First Mining Announces Updated Mineral Resource Estimate at Duparquet Gold Project in Quebec

12.09.2022 | CNW

VANCOUVER, Sept. 12, 2022 - First Mining Gold Corp. ("First Mining" or the "Company") (TSX: FF) (OTCQX: FFMGF) (FRANKFURT: FMG) is pleased to provide an updated Mineral Resource Estimate (the "MRE") on the Duparquet gold ("Duparquet" or the "Project") located in Quebec, prepared by InnovExplo Inc. in accordance with the National Instrume Standards of Disclosure for Mineral Projects ("NI 43-101").

The updated MRE is derived from the master database of drill data, which contains 904 holes totalling 270,119m and 1 sampled intervals. This MRE includes 57 drill holes totaling 9,548m not included in the previous MRE with drilling occur the effective date of February 28, 2013. The drilling was carried out by Clifton Star Resources Inc., Beattie Gold Mines 2588111 Manitoba Ltd. By incorporating these previous drill holes, Duparquet's resource increases to 3.4 Moz in the m indicated category, an increase of 327 koz, and to 1.6 Moz in the inferred category, an increase of 193 koz.

"First Mining is very excited to announce an updated mineral resource estimate at the Duparquet Gold Project," stated CEO of First Mining Gold. "Duparquet is an advanced stage project that has benefited from 270,000m of historical drilli advanced to a PFS level in 2014. This resource growth from incorporating the 2013-2018 drilling is just the beginning o see as immense value potential here at Duparquet. Based on the size of its current resource, Duparquet represents on four undeveloped gold projects in the province of Quebec. Its above average M&I open pit grade of 1.52 g/t Au provides mining flexibility and along with its size and location, make it a very versatile deposit amenable to different potential mi scenarios with good future growth potential. The project site is well located and has access to excellent infrastructure a labour. First Mining intends to complete an updated economic study in the near future and to develop an exploration pa support potential resource expansion, resource classification upgrading, and discovery of new deposits in this underexp district."

Table 1: Duparquet Gold Project Mineral Resource Estimate

Area	Cut-off	Measured resource			Indicated resource			Inferred resource		
(mining method)	(g/t)	Tonnage (t)	Au (g/t)	Ounces	Tonnage (t)	Au (g/t)	Ounces	Tonnage (t)	Au (g/t)	Ounces
Open Pit	0.40	163,700	1.37	7,200	59,410,600	1.52	2,909,600	28,333,000	1.07	970,400
UG Mining	1.50	-	-	-	5,506,900	2.26	399,300	9,038,900	2.29	665,600
Tailings	0.40	19,900	2.03	1,300	4,105,200	0.93	123,200	-	-	-
Total		183,600	1.43	8,500	69,022,700	1.55	3,432,100	37,371,900	1.36	1,636,000

Notes to accompany the Mineral Resource Estimate:	
1.	The independent and qualified persons for the mineral resource estimate, as defined by NI 43 101, are Marina Iund, P.Geo. and Carl Pelletier, P.Geo., both from Innovexplo. The effective date of the estimate is September 12, 2022.
2.	These mineral resources are not mineral reserves, as they do not have demonstrated economic viability. There is currently insufficient data to define these Inferred mineral resources as Indicated or Measured mineral resources and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured mineral resource category. The mineral resource estimate follows current CIM Definition Standards.
3.	The results are presented in situ and undiluted and have reasonable prospects of economic viability.
4.	In-pit and Underground estimates encompass sixty (60) mineralized domains and one dilution envelop using the grade of the adjacent material when assayed or a value of zero when not assayed; The tailings estimate encompass four (4) zones.
5.	In-pit and Underground: High-grade capping of 25 g/t Au; Tailings: High-grade capping of 13.0 g/t Au for Zone 1, 3.5 g/t Au for Zone 2, 1.7 g/t Au for Zone 3 and 2.2 g/t Au for Zone 4. High-grade capping supported by statistical analysis was done on raw assay data before compositing.
6.	In-pit and Underground: The estimate used a sub-block model in GEOVIA SURPAC 2021 with a unit block size of 5m x 5m x 5m and a minimum block size of 1.25m x 1.25m x1.25m. Grade interpolation was obtained by ID2 using hard boundaries. Tailings: The estimate used a block model in GEOVIA GEMS with a block size of 5m x 5m x 1m. Grade interpolation was obtained by ID2 using hard boundaries.
7.	In-pit and Underground: A density value of 2.73 g/cm3 was used for the mineralized domains and the envelope. A density value of 2.00 g/cm3 was used for the overburden. A density value of 1.00 g/cm3 was used for the excavation solids (drifts and stopes) assumed to be filled with water. Tailings: A fixed density of 1.45 g/cm3 was used in zones and waste.
8.	In-pit and Underground: The mineral resource estimate is classified as Measured, Indicated and Inferred. The measured category is defined by blocks having a volume of at least 25% within an envelope built at a distance of 10 m around existing channel samples. The Indicated category is defined by blocks meeting at least one (1) of the following conditions: Blocks falling within a 15-m buffer surrounding existing stopes and/or blocks for which the average distance to composites is less than 45 m. A clipping polygon was generated to constrain Indicated resources for each of the sixty (60) mineralized domains. Only the blocks for which reasonable geological and grade continuity have been demonstrated were selected. All remaining interpolated blocks were classified as Inferred resources. Blocks interpolated in the envelope were all classified as Inferred resources. Tailings: The Measured and Indicated categories were defined based on the drill hole spacing (Measured: Zones 1 and 2 = 30m x 30m grid; Indicated: Zone 3 = 100m x 100m grid and Zone 4 = 200m x 200m grid).
9.	In-pit and Underground: The mineral resource estimate is locally pit-constrained with a bedrock slope angle of 50° and an overburden slope angle of 30°. The out-pit mineral resource met the reasonable prospect for eventual economic extraction by having constraining volumes applied to any blocks (potential underground extraction scenario) using DSO. It is reported at a rounded cut-off grade of 0.4 g/t Au (in-pit and tailings) and 1.5 g/t Au (UG). The cut-off grades were calculated using the following parameters: mining cost = CA$70.00 (UG); processing cost = CA$11.9 to 17.0; G&A = CA$8.75; refining and selling costs = CA$ 5.00; gold price = US$ 1,650/oz; USD:CAD exchange rate = 1.31; and mill recovery = 93.9%. The cut-off grades should be re-evaluated in light of future prevailing market conditions (metal prices, exchange rates, mining costs etc.).
10.	The number of metric tons and ounces was rounded to the nearest hundred, following the recommendations in NI 43 101. Any discrepancies in the totals are due to rounding effects.
11.	The authors are not aware of any known environmental, permitting, legal, title-related, taxation, socio-political, or marketing issues, or any other relevant issue not reported in the Technical Report, that could materially affect the Mineral Resource Estimate.

Project Description

Duparquet consists of four (4) contiguous mineral exploration properties: Beattie, Donchester, Central Duparquet, Dumico and the tailings from the former Beattie mine. The Project is located in the Abitibi region of the province of Quebec, approximately 30 km north of the city of Rouyn-Noranda.

The Project site has infrastructure which includes paved, provincial highways from Rouyn-Noranda to the south and LaSarre to the north, both mining communities that can provide mining infrastructure and skilled

labour to develop a mine. The Project site is also proximal to Quebec's hydroelectric power grid.

Duparquet, previously comprised of 2 separate Mining Concessions (Beattie and Donchester mines), now comprises of fifty (50) map-designated claims ("CDC") covering an area of 1,079.2 ha covering a strike length of 8 km in an E-W direction.

Duparquet is geologically located in the southern portion of the Abitibi, straddling the SE trending prolific Destor-Porcupine Fault Zone (DPMFZ). Structurally the project includes numerous E-W mineralized splays off of the Destor-Porcupine Fault Zone, as well as several syenite intrusions. Surrounding host rocks include mafic to ultramafic volcanic rocks and younger Temiskaming age conglomerates.

The predominant structures on Duparquet are the E-W splays of the DPMFZ. The Beattie Fault Zone ("BFZ") is located along the north contact of the main syenite body, whereas the Donchester Fault Zone ("DFZ") is located along the south contact. The Central Duparquet Fault Zone ("CDFZ") is located along the south contact of the second smaller syenite intrusive to the east.

Figure 1: Geology of the Duparquet Project. Structural and geometric details are represented by surface projections of the relevant structural elements from the deposit-scale 3D litho-structural model

The main style of gold mineralization in the Duparquet deposit generally occurs within shears or brecciated zones along or within the adjacent intrusive syenitic masses and is associated with finely disseminated pyrite and minor arsenopyrite replacement. Sulphide content is generally low (0.5 to 4%), although it can be up to 10% in some cases. Gold is associated and hosted with the pyrite and lesser arsenopyrite and arsenian pyrite.

Gold was initially discovered in the Duparquet Township in 1910 by John Beattie. The Beattie and adjoining Donchester mines were in production from 1933 to 1956, producing upwards of 1.3 million ounces of gold. In the mid-1930's Beattie Gold Mines was the largest gold producer in Quebec. From the 1980's to 2007, very limited exploration was carried out. Clifton Star had an option on the property between 2009 and 2014. During this time a substantial amount of surface diamond drilling, channel sampling was carried out. The company also completed an environmental baseline study, environmental assessment study and numerous metallurgical studies. Mineral resource estimates were also carried out that were included in the preliminary economic assessment and a prefeasibility study. The Clifton Star option was terminated in 2014 and the property was returned to the previous owners, with Clifton Star retaining a 10% interest in the companies that held the properties.

Drilling Summary

Since the effective date of the previous mineral resource estimate (InnovExplo, Poirier et al., 2014), the Company (Clifton Star) and the previous owners (Beattie Gold Mines and 2588111 Manitoba Ltd.) had completed an additional 57 surface drill holes totalling 9,548 m, that were not included in the MRE. Significant assay results added to this new MRE include 5.65 g/t Au over 34.0 m (BD13-22) on Beattie and 5.58 g/t Au over 5.0 m (D13-18) on Donchester.

The 2022 MRE contains 904 drillholes and 892 channel samples in outcrops. It contains 173,831 sampled intervals taken from 270,119 m of drilled core and 2,371 analyses from 1,827 m of channels. The 904 DDH cover the 4.5-km strike length of the Project at a reasonably regular drill spacing of 25-50 m.

Metallurgical Testing Summary

Bench-scale and pilot plant metallurgical testwork programs have been carried out for the Project. SGS carried out preliminary metallurgical testwork in 2012 to support a PEA at that time. In 2013, SGS carried out further flotation, pressure oxidation, cyanidation, rheology and environmental testwork, including a pilot plant for a PFS. Outotec was also mandated in 2013 to carry out filtration testwork.

The overall gold results from flotation concentrate, pressure oxidation (POX) and CIL circuit as well as flotation tail cyanidation for the ore resulted in an overall recovery of gold ranging from 91.9% to 95.4%.

A preliminary pilot test program investigated pressure oxidation and hot curing processing of a Duparquet

flotation concentrate to render precious metals extractable by cyanidation. The recovery of gold from the pilot plant hot cure discharge ranged from 94.7% to 96.5%

Bench-scale test work was also performed on two samples of existing tailings on the Project. The test work for the flotation-POX/CIL flowsheet resulted in overall gold recoveries ranging from 83.5% to 93.3%.

Mineral Resource Summary

The MRE update for the Project (the "2022 MRE") was prepared by Marina Iund, P.Geo. and Carl Pelletier, P.Geo., using all available information. The main objective was to update the results of InnovExplo's previous mineral resource estimate for the Project, dated June 26, 2013 (Poirier et al., 2014). The updated MRE includes new drill holes on the Beattie, Donchester and Central Duparquet properties.

The resource area has an E-W strike length of 4.5 km, a width of approximately 1 km, and a vertical extent of 1,050 m below surface.

The 2022 MRE was prepared using GEOVIA GEMS 6.8.2.2 ("GEMS") and GEOVIA Surpac 2021 ("Surpac") software. GEMS was used for updating the mineralized domains and the compositing. Surpac was used for the estimation, which consisted of 3D block modelling and the inverse distance square ("ID2") interpolation method. Statistical, capping and variography studies were completed using Snowden Supervisor v8.13 and Microsoft Excel software.

The 60 mineralized domain wireframes were created and updated by digitizing an interpretation onto sections spaced 25 m apart or 12.5 m in areas with higher drill hole density. However, if barren intervals were encountered, the mineralized zones were extended only to the mid-distance between the last known occurrence of mineralization and the barren hole. A 50-m extension around the zones was used for the secondary mineralized domains.

A dilution envelope was defined as the parts of the block model that are not included in any of the mineralized domain solids. The solid for the envelope contains "floating" gold intersects for which continuity has not yet been demonstrated or interpreted.

High-grade capping was set at 25 g/t Au for all zones, including the envelope zone. Twenty-two (22) DDH samples and one (1) channel sample were capped.

Analysis of 3,633 bulk density values and a 12 t composite drill core bulk sample from the mineralized zones, yielded 2.73 g/cm^3 (mean density of the syenite) for all 60 mineralized domains and the envelope. A density of 2.00 g/cm^3 was assigned to the overburden, and 1.00 g/cm^3 was assigned to excavation solids (drifts and stopes) assumed to be filled with water.

The intervals defining each mineralized domain were composited to 1-m equal lengths. A grade of 0.00 g/t was assigned to missing sample intervals as it was assumed that unsampled intervals were considered to be unmineralized by the geologist in charge of the core logging.

A block model was built to enclose a sufficiently large enough volume to host an open pit. The model corresponds to a sub-blocked model in Surpac with no rotation. The user block size was defined as 5m x 5m x 5m with a minimal sub-block size of 1.25m x 1.25m x 1.25m. Block dimensions reflect the sizes of mineralized domains and plausible mining methods. All blocks with more than 50% of their volume falling within a selected solid were assigned the corresponding solid block code.

Individual zones and the envelope were estimated separately using their own search ellipsoid. The available geological and geostatistical information was used to establish the size of each search ellipsoid. Seventy-two (72) distinct mineralized domains were studied. The mean azimuth and dip of each domain were used to define 23 search ellipsoids, grouping zones of similar geometry.

Figure 2: Plan view and isometric view of the categorized mineral resources and the Whittle optimized pit-shells (blocks selection: in pit-shells or in DSO and above the respective COG)

Table 2: Cut-off grade sensitivity for the in-pit and underground portions of the Duparquet Project

Area (Mining Method)	Cut-off (g/t)	Measured Resource			Indicated Resource			Inferred Resource		
		Tonnage (t)	Au (g/t)	Ounces	Tonnage (t)	Au (g/t)	Ounces	Tonnage (t)	Au (g/t)	Ounces
Open Pit	0.7	137,321	1.53	6,755	23,142,210	2.05	1,525,279	2,592,695	1.62	135,038
	0.65	141,757	1.5	6,836	25,666,698	1.98	1,633,902	3,334,098	1.48	158,647
	0.6	149,158	1.46	7,001	32,690,577	1.86	1,954,908	5,716,620	1.34	246,283
	0.55	154,634	1.42	7,060	36,556,977	1.77	2,080,340	7,727,020	1.23	305,568
	0.5	156,938	1.41	7,122	41,152,335	1.70	2,253,068	11,007,061	1.13	400,881
	0.45	161,081	1.39	7,187	53,548,726	1.58	2,722,586	22,032,449	1.16	824,601
	0.4	163,709	1.37	7,222	59,410,612	1.52	2,909,551	28,332,980	1.07	970,424
	0.35	165,800	1.36	7,248	66,307,600	1.46	3,117,172	37,354,222	0.96	1,147,282
UG Mining	1.9	-	-	-	5,891,904	2.67	505,871	7,168,869	2.91	669,750
	1.7	-	-	-	5,224,787	2.47	414,153	7,378,504	2.51	595,956
	1.5	-	-	-	5,506,861	2.26	399,356	9,038,871	2.29	665,629
	1.3	-	-	-	5,302,381	2.10	357,603	11,459,118	2.05	756,440
Tailings	0.6	19,000	2.10	1,284	4,104,400	0.93	123,189	-	-	-
	0.5	19,400	2.07	1,290	4,104,800	0.93	123,196	-	-	-
	0.45	19,600	2.06	1,295	4,105,000	0.93	123,200	-	-	-
	0.4	19,900	2.03	1,297	4,105,200	0.93	123,203	-	-	-
	0.35	20,000	2.02	1,299	4,105,400	0.93	123,206	-	-	-

InnovExplo, the authors of the MRE report concluded that:

- The database supporting the 2022 MRE is complete, valid and up to date.
- Geological and gold-grade continuity has been demonstrated for all 72 mineralized zones.
- The key parameters of the 2022 MRE (density, capping, compositing, interpolation, search ellipsoid, etc.) are sup data and statistical and/or geostatistical analysis.
- The 2022 MRE includes measured, indicated and inferred resources for a combination of two mining scenarios: o selective underground. The 2022 MRE complies with CIM Definition Standards and CIM Guidelines.
- Two cut-off grades of 0.40 and 1.50 g/t Au were used, corresponding to potential open pit and selective undergro scenarios.
- Cut-off grades were calculated at a gold price of US$1,650 per troy ounce and an exchange rate of 1.31 USD/CA reasonable mining, processing and G&A costs.
- In a combined pit and selective underground mining scenario, the Project contains an estimated M+I Resource of at 1.58 g/t Au for 3,316,100 oz of gold and an Inferred Resource of 37,371,900 t at 1.36 g/t Au for 1,636,000 oz o Project also contains the Beattie mine tailings with an estimated M+I Resource of 4,125,100 t at 0.94 g/t Au for 12 gold.

- The results of the 2022 MRE represent a 10.5% increase in the M+I Resource and a 13.4% increase in the Inferr compared to the previous 2014 MRE of Poirier et al., 2014. The increase in the M+I Resource is due to a deeper shell and the updated economic parameters. The same reasons combined with the addition of 55 drill holes expla increase in Inferred resources.
- Based on metallurgical tests, the Duparquet project appears amenable to standard gold recovery processes. A co flotation, pressure oxidation and cyanide leach processes has shown a gold recovery ranging from 94.7% to 96.5
- Additional diamond drilling on multiple zones would likely upgrade some of the Inferred Resource to the Indicated and/or add to the Inferred Resource since most of the mineralized zones have not been fully explored at depth or surface infrastructures.

Updated Technical Report

The effective date of the updated MRE is September 12, 2022. A NI 43-101 Technical Report prepared by InnovExplo Inc. will be filed on SEDAR within 45 days of this news release and will be available at that time on the Company website.

Qualified Persons

The independent and qualified persons for the MRE, as defined by National Instrument 43-101 Standards of Disclosure for Mineral Projects, are Marina Iund, P.Geo. and Carl Pelletier, P.Geo., both from Innovexplo. The effective date of the estimate is September 12, 2022.

Mr. Louis Martin P.Geo., (OGQ 0364), a consultant of First Mining, is a "Qualified Person" for the purposes of National Instrument 43-101 Standards of Disclosure for Mineral Projects, and he has reviewed and approved the scientific and technical disclosure contained in this news release.

About First Mining Gold Corp.

First Mining is a gold developer advancing a portfolio of gold projects in Canada, with our most advanced project being the Springpole Gold Project in northwestern Ontario, which is one of the largest undeveloped gold projects in Canada, and where we have commenced a Feasibility Study and permitting activities are on-going with a draft Environmental Impact Statement ("EIS") for the project published in June 2022. First Mining also owns the Cameron, Duparquet, Duquesne and Pitt gold projects, all advanced-stage gold projects in Ontario (in the case of Cameron) and Québec. Our portfolio of gold project interests also includes the Pickle Crow gold project (being advanced in partnership with Auteco Minerals Ltd.), the Hope Brook gold project (being advanced in partnership with Big Ridge Gold Corp.), an equity interest in Treasury Metals Inc., and a portfolio of 21 gold royalties.

First Mining was established in 2015 by Mr. Keith Neumeyer, founding President and CEO of First Majestic Silver Corp.

ON BEHALF OF First Mining Gold Corp.

Daniel W. Wilton
Chief Executive Officer and Director

Cautionary Note Regarding Forward-Looking Statements

This news release includes certain "forward-looking information" and "forward-looking statements" (collectively "forward-looking statements") within the meaning of applicable Canadian and United States securities legislation including the United States Private Securities Litigation Reform Act of 1995. These forward-looking statements are made as of the date of this news release. Forward-looking statements are frequently, but not always, identified by words such as "expects", "anticipates", "believes", "plans", "projects", "intends", "estimates", "envisages", "potential", "possible", "strategy", "goals", "opportunities", "objectives", or variations thereof or stating that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved, or the negative of any of these terms and similar expressions.

Forward-looking statements in this news release relate to future events or future performance and reflect current estimates, predictions, expectations or beliefs regarding future events. All forward-looking statements are based on First Mining's or its consultants' current beliefs as well as various assumptions made by them and information currently available to them. There can be no assurance that such statements will prove to be accurate, and actual results and future events could differ materially from those anticipated in such

statements. Forward-looking statements reflect the beliefs, opinions and projections on the date the statements are made and are based upon a number of assumptions and estimates that, while considered reasonable by the respective parties, are inherently subject to significant business, economic, competitive, political and social uncertainties and contingencies. Such factors include, without limitation the Company's business, operations and financial condition potentially being materially adversely affected by the outbreak of epidemics, pandemics or other health crises, such as COVID-19, and by reactions by government and private actors to such outbreaks; risks to employee health and safety as a result of the outbreak of epidemics, pandemics or other health crises, such as COVID-19, that may result in a slowdown or temporary suspension of operations at some or all of the Company's mineral properties as well as its head office; fluctuations in the spot and forward price of gold, silver, base metals or certain other commodities; fluctuations in the currency markets (such as the Canadian dollar versus the U.S. dollar); changes in national and local government, legislation, taxation, controls, regulations and political or economic developments; risks and hazards associated with the business of mineral exploration, development and mining (including environmental hazards, industrial accidents, unusual or unexpected formations, pressures, cave-ins and flooding); the presence of laws and regulations that may impose restrictions on mining; employee relations; relationships with and claims by local communities, indigenous populations and other stakeholders; availability and increasing costs associated with mining inputs and labour; the speculative nature of mineral exploration and development; title to properties.; and the additional risks described in the Company's Annual Information Form for the year ended December 31, 2021 filed with the Canadian securities regulatory authorities under the Company's SEDAR profile at www.sedar.com, and in the Company's Annual Report on Form 40-F filed with the SEC on EDGAR.

First Mining cautions that the foregoing list of factors that may affect future results is not exhaustive. When relying on our forward-looking statements to make decisions with respect to First Mining, investors and others should carefully consider the foregoing factors and other uncertainties and potential events. First Mining does not undertake to update any forward-looking statement, whether written or oral, that may be made from time to time by the Company or on our behalf, except as required by law.

Contact
Toll Free: 1 844 306 8827 | Email: info@firstmininggold.com; Paul Morris | Director, Investor Relations | Email: paul@firstmininggold.com; Richard Huang | Vice President, Corporate Development | Email: rhuang@firstmininggold.com

View original content to download multimedia:https://www.prnewswire.com/news-releases/first-mining-announces-updated-mineral-resource-estimate-at-d

SOURCE First Mining Gold Corp.