

Maiden JORC-compliant Alluvial Diamond Resource

ASX Code: **NWF**

Highlights

Allotropes Diamond Project: Bo District, Sierra Leone.

- Newfield Resources Limited (ASX: NWF) (“Newfield” or “the Company”) is pleased to announce its first JORC-compliant alluvial Diamond Resource, completed at the Gboyeiya Alluvial Project in exploration licence EL 15/2012.
- Average diamond size is significantly larger than was recovered from trial-mining at the Golu Small-scale mining licence (c.f. 0.66 carats per stone vs 0.33 carats per stone).
- Ongoing alluvial exploration activities will be undertaken through FY2017, aimed at establishing further alluvial resources.



Photograph of rough diamonds recovered from the Allotropes Diamond Project in Sierra Leone.

ASX Release: 28 December, 2016

ACN 153 219 848

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Shares on Issue: 225.58M
Options on Issue: 16M

INFERRED RESOURCE ESTIMATE- GBOYEIYA ALLUVIAL PROJECT

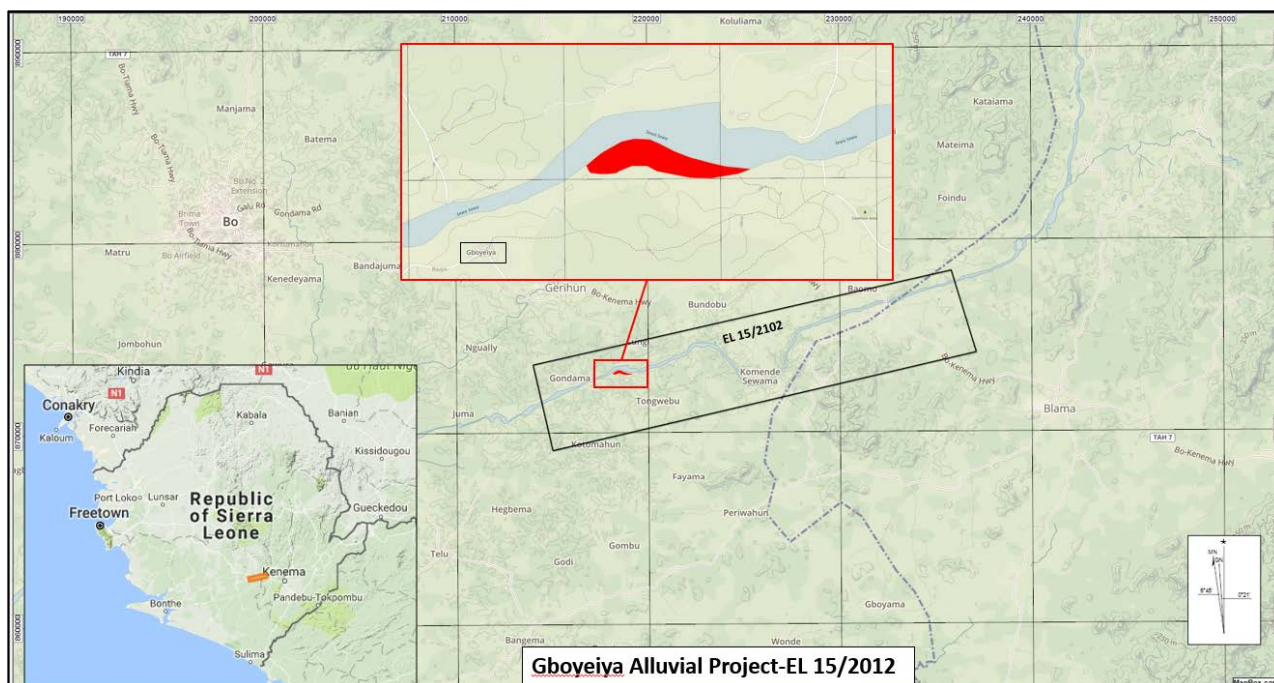


Figure 1. Locality of the Gboyeiya Alluvial Project (red polygon) in exploration licence EL 15/2012, in the Bo District, Sierra Leone.

Introduction

The Gboyeiya Alluvial Project is located in the Bo District of Sierra Leone, within the Allotropes exploration licence EL 15/2012 (Figure 1). The project covers a portion of a buried palaeo-fluvial flat that hosts a mineralised basal gravel-lag deposit of the ancestral Sewa River. The gravel deposit has been delineated using a combination of basic techniques to gather both grade and geological information. These included field mapping (footwall out-crops, terrace-edge, artisanal excavations), bulk-sampling and mechanised auger drilling. The Gboyeiya deposit is relatively small in area and approximately 210,000 m² in extent. It has been informally mined in the past and relicts of artisanal excavations account for a small amount of depletion of the resource.

Locality

The Gboyeiya Alluvial Project lies within Allotrope's exploration licence EL 15/2012, on the south bank of the Sewa River and adjacent to the village of Gboyeiya (Figure 1), some 1.6 km downstream and on the opposite bank to the Golu Small-scale Mining licence (ASX announcement 1 July, 2015).

Local and Regional Geology

The Gboyeiya fluvial deposit has a gravel signature typifying Sewa River deposits of Late-Pleistocene to Recent ages. The sedimentary fill shows diminishing river energy levels associated with a laterally-migrating channel. The mineralised horizon is a gravel lag, accumulated over an irregular pot-holed bedrock, later followed by the deposition sand and finer sediments. The fluvial sediments overlie an Archaean basement comprising granite-migmatite rocks of Leonean-age (2.9 Ga - 3.5 Ga) within the West African Craton. They are intruded by younger Liberian mafic dykes (2.5 Ga - 2.9 Ga amphibolites) of various widths. These dykes are less competent than the surrounding country-rock into which they have intruded, and result in water-worn floor-rock depressions and pot-holes which form a perturbed floor to the river terrace, that may be sediment-filled. A high-degree of bed-rock control in the formation of these trap-sites is apparent in the excavations at both the Golu and Gboyeiya localities which host deposits of identical age and sedimentary architecture.

Bulk-sample Selection and Methodology

Using the field mapping results, four trenches (designated GBO-BLK001 to 004) were positioned some 300m apart and excavated to bedrock (Figure 2). Final excavated trench dimensions varied from 100-200m in length and 6-7m in width, to expose sufficient basal gravel. Of these, two (2) were considered suitable for resource estimation purposes, whilst the others provided valuable information regarding geological continuity. A close-spaced (25m centres) auger-drilling campaign supplemented the bulk-sampling and provided invaluable, high-quality data regarding geological continuity relating to the depositional environment for resource estimation purposes (c.f. Figure 2).

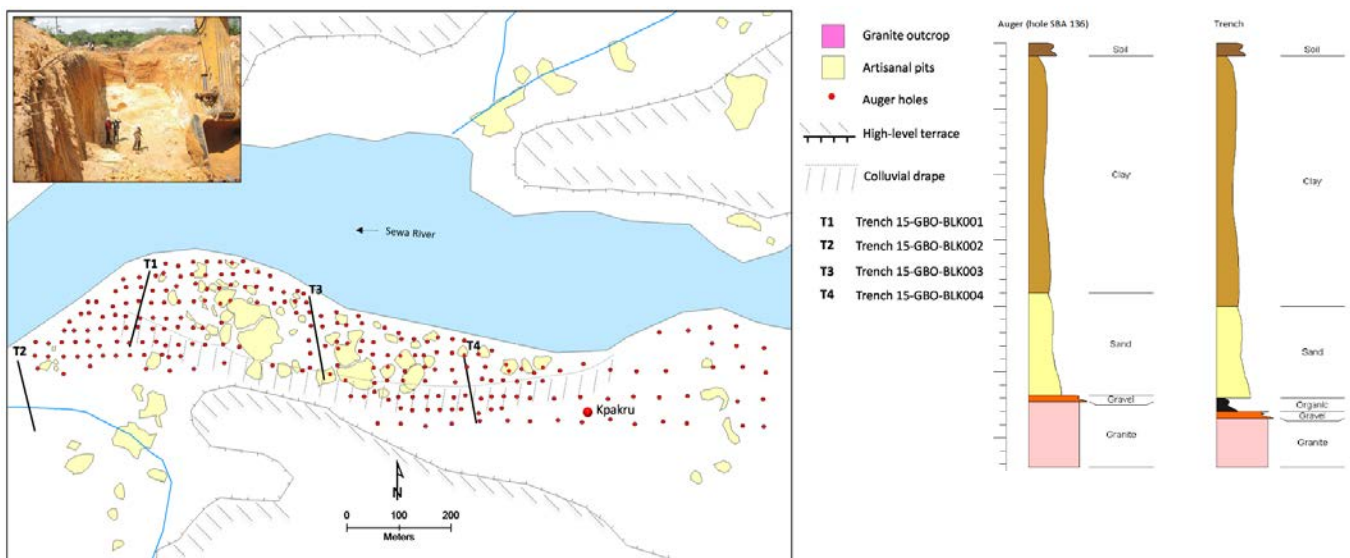


Figure 2. Locality map showing position of bulk-sample trenches, in-fill auger drill-hole collar, and distribution of artisanal workings. The latter correlate well with the lithologies mapped within the excavations (comparisons at right). Inset, shows excavation dimensions of typical bulk-sample trench at Gboyeiya.

Data Acquisition & Resource Estimation

The high confidence placed in the resource estimation of the Gboyeiya Alluvial Deposit is attributable, in part, to both the quantitative and qualitative aspects of the acquired data, viz:

- Trial-mining information acquired from the Golu deposit, being similar in age and depositional environment, which demonstrated the natural attributes of the deposit;
- Three (3) quasi-equidistant bulk-sample trenches up to 200m x7m in dimension;
- A statistically-representative set of samples totalling approximately 500 tons of gravel, contributed to the resource estimation;
- Close-spaced (25m centres) in-fill auger drill-holes, which provided unprecedented knowledge of geological continuity;
- A strong understanding of the geological and mineralisation model;
- Strong sampling and processing integrity and chain of custody.

Table 1 summarises both the in situ and remnant gravel resource to a high-level Inferred Resource. The Diamond Resource is classified in the Inferred category, as outlined in the 2012 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. The details of the resource estimation are located in the JORC Table 1, Appendix 1. Figure 3 refers to Inferred resource blocks pertaining to the intact (*in situ*) and remnant gravel deposits within the project area.

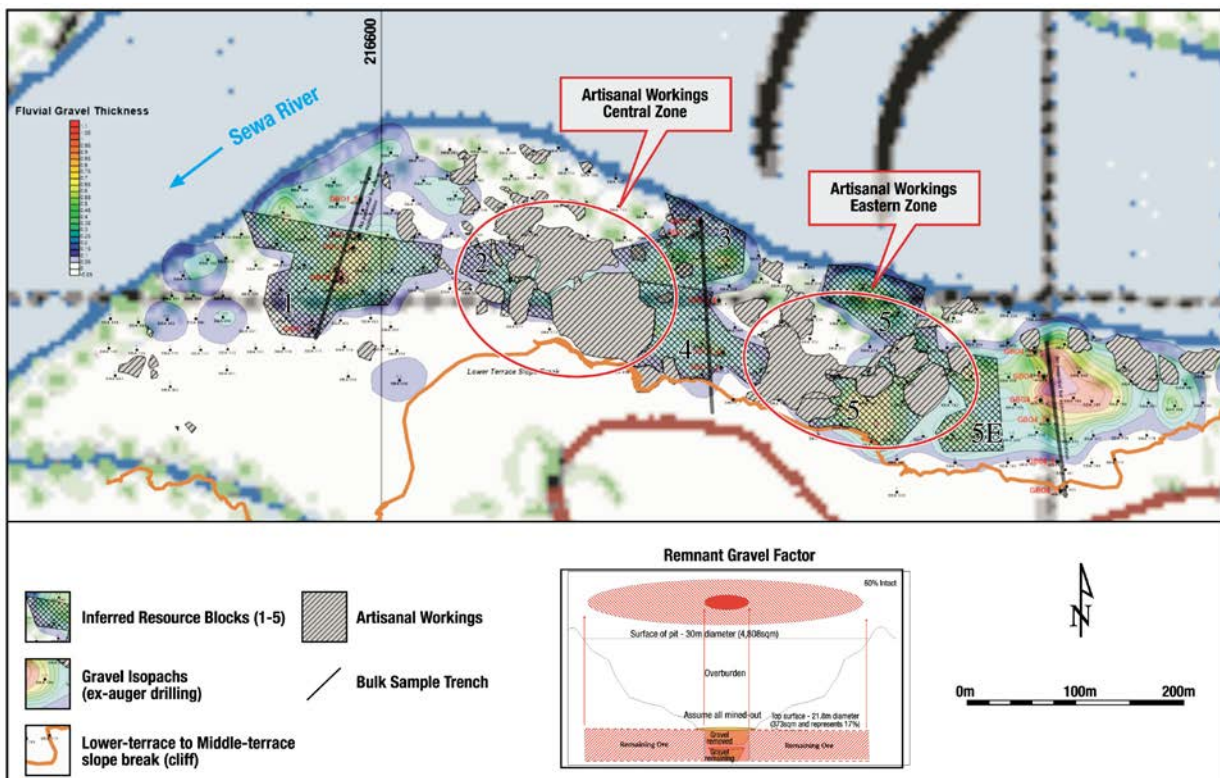


Figure 3. Showing combined Inferred Resource blocking for the Gboyeiya Alluvial Project, comprising intact, un-mined gravel (blocks 1-5) and remnant gravel occurrences (Artisanal workings: Central zone and Artisanal Workings: Eastern Zone).

JORC COMPLIANT INFERRED RESOURCE: GLOBAL INFERRED ALLUVIAL RESOURCE: GBOYEIYA ALLUVIAL PROJECT									
LOCALITY	TARGET	GRAVEL TYPE (FACIES)	GRAVEL THICK. (m)	AREA (m ²)	VOLUME (m ³)	TONS	AV. REC. GRADE (cpt)	CARATS (cts)	AV. STN SIZE (cts)
EL 15/2102 Gboyeiya Alluvial Project, Bo District, Sierra Leone	UN-MINED IN SITU GRAVEL (BLOCKS 1-5)	LOWER TERRACE (PALAEO-FLUVIAL)	0.39	34,270.69	13,259.90	27,580.59	0.18	5,082.96	0.66
	REMNANT MINED-GRAVEL (ARTISANAL WORKINGS)	LOWER TERRACE (PALAEO-FLUVIAL)	0.38	11,269.80	4,327.60	9,001.41	0.24	2,202.65	0.66
			*Figures may differ due to rounding & averaging discrepancies		45,540.49	17,587.50	36,582.01		7,285.61
BSS cut-off = 2mm No mining dilution factors have been applied RD of gravels = 2.08 t/m ³ Anthropogenic and geological losses applied									

Table 1. Summary table of Inferred resource estimation attributes for both intact (*in situ*) and remnant gravels within the Gboyeiya Alluvial Deposit, EL 15,2012, Bo District, Sierra Leone.

COMPETENT PERSON'S STATEMENT

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves on the Allotropes Diamond's Sierra Leone Diamond Project, is based on information compiled by Mr Richard Hall (*M.Sc. Geology, Cum Laude*) who is a Fellow of the Australasian Institute of Mining and Metallurgy and a member of the Australian Geological Society, and who is an employee of Newfield Resources Limited.

Mr Hall 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 of Exploration Results, Mineral Resources and Ore Reserves". Mr Hall consents to the inclusion in this ASX release of this information in the form and context in which it appears.

INDEPENDENT REVIEW BY COMPETENT PERSONS

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves on the Allotropes Diamond's Sierra Leone Diamond Project, has been reviewed by Dr. Renato Spaggiari (*Pri. Sci. Nat.*) and Mr. Mike Lynn (*Pri. Sci. Nat.*) both of whom belong to the South African Council for Natural Scientific Professions (SACNASP), a 'Recognised Professional Organisation' (RPO) included in a list and promulgated by the ASX from time to time*.

Both Dr. Spaggiari and Mr Lynn have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking, to qualify as Competent Persons. Dr. Spaggiari and Mr Lynn consent to the inclusion in this ASX release of this information in the form and context in which it appears.

*<http://www.asx.com.au/documents/regulation/list-recognised-professional-orgs-march-2014.pdf>

APPENDIX 1: Gboyeiya Alluvial Diamond Project -Sierra Leone.

JORC (2012) TABLE 1.

Reporting of Exploration Results and the Estimation and Reporting of a Mineral Resource.

Section 2 - Reporting of Exploration Results

Criteria	JORC Code explanation	Allotropes Diamonds Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<ul style="list-style-type: none"> The exploration licences (ELs) are 100% owned by Allotropes. A 6.5% royalty is levied for precious stones (15% for specials valued over US\$0.5M per stone) as well as an export tax that is applied to all diamonds sent out of the country. The EL is issued initially for a 4-year period, and 2 subsequent renewals are permitted – the second renewal being for a 3-year period and the last being for a 2-year period, for a total of 9 years. There is no requirement at this stage for Allotropes to reduce their licence size. The EL tenure and planned work program for the forthcoming year is in good standing.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Sierra Leone Diamond Company (SLDC, now African Minerals) conducted an extensive multi-commodity and diamond exploration program within an area covering 40,000 km². The latter comprised an airborne magnetic survey (28 000 km²) and reconnaissance stream sediment sampling (RSS) for kimberlites, whilst their alluvial targets were tested through bulk sampling. Artisanal miners have also exploited significant areas that encompass diamondiferous swamps and river gravels in the ELs (Hall, 1972). Depletions have not been documented but significant deposits remain.

Criteria	JORC Code explanation	Allotropes Diamonds Commentary
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> Dominant diamond placer deposits are: <ul style="list-style-type: none"> Modern River deposits; Swamps and Flats; Fluvial terraces (Low and High Terraces of the ancestral river) located in proximity to the Modern River; Surface residual deposits of fluvial terrace origin comprising down wasted <i>in situ</i> or redistributed colluvial gravel lags. Surface residual deposits of laterite-rich colluvial/eluvial aprons over and adjacent to, high terraces and also potentially associated with previously undiscovered kimberlites. There is potential for primary diamond ore-bodies and numerous geophysical anomalies associated with interpreted pipe and dyke features are being investigated.
Drill hole Information	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> easting and northing of the drill hole 	<ul style="list-style-type: none"> An infill auger drilling program was completed between the bulk-samples trenches at the Gboyeiya deposit, comprising 202 holes amounting to 1035m of drilling completed.

Criteria	JORC Code explanation	Allotropes Diamonds Commentary
	<p><i>collar</i></p> <ul style="list-style-type: none"> ○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> ○ <i>dip and azimuth of the hole</i> ○ <i>down hole length and interception depth</i> ○ <i>hole length.</i> <ul style="list-style-type: none"> ● <i>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.</i> 	
Data aggregation methods	<ul style="list-style-type: none"> ● <i>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.</i> ● <i>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.</i> ● <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> ● No weighting, averaging or grade truncation methods have been utilised, other than those industry standard methods employed in alluvial resource reporting i.e. the use of weighted averages in the calculation of average stone sizes or average grades, or the use of arithmetic means for average gravel thickness. ● No metal equivalent values have been considered. ● Isopach models have occasionally utilised kriging to mitigate skewed data, due to the inherent ‘nugget effect’ in alluvial diamond deposits.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> ● <i>These relationships are particularly important in the reporting of Exploration Results.</i> ● <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> ● <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg ‘down hole length, true width not known’).</i> 	<ul style="list-style-type: none"> ● The pervasive single story (multi-storey in some cases) fluvial deposits associated with both the Modern and ancestral Sewa River, forms the preferred target horizon for diamond mineralisation. ● Basal gravel thicknesses are estimated from trench exposures and in-fill auger drilling. Grade results, where quoted, are derived from the extraction of basal gravels from surface or open-cast excavations, completed to bedrock where possible. ● Much of the historic and anecdotal data suggests that many artisanal miners have not intersected the basal bedrock contact, especially in water-logged areas adjacent to the river. This provides significant upside for alluvial diamond resource estimates for low-terrace and river flat deposits adjacent to the Modern River.
Diagrams	<ul style="list-style-type: none"> ● <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i> 	<ul style="list-style-type: none"> ● Appropriate maps and plans have been compiled from various sources, including field plans, geophysical maps and historic and 3rd party maps available from government sources (e.g. Sierra Leone National Minerals Agency ([NMA]).
Balanced reporting	<ul style="list-style-type: none"> ● <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i> 	<ul style="list-style-type: none"> ● Reported results encompass both low and high grade (i.e. actual) values. No compositing has taken place. Note that zero results (gravel absence) from the drilling data were included in the modelling. ● The base-data has not been capped to reduce the ‘nugget-effect’ inherent in many diamond alluvial deposits. ● However, the modelling of these data has incorporated Kriging, a regression analysis designed to reduce and

Criteria	JORC Code explanation	Allotropes Diamonds Commentary
		smooth the effect of skewed ('nuggety') data.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> A trial-mining/ mega-bulk-sampling program has been completed in EL 15/2012. To date, over 30,000 tons has been processed and c.2 600 carats of diamonds recovered from fluvial gravels of Lower Terrace origin from the Golu Small-scale Mining Licence Mine (SML 01/2015). Grade is variable and highs of 60 carats per hundred tons (cpht) achieved for the basal gravel layer, to c.5 cpht for low grade, blended ore. Other substantive exploration data is available over all the tenements. Legacy data obtained from the National Minerals Agency (NMA) compiled by previous operators has been acquired – this includes but is not limited, to: <ul style="list-style-type: none"> High-resolution airborne magnetic data (100m line spacing; 60m and 40m flight heights; 20m grid spacing) Exploration bulk localities and sample grades Maps of potential resource areas Drilling and sampling programs
Further work	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Future exploration work will be aimed at identifying the mode and occurrence (distribution and geographic locality) of diamondiferous gravels within the tenements. Further bulk sample sites will be identified on the basis of the gravel type and distribution within the licence, evaluating the mineral content of these gravels in a systematic, geo-statistically representative manner. This work is an iterative and scalable process that can be easily adaptable to each newly identified potential resource area.

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	Allotropes Diamonds Commentary
Database integrity	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All base-data has been QA/QC'd by other CPs.
Site visits	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Site visits conducted by resident CPs and bulk-sampling program supervised by same.
Geological interpretation	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> High confidence in the geological interpretation of the alluvial diamond deposit. All CPs proficient and highly experienced in the mode and occurrence of diamond placers, diamond placer modelling and diamond resource estimation. The data comprise sedimentological variables, including gravel thickness, type (facies), occurrence (homogenous domains), geological and depositional losses, beneficiation (grade) results an average stone size. No SFDs have been undertaken due to small parcel size but SFD on the adjacent extension of this deposit has been produced for c.2,600 carats. Precise geological mapping of sedimentological units

Criteria	JORC Code explanation	Allotropes Diamonds Commentary
		conducted along trench exposures. Changes in geology and depositional environments noted with respect to geological continuity and facies classification.
Dimensions	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Bulk-sample trenches sited perpendicular to palaeo-fluvial direction and across entire width of resource. Infill auger drilling between trenches has confirmed gravel occurrence, type, thickness and depth below surface. Gravel exposure by trenching and infill drilling, has confidently determined the lateral and vertical distribution of gravels and therefore, strike length and width of the target resource.
Estimation and modelling techniques	<ul style="list-style-type: none"> 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 Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. 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. 	<ul style="list-style-type: none"> Estimation of area, volume thickness, tonnage and contained mineralisation conducted to industry methods and standards. Computer-assisted resource estimation conducted with Surfer 13, utilising combination of kriging and inv. dist. 2 gridding techniques, with minimum anisotropy adjusted to known fluvial (channel system) trend and sedimentologically homogenous domains. Relative density (S.G.) tests of ore conducted (n=30 samples). Peer review of resource estimation and evaluation results by other Company CPs. No grade capping. Nugget effects smoothed by kriging gridding technique, i.e. regression analysis designed to reduce and smooth the effect of skewed ('nuggety') data. Artisanal mining and geological losses (e.g. non-deposition) has been applied in the estimation. Block size estimation is well-constrained with close-spaced (25m centres) infill drilling data. Individual blocks separately gridded and 'cookie-cut (blanked) to produce resource attributes and search radii were selected conducted on this basis. In this way, edge-effects, or excessive interpolation of data, is minimised. Merging of these data to produce a global estimate required some conversion to weighted or arithmetic means, resulting in minor value changes from individual blocking results. Interpolation of these close-spaced data (grid) attributes through inaccessible (flooded) artisanal excavations considered appropriate due to control by close-spacing drilling around mined edges. Knowledge gained from trial-mining the up-stream extension to this deposit, realising a 2,600 carats parcel for revenue and SFD curves, and >30,000 tons for ore-characterisation study, further assisted with the validation process.
Moisture	<ul style="list-style-type: none"> Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	<ul style="list-style-type: none"> Tonnages estimated with natural, <i>in situ</i> moisture content.
Cut-off parameters	<ul style="list-style-type: none"> The basis of the adopted cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> No cut-off grades have been applied and no formal mining plan has been attempted.
Mining factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It 	<ul style="list-style-type: none"> No mining factors applied to the Inferred Resource category. No mining methods or mine plans have been reported or submitted. However, the mining method would be simple

Criteria	JORC Code explanation	Allotropes Diamonds Commentary
	<i>is always 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.</i>	opencast of a tabular gravel deposit, with mechanised stripping of the overburden, followed by the manual extraction of the gravel. This methodology was successfully employed during the trial-mining of the adjacent deposit.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The DMS processing plant for the Golu trial-mine utilised to treat the bulk samples. Daily processing efficiency tests conducted (tromp curves, sample and flowsort spiking with density and luminescence tracers) and data verification of processed tons and recovered diamonds (Bell-scales for tonnage through-puts and flow-sort tails, as well as hands-off final recovery for diamond recoveries). Security procedures at the Golu plant are in place which also includes remote camera monitoring of plant activities and monitoring of sorting by security personnel.
Environmental factors or assumptions	<ul style="list-style-type: none"> 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 assumptions made. 	<ul style="list-style-type: none"> Not applicable as testing conducted under auspices of the exploration licence EMP. The environmental rehabilitation of the adjacent trial-mined deposit has been successfully completed.
Bulk density	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Formal testing of relative density (R.D. or specific gravity) of the ore-horizon (ROM gravel) has been undertaken under controlled conditions and the average value applied to the resource estimation (n = 30 samples). Tonnage estimations, rather than just volume-only estimations have been utilised.
Classification	<ul style="list-style-type: none"> The basis for the classification of the Mineral Resources into varying confidence categories. 	<ul style="list-style-type: none"> The quality and nature of the data satisfies the industry criteria for a high-level 'Inferred' level of confidence for this alluvial resource estimation (as outlined in the JORC

Criteria	JORC Code explanation	Allotropes Diamonds Commentary
	<ul style="list-style-type: none"> • 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. 	<p>(2012) Code).</p> <ul style="list-style-type: none"> • The resource estimation reflects the Competent Person's (CP) view of this alluvial deposit.
Audits reviews	<p>or</p> <ul style="list-style-type: none"> • The results of any audits or reviews of Mineral Resource estimates. 	<ul style="list-style-type: none"> • Diamond resource estimate reviewed two other Company CPs: <ol style="list-style-type: none"> 1. Dr Renato Spaggiari: Ph.D.; <i>Pri. Sci. Nat.</i> 2. Mike Lynn: M.Sc; <i>Pri. Sci. Nat.</i>
Discussion of relative accuracy/confidence	<p>of</p> <ul style="list-style-type: none"> • 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 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. 	<ul style="list-style-type: none"> • Resource estimation conducted with computer-aided modelling of base-data. Some geostatistical procedures utilised to interpolate gravel thicknesses over relatively short distances using kriging technique. This was utilised where artisanal excavations were inaccessible due to flooding. • The resource statement has references to both local (block) and global estimates for the project area. • Relative accuracy can be determined from, and linked back to, a trial-mining exercise (i.e. production data) conducted some 1.6 km up-stream on the same geological horizon. Sedimentological and grade parameters are comparable.

Section 4 Estimation and Reporting of Ore Reserves

(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	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • No attempt at a code compliant Mineral Reserve has been undertaken.
Site visits	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Not applicable as no formal reserve estimation has been undertaken
Study status	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Not applicable as no formal reserve estimation has been undertaken

Criteria	JORC Code explanation	Allotropes Diamonds Commentary
	<i>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.</i>	
Cut-off parameters	<ul style="list-style-type: none"> • <i>The basis of the cut-off grade(s) or quality parameters applied.</i> 	<ul style="list-style-type: none"> • Not applicable as no formal reserve estimation has been undertaken
Mining factors or assumptions	<ul style="list-style-type: none"> • <i>The method and assumptions used as reported in the Pre-Feasibility or 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).</i> • <i>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</i> • <i>The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</i> • <i>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</i> • <i>The mining dilution factors used.</i> • <i>The mining recovery factors used.</i> • <i>Any minimum mining widths used.</i> • <i>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</i> • <i>The infrastructure requirements of the selected mining methods.</i> 	<ul style="list-style-type: none"> • Not applicable as no formal reserve estimation has been undertaken
Metallurgical factors or assumptions	<ul style="list-style-type: none"> • <i>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</i> • <i>Whether the metallurgical process is well-tested technology or novel in nature.</i> • <i>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</i> • <i>Any assumptions or allowances made for deleterious elements.</i> • <i>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.</i> • <i>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the</i> 	<ul style="list-style-type: none"> • Not applicable as no formal reserve estimation has been undertaken

Criteria	JORC Code explanation	Allotropes Diamonds Commentary
Environmental	<p><i>specifications?</i></p> <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Not applicable as no formal reserve estimation has been undertaken
Infrastructure	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Not applicable as no formal reserve estimation has been undertaken
Costs	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Not applicable as no formal reserve estimation has been undertaken
Revenue factors	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Not applicable as no formal reserve estimation has been undertaken
Market assessment	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Not applicable as no formal reserve estimation has been undertaken
Economic	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Not applicable as no formal reserve estimation has been undertaken

Criteria	JORC Code explanation	Allotropes Diamonds Commentary
	<i>in the significant assumptions and inputs.</i>	
Social	<ul style="list-style-type: none"> • <i>The status of agreements with key stakeholders and matters leading to social licence to operate.</i> 	<ul style="list-style-type: none"> • Not applicable as no formal reserve estimation has been undertaken
Other	<ul style="list-style-type: none"> • <i>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</i> • <i>Any identified material naturally occurring risks.</i> • <i>The status of material legal agreements and marketing arrangements.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • Not applicable as no formal reserve estimation has been undertaken
Classification	<ul style="list-style-type: none"> • <i>The basis for the classification of the Ore Reserves into varying confidence categories.</i> • <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i> • <i>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</i> 	<ul style="list-style-type: none"> • Not applicable as no formal reserve estimation has been undertaken
Audits or reviews	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of Ore Reserve estimates.</i> 	<ul style="list-style-type: none"> • Not applicable as no formal reserve estimation has been undertaken
Discussion of relative accuracy/confidence	<ul style="list-style-type: none"> • <i>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.</i> • <i>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.</i> • <i>Accuracy and confidence discussions should extend to specific discussions of</i> 	<ul style="list-style-type: none"> • Not applicable as no formal reserve estimation has been undertaken

Criteria	JORC Code explanation	Allotropes Diamonds Commentary
	<p><i>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.</i></p> <ul style="list-style-type: none"> <i>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.</i> 	

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	Allotropes Diamonds Commentary
Indicator minerals	<ul style="list-style-type: none"> <i>Reports of indicator minerals, such as chemically/physically distinctive garnet, ilmenite, chrome spinel and chrome diopside, should be prepared by a suitably qualified laboratory.</i> 	<ul style="list-style-type: none"> Kimberlite Indicator Minerals (KIMs) in the search for both secondary and primary orebodies have been reported by previous operators and by Allotropes Whilst soil loaming program for KIMs is ongoing for the kimberlite exploration program, it is assumed that mineralised colluvial aprons situated atop primary orebodies, will be significantly mineralised and the utilisation of KIM identification in alluvial exploration is warranted in this specific instance.
Source of diamonds	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> The licences contain a portion of the medial reach of the diamondiferous Sewa River. The diamonds are contained in secondary or alluvial deposits adjacent and inland of the Sewa River. It is assumed that these diamonds originated from the weathering and erosion of primary ore bodies in the Sewa catchment to the north, which straddles the known primary or kimberlite occurrences in the Kono District (Koidu and Tongo pipe and dykes clusters of Jurassic age [c.143-146 Ma]). Various geological parameters indicate a high potential for more proximal, previously undiscovered kimberlites. These include the nature of some of the diamond population, the local occurrence of confirmed kimberlitic indicator minerals, and sedimentological features of some local secondary diamond deposits.
Sample collection	<ul style="list-style-type: none"> <i>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).</i> <i>Sample size, distribution and representivity.</i> 	<ul style="list-style-type: none"> The bulk-samples comprised primarily fluvial basal gravel of Lower Terrace origin. Samples were extracted partly through mechanical excavation and manual labour and hauled to the plant site using 20 ton trucks. The feed bin at the DMS plant was fed using a wheeled loader. The purpose of the gravel processing is to establish the mineral (diamond) content of the gravels. The samples are treated through a 10tph DMS (40tph front-end) processing plant to extract diamonds and provide a representative (indicative) grade (measured in carats per hundred tons or cpht) for the basal gravels. Individual results are representative in relation to their sample size to contribute to a JORC-complaint Diamond Resource Estimation.
Sample	<ul style="list-style-type: none"> <i>Type of facility, treatment rate, and</i> 	<ul style="list-style-type: none"> Samples are treated through purpose-built 10tph DMS

Criteria	JORC Code explanation	Allotropes Diamonds Commentary
treatment	<p>accreditation.</p> <ul style="list-style-type: none"> • <i>Sample size reduction. Bottom screen size, top screen size and re-crush.</i> • <i>Processes (dense media separation, grease, X-ray, hand-sorting, etc).</i> • <i>Process efficiency, tailings auditing and granulometry.</i> • <i>Laboratory used, type of process for micro diamonds and accreditation.</i> 	<p>plant, suitable for alluvial exploration and resource evaluation and small-scale production work in the tropics.</p> <ul style="list-style-type: none"> • Bottom screen size (BSS) is 2.0 mm cut-off (rectangular slots), whilst the top-screen cut-off size is 16 mm. • All sorting is conducted via a hands-off (glove-box) in the final recovery. • DMS Plant efficiencies are in the range of 96% (cf. QA utilising ceramic density tracers). The plant operation is further QA/QC'd with low-luminescence marble sling-shot tracers. All tailings have been retained for future processing through the DMS • A Flowsort X-ray machine provides a final concentrate for hand-sorting. The Flowsort has consistent efficiencies above 90%. A grease circuit has confirmed this efficiency. • Test-work on grease vs X-ray recovered diamonds shows that there are no X-ray refractory diamond population present. The X-ray process recovers c.93% of carats, and over 98% of value. • The process is subject to a documented security protocol which includes hands-off (glove box) sorting in the final recovery, camera surveillance and G4S security supervision.
Carat	<ul style="list-style-type: none"> • <i>One fifth (0.2) of a gram (often defined as a metric carat or MC).</i> 	<ul style="list-style-type: none"> • Reported as carats.
Sample grade	<ul style="list-style-type: none"> • <i>Sample grade in this section of Table 1 is used in the context of carats per units of mass, area or volume.</i> • <i>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.</i> • <i>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).</i> 	<ul style="list-style-type: none"> • Sample grades are reported as carats per hundred tons (i.e. mass, utilising specific gravity, rather than volume-only), or cph. The use of carats per ton (cpt) are used where the grade permits i.e. the mineral tenor is high enough to warrant it.
Reporting of Exploration Results	<ul style="list-style-type: none"> • <i>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.</i> • <i>Sample density determination.</i> • <i>Per cent concentrate and undersize per sample.</i> • <i>Sample grade with change in bottom cut-off screen size.</i> • <i>Adjustments made to size distribution for sample plant performance and performance on a commercial scale.</i> 	<ul style="list-style-type: none"> • The compilation of size frequency distribution (SFD) and revenue curves for the diamond population of Lower Terrace fluvial deposits has been completed in a trial-mining exercise. • An approximation of the gravel relative density (R.D.) at this stage of exploration has been estimated at an average of 2.08 tonnes per cubic metre. • Grade variations associated with changes in BSS have not been determined, but will be assessed in the future. • The size and frequency of sampling is considered to be sufficiently representative for the purposes of reporting an Inferred Diamond Resource. • To date, approximately c.2,600 carats of diamonds have been recovered from trial-mining activities (av. 0.3 carats per stone) over an immediately adjacent deposit. • The value of these carats has measured from two

Criteria	JORC Code explanation	Allotropes Diamonds Commentary
	<ul style="list-style-type: none"> 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. 	Antwerp sales.
Grade estimation for reporting Mineral Resources and Ore Reserves	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Refer detail in Section 3.
Value estimation	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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 in demonstrating project value. The basis for the price (eg dealer buying price, dealer selling price, etc). An assessment of diamond breakage. 	<ul style="list-style-type: none"> Historic reports that refer to the commercial sale of diamonds from the Sewa River, outlining \$/carat, average stone size and quality are available in the public domain. Carat value estimates for the diamonds, or diamond footprinting determinations (e.g. diamond types, quality, size frequency distribution [SFD]) from EL15/2012 tenement have been determined. Bottom screen-size (BSS) is 2mm rectangular slots. Two diamond sales held in Antwerp. First Antwerp Tender -August 2015. Average US\$ 189/ct. Second Antwerp Tender – May 2016. Average US\$ 270 ct due to recovery of a larger average stone size the Golu trial-mining. The average stone size recovered from the Gboyeiya bulk-sampling exercise is effectively double that recovered from the adjacent Golu deposit (c.f. 0.33 cts/stn to 0.66 cts/stn). An increase in the commercial value of such a larger average stone size would be expected. No economic criteria have been applied to the Gboyeiya Inferred Resource.
Security and integrity	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> A SOP has been compiled whereby a strict chain of custody is adhered to, to mitigate theft of diamonds. All high risk areas ('Red Areas' i.e. grease room, flowsort) are under double lock and concentrate boxes are triple locked. Sorting conducted with multiple personnel and in addition, close-circuit cameras are trained on vulnerable security weak-points. Security presence is maintained during maintenance of recovery plant and final recovery section. The product is sorted via an industry standard glove box and the recovered diamonds bagged and sealed and placed into a drop-safe. Luminescent density tracers of various sizes are

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	<ul style="list-style-type: none"> • <i>Geophysical (logged) density and particle density.</i> • <i>Cross validation of sample weights, wet and dry, with hole volume and density, moisture factor.</i> 	<ul style="list-style-type: none"> recovered and tabulated for plant efficiency calculations. • Flowsort tailings recovered to a secure fenced and guarded area.
Classification	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • Sufficient tonnage throughput and diamond recovery has allowed a grade derivation and average stone size determination for this level of resource classification. • To date, there has been no attempt to determine a size frequency distribution for the Gboyeiya resource due to insufficient diamond inventory. However, knowledge of size frequency and revenue curves from trial-mining of the same deposit that is age equivalent just upstream of the Gboyeiya deposit at Golu, provides further confidence to this resource classification.