

Substantial resource increase for Turner River VMS (Zn-Pb-Au-Ag) deposits

ASX Code DEG

ABN 65 094 206 292

COMPANY DIRECTORS

Simon Lill

Executive Chairman

Davide Bosio

Non-executive Director

Steve Morris

Non-executive Director

Craig Nelmes

Company Secretary/CFO

CONTACT DETAILS

Principal & Registered Office
Level 2, Suite 9
389 Oxford Street
Mt Hawthorn WA 6016

PO Box 281
Mt Hawthorn WA 6016

www.degreymining.com.au

admin@degreymining.com.au

T +61 8 9381 4108
F +61 8 9381 6761

Highlights

Total Combined Resource increases to

3.5Mt @ 3.2% Zn, 1.3% Pb, 0.8/t Au, 110g/t Ag (8.7%ZnEq)

Discovery Deposit

1.4Mt @ 2.9% Zn, 1.2% Pb, 1.0g/t Au, 118g/t Ag (8.9%ZnEq)

including massive sulphide zone hosting

0.6Mt @ 5.2% Zn, 2.2% Pb, 1.5g/t Au, 194g/t Ag (14.4%ZnEq)

- Tonnes increased by :13%
- Grade increases by: 23% Zn, 31% Pb, 25% Au and 35% Ag
- Contained metal up: 39% Zn, 48% Pb, 40% Au and 53% Ag
- ~30% of resource upgraded to Indicated category
- Deposit is well drilled to 70m vertical depth and under-drilled at greater depths and remains open in all directions

Orchard Tank Deposit

2.1Mt @ 3.4% Zn, 1.4% Pb, 0.7g/t Au, 105g/t Ag (8.6%ZnEq)

- Tonnes increase by: 23%
- Grade increases by: 43% Zn, 40% Pb, 31% Au and 34% Ag
- Contained metal up: 77% Zn, 73% Pb, 62% Au and 65% Ag
- Remains under-drilled and open in many areas

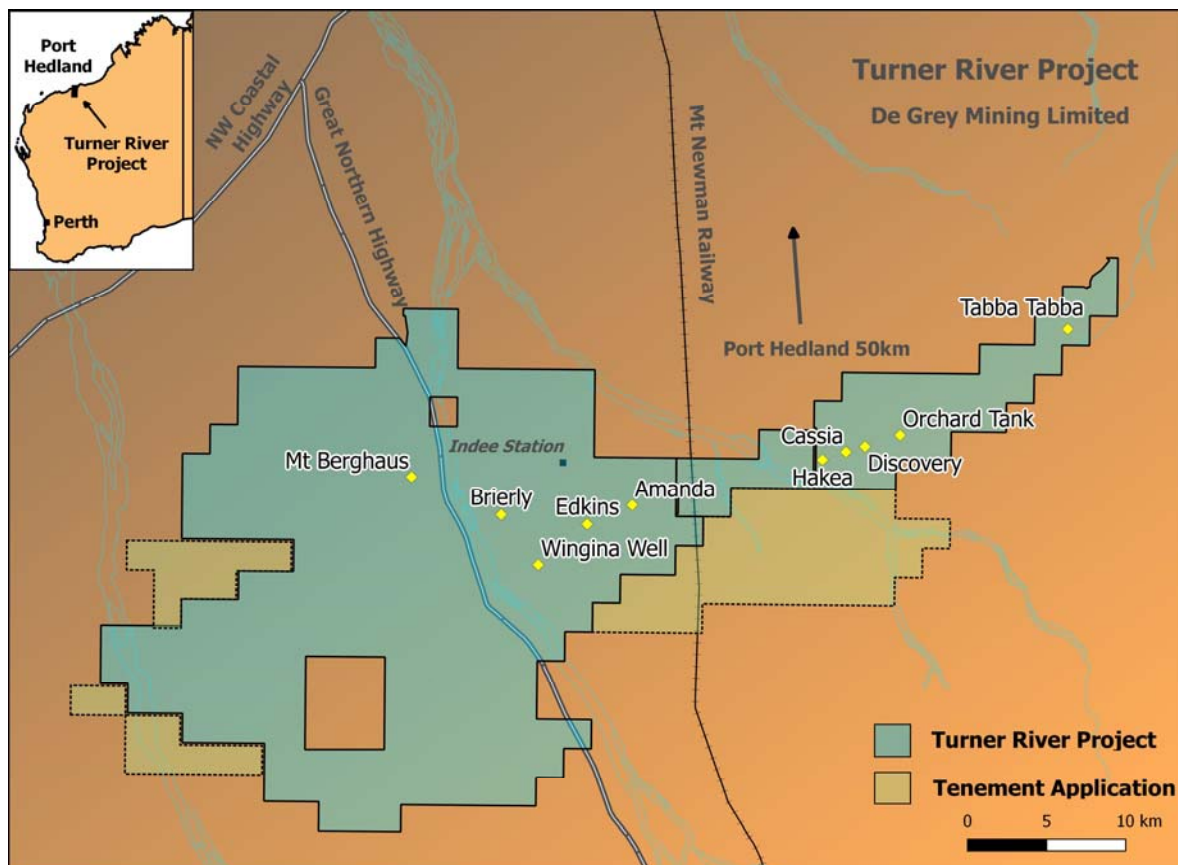
Zinc price rising

- 50% zinc price increase over the last 12-month period
- Positive price forecasts due to world production deficit

Resource upgrades for the Discovery and Orchard Tank deposits

De Grey Mining Limited (ASX: DEG, “De Grey”, “Company”) is pleased to announce updated Mineral Resource Estimates for its 100% owned Discovery and Orchard Tank VMS style base metal deposits, located within the Turner River Project and in an infrastructure, rich area, about 50km south of Port Hedland, with easy access via dominantly bitumen and graded gravel roads. Port Hedland hosts excellent support facilities with a deep port, international airport and mining related businesses.

Figure 1 Turner River Project



The resource updates were completed to include the results of shallow infill RC drilling recently completed at the Discovery deposit. Geological interpretations at both deposits were revised to better identify and quantify the massive sulphide mineralisation that occurs within a broader zone of disseminated mineralisation. Improved bulk density data was also applied to both deposits. Modelling and estimation was completed by Payne Geological Services Pty Ltd, an external and independent mining consultancy, using data provided by De Grey.

The updated November 2016 Mineral Resource estimate for both the Discovery and Orchard Tank VMS deposits are provided below in Table A and B.

**Table A: Discovery Deposit
November 2016 Mineral Resource Estimate
(0.5% Zn Cut-off)**

Massive Sulphide Mineralisation

Class	Tonnes Mt	Zn %	Pb %	Au ppm	Ag ppm	Zn Metal Tonnes	Pb Metal Tonnes	Au Oz	Ag kOz
Indicated	0.27	5.2	2.4	1.9	192	13,900	6,400	16,300	1,600
Inferred	0.35	5.2	2.1	1.3	196	18,200	7,100	14,100	2,200
Total	0.6	5.2	2.2	1.5	194	32,100	13,500	30,400	3,800

Halo Mineralisation

Class	Tonnes Mt	Zn %	Pb %	Au ppm	Ag ppm	Zn Metal Tonnes	Pb Metal Tonnes	Au Oz	Ag kOz
Indicated	0.15	0.9	0.5	0.9	47	1,300	700	4,300	200
Inferred	0.63	1.1	0.5	0.6	60	6,900	2,900	11,700	1,200
Total	0.8	1.0	0.5	0.6	57	8,200	3,600	16,000	1,400

Discovery Deposit Total Mineral Resource

Class	Tonnes Mt	Zn %	Pb %	Au ppm	Ag ppm	Zn Metal Tonnes	Pb Metal Tonnes	Au Oz	Ag kOz
Indicated	0.41	3.7	1.7	1.6	140	15,200	7,100	20,600	1,900
Inferred	0.98	2.6	1	0.8	108	25,100	10,000	25,800	3,400
Total	1.4	2.9	1.2	1	118	40,300	17,100	46,400	5,300

**Table B: Orchard Tank Deposit
November 2016 Mineral Resource Estimate
(0.5% Zn Cut-off)**

Orchard Tank Deposit Total Mineral Resource

Class	Tonnes Mt	Zn %	Pb %	Au ppm	Ag ppm	Zn Metal Tonnes	Pb Metal Tonnes	Au Oz	Ag kOz
Indicated	-	-	-	-	-	-	-	-	-
Inferred	2.1	3.4	1.4	0.7	105	70,800	28,900	45,500	7,000
Total	2.1	3.4	1.4	0.7	105	70,800	28,900	45,500	7,000

The following Tables C and D provide a comparison of the new updated November 2016 Mineral Resource estimates with the June 2014 estimates. The November 2016 estimates provide a substantial upgrade of tonnes, grade and contained metal for both the deposits. The Orchard Tank deposit shows the greatest overall increase in contained metals with a range from 62% to 77%, 34% to 43% in grades and 23% in overall tonnes. Increases at Discovery shows range of increases in contained metals from 39% to 53%, 23% to 35% increase in grade and an overall 13% increase in tonnes. The resource has also been upgraded with approximately 30% of the estimate now in the Indicated category. Copper was previously reported in the June 2014 resource estimate, and while the grade has also increased in the new estimate, it is not reported due to the comparatively lower value relative to other metals.

Table C Discovery - Comparison of resource estimates

Type	Tonnes Mt	Zn %	Pb %	Au ppm	Ag ppm	Zn Metal Tonnes	Pb Metal Tonnes	Au Oz	Ag kOz
Nov 2016	1.4	2.9	1.2	1.0	118	40,300	17,100	46,400	5,300
June 2014	1.2	2.3	0.9	0.8	87	29,000	11,600	33,100	3,500
Difference	13%	23%	31%	25%	35%	39%	48%	40%	53%

Table D Orchard Tank - Comparison of resource estimates

Type	Tonnes Mt	Zn %	Pb %	Au ppm	Ag ppm	Zn Metal Tonnes	Pb Metal Tonnes	Au Oz	Ag kOz
Nov 2016	2.1	3.4	1.4	0.7	105	70,800	28,900	45,500	7,000
June 2014	1.7	2.4	1.0	0.5	79	40,066	16,733	28,036	4,252
Difference	23%	43%	40%	31%	34%	77%	73%	62%	65%

The Discovery and Orchard Tank deposits are volcanogenic massive sulphide-style (VMS) deposits occurring in the Tabba Tabba greenstone belt of the Archean Pilbara Craton of northern Western Australia. Silver and gold rich sulphide minerals including sphalerite and galena occur within felsic schists.

At Discovery, the main mineralisation horizon strikes at 260° over a distance of 350m and dips at 70° to the south. Mineralisation has a maximum horizontal width of 20m at surface and has been intersected a vertical depth of 290m.

Figure 2 Discovery mineralisation – Oblique view looking west

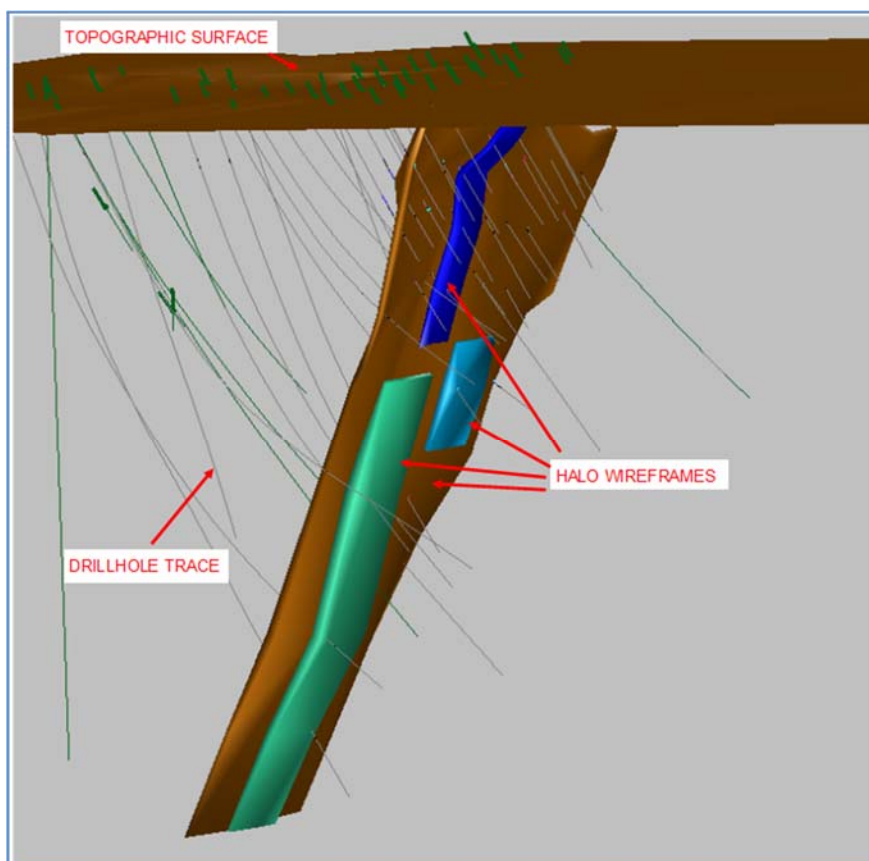
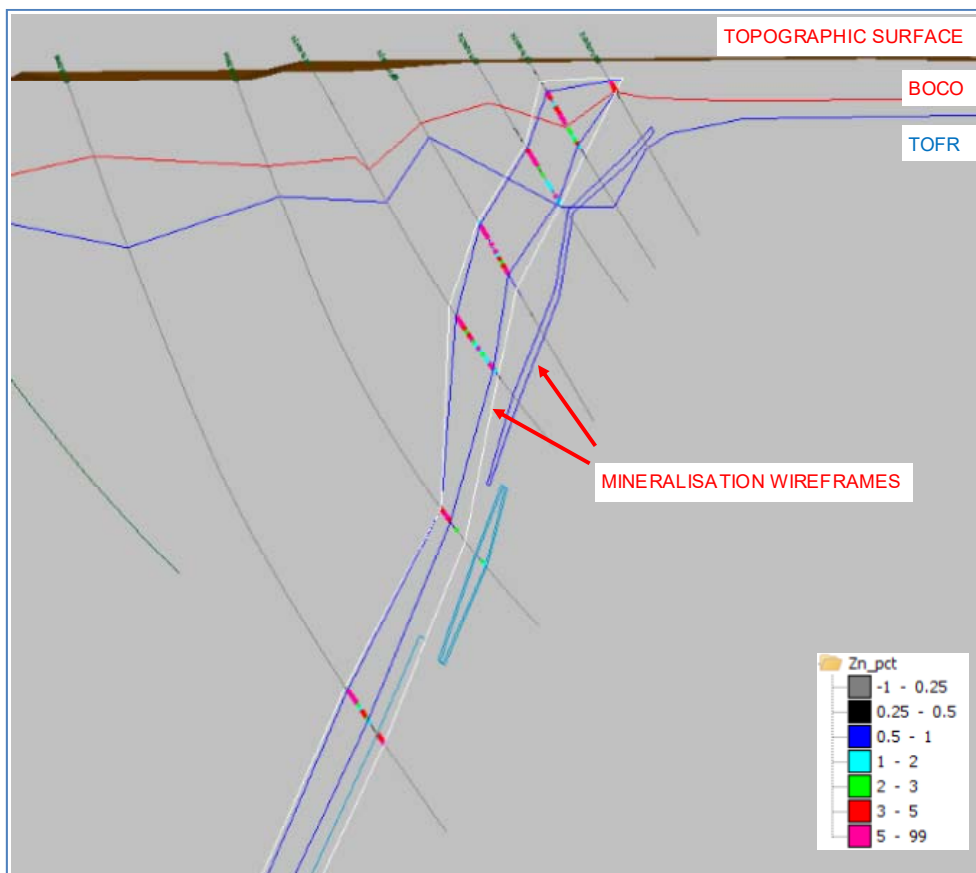


Figure 3 Discovery cross section 85,440E, mineralisation coloured by Zn%



VMS mineralisation at Orchard Tank consists of thin, sub-vertical lodes that strike approximately east-west over a strike length of 620m and are hosted by highly foliated quartz-sericite schist. The thin lodes occur within a north-south area of 200m and mineralisation reaches a vertical depth of 500m.

The majority of resource drill holes at the Turner River project were completed between 2005 and 2014. A total of 24 RC holes were recently completed by DEG at the Discovery deposit. The majority of the Discovery deposit has been drilled with 20m spaced holes on 40m spaced north-south sections. A similar drill spacing defines the eastern portion of the Orchard Tank deposit, whilst the western part is defined by drilling at 100m sections with minimal drilling on each section.

At Discovery, the model has used 35 RC and 3 diamond drill holes in the resource estimate and 13 RC holes and 7 diamond holes were used in the Orchard Tank resource estimate.

Samples in the mineralised zones were collected at 1m intervals (RC) or to geological contacts in diamond core. Samples were submitted for analysis by Fire Assay and AAS finish for Au, and by four acid digest with ICP-AES finish for Zn, Pb, Cu and Ag. Quality control procedures adopted by DEG include standards and duplicates which have confirmed the quality of the drill results.

The Discovery deposit was estimated using ordinary kriging (“OK”) grade interpolation of 1m composited data within massive sulphide wireframes prepared using a nominal 1% Zn cut-off. These lodes were encompassed by a disseminated sulphide halo envelope prepared using a 0.2g/t Au cut-off.

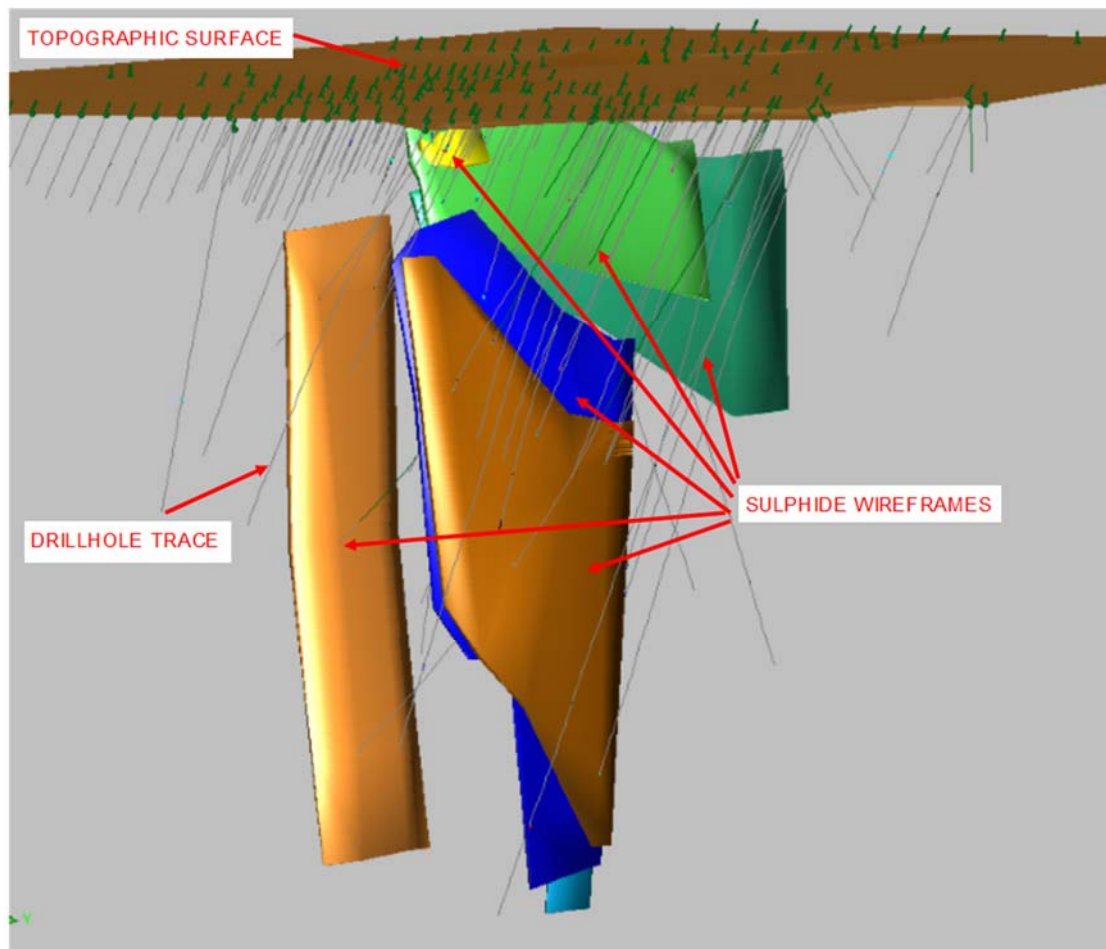
Interpolation parameters were based on the geometry of each zone and geostatistical parameters determined by variography. A high-grade cut of 10g/t Au and 220ppm Ag was used for the halo domains whilst a high-grade cut of 10g/t Au and 800ppm Ag was used for the internal massive sulphide domains.

The block dimensions used in the model were 20m EW by 10m NS by 10m vertical with sub-cells of 2.5m by 1.25m by 1.25m.

The Orchard Tank deposit was estimated using Inverse Distance Squared ("ID2") grade interpolation of 1m composited data within wireframes prepared using 0.6% Zn envelopes. High grade cuts were applied to Au and Ag.

Interpolation parameters were based on the geometry of each zone. The block dimensions used in the model were 20m EW by 10m NS by 10m vertical with sub-cells of 1.25m by 1.25m by 0.625m.

Figure 4 Orchard Tank mineralisation – Oblique view looking south-west



Bulk density data was obtained from immersion testing of drill core and pycnometer testing of RC chips (fresh rock only). Density applied to the estimate was 3.2t/m³ within fresh massive sulphide, 2.85t/m³ in fresh halo material at Discovery, 2.4t/m³ in mineralised transition, and 2.2t/m³ in mineralised oxide material.

The portion of the resource at Discovery defined by the 40m by 20m spaced drilling and displaying good continuity of mineralisation was classified as Indicated Mineral Resource. The peripheral and deepest portions of the lodes were classified as Inferred Mineral Resource due to the sparse drilling. Small zones of discontinuous mineralisation were also classified as Inferred Mineral Resource. Orchard Tank was classified as Inferred Mineral Resource due to the relatively sparse drilling.

The deposits are open down dip and along strike. Good potential exists to extend the resources with further drilling.

No detailed metallurgical test work has been completed on the Discovery and Orchard Tank VMS deposits. However, the nearby Sulphur Springs and Whim Creek VMS deposits have previously been commercially mined and are currently undergoing on-going economic studies for recommencement of both open pit and underground mining. The similar style of mineralisation and past mining at these projects provides support to the potential for economic extraction at both Turner River deposits.

Summary

The new resource estimates for both Discovery and Orchard Tank have focused on distinguishing the massive sulphide style and higher grade mineralised zone from the peripheral disseminated sulphide zones. Detailed assessment of the gold mineralisation and its relationship to the base metals mineralisation in both the oxide and fresh zones was carried out.

The significant increases in tonnes and grade of each deposit are a result of additional drilling at Discovery, additional bulk density data and massive sulphide wireframing. Both deposits remain open in most directions and additional regional datasets provide scope for new deposits to be discovered along strike.

The Tabba Tabba greenstone belt has proven to be a fertile VMS environment and this style of deposit is well known to form in clusters of deposits. As the potential for further discoveries is considered high, future work includes a full assessment of previous IP surveys and other geophysical and geochemical datasets along strike for resource extensions, repetitions and new targets. The recent option to acquire the southern area of E45/2983 between the Hakea and Amanda prospects (Fig 1) is also considered prospective for VMS style deposits as well as for gold.

Overall the additional drilling at the Discovery deposit has also provided a clear control of mineralisation and in particular the distribution of gold and high grade silver mineralisation in the oxide and transition zones. Further exploration will be required to define sufficient oxide tonnes to add to the Wingina development scenario.

For further information:

Simon Lill (Executive Chairman) or Davide Bosio (Director)

De Grey Mining Ltd
Phone +61 8 9381 4108
admin@degreymining.com.au

COMPETENT PERSONS STATEMENTS

The information in this report that relates to exploration results is based on, and fairly represents information and supporting documentation prepared by Mr. Andrew Beckwith, a Competent Person who is a member of The Australasian Institute of Mining and Metallurgy. Mr. Beckwith is a consultant to De Grey Mining Limited. Mr. Beckwith 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. Beckwith 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 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.

Equivalence Calculations

Formula

$$\text{ZnEq \%} = 1.74 \times \text{Au g/t} + 0.024 \times \text{Ag g/t} + 2.04 \times \text{Cu\%} + 0.88 \times \text{Pb \%} + \text{Zn \%}$$

Assumptions

Au	1300	\$US/oz
Ag	18	\$US/oz
Cu	4900	\$US/tonne
Pb	2100	\$US/tonne
Zn	2400	\$US/tonne
	0.75	\$AUD exchange rate

JORC Code, 2012 Edition

The following Table and Sections are provided to ensure compliance with the JORC Code (2012) edition requirements for the reporting of exploration results and Mineral Resources.

JORC Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Samples have been collected from a variety of methods; air core drilling, open hole percussion drilling, reverse circulation drilling, and diamond drilling. Only RC and diamond holes were used for estimation. All holes sampled on a nominal 4m basis over the entire length of the hole. The 4m composites were submitted for analysis. All holes were also sampled on a nominal 1m basis. These 1m samples are stored on site and selectively re-sampled based on mineralised zones defined by the 4m composite samples. Diamond holes were sampled at 1m intervals or at geological intervals. Each 4m and 1m sample ranges from a typical 3-4kg. The entire sample was submitted to the laboratory and pulverized to produce a sub-sample for analysis.
Drilling techniques	<ul style="list-style-type: none"> 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.). 	<ul style="list-style-type: none"> RC drilling used a face sampling bit; Diamond drilling was typically completed using HQ or NQ size core.
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All samples were visually assessed for recovery. Samples are considered representative with good recoveries. Only a small percentage of samples were considered low recovery primarily due to change of rods when a small amount of wet sample occurred. There is no known relationship between sample recovery and sample grades.
Logging	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> All drill holes were logged in full by Company geologists. Logging was carried out in detail in anticipation of being used in subsequent Mineral Resource estimates.

Criteria	JORC Code explanation	Commentary
	<p><i>in nature. Core (or costean, channel, etc.) photography.</i></p> <ul style="list-style-type: none"> • <i>The total length and percentage of the relevant intersections logged.</i> 	
<p>Sub-sampling techniques and sample preparation</p>	<ul style="list-style-type: none"> • <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <i>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.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> • Diamond core was cut using a core saw and half core taken for analysis. • The sampling of the RC sample was rotary split via the rig cyclone and sampled on a 1m and 4m composite basis. • For historical drilling, holes were sampled by a cone or riffle splitter, 2 to 4m speared composites were taken outside the mineralised zones, and 1m split intervals through expected mineralised zones. Wet samples were tubed sampled. • Duplicate samples were collected at a rate of 1 in 40 and independent standards were inserted approximately every 20 samples. • A QAQC program of standards, and field duplicates has been used to confirm assay integrity. • The samples are considered representative and appropriate for this type of drilling and for use in future resource estimates.
<p>Quality of assay data and laboratory tests</p>	<ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>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.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • The samples were submitted to an independent commercial laboratory in Perth, Western Australia. • Au was analysed by 50g charge Fire Assay fusion technique with AAS finish. • Cu, Ni, Zn, Pb, Ag were analysed by a 4 acid digest with ICP-AES finish. • The techniques are considered quantitative in nature. • No geophysical tools were used to determine any element concentrations. • As discussed previously, standards and duplicates samples were inserted by DEG and the laboratory carries out internal standards in each individual batch. • The standards and duplicates were considered satisfactory. • Additional 1m re-samples will also be analysed based on the anomalous zones of the 4m samples.
<p>Verification of sampling and assaying</p>	<ul style="list-style-type: none"> • <i>The verification of significant intersections by either independent or alternative company personnel.</i> • <i>The use of twinned holes.</i> • <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> • <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> • The assay results have been checked by two company geologists. • Additional 1m re-sampling provides an additional layer of checking of the anomalous mineralised zones. • No adjustments have been made to the assay data. • Results are on a length weighted basis.

Criteria	JORC Code explanation	Commentary
Location of data points	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Drill hole collars were located by either electronic distance measurement (EDM) or differential GPS (DGPS) surveys to a high degree of accuracy. DEG drilling in 2016 located RC collars using a hand held GPS to an accuracy of +/-3m and have nominal RL values. Locations are to GDA94 Zone 50. Down hole surveys were collected by camera or GYRO methods (historical drilling) or Reflex system (recent drilling) at varying intervals from 10 m to 30 m. Topographic surface is based on drill collar positions and is adequate.
Data spacing and distribution	<ul style="list-style-type: none"> 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. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> At Discovery, hole spacing is largely 20m by 40m whilst at Orchard Tank the spacing is more irregular, from 20m to more than 100m spacing. The drilling was sufficient for Mineral Resource estimation; Initial samples are 4m composite field samples. Additional 1m re-sampling is carried out on anomalous zones.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Holes were generally angled to optimize the intersection angle with the interpreted structures. The drilling is largely perpendicular to the mineralised trend and therefore the sampling is considered representative of the mineralised zone. No orientation based sampling bias has been identified in the data.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Company representatives supervised the collection and submission of samples up to the point of transfer to the assay laboratory
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> No external audit or review of the sampling techniques has been undertaken. Two company geologists have reviewed the results. The database geologist reviews the standards and duplicates.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> The Discovery and Orchard Tank deposits are both located on granted tenement E45/2533 which is 100% owned by De Grey (or its 100% owned subsidiaries). The tenements form a part of De Grey's Turner River Project located approximately

Criteria	JORC Code explanation	Commentary
	<p><i>reporting along with any known impediments to obtaining a license to operate in the area.</i></p>	<p>50km south of Port Hedland.</p>
Exploration done by other parties	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> The deposits have had limited previous drilling undertaken over a period of 12 years. The majority of work completed at the project was carried out by De Grey between 2003 and 2014.
Geology	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> The mineralisation targeted is VMS style precious and base metal mineralisation and is similar in style to many other Western Australia deposits.
Drill hole information	<ul style="list-style-type: none"> <i>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:</i> <ul style="list-style-type: none"> <i>easting and northing of the drill hole collar</i> <i>elevation or RL (elevation above sea level in metres) of the drill hole collar</i> <i>dip and azimuth of the hole</i> <i>down hole length and interception depth</i> <i>hole length</i> <i>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.</i> 	<ul style="list-style-type: none"> A comprehensive listing of significant intersections from previous drilling at Discovery and Orchard Tank has been included in previous ASX releases. A listing of the most recent drilling at Discovery completed by DEG during 2016 were reported to the ASX on 27 July 2016.
Data aggregation methods	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> Results are reported on a length weighted basis. No maximum cuts have been made. Intersections are based on a nominal 0.5% Zn interval with higher grade intervals based on a 3% Zn basis. Metal equivalent values are not being reported.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>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’).</i> 	<ul style="list-style-type: none"> Drill holes are angled to grid south or grid north, which is approximately perpendicular to the orientation of the mineralised trend. True width as interpreted to be approximately 60-70% of downhole intervals.
Diagrams	<ul style="list-style-type: none"> <i>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</i> 	<ul style="list-style-type: none"> Relevant diagrams have been included in previous ASX releases.

Criteria	JORC Code explanation	Commentary
	<i>locations and appropriate sectional views.</i>	
Balanced Reporting	<ul style="list-style-type: none"> • 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. • 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. 	<ul style="list-style-type: none"> • Drill hole collars were located by either electronic distance measurement (EDM) or differential GPS (DGPS) surveys to a high degree of accuracy. • DEG drilling completed in 2016 located drill collars using a hand held GPS. • Down hole surveys were collected by camera or GYRO methods (historical drilling) or Reflex system (recent drilling) at varying intervals from 10 m to 30 m. • Representative reporting of significant intersections from previous drilling has been included in previous DEG releases to the ASX. These reports are considered by DEG to be balanced and provided in context.
Other substantive exploration data	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Geophysical and geochemical surveys have been completed but are not material to the Mineral Resource estimate.
Further work	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Mineralisation remains open at both Discovery and Orchard Tank and likely to be tested with future drilling programs.

JORC Table Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> • Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. • Data validation procedures used. 	<ul style="list-style-type: none"> • The database is created and validated by De Grey Mining Limited. • PayneGeo performed data audits in Surpac and found no errors that affected the resource drilling.
Site visits	<ul style="list-style-type: none"> • Comment on any site visits undertaken by the Competent Person and the outcome of those visits. • If no site visits have been undertaken indicate why this is the case. 	<ul style="list-style-type: none"> • A site visit to the Turner River Project was conducted in September 2016 by Paul Payne who is a full time employee of PayneGeo. • Recent drill hole collars were identified, drill core from selected holes was reviewed and geological features of the site were observed.
Geological interpretation	<ul style="list-style-type: none"> • Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. • Nature of the data used and of any assumptions made. • The effect, if any, of alternative interpretations on Mineral Resource 	<ul style="list-style-type: none"> • The confidence in the geological interpretation at both Discovery and Orchard Tank is considered to be good. Successive drill programs and updated Mineral Resource estimates have increased the confidence in the geological interpretation of each deposit.

Criteria	JORC Code explanation	Commentary
	<p><i>estimation.</i></p> <ul style="list-style-type: none"> <i>The use of geology in guiding and controlling Mineral Resource estimation.</i> <i>The factors affecting continuity both of grade and geology.</i> 	<ul style="list-style-type: none"> Diamond core and RC drill chips have been used to interpret the geology. The interpretation of the massive sulphide domains based on assay results, observation of diamond core, and the well-known regional geological setting, makes the current interpretations robust. Alternative interpretations are not likely to have any effect on the Mineral Resource estimation. Geological logging has been used to define oxide, transition and fresh domains. The sulphide mineralisation at Discovery and Orchard Tank is sub-vertical to steeply dipping. The interpretation is based on geological logging and assaying of diamond core and RC chips.
Dimensions	<ul style="list-style-type: none"> <i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i> 	<ul style="list-style-type: none"> The Discovery deposit extends over a strike length of 350m (from 85,290mE to 85,640mE local grid) and the mineralisation was modelled from surface to a depth of approximately 290m below surface. The main mineralised lode is approximately 20m in width (north to south) at surface. The Orchard Tank deposit extends over a strike length of 620m (from 87,300mN to 87,920mN local grid) and was modelled from surface to a depth of approximately 525m below surface. The plan width of the EW striking lodes is approximately 200m.
Estimation and modelling techniques	<ul style="list-style-type: none"> <i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i> <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i> <i>The assumptions made regarding recovery of by-products.</i> <i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i> <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i> <i>Any assumptions behind modelling of selective mining units.</i> <i>Any assumptions about correlation between variables.</i> <i>Description of how the geological interpretation was used to control the resource estimates.</i> 	<ul style="list-style-type: none"> Using parameters derived from modelled variograms, Ordinary Kriging (OK) was used to estimate average block grades within the Discovery domains using Surpac software. The OK interpolation technique is suitable as it allows the measured spatial continuity to be incorporated into the estimate and results in a degree of smoothing which is appropriate for the nature of the mineralisation. Inverse Distance Squared interpolation was used to estimate block grades at the Orchard Tank deposit. Drill hole sample data was coded using mineralisation wireframes. Samples were composited to 1m based on an analysis of sampling intervals used at each deposit. Three estimation passes were used in each model. For Discovery, the first pass used a range of 50m, with a minimum of 10 samples. For the second pass, the range was extended to 100m, with a minimum of 6 samples. The third pass used a range 150m with a minimum of 2 samples. A maximum of 32 samples was used for each pass. For Orchard Tank, the first pass used a search radius ranging from 60m to 80m dependant on lode, with a minimum of 6 samples. For the second pass, the range was doubled and a minimum of 6 samples used. For the third pass the range was

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> • <i>Discussion of basis for using or not using grade cutting or capping.</i> • <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i> 	<p>doubled again and the minimum samples reduced to 2. A maximum of 30 samples was used for each pass.</p> <ul style="list-style-type: none"> • The extrapolation distance from the end points was half the drill hole spacing. This distance was 20m at Discovery and 100m at the western extremity of Orchard Tank and 25m at the eastern end. • A previous estimate was completed at both Discovery and Orchard Tank, by Ravensgate Mining Industry Consultants in 2014. • The deposits have not been mined so no production records exist. • No assumptions have been made with regards to by-products. • Non grade variables were not estimated. Only minerals of commercial interest; Zn, Pb, Cu, Au, and Ag were estimated. • For Discovery, the parent block size was 10m NS by 20m EW by 10m vertical with sub-cells of 1.25m by 2.5m by 1.25m. For Orchard Tank, the parent block size was 10m NS by 20m EW by 10m vertical with sub-cells of 1.25m by 1.25m by 0.625m. The parent block size was selected on the basis of being approximately 50% of the average drill hole spacing. An orientated 'ellipsoid' search was used to select data and was based on parameters taken from the variography or based on lode geometry. • Selective mining units were not modelled. The block size used in the Mineral Resource model was based on drill sample spacing and lode orientation. • There is a strong correlation between Zn and Pb at both deposits. Au has the weakest correlation with the other elements and is moderately correlated to Ag at the Discovery deposit. • The deposit mineralisation was constrained by wireframes constructed using down hole assay results and associated lithological logging. At the Discovery deposit a nominal grade cut-off of 1% Zn was used for the massive sulphide mineralisation interpretations. A halo domain was interpreted to encompass the massive sulphide lodes, and this was based on a nominal 0.2g/t Au grade cut-off. At the Orchard Tank deposit, the sulphide mineralisation was constrained by a 0.6% Zn grade cut-off. Supplied weathering surfaces were used to code material type at each deposit. The wireframes were used as hard boundaries in the interpolations at each deposit.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> The data from the domains typically showed slightly skewed distributions for all the elements. Distinct breaks on the log-probability curves, and the high CV values for Au and Ag within selected lodes suggested that high grade cuts were appropriate for these elements. No outlier values were noted for Zn, Pb, and Cu. A three step process was used to validate the models. A qualitative assessment was completed by slicing sections through the block model in positions coincident with drilling. A quantitative assessment of the estimate was completed by comparing the average grades of the composite file input against the block model output for the mineralised domains. A trend analysis was completed by comparing the interpolated blocks to the sample composite data within the domains. This analysis showed good correlation between the composite grades and the block model grades.
Moisture	<ul style="list-style-type: none"> Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	<ul style="list-style-type: none"> Tonnages and grades were estimated on a dry in situ basis.
Cut-off parameters	<ul style="list-style-type: none"> The basis of the adopted cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> Mineralisation cut-off grades were based on observed changes in statistical plots of the sample data. The Mineral Resource has been reported at a 0.5% Zn cut-off grade to reflect the underlying geological boundaries of the mineralisation.
Mining factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	<ul style="list-style-type: none"> Mining of the deposits is anticipated to be by open pit and underground mining methods involving mechanised mining techniques. No other assumptions on mining methodology have been made.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made. 	<ul style="list-style-type: none"> No metallurgical test work has been completed. The simple mineralogy of the deposits and similarities with operating or development projects in the region suggest that metallurgical problems are unlikely.

Criteria	JORC Code explanation	Commentary
Environmental factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. 	<ul style="list-style-type: none"> There are no known environmental factors which would prevent the eventual economic extraction of the deposits. Environmental surveys will form part of a prefeasibility study.
Bulk density	<ul style="list-style-type: none"> Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	<ul style="list-style-type: none"> Bulk density measurements have been made on diamond core from three selected drill holes at Discovery, and one drill hole at Orchard Tank, using weight in air/weight in water techniques. In addition, pulps from four RC drill holes at Discovery were used to determine bulk density using pycnometer readings. Density values were assigned to the different material types based on the average value within the mineralised lodes at each deposit. Values were assigned to the models as follows; Fresh massive sulphide - 3.2t/m³, Fresh halo - 2.85t/m³, Transition - 2.4t/m³, and Oxide - 2.2t/m³.
Classification	<ul style="list-style-type: none"> The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	<ul style="list-style-type: none"> Mineral Resources were classified in accordance with the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC, 2012). The Mineral Resource at Discovery was classified as Indicated and Inferred Mineral Resource on the basis of data quality, sample spacing, and lode continuity. The Indicated portion of the resource was defined where the drill spacing was at a regular spacing of 40m by 20m and is confined to a depth of 80m where lode continuity is robust. The Inferred portion of the Mineral Resource was defined where the drill holes were at irregular spacing such as the strike extents of the lodes and at depth. The Mineral Resource at Orchard Tank was classified as Inferred Mineral Resource on the basis of sample spacing and lode continuity. The drill holes are closely spaced at 20m to 40m on the eastern extents, but are spaced at 100m or greater to the west, with few holes on each section. This has resulted in a lower confidence in the interpretations along strike and at depth. The input data adequately covers the mineralisation and does not favour or misrepresent in-situ mineralisation. The

Criteria	JORC Code explanation	Commentary
		<p>definition of mineralised zones at Discovery is based on a good geological understanding producing a robust model of continuous mineralised lodes. Validation of the block models show good correlation of the input data to the estimated grades.</p> <ul style="list-style-type: none"> The input data is considered reliable as DEG has implemented Quality Control measures which have confirmed the suitability of data for use in the Mineral Resource estimates. The Mineral Resource estimate appropriately reflects the view of the Competent Person.
Audits or reviews	<ul style="list-style-type: none"> <i>The results of any audits or reviews of Mineral Resource estimates.</i> 	<ul style="list-style-type: none"> Internal audits have been completed by PayneGeo which verified the technical inputs, methodology, parameters and results of the estimate.
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> <i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i> <i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i> <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i> 	<ul style="list-style-type: none"> The Discovery Mineral Resource estimate has been estimated with a high degree of confidence. The mineralisation geometry and continuity is well defined to a depth of 80m and is reflected in the applied level of Indicated Mineral Resource. The Orchard Tank Mineral Resource estimate has been estimated with a moderate degree of confidence. The geometry of the lodes is defined by irregular spaced drilling but have been interpreted into continuous lodes along strike with some confidence reflected in the applied level of Inferred Mineral Resource. The data quality at both deposits is good and the drill holes have detailed logs produced by qualified geologists. Recognised laboratories have been used routinely. The Mineral Resource statement relates to global estimates of tonnes and grade. No mining has taken place at either deposit so no production data is available.