

**NEWS RELEASE****First Mining Announces Positive Preliminary Economic Assessment  
for the Duparquet Gold Project, Quebec, Canada**

*Pre-Tax NPV<sub>5%</sub> of C\$1.07 billion, After-Tax NPV<sub>5%</sub> of C\$588 million*

*Pre-Tax IRR of 24.9%, After-Tax IRR of 18.0%*

*Average LOM Annual Gold Production of 233 koz with AISC of US\$976/oz over 11-year LOM*

**September 7, 2023 – Vancouver, Canada – First Mining Gold Corp. (“First Mining” or the “Company”) (TSX: FF) (OTCQX: FFMGF) (FRANKFURT: FMG)** is pleased to announce the positive results of a Preliminary Economic Assessment (“PEA”) completed for its 100%-owned Duparquet Gold Project (the “Project” or “Duparquet”) located in the Abitibi region of Quebec, Canada. The PEA results support a 15,000 tonnes per day open pit and underground mining operation over an 11-year mine life. The PEA only considers the Duparquet gold deposit located on the Beattie, Donchester, Central Duparquet and Dumico claim blocks and does not include the Pitt Gold and Duquesne deposits (see Mineral Resource Estimate section).

**PEA Highlights**

- C\$1.07 billion pre-tax NPV<sub>5%</sub> and C\$588 million after-tax NPV<sub>5%</sub> at US\$1,800/oz gold (“Au”)
- 24.9% pre-tax IRR; 18.0% after-tax IRR at US\$1,800/oz Au
- Annual Life-of-Mine (“LOM”) recovered gold production of 233 koz
- Total LOM recovered gold of 2.5 Moz over an 11-year mine life
- Pre-tax payback of 3.8 years; after-tax payback of 4.8 years
- Initial capital costs estimated at C\$706 million; sustaining and underground development capital costs estimated at C\$738 million
- Average annual LOM Total Cash Cost of US\$751/oz<sup>(1)</sup>; average annual LOM All-In Sustaining Costs (“AISC”) of US\$976/oz<sup>(2)</sup>

Note: Base case parameters assume a gold price of US\$1,800/oz and an exchange rate (C\$ to US\$) of 1.33. All currencies are reported in Canadian dollars unless otherwise specified. NPV calculated as of the commencement of construction and excludes all pre-construction costs.

(1) Total Cash Costs consist of mining costs, processing costs, mine-level G&A, treatment and refining charges and royalties.

(2) AISC includes total cash costs plus sustaining capital, development capital and closure costs.

“This PEA demonstrates the robust economic potential of the Duparquet Gold Project,” stated Dan Wilton, CEO of First Mining. “The +200 koz per year production profile, attractive capital and operating cost profile and strategic location of the deposit in the heart of the Abitibi gold belt all contribute to the recognition of Duparquet as one of the most meaningful development projects in Canada. We are also pleased to have completed such a robust PEA within a year of consolidating the ownership of the Project. Importantly, the Duparquet Gold Project represents a unique opportunity to address the environmental legacy issues from the historic mining operations while delivering an important economic development opportunity for the local and Indigenous communities around the Project. We look forward to continuing to work with regulators, the Municipality of Duparquet and other local and Indigenous communities to advance this parallel track of environmental stewardship and economic development.”

This PEA for the Duparquet Gold Project was prepared by G Mining Services Inc. of Montreal, Quebec, in accordance with National Instrument 43-101 *Standards of Disclosure for Mineral Projects* (“NI 43-101”), and a technical report for the PEA will be filed by the Company on SEDAR+ within 45 days of this news release.

### PEA Overview

The Duparquet Gold Project, located in the Abitibi region of Quebec, Canada, is one of the largest undeveloped gold projects in North America. The Project is located immediately north of the town of Duparquet which is approximately 50 kilometres northwest of Rouyn-Noranda, Quebec, a major mining service centre and home to the only remaining copper smelter in Canada. Duparquet currently hosts 3.4 million ounces of gold in the Indicated Mineral Resource category and 2.7 million ounces of gold in the Inferred Mineral Resource category, as set out in Table 5 in the Mineral Resource Estimate section.

The PEA evaluates recovery of gold from a 15,000 tonne-per-day (“tpd”) open pit and underground mining operation, with a process plant that includes crushing, grinding, and flotation, producing a concentrate for sale.

**Table 1: Key PEA Assumptions and Project Economics <sup>(1)</sup>**

Key Assumptions	Unit	LOM
Gold Price	US\$/oz	US\$1,800/oz
Exchange Rate	C\$:US\$	1.33
Production Profile	Unit	LOM
Total Open Pit Tonnage	Mt	282.0
Total Open Pit Mineralized Material Mined	Mt	43.6
Open Pit Strip Ratio	w:o	5.4
Total UG Mineralized Material Mined	Mt	12.0
Total Tailings Mineralized Material Mined	Mt	4.1
Total Tonnes Processed	Mt	59.7
Daily Throughput	tpd	15,000
Mill Grade	g/t Au	1.51
Mine Life	Years	11 years
Gold Recovery to Concentrate	%	89.5%
LOM Metal Recovered	koz Au	2,595 koz Au
Average Annual Recovered	koz Au	233 koz Au
Operating Costs (US\$/oz)	Unit	LOM
Total Cash Costs <sup>(2)</sup>	US\$/oz	\$751
AISC <sup>(3)</sup>	US\$/oz	\$976
Capital Expenditures	Unit	LOM
Initial Capital	C\$M	C\$706
Sustaining and Development Capital	C\$M	C\$738
Closure Costs	C\$M	\$30
Estimated Salvage Value	C\$M	(\$36)

Economics	Unit	LOM
NPV at 5% (pre-tax; post-tax)	C\$M	C\$1,073; C\$588
IRR (pre-tax; post-tax)	%	24.9%; 18.0%
Payback (pre-tax; post-tax)	Years	3.8 years; 4.8 years

- (1) The reader is advised that the PEA is preliminary in nature and is intended to provide only an initial, high-level review of the Project potential and design options. The PEA mine plan and economic model include numerous assumptions and the use of Inferred mineral resources. Inferred mineral resources are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves and to be used in an economic analysis except as allowed for in PEA studies. There is no guarantee that Inferred resources can be converted to Indicated or Measured resources, and as such, there is no certainty that the PEA or Project economics described herein will be realized or achieved.
- (2) Total Cash costs consist of mining costs, processing costs, mine-level G&A, treatment and refining charges and royalties.
- (3) AISC includes total cash costs plus sustaining capital, development capital and closure costs.

### Economic Sensitivities

The Project economics and cash flows are highly sensitive to changes in the price of gold.

**Table 2: PEA Sensitivity to Gold Price, Operating Costs and Capital Costs**

#### Sensitivity to Gold Price

Gold Price (US\$/oz)	\$1,400	\$1,600	<b>\$1,800</b>	\$2,000	\$2,200
Pre-Tax NPV <sub>5%</sub>	C\$168 million	C\$621 million	<b>C\$1.07 billion</b>	C\$1.53 billion	C\$1.98 billion
Pre-Tax IRR	8.5%	17.1%	<b>24.9%</b>	32.0%	38.6%
After-Tax NPV <sub>5%</sub>	C\$20 million	C\$310 million	<b>C\$588 million</b>	C\$859 million	C\$1.12 billion
After-Tax IRR	5.5%	12.1%	<b>18.0%</b>	23.2%	28.0%

#### Sensitivity to Initial Capital Costs

Initial Capital Costs	+20%	+10%	<b>C\$706 million</b>	-10%	-20%
Pre-Tax NPV <sub>5%</sub>	C\$814 million	C\$949 million	<b>C\$1.07 billion</b>	C\$1.18 billion	C\$1.28 billion
Pre-Tax IRR	16.7%	20.4%	<b>24.9%</b>	30.5%	37.8%
After-Tax NPV <sub>5%</sub>	C\$413 million	C\$503 million	<b>C\$588 million</b>	C\$661 million	C\$723 million
After-Tax IRR	12.0%	14.7%	<b>18.0%</b>	21.9%	26.9%

#### Sensitivity to Operating Costs

Operating Costs	+20%	+10%	<b>C\$2.2 billion</b>	-10%	-20%
Pre-Tax NPV <sub>5%</sub>	C\$761 million	C\$917 million	<b>C\$1.07 billion</b>	C\$1.23 billion	C\$1.39 billion
Pre-Tax IRR	19.5%	22.2%	<b>24.9%</b>	27.4%	29.9%
After-Tax NPV <sub>5%</sub>	\$398 million	\$494 million	<b>C\$588 million</b>	\$680 million	\$771 million
After-Tax IRR	14.0%	16.0%	<b>18.0%</b>	19.9%	21.7%

### Mineral Resource Estimate

In September 2022, the Duparquet Gold Project Mineral Resource Estimate (“MRE”) was updated by InnovExplo Inc. in accordance with NI 43-101. (See news release of September 12, 2022 for more details) The Duparquet Gold Project contains 3.44 million ounces of gold in the Measured & Indicated category, grading 1.55 g/t Au, and an additional 1.6 million ounces of gold in the Inferred category, grading 1.36 g/t Au (see Table 3).

In August 2023, new updated Mineral Resource Estimates were completed on First Mining’s 100% owned Pitt Gold and Duquesne projects and have added 1.05 million ounces of gold grading 2.32 g/t Au in the Inferred category (see Table 4), which will now form part of the larger consolidated Duparquet Gold Project.

Following the updated Mineral Resource Estimate at Pitt Gold and Duquesne, the consolidated Duparquet Project now contains 3.44 million ounces of gold in the Measured & Indicated category, grading 1.55 g/t Au, and an additional 2.68 million ounces of gold in the Inferred category, grading 1.68 g/t Au.

**Table 3: Duparquet Deposit Mineral Resource Estimate (Effective September 12, 2022)**

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
Potential 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
Potential 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	-	-	-
<b>Total</b>		<b>183,600</b>	<b>1.43</b>	<b>8,500</b>	<b>69,022,700</b>	<b>1.55</b>	<b>3,432,100</b>	<b>37,371,900</b>	<b>1.36</b>	<b>1,636,000</b>

**Table 4: Pitt Gold and Duquesne Deposits Mineral Resource Estimate (Effective August 31, 2023) (not included in the PEA)**

Area (mining method)	Cut-off (g/t)	Pitt Gold Inferred Resource			Duquesne Inferred resource		
		Tonnage (t)	Au (g/t)	Ounces	Tonnage (t)	Au (g/t)	Ounces
Potential Open Pit	0.50	-	-	-	6,300,000	1.56	316,000
Potential UG Mining	1.75	2,691,000	2.67	231,200	5,030,000	3.10	501,400
<b>Total</b>		<b>2,691,000</b>	<b>2.67</b>	<b>231,200</b>	<b>11,330,000</b>	<b>2.24</b>	<b>817,400</b>

**Table 5: Duparquet Gold Project Consolidated Mineral Resource Estimate (Effective August 31, 2023)\***

Area (mining method)	Total Measured Resource			Total Indicated Resource			Total Inferred Resource		
	Tonnage (t)	Au (g/t)	Ounces	Tonnage (t)	Au (g/t)	Ounces	Tonnage (t)	Au (g/t)	Ounces
Potential Open Pit	163,700	1.37	7,200	59,410,600	1.52	2,909,600	34,633,000	1.16	1,286,400
Potential UG Mining	-	-	-	5,506,900	2.26	399,300	16,759,900	2.59	1,398,200
Tailings	19,900	2.03	1,300	4,105,200	0.93	123,200	-	-	-
<b>Total</b>	<b>183,600</b>	<b>1.43</b>	<b>8,500</b>	<b>69,022,700</b>	<b>1.55</b>	<b>3,432,100</b>	<b>51,392,900</b>	<b>1.62</b>	<b>2,684,600</b>

\*Refer to respective deposit resource estimate table for cut-off grade

Notes to accompany the Duparquet Gold Project Mineral Resource Estimates:

- The independent qualified persons for the Duparquet mineral resource estimate, as defined by NI 43-101, are Marina Lund, P.Geo., Carl Pelletier, P.Geo. and Simon Boudreau, P.Eng. from InnovExplo. The effective date of the estimate is September 12, 2022.
- The independent qualified persons for the Pitt Gold and Duquesne mineral resource estimates, as defined by NI 43 101, are Olivier Vadnais-Leblanc, P.Geo., Carl Pelletier, P.Geo., and Simon Boudreau, P.Eng. from InnovExplo. The effective date of the estimate is August 31, 2023.
- 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.
- The results are presented in situ and undiluted and have reasonable prospects of eventual economical extraction.
- 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.
- Duparquet: 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.
- Pitt Gold: Underground: High-grade capping of 20 g/t Au. High-grade capping supported by statistical analysis was done on composited assays.
- Duquesne: In-pit and Underground: High-grade capping of 55 g/t Au. High-grade capping supported by statistical analysis was done on composited assays.
- In-pit and Underground: For Duparquet, 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 x 1.25m. For Pitt Gold and Duquesne, the estimates used a sub-block model in GEOVIA SURPAC 2023 with a unit block size of 6m x 6m x 6m and a minimum block size of 1.5m x 0.5m x 0.5m. Grade interpolations were obtained by ID2 using hard boundaries. Duparquet 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.
- In-pit and Underground: For Duparquet, a density value of 2.73 g/cm<sup>3</sup> was used for the mineralized domains and the envelope. For Pitt Gold and Duquesne, a density value of 2.7 g/cm<sup>3</sup> was used for the mineralized domains and the envelope. A density value of 2.00 g/cm<sup>3</sup> was used for the overburden. A density value of 1.00 g/cm<sup>3</sup> was used for the excavation solids (drifts and stopes) assumed to be filled with water. Tailings: A fixed density of 1.45 g/cm<sup>3</sup> was used in zones and waste.
- In-pit and Underground: For Duparquet, 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). For Pitt Gold and Duquesne, the mineral resource estimate are completely classified as Inferred due to a lack of confidence in certain drill hole collar and underground development locations.

12. The Mineral Resource Estimate for Duquesne and Pitt Gold was prepared using 3D block modelling and the inverse distance squared (“ID2”) interpolation method.
13. The mineral resources are categorized as Inferred based on drill spacing, as well as geological and grade continuity. A maximum distance to the closest composite of 75 m for Inferred in all zones for Duquesne of 210 m for Inferred in all zones for Pitt Gold.
14. The reasonable prospect for an eventual economical extraction is met by having used reasonable cut-off grades both for a potential open pit and underground extraction scenarios (minimum mining width of 2m) and constraining volumes (Deswik optimized shapes and Whittle optimized pit-shells).
15. 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. Duparquet resources 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 (tailing) to CA\$17.0 (pit& UG); 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.). Duquesne resources are reported at a rounded cut-off grade of 0.5 g/t Au (in-pit) and Pitt Gold and Duquesne resources are reported at a rounded cut-off grade of 1.75 g/t Au (UG). The cut-off grades were calculated using the following parameters: mining cost = CA\$84.86 (UG); processing cost = CA\$21.010; G&A = CA\$11.75; refining and selling costs = CA\$ 5.00; gold price = US\$ 1,800/oz; USD:CAD exchange rate = 1.3; and mill recovery = 90%. The cut-off grades should be re-evaluated in light of future prevailing market conditions (metal prices, exchange rates, mining costs etc.).
16. The number of metric tons was rounded to the nearest thousand and ounces were rounded to the nearest hundred, following the recommendations in NI 43 101. Any discrepancies in the totals are due to rounding effects.
17. The qualified persons are not aware of any known environmental, permitting, legal, title-related, taxation, socio-political, or marketing issues, or any other relevant issue not reported herein, that could materially affect the Mineral Resource Estimate.

The database used for the Duparquet MRE contains 904 holes totalling 270,119m and 173,831 sampled intervals. 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. A total of 60 mineralized zones wireframes have been created for the Duparquet deposit.

The database used for the Duquesne MRE contains 1,011 underground drill holes for a total of 51,957.43m and 393 surface Diamond Drill Holes (“DDH”) totaling 103,888.19m. The DDH intervals used for the interpretation contain 66,411 assays taken from the 1404 drill holes and surface channels (71,034.71m of core). A total of 389 mineralized zones wireframes have been created for the Duquesne deposit. Mineralized zones average thickness in the deposit varies between 0.69 m and 4.28 m with an interpreted average thickness of 1.89 m.

The database used for the Pitt Gold MRE contains 163 surface diamond drill holes totaling 70,364.67m. A total of 119 mineralized zones wireframes have been created for the Pitt Gold deposit. Mineralized zones average thickness in the deposit varies between 0.71 m and 3.03 m with an interpreted average thickness of 1.56 m.

### Capital Costs

The capital cost estimate for the proposed open pit operation in the PEA is based on the scheduled plant throughput rates, as well as a review of similar sized open pit gold operations.

**Table 6: Capital Cost Details**

Total Capital Cost	C\$M
Infrastructure	\$10
Power & Electrical	\$15
Water	\$37

Surface Operations	\$5
Mining	\$102
Process Plant	\$190
Indirect	\$90
Owner's Cost	\$54
<b>Construction cost</b>	<b>\$503</b>
Contingency	\$126
Pre-Production	\$57
Working Capital	\$20
<b>Initial Capital</b>	<b>\$706</b>
Sustaining and Development Capital	\$738
Closure Costs	\$30
Salvage Value	(\$36)
<b>Total Capital</b>	<b>\$1,438</b>

### Mining Capital Costs

The open pit mining activities for the Project were assumed to be undertaken by an equipment financed fleet. Mining capital costs were estimated based on a detailed equipment schedule matched to the mining production schedule. Total initial mining capital was estimated at C\$102 million, inclusive of capitalized stripping, and equipment. The capital expenditure for the underground, which starts at year 1 of open pit operations, is \$404 million of which C\$255 million is attributed to mine development.

### Processing Capital Costs

The process plant was designed using conventional processing unit operations. It will nominally treat 15,000 tpd or 679 dry tonne/hour based on 92% availability. The primary crushing plant design is based on 75% availability. The plant will operate two shifts per day, 365 days per year, and will produce a high-grade gold concentrate for sale to smelters.

Initial capital costs for the processing facility were estimated to be C\$190 million, excluding contingency. No major plant re-build or expansion was considered during the LOM, with sustaining capital set to maintain the equipment in operating condition.

### Operating Costs

**Table 7: Operating Cost Details**

Operating Costs per Tonne	Unit	LOM
Mining Costs – OP (inc. historic tailings)	C\$/t mined	C\$3.16
Mining Costs – OP (inc. historic tailings)	C\$/t processed	C\$20.85
Mining Costs – UG	C\$/t processed	C\$44.26

Processing Costs	C\$/t processed	C\$10.59
G&A Costs	C\$/t processed	C\$2.90
Total Operating Costs	C\$/t processed	C\$78.60
<b>Other Costs</b>		<b>LOM</b>
Transport Costs	C\$/t	\$30
Treatment Charges	C\$/dmt	\$75
Refining Charges	US\$/oz	\$5

### Mining Costs

The PEA contemplates open pit and underground mining undertaken by an equipment financed fleet. An average unit mining cost of C\$3.16 per tonne of material mined from the open pit was used in the economics. The cost estimate was built from first principles with detailed haulage profiles, and is based on experience of similar sized open pit operations and local conditions. The open pit mining costs consider variations in haulage profiles by month and by year and variable equipment requirements necessary to meet the plant production.

Underground mining cost was also estimated using first principles with supplier's quotations for equipment, consumables, contractor work, and is based on experience with underground operations with similar size and environment. The underground mining costs of \$44.26 per tonne of mineralized material mined from underground includes \$2,257 per metre of OPEX development. A sustaining development cost of \$16.64 per tonne is required to maintain production which is excluded from the operation costs.

### Processing Costs

An average cost of C\$10.59 per tonne of processed material was used in the PEA, based on the selected process flowsheet. This includes tailings handling, labour, consumables, maintenance, and supplies. A power cost of C\$0.0524/kWh was assumed.

### Mining

Open pit mining would occur in year one concurrent with underground development. Over the LOM, the open pit will deliver an average of 10,400 tpd of mineralized material to the mill. The annual peak of mineralized material delivered to the mill is 12,670 tpd in year 8. Underground production is expected to begin in year two with an average underground production rate of 3,500 tpd. Over an 11-year mine life, A total of 59.7 Mt of mineralized material (including pre-production) will be mined, which includes 4.1 Mt of historical tailings. The current LOM plan focuses on achieving consistent processing feed production rates, mining of higher-grade material early in the schedule, and balancing grade and strip ratios.

### Mining Methods

The Duparquet Project is planned as a mix of conventional open pit mine and a long hole (transversal – longitudinal – uppers) underground mine.

Open pit mining will be done with the use of diesel equipment including drilling rigs and haul trucks coupled with hydraulic shovels. The Project consists of seven (7) pits with Pit 1 having three (3) phases.



The LOM will last for 11 years including a pre-production and construction period where waste will be mined for construction purposes (dams, roads, etc.) and mineralized material will be stockpiled ahead of the process plant commissioning.

Production drilling and mining operations will take place on a 10 m bench height. The primary production equipment includes 12m<sup>3</sup> diesel-hydraulic shovel coupled with 65 tonnes Drammis trucks for the mineralized material and 22m<sup>3</sup> diesel-hydraulic production shovels coupled with 200 tonnes off highway mining trucks for the waste. An open-pit mining operation is planned with overburden stripping, topographic drilling activities, and supply of explosives outsourced to contractors.

For the underground mine, long hole stopping, both transverse and longitudinal with cemented rockfill (“CRF”) is the preferred mining method. Mineralized material will be removed from the stopes using a high production sized load-haul-dump (“LHD”). The underground mine's main declines will be accessible from surface through a single portal located north of the site.

In addition to the open pit and underground mines, a portion of the historical tailings will be transported and processed at the mill. A maximum of 750,000 t of material will be processed yearly.

### **Metallurgical Testing**

The PEA reflects gold recoveries that were a result of the extensive metallurgical test work completed by Clifton Star Resources Inc. (“Clifton Star”) during 2012 to 2014. The test work involved several rounds of bench scale and pilot plant testing of flotation concentration. In addition, Clifton Star completed extensive metallurgical test work on follow-on processing to treat the sulfide concentrates with fine grinding and alkaline leaching, bio-oxidation, and pressure oxidation but was not included in the PEA flowsheet.

Based on the test work carried out and trade-off studies conducted as part of the PEA, the Project was scoped with a flowsheet that includes comminution circuit and rougher and cleaner flotation to produce a high-grade gold concentrate for sale. This flowsheet is based on a primary grind size of 80% passing (“P<sub>80</sub>”) of 150 microns (“µm”) ahead of flotation. The gold recoveries to the flotation concentrate expected and used for the economics presented in the PEA are 89.5% to a concentrate grading approximately 36 g/t Au. First Mining plans to undertake follow-up metallurgical test work to investigate additional opportunities to further increase recoveries and believes that this remains an important focus area for further improving the economics of the Project.

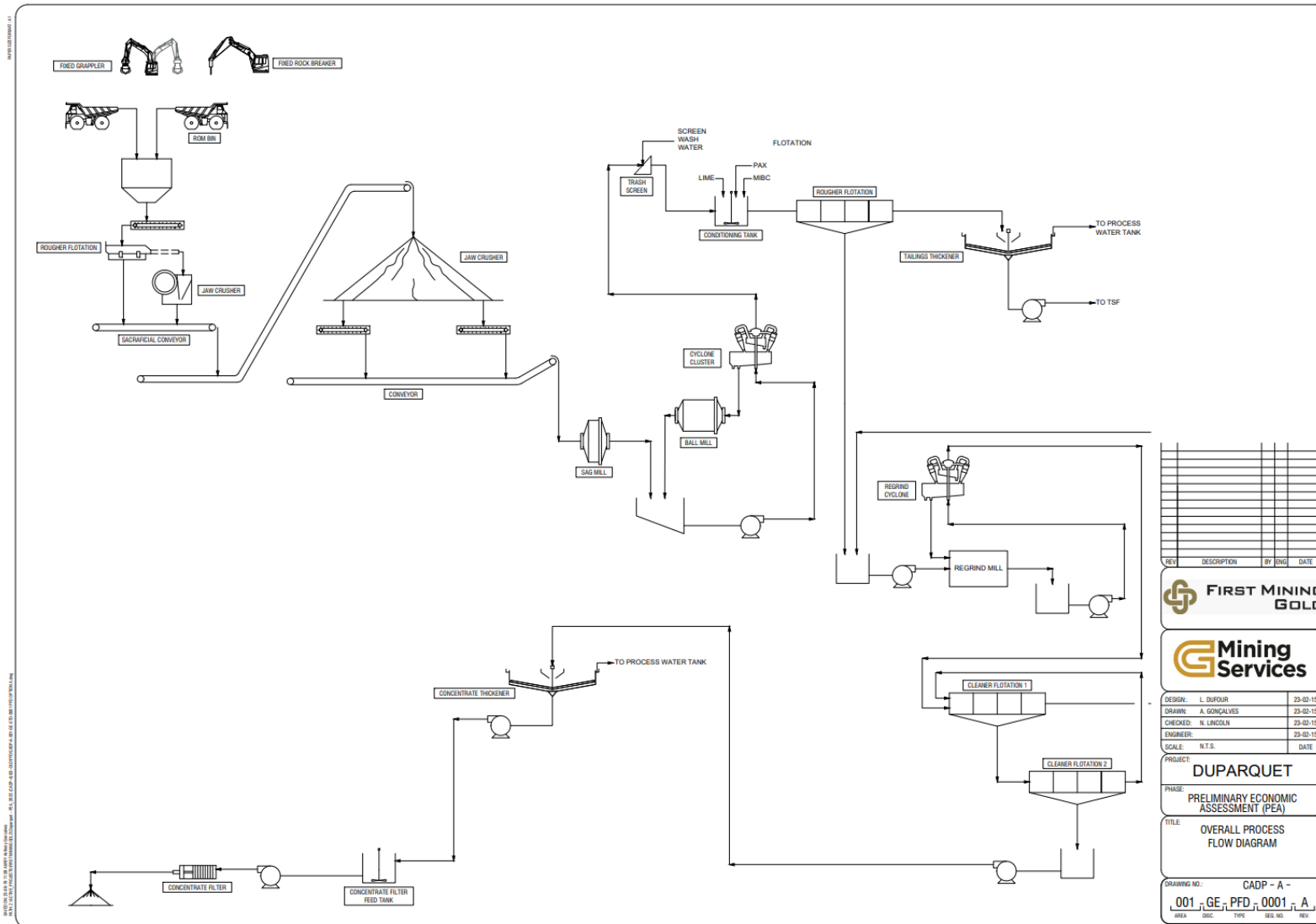
### **Processing**

The preliminary process plant design for the Duparquet Project is based on a robust metallurgical flowsheet to treat gold bearing material to produce gold concentrate. The flowsheet is based on previous metallurgical test work by Clifton Star, industry standards and conventional unit operations.

The process plant is designed to nominally treat 15,000 tpd of mineralized material and reprocessing of existing tailings. The flowsheet will consist of primary crushing, SAG and ball mill grinding, rougher and cleaner gold flotation circuits, concentrate dewatering and load out facilities. Flotation tailings will be dewatered in a thickener to produce a tailings slurry for storage onsite. The process plant will include reagents, air systems and utilities to support the operation.

Figure 1 represents the overall flowsheet for the Duparquet Gold Project.

**Figure 1: Overall Flowsheet for the Duparquet Gold Project**



## **Site Infrastructure**

The Project is located immediately north of the town of Duparquet with much of the site infrastructure optimized to utilize existing infrastructure within the town of Duparquet. No camp is planned on site and the administrative offices, the light vehicle truck shop and warehouse, among others are considered off site. The operation buildings, which will include the security office, offices for technical personnel, the conference rooms, a change room, an infirmary and a lunchroom, will be located at site entrance. An on-site temporary workshop is included in the initial capital with the permanent truck shop planned in year 4. The assay lab, the fuel storage (200,000 litres) and the explosive magazine among other essential infrastructure are also considered on site.

The infrastructure and process plant platform will be located on the north side of the pits. The waste rock stockpiles will be located on each side of the pits. A haul road is planned to connect the pits to the waste stockpiles, overburden stockpiles, process plant and Tailings Storage Facility.

## **Tailings Storage Facility**

The Tailings Storage Facility (“TSF”) design will take advantage of the existing topographic and ground conditions in the eastern part of the Project site. The TSF will provide enough capacity for 34.5 million cubic meters of tailings. A tailings deposit basin will be created by building a main dam at the downstream end of the valley and the tailings dams will be constructed in phases to minimize the initial capital. The process plant tailings will be pumped to the TSF through a 4 km pipeline and will be thickened prior to deposition. The reclaim water system will consist of a reclaim barge equipped with two reclaim water pumps.

## **Power Infrastructure**

Approximately 22.7MW of electrical demand will be supplied via a new 120 kV overhead transmission line, built to connect to the provincial grid’s 120 kV line approximately 15 km to the southeast in Reneault Hydro-Québec substation. Main distribution network is made at 13.8 kV from the main substation where two (2) fully redundant power transformers are installed. Distribution to the equipment is made at 4.16 kV and 600V.

## **Environment & Community**

The PEA has considered and incorporated the opportunity to leverage the Duparquet Gold Project development with the reclamation of the brownfield site conditions including the removal and reprocessing of over 4.1 Mt of uncontained historical mine tailings. With such measures incorporated into the PEA mine plan, in combination with the ability of the Project to collect and treat historically impacted groundwater via the excavation and dewatering of the open pit, the Project is positioned to deliver both environmental benefits and socio-economic benefits via employment, contracting and revenue for the Municipality of Duparquet. The PEA is anticipated to be refined and optimized based on consultation and input to be received by government, the Municipality of Duparquet and other local and regional stakeholders, and local First Nation community.

Since acquiring the Duparquet Gold Project in September of 2022, First Mining has prioritized meeting the people, communities and government representatives on project planning in an open and transparent manner. First Mining published the Mines d’Or Duparquet website to share project information and has recently finished renovations required to open a First Mining community relations office in Duparquet.

The Project provides an opportunity to address historical environmental aspects at the Project site to improve long-term sustainability, economic activity and support sustainable municipal planning and development.

The Municipality of Duparquet is in the Abitibi-Témiscamingue region which has been shaped primarily by natural resource-based industries, including mining, and forestry, where the mining industry accounts for 1 in 7 jobs in the region.

### **Project Enhancement Opportunities**

The PEA identified several opportunities to enhance the economics of the Duparquet Gold Project and will be investigated as First Mining continues to advance the Project. These opportunities include:

- **Exploration Drilling** – opportunity to expand the resource with drilling regionally along 19 km of First Mining’s property over the Destor-Porcupine fault zone; First Mining is in the process of completing an initial 5,000 metre drill program at the Project and intends to start a Phase II drill program later in 2023
- **Infill Drilling** – opportunity to expand the resource and increase the grade profile at the Project
- **Silver Mineralization** – opportunity to incorporate silver mineralization into the economics; the PEA does not contemplate any payable silver ounces
- **Additional Technical Studies** – opportunity to optimize project economics by reducing sustaining capital, development capital and operating costs
- **Incorporating New Mineral Resource** – opportunity to improve project economics by incorporating new mineral resource estimates into the mine plan from nearby Pitt and Duquesne deposits, which form part of the larger Duparquet Gold Project
- **Regional Consolidation** – opportunity to consolidate refractory deposits in the region to create a central processing facility to treat feed from other regional mines
- **Test work on Historical Tailings** – opportunity to optimize the blending of the old tailings through the process with additional test work
- **Metallurgical Test work** – opportunity to improve metallurgical recoveries and concentrate grade with additional metallurgical test work
- **Water Management** – opportunity to optimize water treatment and services estimate with additional studies
- **Tailings** – opportunity to optimize tailings and design and cost estimates with additional studies
- **Infrastructure** – opportunity to optimize town infrastructure in project design

### **Qualified Persons and NI 43-101 Technical Report**

The PEA for the Duparquet Gold Project summarized in this news release was prepared by G Mining Services Inc. and will be incorporated in a NI 43-101 technical report which will be available under the Company’s SEDAR profile at [www.sedarplus.ca](http://www.sedarplus.ca) , and on the Company’s website, within 45 days of this news release. The affiliation and areas of responsibility for each of the Qualified Persons involved in preparing the PEA, upon which the technical report will be based, are as follows:

**Table 7: Qualified Persons for PEA NI 43-101**

Qualified Persons	Company	Area of Expertise
Carl Michaud, P.Eng.	G Mining Services Inc.	Operating Cost Estimation, Economic Analysis and Mine Engineering
Alexandre Dorval, P. Eng.	G Mining Services Inc.	Open pit Mine Engineering
Marina Iund, P.Geo.	InnovExplo Inc.	Duparquet MRE
Olivier Vadnais-Leblanc, P.Geo.	InnovExplo Inc.	Duquesne and Pitt Gold MRE
Carl Pelletier, P.Geo.	InnovExplo Inc.	Duparquet, Duquesne and Pitt Gold MRE
Simon Boudreau, P. Eng.	InnovExplo Inc.	Duparquet, Duquesne and Pitt Gold MRE
Neil Lincoln, P. Eng.	G Mining Services Inc.	Mineral Processing and Recovery Methods
Philip Rodrigue, P. Eng.	G Mining Services Inc.	Infrastructure and Capital Cost Estimation
Sheldon Smith MES, P. Geo	Stantec Consulting Ltd.	Environmental and Permitting

Each QP has reviewed and approved the content of this news release.

The Company cautions that the results of the PEA are preliminary in nature and include Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. There is no certainty that the results of the PEA will be realized.

#### **Data Verification**

The Qualified Persons responsible for the preparation of the PEA and the technical report in respect thereof have verified the data disclosed in this news release, including sampling, analytical, and test data underlying the information contained in this news release. Geological, mine engineering and metallurgical reviews included, among other things, reviewing mapping, core logs, and re-logging existing drill holes, review of geotechnical and hydrological studies, environmental and community factors, the development of the life of mine plan, capital and operating costs, transportation, taxation and royalties, and review of existing metallurgical test work. In the opinion of the Qualified Persons, the data, assumptions, and parameters used to estimate Mineral Resources and Mineral Reserves, the metallurgical model, the economic analysis, and the PEA are sufficiently reliable for those purposes. The technical report in respect of the PEA, when filed, will contain more detailed information concerning individual responsibilities, associated quality assurance and quality control, and other data verification matters, and the key assumptions, parameters and methods used by the Company.

#### **Non-IFRS Financial Measures**

The Company has included certain non-IFRS financial measures in this news release, such as Initial Capital Costs, Total Cash Costs and All-In Sustaining Costs, which are not measures recognized under IFRS and do not have a standardized meaning prescribed by IFRS. As a result, these measures may not be comparable to similar measures reported by other companies. Each of these measures used are intended to provide additional information to the user and should not be considered in isolation or as a substitute for measures prepared in accordance with IFRS.

Certain Non-IFRS financial measures used in this news release and common to the gold mining industry are defined below.

*Total Cash Costs and Total Cash Costs per Gold Ounce*

Total Cash Costs are reflective of the cost of production. Total Cash Costs reported in the PEA include mining costs, processing, water & waste management costs, on-site general & administrative costs, treatment & refining costs, royalties and silver stream credits. Total Cash Costs per Ounce is calculated as Total Cash Costs divided by total LOM recovered gold ounces.

*All-in Sustaining Costs (“AISC”) and AISC per Gold Ounce*

AISC is reflective of all of the expenditures that are required to produce an ounce of gold from operations. AISC reported in the PEA includes Total Cash Costs, sustaining capital and closure costs. AISC per Ounce is calculated as AISC divided by total LOM recovered gold ounces.

**Qualified Persons**

Mr. Louis Martin P. Geo., (OGQ 0364), a consultant of First Mining, is a “Qualified Person” for the purposes of NI 43-101, 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 two of the largest gold projects in Canada, the **Springpole** Gold Project in northwestern Ontario, 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, and the Duparquet Project in Quebec, a PEA stage development project located on the Destor-Porcupine Fault Zone in the prolific Abitibi region. First Mining also owns the Cameron Gold Project in Ontario and a portfolio of gold project interests including 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.), and a large equity interest in Treasury Metals Inc.

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*

**For further information, please contact:**

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**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 expression Forward-looking statements in this news release include, but are not limited to, statements with respect to: (i) the results of the PEA; (ii) the economic potential and merits of the Project; (iii) the estimated amount and grade of Mineral Resources at the Project; (iv) the PEA representing a viable development option for the Project; (v) construction of a mine at the Project; (vi) the Project being one of the most meaningful development projects in Canada; (vii) estimates of capital and operating costs; (viii) the estimated amount of future production from the Project (ix) life of mine estimates and economic returns from the Project; (x) environmental benefits of the Project; (xi) Project enhancement opportunities; and (xii) timing of filing a technical report for the PEA on SEDAR+.

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, 2022 filed with the Canadian securities regulatory authorities under the Company's SEDAR+ profile at [www.sedarplus.ca](http://www.sedarplus.ca), 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.

#### **Cautionary Note to United States Investors**

The Company is a “foreign private issuer” as defined in Rule 3b-4 under the United States Securities Exchange Act of 1934, as amended, and is eligible to rely upon the Canada-U.S. Multi-Jurisdictional Disclosure System, and is therefore permitted to prepare the technical information contained herein in accordance with the requirements of the securities laws in effect in Canada, which differ from the requirements of the securities laws currently in effect in the United States. Accordingly, information concerning mineral deposits set forth herein may not be comparable with information made public by companies that report in accordance with U.S. standards.



*Technical disclosure contained in this news release has not been prepared in accordance with the requirements of United States securities laws and uses terms that comply with reporting standards in Canada with certain estimates prepared in accordance with NI 43-101.*

*NI 43-101 is a rule developed by the Canadian Securities Administrators that establishes standards for all public disclosure an issuer makes of scientific and technical information concerning the issuer's material mineral projects.*