

Merlin base metal targets look more compelling following in depth review of geophysics data

EM survey data review finds the targets, located just 50km from the world-class McArthur River mine, are even more prospective than first thought; plus, 16 more kimberlite targets identified

Lucapa Diamond Company Limited ("Lucapa" the "Company") is pleased to announce further review of the Electromagnetic (EM) Survey data over the Merlin tenements in the Northern Territory has significantly increased the prospectivity of the two previously identified large targets.

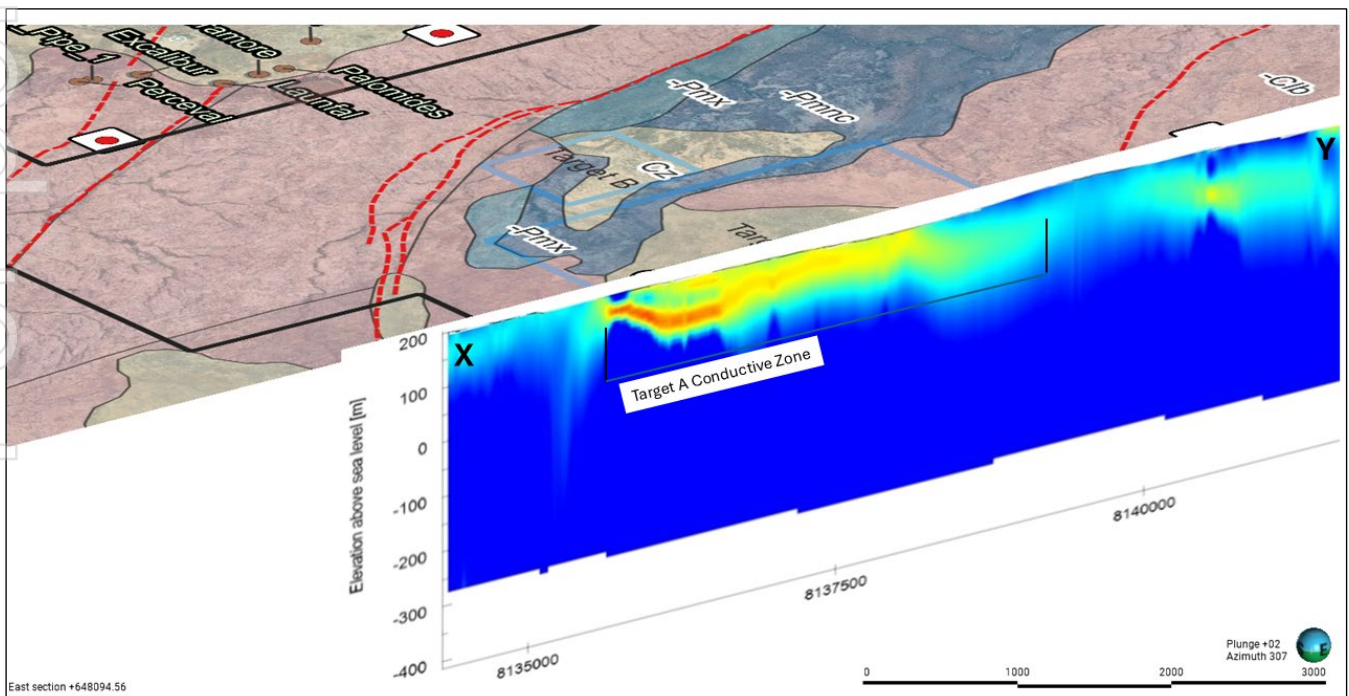
The review has also led to an additional 16 kimberlite targets being identified.

Lucapa announced in January that an initial assessment of the geophysics data had identified two base metals targets (see ASX release dated January 21, 2025).

Subsequent extensive analysis and modelling of previously identified Targets A and B shows a distinct conductive feature below shallow sandstone cover and within comparable stratigraphy to the McArthur River Mine ore bodies situated 50 kms away.

Importantly, interpretation of the data indicates that there is a fold feature close to Target A and that the Barney Creek formation, which is the host geological formation for the deposit at McArthur River Mine, may be present below the Bukkalara sandstone cover and therefore has not been identified in outcrop during regional geological mapping. A review of publicly available data has also found a regional gravity survey station indicating a gravity high over the top of Target A.

Lucapa Managing Director and CEO Alex Kidman said *"The findings of the review are extremely compelling in several key respects. The analysis of the EM data, combined with the local geology, reveals many highly promising features which demonstrate the immense potential of these targets. Given these outstanding results, we intend to undertake follow-up geophysics, soil sampling and geological mapping to continue defining the targets ahead of drilling. With a further 16 kimberlite targets identified in the EM data, the survey has been more successful than we could have hoped for."*

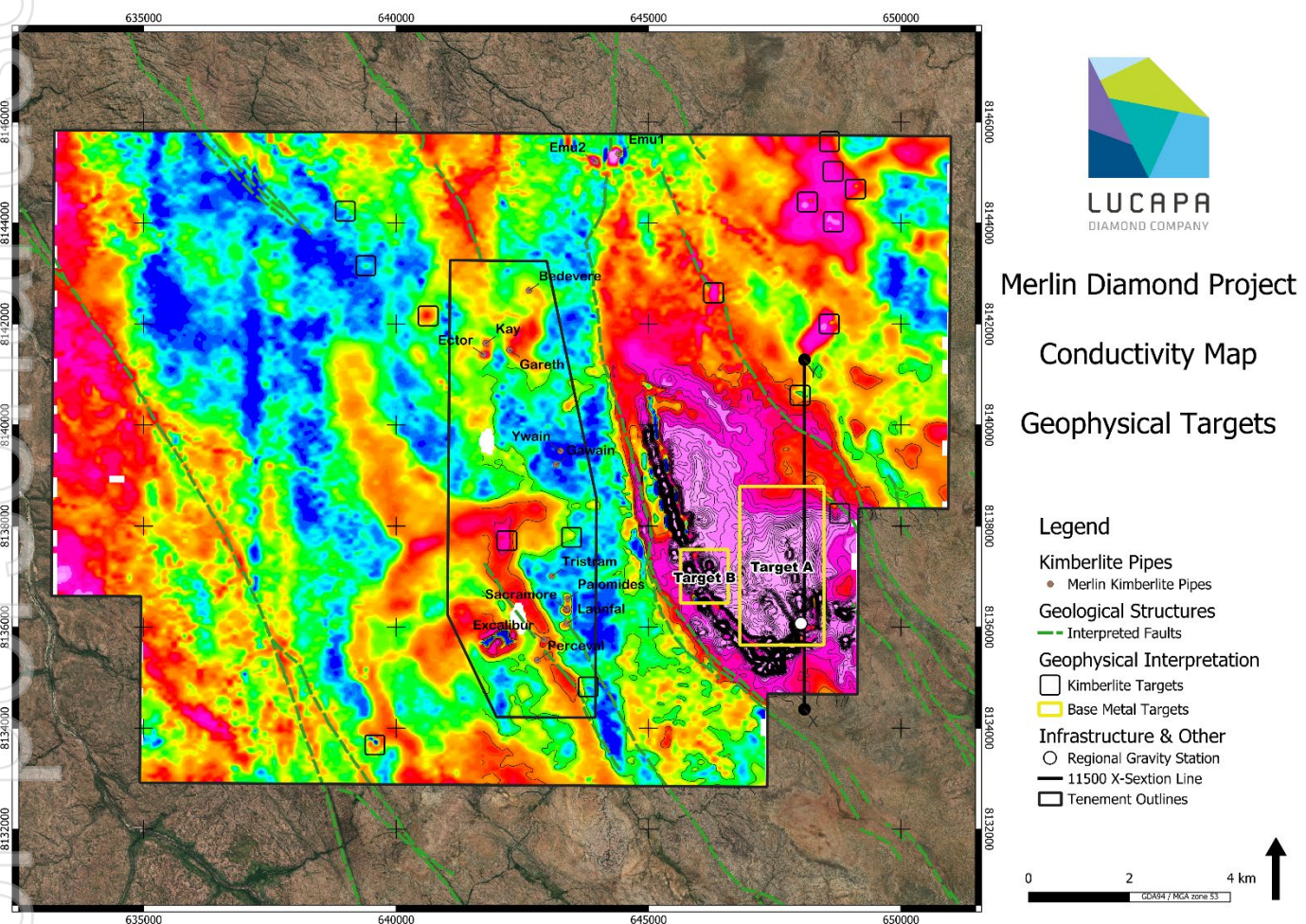


Map 1: Geological map around Target A with conductivity section showing the conductive target in orange and yellow

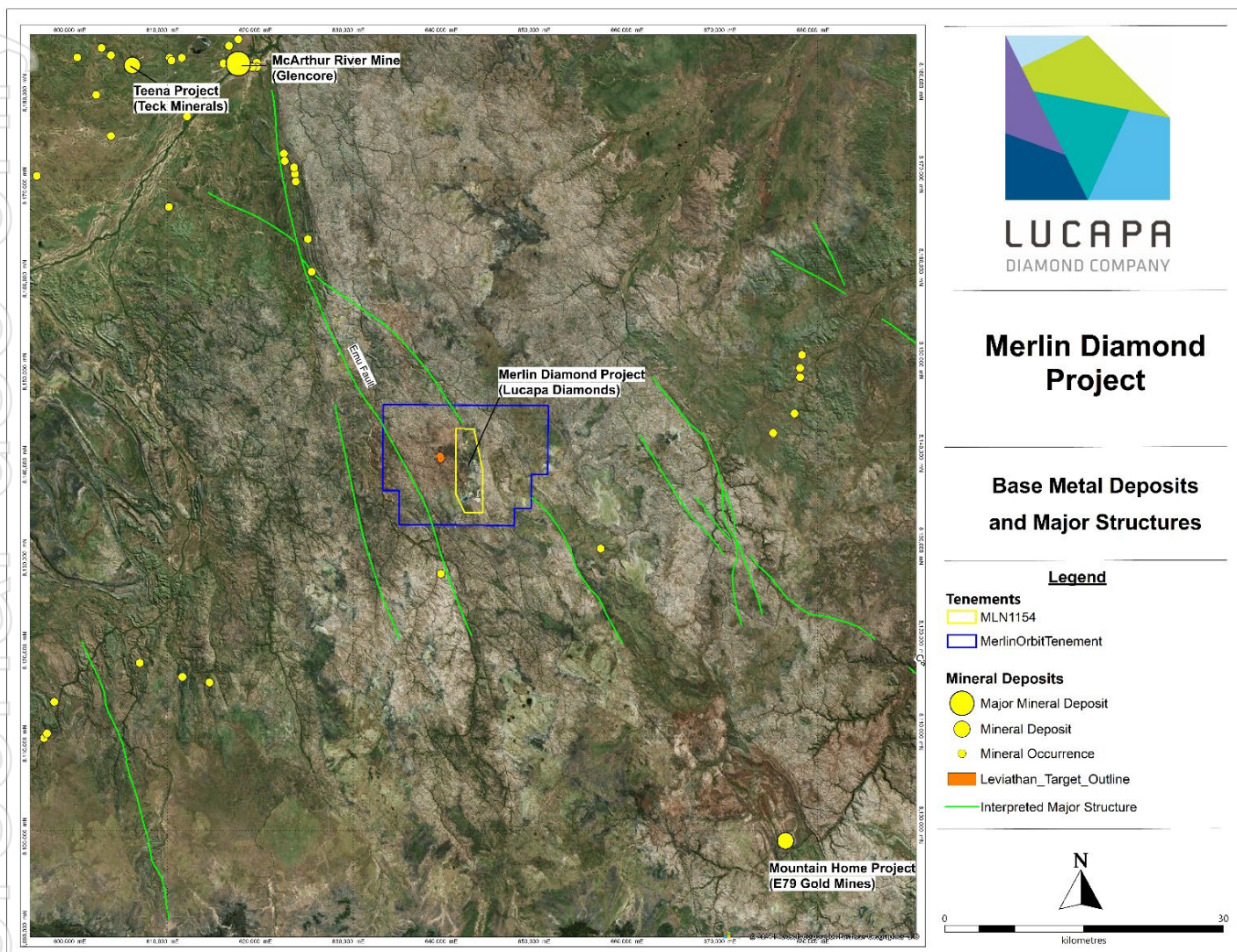
The base metal targets are large in size. Target A covers an area measuring approximately 2 kilometres by 1 kilometre while Target B covers an estimated area of 1 kilometre by 600 metres.

A single regional gravity station extracted from the Geoscience Australia portal has also been located directly above Target A and shows a positive Bouguer anomaly (gravity high) in this area.

While the cause of this gravity anomaly is uncertain at this stage, a positive Bouguer anomaly is what would be expected above a higher density sulphide deposit similar to the McArthur River Mine and the other base metal deposits found in this area.



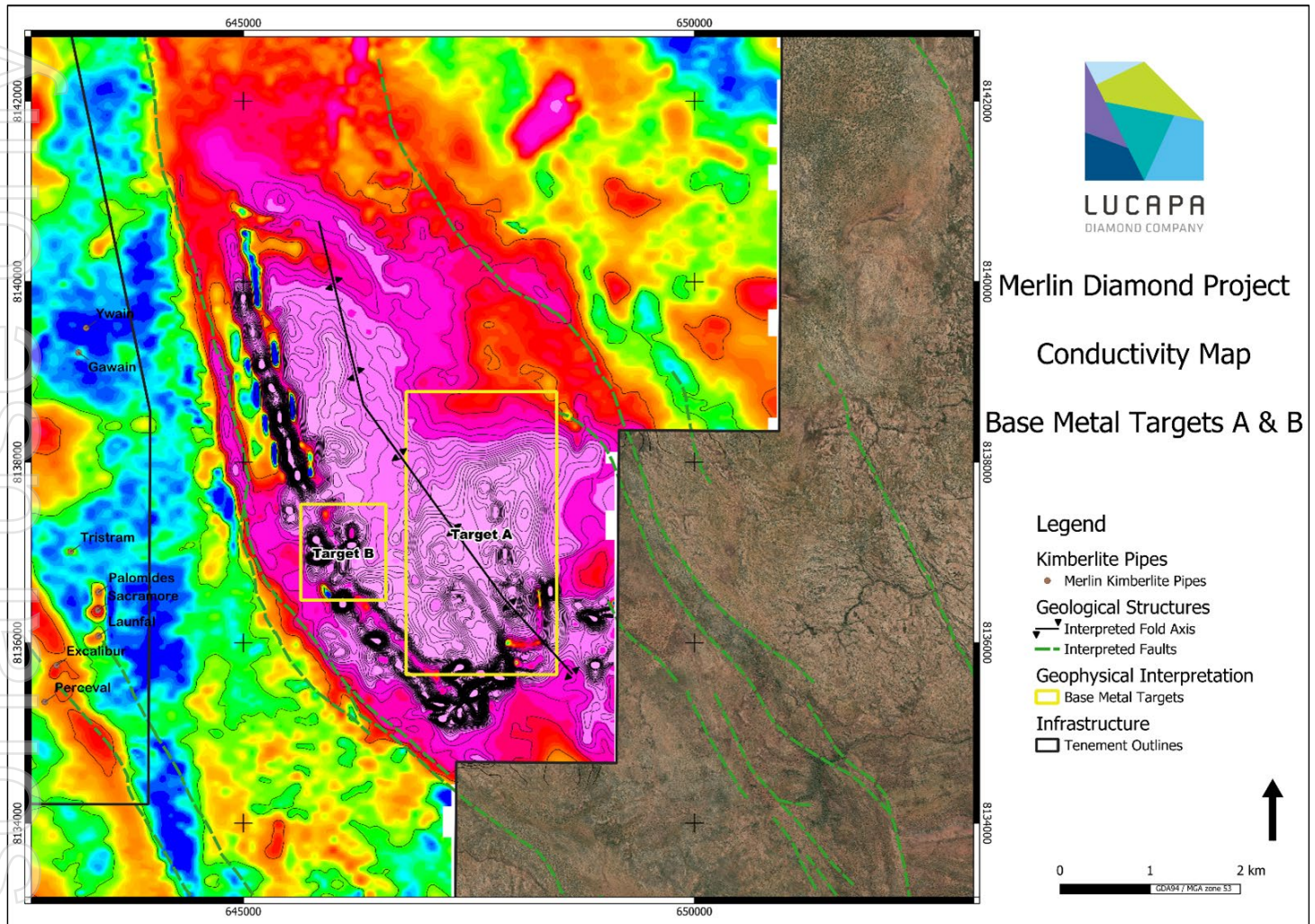
Map 2: Conductivity map of Merlin project area showing base metal Targets A and B and 16 kimberlite targets.



Map 3: Highlighting the regional structures, mines and deposits surrounding the Merlin tenements

A field visit to the targets identified areas of steeply dipping strata, while to the west, the geotechnical drilling data collected around the Merlin kimberlite pipes in 2021 indicated flat lying Proterozoic strata to the west of the mapped faulting.

This structural disturbance is an encouraging feature for potential ore forming fluid pathways with similar features identified at some of the known deposits in the region.



Map 4: Conductivity map over Targets A & B showing interpreted fold axis

Review of the EM data has also resulted in the identification of 16 potential kimberlite targets. Three of these targets have previously been investigated through drilling, however, the drilling is considered insufficient because of the location or depth of the drill holes, and further work is recommended.

The analysis of the data was conducted by independent geophysicist Keith Jones following the first new generation helicopter-borne time-domain electromagnetic (HTDEM) survey over the 234 sq km area in 25 years, covering both the Merlin Mineral Lease (MLN1154) and the surrounding Exploration Licence (EL26944).

A follow-up program of ground and drone-borne geophysics is being planned to better define these targets prior to drilling. The geophysics will be supplemented by soil sampling for kimberlitic indicator minerals (KIM's), soil geochemistry and surface mapping.

This announcement is authorised for release by the Board of Lucapa Diamond Company Limited.

Alex Kidman
Managing Director and CEO



For more information:

Candice Sgroi
Head of Investor Relations and Corporate Communications
Mob: +61 400 49 22 85 | csgroi@lucapa.com.au

Media:
Paul Armstrong
Read Corporate
(08) 9388 1474

ABOUT LUCAPA

Lucapa is an ASX listed diamond miner and explorer with assets in Angola and Australia. It has an interest in the Lulo Diamond Mine in Angola which has been in commercial production since 2015, (conducted by Sociedade Mineira Do Lulo, Lda ("SML") Lucapa 40%, Endiama 32%, Rosas & Petalas 28%).

The large, high-value diamonds produced from Lulo attracts the highest prices per carat for alluvial diamonds globally. Lucapa also has a 39% interest in the Lulo Kimberlite Exploration Joint-Venture (Endiama 51%, Rosas & Petalas 10%), which is exploring for the potential primary source kimberlites at the prolific Lulo concession in Angola.

In 2021, through its wholly owned subsidiary, Australian Natural Diamonds Pty Ltd, Lucapa completed the strategic and transformative acquisition of the Merlin Diamond Project, an historic Australian mine in the Northern Territory of Australia.

The Board, management and key stakeholders in Lucapa have deep global diamond industry experience and networks all through the value chain from exploration to retail.

Competent Person's Statement

Information included in this announcement that relates to exploration results and resource estimates is based on and fairly represents information and supporting documentation prepared and compiled by Richard Price MAusIMM who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Price is an employee of Lucapa Diamond Company Limited. Mr Price has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves. Mr Price consents to the inclusion in the announcement of the matters based on this information in the form and context in which it appears.



No New Information

To the extent that this announcement contains references to prior exploration results, a production target and financial information derived from a production target and Mineral Resource estimates, which have been cross referenced to previous market announcements made by the Company, unless explicitly stated, no new information is contained. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements and, in the case of estimates of a production target and financial information derived from a production target and Mineral Resources that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

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This announcement has been prepared by the Company. This document contains background information about the Company and its related entities current at the date of this announcement. This is in summary form and does not purport to be all inclusive or complete. Recipients should conduct their own investigations and perform their own analysis in order to satisfy themselves as to the accuracy and completeness of the information, statements and opinions contained in this announcement.

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Appendix 1

Reporting of geophysics exploration results for the Merlin Project

– JORC Code (2012) requirements – Sampling Techniques and Data

Criteria	JORC Code Explanation	Lucapa 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"> The TDEM (Time Domain Electro-Magnetic) survey was conducted by New Resolution Geophysics Australia, using a helicopter-borne Xcite™ system. The survey was conducted at a flight line spacing of 100m with highest interest areas infilled at 50m line spacing. All flight lines were surveyed N-S. The nominal survey height for the EM system was 30-40m EM coil height above ground surface. Magnetic data was acquired concurrently with the EM data
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"> No drilling is reported
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"> No drilling or sampling is reported.



Logging

- Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.
- Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.
- The total length and percentage of the relevant intersections logged.

- No drill logging is reported

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.

- No sampling is reported

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 is reported

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.

- No sampling or assay data is reported



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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.

- Reading positions are located using a Novatel DL-V3L1L2 GPS system with differential correction

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.

- Line spacing was nominally 100m with readings approximately 50cm along line.

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.

- No drilling is reported

Sample security

- The measures taken to ensure sample security.

- No sampling is reported

Audits or reviews

- The results of any audits or reviews of sampling techniques and data.

- The data was interpreted and reviewed by K Jones - Geophysical Consultant
- No audits were considered necessary for this stage of exploration.

**– JORC Code (2012) requirements –
Reporting of Exploration Results**

Criteria	JORC Code Explanation	Lucapa 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 reporting along with any known impediments to obtaining a licence to operate in the area. 	<ul style="list-style-type: none"> The Merlin Diamond Project is contained within mining lease ML1154 in the Northern Territory, Australia and covers 23.5 km². The lease was initially granted in 1998 for a period of 25 years and was renewed until 2047 in 2022. It is held by Australian Natural Diamonds Ltd, which is a 100% owned subsidiary of Lucapa Diamonds Limited. Exploration license EL26944 surrounds MLN1154 was granted in 2009 and covers approximately 186 km² and is due for renewal in April 2025.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> The lease is located on Special Purpose Crown Lease held by Wardell Nominees Pty Ltd on behalf of Ashton Mining Limited.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> A Native Title Agreement with local traditional owners includes a minimum annual payment of \$10,000, and a Net Profit Interest to be paid annually at the rate of 1% on total profit <\$10M and scaling up to 5% above \$40M.
Drill hole Information	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	<ul style="list-style-type: none"> No drilling is reported
Data aggregation methods	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> No data aggregation was used.



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	<p><i>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></p> <ul style="list-style-type: none"> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	
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"> No mineralisation was intersected.
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 locations and appropriate sectional views.</i> 	<ul style="list-style-type: none"> Appropriate map and plans for the reported mineralisation with scale and north points are included with the text of the report.
Balanced reporting	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> No grades are reported.
Other substantive exploration data	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> The gravity data point is sourced from the Geophysical Archive Data Delivery System (GADDs) The survey point over Target A was derived from the Barkly Tablelands Gravity Survey, 2009, NT (P200980), gravity point data. The original data acquisition was by Atlas Geophysics Pty Ltd at approximately 4,000m station spacing using a Scintrex CG5 gravity meter.
Further work	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> Follow-up geophysics and soil sampling is being planned.

SECTION 3 (RESOURCES) DOES NOT APPLY TO THIS ANNOUNCEMENT

SECTION 4 (RESERVES) DOES NOT APPLY TO THIS ANNOUNCEMENT