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Hemi discovery, Mallina gold province

Australia's fastest growing gold company

Investor Presentation September 2020



Forward looking statements disclaimer



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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.*

Australia's fastest growing gold company

- Major new gold discovery at Hemi within the Mallina Gold Project
- New style of gold deposit in WA's Pilbara region:
 - Intrusion-hosted
 - Large scale, close to surface, grade continuity
 - Underexplored with district-scale upside
- Located near world-class established mining infrastructure and major regional centres
- Highly adept Board and Management team
- Immediate growth strategy linked to increasing gold resources, extending deposits and making large new discoveries



Strategy Summary

Hemi Mineralisation

Aspirational goal of Tier 1 scale of mineralisation at Hemi and nearby
Prove significant depth extensions below the current limits of mineralisation
Continue comprehensive metallurgical studies

Hemi lookalikes and shear hosted opportunities

Delineate known mineralised intrusive structures immediately surrounding Hemi
5 intrusions have been identified in this area, 4 with known gold mineralisation
Use aeromagnetics and aircore to test for new intrusions project wide
Explore project wide for other styles of mineralisation along 200km shear zones

Other Mallina Project Resources

Continue drilling on other Mallina Project resources
Deliver incremental expansion of the existing 2.2Moz resource
Incorporate existing resources into potential Hemi production scenarios



**Demonstrate
Tier 1+
Gold Production
Potential**

**Aspirational goal Cautionary Statement: The potential quantity and grade of the aspirational goal is conceptual in nature. As at the date of this report, there has been insufficient exploration to determine the scale of mineralisation and there is no certainty that further exploration work will result in the goal being realised.*

Corporate overview

Corporate structure

Shares (ASX:DEG)	1,196
Share price (08 September 2020)	A\$1.44
Market capitalisation	~A\$1.7B
Cash (30 June 2020)	A\$28M
Additional funds (approved 10 July 2020)	A\$5M
Total	A\$33M

Major shareholders

DGO Gold Limited	16%
Bank of America	5%
Northwest Nonferrous	5%
Directors and management	3%
Top 20 holders	59%
Top 50 holders	68%

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Board of Directors



Simon Lill - Chairman
(BSc MBA)

- 35 years' experience in stockbroking, capital raising, management, business development and analysis for a range of small and start-up companies, both in the manufacturing and resources industries
- Specialised in company restructuring activities
- Joined the De Grey board in 2013 and was elected chairman in 2015



Glenn Jardine - Managing Director
(B.Eng (Mining), MAICD, FAusIMM)

- Senior mining executive with direct experience growing resource companies from early stage exploration through to multi-operation entities across a range of precious and base metals and bulk commodities, including underground and open pit mining operations
- Projects developed have received Australian Federal and State recognition for environmental best practice and health and safety and human resources systems



Andy Beckwith - Executive Technical Director
(BSc Geology, AusIMM)

- Successfully worked on projects from grassroots to mine development and has extensive experience working with corporate transactions, project acquisitions, resources development and project generation
- Joined De Grey Mining originally as a consultant, before coming on as Technical Director and Operations Manager in November 2017 and has played a significant role in the rebirth and growth of the company



Bruce Parncutt AO – Non-Executive Director
(BSc, MBA)

- 40 years of experience in investment management, investment banking and stock broking, including roles as Managing Director of McIntosh Securities, Senior VP of Merrill Lynch and Director of ASX Limited
- Awarded the Order of Australia in 2016 for distinguished service to the community as a philanthropist, particularly in the arts and education sectors, as an advocate and supporter of charitable causes, and to business & commerce
- Chairman of investment banking group Lion Capital and a Director of ASX listed DGO Gold Limited



Eduard Eshuys – Non-Executive Director
(BSc, FAUSIMM, FAICD)

- Geologist with over 30 years of gold exploration experience in Australia
- Successful explorer leading the teams that discovered the Plutonic, Bronzewing, Jundee gold deposits and was directly involved in the Cawse, Maggie Hays and Mariners nickel discoveries
- Managing Director and CEO of St Barbara Limited from July 2004 to March 2009 and oversaw its substantial growth as a gold producer
- Currently a Director of ASX listed companies DGO Gold Limited and NTL Gold Limited



Peter Hood AO - Non-Executive Director
(B.E (Chem), MAusIMM, FIChemE, FAICD)

- Chemical Engineer with a distinguished career in the Australian Mining and Chemical Industries. Held the position of Senior Production Engineer at the Kwinana Nickel Refinery from 1971 to 1981, then Mill Superintendent of the WMC Kambalda Nickel and Gold Operations between 1982 to 1985.
- In 1985, he joined Coogee Chemicals Pty Ltd in the position of General Manager and then as their CEO between 1998 and 2005. He then held the position of CEO of Coogee Resources Limited
- Awarded the Order of Australia in 2020 for distinguished service to business and commerce at the state, national and international level, and to the resources sector

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Technical team and key consultants



Glenn Jardine - Managing Director

(B.Eng (Mining), MAICD, FAusIMM)

- Senior mining executive with direct experience growing resource companies from early stage exploration through to multi-operation entities across a range of precious and base metals and bulk commodities, including underground and open pit mining operations
- Projects developed have received Australian Federal and State recognition for environmental best practice and health and safety and human resources systems



Andy Beckwith - Executive Technical Director

(BSc Geology, AusIMM)

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- Joined De Grey Mining originally as a consultant, before coming on as Technical Director and Operations Manager in November 2017 and has played a significant role in the rebirth and growth of the company



Phil Tornatora - Exploration Manager

BSc (Hons), MEconGeol

- 25 years of geological experience, including exploration management
- General Manager of Exploration at Northern Star for over 4 years. During this time Northern Star advanced from a single mine operation to a multi-mine company producing around 500Koz gold per annum
- Previous Exploration and Geology Manager for Galaxy Resources, a prominent Australian lithium/tantalum producer
- Held senior geology roles with major international gold producer AngloGold Ashanti and has had a range of experience from regional to near mine exploration and resource development roles



Allan Kneeshaw - Consulting Geologist

(BSc (Hons), MSc, FAusIMM, FAIG)

- Diversified exploration geologist with 26 years' experience in gold, base metals and bulk commodities in Australia and China
- Joined De Grey Mining as a consulting geologist 2017
- Held senior roles with major mining companies, including Head of Greenfields Exploration (Australia) for AngloGold Ashanti, Country Manager (Exploration – Australia) for Anglo American and Chief Geologist (China) for AngloGold Ashanti



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Foundations for our future

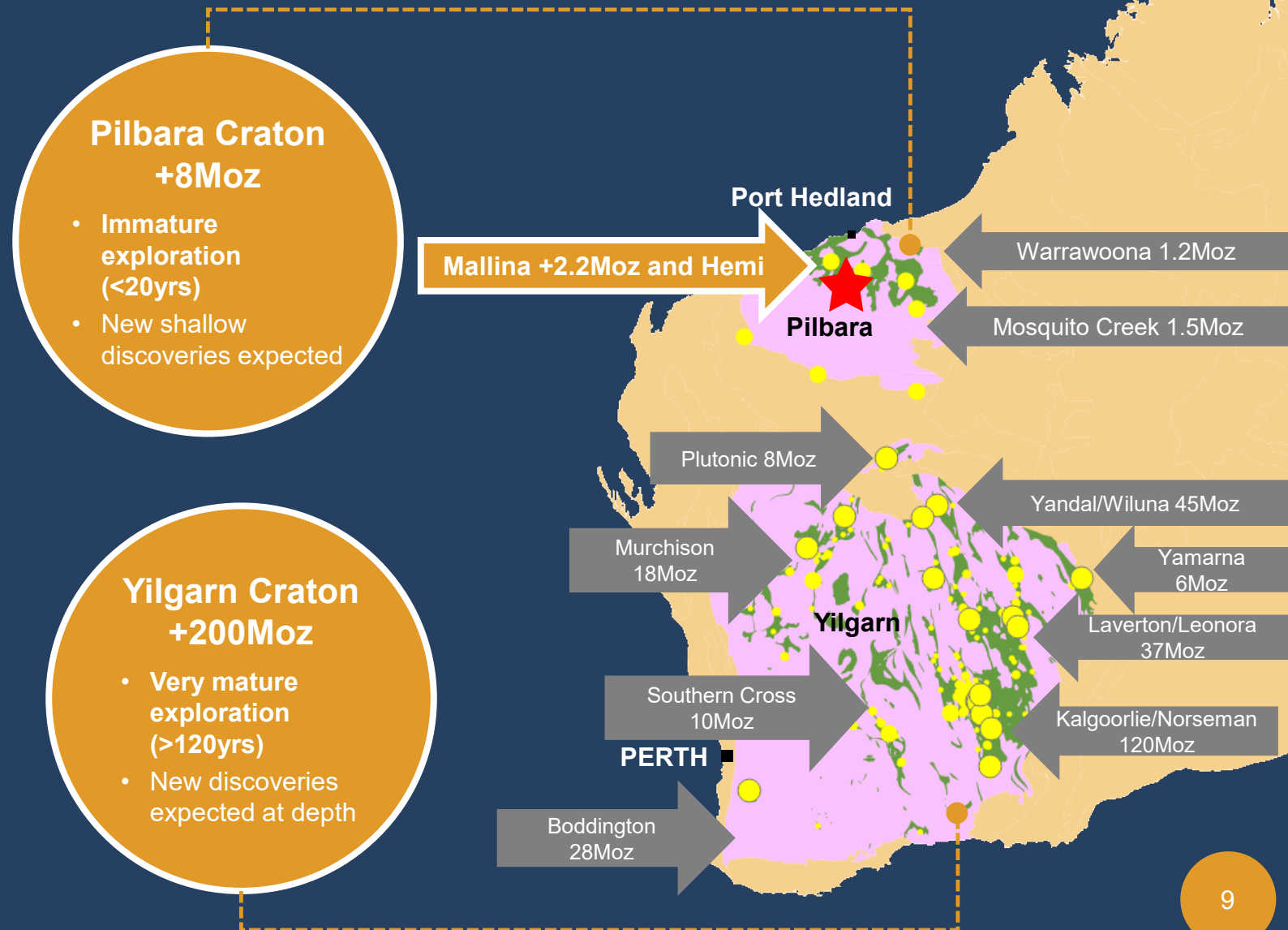
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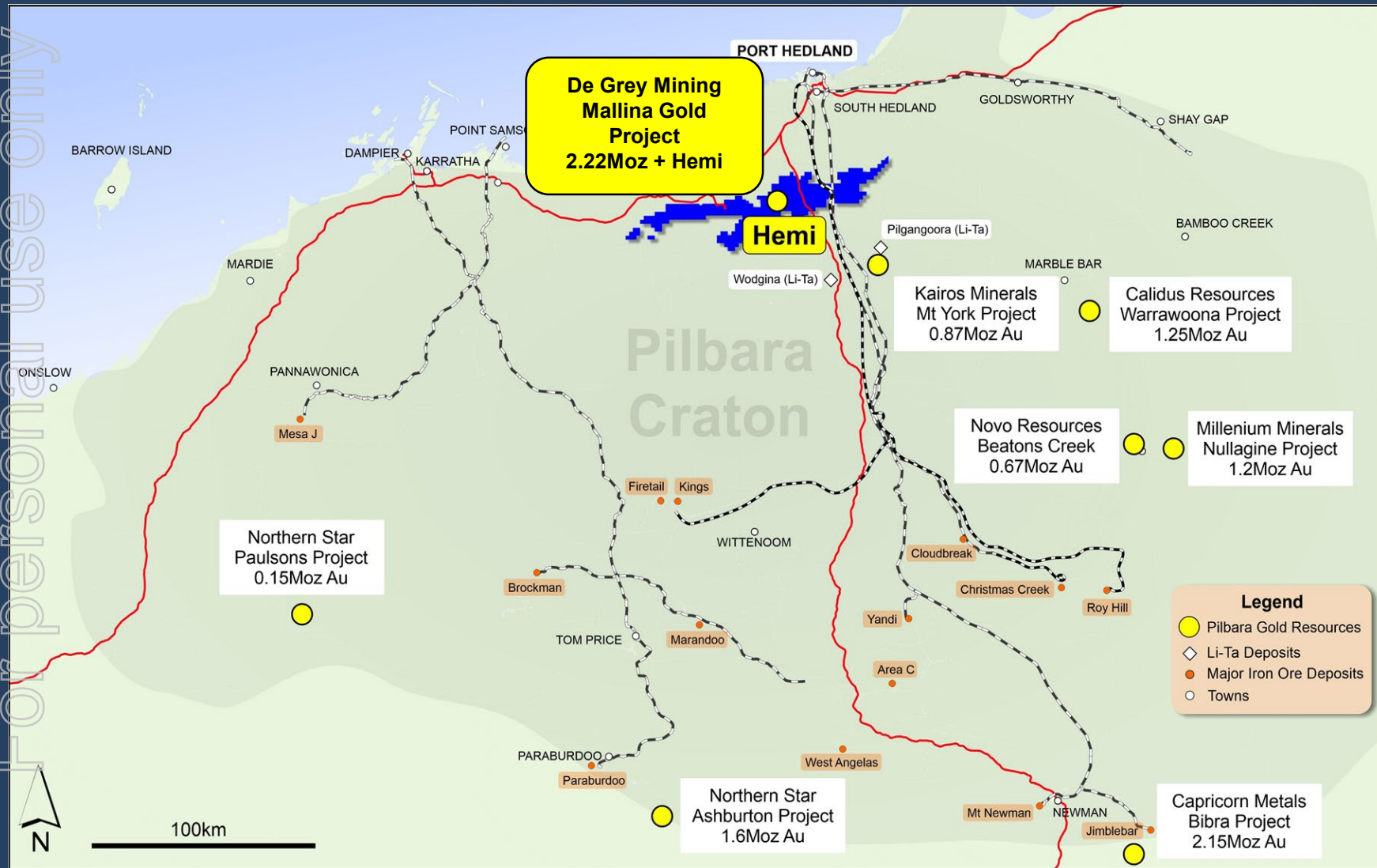
The emergence of a new gold province

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- The same geological setting as the Yilgarn:
 - Archaean aged rocks
 - Granite/greenstone belts
- Potential for shear-hosted gold previously recognised
- Recent discovery of a new intrusion-hosted style of gold mineralisation
 - Sanukitoid intrusions associated with gold
- 150km of prospective strike still largely untested



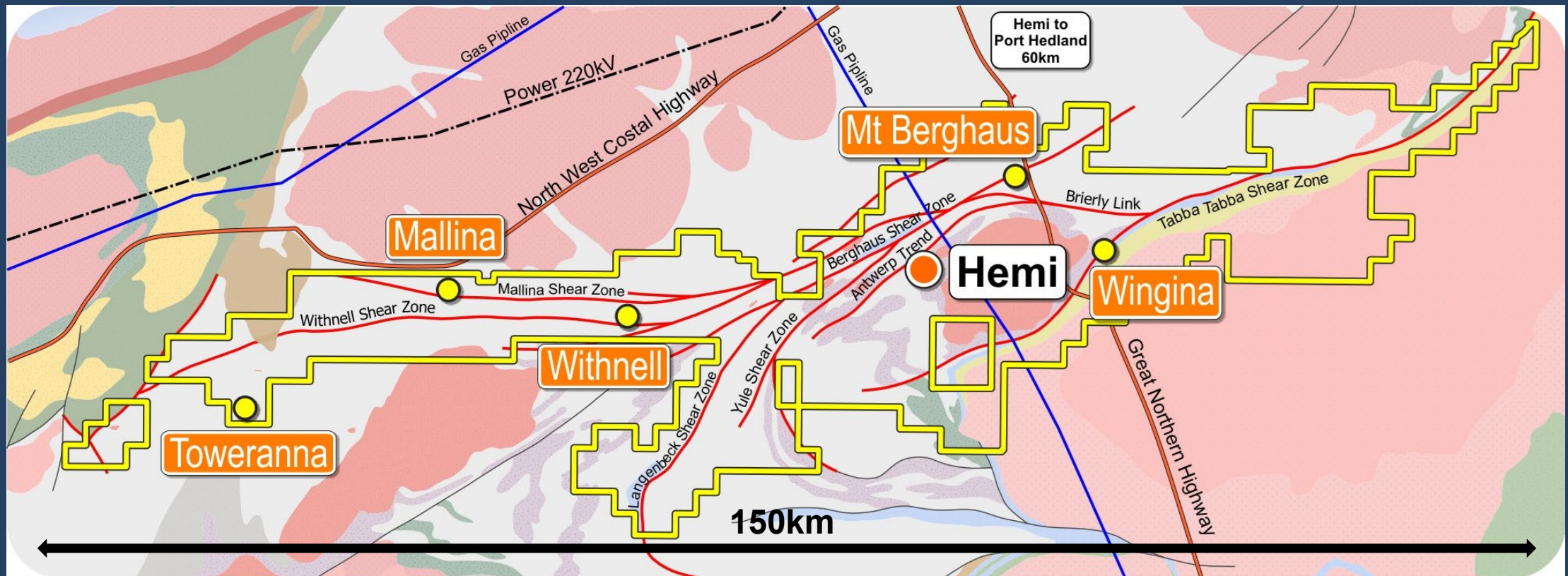
A Tier 1 mining region



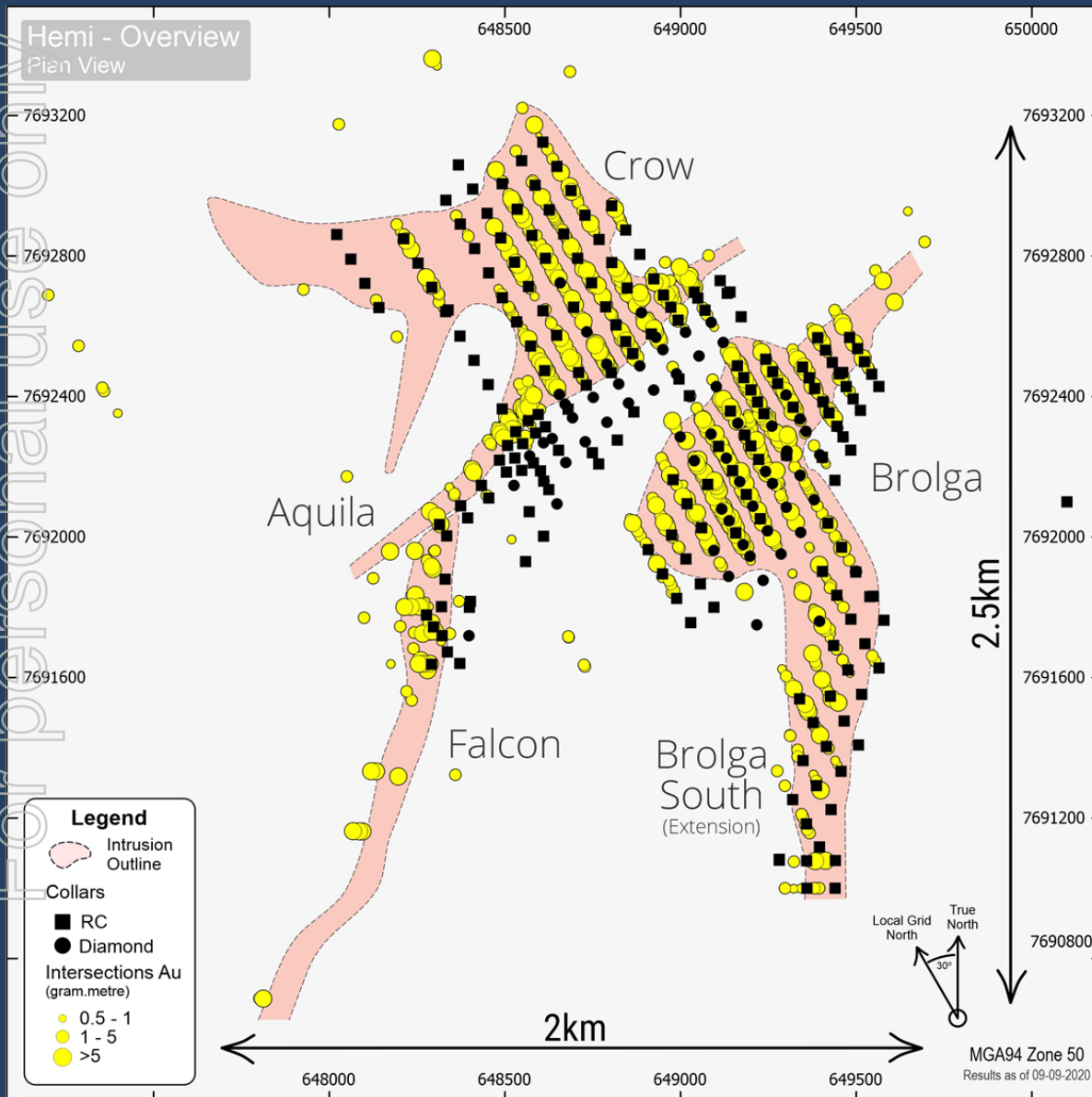
- Located 45/60 minutes drive from the ports and regional centres of Port Hedland/Karratha
- Major mining and service centres for iron ore, lithium and gas
- Two major sealed highways within 10km of Hemi
- Gas pipelines located 5km and 20km from Hemi
- Major 220kV electricity transmission line within ~20km
- Flat sand plain topography ideal for mining
- Replenishable fresh groundwater seen in drilling

District scale project potential

- Consolidated land position spanning 150km of strike and more than 200km of shears
- Large scale intrusion hosted discovery at Hemi and others surrounding Hemi and regionally still to be tested
- Existing shear-hosted Mineral Resource of 2.2Moz @ 1.8g/t Au excludes Hemi



Hemi discovery

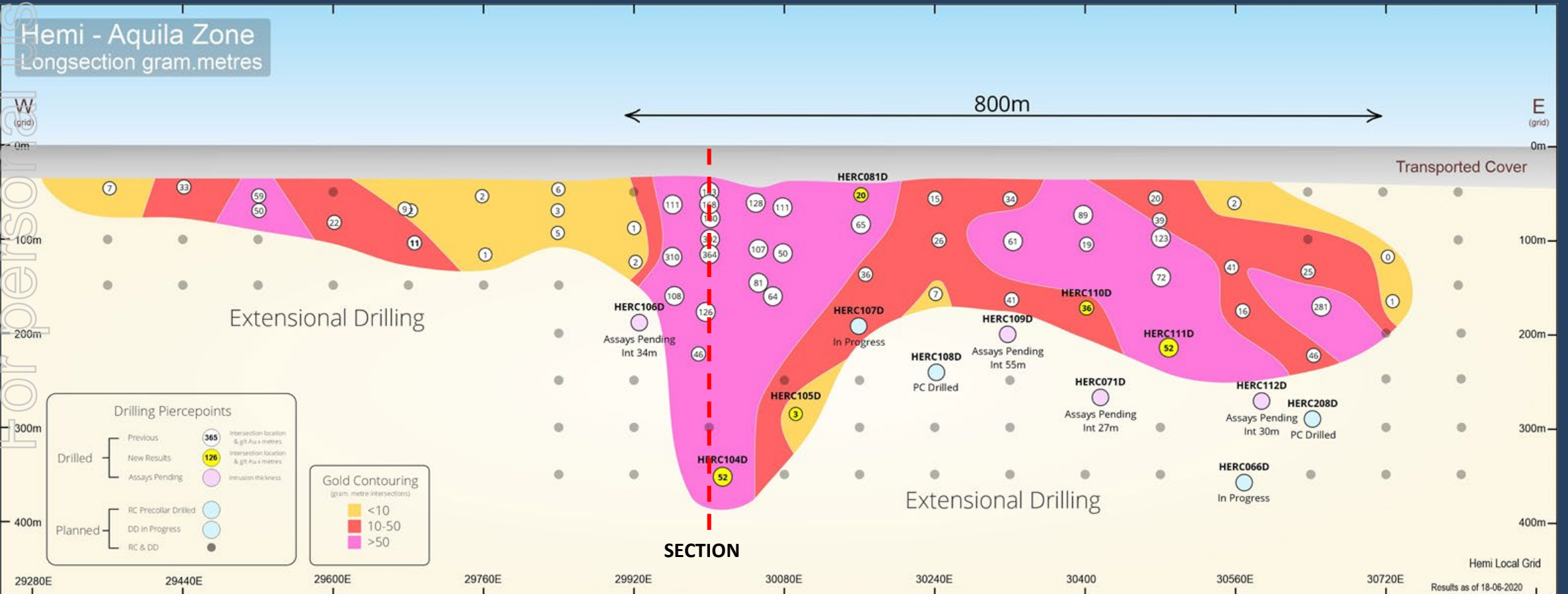


- Transformational discovery for the Pilbara
- Hemi first identified as a potential intrusion target in June 2019 and discovery made in December 2019
- The Hemi system is now:
 - +2,500m N-S
 - +2,000m E-W
 - +400m deep
 - Open along strike and at depth
- Four main deposit areas
 - Aquila, Brolga, Crow and Falcon
- AC rig drilling extensional targets for RC and DD follow up

Aquila deposit

- 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

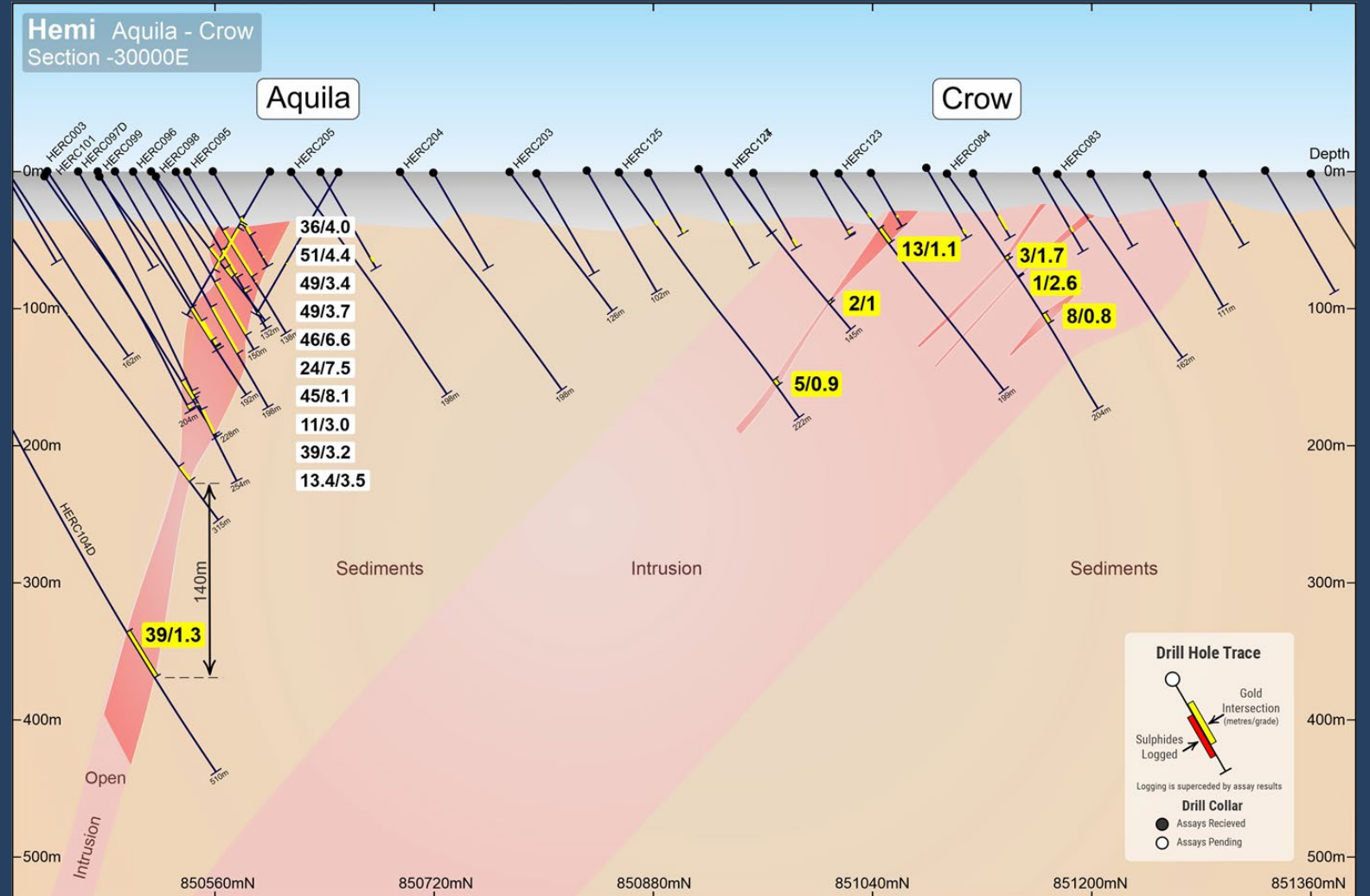
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Aquila – Section 30000E

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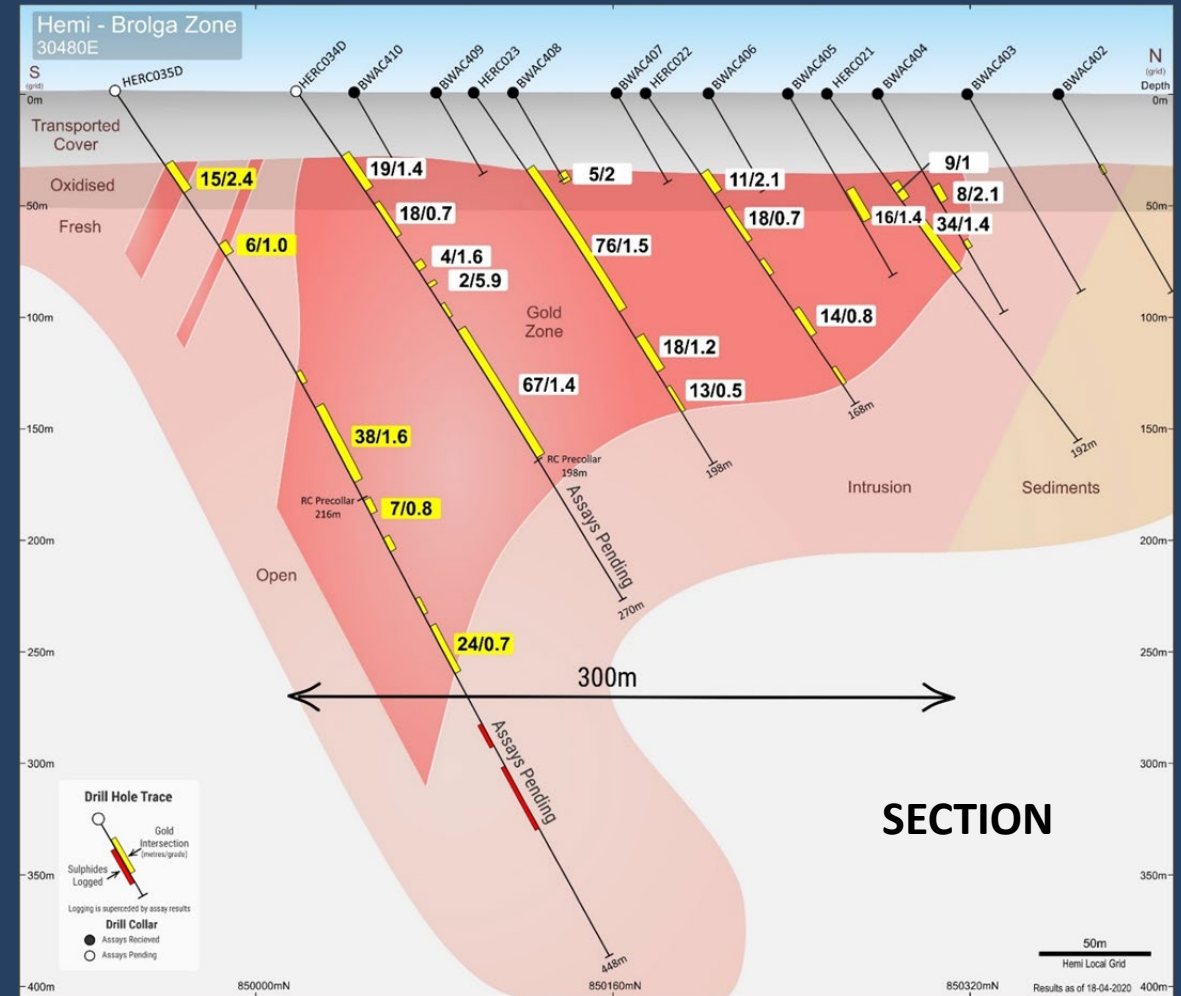
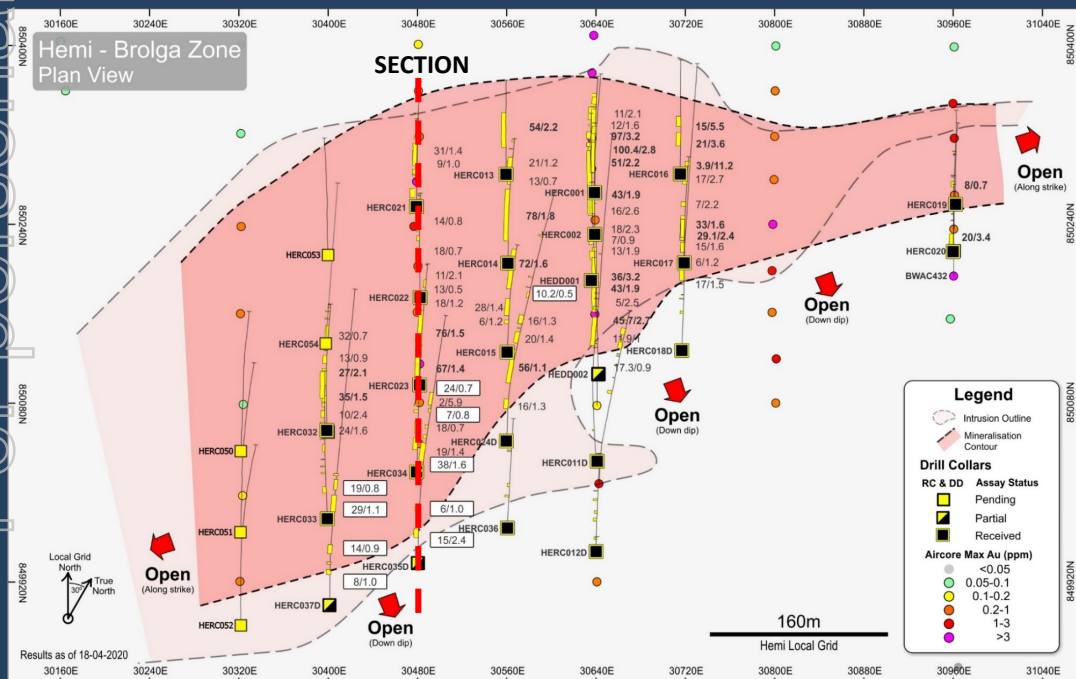
- Strongly mineralised zone
- Continues to ~400m depth
- Remains open at depth and along strike
- Diamond drilling in progress to extend near surface high grade mineralisation intersected in aircore and RC drilling



Brolga deposit

- Current strike approximately 800m
- Up to 300m wide
- Open to the east, west, south and at depth
- Extensional drilling to define scale ongoing

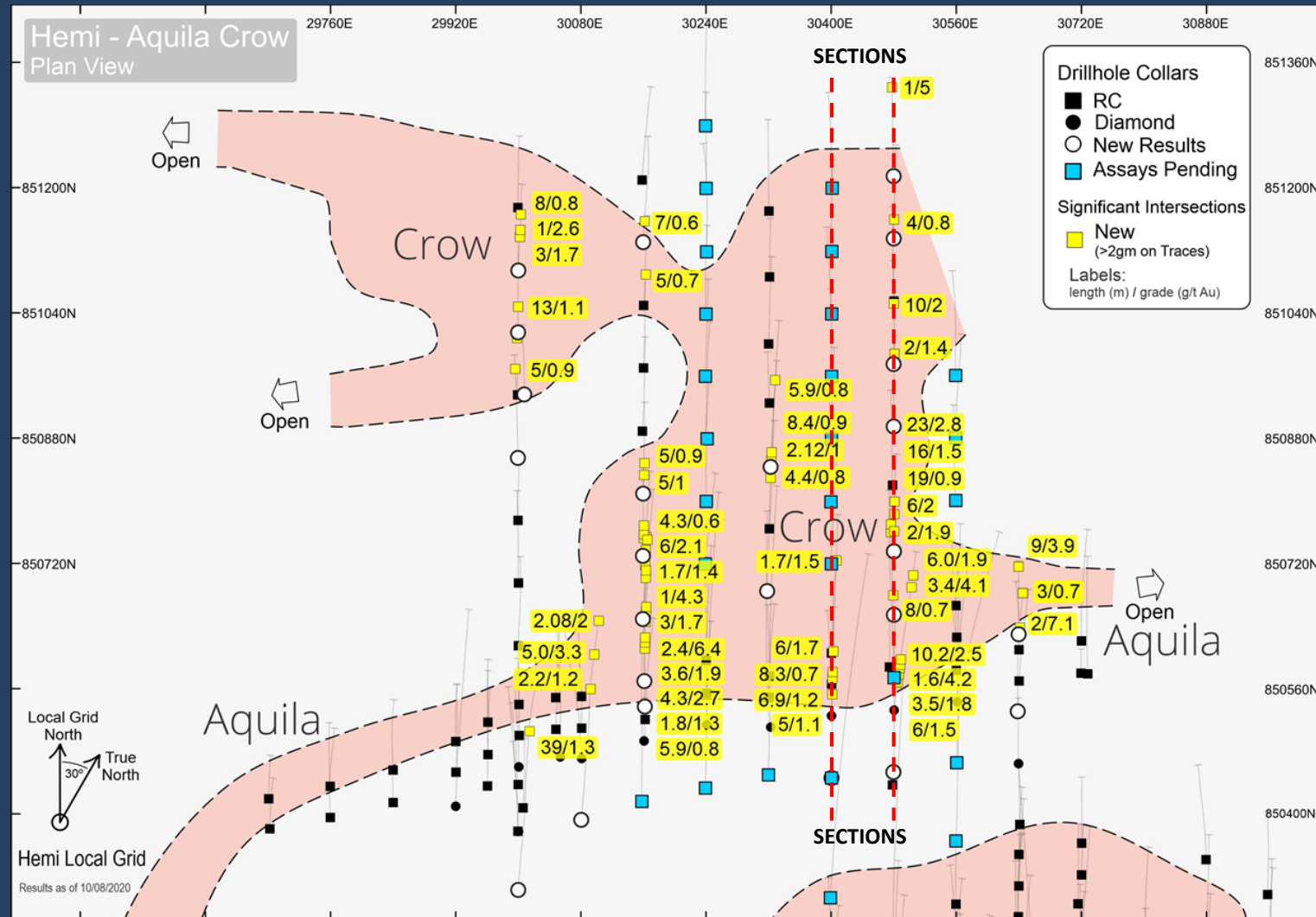
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Crow - Plan

- Zone up to 400m wide and 1,000m strike
- RC step out drilling and definition continuing and DD drilling testing depths extents

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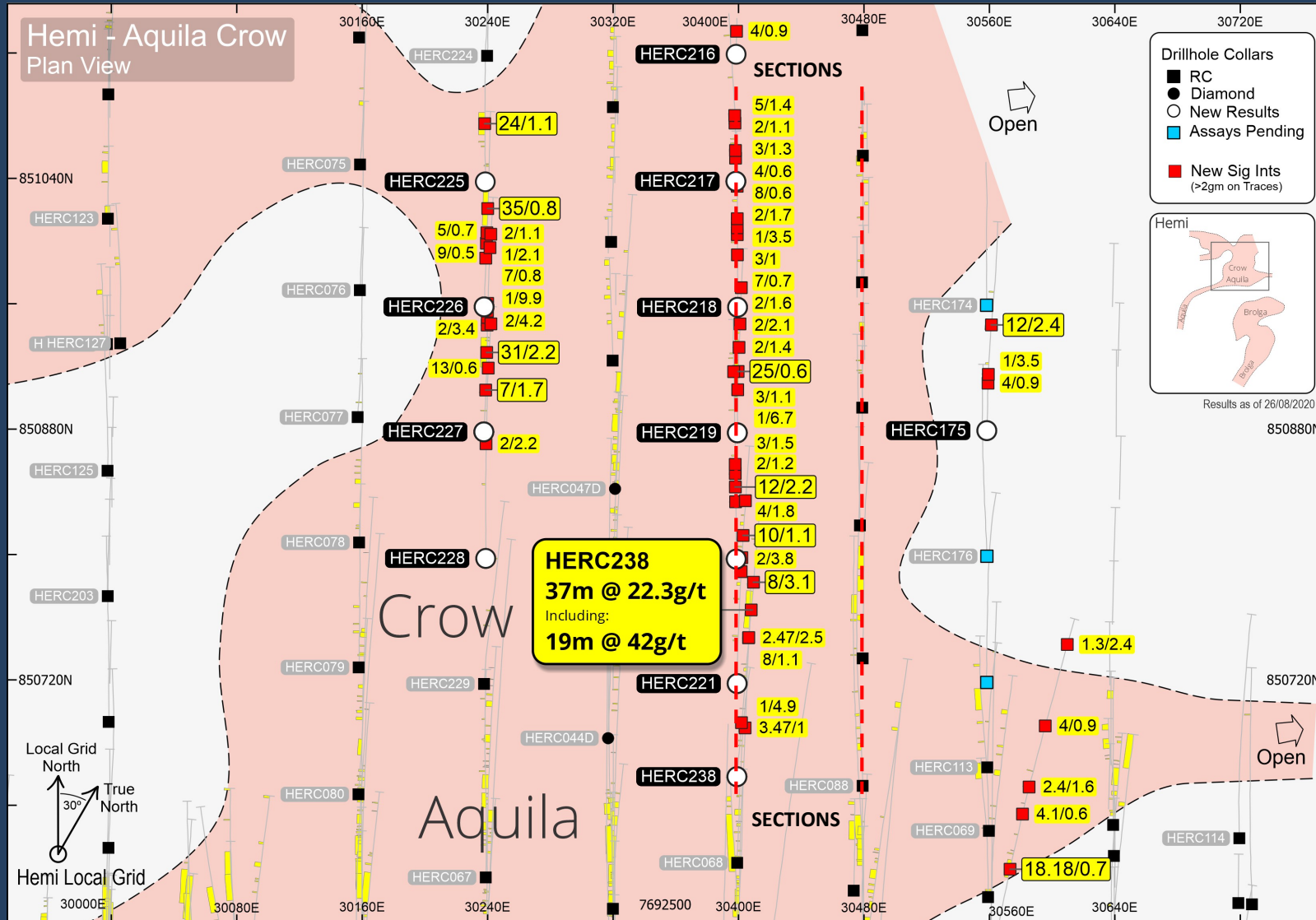


Crow – Plan – 27 August Announcement



- Significant mineralisation along strike and north of HERC238

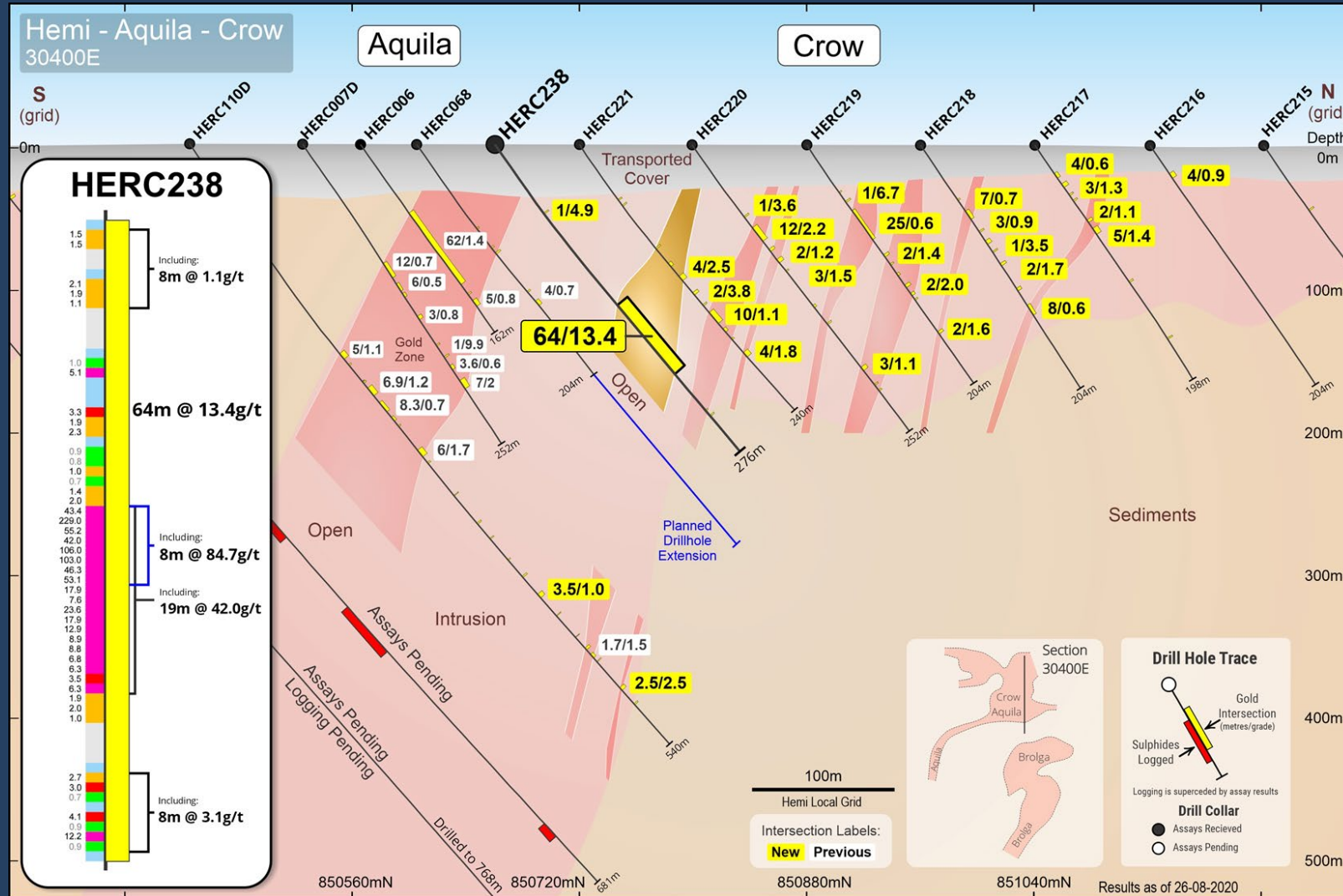
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Crow – Section 30400E

- Currently 80m x 80m hole spacing, nearest down dip interval ~200m below HERC238

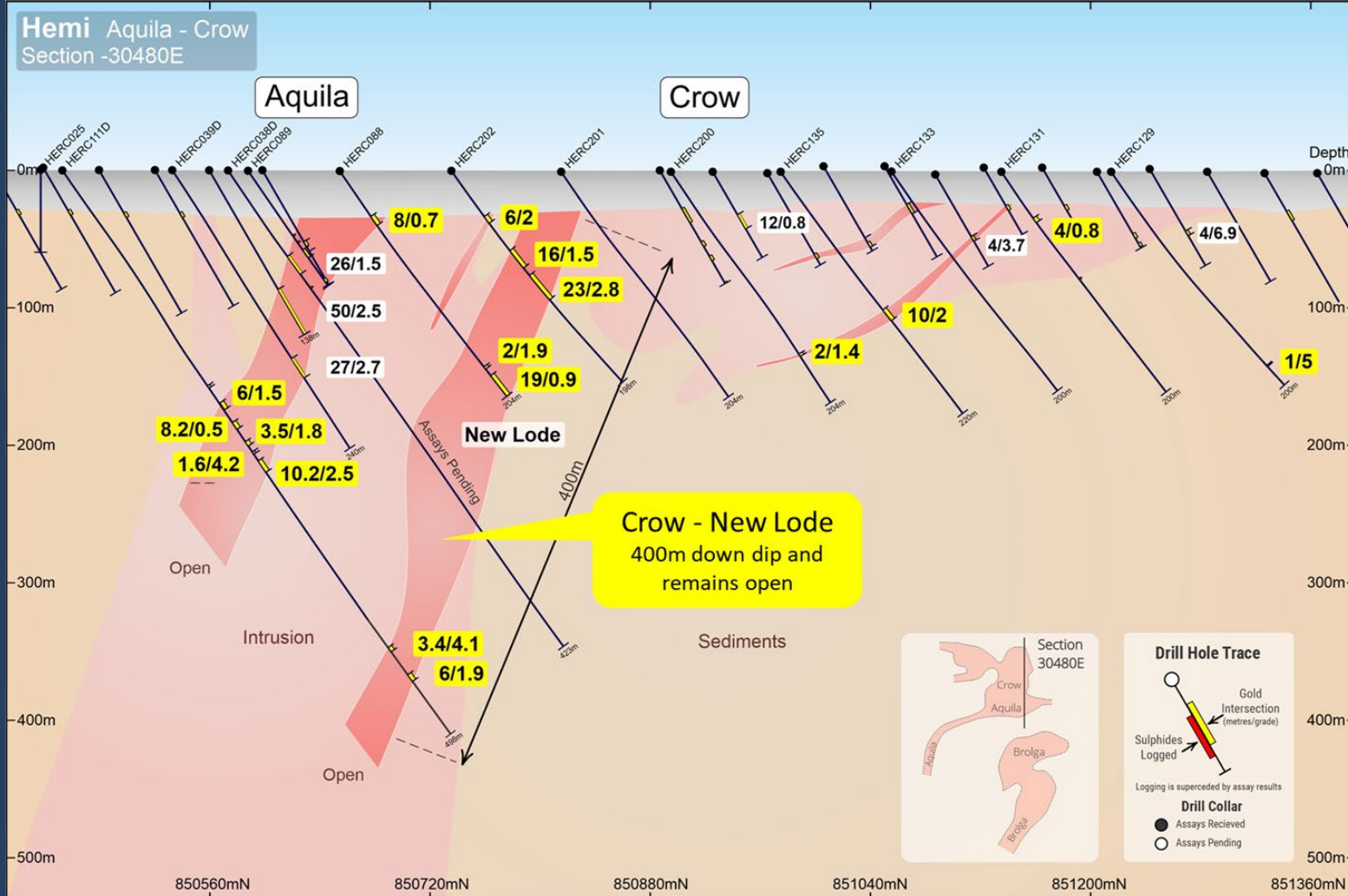
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Crow - Section 30480E

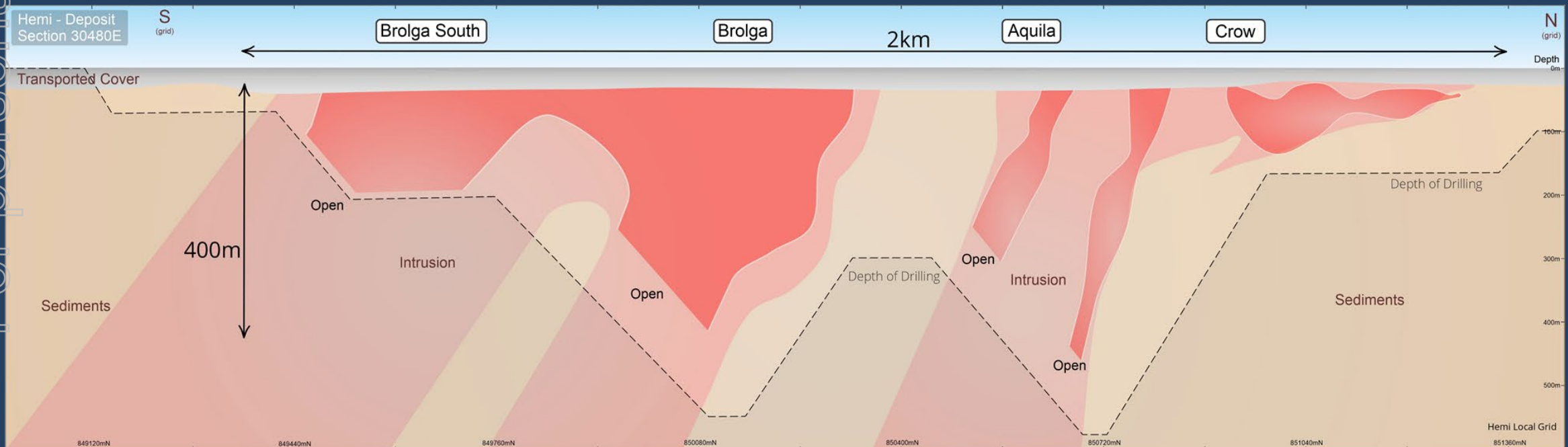
- New lode identified between Aquila and Crow
- 80m east of HERC238

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Large, single open pit potential

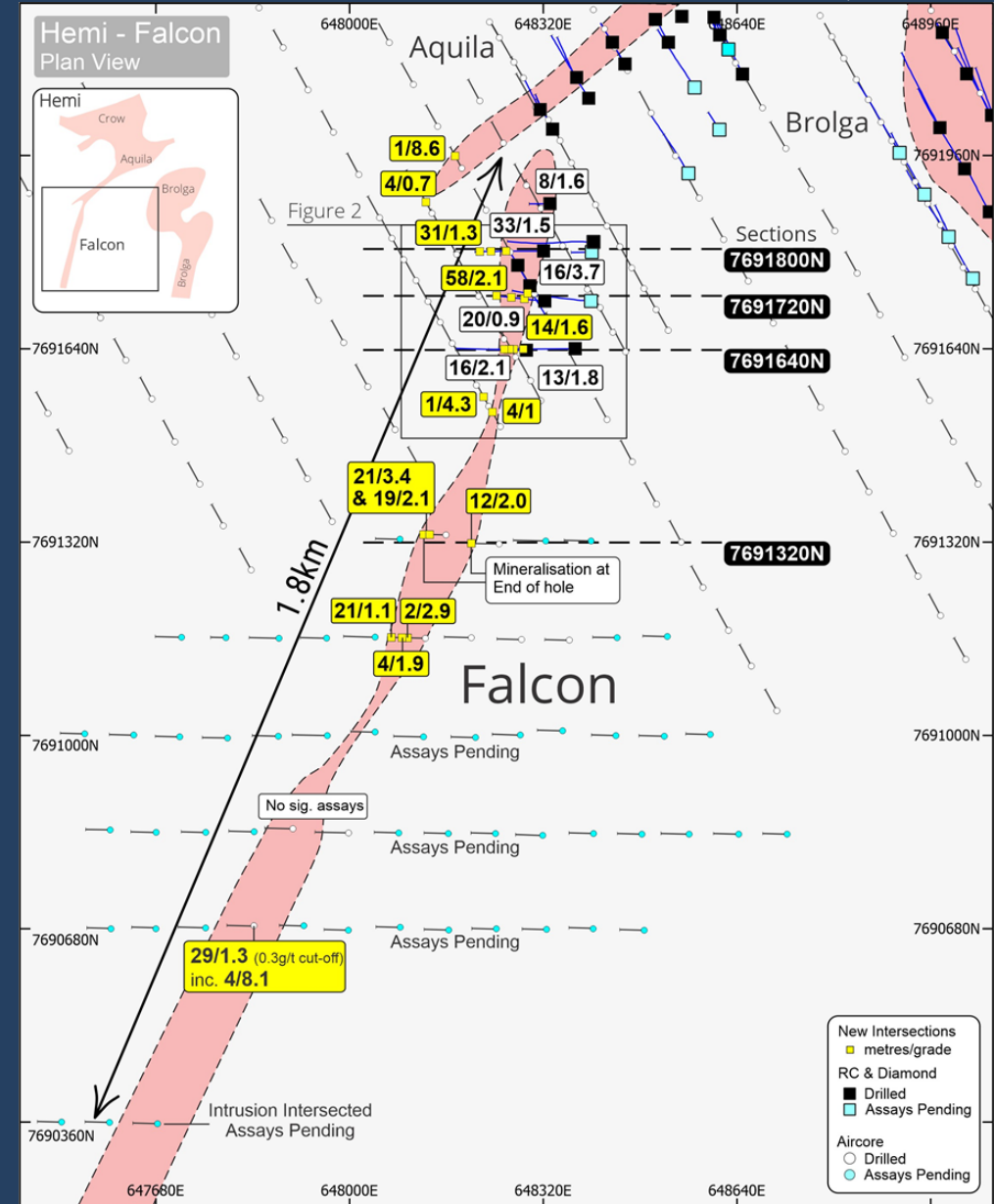
- Hemi mineralisation is characterised by its shallow nature and grade continuity
- Extensional drilling across all four deposit areas currently in progress
- Large area to the south of the Brolga deposit remains to be tested with RC and DD
- Potential for new lodges between Brolga and Aquila and Aquila and Crow



Falcon – New Gold Intrusion Discovery

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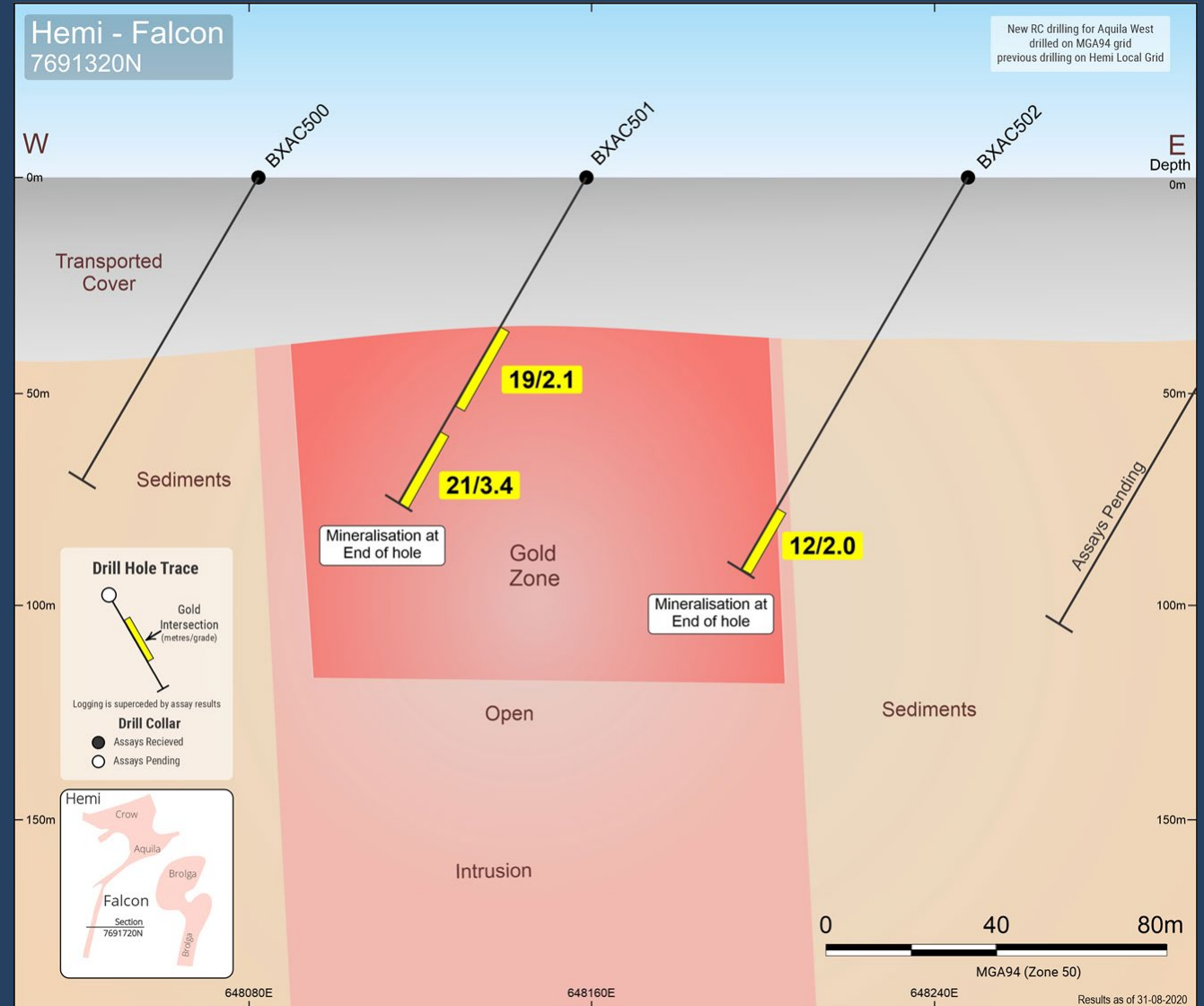
- Immediately south of Aquila and west of Brolga
- 1.8km long, up to 80m thick
- Open to the south and at depth
- Early intervals include 58m @ 2.1g/t Au
- AC and RC drilling targeting southern extensions and anomalous gold between Brolga and Falcon



Falcon – Section 769 1320N

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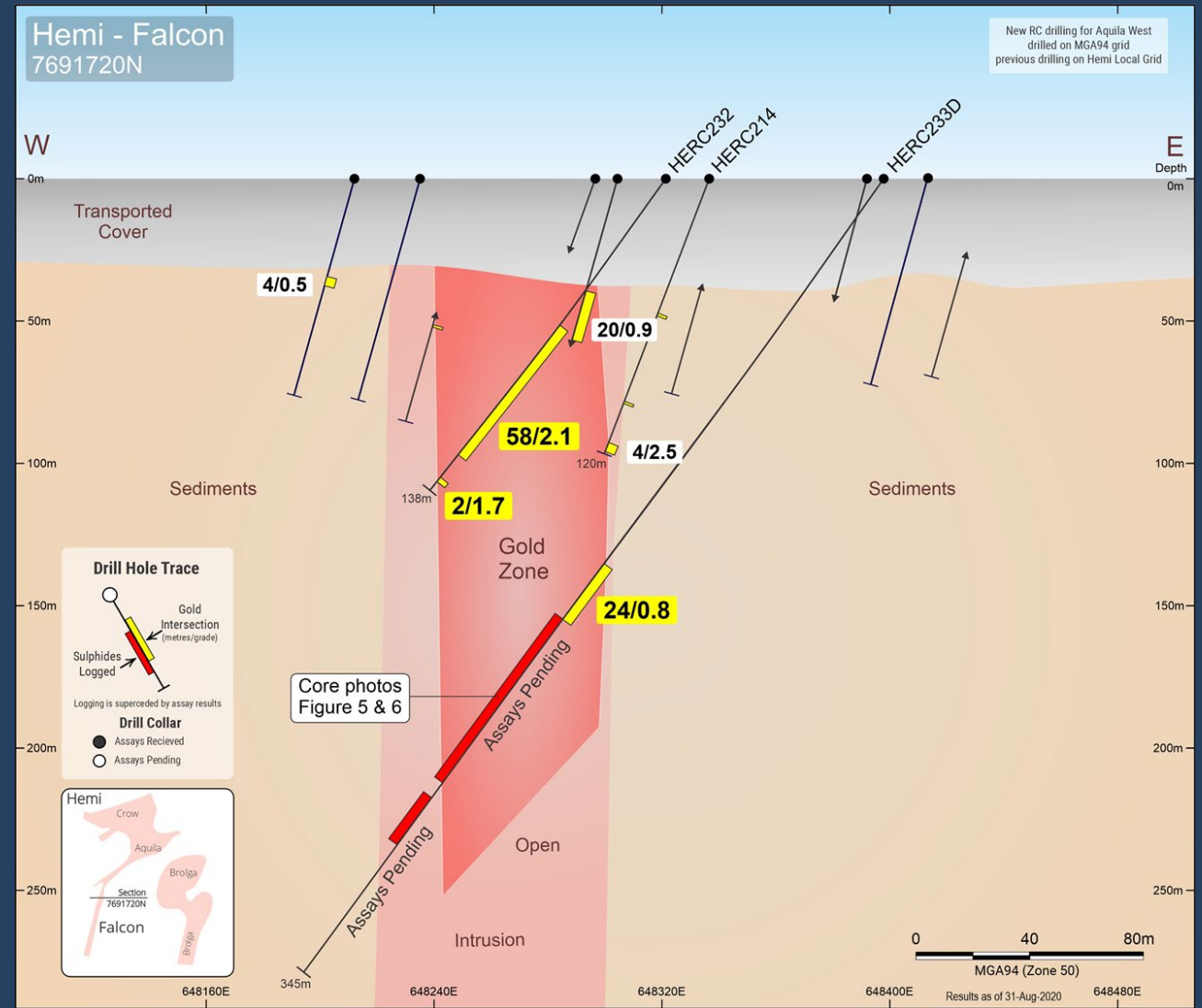
- Thick zone of mineralised intrusive
- Similar to Aquila
- RC and diamond drilling to test depth extensions



Falcon – Section 769 1720N

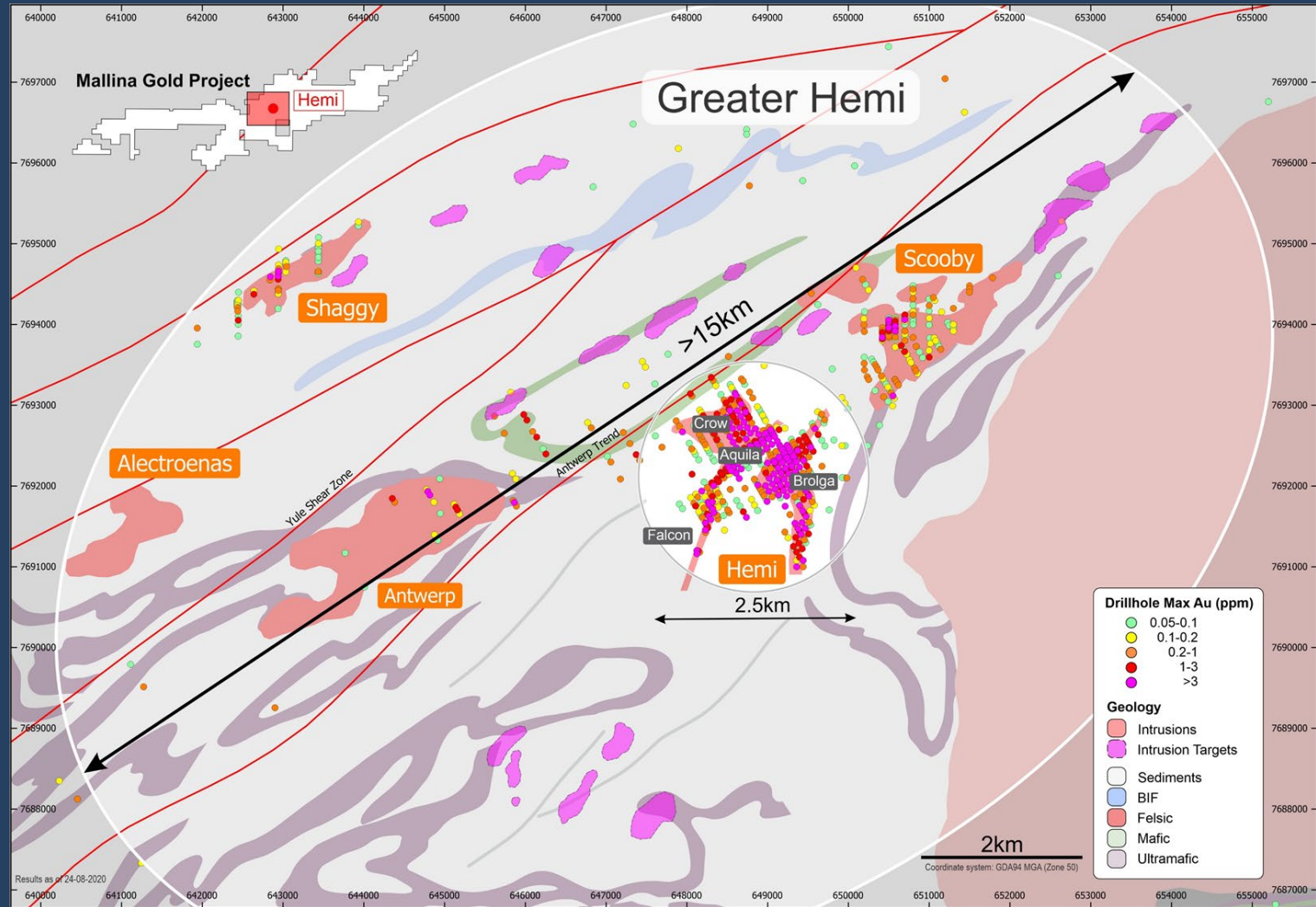
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- Visible gold intersected in HERC232
- RC and diamond drilling testing depth extensions



Finding the next Hemi

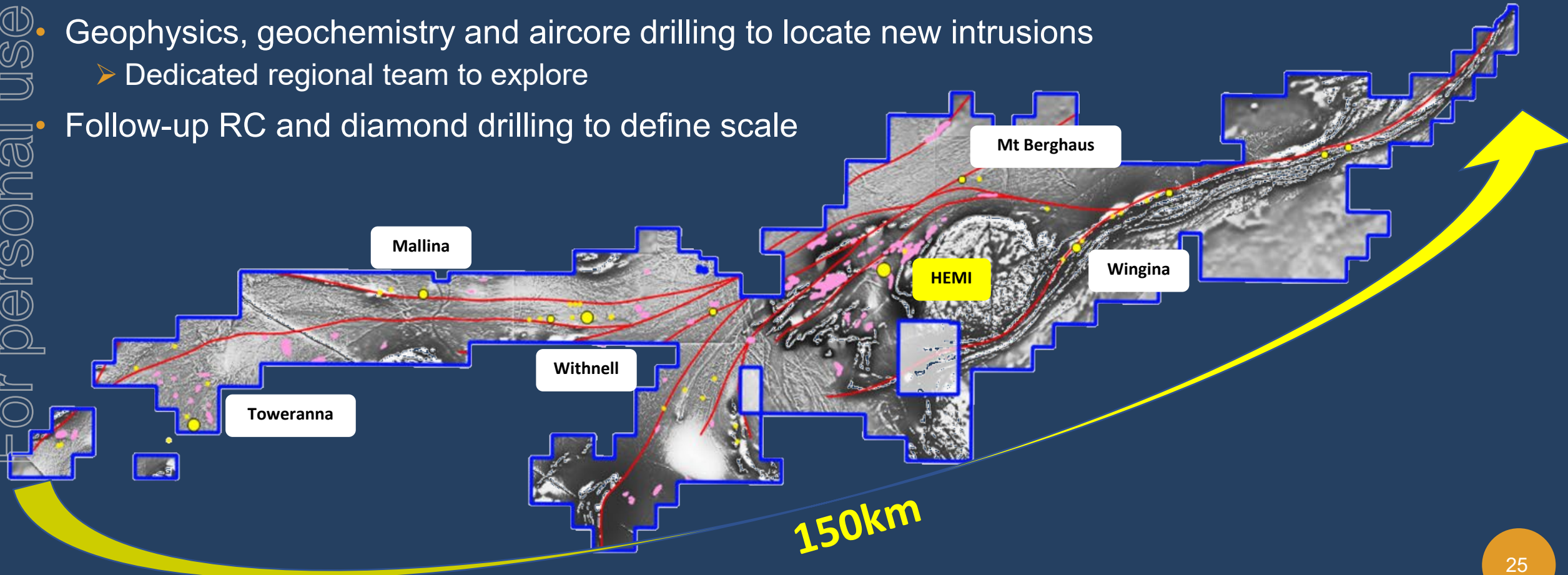
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- Four “lookalike” mineralised intrusions identified within 10km of Hemi:
 - Scooby, Antwerp, Shaggy, Alectroenas
 - One AC rig testing extensions at Hemi
 - One AC rig currently testing targets at Scooby, Antwerp and Shaggy
 - Working to put meaningful blocks of RC drilling together for each target area
 - Detailed aeromagnetic survey completed over prospective 30km zone
 - Modelling, interpretation and targeting study well advanced



Identifying new regional intrusions

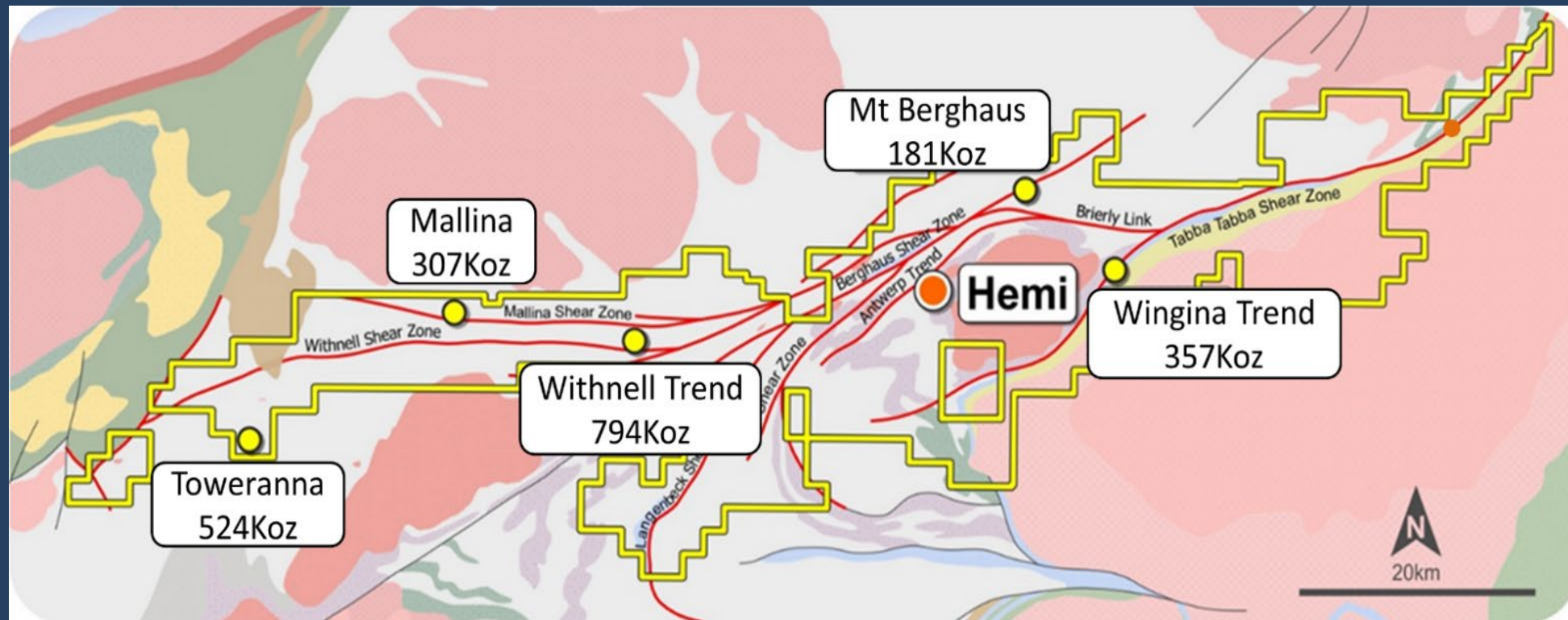
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- A total of 8 known intrusions identified throughout the project area:
 - Seven are mineralised and four are mineralised in the Hemi corridor
 - >20 new magnetic features identified as possible intrusions
- Geophysics, geochemistry and aircore drilling to locate new intrusions
 - Dedicated regional team to explore
- Follow-up RC and diamond drilling to define scale



Shear-hosted targets

- Existing shear-hosted resource of 37.4Mt @ 1.8g/t Au for 2.2Moz
- Increasingly valuable following the discovery at Hemi
- Shear-hosted target generation will continue to be progressed







Project studies

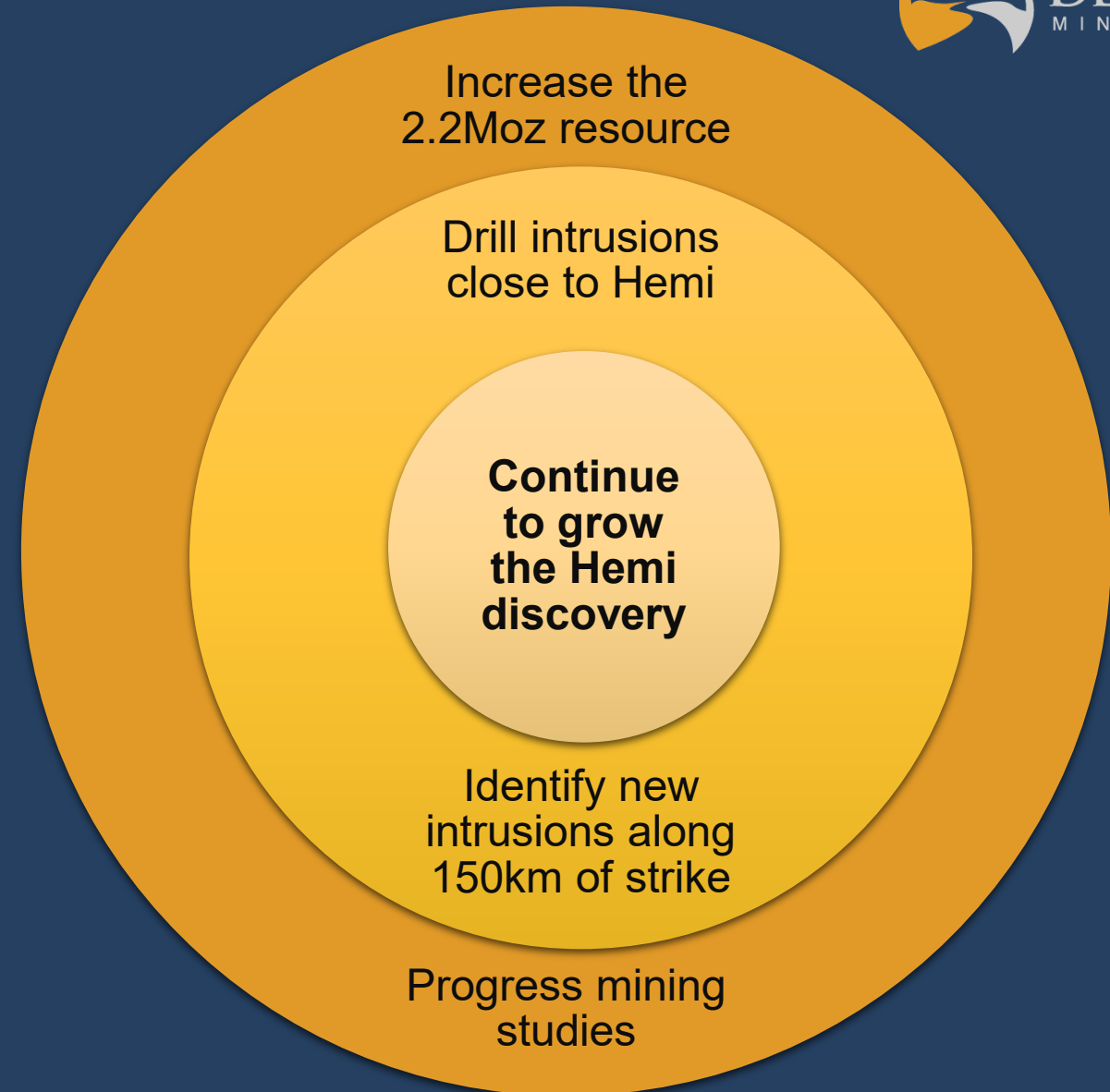
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- Long lead time de-risking studies underway:
 - Metallurgy, Environment and Infrastructure corridors
- Initial metallurgical testwork on Brolga:
 - 93% in oxidised using carbon in leach (CIL)
 - 96% from fresh rock using flotation, oxidation and (CIL)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



Growth strategy

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-  Deliver a Tier 1 scale mineralised system at Hemi
 -  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

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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

Mallina Gold Project Resources

(not including Hemi)

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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