

# **ASX ANNOUNCEMENT**

**14 November 2023** 

**ASX: DEG** 

## **Major extensions to Eagle and Diucon**

### **Highlights**

- New diamond drilling results at Eagle comprise wide intersections containing higher grade intervals:
  - o 38.8m @ 3.6g/t Au in HEDD196 (including 20.7m @ 6.3g/t Au)
  - o 37.7m @ 1.8g/t Au in HEDD226 (including 5.1m @ 8.1g/t Au)
  - o 67m @ 2.1g/t Au in HEDD230 (including 3.1m @ 28.7g/t Au)
  - o 25.4m @ 1.5g/t Au in HEDD252 (including 4.5m @ 6.7g/t Au)
  - 42.8m @ 2.0g/t Au in HEDD253 (including 23m @ 2.6g/t Au)
- These results provide a strong basis for future Resource increases at Eagle and Diucon and potential upside to the production metrics of the September 2023 Hemi Definitive Feasibility Study (DFS).
- Drilling along the Diucon Thrust has extended relatively shallow mineralisation west of the Diucon MRE, with results including:
  - o 8m @ 1.8g/t Au in HEDD197
  - 5.7m @ 1.6g/t Au in HEDD230
  - o **16.4m @ 1.9g/t Au** in HEDD230
- Several new Eagle hanging wall lodes (termed Antwerp Link) have been intersected, with results including:
  - o 5m @ 1.6g/t Au and 6.5m @ 5.1g/t Au in HEDD196
- New drill results provide the potential for increased scale of the planned Diucon-Eagle open pits at the Hemi Gold Project, as well as enhancing future underground mining potential.
- Results substantially extend mineralisation by at least 250m down plunge and 300m down dip at Eagle. In addition, new lodes have been intersected in the hanging wall that warrant follow up.
- Results extend Diucon along strike to the west, down the Diucon Thrust structure.
- Mineralisation remains open at depth, down plunge to the west and along strike
- Follow up drilling planned for Eagle, Diucon and Antwerp Link areas.
- Discovery and resource extension drilling is continuing within the Hemi area, at Regional targets and within the Egina Joint Venture area.





De Grey General Manager Exploration, Phil Tornatora, commented:

"Further significant mineralisation has been intersected at Eagle and Diucon in recent drilling. The extensions below the Eagle DFS pit and shallower Diucon extensions have the potential to result in a substantial expansion of the current Diucon-Eagle open pit shell outline. In addition to potential resource increases, deeper drilling at Hemi will support our conceptual studies into potential underground mining in the future. RC drilling at Hemi is continuing along the Diucon Thrust north of Crow and extending towards Scooby, aiming to define additional shallow resources."

De Grey Mining Limited (ASX: DEG, De Grey or the Company) is pleased to report on recent drill results from the Diucon and Eagle deposits at Hemi. Hemi is located approximately 85km south of the town of Port Hedland in the Pilbara region if Western Australia. Diucon and Eagle are located in the west of Hemi as shown in Figure 1.

This release provides an update on drilling since the previous report on Diucon and Eagle resource infill and extensional drilling released to the ASX on 8 August 2023. Recent drilling has continued to target extensions to the June 2023 Mineral Resource Estimate (MRE) down plunge and down dip at Eagle, and along strike at Diucon.

The Hemi Gold Project Definitive Feasibility Study (DFS), based on the June 2023 MRE, was released on 28 September 2023, and demonstrates a robust, Tier 1 project with outstanding financial metrics. The new extensional drill results in this release represent further upside to the DFS outcomes. There is potential for the extensions to be included in future open pit and underground mining plans.

New drill results are shown in Table 1 at the end of the announcement.

#### **Eagle Extensional Drilling**

Since the June 2023 MRE and the 8 August 2023 Diucon-Eagle drilling update, continuing widely spaced drilling (nominally 80m  $\times$  80m) down plunge and down dip at Eagle has continued, demonstrating substantial extensions to known mineralisation. Significant results from this work include:

- **38.8m @ 3.6g/t Au** from 524.2m in HEDD196 (including **20.7m @ 6.3g/t Au** from 535.4m)
- 37.7m @ 1.8g/t Au from 523.3m in HEDD226 (including 5.1m @ 8.1g/t Au from 539.9m)
- 67m @ 2.1g/t Au from 665.1m in HEDD230 (including 3.1m @ 28.7g/t Au from 721m)
- **7.1m @ 2.9g/t Au** from 345.9m in HEDD250
- 2.9m @ 8.6g/t Au from 361.1m in HEDD252
- 25.4m @ 1.5g/t Au from 564m in HEDD252 (including 4.5m @ 6.7g/t Au from 584.9m)
- 42.8m @ 2.0g/t Au from 393m in HEDD253 (including 23m @ 2.6g/t Au from 412.9m)

Recent significant intersections from Eagle are shown in plan view in Figure 2 and in long section view in Figure 3. Drilling has extended mineralisation at Eagle beyond the June 2023 MRE for at least 250m down plunge to the west and over 300m down dip, beneath the current Eagle pit plan. The substantial widths and tenor in recent drilling demonstrate strong potential to expand the June 2023 MRE, and also expand pit shells defined in the DFS. Mineralisation is still open both down dip and down plunge.



Ten diamond holes have been completed and are still awaiting assay results (Figure 3), with many of these intersecting substantial zones of visible mineralisation. Additional planned holes yet to be commenced are also shown in Figure 3. These aim to extend mineralisation further to the west down plunge and also down dip beneath the current Eagle MRE.

Figures 5 to 7 are cross sections showing new results from Eagle below and to the west of the 2023 MRE.

Intercepts at Hemi are generally reported using a lower cut-off grade of 0.5g/t Au, but often include higher grade zones that may be suitable for underground mining. These higher grade zones calculated at a lower cutoff grade of 1g/t Au are reported in brackets in the text and are also included in Table 1.

The Eagle mineralised intrusion has now been intersected over a strike of more than 1,000m and a true thickness of approximately 200m, extending to at least 600m depth. Mineralisation remains open at depth and down plunge.

#### **Diucon Extensional Drilling**

A drill program at Diucon continued to target mainly shallow, open-pittable resources along the Diucon Thrust to the west of the Diucon MRE and between the Diucon and Eagle proposed pits. Additional resources in this area may allow expansion and deepening of the proposed Diucon and Eagle pits.

Drilling has continued to return very encouraging intercepts from lodes in the hanging wall (south) of the Diucon Thrust, which has a strong control on mineralisation in the Hemi area. The lodes extend west of the Diucon MRE, with results including:

- **8.0m @ 1.8g/t Au** from 379m in HEDD197
- **5.7m @ 1.6g/t Au** from 405.3m in HEDD230
- **16.4m @ 1.9g/t Au** from 446.6m in HEDD230 (including **10.6m @ 2.8g/t Au** from 452.4m)

Recent Diucon West significant intersections are shown in plan view in Figure 2 and in long section view in Figure 4. Cross sections including Diucon intercepts are shown in Figures 5 to 7.

Drilling at Diucon West is still relatively wide spaced (nominally 80m x 80m), with mineralisation appearing to be improving in tenor with depth. This mineralisation is open along strike to the west, and down dip and down plunge.

#### **Eagle-Antwerp Strike Extensions**

Recent drilling targeting deeper Eagle mineralisation has intersected a number of shallow lodes in the hanging wall to Eagle. These lie north of the Diucon Thrust and have been termed the "Antwerp Link" lodes. Significant intercepts are given in Table 1, with higher tenor results including:

- **15.0m @ 0.7g/t Au** from 15m in HMRC633
- **5.0m @ 1.6g/t Au** from 278.0m in HEDD196
- **6.5m @ 5.1g/t Au** from 298.1m in HEDD196 (including **0.9m @ 33.6g/t Au** from 298.1m)



Drilling is still widely spaced, with some lines 160m apart. Geology in this area is complex, and a program is being developed to follow up Diucon West, and better define the Antwerp Link mineralisation.

Current exploration at Hemi includes RC drilling along the Diucon Thrust to the north of Crow, extending towards Scooby. Diamond drilling is continuing to target Eagle extensions, with one diamond rig drilling additional holes to assess moisture content and geotechnical data to advance operational readiness.

De Grey also has one aircore rig drilling Regional targets and an additional RC rig drilling within the Becher area on the Egina Joint Venture.



Figure 1: Hemi Plan

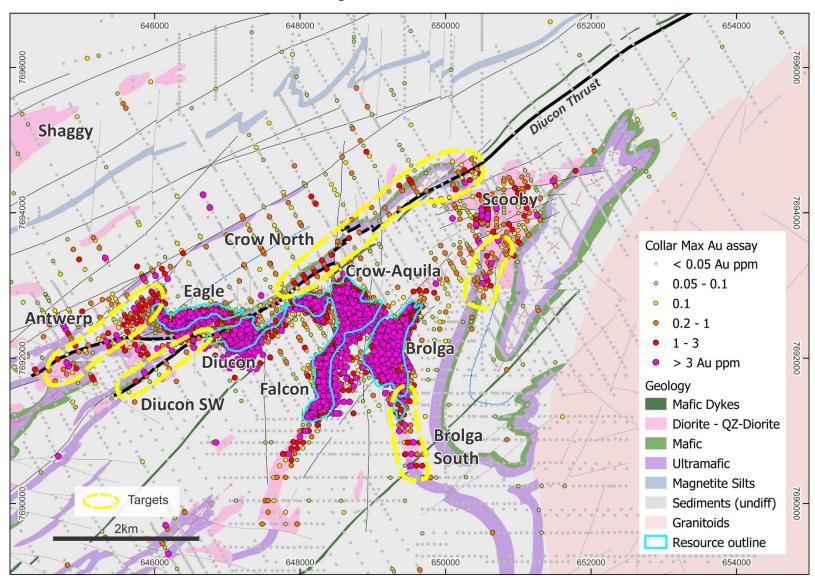




Figure 2: Plan of Diucon and Eagle showing only new and previously unannounced drill results

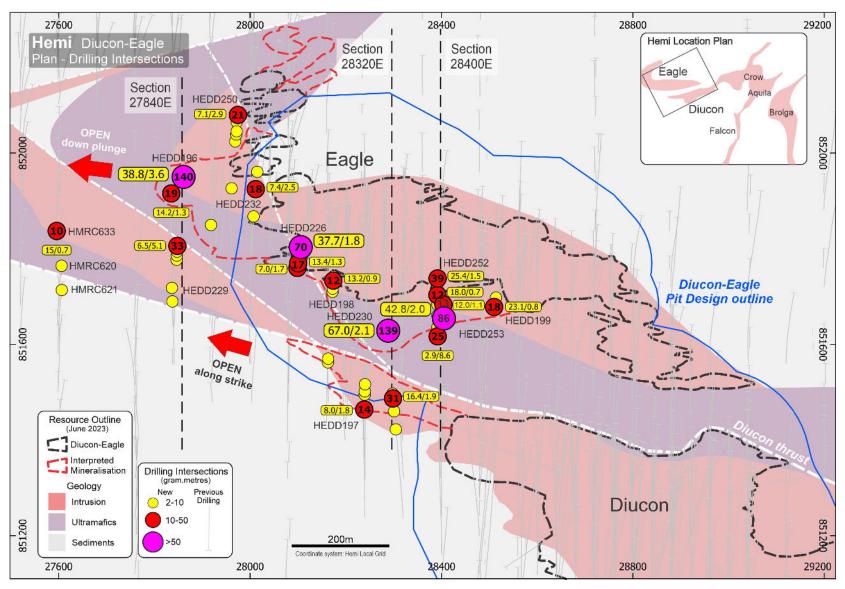




Figure 3: Eagle Long Projection showing new drill results outside DFS open pit

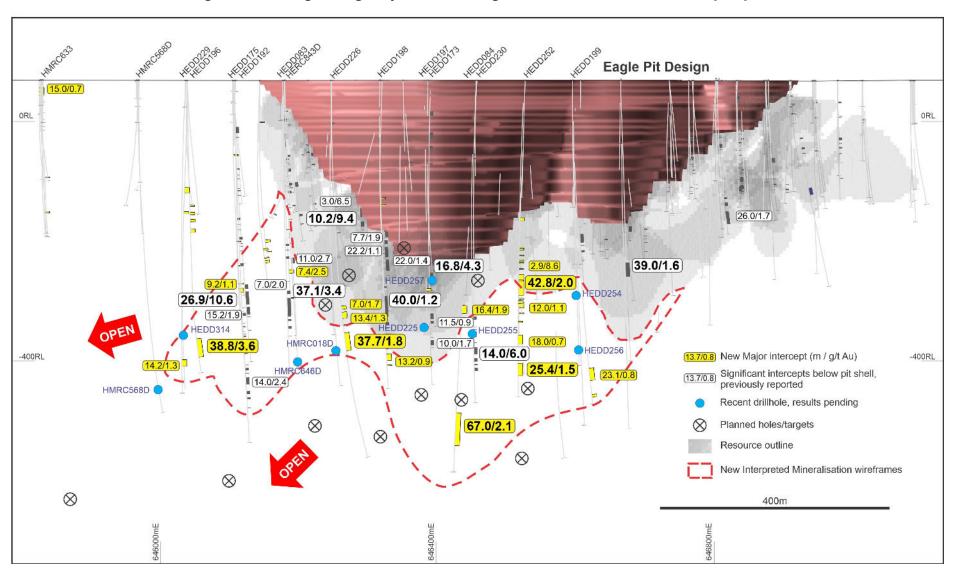
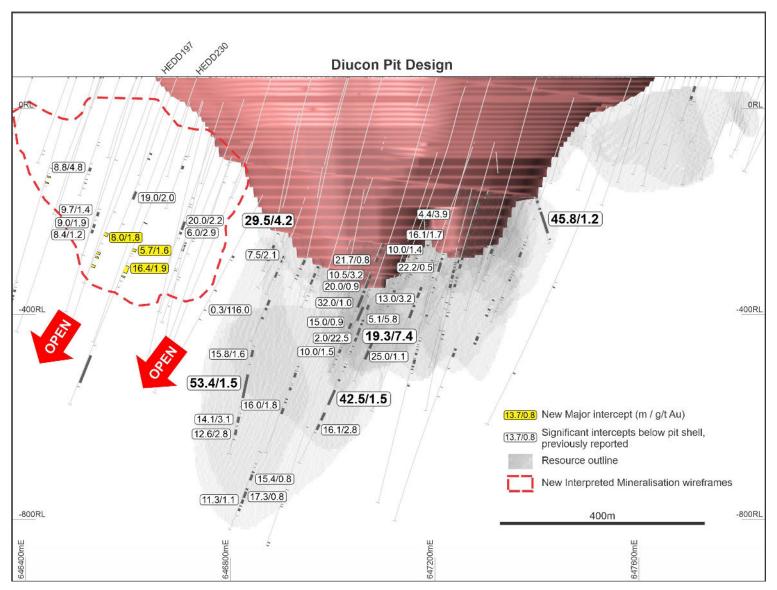




Figure 4: Diucon Long Projection showing new drill results outside DFS open pit





Hemi Diucon WEDD 252 HERCASS HERC886 0m Transported Eagle Pit Design 14.0/1.5 228m June 2023 20.0/2.2 6.0/1.6 Resource outline 2.9/8.6 6.0/2.9 6.0/0.9 250m 250m 42.8/2.0 5.0/1.0 12.0/1.1 Sediments 18.0/0.7 12.0/0.7 **Drill Hole Trace** 25.4/1.5 Intrusion Sediments Interpreted - 500m 500m-Mineralisation Logging is superceded by assay results **Drill Collar** Assays Recieved O Assays Pending Intrusion Intersection Labels 200m 44/4.4 New Results (0.5 cut-off) 44/4.4 Previously Reported 851500mN 852000mN 851250mN 851750mN

Figure 5: Diucon/Eagle Section 28400E



**Hemi** Diucon Section - 28320E HEDDO85 HERCBOR HEDDOS2 HEDDO53 0m Transported 31.6/0.7 Eagle Pit 15.7/1.1 23.6/2.9 Design 8.0/4.8 3.0/9.1 33/1.0 49.0/1.5 3.1/3.1 19.0/2.0 27.0/1.1 - 250m 250m-47.4/1.3 5.0/2.1 June 2023 Resource outline 5.7/1.6 Sediments Intrusion 16.4/1.9 6.3/2 Interpreted Mineralisation Intrusion 14.6/1.7 **Drill Hole Trace** 7.0/1.7 Gold Intersection - 500m 500m-Sediments 67.0/2.1 Logging is superceded by assay results **Drill Collar** Assays Recieved O Assays Pending Intersection Labels 44/4.4 New Results (0.5 cut-off) 200m 44/4.4 Previously Reported 851250mN 851500mN 851750mN 852000mN

Figure 6: Diucon/Eagle Section 28320E



Hemi Diucon HINECSES SE HMRC576 HMRCATT HMRC5TA HMRC236 HMRC234 HMRC513 HNRC232 HNRC5TSD 0m Transported 16.0/0.8 9.0/0.6 12.0/1.4 Ultramafic 11.9/0.6 2.1/3.2 5.1/0.5 4.5/1.0 5.0/1.6 250m 6.5/5.1 Sediments Intrusion Interpreted Mineralisation 38.8/3.6 **Drill Hole Trace** 500m--500m Gold Intrusion Sediments 1 g/t cut-off Logging is superceded by assay results Drill Collar Assays Recieved O Assays Pending Intersection Labels 750m --750m 44/4.4 New Results (0.5 cut-off) 44/4.4 Previously Reported 851500mN 852000mN 852500mN

Figure 7: Diucon/Eagle Section 27840E



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

#### For further information, please contact:

Glenn Jardine
Managing Director
+61 8 6117 9328
admin@degreymining.com.au

Peter Canterbury Chief Financial Officer +61 8 6117 9328 admin@degreymining.com.au Michael Vaughan (Media enquiries) Fivemark Partners +61 422 602 720 michael.vaughan@fivemark.com.au

#### **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. 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.

#### 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
- Mallina Gold Project Resource Statement 2023, 16 June 2023
- Hemi Gold Project DFS Outstanding Financial Metrics, 28 September 2023

#### Exploration results at Greater Hemi, announced since beginning of financial year 2022-23:

- Major gold intersection 200m below Diucon, 01 August 2022
- New AC and RC results in intrusion at Antwerp, 22 November 2022
- Major strike and depth extensions at Diucon, 15 February 2023
- Resource definition and extensional drilling at Brolga, 16 March 2023
- Major strike and depth extensions to Eagle and Diucon, 8 August 2023



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)	Down hole Width (m)	Au (g/t)	Collar East (GDA94 )	Collar North (GDA94	Collar RL (GDA9 4)	Dip (degr ees)	Azimut h (GDA94	Hole Depth (m)	Hole Type
HEDD196	AntwerpLink	249.9	252.1	2.1	3.2	646112	7692170	67	-55	331	597	DD
HEDD196	AntwerpLink	264.0	269.0	5.1	0.5	646112	7692170	67	-55	331	597	DD
HEDD196	AntwerpLink	278.0	283.0	5.0	1.6	646112	7692170	67	-55	331	597	DD
incl	AntwerpLink	282.0	283.0	1.0	5.7	646112	7692170	67	-55	331	597	DD
HEDD196	AntwerpLink	298.1	304.6	6.5	5.1	646112	7692170	67	-55	331	597	DD
incl	AntwerpLink	298.1	299.0	0.9	33.6	646112	7692170	67	-55	331	597	DD
HEDD229	AntwerpLink	218.6	230.5	11.9	0.6	646151	7692102	67	-55	329	654	DD
HEDD229	AntwerpLink	269.0	273.5	4.5	1.0	646151	7692102	67	-55	329	654	DD
HMRC620	AntwerpLink	192.0	193.0	1.0	2.0	645890	7692070	68	-55	332	300	RC
HMRC621	AntwerpLink	256.0	258.0	2.0	1.3	645930	7692000	68	-55	329	300	RC
HMRC633	AntwerpLink	15.0	30.0	15.0	0.7	645806	7692210	67	-55	329	215	RC
HEDD197	Diucon	379.0	387.0	8.0	1.8	646655	7692025	68	-55	329	511	DD
HEDD197	Diucon	428.9	434.0	5.1	0.8	646655	7692025	68	-55	329	511	DD
HEDD197	Diucon	440.0	443.6	3.6	1.7	646655	7692025	68	-55	329	511	DD
HEDD197	Diucon	461.9	468.1	6.3	0.5	646655	7692025	68	-55	329	511	DD
HEDD198	Diucon	228.6	230.9	2.4	1.2	646486	7692160	67	-56	330	606	DD
HEDD198	Diucon	242.6	245.0	2.4	2.1	646486	7692160	67	-56	330	606	DD
HEDD230	Diucon	341.8	342.4	0.6	7.5	646726	7692064	68	-56	326	786	DD
HEDD230	Diucon	405.3	411.0	5.7	1.6	646726	7692064	68	-56	326	786	DD
HEDD230	Diucon	446.6	463.0	16.4	1.9	646726	7692064	68	-56	326	786	DD
incl	Diucon	452.4	463.0	10.6	2.8	646726	7692064	68	-56	326	786	DD
HEDD230	Diucon	471.0	473.6	2.6	1.0	646726	7692064	68	-56	326	786	DD
HEDD196	Eagle	524.2	563.0	38.8	3.6	646112	7692170	67	-55	331	597	DD
incl	Eagle	535.4	556.1	20.7	6.3	646112	7692170	67	-55	331	597	DD
HEDD198	Eagle	497.8	503.1	5.3	0.6	646486	7692160	67	-56	330	606	DD
HEDD198	Eagle	510.7	514.3	3.6	0.6	646486	7692160	67	-56	330	606	DD
HEDD198	Eagle	537.0	550.2	13.2	0.9	646486	7692160	67	-56	330	606	DD



HoleID	Zone	Depth From (m)	Depth To (m)	Down hole Width (m)	Au (g/t)	Collar East (GDA94	Collar North (GDA94	Collar RL (GDA9 4)	Dip (degr ees)	Azimut h (GDA94	Hole Depth (m)	Hole Type
HEDD198	Eagle	559.0	560.6	1.6	1.6	646486	7692160	67	-56	330	606	DD
HEDD199	Eagle	550.1	573.2	23.1	0.8	646782	7692284	68	-57	331	618	DD
HEDD199	Eagle	600.0	605.0	5.0	1.5	646782	7692284	68	-57	331	618	DD
HEDD226	Eagle	467.0	474.0	7.0	1.7	646398	7692152	67	-56	331	802	DD
incl	Eagle	468.0	469.0	1.0	9.9	646398	7692152	67	-56	331	802	DD
HEDD226	Eagle	480.0	493.4	13.4	1.3	646398	7692152	67	-56	331	802	DD
incl	Eagle	490.0	493.4	3.4	3.7	646398	7692152	67	-56	331	802	DD
HEDD226	Eagle	506.4	508.4	2.0	2.6	646398	7692152	67	-56	331	802	DD
HEDD226	Eagle	523.3	561.0	37.7	1.8	646398	7692152	67	-56	331	802	DD
incl	Eagle	525.9	534.1	8.2	2.2	646398	7692152	67	-56	331	802	DD
incl	Eagle	539.9	545.0	5.1	8.1	646398	7692152	67	-56	331	802	DD
HEDD229	Eagle	582.0	596.2	14.2	1.3	646151	7692102	67	-55	329	654	DD
incl	Eagle	582.0	583.0	1.0	7.1	646151	7692102	67	-55	329	654	DD
incl	Eagle	595.0	596.2	1.1	5.0	646151	7692102	67	-55	329	654	DD
HEDD230	Eagle	665.1	732.2	67.0	2.1	646726	7692064	68	-56	326	786	DD
incl	Eagle	721.1	724.1	3.1	28.7	646726	7692064	68	-56	326	786	DD
HEDD232	Eagle	310.2	311.2	1.0	5.5	646229	7692286	67	-55	329	492	DD
HEDD232	Eagle	396.9	404.4	7.4	2.5	646229	7692286	67	-55	329	492	DD
incl	Eagle	403.5	404.4	0.9	7.9	646229	7692286	67	-55	329	492	DD
HEDD232	Eagle	457.0	458.0	1.0	2.2	646229	7692286	67	-55	329	492	DD
HEDD233	Eagle	151.1	154.0	2.9	0.8	646117	7692315	67	-55	330	486	DD
HEDD233	Eagle	332.7	334.3	1.6	3.5	646117	7692315	67	-55	330	486	DD
HEDD233	Eagle	384.4	385.5	1.1	1.8	646117	7692315	67	-55	330	486	DD
HEDD233	Eagle	421.9	424.4	2.4	1.3	646117	7692315	67	-55	330	486	DD
HEDD233	Eagle	432.8	442.0	9.2	1.1	646117	7692315	67	-55	330	486	DD
incl	Eagle	436.3	440.9	4.6	1.6	646117	7692315	67	-55	330	486	DD
HEDD250	Eagle	82.0	83.6	1.5	5.1	646094	7692440	67	-56	330	402	DD
HEDD250	Eagle	322.0	327.0	5.0	0.5	646094	7692440	67	-56	330	402	DD
HEDD250	Eagle	345.9	353.0	7.1	2.9	646094	7692440	67	-56	330	402	DD



HoleID	Zone	Depth From (m)	Depth To (m)	Down hole Width (m)	Au (g/t)	Collar East (GDA94	Collar North (GDA94	Collar RL (GDA9 4)	Dip (degr ees)	Azimut h (GDA94	Hole Depth (m)	Hole Type
incl	Eagle	345.9	349.0	3.1	6.2	646094	7692440	67	-56	330	402	DD
HEDD251	Eagle	358.9	362.8	3.9	0.9	646135	7692370	67	-56	327	450	DD
HEDD251	Eagle	380.0	382.0	2.0	1.2	646135	7692370	67	-56	327	450	DD
HEDD251	Eagle	387.0	393.0	6.0	1.1	646135	7692370	67	-56	327	450	DD
incl	Eagle	392.0	393.0	1.0	5.9	646135	7692370	67	-56	327	450	DD
HEDD252	Eagle	361.1	364.0	2.9	8.6	646707	7692261	68	-56	328	633	DD
HEDD252	Eagle	396.1	397.9	1.8	2.0	646707	7692261	68	-56	328	633	DD
HEDD252	Eagle	438.0	443.0	5.0	1.0	646707	7692261	68	-56	328	633	DD
HEDD252	Eagle	479.0	482.2	3.2	0.7	646707	7692261	68	-56	328	633	DD
HEDD252	Eagle	507.0	525.0	18.0	0.7	646707	7692261	68	-56	328	633	DD
HEDD252	Eagle	533.0	545.0	12.0	0.7	646707	7692261	68	-56	328	633	DD
HEDD252	Eagle	564.0	589.4	25.4	1.5	646707	7692261	68	-56	328	633	DD
incl	Eagle	584.9	589.4	4.5	6.7	646707	7692261	68	-56	328	633	DD
HEDD253	Eagle	278.1	284.4	6.3	0.8	646652	7692351	67	-56	327	522	DD
HEDD253	Eagle	339.8	343.5	3.7	1.5	646652	7692351	67	-56	327	522	DD
HEDD253	Eagle	354.2	356.1	1.9	1.6	646652	7692351	67	-56	327	522	DD
HEDD253	Eagle	364.0	366.0	2.0	1.1	646652	7692351	67	-56	327	522	DD
HEDD253	Eagle	381.8	382.6	0.8	6.2	646652	7692351	67	-56	327	522	DD
HEDD253	Eagle	393.0	435.9	42.8	2.0	646652	7692351	67	-56	327	522	DD
incl	Eagle	412.9	435.9	23.0	2.6	646652	7692351	67	-56	327	522	DD
HEDD253	Eagle	442.0	444.1	2.1	1.2	646652	7692351	67	-56	327	522	DD
HEDD253	Eagle	449.0	461.0	12.0	1.1	646652	7692351	67	-56	327	522	DD
incl	Eagle	456.0	461.0	5.0	1.4	646652	7692351	67	-56	327	522	DD
HEDD253	Eagle	471.1	473.0	2.0	1.7	646652	7692351	67	-56	327	522	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	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li>an industry standard manner.</li> <li>Core samples were collected with a diamond rig drilling mainly NQ2 diameter core.</li> <li>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.</li> <li>Sample weights ranged from 2-4kg.</li> <li>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.</li> </ul>



Criteria	JORC Code explanation	Commentary
		Diamond core and RC samples are appropriate for use in the Mineral Resource estimate.
Drilling techniques	<ul> <li>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.).</li> </ul>	<ul> <li>(51mm), HQ3 (61mm), PQ (85mm).</li> <li>Reverse Circulation (RC) holes were drilled with a 51/2-inch bit and face sampling hammer.</li> <li>Aircore holes were drilled with an 83mm diameter blade bit.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>run by the driller and then checked by the Company geological team during the mark up and logging process.</li> <li>RC and aircore samples were visually assessed for recovery.</li> </ul>
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	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
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain</li> </ul>	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.



Criteria	JORC Code explanation	Co	ommentary
	size of the material being sampled.	•	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.
Quality of assay data and laboratory	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> </ul>	•	The samples were submitted to a commercial independent laboratory in Perth, Australia.
tests	<ul> <li>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.</li> <li>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.</li> </ul>	•	For diamond core and RC samples Au was analysed by a 50g charge Fire assay fusion technique with an AAS finish.
		٠	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	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> </ul>	•	A number of significant intersections were visually field verified by the Competent Person.
	<ul> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	•	Diamond holes twinning RC have been completed. The diamond twins verify grade tenor and mineralisation thickness of RC holes.
		•	Sample results have been merged by the



Criteria	JORC Code explanation	Commentary
		<ul> <li>company's database consultants.</li> <li>Results have been uploaded into the company database, checked and verified.</li> <li>No adjustments have been made to the assay data.</li> <li>Results are reported on a length weighted basis.</li> </ul>
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>are located by DGPS to an accuracy of +/- 10cm.</li> <li>Aircore hole collar locations are located by DGPS to an accuracy of +/-10cm., or by handheld GPS to an accuracy of 3m.</li> <li>Locations are recorded in GDA94 zone 50 projection</li> <li>Diagrams and location tables have been provided in numerous releases to the ASX.</li> <li>Topographic control is by detailed georeferenced airphoto and Differential GPS data.</li> <li>Down hole surveys were conducted for all</li> </ul>
Data anasina	Data anguing for reporting of Europagian Decults	RC and DD holes using a north seeking gyro tool with measurements at 10m down hole intervals.
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Drill spacing varies from 40m x 40m to 320m x 80m.</li> <li>The extensive drilling programs have demonstrated that the mineralised domains have sufficient continuity in both geology and grade to be considered appropriate for the Mineral Resource and Ore Reserve estimation procedures and classification applied under the 2012 JORC Code.</li> <li>Data spacing and distribution of RC and diamond drilling is sufficient to provide support for the results to be used in a resource estimate.</li> </ul>
		<ul> <li>Sample compositing has not been applied except in reporting of drill intercepts, as described in this Table</li> </ul>
Orientation of data in relation to	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation</li> </ul>	



Criteria	JORC Code explanation	Commentary
geological structure	and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	<ul> <li>-45° dip.</li> <li>The sampling is considered representative of the mineralised zones.</li> </ul>
		<ul> <li>Where drilling is not orthogonal to the dip of mineralised structures, true widths are less than downhole widths.</li> </ul>
Sample	• The measures taken to ensure sample security.	• Samples were collected by company
security		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	<ul> <li>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.</li> </ul>	Mining Lease M47/1628. The tenement is held 100% by Last Crusade Pty Ltd, a wholly owned subsidiary of De Grey Mining Limited.
	<ul> <li>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.</li> </ul>	<ul> <li>The Hemi deposit is approximately 60km SSW of Port Hedland.</li> <li>The tenements are in good standing as at the time of this report.</li> </ul>
		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	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <li>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 the older Archaean Mallina basin sediments.</li> </ul>



Criteria	JORC Code explanation	Commentary
Drill hole Information	<ul> <li>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:</li> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea</li> </ul>	<ul> <li>Host rocks comprise igneous rocks of quartz diorite composition.</li> <li>The gold mineralisation is intimately associated with sulphide stringers and disseminations.</li> <li>The sulphide minerals are dominantly arsenopyrite and pyrite.</li> <li>Drill hole location and directional information are provided in this release and various previous ASX releases.</li> </ul>
	<ul> <li>level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>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.</li> </ul>	
Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>grade of 0.5g/t gold with an internal dilution of 4m maximum.</li> <li>Higher grade intervals are aggregated using a 1.0g/t Au lower cut with an internal dilution of 2m maximum.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	perpendicular to the strike of mineralisation.
Diagrams	<ul> <li>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.</li> </ul>	Plans and sections are provided in this release.



Criteria	JORC Code explanation	Commentary
Balanced reporting	<ul> <li>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.</li> </ul>	figures and all significant results are provided in this report.
Other substantive exploration data	• 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 method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Extensive metallurgical, groundwater, and geotechnical studies have commenced as part of the economic assessment of the project.
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	drilling aimed at extending resources at depth and laterally are underway.