

# Highlights

Lucapa Diamond Company Limited (ASX: LOM) is pleased to provide an overview of its achievements during the December 2018 Quarter ("the Quarter"). These included two of the most important milestones in Lucapa's history, which will underpin an exciting new era of growth for the Company:

- Commencement of commercial diamond recoveries at the new 1.1Mtpa Mothae kimberlite mine in Lesotho, delivering high-value production from a second African diamond mine
- The approval of historic new diamond marketing regulations in Angola enabling Lucapa and its partners to commence marketing large and exceptional diamonds from the Lulo alluvial mine via an international competitive bid process

These milestones have positioned Lucapa to achieve another strategic goal in 2019:

> To pursue its value-adding partnerships with leading global manufacturers and diamantaires for the cutting and polishing of select high-value diamonds



The new 1.1Mtpa Mothae diamond treatment plant completed and commissioned during the Quarter

#### INTRODUCTION

Lucapa is a global diamond group with high-quality mines and exploration projects in Angola (Lulo alluvial mine and kimberlite/source exploration), Lesotho (Mothae kimberlite mine), Australia (Brooking diamondiferous lamproite discovery) and Botswana (Orapa Area F kimberlite exploration).

Lucapa's focus on high-quality diamond production is designed to maximise cash flows in a niche sector of the global diamond market where demand and pricing remain robust.

Lucapa, with its respective project partners, made significant advancements across its suite of diamond projects during the Quarter, including:

- Construction and commissioning of the new Mothae 1.1Mtpa kimberlite diamond mine in Lesotho
- First commercial diamond recoveries from the South East domain of the Mothae kimberlite pipe at double the resource and forecast grades, including six Specials of up to 78 carats
- Finalisation and draw-down of a ZAR100m (US\$7m) Mothae project development facility with leading southern African financier, the Industrial Development Corporation of South Africa, enabling Lucapa to be repaid US\$3m in a first repayment instalment of its development loan to Mothae
- Continued production of large and premium-value diamonds at record annual throughput rates at the **Lulo mine in Angola**, the world's highest US\$ per carat alluvial diamond production
- Discovery of a new alluvial source of large and premium-value diamonds at Lulo within the extensive flood plains along the Cacuilo River valley, including top-colour Specials of up to 55 carats
- Increasing to 68 the number of confirmed kimberlites at Lulo in the current systematic drilling campaign
- Finalisation of an historic agreement to sell select Lulo production via an international competitive bid process scheduled to close on 31 January 2019
- Declaration of a US\$4 million loan repayment to Lucapa from Lulo mining company SML and a pro-rata US\$4 million distribution to Lulo partners
- Completion of an exploration program at **Brooking in Western Australia** to follow up on the spectacular Little Spring Creek lamproite discovery, with results pending

### MOTHAE, LESOTHO Kimberlite Diamond Mine (*Mothae Diamonds (Pty) Ltd* - Lucapa 70%; Government of the Kingdom of Lesotho 30%)

Mothae is a high-quality kimberlite resource located in diamond-rich Lesotho, southern Africa. Lucapa has been developing a new mine at Mothae throughout 2018 to complement production from the high-value Lulo mine in Angola.

During the Quarter, Lucapa completed construction of the new 1.1Mtpa Mothae treatment plant, which incorporates two XRT diamond recovery circuits, and commenced the commissioning phase.

This enabled the first commercial diamond recoveries to be delivered as the plant was progressively ramped up using kimberlite material from the South East domain of the Mothae kimberlite pipe.

The ramping-up phase continues to progress well, with the plant on target to be operating at nameplate capacity (90,000 tonnes/month) in Q1 2019. The targeted treatment rate of 150 tonnes per hour has been achieved for extended periods and also surpassed during December 2018.



The 1.1Mtpa Mothae treatment plant, which was completed and commissioned during the Quarter

By the end of the Quarter, 3,089 carats of diamonds had been recovered from the processing of 78,426 tonnes of kimberlite material from the South East domain during the ramp-up phase (Table 1).

The diamonds recovered included six Specials (diamonds weighing >10.8 carats). These Specials included D-colour white diamonds weighing 78 carats and 38 carats.

Significantly, these recoveries produced a recovered grade of 3.94 carats per 100 tonnes ("cpht") for the Quarter – more than double the resource and forecast grades of 1.92 cpht and 1.83 cpht respectively.

The production of large diamonds has continued post-Quarter end, with three Specials recovered to date in January 2019 already.

	Nov-18	Dec-18	Total
Tonnes Processed	4,438	73,988	78,426
Recovered Carats	128	2,961	3,089
Grade forecast (cpht)	1.8	1.8	1.8
Resource Grade (cpht)	1.9	1.9	1.9
Actual Recovered Grade (cpht)	2.9	4.0	3.9

Table 1: Initial recovery results from the Mothae kimberlite mine during the Quarter

The production and recoveries up to the end of December 2018, under International Financial Reporting Standards, are accounted for as part of the commissioning or pre-production phase of the mine and, as such, the operating costs and related revenues from this phase will be recognised as part of the mine development asset.

The first sale of commercial run of mine diamonds from Mothae is scheduled for Q1 2019 in Antwerp.

During the Quarter, ~4,000 carats of Mothae diamonds recovered from the bulk sampling plant were sold in Antwerp via tender, achieving gross proceeds of ~US\$1.5m and individual sale prices of up to US\$15,000 per carat.

Lucapa signed a Term Sheet for a ZAR100m (US\$7m) project development facility for Mothae during the Quarter with the Industrial Development Corporation of South Africa Limited ("IDC"), one of the largest development financiers in southern Africa. This followed the completion of extensive legal, technical and financial due diligence by IDC on the Mothae mine.

This facility was finalised, and funds advanced, during the Quarter (Refer ASX announcement 20 December 2018).

The proceeds from the IDC loan and the sale of the bulk sampling diamonds enabled Mothae to make its first US\$3m repayment to Lucapa of shareholder loans provided by the Company for the development of the 1.1Mtpa plant.

Post this loan repayment to Lucapa, Mothae had cash and equivalents of US\$3.9m at Quarter-end, along with a diamond inventory of 3,089 carats.



78 carat D-colour white diamond (pre-boiling) recovered during the Quarter through the new 1.1Mtpa Mothae treatment plant during ramp up phase



38 carat D-colour white diamond (pre-boiling) recovered during the Quarter through the new 1.1Mtpa Mothae treatment plant during ramp up phase

# LULO, ANGOLA Alluvial Diamond Mine (*Sociedade Mineira Do Lulo* - Lucapa 40% associate and operator)

Lulo alluvial diamond mining company SML treated 70,047 bulk cubic metres ("bcm") of alluvial gravels during the Quarter, which contributed to a record annual throughput of 285,704 bcm for calendar 2018 (Table 3).

Diamond production for the Quarter totalled 5,070 carats, which was 1% down on the previous corresponding period due to the processing of gravels from lower-grade areas. This took annual production for 2018 to 19,196 carats, up 3% on the previous year.

Lulo continued to regularly produce large and premium-value diamonds throughout the Quarter, including 50 Specials for an annual total of 214. The Specials recovered during the Quarter included three +50 carat diamonds, the largest being 75 carats.



Selection of run of mine Lulo diamonds sold during the Quarter



75 carat Type IIa D-colour Lulo diamond recovered during the Quarter

Apart from mining and processing gravels from established mining blocks, exploration was also undertaken during the Quarter to test new alluvial areas with potential to add to the Lulo resource.

While the diamonds mined to date at Lulo have been sourced predominantly from the terrace deposits along the Cacuilo River valley, exploration was undertaken for the first time along the extensive flood plains (leziria areas) to determine whether these areas also hosted diamonds of similar size and quality to the terraces.

The results from the first of these flood plain areas tested – adjacent to Mining Block 31 – were considered exceptional, demonstrating the potential to open additional and expansive new mining areas at Lulo (Refer ASX announcement 29 October 2018).

Mining continued at this new Mining Block during the Quarter. By Quarter-end, a total of 22 Specials were recovered at a grade of 10.9 carats per 100 cubic metres (Table 2). The largest of the Specials was an exceptional 55 carat Type IIa D-colour stone.

	Q4 18
Actual Treated m <sup>3</sup> (bulked)	21,481
Actual Carats Recovered	2,337
Actual Grade Recovered (cphm <sup>3</sup> )	10.9
Average Size of Diamonds Recovered (carats)	1.41
Specials Recovered	22
Largest Special Recovered (carats)	55.3

Table 2: Diamond recoveries during the Quarter from the flood plains sampled adjacent to Mining Block 31



55 carat Type IIa D-colour white Lulo diamond recovered from flood plains adjacent to Mining Block 31

					Var 04 18	Var YTD 18
					04 18 to	to
	Q4 17	FY 17	Q4 18	FY 18	Q4 17	YTD 17
Actual Treated m <sup>3</sup> (bulked)	63,626	251,968	70,047	285,704	10%	13%
Actual Carats Recovered	5,127	18,706	5,070	19,196	-1%	3%
Actual Grade Recovered (cphm <sup>3</sup> )	8.1	7.4	7.2	6.7	-10%	-9%
Actual No of Stones Recovered	3,333	13,400	3,670	13,508	10%	1%
Actual Avg Stone Size Recovered	1.5	1.4	1.4	1.4	-10%	2%
Number of Specials Recovered	75	238	50	214	-33%	-10%
Diamond Inventory (carats)	2,711	2,711	1,935	1,935	-29%	-29%

Exploration was also undertaken during the Quarter to define additional alluvial gravels within the high-quality Mining Block 8 area.

Table 3: Lulo production results for the Quarter and calendar 2018 and comparisons

#### **Alluvial Diamond Sales and Inventories**

Lulo alluvial mining company SML achieved gross revenues of US\$6.0m from the sale of two parcels of Lulo diamonds during the Quarter averaging US\$1,118/carat, taking calendar 2018 sales to US\$26.4m at US\$1,313/carat (Table 4).

					Var	Var
					Q4 18	YTD 18
					to	to
	Q4 17	FY 17	Q4 18	FY 18	Q4 17	YTD 17
Actual Sales (carats)	4,126	18,941	5,407	20,121	31%	6%
Actual Sales (US\$)	7,303,921	31,603,418	6,047,679	26,417,747	-17%	-16%
Actual Price per Carat (US\$)	1,770	1,669	1,118	1,313	-37%	-21%
Actual Sales (A\$)	9,629,906	40,999,557	8,332,604	34,698,703	-13%	-15%
Actual Price per Carat (A\$)	2,334	2,165	1,541	1,725	-34%	-20%

Table 4: SML sales revenues for the Quarter and calendar 2018 and comparisons

The SML sales and average price per carat figures for both the Quarter and calendar 2018 do not reflect the true value of the production and strong operating results achieved during these periods.

This is due to the decision to withhold from sale seven exceptional, large and premium-value Lulo diamonds for a later sale under Angola's new diamond marketing policy, which was enacted by the Angolan Government during the Quarter.

These diamonds will be sold via an international competitive bid process in Luanda closing on 31 January 2019 which will be attended by major global diamantaires and large stone manufacturers (Refer ASX announcement 14 January 2019). The revenues from the sale of these diamonds recovered in 2018 will thus be included in SML's Q1 2019 sales figures.

The Lulo diamonds held over for sale under the new marketing policy are shown in Figure 1. They include six Type IIa D-colour diamonds of up to 114 carats and a 46 carat pink diamond.

As set out in the ASX announcement of 14 January 2019, the international sale of the seven Specials will mark a significant milestone for both Lulo and the positive Angolan diamond sector reforms being enacted by His Excellency Joao Lourenco, the new Angolan President.



46 carat pink



114 carats

### 85 carats





70 carats

62 carats

43 carats

Figure 1: The seven Lulo Specials to be sold in the historic international competitive bid process closing 31 January 2019

SML had cash and equivalents of US\$5m at Quarter-end, along with a diamond inventory of 1,935 carats (including the seven Specials in Figure 1).

During the Quarter, SML declared a pro-rata US\$4m distribution to the Lulo partners and a US\$4m loan repayment to Lucapa (Refer ASX announcement 24 December 2018).

### Lulo Kimberlite Exploration (*Project Lulo* – Lucapa 39% JV partner and operator)

In parallel with the alluvial mining operations, Lucapa and its Lulo partners continued a systematic kimberlite exploration program during the Quarter. This drilling and sampling program is designed to identify the primary hard-rock source or sources of the exceptional alluvial diamonds being recovered along the Cacuilo River valley.

A drilling campaign to test more than 90 targets proximal to, and/or upstream of, the alluvial mining blocks is almost completed (Table 5). A total of 68 targets have been confirmed as kimberlites in the current campaign, with just three planned targets remaining to be drilled.

Drill core from the confirmed kimberlites is progressively logged and exported in batches to laboratories in South Africa and Canada for mineral chemistry analysis.

During the Quarter, Lucapa received further mineral chemistry results from batches of kimberlite core – together with results from historical pit, stream and loam samples sent to the laboratory (Refer ASX announcement 29 November 2018).

A micro-diamond was recovered from a pit sample at kimberlite L204, which also recorded a strong lherzolitic garnet chemistry signature, which is also closely associated with diamonds.

In addition, diamond-associated G3D, G4D and G10D garnets were recovered from seven other Lulo kimberlites, including:

- Four G4D and one G10D garnet from kimberlite L048
- Three G4D garnets from kimberlite L050
- Two G3D and two G4D garnets from kimberlite L232
- Two G10D garnets from kimberlite target E192
- Two G4D garnets from kimberlite L103
- One G10D garnet from kimberlite L028
- One G4D garnet from kimberlite L104

In addition, a 2.05 carat diamond was recovered from a 614 bcm sample of kimberlite material excavated from L104 and processed through the Lulo plant (Figure 2). L104 was selected for bulk sampling due to the visual presence of an orange eclogitic garnet and phlogopite in possible mantle xenolith in the drill core, combined with the presence of historic garimpeiro activity.



Figure 2: 2.05 carat diamond recovered from the kimberlite L104 bulk sample

Further testing is planned at L104 and the other seven kimberlites which produced micro-diamonds and diamond-associated garnets.

At Quarter-end, mineral chemistry results had been progressively received from 32 of the 68 targets confirmed as kimberlites in the current drilling program.

The Lulo partners will review all kimberlite drilling and sampling results to guide follow-up programs on selected kimberlites once the current campaign is completed.

Original targets planned in drilling campaign	62
Planned targets drilled	57
Additional proximal targets drilled	35
Planned targets remaining	3
Confirmed kimberlites	68
Mineral chemistry results received from laboratory	32
Kimberlites highlighted for follow-up test work	11

Table 5: Status of current Lulo kimberlite drilling campaign

#### **BROOKING DIAMOND PROJECT, WESTERN AUSTRALIA**

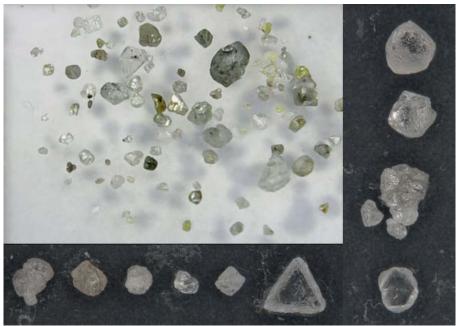
#### Lamproite Exploration

(*Brooking Diamonds (Pty) Ltd -* Lucapa 100% - project tenements owned 80% Lucapa; 20% Leopold Diamond Company)

Lucapa's Brooking project is located in the West Kimberley region of Western Australia within 50km of the Ellendale mine which, until its recent closure, produced more than 50% of the world's fancy yellow diamonds.

During the Quarter, Lucapa launched a new exploration program at Brooking to follow up on the spectacular micro- and macro-diamond counts received from the first two holes drilled at the Little Spring Creek discovery, which included:

- 119 micro- and macro-diamonds from an 87kg sample of drill core from discovery hole LSC/DH001; and
- 1,100 micro- and macro-diamonds from a 178kg sample of drill core from follow-up hole LSC/DH002



Micro- and macro-diamonds recovered from the LSC drill holes 001 and 002

The follow-up program included:

- Excavating a ~100 tonne bulk sample of lamproite material from Little Spring Creek to test for macro-diamond population, value and grade
- Drilling new lamproite targets defined within the broader Brooking project from a helicopterborne Time Domain Electromagnetic ("TDEM") survey
- Re-evaluating the known Big Spring Creek lamproite cluster
- Stream sampling further targets including near Little Spring Creek

During the Quarter, the kimberlite bulk sample excavated from the Little Spring Creek lamproite body was trucked to the Nagrom metallurgical and analytical laboratory in Perth. The sample must be cleaned through a scrubber before it can be processed through a Dense Media Separation unit to produce a heavy mineral concentrate, which will then undergo diamond picking.

This laboratory process has taken significantly longer than advised due to the relatively high clay content of the lamproite sample. Results are expected in late January/early February, based on the latest guidance provided from the laboratory.

Results are also awaited from the geochemical analysis of selected core from the Brooking drilling program and the laboratory analysis of rock and geochemical samples from Big Spring Creek.

### ORAPA AREA F PROJECT, BOTSWANA Kimberlite Exploration (Lucapa Diamonds (Botswana) Pty Ltd - Lucapa 100% subsidiary)

Lucapa's Orapa Area F project is located ~40km east of the prolific Orapa diamond mine in Botswana. Previous exploration programs completed by Lucapa at Orapa Area F were successful in defining kimberlite drilling targets.

During the Quarter, Lucapa received a two-year extension to the Orapa Area F licence covering the area containing the proposed kimberlite drilling targets. The planned drilling will now be scheduled for later in 2019.

### CORPORATE

Lucapa's group Quarter-end cash balance stood at US\$8.2m, of which US\$4.3m was held at corporate level and US\$3.9m at Mothae.

Further to its US\$3.9m Quarter-end cash, Mothae had a 3,089 carat diamond inventory, including the 78 carat and 38 carat high-value Specials to be sold in the first parcel of commercial diamonds in Q1 2019.

Additionally, Lulo alluvial mining company, SML, had cash and equivalents of US\$5m at Quarter-end, along with a diamond inventory of 1,935 carats including the seven large and high-value Specials listed in Figure 1, along with the 75 carat Special recovered late in the Quarter.

As previously stated, SML declared a pro-rata US\$4m distribution to the Lulo partners during the Quarter and a US\$4m loan repayment to Lucapa. These funds are to be paid by SML in early 2019.

As previously stated, a ZAR100m (US\$7m) project development facility from IDC was finalised for Mothae during the Quarter and the funds advanced. This enabled Mothae to make an initial US\$3m repayment to Lucapa of shareholder loans advanced for the development of the 1.1Mtpa kimberlite mine.

Due to timing issues with the IDC facility and the SML loan repayments to Lucapa, the Company entered into an unsecured short-term US\$1.2m loan facility with Director Ross Stanley on normal commercial terms during the Quarter. This loan will be repaid in Q1 2019.

For and behalf of the Lucapa Board.

### STEPHEN WETHERALL MANAGING DIRECTOR

	Schedule of Tenements as at 31 December 2018					
Country	Туре	Size (km²)	Period	Interest (%)	End date	
Angola	Exploration (primary) Kimberlite	3,000	5 years	39	04/2023	
Angola	Mining (secondary) and Exploration Alluvial	1,500	10 years	40	07/2025	
Lesotho	Mining Licence	47	10 years	70	01/2027	
Botswana	Reconnaissance	8	2 years	100	09/2020	
Australia	Exploration Licence	72	5 years	80	12/2020	
Australia	Exploration Licence	13	5 years	80	03/2019	
Australia	Exploration Licence	29	5 years	80	06/2022	
Australia	Exploration Licence	3	5 years	80	06/2023	

### 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 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.

This announcement may not be distributed in any jurisdiction except in accordance with the legal requirements applicable in such jurisdiction. Recipients should inform themselves of the restrictions that apply in their own jurisdiction. A failure to do so may result in a violation of securities laws in such jurisdiction. This document does not constitute investment advice and has been prepared without taking into account the recipient's investment objectives, financial circumstances or particular needs and the opinions and recommendations in this representation are not intended to represent recommendations of particular investments to particular investments to particular persons.

Recipients should seek professional advice when deciding if an investment is appropriate. All securities transactions involve risks, which include (among others) the risk of adverse or unanticipated market, financial or political developments.

No responsibility for any errors or omissions from this document arising out of negligence or otherwise is accepted. This document does include forward-looking statements. Forward-looking statements are only predictions and are subject to risks, uncertainties and assumptions which are outside the control of the Company. Actual values, results, outcomes or events may be materially different to those expressed or implied in this announcement. Given these uncertainties, recipients are cautioned not to place reliance on forward-looking statements. 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.

# Appendix 1 Quarterly Report October to December 2018 – 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 an EDM 2000 High Capacity Diamond Drill Rig, drilling HQ3 diameter core.</li> <li>Core was preliminary logged at the base camp, sections of core were selected for further examination by geochemical analysis</li> <li>Selected core samples were submitted to the SGS laboratory in Perth for ICP-MS &amp; ICP-OES analysis.</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 HQ3 sized 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 at the drill site, before being transported by light vehicle to the base camp, where it is visually logged.</li> <li>Core recovery is generally high, though often of poor quality due to the nature of the rocks intersected, making visual identification of rock type problematic.</li> <li>Given the generally massive nature of diamond deposits, no sample bias is expected in the core samples.</li> </ul>

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>	<ul> <li>No duplicates have been submitted. The remaining core is available for resampling if required.</li> <li>Selected sections of approximately 20cm of core where extracted from the core trays bagged and submitted to the laboratory.</li> </ul>
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>	<ul> <li>The process undertaken is a common process for samples at this stage or exploration.</li> <li>The samples are analysed for elements that would indicate an igneous and possible lamproite source rock.</li> </ul>
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>
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>Drill sites were located using a hand held GPS with a nominal accuracy of about 5m No elevation data was captured.</li> <li>The grid system is WGS84 Zone 34L.</li> </ul>

Criteria	JORC Code Explanation	Lucapa Commentary
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>	• The objective of the sample was to confirm the visual logging of the core.
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>All drill holes were vertical and designed to intersect geophysical anomalies close to surface.</li> <li>Orientation of the samples is not a factor for the objective of the sampling.</li> </ul>
Sample security	• The measures taken to ensure sample security.	<ul> <li>Core was stored and transported in a locked container.</li> <li>Samples were sealed at the core storage area.</li> </ul>
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• The sampling techniques are industry standard and no audits or reviews have been undertaken to validate the information presented at this stage.

# **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 Brooking Diamond Project comprises Exploration Licences E04/1936, E04/2317, E04/2471 and E04/2502.</li> <li>The Project area is located approximately S5km NNW of Fitzroy Crossing in the West Kimberley region of Western Australia on the Lennard River 1:250,000 (SE51-08) and Leopold Downs 1:100,000 (3692) map- sheets. The Project area straddles the boundary between the Brooking Springs and Leopold Downs pastoral leases. The Exploration Licences E04/1936 and E04/2317 were originally 100% owned and operated by Leopold Diamond Company Pty Ltd.</li> <li>On 13 October 2016, Lucapa (ASX: LOM) announced that it had agreed to acquire 80% of the project.</li> <li>On 6 June 2017 Brooking Diamond Company was granted exploration licence E04/2471 for a period of 5 years.</li> <li>On 11 June 2018 Brooking Diamonds Pty Ltd was awarded exploration license E04/2502</li> </ul>

Criteria JORC Code	Explanation	Lucapa Commentary
· .	edgment and appraisal of exploration	

Criteria	JORC Code Explanation	Lucapa Commentary
Geology	• Deposit type, geological setting and style of mineralisation.	<ul> <li>The targets for this exploration program are diamondiferous lamproites similar to the nearby Big Springs pipes or the Ellendale bodies to the WNW.</li> <li>Like kimberlite, lamproite magma originates at upper mantle depths of 150 – 200km and may entrain diamonds and other minerals from the upper mantle during its rapid ascent to the earth's surface.</li> <li>The interaction of the hot magma with groundwater results in a highly explosive eruption that, in the case of the Ellendale Lamproite Field, has generally resulted in large flared champagne glass shaped pipes near surface with a narrow pipe stem extending to depth.</li> <li>Minerals commonly present within lamproites include olivine, clinopyroxene, phlogopite, leucite and amphibole. Xenoliths and xenocrysts, including pyrope garnets and rare diamonds (of upper mantle origin) may also be present. The presence of these xenocrysts is dictated by the mantle lithologies sampled by the lamproite magma on its ascent to surface.</li> <li>Lamproites diamondiferous if the lamproite magma intersects and samples diamondiferous mantle lithologies during its ascent, and if the conditions within the lamproite magma are such that the entrained diamonds are preserved once emplaced near or on the earth's surface (by rapid cooling of the lamproite to limit diamond resorption).</li> </ul>
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 Competent Person should clearly explain why this is the case.</li> </ul> </li> </ul>	Drill hole collar information is tabulated in Table 6.

Criteria	JORC Code Explanation	Lucapa Commentary			
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>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.	<ul> <li>Appropriate map and plans for the reported mineralisation with scale and north points are included with the text of the report.</li> </ul>			
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>Stream and loam sampling have been undertaken downstream of two original drill targets due to access issues.</li> <li>Trenching and bulk sampling of Little Spring Creek has been undertaken to recover macro-diamonds. Results are expected during the next quarter.</li> </ul>			
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	• Further work is dependent on the results of the stream and bulk samples.			

Criteria	JORC Code Explanation	Lucapa Commentary			
Indicator minerals	• Reports of indicator minerals, such as chemically/physically distinctive garnet, ilmenite, chrome spinel and chrome diopside, should be prepared by a suitably qualified laboratory.	<ul> <li>No indicators have been recovered from the drill hole samples.</li> </ul>			
Source of diamonds	• Details of the form, shape, size and colour of the diamonds and the nature of the source of diamonds (primary or secondary) including the rock type and geological environment.				
Sample collection	<ul> <li>Type of sample, whether outcrop, boulders, drill core, reverse circulation drill cuttings, gravel, stream sediment or soil, and purpose (e.g. large diameter drilling to establish stones per unit of volume or bulk samples to establish stone size distribution).</li> <li>Sample size, distribution and representivity.</li> </ul>	<ul> <li>Samples reported are from drilled core samples.</li> </ul>			
Sample treatment	<ul> <li>Type of facility, treatment rate, and accreditation.</li> <li>Sample size reduction. Bottom screen size, top screen size and re-crush.</li> <li>Processes (dense media separation, grease, X-ray, hand-sorting, etc.).</li> <li>Process efficiency, tailings auditing and granulometry.</li> <li>Laboratory used type of process for micro diamonds and accreditation.</li> </ul>	<ul> <li>Selected core samples were submitted to the SGS laboratory in Perth for ICP-MS &amp; ICP-OES analysis.</li> </ul>			
Carat	• One fifth (0.2) of a gram (often defined as a metric carat or MC).	Reported as carats.			
Sample grade	<ul> <li>Sample grade in this section of Table 1 is used in the context of carats per units of mass, area or volume.</li> <li>The sample grade above the specified lower cut-off sieve size should be reported as carats per dry metric tonne and/or carats per 100 dry metric tonnes. For alluvial deposits, sample grades quoted in carats per square metre or carats per cubic metre are acceptable if accompanied by a volume to weight basis for calculation.</li> <li>In addition to general requirements to assess volume and density there is a need to relate stone frequency (stones per cubic metre or tonne) to stone size (carats per stone) to derive sample grade (carats per tonne).</li> </ul>	<ul> <li>No sample grade has been calculated for these samples.</li> </ul>			
Reporting of Exploration Results	<ul> <li>Complete set of sieve data using a standard progression of sieve sizes per facies. Bulk sampling results, global sample grade per facies. Spatial structure analysis and grade distribution. Stone size and number distribution. Sample head feed and tailings particle granulometry.</li> <li>Sample density determination.</li> <li>Per cent concentrate and undersize per sample.</li> <li>Sample grade with change in bottom cut-off screen size.</li> </ul>	<ul> <li>No sample grade has been calculated for these samples.</li> </ul>			

# Estimation and Reporting of Diamonds and Other Gemstones

Criteria	JORC Code Explanation	Lucapa Commentary			
	<ul> <li>Adjustments made to size distribution for sample plant performance and performance on a commercial scale.</li> <li>If appropriate or employed, geostatistical techniques applied to model stone size, distribution or frequency from size distribution of exploration diamond samples.</li> <li>The weight of diamonds may only be omitted from the report when the diamonds are considered too small to be of commercial significance. This lower cut-off size should be stated.</li> </ul>				
Grade estimation for reporting Mineral Resources and Ore Reserves	<ul> <li>Description of the sample type and the spatial arrangement of drilling or sampling designed for grade estimation.</li> <li>The sample crush size and its relationship to that achievable in a commercial treatment plant.</li> <li>Total number of diamonds greater than the specified and reported lower cut-off sieve size.</li> <li>Total weight of diamonds greater than the specified and reported lower cut-off sieve size.</li> <li>The sample grade above the specified lower cut-off sieve size.</li> </ul>	<ul> <li>No Diamond Resources or Reserves are reported.</li> </ul>			
Value estimation	<ul> <li>Valuations should not be reported for samples of diamonds processed using total liberation method, which is commonly used for processing exploration samples.</li> <li>To the extent that such information is not deemed commercially sensitive, Public Reports should include:</li> <li>diamonds quantities by appropriate screen size per facies or depth.</li> <li>details of parcel valued.</li> <li>number of stones, carats, lower size cut-off per facies or depth.</li> <li>The average \$/carat and \$/tonne value at the selected bottom cut-off should be reported in US Dollars. The value per carat is of critical importance in demonstrating project value.</li> <li>The basis for the price (e.g. dealer buying price, dealer selling price, etc.).</li> <li>An assessment of diamond breakage.</li> </ul>	<ul> <li>No diamond value is estimated from microdiamonds.</li> </ul>			
Security and integrity	<ul> <li>An assessment of diamond breakage.</li> <li>Accredited process audit.</li> <li>Whether samples were sealed after excavation.</li> <li>Valuer location, escort, delivery, cleaning losses, reconciliation with recorded sample carats and number of stones.</li> <li>Core samples washed prior to treatment for micro diamonds.</li> <li>Audit samples treated at alternative facility.</li> <li>Results of tailings checks.</li> <li>Recovery of tracer monitors used in sampling and treatment.</li> <li>Geophysical (logged) density and particle</li> </ul>	<ul> <li>Samples were secured in a locked container at the base camp, before being transferred to a secure core storage facility in Perth.</li> </ul>			

Criteria	JORC Code Explanation	Lucapa Commentary			
	<ul> <li>density.</li> <li>Cross validation of sample weights, wet and dry, with hole volume and density, moisture factor.</li> </ul>				
Classification	<ul> <li>In addition to general requirements to assess volume and density there is a need to relate stone frequency (stones per cubic metre or tonne) to stone size (carats per stone) to derive grade (carats per tonne). The elements of uncertainty in these estimates should be considered, and classification developed accordingly.</li> </ul>	from these samples so no classification appropriate.			

HOLE-ID	Drilling Type	Easting	Northing	Azi	Dip	Total Depth
XC01/DH002	Core	747,844	8,031,567	-90	0	30.0
XC01/DH003	Core	747,838	8,031,445	-90	0	58.7
XC01/DH001	Core	747,839	8,031,499	-90	0	30.7
XC07/DH001	Core	751,825	8,032,104	-90	0	33.5
XC09/DH001	Core	754,608	8,030,427	-90	0	29.8
XC10/DH001	Core	755,003	8,030,453	-90	0	30.0
XC05/DH001	Core	752,865	8,033,333	-90	0	30.5
XC03/DH001	Core	750,703	8,037,599	-90	0	24.5
XC02/DH001	Core	746,008	8,033,360	-90	0	30.5
XC04/DH001	Core	752,195	8,034,231	-90	0	63.0
XC05/DH001	Core	752,870	8,033,257	-90	0	30.5

Table 6: Brooking Drilling Project - Drill Collar Details