

ASX Announcement

30 May 2017

# LULO KIMBERLITE EXPLORATION UPDATE

- Kimberlite drilling program accelerated during the Quarter following end of Angolan wet season

- TDEM survey results being finalised, with preliminary analysis already successful in identifying another kimberlite pipe in a priority area
  - Kimberlite pipe L14 discovered ~2km upstream of the prolific Mining Block 8 on the Cacuilo River - First hole drilled at L14 discovery recovers coarse, near-surface kimberlite material in core
- Coarse, near-surface kimberlite also intersected at other priority targets L13, L15 and L242 during the Quarter - Range of core samples selected for laboratory analysis in South Africa



Figure 1: Core from the first hole drilled at the L14 kimberlite discovery, within ~2km and upstream of Mining Block 8 on the Cacuilo River (Hole: HJ/014/01, Depth: ~10.00m - 22.00m)

Lucapa Diamond Company Limited (ASX: **LOM**) ("Lucapa" or "the Company") and its partners, Empresa Nacional de Diamantes E.P. ("Endiama") and Rosas & Petalas, are pleased to provide an update on the kimberlite exploration program at the Lulo diamond project in Angola.

The kimberlite program aims to identify the primary source or sources of the exceptional alluvial diamonds being mined at Lulo, which achieved the highest average per carat prices in the world in 2016.

As previously advised, the kimberlite drilling program was constrained during the Angolan wet season. However, improved weather conditions during the June Quarter, coupled with the availability of three drilling rigs, have enabled drilling to be conducted at several priority targets, including L13, e14, L15 and L242. Drilling at all four of these priority targets has intersected coarse, near-surface kimberlite material (Figures 1-6) (Refer Appendix 1 and Table 1).

While the Lulo partners await the final report on the helicopter-borne Time Domain Electromagnetic ("TDEM") survey completed recently over the Cacuilo Valley area, preliminary analysis highlighted e14 as an anomaly of interest, favourably located just ~2km upstream of the Mining Block 8 area which has been Lulo's most prolific source of large and high-value alluvial diamonds (Figure 3).

While historic surveys had indicated the existence of e14, it was largely covered by the Cacuilo River and its flood plain, thus limiting access until later in the dry season. However, the preliminary TDEM data also highlighted extensions to e14 where drilling access was possible. As a result, the new Hanjin D&B35 rig was mobilised to this target. The first drill hole successfully intersected near-surface and coarse kimberlite material, thus confirming the e14 anomaly as a new priority kimberlite pipe (L14).

Apart from its close proximity to Mining Block 8, L14 is also the closest confirmed kimberlite pipe to the large L259 kimberlite target, where a deep hole is planned to be drilled with the Hanjin D&B35 rig later this Quarter once surface conditions allow.

Drilling of the first hole at L14 is ongoing with kimberlite so far intersected continuously to a depth of 57m. Drilling will continue at L14 to define the shape of the kimberlite pipe and to understand its internal geology as access permits. As kimberlite was intersected near the surface (<10m) at L14, it provides the potential for future bulk sampling to test for diamond content if this is supported by the ongoing drilling and laboratory results.



Figure 2: Drilling at the L14 kimberlite discovery at Lulo with the Hanjin D&B35 rig

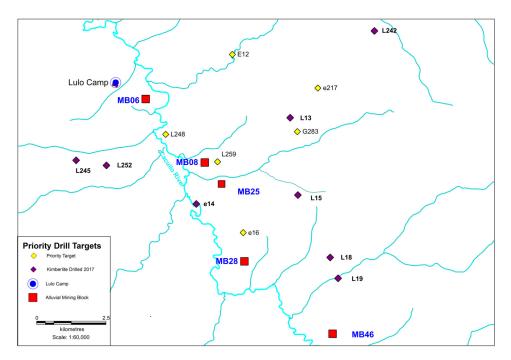


Figure 3: Priority kimberlite targets in proximity to key alluvial mining areas

The core from L14 will be included in the first batch of Lulo kimberlite drilling samples to be dispatched to South Africa for laboratory analysis. The core selection is expected to be completed this week.

Further drilling is also planned in the June Quarter at the L15, L13 and L242 kimberlites to follow up on the coarse, near-surface kimberlite material intersected in the first holes drilled at each of those targets. Initial drilling is also planned at targets including e12 and G283 (Figure 3).

The kimberlite drilling program for the remainder of 2017 will also be guided by the final interpretation and analysis of the TDEM data, which will be announced once completed.



The helicopter-borne TDEM survey which highlighted the L14 kimberlite discovery

As previously advised, Lucapa is funding the Lulo kimberlite drilling program from its US\$1.6 million (A\$2.1 million) share of the distribution declared recently from the Lulo alluvial diamond mining operations (See ASX announcements 8 March 2017 and 25 May 2017).



Figure 4: Drill core from L13 (Hole: RS/013/04, Depth: ~27.90m - 29.00m)



Figure 5: Drill core from L242 (Hole: RS/242/01, Depth: ~10m)



Figure 6: Drill core from L15 (Hole: RS/015/01, Depth: 35.50m -38.50m (See ASX announcement 26 April 2017)

Lucapa Managing Director Stephen Wetherall said he was encouraged by the advancements made with the Lulo kimberlite exploration program.

"While our progress with the Lulo kimberlite exploration program during the previous two quarters was restricted by weather conditions, the end of the Angolan wet season, coupled with the availability of additional drilling rigs, has enabled us to speed up drilling across our priority targets."

"The major objective for us is to locate the primary kimberlite source, or sources, of the exceptional alluvial diamonds we have been recovering at Lulo. While it is still early days, we are already seeing very encouraging results in the coarse material and contained indicator minerals."

"The preliminary analysis of the TDEM data has already resulted in the discovery of the L14 kimberlite pipe, within our high-priority area and just 2km upstream of Mining Block 8 on the Cacuilo River. We expect the final analysis and interpretation of the TDEM survey data will further refine existing targets and identify new targets to be drilled in 2017."

For and on behalf of the Lucapa Board.

#### STEPHEN WETHERALL MANAGING DIRECTOR

HOLE-ID	Drilling type	Easting	Northing	Elevation	Total Depth
HJ/252/02	Core	261,234.1	8,939,890.1	1,040.6	65.80
RS/015/02	Core	268,114.8	8,938,827.9	1,038.7	84.50
HJ/252/03	Core	261,219.7	8,939,888.6	1,040.7	72.55
RS/013/01	Core	267,672.5	8,941,686.3	1,053.3	44.50
RS/013/02	Core	267,650.2	8,941,660.2	1,053.3	35.00
RS/013/03	Core	267,640.0	8,941,710.5	1,055.2	39.00
HJ/245/01	Core	259,938.6	8,939,629.2	1,057.9	52.95
RS/217/02	Core	268,800.7	8,942,609.1	1,082.1	73.50
HJ/245/02	Core	259,938.6	8,939,629.2	1,057.9	49.75
RS/217/03	Core	268,839.0	8,942,503.0	*	76.00
HJ/245/03	Core	259,939.0	8,939,635.0	*	46.75
RS/217/04	Core	268,807.0	8,942,396.0	*	73.00
HJ/245/04	Core	260,100.0	8,940,087.0	*	43.50
HJ/248/01	Core	263,345.0	8,941,060.0	*	40.50
RS/242/01	Core	270,777.0	8,944,787.0	*	49.00
RS/013/04	Core	267,751.0	8,941,655.0	*	54.50
HJ/014/01	Core	264,293.0	8,938,560.0	*	57.00

### Table 1: Kimberlite Drilling Project - Drill Collar Details

\* Location measured using handheld GPS only. No accurate elevation.

### **Competent Person's Statement**

Information included in this announcement that relates to previously released exploration data disclosed under JORC Code 2012. The information has not materially changed since it was last reported and is based on and fairly represents information and supporting documentation prepared and compiled by Albert Thamm MSc FAusIMM (CP), who is a Corporate Member of the Australasian Institute of Mining and Metallurgy. Mr Thamm is a Director of Lucapa Diamond Company Limited. Mr Thamm 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 Thamm and 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 announcement contains references to prior exploration results 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 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.

#### Forward-Looking Statements

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. This announcement is for information purposes only. Neither this document nor the information contained in it constitutes an offer, invitation, solicitation or recommendation in relation to the purchase or sale of shares in any jurisdiction.

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Any forward-looking statements in this announcement speak only at the date of issue of this announcement. Subject to any continuing obligations under applicable law and ASX Listing Rules, the Company does not undertake any obligation to update or revise any information or any of the forward-looking statements in this document or any changes in events, conditions or circumstances on which any such forward-looking statement is based.

### Appendix 1 Reporting of kimberlite exploration results for the Lulo Project – JORC Code (2012) requirements – Sampling Techniques and Data

Criteria	JORC Code Explanation	Lucapa Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.) These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Drilling was undertaken using a combination of a Hanjin D&amp;B 35 wireline coring rig, owned by the company and a contract wireline rig provided by Rosanstroi.</li> <li>The Hanjin rig drills HQ diameter core</li> <li>The Rosanstroi rig has drilled both PQ and 112mm hole/96mm core diameters.</li> </ul>
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.).	<ul> <li>The drilling to date has consisted of diamond core drilling.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>Core is recovered from the core barrel and stored in core boxes, before being transported by light vehicle to the core shed, where it is visually logged.</li> <li>Core recovery is generally high.</li> </ul>

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Criteria	JORC Code Explanation	Lucapa Commentary
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>The core is visually logged</li> <li>No quantitative analysis of the core is reported.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	No sub-samples have been taken
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	• No assay or lab tests are reported.
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>No verification of samples has been undertaken.</li> </ul>

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Criteria	JORC Code Explanation	Lucapa Commentary
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Sample sites were initially located using a hand held GPS with a nominal accuracy of about 5m. The final location was measured using a Trimble Real-Time differential GPS system.</li> <li>The grid system is WGS84 Zone 34L.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Drill spacing is variable and dependent on the size of the target being investigated.</li> <li>No sample compositing is applied.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>The samples are considered spot samples within a kimberlitic body.</li> <li>Insufficient data exists to determine whether sample bias is present but given the nature of the bodies, bias is considered unlikely.</li> </ul>
Sample security	• The measures taken to ensure sample security.	<ul> <li>Security of the drilling and core storage area, processing and diamond recovery is monitored by company and Angolan State Diamond Security personnel.</li> </ul>
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	<ul> <li>The sampling techniques are industry standard and no audits or reviews have been undertaken to validate the information presented at this stage.</li> </ul>

# **Reporting of Exploration Results**

	Reporting of Exploration Results			
Criteria	JORC Code Explanation	Lucapa Commentary		
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>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.</li> </ul>	<ul> <li>The 1994 legislation covering the Angolan diamond industry stipulates that only Endiama (Empresa Nacional de Diamantes de Angola, the State Diamond Company) or joint ventures with Endiama, can hold diamond mining rights awarded by the Council of Ministers.</li> <li>Under the terms of the Lulo Joint Venture Association Agreements, separate titles are granted for alluvial and kimberlite mining. The exploration for both alluvials and kimberlites on the Lulo Concession is a requirement under the Act.</li> <li>The Angolan Government Gazette, dated 24 December 2007, authorized the formation of a Joint Venture for the purpose of prospecting,</li> </ul>		

Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	<ul> <li>evaluation and mining of secondary (alluvial) diamond deposits. These rights were granted for a maximum period of five years. Should the Joint Venture wish to extend the agreement beyond five years, then 50% of the Concession would be relinquished. The equity distribution is: Endiama 32%, Lucapa Diamond Company Ltd 40%, Rosas e Petalas S.A. 28%.</li> <li>In May 2014, the authorization for the kimberlite exploration and mining was gazetted and equity distribution in this is Endiama 51%, Lucapa Diamond Company Ltd 39%*, Rosas e Petalas S.A. 19% (*This interest will be reduced to 30% after recoupment of the investment).</li> <li>A new kimberlite licence was awarded by the Angolan Ministry of Mines on 15<sup>th</sup> November 2016; subject to negotiation of a mining investment contract.</li> <li>The 10-year alluvial mining licence was signed end July 2015 creating "Sociedade Mineira Do Lulo, LDA.", an Angolan incorporated company with which Lucapa Diamond Company Ltd has a 40% beneficial interest. This entity was incorporated in Angola in May, 2016.</li> <li>Limited exploration has been undertaken by state controlled entities and joint ventures Diamang and Condiama.</li> <li>Parts of the area have been exploited by artisanal miners – no records of this work are available.</li> </ul>
Geology	• Deposit type, geological setting and style of mineralisation.	• Significant diamond bearing alluvial systems, of Mesozoic to Recent ages overlie a major, but relatively poorly explored, kimberlite field. The kimberlite pipes intrude flat-lying Proterozoic sediments within the Lucapa Graben. The kimberlite field is believed to be the source of the alluvial diamonds.
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth hole length.</li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the</li> </ul> </li> </ul>	<ul> <li>Drill hole coordinates are shown in Table 1.</li> <li>All drill holes are vertical.</li> <li>Intercept information is currently unverified and is not presented here.</li> <li>Drill hole collar information is tabulated below.</li> </ul>

	Competent Person should clearly explain why this is the case.	
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>No weighting, averaging, grade truncations or cut-off grades have been used.</li> <li>No short or long length aggregation applicable.</li> <li>No metal equivalent values are used.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul> <li>All drill holes are vertical.</li> <li>The deposits may be regarded as massive deposits so drill hole orientation is not relevant.</li> </ul>
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.	• Appropriate map and plans for the reported mineralisation with scale and north points are included with the text of 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.	Results reported are complete.
Other substantive exploration data	<ul> <li>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.</li> </ul>	<ul> <li>The drilling at L259 has been planned based on the ground geophysics work undertaken in Dec 2015 and Jan 2016.</li> <li>All other targets have been drilled based on the aeromagnetic surveys conducted in 2008 and 2013.</li> <li>A helicopter-borne Time-Domain Electromagnetic survey, has been flown over the Cacuilo River and valley area. Results are awaited.</li> </ul>

<ul> <li>Further work</li> <li>The nature and scale of planned further (e.g. tests for lateral extensions or a extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the area possible extensions, including the geological interpretations and future dri areas, provided this information is commercially sensitive.</li> </ul>	<ul> <li>have been identified by the company.</li> <li>Core from the ongoing drilling program will be selected for laboratory testing in South Africa for petrographic and heavy mineral analysis, as well as dating, spectrographic analysis and</li> </ul>
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