

GMM

Great Northern Minerals



February 2020



Disclaimer

Preparation

This Presentation has been prepared to provide prospective investors in Great Northern Minerals Limited, ACN 000 002 111, ("The Company" or "Great Northern Minerals"), with general information to assist them in deciding whether they wish to undertake their own investigation and/ or consider a possible investment in the Company or the Company's projects.

This Presentation has not been independently verified for reliability, completeness or accuracy. No representation is made that such information and materials are reliable, complete or accurate. This Presentation is not a prospectus and does not constitute an offer or invitation or recommendation to any person and has been prepared solely for use by persons who are deemed to be "sophisticated investors" as described in the Corporations Act.

Projections and Assumptions

The projections and assumptions in this Presentation are indicative only and are not and should not be relied upon as representations as to future matters. The projections are based on assumptions that may or may not prove to be correct. The recipient must make their own independent assessment and investigation of those projections and assumptions. Investors will be required to undertake at their cost, any additional works needed for an investment decision.

Disclaimer

The Company and its respective shareholders, directors, partners, employees, officers, agents, consultants or advisors disclaim (to the maximum extent permitted by law) all duties and liabilities, including liability for negligence, for any loss or damage which is suffered or incurred by any person acting on any information provided or omitted to be provided by any of them in connection with an investment in The Company or any statements, opinions or matters (expressed or implied) arising out of, or contained in, or derived from, such information

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The information set out in this Presentation does not constitute an offer or invitation to subscribe for securities in The Company or investment in the assets of the Company, or a recommendation by The Company to any person in respect of any matter.

Competent Persons Statement

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Andrew Jones (Exploration Results), an employee of Great Northern Minerals, and Andrew Beaton (Mineral Resources) a part time consultant to Great Northern Minerals. Mr Jones and Mr Beaton are both members of the Australasian Institute of Mining and Metallurgy and have sufficient experience of relevance to the styles of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves." Mr Jones and Mr Beaton consent to the inclusion in this report of the matters based on their information in the form and context in which it appears.

Refer to previous ASX announcements on the 14 May 2019, 20 June 2019, 4 July 2019, 11 July 2019, 5 August 2019, 15 August 2019, 25 November 2019, 10 December 2019, 12 December 2019, 16 December 2019, 20 December 2019, 23 December 2019 and 28 January 2020 in respect of historic drilling intersections, exploration targets and mineral resources. Great Northern Minerals is not aware of any new information or data that materially affects the information included in the relevant market announcements listed.



Corporate Snapshot

Board of Directors

Chairman – Gerard King

Managing Director – Cameron McLean

Non Executive Director - Simon Peters

Company Secretary – Aida Tabakovic

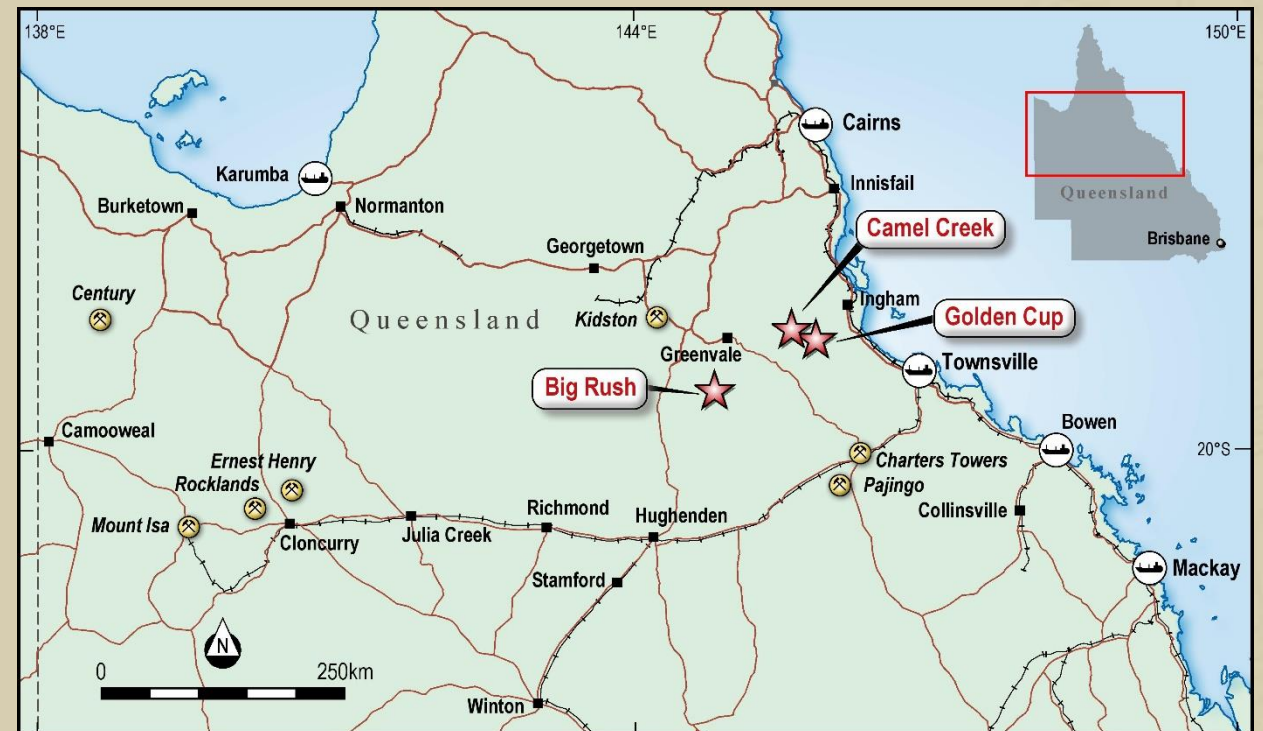
Management

Exploration Manager - Andrew Jones

Shareholders

- Shares on issue: 346,935,835
- Market Capitalisation: \$2.78 million
- Top 20 Holders: 45%

Gold Portfolio





Investment Highlights

- Highly active explorer in a goldfield with **multi-million ounce** potential (tenure covers 695 km²).
- Maiden gold resource of **30,000 ounces** estimated at Golden Cup in December 2019.
- Maiden gold resource of **47,000 ounces** estimated at Big Rush in February 2020.
- The viability of processing existing heap leach pads being assessed (2.5 million tonnes of material).
- Excellent exploration upside supported by:
 - Previous mining to only shallow depths
 - Limited modern or systematic exploration
 - High-grade drill intersections beneath open pits &
 - Significant Exploration Targets defined
- Gold resources located on granted Mining Leases.

Gold Resources - Golden Ant Project

Project	Tonnes	Grade (g/t Au)	Ounces (Gold)
Golden Cup	256,504	3.6	29,721
Big Rush	558,322	2.62	47,006
TOTAL			76,727

Nb. Resources tabled above were estimated above a 0.75 g/t Au cut-off grade.

Exploration Targets to 100m depth- Golden Ant Project

Project	Tonnes		Grade (g/t Au)		Ounces (Gold)	
	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
Golden Cup	450,000	750,000	3.5	5.5	50,643	132,637
Camel Creek	500,000	1,000,000	2	3.5	32,154	112,540
Big Rush	1,800,000	3,600,000	2	3	115,756	347,267
TOTAL					200,000	590,000



A Re-discovered Under-explored Goldfield

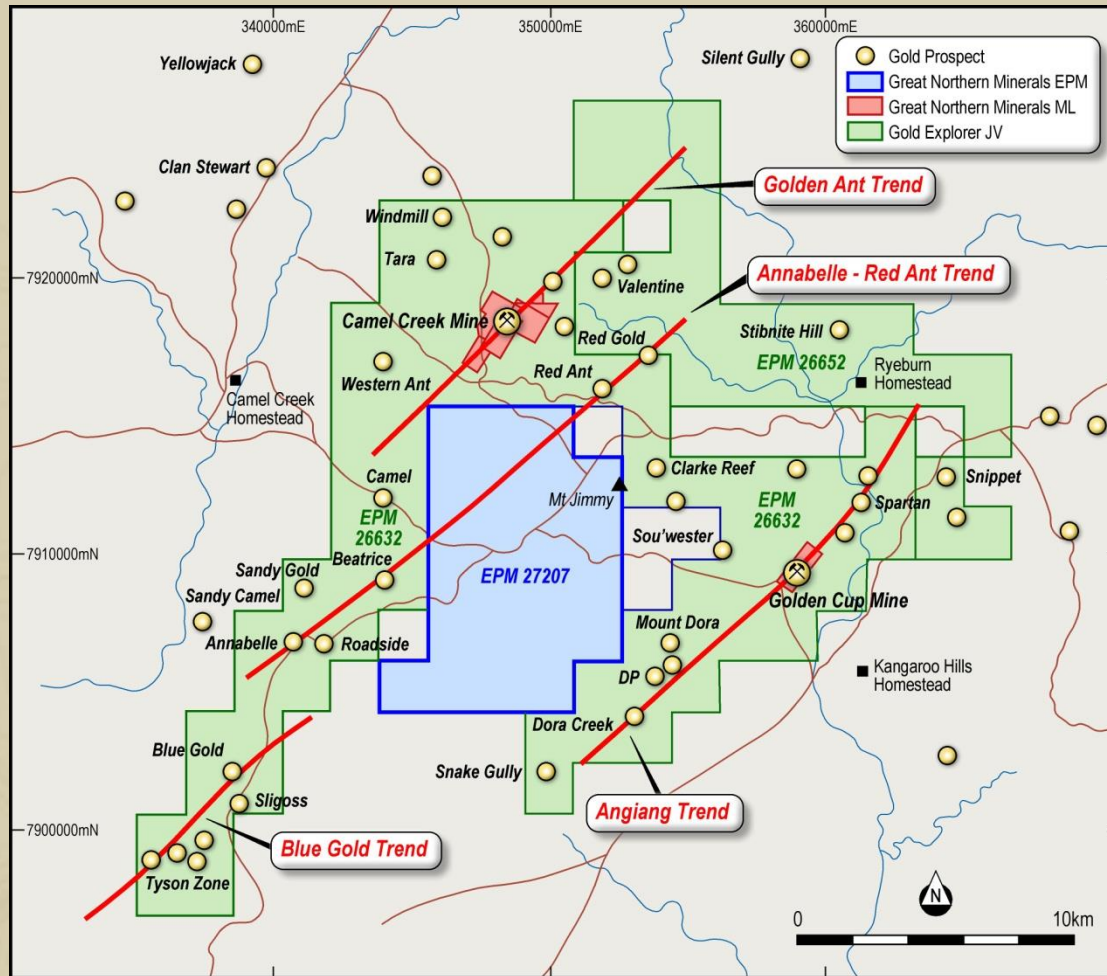
- In 2019 the goldfield was secured:
 - Camel Creek, Golden Cup & Big Rush Mines purchased
 - Exploration permit applications made &
 - Joint Venture executed with Gold Explorer Pty Ltd
- Project covers 695km² across 11 granted Mining Leases, two 100% owned exploration permits and two joint ventured exploration permits.
- Combined previous open pit gold production of in excess of **160,000 ounces at 1.91 g/t Au**.
- Previous gold production via heap leaching and trial CIL Processing.
- Third party toll treatment facilities at Thalanga, Charters Towers and Mt Garnet all within trucking distance.

Historic recorded gold production data – Golden Ant Project.

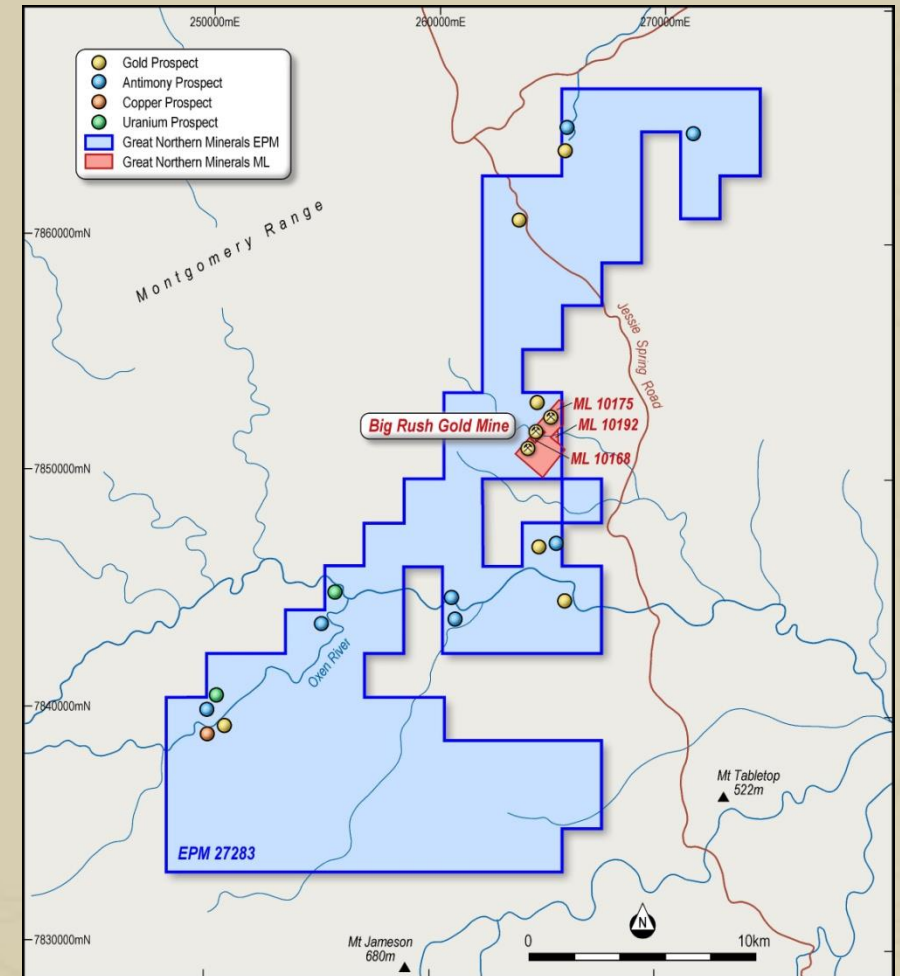
Historic Mine	Ore Mined (tonnes)	Grade (g/t Au)	Ounces Produced
Camel Creek	1,059,696	1.68	57,238
Camel Creek Satellites	188,876	2.29	13,906
Golden Cup	201,081	2.83	18,296
Golden Cup Satellites	94,548	1.92	5,836
Big Rush Heap Leach	950,000	1.9	58,039
Big Rush CIL	33,000	11	10,000
TOTAL	2,494,201	1.91	163,315

Nb. The locations of the satellite deposits are yet to be confirmed.

TENURE POSITION



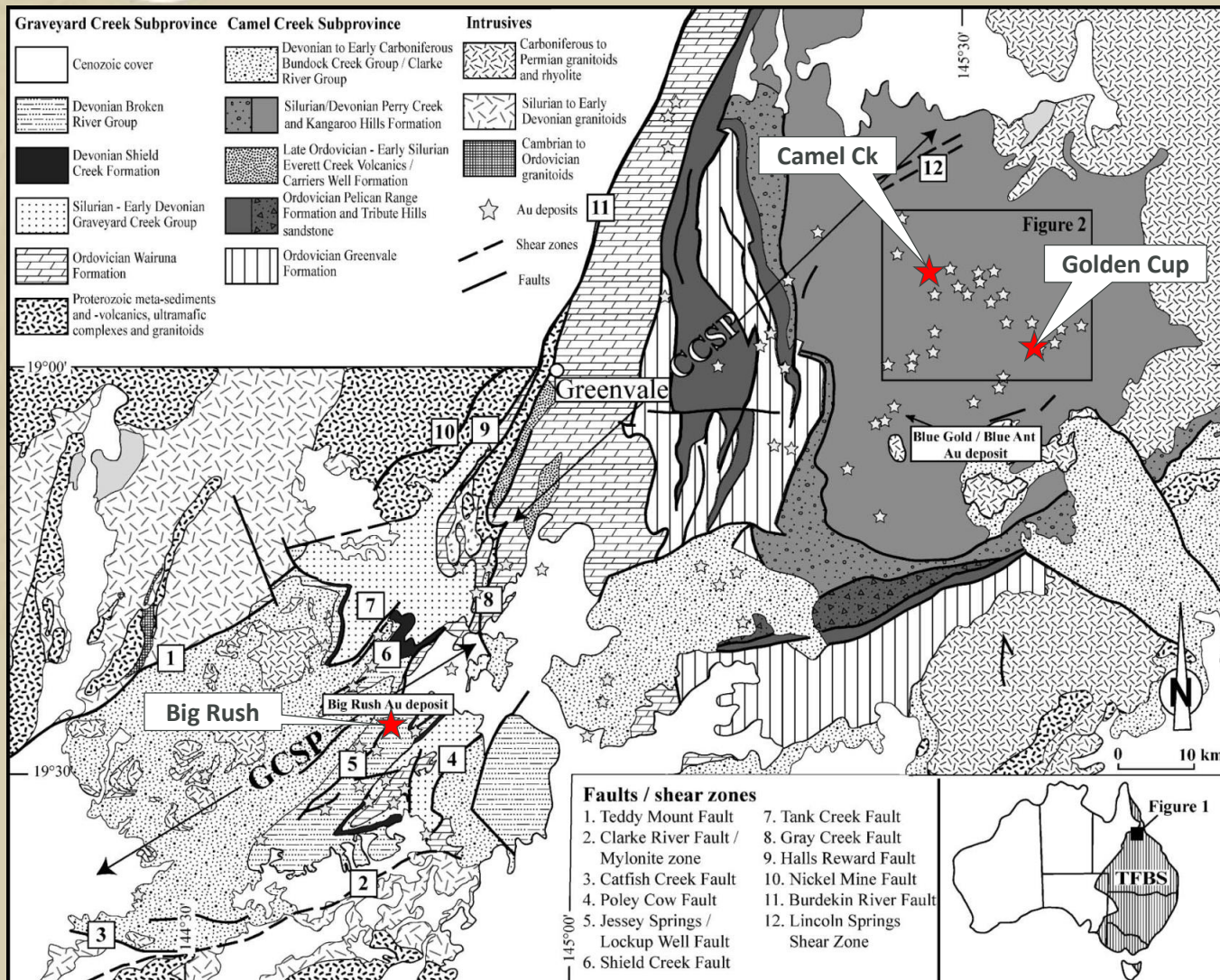
Golden Cup & Camel Creek Projects



Big Rush Project

Broken River Province Geology and Orogenic-style Gold Deposits

(from: I. M. A. VOS, F. P. BIERLEIN and G. S. TEALE, 2005)



Camel Creek and Golden Cup deposits lie within the Amanda Bell Goldfield.

Gold mineralisation hosted by sequence of highly deformed interbedded sandstone and variably carbonaceous siltstone and shale of the Silurian-Devonian Kangaroo Hills Formation of the Camel Creek Subprovince (CCSP). Gold associated with multi-phase quartz veining along NE-trending structural corridors.

Big Rush deposit hosted by Devonian-age Mytton Formation which lies in the upper part of the Broken River Group within the Graveyard Creek Subprovince (GCSP).

Host rocks comprise highly deformed interbedded sandstone, and variably carbonaceous siltstone and shale, similar to the Camel Creek and Golden Cup host rocks. Gold mineralisation is associated with multi-phase quartz veining along a discrete NE-trending brittle structure that cuts the highly deformed host sediments.

The three deposits share common associations with quartz veining, pyrite (FeS₂), arsenopyrite (FeAsS) and stibnite (Sb₂S₃).



GOLDEN CUP

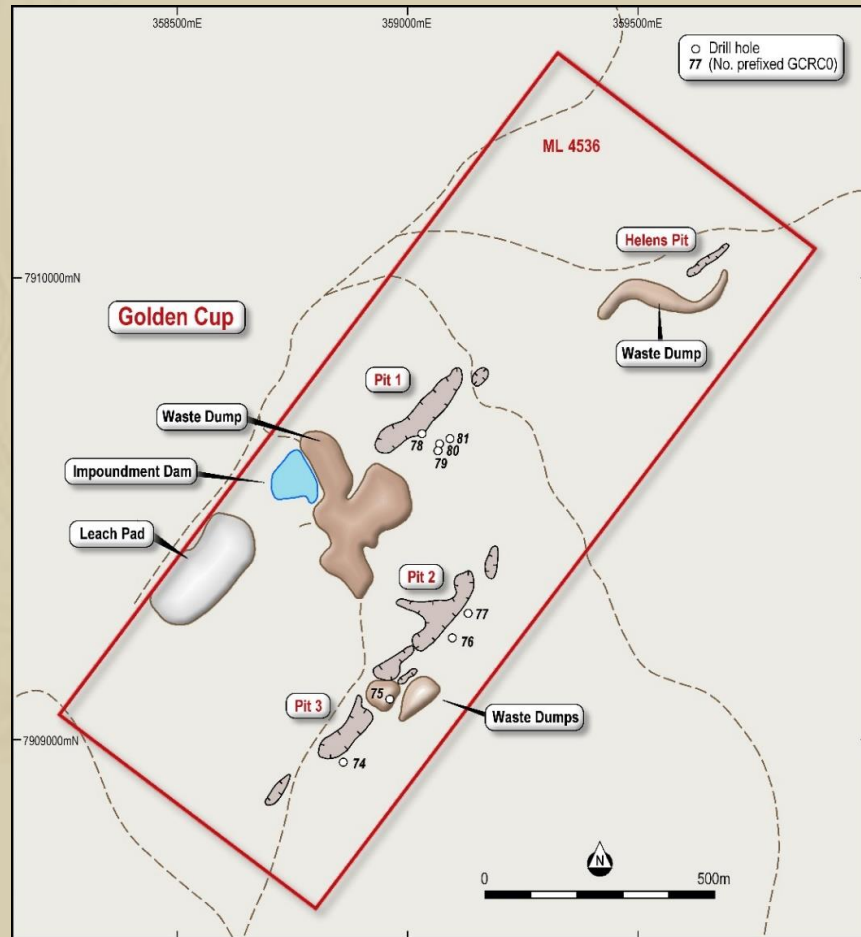
- RC Drilling in December 2019 returned high grade gold intercepts including:
 - **7m @ 7.49 g/t Au from 32m (GCRC074) &**
 - **9m @ 4.72 g/t Au from 42m (GCRC078).**
- Maiden JORC-compliant gold resource of **30,000 ounces** announced in December 2019 (256,504 tonnes @ 3.60 g/t Au).
- Historically heap leaching processed approximately 200,000t @ 2.8 g/t Au for 18,000 ounces with production finishing in 1993.
- Ore extracted from 9 pits over a 1.5km strike length with an average pit depth of less than 15m.
- 90% of drilling was less than 50m deep and mineralisation remains open at depth and along strike.
- Resource expansion drilling will be a major focus this year.



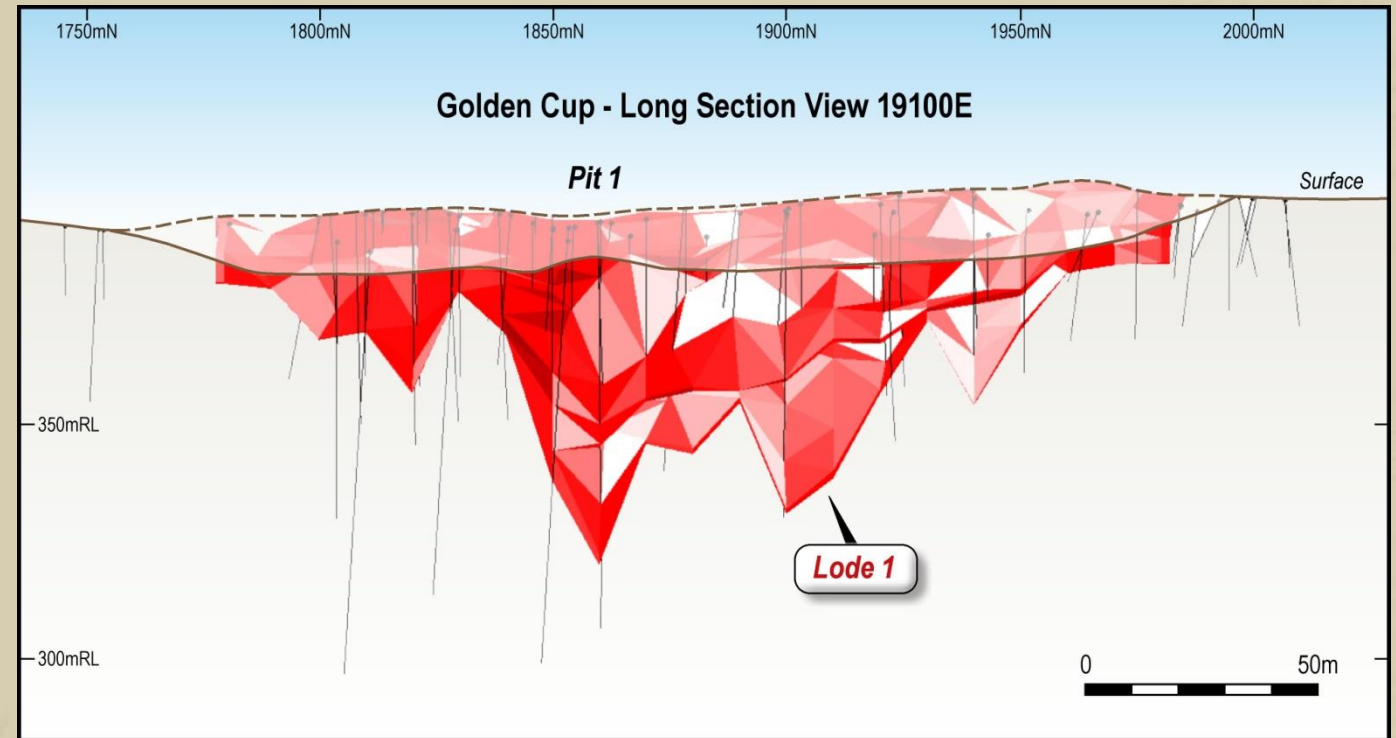
Golden Cup Open Pit



GOLDEN CUP: Site Plan and Longitudinal Section Lode 1



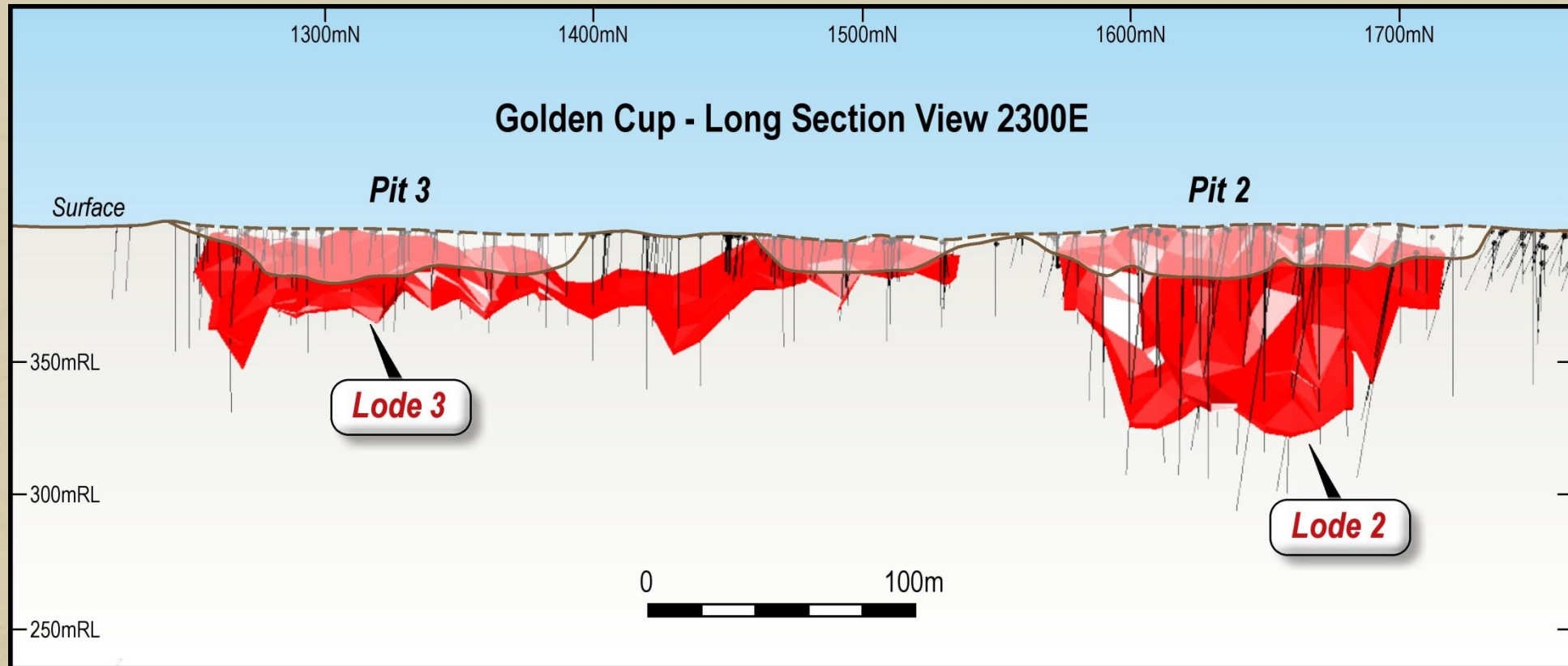
Golden Cup Plan View



Golden Cup Long Section View of Lode 1

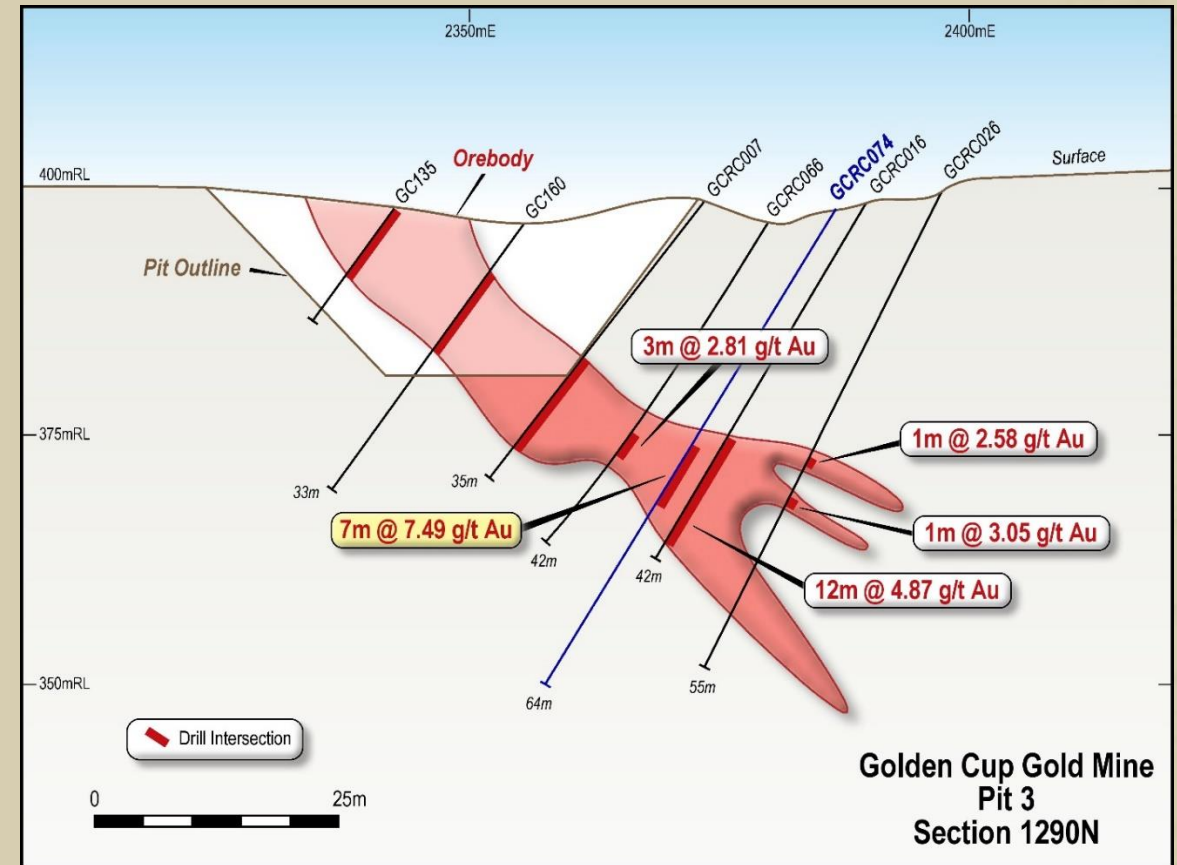
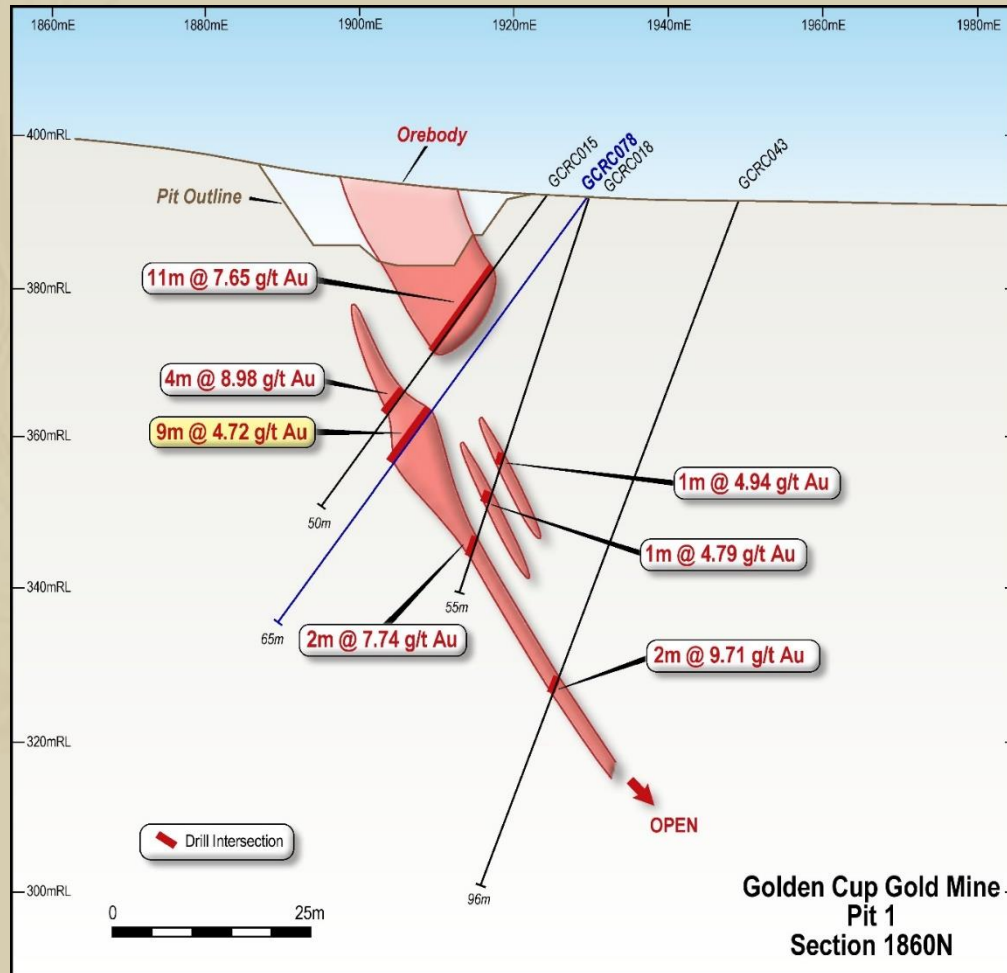


GOLDEN CUP: Longitudinal Section Lodes 2 and 3





GOLDEN CUP





BIG RUSH

- RC Drilling in December 2019 returned high grade gold intercepts beneath the Central Pit including:
 - **28m @ 2.51 g/t Au from 83m (BRRC1007) &**
 - **24m @ 3.99 g/t Au from 73m (BRRC1009).**
- Maiden gold resource of 47,000 ounces announced in February 2020 (558,322 tonnes @ 2.62 g/t Au).
- The largest producer of the Company's mines and with significant infrastructure still in place.
- Historic crushed heap leach operation produced 58,000 ounces from 950,000t @ 1.9g/t Au plus 33,000 tonnes at 11 g/t Au from a small trial CIL operation.
- Mining conducted from 1995-1998.
- Metallurgical testwork in 1994 by Amdel for Werrie Gold Ltd on 3 samples of primary ore showed gravity recoveries of approximately 70% of gold for the 3 samples tested.
- 4 open pits over a 2.2km strike length.
- The Northern, Southern & Sergei Pits remain to be drilled and assessed and will be part of a major exploration drilling program this year, along with resource expansion drilling at the Central Pit.



BIG RUSH



BRRC1005: rig set up and ready to collar – looking SW towards South Pit



North Pit looking NE – steep S-plunging chevron fold in western wall



BIG RUSH



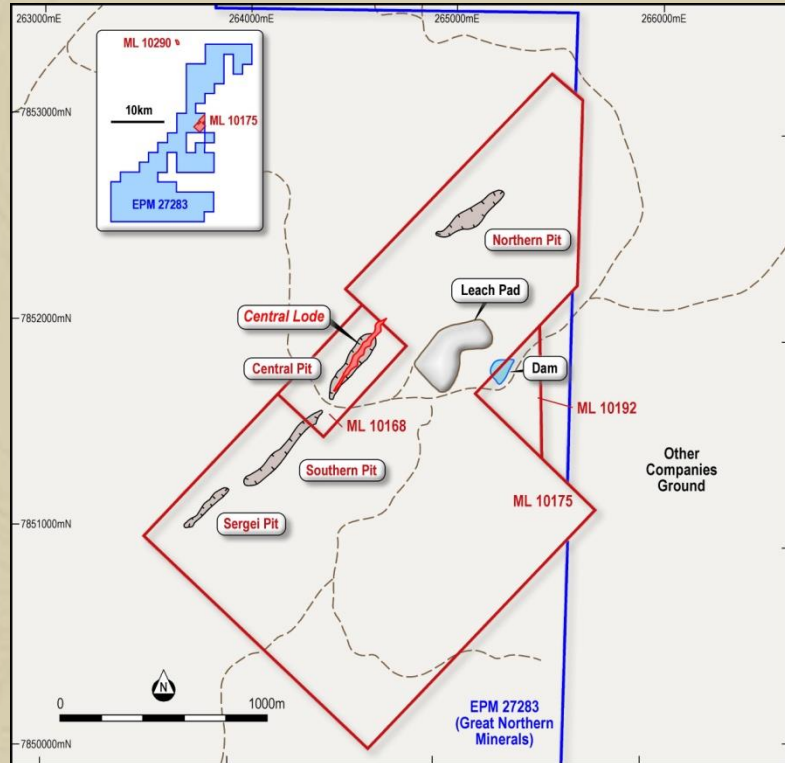
Big Rush impoundment dam & heap leach



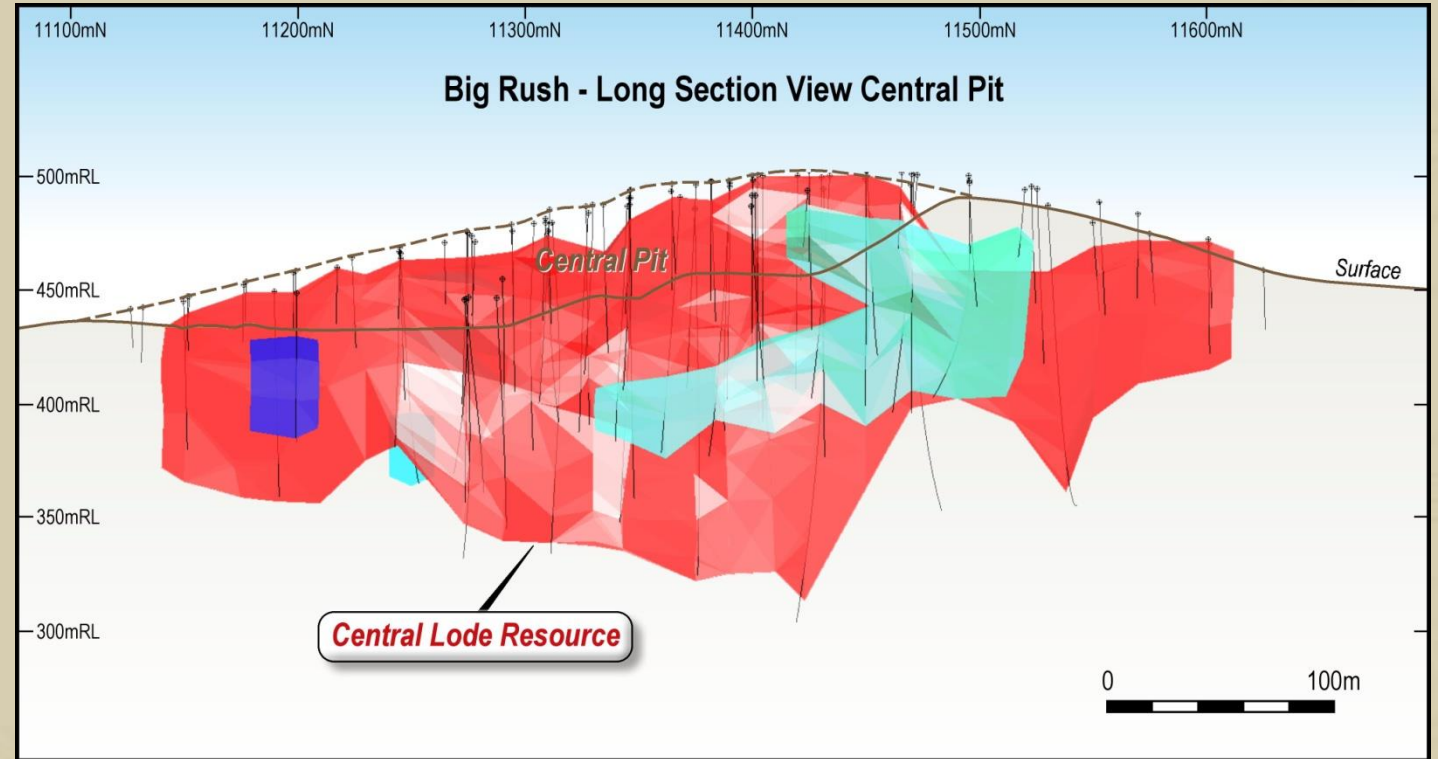
Big Rush Open Pit



BIG RUSH



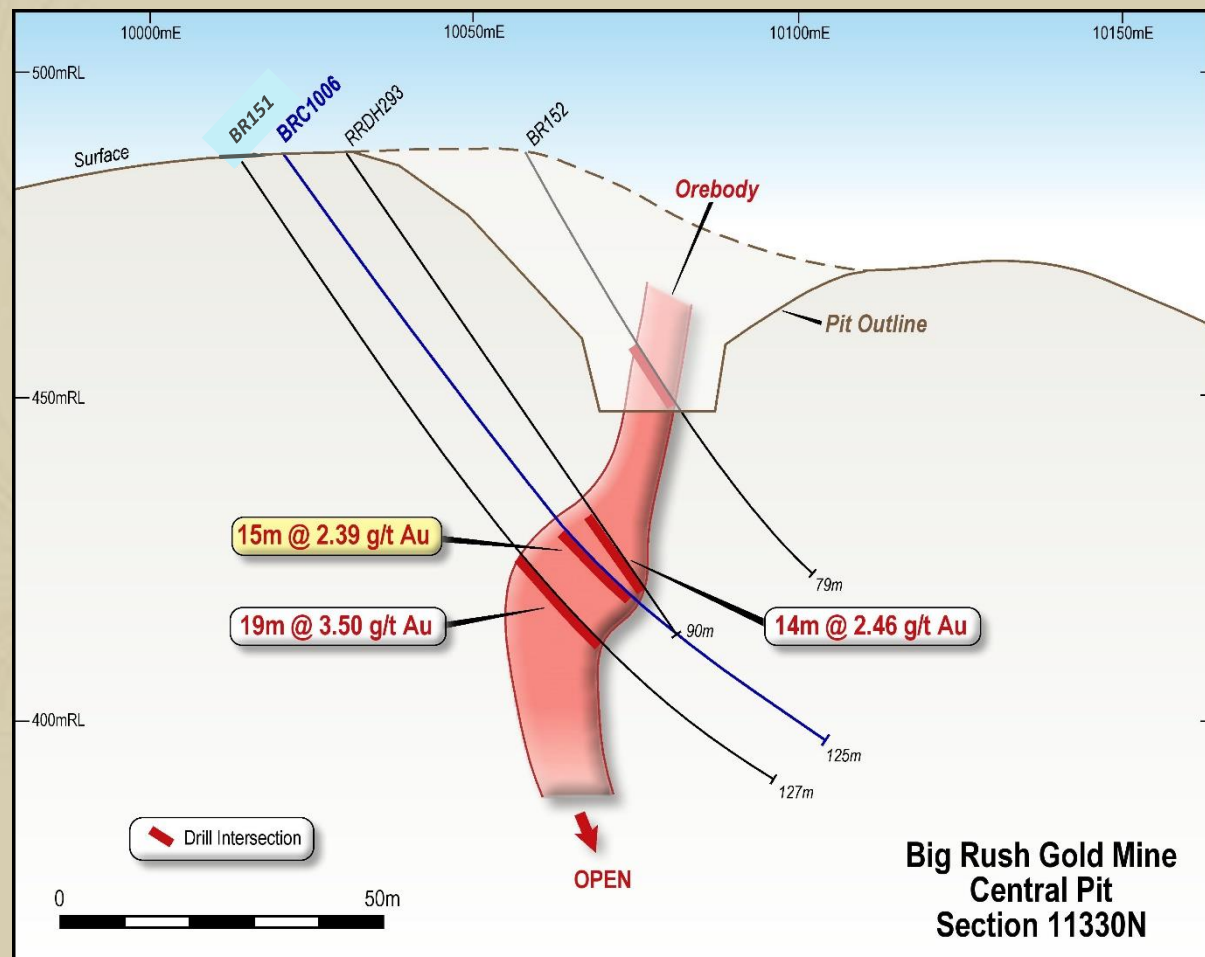
Big Rush Plan View



Big Rush Long Section View of Central Lode



BIG RUSH: Central Pit Drill Section 11330N



Grade increasing with depth

BR152:

7m from 34m @ 2.12g/t Au (1g/t cut)
inc. 2m from 38m @ 3.43g/t Au (2g/t cut)

BRDH293:

14m from 65m @ 2.46g/t Au (1g/t cut)
inc. 3m from 71m @ 8.01g/t Au (2g/t cut)

BRRC1006:

15m from 84m @ 2.39g/t Au (1g/t cut)
inc. 10m from 89m @ 3.05g/t Au (2g/t cut)

BR151:

19m from 74m @ 3.5g/t Au (1g/t cut)
inc. 15m from 76m @ 4.06g/t Au (2g/t cut)



BIG RUSH: Central Pit Drill Section 11390N

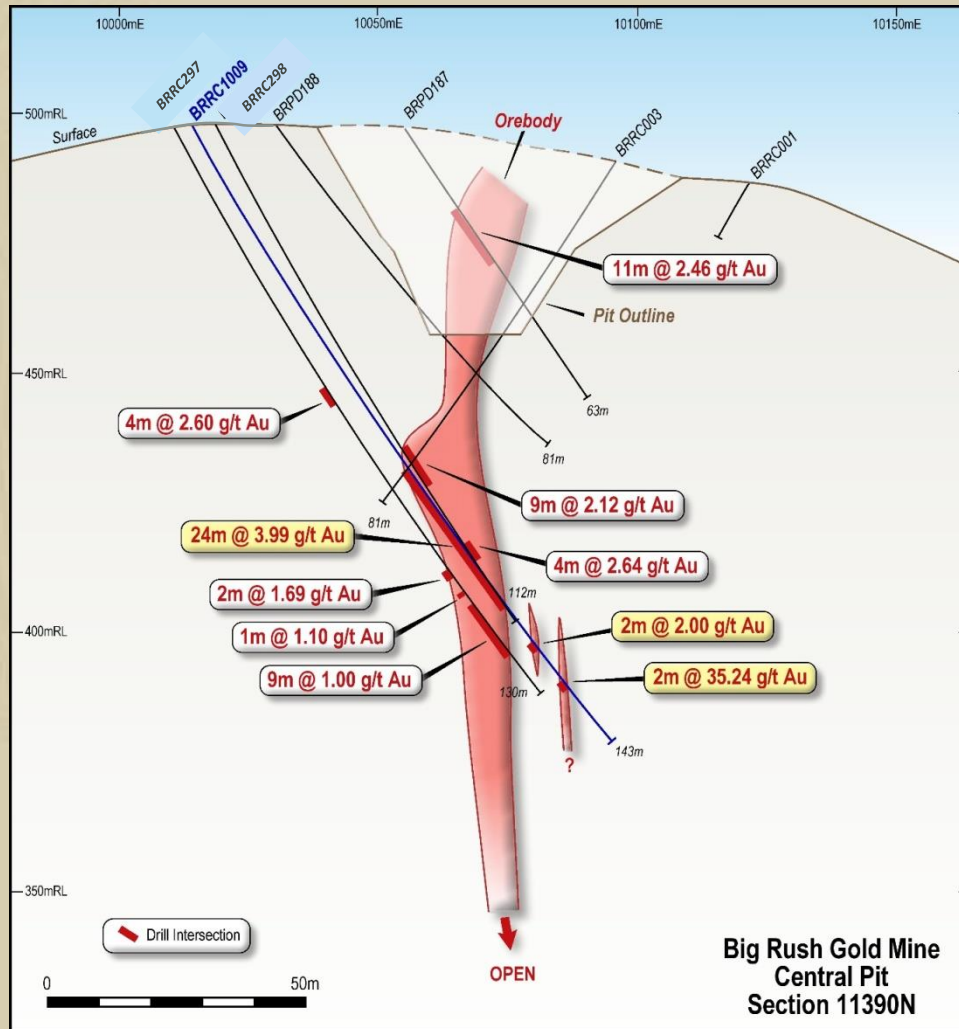
Lower grade section significantly upgraded by recent GNM drilling

BRRC1009, targeted approx 5m south of historic holes BRRC297 and BRRC298, resulted in marked increase in grade, reinforcing need for close pattern drilling. Orientated core drilling will provide vital information to determine structural controls on grade distribution.

BR297: 22m from 98m @ 0.67g/t Au
inc. 9m from 111m @ 1g/t Au

BR298: 24m from 72m @ 1.31g/t Au
inc. 4m from 77m @ 2.9g/t Au
& 4m from 94m @ 2.64g/t Au

BRRC1009: 24m from 73m @ 3.99g/t Au
inc. 10m from 79m @ 5.76g/t Au





CAMEL CREEK

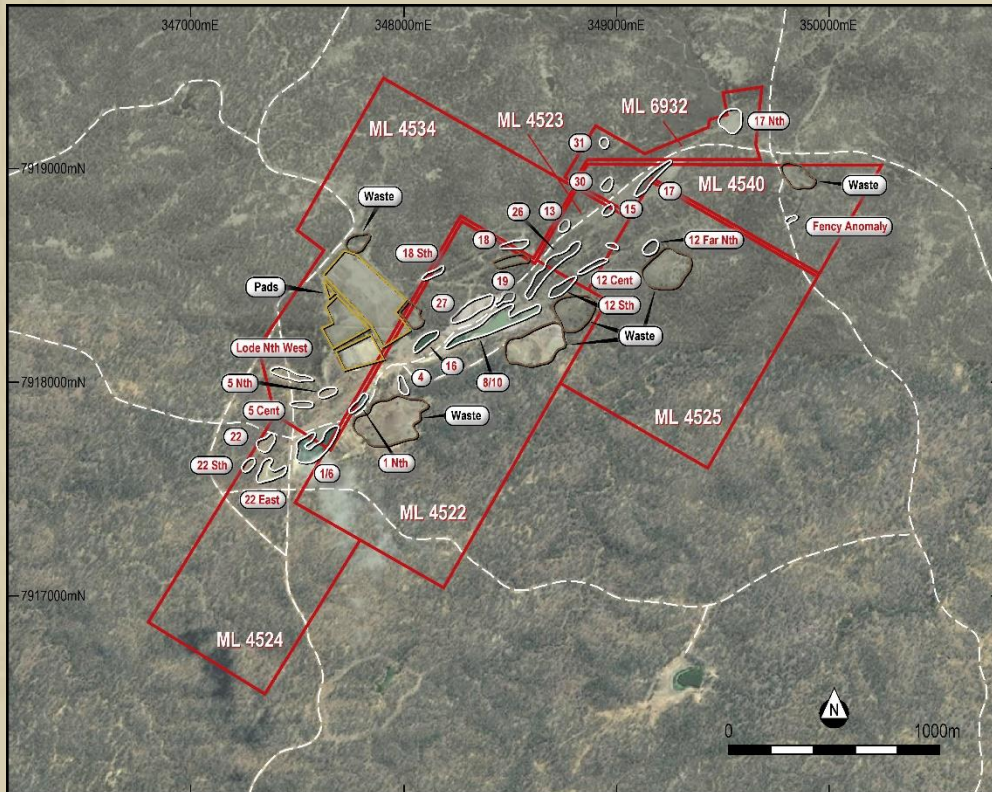
- Over 1Mt @ 1.7g/t Au processed via heap leaching to produce 57,000 ounces. Ore extracted was oxide and was not crushed prior to being placed on the heap leach pads.
- Camel Creek is the largest gold system controlled by GNM and consists of 4km of continuous workings, comprising about 30 individual pits which vary from 12 to 25m deep.
- Better intersections from floor of open pits include:
 - **12m @ 8.4 g/t Au from 0m** (Hole GA343)
 - **22m @ 2.94 g/t Au from 8m** (Hole GA336)
 - **9m @ 10.4 g/t Au from 6m** (Hole GA276)
- All previous drilling was confined to the top 50m. Mineralisation beneath the pits, distributed along 4km of NE-trending strike and up to 500m wide, remains largely untested.
- Previous exploration drilling poorly documented, not accurately surveyed and mostly mined out. A major exploration program will be required in the forthcoming programme to test this high priority target.



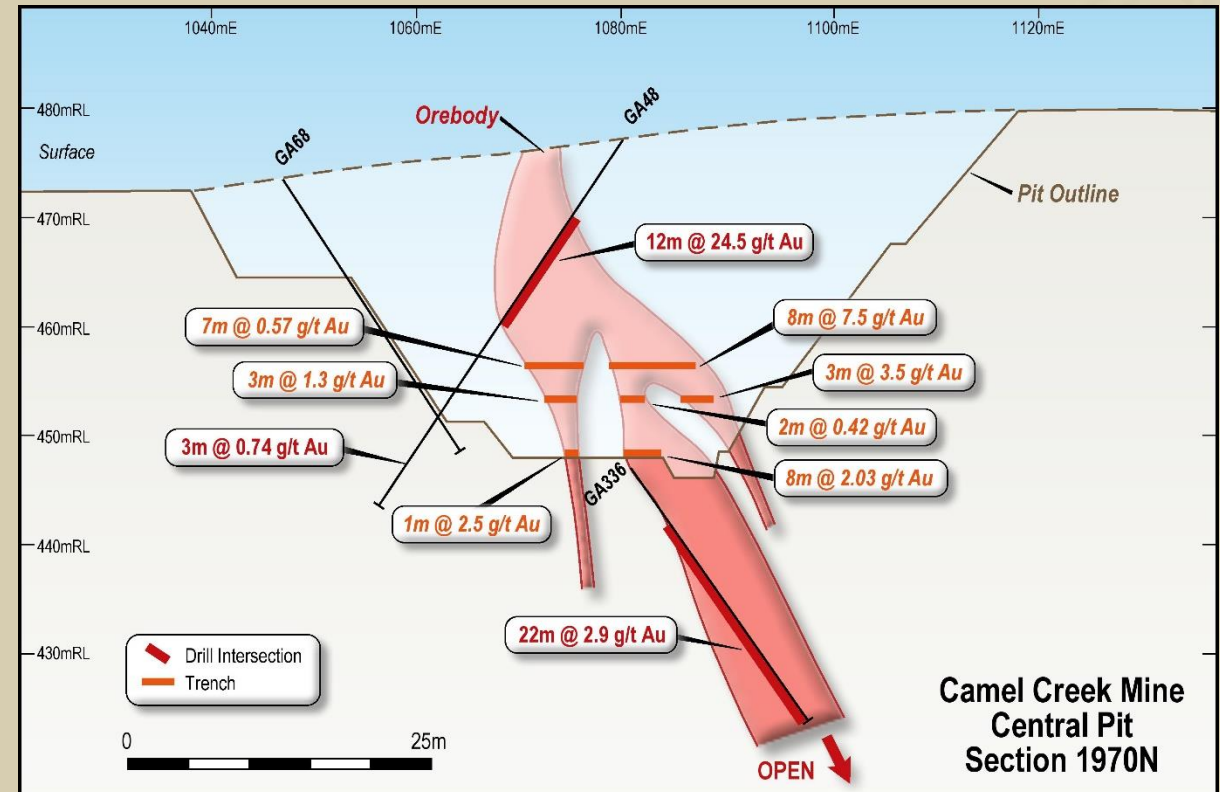
Camel Creek Open Pit



CAMEL CREEK



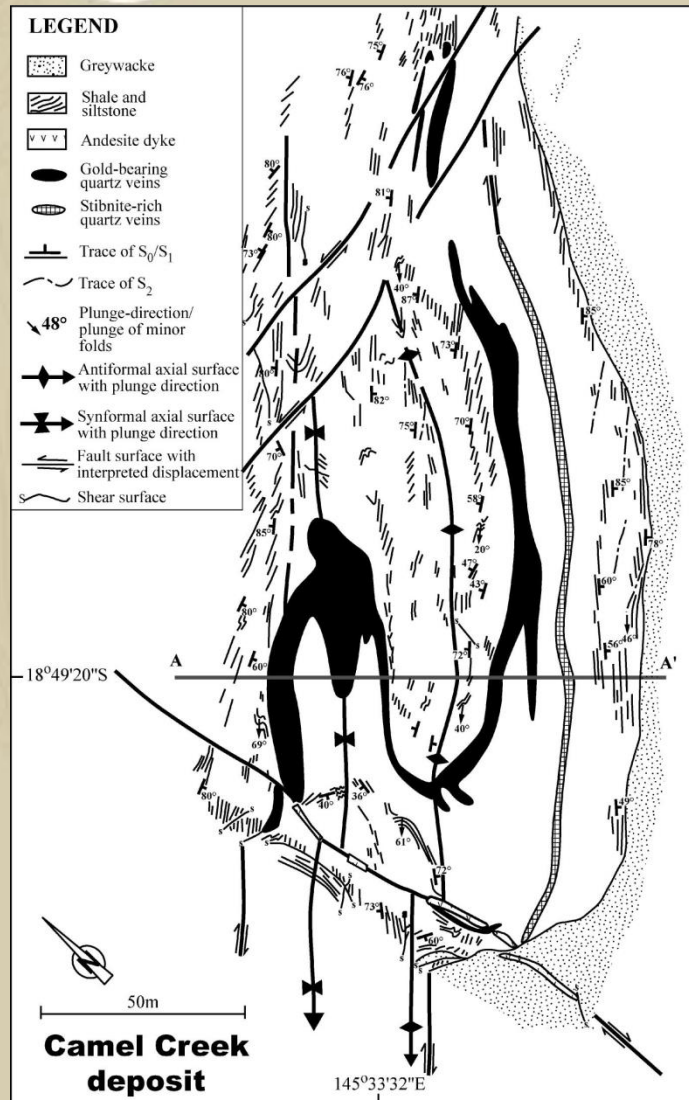
Camel Creek Plan View



Camel Creek Cross Section

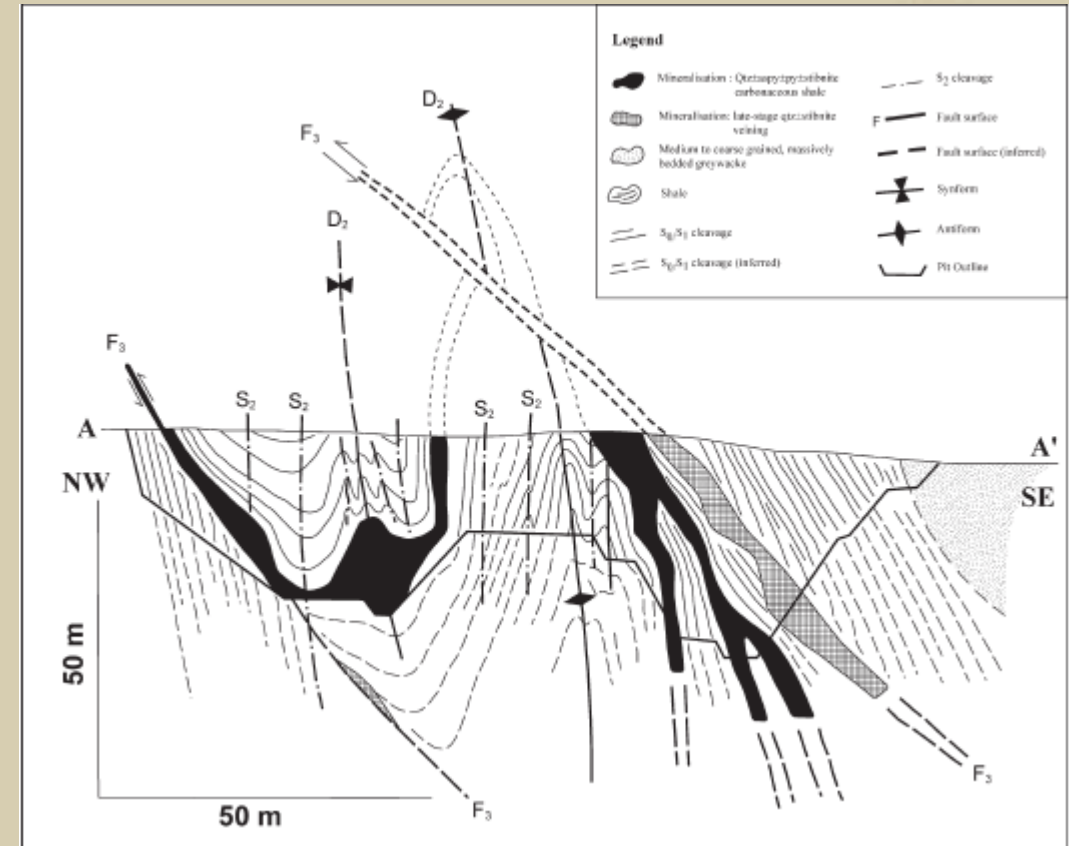
Camel Creek: Geology Plan and Cross Section – Pit1/6

(from: G. S. Teale, I. M. A. VOS, F. P. BIERLEIN)



Geology plan (LHS) and cross section (RHS), Pit 1/6, showing:

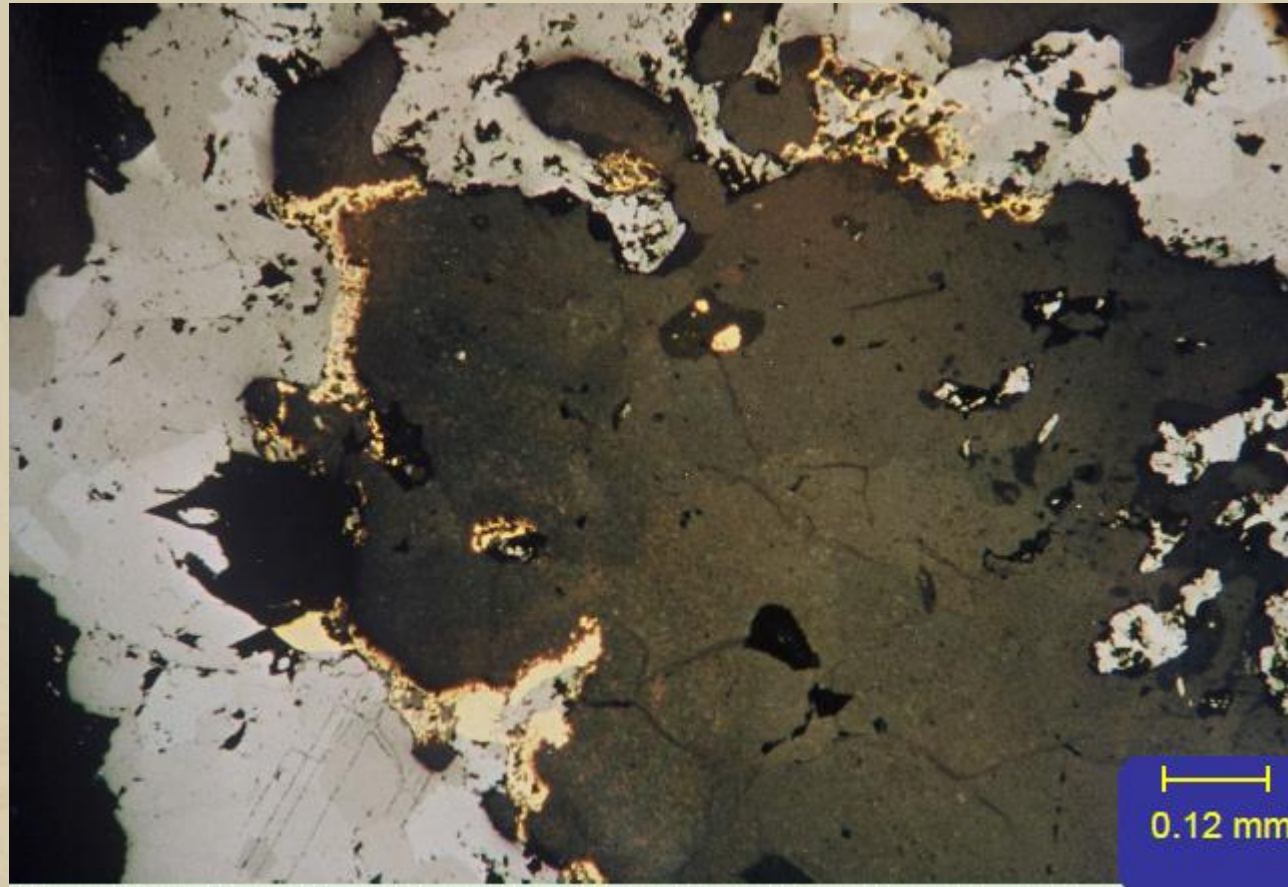
- overprinting relationships between the main deformation phases,
- the folded nature of the ore lens and
- late-stage quartz-stibnite vein





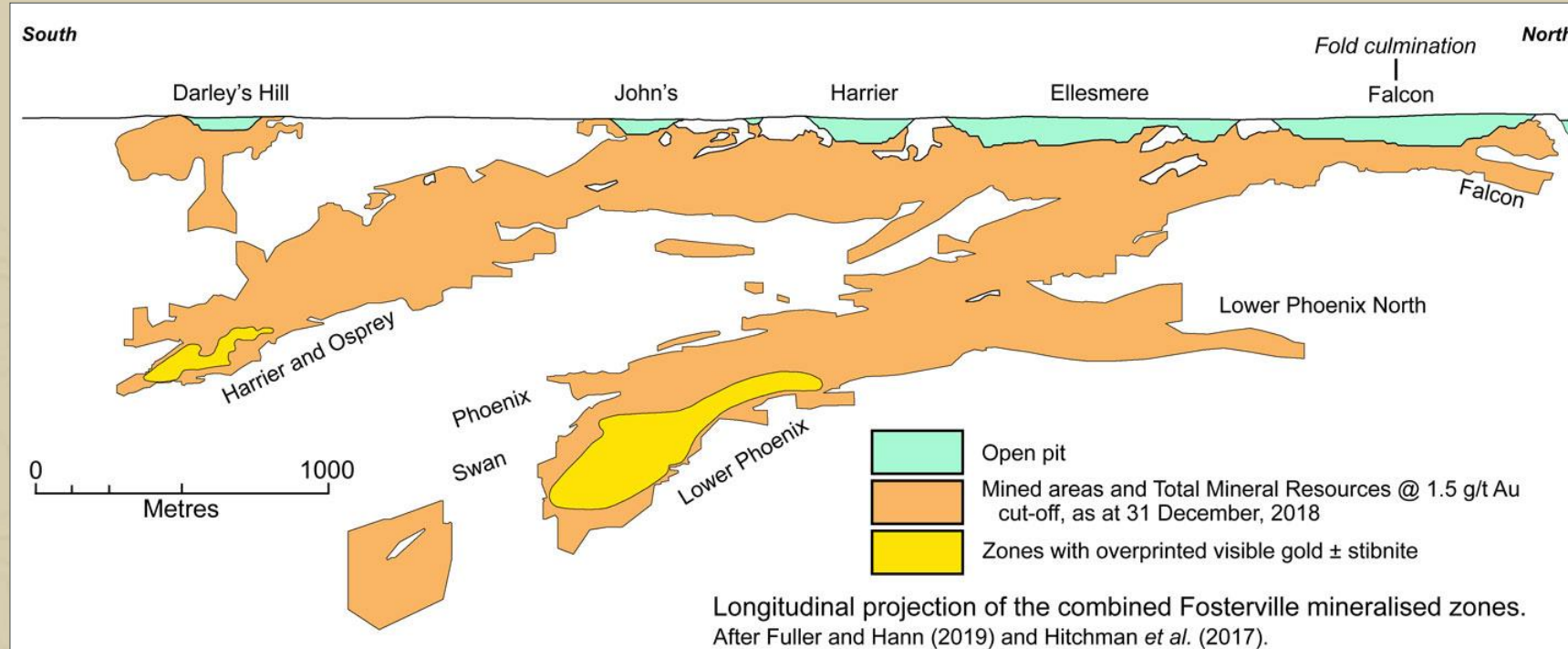
Camel Creek: Gold developing after aurostibite and enclosing quartz gangue

(From: G.S. Teale¹, I.M.A. Vos², F.P. Bierlein)





Fosterville Comparison - Compelling



- Similar age host rocks
- Comparable periods of deformation and metamorphism
- Comparable mineralogy
- Similar strike length
- Deep drilling in 2015 unlocked the deep potential
- 1995 reserves and resources for Fosterville similar grade to Big Rush, Golden Cup and Camel Creek
 - 4.79Mt @ 1.1 g/t Au Oxide ore and 5.9Mt @ 2.7 g/t Au sulphide ore



Process Highlights

2019 – Implementing the vision

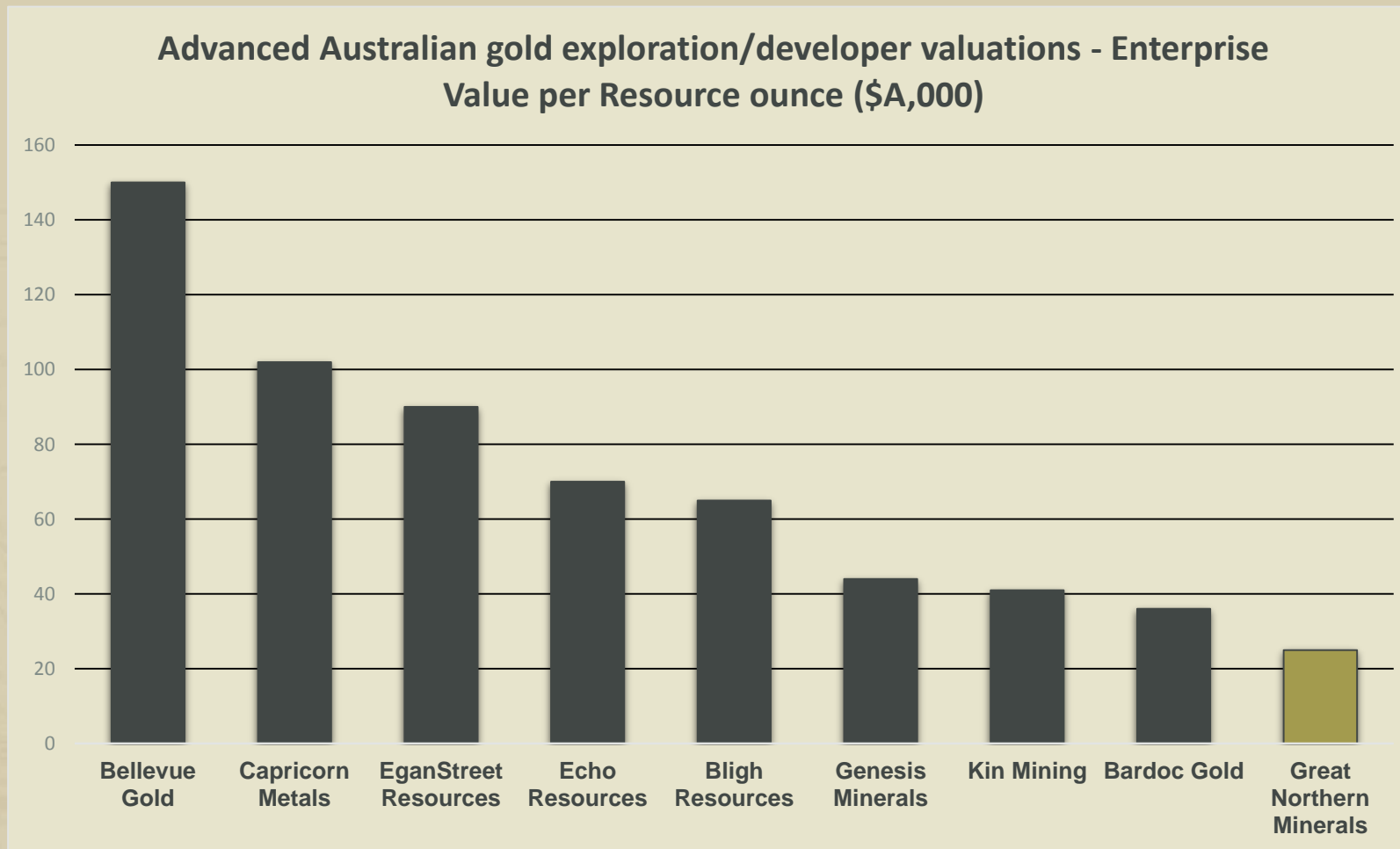
- Divested all non-core projects
- Signed Heads of Agreement for 3 previously mined gold projects
- Rebranded to Great Northern Minerals to reflect the refreshed vision of the Company
- Completed 10-1 share consolidation
- Released maiden JORC resource of 30,000 ounces at Golden Cup
- Completed drilling campaign at Golden Cup and Big Rush with encouraging results and a new zone identified at Big Rush

2020 – Executing the strategy

- Released maiden JORC resource of 47,000 ounces at Big Rush.
- Finalising toll treating agreements
- Further drilling at all projects
- Drilling and bulk testing heap leach material
- Continue resource growth toward 500,000 ounces
- Complete detailed extension and infill drilling Golden Cup to 100-200m depth, metallurgical and geotechnical studies and mining scoping studies in preparation for commencement mining in calendar 2021



Valuations





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