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ASX Announcement

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Increase in Diamond Resource to 8.3 million carats

Newfield Resources Limited (**Newfield** or **Company**) (ASX: **NWF**) is pleased to announce a maiden JORC-compliant Inferred Diamond Resource estimate of 910,000 carats for the Panguma kimberlite, which forms part of the Tongo Diamond Project in Sierra Leone (**Tongo Project** or **Project**). This brings the combined Indicated and Inferred Diamond Resources for the Tongo Project to 8.3 million carats, based on five of 11 known kimberlites within the project area which have so far been evaluated.

Highlights

- Panguma JORC-compliant Inferred Resource estimate of 910,000 carats at a grade of 1.7cpt and a modelled diamond value of US\$184/carat*
- Tongo Project combined diamond resource estimate has increased to 8.3 million carats from the previous resource estimate of 7.4 million carats** (+12%), detailed as follows;
 - Panguma: 0.9M carats at a grade of 1.7cpt and a diamond value of US\$184/carat
 - Kundu: 2.8M carats at a grade of 3.2cpt and diamond value of US\$194/carat
 - Lando: 3.0M carats at a grade of 2.9cpt and a diamond value of US\$194/carat
 - Tongo Dyke-1: 1.4M carats at a grade of 1.5cpt and a diamond value of US\$187/carat
 - Pandebu: 0.2M carats at a grade of 1.1cpt and a diamond value of US\$182/carat
- Resource work completed and signed off by independent consultants:
 - MPH Consulting Limited JORC Resource and Exploration Target Statement; and
 - Z-Star Mineral Resource Consultants Grade and Revenue Modelling

(Newfield confirms that it is not aware of any new information or data that materially affects the information included in the initial announcement dated 28 November 2018, all material assumptions and technical parameters underpinning the estimates in the initial announcement continue to apply and have not materially changed).

^{*} Grades and values stated at a +1.0mm square bottom cut off (Table 2)

^{**} Refer to Resource Statement Announcement dated 28 November 2018



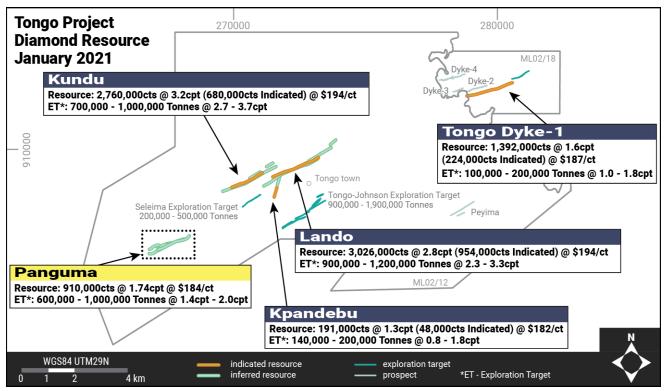


Figure 1: Tongo Diamond Resource Map

Newfield Executive Director, Karl Smithson, commented:

"This maiden JORC-compliant resource statement for the Panguma kimberlite demonstrates the exciting exploration potential of the Tongo Project. This new resource of 910,000 carats increases our current resource inventory, from just five of 11 known kimberlites to 8.3M carats (an increase of +12% on the 2018 resource statement announcement) (refer Figure 1). Notably this Panguma resource is declared mostly to a depth of only 100m below surface. There is clearly the potential to increase the Panguma resource at depth as demonstrated by the Exploration Target classification of Panguma down to a depth of 500m.

"Furthermore, the diamonds recovered from the bulk sampling, and commercial sized diamonds recovered from the microdiamond analysis (Figure 2), show the same exceptional quality as those recovered from the other Diamond Resources within the Project.

"Having inherited an extensive database of the Tongo Project, Newfield has been able to build upon this in order to achieve this Panguma resource upgrade at a cost of less than US\$250,000 which clearly shows how focused and cost-effective exploration has the potential to significantly increase the overall carat resource of the Tongo Project.

"As recently announced, the underground mine development has now intersected the Kundu ore reserve and first diamonds from the mine have been yielded. Furthermore, with this significant increase in global diamond resource we believe that the Tongo Project and its future potential continues to go from strength to strength."





Figure 2: +3.35 mm size diamonds reported from the most recent Panguma microdiamond samples.

Independent Resource Statement Consultants

Independent geological consultant, MPH Consulting Limited of Toronto, Canada (MPH), has undertaken and completed the updated JORC-compliant resource statement for the Panguma kimberlite. Z-Star Mineral Resource Consultants (Z-Star), also an independent consultancy, provided the diamond grade and value estimates for MPH to incorporate in the resource statement. Both MPH and Z-Star are independent of Newfield and do not hold any securities in the Company. Furthermore, they have signed consent forms verifying that the information contained in this announcement fairly and accurately represents their work, analysis and interpretation used in the mineral resource statement.

Geological Information Used for the Mineral Resource Estimate

The data used by MPH to generate the resource statement was collected over a number of evaluation phases from 2012 to 2020.

The data collected and processed from the Panguma kimberlite that has been reviewed and utilised by MPH is described in detail in the attached Appendix "JORC 2012 Table 1 Report" at the end of this announcement and can be broadly summarised as follows:

Drilling and Density Measurements

Some 43 NQ/HQ drill core holes, totalling 10,850.50 metres, have been drilled across the kimberlite.
 Of this, some 28 holes for 9,806m were drilled in 2012 (at 200m collar intervals) and some 15 holes for 1,050.5m were drilled in 2019 (at 100m collar infill intervals).



- Each drill hole was surveyed on surface and downhole for orientation purposes which is required in creating the accurate geological wireframe and block models by MPH.
- All cores were carefully logged by Company geologists and independently reviewed by an experienced MPH diamond geologist.
- Some 233 kimberlite sample values for bulk density and specific gravity were used to derive an average density per kimberlite for use in the geological block models and hence resource statement tonnage calculations.

Diamond Grade and Value Estimation

- Some 945kg of kimberlite from a combination of drill intersections and surface grab samples were assayed and yielded 3,110 diamonds (weighing 5.35 carats), which were used for grade modelling purposes (see Table 1).
- These microdiamond samples were processed by Saskatchewan Research Council Geoanalytical Laboratories (SRC) in Canada using industry standard caustic fusion processes.
- A single bulk sample totalling 184 dry tonnes was collected and processed and yielded 166 carats of diamonds at a +1.25mm bottom cut off which was used for grade and value modelling purposes.
- The diamond grade estimation was performed by Z-Star and was based on the microdiamond data and the bulk sample result for a square mesh bottom cut-off of +1.0mm and +1.18mm, while grades are reported in carats per tonne. The grade estimate reflects an undiluted in-situ kimberlite grade without factorisation (Table 2).
- The bulk sample diamond parcel was initially valued at the time of their recovery in 2012 by diamond marketing group DMC. The valuation work provided very detailed classifications of the diamond parcels based on criteria such as size, colour and clarity. This valuation estimate has recently been revised by independent diamond marketing group DDA Trading in Antwerp.
- The resulting US Dollar per carat per sieve class information was then provided to Z-Star who created a diamond value model of the Panguma kimberlite in order to generate an average price in US Dollar per carat terms, at both +1.0mm and +1.18mm bottom cut off sizes. Therefore, the diamond value, as reported in the mineral resource estimate, is a modelled diamond price according to industry standard methods, and not from actual buying or selling prices of the Panguma diamonds.

Geological Block Modelling

○ Using the GEMSTM Version 6.3 software all drilling information was collated, wireframes constructed, volumes of kimberlite calculated and a geological block model generated for the Panguma kimberlite deposit (and dyke segments). Using a composited specific gravity of the Panguma kimberlite a total resource of 540,000 tonnes was calculated to an approximate depth of 100m from surface for the majority of the resource, with a single kimberlite segment being projected into resource to 200m below surface (See Table 2).



A number of drill holes intersected kimberlite below the current resource level, confirming continuity
of the kimberlites at depth thus giving the potential for an expanded resource in the future.

Table 1: Summary of the Panguma Microdiamond Results

Number of Diamonds According to Sieve Size Fraction (mm)

From	То	No. of Stones
-4.75	3.35	4
-3.35	2.36	2
-2.36	1.70	5
-1.7	1.18	19
-1.18	0.85	36
-0.85	0.6	63
-0.6	0.425	102
-0.425	0.3	184
-0.3	0.212	345
-0.212	0.15	467
-0.15	0.106	792
-0.106	0.075	1,091
Total No. of Stones		3,110
Total Sample Weight (kg)	945.15	
Total No. Carats	5.35	
Total Diamonds per kg		3.29

Panguma Inferred Diamond Resource Estimate

Based on the drilling and core logging of the Panguma kimberlite, MPH created a detailed geological model of the Panguma kimberlite dyke and separated the resource into a series of along-strike units and vertical depth levels which are referred to as Segments.

The drilling, sampling density and consistency of results for the upper level of several of the largest kimberlite segments have been deemed by MPH and Z-Star to provide sufficient confidence for the resource reflected in Table 2 to be classified in the Inferred category according to the JORC Code (2012). Both Z-Star and MPH concur that there is evidence of continuity of grade at depth, however the density of data at this time is only sufficient for these resources to be classified as Exploration Target for the levels directly beneath the Inferred resource component.



Table 2 shows the resource classification per kimberlite segment per depth level, at a +1.0mm square bottom cut off. A total of 540,000 tonnes of kimberlite at an average grade of 1.7 carats per tonne for a total of 910,000 carats at an average modelled diamond value of US\$184 per carat has been declared by MPH in the Inferred resource category. It should be noted that this resource is declared to only -100m below surface with the exception Panguma A segment which has been declared as inferred resource to -200m below surface.

Table 2: Summary of the Panguma Inferred Diamond Resource (+1.0mm cut off, rounded)

Kimberlite	Dyke Segment	Depth from surface (m)	Resource Category	Tonnes Kimberlite	+1.0mm Grade (cpt)	Total Carats	Diamond Value (US\$/ct)
Panguma	Α	-100m	Inferred	159,000	1.8	287,000	184
Panguma	В	-100m	Inferred	81,000	1.5	122,000	184
Panguma	С	-100m	Inferred	63,000	1.8	114,000	184
Panguma	D	-100m	Inferred	43,000	1.8	78,000	184
Panguma	Е	-100m	Inferred	54,000	1.8	98,000	184
Panguma	Α	-100 to -200m	Inferred	140,000	1.5	210,000	184
TOTAL			INFERRED	540,000	1.7	910,000	184

Recovered Grade and Value Estimate

The diamond grade and resource stated in Table 2 are total content (i.e. 100% liberation and efficiency). Z-Star therefore calculated a "factored" grade which takes into account realistic liberation and efficiency factors during typical kimberlite mining and processing using dense media separation and diamond recovery by X-Ray technology, at a +1.0mm and +1.18mm cut off. This has the effect of decreasing the grade whilst increasing the diamond value as a proportion of smaller stones are not recovered in the plant process. Table 3 shows the recovered (factored) grades and values for the inferred resource of Panguma.

Table 3: Recovered (Factored) Mineral Resource Grade and Value Estimate

Kimberlite	Tonnes (t)	Recovered Grade (cpt) +1.0mm	Diamond Value (US\$/ct)	Recovered Grade (cpt) +1.18mm	Diamond Value (US\$/ct)
Panguma	540,000	1.32	208	1.26	213

Overall Tongo Project Diamond Resource

As stated above, the total JORC complaint indicated and inferred diamond resource estimate has been increased by 12% from the previous 7.4 million carats to 8.3 million carats through the declaration of the Panguma diamond resource of 910,000 carats. This can be summarised by kimberlite ore body in Table 4 below.



Table 4: Summary of the Global Tongo Project Mineral Resource Estimates (+1.0mm cut off, rounded)

Kimberlite	Depth (metres above sea level)	Dyke Segment	Resource Category	Tonnes Kimberlite	+1.0mm Grade (cpt)	Total Carats	Diamond Value (US\$/ct)
INDICATED							
Kundu	245-110masl	B(K1)	Indicated	200,000	3.4	680,000	194
Lando	245-110masl	C(L1)	Indicated	220,000	3.2	704,000	194
Lando	245-110masl	G(L2)	Indicated	100,000	2.5	250,000	194
Pandebu	245-110masl	KP1(A)	Indicated	60,000	0.8	48,000	182
Tongo D-1	200-060masl	T(D1)	Indicated	160,000	1.4	224,000	187
TOTAL			INDICATED	740,000		1,906,000	
INFERRED							
Kundu	245-110masl	various	Inferred	290,000	3.2	928,000	194
Lando	245-110masl	various	Inferred	270,000	2.8	756,000	194
Pandebu	245-110masl	various	Inferred	30,000	1.3	39,000	182
Kundu	110-0masl	various	Inferred	360,000	3.2	1,152,000	194
Lando	110-0masl	various	Inferred	470,000	2.8	1,316,000	194
Pandebu	110-0masl	various	Inferred	80,000	1.3	104,000	182
Tongo D-1	200-060masl	T(D2/D3)	Inferred	120,000	1.6	192,000	187
Tongo D-1	060040masl	T(D1/2/3)	Inferred	280,000	1.6	448,000	187
Tongo D-1	-040200masl	T(D1/2/3)	Inferred	330,000	1.6	528,000	187
Panguma	360-230masl	A to E	Inferred	400,000	1.7	695,000	184
Panguma	250-150masl	Α	Inferred	140,000	1.5	210,000	184
TOTAL			INFERRED	2,770,000		6,368,000	
TOTAL			IND. & INF.	3,510,000		8,274,000	

Exploration Target Range

The Exploration Target Range (ETR) for the Panguma kimberlite is reported in a range of tonnes and grades per Table 5 below. The ETR is mostly based on depth extensions below the current Panguma inferred resource to a depth of 500m. This is supported by drilling and microdiamond sampling at depth but which is not at a sufficient density to declare a resource.

The ETR clearly shows the potential of the existing Panguma resource of 910,000 carats to be increased through further exploration and evaluation work, primarily through deeper drilling and microdiamond analysis.

Table 5: Exploration Target Range (ETRs)

Kimberlite	Depth from bottom of inferred resource	Tonnes Minimum	Tonnes <i>Maximum</i>	+1.0mm Grade <i>Minimum</i> (cpt)	+1.0mm Grade <i>Maximum</i> (cpt)
Panguma	To -500m	600,000	1,000,000	1.4	2.0



The ETR is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource in these areas and it is uncertain if further exploration will result in the estimation of a Mineral Resource. MPH Consulting has signed a consent form confirming the ETR are based on their current estimates and are fairly represented in this announcement.

AUTHORISED BY:

The Board of Directors

Newfield Resources Limited

About the Tongo Diamond Project:

The Tongo Diamond Mine Development comprises two adjacent mining licences covering a combined area of 134 square kilometers in eastern Sierra Leone. Tongo hosts 11 identified diamondiferous kimberlites, only five of which are incorporated in the current JORC-compliant indicated and inferred diamond resource estimate of 8.3 million carats. Of this resource, a 1.1 million carat probable reserve, has been estimated.

Competent Person's Statement:

The information in this ASX release that relates to Exploration Results, Mineral Resources or Ore Reserves on the Tongo Diamond Project, is based on information compiled and reviewed by Karl Smithson, Executive Director of Newfield and Chief Executive Officer of Newfield's subsidiary company Sierra Diamonds Limited, a qualified geologist and Fellow of the Institute of Materials, Metals, Mining, with 32 years' experience in the diamond and natural resources sector. Mr Smithson has sufficient experience which is relevant to the style of mineralization 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 of Exploration Results, Mineral Resources and Ore Reserves". Mr Smithson consents to the inclusion in this ASX release of this information in the form and context in which it appears.

Information included in this announcement that relates to the diamond grade and valuation modelling and validation in the resource estimate is based on and fairly represents information and supporting documentation prepared and compiled by Z-Star Mineral Resource Consultants (Pty) Ltd, principal consultants DE Bush Pr. Sci. Nat and JA Grills (Dr) Pr. Sci. Nat.

MPH Consulting Limited (Toronto) and principal consultant Paul Sobie (P.Geo) have compiled and signed off the mineral resource on the basis site visits, detailed logging and modelling of the drilling data in order to establish a robust geological model and tonnage estimates for the Tongo resource. MPH used the diamond grades and values of Z-Star to compile the resource statement.



Both MPH and Z-Star have extensive experience which is relevant to the style of mineralization and type of deposit under consideration and therefore qualify as Competent Persons as defined in the 2012 Edition of the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore reserves. Both consultancies have consented to the inclusion in the announcement of the matters based on this information in the form and context in which it appears.

Forward Looking Statements:

This announcement may contain certain forward-looking statements and projections regarding estimated resources and planned strategies and corporate objectives.

Such forward looking statements/projections are estimates for discussion purposes only and should not be relied upon. They are not guarantees of future performance and involve known and unknown risks, uncertainties and other factors many of which are beyond the control of Newfield Resources Limited. The forward-looking statements/projections are inherently uncertain and may therefore differ materially from results ultimately achieved.

Newfield Resources Limited does not make any representations and provides no warranties concerning the accuracy of the projections, and disclaims any obligation to update or revise any forward looking statements/projects based on new information, future events or otherwise except to the extent required by applicable laws and ASX Listing Rules.

** ENDS **

APPENDIX 1: Reporting of Macrodiamond and Microdiamond results for the Panguma Kimberlite in the Tongo Diamond Project - Sierra Leone.

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary

Criteria	JORC Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (eg 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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information. 	 Representative microdiamond sampling to determine grade and size frequencies at different locations, and bulk sampling to determine average diamond value from a parcel of commercial-sized stones. A total of 4 consignments of microdiamond samples were collected from separate areas along strike from all the Panguma kimberlite dyke segments. Initially, in the far east of the kimberlite (Segment A) some 187kg were collected from an area that was bulk sampled in 2012 (Section 6.2.1). In the western part of the dyke system some 142.95kg were collected from float of kimberlite (Segment D) associated with artisanal diggings of the kimberlite (Section 6.4). Some 156 Kg of drill core samples (from the 2012 drilling programme) were composited from intersections along the strike of the dyke incorporating all dyke segments (Section 6.1.1 – Table 6-2). A further additional 459.1 kg of kimberlite, comprising weathered surface material as well as drill core (from the 2019 drilling programme) from Segments B, C & E, was collected (Section 6.3). The samples are considered to be spatially representative of the whole strike length of the Panguma kimberlite and all dyke segments. The selected samples of kimberlite were collected, labelled, bagged and sealed prior to dispatching to the Saskatchewan Research Council Geoanalytical Laboratories ("SRC") in Canada. The SRC is accredited to the ISO/IEC 17025 standard by the Standards Council of Canada as a testing laboratory for diamond analysis using caustic fusion. The 184 dry t combined bulk sample was recovered and processed in 2012 by Octea under the technical supervision of independent
		consultants Mineral Services of Canada (Section 9). It comprised two sub-samples of comparable size from a surface excavation, and was accurately surveyed to provide volumetric measures. 33 bulk density measurements provided reliable dry tonnage figures for the two subsamples (Section 9.1).
Drilling techniques	 Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, 	 Two of the four microdiamond consignments contain samples that are from drill core These comprise NQ & HQ diamond drill core samples (that were not orientated) were drilled in 2012 and 2019 respectively.

Criteria	JORC Code explanation	Commentary
	whether core is oriented and if so, by what method, etc).	
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	 Each drill hole was electronically surveyed down the hole to accurately trace its path. Both NQ & HQ core recovery was generally very good. Core loss, if any, was calculate systematically in all holes intersecting kimberlite. Each core tray was photographed by the company geologists. No sample bias was incurred as all intact kimberlite core was collected for each sample and analysed for microdiamonds. Some 28 holes totalling 9,800m were drilled at NQ in 2012 (Section 5.2) and a further 15 holes amounting to an additional 1,050.5m were drilled at HQ in 2019 (Section 6.1).
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. 	 The 2012 drill core was logged by Company geologists and overseen by an independent consulting geologist from Mineral Services Canada. The 2019 drill core was logged by Company geologists and verified by independent consulting geologist from MPH Consulting (Toronto). Industrial standard kimberlite logging nomenclature, techniques, measurements and observations as applicable to kimberlite logging were applied to both drilling episodes Section 6.1.2). All samples were carefully logged and described to determine if they represented potentially different facies of kimberlite. It was decided that the samples were very similar in appearance and that there were no discernible differences in facies. Quantitative analysis was done of the core to determine olivine macrocryst content (Section 6.1.2). All drill core was logged and photographed and the key intersections stored in durable core trays and stored at the Company Tongo mine site. 100% of the 10,850.5m drilled in 2012 & 2019 were logged
Sub-sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 	 All dyke segment intersections, i.e. whole core, along strike of the kimberlite, were collected and dispatched for microdiamond analysis to SRC in 2019 and 2020. Some 233 bulk density values were used in the Block Model, of which 207 were measurements from kimberlite core intersections. Non-core, i.e. grab samples, were dried at the SRC laboratory and all results are reported as dry weights.

Criteria	JORC Code explanation	Commentary
	 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, 	 SRC conducted extensive quality control tests on each sample and these were reported to the Company along with the microdiamond results (Section 8.3). SRC retained all sample residues and all diamond recovered are stored at SRC. A single bulk sample (TGBS-7) was collected in 2012 and processed from the Panguma kimberlite (Segment A). The sample weight was 416 dry tonnes of which 184 dry tonnes of kimberlite was calculated. The sample was processed via a production DMS plant and yielded 166 carats at a calculated grade of 94 carats per hundred tonnes at a +1.25mm cut off. The bulk sample was carefully measured / surveyed in-situ with specific gravity, bulk density and moisture content measurements being collected (Section 9.1). This enabled an accurate volume and tonnage to be estimated which could then be used to calculate the grade of the bulk sample. Kimberlite dykes, by their geological nature, are elongate and narrow in form. Therefore, it is challenging to achieve full representation along strike and at depth for these types of deposits. The bulk sample stone size frequency data is therefore plotted along with the stone size frequency data of the four consignments of microdiamond samples that were collected from the bulk sample as well as spatially representative drill core material and surface grab samples collected along strike. In this way, it is then statistically possible to determine the continuity of grade along each kimberlite dyke segment and a whether the data is representative of the dyke or a sub-section of the dyke (Section 10.4). It is believed that the 945.15 kg of microdiamond results supports the 184 dry tonne bulk sample result in terms of representativity.
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 	 Microdiamond analysis by caustic fusion of kimberlite rock is a standard process in the diamond industry to determine the initial diamond content of kimberlite. The SRC is accredited to the ISO/IEC 17025 standard by the Standards Council of Canada as a testing laboratory for diamond analysis using

Criteria	JORC Code explanation	Commentary
	 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. 	caustic fusion. SRC conducts quality control testing/spiking of all samples processed. The method is validated to reliably recover diamonds from geological material. A predetermined number of synthetic diamonds are added to each sample as an internal QC standard. Minimum acceptable results are an 80% rate of recovery upon observation. The assumption made is that if the tracers (or spikes) are recovered, natural diamonds will similarly be recovered. There are no absolute standards available to test this method and so recovery of spiles in the determining factor for confirming acceptable performance requirements. The overall level of confidence is approximately 95% assuming normal distribution. SRC's overall recovery average is around 98% for their internal spiking programme (Section 8.1).
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. 	 Verification of the 2012 drill core was undertaken by independent consultants, Mineral Services Canada. CP consultant Paul Sobie of MPH Consulting (Toronto) visited the project area and the Panguma kimberlite to observe the ongoing drilling and visited localities from which the kimberlite samples were collected. MPH reviewed the drill core microdiamond compositing while in progress in September 2019 and signed off on the methodology of selecting representative drill core for microdiamond analysis.
Location of data points	Location data for reporting of Exploration Results.	 The surface sample locations, i.e. grab, trench or bulk sample, have been accurately geo-referenced. All drill collars were surveyed by real time differential GPS which gives millimeter accuracy on the X, Y and Z coordinates.
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. 	 The 2012 drill holes were spaced 200m whereas the 2019 drilling was aimed at 100m infill drilling occasionally reducing to 50m infill in areas of complex geology. The drill spacing for geological and microdiamond sampling purposes is considered sufficient to establish high confidence in the geological and grade continuity of the kimberlite segments drilled (along strike) to the inferred level of confidence in the upper 130m of emplacement.

Criteria	JORC Code explanation	Commentary
		Kimberlite intersections, within individual dyke segments, were composited when multiple smaller dykes and intervening country rock made up an individual kimberlite zone of intersection or "KZI" (Sections 10.1, 10.2). In additional same segment intersections in one or more holes, not spaced more than 100m apart, were composited to ensure a representative sample in terms of microdiamond recoveries was achieved.
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 sampling bias was introduced as the drill holes were orientated perpendicular to strike and at a dip of ~45 – 60 degrees Dip was determined from surface outcrop measurements using a Brunton compass, as no orientation drilling was carried out.
Sample security	The measures taken to ensure sample security.	 The microdiamond samples collected were stored securely in security sealed bags at the Tongo project site. The microdiamonds samples dispatched for assay were sealed in containers that could not be tampered with in transit from site to the (SRC) lab in Canada. Upon arrival, the lab cross checked the seals against the sample lists and seal numbers to verify the integrity of the sample. No irregularities or sample tampering was observed or reported. The kimberlite bulk sample (TGBS7) was securely stockpiled at the Tonguma camp prior to trucking (under security escort) in 2012 to the Koidu mine DMS treatment facility located some 60Km away. The diamonds were recovered under security observation in glove boxes and all diamonds recovered are stored in a safe that had two separate key holders. All diamonds exported for valuation purposes were carried out on full compliance with the Kimberley Certification process.

Criteria	JORC Code explanation	Commentary
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	 The microdiamond assay process is industry standard (ISO/IEC 17025:2005) and no audit is required. The bulk sampling and processing was undertaken by Octea Mining and was not audited by independent parties. Plant DMS and final recovery tailings were processed at least twice to ensure full diamond recovery.

Section 2 Reporting of Exploration Results

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 The Tongo project comprises mining licence ML02/12 held by Tonguma Limited and the adjacent mining licence ML02/18 held by Newfield subsidiary company Sierra Diamonds Limited. The Panguma kimberlite lies within ML02/12 (Section 4.2) The project is subject to a Tribute Mining Agreement between Sierra Diamonds Limited and Tonguma Limited. Sierra Diamonds has the rights to mine the two properties and once all capital costs have been recovered, pay to Tonguma a 10% royalty on revenues (after deduction of the 6.5% export royalty paid to the Government of Sierra Leone. All licence fees are paid up to date and the licences are in good standing.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 Both Tonguma Limited and Sierra Diamonds limited have conducted extensive exploration and evaluation including of over 75,000m of core drilling, numerous bulk samples and processing of a number of kimberlite dykes. Some 9,800 m of NQ core drilling was carried out along strike at Panguma in 2012 with a further 1,050.5 m being drilled (at HQ) in 2019. All of this work has been extensively reported and summarised in two resource reports issued in 2014 (for Sierra Diamonds Ltd), a resource report issued in 2016 for Tonguma Ltd, and more recently an updated

JORC Code explanation	Commentary
	 resource report announced by Newfield Resources in November 2018. In this most recent report, the Panguma kimberlite was classified by MPH Consulting (Toronto) as an Exploration Target with a range of tonnage from 1.0 to 1.9 million tonnes with a grade range of 0.9 to 2.0 carats per tonne at a +1.18mm cut off.
Deposit type, geological setting and style of mineralisation.	 The project area is underlain by Archean granite-gneiss into which presumed Jurassic age (circa. 140Ma) kimberlites have intruded. These kimberlites have been weathered into their root zones such that only kimberlite dykes with small blows or pipes remain. The extensive erosion has resulted in widespread dispersion of alluvial diamonds in the Tongo area which have been mined both commercially (to 1980's) and by artisanal miners since the diamonds were first discovered in the early 1950's (Section 3.0).
 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 	Some 9,800 m of NQ core drilling was carried out along strike at Panguma in 2012 with a further 1,050.5 m being drilled (at HQ) in 2019. Both the drill collars and down hole directions have been surveyed. Appendix 3 provides the drill vertical and longitudinal sections.
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.	Reference is made to the information in the body of the Panguma resource report written by MPH Consulting.
 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. 	 No weighting averaging techniques have been applied to the results. However, for simplicity in the announcement, the results of the micro diamond samples have been summarised as a single table in the announcement.
	Deposit type, geological setting and style of mineralisation. 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:

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	 should be clearly stated. These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). 	 The mineralisation occurs in near-vertical kimberlite dykes. There is no relationship between the diamond content of the kimberlites and the widths of the dykes. True kimberlite dyke widths are known from surface bulk sampling, pitting and trenching and, in terms of the drill, by calculation of "down the hole" length, dip and strike in order to derive true width (Section 10.1).
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.	 Photographs of diamonds recovered from the TGBS7 bulk sample of dyke Segment A in the resource are provided (Section 6.2) Photos of recovered large (+3.35mm) microdiamonds are also provided (Section 11, Figure 11-4) A single diagram is included in the announcement (Figure 1) which highlights the resource summary and exploration targets for the various kimberlite dykes within the two properties.
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.	 The results of the microdiamond assays reported are full and complete for the combined samples of 945.15 kg. The resource is stated to a +1.0mm and +1.18mm bottom cut off and reported as carats per dry tonnes.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	 A total of 5 dyke Segmentsare known on the Panguma kimberlite system. The four consignments referred to are for microdiamond results from the Panguma kimberlite which is currently classified as an Inferred resource (JORC 2012). A single bulk sample has been collected and processed from the Panguma kimberlite in 2012. The sample weight was 416 dry tonnes of which 184 dry tonnes of kimberlite was calculated. The sample was processed via a production DMS plant and yielded 166 carats at a calculated grade of 94 carats per hundred tonnes at a +1.25mm cut off. In 2012 some 28 holes (9,800m) was drilled across the Panguma

Criteria	JORC Code explanation	Commentary
		 kimberlite while an additional 1,050.5 m from 15 holes was drilled in 2019. These bulk sampling and 2012 drilling results were reported in the JORC Mineral Resource Estimate Update Report (26 November 2018) by MPH Consulting (Toronto). An Exploration Target has been declared for the remaining part of the Panguma dyke Segments giving a range of tonnage and grades (Section 12.3, Section 13)
Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 A drilling programme to upgrade the resource to indicated to -100m, and inferred to -200m is recommended entailing ~ 7,750m of drilling (Section 13) Based on the drilling, microdiamond and historical bulk sample information, a revised geological and grade model for the Panguma kimberlite was estimated (Section 13.0).

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	 Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	A detailed and extensive database is held by the Company that shows all drilling, bulk sampling, density, moisture content, and other required technical information. This database has been validated most recently by MPH Consulting who used this as the basis for the resource estimation.
Site visits	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	 Site visits have been conducted in the past by Mineral Services Canada and MPH Consulting, the most recent being September 2019 by MPH Consulting specifically for the Panguma resource estimation exercise. MPH Consultant, Mr Sobie, has visited the project area on three different occasions.

Criteria	JORC Code explanation	Commentary
		During the site visits all processes of drilling, sampling and bulk sample processing were audited by MPH.
Geological interpretation	 Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	 The logging by the Company of all Panguma drill holes has been carefully verified by MPH Consulting with plans and sections prepared and used for the creation of a robust geological model for the various kimberlite dyke segments by MPH. The geological model is well constrained by the 10,850 m of drill data. Geological domains or dyke segments were determined and the diamond data from the bulk sample and microdiamond assays were applied to these domains and broken down into depth slices which correspond to approximately 3 mining levels. Different dyke segments can carry different grade and value of diamonds. South African specialist company, Z-Star, and MPH have, where possible, confirmed continuity of grade across certain segments of the Panguma kimberlite dyke system.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	• The inferred resource estimate for the Panguma has been determined between ~350 masl (the variable surface) and 150 masl, and between ~350 masl (surface) and 230masl for dyke segments B, C, D and E respectively; At depths below this, an exploration target has been identified on all five dyke segments (Section 12.0).
Estimation and modelling techniques	 The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the 	 Diamond industry standard grade and value statistical modelling was carried out to determine grades/values to the inferred status. The upper level to approximately 150m depth had data at a sufficient density (100m intervals) to declare inferred status on each kimberlite segment. Below this level the data was not sufficiently detailed and an exploration target has been declared. GEMs V6.3 was used for the geological modelling

Criteria	JORC Code explanation	Commentary
	 Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of byproducts. Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	 (Section 10.2). No assumptions on by-products were made. The block model was constructed on a 10m x 10m basis by MPH in GEMS V6.3. The Inverse Distance Squared (ID2) method was used for interpolation with a minimum of 2 and a maximum of 12 drill hole intersections within 250 metres range from the block in all directions (Section 10.2.1). The detailed core logging and surface mapping of dyke exposures and artisan workings was used to determine the five main dyke segments that comprise the Panguma model. Grades were applied to these segments, where possible, based on the density of the microdiamond samples and surface bulk sample. These were tied back to the bulk sample results such that modelling from the micro to macrodiamond stone sizes could be achieved and grades applied to the geological domains/dyke segments. Grades are reported at a 1.0m and +1.18mm square mesh cut off which is optimal cut-off for the project. Furthermore, grades are reported as total content or as recoverable/factored grades which considers inherent inefficiencies of processing plant where small stones could be lost. MPH validated the geological work done by the company.
Moisture	 Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	Tonnages are reported on a dry basis
Cut-off parameters	 The basis of the adopted cut-off grade(s) or quality parameters applied. 	Grades are reported at +1.0mm and +1.18mm bottom cut off which is industry standard for diamond projects.
Mining factors or assumptions	 Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always 	 Standard shrinkage stoping is considered to be the mining method. A mining zone width of a minimum of 0.85m is assumed. Based on the detailed logging,

Criteria	JORC Code explanation	Commentary
	necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	the dilution of kimberlite with country rock could be established and therefore the tonnage for the kimberlite zone of intersection (KZI) was calculated. The KZI was then diluted to include all / any country rock within a 0.85m stope width. The percentage of kimberlite within that modelled stope width was calculated based on the detailed core logging and therefore the in-situ volume and tonnage of kimberlite could be calculated and applied to the geological model in a domain, segment and 10m x 10m block model.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	Resource grades are reported at a +1.0mm and +1.18mm cut off which is industry standard for diamond projects. Furthermore, grades are reported as total content and as recoverable/factored grades which considers inherent inefficiencies of processing plant where small stones could be lost. The recovered grades are typically lower than total content grades, with a commensurate higher diamond value as smaller, lower value diamonds are lost in the process (Sections 10.5 and 10.6).
Environmental factors or assumptions	 Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental 	Environmental impact assessment studies have been completed for the Tongo project area which includes Panguma, and approved by the Environmental Protection Agency of Sierra Leone. Environmental licences (with certificates) are in place for the project.

Criteria	JORC Code explanation	Commentary
Bulk density	 Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	 Bulk density measurements (233 in number) of multiple kimberlite and country rock samples within all KZI's have been taken and have been used in the resource declaration exercise (Section 6.1 and 10.3.1). Surface and TGBS7 bulk sample density data were not utilized in the determination of the Block Model due to the extensive weathering of this material. For core samples the density was calculated by normal water displacement methods. For the single bulk sample bulk density was calculated by a bucket weight method, which takes into account the void spaces in a sample stockpile.
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	 The resource has been declared to the inferred level of confidence depending on the density of data and depth of the deposit, according to JORC Standards of reporting (2012). All relevant factors have been taken into account by MPH Consulting in the declaration of the resource and therefore the outcome and result appropriately reflects the Competent Person's view of the deposit (Table 12-4).
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	MPH reviewed but did not audit earlier resource work as reported for the project by MSC. The results in terms of diamond grade and value are consistent between 2012 and 2020.
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the	The Competent Person considers that the quantity of the bulk sample and microdiamond samples processed are sufficient to determine average diamond grade and value for the Panguma dyke segment global estimates per segment, and per depth slice, have been determined on the basis of continuity

Criteria	JORC Code explanation	Commentary
	resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. • The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. • These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	of grade based on the Z-Star modelling of data and the MPH detailed geological block model.

Section 4 Estimation and Reporting of Ore Reserves (NO ORE R

(NO ORE RESERVE IS BEING ANNOUNCED)

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Allotropes Diamonds Commentary
Mineral Resource estimate for conversion to Ore Reserves	 Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves. 	•
Site visits	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	•
Study status	 The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered. 	

Criteria	JORC Code explanation	Allotropes Diamonds Commentary
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	•
Mining factors or assumptions	 Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as prestrip, access, etc. The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling. The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). The mining dilution factors used. The mining recovery factors used. Any minimum mining widths used. The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion. 	
Motallurgical	The infrastructure requirements of the selected mining methods. The material and the appropriate selected mining methods.	
Metallurgical factors or	• The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	•
assumptions or	 Whether the metallurgical process is well-tested technology or novel in nature. The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. Any assumptions or allowances made for deleterious elements. The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications? 	

Criteria	JORC Code explanation	Allotropes Diamonds Commentary
Environmental	• The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	•
Infrastructure	 The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed. 	
Costs	 The derivation of, or assumptions made, regarding projected capital costs in the study. The methodology used to estimate operating costs. Allowances made for the content of deleterious elements. The source of exchange rates used in the study. Derivation of transportation charges. The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. The allowances made for royalties payable, both Government and private. 	
Revenue factors	 The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products. 	•
Market assessment	 The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. A customer and competitor analysis along with the identification of likely market windows for the product. Price and volume forecasts and the basis for these forecasts. For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract. 	
Economic	 The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. NPV ranges and sensitivity to variations in the significant assumptions and 	•

Criteria		JORC Code explanation	Allotropes Diamonds Commentary
		inputs.	
Social		• The status of agreements with key stakeholders and matters leading to social licence to operate.	•
Other		 To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: Any identified material naturally occurring risks. The status of material legal agreements and marketing arrangements. The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent. 	
Classification	n	 The basis for the classification of the Ore Reserves into varying confidence categories. Whether the result appropriately reflects the Competent Person's view of the deposit. The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any). 	
Audits reviews	or	The results of any audits or reviews of Ore Reserve estimates.	•
Discussion relative accuracy/ confidence	of	 Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. Accuracy and confidence discussions should extend to specific discussions of 	

Criteria	JORC Code explanation	Allotropes Diamonds Commentary
	 any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	

Section 5 Estimation and Reporting of Diamonds and Other Gemstones

(Criteria listed in other relevant sections also apply to this section. Additional guidelines are available in the 'Guidelines for the Reporting of Diamond Exploration Results' issued by the Diamond Exploration Best Practices Committee established by the Canadian Institute of Mining, Metallurgy and Petroleum.)

Criteria		JORC Code explanation	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.	No indicator minerals have been recovered during this work.
Source diamonds	of	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.	 The microdiamonds recovered at SRC have been individually weighed if they are above the 300 micron mesh size. These details are not provided in the announcement as they are not considered to be representative of the macrodiamond population of the Panguma kimberlite dyke. Photographs of some of the +3mm microdiamonds are included in the announcement. The diamonds reported upon are derived from primary sources, i.e. kimberlite. These kimberlites have been weathered into their root zones such that only kimberlite dykes with small blows or pipes remain.
Sample collection		 Type of sample, whether outcrop, boulders, drill core, reverse circulation drill cuttings, gravel, stream sediment or soil, and purpose (eg large diameter drilling to establish stones per unit of volume or bulk samples to establish stone size distribution). Sample size, distribution and representivity. 	 The samples collected and consigned to SRC were collected from an historical bulk sample and float discarded by artisanal miners. The grab samples from the bulk sample weighed 187kg and the grab samples collected from the artisanal workings weighed 142.95kg. In addition, some 156.06 Kg of drill core from various kimberlite dyke segments at various levels was consigned to SRC and more recently some 459.15 Kg of grab samples and drill core (HQ) were collected and consigned to SRC.

Criteria	JORC Code explanation	Commentary
		Through combining the data from representative samples, i.e. 184 dry tonnes (microdiamond) and 945.15 Kg (microdiamond) representivity has been determined for the inferred resource statement declaration.
Sample treatment	 Type of facility, treatment rate, and accreditation. Sample size reduction. Bottom screen size, top screen size and re-crush. Processes (dense media separation, grease, X-ray, hand-sorting, etc). Process efficiency, tailings auditing and granulometry. Laboratory used, type of process for micro diamonds and accreditation. 	 The microdiamond drill core samples were processed at accredited lab SRC in Canada using industry standard caustic fusion methods. Results were reported to a mesh size of +0.075mm. The bulk sample was processed through a 50tph DMS plant at the Koidu Mine in Sierra Leone. Diamond recovery was by Flowsort X-rays and with a grease scavenge. The sample concentrates were processed twice and diamonds were recovered under strict security control in diamond glove boxes by diamond pickers. The diamonds were weighed, described and stored securely in a safe each day. This process was done under Government observation. A bottom cut off of 1.25mm was used in the processing plant.
Carat	One fifth (0.2) of a gram (often defined as a metric carat or MC).	Sample results are reported in as carats per tonne, which is industry standard for reporting purposes.
Sample grade	 Sample grade in this section of Table 1 is used in the context of carats per units of mass, area or volume. 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. 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). 	 No sample grades are reported from the Microdiamond results. However, the sample weight, carat weight and stones/kg are reported which is a typical reporting standard for announcing Microdiamond results. The resource grades are reported as carats per dry metric tonne at a cut off of +1.0mm and +1.18mm (Section 6.2.3)
Reporting of Exploration Results	 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. Sample density determination. Per cent concentrate and undersize per sample. Sample grade with change in bottom cut-off screen size. 	 The microdiamond results were reported per the normal industry standards in the SRC reports and are shown in the tables in the announcement. The resource grades and values are reported to a bottom size cut off of +1.0mm and +1.18mm in carats per metric tonne. For grade modelling purposes standard DTC sieve sizes were used and size frequency plots determined (Section 10.5 – grade estimation, Section 10.6 – revenue)

Criteria	JORC Code explanation	Commentary
	 Adjustments made to size distribution for sample plant performance and performance on a commercial scale. If appropriate or employed, geostatistical techniques applied to model stone size, distribution or frequency from size distribution of exploration diamond samples. 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. 	 estimation). The resource grades are reported where possible in individual segments of the Panguma kimberlite dyke where the sampling density allows. Total content grade for the Panguma deposit range from 1.5 cpt to 1.8 cpt at a +1.0mm bottom cut off with an average grade of 1.7 carats per tonne for a total of 910,000 carats. Diamond valuation of the 166 carats yielded from bulk sampling range from \$ 207.7 / ct in 2012 (DMC diamond consultants) to \$ 209.9 / ct in December 2020 (by DDA Trading Antwerp) An average modelled diamond value of US\$ 184 per carat has been applied to the Inferred resource category by consultant Z-Star and included by MPH in the Panguma Resource Report. All diamond grades were estimated by using industry standard size frequency plots and modelling by Z-Star (Section 10.7 – grade & revenue estimate).
Grade estimation for reporting Mineral Resources and Ore Reserves	 Description of the sample type and the spatial arrangement of drilling or sampling designed for grade estimation. The sample crush size and its relationship to that achievable in a commercial treatment plant. Total number of diamonds greater than the specified and reported lower cut-off sieve size. Total weight of diamonds greater than the specified and reported lower cut-off sieve size. The sample grade above the specified lower cut-off sieve size. 	•
Value estimation	 Valuations should not be reported for samples of diamonds processed using total liberation method, which is commonly used for processing exploration samples. To the extent that such information is not deemed commercially sensitive, Public Reports should include: diamonds quantities by appropriate screen size per facies or depth. details of parcel valued. number of stones, carats, lower size cut-off per facies or depth. 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 	 The bulk sample parcel of 166 carats was initially valued in 2012 by diamond marketing agent DMC at a value of US\$207 per carat. Detailed \$/carat/sieve class information was generated by DMC. This detailed information was used as a basis for revaluation of the diamond parcel by DDA Trading (Antwerp) in February 2020 at US\$211 per carat. The most recent re-valuation was done by DDA Trading (Antwerp) in December 2020 at a value of US\$209.93 per carat. The individual prices per sieve class were used by Z-Star to model the

Criteria	JORC Code explanation	Commentary
	 in demonstrating project value. The basis for the price (eg dealer buying price, dealer selling price, etc). An assessment of diamond breakage. 	diamond value for the resource report.
Security and integrity	 Accredited process audit. Whether samples were sealed after excavation. Valuer location, escort, delivery, cleaning losses, reconciliation with recorded sample carats and number of stones. Core samples washed prior to treatment for micro diamonds. Audit samples treated at alternative facility. Results of tailings checks. Recovery of tracer monitors used in sampling and treatment. Geophysical (logged) density and particle density. Cross validation of sample weights, wet and dry, with hole volume and density, moisture factor. 	 The SRC laboratory process has been accredited to the ISO/IEC 17025 standard by the Standards Council of Canada for the microdiamond samples. The processing of the bulk samples was done by the Koidu Holdings, under supervision of MSC, which is experienced in this process. Internal security measures were strict and the process was done under observation by a representative of the Government of Sierra Leone. The bulk sample and tailings were processed twice for audit purposes. Tracers were used in the DMS and Flowsort processes and monitored for efficiency of recoveries. No geophysical logging was undertaken for the drilling. Multiple density and moisture content calculations were determined for the drill core and bulk samples.
Classification	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.	 Z-Star has undertaken a thorough modelling process of all results in terms of stone frequency for all microdiamond results (reported as stones >150micron/8kg) which is normal industry practice. Z-Star has reported on the basis of stones per DTC sieve class. All stone size frequencies for the microdiamond and macrodiamond results have been combined in the form of grade size plots to quantify grade, at a defined bottom cut off, as well as the stone and carat size frequency distribution (Sections 10.4 to 10.7).