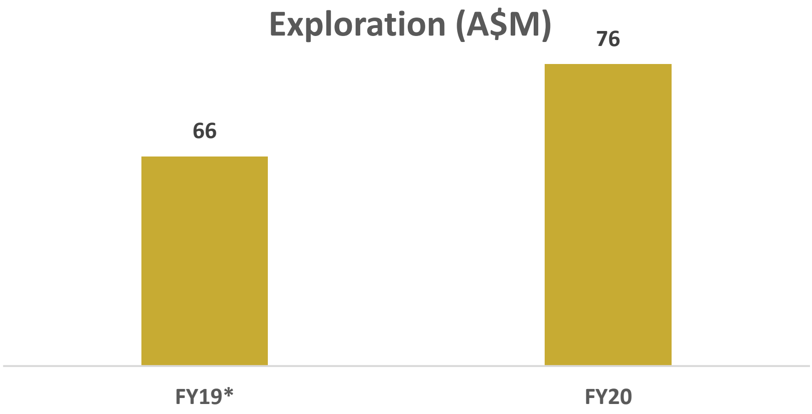
FY2020 growth capital of A$116M is primarily allocated to the following key projects:

- A$44M developing and bringing online new mining areas at Pogo. This also includes A$7M on processing infrastructure to de-bottleneck the front end of the processing plant
- A$24M development and infrastructure to bring Moonbeam UG online in Kalgoorlie
- A$7M development for drill drives and access for new areas at EKJV Operation
- A$37M excavation of exploration drill platforms at Jundee as well as setting up access to new mining areas

FY2020 Exploration spend focus areas:

- Jundee in-mine & regional targets A$19M
- Pogo in-mine & regional targets A$20M
- Kanowna Belle in-mine & regional targets A$11M





* FY2019 spend includes capital spent since acquisition 28 September 2018.

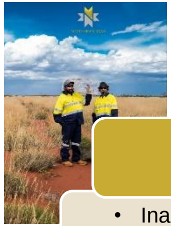
NORTHERN STAR
RESOURCES LIMITED

ESG & Culture

Environmental, Social & Governance Values are core at NST

Environmental Compliance

- Zero significant incidents or regulator fines
- Portfolio of assets in good standing



Transparency

- Inaugural sustainability report FY17
- CY Reporting change highlighting focus

Climate Change

- Effective risk management
- Water, carbon, temperature, energy

Diversity

- 17% CY18 female participation above industry average

SUSTAINABILITY

Management System

- Well established and compliant
- Long-term teams

Human Rights

- Modern Slavery Statement released

Governance

- Board-level ESG and Safety Committee
- Senior reporting structure

Stakeholder Engagement

- Zero stakeholder complaints
- Expanded Company Ranger Program

Environmental, Social & Governance Values are core at NST

- We consider good governance to be a key enabler of sustainable growth
- By practicing good governance, we can optimise:
  - Business growth - protecting and developing our human capital
  - Optimise performance efficiencies
  - Manage and reduce environmental impacts
  - Long term planning & risk management
  - Compliance
- Empowered and diverse independent directors
- Workforce accountable to our Codes, Policies, Standards as well as legal and regulatory compliance
- We consider the potential impact of our business (good or bad) on all our Stakeholders and make decisions accordingly

ESG - Governance

- Board Composition, 7 Directors; Executive Chairman & 6 Non-Executive Independent Directors
  - Two new appointees, Mary Hackett (Mechanical Engineer) and Nick Cernotta (Mining Engineer)
  - Superior skills matrix with the current Board
- Diversity; 33% Female Non-Executive Directors and 17% Females in workforce (above industry average)
- Ranked Top Quartile in the 2019 Ownership Matters (Governance Advisors) Board Confidence Report
  - Survey of 33 Institutions representing $363 Billion of Australian Equities under management

June 2019 — **Northern Star Resources Limited (NST)**

BOARD CONFIDENCE INDEX

LEADERSHIP	OVERSIGHT	INFLUENCE & RESPONSIVENESS	STRATEGIC DECISION MAKING	COMPOSITION	REMUNERATION
ASX100 Range (68.9 to 125.0)	ASX100 Range (66.5 to 119.7)	ASX100 Range (69.5 to 117.9)	ASX100 Range (69.9 to 135.9)	ASX100 Range (77.0 to 123.0)	ASX100 Range (77.1 to 128.0)
120.80	119.34	117.53	116.58	116.76	127.24
Top Quartile	Top Quartile	Top Quartile	Top Quartile	Top Quartile	Top Quartile

Overall 'Board Confidence Index' (BCI)

119.71

Top Quartile

As an index score, the BCI is relative to the average rating for an ASX100 company (set as 100). A score above/ below 100 represents both the direction and the magnitude of difference from the mean. To see absolute scores see the charts below and overleaf.

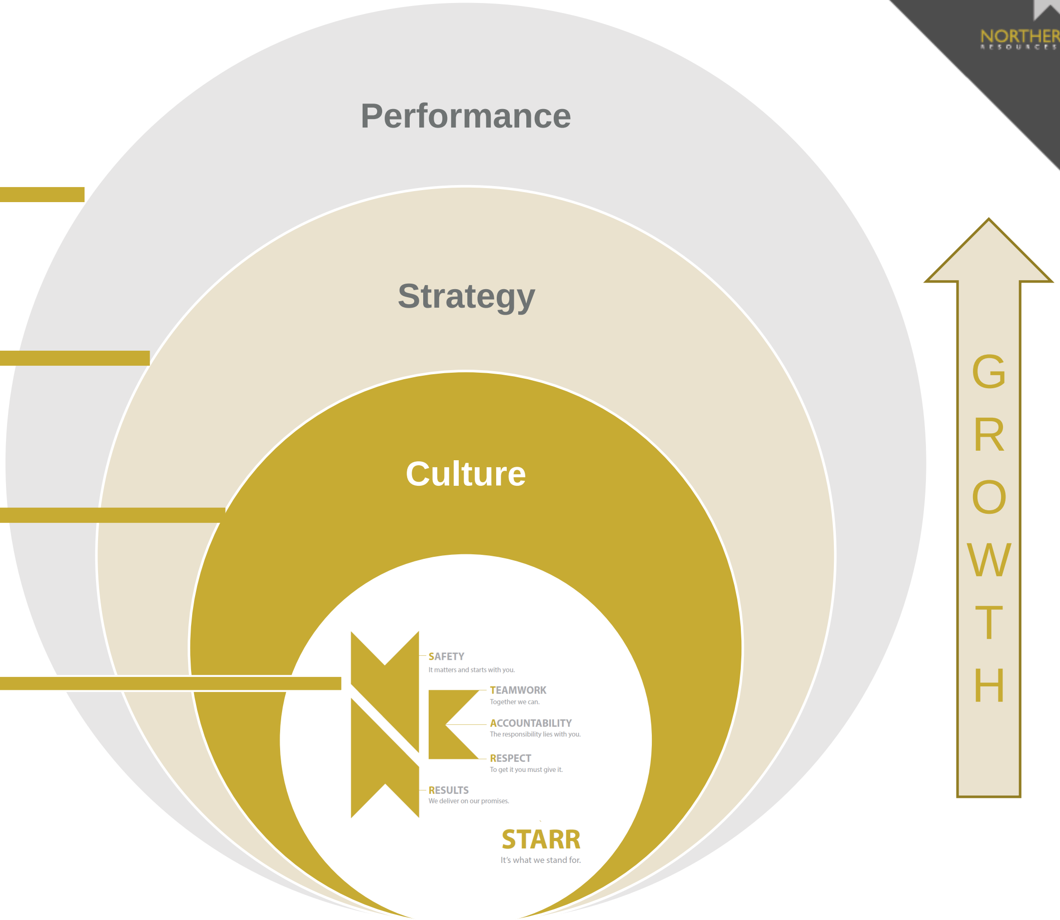
Aligning for Growth

Superior performance enables growth

Developing and execution of a strategy delivers growth

Preserving culture protects the growth outcomes

Our Core Values are the foundations of our growth



Human Capital - Developing Capability for Growth

- Global Company
- Strong Growth
- Tier-1 Operations
- Job Security
- Underground specialists

ATTRACT

- Work/life balance
- High Performance Culture
- Career Advancement
- Incentive Plans (STI and LTI's)
- Over 80% of employees are Shareholders

RETAIN

- High Potential Talent Screening
- Fast track development
- Bespoke Leadership Programs
- Coaching and Mentoring Framework
- Cross-site exchange

DEVELOP

EMPLOYEE WELLBEING

Snr Leaders

Managers

Supervisors

Operational

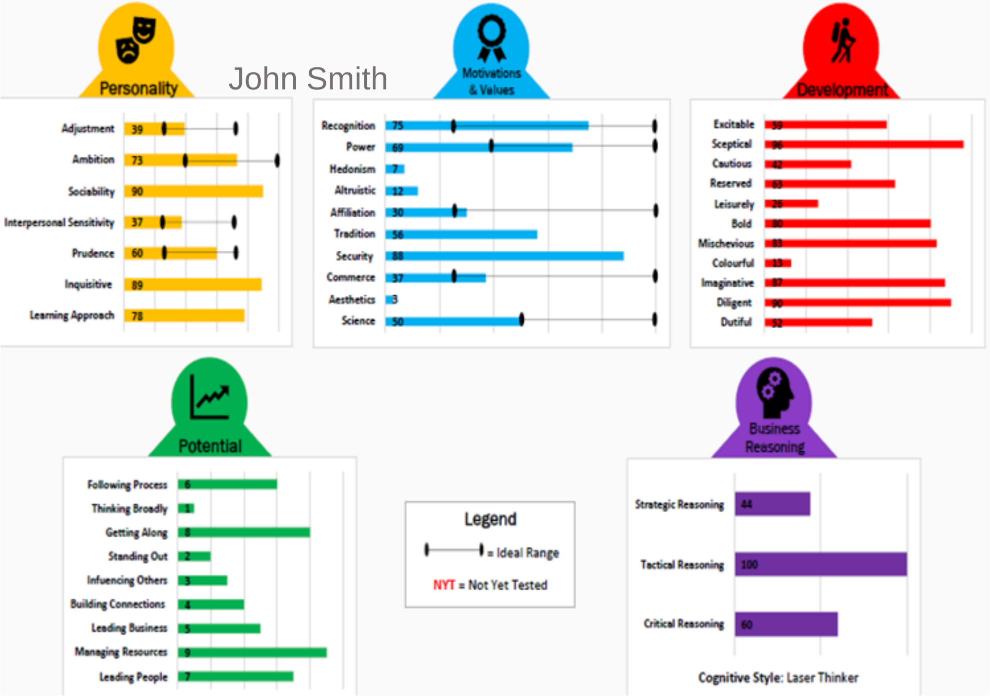
Graduates

Apprentices

Ready for Growth - World Class Talent Program

NST Talent mapping program enables comprehensive workforce development planning essential to our growth, providing:

- Early identification of employee capability
- Customised employee development plans
- Succession mapping = Psychometrics + Performance
- Gap analysis



Employee dashboard utilising Hogan Assessment Systems

Our Sustainability Journey

NORTHERN STAR RESOURCES LIMITED

2003
IPO, East-Kimberley focused exploration Company targeting nickel and gold.

2010
Purchase of the Paulsens gold mine from Intrepid.

2014
Purchase of the Kanowna Belle/Kundana & Jundee mines from Barrick & Newmont respectively.

2017
Release of the Company's Inaugural Sustainability Report, highlighting key ESG performance.

2017
Inaugural participation in the Dow Jones/RobecoSAM Sustainability Survey.

2017
Alignment of reporting structures for key ESG functions (Safety, Governance and Sustainability) to either CEO or Executive Chair.

2018
Purchase of the Pogo mine in Alaska from Sumitomo. First disclosure of climate related risk.

2018
Release of the Company's Sustainability Report independent of the Annual Financial Report. Board-level ESG&S Committee formed.

2019
Announced alignment with the United Nations Sustainable Development Goals. First ESG Investor Roadshow. Modern Slavery Statement.

>2019
Disclosure of progress against the SDG Targets. Adoption of the TCFD recommendations.

NST aligning to the UN Sustainable Development Goals

"Delivering responsible environmental and social business practices that lead to both the creation of strong economic returns for our Shareholders and shared-value for our Stakeholders"

Northern Star's Sustainability Vision

SDG	United Nations Target	Alignment	NST Action CY2018
3 GOOD HEALTH AND WELL-BEING	**3.4** Promote mental health and well-being. **3.5** Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol.	✓	• Mental Health Strategy – 20% of workforce accredited mental health first aiders. • Health and Safety Policies ensuring a resilient workforce and surrounding communities. • Sector leading safety statistics: LTIRF 0.6 and TRIFR 3.7 (industry average 2.7 & 9.6 respectively).
4 QUALITY EDUCATION	**4.4** By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.	✓	• Apprenticeships up 71% on FY17. • 70 graduates and vacation students. • Professional development strategy. • Strong support for WASM et al.
8 DECENT WORK AND ECONOMIC GROWTH	**8.1** Sustain per capita economic growth in accordance with national circumstances. **8.7** Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking.	✓	• A$50M innovation fund over next 10 years to improve business and industry performance. • Record Economic value add of A$1.07B in CY18. • Released Modern Slavery Statement 2019. • Undertook supply chain survey.
15 LIFE ON LAND	**15.5** Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species	✓	• Introduction of A$2.5M per year progressive rehabilitation fund. • Long-term record of engaging Aboriginal Rangers for environmental compliance and land/biodiversity management. • Compliance to our robust Environmental Management System.

Social Licence to Operate at Northern Star

Our Social Licence to Operate is important to the sustainability of our business.

<u>We see community trust as a key aspect of maintaining our Social Licence to Operate. We achieve this by:</u>

- Clearly identifying our stakeholders and understanding the issues that matter to them
- Openly, effectively and respectfully communicating with our stakeholders
- Being transparent in our decision-making
- Showing responsiveness to social, environmental and economic issues and impacts
- Constantly looking for opportunities to create shared value for stakeholders from our business activities

<u>Shared Value Example: Supporting Aboriginal Rangers</u>

- Northern Star has been supporting Aboriginal Rangers at our Australian mines since 2014.
- Rangers undertake environmental compliance work as professional environmental contractors at all our Australian mines.
- This highly innovative employment model accommodates the Rangers unique cultural norms as well as meeting the needs of the business.
- Supported research indicates every dollar spent on Aboriginal rangers creates almost $3 of socioeconomic value in communities.

<u>Sponsorship Snapshot – totalling over $1,000,000 for FY19</u>

Netball WA – empowering women

Telethon Trust – children's health research

Goldfields Childcare Centre – regional development and liveability

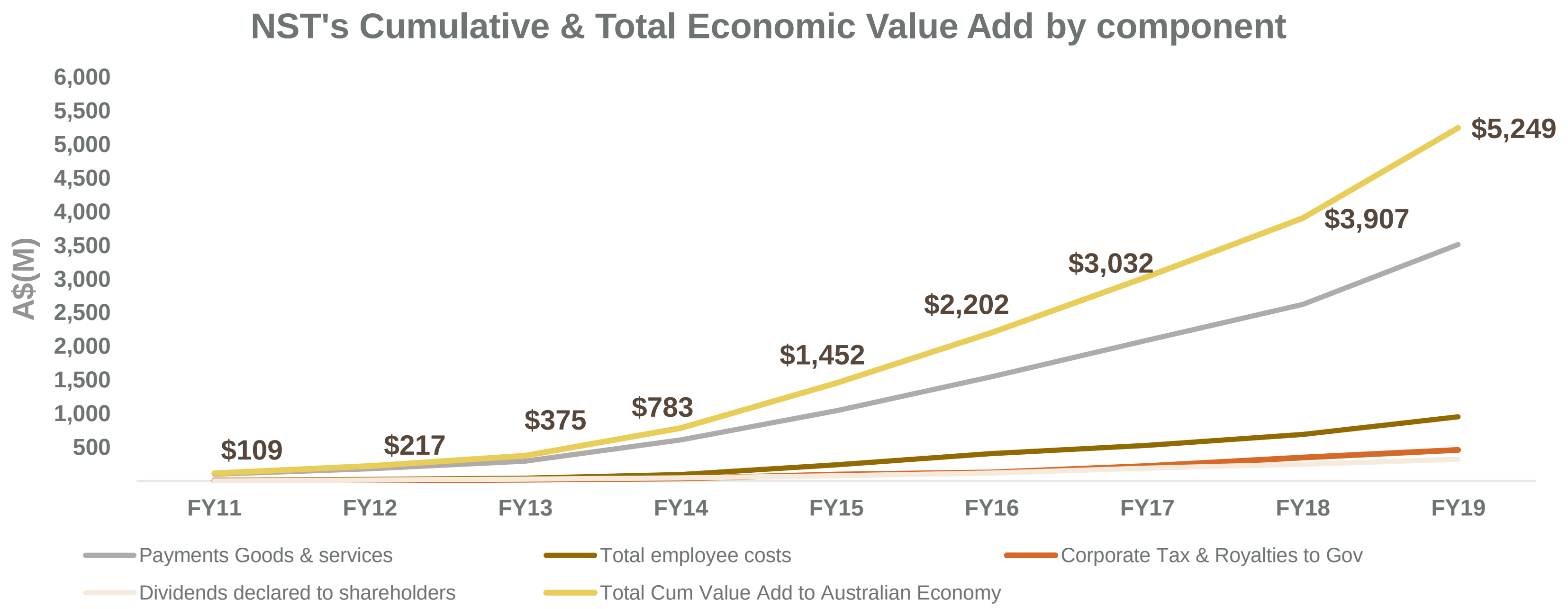
Resource Rising Stars Scholarship – resource education

Kalgoorlie Case Study

- 970 direct employees, 250 contractors
- 75% of our employees are residential
- We offer substantial incentives for employees to reside within the Kalgoorlie region
- NST contributed over A$516m of direct Economic Value add into the Kalgoorlie region in FY19
- On top of this direct contribution, NST has provided over A$190,000 in sponsorships and donations to local and Community groups in FY19

Adding significant value to the economy

- The resources industry in Australia contributed 45% of Australia's total exports with gold being our 4th largest export equating to A$19.3B in FY2018
- NST directly contributed over **A$1.34B** of economic value add in FY2019 and has contributed over **A$5.25B since FY11**



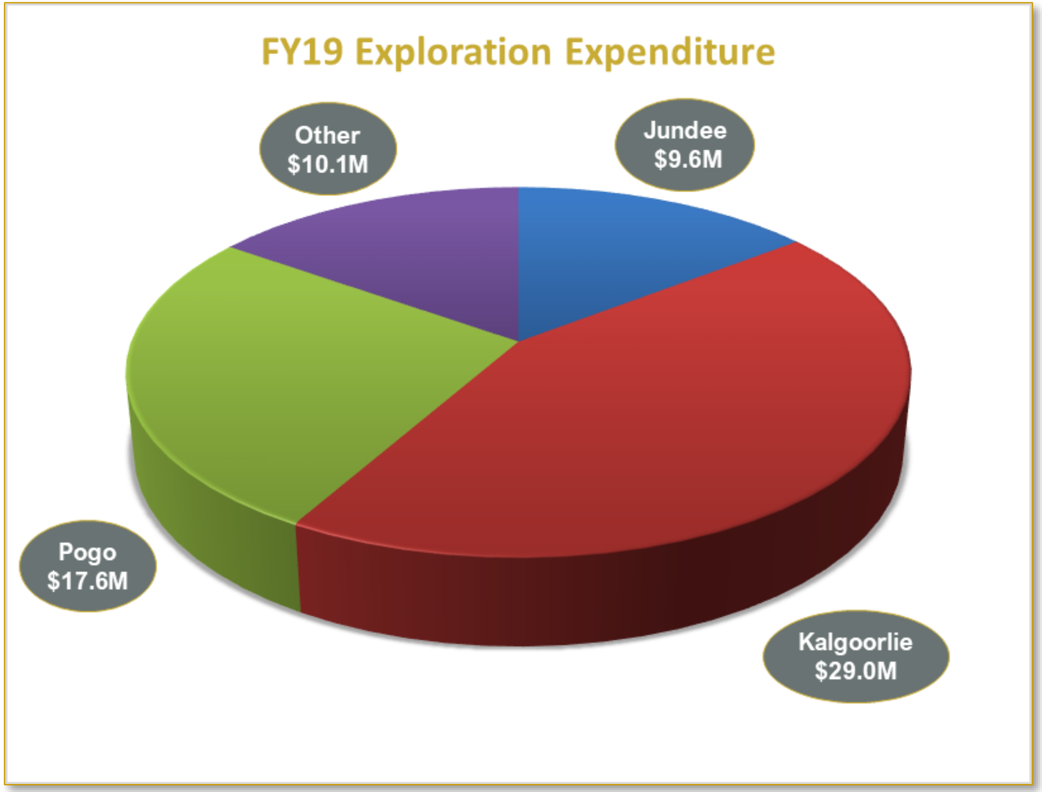
NORTHERN STAR
RESOURCES LIMITED

Resources/Reserves and Exploration

FY2019 Exploration Spend

SUMMARY

- Group FY2019 exploration expenditure totalled A$66M
- A$60M Group Exploration budget reallocated and accelerated post Pogo acquisition



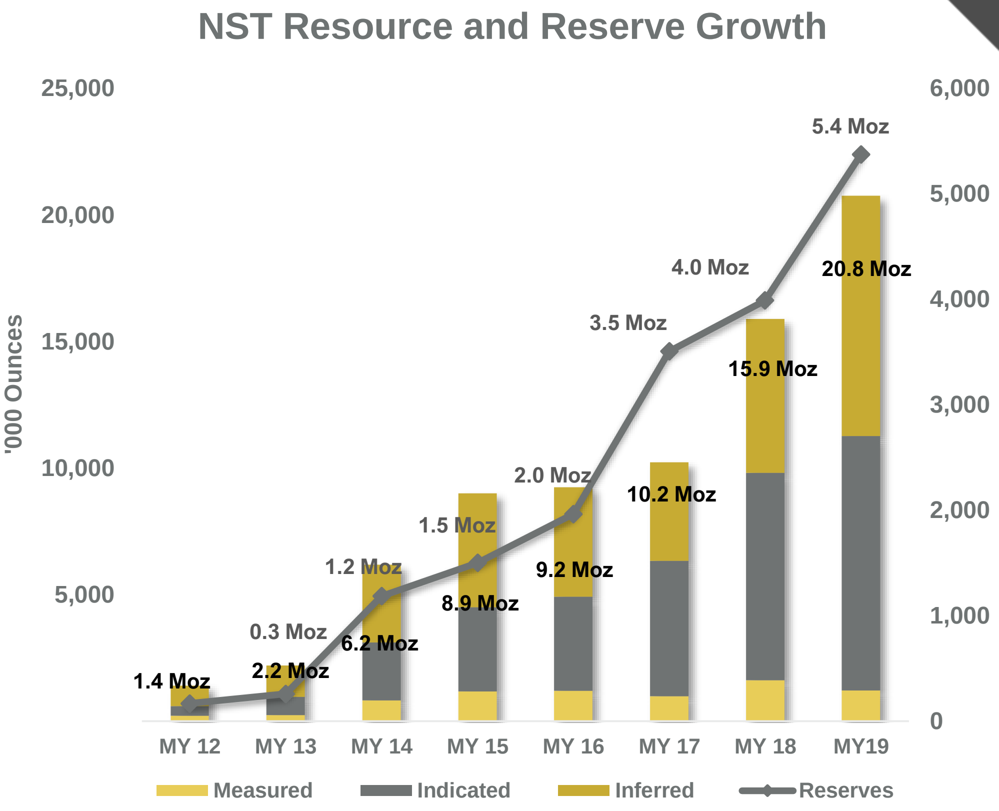
Group Resource and Reserve Update

Fast start at Pogo

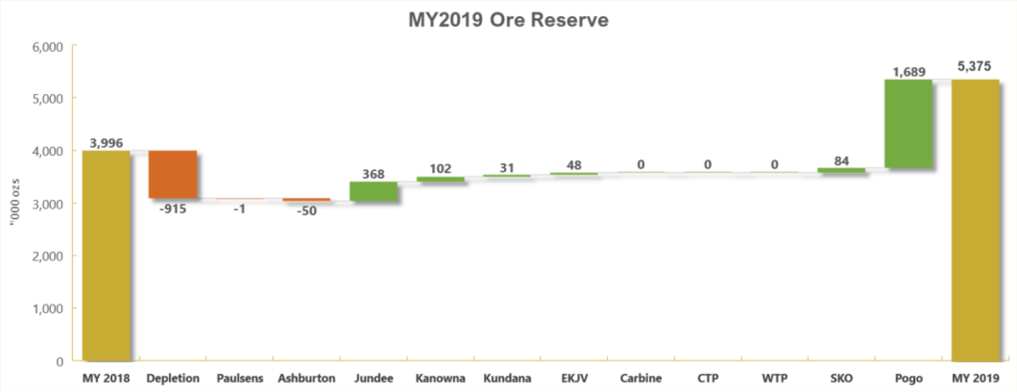
- Substantial growth with only six months of drilling data
- Significant in-mine growth still visible before considering near mine potential

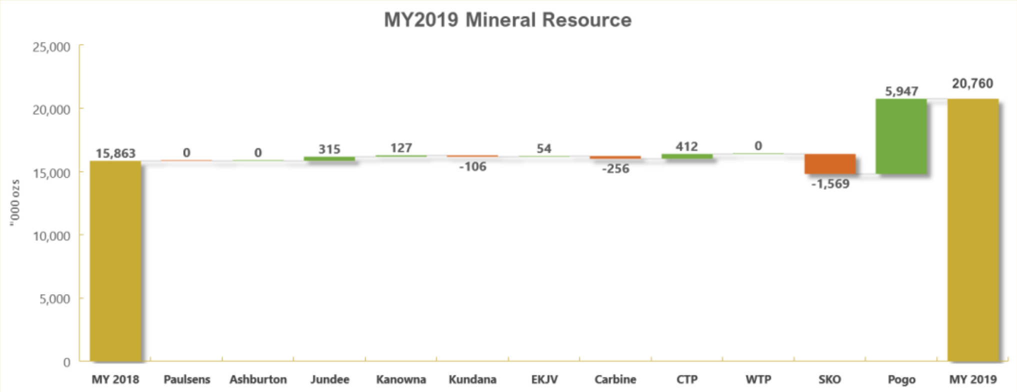
Consolidation in Australia

- Replaced Reserve depletion
- Resource uplift with major grade increase setting the stage for the next Reserve growth step
- Increased material in higher Resource classification levels
- Moved some historical resources to "unclassified" pending further validation



Group Resource and Reserve Update



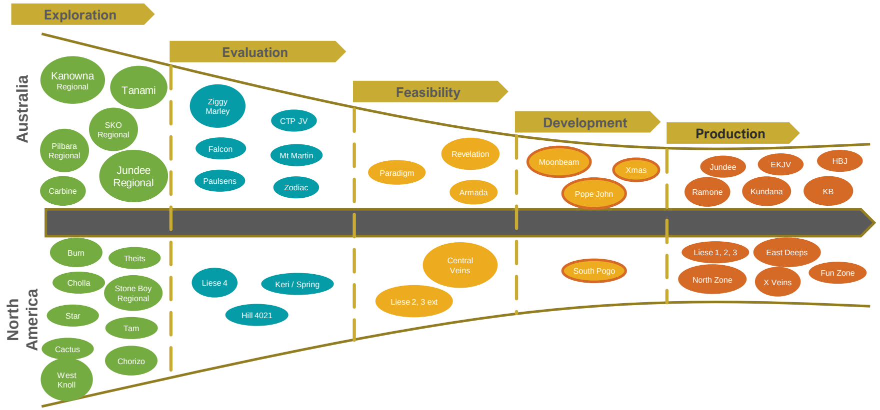


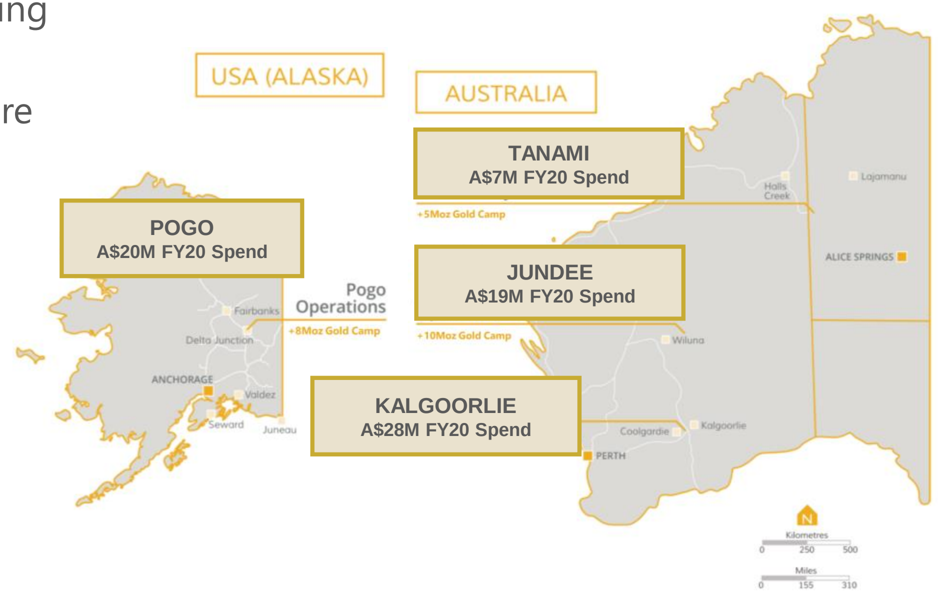
Pogo – Building a Mountain

- Resource and Reserve growth is net of 915,000 mining depletion
- Stellar Resource increase propels Pogo towards 10Mozs endowment after only six months drilling
- Maiden Pogo 1.5Moz Reserve is just the first step with large inventory still awaiting conversion
- Resource increases at Jundee, Kanowna and EKJV are forerunners to next reserve uplift
- Reserve replacement at Jundee and across Kalgoorlie continue to underwrite domestic operations
- Historic resources at SKO and Carbine reclassified ahead of validation and optimisation

A$76M Global Investment in Future Growth

- A$76M exploration and drilling commitment for FY2020 is a record commitment
- Pogo will continue to be a major focus with outstanding in-mine and near mine opportunities
- Strong commitment to Jundee growth with major investment in-mine to begin evaluating existing 39 Drill Drive targets
- Regional exploration at South Kalgoorlie is generating considerable success across a 1,000km² portfolio
- Efficient funds allocation; 77% in-ground expenditure



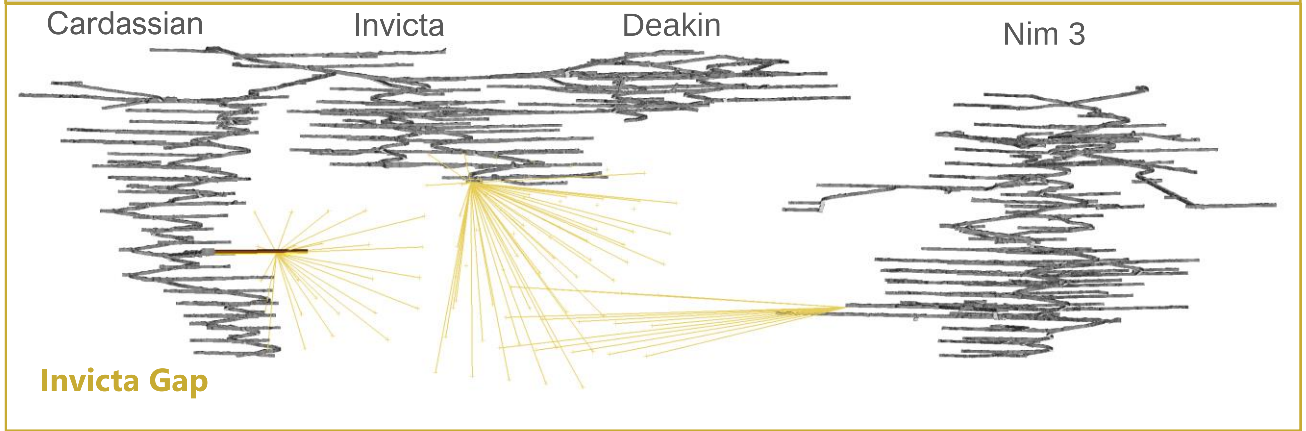


FY2020 Jundee In-Mine

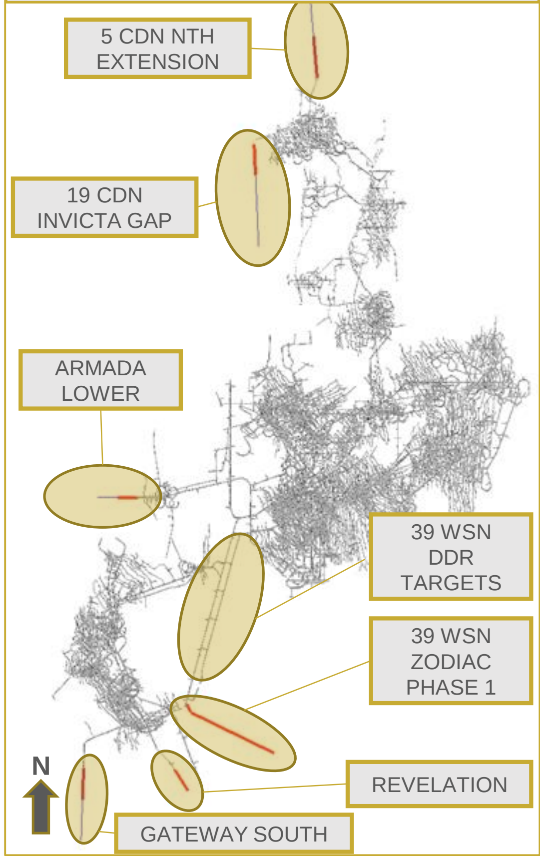
Planned In-Mine Spend of A$14M

- Next phase of in-mine exploration investment into major targets
- New drill drive developments to support up to 14 UG Drill rigs operating
- Key new targets include Gateway South, Invicta Gap and Revelation
- Returning to 39DDR to commence follow up of large volume of targets from initial drilling phase which generated Armada discovery

JUNDEE LONG SECTION



JUNDEE IN-MINE TARGETS

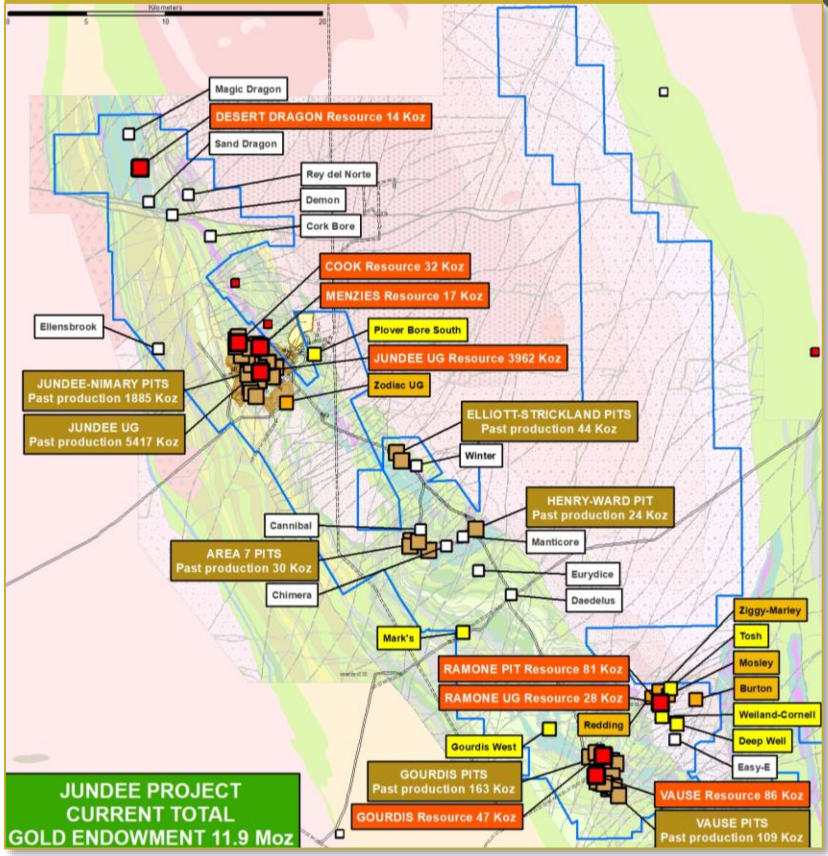


Jundee Regional Exploration

Regional Spend of A$5M

- Regional land holding continued to deliver excellent exploration results and discoveries
- Expansion of the Ramone / Deep Well discovery
- Jundee North and Dragon open pit target evaluation
- Commencement of early-stage exploration in the Eastern Block region (Firestarter)

JUNDEE REGIONAL TARGETS



Kanowna Belle

Forecast A$10.5M spend

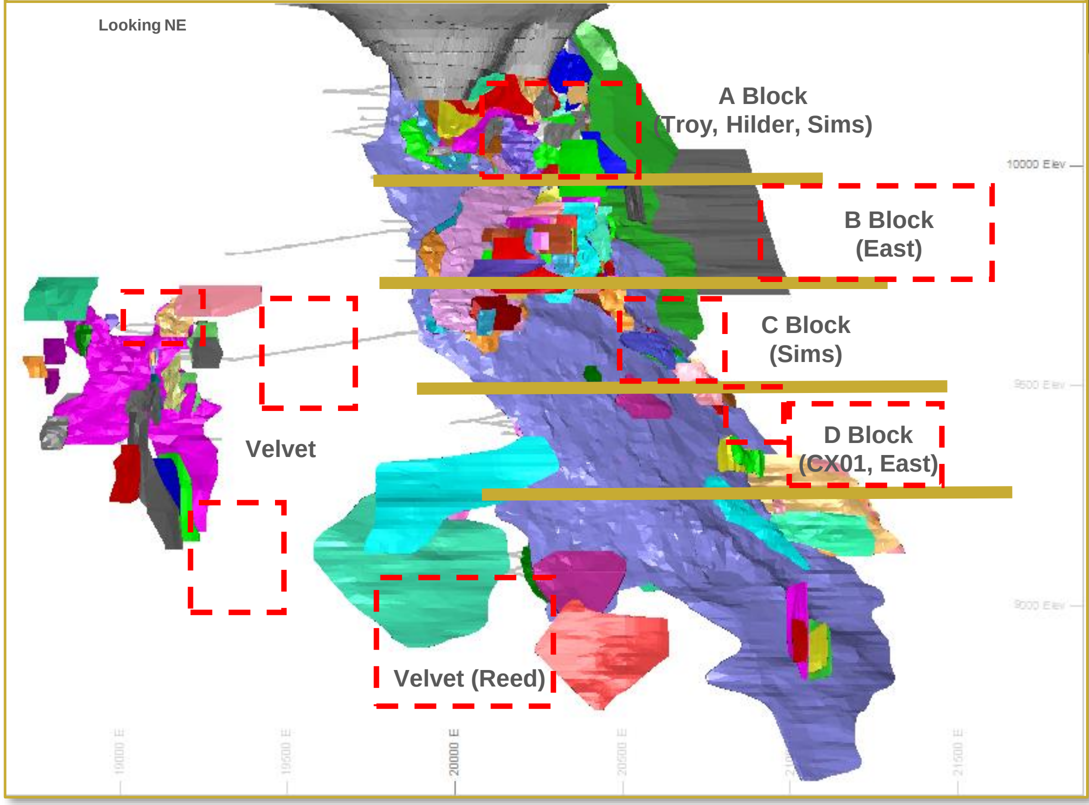
In-Mine

- Focus on higher grade A-D Block HW (Troy-Sims) Resource conversion
- Expand Velvet HW, Velvet Gap (Reed)
- Test for eastern extensions to Lowes (B-C Block)

Near Mine

- Progress evaluation of large scale targets
- Nemesis, Red Hill, BLC systems

KANOWNA BELLE UNDERGOUND TARGET AREAS

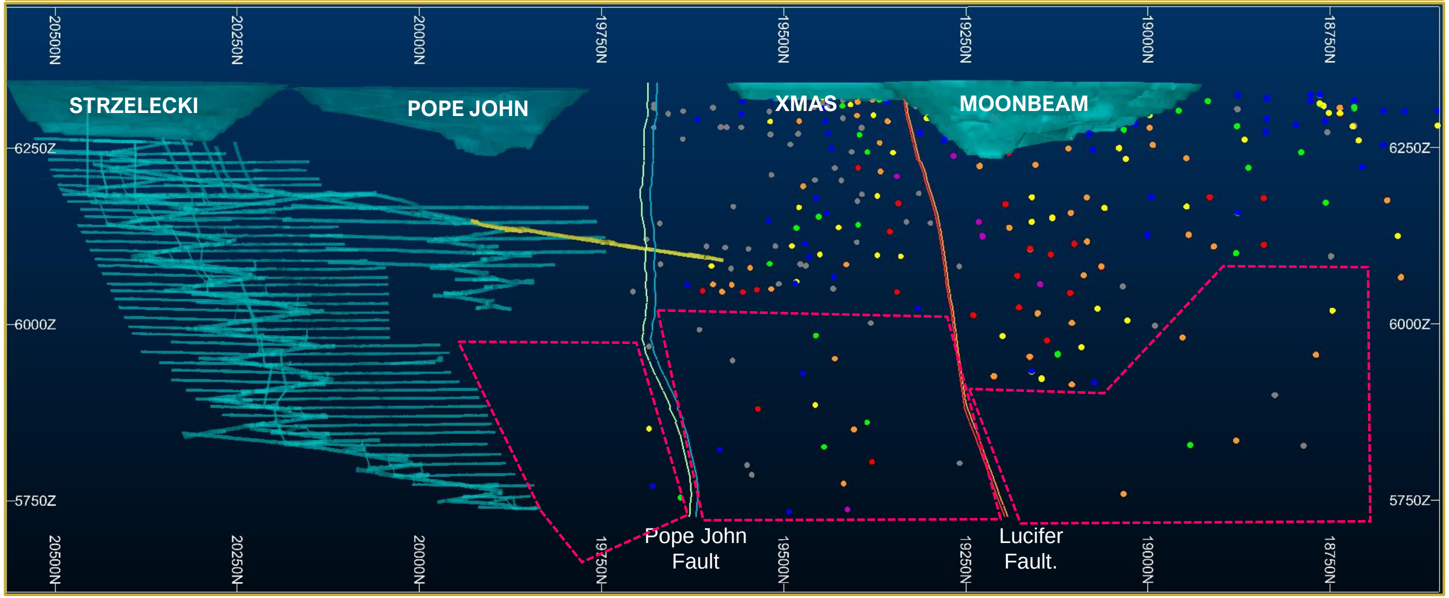


Kundana (100% NST)

Moonbeam Development

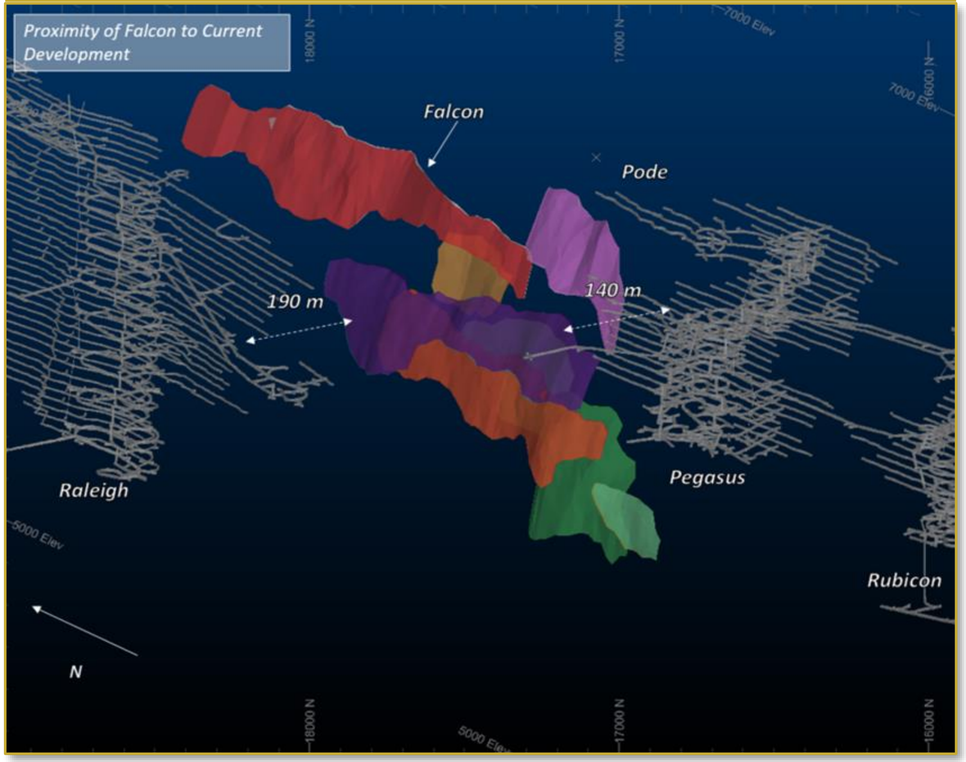
- A$2.5M forecast for incremental extension targets
- Pope John, Xmas, Moonbeam systems at depth
- Extending Strzelecki trend south

KUNDANA UNDERGROUND TARGETS



EKJV (51% NST)

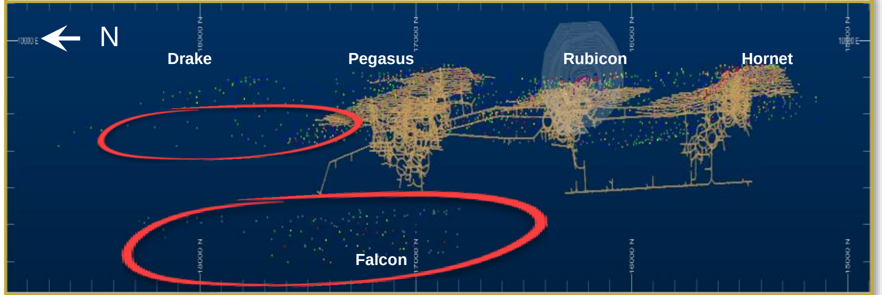
FALCON DISCOVERY



Falcon is the Focus

- Forecast A$2.8M (NST share) budget
- Major focus to bring Falcon trend to feasibility status
- K2 HW extensions northward from Pegasus
- Extensional drilling into RHP hanging wall positions (Hera)

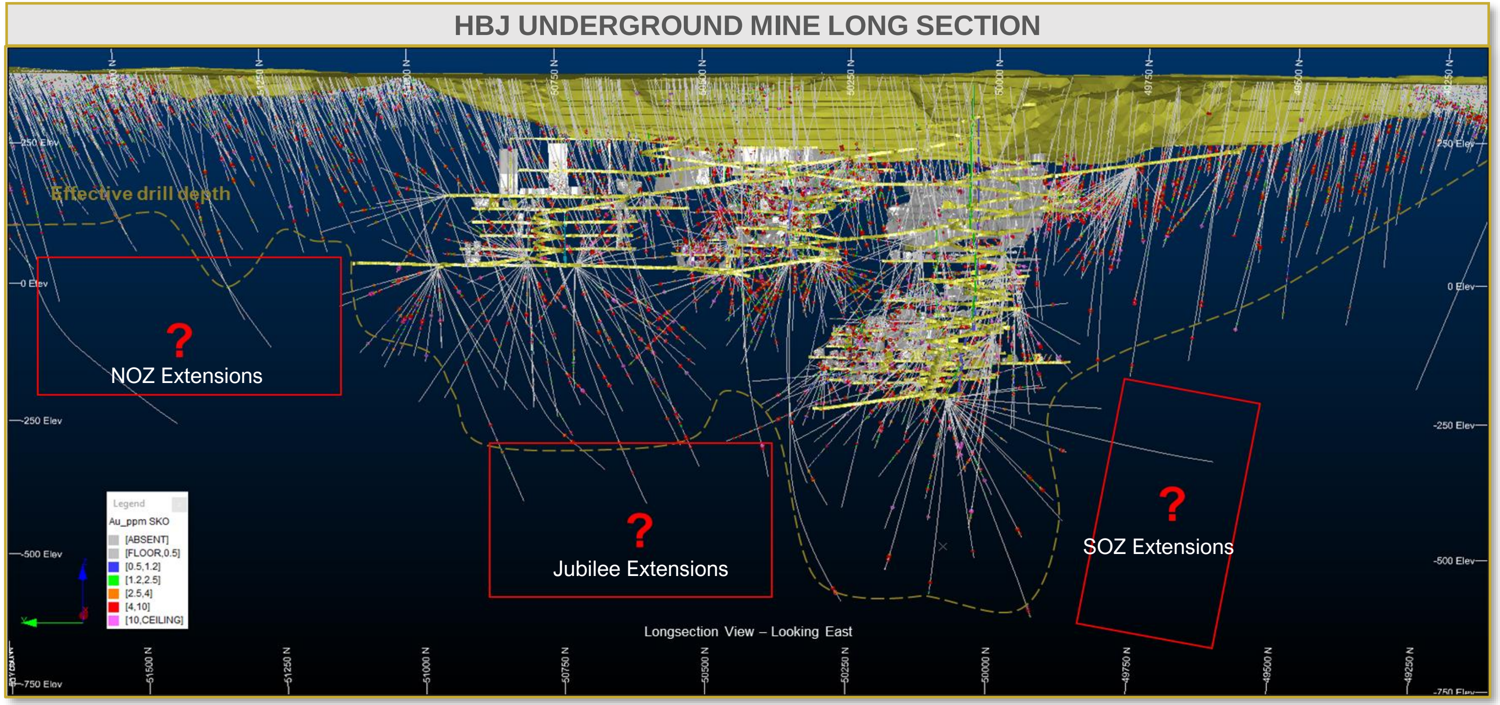
EKJV MINE TARGETS



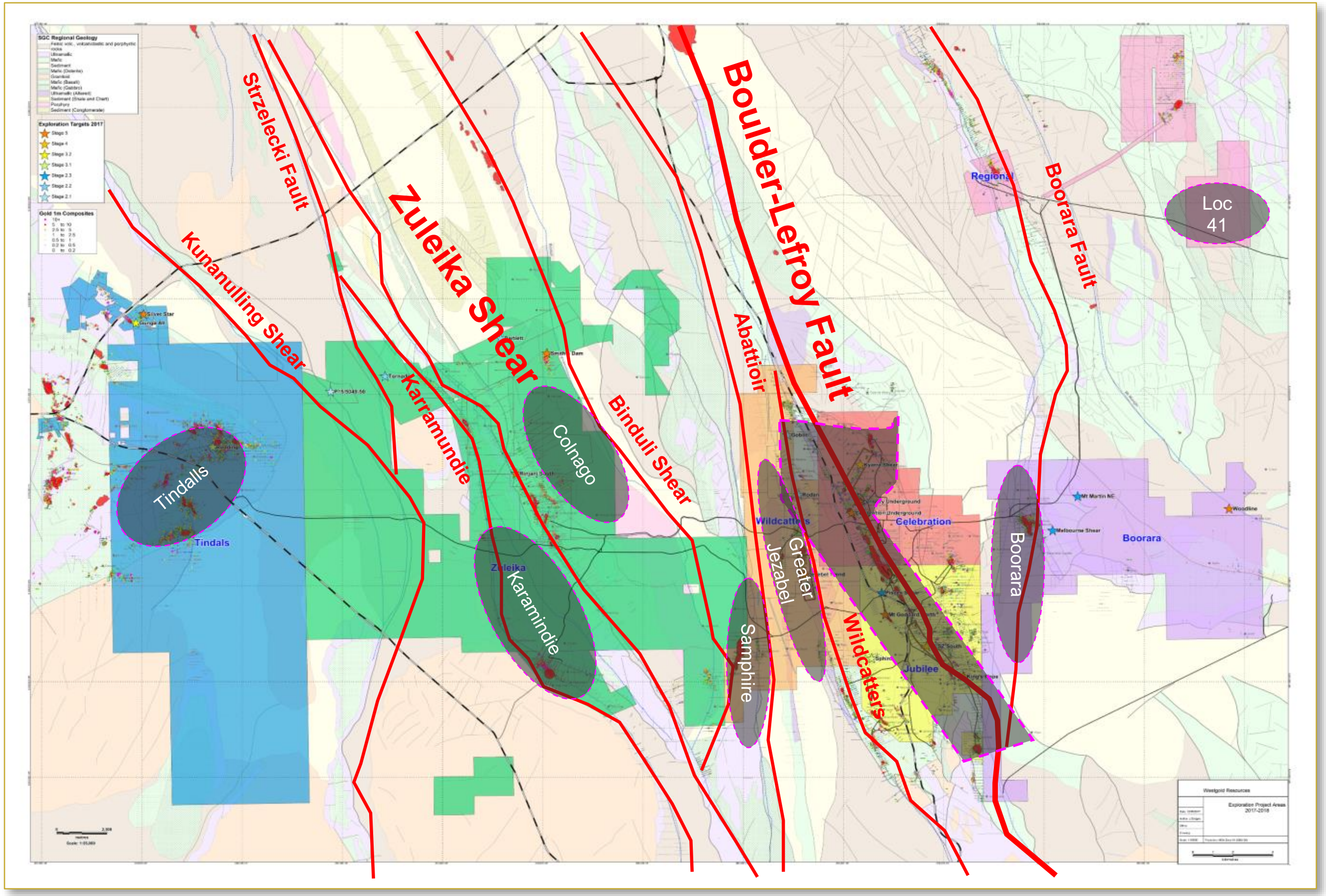
South Kalgoorlie

In-Mine

- Forecast A$2.2M spend on HBJ extensions, early success evident from NOZ extensions to extend mine life



SKO – Exploring in the heart of the Goldfields



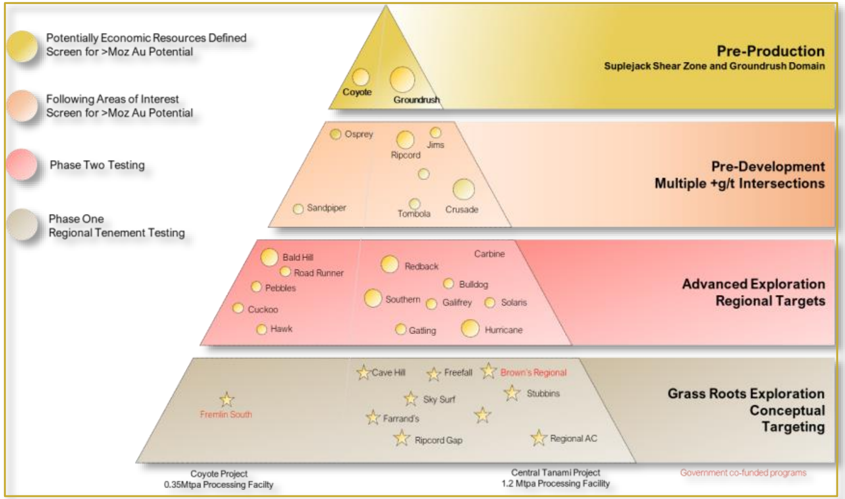
- Over 1,000km^2 of exploration and freehold tenure
- Extensive production history
- Contains strike continuation of Boulder-Lefroy fault system – key to the Golden Mile
- Plus all the major structural corridors of the Coolgardie-Kalgoorlie terrane - host to ~120Mozs

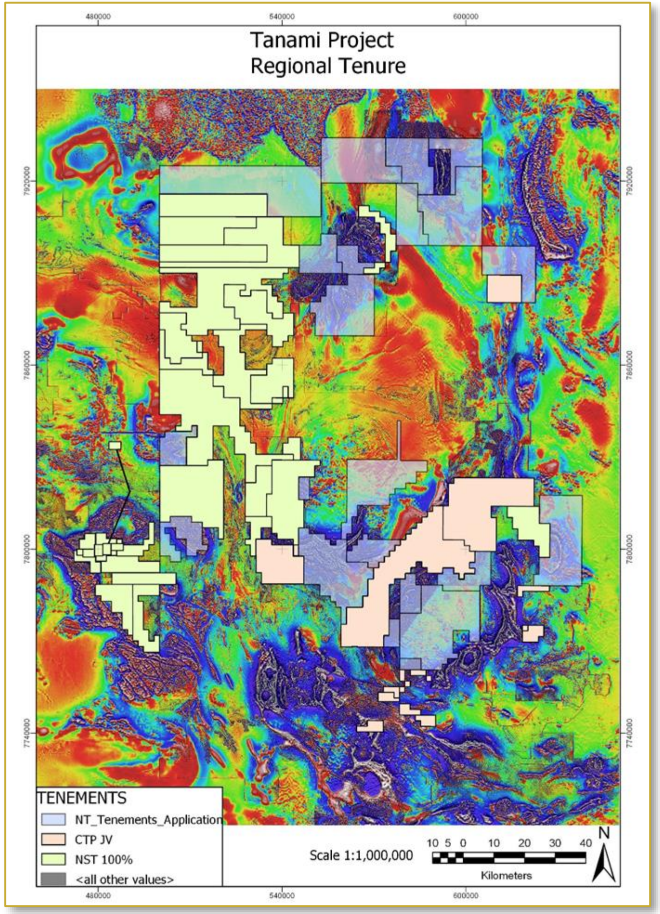
Structural Corridors

Tanami

CTP JV, Regional, WTP

- Work in progress
- Largely greenfield exploration
- Geologically challenging
- Large resource upside
- High discovery potential



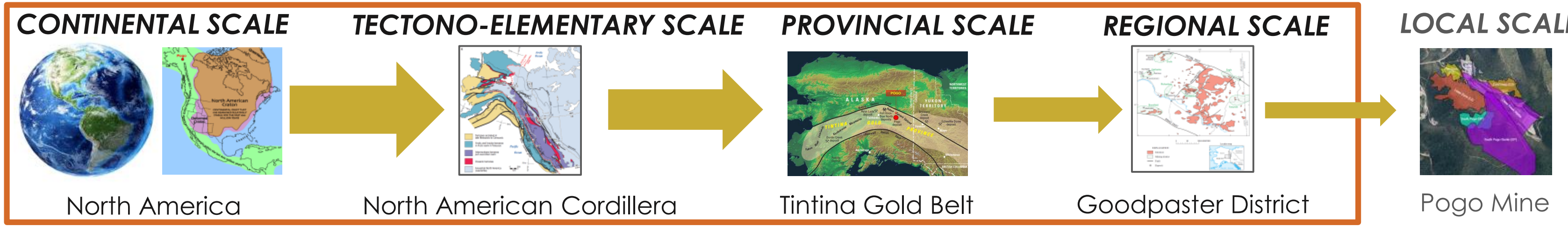


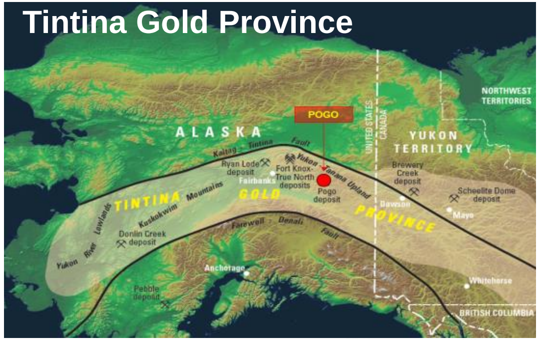
NORTHERN STAR
RESOURCES LIMITED

Pogo Geological Presentation

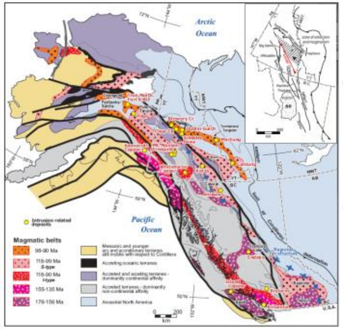
Geological Setting of the Pogo Deposit

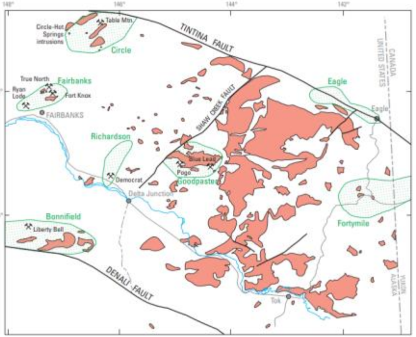
An Intrusion Related Gold Deposit in a World-Class District

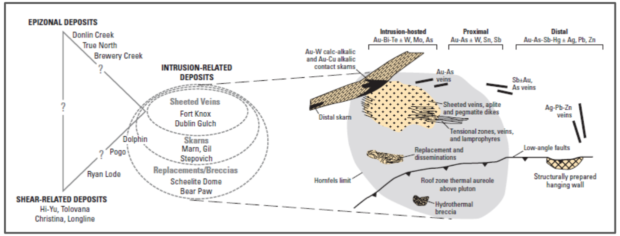


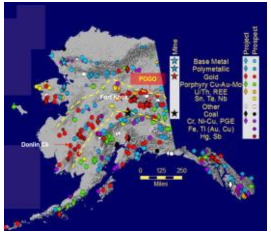


- The Tintina Gold Province (TGP) is an arcuate zone broadly defined by the by the Kaltag-Tintina fault to the north and the Denali-Farewell fault to the south (~200km x ~1,200km)
- The TGP has a total gold endowment exceeding 70Moz of gold. Notable deposits include Donlin Creek (Barrick / Novagold, >45Moz), Fork Knox (Kinross, <10Moz), Pogo (NST, >9Moz) and Dublin Gulch (Victoria Gold Corp., >3Moz)
- A series of at least 25 Early to Mid-Cretaceous (145Ma to 90Ma) plutons were emplaced across the northern North American Cordillera (Hart, 2004). These were likely related to subduction and extension resulting from terrane collision
- The Pogo gold deposit is one of several Intrusion Related Gold Systems (IRGS) in the central northern Cordillera spatially and temporally associated with the early to mid-Cretaceous magmatic belts and intrusive complexes



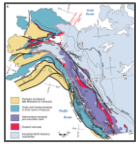
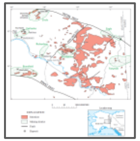




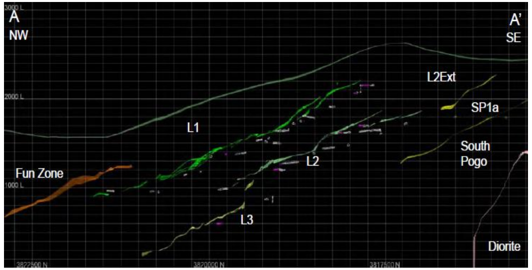


Pogo Deposit Scale Geology

A High-Grade Structurally-Controlled Stacked Vein System

CONTINENTAL SCALE	TECTONO-ELEMENTARY SCALE	PROVINCIAL SCALE	REGIONAL SCALE	LOCAL SCALE
 				
North America	North American Cordillera	Tintina Gold Belt	Goodpaster District	Pogo Mine

DEPOSIT CLASSIFICATION	Mesothermal quartz vein hosted intrusion related structurally-controlled gold deposit; Related to mid-cretaceous intrusive complex; Mineralisation dated at ~104M years
HOST ROCKS	Sillimanite-bearing paragneiss or orthogneiss that ranges in age from Proterozoic (>541Ma) to mid-Palaeozoic (Siluro-Devonian, ~375Ma); Proximal to Mid- Cretaceous granitoids and other associated intrusive rocks
MINERALISATION	(1) Quartz hosted stacked vein systems (Liese, Fun Zone, South Pogo, East Deeps); Flat to moderately dipping (25-45º) laminated to massive veins dipping towards the NW; Average grade of the deposit mined to date is 13.6gpt. Vein width varies from <0.5m to >10m (average ~3m) (2) Steeply east-dipping veins (~60-70º) within late stage north-striking fault zone (North Zone) (3) Sulphide associated gold as disseminated sulphides or in sulphide veinlets
SULPHIDE ASSEMBLAGES	Low sulphide content (<3%); Main sulphide species include pyrite, arsenopyrite, pyrrhotite and chalcopyrite. Mineralised zones may include trace amounts of loellingite, bismuth-tellurium sulphides, molybdenite, and galena. Occurs as fracture fill, disseminations, stringers, coarse blebs or on sheared surfaces
STRUCTURE	Multi-phase early stage brittle-ductile structures offset by late stage brittle faults with common dextral displacement. The Liese mineralised structures are parallel to low-angle regional shear, and exhibit laminations adjacent to the FW contacts. Late stage north to north east trending
ALTERATION	Multi-phase variable alteration assemblages. Common alteration minerals include biotite, silica, sericite, dolomite and chlorite



Mine Exploration Framework

Conceptual Targeting Model Highlights Scale and Potential

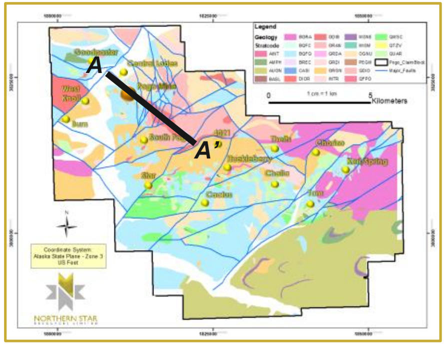
- The Pogo deposit is a series of stacked north-west dipping veins offset by regional scale shear zones with both vertical and lateral offset
- Late stage north-striking faults offset the flat-dipping Liese-style veins, and may be mineralised (e.g. North Zone)

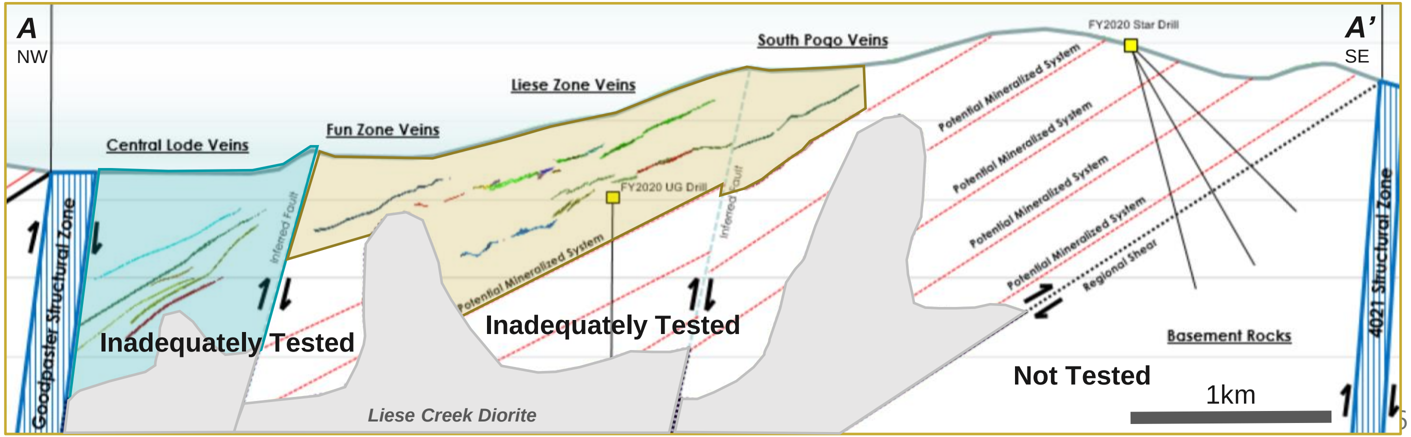
NEAR MINE POTENTIAL
CENTRAL
MY19 Resource 0.5Moz

IN MINE POTENTIAL
POGO MINE AREA
Gold Produced to June 2019: ~4Moz
MY19 Resource: 4.9Moz
MY19 Reserve: 1.5Moz

NEAR MINE POTENTIAL
HILL 4021
MY19 Resource 0.5Moz

POGO IN-MINE FRAMEWORK



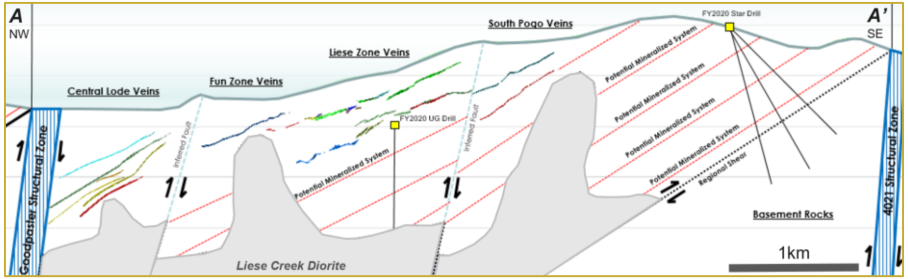


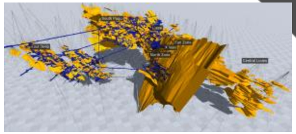
Above: Pogo lease geological plan
Right: Schematic Pogo mine long projection A-A'

Pogo Deposit Scale Geology

Scale of the System

- Mineralised structures poorly drilled at margins
- Mineralisation remains open

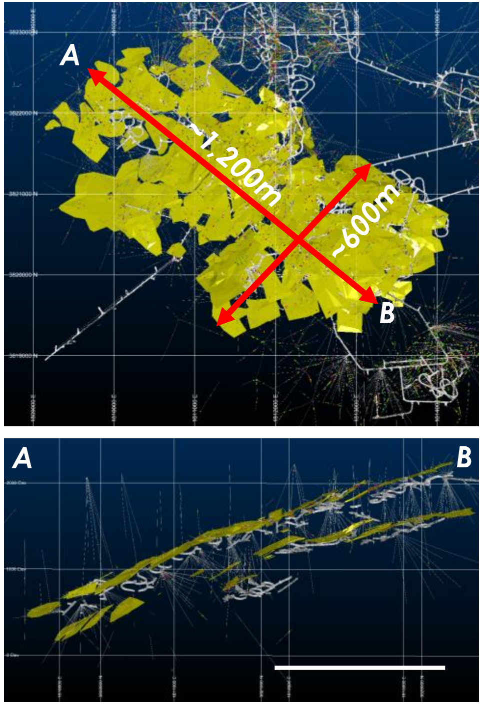




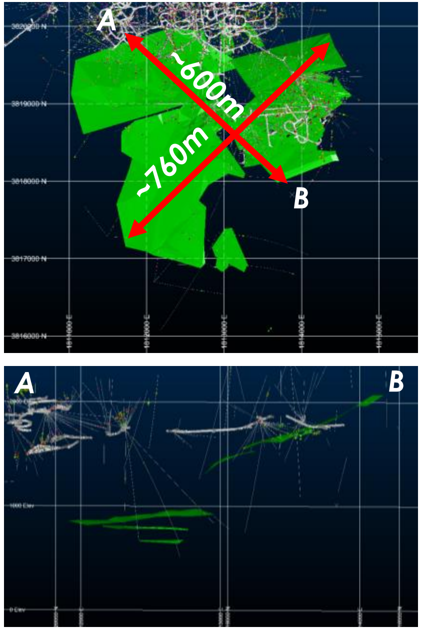
POGO 3D MODEL

https://inventum3d.com/c/nsrltd/pogo

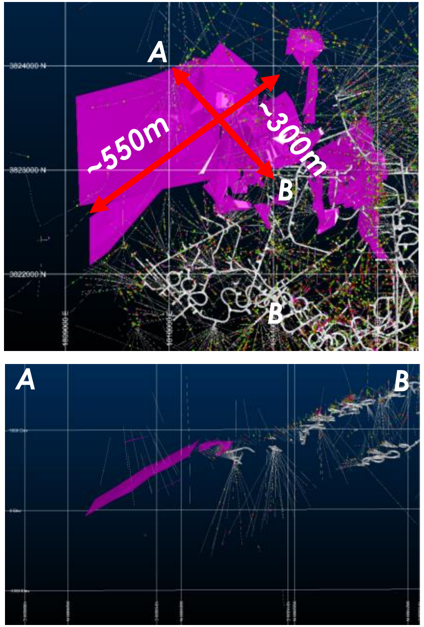
LIESE ZONE VEINS



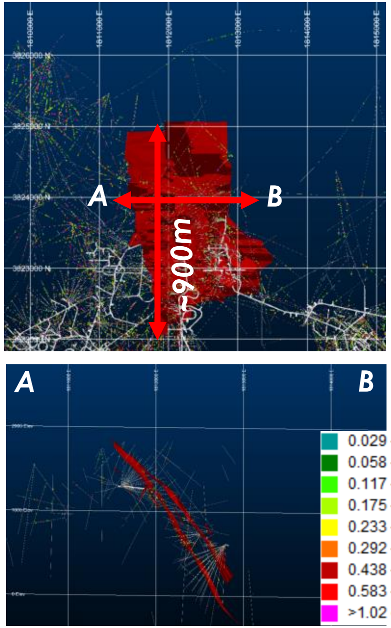
SOUTH POGO



FUN ZONE



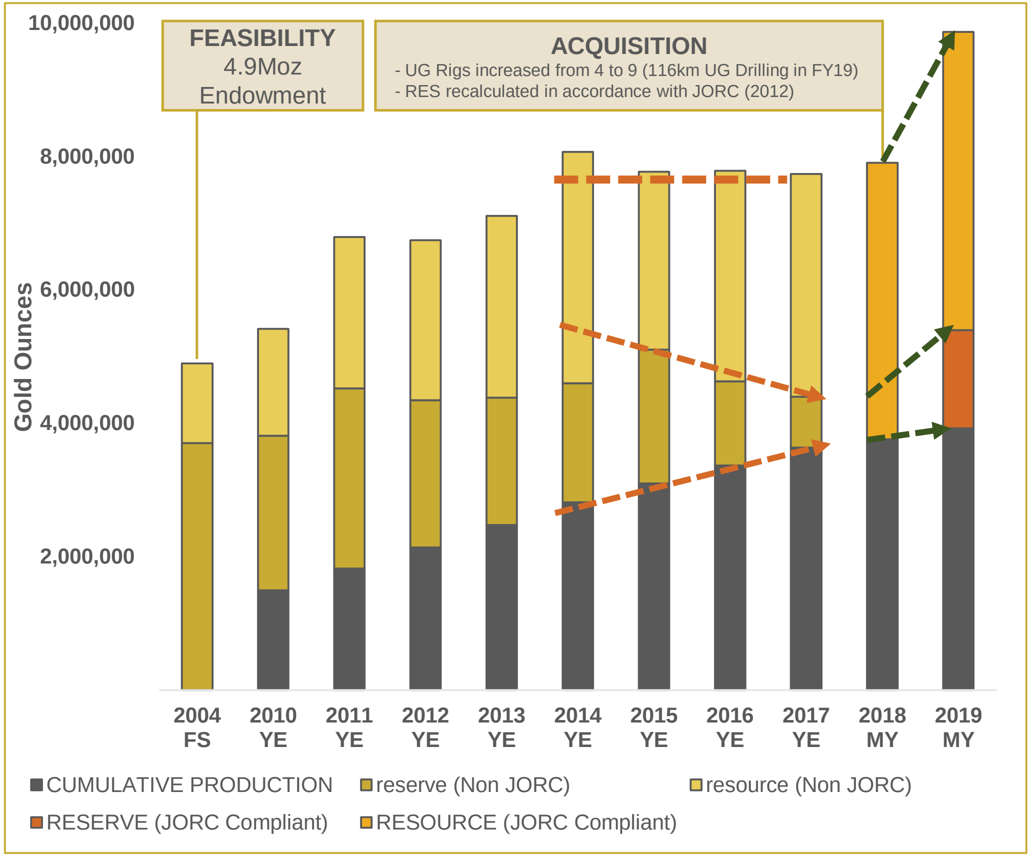
NORTH ZONE



- 0.029 - 0.058 opt (1.0 - 2.0 g/t)
- 0.058 - 0.117 opt (2.0 - 4.0 g/t)
- 0.117 - 0.175 opt (4.0 - 6.0g/t)
- 0.175 - 0.233 opt (6.0 - 8.0 g/t)
- 0.233 - 0.292 opt (8.0 - 10.0g/t)
- 0.292 - 0.438 opt (10.0 - 15.0 g/t)
- 0.438 - 0.583 opt (15.0 - 20.0 g/t)
- 0.583 - 1.02 opt (20.0 - 35 g/t)
- >1.02 opt (35.0g/t)

Resource & Reserve Trends

Resource Reserve Update Demonstrates Strong Growth Through Drill Investment



POGO MID YEAR 2019 RESERVE & RESOURCE UPDATE

ORE RESERVES
As at 30 June 2019

CATEGORY	Tonnes ('000)	Grade (gpt)	Contained Au ('000oz)
Proved	-	-	3*
Probable	6,103	7.49	1,469
TOTAL	**6,103**	**7.50**	**1,472**

MINERAL RESOURCES
As at 30 June 2019 Inclusive of Reserve

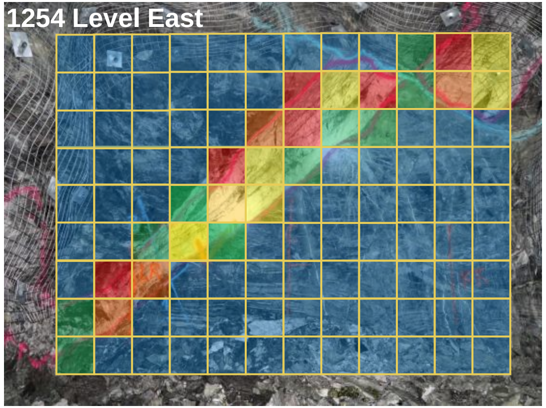
CATEGORY	Tonnes ('000t)	Grade (gpt)	Contained Au ('000oz)
Measured	-	-	3*
Indicated	7,200	9.6	2,226
Inferred	12,128	9.5	3,720
TOTAL	**19,328**	**9.57**	**5,949**

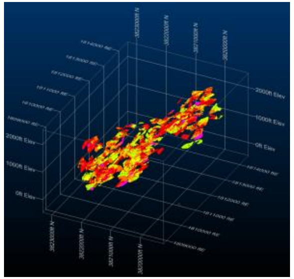
* Gold In Circuit

Pogo Resource Methodology

Ensuring high quality Resource ounces in line with Northern Star standards

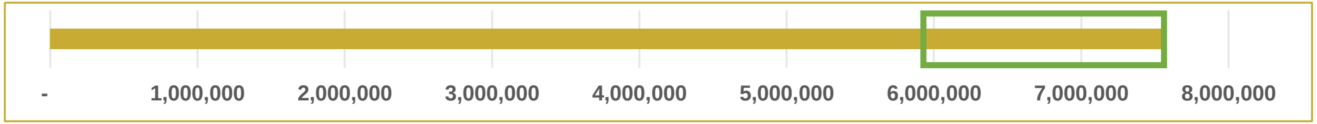
IN-SITU MATERIAL ABOVE CUTOFF (3.8gpt)



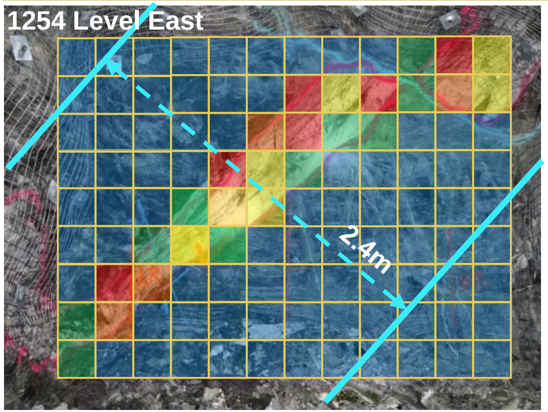


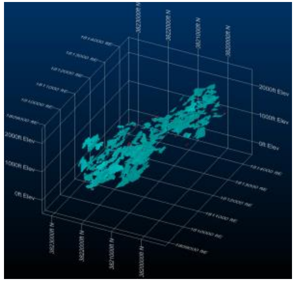
- All blocks in the model greater than the cutoff grade (3.8gpt) are summed to give an estimate
- This method **does not** take into account orebody width or potential dilution at extraction
- This methodology may result in a lower Resource to Reserve conversion

INSITU >3.8gpt COG



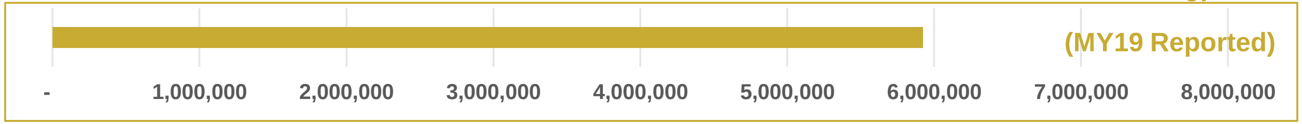
NST STANDARDISED RESOURCE REPORTING METHOD - MSO STOPE SIMULATION (2.44m MINIMUM WIDTH) CUTOFF (3.8gpt)





- Mineable Shape Optimiser (MSO) used to simulate stoping blocks that have the dimensions 2.4m x 9.1m x 9.1m (8ft x 30ft x 30ft)
- The **sum** of the blocks **within the MSO shape** must exceed the Resource cutoff grade (3.8gpt) (i.e. the ore blocks must carry the dilution at a minimum 2.4m width)
- Reporting in this methodology will likely result in a higher long-term Resource to Reserve conversion

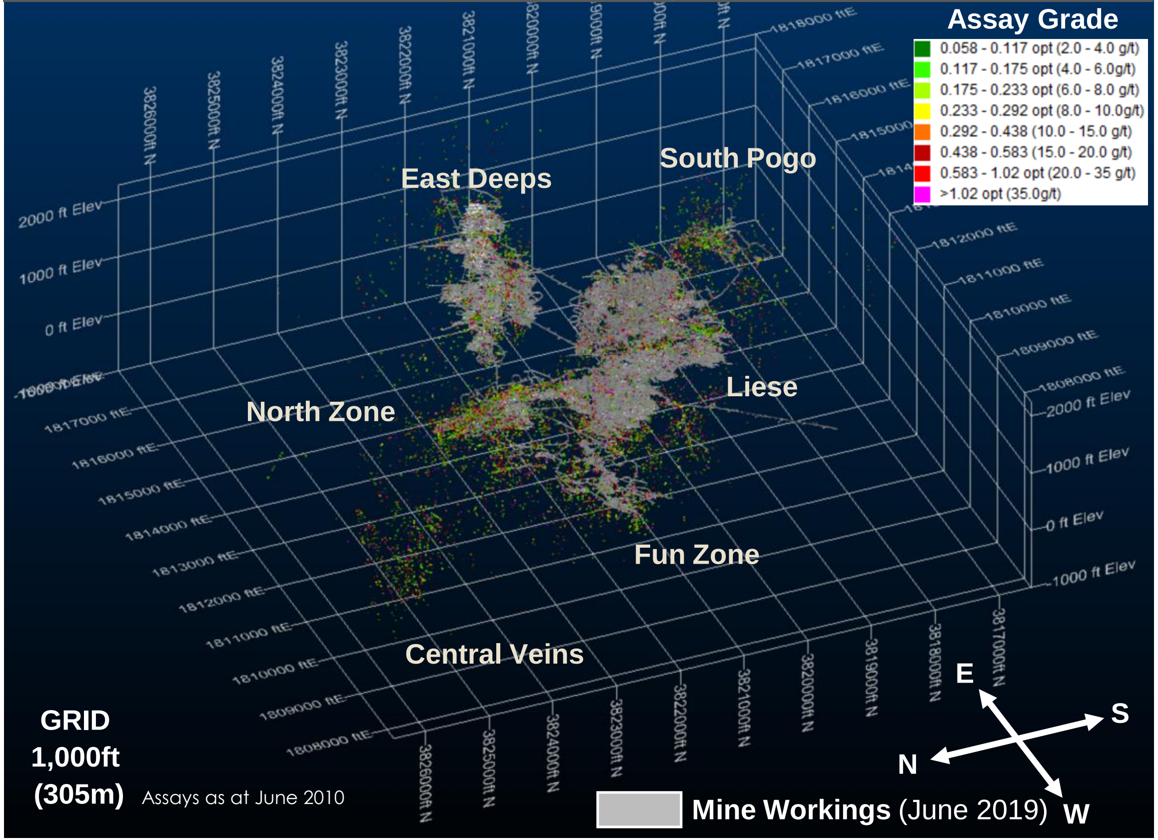
POGO OUNCES MSO >3.8gpt COG

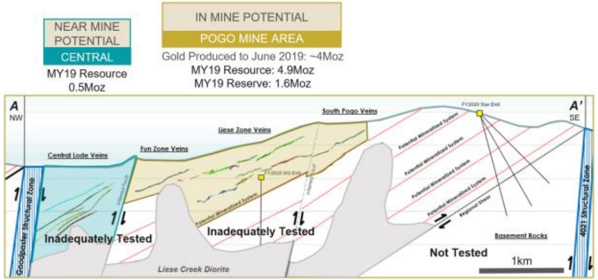


Pogo In-Mine & Near Mine Potential

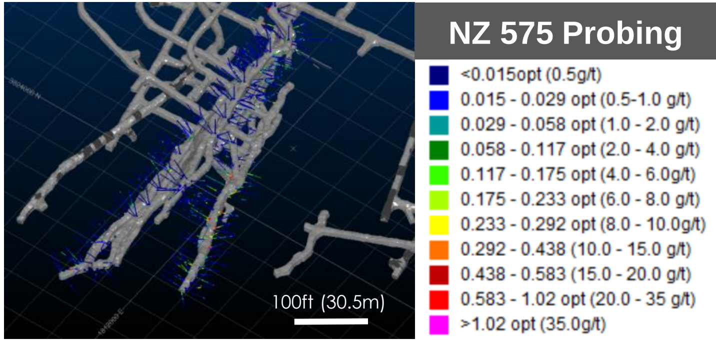
A$20M FY2020 Exploration Budget

Drill Intersections >3.8gpt (0.11 opt)





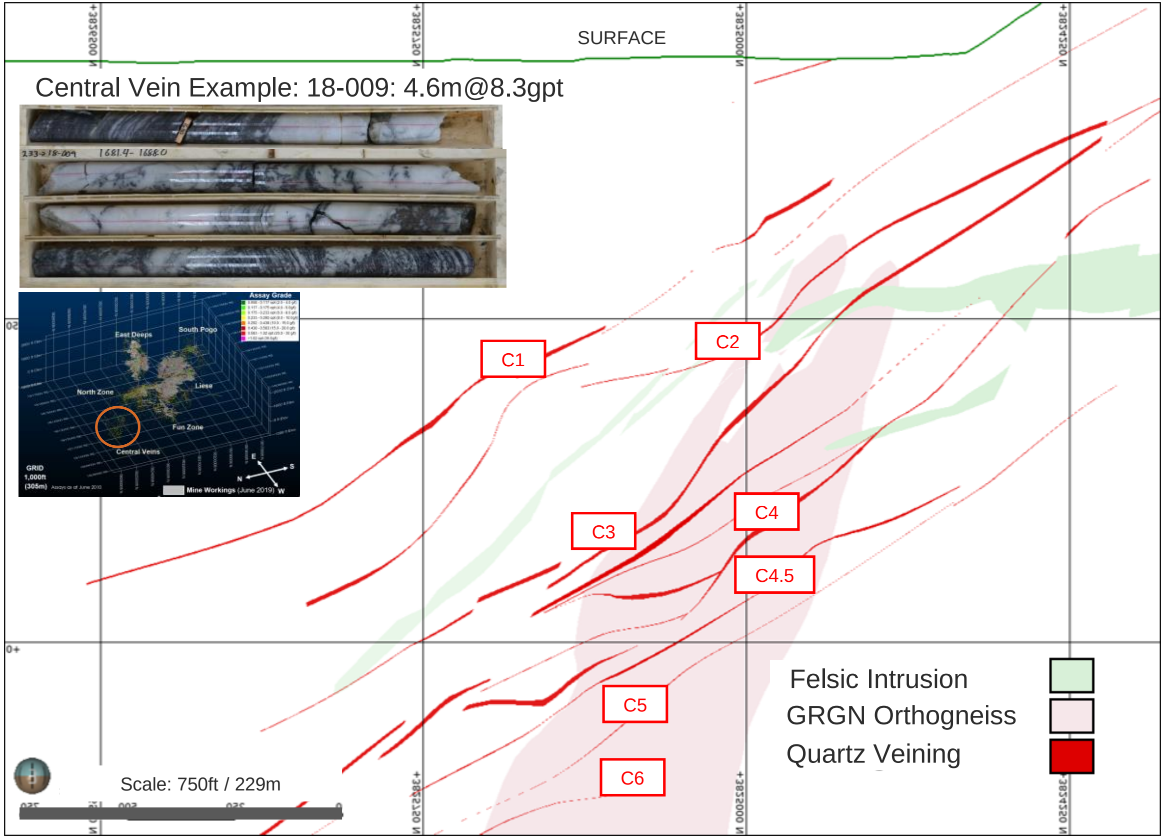
- Continued Extension of vein systems (open in all directions)
- Conversion of Inferred Resources:
  - 12.2Mt @ 9.5gpt for 3.7Moz in Inferred Resource
- Remnant Mining Potential

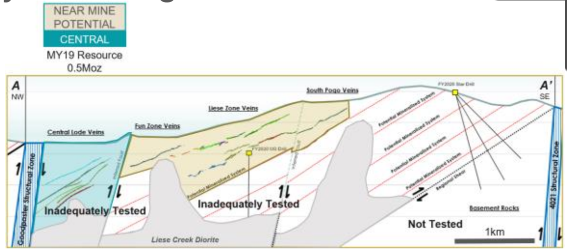


Near Mine Exploration: Central Veins

Discovery of a New Stacked Vein System within 600m of the Existing Underground

- The Central Veins are interpreted to be an offset fault block of Liese-style veining & mineralisation

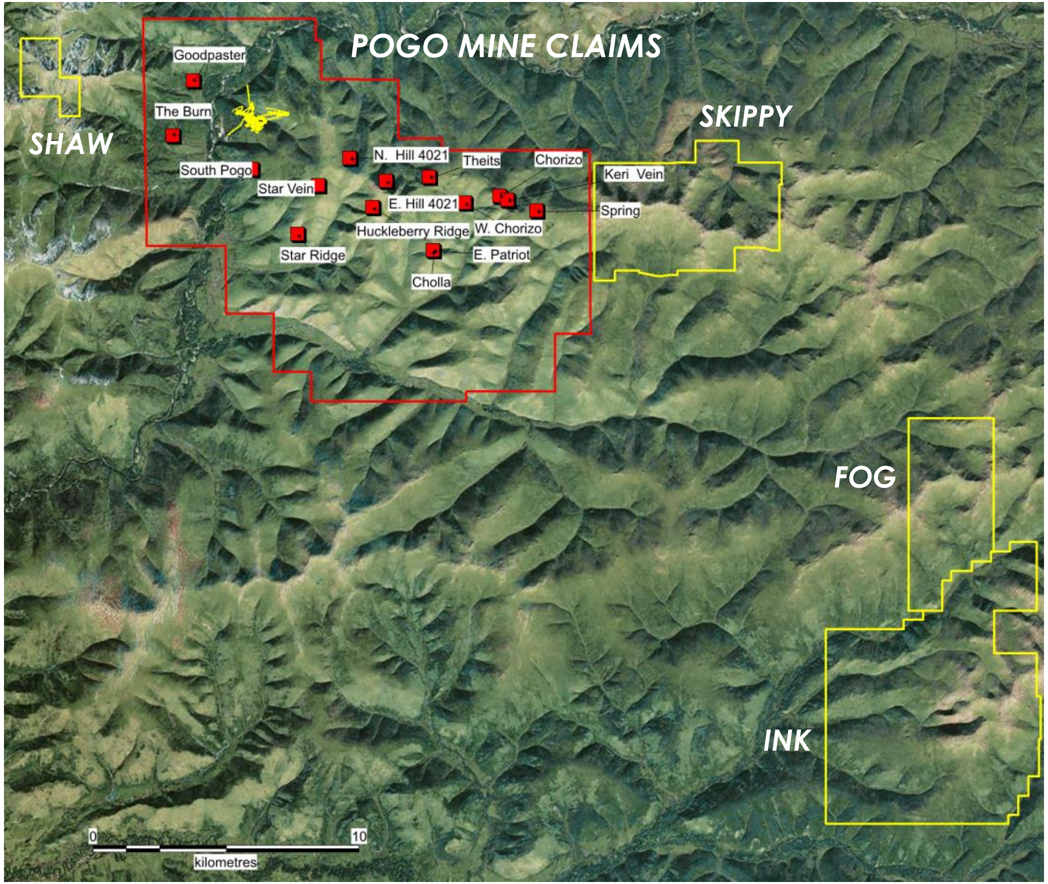




- FY2019 surface drilling focused on definition of the Central Vein system
- The maiden JORC (2012) Resource of 509koz @ 7.9gpt formed part of the MY19 estimate
- Interpretation shows an array of at least 6 stacked coherent mineralised veins, in addition to multiple structural offsets
- Orientation and location of mineralised veins (and potential linking structures) is influenced by pre-mineral felsic intrusions, with the main granitic gneiss (GRGN) body observed in the core of the Central Veins system
- Conceptual development to define and access the Central Veins has been designed

Regional Potential - District scale camp

High quality exploration portfolio expanded with Stone Boy Project acquisition



- Strong portfolio of early stage exploration prospects on the Pogo mine claim
- Key prospects include Burn, Cholla, Keri, Spring, Star and Hill 4021 (all with Pogo style veins in historic drilling or surface rock chips)
- Hill 4021 maiden Resource 0.5Mozs @ 8.2gpt
- Recently acquired Stone Boy Project for a total consideration of US$1.2M has added significant exploration tenure close to the Pogo Project

Operational Capability

Operational Capability - Starts with the people

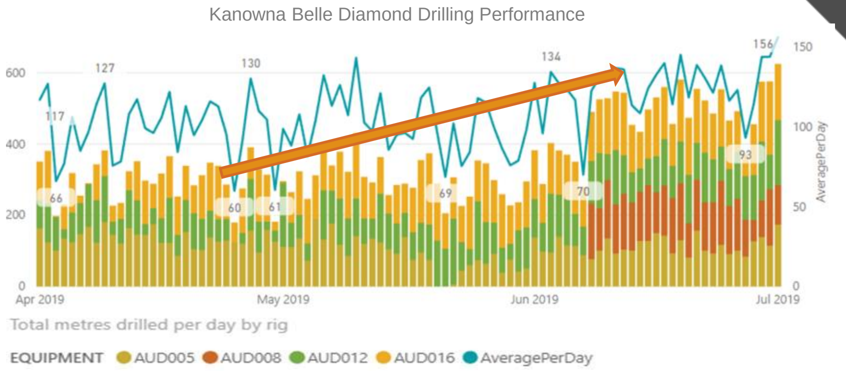


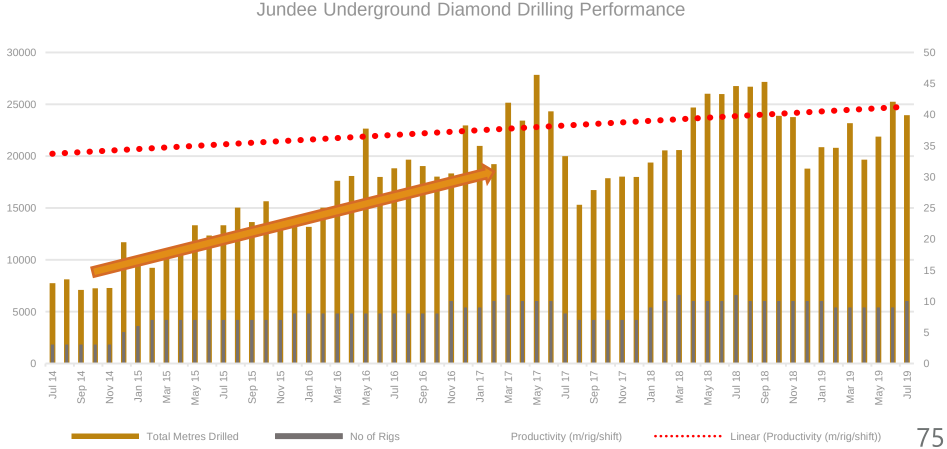
- Northern Star's greatest advantage is in its Culture – the way it does business
- Northern Star continues investing A$50M over the next 10 years to expand our specialist underground mining, geology and processing capability
- Key areas of investment include training, education, research and implementation of the latest technologies
- Our commitment to improve productivities and reduce unit costs is culturally imbedded and our capability is scalable and prepared for growth
- Safety is our first core value and Northern Star has delivered with an FY19 TRIFR of 3.3 and LTIFR of 0.5, 68% below the industry average LTIFR of 1.6
- This commitment will place Northern Star in a strategic position to optimise the value of assets as more mines transition from open pit to underground in the future



Operational Capability - Geology first

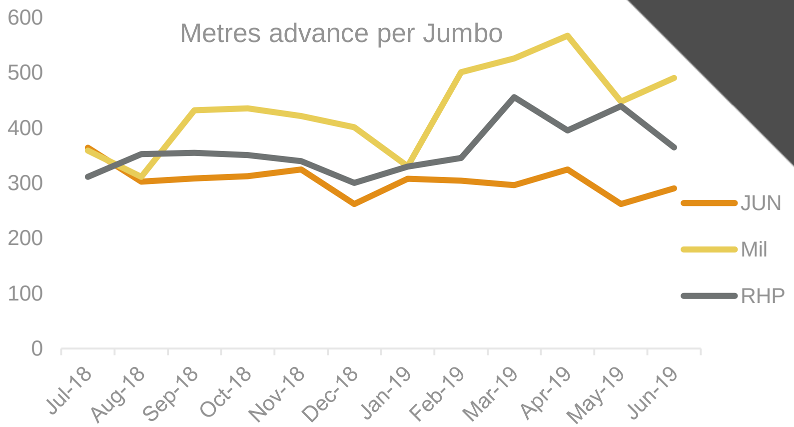
- First principal approach to mine planning; focus on integrity of geological information and getting ahead of mining front
- Increase speed of information flow; increasing speed of drilling is how we grow resources and reserves
- We empower our diamond drill contractors to optimise productivity, with our Kalgoorlie Operations contractor now averaging ~60m per shift, twice the industry average
- Our operational framework and integrated approach to geology, mine planning and execution is built by underground miners for underground mines
- Robust framework with in-built agility to respond and optimise the variability in underground orebodies

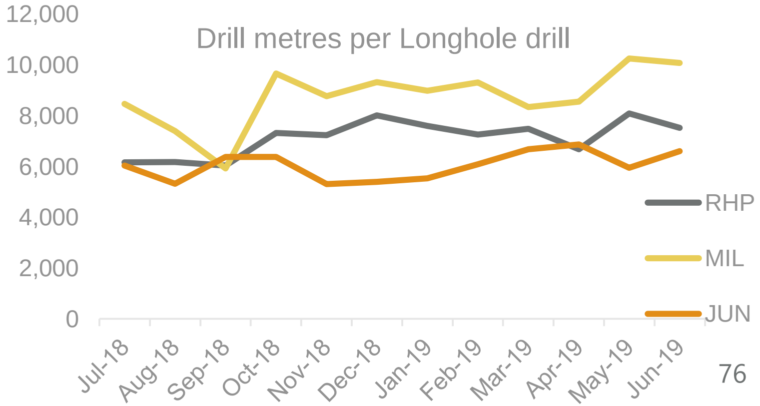




Operational Capability - NSMS world class physicals

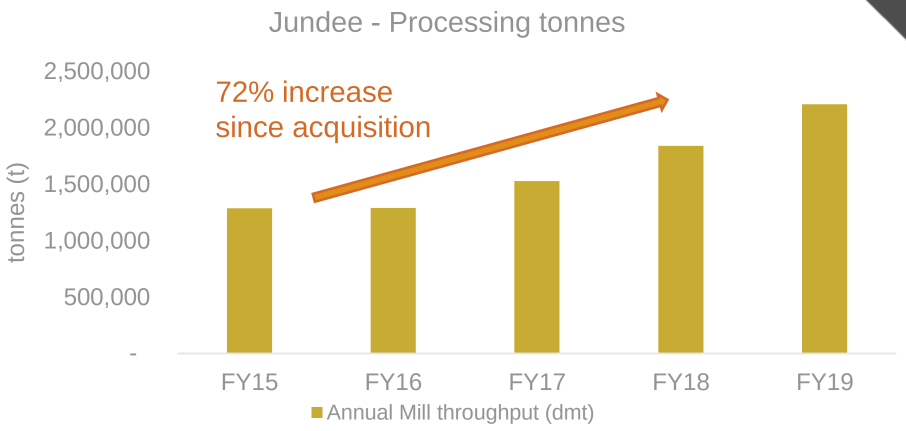
- Underground Mining Services Division (NSMS) is effectively an "In House" Mining contractor; we do not follow a traditional owner-miner model
- Simplifies running the overall business; best of both worlds to leverage technical and operational expertise with dedicated operational focus to achieve best results
- Systems and organisational structure set up for high productivities, responsive decision making & scalability
- Equipment replacement schedule in place to ensure delivery times, fit for purpose equipment selection, exposure to latest technology
- Flexibility to transfer resources between sites or deploy
- Unique and successful – deployment of NSMS delivers competitive advantage and is a key value driver to optimise our underground mines
- NSMS has the expertise and capability of a tier-1 underground contractor; and is now deployed in Australia and USA

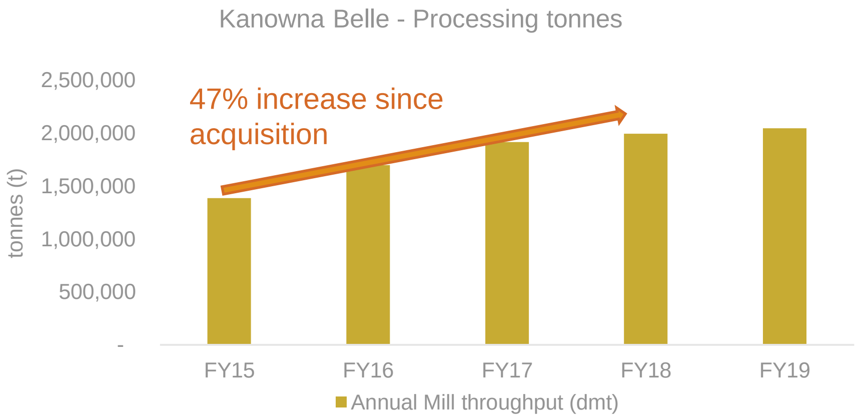




Operational Capability – Year of record processing

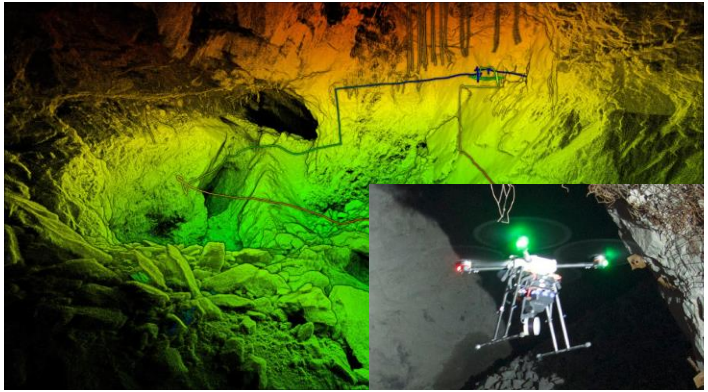
- Another year of record throughput from our Jundee and Kanowna Belle Mills
- Jundee processing capacity has increased 72% since acquisition in July 2014 with low capital intensity
- FY2019 was a record year of processed tonnes at Jundee with 2.1Mt processed
- Kanowna Belle plant has increased 47% since acquisition; also with very low capital intensity
- Kanowna Belle plant processed over 2.0Mt tonnes for a record FY2019, breaking the FY2018 record



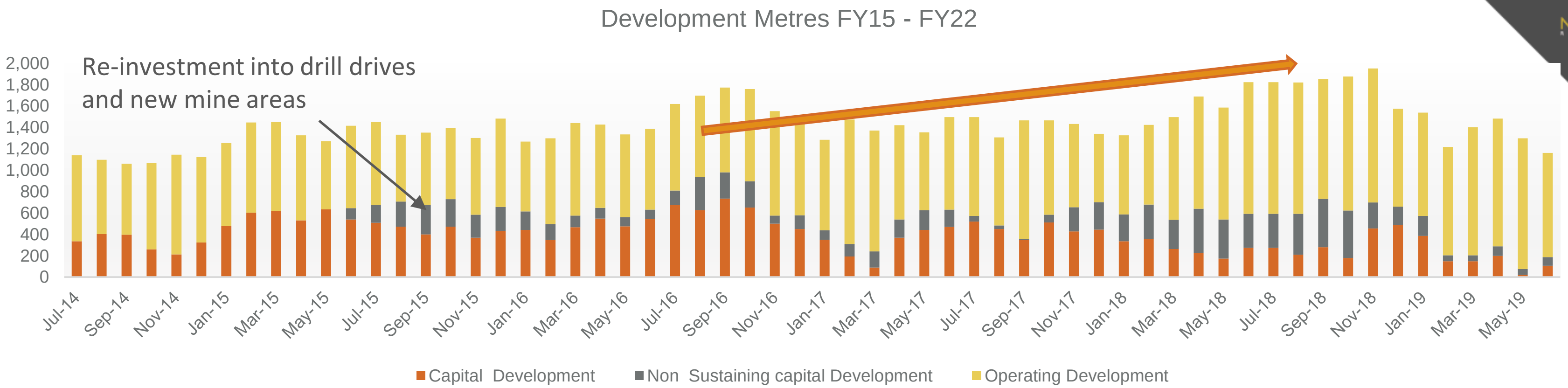


Operational Capability – Innovation integrated

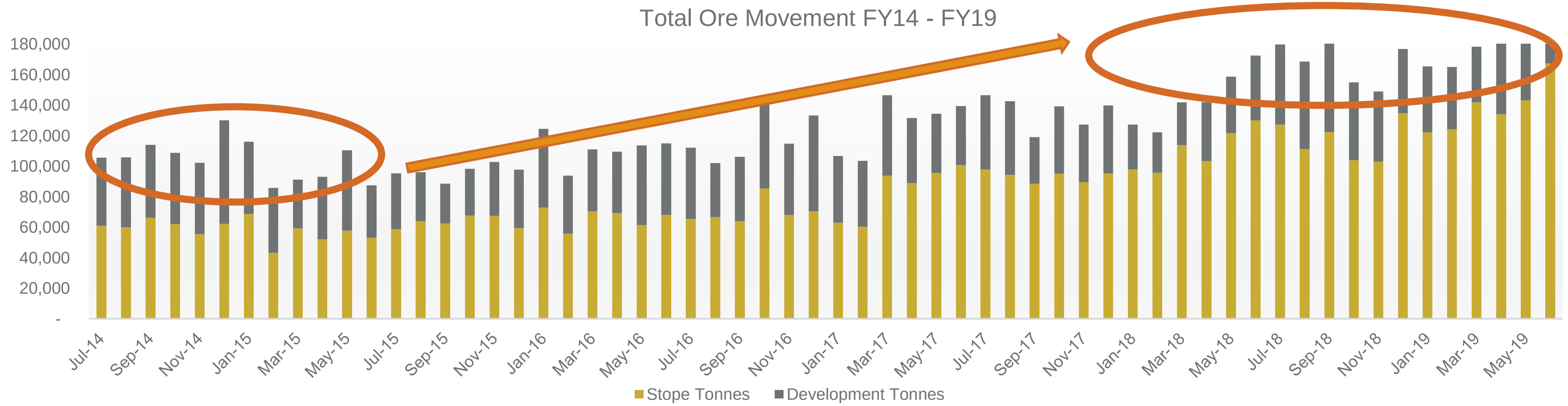
- Fully funded A$5M per year embedded in our costs for people, innovation and technology
- Committed to leveraging our people's capability through embracing emerging technologies to drive continuous improvement
- We are a rapid adopter of "business deliverable" technology such tele-remotes at all operations, auto-drill functions on drills, robotic mill reline machine, operational drone unit
- We invest into research, and use that research to drive innovation to solve our future challenges
- Future initiatives – multi-platform operational communications, electrification, automation, processing recovery improvements and data efficiency



Operational Capability – Jundee case study

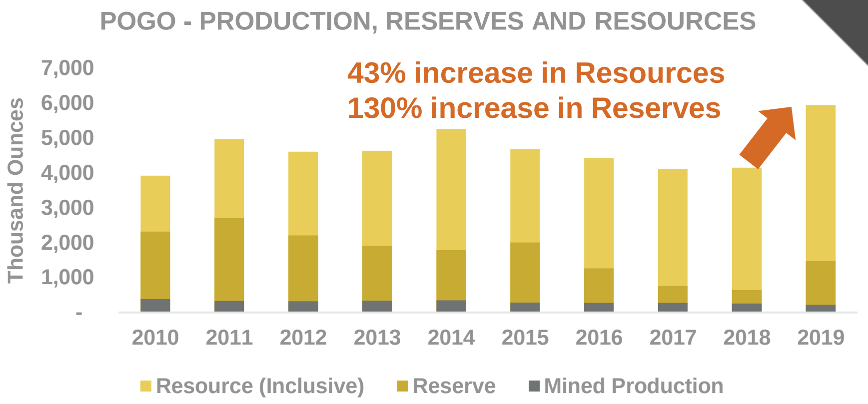


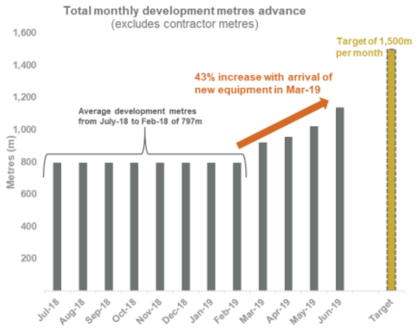
Without NST business model; Jundee would be a 180kozpa mine vs a 300kozpa

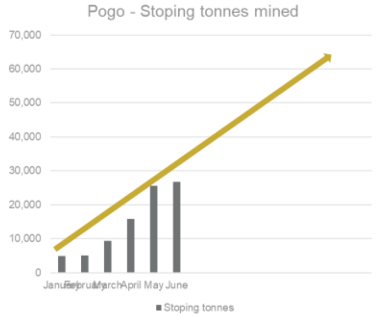


Operational Capability – Pogo is just getting started…

- Geology first; the building blocks in place with Reserve increase to 1.5Moz at 7.5gpt and Resources of 5.95Moz at 9.6gpt
- Working within our proven business model
- Increase diamond drill rigs from 2 to 8, now focusing on increasing productivity
- Increasing development advance and productivities with introduction of bolt and mesh with jumbo
- Implementation of highly productive, low cost method of Longhole stoping showing month-on-month improvement
- **As with all our assets, our focus on continuous improvement never stops**



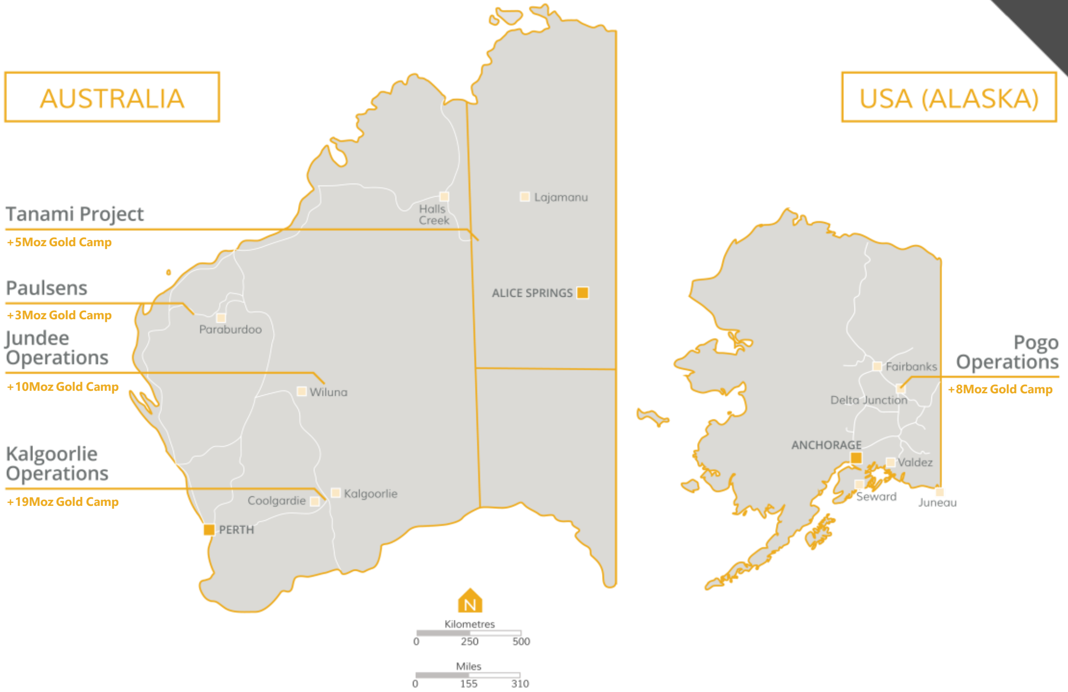




Asset Overview

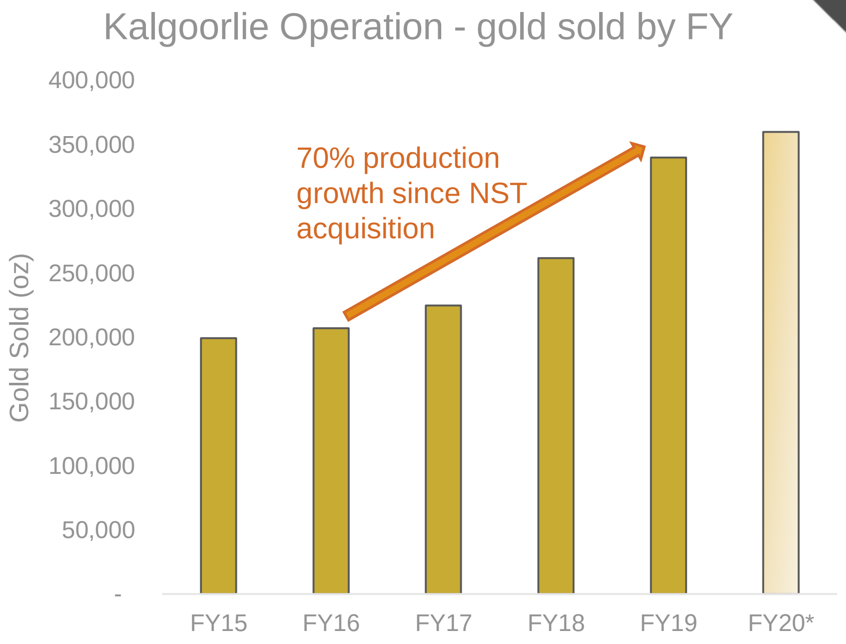
NST Operations – Tier-1 Assets, Tier-1 Locations

- NST manages a simplified business with a strong organic growth outlook; with 3 Tier-1 assets in Tier-1 locations
- FY2019 group performance 840,580oz sold at an AISC of A$1,296/oz (US$907/oz)
- Record year for company and Australian operations demonstrating 5 years of year-on-year growth
- Acquired Pogo Operation in September 2018 with financial benefit from July 2018
- Pogo operation in process of transitioning to NST business model
- Operations located in world class gold camps with both in-mine and regional expansion potential
- Governed by the adage "a business first and a mining company second"



Kalgoorlie Operation – Under NST business model

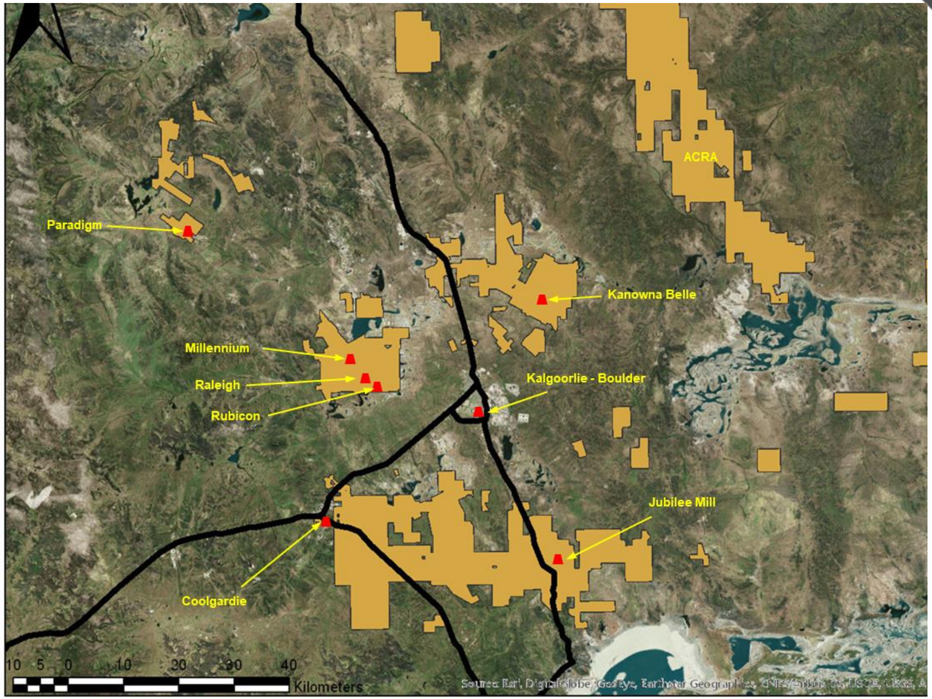
- Since acquisition in 2014, Kalgoorlie Operation has demonstrated year on year growth
- At time of purchase, the production profile was ~200kozpa and there was ~380koz in Reserve
- More than 5 years later, and after producing over 1.2Moz, we have grown production by ~70% and FY20 is forecast to grow again
- More than 5 years later, mine lives are backed by Reserves of 2.2Moz and Resources of 12.5Moz; with a strong track record of Resource conversion
- Kalgoorlie remains a highly prospective region with numerous in-mine and regional opportunities for organic growth
- NST has strategic advantage of infrastructure, people, equipment and capability for continued growth in the region



* Mid point of guidance FY20

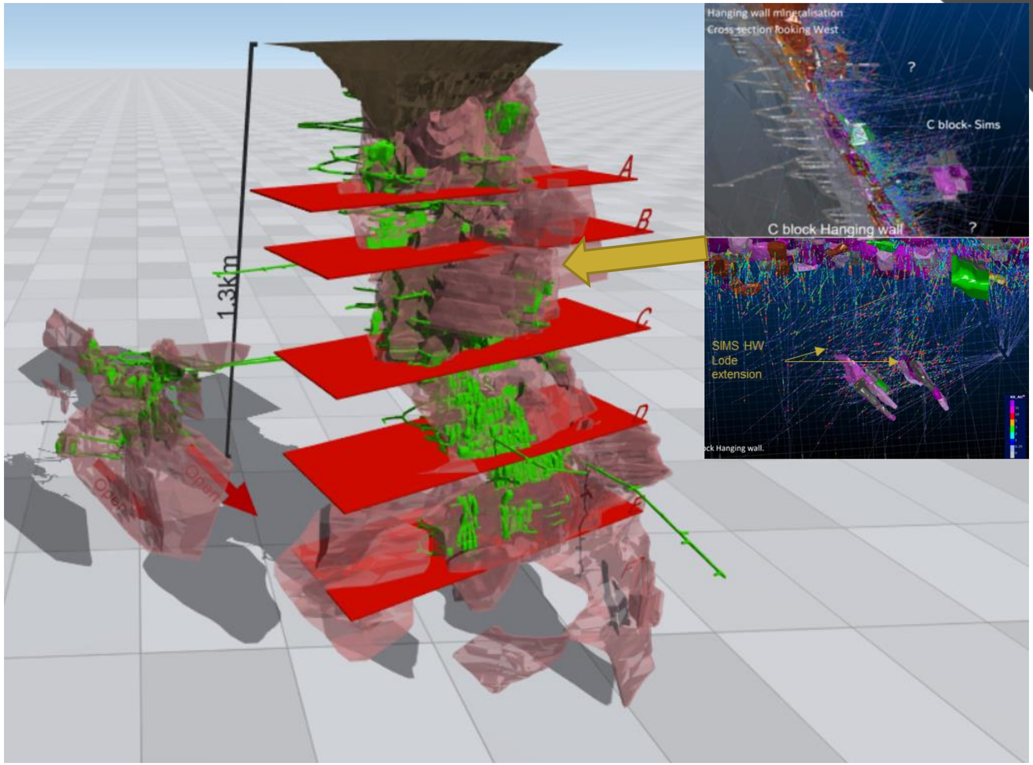
Kalgoorlie – Concentrated centre, great infrastructure

- FY2019 record production at top end of guidance with 340,007oz sold at AISC of A$1,330oz (US$931/oz)
- FY2020 continues organic production growth profile with guidance of 340,000oz-380,000oz at an AISC of A$1,260-A$1,370 (US$880-US$960/oz)
- Underground operations include Kanowna Belle, Kundana, EKJV, SKO
- Processing capacity of 3.2Mtpa with two fully utilised process plants Kanowna Belle (2.0Mtpa) and Jubilee (1.2Mtpa); plus access to regional toll-treatment options as required
- Concentrated centre allows simplified management and leverage to synergies and gold price with organic growth options

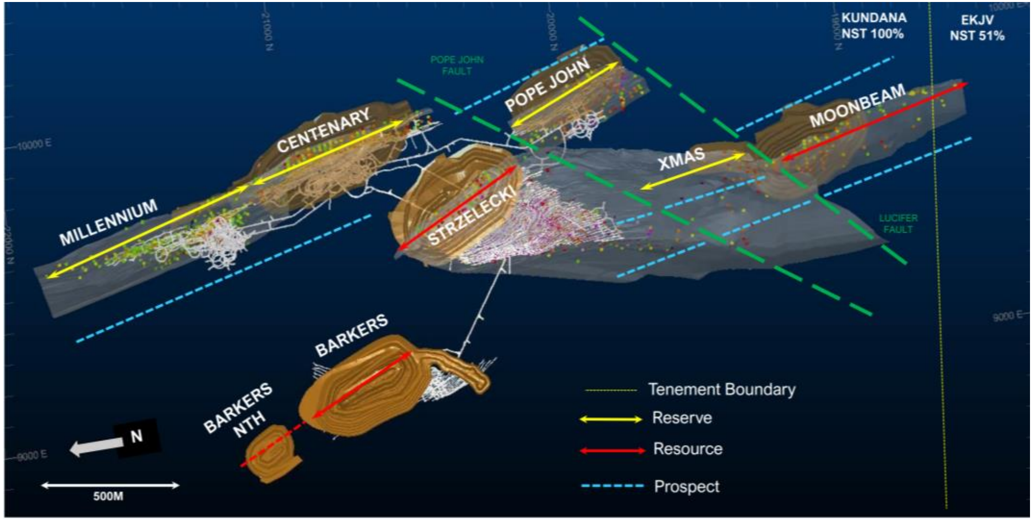


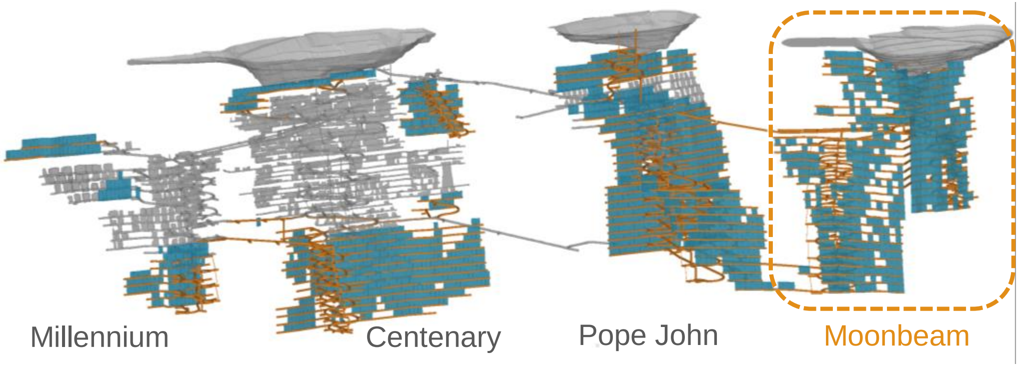
Kalgoorlie – Kanowna Belle

- Kanowna Belle ~7Moz endowment with substantial infrastructure and growth potential across all areas of the mine
- Consistent performance of production and Reserve replacement with Reserves of 0.7Moz and Resources of 1.9Moz
- Reserve grade has increased by 17% as the potential of hanging-wall lodes of SIMS orebody is realised
- The Velvet deposit remains open up dip, along strike and down plunge back towards the main Lowes ore body
- Drill drives established in key locations for further reserve growth



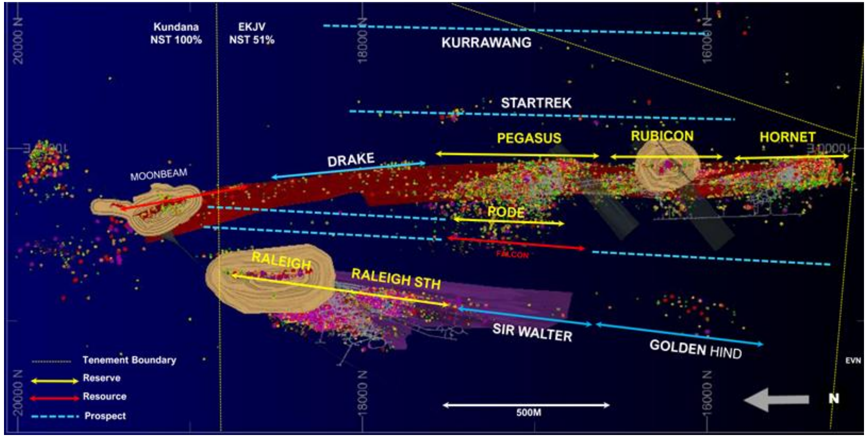
Kalgoorlie – Kundana (100% NST)



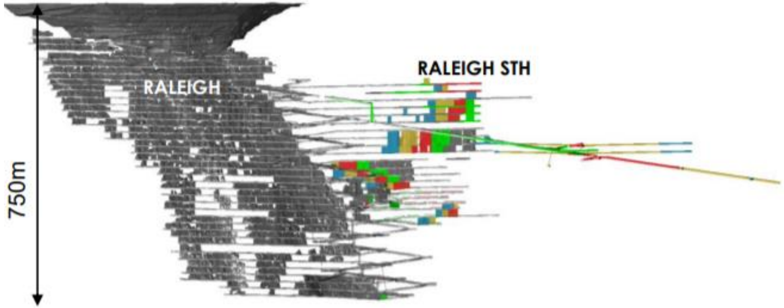


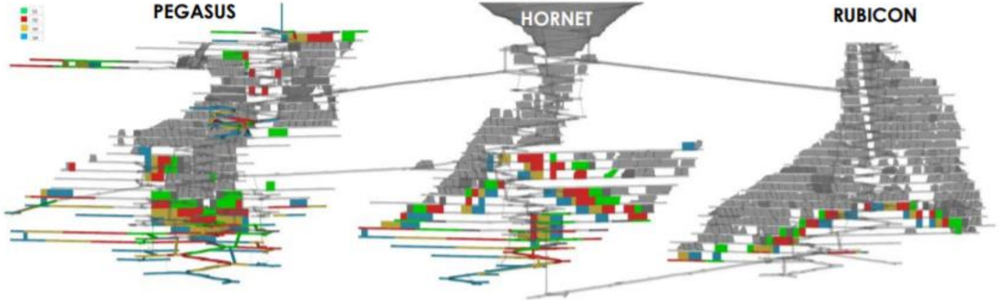
- Kundana region continues to grow production and offers operational flexibility
- Reserves of 0.6Moz and Resources of 1.4Moz
- Orebodies remain open at depth as well as along strike
- In FY20, Moonbeam underground will be established as production centre, continuing growth along the Kundana trend
- Low capital intensity of A$24M to bring Moonbeam into production
- Kundana is achieving industry leading mining physicals as demonstrated by consistently developing over 500m per month with one jumbo

Kalgoorlie – EKJV (51% NST)



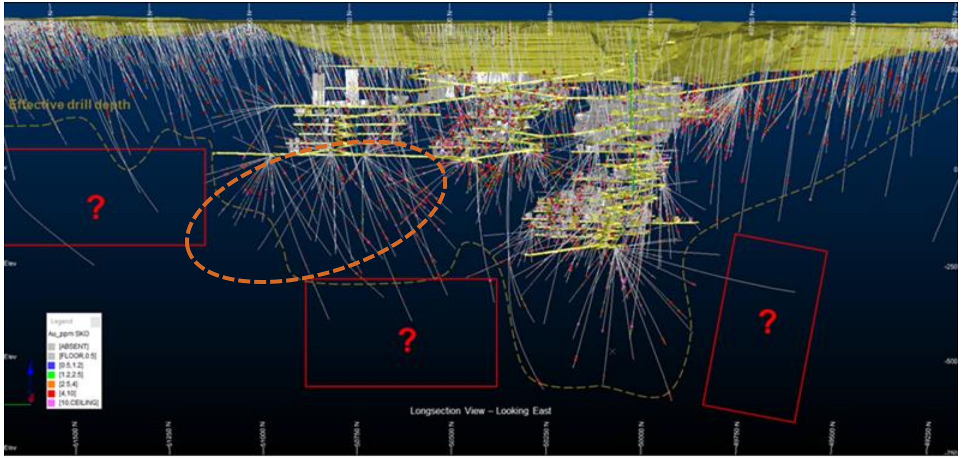
- NST attributable Reserves 0.55Moz of Resource of 1.4Moz
- Committed capital of A$7M for expansion of drill drives to drill out Falcon and access Hera in FY20
- Changes to stope methodology paying back – multi lift stopes and improved productivity
- Operations deliver sector leading productivity metrics of stope turn over and development rates

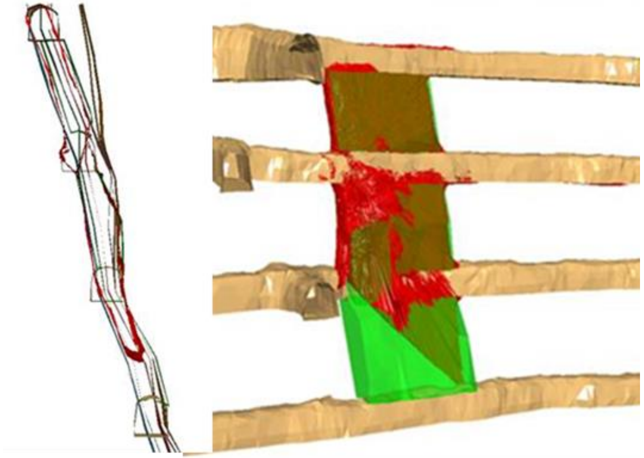




Kalgoorlie – South Kalgoorlie Operation (SKO)

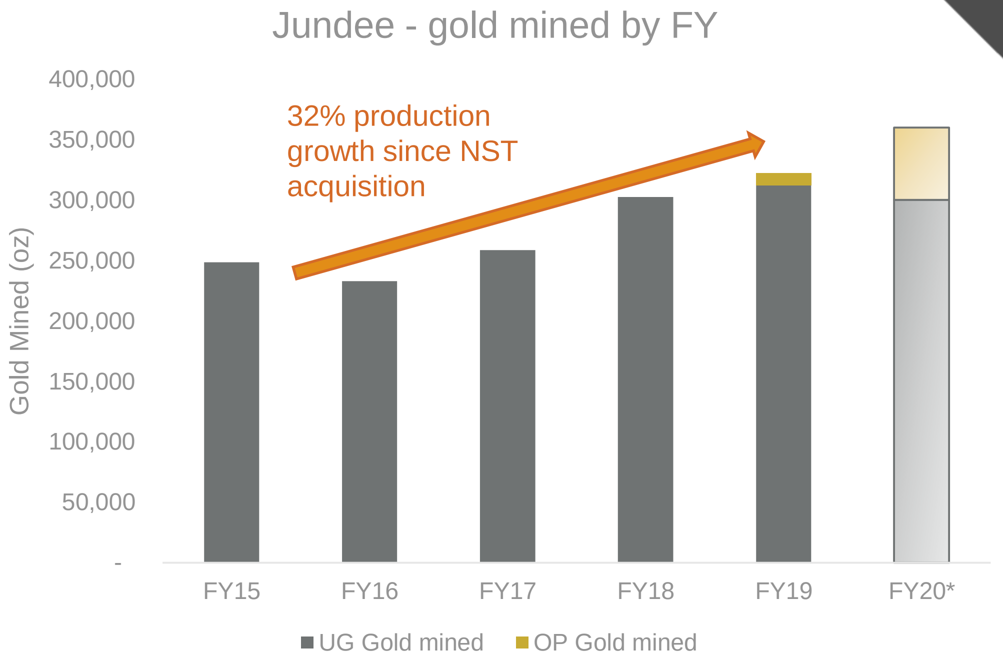
- Reserve increase of 21% to 0.32Moz at 3gpt
- High grade trend evolving from the Northern Ore Zone (NOZ) through to Mutooroo
- Successful implementation of triple-lift stoping with increased productivities and reduced dilution
- Transition from contractor to NSMS in Jan 2019 with immediate lift in physicals and reduction in costs





Jundee Operation – Under NST business model

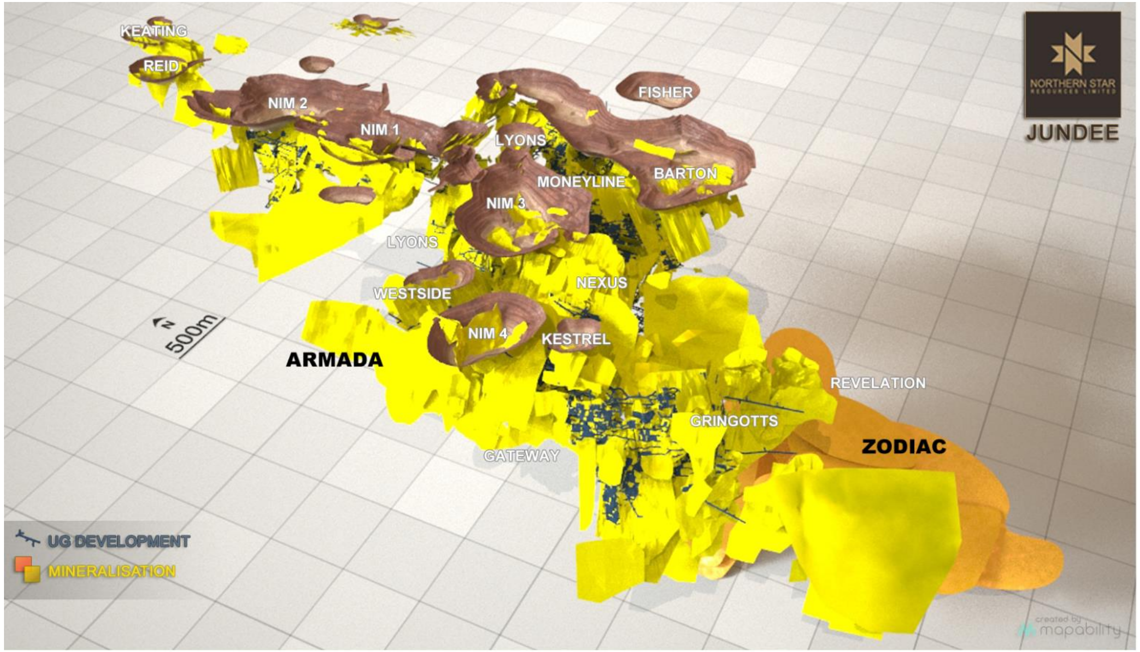
- Since acquisition in 2014, Jundee production has grown ~32%
- At time of purchase, the production profile was ~220kozpa and there was ~410koz in Reserve
- More than 5 years later, and after producing over 1.6Moz, gold mined in FY20 is forecast to grow again by 12%
- More than 5 years later, mine lives are backed by Reserves of 1.6Moz and Resources of 4.55Moz; with a strong track record of Resource conversion



* Mid point of guidance FY20 + 60koz of Ramone OP ore on stockpile

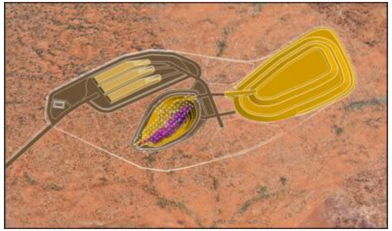
Jundee – Going from strength to strength

- A significant FY2019: Record 299koz sold at an AISC of A$981/oz
- Resources up 7% to 4.55Moz and Reserves up 3% to 1.6Moz
- Mining & processing of Ramone open pit material commenced the June quarter
- FY2020: Guidance 260,000-280,000oz at an AISC of A$1,115-A$1,195/oz (US$780-US$840)
- In addition to guidance, a further 60koz of Ramone ore will be stockpiled in FY20
- Plant upgrade delivered up to 2.2Mtpa processing capacity

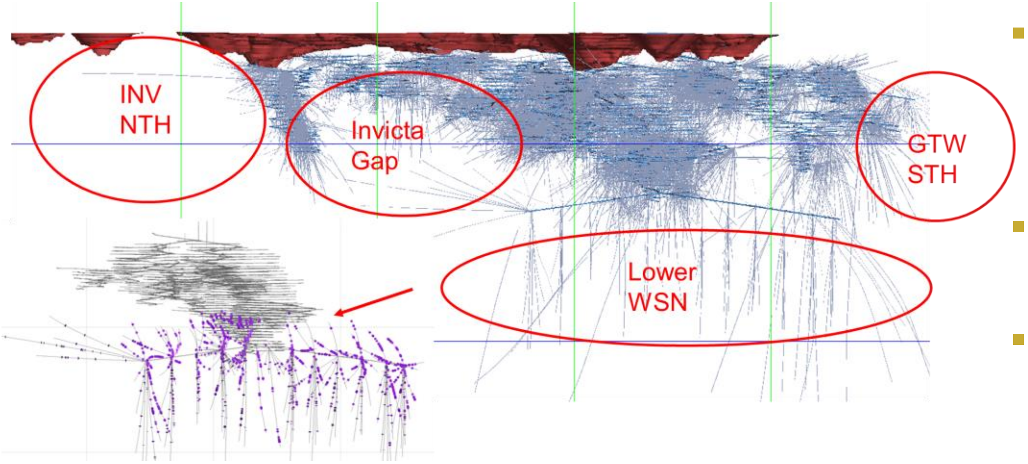


Jundee – Open pit opportunities realised

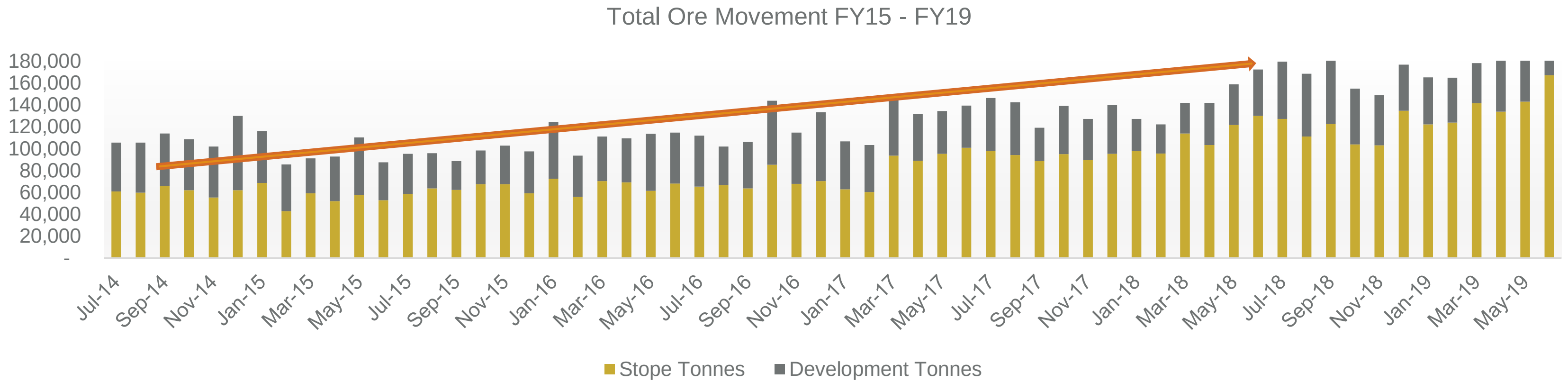
- Open pit mining commenced at Ramone in late FY2019
- Open pit Resources of 0.3Moz and Reserve of 0.12Moz
- All permitting, approvals and commissioning completed on schedule
- BGC awarded contract, mobilised to site March 2019
- First ore in the June quarter of FY2019 reconciled within 1% of model
- Exploration success in the region has potential to greatly extend open pit mining opportunities



Jundee – Growth opportunity in every direction

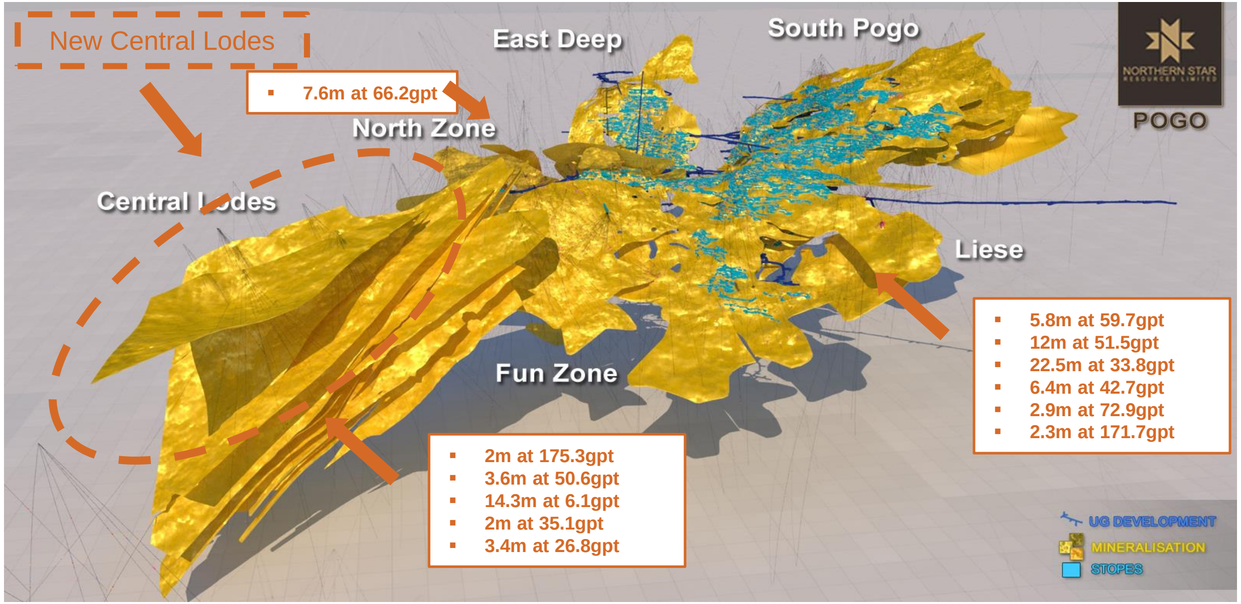


- Commitment of A$37M of expansionary capital for excavation of exploration drill drives and setting up access to new mining areas
- Continued production growth delivered by industry leading productivities
- Record year for ore tonnes mined at 2.1Mt and record stope tonnes mined at 1.53Mt (~130kt per month)



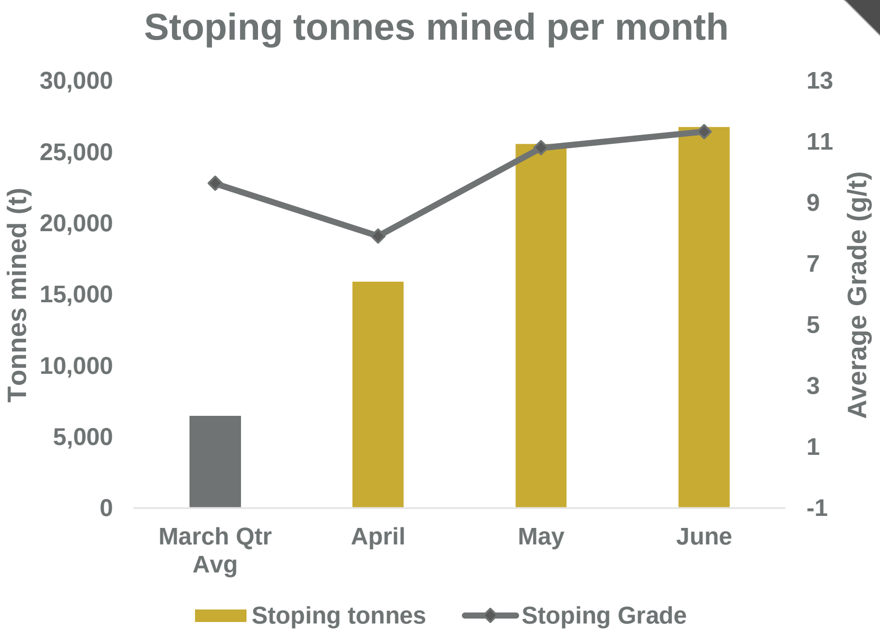
Pogo – The next Jundee

- Pogo is a world-class 10Moz gold endowment that has produced approximately 3.8Moz at an average grade of 13.6gpt over the past 12 years at an average of ~300,000ozpa
- Pogo has a JORC Resource of 5.95Moz at 9.6gpt and a maiden JORC Reserve of 1.5Moz at 7.5gpt
- FY20 guidance of 200,000oz-240,000oz at an AISC US$850-US$925/oz (A$1,210-A$1,320/oz) (H1: 80,000-100,000oz; H2: 120,000-140,000oz)
- Exploration success has exceeded what was initially modelled pre acquisition
- A$20M of exploration is budgeted for FY20 to improve classification of the significant Inferred Resource of 3.7Moz at 9.5gpt
- Approvals are already in place for exploration and production activities on the Central Lodes
- A$37M growth capital committed for developing and establishing new mining areas
- A$7M growth capital allocated to processing infrastructure to de-bottleneck the front end of the plant and increase capacity



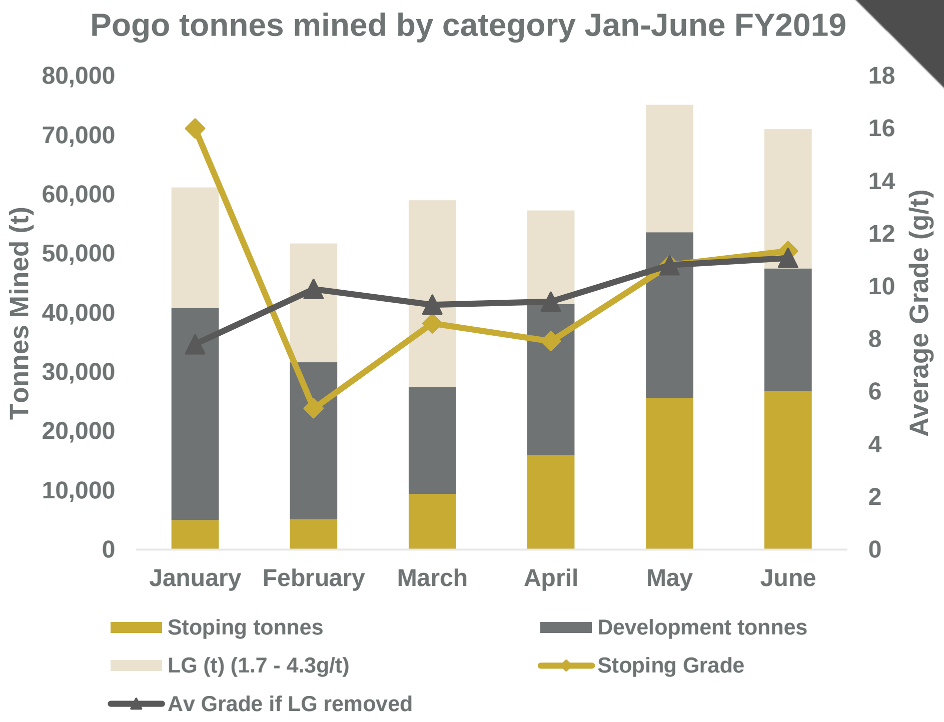
Pogo – June 2019 Quarter performance

- Implementation of NST business model is on track to achieve key objectives, with results reflecting strong operational gains at all levels
- Compared to March 2019 quarter, improvements include;
  - Ounces mined up **27%** to 50,566oz
  - Gold sold up **33%** to 48,009oz
  - Development metres up **13%**
  - Stoping tonnes up **250%**; these now account for **33%** of mill feed (up from 11% in the March Qtr)
  - All-in sustaining cost (AISC) down **18%** to US$1,207/oz from US$1,468/oz
- Gold production will rise significantly as additional areas are brought on line and the number of available stoping panels increases
- New Pogo mobile mining fleet has been delivered and is operating
- Aggressive diamond drilling campaign underway with 8 underground rigs committed



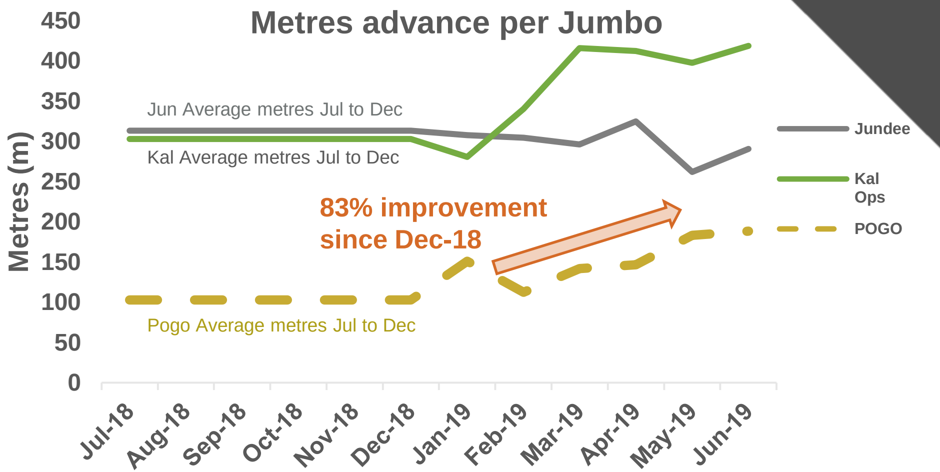
Pogo – Month on month improvement

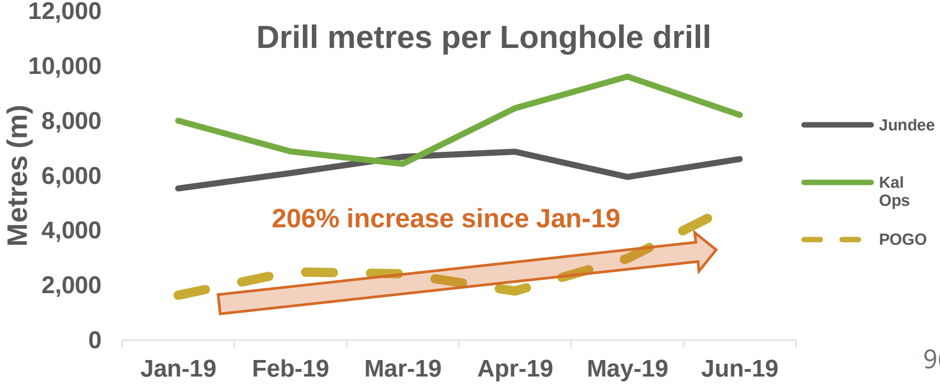
- Pogo is currently mining constrained until new stoping areas come on line which is part of the 18 month transition plan announced at acquisition
- Processing shortfall is currently being supplemented by economic low grade "LG" ore above 1.7gpt, which previously would have been placed on the waste dump and sterilised
- As we increase mining rates to +1.0Mtpa this LG material will be removed from the feed blend
- Past 6 months the average total mined grade has been 7.6gpt, of which the stoping grade is 10.2gpt
- If we remove the LG ore, average grade for the past 6 months would be ~28% higher at 9.7gpt
- The main mining target for Pogo is for 60% of total processing tonnes to come from stoping, which in turn will significantly increase gold production and reduce the AISC



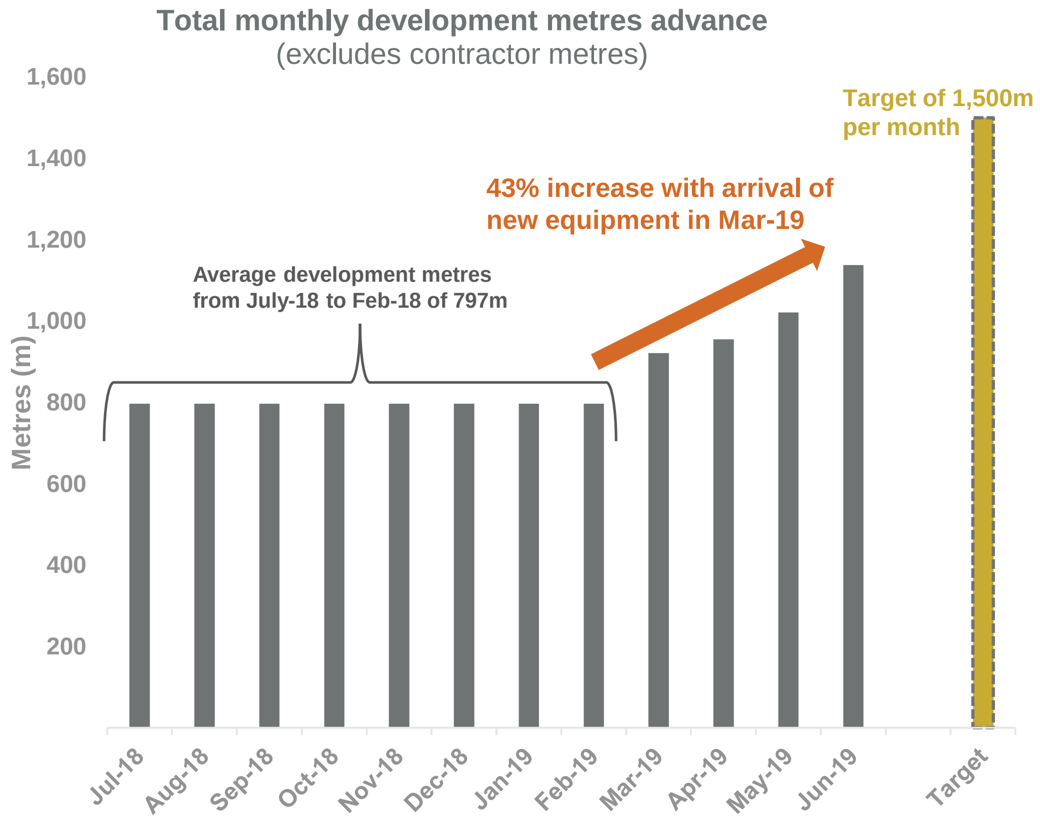
Pogo – Equipment selection set for success

- New mining fleet now on site, supports current and future mining requirements and the higher expected productivities
- New equipment benefits include:
  - Drilling holes 2 to 3 times quicker than the replaced equipment which was 13 years old
  - Exposure to latest technologies including; semi-autonomous guidance for tele-remote loaders, automatic drilling on development jumbos and long-hole drills
- There has been a **43%** reduction in the number of major underground plant from 39 to 22
- Immediate and significant improvement in productivities and substantially lower maintenance costs is being achieved with the new equipment
- Progress remains on track to transition to 60% of ore tonnes from longhole stoping in 2020; Pogo is now set-up to deliver similar productivities that NST achieves in Australia





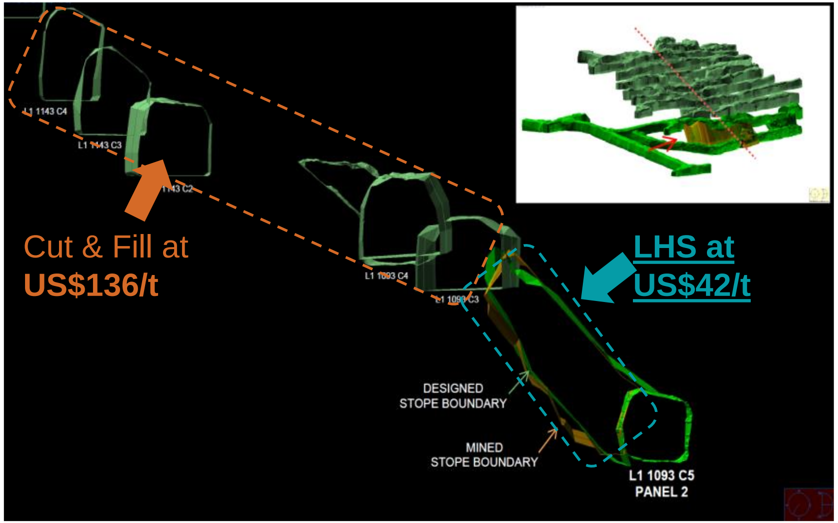
Pogo – Development physicals continues to improve

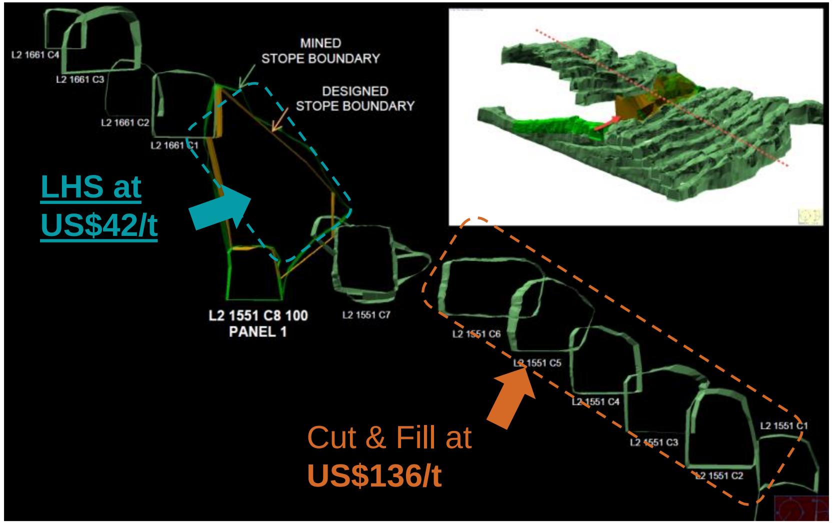


- New development fleet has been delivered and commissioned
- The implementation of bolting & meshing with jumbos has been well received and delivered immediate productivity improvements
- Bolting & meshing with jumbos has substantially increased development rates and allowed for a **45%** reduction in the total number of drilling units required (from 9 down to 5)
- Development metres are targeted for a run-rate of ~1,500m per month to be able to achieve a +1Mtpa ore tonnage

Pogo – Successfully transitioning to longhole stoping

- Transition to longhole stoping (LHS) is a key driver to the success at Pogo to deliver significant cost reductions per tonne and greatly improve the mine's profitability
- Existing method of cut & fill costs **~US$136/t** mined compared to LHS at **~US$42/t mined**; this equates to a saving of ~US$94/t mine, realising a 69% lower cost per stoping tonne
- LHS increases production rate through increased ore drive efficiency (more tonnes/metre advance)
- June quarter stoping tonnes increased by 250% compared to the March quarter and now represents 33% of the processing feed tonnage; on track for the 60% target



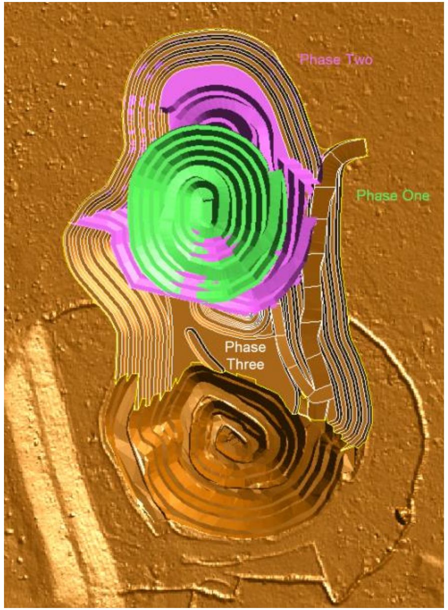


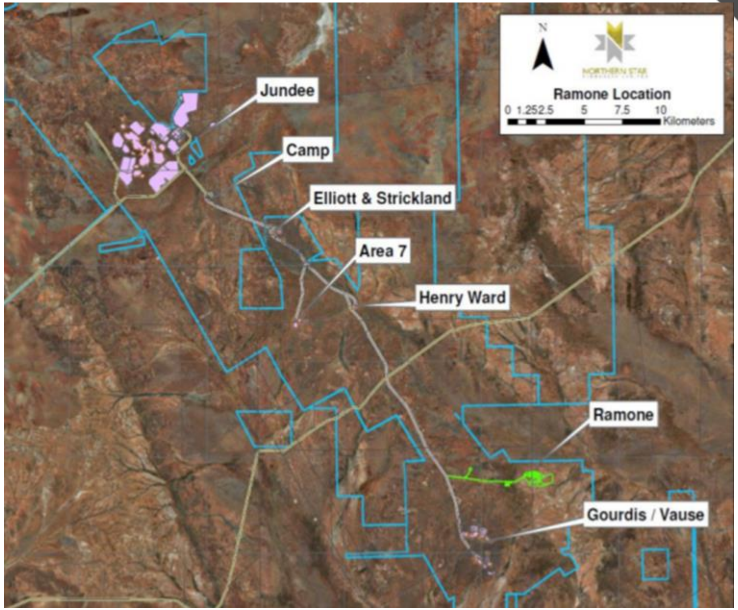
Pogo – NST's proven business model will deliver again

- The NST business model has been implemented at all our operations with proven effectiveness
- There are many parallels between our Jundee and Pogo operations
- As a comparison; since the acquisition of Jundee, operating metrics have improved in the following key areas;
  - Development metres increased by **~32%** (from ~1,150m/month to ~1,575m/month)
  - Ore tonnes increased by over **100%** (from ~1Mtpa to over 2Mtpa)
  - Stoping tonnes increased by over **100%** (from ~60kt/month to ~130kt/month)
- Pogo is transitioning to the same mining method as Jundee with the same equipment and technical processes
- The implementation of the NST business model continues in FY2020; with Pogo on track to achieve these productivity metrics to demonstrate a +1Mtpa production rate

Operations – Additional leverage to increasing gold price

- **Proven track record of rapid development and expedited production from discoveries and Resources**
- Large Resource base across multiple regions provides significant leverage to gold price
- Paradigm & Carbine area emerging with Resources of 0.3Moz and Reserves of 0.1Moz
- Open pit potential at Jundee with Resources of 0.3Moz and Reserve of 0.12Moz
- Paulsens & Ashburton Resources of 1.8Moz and Reserves of 55koz
- CTP and WTP Resources of 1.6Moz





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