ASX ANNOUNCEMENT

15 February 2023

Major strike and depth extensions at Diucon

Further scope for near surface and depth extensions

- New results at Diucon have extended mineralisation by approximately 120m along strike and 400m down plunge to the west of the May 2022 mineral resource estimate (MRE)
- Diamond drill hole HEDD136, which intersected 75m @ 1.1g/t Au and 72.3m @ 1.4g/t Au at a 0.3g/t Au lower cut, including:
  - **15.1m @ 1.6g/t Au** from 599.0m
  - **53.4m @ 1.4g/t Au** from 654.2m
  - **14.1m @ 3.1g/t Au** from 750.0m and
  - **12.6m @ 2.8g/t Au** from 779.7m
- Mineralisation intersected in HEDD136 remains open in all directions, including up-dip, and to the west toward Antwerp, where encouraging results from shallow drilling have been released.
- Higher grade mineralisation at Diucon in shallow and deeper drilling appears to be associated with inflections on major shear zones.
- Further exploration drilling, recommencing this quarter, will focus on identifying these inflections near surface within open pit depths.
- Deeper drilling at Diucon has been conducted at a wide spacing on 160m lines and 80m collars along strike of mineralisation previously intersected in HEDD128.
- HEDD128 intersected **359.4m @ 1.2g/t Au** through the width of the intrusion from 530m down hole comprising intervals calculated at a 0.3g/t Au cut-off grade.
- Strong mineralisation at Diucon has now been intersected for approximately 560 metres along strike, to a depth of approximately 900 vertical metres and remains open. Mineralisation on some sections attains a width of 300 metres over multiple lodes.

De Grey General Manager Exploration, Phil Tornatora, commented:

"Wide-spaced drilling down plunge to the WSW of the current Diucon resource has demonstrated that the Diucon mineral system is open in this direction. Drilling is still very widely spaced and significant intersections are being returned from holes such as HEDD136 and HEDD128. This work has strong potential to extend Diucon's current 1.6Moz mineral resource. Higher grade zones, often showing visible gold in quartz continue to support the potential for underground mining below open pit depths. In addition to diamond holes to follow up deeper mineralisation, shallow RC drilling is planned west of Diucon to follow up significant results from aircore and RC drilling at Antwerp."*

*** Mallina Gold Project Resource Statement, 31 May 2022**

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De Grey Mining Limited (ASX: DEG, "De Grey" or the "Company") is pleased to report latest resource extension and infill drilling results from the Diucon deposit at Hemi. Diucon is located in the west of Hemi as shown in **Figure 1**.

The Diucon mineralised intrusion has been intersected over a strike of approximately 560m, depth of 900m and a true thickness of approximately 300m. Recent drilling has demonstrated that mineralisation extends down plunge for at least 400m to the WSW of the May 2022 mineral resource model and remains open.

New drill results calculated are shown in **Tables 1 and 2** at the end of the announcement.

Extensional Drilling

Deep mineralisation has been intersected in HEDD135 and HEDD136 (**Figure 2**) up to 120 metres west of the May 2022 mineral resource model and 900 metres deep. In addition to broad, moderate grade intercepts, HEDD136 also shows narrow, high grade intersections at a 3g/t Au lower cut, which demonstrate potential for selective high grade underground mining. Results include:

- **6.3m @ 3.5g/t** from 689.7m
- **1m @ 14.1g/t Au** from 702m
- **0.4m @ 32.9g/t** from 756.5m
- **0.6 @ 38.6g/t Au** from 763.1m, and
- **1.7m @ 17.6g/t Au** from 788m.

Also, on section 28480E, HEDD453 intersected **0.3m @ 116g/t Au** from 493.1m, around 200m up dip of HEDD136.

The mineralised extensions to the May 2022 MRE in recent drilling and the preliminary feasibility study (PFS) pit shell for Diucon is shown in 3D isometric view in **Figure 3**.

Visible gold in smokey quartz veins (see **Figure 4**) is associated with many of these high grade intercepts.

Shallow mineralisation remains open to the west of the Diucon and Eagle deposits towards Antwerp. Results at Antwerp in aircore (AC) and first pass reverse circulation (RC) drilling are shown in plan in **Figure 5**.

Drilling results reported in November 2022 from first pass RC drilling at Antwerp included:

- **25m @ 1.0g/t Au** from 78m in HMRC198
- **6m @ 4.4g/t Au** from 28m in HMRC197
- **20m @ 0.7g/t Au** from 88m in HMRC193
- **6m @ 2.1g/t Au** from 43m in HMRC167
- **10m @ 1.0g/t Au** from 190m in HMRC425

Previously reported results on this trend include:

- **31m @ 2.1g/t Au** from 155m **and 19m @ 1.8g/t Au** from 192m in HMRC229
- **5m @ 5.4g/t Au** from 247m **and 15m @ 5.5g/t Au** from 257m in HERC875
- **4m @ 6.1g/t Au** from 230m **and 6m @ 5.1g/t Au** from 240m in HMRC280

AC drilling around 500m north of this Antwerp trend intersected **2m @ 261g/t Au** from 36m in HEAC920 within altered sediments. An intersection of **3m @ 2.7g/t Au** from 57m was returned from hole in HAC349 on the section 160m to the west of HEAC920.

In addition, AC drilling around 1.4km south of Antwerp has returned **1m @ 41.6g/t Au** from 59m in HAC654 within intrusive. Drill line spacing at Antwerp varies from 160m to 320m and follow up drilling of these results is continuing.

Infill Drilling

Infill drilling at Diucon to upgrade portions of the current mineral resource from Inferred to Indicated to increase ore reserves for the Hemi definitive feasibility study (DFS) continues to support the resource model.

In the eastern part of Diucon, on Section 29000E, shallow mineralisation has been intersected within the resource model and at the base of the PFS pit shell optimisation between 60 and 220 metres below surface in infill hole HEDD132, including:

- 2.2m @ 2.4g/t Au from 80.2m
- 4.6m @ 1.0g/t Au from 87.9m
- 2.7m @ 2.4g/t Au from 191.2m
- 20.0m @ 1.2g/t Au from 240.0m

Planned drilling on the southern margin of Diucon and at the base of the PFS pit shell optimisation has the potential to both expand the mineral resource and extend the open pit shell optimisation to the south and at depth.

In addition to the southern and down plunge extensions outlined above, work will also be carried out to follow up shallow lodes between Diucon and Eagle, all of which have the potential to add to the Diucon mineral resource.

Figure 1 Plan of Diucon showing only new and previously unannounced drill results

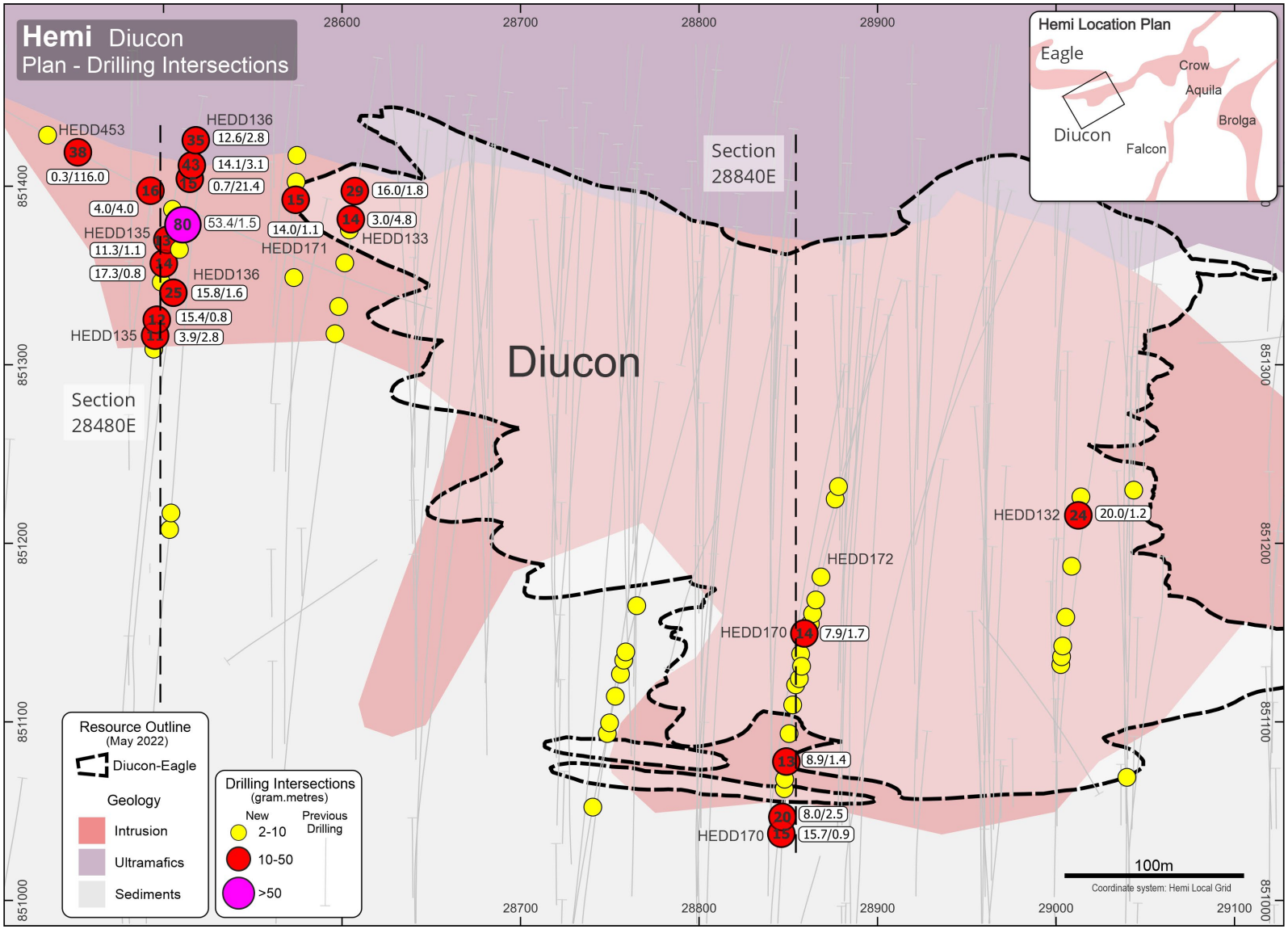


Figure 2 Diucon Section 28480E

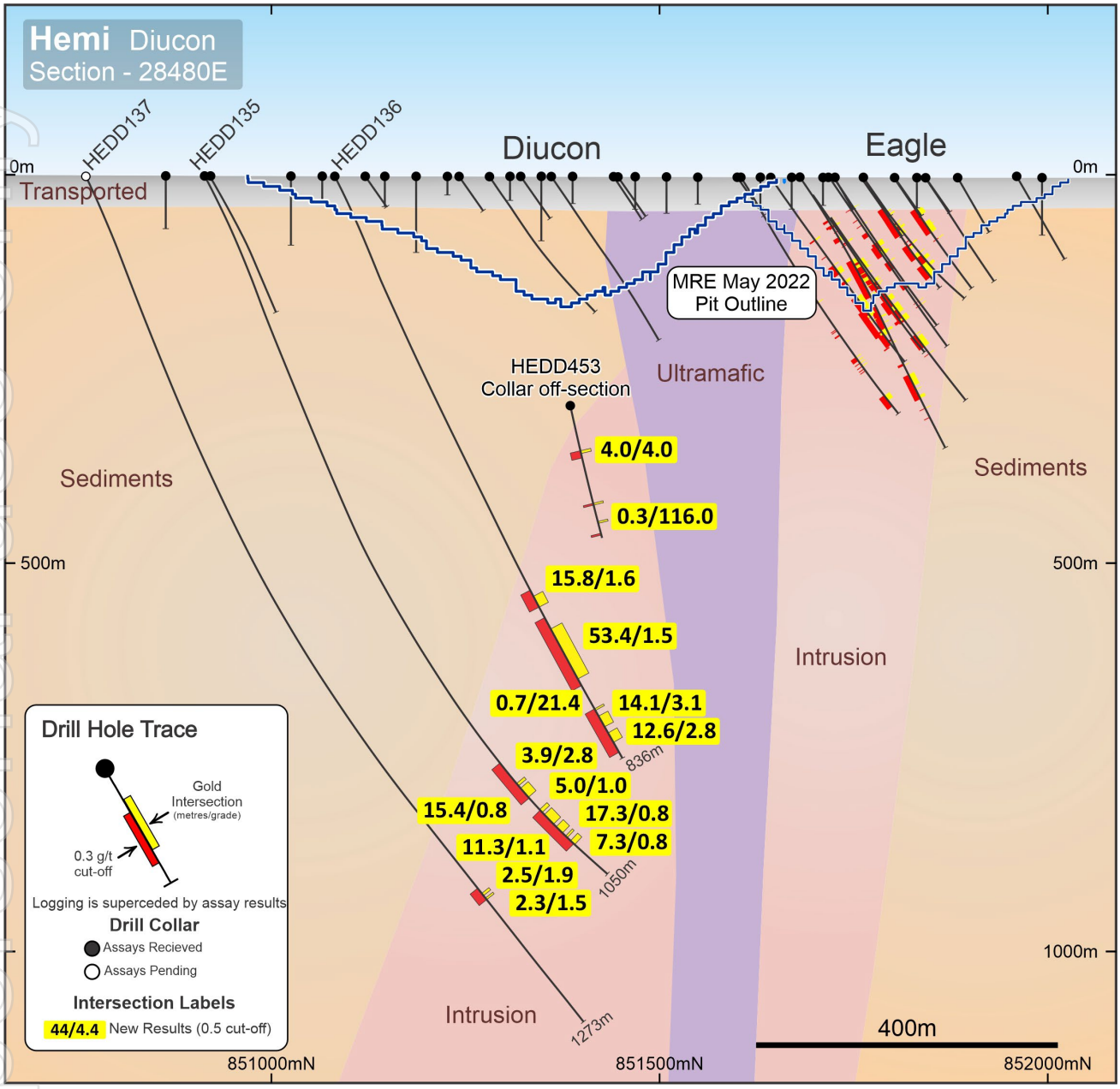


Figure 3 **3D isometric view showing recent intersection, May 2022 MRE block model and PFS pit shell at Diucon**

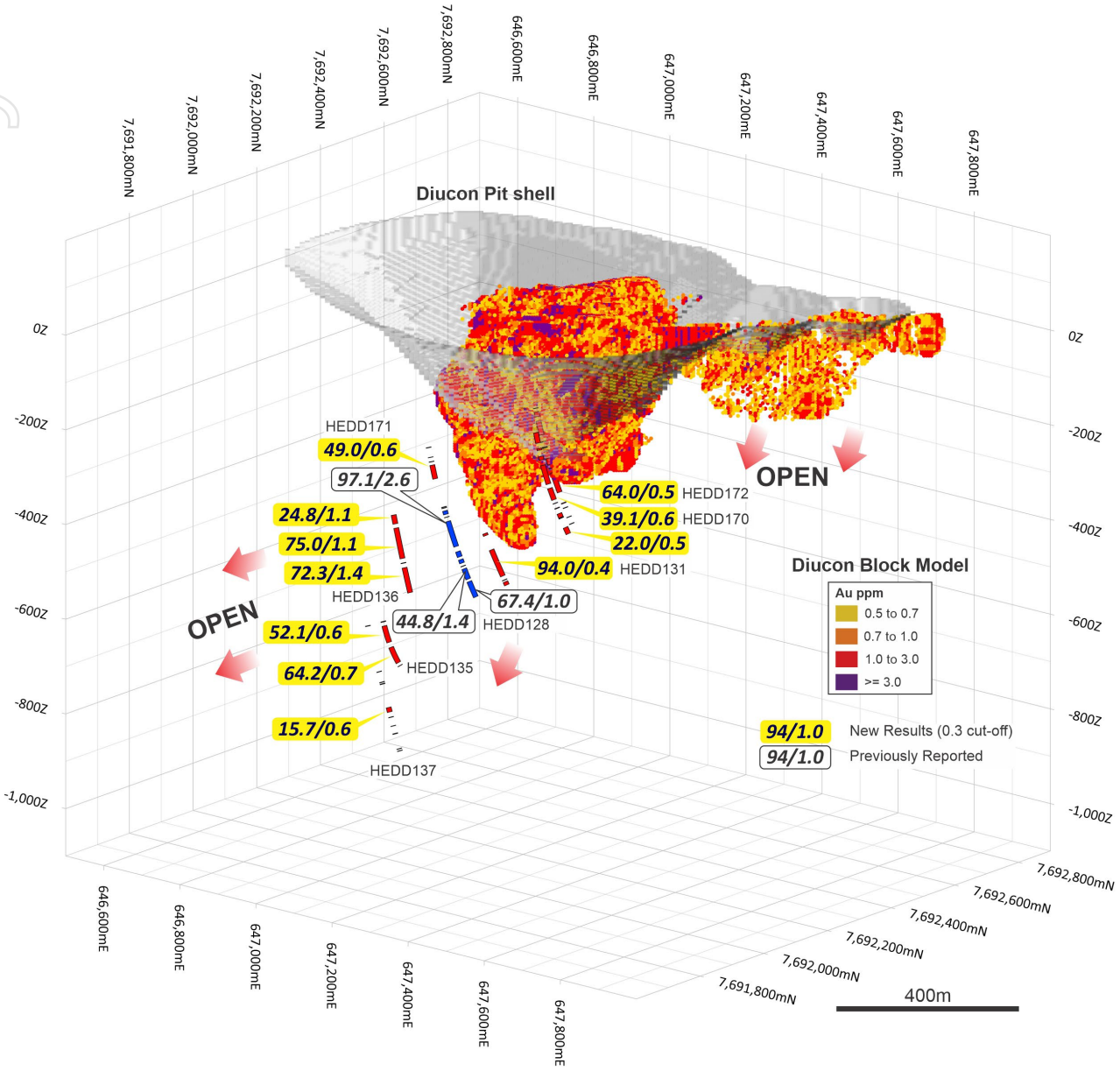
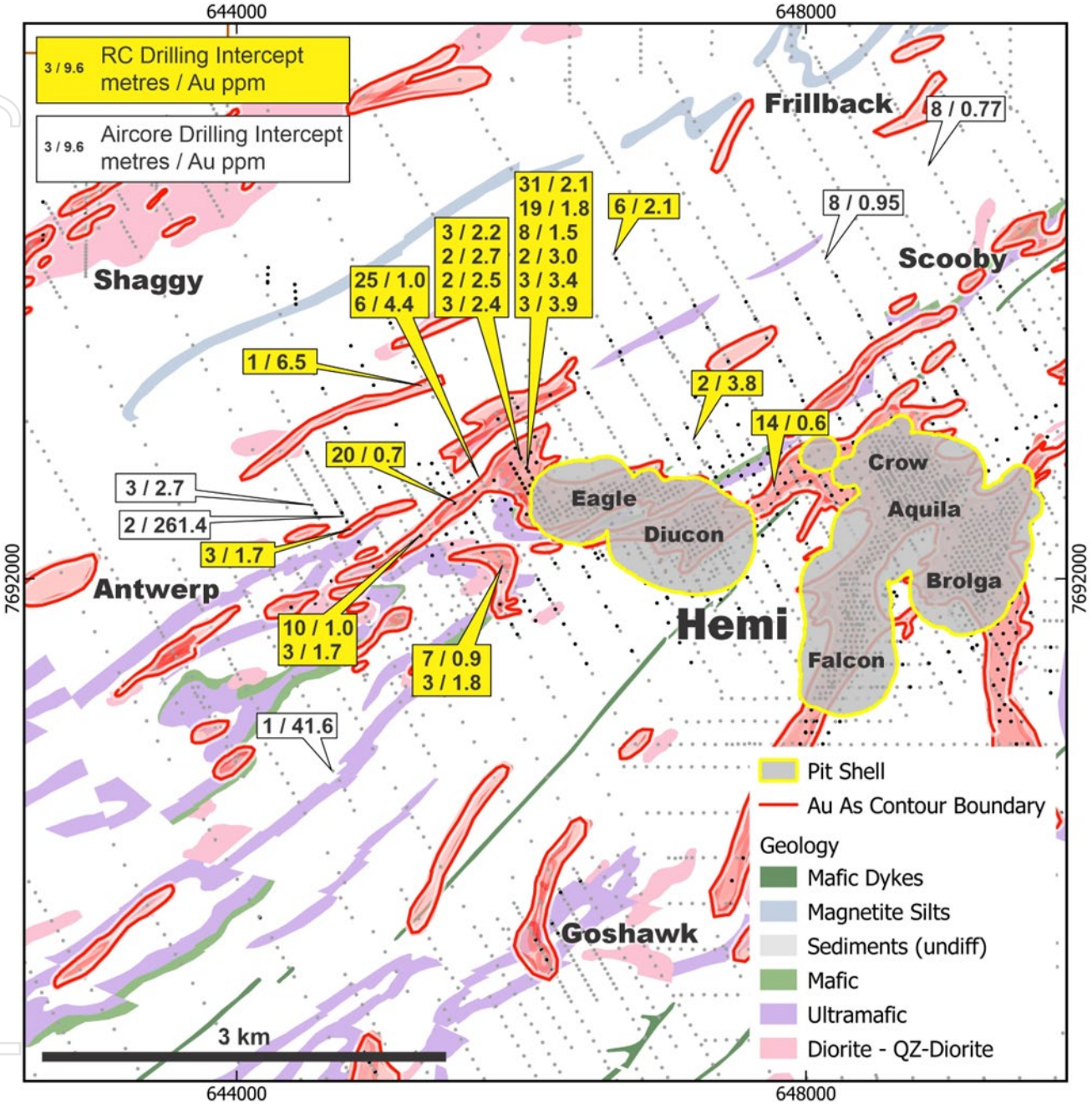


Figure 4 Visible gold in smokey quartz vein at 741m in HEDD136

Figure 5 Recent AC and RC results at along the Antwerp and Frillback trends



This announcement has been authorised for release by the De Grey Board.

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Competent Person's Statement

The information in this report that relates to exploration results is based on, and fairly represents information and supporting documentation prepared by Mr. Phil 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.

Previously released ASX Material References *that relates to Hemi Prospect includes:*

Resources and Studies:

- *2020 Mallina Gold Project Resource update, 2 April 2020*
- *6.8Moz Hemi Maiden Mineral Resource drives Mallina Gold Project, 23 June 2021*
- *De Grey Mining Mallina Gold Project Scoping Study, 5 October 2021*
- *Mallina Gold Project Resource Statement 2022, 31 May 2022*
- *Feasibility Study Outcomes – Mallina Gold Project, 8 September 2022*

Exploration results at Hemi, announced during financial year 2023:

- *Diucon major new gold intersection, 01 August 2022*
- *New AC and RC results in intrusion at Antwerp, 22 November 2022*

Table 1: Significant new results (>2 gram x m Au) - Intercepts - 0.5g/t Au lower cut, 4m maximum internal waste, >2gm.

HoleID	Zone	Depth From (m)	Depth To (m)	Downhole Width (m)	Au (g/t)	Collar East (GDA94)	Collar North (GDA94)	Collar RL (GDA94)	Dip (degrees)	Azimuth (GDA94)	Hole Depth (m)	Hole Type
HEDD131	Diucon	554.9	559.0	4.1	0.7	647311	7691850	68	-56	330	1051	DD
HEDD131	Diucon	621.9	624.0	2.0	1.4	647311	7691850	68	-56	330	1051	DD
HEDD131	Diucon	632.0	633.1	1.1	2.0	647311	7691850	68	-56	330	1051	DD
HEDD131	Diucon	654.0	659.0	5.0	0.9	647311	7691850	68	-56	330	1051	DD
HEDD131	Diucon	670.9	682.1	11.1	0.5	647311	7691850	68	-56	330	1051	DD
HEDD131	Diucon	687.2	691.0	3.9	0.9	647311	7691850	68	-56	330	1051	DD
HEDD131	Diucon	695.1	698.0	2.9	2.1	647311	7691850	68	-56	330	1051	DD
HEDD131	Diucon	736.4	740.3	4.0	0.6	647311	7691850	68	-56	330	1051	DD
HEDD132	Diucon	80.2	82.4	2.2	2.4	647395	7692271	68	-56	332	456	DD
HEDD132	Diucon	87.9	92.5	4.6	1.0	647395	7692271	68	-56	332	456	DD
HEDD132	Diucon	99.7	105.0	5.3	0.7	647395	7692271	68	-56	332	456	DD
HEDD132	Diucon	132.0	138.0	6.0	0.7	647395	7692271	68	-56	332	456	DD
HEDD132	Diucon	191.2	193.8	2.7	2.4	647395	7692271	68	-56	332	456	DD
incl	Diucon	193.5	193.8	0.3	18.1	647395	7692271	68	-56	332	456	DD
HEDD132	Diucon	240.0	260.0	20.0	1.2	647395	7692271	68	-56	332	456	DD
incl	Diucon	240.7	241.6	0.9	9.7	647395	7692271	68	-56	332	456	DD
HEDD132	Diucon	269.0	273.0	4.0	0.7	647395	7692271	68	-56	332	456	DD
HEDD133	Diucon	700.0	702.0	2.0	2.0	647094	7691907	68	-56	330	936	DD
HEDD133	Diucon	718.1	730.0	11.9	0.8	647094	7691907	68	-56	330	936	DD
HEDD133	Diucon	757.0	764.7	7.7	0.9	647094	7691907	68	-56	330	936	DD
HEDD133	Diucon	787.0	790.0	3.0	2.2	647094	7691907	68	-56	330	936	DD
HEDD133	Diucon	796.0	799.0	3.0	4.8	647094	7691907	68	-56	330	936	DD
HEDD133	Diucon	813.0	829.0	16.0	1.8	647094	7691907	68	-56	330	936	DD
incl	Diucon	821.0	822.0	1.0	14.2	647094	7691907	68	-56	330	936	DD
HEDD135	Diucon	873.8	874.6	0.9	6.0	647028	7691864	69	-61	327	1051	DD
HEDD135	Diucon	884.1	888.0	3.9	2.8	647028	7691864	69	-61	327	1051	DD
HEDD135	Diucon	892.2	907.6	15.4	0.8	647028	7691864	69	-61	327	1051	DD
HEDD135	Diucon	929.0	934.0	5.0	1.0	647028	7691864	69	-61	327	1051	DD
HEDD135	Diucon	938.0	955.3	17.3	0.8	647028	7691864	69	-61	327	1051	DD
HEDD135	Diucon	960.0	971.3	11.3	1.1	647028	7691864	69	-61	327	1051	DD
HEDD135	Diucon	986.0	993.3	7.3	0.8	647028	7691864	69	-61	327	1051	DD
HEDD136	Diucon	599.0	614.8	15.8	1.6	646943	7692009	68	-63	334	836	DD
HEDD136	Diucon	654.2	707.6	53.4	1.4	646943	7692009	68	-63	334	836	DD
incl	Diucon	689.7	696.0	6.3	3.5	646943	7692009	68	-63	334	836	DD
incl	Diucon	702.0	703.0	1.0	14.1	646943	7692009	68	-63	334	836	DD
HEDD136	Diucon	741.3	742.0	0.7	21.4	646943	7692009	68	-63	334	836	DD
HEDD136	Diucon	750.0	764.1	14.1	3.1	646943	7692009	68	-63	334	836	DD
incl	Diucon	756.5	756.9	0.4	32.9	646943	7692009	68	-63	334	836	DD
incl	Diucon	763.1	763.7	0.6	38.6	646943	7692009	68	-63	334	836	DD
HEDD136	Diucon	779.7	792.2	12.6	2.8	646943	7692009	68	-63	334	836	DD
incl	Diucon	788.0	789.7	1.7	17.6	646943	7692009	68	-63	334	836	DD
HEDD170	Diucon	290.3	306.0	15.7	0.9	647355	7692017	68	-57	333	816	DD
HEDD170	Diucon	311.0	319.0	8.0	2.5	647355	7692017	68	-57	333	816	DD

HoleID	Zone	Depth From (m)	Depth To (m)	Downhole Width (m)	Au (g/t)	Collar East (GDA94)	Collar North (GDA94)	Collar RL (GDA94)	Dip (degrees)	Azimuth (GDA94)	Hole Depth (m)	Hole Type
incl	Diucon	314.0	315.0	1.0	16.2	647355	7692017	68	-57	333	816	DD
HEDD170	Diucon	340.9	346.0	5.1	1.0	647355	7692017	68	-57	333	816	DD
HEDD170	Diucon	366.1	375.0	8.9	1.4	647355	7692017	68	-57	333	816	DD
incl	Diucon	367.6	368.3	0.7	7.4	647355	7692017	68	-57	333	816	DD
incl	Diucon	374.5	375.0	0.6	5.0	647355	7692017	68	-57	333	816	DD
HEDD170	Diucon	396.0	400.0	4.0	0.8	647355	7692017	68	-57	333	816	DD
HEDD170	Diucon	421.7	429.6	7.9	0.6	647355	7692017	68	-57	333	816	DD
HEDD170	Diucon	439.4	450.1	10.6	0.5	647355	7692017	68	-57	333	816	DD
HEDD170	Diucon	472.3	475.0	2.7	1.1	647355	7692017	68	-57	333	816	DD
HEDD170	Diucon	489.0	496.9	7.9	1.7	647355	7692017	68	-57	333	816	DD
incl	Diucon	495.9	496.9	1.0	10.3	647355	7692017	68	-57	333	816	DD
HEDD170	Diucon	616.0	619.2	3.2	1.7	647355	7692017	68	-57	333	816	DD
HEDD170	Diucon	628.0	630.0	2.0	2.7	647355	7692017	68	-57	333	816	DD
HEDD171	Diucon	471.4	472.6	1.2	1.8	647015	7692058	68	-57	330	642	DD
HEDD171	Diucon	535.0	549.0	14.0	1.1	647015	7692058	68	-57	330	642	DD
incl	Diucon	536.0	537.0	1.0	5.9	647015	7692058	68	-57	330	642	DD
HEDD171	Diucon	555.0	561.0	6.0	0.6	647015	7692058	68	-57	330	642	DD
HEDD171	Diucon	579.0	584.0	5.0	0.9	647015	7692058	68	-57	330	642	DD
HEDD172	Diucon	241.0	250.9	9.9	0.7	647334	7692050	68	-58	330	697	DD
HEDD172	Diucon	283.0	289.0	6.0	1.1	647334	7692050	68	-58	330	697	DD
HEDD172	Diucon	304.0	310.0	6.0	1.3	647334	7692050	68	-58	330	697	DD
HEDD172	Diucon	385.4	393.0	7.6	0.8	647334	7692050	68	-58	330	697	DD
HEDD172	Diucon	398.6	404.7	6.1	1.0	647334	7692050	68	-58	330	697	DD
HEDD172	Diucon	443.0	445.0	2.0	1.0	647334	7692050	68	-58	330	697	DD
HEDD172	Diucon	450.0	458.1	8.1	1.1	647334	7692050	68	-58	330	697	DD
HEDD172	Diucon	463.0	472.0	9.0	0.6	647334	7692050	68	-58	330	697	DD
HEDD172	Diucon	485.3	495.0	9.7	0.6	647334	7692050	68	-58	330	697	DD
HEDD223	Diucon	517.0	520.0	3.0	1.1	647589	7692010	68	-55	330	900	DD
HEDD223	Diucon	752.0	755.4	3.4	0.9	647589	7692010	68	-55	330	900	DD
HEDD453	Diucon	392.0	396.0	4.0	4.0	646964	7692310	68	-67	258	673	DD
HEDD453	Diucon	493.1	493.4	0.3	116.0	646964	7692310	68	-67	258	673	DD
HEDD453	Diucon	534.0	535.2	1.2	2.3	646964	7692310	68	-67	258	673	DD

Table 3: Significant new results (>40 gram x m Au) - Intercepts - 0.3g/t Au lower cut, 10m maximum internal waste

HoleID	Zone	Depth From (m)	Depth To (m)	Downhole Width (m)	Au (g/t)	Collar East (GDA94)	Collar North (GDA94)	Collar RL (GDA94)	Dip (degrees)	Azimuth (GDA94)	Hole Depth (m)	Hole Type
HEDD131	Diucon	614.0	708.0	94.0	0.4	647311	7691850	68	-56	330	1051	DD
HEDD132	Diucon	240.0	273.0	33.0	0.8	647395	7692271	68	-56	332	456	DD
HEDD133	Diucon	787.0	799.0	12.0	1.8	647094	7691907	68	-56	330	936	DD
HEDD133	Diucon	813.0	830.0	17.0	1.7	647094	7691907	68	-56	330	936	DD
HEDD135	Diucon	857.0	909.1	52.1	0.6	647028	7691864	69	-61	327	1051	DD
HEDD135	Diucon	929.0	993.3	64.2	0.7	647028	7691864	69	-61	327	1051	DD
HEDD136	Diucon	590.0	614.8	24.8	1.1	646943	7692009	68	-63	334	836	DD

HoleID	Zone	Depth From (m)	Depth To (m)	Downhole Width (m)	Au (g/t)	Collar East (GDA94)	Collar North (GDA94)	Collar RL (GDA94)	Dip (degrees)	Azimuth (GDA94)	Hole Depth (m)	Hole Type
HEDD136	Diucon	639.0	714.0	75.0	1.1	646943	7692009	68	-63	334	836	DD
HEDD136	Diucon	741.3	813.6	72.3	1.4	646943	7692009	68	-63	334	836	DD
HEDD170	Diucon	290.3	323.0	32.7	1.1	647355	7692017	68	-57	333	816	DD
HEDD170	Diucon	471.9	511.0	39.1	0.6	647355	7692017	68	-57	333	816	DD
HEDD171	Diucon	535.0	584.0	49.0	0.6	647015	7692058	68	-57	330	642	DD
HEDD172	Diucon	431.0	495.0	64.0	0.5	647334	7692050	68	-58	330	697	DD
HEDD453	Diucon	493.1	493.4	0.3	116.0	646964	7692310	68	-67	258	673	DD

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	• All drilling and sampling was undertaken in an industry standard manner. • Core samples were collected with a diamond rig drilling mainly NQ2 diameter core. • After logging and photographing, NQ2 drill core was cut in half, with one half sent to the laboratory for assay and the other half retained. HQ and PQ core was quartered, with one quarter sent for assay. Holes were sampled over mineralised intervals to geological boundaries on a nominal 1m basis. • Sample weights ranged from 2-4kg. • RC holes were sampled on a 1m basis with samples collected from a cone splitter mounted on the drill rig cyclone. The 1m samples typically ranged in weight from 2.5kg to 3.5kg. • Aircore samples were collected by spear from 1m sample piles and composited over 4m intervals. Samples for selected holes were collected on a 1m basis by spear from 1m sample piles. Sample weights ranges from around 1kg to 3kg. Aircore results have not been used in the resource estimate. • Commercially prepared certified reference material ("CRM") and course blank was inserted at a minimum rate of 2%. • Field duplicates were selected on a routine basis to verify the representivity of the sampling methods. • Sample preparation is completed at an independent laboratory where samples are dried, split, crushed and pulverized prior to analysis as described below. • Sample sizes are considered appropriate for the material sampled. • The samples are considered representative and appropriate for this type of drilling. Diamond core and RC samples are appropriate for use in the Mineral Resource estimate.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	• Diamond core diameters are - NQ2 (51mm), HQ3 (61mm), PQ (85mm). • Reverse Circulation (RC) holes were drilled with a 51/2-inch bit and face sampling hammer. • Aircore holes were drilled with an 83mm diameter blade bit.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Core recovery is measured for each drilling run by the driller and then checked by the Company geological team during the mark up and logging process. • RC and aircore samples were visually assessed for recovery. • Samples are considered representative with generally good recovery. Deeper RC and aircore holes encountered water, with some intervals having less than optimal recovery and possible contamination. • No sample bias is observed.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	• The entire hole has been geologically logged and core was photographed by Company geologists, with systematic sampling undertaken based on rock type and alteration observed. • RC and diamond sample results are appropriate for use in a resource estimation. • The aircore results provide a good indication of mineralisation but are not used in resource estimation.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Core samples were collected with a diamond drill rig drilling NQ2, HQ3 or PQ diameter core. After logging and photographing, NQ2 drill core was cut in half, with one half sent to the laboratory for assay and the other half retained. HQ and PQ core was quartered, with one quarter sent for assay. Holes were sampled over mineralised intervals to geological boundaries on a nominal 1m basis. • RC sampling was carried out by a cone splitter on the rig cyclone and drill cuttings were sampled on a 1m basis in bedrock and 4m composite basis in cover. • Aircore samples were collected by spear from 1m sample piles and composited over 4m intervals. Samples for selected holes were collected on a 1m basis by spear from 1m sample piles. • Each sample was dried, split, crushed and pulverised to 85% passing 75µm. • Sample sizes are considered appropriate for the material sampled. • The samples are considered representative and appropriate for this type of drilling. • Core and RC samples are appropriate for use in a resource estimate. • Aircore samples are generally of good quality and appropriate for delineation of geochemical trends but were not used in the Mineral Resource estimate.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• The samples were submitted to a commercial independent laboratory in Perth, Australia. • For diamond core and RC samples Au was analysed by a 50g charge Fire assay fusion technique with an AAS finish. • Aircore samples were analysed for Au using 25g aqua regia extraction with ICPMS finish. • All aircore samples and at least every fifth RC and DD sample were analysed with ALS procedure MS61 which comprises a four acid digest and repots a 48 element analysis by ICPAES and ICPMS. • The techniques are considered quantitative in nature. • A comprehensive QAQC protocol including the use of CRM, field duplicates and umpire assay at a second commercial laboratory has confirmed the reliability of the assay method.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• A number of significant intersections were visually field verified by the Competent Person. • Two twin holes were completed. The diamond twins verify grade tenor and mineralisation thickness of RC holes. • Sample results have been merged by the company's database consultants. • Results have been uploaded into the company database, checked and verified. • No adjustments have been made to the assay data. • Results are reported on a length weighted basis.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Diamond and RC drill hole collar locations are located by DGPS to an accuracy of +/-10cm. • Aircore hole collar locations are located by DGPS to an accuracy of +/-10cm., or by handheld GPS to an accuracy of 3m. • Locations are recorded in GDA94 zone 50 projection. • Diagrams and location tables have been provided in numerous releases to the ASX. • Topographic control is by detailed georeferenced airphoto and Differential GPS data. • Down hole surveys were conducted for all RC and DD holes using a north seeking gyro tool with measurements at 10m down hole intervals.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*	• Drill spacing varies from 40m x 40m to 320m x 80m. • The extensive drilling programs have demonstrated that the mineralised domains have sufficient continuity in both geology and

Criteria	JORC Code explanation	Commentary
	• *Whether sample compositing has been applied.*	grade to be considered appropriate for the Mineral Resource and Ore Reserve estimation procedures and classification applied under the 2012 JORC Code. • Data spacing and distribution of RC and diamond drilling is sufficient to provide support for the results to be used in a resource estimate. • Sample compositing has not been applied except in reporting of drill intercepts, as described in this Table
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• The drilling is approximately perpendicular to the strike of mineralisation. The holes are generally angled at -55o which provides good intersection angles into the mineralisation which ranges from vertical to -45o dip. • The sampling is considered representative of the mineralised zones. • Where drilling is not orthogonal to the dip of mineralised structures, true widths are less than downhole widths.
Sample security	• *The measures taken to ensure sample security.*	• Samples were collected by company personnel and delivered direct to the laboratory via a transport contractor.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• QAQC data has been both internally and externally reviewed.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	• The Hemi deposit lies within exploration licence E45/3392-I. The tenement is held 100% by Last Crusade Pty Ltd, a wholly owned subsidiary of De Grey Mining Limited. • The Hemi deposit is approximately 60km SSW of Port Hedland. • The tenements are in good standing as at the time of this report. • There are no known impediments to operating in the area.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• No detailed exploration is known to have occurred on the tenement prior to De Grey Mining. Prior to the Hemi discovery, De Grey completed programs of airborne aeromagnetics/radiometrics, surface geochemical sampling and wide spaced aircore and RAB drilling. Limited previous RC drilling was carried out at the Scooby Prospect approximately 2km NE of the Brolga deposit at Hemi.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The mineralisation style is new to the Pilbara region and is interpreted to be hydrothermally emplaced gold mineralisation within intermediate intrusions that have intruded into

Criteria	JORC Code explanation	Commentary
		the older Archaean Mallina basin sediments. • Host rocks comprise igneous rocks of quartz diorite composition. • The gold mineralisation is intimately associated with sulphide stringers and disseminations. • The sulphide minerals are dominantly arsenopyrite and pyrite.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* • *easting and northing of the drill hole collar* • *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* • *dip and azimuth of the hole* • *down hole length and interception depth* • *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• Drill hole location and directional information are provided in this release and various previous ASX releases.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Results are reported to a minimum cutoff grade of 0.5g/t gold with an internal dilution of 4m maximum. • Wider intervals are aggregated using a 0.3g/t Au lower cut with an internal dilution of 10m maximum. Results over 50 gram x metres are reported using this method. • Intercepts are length weighted averaged. • No maximum cuts have been made.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	• The drill holes are approximately perpendicular to the strike of mineralisation. • Where drilling is not perpendicular to the dip of mineralisation the true widths are less than downhole widths.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Plans and sections are provided in this release.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• All drill collar locations are shown in figures and all significant results are provided in this report. • The report is considered balanced and provided in context.
Other substantive	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and*	• Extensive metallurgical, groundwater, and geotechnical studies have commenced as part of the economic assessment of the project.

Criteria	JORC Code explanation	Commentary
exploration data	*method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Programs of follow up RC and diamond drilling aimed at extending resources at depth and laterally are underway. • Refer to diagrams in the body of this and previous ASX releases.