

# 7 December 2022

# Lexington Gold Ltd

("Lexington Gold" or the "Company")

# **Operational Update**

Lexington Gold (AIM: LEX), the gold exploration and development company with projects in North and South Carolina, USA, is pleased to announce an operational update in respect of its four gold projects in the USA.

# Operational Highlights:

# Jennings-Pioneer Project:

- A soil sampling programme has commenced at Jennings-Pioneer targeting gold, silver and base metals through multi-element assaying
- Approximately 500 soil samples are set to be collected on a 30m by 123m grid spacing
- Soil and surface sampling as well as concurrent surface mapping is planned in order to verify and supplement historical sampling conducted at the deposit
- The sampling programme, in conjunction with the Company's existing database and previous helicopter borne VTEM results, will be utilised to generate drill targets and drill collar positions
- The sampling campaign is planned to be completed during the remainder of 2022 with the assay results expected to be returned in early Q1 2023

# Argo Project:

- A surface trenching and sampling campaign at Argo is set to commence this month, comprising 14 trench lines with a total combined length of approximately 1,000m
- Trenches will be dug by an excavator and approximately 500 composite channel samples of 2m each will be collected and sent for assaying
- The trenching and sampling campaign will commence as soon as the abovementioned soil and surface sampling and mapping programme at Jennings-Pioneer has been completed

# Jones-Keystone-Loflin ("JKL") Project:

- The geological model has been further refined as part of the recently completed JORC resource upgrade to 210,800 oz of contained gold at JKL
- A review of the updated model in conjunction with the detail geophysics conducted by the Company has highlighted the significant expansion potential for the project and surrounding areas
- Loflin, Loflin South and Jones-Keystone remain open at depth as well as in most directions
- The next drilling campaign will focus on the areas for potential expansion as well as untested anomalies as highlighted in Figures 4 and 5 below

# Carolina Belle Project:

• Following completion of the Company's maiden 2021 drilling campaign at Carolina Belle, the Company has reviewed and updated its geological model for the project



- Drilling during 2021 at Carolina Belle resulted in multiple intersections of 1 g/t Au or more
- The maiden drilling campaign also improved delineation of the historic third party mining operations and the nature of the ore-zones targeted by historic mining operations
- Further to the Company's extensive review of the project a Phase II drilling campaign is currently being prepared

# Bernard Olivier, Lexington Gold's CEO, commented:

"We are excited to report that we have started our soil and surface sampling programme at Jennings-Pioneer. We will also, in a matter of weeks, commence trenching and sampling work at our Argo project.

"Following our recent successful upgrade of the JORC Resources at our JKL Project to 210,800 of contained gold ounces, we have also conducted extensive geological modelling and review of the project and its growth potential. The resource model in conjunction with aerial geophysics, geological mapping, rock sampling, soil sampling and LiDAR have identified significant areas of potential expansion for the current JKL deposits as well as successfully identifying additional exploration targets in the vicinity that could lead to additional expansion of the JKL Project through additional drilling.

"Further to an extensive review of the Carolina Belle Project, a Phase II drill campaign is currently being prepared to further target, define and expand the intersected gold mineralisation from the various targets identified to date at the site.

*"We continue to progress our planned highly prospective exploration and development work at our North and South Carolina assets with the goal of proving up a significant resources base."* 

# For further information, please contact:

# Lexington Gold Ltd

Bernard Olivier (Chief Executive Officer) Edward Nealon (Chairman) Mike Allardice (Group Company Secretary)

**Strand Hanson Limited (Nominated Adviser)** Matthew Chandler / James Bellman / Abigail Wennington

WH Ireland Limited (Joint Broker) Katy Mitchell / Ben Good / Enzo Aliaj

# Peterhouse Capital Limited (Joint Broker)

Duncan Vasey / Lucy Williams (Broking) Eran Zucker (Corporate Finance)

#### Yellow Jersey PR Limited (Financial Public Relations) Tom Randell / Annabelle Wills

The information contained within this announcement is deemed by the Company to constitute inside information as stipulated under the Market Abuse Regulation (EU) No. 596/2014 as it forms part of United Kingdom domestic law by virtue of the European Union (Withdrawal) Act 2018, as amended.

www.lexingtongold.co.uk via Yellow Jersey

www.strandhanson.co.uk T: +44 207 409 3494

www.whirelandplc.com T: +44 207 220 1666

<u>www.peterhousecap.com</u> T: +44 207 469 0930

www.yellowjerseypr.com T: +44 7948 758 681



#### Additional Information

#### Jennings-Pioneer Project

The Jennings-Pioneer Project forms part of the Barite Hill Gold district in South Carolina where several old mines and prospects are located within a 25km<sup>2</sup> area. The Jennings-Pioneer Project lies within the late Proterozoic (554-566 Ma) Persimmon Fork Formation, a volcanic unit comprised primarily of felsic tuffs with subordinate sedimentary clastic rocks. The Persimmon Fork Formation has been metamorphosed to greenschist facies. The Jennings-Pioneer Project area has several greenfield exploration prospects with well-defined and potentially continuous zones of gold and base metal mineralisation already identified from historic mines and surface workings. There is potential to define volcanic hosted massive sulphide ("VHMS") style mineralisation and discover additional feeder veins and alteration.

Multiple foliated gossans exist at the Jennings-Pioneer Project with the best defined and expansive outcropping of gossans located on Red Hill, which is situated along the north-east strike extension of the Barite Hill ore zone. Surface gold mining at Barite Hill took place for several years in the 1990s. Additional gossans occur on the historically mined Jennings Trend to the north of the Barite Hill Trend.

These gossans are interpreted to be base metal VHMS mineralisation with quartz-pyrite-barite-gold veins cross cutting some gossans which is interpreted to be epithermal gold mineralisation overprinting the VHMS system. This geological process is known as telescoping as hydrothermal fluids pressure, temperature, and chemistry evolve through time. Both styles of mineralisation are associated with pervasive silicification that manifests itself as topographic highs on the property. As a result, local foliation and ore zones dip steeply to the north-west. Additional deformation includes NW-SE trending faults that result in an "en echelon" array of steeply dipping ore bodies.

The versatile time domain electromagnetics ("VTEM") helicopter borne magnetic survey conducted by Lexington Gold in early 2021 successfully defined the structural trends and lithology contrasts as described above.

A detailed soil sample programme has commenced at Jennings-Pioneer targeting gold, silver and base metals through multi-element assaying. Approximately 500 soil samples are set to be collected on a 30m by 123m grid spacing. The soil and surface sampling, as well as concurrent surface mapping, has been planned to verify and supplement historical sampling conducted at the deposit. The soil sampling with multi-element geochemistry in conjunction with field mapping will add resolution and confidence to our understanding of the mineralisation at the Jennings-Pioneer Project.

The sampling programme in conjunction with existing database and helicopter borne VTEM conducted by the Company will be utilised to generate drill targets and to design a Phase I drill campaign for the project. The multi-element assay results are expected to be returned in early Q1 2023.

The intended soil and surface sample locations overlain on the LiDAR and aerial magnetics data for Jennings-Pioneers are shown in Figure 1.





**Figure 1**: LiDAR and Aerial Magnetics map for Jennings-Pioneer showing the location of the soil and surface sampling currently being conducted.



Figure 2: Geologists conducting sampling and mapping at Jennings-Pioneer



# **Argo Project**

The Argo project is situated in the northwest corner of Nash County, 16km north of Nashville, North Carolina. The historic workings are easily identified by the detailed LiDAR topographic data and form three clusters of hard rock surface and underground historic workings. The largest zone of workings extends over 500m, striking to the northeast, with some cross-strike trenching presumably dug to identify the mineralised zone. Significant placer mining has also occurred on the property. Gold is hosted in thin but numerous 0.3m thick sucrose quartz lenses that are interlaminated within chlorite schist country rock. 27 reconnaissance rock samples from such historic workings have yielded 13 samples with assays above 1 g/t Au. 5 of those 13 samples assayed above 5 g/t Au with the highest assay result being 12.65 g/t Au.

Multi-element analysis indicates a very strong correlation coefficient between tellurium and gold suggesting that gold tellurides are present at Argo. Gold telluride minerals are present at several world class gold deposits including the Kalgoorlie deposit in Western Australia and at the Cripple Creek deposit, Colorado, United States.

The surface trenching, sampling and mapping campaign at Argo is set to commence during December 2022. The work programme will comprise of 14 trench lines with a total combined length of approximately 1,000m. The trenches will be dug by an excavator and approximately 500 channel samples will be collected at continuous 2m intervals and sent for assaying (refer to Figure 3).

The trenching, sampling and mapping campaign is aimed at better defining the grade distribution, lithology and structure of the mineralised zones and to enable the design of a Phase I drilling campaign for the project.

Work at the Argo project will commence as soon as the soil and surface sampling and mapping programme at Jennings-Pioneer has been completed.



Figure 3: Planned trenching and sampling campaign at the Argo Project



#### Jones-Keystone Loflin ("JKL") Project

Following the recent significant increase in the estimated JORC resources at the JKL Project, as announced on 14 November 2022, the total JORC Mineral Resource is now estimated at 6,976,000t at an average grade of 0.94 g/t Au for 210,800oz of contained gold. Lexington Gold's drill programmes at JKL have defined reasonably broad zones of low to high grade gold mineralisation along a complex sheared, folded and strongly altered sequence of quartz-sericite-sulphide associated with volcanoclastic and tuffaceous units. The project shows kilometre scale alteration, geology, mineralogy and grade-range similarities to that of the third-party Russell gold deposit in North Carolina as well as the Haile mine in South Carolina.

The third party Haile Mine consists of 9 separate ore deposits that occur in a 4 km x 1 km area. The 9 separate deposits vary in size from as low at 0.8Mt to as high as 25Mt of ore with the contained gold ounces ranging from 19,000 gold ounces to over 1 million ounces. The 9 deposits that comprise the Haile Mine occur as clusters of en-echelon lenses varying in dimensions of between 50m to 300m long, 20m to 100m wide and 50m to 30m thick.

Similarly, the JKL Project currently comprises 3 separate ore deposits within a 3.5km by 0.6km area. The Jones Keystone deposit's resource estimate is 4.38Mt containing over 128,000 gold ounces, the Loflin Main deposit is 2.36Mt containing 73,700 ounces and Loflin South is currently 0.24Mt containing 9,100 gold ounces. Similar to Haile, the Jones Keystone deposit currently comprises 3 en echelon lenses that are 100m to 250m long, 25 to 100m wide, and 20 to 80m thick. The Loflin Main deposit currently comprises a single lens of 400m length, 100m to 200m width and 20m to 60m thickness. Multiple additional potential lenses have been identified at surface, both at Loflin and Jones-Keystone which have not yet been drill tested.

Lexington Gold has now further refined its geological and 3D model for the JKL Project following the completion of the recent JORC resource upgrade and associated work. A review of the updated model in conjunction with the detailed geophysics conducted by the Company, highlights the significant expansion potential of the project and surrounding areas. Magnetic and potassium radiometric data have been shown to be particularly useful in target generation at JKL. Areas with disparate magnetic contrasts are interpreted to be zones where weakly magnetic gold-pyrite bearing phyllic alteration has replaced propylitic strongly magnetic pyrrhotite. This process has resulted in extremely magnetic contrasts, areas with high potassium radiometric signatures are either phyllic ore zones, sercite or felsic country rocks like feldspar porphyries or felsic volcaniclastics. The superimposing of LiDAR image interpretation, which highlights historical mining activities over the magnetic and potassium radiometric data, further enhances the target generation capabilities. Figure 4 shows the areas of expansion potential and additional potential targets identified through magnetics, while Figure 5 shows the areas of expansion potential and additional potential targets identified through radiometrics.

The resource model in conjunction with aerial geophysics, as described above, plus regional and local geological mapping, rock sampling, soil sampling and LiDAR have identified areas of potential expansion for the current Jones-Keystone, Loflin and Loflin South deposits as well as successfully identifying additional exploration targets in the vicinity that, following drill testing, could lead to additional deposits being discovered that could form part of and expand the current JKL Project area. The next drilling campaign will focus on these areas for potential expansion as well as the untested anomalies as highlighted in Figures 4 and Figure 5 below.

# LEXINGTON



Figure 4: Magnetics map for the JKL Project showing areas of potential expansion as well as potential additional drill targets



Figure 5: Potassium Radiometrics map for the JKL Project showing areas of potential expansion as



well as potential additional drill targets

# **Carolina Belle Project**

The Carolina Belle project comprises exploration and mining rights over a total of 391.98 acres, covering both the historical Iola and Uwarra mining areas. Discovered in 1901, the area was mined almost continuously until 1916, collectively producing approximately 50,000oz of gold until a dispute between the neighbouring mines of Iola and Uwarra prevented continued mining activities.

The largest drilling campaign ever conducted at Carolina Belle was completed by the Company in early December 2021 involving a total of 32 drill holes for an aggregate of 2,630m of drilling.

Following completion of such maiden drilling campaign at Carolina Belle, the Company has reviewed and updated its geological model for the project. The maiden drilling campaign at Carolina Belle identified multiple intersections of 1 g/t Au or more including 3m @ 3.68 g/t Au from 64m and 4m @ 1.8 g/t Au from 28m. The maiden drilling campaign at Carolina Belle also discovered a new deposit called Martha Washington South and confirmed the down-dip extension of the main historical ore-zone mined during the early 1900s at the third party lola and Uwarra gold mining operations. The maiden drilling campaign at Carolina Belle also improved delineation of the historical mining operations and nature of the ore-zones targeted by such mining operations.

Following an extensive review of the project, a Phase II drilling campaign is currently being prepared to further target, define and expand the intersected gold mineralisation from the various targets identified to date at the project.

#### - END -

# Note to Editors:

Lexington Gold (AIM: LEX) is a gold exploration and development company currently holding interests in four diverse gold projects, covering a combined area of approximately 1,675 acres in North and South Carolina, USA. The projects are situated in the highly prospective Carolina Super Terrane ("CST"), which has seen significant historic gold production and is host to a number of multi-million-ounce mines operated by majors. It was also the site of the first US gold rush in the early 1800s, before gold was discovered in California.

Further information is available on the Company's website: <u>www.lexingtongold.co.uk</u>. Neither the contents of the Company's website nor the contents of any website accessible from hyperlinks on the Company's website (or any other website) is incorporated into, or forms part of, this announcement.