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ASX Announcement

7 December 2021

Exploration Update: Peyima Kimberlite

Newfield Resources Limited (**Newfield or Company**) (ASX: **NWF**) is pleased to report encouraging results of its exploration programme on the Peyima Kimberlite located within its Tongo Mine concession area.

Highlights

- Peyima Kimberlite mapped over 2.2km
- Previous drilling has intersected the Kimberlite to 130m below surface
- 108 dry tonnes kimberlite bulk sample collected and processed
- 110.20 carats of diamonds recovered giving a grade of 102cpht (+1.2mm cut off)
- Largest stone weighs 5.07 carats with 74% of recovered diamonds categorised as gem/near-gem quality

Newfield Executive Director, Karl Smithson, commented:

"The Peyima Kimberlite is one of 11 known kimberlites on the Tongo Mine concessions, located some 5km to the southeast of the current mine development on the Kundu and Lando kimberlites. Earlier this year Newfield decided to undertake a bulk sample of the Peyima Kimberlite for a first assessment on the diamond grade and quality of the body. This initial evaluation programme was successfully completed through the collection and processing of a 108 dry tonne sample which yielded 110 carats of diamond, for an encouraging sample grade of 102 carats per hundred tonnes (cpht).

"This first assessment of the Peyima Kimberlite diamond grade and quality is highly encouraging and supports the further work which will include the processing and analysis of a 182kg microdiamond sample to better assess the grade potential of the kimberlite. Initial independent valuation of the recovered diamond sample confirmed diamond value consistent with the Kundu and Lando Kimberlites in the smaller sieve classes.

"The success of this sampling program is very exciting exploration progress which supports the Company's confidence that Peyima holds the potential to expand the global diamond resource at Tongo which currently stands at 8.3 million carats hosted in just 5 of the 11 kimberlites on the concession."



Peyima Kimberlite

The Peyima Kimberlite is located in the south east of the Tongo mining concession, and has been mapped along surface over a distance of 2.24kms, primarily following historical artisanal mining (Figures 1 and 2). In 2010 a limited drilling programme was conducted whereby four holes were drilled, three of which intersected kimberlite with the deepest intersection being 130m from surface (vertical depth). In addition, a ground geophysical survey was conducted across the area of drilling interest. Petrographic studies of the drill core intersections identified the kimberlite as a medium grained, garnet macrocrystic, phlogopite hypabyssal kimberlite (Figure 3).

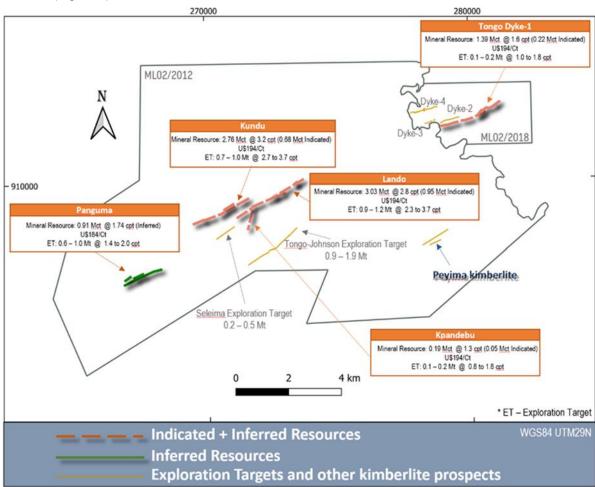


Figure 1: Mining Concessions and Location of Peyima Kimberlite



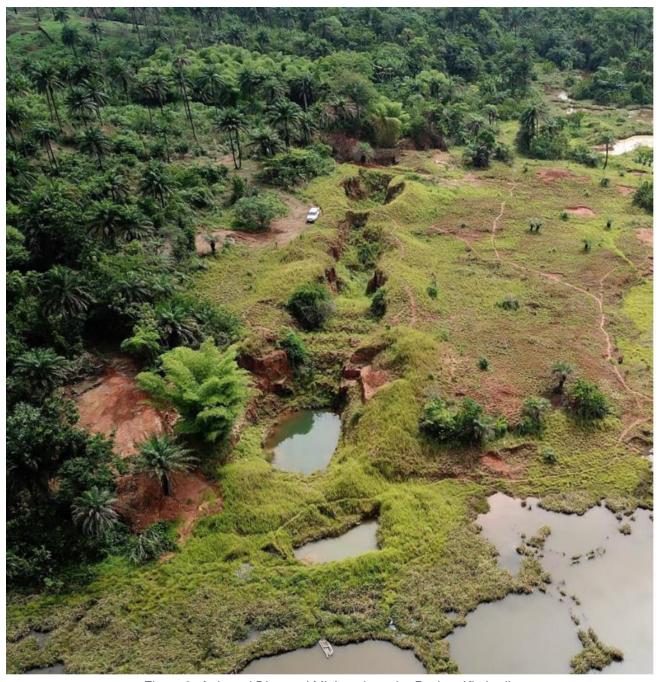


Figure 2: Artisanal Diamond Mining along the Peyima Kimberlite





Figure 3: Drill Core from the Peyima Kimberlite

Bulk Sample Collection

Historical reports identified the Peyima Kimberlite as being diamondiferous, which is supported by the fact that the upper parts of the dyke have been subjected to significant artisanal diamond mining over the years.

As previously reported, Newfield undertook a bulk sampling exercise from two separate but relatively proximal locations on the body. The one area was challenging in that the kimberlite and ground conditions were relatively decomposed, so the majority of the bulk sample was collected from an area where ground conditions were better and the kimberlite was hard and fresh (Figure 4).



Figure 4: Bulk Sampling of Peyima Kimberlite



The sample was carefully measured and surveyed every metre to determine the volume extracted and the specific gravity and moisture content measured from kimberlite samples collected every 1m. Using these data it was calculated that a total of 108 dry tonnes of kimberlite was collected along a sample strike length of 40m.

In addition, at every 2m along the sample trench, samples of kimberlite were collected to give a composite weight of approximately 200kg. These samples will be consigned to the SRC Laboratory in Canada for microdiamond analysis, the results of which will assist in the evaluation of the kimberlite.

Bulk Sample Processing and Results

The kimberlite samples were trucked and stockpiled in a secure sample paddock next to the 5tph bulk sample plant located at the Tongo camp and plant site. The samples were processed at a bottom cut off of +1.2mm, with diamond recovery by X-Ray Flowsort machines. The diamonds were recovered from the heavy mineral concentrate by an experienced diamond sorter under strict security and in the presence of a Government observer

A total of 110.58 carats of diamond were recovered from the 108 dry tonnes processed, giving a recovered sample grade of 102.37cpht at a +1.2mm cut off. The diamonds are categorised as gem (49%), near-gem (25%) and industrial (26%) quality. The largest stone recovered was a 5.07 carat near-gem stone (Table 1 and Figure 5).

Table 1: Peyima Bulk Sample Result

				Average Stone	Grade cpht	
	Dry Tonnes	Carats	Stones	Size	(+1.2mm)	Largest Stone
Peyima Kimberlite Bulk Sample	108.0	110.58	960	0.12	102.37	5.07 carats



Figure 5: Selection of Gem Diamonds Recovered from the Peyima Kimberlite Bulk Sample (Sizes from Top Left to Right, 3Gr and 4Gr)



The results provided are only a preliminary grade estimate based on a small sample and are not sufficient to determine a mineral resource estimate. Further work, including drilling, bulk sampling and microdiamond analysis must be undertaken if a mineral resource estimate for the Peyima Kimberlite is to be established.

Diamond Valuation

The small diamond parcel was exported to Antwerp in adherence to the Kimberley Process Certification Scheme, where the goods were deep boiled to remove any impurities and dirt and re-weighed, giving a total weight of 110.20 carats (loss of 0.38 carats compared to the pre-cleaning weight).

Initial independent valuation of this small diamond parcel in Antwerp confirmed the Peyima sample to have average values per sieve class to be similar to the Kundu and Lando kimberlites in the +3 DTC sieve to 8 grainer sizes (i.e. up to 2 carats in size). While it is premature at this point of the work programme to compare the overall revenue per carat, as the coarser sizes are under-represented in the small sample size, this result is highly encouraging and suggests that Peyima may host the same high percentage of gems as the other kimberlites currently in the Mineral Resource and Reserve inventory, with Lando and Kundu diamond reserves having a modelled diamond value of U\$222 per carat (+1.18mm cut off).

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 33 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.