



KIRKLAND LAKE GOLD

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Fosterville Gold Mine
Sept 2019

TIER ONE GOLD PRODUCTION | DISTRICT SCALE EXPLORATION | VALUATION UPSIDE

Cautionary Note Regarding Forward-Looking Information

The information in this presentation has been prepared as at April 5, 2019. This presentation contains "forward looking statements" and "forward-looking information" within the meaning of applicable securities laws, including statements regarding the plans, intentions, beliefs and current expectations of Kirkland Lake Gold with respect to future business activities and operating performance. Forward-looking information is often identified by the words "may", "would", "could", "should", "will", "intend", "plan", "anticipate", "believe", "estimate", "expect" or similar expressions and include information regarding: (i) the amount of future production over any period; (ii) assumptions relating to revenues, operating cash flow and other revenue metrics set out in the Company's disclosure materials; and (iii) future exploration plans. Investors are cautioned that forward-looking information is not based on historical facts but instead reflect Kirkland Lake Gold's management's expectations, estimates or projections concerning future results or events based on the opinions, assumptions and estimates of management considered reasonable at the date the statements are made. Although Kirkland Lake Gold believes that the expectations reflected in such forward-looking information are reasonable, such information involves risks and uncertainties, and undue reliance should not be placed on such information, as unknown or unpredictable factors could have material adverse effects on future results, performance or achievements of the combined company. Among the key factors that could cause actual results to differ materially from those projected in the forward-looking information are the following: the future development and growth potential of the Canadian and Australian operations; the future exploration activities planned at the Canadian and Australian operations and anticipated effects thereof; changes in general economic, business and political conditions, including changes in the financial markets; changes in applicable laws; and compliance with extensive government regulation. Exploration results that include geophysics, sampling, and drill results on wide spacings may not be indicative of the occurrence of a mineral deposit. Such results do not provide assurance that further work will establish sufficient grade, continuity, metallurgical characteristics and economic potential to be classed as a category of mineral resource. A mineral resource that is classified as "inferred" or "indicated" has a great amount of uncertainty as to its existence and economic and legal feasibility. It cannot be assumed that any or part of an "indicated mineral resource" or "inferred mineral resource" will ever be upgraded to a higher category of resource. Investors are cautioned not to assume that all or any part of mineral deposits in these categories will ever be converted into proven and probable reserves. This forward-looking information may be affected by risks and uncertainties in the business of Kirkland Lake Gold and market conditions. This information is qualified in its entirety by cautionary statements and risk factor disclosure contained in filings made by Kirkland Lake Gold, including its annual information form, financial statements and related MD&A for the financial year ended December 31, 2018, which are filed with the securities regulatory authorities in certain provinces of Canada and available at www.sedar.com.

Should one or more of these risks or uncertainties materialize, or should assumptions underlying the forward-looking information prove incorrect, actual results may vary materially from those described herein as intended, planned, anticipated, believed, estimated or expected. Although Kirkland Lake Gold has attempted to identify important risks, uncertainties and factors which could cause actual results to differ materially, there may be others that cause results not to be as anticipated, estimated or intended. Kirkland Lake Gold does not intend, and do not assume any obligation, to update this forward-looking information except as otherwise required by applicable law.

All dollar amounts in this presentation are expressed in U.S. dollars except as otherwise noted. For further details of Kirkland Lake Gold's Q4 2018 production results, please see the Company's press releases dated January 8, 2019 and February 21, 2019. For further information on the Company's three-year production guidance, including the assumptions and qualifications made, please see the Company's press releases dated December 11, 2018 and February 21, 2019.

Use of Non-IFRS Measures

This Presentation refers to average realized price, operating costs, operating costs per ounce sold, all-in sustaining cost ("AISC") per ounce of gold sold, free cash flow, sustaining capital expenditures and growth capital expenditure because certain readers may use this information to assess the Company's performance and also to determine the Company's ability to generate cash flow and meet its expenditure requirements. This data is furnished to provide additional information and are non-IFRS measures and do not have any standardized meaning prescribed by International Financial Reporting Standards ("IFRS"). These measures should not be considered in isolation as a substitute for measures of performance prepared in accordance with IFRS and are not necessarily indicative of operating costs presented under IFRS. Refer to each Company's most recent MD&A for a reconciliation of these measures. The most comparable IFRS Measure for operating cash costs, operating cash costs per ounce sold and AISC per ounce sold is production costs as presented in the Consolidated Statements of Operations and Comprehensive Income, while total additions and construction in progress are the most comparable measures for sustaining and growth capital expenditures. Operating cash costs, operating cash cost per ounce sold and All-in sustaining costs ("AISC") per ounce sold in the Company's 2018 guidance reflect an average US\$ to C\$ exchange rate of 1.29 and a US\$ to A\$ exchange rate of 1.34 (as at October 30, 2018). Operating cash costs, operating cash cost per ounce sold and AISC per ounce sold for YTD 2018 reflect an average US\$ to C\$ exchange rate of 1.2875 and a US\$ to A\$ exchange rate of 1.3194. Operating cash costs, operating cash costs per ounce and AISC per ounce sold for 2017 reflect an average USD to CAD exchange rate of 1.2965 and a USD to AUD exchange rate of 1.3041. See Kirkland Lake Gold News release dated Feb. 21, 2018 and the Company's MD&A for the three and twelve months ended December 31, 2018.

Kirkland Lake Gold Australian & Canadian Operations

Fosterville Gold Project

- **Location and Tenements**
- **History**
- **Tectonic Setting & Regional Geology**
- **Mine Lease Geology**
 - Host Rocks
 - Mineralisation
 - Exploration Models through time
- **Mineral Resource and Reserve Increases**
- **Fosterville Long Projection**
- **Processing**
- **Production Profile**
- **How Many More?**

HIGH-GRADE, LOW COST GOLD MINES

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HIGH-GRADE GOLD PRODUCTION IN CANADA AND AUSTRALIA

TWO OF THE WORLD'S HIGH-GRADE GOLD MINES IN LEADING MINING JURISDICTIONS



2 Key Drivers of Performance – 82% of 2018 Production

	Fosterville	Macassa	Consolidated ¹
P&P Mineral Reserves (kozs)	2,720	2,250	5,570
P&P Reserve Grade (g/t Au)	31.0	21.9	15.8
2018 Production (ounces)	356,230	240,126	723,701
2018 Op. Cash Costs (\$/Oz Sold) ²	200	426	362

1. Includes Holt/Holloway, Taylor and other properties in Canada (on care and maintenance), as well as the Northern Territory properties in Australia (on care and maintenance)
2. See Non-IFRS Measures section in forward looking statements (Slide 2) as well as in the MD&A for the three and twelve months ended December 31, 2018 starting on page 41.

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CENTRAL VICTORIA - WORLD CLASS GOLD PROVINCE

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- **Discovery and Initial Mining**

- 1894 – 1909: Discovery and mining - **~47koz**
- 1930's & 1980's: Minor tailings retreatment - **~3koz ?**

- **Open pit and Heap Leach Oxide Production**

- 1991 – Early 2003: Heap Leach Operations (PSV from 1992) - **241koz**

- **Sulphide Development/ Production (1.5Moz to 6th May 2018)**

- From mid 2001: Sulphide resource growth
- Sep 2003: Feasibility Study completed
- Apr 2004: Construction and start of open pit mining
- Apr 2005: First gold pour
- Mar 2006: UG Decline began, first stope in Dec 2006
- Early 2008: UG ore (open stoping and sub-level caving mining methods)
- Mar 2011: **500,000th ounce produced**
- Dec 2015: **1,000,000th ounce produced**
- May 2017: **1,500,000th ounce produced**
- **July 2019** **2,000,000th ounce produced**

■ Previous Explorers and Operators

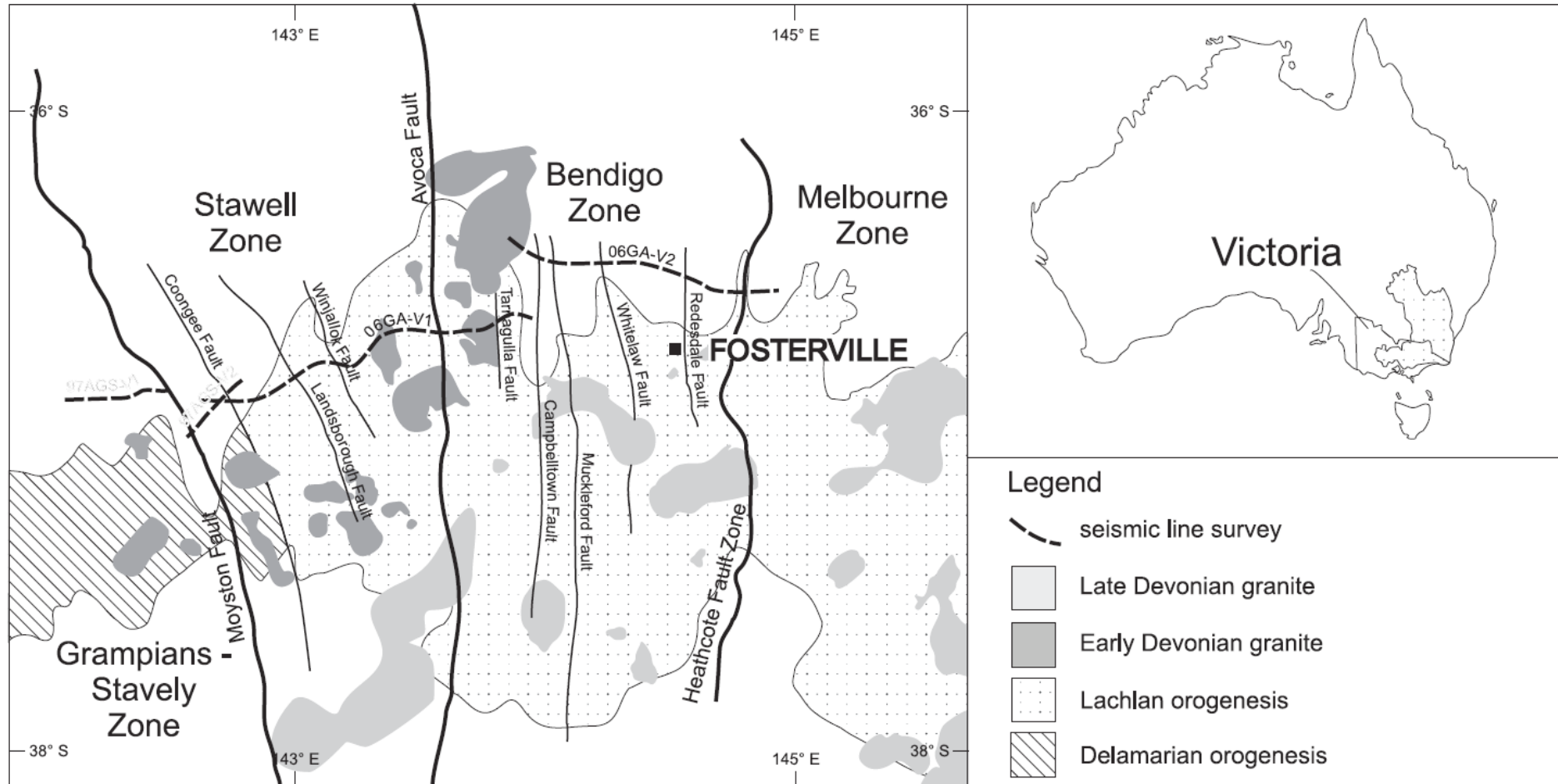
- 1973 - 1983: Noranda Australia, Pennzoil, Newmont,
Lone Star Exploration and Apollo International
- 1982 - 1991: Bendigo Gold Limited
- 1991 - Apr 1992: Brunswick NL
- Apr 1992 - Feb 2008: Perseverance Exploration
- Feb 2008 - Oct 2011: Northgate Minerals
- Oct 2011- May 2012: AuRico Gold
- May 2012 - Aug 2015: Crocodile Gold
- Aug 2015 – Nov 2016: Newmarket Gold

Current Operator

- Nov 2016 to present: Kirkland Lake Gold

TECTONIC SETTING

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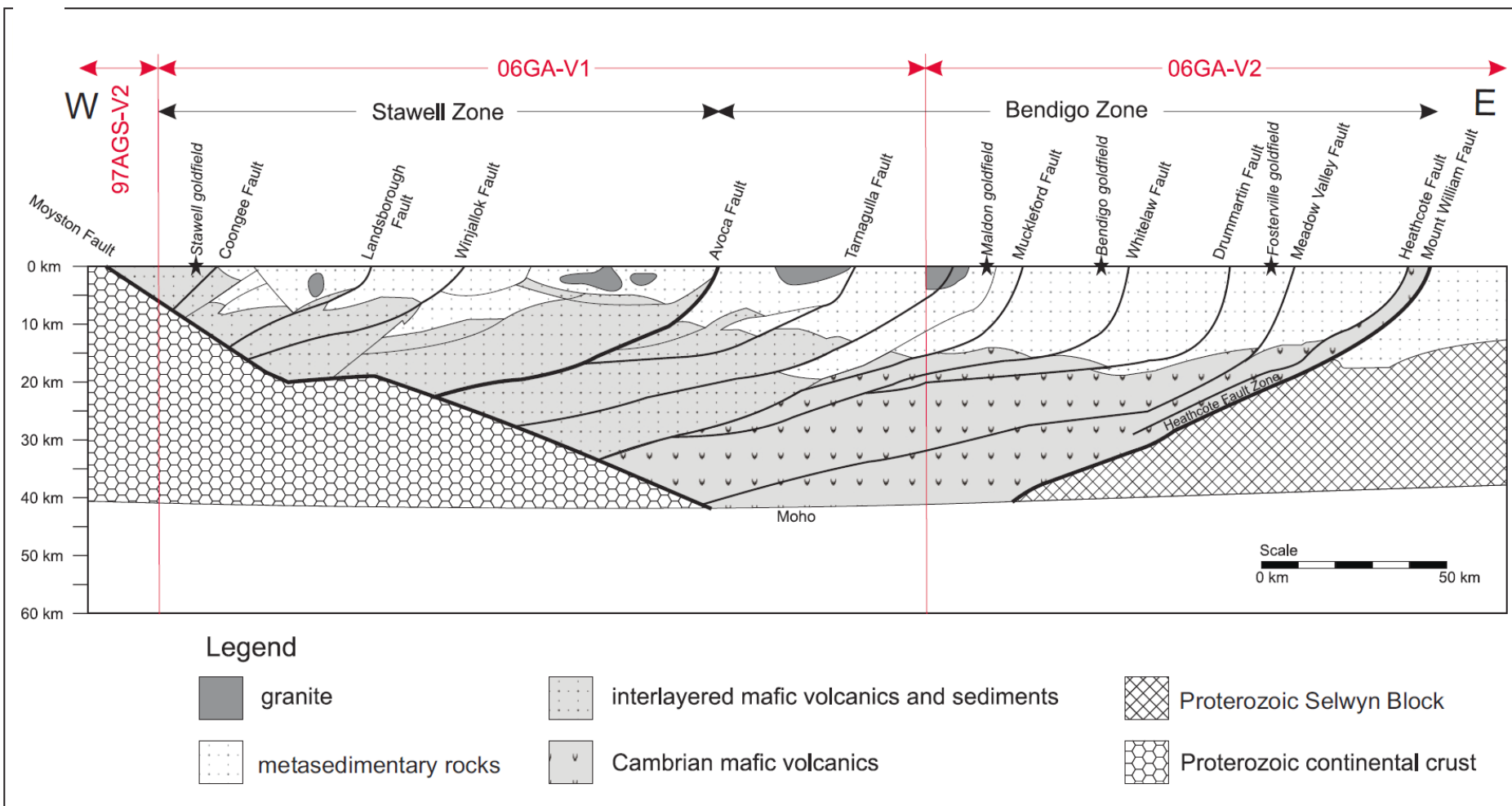
Orogenic Events:

Cambrian Delamerian Orogeny (~520-490Ma)
Late Ordovician Benambran Orogeny (~455-440Ma)
Late Devonian Tabberabberan Orogeny (~380Ma)

(Adapted from Leader and Wilson, 2010)

TECTONIC SETTING – REGIONAL CROSS SECTION

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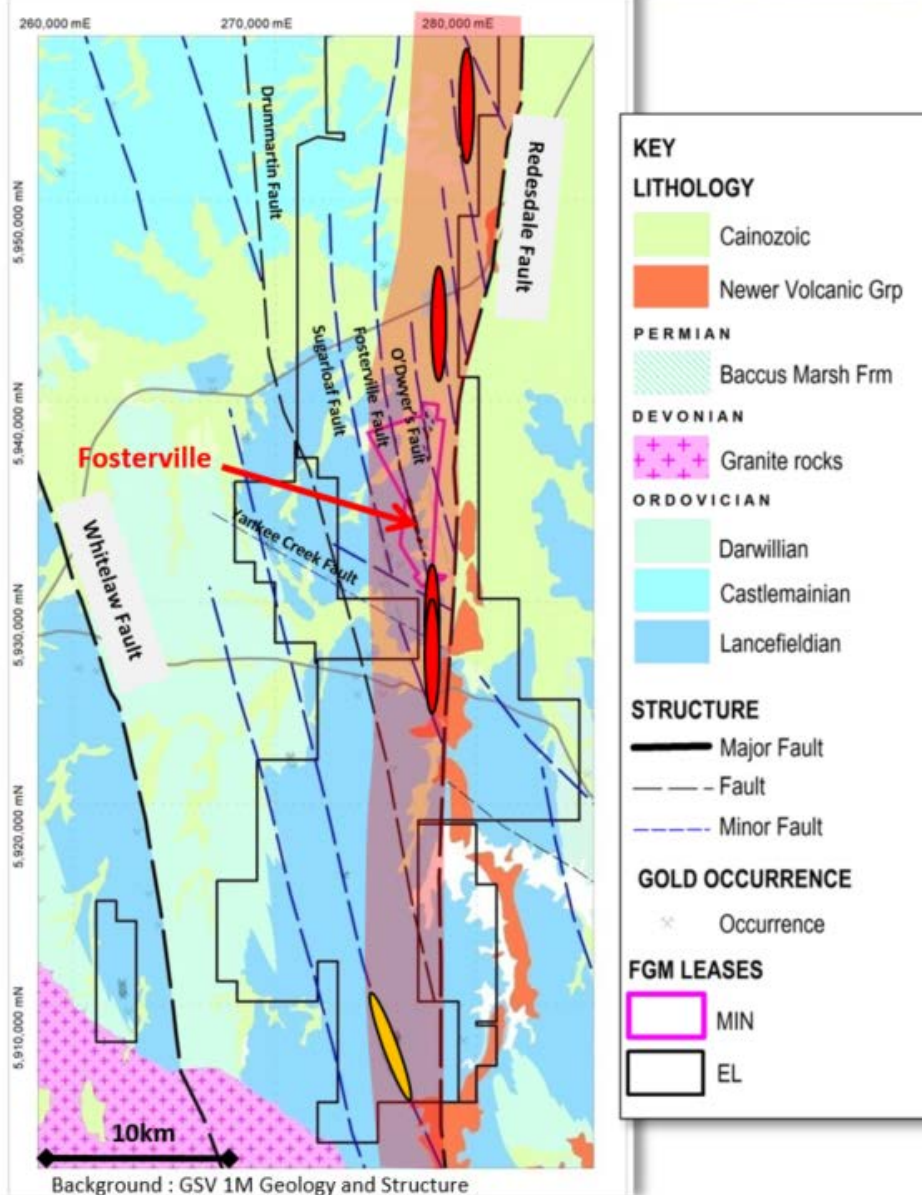
Mineralisation Events:

455-440Ma - Stawell, Bendigo, Castlemaine, Maldon and Daylesford

420-410Ma - Tarnagulla and Ballarat

380-370Ma – Fosterville, Costerfield and Woods Point

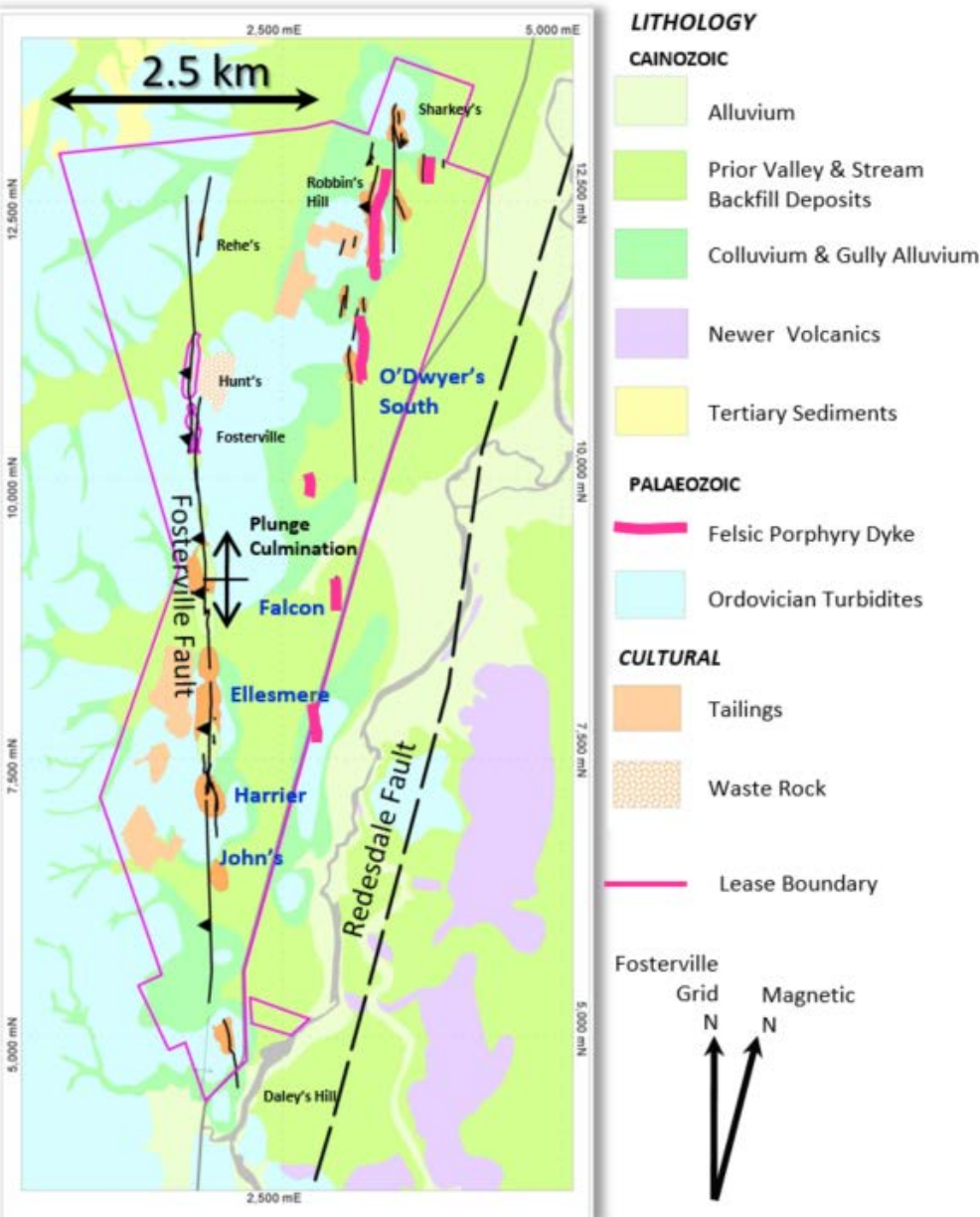
(Adapted from *VandenBerg et al (2000)*,
Korsch et al (2002) and *Cayley et al (2010)*)



- Fosterville is 20km east of Bendigo
- Fosterville Fault (2/3rd order) and other faults are interpreted to splay off the Redesdale Fault
- Ordovician Lancefieldian sedimentary host rocks
- Gold mineralisation extends outside of the Fosterville Mine lease

MINE LEASE GEOLOGY

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- Mine lease 8.5km along strike
- Goldfield 3km wide & total strike length of over 20km
- 20+ shallow oxide open pits
- Ordovician turbidites on western and northern sections of mine lease, shallow cover on remainder
- Major controlling feature is the Fosterville Fault – north-south trend, steeply west dipping
- Other parallel structures (including felsic dykes) in the north-east also host mineralisation

- Ordovician turbidites

**Shale-topped
sandstone**
SPD309

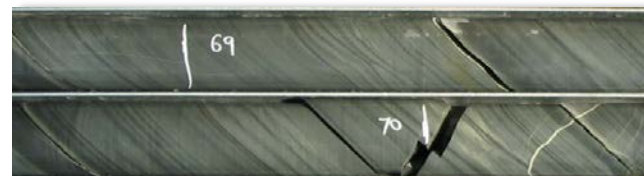
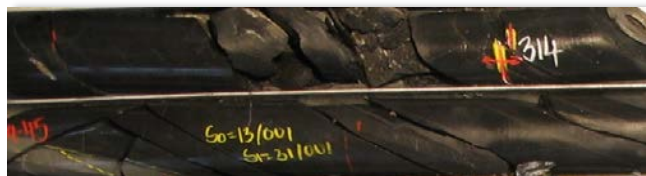


Massive Sandstone
RHD021



Shale
SPD303

**Black
Shale**
SPD292



**Laminated
Shale**
SPD283

- Arsenopyrite and pyrite: halo to quartz-carbonate stockwork, localised on faults.
- Fluid inclusions studies (qtz-carb veins): 270°C and 2.6 to 5.7 km depth
- Gold as solid solution within sulphides:
 - Arsenopyrite: 0.05-6mm needle-like crystals, typically 100-5,000 ppm Au
 - Auriferous pyrite: 0.1-2mm crystalline pyritohedrons, typically 10-100 ppm Au
- Visible gold (generally ≤ 3 mm nuggets): disseminated within host quartz veins, sometimes occurring with stibnite. *Drill assays can be spectacular , e.g. >2% gold*
- Antimony as stibnite (Sb_2S_3) (and minor aurostibite (AuSb_2)), infills and replaces carbonate in qtz-carb veins; often has adjacent high-grade Aspy/ Py mineralisation.
- Trace sulphide minerals:
 - Galena, Sphalerite
 - Chalcopyrite – CuFeS_2
 - Tennantite – $\text{CuFe}_{12}\text{As}_4\text{S}_{13}$
 - Tetrahedrite – $\text{CuFe}_{12}\text{Sb}_4\text{S}_{13}$
 - Bournonite - PbCuSbS_3
 - Boulangerite - $\text{Pb}_5\text{Sb}_4\text{S}_{11}$
 - Breithauptite - NiSb



MINERALIZATION

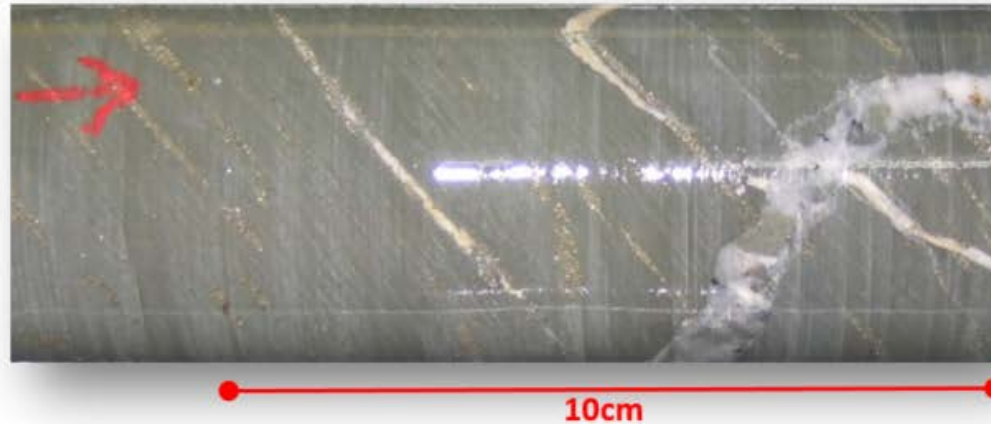
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Laminated Quartz Veins

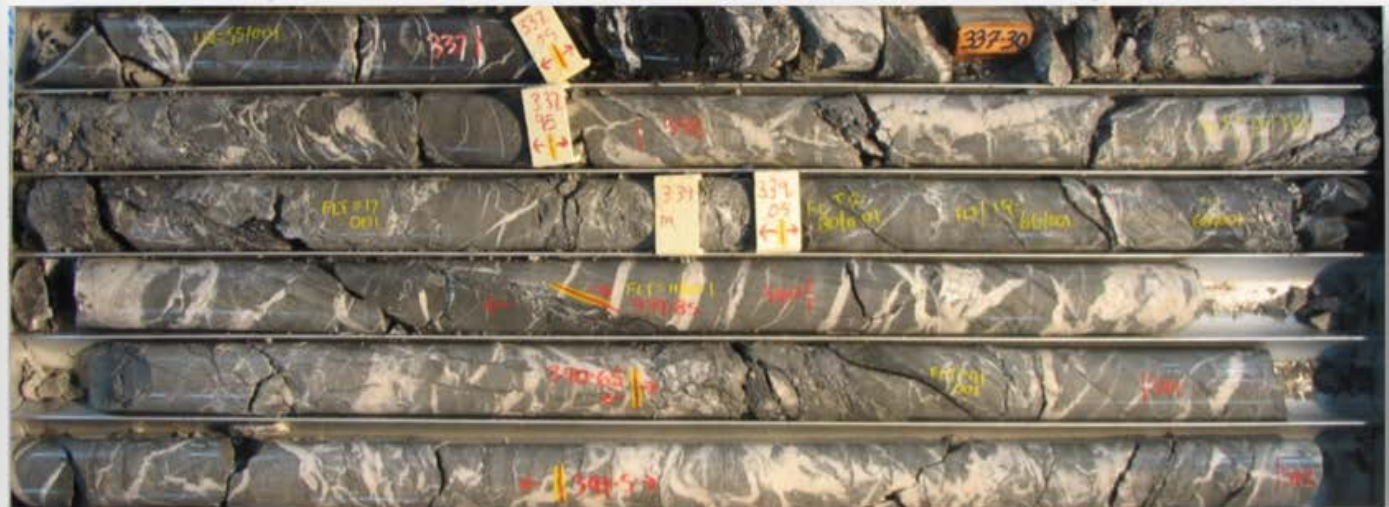
SPD336



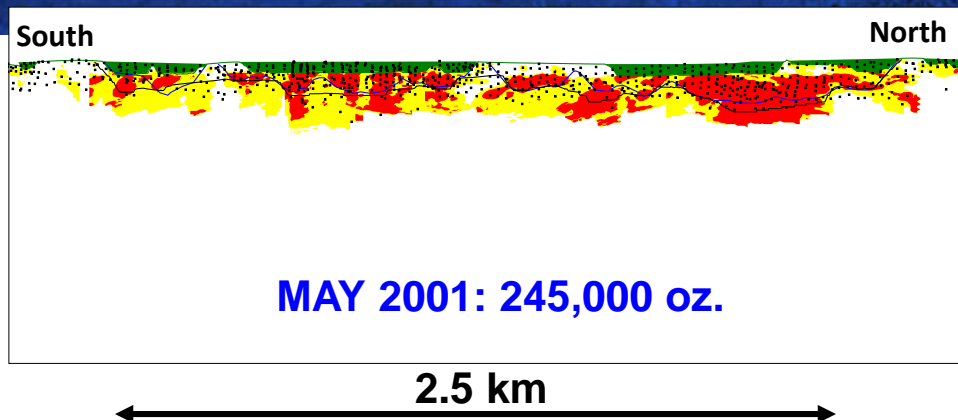
Sulphides in cleavage SPD336



Fault Zone (Intersection of Fosterville & Harrier Faults) SPD333



FOSTERVILLE – DISCOVERY OF THE PHOENIX SYSTEM



Central Resource Area Exploration Progress 2001-2003

- Fold culmination important control of mineralisation plunge.
- Drilling progressed southwards to test higher grade structures.

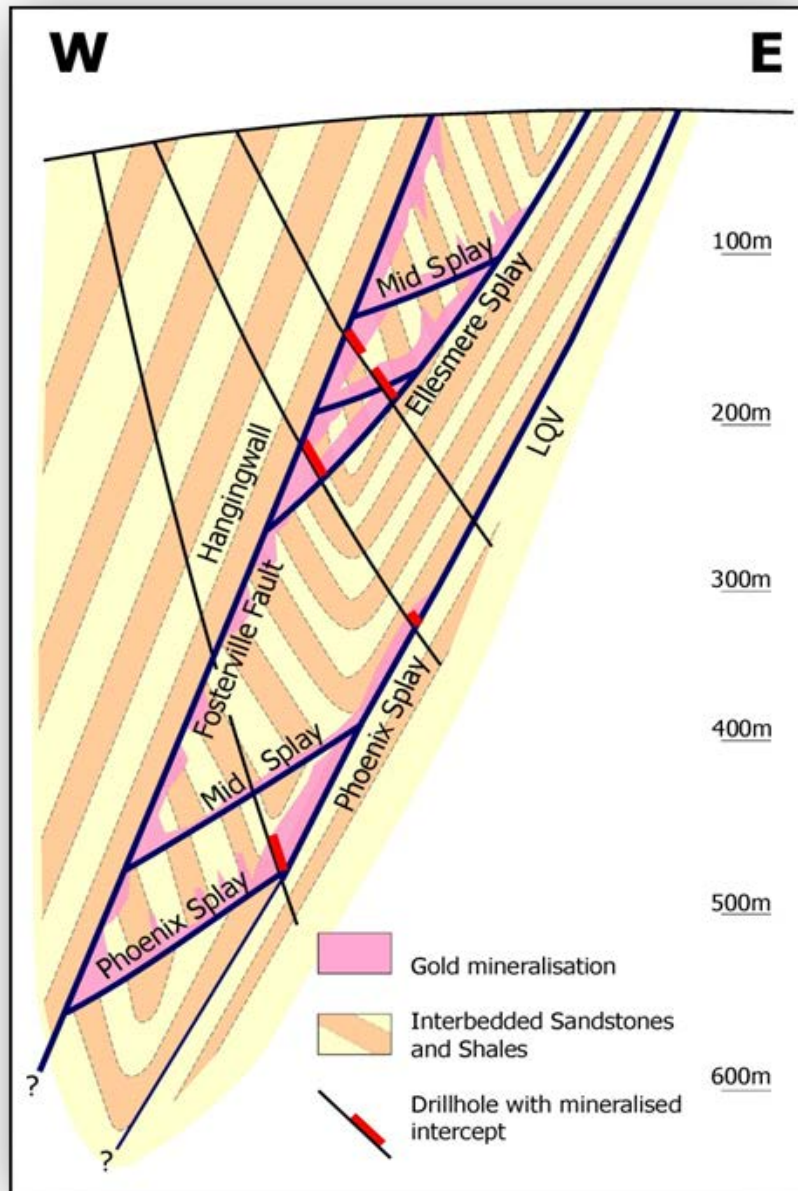
Resource Model Colours

1.0 g/t Au

4.0 g/t Au

SCHEMATIC CROSS SECTION 2003

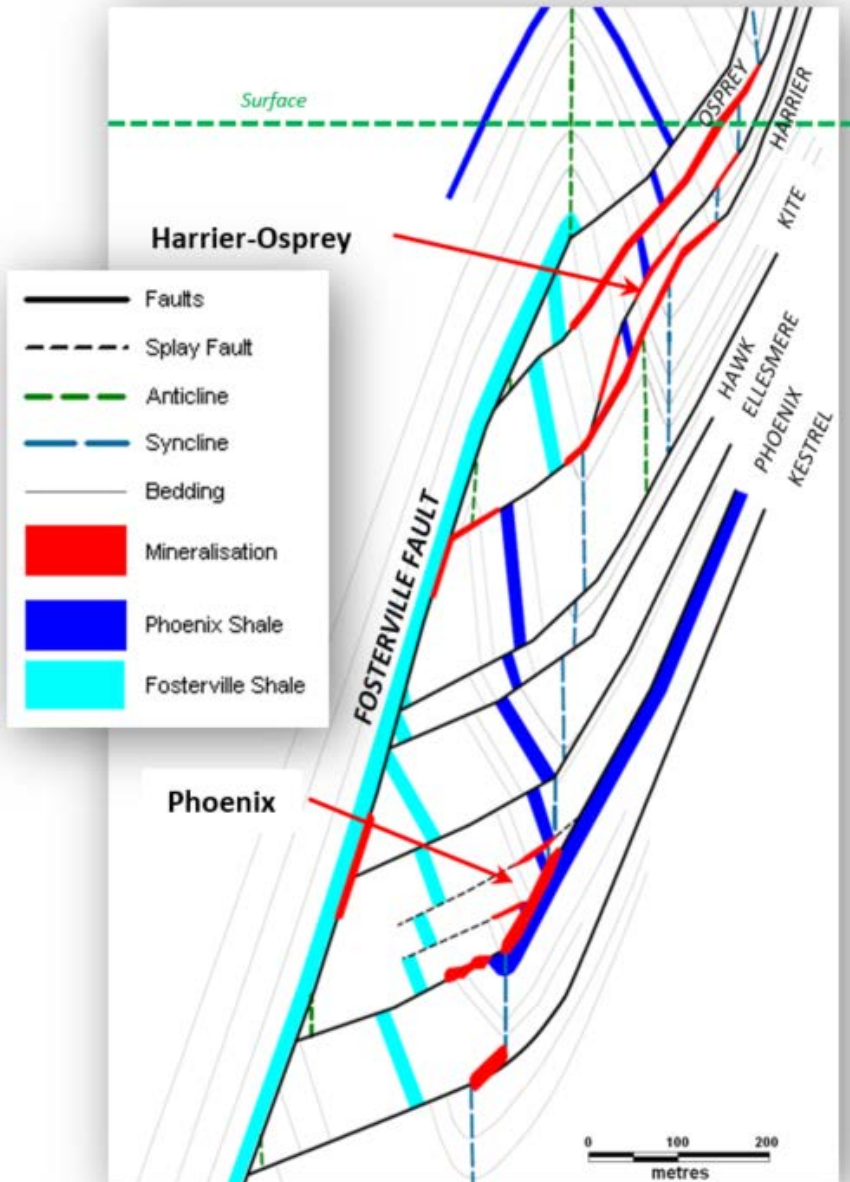
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- Host turbidite sequence of sandstones, siltstones and shales (and black shales)
- E-W compression produced upright fold sets and late brittle faults
- Laminated quartz veins (LQV) preferentially developed in shales:
 - On or close to sandstone contact
 - Usually bedding parallel
- Generally steeply west dipping reverse faults with a series of moderately west dipping splay faults
- Mineralisation:
 - Controlled by brittle faults; reactivated and link LQVs
 - Best developed where bedding is discordant across faults – oblique/parallel, P/O, O/O structural settings
 - Typical geometries are steep to moderate west-dipping and 3-20m widths.

SCHEMATIC CROSS SECTION 2011

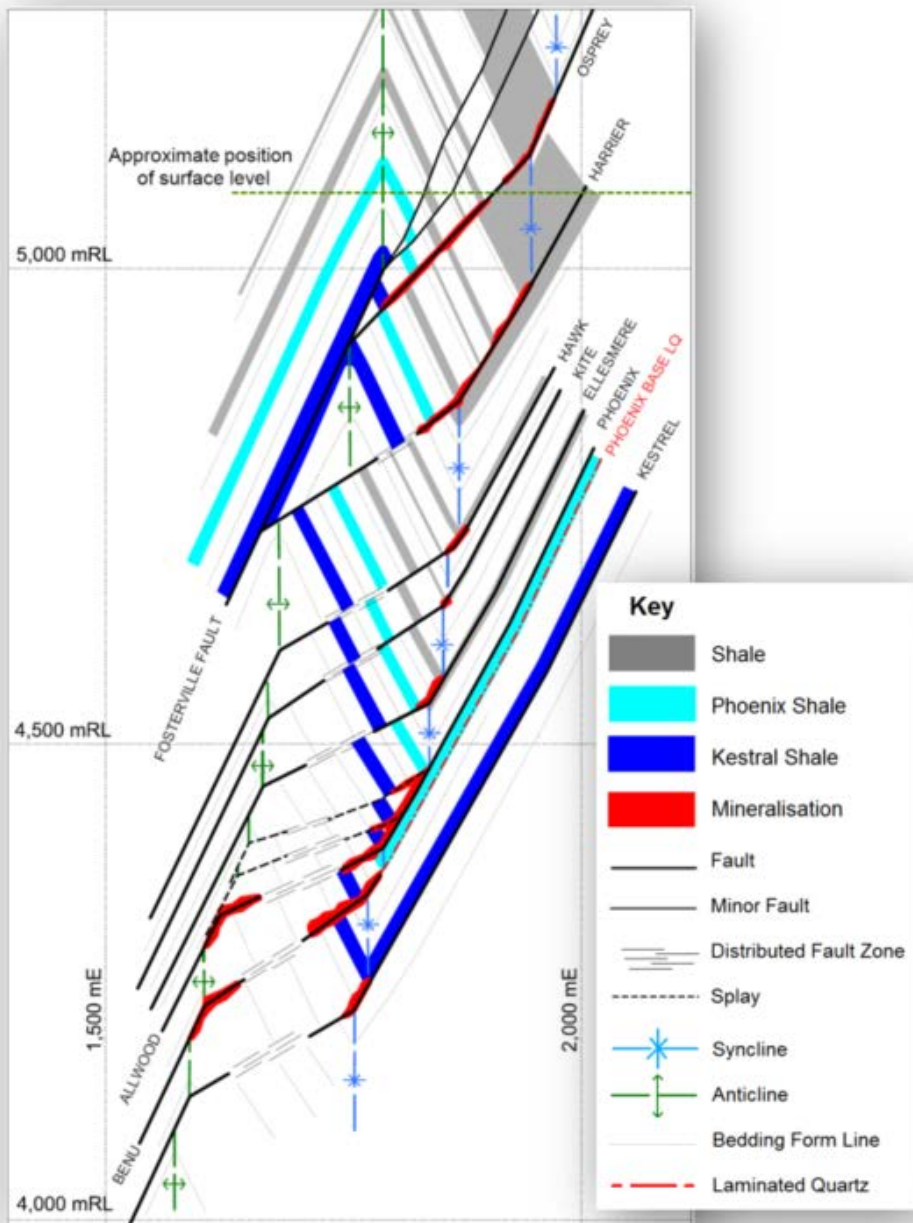
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- An anticline and syncline pair are identified, internal shear zone fabric understanding developed:
 - Phoenix and Harrier-Osprey orebodies
- Phoenix Faulting becoming more complex down-plunge:
 - Hangingwall splays more prominent, but less mineralised.
- Harrier-Osprey thought to have dip-extensive mineralisation
- Turbidite Package is mappable

SCHEMATIC CROSS SECTION 2013

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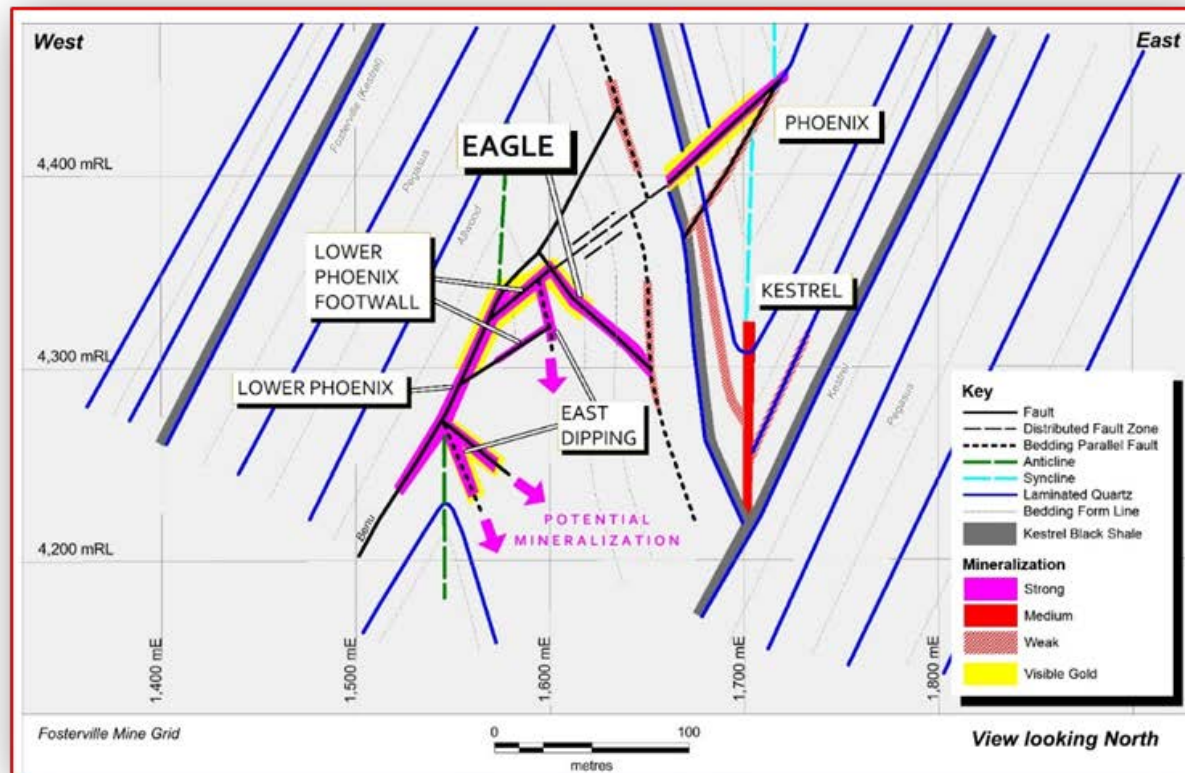
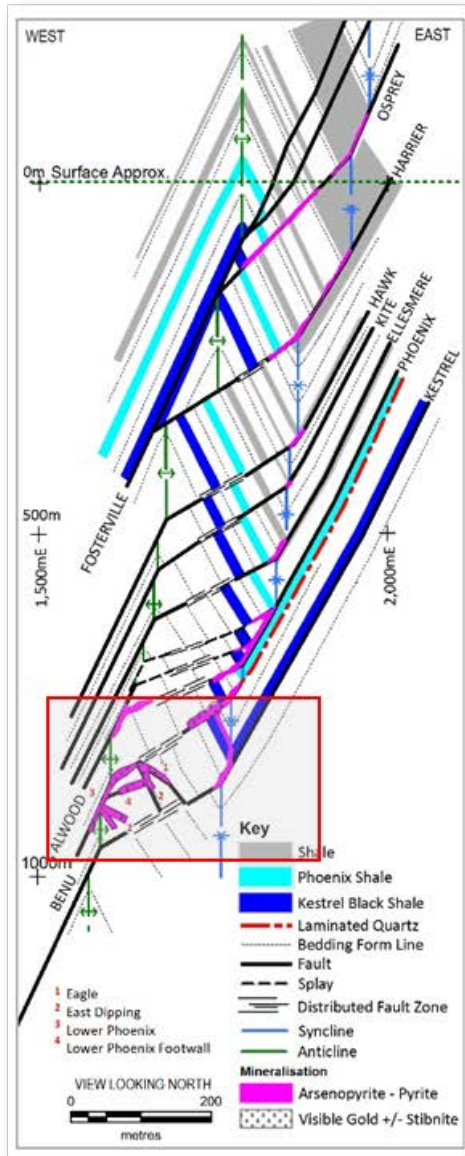


Drilling identified:

- Faulting linking easterly from an anticline across discordant bedding to the well-drilled syncline
- Segments of Benu Fault well-mineralised

SCHEMATIC CROSS SECTION 2015

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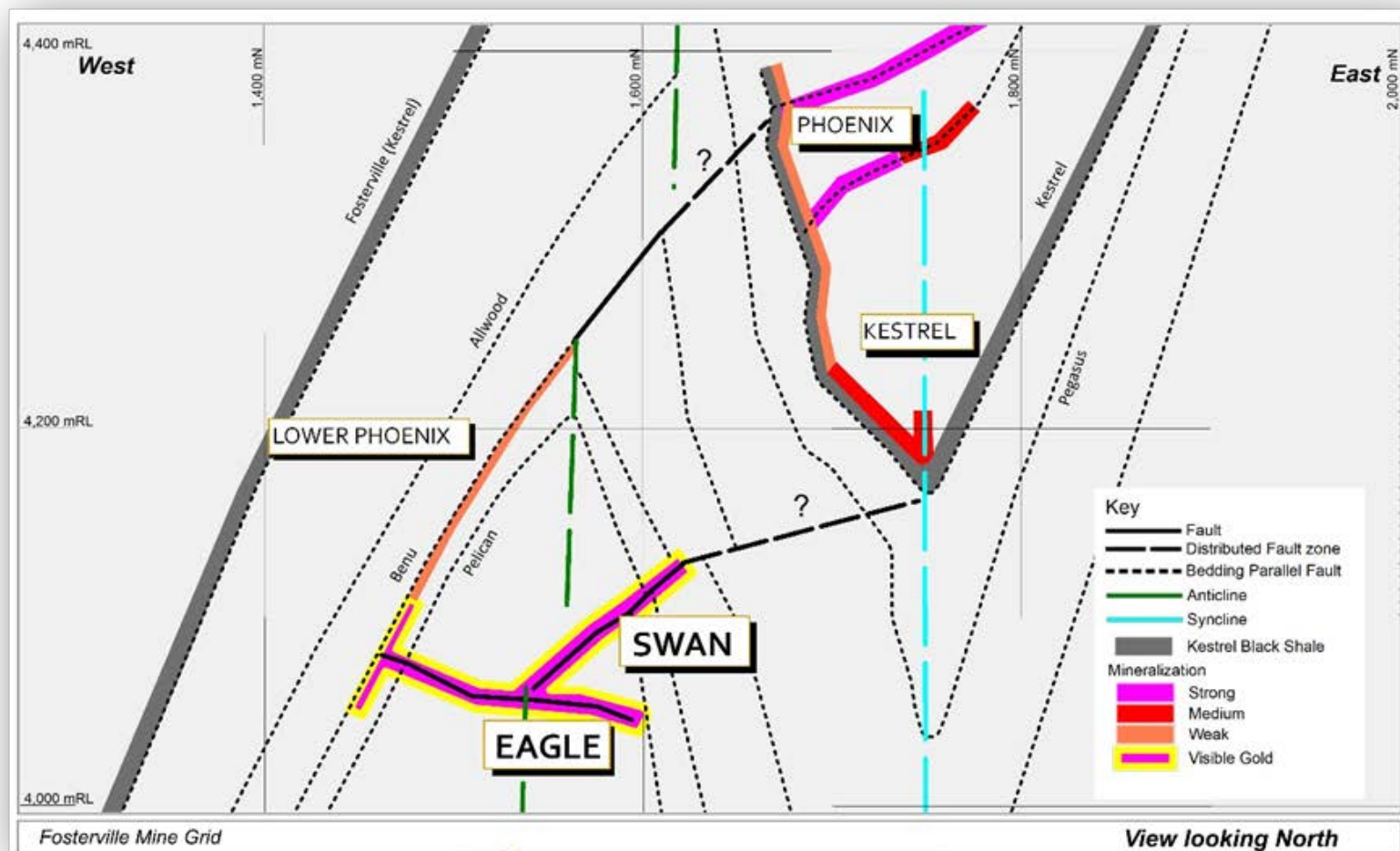


Cross Section 6950mN

- Faulting links from an anticline across discordant bedding to the well-drilled syncline
- Segments of the Benu Fault well-mineralised

SCHEMATIC CROSS SECTION 2017

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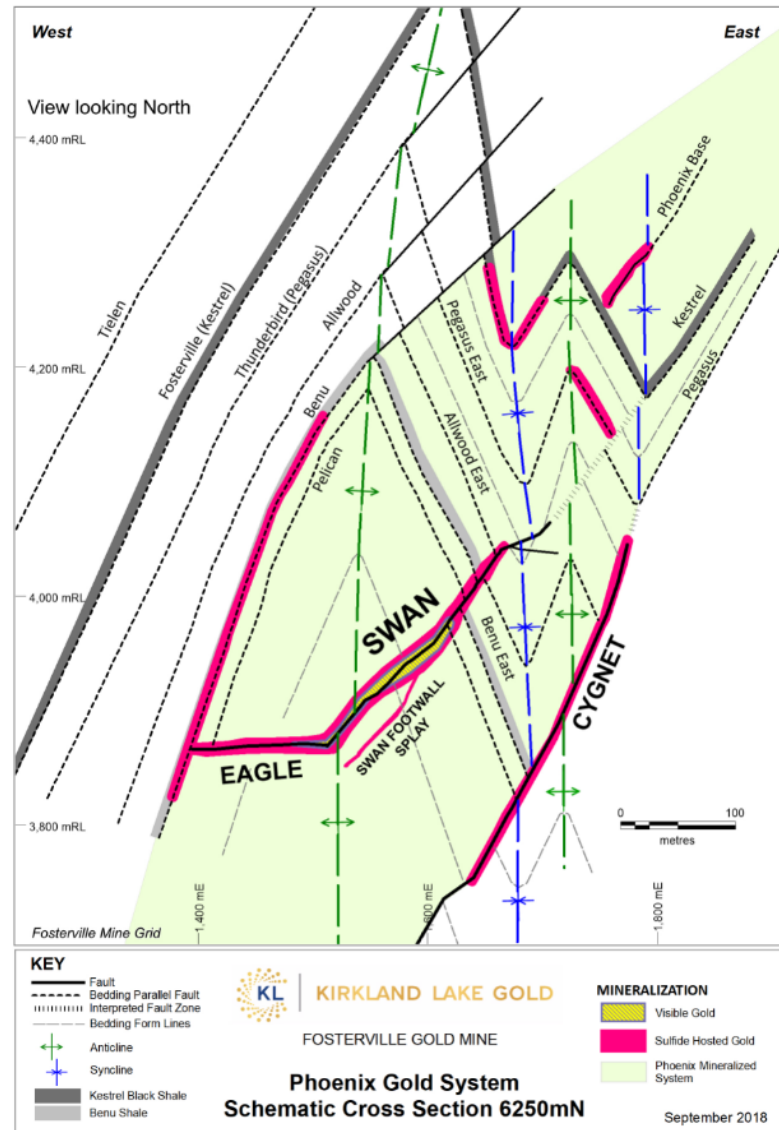


Cross Section 6500mN

- Eagle Zone strikes E-W and dips ~40°S.
- Swan Zone well-mineralized, 2-5m in width, open down-plunge

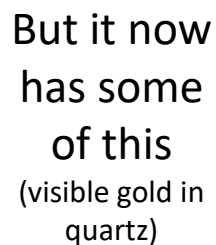
SCHEMATIC CROSS SECTION 2018

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Cross Section 6250mN

It used to
be this
(sulfide
dominated)



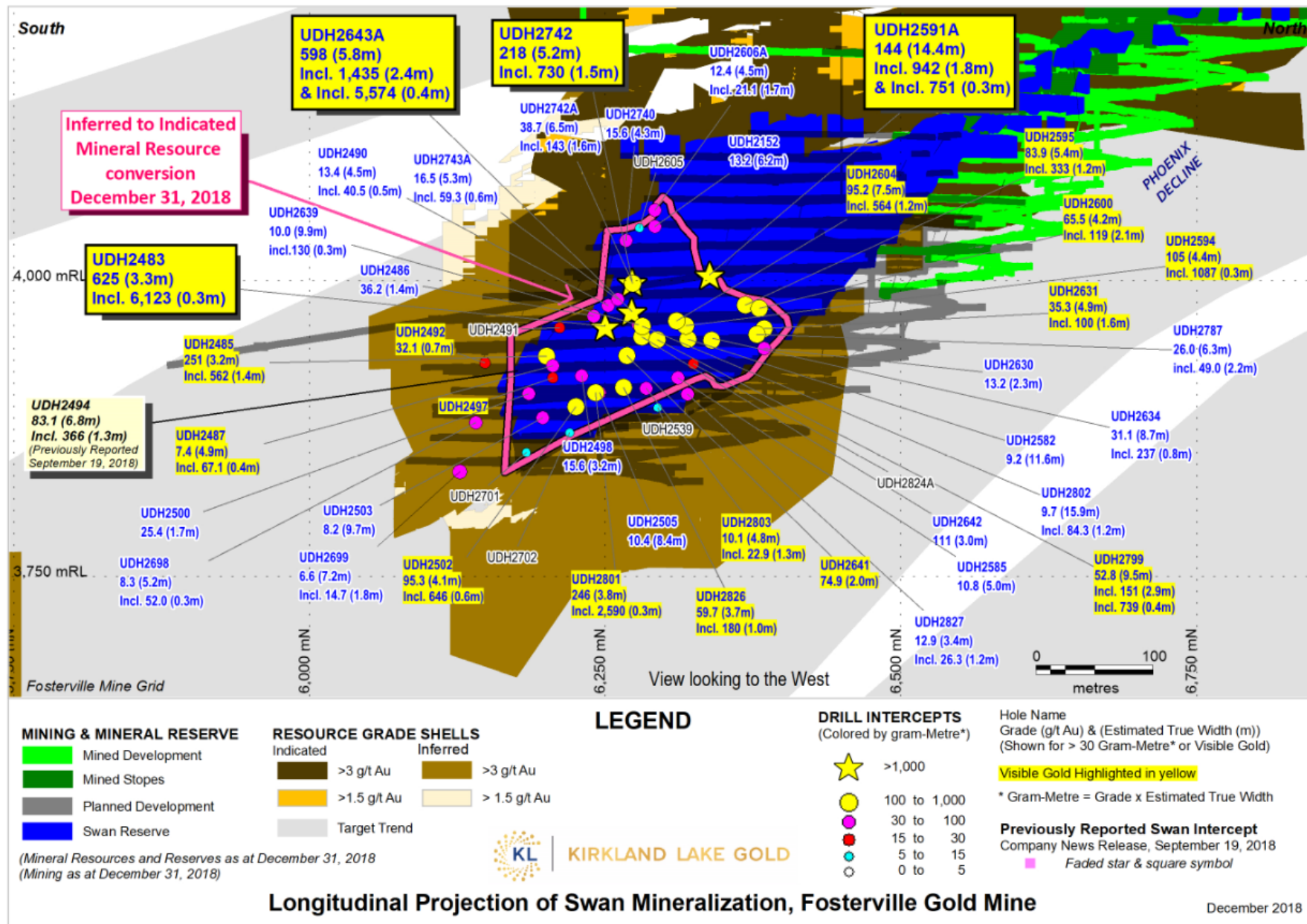
SWAN ZONE – A GROWING HIGH-GRADE ZONE

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FOSTERVILLE'S TRANSFORMATION DRIVEN BY GRADE

Change in Mineralization

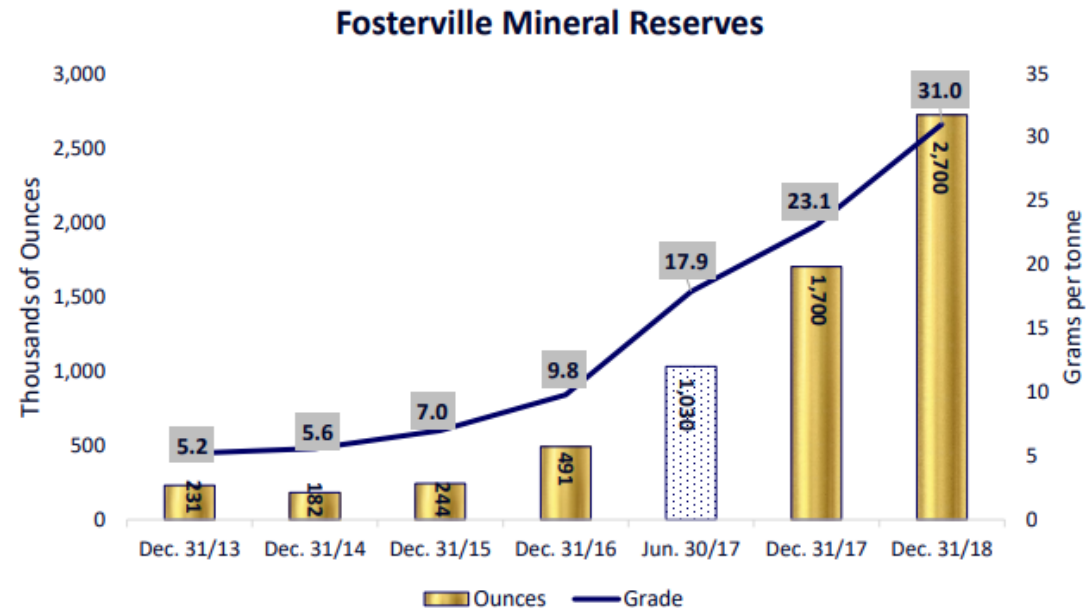
Quartz veins with visible gold key to increase reserve ounces and grade

Significant Growth in Mineral Reserve

2.7M ozs @ 31.0 g/t (Dec.31/18)

1.7M ozs @ 23.1 g/t (Dec. 31/17)

FOSTERVILLE MINERAL RESERVES (kozs & g/t)



FOSTERVILLE GROWING TO 600,000 OZS/YEAR

2018 Guidance

> 330 kozs

Improved 2019 guidance

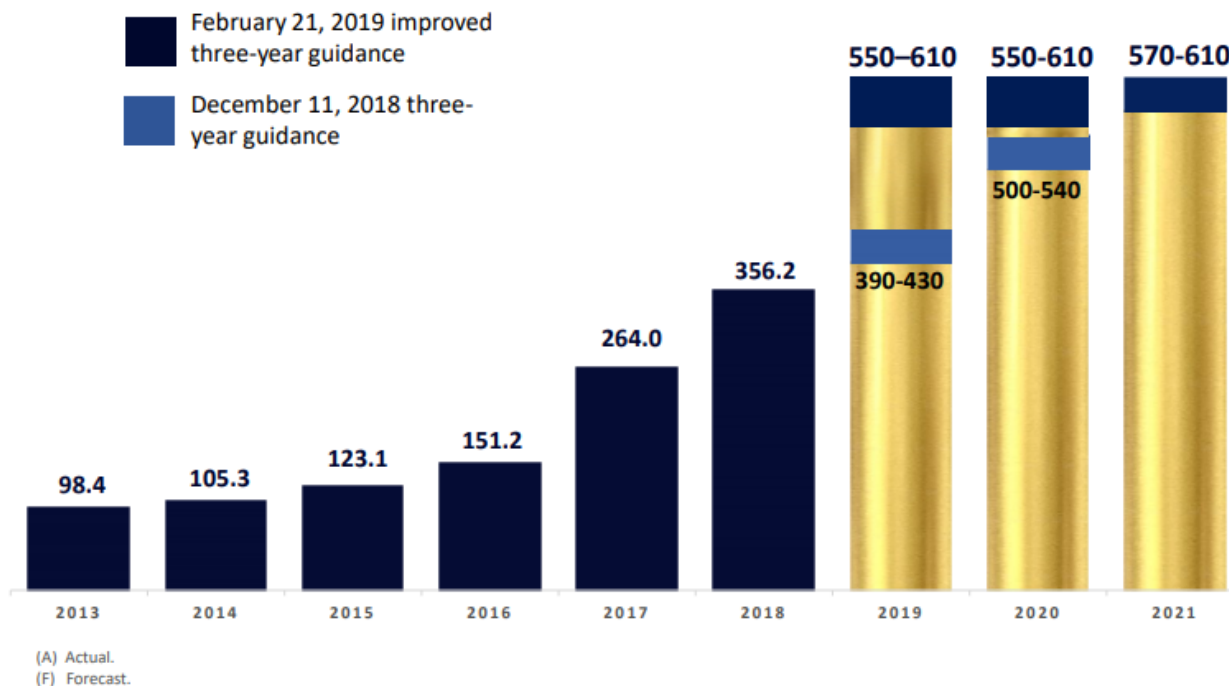
550 – 610 in 2019
and 2020

Record Production in 2018

356.2 kozs

35% growth from
2017

FOSTERVILLE GOLD PRODUCTION (KOZS)



- Production largely from open pits 2005-2007, predominantly underground since 2008.
- Total production from April 2005 to the 31st of December 2018: 1.77 million ounces.

FOSTERVILLE MINE RECORD PRODUCTION Q4 & FY 2018

FOSTERVILLE Q4 2018 MINE PLAN (KOZS)

Record Production

356.2 kozs in 2018 (35% growth)

124.3 kozs in Q4 2018 (57% growth)

Strong Unit Cost Performance

2018: Op. cash costs: \$200/oz; AISC: \$442/oz

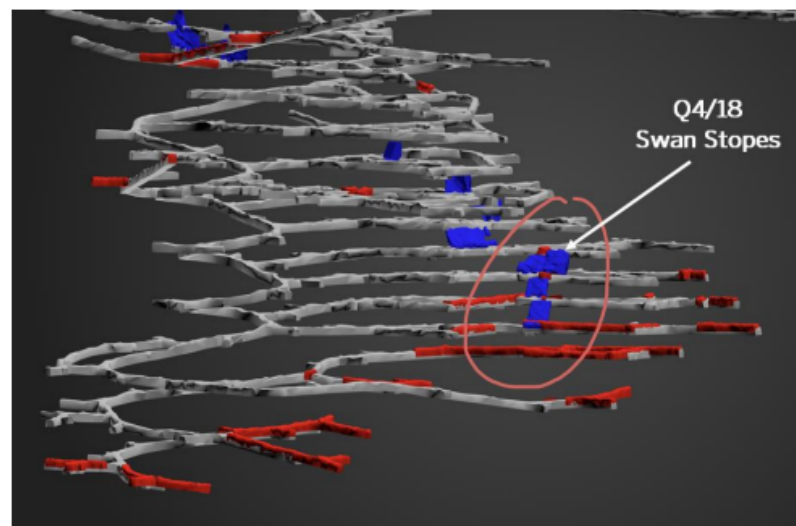
Q4 2018: Op. cash costs: \$139/oz; AISC: \$332/oz

Key Performance Drivers

Grade outperformance in Swan & Eagle

Increase development around Swan

Advancement of Swan Stopes



**Q4 2018: Swan/Eagle stopes outperform on grade
2 Swan stopes brought into mine plan**

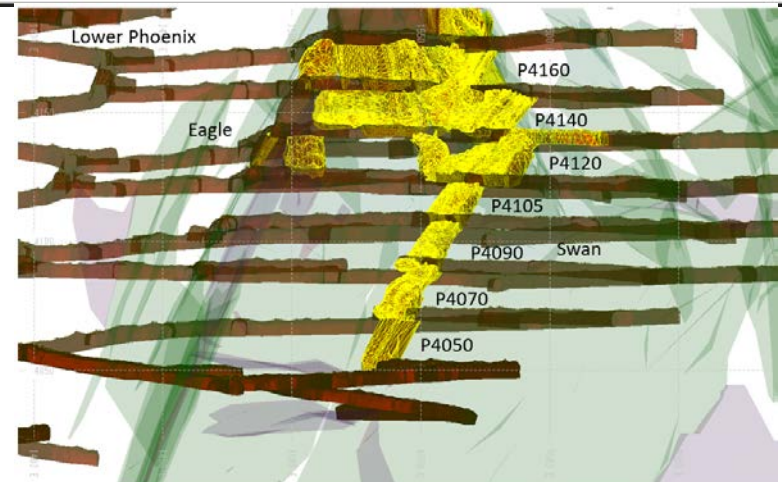
Q4 2018

Tonnes:	98,797
Grade:	39.7 g/t
Ounces:	124,307

SWAN MINING

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Developments over 8 levels 4030 – 4160RL
6 stopes mined Q1 2019
(31,593t @ 40.31g/t Au – 40,947oz)



FOSTERVILLE THREE YEAR MINE PLAN

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FOSTERVILLE THREE-YEAR MINE PLAN

Three-Year Production Guidance

2019: 550 – 610 kozs

2020: 550 – 610 kozs

2021: 570 – 610 kozs

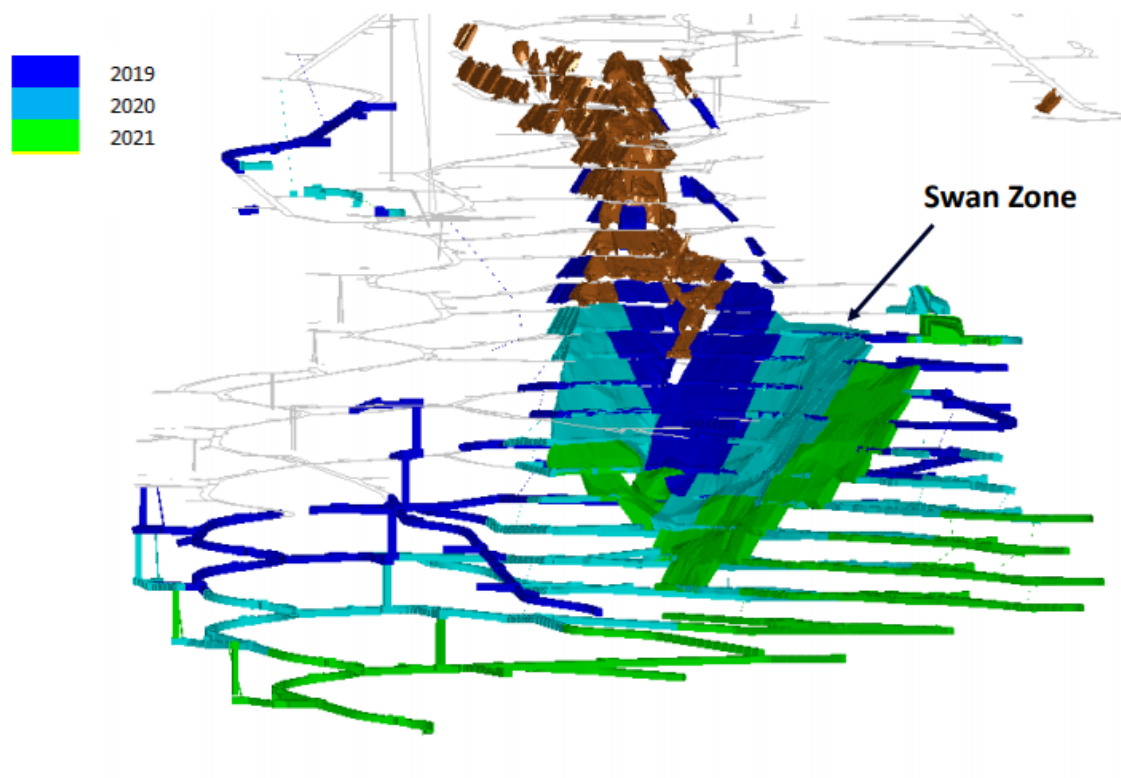
2019 Unit Cost Guidance

Op. cash costs: \$170 – 190/oz

Mineral Reserves (Dec. 31/18)

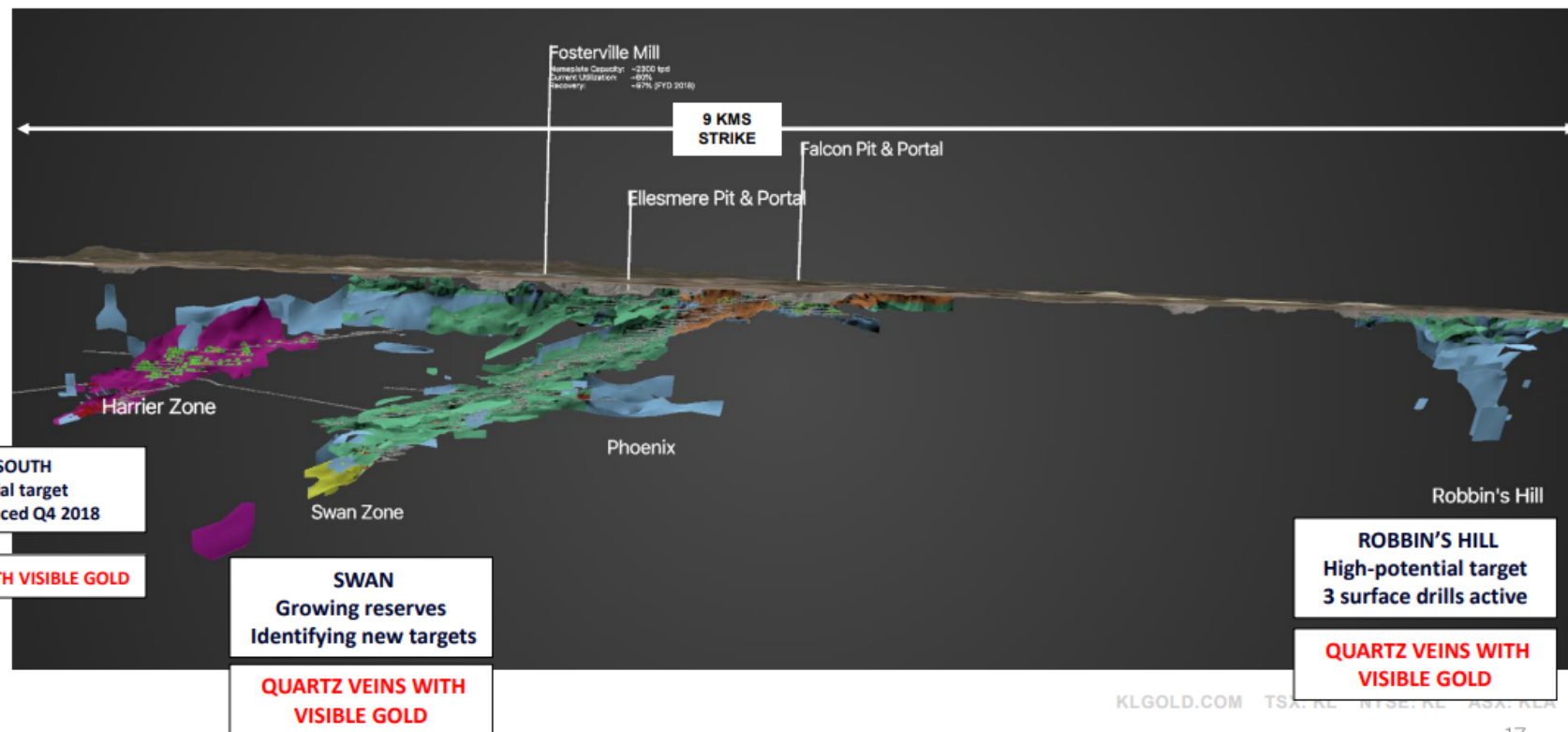
Total: 2.7M ozs @ 31.0 g/t

THREE-YEAR MINE PLAN



FOSTERVILLE IN-MINE TARGETS

FIGURE: 3D VIEW OF LOWER PHOENIX AND HARRIER GOLD SYSTEMS



FOSTERVILLE IN-MINE TARGETS

Key Targets:

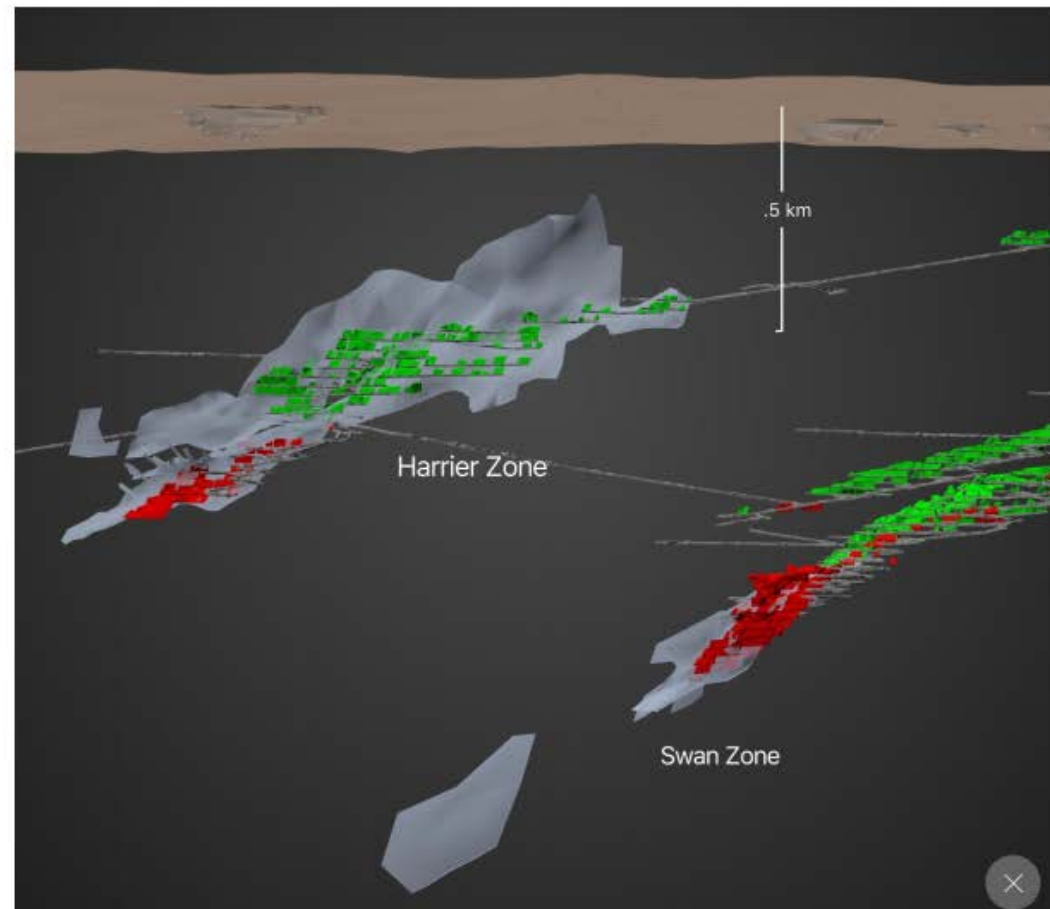
Continued extension of Swan

Gap between Swan Zone and 750 m
extension (announced in July 2018)

Other potential parallel structures
near Phoenix

Extension of Harrier to depth

LARGE ORE DEPOSIT EXPLORATION ("LODE") PROGRAM: POTENTIAL FOR A NEW GOLD CAMP

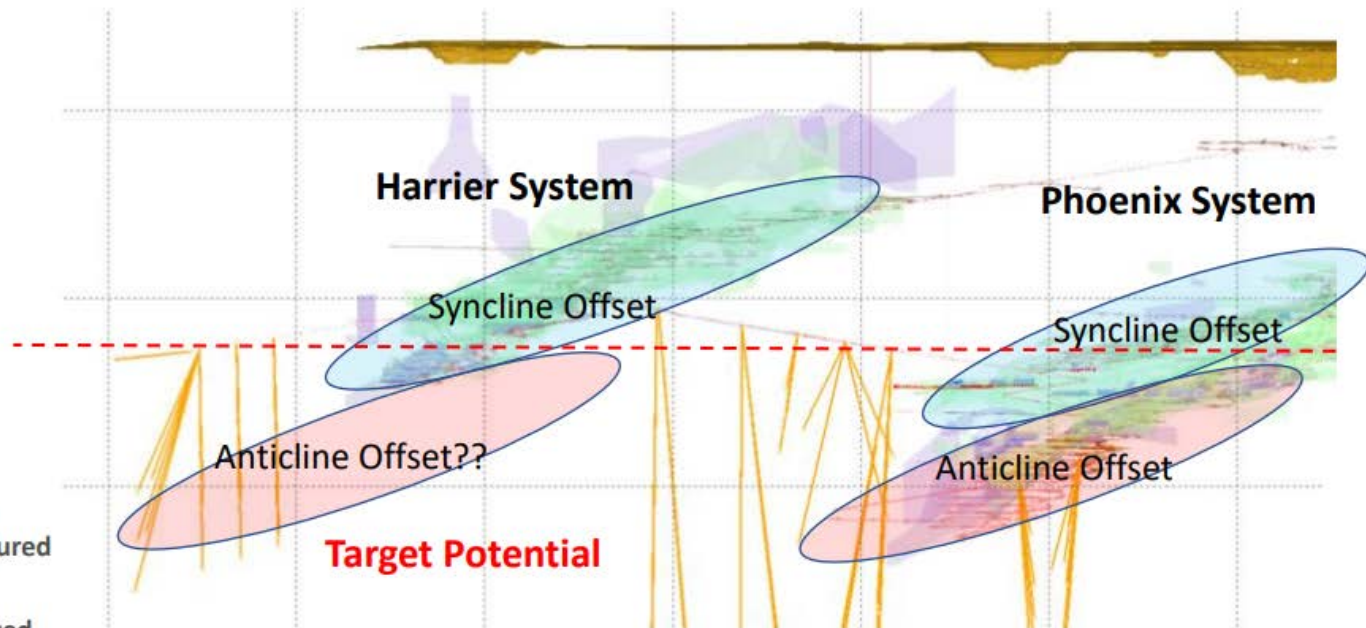


FOSTERVILLE HARRIER: HIGH- POTENTIAL TARGET

KEY ELEMENTS OF LOWER PHOENIX HIGH-GRADE MINERALIZATION

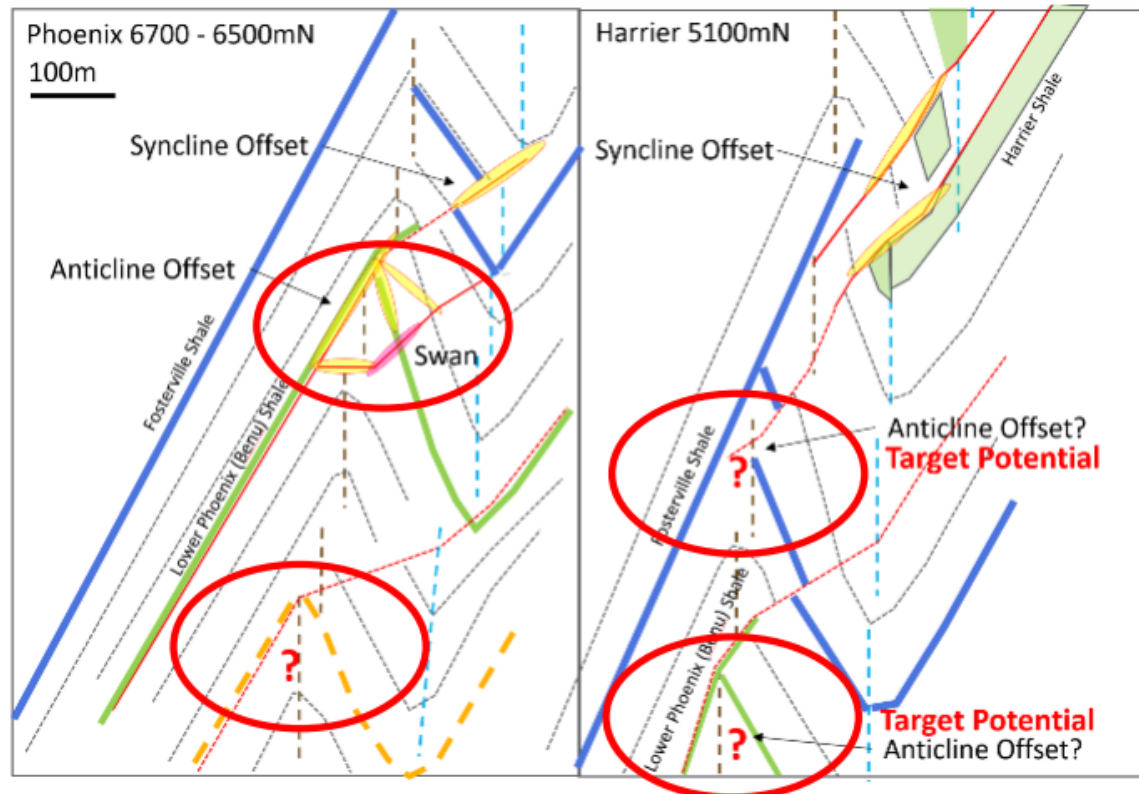
- Reverse fault with sizeable offset
- Shale unit – Lithological competency contract – Larger faults, slippage Fractured sandstones in hinge
- Anticline – Trap of ascending mineralized fluids
- Carbon – What role does this play in precipitation?
- Crustal level – visible gold – repeating trend seen throughout gold field

SWAN INFILL DRILLING DRIVING GROWTH IN MINERAL RESERVES



FOSTERVILLE HARRIER DOWN- DIP POTENTIAL

PARALLELS BETWEEN LOWER PHOENIX AND HARRIER



Key Points:

Harrier anticline fault offset almost identical in structural setting to Phoenix

Recent drilling at Harrier confirmed Anticline offset and intersected gold mineralization

Potential for same model to be applied across Fosterville land position