

**Technical Report  
On the  
SLF Property  
Red Lake Mining Division  
Northwestern Ontario**

**Prepared for  
Golden Goliath Resources Ltd.**

Prepared by:  
**D. Cullen, P.Geol. and J. Garry Clark, P.Geol.**  
Clark Exploration Consulting  
941 Cobalt Crescent  
Thunder Bay, ON  
P7B 5Z4

**January 15th, 2019**

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**DATE and SIGNATURE PAGE**

This report titled “Technical Report on the SLF Property, Red Lake Mining Division, Northwestern Ontario”, and dated January 15th, 2019 was prepared and signed by the following authors:

Dated at Thunder Bay, Ontario  
January 15th, 2019

“Desmond Cullen”

“J. Garry Clark”

Desmond Cullen, P.Geol.

J. Garry Clark, P.Geol.

**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 SLF 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 Property is located about 35 km south of the municipality of Red Lake, Ontario; gold was first discovered in the Red Lake area in the mid 1920s and by the mid 1930s 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.

Golden Goliath's SLF Property is located in the Cabin Bay and Longlegged Lake Areas of the Red Lake Mining Division in northwestern Ontario, approximately 35 km south of the community of Red Lake. The UTM co-ordinates for the approximate centre of the claim block are 452000 E, 5614000 N (NAD 83, Zone 15).

Golden Goliath's SLF Property consists of 8 multi-cell mining claims, totalling 69 cells under MLAS, for a total area of 1412 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 \$67,200 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 SLF Property lies within the Superior Province, just south of 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 of the English River subprovince.

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.

Work to date has outlined anomalous gold features on Golden Goliath's SLF Property, primarily through MMI soil geochemistry and lake sediment geochemistry in Pakwash Lake. These anomalies in an underexplored area are the first steps in looking for Eleonore-type mineralization near the subprovince boundary.

As there appears to be very little outcrop on the SLF Property, it is recommended that Golden Goliath initially conduct a program of B-horizon soil geochemical sampling across the Property on lines at 100 metre spacing running north-south, and sample stations every 25 metres. Samples should be analyzed by fire assay for gold and a multi-element ICP analysis.

Research should also be done into the local glaciation history to determine what direction the glacial cover in the area came from in order to determine the location of the bedrock source for gold anomalies in the area. The authors assume that this type of work has already been done for the general Red Lake area, given its significance, and the information should be readily available.

Ground geophysics consisting of IP and or VLF-EM should also be conducted over the claims to help define sulphide mineralization associated with the Sydney Lake Fault and related splays along the length of the Property. The grid lines should be run north-south in order to survey across the strike of the fault.

An initial budget of \$30,125 is proposed to do the soil geochemistry sampling and analysis program.

**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 SLF 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 SLF Property lies within the Superior Province, just south of 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 of the English River subprovince.

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Work to date has outlined anomalous gold features on Golden Goliath's SLF Property, primarily through MMI soil geochemistry and lake sediment geochemistry in Pakwash Lake. These anomalies in an underexplored area are the first steps in looking for Eleonore-type mineralization near the subprovince boundary.

The Property is located about 35 km south of the municipality of Red Lake, Ontario; gold was first discovered in the Red Lake area in the mid 1920s and by the mid 1930s 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**

The authors have relied on previous exploration reports as referenced in Section 27.0 References. These reports may or may not have been completed by qualified persons as defined by NI 43-101. After reviewing the reports and associated data the author is satisfied the data presented is accurate.

For the purposes of this report the author has relied on ownership information provided by Golden Goliath, as well as claim information available on the web site of the Ontario Ministry of Northern Development and Mines. 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.

#### Item 4: Property Description and Location

Golden Goliath's SLF Property is located in the Cabin Bay and Longlegged Lake Areas of the Red Lake Mining Division in northwestern Ontario, approximately 35 km south of the community of Red Lake. The UTM co-ordinates for the approximate centre of the claim block are 452000 E, 5614000 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 SLF Property consists of 8 multi-cell mining claims, totalling 69 cells under MLAS, for a total area of 1412 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 \$67,200 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 Ontario Mining Act requires Exploration Permit or Plans for exploration on Crown Lands. The permit and plans are obtained from the Ministry of Energy, Northern Development and Mines (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.



**Table 1. SLF Property Claims**

<b>Claim No.</b>	<b>Number of Cells</b>	<b>Township/Area</b>	<b>Anniversary Date</b>	<b>Work Required</b>
531542	10	Longlegged Lake Area	Sept 18, 2020	\$4,000
531543	20	Cabin Bay Area	Sept 18, 2020	\$8,000
531544	10	Cabin Bay Area	Sept 18, 2020	\$4,000
531545	8	Cabin Bay Area	Sept 18, 2020	\$3,200
531546	7	Cabin Bay Area	Sept 18, 2020	\$2,800
531549	6	Cabin Bay Area	Sept 18, 2020	\$2,400
531556	3	Longlegged Lake Area	Sept 18, 2020	\$1,200
531557	5	Cabin Bay Area	Sept 18, 2020	\$2,000
<b>Total</b>	<b>69</b>			<b>\$27,600</b>

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

The Property is located approximately 35 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) east-northeast 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 can be accessed from Highway 804, a major logging road off Highway 105 approximately 80 km south of Red Lake (or about 2 km south of Ear Falls).

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.

The topography in the area is gentle to moderate with elevations ranging from 360 to about 430 m. Topography is dominated by glacially scoured southwest-

trending 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.

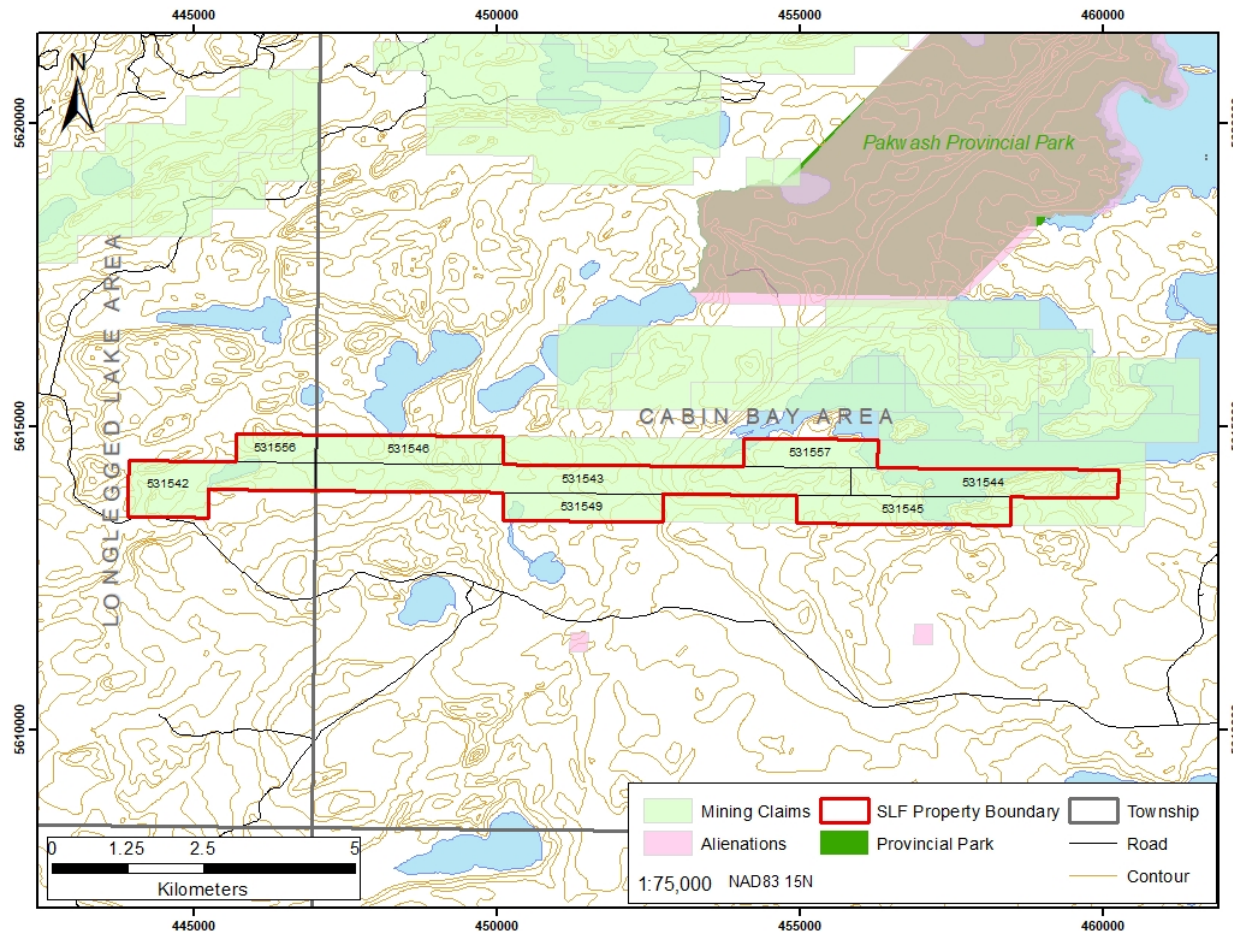
Vegetation consists of thick second growth boreal forest composed of black spruce, jack pine, poplar, and birch.

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



Figure 2. SLF Property Claims



**Item 6: History**

The SLF 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/](http://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.

2009 - 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 (using the mobile metal ion method) 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.

The West Leg 1 grid was 9.2 km x 2 km and consisted of 482 collected samples on the south shore of Pakwash Lake (not all on Golden Goliath's Property, but straddling it). It was designed to delineate Au responses related to the Sydney Lake Fault Zone. In general the grid had discontinuous Au anomalism; 40 samples had values greater than 10 Au RR defining two semicoherent anomalies. The eastern-most of the two anomalies trends northwest and roughly follows a second order fault interpreted from the magnetics.

2011: Laurentian conducted further MMI sampling in order to refine the targets for drilling. Mead (2012) stated that "The largest and densest of the anomalies is located on the south shore of Cabin Bay near the inferred intersection between the Cabin Bay trend and the Sydney Lake Fault. The anomaly consists of 22 samples with Au response ratios of 10 or greater and shows marked coincidence with a narrow magnetic low. This anomaly was tested by drill hole GPS-11-001."

From GPS-11-001, 116 samples were analyzed with an additional 8 samples submitted for quality control. All samples with the exception of one were found to contain gold concentrations below the limit of detection for the analysis (<0.005 ppm). The single anomalous sample was taken from 299m to 300m and was found to contain 0.057 ppm Au (57 ppb).

## 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 SLF Property lies within the Superior Province, just south of 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 of the English River subprovince.

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 SLF 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<sup>0</sup>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, turbiditic greywackes. The turbidites are interpreted to be syn-orogenic flysch 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 brittle-ductile 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. (2010).

### English River Subprovince

Metasedimentary rocks of the English River subprovince underlie the SLF 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 meter-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 meters 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.

Occurring rarely within the metasedimentary succession are thin intervals of amphibolite. They are strongly foliated and banded, comprising apparently stratiform horizons within the sediment. Contacts are diffused, possibly gradational suggesting that the strata are metamorphosed layers of mafic volcanoclastic sediment. Although the equivalent sedimentary successions in the Uchi subprovince to the north are commonly interbedded with volcanic material, these amphibolites are a minor lithology in the English River subprovince.

Amphibolitized mafic dykes occur throughout the English River subprovince. They are typically less than 30cm in thickness and are highly transposed into the main foliation. The dykes are commonly preserved as attenuated and dismembered fold hinges.

The foliated metasedimentary rocks of the English River subprovince are deformed by a pervasive fold system. The folds demonstrably deform all fabric elements in the succession including pegmatite dykes; it is therefore correlated to the regional F2 fold system defined by Hrabí and Cruden (2006).

In the SLF area, folding is observed on the Pakwash Lakeshore where it is characterized by east-west trending, moderately inclined, weakly asymmetrical, north-verging fold wave trains.

### **Sydney Lake Fault Zone**

In the Goldpines South property the Sydney Lake Fault (SLF) is expressed as a wide zone of brittle-ductile deformation that is mappable along the southern shore of Pakwash Lake. Metasediment and pegmatite within the fault zone have well-developed steeply south dipping foliation fabrics indicative of shear deformation. Unfortunately, these lithologies rarely show strong linear fabrics and many polished outcrops do not provide three-dimensional exposure, so most shear-sense indicators remain ambiguous. Apparent shear-sense is however, consistently dextral, in keeping with interpretations of the regional displacement on the SLFZ (Stone, 1981).

Ductile deformation features and fabric development in the metasediment are characterized by rotated garnet porphyroblasts with sigmoidal pressure solution tails. C-S fabrics are locally well-developed within the fault zone, but gradually



lose expression toward the northern boundary of the zone where only a weak crenulation cleavage is formed.

Pegmatite dykes in the fault zone are boudinaged, forming augen with asymmetrical tails indicating rotation. Smaller dykes are completely dismembered forming protomylonitic textures with rotated feldspar crystals preserved in a strongly foliated fine-grained matrix. Internally, coarse-grained feldspar-dominated pegmatite dykes have crudely-developed, anastomosing cleavage. In more medium grained tonalite, large feldspar grains are rotated defining a C-S fabric, with well-developed R-shears.

Brittle to brittle-ductile deformation features also occur within the Sydney Lake fault zone. On the southern Pakwash shoreline, fractures annealed by fine-grained silica and tourmaline offset the main foliation and locally form foliation-parallel detachments. These features may be attributed to a later phase of movement on the fault zone, but the sense of movement indicated by these structures is consistent with the right-lateral shear sense defined in ductile fabrics. In the eastern portion of the property the SLFZ is exposed in a roadside outcrop on Highway 105. At this locality, metasedimentary rocks have well-developed, steeply south-dipping right-lateral C-S fabrics that are overprinted by brittle-ductile features. Fine seams of quartz-tourmaline along foliation planes form detachment surfaces, locally with thin horizons of annealed fault breccia or small-scale Riedel shears.

### **7.3 Mineralization**

The work done on the Property to date has uncovered very little outcrop, and no visible sulphide or gold mineralization. The one anomalous gold assay from hole GPS-11-001 was from 299.0 to 300.0 m, and was logged as a wacke from 296.00 to 305.90 m, with tonalite on each side of this interval. No sulphides were noted in the interval.

Figure 3. Regional Geology

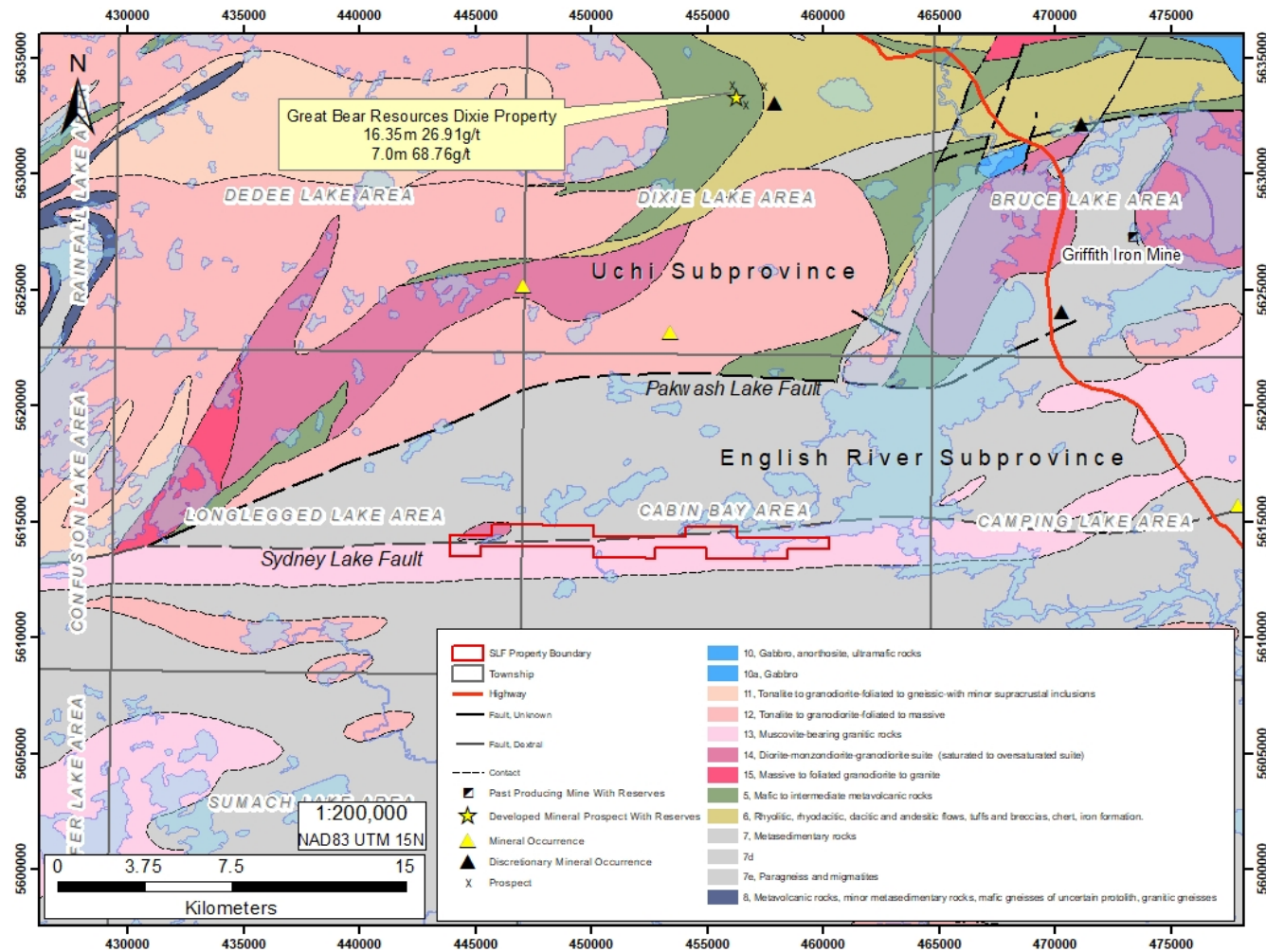
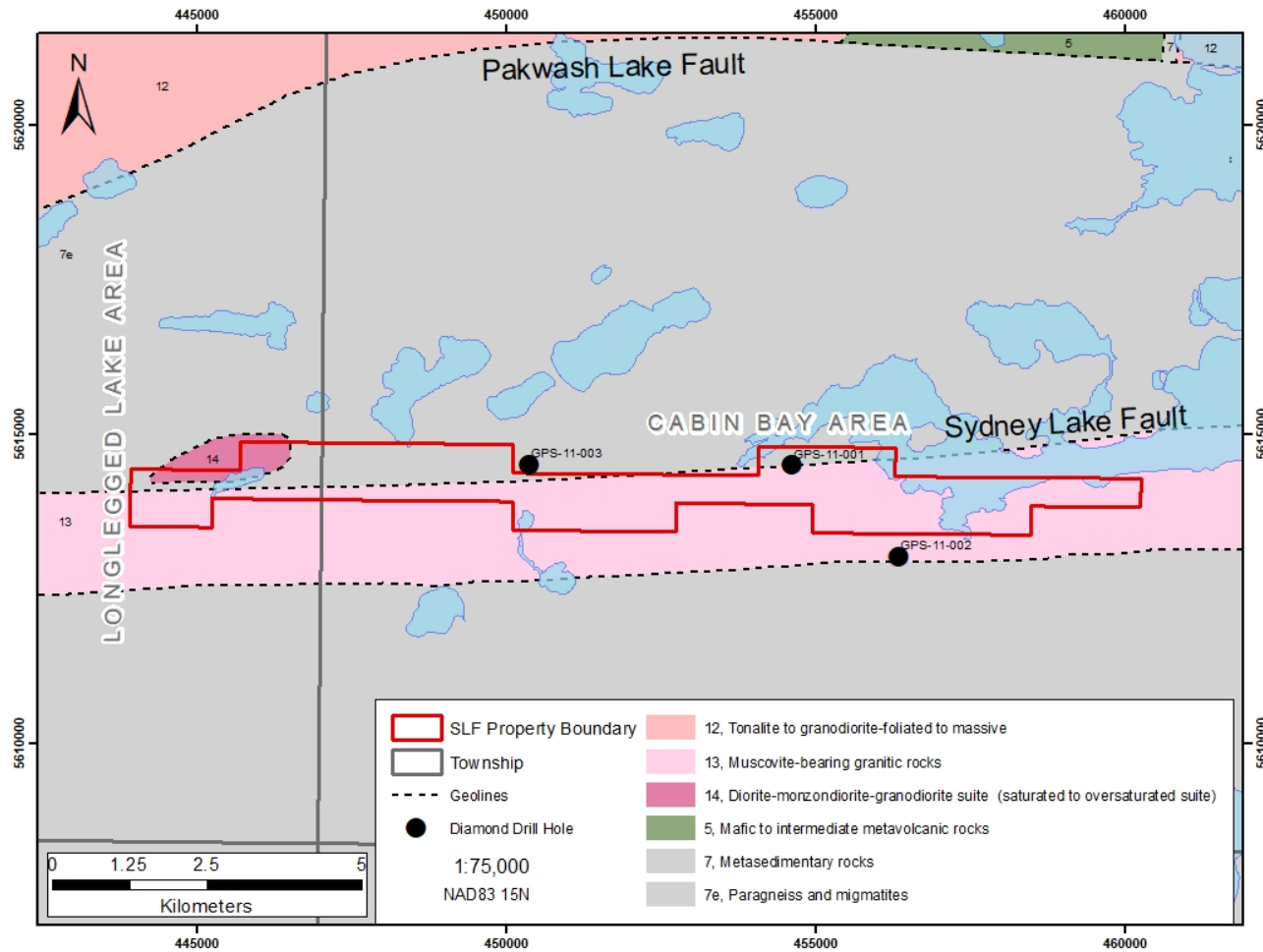


Figure 4. Property Geology



**Item 8: Deposit Types**

On their SLF 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”.

**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.

**Item 15: Mineral Reserve Estimates**

Not applicable.

**Item 16: Mining Methods**

Not applicable.

**Item 18: Project Infrastructure**

Not applicable.

**Item 19: Market Studies and Contracts**

Not applicable.

**Item 20: Environmental Studies, Permitting and Social or Community Impact**

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.

**Item 21: Capital and Operating Costs**

Not applicable.

**Item 22: Economic Analysis**

Not applicable.

**Item 23: Adjacent Properties**

Not applicable.

**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 author is 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**

MMI sampling by Laurentian in the area of Golden Goliath's Property resulted in a strong gold anomaly on the Property. Mead (2012) stated that "The largest and densest of the anomalies is located on the south shore of Cabin Bay near the inferred intersection between the Cabin Bay trend and the Sydney Lake Fault. The anomaly consists of 22 samples with Au response ratios of 10 or greater and shows marked coincidence with a narrow magnetic low. This anomaly was tested by drill hole GPS-11-001."

In Laurentian's diamond drill hole GPS-11-001, Au concentrations are below detection throughout most of the drill hole where it transects a magnetic low that is characterized by MMI soil Au responses of 10 or lower. The one anomalous sample assayed from the drill hole occurs at the margin of a magnetic high that is coincident with slightly greater Au response ratios in soil. Although this correlation is at best tenuous, it may indicate that relative abundances of gold in bedrock have some expression in the MMI survey, at least locally (Meade 2012).

The accepted concept of MMI analysis maintains that a sample containing an anomalous concentration of gold should be directly underlain by an enriched bedrock source. This has been demonstrated not to be the case in every instance by the 2011 drill program; drill testing of MMI soil anomalies failed to define a clear bedrock source for the gold anomalies (Meade 2012).

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.

Laurentian's work to date has outlined anomalous gold features on Golden Goliath's SLF Property, primarily through MMI soil geochemistry and lake sediment geochemistry in Pakwash Lake. These anomalies in an underexplored area are the first steps in looking for Eleonore-type mineralization near the subprovince boundary.

**Item 26: Recommendations**

As there appears to be very little outcrop on the SLF Property, it is recommended that Golden Goliath initially conduct a program of B-horizon soil geochemical sampling across the Property on lines at 100 metre spacing running north-south, and sample stations every 25 metres. Samples should be analyzed by fire assay for gold and a multi-element ICP analysis.

Research should also be done into the local glaciation history to determine what direction the glacial cover in the area came from in order to determine the location of the bedrock source for gold anomalies in the area. The authors assume that this type of work has already been done for the general Red Lake area, given its significance, and the information should be readily available.

Ground geophysics consisting of IP and or VLF-EM should also be conducted over the claims to help define sulphide mineralization associated with the Sydney Lake Fault and related splays along the length of the Property. The grid lines should be run north-south in order to survey across the strike of the fault.

The budget proposed below is for the initial soil geochemistry program.

**26.1: Proposed Budget**

Soil Geochemical Sampling	
2 technicians for 15 days @\$300/day .....	9,000
15 days room and board for 2 @300/day.....	4,500
Transportation	
truck, gas	
15 days @ \$125/day .....	1,875
Supplies .....	1,000
Assaying, Analyses (275 samples @ \$25) .....	8,250
Report and Maps .....	3,500
Contingency .....	2,000
<b>Total Proposed Budget</b>	<b>\$30,125</b>



**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 Northern Development and Mines on the MNDM website ([www.geologyontario.mndm.gov.on.ca/](http://www.geologyontario.mndm.gov.on.ca/)).

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**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 SLF Property, Red Lake Mining Division, Northwestern Ontario" dated January 15th, 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 SLF Property.
9. I have reviewed and edited the entire Technical Report.
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.
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 15<sup>th</sup> day of January, 2019.

**SIGNED**

“Desmond Cullen”

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Desmond Cullen, P.Geol.

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 SLF Property, Red Lake Mining Division, Northwestern Ontario" dated January 15th, 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 review and editing of the Technical Report.
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 15<sup>th</sup> day of January, 2019.

SIGNED

“J. Garry Clark”

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J. Garry Clark, P.Geol.