# Technical Report On the Kwai Property Red Lake Mining Division Northwestern Ontario

# Prepared for Golden Goliath Resources Ltd.

Prepared by: D. Cullen, P.Geo.J. Garry Clark, P.Geo. and R. Greenwood Clark Exploration Consulting

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## DATE and SIGNATURE PAGE

This report titled "Technical Report on the Kwai Property, Red Lake Mining Division, Northwestern Ontario", and dated March 1st, 2019 was prepared and signed by the following authors:

Dated at Thunder Bay, Ontario March 1st, 2019

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#### Item 1: Summary

Clark Exploration Consulting of Thunder Bay, Ontario was contracted by Golden Goliath Resources Ltd. ("Golden Goliath"), to review historic data for their Kwai Property (the "Property"), identify its merits, propose an appropriate exploration program and budget for gold exploration on the property, and prepare a Technical Report (the "Report") compliant with NI 43-101 and suitable for inclusion in a prospectus document for the purposes of a financing or listing application by Golden Goliath.

Golden Goliath's Kwai Property is located in the Dixie Lake and Cabin Bay Areas of the Red Lake Mining Division in northwestern Ontario, approximately 30 km south of the community of Red Lake. The UTM co-ordinates for the approximate centre of the claim block are 455500 E, 5622000 N (NAD 83, Zone 15).

Golden Goliath's Kwai Property consists of 6 multi-cell mining claims, totalling 133 cells under MLAS, for a total area of 2732 hectares. The claims are held 100% by Perry English, and under the terms of an option agreement with P. English, Golden Goliath can earn a 100% interest in the Property by making staged payments totalling \$68,000 and issuing 400,000 shares of Golden Goliath over 4 years. P.English retains a 1.5% net smelter royalty ("NSR"), with Golden Goliath having the option to buy back 0.75% of the NSR for \$500,000.

The Kwai Property lies within the Superior Province, straddling the suture zone between the eastwest trending, Mesoarchean North Caribou and Winnipeg River Terranes to the north and south respectively. More specifically, the property is underlain by rocks assigned to the Uchi subprovince in the north, and the English River subprovince in the south. The English River and Uchi subprovinces in the Property area are separated by the Pakwash Lake Fault, a major east-west trending fault that is interpreted to splay from the Sydney Lake Fault zone, located south of the property.

The local geology fits the model for the style of mineralization found at the Eleonore deposit of Goldcorp in northern Quebec (total reserves and resources of 35,220,000 tonnes at 6.3 g/T Au), where mineralization occurs in polydeformed sedimentary rocks near a subprovince boundary and near a quartz diorite stock. The authors have been unable to verify this information, and the information is not necessarily indicative of the mineralization that is the subject of the technical report.

On their Kwai Property, Golden Goliath is focused on identifying and delineating Archean-aged orogenic gold deposits (Groves et al., 1998). Following Kerrich et al. (2000), orogenic gold deposits are typically associated with crustal-scale fault structures, although the most abundant gold mineralization is hosted by lower-order splays from these major structures. Deposition of gold is generally synkinematic, syn- to post-peak metamorphism and is largely restricted to the brittle-

ductile transition zone. Host rocks are highly variable, but typically include mafic and ultramafic volcanic rocks, banded iron formation, sedimentary rocks and rarely granitoids.

The previous work on the Kwai Property has indicated the presence of elevated, or anomalous, gold values within a foliated granodiorite with quartz veins and fractures, +/- pyrite mineralization, with the Kwai Showing being the main gold occurrence. Two channel samples from the south and north ends of the trench at the Kwai Showing contained 662 ppb Au and 468 ppb Au over 1m respectively (Render et al. 2010). This mineralization is located approximately 1.6 km north of the interpreted location of the Pakwash Lake Fault, a major east-west trending fault that is interpreted to splay from the Sydney Lake Fault zone, located south of the property. This area should be the main focus of future exploration by Golden Goliath.

It is recommended that further mapping and soil sampling be conducted in the area of the Kwai Trench and south to the area of the Pakwash Lake Fault. Target areas identified by the previous and new sampling should be followed up by mechanical stripping, washing, mapping and sampling. The Kwai Trench should also be extended to the south if possible, since Laurentian's high assay of 662 ppb from 2010 was taken from the south end of the trench.

An Induced Polarization ("IP") survey should also be conducted over the area from norh of the Kwai Trench to south of the interpreted location of the Pakwash Lake Fault in order to determine the presence of any conductors that could represent sulphide mineralization. An initial IP survey covering this area could consist of 5 lines of about 2.5 km length.

If results warrant, selected targets should be drill tested with wide-spaced shallow holes to test for large-scale alteration and/or mineralization.

A budget of **\$141,650** is recommended to carry out the initial recommended work.

#### Item 2: Introduction

Clark Exploration Consulting of Thunder Bay, Ontario was contracted by Golden Goliath Resources Ltd. ("Golden Goliath"), to review historic data for the Kwai Property (the "Property"), identify its merits, propose an appropriate exploration program and budget for gold exploration on the property, and prepare a Technical Report (the "Report") compliant with NI 43-101 and suitable for inclusion in a prospectus document for the purposes of a financing or listing application by Golden Goliath.

The Kwai Property lies within the Superior Province, straddling the suture zone between the eastwest trending, Mesoarchean North Caribou and Winnipeg River Terranes to the north and south respectively. More specifically, the property is underlain by rocks assigned to the Uchi subprovince of the North Caribou terrane in the north, and the English River subprovince in the south. The English River and Uchi subprovinces in the Property area are separated by the Pakwash Lake Fault, a major east-west trending fault that is interpreted to splay from the Sydney Lake Fault zone, located south of the property.

The Property is located about 30 km south of the municipality of Red Lake, Ontario; gold was first discovered in the Red Lake area in the mid 1920's and by the mid 1930's several producing gold mines were in operation. The belt is recognized for its high-grade, highly profitable gold mines, which include the world class Campbell and Red Lake mines of Goldcorp Inc.

## Item 3: Reliance on Other Experts

For the purposes of this report the authors have relied on ownership information provided by Golden Goliath, as well as claim information available on the web site of the Ontario Ministry of Energy, Northern Development and Mines (MENDM). The authors have not researched property title or mineral rights for the property and express no opinion as to the ownership status of the property. The option agreement for the claims is discussed in Item 4, "Property Description and Location" below, and the claim information from the MENDM website is current as of the date of this Report.

#### Item 4: Property Description and Location

Golden Goliath's Kwai Property is located in the Dixie Lake and Cabin Bay Areas of the Red Lake Mining Division in northwestern Ontario, approximately 30 km south of the community of Red Lake. The UTM co-ordinates for the approximate centre of the claim block are 455500 E, 5622000 N (NAD 83, Zone 15).

On April 10, 2018, Ontario converted their manual system of ground and paper staking, and maintaining unpatented mining claims to an online system. All active, unpatented claims were converted from their legally defined location by claim posts on the ground or by township survey to a cell-based provincial grid. Mining claims are now legally defined by their cell position on the grid and coordinate location in the MLAS (Mining Land Administration System) map viewer.

Golden Goliath's Kwai Property consists of 6 multi-cell mining claims, totalling 133 cells under MLAS, for a total area of 2732 hectares. The claims are listed in Table 1, and are shown in Figure 2. The claims are held 100% by Perry English, and under the terms of an option agreement with P. English, Golden Goliath can earn a 100% interest in the Property by making staged payments totalling \$68,000 and issuing 400,000 shares of Golden Goliath over 4 years. P. English retains a 1.5% net smelter royalty ("NSR"), with Golden Goliath having the option to buy back 0.75% of the NSR for \$500,000.

The proposed exploration program in this report is subject to the guidelines, policies and legislation of the Ontario Ministry of Northern Development and Mines, Ontario Ministry of Natural Resources and Federal Department of Fisheries and Oceans regarding surface exploration, stream crossings, and work being carried out near rivers and bodies of water, drilling and sludge disposal, drill casings, capping of holes, storage of core, trenching, road construction, waste and garbage disposal.

The Ontario Mining Act requires Exploration Permit or Plans for exploration on Crown Lands. The permit and plans are obtained from the MENDM. The processing periods are 50 days for a permit and 30 days for a plan while the documents are reviewed by MENDM and presented to the Aboriginal communities whose traditional lands will be impacted by the work. The authors recommend the company discuss the recommended exploration with the MENDM to determine the plan and/or permit required as well as the Aboriginal communities to consult.

The government of Ontario requires expenditures of \$400 per year per cell for staked claims, prior to expiry, to keep the claims in good standing for the following year. Boundary claims (i.e. claims where the new cell was covered by more than one owner) require expenditures of \$200 per year. The report must be submitted by the expiry date. There are no boundary claims on the Property.

No mineral resources, reserves or mine existing prior to the mineralization described in this report are known by the authors to occur on the Property. There are no known environmental liabilities associated with the Property, and there are no other known factors or risks that may affect access, title, or the right or ability to perform work on the Property. The mining claims do not give the claim holder title to or interest in the surface rights on those claims, and as the land is crown land, legal access to the claims is available by public roads which cross the Property.

Claim No.	Number of Cells	Township/Area	Anniversary Date	Work Required
530903	17	Dixie Lake Area	Sept 7, 2020	\$6,800
530908	16	Dixie Lake Area	Sept 7, 2020	\$6,400
530909	25	Cabin Bay Area	Sept 7, 2020	\$10,000
530910	25	Cabin Bay Area	Sept 7, 2020	\$10,000
530311	25	Cabin Bay/Dixie Lake Areas	August 29, 2020	\$10,000
530312	25	Cabin Bay Area	August 29, 2020	\$10,000
Total	133			\$53,200

#### Table 1. Kwai Property Claims

# Item 5: Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Property is located approximately 30 km south of the Red Lake Municipality of northwestern Ontario, approximately 565 km by road (430 km direct) northwest of Thunder Bay and approximately 475 km by road (260 km direct) eastnortheast of Winnipeg, Manitoba. Red Lake can be reached via Highway 105 from the Trans-Canada Highway 17. Red Lake is also serviced with daily flights from Thunder Bay and Winnipeg.

The Property itself can be accessed from the Dixie Lake Road off Highway 105 about 10 km south of Red Lake. The Dixie Lake Rd. crosses the Property approximately 600m south of the Kwai Trench.

The Red Lake Municipality, with a population of approximately 5,000, comprises six communities: Red Lake, Balmertown, Cochenour, Madsen, McKenzie Island, and Starratt-Olsen. Mining and mineral exploration is the primary industry in the area, with production mainly from Goldcorp's 3100 tonne/day Red Lake gold

mine. Other industries include logging and tourism. The Municipality of Red Lake offers a full range of services and supplies for mineral exploration and mining, including both skilled and unskilled labour, bulk fuels, freight, heavy equipment, groceries, hardware and mining supplies.

Power is available from Red Lake, and there is also a generating station at Ear Falls Approximately 70km south of Red Lake, with the power line running along Highway 105. The current land holdings are sufficient to allow for exploration and there are currently no encumbrances on surface rights on the Property. However, it is beyond the authors' scope to determine whether or not the current land holdings are sufficient for development of infrastructure to sustain a mining operation.

The topography in the area is gentle to moderate with elevations ranging from 360 to about 430 m. Topography is dominated by glacially scoured southwesttrending ridges, typically covered with jack pine and mature poplar trees. Swamps, marshes, small streams, and small to moderate-size lakes are widespread. Glacial overburden depth is generally shallow, rarely exceeding 20m, and primarily consists of ablation till, minor basal till, minor outwash sand and gravel, and silty-clay glaciolacustrine sediments.

Vegetation consists of thick second growth boreal forest composed of black spruce, jack pine, poplar, and birch.

The climate in the Red Lake area is described as warm-summer humid continental (climate type Dfb according to the Köppen climate classification system). Mean daily temperatures range from -18°C in January to +18°C in July. Annual precipitation averages 70 cm, mainly occurring as summer showers, which includes a total of about two metres of snow. Snow usually starts falling during late October, and starts melting during March but is not normally fully melted until late April. Late-season snow in May does occur. Fieldwork and drilling are possible year-round on the property although certain wetter areas are more easily accessible in the winter when frozen.

## Figure 1. Property Location







#### Item 6: History

The Kwai Property has no documented exploration previous to the work by Laurentian Goldfields Ltd. described below, according to the data available in the assessment files archived with the Ontario Ministry of Energy, Northern Development and Mines on the MENDM website: (www.geologyontario.mndm.gov.on.ca/). Most of the previous work in the area

has focussed on the Dixie Zone area currently being explored by Great Bear Resources and BTU Metals, about 10 km to the north.

2010: Laurentian Goldfields Ltd. staked a large property (approximately 22,940 ha) in the area from December 2009 to January 2010 following the delineation of a large hydrogeochemical anomaly over Pakwash Lake. The property was several times the size of the current Property and most of it was not covered by the current Property.

Initial work on the property consisted of a high resolution, airborne magnetic and VLF- EM survey completed in March 2010. Phase 2 of the project included comprehensive soil and lake sediment sampling as well as a property-wide mapping and prospecting program, which systematically targeted structures and lithological contacts interpreted from magnetic susceptibility mapping.

Prospecting in the western portion of the property recovered slightly anomalous Au samples from within the granodiorite pluton. A grab sample of a pyrite-bearing quartz vein occurring in the granodiorite contained 243ppb Au. Fifty six (56) channel samples were reportedly collected from the nearby Kwai trench on Golden Goliath's Property, (Render et al. 2010), however, the assays and certificates for these samples were not included in Laurentian's 2010 report, and therefore the authors cannot report on any of the results.. This area also reported "some of the most extensive high gold response ratio anomalies defined by the detailed MMI (mobile metal ion) soil sampling survey" (Render et al. 2010).

2011: In the winter of 2011, Laurentian drilled 9 holes on the ice on Pakwash Lake to test a large lake sediment gold and pathfinder element anomaly, however this part of their property is not covered by the current Property, and of 836 samples taken for assay, the high value was 40 ppb, with the rest averaging slightly above detection limit (Render et al. 2011).

The drill program was followed up by further MMI soil sampling and rock sampling over nine grids on their property, including over the Kwai area on Golden Goliath's Property. The purpose of this sampling was to better define the anomalies by sampling on tighter spacing in order to infill the wider spaced sampling done in 2010. The work was reported to have helped in further defining the gold mineralization in the Kwai area, although it was stated that further work was required to "validate these targets to drilling status" (Chiang and Rennie, 2013).

2012: In the fall of 2012 Laurentian conducted further soil and rock sampling utilizing three different analytical methods as provided by Acme Analytical Laboratories; an ultratrace method with aqua regia digestion, partial leaching with sodium pyrophosphate and leaching with distilled water. The work was reported to be successful in validating the occurrence of the gold anomaly in the Kwai area, and further mapping and surface sampling of the Kwai area to better define subsurface targets was recommended as well as trenching in areas of limited glacial cover (Chiang and Labrenz, 2013). They also recommended drill testing of selected targets with wide-spaced shallow holes to test for large-scale alteration and/or mineralization.

The authors could find no record of Golden Goliath's Property being staked or any exploration work performed on it subsequent or prior to the work by Laurentian Goldfields described above. No such records exist in the MENDM files.

#### **ITEM 7: GEOLOGICAL SETTING AND MINERALIZATION**

### 7.1 Regional Geology

The following discussion of the Regional Geology is taken from Render et al. (2011).

The Kwai Property lies within the Superior Province, straddling the suture zone between the eastwest trending, Mesoarchean North Caribou and Winnipeg River Terranes to the north and south respectively. More specifically, the property is underlain by rocks assigned to the Uchi subprovince of the North Caribou terrane in the north, and the English River subprovince in the south.

The Uchi subprovince is a chain of greenstone belts characterized by strongly deformed successions of supracrustal rocks and intrusive complexes formed over protracted periods of rifting and arc magmatism. The Uchi subprovince is one of the more prolific mineral belts in the Superior Province, hosting several major deposits including the world-class Red Lake gold camp. The stratigraphy of the Uchi subprovince indicates that rifting began ca. 2.99 Ga, followed by juvenile and continental arc magmatism at 2.94-2.91, 2.90-2.89, 2.85 and 2.75-2.72 Ga (Percival, 2007). The youngest rocks in the belts are typically coarse clastic sediments that locally contain detrital zircons as young as 2.703 Ga. These strata may be facies equivalents of the marine greywacke successions of the English River subprovince to the south (Percival, 2007).

Multiple regional deformation events have affected the greenstone belts in the Uchi subprovince, producing steep south-dipping composite fabrics. These are constrained by age dating as pre-2.74, 2.73, 2.72 and 2.70 Ga. Regionally, gold mineralization is found to be associated with structures formed prior to 2.712 Ga and with late-stage gold localization after 2.701 Ga (Percival, 2007).

The North Caribou terrane is separated from the Winnipeg River terrane to the south by a narrow eastwest trending belt of metasedimentary rocks known as the English River subprovince. These rocks underlie the southern edge of the Kwai property. They are described regionally as migmatite and diatexite, since much of the belt has been subjected to middle amphibolite facies to low-pressure granulite facies (750-850°C at 0.6-0-7 MPa) metamorphism; however original sedimentary features are locally preserved. The sedimentary protoliths of the English River schists and migmatites are generally immature, turbidtic greywackes. The turbidites are interpreted to be syn-orogenic flysh successions that were deposited into a forearc basin and subsequently telescoped, forming an accretionary prism at the leading edge of the Winnipeg River terrane. Detrital zircon analysis indicates that the English River sediments were deposited between 2.705 Ga and 2.698 Ga, after cessation of volcanic activity in the adjacent arc terranes. Metamorphism of the sediments has been dated at 2.691

Ga, which was followed by intrusion of 2.65 Ga volatile-rich pegmatites (Percival, 2007).

Structurally, the English River subprovince is characterized by a well-developed, east-west trending composite foliation fabric defined by migmatitic layering parallel to banding in the metasediment. The fabric is folded by a tight, upright, to weakly asymmetric, north-verging F2 fold system (Hrabi and Cruden, 2001). Macroscale F1 folds are locally identified by their interference with this regional fold system.

The English River subprovince is juxtaposed against the Uchi subprovince to the north by the Sydney Lake – Lake St. Joseph fault. This east-west trending brittleductile fault zone is up to 3km wide and is interpreted to be subvertical to steeply south-dipping. The fault is estimated to have a dextral transcurrent displacement of about 30km and a south-side-up vertical displacement of about 2.5 km (Stone, 1981). The timing of movement on the fault zone is constrained by an offset marker that is dated to 2.68 Ga (Bethune et al., 2000).

## 7.2 Property Geology

The following discussion of the Property Geology is taken from Render et al. (2011).

## Uchi Subprovince

Rock units assigned to the Uchi subprovince occurring in the Kwai Property include mafic to intermediate volcanic rocks and fine-grained, bedded volcaniclastic rocks. Clastic sedimentary rocks that lie north of the Pakwash Lake Fault zone are assigned to the Uchi subprovince because they are texturally different from the metasedimentary rocks of the adjacent English River subprovince to the south. These sedimentary successions are very similar in composition and may represent facies equivalents that have been juxtaposed during orogenesis.

The sedimentary unit is dominated by gritty fine-grained sandstones and greywacke (containing up to 40% mica). In the north, the unit contains a thick succession of laminated argillite and interbedded argillite and greywacke. These strata host an ironstone succession that was exploited by the past producing Griffith Iron Mine (Figure 5). A thin unit of cobble conglomerate occurs along the trace of the Pakwash Fault. The conglomerate contains rounded clasts of diorite to granodiorite that are supported in a fine-grained, thinly bedded, black matrix. Petrographic analysis of this unit indicates that the matrix may be volcaniclastic in origin. Interbedded volcanic and sedimentary rocks are observed locally suggesting that the two units were deposited contemporaneously. The sedimentary/volcanic succession is typically strongly foliated and contains

metamorphic mineral assemblages including garnet, that are indicative of upper greenschist to lower amphibolite grade metamorphism. The supracrustal rocks are intruded by a granodiorite of undetermined age covering the majority of the north portion of the property.

#### **English River Subprovince**

Metasedimentary rocks of the English River subprovince underlie the southern part of the Kwai North property. This unit includes psammitic to pelitic rocks that are variably recrystallized, strongly foliated and banded. Mineralogically the unit is fairly homogeneous; its mineral assemblage consists dominantly of quartz and biotite with minor feldspar. Garnet commonly occurs as a porphyroblast phase indicating amphibolite facies metamorphism. The crystals range in size from 1mm to 3cm. The modal proportions of quartz and biotite are variable, which is attributed to the mud content of the original sedimentary rock. Although sedimentary layering is not preserved, compositional banding defined by biotite content occurs at the decimetre to metre-scale and is interpreted to reflect a protolith consisting of interbedded mudstone and muddy sandstone. This is consistent with regional interpretations of the English River as a flyshoid greywacke succession.

The metasediment is intruded by pegmatite dykes that are dominantly tonalitic in composition, consisting of plagioclase, quartz and biotite. Accessory phases locally noted include garnet, beryl, and tourmaline. Lesser granitic pegmatite occurs in some portions of the claim area. It contains K-feldspar, plagioclase, quartz, biotite and muscovite. The dykes range from cm-wide stringers to small plutons several metres in diameter. They are consistently parallel to the main foliation in the rock but the degree to which the dykes are transposed is variable. Throughout most of the claim area pegmatite dykes are demonstrably infolded with deformed metasediment, describing tight, weakly asymmetrical fold wave trains. In high strain zones, dykes are commonly dismembered and boudinaged with fabric in the surrounding metasediment wrapping around the deformed dyke. At some localities, highly transposed dykes form regular banding to the extent that these portions of the unit may be characterized as metatexite.

#### Structure

The English River and Uchi subprovinces in the Property area are separated by the Pakwash Lake Fault, a major east-west trending fault that is interpreted to splay from the Sydney Lake Fault zone, located south of the property.

The Pakwash Lake Fault is tightly constrained by mapping, but fault rocks are rarely exposed, suggesting that along much of its length it is a narrow zone of deformation. It is interpreted to be roughly parallel to the steeply south dipping foliation fabric expressed in sedimentary rocks adjacent to the fault zone.

Outcrops within the deformation zone show a combination of brittle and ductile deformation features suggesting the fault had a protracted history of movement. The fault rocks typically show well developed C-S fabrics that indicate apparent dextral shear sense. The ductile fabrics are locally overprinted by annealed, fabric-parallel brittle faults and thin horizons of fault breccia that similarly show right-lateral strike-slip movement.

#### 7.3 Mineralization

The Kwai trench exposes strongly foliated granodiorite that is cut by several small quartz veins up to 10cm wide and 1m to 4m in length. The vein quartz is typically colourless to dark grey with brownish weathered surfaces. Two channel samples from the south and north ends of the Kwai trench contained 662 ppb Au and 468 ppb Au over 1m respectively (Render et al. 2010). The sample in the north consisted of foliated granodiorite cut by a fracture with minor secondary quartz occurring discontinuously along its length. In the south, the mineralized sample contained mostly foliated granodiorite with a small (<10cm wide) portion of vein material. 2.5km west of the Kwai trench, another small quartz vein hosted by granodiorite was sampled. This vein had minor disseminated pyrite and contained 243 ppb Au. Despite these findings, mineralization cannot be consistently associated with quartz veining in the granodiorite, since several other veins sampled in the Kwai area proved to be barren.

#### Figure 3. Regional Geology





#### Figure 4. Property Geology

## Item 8: Deposit Types

On their Kwai Property, Golden Goliath is focused on identifying and delineating Archean-aged orogenic gold deposits (Groves et al., 1998). Following Kerrich et al. (2000), orogenic gold deposits are typically associated with crustal-scale fault structures, although the most abundant gold mineralization is hosted by lower-order splays from these major structures. Deposition of gold is generally syn-kinematic, syn- to post-peak metamorphism and is largely restricted to the brittle-ductile transition zone. However, deposition over a much broader range of 200–650°C and 1–5 kbar has been demonstrated. Host rocks are highly variable, but typically include mafic and ultramafic volcanic rocks, banded iron formation, sedimentary rocks and rarely granitoids. Alteration mineral assemblages are dominated by quartz, carbonate, mica, albite, chlorite, pyrite, scheelite and tourmaline, although there is much inter-deposit variation.

#### Item 9: Exploration

Golden Goliath has not yet performed any exploration of its own. For a summary of previous exploration on the Property, see "Item 6: History". As of the writing of this Report the authors have not yet performed a Property visit due to extensive snow cover in the area. The Property visit will be conducted at the first available opportunity in the spring.

#### Item 10: Drilling

Golden Goliath has not yet performed any drilling of its own. For a summary of previous drilling on the Property, see "Item 6: History".

#### Item 11: Sample Preparation, Analysis and Security

Golden Goliath has not yet performed any work of its own and therefore has no sample prep, analysis and security protocols to report on.

#### Item 12: Data Verification

The data presented in this report has come primarily from the assessment files available at the Ontario Ministry of Energy, Northern Development and Mines. The authors can verify that the information has been presented accurately as reported in those files and reports.

There were no limitations placed on the Authors in conducting the verification of the data or the Property visit. Some of the data relied upon predates National

Instrument 43-101 and was therefore not completed by qualified persons. The authors are of the opinion that these data sets were adequate for the completion of the technical report.

#### Item 13: Mineral Processing and Metallurgical Testing

Golden Goliath has not yet done any mineral processing studies or metallurgical testing on the Property.

#### Item 14: Mineral Resource

There is no mineral resource defined on the Property.

Items 15 to 22 are for use on Advanced Properties, and since Golden Goliath's Kwai Property does not meet the criteria for an Advanced Properties, these items are not included in this Report.

#### Item 23: Adjacent Properties

The Dixie Halo Property of BTU Metals Corp. lies immediately north of Golden Goliath's Property; the following is a summary from BTU's 43-101 report dated December 5, 2018 and available on BTU's website (https://www.btumetals.com).

The Property lies to the southeast of the main Red Lake gold mining camp in a "...broadly east-west trending belt of mafic to felsic meta-volcanics and associated metasediments, which are infolded between a series of granulitic batholiths" (Fingler and Middleton, 2003, p.16). The favourable geologic package of rocks containing the mineralization on the Dixie property appears to trend southwesterly across the Dixie Halo South Property. This variably metamorphosed package of rocks consists of bedded iron formation units interbedded with volcanic horizons.

The general geologic trend on the Property is roughly 045 to 070 degrees. A series of faults in the north-central section of the Property has been interpreted from local mapping and property-wide geophysics, trending roughly northwest-southeast. These faults have been interpreted to be offsetting a mineralized trend crossing into the Property from the north.

Narrow iron formations manifest throughout the mapped area on the Property. Their extent is largely inferred from localized outcrops, but two bands extend southwesterly across the central portion of the Dixie Halo South property, interbedded with varied volcanics and sediments. The north-central portion of the Dixie Halo South Property is underlain by an area of felsic intrusives. Similarly the area along the western side of the Property is dominantly underlain by mafic and felsic metavolcanics, which have been subsequently intruded by felsic intrusives. Intrusives occupying the western portion of the property are characterized as foliated tonalites and gneissic tonalites.

The Dixie Halo South property holds considerable potential for the occurrence of both gold deposits and volcanogenic massive sulphide (VMS) deposits. Reserve drilling in the current program of Great Bear Mining has been directed towards the eastern projection of the previously outlined mineralized zone. This renewed activity impels exploration activity on the Dixie Halo South property holdings.

The Dixie Halo South area has been the location of numerous exploration programs since the 1960's. Early exploration included soil, lake water and lake sediment sampling, geophysical surveys, and diamond drilling. More recently, airborne geophysics (HLEM) interpretation, surface sampling, and mapping have been carried out on the Property. The Property is still at a relatively early stage of exploration, with several targets of interest across the Property still underexplored.

The authors have been unable to verify this information, and the information is not necessarily indicative of the mineralization that is the subject of the technical report.

The Dixie Project of Great Bear Resources is located approximately 10 km north of the Kwai Trench on Golden Goliath's Property, or abouth 8 km north of the northeast corner of the Property. The following is summarized from Great Bear's website: <u>https://greatbearresources.ca/projects/red-lake-camp-ontario/dixie/</u>.

In July 2017, the company entered into a purchase agreement with Newmont Mining to acquire Newmont's 33% stake in the project for \$80,000 in total cash payments over 4 years.

In September 2017, the company acquired an additional 26 minerals claims and today the Dixie property covers 9,140 hectares.

# In November 2018 Great Bear completed the purchase of 100% royalty -free interest in the Dixie Gold Project, Red Lake Ontario.

At the Dixie Project, gold mineralization is confirmed along a 2.3 km strike of a 10 km target. The system at Dixie has a high-grade gold zone that includes recent intervals of 16.35 metres of 26.91 g/t gold and 7.00 metres of 68.76 g/t gold and is open along strike and at depth.

The above results prompted a \$6 million investment by Rob McEwen and McEwen Mining, as part of a \$10 million financing completed in September 2018. Combined with historical drilling, over 198 drill holes for 30,000 metres have

been completed at Dixie. In March of 2018 Great Bear commenced a 10,000 metre drill program, of which results from 5,000 metres in 23 holes had been reported as of August with an additional 5,000 metres underway.

Dixie is a typical Archean mesothermal gold vein system located approximately 20-25 km from significant mines that share the same geological and metallogenic characteristics (Red Lake, Madsen and Rahill-Bonanza). Dixie hosts a series of mafic-felsic sequences within the Red Lake Greenstone Belt. Significant folding and thinning of the greenstone lends itself to enriched zones of gold mineralization.

The authors have been unable to verify this information, and the information is not necessarily indicative of the mineralization that is the subject of the technical report.

#### Item 24: Other Relevant Data and Information

The authors are unaware of any further data or relevant information that could be considered of any practical use in this report. The authors are not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.

#### Item 25: Interpretation and Conclusions

The previous work on the Kwai Property has indicated the presence of elevated, or anomalous, gold values within a foliated granodiorite with quartz veins and fractures, +/- pyrite mineralization, with the Kwai Showing being the main gold occurrence. Two channel samples from the south and north ends of the trench at the Kwai Showing contained anomalous gold values (Render et al. 2010), however, as Laurentian's 2010 report on this trenching did not include the assays or certificates, the authors cannot discuss these figures in detail. This mineralization is located approximately 1.6 km north of the interpreted location of the Pakwash Lake Fault, a major east-west trending fault that is interpreted to splay from the Sydney Lake Fault zone, located south of the property. This area should be the main focus of future exploration by Golden Goliath.

As this Property is still a grassroots Property, with little previous exploration, there is always a substantial risk that the work proposed may not result in advancing the Property under current market conditions.

#### Item 26: Recommendations

It is recommended that further mapping and soil sampling be conducted in the area of the Kwai Trench and south to the area of the Pakwash Lake Fault. Target areas identified by the previous and new sampling should be followed up by mechanical stripping, washing, mapping and sampling. The Kwai Trench should also be extended to the south if possible, since Laurentian's high assay of 662 ppb from 2010 was taken from the south end of the trench.

An Induced Polarization ("IP") survey should also be conducted over the area from norh of the Kwai Trench to south of the interpreted location of the Pakwash Lake Fault in order to determine the presence of any conductors that could represent sulphide mineralization. An initial IP survey covering this area could consist of 5 lines of about 2.5 km length.

If results warrant, selected targets should be drill tested with wide-spaced shallow holes to test for large-scale alteration and/or mineralization.

A budget of **\$141,650** is recommended to carry out the initial recommended work.

## 26.1: Proposed Budget

Total Pro	posed Budget	\$141,650
Contingen	ncies	<u>10,000</u>
Reports a	nd Maps	
	Polarization Survey 5 km @ \$1500/km	22,500
Line Cuttir 15	ng 6 km @ \$900/km	
Assays 40	00 @ \$35/sample	
	ation ick, gas · days @ \$125/day	1,750
Room and 2 p	d Board people 14 days @ \$300/day	4,200
Pump and 14	d Hose Rental days @ \$200/day	2,800
Ĩ g	Mapping and Sampling geologist for 14 days @ \$700/day assistant for 14 days @ \$450/day	9,800 6,300
	al Stripping 0 hours @ \$125/hour	
	ation ıck, gas days @ \$125/day	1,750
2 t	hemical Sampling technicians for 14 days @ \$300/day days room and board for 2 @ 300/day	
	ation ick, gas days @ \$125/day	1,750
Ge Te	Prospecting and Sampling eologist for 14 days @ \$700/day echnician/helper for 14 days @ \$300/day days room and board for 2 @ 300/day	

#### Item 27: References

- **Note:** Notations listed in the references below in the format "AFRI 20011328" refer to assessment files archived with the Ontario Ministry of Energy, Northern Development and Mines on the MNDM website (www.geologyontario.mndm.gov.on.ca/).
- Bethune, K., Helmstaedt, H., and McNicoll, V.M., 2000, U-Pb geochronology bearing on the timing and nature of deformation along the Miniss River Fault; in Harrap, R.M., and H. Helmstaedt, H., eds., Western Superior Transect Seventh Annual Workshop: Lithopropbe Report 77, p 8-12.
- Chiang, M., and Labrenz, D., 2013. Goldpines North Property Fall 2012 Exploration Report, Ear Falls Area, Ontario, Canada; *prepared for* Laurentian Goldfields Ltd. AFRI 20012211.
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- Groves, D. I., Goldfarb, R. J., Gebre-Mariam, M., Hagemann, S. G., and Robert, F., 1998. Orogenic gold deposits: A proposed classification in the context of their crustal distribution and relationship to other gold deposit types: Ore Geology Reviews, v. 13, p. 7-27.
- Hrabi, B., and Cruden, A. R., 2001, Three-dimensional geometry of the English River subprovince in the Separation Lake-Longlegged Lake area; in Harrap, R.M., and H. Helmstaedt, H., eds., Western Superior Transect Seventh Annual Workshop: Lithopropbe Report 80, Lithoprobe Secretariat, University of British Columbia, p146-148.
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- Kerrich, R., Goldfarb, R. J., Groves, D. I., and Garwin, S., 2000. The geodynamics of world-class gold deposits: Characteristics, space-time distribution, and origins: Reviews in Economic Geology, v. 13, p. 501-551.
- Percival, J.A., 2007, Geology and metallogeny of the Superior Province, Canada, in Goodfellow, W.D., ed., Mineral Deposits of Canada: A Synthesis of Major Deposit Types, District Metallogeny, the Evolution of the Geological

Provinces, and Exploration Methods; Geological Association of Canada, Mineral Deposits Division, Special Publication No. 5, p. 903-928.

- Render, M., Meade, S.R., Lengyel, J.W.P., 2010. Goldpines North Property, Ear Falls Area, Ontario, Canada; *prepared for* Laurentian Goldfields Ltd. AFRI 20009807.
- Render, M., Meade, S.R., Lengyel, J.W.P., 2011. Goldpines North Property Drilling Report, Ear Falls Area, Ontario, Canada; *prepared for* Laurentian Goldfields Ltd. AFRI 20011328.
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- Sanborn-Barrie, M., Skulski, T., and Parker, J., 2001. 300 m.y. of tectonic history recorded by the Red Lake greenstone belt, Ontario: Current Research 2001-C19, p. 32.
- Stone, D., 1981, The Sydney Lake fault zone in Ontario and Manitoba, Canada. Ph.D. thesis: University of Toronto, Toronto Canada.
- Stott, G. M., Corfu, F., Breaks, F. W., and Thurston, P. C., 1989. Multiple orogenesis in northwestern Superior Province: Geological Association of Canada, 1989, Abstracts, p. A56.

#### Item 28: Certificate of Qualifications

#### **Desmond Cullen**

49 Husu Rd., R.R. #2 Kaministiquia, Ontario Canada, P0T 1X0 Telephone: 807-633-6960, Fax: 807-622-4156 Email: desmond63@hotmail.com

#### **CERTIFICATE OF QUALIFIED PERSON**

I, Desmond Cullen, P.Geo. (#0164) do hereby certify that:

- 1. I am a consulting Professional Geologist living at 49 Husu Rd., R.R.#2, Kaministiquia, Ontario
- 2. I graduated with the degree of Honours Bachelor of Science (Geology) from Lakehead University, Thunder Bay, in 1988
- 3. "Technical Report" refers to the report titled "Technical Report on the Kwai Property, Red Lake Mining Division, Northwestern Ontario" dated March 1st, 2019.
- 4. I am a registered Professional Geoscientist with the Association of Professional Geoscientists of Ontario (#0164) and a member Ontario Prospectors Association.
- 5. I have worked as a Geologist for 30 years since my graduation from university.
- 6. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements as a Qualified Person for the purposes of NI 43-101.
- 7. I have worked extensively in Northwestern Ontario, and also Indonesia, China and Mongolia since graduating University.
- 8. I have not visited the Kwai Property.
- 9. I am responsible for the complete Technical Report, except for the Property visit..
- 10. I am independent of the party or parties (the "issuer") involved in the transaction for which the Technical Report is required, other than providing consulting services, and in the application of all of the tests in section 1.5 of NI 43-101.
- 11. I have had no prior involvement with the mineral Property that forms the subject of this Technical Report.

January 2019 29 Clark Exploration Consulting

- 12. I have read NI-43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that Instrument and Form.
- 13. As of the date of this certificate, and to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 1<sup>st</sup> day of March, 2019.

#### SIGNED

"Desmond Cullen"

Desmond Cullen, P.Geo.

#### J. Garry Clark 941 Cobalt Crescent Thunder Bay, Ontario Canada, P7B 5Z4 Telephone: 807-622-3284, Fax: 807-622-4156

#### CERTIFICATE OF QUALIFIED PERSON

I, J. Garry Clark, P. Geo. (#0245), do hereby certify that:

1. I am the owner of Clark Expl. Consulting Inc. with an office at 941 Cobalt Crescent, Thunder Bay, Ontario.

2. I graduated with the degree of Honours Bachelor of Science (Geology) from Lakehead University, Thunder Bay, in 1983. I have written qualifying gold property reports for companies such as Discovery Harbour and Rainy River Resources both companies having gold potential on their properties.

3. "Technical Report" refers to the report titled " Technical Report on the Kwai Property, Red Lake Mining Division, Northwestern Ontario" dated March 1st, 2019.

4. I am a registered Professional Geoscientist with the Association of Professional Geoscientists of Ontario (#0245).

5. I have worked as a Geologist for 35 years since my graduation from university.

6. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements as a Qualified Person for the purposes of NI 43-101 and am independent of the vendor of the property.

7. I am responsible for the complete Technical Report, except for the Property visit..

8. I am independent of the party or parties (the "issuer") involved in the transaction for which the Technical Report is required and in the application of all requirements in Section 1.5 of N.I. 43-101.

9. I have had no other prior involvement with the mineral Property that forms the subject of this Technical Report.

10. I have read N.I. 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that Instrument and Form.

11. As of the date of this certificate, and to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 1<sup>st</sup> day of March, 2019.

SIGNED

"J. Garry Clark"

J. Garry Clark, P.Geo.

#### Richard Greenwood 29 Cochenour Crescent Cochenour, Ontario Canada, POV 1L0 Telephone: 807-662-5174

I, Richard Greenwood, P. Geo (#2390), do hereby certify that:

- 1. I am an employee of Rimini Exploration and Consulting Ltd. based in Red Lake, Ontario.
- 2. I Graduated with the degree of Honours Bachelor of Science (Earth Science) from Memorial University of Newfoundland and Labrador, St. John's, in 2004.
- 3. I am a registered Professional Geoscientist with the Association of Professional Geoscientists of Ontario (#2390).
- 4. I have worked as a Geologist for 15 years since my graduation from university.
- I am responsible for completing the property visit completed on February 28<sup>th</sup>, 2019. The visit was completed by snow machine as roads to the claim group were not accessible by vehicle due to snow. Upon arriving on the claim group, the snow cover was too thick to conduct any visual inspection of the property at the time. GPS coordinates and photos of these locations were provided for this visit.
- 6. I am independent of the party or parties (the "issuer") involved in the transaction for which the Technical Report is required, other than providing consulting services, and in the application of all of the tests in section 1.5 of NI 43-101.
- 7. I have had no prior involvement with the mineral Property that forms the subject of this Technical Report.

Dated this 1<sup>st</sup> day of March, 2019.

#### SIGNED

"Richard Greenwood"

Richard Greenwood, P.Geo.

CLAIM #	TITLE TYPE	ISSUE_DATE	ANNIVERSARY
550975	Multi-cell Mining Claim	2019-06-03	2021-05-29
550494	Single Cell Mining Claim	2019-05-29	2021-05-29
550495	Single Cell Mining Claim	2019-05-29	2021-05-29
550496	Single Cell Mining Claim	2019-05-29	2021-05-29
550497	Single Cell Mining Claim	2019-05-29	2021-05-29
543042	Single Cell Mining Claim	2019-02-21	2021-02-21
543043	Single Cell Mining Claim	2019-02-21	2021-02-21
543044	Single Cell Mining Claim	2019-02-21	2021-02-21
543045	Single Cell Mining Claim	2019-02-21	2021-02-21
543046	Single Cell Mining Claim	2019-02-21	2021-02-21
543047	Single Cell Mining Claim	2019-02-21	2021-02-21
543048	Single Cell Mining Claim	2019-02-21	2021-02-21
543034	Single Cell Mining Claim	2019-02-21	2021-02-21
543035	Single Cell Mining Claim	2019-02-21	2021-02-21
543033	Single Cell Mining Claim	2019-02-21	2021-02-21
543036	Single Cell Mining Claim	2019-02-21	2021-02-21
543037	Single Cell Mining Claim	2019-02-21	2021-02-21
543038	Single Cell Mining Claim	2019-02-21	2021-02-21
543039	Single Cell Mining Claim	2019-02-21	2021-02-21
543040	Single Cell Mining Claim	2019-02-21	2021-02-21
543041	Single Cell Mining Claim 2019-		2021-02-21
543057	Single Cell Mining Claim	2019-02-21	2021-02-21
543058	Single Cell Mining Claim	2019-02-21	2021-02-21
543059	Single Cell Mining Claim	-	
543060	Single Cell Mining Claim	2019-02-21	2021-02-21
543061	Single Cell Mining Claim	2019-02-21	2021-02-21
543062	Single Cell Mining Claim	2019-02-21	2021-02-21
543049	Single Cell Mining Claim	2019-02-21	2021-02-21
543050	Single Cell Mining Claim	2019-02-21	2021-02-21
543051	Single Cell Mining Claim	2019-02-21	2021-02-21
543052	Single Cell Mining Claim	2019-02-21	2021-02-21
543053	Single Cell Mining Claim	2019-02-21	2021-02-21
543056	Single Cell Mining Claim	2019-02-21	2021-02-21
543054	Single Cell Mining Claim	2019-02-21	2021-02-21
543055	Single Cell Mining Claim	2019-02-21	2021-02-21

KWAI CLAIMS ADDED TO PROPERTY SINCE MAR 1 2019 SUBMISSION OF THE 43-101

#### SLF CLAIMS ADDED TO PROPERTY SINCE SUBMISSION OF MAR 1, 2019 43-101

CLAIM #	TENURE TYPE	ISSUE DATE	ANNIVERSARY
534361	Multi-Cell Mining Claim	2018-11-07	2020-11-07
534362	Multi-Cell Mining Claim	2018-11-07	2020-11-07
534363	Multi-Cell Mining Claim	2018-11-07	2020-11-07