RedRiver
RESOURCES LIMITED

# HILLGROVE GOLD-ANTIMONY PROJECT SITE VISIT

September 2019

*Building a multi-asset mining business*

# DISCLAIMER & COMPLIANCE STATEMENTS



The information contained in this presentation should be read in conjunction with and subject to the cautionary statements contained on this page and the statements contained in and referred to elsewhere in this presentation, including the competent persons statements referred to in this presentation and the ASX announcements to which this presentation refers.

## FORWARD LOOKING STATEMENTS

This presentation may contain forward looking statements that are subject to risk factors associated with the mining and resources industry. It is believed that the expectations reflected in these statements are reasonable, but they may be affected by a range of variables which could cause actual results or trends to differ materially, including but not limited to: price fluctuations, actual demand, currency fluctuations, geotechnical factors, drilling and exploration results, development progress, operating results, engineering estimates, reserve estimates, loss of market, industry competition, environmental risks, physical risks, legislative, fiscal and regulatory developments, economic and financial markets conditions in various countries, approvals and cost estimates

The Hillgrove Mineral Resources reported in accordance with the JORC Code 2004 are not reported in accordance with the JORC Code 2012

A Competent Person has not done sufficient work to classify the estimates of Mineral Resources or Ore Reserves in accordance with the JORC Code 2012

It is possible that following evaluation and/or further exploration work the currently reported estimates may materially change and hence will need to be reported afresh under and in accordance with the JORC Code 2012

Nothing has come to the attention of Red River Resources that causes it to question the accuracy or reliability of the former owner's estimates

Red River Resources has not independently validated the former owner's estimates and therefore is not to be regarded as reporting, adopting or endorsing those estimates

For further detailed information on the Hillgrove Mineral Resources please refer to the ASX release dated 3 July 2019 "Red River acquires Hillgrove Gold-Antimony Project in NSW"

# Hillgrove Project Overview

# BUILDING A MULTI-ASSET MINING BUSINESS

## Completed Acquisition of the Hillgrove Project

- Red River has acquired 100% ownership of the Hillgrove gold-antimony Project ("Hillgrove") in northern New South Wales, Australia
- Mineral Resource of 2.8Mt @ 5.1 g/t Au & 1.7% Sb (459kozs Au and 48kt Sb) reported in accordance with the 2012 JORC Code, plus a
- Mineral Resource of 3.9Mt @ 4.7 g/t Au & 1.3% Sb (597kozs Au and 50kt Sb) reported in accordance with the 2004 JORC Code
- Existing processing facility with a +$180m replacement cost
- Clear pathway to production, following a period of assessment and study work
- Numerous opportunities to apply clever operatorship and create strong shareholder returns
- Opportunity for Red River to replicate the success of the Thalanga project restart

## Acquisition Price

- Total consideration of $4m payable in Red River shares (subject to 12-month escrow)
- 23.0m shares issued to Vendor (calculated at 10 day VWAP price to 2 July 2019)
- Acquisition cost of A$3.80/oz (gold only) based on current Mineral Resource
- Includes $4.3m in cash backed environmental bonds

## Strategy & Positioning

- Red River now a multi-asset mining business
- Generating shareholder returns through lean and clever resource and mine development
- Debt free and well funded producer, developer and explorer
- Operating in two tier 1 regions which have exceptional ongoing exploration potential
- Infrastructure-rich locations with exceptional mining, energy and transportation networks

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# CORPORATE OVERVIEW

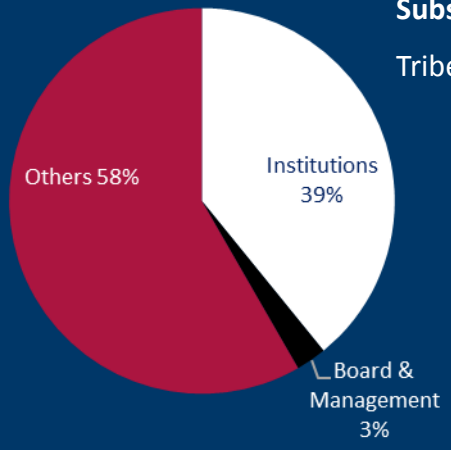


## CAPITAL STRUCTURE

| | | |
|---|---|---|
| Current Share Price | A$ | $0.165 |
| Shares on Issue | # | 513.7 million |
| Options on Issue[1] | # | 3.3 million |
| Market Capitalisation | A$ | $84.7 million |
| Cash[2] | A$ | $25.9 million |
| Debt | A$ | Nil |
| Enterprise Value | A$ | $58.8 million |

1. 3.3 million options on issue with an exercise price of 30.0cps
2. 3. Cash balance as at 30 June 2019

## SHARE OWNERSHIP




**Substantial Shareholders**

| | |
|---|---|
| Tribeca Investment Partners | 7.3% |

## BOARD & SENIOR MANAGEMENT

| | |
|---|---|
| BRETT FLETCHER | Non Executive Chairman (Mining Engineer) |
| MEL PALANCIAN | Managing Director (Mining Engineer) |
| DONALD GARNER | Executive Director (Geologist/Corporate Finance) |
| MARK HANLON | Non-Executive Director (Finance & Commercial) |
| ROD LOVELADY | Chief Financial Officer (Finance & Commercial) |
| CAMERON BODLEY | Company Secretary |
| KARL SPALECK | Thalanga GM (Metallurgist) |

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# HILLGROVE OVERVIEW



**EXCELLENT LOCATION**

- 23km east of Armidale in NSW, 1hr 20min flight from Sydney
- Residential workforce
- Excellent regional infrastructure in place - sealed road access and grid power at site (66kV distributor)

**LONG OPERATING HISTORY**

- Discovered in 1857
- Modern operational history from 1969 to present
- Over 730Koz Au, 50Kt Sb produced plus by-product tungsten
- Over $200m capital spent since 2004 to build a new processing plant, infrastructure, TSF & UG mine development

**SIGNIFICANT EXISTING INFRASTRUCTURE**

- Existing 250ktpa plant, capable of producing saleable gold and gold-antimony concentrates
- Additional antimony alkali leach and electrowinning circuit, pressure oxidation circuit, gold cyanide leach circuit and gold room
- Offices, warehouses, assay lab and maintenance facilities
- UG mining fleet and surface vehicle fleet
- Lined tailing storage facility with approx. 2 years capacity

**LARGE RESOURCE**

- Mineral Resource of 2.8Mt @ 5.1 g/t Au & 1.7% Sb (459kozs Au and 48kt Sb) reported in accordance with the 2012 JORC Code; in addition to a
- Mineral Resource of 3.9Mt @ 4.7 g/t Au & 1.3% Sb (597kozs Au and 50kt Sb) reported in accordance with the 2004 JORC Code

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# HISTORY



| | |
|---|---|
| Pre 1969 | • Gold discovered at Hillgrove in 1857<br>• Largest single producer was Bakers Creek Gold Mine (1877 to 1921)<br>• Recorded production up to 1916 of 303,900oz from 175,980 tonnes of ore (approx. 50g/t Au)[(1)]<br>• Brief revival of gold mining (1937 to 1940) |
| 1969-2002 New England Antimony Mines (NEAM) | • 1969 to 2002: NEAM re-commences mining by constructing a processing plant (producing separate antimony-gold and gold concentrates) and restarts mining operations at site<br>• 1998 to 2002: Pressure Oxidation Circuit installed - treats gold concentrate on site at 90%+ recovery to dore bullion<br>• 2002: Closure due to low Sb/Au prices |
| 2004-2013 Straits Resources | • 2004: Straits acquires Hillgrove Project for $8m<br>• 2004 to 2007: Extensive exploration, UG development and construction of new processing facility ($150m+ investment)<br>• 2008 to 2009: Technical complexity of Straits plant results in lower than forecast production and site placed on care & maintenance |
| 2013-2019 Bracken Resources | • 2013: Bracken acquires Hillgrove Project for $33m plus replaces $3.9m in environmental bonds<br>• 2013 to 2014: Bracken upgrades processing plant and restarts operations ($40m+ investment)<br>• 2014 to 2016: Operations produce a separate antimony-gold and gold concentrate, placed on care & maintenance in 2016 due to low antimony prices<br>• 2016 to 2018: Bracken initiates a 'Transition to Gold' strategy targeting high grade gold zones below historical workings (96 drill holes completed for 23,703m drilling) – successfully defines new resources at Sunlight and Brackin's Spur ($23/oz discovery cost) |

# HOW WILL WE UNLOCK VALUE AT HILLGROVE?

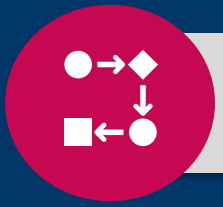


- Red River has demonstrated its ability to redevelop, restart and successfully operate mining operations
- The low-capital acquisition and development of Thalanga has generated material value
- Red River is aiming to replicate that success with Hillgrove
- Red River has identified a number of opportunities to unlock the value of Hillgrove

Investigate the use of ore sorting and minor plant upgrades to increase production capacity

Better understand the orebodies by undertaking exploration

Leverage RVR's exceptional operating experience to ensure optimal outcomes



Use recent antimony processing case studies to determine best processing route at Hillgrove

Confirm the optimum mining strategy during a period of detailed study work / analysis

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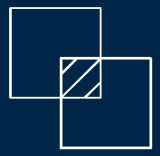
# NEXT STEPS





## SET UP AT HILLGROVE

- Appoint management team
- Evaluate potential synergies with Thalanga – equipment and assets transfer

## UNDERTAKE THOROUGH EXPLORATION & EVALUATION

- Convert historic Mineral Resources to Mineral Resources reported in accordance with 2012 JORC Code
- Targeted exploration to extend vein systems at depth and consolidate along strike
- Review regional consolidation opportunities

## COMPLETE A RESTART STUDY

- Determine processing strategy
- Complete Restart Study
- Capital & operating cost estimates
- Mine design and scheduling
- Concentrate offtake agreements

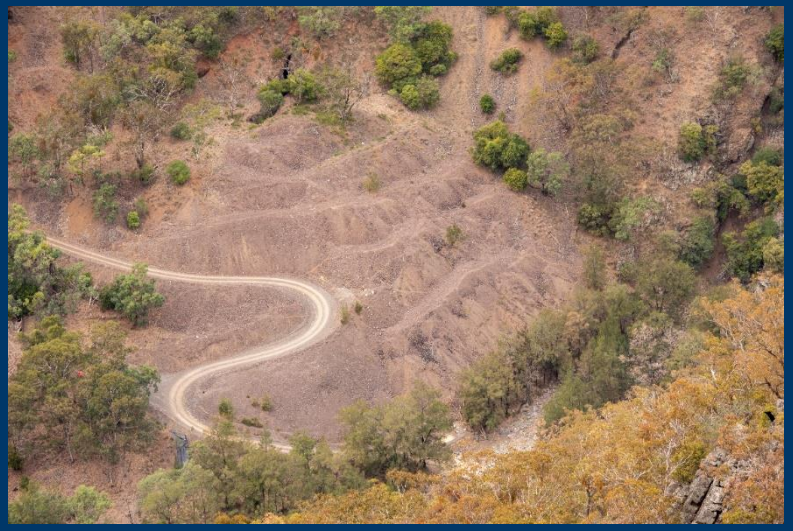
RVR planning a methodical approach similar to successful Thalanga restart

RVR restarted production at Thalanga in Sept 2017: 3 years from acquisition (Sept 2014)

Thalanga restart completed on time and under budget

# INVESTIGATING PROCESSING RESTART



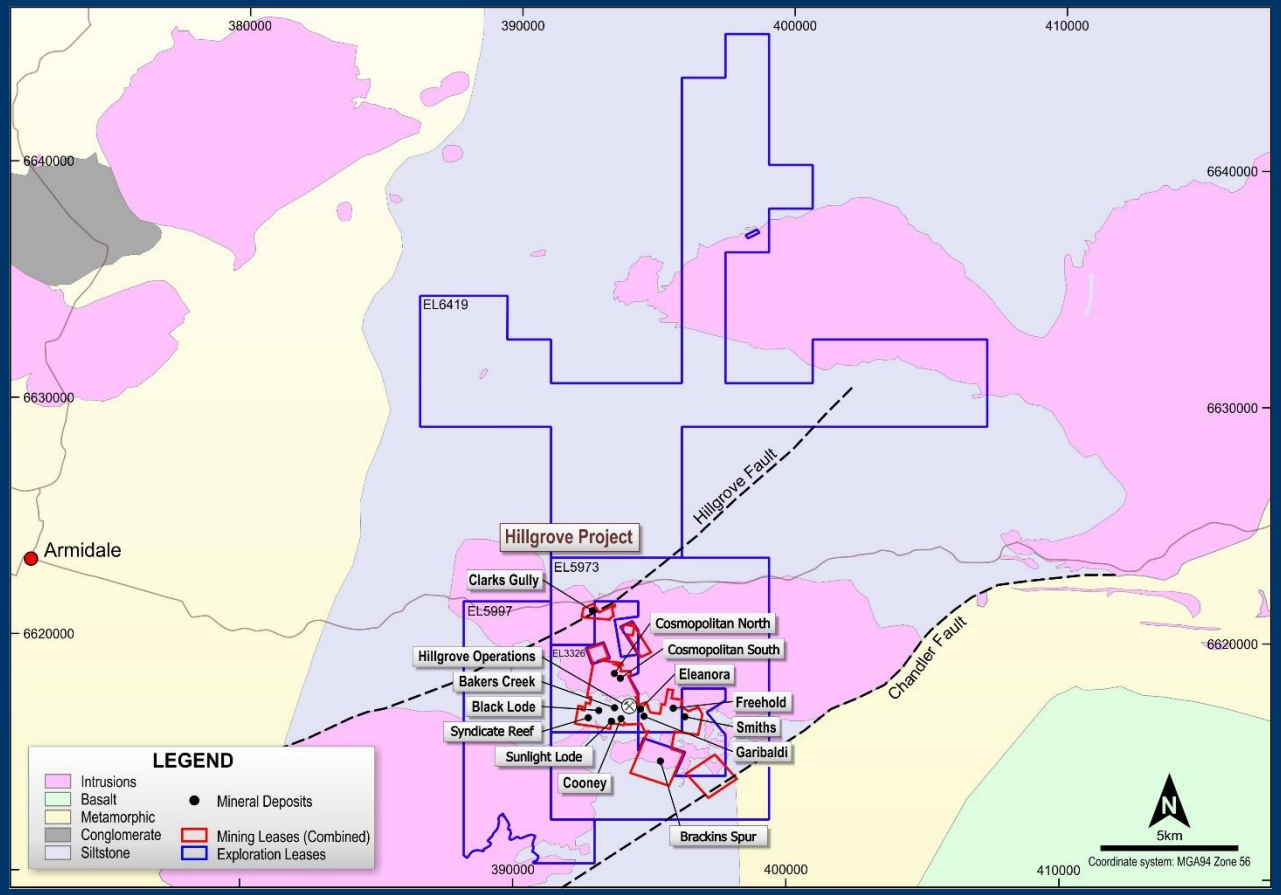


- Bakers Creek waste dump was generated by Bakers Creek Gold Mine (operated 1877-1921)
- Dump has an average grade of 3.5 g/t Au (based on historic Straits sampling) and approx. dimensions of 100m by 70m and up to 20m deep
- Main access road to Metz Mining Centre was built through waste dump by Straits in 2009 (dump was previously inaccessible) – 4km to processing plant
- Bulk historic gold concentrate stockpiled on TSF1 - produced in 2009 by Straits (produced a bulk antimony-gold concentrate and leached antimony for electrowinning process leaving a bulk gold concentrate)
- Sampling has returned grades of ~15 g/t Au with metallurgical test work indicating gold recoveries in excess of 75% via cyanide leach


Hillgrove Geology

# Hillgrove Mineral Field






- Hillgrove Mineral Field (HMF) contains significant gold-antimony-tungsten mineralisation
- HMF covers approx. 9km x 6km
- In excess of 200 individual mineral occurrences identified in field; of these:
  - 18 have significant historical mining activity
  - 6 have had recent exploration resulting in establishment of resources
- RVR controls entirety of HMF
- Holds 225km$^2$ of Els and 17km$^2$ of mining leases (or equivalent)

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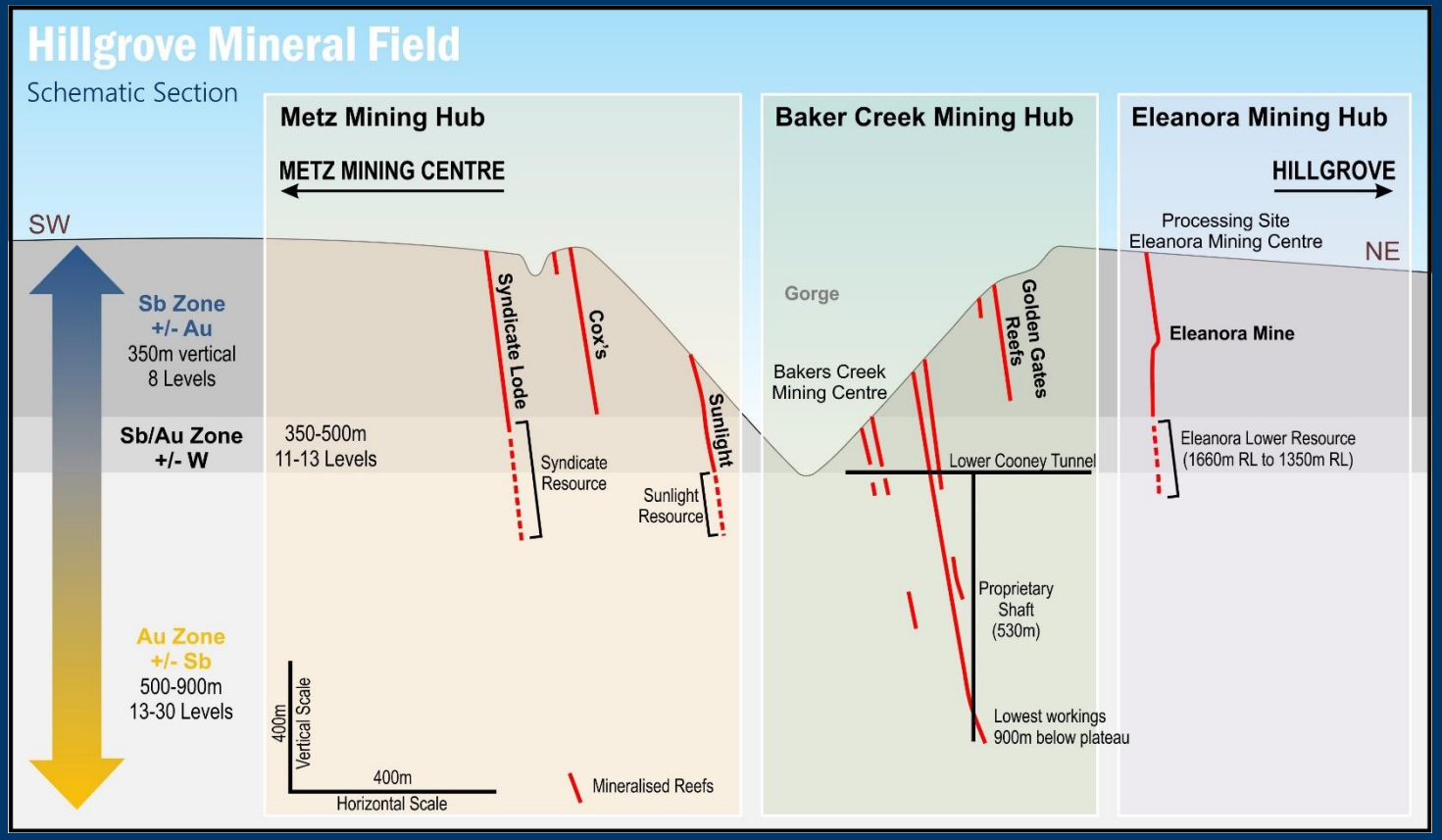
# Hillgrove Mineral Field Schematic Section



- Strong zonation in vein systems – transition to gold rich (with significant free gold at depth)
- Deepest workings in Bakers Creek (antimony crown was eroded by creek allowing historical mining activity to start in Au zone) – produced ~300,000 oz Au from ~175,000 tonne of ore
- More recent mining activity has focused on the higher antimony rich zones – all vein systems are open at depth – with potential transition to high grade gold dominant mineralisation at depth



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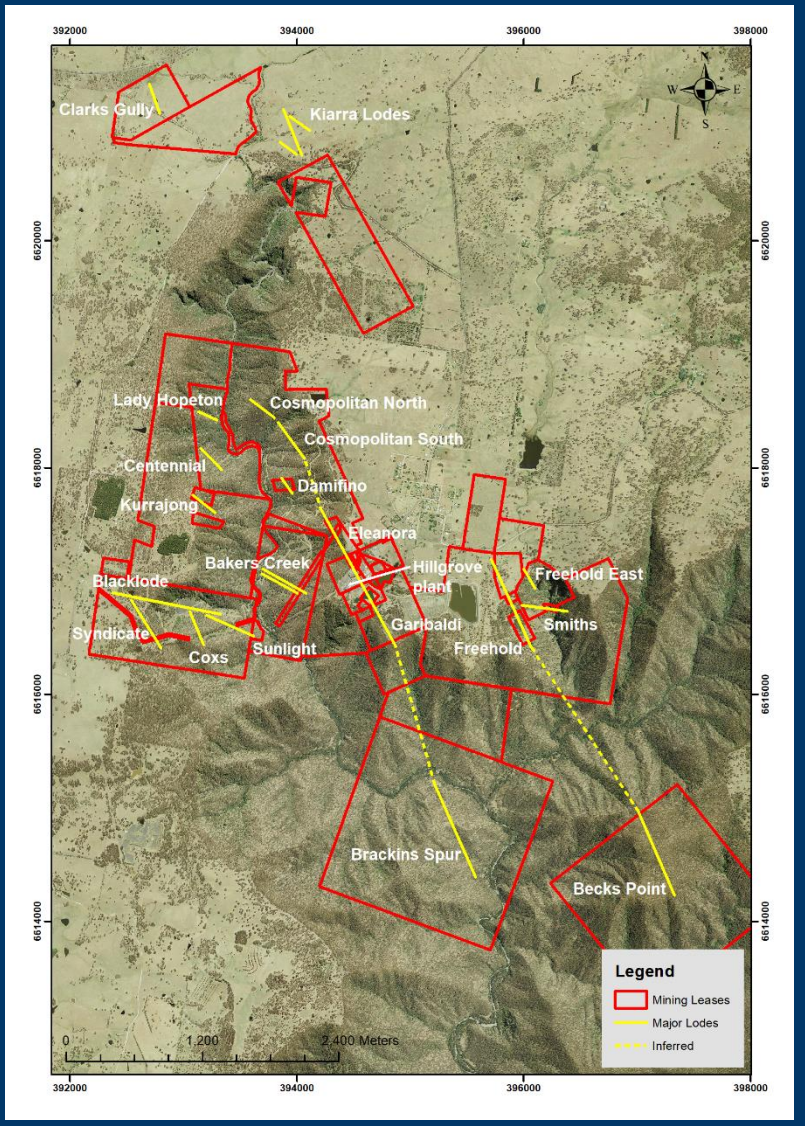
# SIX KEY HUBS IN HILLGROVE MINERAL FIELD



| | |
|---|---|
| **1. Metz Centre** | • Syndicate largely developed<br>• 3rd largest gold production centre in field<br>• Sunlight and Blacklode contain high-grade free and refractory gold in quartz breccia systems<br>• Open at depth |
| **2. Bakers Creek** | • Largest gold production centre in field<br>• Deepest workings in Hillgrove Field<br>• Mined from 1877 to 1921<br>• Recorded production up to 1916 of 303,900oz from 175,980 tonnes of ore (approx. 50g/t Au)(1) |
| **3. Brackins Spur** | • Located on southern end of Eleanora structure<br>• Gold-antimony-tungsten resource – open all directions |
| **4. Eleanora/ Garibaldi** | • 2nd largest gold production centre in field<br>• Mined since 1880, with modern mining undertaken from 1969-2002<br>• Total strike length >4km, open all directions |
| **5. Freehold** | • Moderate gold production<br>• Not targeted by modern exploration<br>• Open at depth |
| **6. Clarks Gully** | • Recent discovery (~1990)<br>• Partially mined (oxide gold) in 1994/1995<br>• Open at depth |



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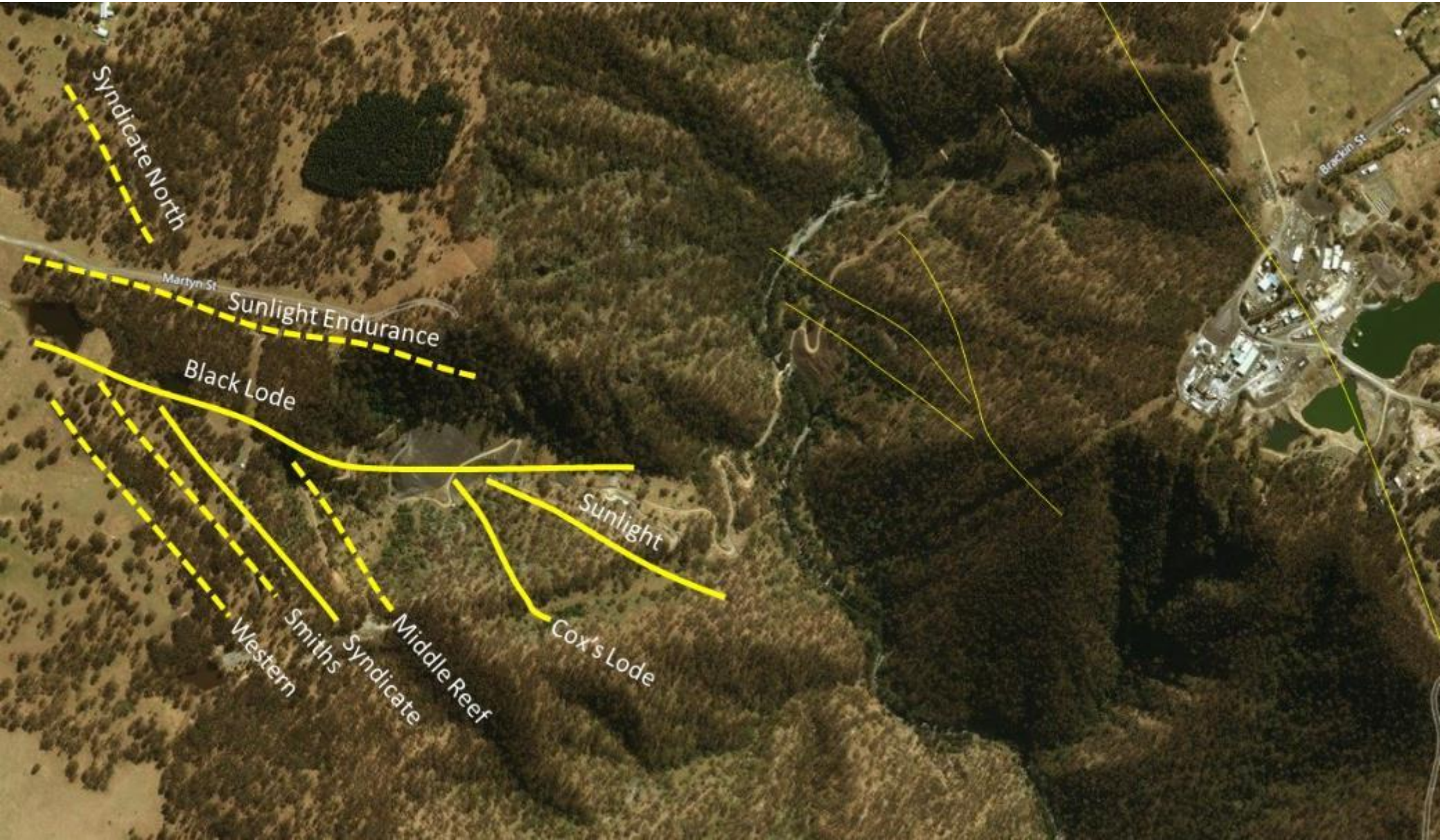
# Metz Mining Centre

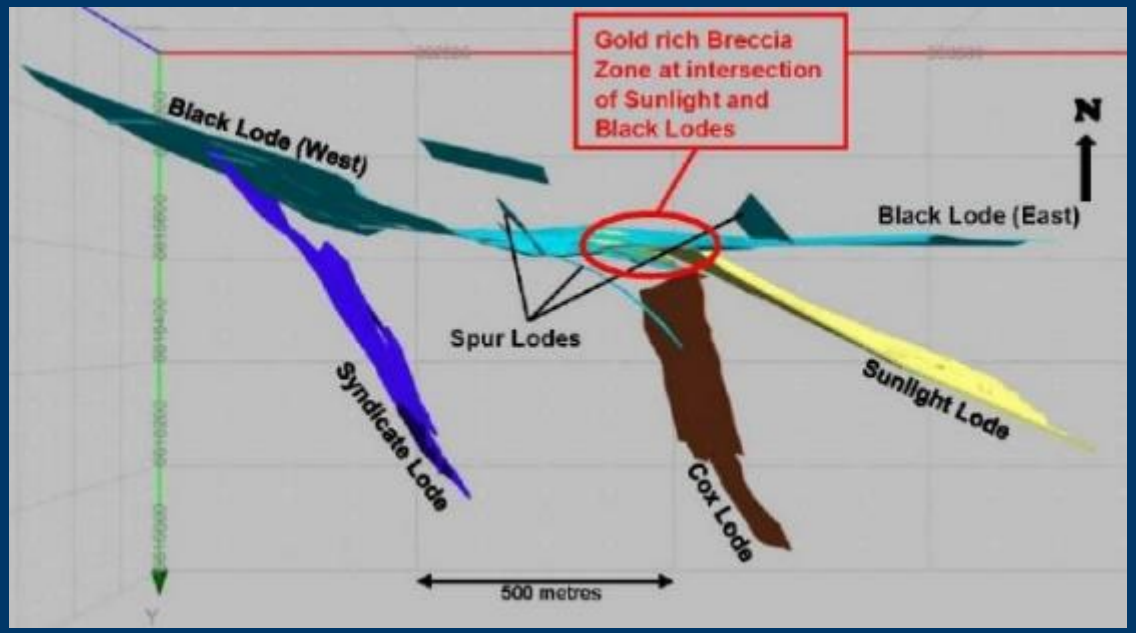




# Metz Mining Centre



- Significant gold polymetallic endowment comprising the four interlinking mineralised structures of Syndicate, Sunlight, Blacklode and Coxs Lode




- Majority of mining areas are focused on a 200m breccia zone. Structurally complex area with an interplay of:
- 1.9km east-west oriented shear structure (Blacklode); and
- A series of NW oriented steeply dipping shear structures (Syndicate, Sunlight and Coxs Lode)
- All lodes have mechanised underground development access - potential for parallel mineralised structures in addition to the mineralisation remaining open at depth

| DEPOSIT | CLASSIFICATION | TONNES | GOLD | ANTIMONY | CONTAINED GOLD | CONTAINED ANTIMONY |
|---|---|---|---|---|---|---|
| | | (kt) | (g/t) | (%) | (koz Au) | (kt Sb) |
| **SUNLIGHT** | JORC 2012 | 680 | 8.0 | 0.3 | 175 | 2 |
| **SYNDICATE** | JORC 2012 | 230 | 4.5 | 4.5 | 33 | 10 |
| | **Total** | **910** | **7.1** | **1.4** | **208** | **12** |
| **BLACKLODE** | JORC 2004 | 1,195 | 4.0 | 1.8 | 154 | 22 |
| **COXS LODE** | JORC 2004 | 116 | 1.7 | 1.7 | 6 | 2 |
| | **Total** | **1,311** | **3.8** | **1.8** | **161** | **24** |

Sunlight and Syndicate Resources are reported in accordance with JORC 2012 Code

Blacklode and Cox's Lode Resources are reported in accordance with JORC 2004 Code

For full details see Mineral Resource Statement at end of presentation

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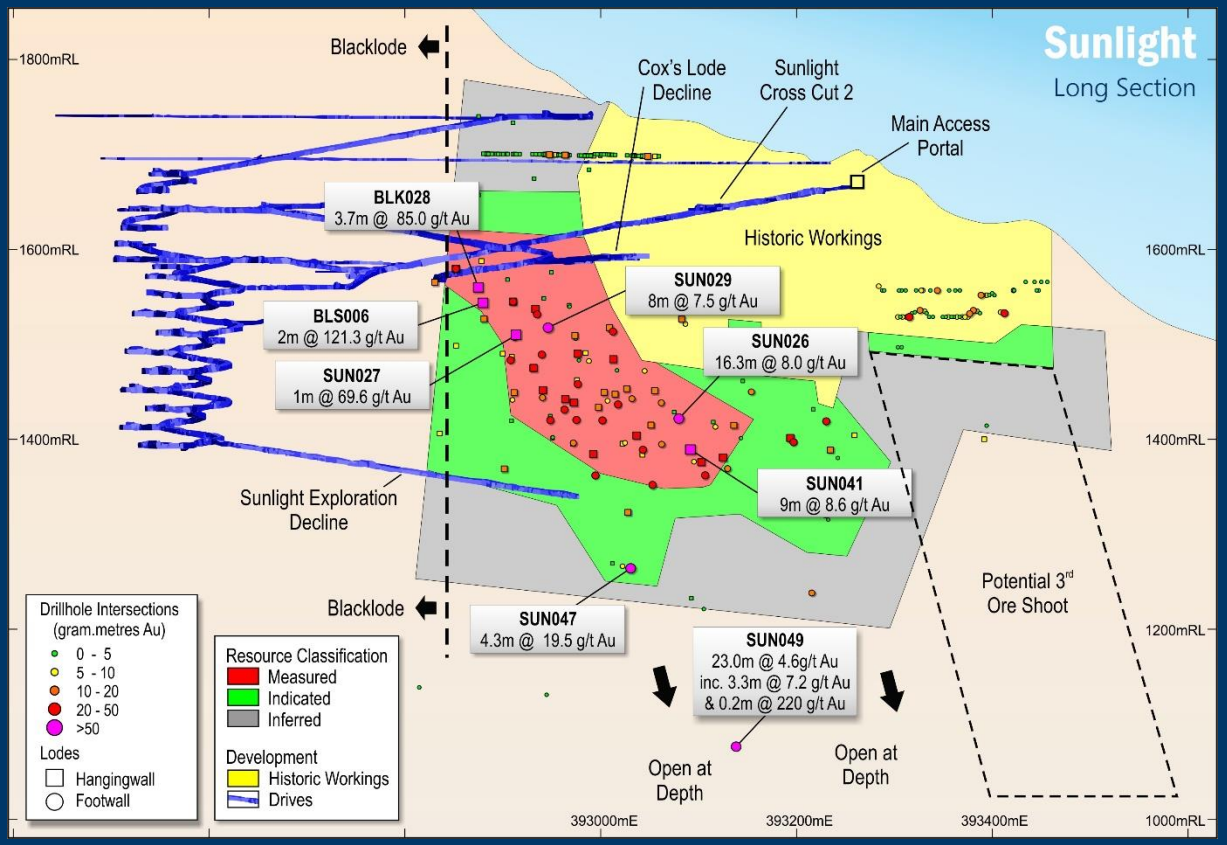
# Sunlight Long Section






- Gold dominant resource of 680kt @ 8.0 g/t Au – reported in accordance with 2012 JORC Code
- Visible free gold in arsenopyrite rich halo surrounding quartz breccia and stibnite veins
- Potential for high grade gold resource extensions down plunge and to SE
- Coxs Lode Decline is connected to the Syndicate Decline – only 40m additional development to potential first ore drive
- Sunlight Exploration Decline developed by Bracken to provide drill platforms at depth

| DEPOSIT | CLASSIFICATION | TONNES | GOLD | ANTIMONY | GOLD (AU EQ.) | CONTAINED GOLD | CONTAINED ANTIMONY |
|---|---|---|---|---|---|---|---|
| | | (kt) | (g/t) | (%) | (g/t) | (koz Au) | (kt Sb) |
| **SUNLIGHT** | Measured | 270 | 9.4 | 0.2 | 9.0 | 82 | 1 |
| | Indicated | 260 | 7.6 | 0.2 | 7.3 | 64 | 1 |
| | Inferred | 150 | 6.1 | 0.5 | 6.3 | 29 | 1 |
| | **Total** | **680** | **8.0** | **0.3** | **7.7** | **175** | **2** |

# SUN049 – Deepest Hole to Date in Sunlight



- SUN049, the deepest hole drilled to date at Sunlight, intersected a broad mineralised zone grading 22.95m @ 4.5g/t Au from 392.65m down-hole
- Including 3.30m @ 7.2g/t Au from 394.20m down-hole and a narrow high-grade intersection of 0.20m @ 220g/t Au from 415.05m down-hole containing abundant visible gold (as per image)
- SUN049 is not part of current Sunlight JORC Resource (680kt @ 8.0 g/t Au) – demonstrated potential at depth

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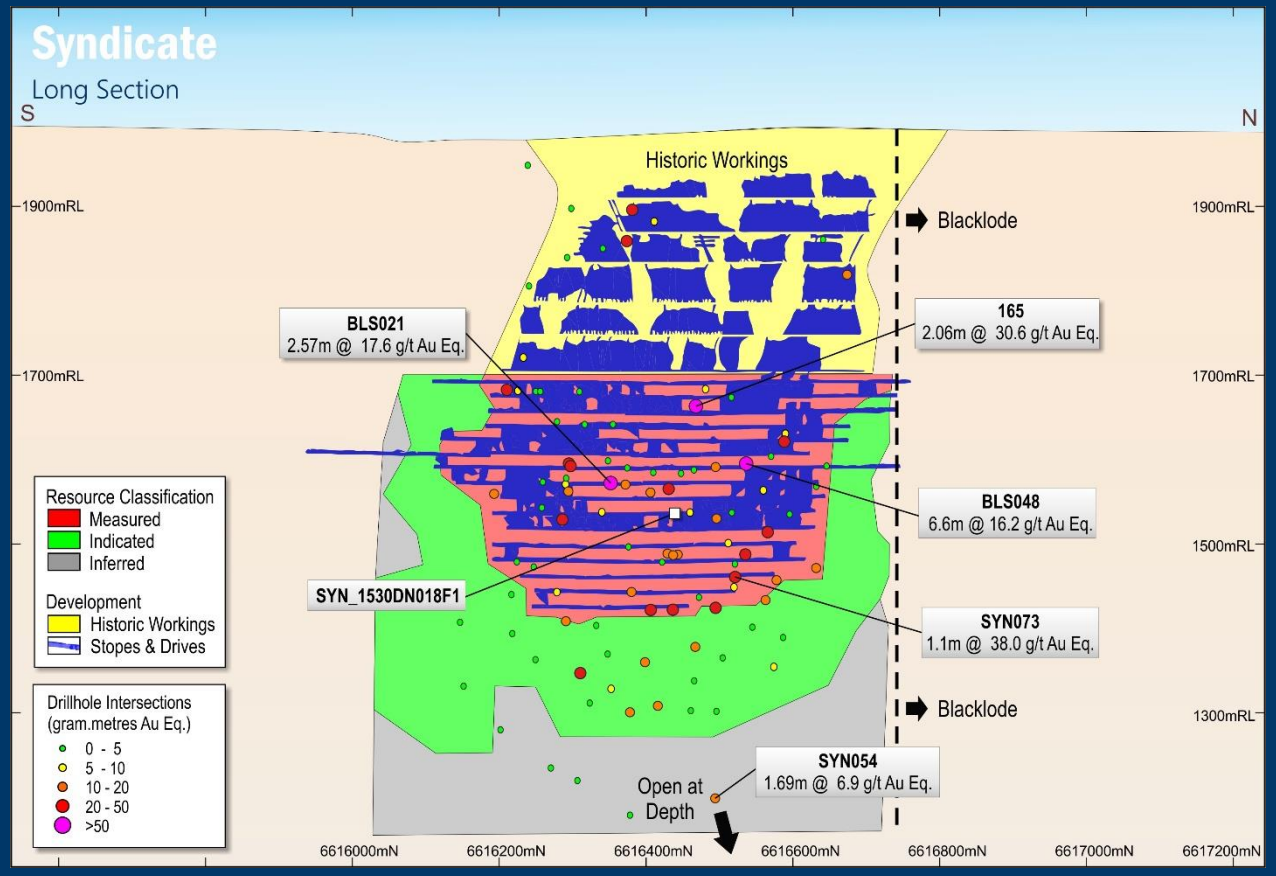
# Sunlight Cross Cut 2




- Sunlight Vein System exposed in Cross Cut 2 (area of historic mining)
- Assay of 0.95m @ 130 g/t Au with visible gold
- Metallurgical test work (Sept 2017) was carried out on 20kg sample from Cross Cut 2
- Calculated grade of 122 g/t Au with 84.2% of present as gravity recoverable gold (GRG)

# Syndicate Long Section



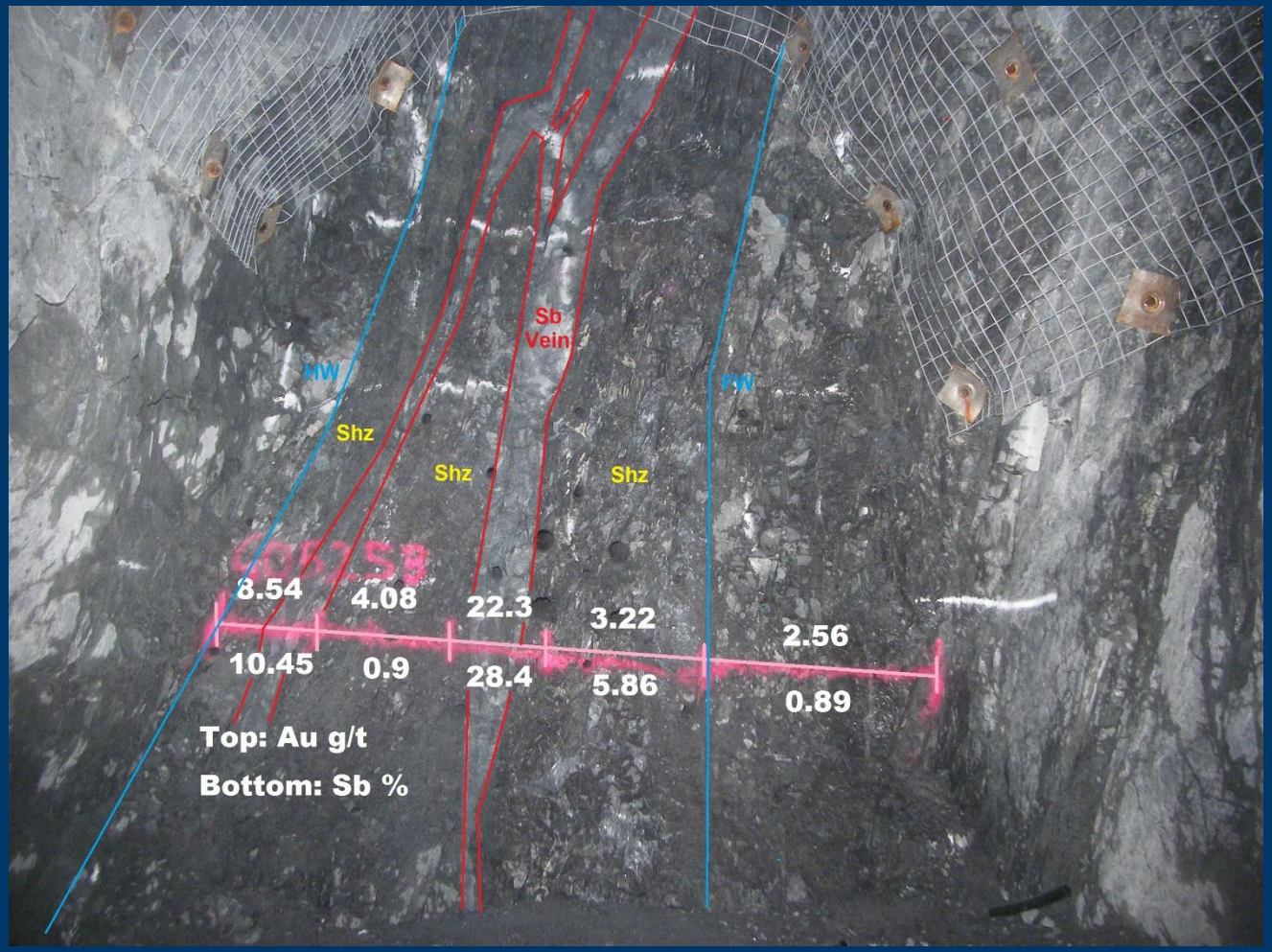



| DEPOSIT | CLASSIFICATION | TONNES | GOLD | ANTIMONY | GOLD (AU EQ.) | CONTAINED GOLD | CONTAINED ANTIMONY |
|---|---|---|---|---|---|---|---|
| | | (kt) | (g/t) | (%) | (g/t) | (koz Au) | (kt Sb) |
| SYNDICATE | Measured | 170 | 4.4 | 5.5 | 13.4 | 24 | 9 |
| | Indicated | 56 | 4.7 | 1.7 | 7.2 | 8 | 1 |
| | Inferred | 4 | 9.3 | 0.3 | 9.0 | 1 | 0 |
| | **Total** | **230** | **4.5** | **4.5** | **11.8** | **33** | **10** |

- Polymetallic NW shear system trending parallel to Sunlight
- High grade gold-antimony resource of 230kt @ 4.5 g/t Au & 4.5% Sb – reported in accordance with 2012 JORC Code
- Massive stibnite veins within a broad halo of refractory gold in arsenopyrite
- 300m+ strike length; up to 5m wide
- Appears to terminate to N against Blacklode – open at depth
- Mined by NEAM, Straits & Bracken
- 11 levels (1600mRL to 1422mRL) developed by Vendor – stopes designed and in some cases drilled and not fired
- All infrastructure in place (ventilation, power, water) to support near term restart of mining

# Syndicate Mineralisation






- Sulphidic shear – gold & antimony, with a sericite alteration halo
- Massive stibnite veins with stibnite stockworks and disseminated arsenopyrite
- Occasional scheelite ($CaWO_4$) veins and clasts
- Face (SYN_1530DN018F1):
  - Ore Zone of 2.3m @ 8.3 g/t Au & 10.0% Sb (24.8 g/t Au Eq.)
  - Total Face of 3.3m @ 6.6 g/t Au & 7.2% Sb (18.5 g/t Au Eq.)

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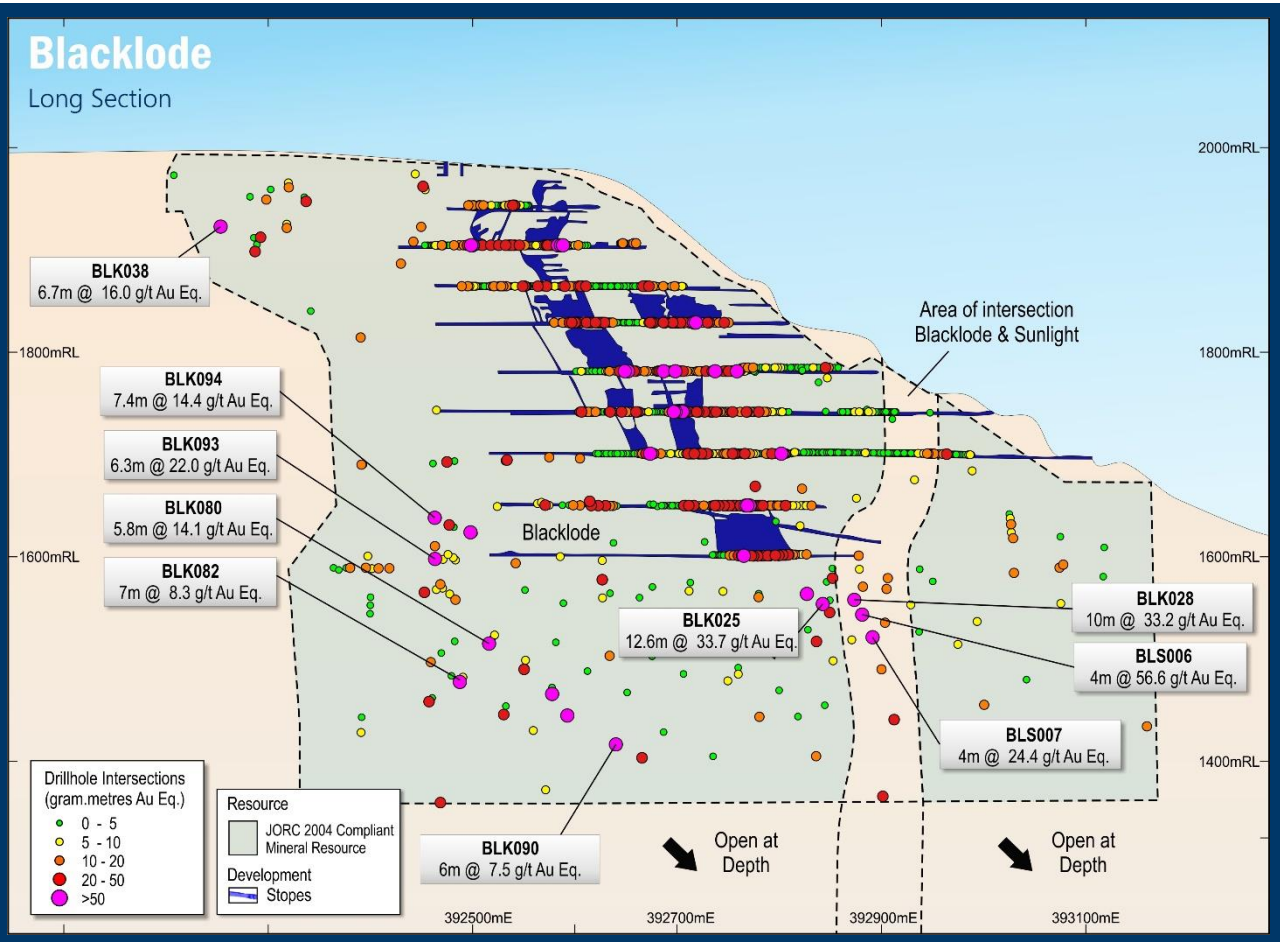
# Blacklode Long Section






| DEPOSIT | CLASSIFICATION | TONNES | GOLD | ANTIMONY | CONTAINED GOLD | CONTAINED ANTIMONY |
|---|---|---|---|---|---|---|
| | | (kt) | (g/t) | (%) | (koz Au) | (kt Sb) |
| **BLACKLODE** | JORC 2004 | 1,195 | 4.0 | 1.8 | 154 | 22 |

Blacklode Resource is reported in accordance with 2004 JORC Code

- Mined from surface to 400m depth by NEAM . No recent mining – focus was on Syndicate
- Gold rich breccia zone at intersection of Blacklode and Sunlight Lode
- Resource of 1,195kt @ 4.0 g/t Au & 1.8% Sb – reported in accordance with 2004 JORC Code
- Mineralisation within in an intense shear zone with disseminated arsenopyrite, stibnite, minor brecciation with stockwork development
- Mineralisation open at depth
- Close proximity to Syndicate and Sunlight declines provides basis for future access

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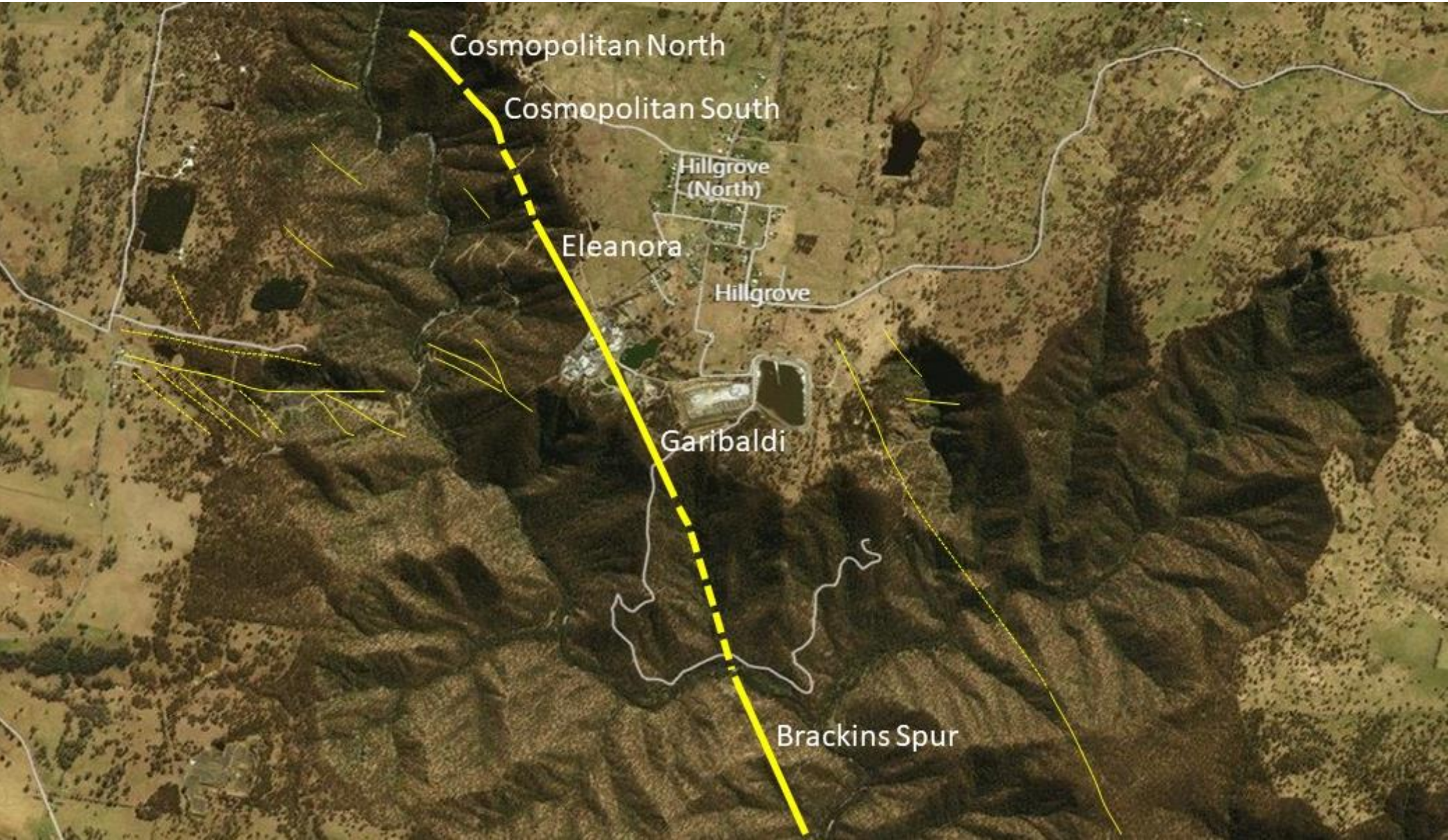
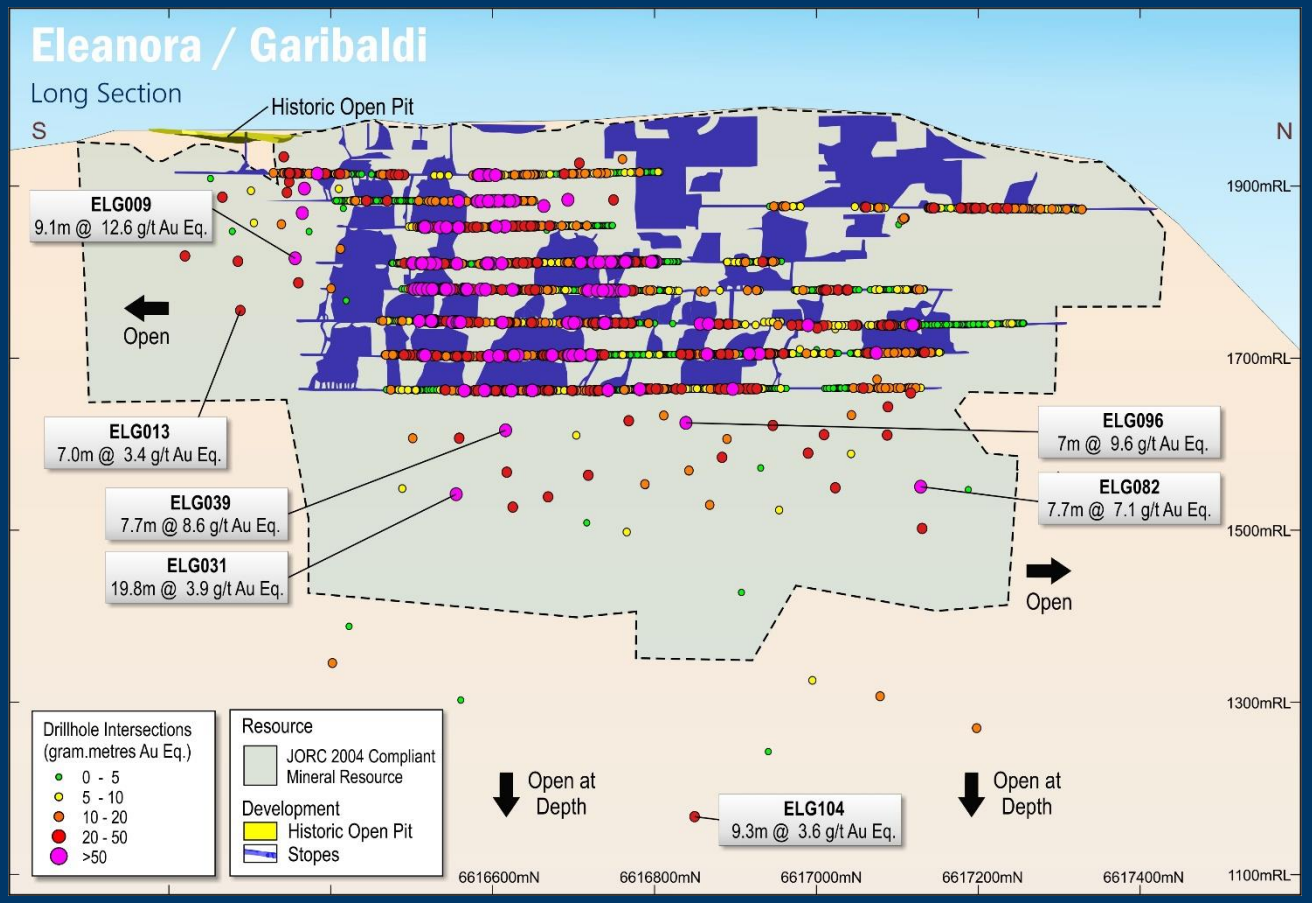
# Eleanora-Garibaldi Mining Centre





# Eleanora-Garibaldi Long Section



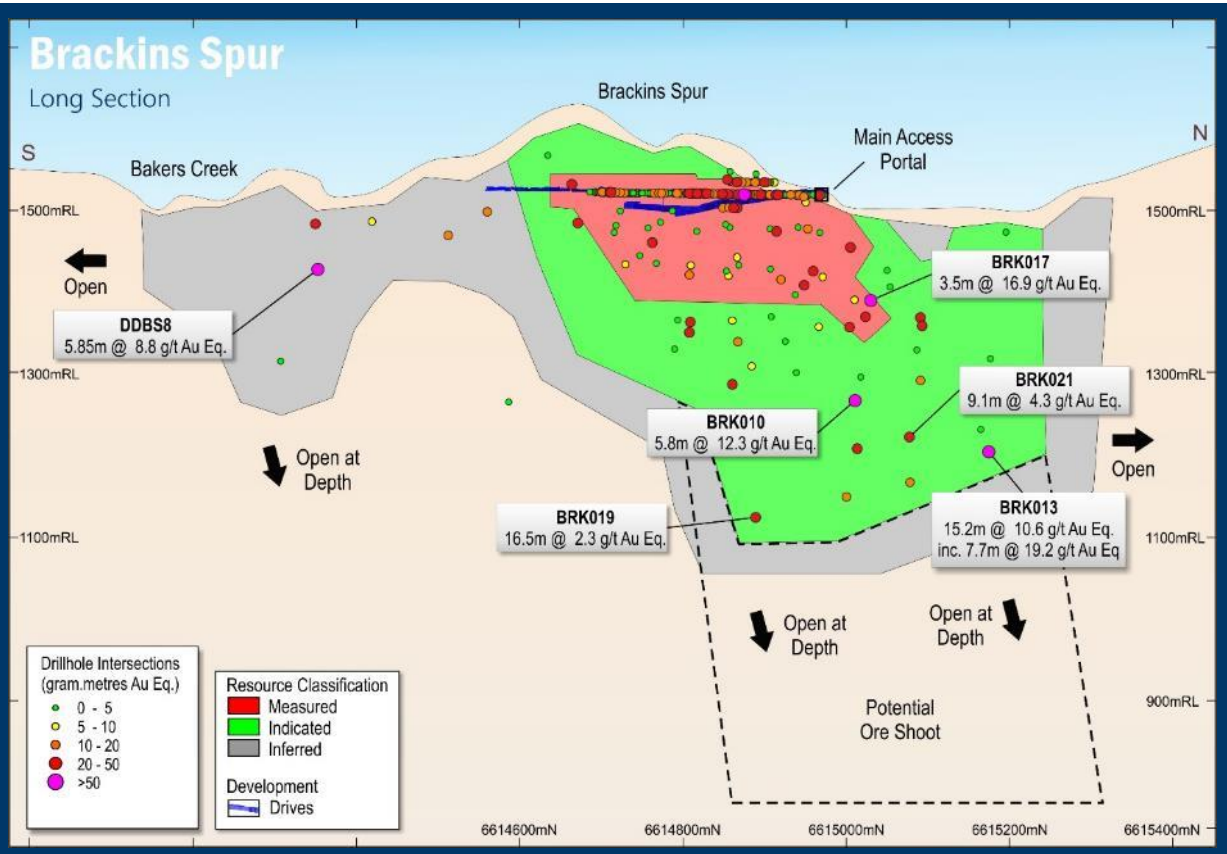



- Eleanora outcrops through the Hillgrove plant site
- NEAM mined down to 11 level (1660m RL) access via shaft (now decommissioned) and adits in side of gorge
- Mineralisation occurs in quartz breccias, typically 8m wide with varying levels of gold and antimony
- Resource of 2,442kt @ 5.0 g/t Au & 0.9% Sb – reported in accordance with 2004 JORC Code
- Mineralisation open at depth
- Eleanora-Garibaldi structure interpreted to extend north to Cosmopolitan and south to Brackin's Spur – strike length in excess of 4km

| DEPOSIT | CLASSIFICATION | TONNES | GOLD | ANTIMONY | CONTAINED GOLD | CONTAINED ANTIMONY |
|---|---|---|---|---|---|---|
| | | (kt) | (g/t) | (%) | (koz Au) | (kt Sb) |
| ELEANORA | JORC 2004 | 1,655 | 5.6 | 0.6 | 296 | 10 |
| GARIBALDI | JORC 2004 | 787 | 3.9 | 1.4 | 99 | 11 |
| Eleanora and Garibaldi Resources are reported in accordance with 2004 JORC Code | | | | | | |

# Brackin's Spur Long Section






- Located south of Hillgrove Plant with independent haul road for access
- Resource of 1,600kt @ 4.5 g/t Au & 1.5% Sb – reported in accordance with 2012 JORC Code
- Some development (250m of declines/capital development and 350m of ore drives) but not mined to date
- High grade gold in arsenopyrite rich sulphidic shears with tungsten mineralisation - scheelite ($CaWO_4$)
- Mineralisation open at depth & N/S
- Eleanora-Garibaldi structure interpreted to extend north to Cosmopolitan and south to Brackin's Spur – strike length in excess of 4km

| DEPOSIT | CLASSIFICATION | TONNES | GOLD | ANTIMONY | GOLD (AU EQ.) | CONTAINED GOLD | CONTAINED ANTIMONY |
|---|---|---|---|---|---|---|---|
| | | (kt) | (g/t) | (%) | (g/t) | (Koz Au) | (Kt Sb) |
| BRACKIN'S SPUR | Measured | 73 | 5.1 | 0.9 | 6.2 | 12 | 1 |
| | Indicated | 640 | 4.2 | 1.8 | 6.9 | 86 | 12 |
| | Inferred | 870 | 4.8 | 1.3 | 6.5 | 134 | 11 |
| | **Total** | **1,600** | **4.5** | **1.5** | **6.6** | **231** | **24** |

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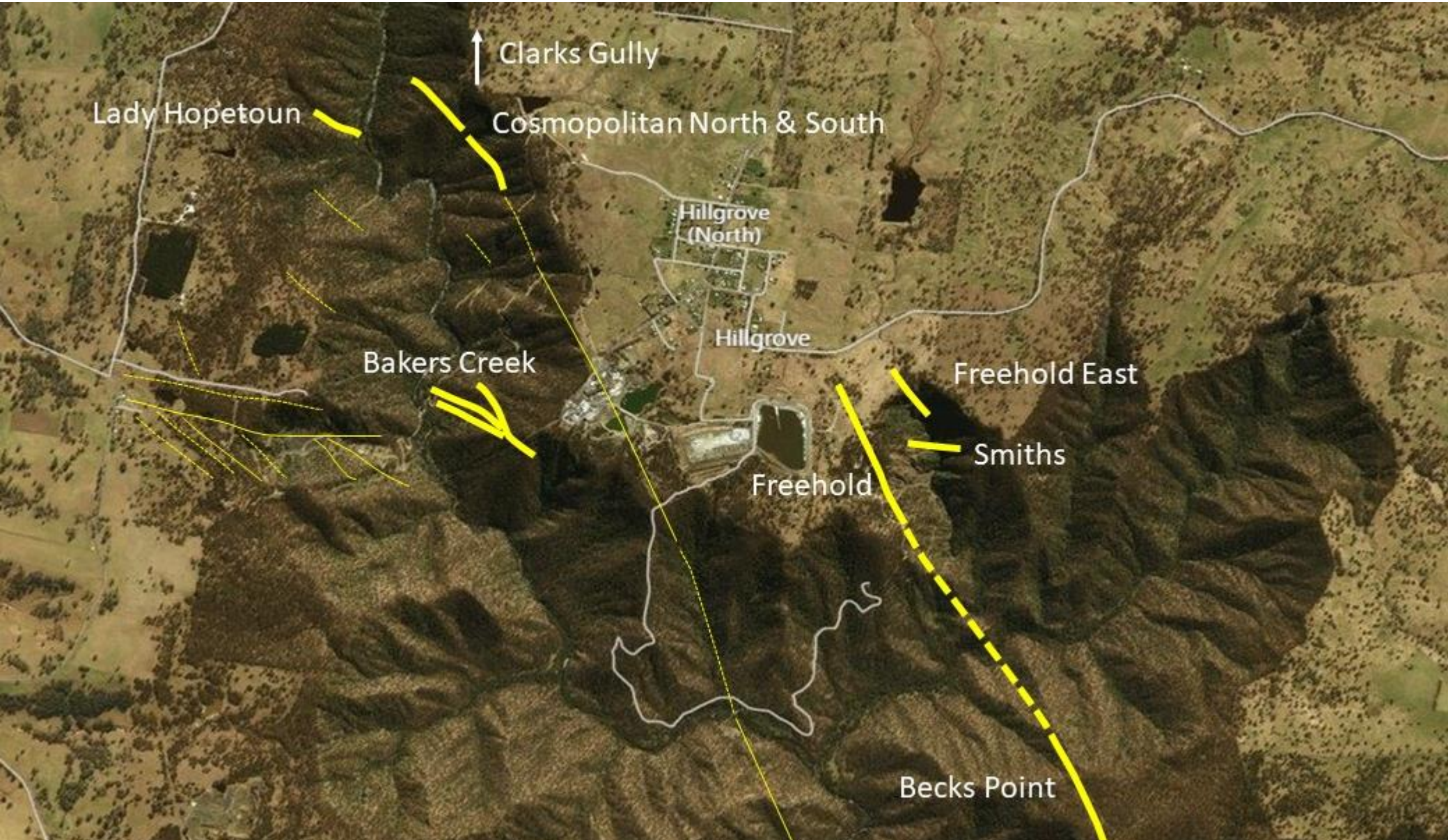
# Priority Targets





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# Multiple Priority Targets

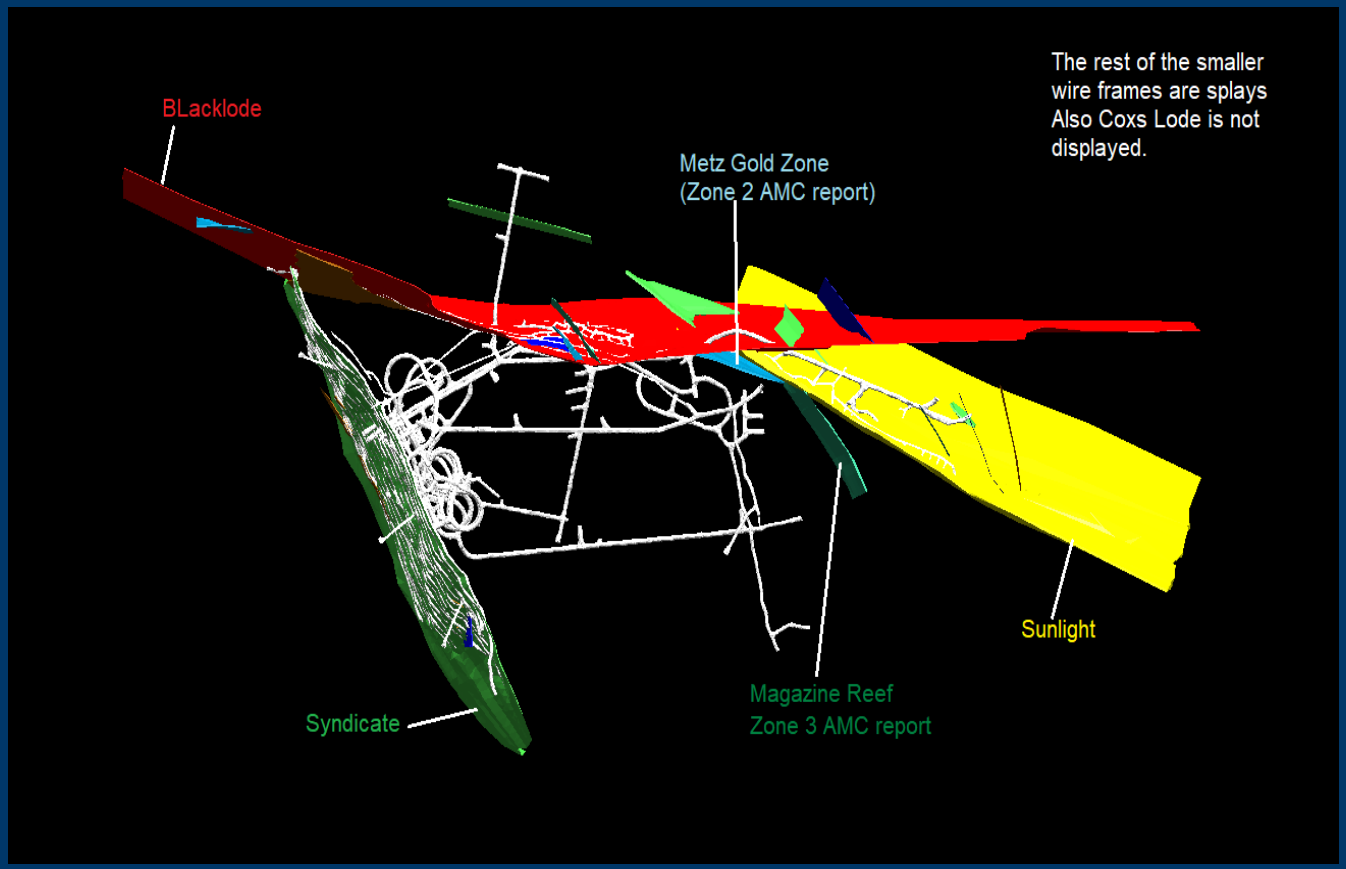


| | |
|---|---|
| Bakers Creek | • Largest single gold mine in HMF was Bakers Creek Gold Mine (1877 to 1921)<br>• Recorded production up to 1916 of 303,900oz from 175,980 tonnes of ore (approx. 50g/t Au) |
| Swamp Creek Mining Centre (Freehold/Smiths) | • Historical mining centre – last operated by NEAM<br>• Parallel structure to Eleanora-Garibaldi<br>• All systems open at depth |
| Lady Hopetoun | • Historical mine – last operated by NEAM<br>• Highest grade gold (445 g/t Au) recorded in thin (0.1m) channel sample |
| Becks Point | • Six vein systems identified, one with a potential strike length of 800m<br>• Area not explored (no drilling) - significant historic workings<br>• Multiple rock samples in the area - peak assay results of 20g/t Au, 22.5% Sb and 1.33% W<br>• Recent soil sampling correlates well with geological mapping.<br>• Southern extension of Freehold. |
| Cosmopolitan | • Mined historically and by NEAM<br>• Northern end of the Eleanora structure<br>• Best NEAM face sample 55cm at 146.3 g/t Au<br>• No drilling |
| Clarks Gully | • 2012 Compliant JORC Resource of 270kt @ 2.0 g/t Au & 3.8% Sb<br>• Open at depth/strike |

# UG Development & Infrastructure

# EXTENSIVE ACCESSIBLE MINE DEVELOPMENT






Metz Mining Centre (pictured)

- Declines/capital development: 3,950m
- Syndicate: 3,400m of ore drives
- Black Lode: 500m of ore drives
- Coxs Lode: 320m of ore drives
- All infrastructure in place (ventilation, power, water) to support near term restart of mining

Brackins Spur Mining Centre

- Declines/capital development: 250m
- Ore drives: 330m

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# MINING/VEHICLE FLEET



- Hillgrove operated with an owner-miner UG vehicle fleet
- All UG equipment still on site; including:
  - 3 Volvo A40F trucks
  - 2 development jumbos
  - 1 production jumbo
  - 5 UG loaders
  - Support vehicles
- Extensive surface vehicle fleet; including:
  - 15 light vehicles
  - 1 972G loader
  - Support vehicles (graders, backhoes, forklifts, trucks)


Hillgrove Processing

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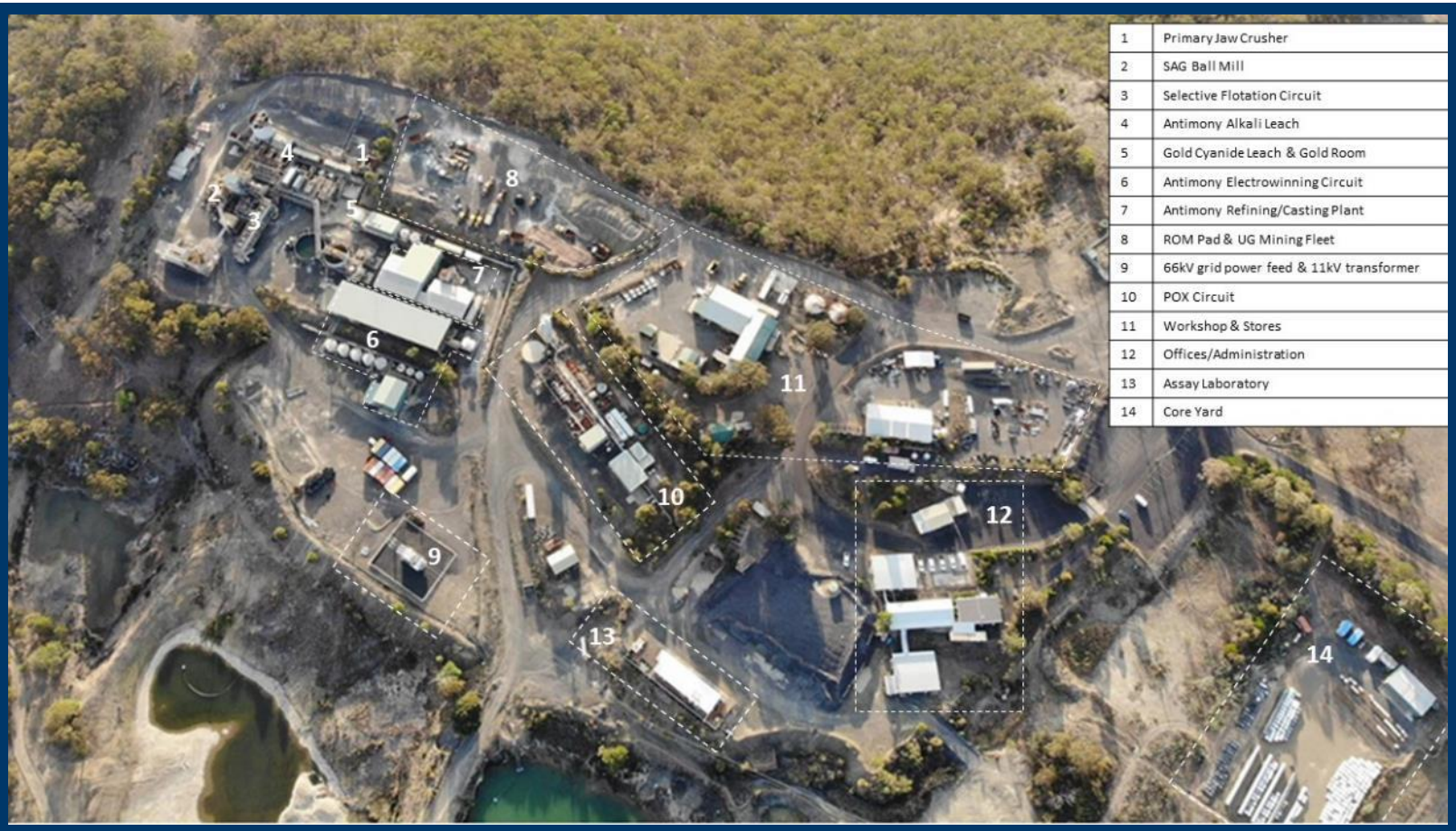
# SIGNIFICANT INFRASTRUCTURE






- Modern 250ktpa processing plant on care & maintenance - can produce refractory gold and gold-antimony concentrates
- Commissioned by Straits Resources (2009), cost > $150m
- Bracken invested $40m in plant (2013/2014 added multi stream flotation)
- Plant Pressure Oxidation (POX) Circuit - successfully treated refractory Au concentrates
- Alkali leach & electrowinning facility plus refining/casting plant producing antimony metal ingots

# REVIEW PROCESSING APPROACH



- Plant currently configured as Stage One (selective flotation) – gravity gold circuit and ore sorter required
- Stage Two: Recommission POX and add CIL to produce gold bullion
- Stage Three: Recommission antimony leach/EW/smelting and casting to produce antimony ingots on site
- Progressive approach likely – start at Stage One and then move forward

**STAGE ONE : Selective Flotation**

- Antimony-gold concentrate
- Refractory gold concentrate
- Gravity gold concentrate

**STAGE TWO: Selective Flotation & POX/CIL**

- Antimony-gold concentrate
- Gold bullion
- Gravity gold concentrate

**STAGE THREE: Selective flotation & POX/CIL & Sb leach/EW**

- Antimony ingots
- Gold bullion
- Gravity gold conc.

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# STAGE ONE:CONCENTRATE PRODUCTION




SELECTIVE FLOTATION CIRCUITS


CONCENTRATE FILTER PRESSES


CRUSHING AND GRINDING CIRCUIT

- Vendor invested $40m+ in plant to configure for production of separate gold-antimony and refractory gold concentrate
- Operated from 2014 to 2016 in this configuration
- Currently on active care & maintenance (energised, mill inched etc)
- Potential to add a gravity gold circuit to recover free gold
- Reinstall ore sorter

# STAGE TWO: GOLD BULLION




PRESSURE OXIDATION CIRCUIT


EXISTING GOLD LEACH CIRCUIT


GOLD ROOM

- Mothballed Pressure Oxidation (POX) Circuit on site
- Previously successfully treated refractory gold concentrates from Hillgrove to produce gold bullion (achieved gold recoveries of ~ 90%+)
- CIL circuit associated with POX plant which was used to recover gold to dore bullion has been removed
- Gold leach circuit and gold room built by Straits in 2009 – but unused
- Recommission POX plus add CIL circuit and use existing gold room

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# STAGE THREE: ANTIMONY METAL




EW CIRCUIT


ROTARY FURNACE


EW CIRCUIT RECTIFIER

- Straits invested >$150m in building new processing plant at Hillgrove in ~2007
- Objective of plant was to produce antimony metal (in ingot) and gold bullion
  - Production of bulk Sb-Au concentrate which was leached to extract antimony in solution (hot alkali leach)
  - EW circuit (antimony metal plated out on cathode)
  - Antimony cathode dried (rotary furnace), smelted and cast into ingots for sale
  - Gold rich residue from leach circuit was treated to recover gold (cyanide leach) and produce bullion on site
- Processing challenges that led to Straits putting circuit on care & maintenance in 2009 are understood and solvable

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# TAILINGS STORAGE FACILITY



- TSF2 was commissioned in 2008
- Fully lined (HDPE liner) with leak detection, movement monitoring and sumps
- Tailings survey (Nov 2015) indicated that remaining capacity to RL996 (spillway height) was 163,000m3
- TSF is permitted for two additional lifts of 2m each

# RedRiver
RESOURCES LIMITED

*"Prosperity Through Lean & Clever Resource Development"*


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Annexure 2

# Hillgrove Mineral Resources

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# HILLGROVE MINERAL RESOURCE

## Reported in accordance with the 2012 JORC Code



| DEPOSIT | CLASSIFICATION | TONNES | GOLD | ANTIMONY | GOLD EQUIVALENT (AU EQ.) | CONTAINED GOLD | CONTAINED ANTIMONY |
|---|---|---|---|---|---|---|---|
| | | (kt) | (g/t) | (%) | (g/t) | (Koz Au) | (Kt Sb) |
| **SUNLIGHT** | Measured | 270 | 9.4 | 0.2 | 9.0 | 82 | 1 |
| | Indicated | 260 | 7.6 | 0.2 | 7.3 | 64 | 1 |
| | Inferred | 150 | 6.1 | 0.5 | 6.3 | 29 | 1 |
| | **Total** | **680** | **8.0** | **0.3** | **7.7** | **175** | **2** |
| **BRACKIN'S SPUR** | Measured | 73 | 5.1 | 0.9 | 6.2 | 12 | 1 |
| | Indicated | 640 | 4.2 | 1.8 | 6.9 | 86 | 12 |
| | Inferred | 870 | 4.8 | 1.3 | 6.5 | 134 | 11 |
| | **Total** | **1,600** | **4.5** | **1.5** | **6.6** | **231** | **24** |
| **CLARK'S GULLY** | Measured | 170 | 1.9 | 4.2 | 9.0 | 10 | 7 |
| | Indicated | 96 | 2.1 | 3.1 | 7.3 | 6 | 3 |
| | Inferred | 0.4 | 0.8 | 3.0 | 5.8 | 0 | 0 |
| | **Total** | **270** | **2.0** | **3.8** | **8.4** | **17** | **10** |
| **SYNDICATE** | Measured | 170 | 4.4 | 5.5 | 13.4 | 24 | 9 |
| | Indicated | 56 | 4.7 | 1.7 | 7.2 | 8 | 1 |
| | Inferred | 4 | 9.3 | 0.3 | 9.0 | 1 | 0 |
| | **Total** | **230** | **4.5** | **4.5** | **11.8** | **33** | **10** |
| **TOTAL** | **Measured** | **690** | **5.8** | **2.6** | **9.8** | **129** | **18** |
| | Indicated | 1,100 | 4.9 | 1.5 | 7.0 | 173 | 17 |
| | Inferred | 1,000 | 5.0 | 1.1 | 6.5 | 161 | 11 |
| | **Total** | **2,800** | **5.1** | **1.7** | **7.5** | **459** | **48** |

Source: AMC Consultants Pty Ltd (AMC) Hillgrove Mineral Resource Estimate (August 2017)
Tonnages and grades are rounded. Discrepancies in totals may exist due to rounding.
Gold equivalent (Au Eq.) has been calculated using the metal selling prices, recoveries and other assumptions contained in the AMC Estimate and included this announcement.
For full disclosure details refer to ASX release "Red River acquires Hillgrove Gold-Antimony Project in NSW" dated 3 July 2019

RedRiver RESOURCES LIMITED
HILLGROVE GOLD MINE

# HILLGROVE MINERAL RESOURCE

## Reported in accordance with the 2004 JORC Code



| DEPOSIT | MINERAL RESOURCE | | | | | MINERAL RESOURCE | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | TOTAL | | | | | MEASURED | | | INDICATED | | | INFERRED | | |
| | TONNES (KT) | GOLD (G/T) | ANTIMONY (%) | CONTAINED GOLD (KOZ AU) | CONTAINED ANTIMONY (KT SB) | TONNES (KT) | GOLD (G/T) | ANTIMONY (%) | TONNES (KT) | GOLD (G/T) | ANTIMONY (%) | TONNES (KT) | GOLD (G/T) | ANTIMONY (%) |
| **Austins** | 5 | 1.4 | 2.3 | 0 | 0 | 5 | 1.4 | 2.3 | | | | | | |
| **Black Lode – Main Lode** | 1,013 | 4.1 | 1.7 | 134 | 17 | 105 | 4.4 | 2.8 | 487 | 4.4 | 1.5 | 421 | 3.6 | 1.7 |
| **Black Lode – North Splay** | 23 | 5.9 | 3.4 | 4 | 1 | 20 | 6.1 | 3.6 | 3 | 4.3 | 2.2 | | | |
| **Black Lode – South Splay** | 33 | 3.3 | 0.1 | 4 | 0 | | | | 30 | 3.3 | 0.1 | 3 | 3.0 | 0.1 |
| **Black Lode – West Splay** | 126 | 3.2 | 3.2 | 13 | 4 | | | | | | | 126 | 3.2 | 3.2 |
| **Prendergasts** | 7 | 3.0 | 2.2 | 1 | 0 | 7 | 3.0 | 2.2 | | | | | | |
| **Cox's Lode** | 116 | 1.7 | 1.7 | 6 | 2 | 12 | 1.7 | 2.0 | 46 | 2.0 | 1.7 | 58 | 1.5 | 1.6 |
| **Eleanora (Upper)** | 787 | 6.4 | 1.0 | 162 | 8 | 507 | 6.6 | 1.0 | 280 | 5.9 | 0.9 | | | |
| **Eleanora (Lower)** | 868 | 4.8 | 0.3 | 134 | 3 | 47 | 6.3 | 1.0 | 589 | 4.9 | 0.3 | 232 | 4.1 | 0.1 |
| **Garibaldi** | 787 | 3.9 | 1.4 | 99 | 11 | | | | 513 | 3.9 | 1.4 | 274 | 4.0 | 1.4 |
| **Freehold** | 74 | 6.3 | 3.5 | 15 | 3 | 3 | 4.1 | 3.0 | 34 | 6.7 | 3.6 | 37 | 6.1 | 3.4 |
| **Smiths** | 2 | 9.0 | 3.6 | 1 | 0 | | | | 2 | 9.0 | 3.6 | | | |
| **Golden Gate** | 44 | 7.8 | 1.9 | 11 | 1 | | | | 31 | 8.5 | 1.9 | 13 | 6.1 | 1.8 |
| **Cosmopolitan** | 15 | 10.1 | 0.5 | 5 | 0 | | | | 15 | 10.1 | 0.5 | | | |
| **Damifino** | 6 | 6.8 | 3.7 | 1 | 0 | | | | | | | 6 | 6.8 | 3.7 |
| **Lady Hopetoun** | 29 | 8.0 | 1.0 | 7 | 0 | | | | 3 | 9.1 | 0.6 | 26 | 7.9 | 1.0 |
| **Total** | 3,935 | 4.7 | 1.3 | 597 | 50 | 706 | 6.1 | 1.4 | 2,033 | 4.7 | 1.1 | 1,196 | 3.9 | 1.5 |

Source: Straits Resources Limited (9 May 2011)
Tonnages and grades are rounded. Discrepancies in totals may exist due to rounding.
Sunlight, Syndicate, Brackin Spur and Clark's Gully have been updated and reported by AMC as JORC 2012 Mineral Resources (refer to Table 1)
For full disclosure details refer to ASX release "Red River acquires Hillgrove Gold-Antimony Project in NSW" dated 3 July 2019

# COMPETENT PERSONS STATEMENTS



## COMPETENT PERSON'S STATEMENT
### Mineral Resource Reported in Accordance with 2012 JORC Code

The information in this report that relates to the reporting of the Hillgrove Mineral Resource Estimate is based on and fairly represents, information and supporting documentation compiled by Rodney Webster who is a Member of The Australasian Institute of Mining and Metallurgy and a Member of the Australian Institute of Geoscientists. Mr Webster is independent of Hillgrove Mines Pty Ltd. and an employee of AMC Consultants Pty Ltd. Mr Webster has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original report.

## COMPETENT PERSON'S STATEMENT
### Mineral Resource Reported in Accordance with 2004 JORC Code

The information in this release that relates to Mineral Resources is based on information reviewed by Mr Peter Carolan, who is a Member of The Australasian Institute of Mining and Metallurgy and a full time employee of Red River Resources Ltd.
Mr Carolan has sufficient experience in the style of mineralisation and types of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Carolan consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.
All Mineral Resource estimates were prepared and first disclosed under the JORC Code 2004 and are an accurate representation of the available data and studies for the Hillgrove Mining Project. This information has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported. Work will commence on close of acquisition by the Company to bring each of the Mineral Resources into line with the JORC Code 2012.

# HILLGROVE MINERAL RESOURCE



## GOLD EQUIVALENT CALCULATION

The Hillgrove Mineral Resource reported in accordance with the JORC 2012 Code is reported above a gold equivalent (Au Eq.) cut-off of 5 g/t Au Eq. The use of a gold equivalent cut-off is appropriate for the multi-element mineralisation at Hillgrove, where value is obtained from both antimony and gold.

The Au Eq. value was calculated on commodity prices as at 18 July 2017. The individual grades, the assumed commodity prices and metal recoveries and the Au Eq. formula are as follows:

Au Eq. (g/t) = (Au g/t * 91%) + (2.0 * Sb % * 86%)

Where 2.0 = (US$7,950/100) / (US$1,234/31.1035)

Gold price = US$1,234/oz and gold recovery = 91%

Antimony price = US$7,950/tonne and antimony recovery = 86%

Net smelter return calculations for the deposits indicate that Au Eq. grades above 4.8 g/t are economic, based on site costs, mill recoveries, off-site transportation and royalty costs.

The Company has selected to report on a gold equivalent basis, as gold is the metal that contributes the most to the net smelter return gold equivalent (Au Eq.) calculation. It is the view of the Company that all the metals used in the Au Eq. formula are expected to be recovered and sold.