DE GREY MINING LTD

"Developing the +1.0Moz Pilbara Gold Project"

ASX Announcement
26 September 2017

Gold nuggets confirm important new conglomerate discovery – Loudens Patch

Highlights

- **Outcropping conglomerate identified at base of Mt Roe Basalt at new location "Loudens Patch" within E47/2720.**
- **91 nuggets detected downslope from shallow dipping to flat lying conglomerate, many flattened "watermelon seed" shaped nuggets with pitted texture.**
- **Target Size - 1.5km strike x 400m width x 5-10m thick.**
- **Extensive old alluvial workings at base of hill and other historic workings and trenches further up scree slope to conglomerate outcrop**
- **Loudens Patch is additional to De Grey's 12km target.**
- **Evaluation of both target areas still on-going.**

91 Gold Nuggets - Support Gold Potential

De Grey Mining's Operations Manager, Mr. Andy Beckwith commented: *"This is a very important new discovery for De Grey and the Pilbara region. Loudens Patch now ranks with Comet Well, Purdy's Reward and Beatons Creek for conglomerate hosted gold potential. We are essentially now only one step behind Novo and Artemis in terms of defining bedrock hosted conglomerate gold mineralisation.*

Any new high grade resource, large or small, will provide a tremendous economic advantage to our planned Pilbara Gold development based on our existing 1.0Moz of gold resources."

ASX Code DEG

ABN 65 094 206 292

DIRECTORS
Simon Lill
Executive Chairman

Davide Bosio
Non-executive Director

Steve Morris
Non-executive Director

MANAGEMENT
Craig Nelmes
Company Secretary/CFO

Andy Beckwith
Operations Manager

Phil Tornatora
Exploration Manager

CONTACT DETAILS

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

PO Box 281
Mt Hawthorn WA 6016

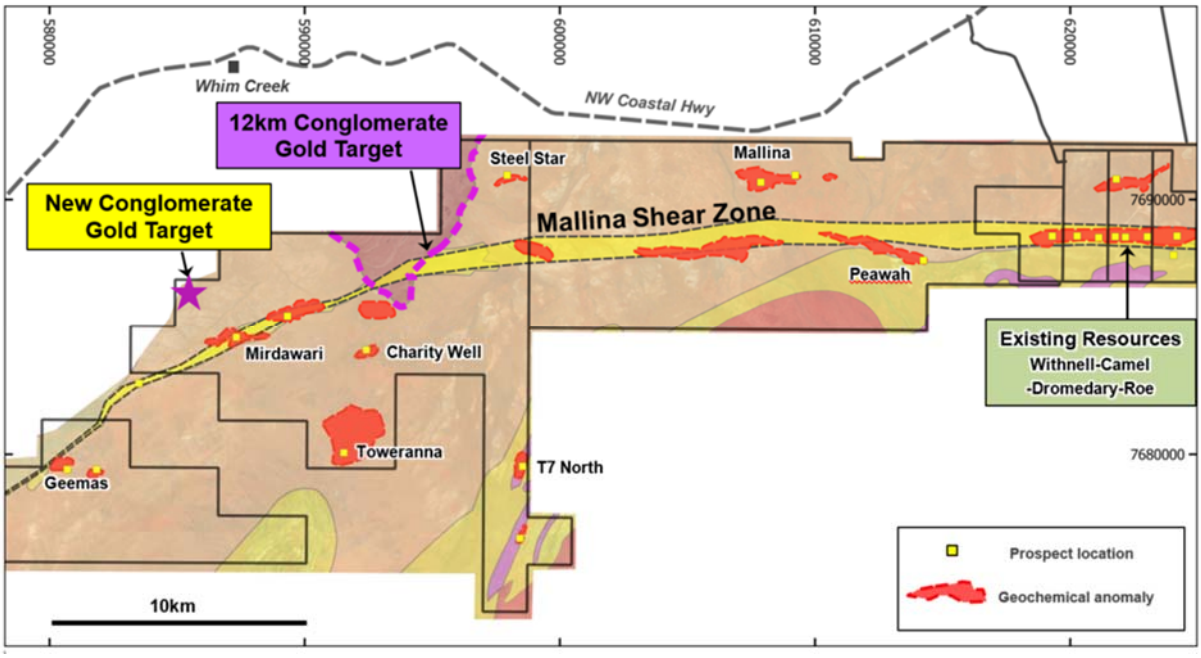
www.degreymining.com.au

admin@degreymining.com.au

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

De Grey Mining Limited (ASX: DEG, “De Grey”, “Company”) is pleased to report that a new conglomerate gold target with gold nuggets has been identified at the Pilbara Gold Project. This target represents a new area separate from the 12km Mt Roe Basalt target previously reported (refer to ASX release “12km of Witwatersrand conglomerate target identified”, dated 23 August 2017).

Figure 1 Conglomerate Gold Targets location plan



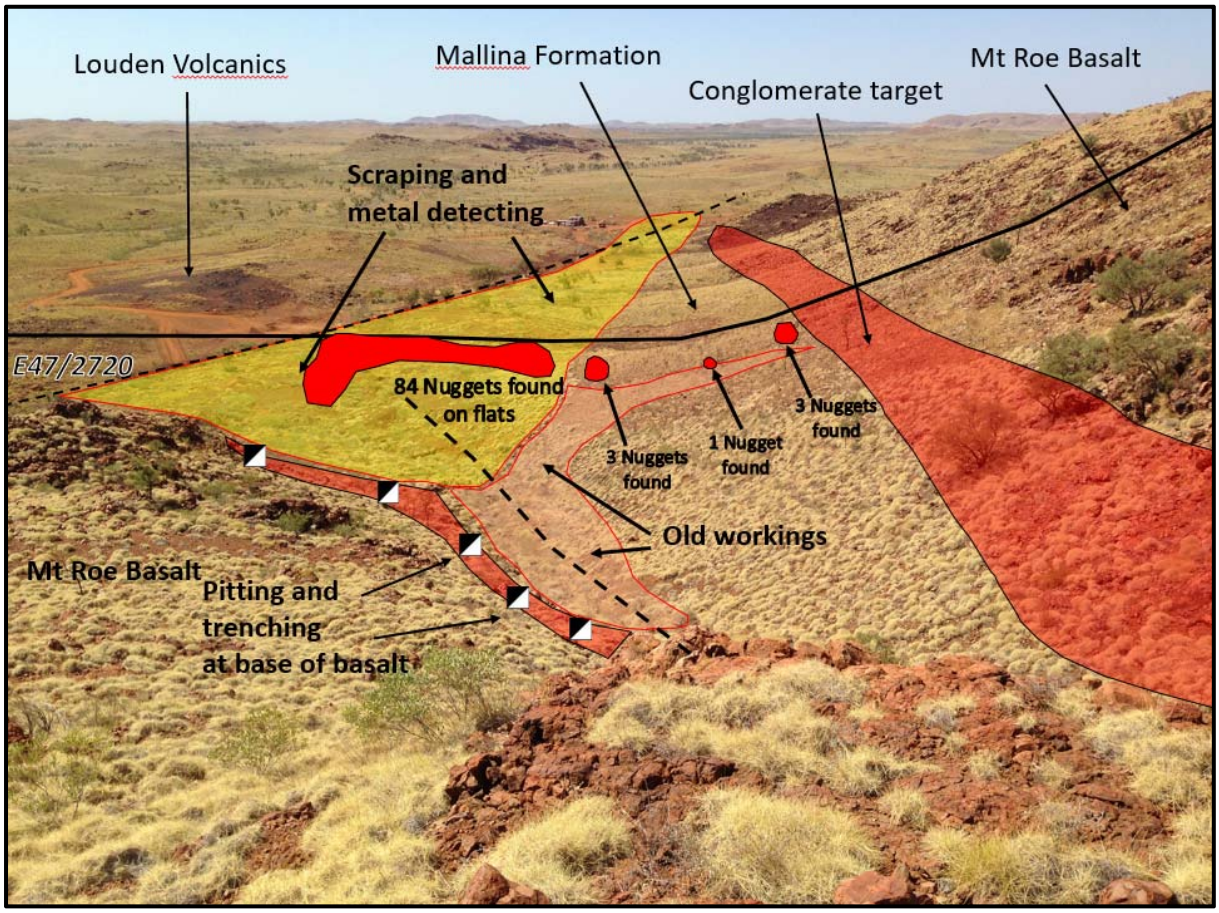
Conglomerate

Geological mapping has identified a new 200m long zone of prospective conglomerate at the foot of the Mt Roe Basalt (unconformable above the underlying older Mallina Formation) that coincides with extensive alluvial gold workings within De Grey’s project area. The conglomerate ranges in thickness from 5m to 10m and comprises angular to well-rounded fragments of basalt, quartz, greywacke and intermediate to ultramafic volcanic rocks in a strongly silicified, limonitic matrix with minor pyrite. The scree slope draining the area below the mapped conglomerate also contains a number of well-rounded, cobble-sized clasts liberated from the rock horizon with several nuggets located with metal detectors amongst these rounded cobbles.

Regional geological mapping across the new target area has traced the prospective contact for 1,500m with geochemical sampling underway to locate additional gold targets in particular along the eastern side of the Mt Roe Basalt where the conglomerate target zone strikes for 1,100m. The conglomerate target zone is interpreted as being flat-lying, dipping gently to the east. Outcropping conglomerate is evident on the western side of the north-south trending ridge. Conglomerate is expected to occur on the eastern side of the range based on mapped basalt and outcropping Mallina Formation. Outcrop however is limited on the eastern side of the ridge due to the large volume of slope debris, anticipated to be covering the expected conglomerate horizon. The gold potential is currently being tested by detailed mapping, metal detecting and geochem sampling.

Geological mapping and prospecting undertaken to date indicates that where the conglomerate outcrops above the Mallina Formation on the western side of the range there is a direct link to the presence of water worn and pitted gold nuggets on the slopes below. This indicates the conglomerate as a potential host for palaeo-placer style gold mineralisation similar to that identified at Comet Well and Purdy's Reward (Novo Resources TSX-V: NVO and Artemis Resources ASX: ARV).

Figure 2. Panoramic view looking North across Mt Roe Basalt and associated gold workings.



Gold Nuggets

Following the recent discovery at Purdy's Reward by Artemis/Novo, several days were spent mapping and sampling along the slopes draining west of the conglomerate target zone. Subsequent metal detecting was undertaken to find and observe the size and shape of the gold and determine nugget distribution relative to the conglomerate horizon.

To date over 90 nuggets ranging in size from 2mm to 10mm have been found over the mapped area west of the Mt Roe Basalt and as far west as the north-draining gully on the western side of the tenement. Importantly, several nuggets have been found higher up the slope, outside the historic workings and within several meters of the conglomerate target zone. No nuggets have been found above the mapped conglomerate horizon within the more massive Mt Roe Basalt.

All the nuggets found are smooth and waterworn, typical of a palaeo-placer gold deposit with most having pitting. Many have the appearance of watermelon seeds very similar to what has been found at Comet Well and Purdy's Reward. This is considered comparable to Witwatersrand style gold mineralisation.

Figure 3. Loudens Patch nuggets.

Figure 4. Various waterworn, pitted and watermelon shaped nuggets.

Gold Workings

Extensive alluvial gold workings dating from modern day scraping and metal detecting to historic alluvial and dry blowing mining, during the Pilbara's earlier gold rush era, have been identified over 200m within the tenement area. These workings continue along the foot of the Mt Roe Basalt for several hundred meters to the north, outside the tenement area.

Historic alluvial workings and surfacing west of the Mt Roe Basalt-Mallina Formation contact extend up-slope and stop at the base of the conglomerate target zone. In addition, extensive pitting and trenching has been observed in conglomerates at the foot of the Mt Roe Basalt west of an intensely worked alluvial mining area at the southern extent of the workings. This observation is significant as it indicates the historic miners have previously identified the foot of the basalt as the source of the gold.

Figure 5. Examples of conglomerate and rounded clasts

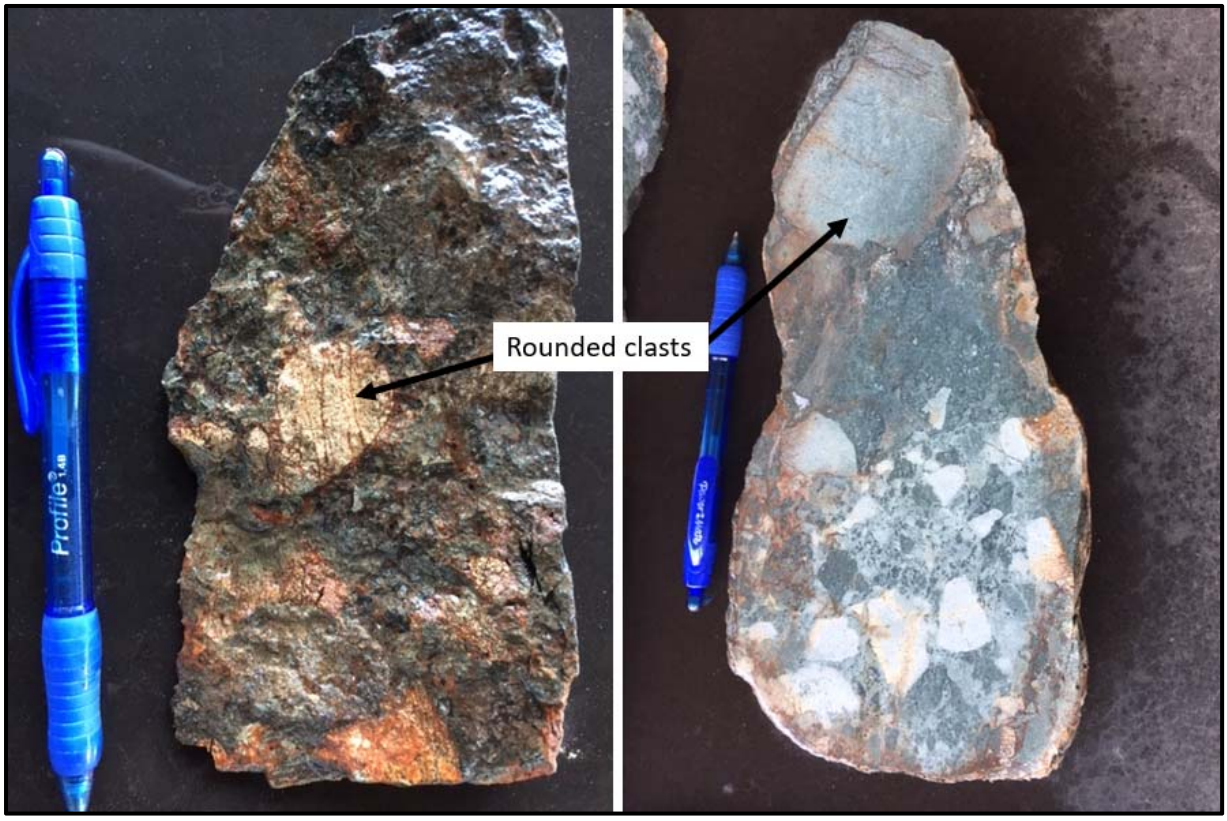


Figure 6. Regional map of new target area.

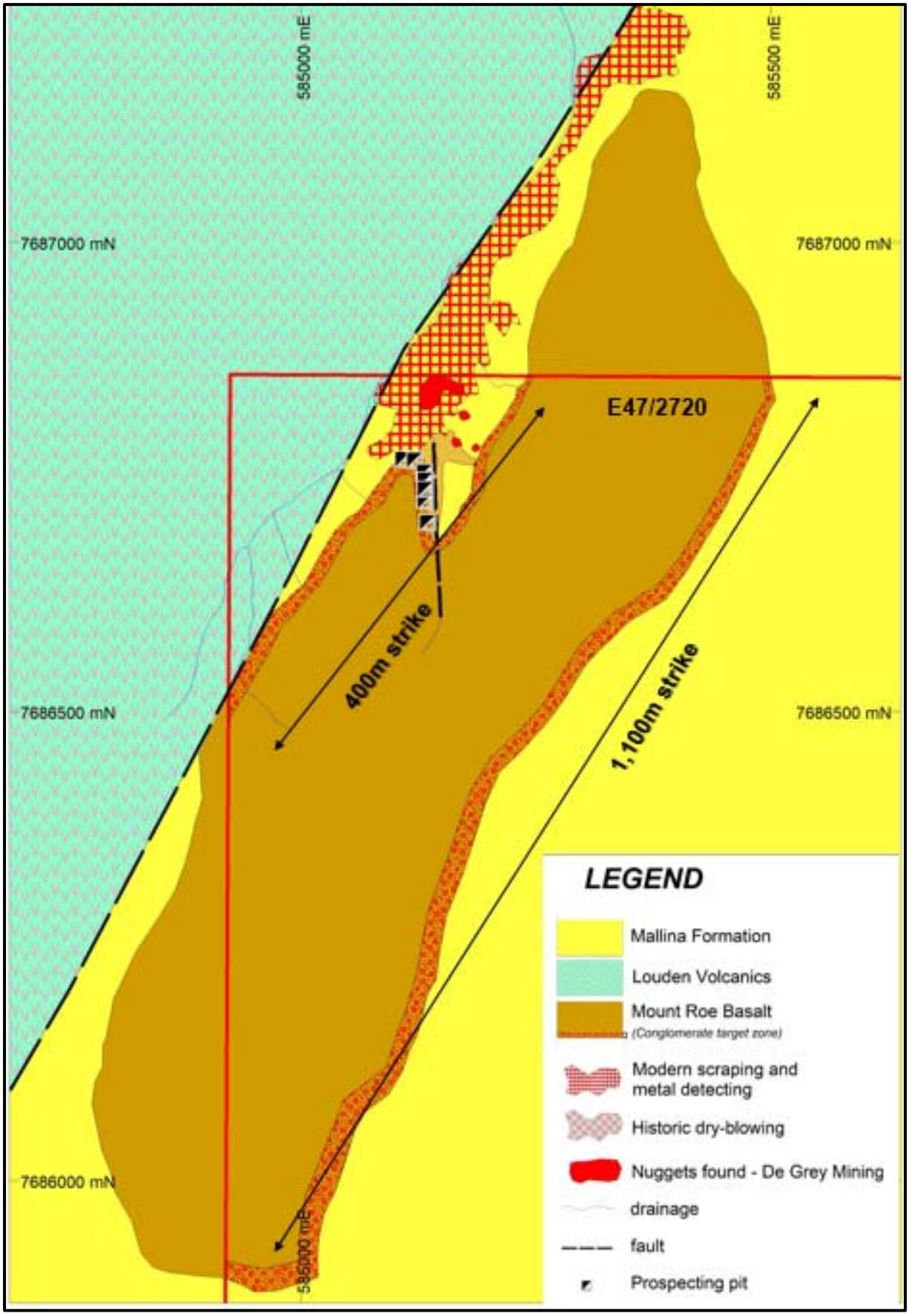


Figure 7. Detailed map showing location of workings and nuggets found.

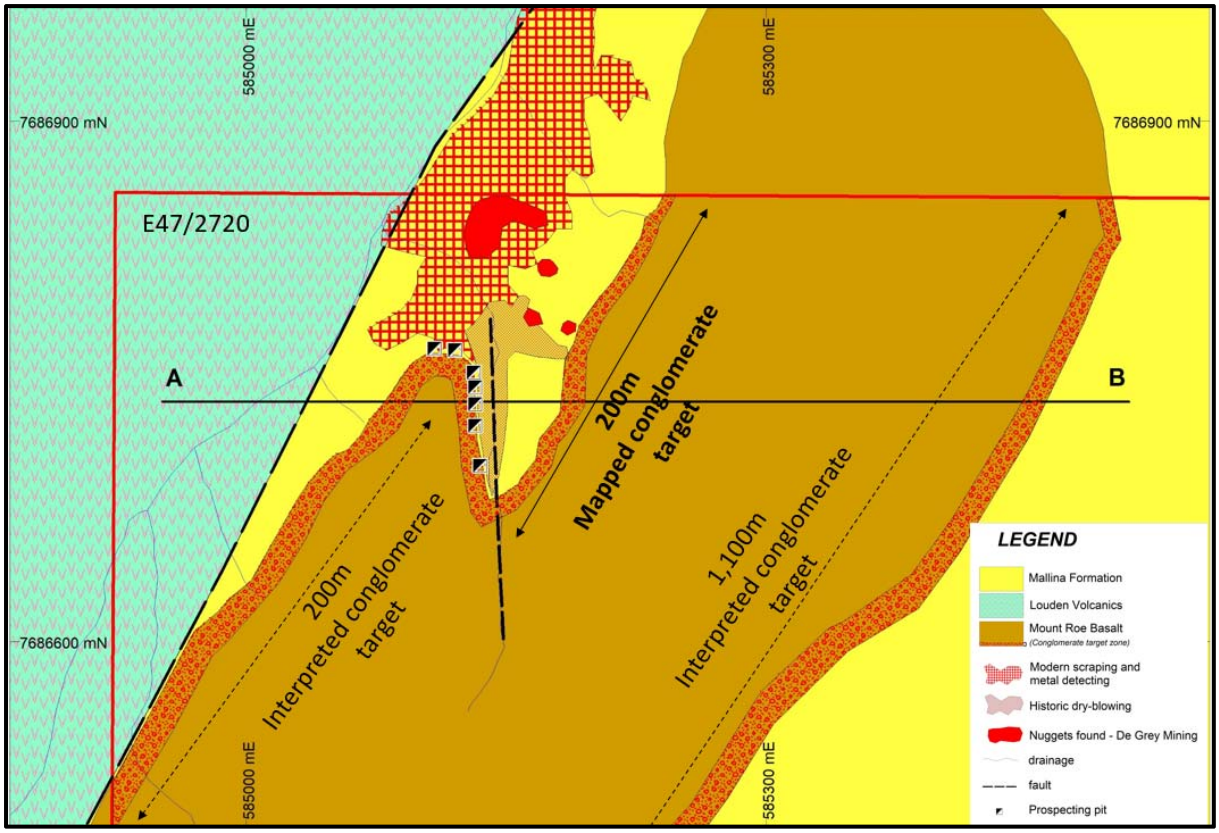
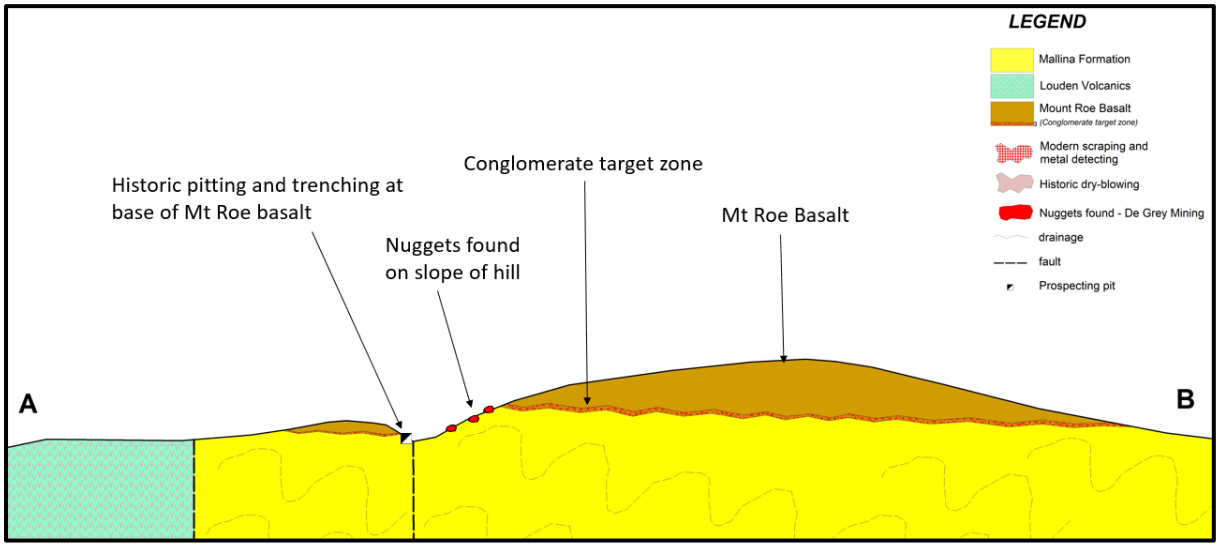


Figure 8. Cross section showing orientation of target area.



Current programmes and Future Work

The Company has undertaken initial reconnaissance mapping, geochem sampling and metal detecting. Detailed mapping and geochem sampling (including metal detecting, rock chip and stream sediment sampling) are continuing on both western and eastern sides of the prospective Mt Roe Basalt range at Loudens Patch targeting the prospective conglomerate horizon. Samples will be progressively submitted to ALS Laboratories in Perth for assay. Subject to additional mapping and sampling results, De Grey intends to assess the outcropping conglomerate areas for in-situ bedrock mineralisation. Currently this work is most likely to include surface trenching

to provide better exposures for detailed and bulk sampling and geological examination, followed by drilling testing.

Drilling of the Loudens conglomerate is expected to be similar to the way Novo is undertaking drilling at its prospects. This will include initial diamond drilling to define the conglomerate and then wide diameter RC drilling to provide a large volume bulk sample of the conglomerate horizon for total volume testwork. Drilling and trenching is subject to necessary statutory approvals and heritage clearances.

Geological mapping and sampling at the 12km Mt Roe Basalt target is also continuing. Reconnaissance exploration for additional Mt Roe Basalt targets within De Grey's tenement holdings continues to be assessed.

Background

On 24 January 2017, De Grey secured an option to acquire 100% of the Indee Gold Project by entering into an exclusive and binding Heads of Agreement. The tenement (E47/2720) on which the Loudens Patch discovery resides remains subject to this option agreement whereby De Grey is required to pay a remaining total of $14.9M to acquire the asset in its totality by July 24, 2018.

For further information:

Simon Lill (Executive Chairman) or Andy Beckwith (Operations Manager)

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

COMPETENT PERSONS STATEMENT

The information in this report that relates to exploration results is based on, and fairly represents information and supporting documentation prepared by Mr. Michael Jackson, a Competent Person who is a Member of The Australian Institute of Geoscientists. Mr. Jackson is a consultant to De Grey Mining Limited. Mr. Jackson 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. Jackson consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

Figure 9. General views of conglomerate outcrop.

Table JORC Code, 2012 Edition

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.*	• Gold nuggets have been found using a handheld metal detector and traversing the target area. Once a metal detector signal is evident, the source of the signal was found by hand digging using a handheld pick. • Nuggets were found at various depths ranging from 5-30cm in the soil and rock scree. • The principal nugget locations were recorded with a handheld GPS. • The gold samples are still to be tested for purity.
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.).*	• No drilling undertaken
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.*	• No drilling undertaken
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*	• Gold nuggets have been found using a handheld metal detector. • Nuggets were found at various depths ranging from 5-30cm in the soil and rock scree. • Rock types associated with the nuggets were logged. • The nuggets were found in combination with geological mapping of the target area based on prospective geological unit being mapped in the vicinity

Criteria	JORC Code explanation	Commentary
	relevant intersections logged.	
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.*	• The gold nuggets are not considered to be representative as the nuggets were found in loose rocks and soil near the prospective geological unit. The geological unit remains to be sampled in detail.
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.*	• No assay data or laboratory tests have been completed on the nuggets
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.*	• Due to the early stage of exploration and type of work completed to date, no verification nor assaying has been undertaken to date
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.*	• The accuracy of location is to approximately +/-5m and was determined using a handheld GPS • Mapping and location was completed in GDA94 zone 50 projection • Location of nuggets and mapping of historical workings are indicated on maps within the report, refer to figures 1, 2, 6 and 7.
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.* • *Whether sample compositing has been applied.*	• Due to the early stage of exploration and type of work completed to date, the sampling is non-systematic nor representative for any future resource estimate.

Criteria	JORC Code explanation	Commentary
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 metal detecting concentrated on the area immediately below the prospective horizon to determine if the horizon was the source of the nuggets. Metal detecting was also conducted above the target horizon to further support this observation. • The prospective horizon is a conglomerate at the base of the Mt Roe Basalt which outcrops along a north -south trending ridge for approximately 1.5km ridge • The deposit style is poorly understood and further detailed work is required before any conclusion on the mineralisation can be confirmed
Sample security	• *The measures taken to ensure sample security.*	• Samples were collected by company personnel and stored at the company's exploration camp
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits have been completed.

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 mapping and metal detecting was completed on E47/2720. • The tenement is held by Indee Gold Pty Ltd, which De Grey mining has an option to purchase 100%. De Grey has the right to acquire Indee Gold for a total payment of $14.9M by July 2018.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The mapped area has a history of alluvial and alluvial mining by prospectors. No modern sampling is known over this immediate area. • No previous drilling is known within the immediate mapped area or the Mt Roe Basalt ridge within the tenement.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The mineralisation targeted is related to palaeo-placer conglomerate hosted gold. This style of mineralisation is poorly understood in the Pilbara region, however recent discoveries in the region have been noted and are currently being explored by third parties.
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*	• No drilling undertaken

Criteria	JORC Code explanation	Commentary
	clearly explain why this is the case.	
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.*	• Shallow nuggets have been found only. • Due to the early stage of exploration and type of work completed to date, the sampling is non-systematic nor representative.
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').*	• Shallow nuggets have been found only. • Due to the early stage of exploration and type of work completed to date, the sampling is non-systematic nor representative.
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.*	• Maps and photographs of the area and geology are reported in the report.
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.*	• Maps and photographs of the area and geology are reported in the 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.*	• Maps and photographs of the area and geology are reported in the report and provide geological observations and interpretations as known to date.
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.*	• Detailed mapping, rock chip and other geochemical sampling including further metal detecting is currently underway. Results of this work will be reported when samples have been submitted and results received. • Trenching and drilling is being planned to systematical test the mineralisation once detailed mapping and sampling is completed • Approvals for ground disturbing work including trenching and drilling are required to be submitted and approved before any trenching and drilling can commence.