



HEMI DISCOVERY MALLINA GOLD PROJECT

Annual General Meeting
4 December 2020



FORWARD LOOKING STATEMENTS DISCLAIMER



These materials prepared by De Grey Mining Limited (or the "Company") include forward looking statements. Often, but not always, forward looking statements can generally be identified by the use of forward looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue", and "guidance", or other similar words and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production outputs.

Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance and achievements to differ materially from any future results, performance or achievements. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licenses and permits and diminishing quantities or grades of reserves, political and social risks, changes to the regulatory framework within which the Company operates or may in the future operate, environmental conditions including extreme weather conditions, recruitment and retention of personnel, industrial relations issues and litigation.

Forward looking statements are based on the Company and its management's good faith assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect the Company's business and operations in the future. The Company does not give any assurance that the assumptions on which forward looking statements are based will prove to be correct, or that the Company's business or operations will not be affected in any material manner by these or other factors not foreseen or foreseeable by the Company or management or beyond the Company's control.

Although the Company attempts and has attempted to identify factors that would cause actual actions, events or results to differ materially from those disclosed in forward looking statements, there may be other factors that could cause actual results, performance, achievements or events not to be as anticipated, estimated or intended, and many events are beyond the reasonable control of the Company. Accordingly, readers are cautioned not to place undue reliance on forward looking statements. Forward looking statements in these materials speak only at the date of issue. Subject to any continuing obligations under applicable law or any relevant securities exchange listing rules, in providing this information the Company does not undertake any obligation to publicly update or revise any of the forward looking statements or to advise of any change in events, conditions or circumstances on which any such statement is based.

Aspirational goal Cautionary Statement: The potential quantity and grade of the aspirational goal referred to on Slide 4 is conceptual in nature. As at the date of this report, there has been insufficient exploration to determine a Mineral Resource of this magnitude and there is no certainty that further exploration work will result in the determination of such Mineral Resources to be realised.

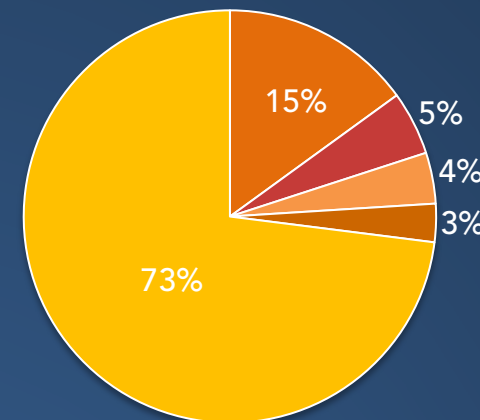
CORPORATE OVERVIEW



Corporate structure

| | |
|---|-----------|
| Shares (ASX:DEG) | 1,278M |
| Options | 6.74M |
| Performance rights | 1.45M |
| Share price (3 Dec 2020) | A\$1.12 |
| Market capitalisation | A\$1.4B |
| Cash (30 Sep 2020) | A\$109.5M |
| plus Cash (post 30 Sep 2020) | A\$12.5M |

Shareholders



- DGO Gold Limited
- Van Eck
- Northwest Nonferrous
- Directors and Management
- Other

Major Shareholders

| | |
|-----------------------|-----|
| Top 20 holders | 66% |
| Top 50 holders | 73% |

BOARD AND TECHNICAL MANAGEMENT



Simon Lill
Non-Executive Chairman



Glenn Jardine
Managing Director



Peter Hood AO
Non-Executive Director



Andy Beckwith
Executive Technical Director



Eduard Eshuys
Non-Executive Director



Phil Tornatora
Exploration Manager



Bruce Parncutt AO
Non-Executive Director



Allan Kneeshaw
Consulting Geologist

A TRANSFORMATIONAL YEAR

Achievements since the announcement of the discovery of Hemi in December 2019

\$131m
raised



Cash

8

drill rigs
from 3



Discovery

250km
drilled



Productivity

2,700%
share price
increase*



Shareholder
returns

*From 17 December 2019 to 3 December 2020

INDUSTRY RECOGNITION FOR OUR TEAM



Best Emerging
Company 2020



Explorer of the
Year 2020



Explorer of the
Year 2020

LEADING CONSULTANTS AND CONTRACTORS

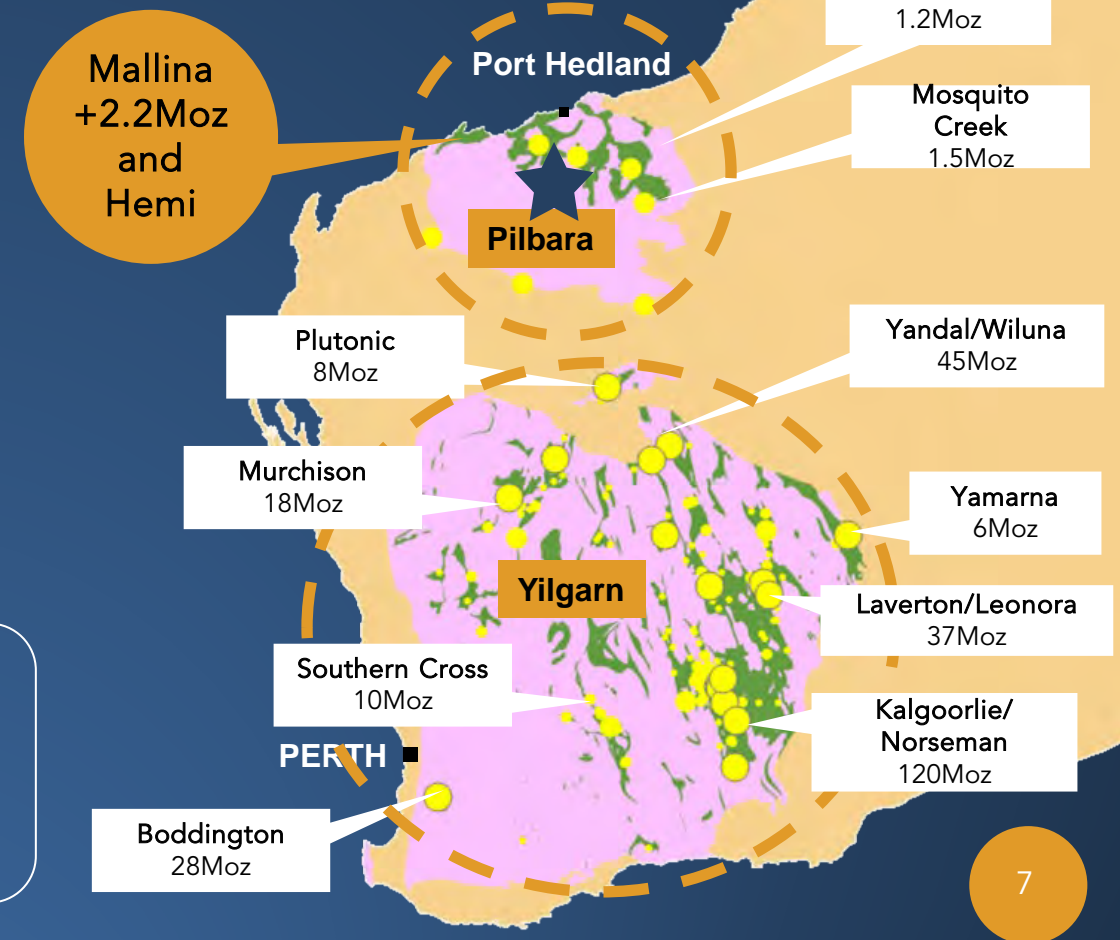


REDEFINING THE PILBARA

- The same geological setting as the Yilgarn:
 - Archaean aged rocks 2.5 – 4 billion years old
 - Granite/greenstone belts
- De Grey has been operating in the Pilbara region since 2003
- Potential for shear-hosted gold recognised for many decades
- More recent discovery of an intrusion-hosted style of gold mineralisation new for the Pilbara
- Transformational discovery at Hemi for De Grey and the Pilbara region

Pilbara Craton +8Moz

- Immature modern exploration (<20yrs)
- New shallow discoveries expected



Yilgarn Craton +200Moz

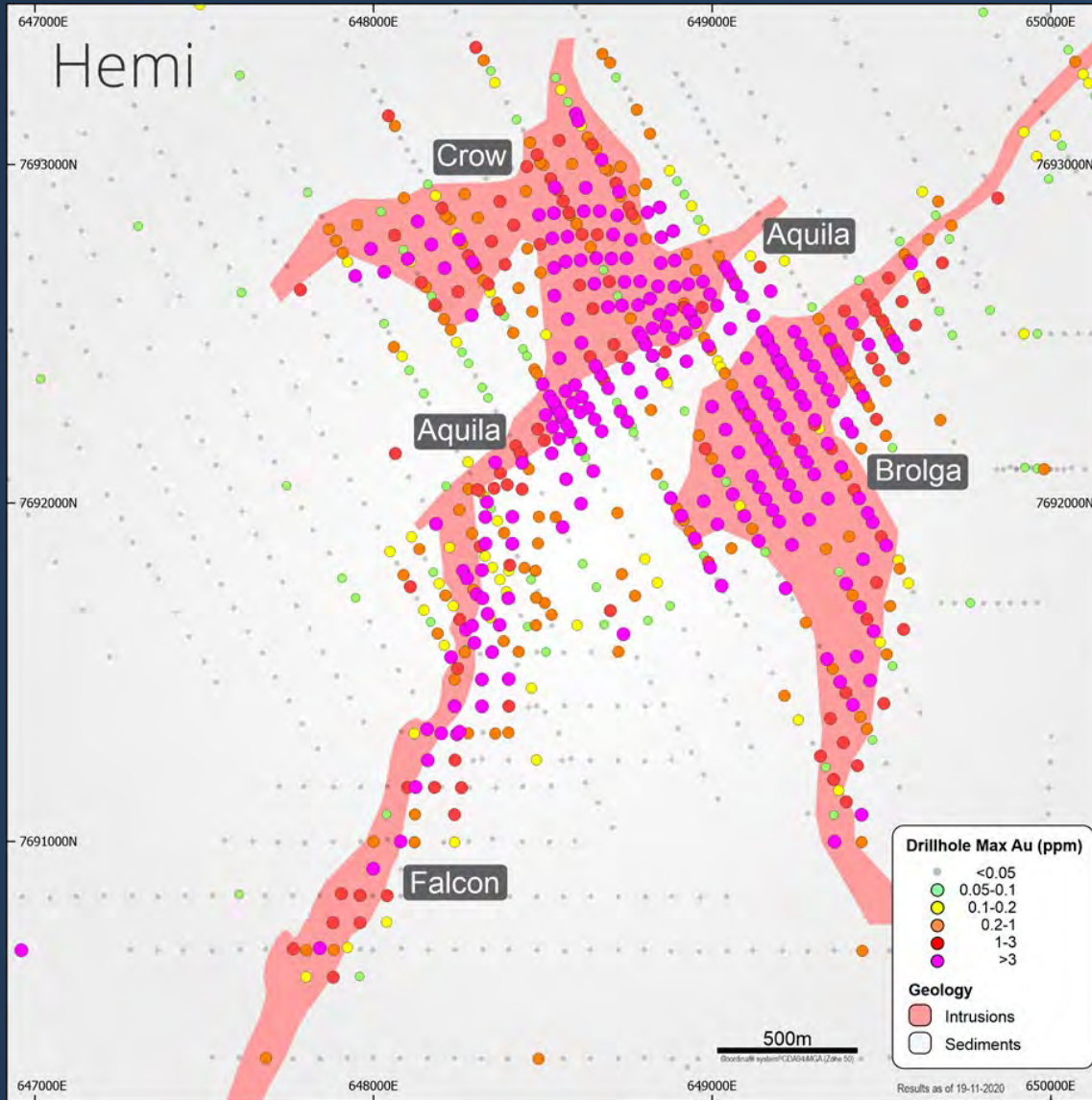
- Very mature exploration (>120yrs)
- New discoveries expected at depth

THE HEMI DISCOVERY

- Major new gold discovery at Hemi within the Mallina Gold Project in late 2019
- A new style of gold deposit in the Pilbara:
 - Intrusion-hosted
 - Large scale, close to surface, grade continuity
 - High value deposit
- Underexplored with district-scale upside
- Located near world-class established mining infrastructure and major regional centres
- Immediate growth strategy linked to increasing gold resources, extending deposits and making large new discoveries



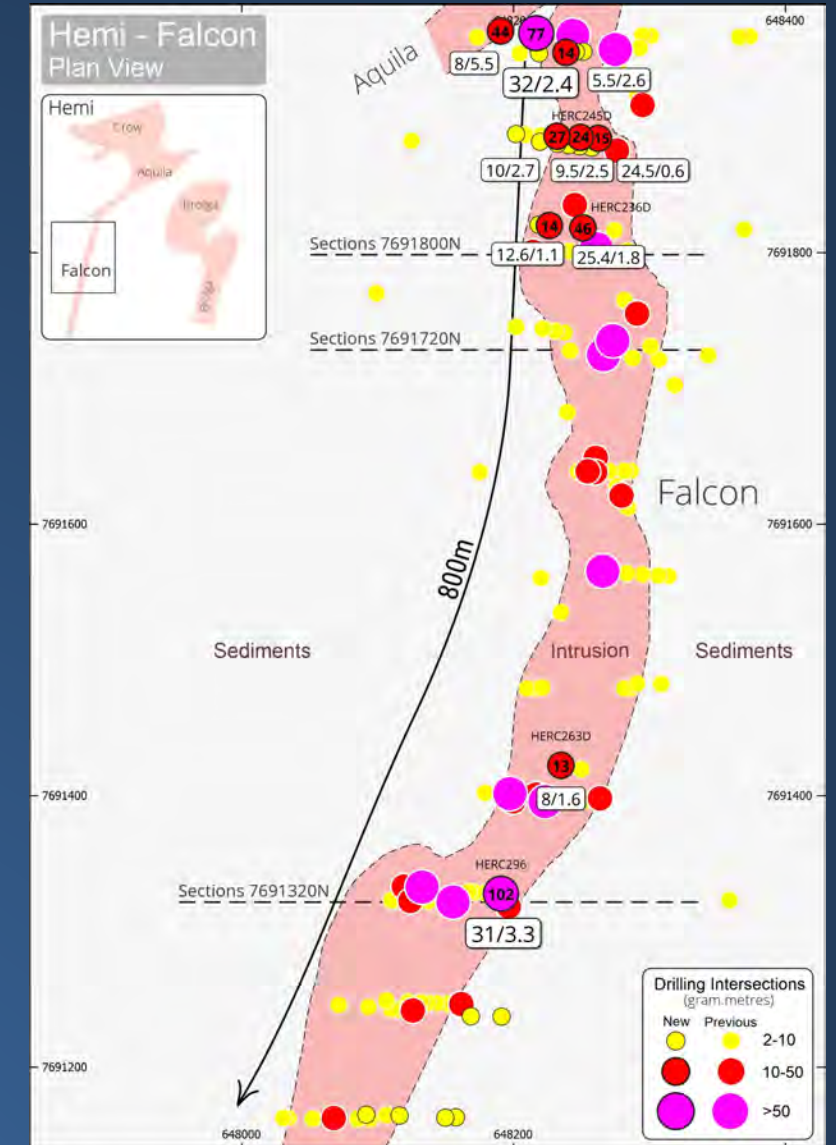
AN OVERVIEW OF HEMI TODAY



- Four main zones identified to date:
 - Aquila, Brolga, Crow, Falcon
- Mineralisation defined over a large area:
 - +3,500m north-south
 - +3,500m east-west
 - Depths up to +400m
- All zones open along strike and at depth
 - Brolga to the west and south
 - Crow to the west
 - Aquila to the south west
 - Falcon to the south
- Eight rigs conducting extensional and infill drilling to support maiden Mineral Resource for Hemi in H1 2021

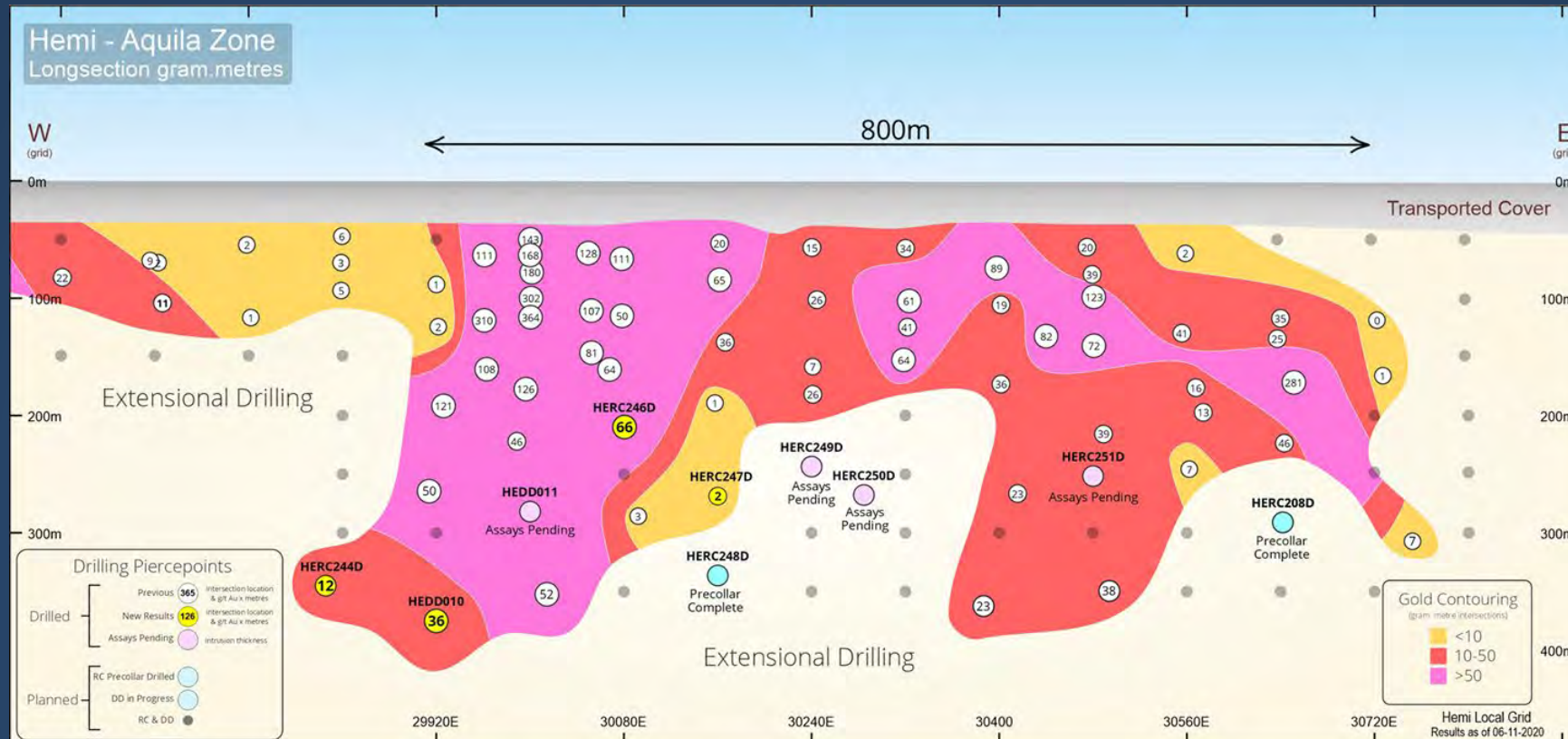
FALCON ZONE

- Immediately south of Aquila and west of Brolga
- Identified in September 2020
- RC and diamond drilling has confirmed mineralisation over more than 1,000m strike and 300m below surface
- Open along strike and at depth
- Mineralisation style similar to Aquila
- Recent intersections include:
 - 31m @ 3.3g/t Au from 101m (HERC296)
 - 32m @ 2.4g/t Au from 43m (HERC412)
- RC and diamond drilling continuing to test along strike to the south and depth potential
- Aircore and RC drilling also targeting southern extensions gold anomalies east towards Brolga



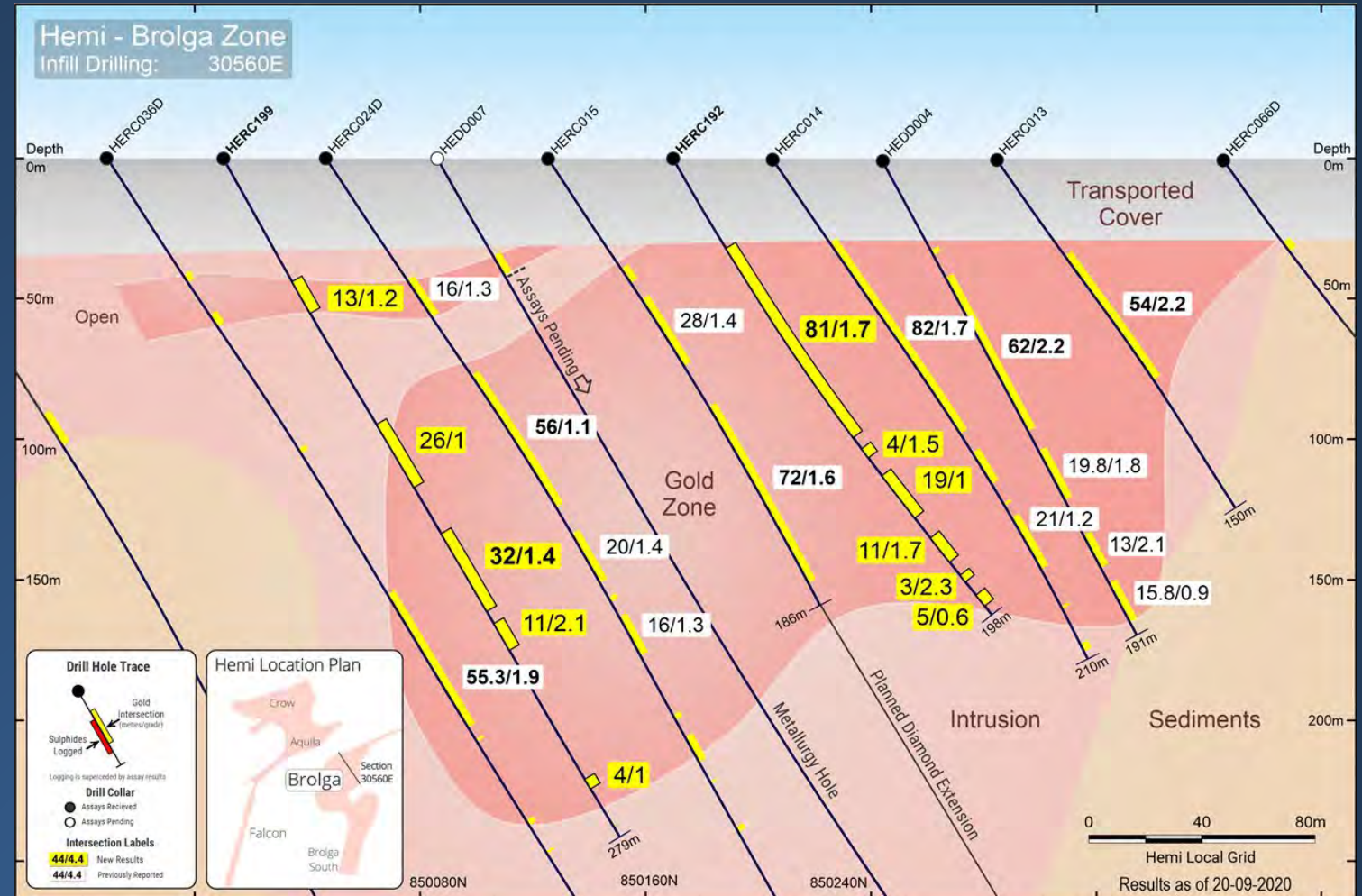
AQUILA ZONE

- Approximately 1.2km in strike and open to the west
- High grade drill results demonstrating high ounces per vertical metre
- Mineralisation confirmed to ~400m depth and remains open



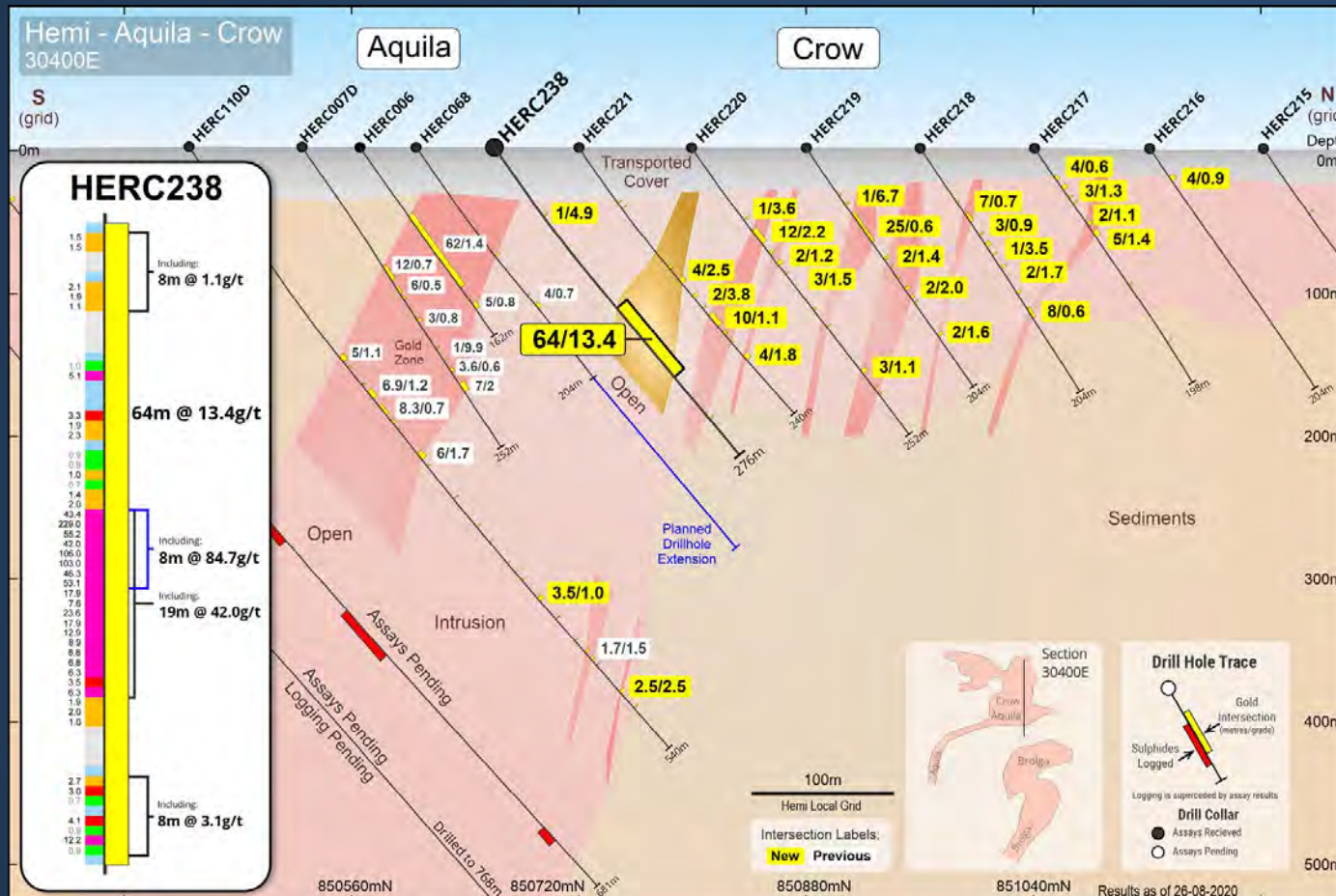
BROLGA ZONE

- Large zone with a strike of approximately 800m and up to 300m wide
- RC definition drilling
- DD extensional drilling
- Open to the west, south and at depth
- Strong grade continuity
- Low strip ratio
- Bulk mining characteristics
- Extensional drilling to define scale ongoing



CROW ZONE

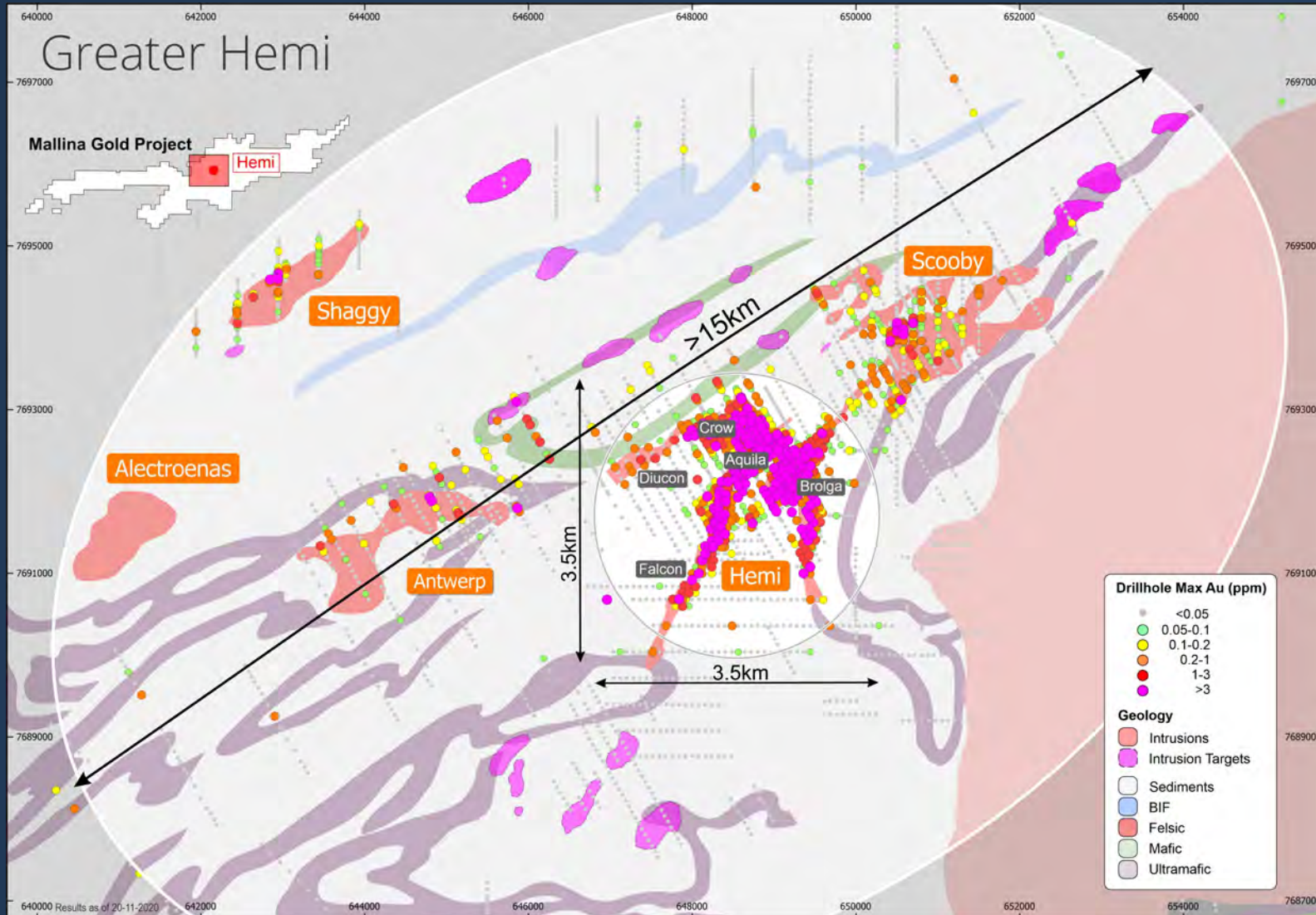
- Zone up to 400m wide and 1,000m strike – only recent infill drilling on 80m lines
- RC step out drilling and definition continuing and diamond drilling testing depths extents



High-grade lodes and visible gold

- Infill drilling has identified a number of high-grade lodes and areas of visible gold:
 - 64m @ 13.4g/t Au from 141m including 19m @ 42.0g/t Au from 170m (HERC238)
 - 17m @ 12.9g/t Au from 91m including 7m @ 29.4g/t from 94m (HERC342)

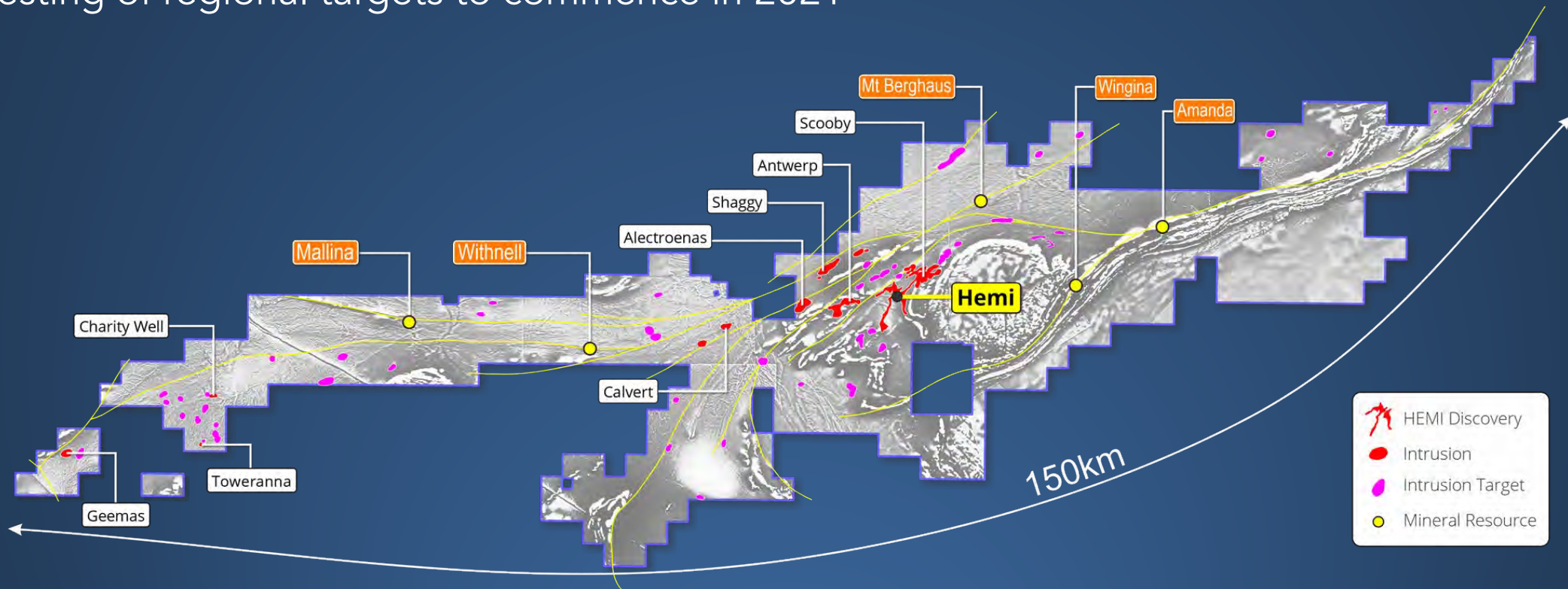
GREATER HEMI



- Extending the Hemi discovery remains the main focus of drilling
- Aircore drilling in the Greater Hemi area is progressing
- Anomalous gold and geochemical targets will be followed up with RC drilling underway

HUGE UNTESTED REGIONAL POTENTIAL

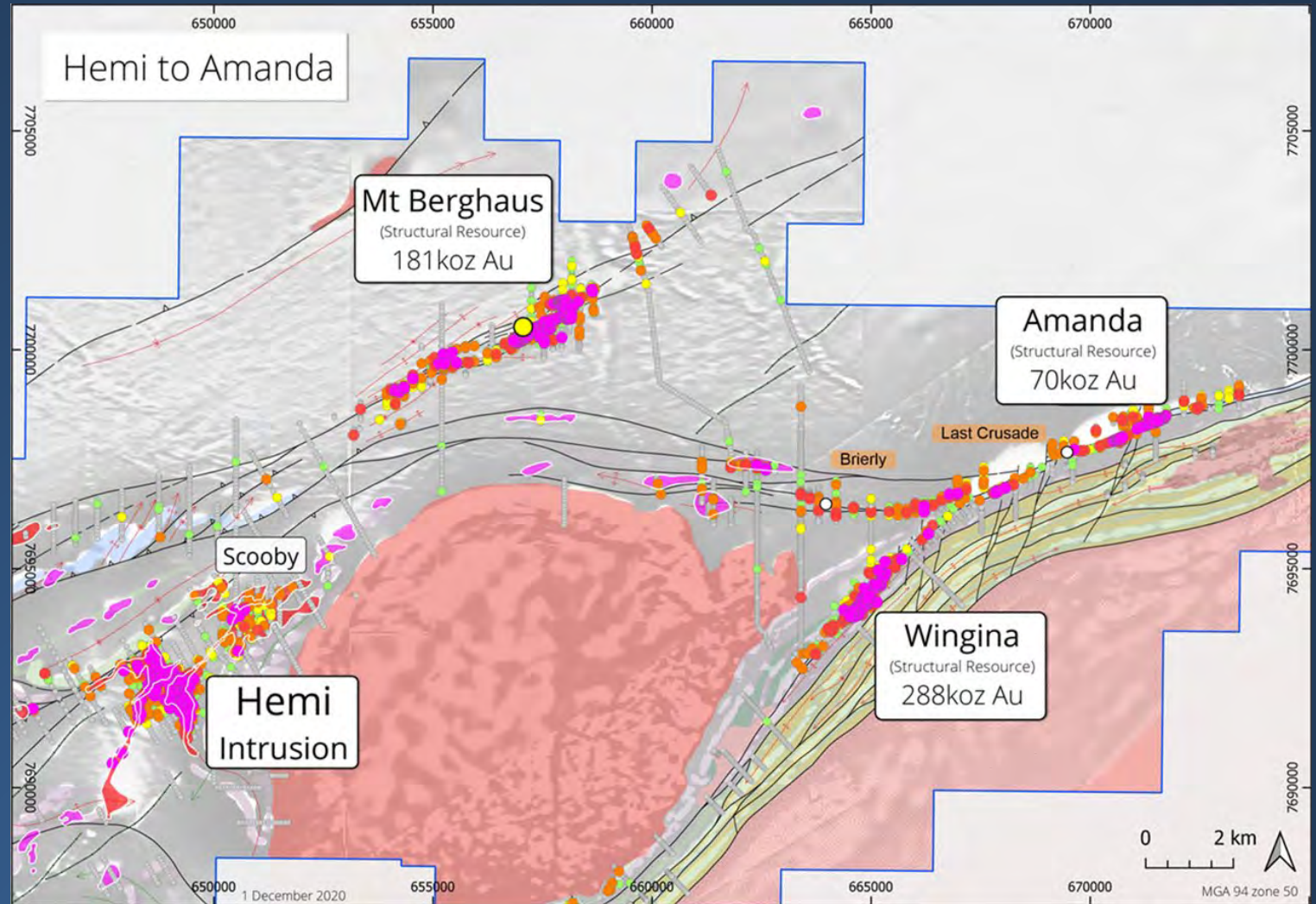
- Hemi remains the main drilling focus and continues to grow with potential for new zones
- Four known intrusions outside the Greater Hemi area plus more than 30 intrusion targets
- More than 200km of shear zones with high potential to extend existing shear-hosted Mineral Resource of 37.4Mt at 1.8g/t Au for 2.2Moz (excluding Hemi) with known deposits still open
- Testing of regional targets to commence in 2021



REGIONAL – HEMI TO AMANDA

- Structural Corridor wrapping around Mt Dove Granite
- Opportunity for dilation
- Multiple potential intrusions identified
- Limited drilling to date along 10km corridor

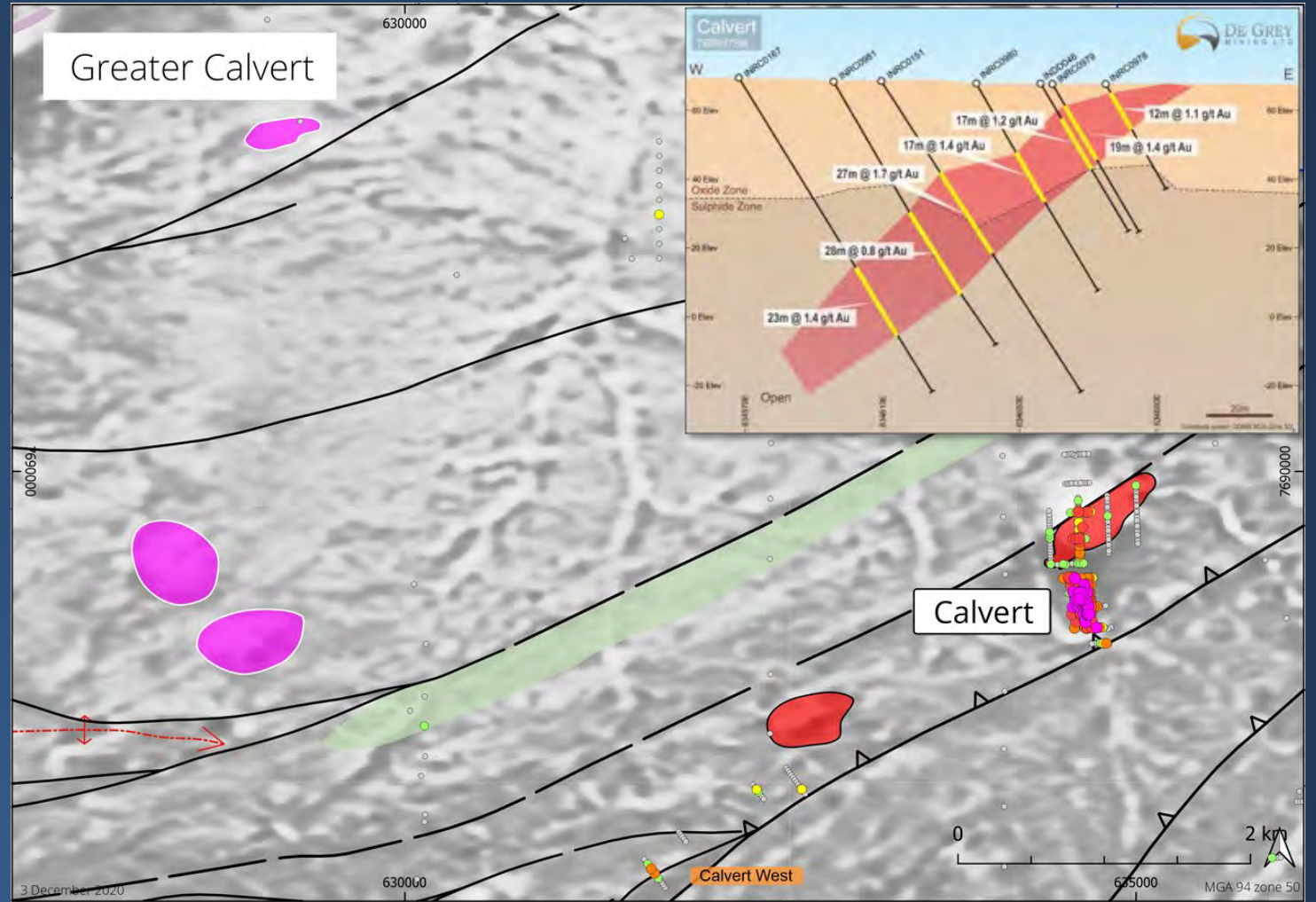
Mallina Gold Project



REGIONAL – INTRUSION TARGET – CALVERT

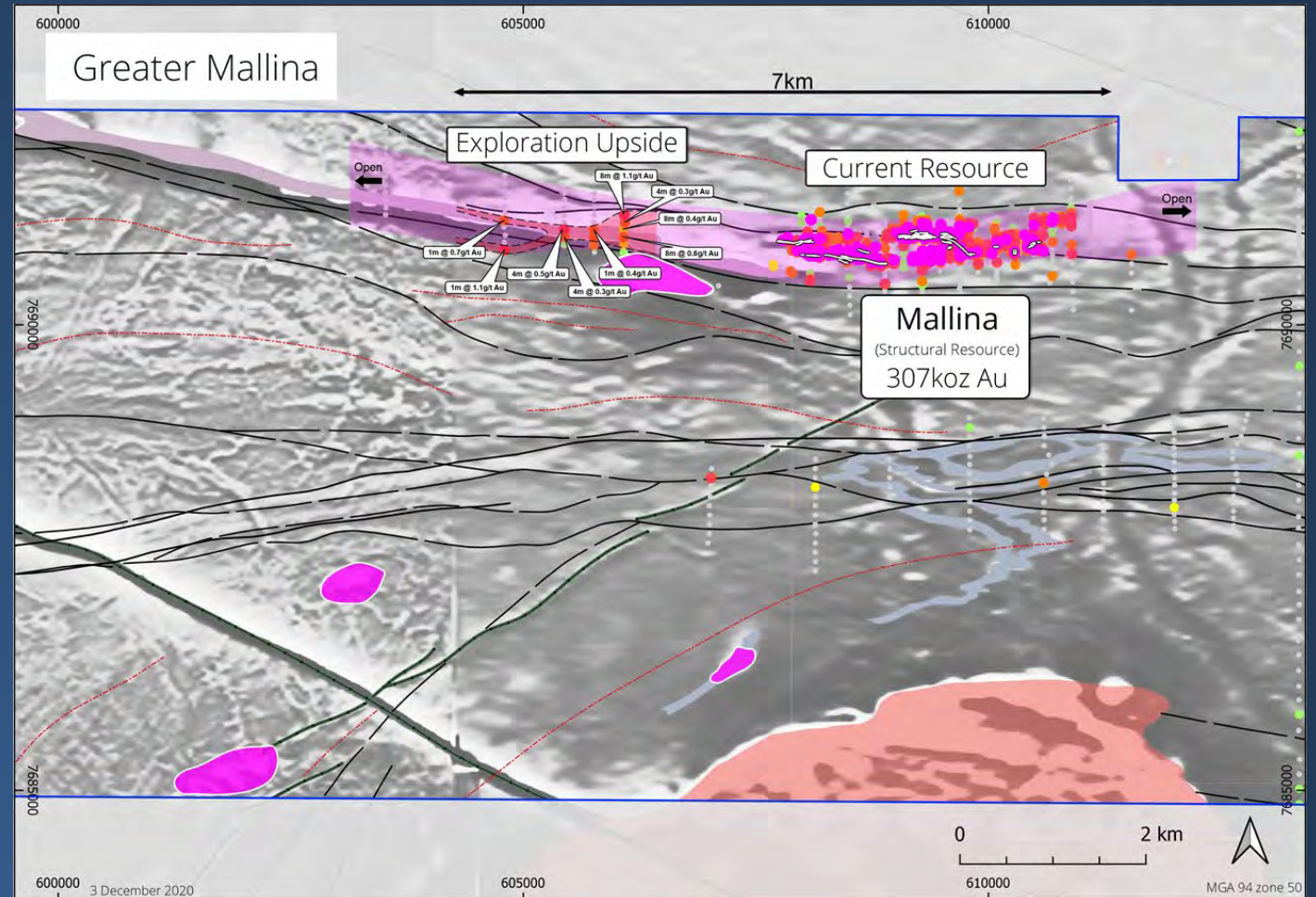
- Mineralisation in sediments adjacent to intrusion
- Limited shallow drill testing to date into intrusive target

Mallina Gold Project



REGIONAL DEPOSIT – MALLINA

- Mallina has been tested along only ~3km of strike
- Gold mineralisation intersected over 7km in total
- Potential for growth of current 307koz Mineral Resource
- Nearby untested intrusive target



PROJECT STUDIES

- Long lead time de-risking studies underway:
 - Metallurgy, environment, infrastructure corridors
- Initial metallurgical testwork on Brolga:
 - 93% in oxidised using carbon in leach (CIL)
 - 96% in fresh rock using flotation, oxidation and CIL
 - High gold recovery into concentrate at low mass pull
 - Oxidation circuit ~15x smaller than plant front end
 - High Au:S ratio in concentrate – lowers hydrometallurgical circuit size and oxygen addition rate
 - Variability and optimisation testwork continuing
- Hydrometallurgical processes to be assessed include:
 - POX, Albion and BIOX





BUILDING A SOLID BUSINESS



Safety

Risk and Safety, Health and Environment Manager appointed

Successful COVID 19 management

Governance

Appointment of Managing Director and Board restructure to majority Non-Executive Directors including Chair

Environment

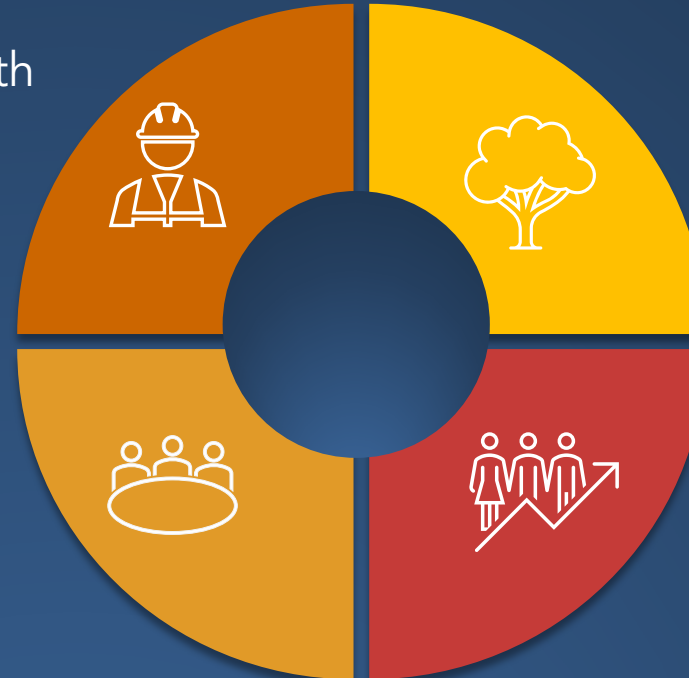
Heritage surveys underway and will continue for exploration

Detailed environmental surveys starting 2021

People

Community Relations Manager appointed

Mission Australia East Pilbara partnership



FOCUS FOR 2021

Hemi

- RC/diamond drilling to expand and delineate the footprint and depth of the known mineralisation
- Maiden Mineral Resource in mid-2021
- Zones remain open
- Potential for new zones to be identified

Greater Hemi

- Continued aircore drilling of known intrusions
- Anomalous gold mineralisation and prospective geochemical targets will be followed up by RC drilling starting H1 2021

Regional

- Aircore drilling expanding to test known regional intrusions outside Greater Hemi:
 - Charity Well
 - Calvert
 - Geemas
 - Others
- RC/diamond drilling to extend existing shear hosted deposits

Development

- More detailed metallurgical testwork on wider Hemi ore types:
 - POX
 - Albion
 - BIOX
- Heritage surveys
- Environmental surveys
- Mining and processing studies

LONG-TERM GROWTH STRATEGY



Demonstrate Tier 1 scale resource and production potential at Hemi mid-2021



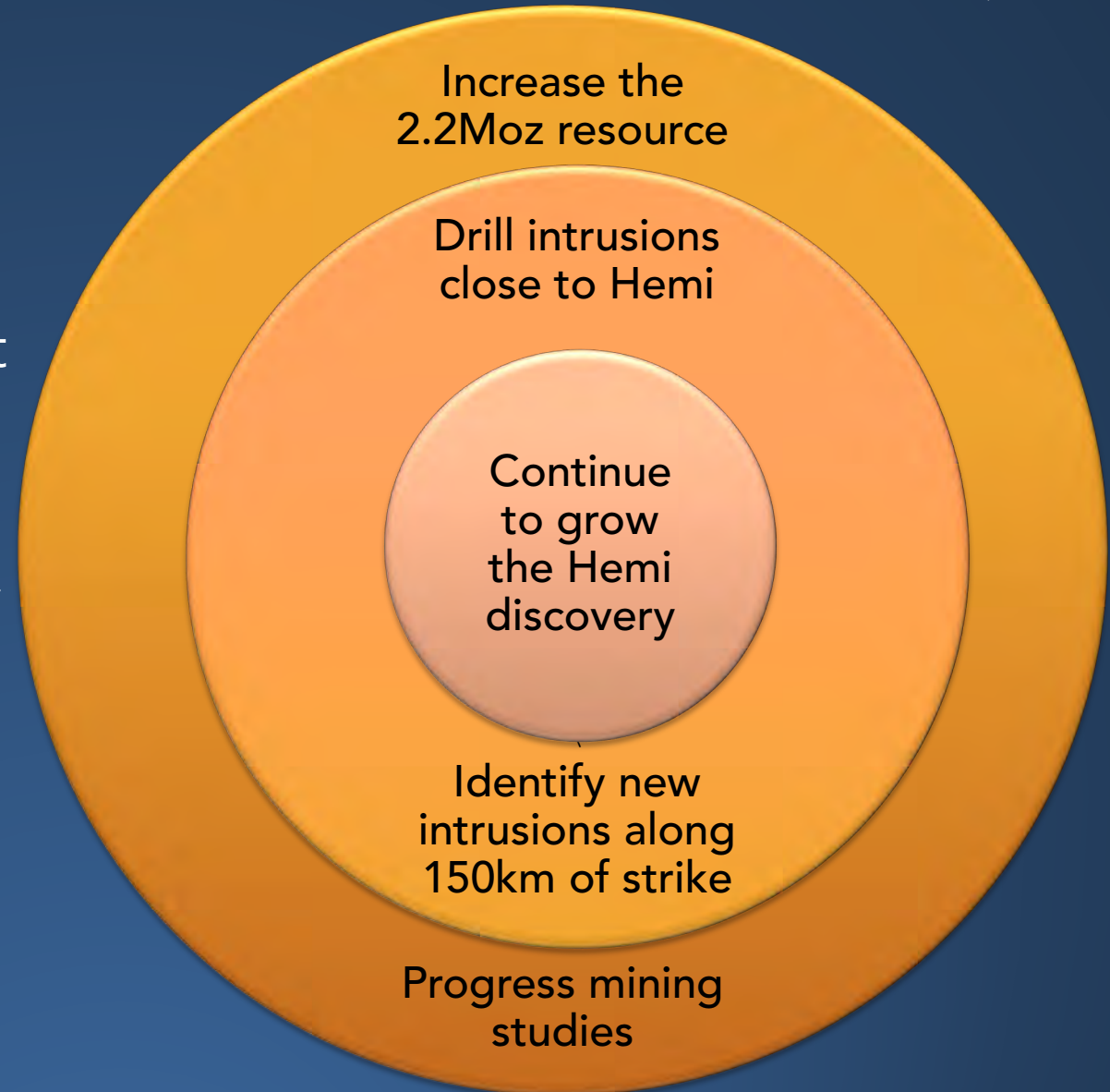
Continue to grow resources at a discovery cost below industry average of A\$20/oz



Build organisational capability and progress development studies



Ultimate objective to become a Tier 1 gold producer at Hemi





CONTACT

Level 3, Suite 24-26,
22 Railway Road,
Subiaco WA 6008

+61 8 6117 9328

admin@degreymining.com.au

degreymining.com.au

ASX: DEG



Competent Persons Statements

The information in this report that relates to Exploration Results for the Pilbara Gold Project is based on, and fairly represents information and supporting documentation compiled by Mr Philip Tornatora, a Competent Person who is a member of The Australasian Institute of Mining and Metallurgy. Mr Tornatora is an employee of De Grey Mining Limited. Mr Tornatora has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resource and Ore Reserves". Mr Tornatora consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The Information in this report that relates to Mineral Resources for Pilbara Gold Project is based on information compiled by Mr Paul Payne, a Competent Person who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Payne is a full-time employee of Payne Geological Services. Mr Payne has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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". Mr Payne consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. De Grey advises that no material changes have occurred to the resource estimates since the date of publication of April 2020.

The Company has released all material information that relates to Exploration Results, Mineral Resources and Reserves, Economic Studies and Production for the Pilbara Gold Project on a continuous basis to the ASX and in compliance with JORC 2012. The Company confirms that it is not aware of any new information that materially affects the content of this ASX release.

Forward Looking Statements

Statements regarding De Grey's plans with respect to the mineral properties, resource reviews, programmes, economic studies and future development are forward-looking statements. There can be no assurance that De Grey's plans for development of its mineral properties will proceed any time in the future. There can also be no assurance that De Grey will be able to confirm the presence of additional mineral resources/reserves, that any mineralisation will prove to be economic or that a mine will successfully be developed on any of De Grey's mineral properties.

MATERIAL ASX RELEASES



Resources & Metallurgy:

2020 Mallina Gold Project Resource update, 2 April 2020

Positive gold recoveries enhance Pilbara Gold Project potential, 12 February 2019

High gold recoveries with conventional CIL processing at Toweranna, 13 June 2019

Mallina drilling, new targets and metallurgy update, 15 July 2019

High gold recoveries achieved at Hemi, 9 July 2020

Exploration:

Multiple new targets increase exploration potential, 2 July 2019

New Gold Discoveries at Hemi and Antwerp, 17 December 2019

Hemi confirms potential for major discovery, 6 February 2020

Further impressive thick and high grade gold at Hemi, 11 February 2020

Major extension of sulphide mineralisation at Hemi, 26 February 2020

RC drilling confirms large scale gold system at Hemi, 5 March 2020

Continuing extensive sulphide mineralisation intersected at Hemi, 10 March 2020

Hemi continues to grow, 17 March 2020

Major Gold Extensions defined at BROLGA, 25 March 2020

Brolga Continues to grow, 9 April 2020

Aircore Drilling defines third large gold zone at Hemi, 17 April 2020

Brolga and Aquila drilling update, 22 April 2020

Large gold system defined at Crow, 1 May 2020

Exploration update, 20 May 2020

Significant extension at Hemi- Aquila, 27 May 2020

HEMI – Major extension, 5 June 2020

HEMI – Broad, high grade extensions at Aquila, 9 June 2020

Further high grade and expanded footprint at Hemi, 22 June 2020

Further extensions confirmed at Brolga, 10 July 2020

Hemi scale grows with Aquila new extensions, 22 July 2020

Strong results boost Aquila westerly extension, 5 August 2020

Aquila extends to 400 vertical metres, New lode at Crow, 12 August

Brolga extends north towards Aquila and northeast to Scooby, 21 August

Exceptional high grade gold intercept at Crow, 27 August 2020

Falcon - Major new gold discovery at Hemi, 2 September 2020

Falcon - Drilling Update, Drill results confirm Falcon as a growing new opportunity, 15 September

Strong Brolga Infill and Extensions, 25 September

Encouraging Extensional and Infill Drilling Results at Aquila and Crow, 7 October 2020

Thick High Grade near surface hits continue at Falcon, 12 October 2020

Further positive results extend Aquila and Crow, 29 October 2020

Further high-grade extensions at Crow and Aquila, 12 November 2020

High Grade Depth Extensions and Visible Gold at Falcon, 30 November 2020

MALLINA GOLD PROJECT RESOURCES

(not including Hemi)



| Area | Type | Measured | | | Indicated | | | Inferred | | | Total | | |
|----------------------------|-------|----------|--------|---------|-----------|--------|---------|----------|--------|-----------|-------|--------|-----------|
| | | Mt | Au g/t | Au Oz | Mt | Au g/t | Au Oz | Mt | Au g/t | Au Oz | Mt | Au g/t | Au Oz |
| Withnell Mining Centre | Oxide | 0.98 | 1.8 | 57,500 | 3.49 | 1.5 | 166,800 | 2.35 | 1.4 | 102,300 | 6.82 | 1.5 | 326,600 |
| | Fresh | 0.66 | 1.7 | 34,800 | 8.23 | 1.9 | 496,700 | 9.87 | 2.4 | 766,600 | 18.75 | 2.2 | 1,298,200 |
| | Total | 1.63 | 1.8 | 92,300 | 11.72 | 1.8 | 663,500 | 12.24 | 2.2 | 870,200 | 25.58 | 2.0 | 1,626,100 |
| Wingina Mining Centre | Oxide | 2.68 | 1.8 | 152,100 | 1.84 | 1.5 | 87,600 | 2.21 | 1.1 | 74,900 | 6.74 | 1.5 | 314,500 |
| | Fresh | 0.40 | 1.6 | 20,500 | 0.68 | 1.6 | 34,900 | 4.04 | 1.3 | 168,400 | 5.12 | 1.4 | 223,800 |
| | Total | 3.08 | 1.7 | 172,700 | 2.52 | 1.5 | 122,500 | 6.25 | 1.2 | 243,200 | 11.86 | 1.4 | 538,400 |
| TOTAL Pilbara Gold Project | Oxide | 3.66 | 1.8 | 209,700 | 5.33 | 1.5 | 254,300 | 4.57 | 1.2 | 177,200 | 13.56 | 1.5 | 641,200 |
| | Fresh | 1.06 | 1.6 | 55,400 | 8.91 | 1.9 | 531,700 | 13.90 | 2.1 | 935,000 | 23.87 | 2.0 | 1,522,000 |
| | Total | 4.71 | 1.7 | 265,000 | 14.24 | 1.7 | 786,000 | 18.49 | 1.9 | 1,113,500 | 37.44 | 1.8 | 2,164,500 |

ASX: Total Gold Mineral Resource increases to 2.2Moz, 2 April 2020