

## MAPLE GOLD MINES LTD.

# TECHNICAL REPORT ON THE DOUAY GOLD PROJECT, NORTHWESTERN QUÉBEC, CANADA

NI 43-101 Report

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## Report Control Form

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## 1 SUMMARY

## **EXECUTIVE SUMMARY**

Maple Gold Mines Ltd. (Maple Gold) has retained Roscoe Postle Associates Inc. (RPA) to prepare this Technical Report on the Douay Gold Project (Douay, the Property or the Project), located in the province of Quebec, Canada. The purpose of this Technical Report is to support the disclosure of the Project's updated Mineral Resource estimate with an effective date of October 23, 2019. This Technical Report has been prepared in accordance with National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101). RPA visited the Project on November 14, 2019.

Maple Gold is a publicly listed gold exploration company trading under the symbol TSX.V:MGM on the Canadian TSX Venture Exchange. Its corporate office is located in Vancouver, Canada. Maple Gold is focused on advancing its Douay Gold Project consisting of 666 mostly contiguous claims totalling 355.1 km² located 55 km southwest of Matagami, Quebec, Canada. Maple Gold has 100% ownership of 634 claims covering an area of 343.2 km². Maple Gold has 75% ownership and SOQUEM Inc. (SOQUEM) has 25% ownership of a contiguous block of 32 claims totalling 11.9 km² located in the north-central part of the Property. The same 32 claims are subject to a 1% net smelter return (NSR) royalty in favour of Cambior Inc. (Cambior), now IAMGOLD Corporation (IAMGOLD). The Property is located within the prolific Abitibi Greenstone Belt (AGB) in northern Quebec, approximately 200 km north of Val d'Or.

The Property is at the exploration stage with a focus on gold mineralization.

The Mineral Resource estimate for the Douay deposit, with an effective date of October 23, 2019, is listed in Table 1-1. The Mineral Resource estimates conform to Canadian Institute of Mining, Metallurgy and Petroleum Definition Standards for Mineral Resources and Mineral Reserves dated May 10, 2014 (CIM (2014) definitions).



TABLE 1-1 MINERAL RESOURCE SUMMARY, AS OF OCTOBER 23, 2019
Maple Gold Mines Ltd. – Douay Gold Project

Resource Category	Tonnes (Mt)	Grade (g/t Au)	Contained Metal (koz Au)	
Pit Constraine	ed Mineral Reso	urces		
Indicated	8.6	1.52	422	
Inferred	65.8	0.97	2,045	
Underground Mineral Resources				
Inferred	5.4	1.75	307	
Total Mineral Resources				
Indicated	8.6	1.52	422	
Inferred	71.2	1.03	2,352	

#### Notes:

- 1. CIM (2014) definitions were followed for Mineral Resources.
- 2. A minimum mining width of three metres was applied to the Mineral Resource wireframes.
- 3. Bulk density of either 2.71 t/m³ or 2.82 t/m³ was assigned to Mineral Resources based on the zone.
- Mineral Resources are reported above a cut-off grade of 0.45 g/t Au for a potential open pit scenario and 1.0 g/t Au for a potential underground scenario.
- The Whittle pit shell used to estimate Mineral Resources used a long-term gold price of US\$1,500
  per ounce, however the implied gold price for the Mineral Resources reported at the elevated cut-off
  grade would be significantly lower.
- 6. Mineral Resources are estimated using a recovery of 90%.
- 7. Numbers may not add due to rounding.
- 8. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- 9. Pit constrained Mineral Resources are reported within a preliminary pit shell.

RPA is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource estimate.

## CONCLUSIONS

The Property is located within the Archean age Harricana-Turgeon belt of the Abitibi volcanoplutonic sub-province, part of the Superior Province of the Canadian Shield.

The Project is underlain by a northern assemblage of sedimentary, felsic pyroclastic and lesser mafic volcanic rocks (Taïbi Group), tectonically juxtaposed against a southern assemblage consisting of basalts and co-genetic gabbros, with lesser felsic volcanic and interflow sedimentary rocks, including cherts (Cartwright Hills Group). The Cartwright Hills Group is intruded by the 6.5 km x 2.0 km Douay alkaline intrusive complex (syenite to monzonite, alkali gabbro, and carbonatite) with its associated gold mineralization.



Gold zones on the Property are spatially and genetically linked to the presence or proximity of the syenitic intrusive complex. Proximal styles of mineralization (e.g., Porphyry and Nika zones) are associated with a significant proportion of syenitic rocks. More distal styles of mineralization, such as much of the Douay West and 531 zones, are associated with predominantly basaltic assemblages with multiple interflow sedimentary units with only minor syenite.

Maple Gold's protocols for drilling, sampling, analysis, security, and database management meet industry standard practices. The drill hole database was verified by RPA and is suitable for Mineral Resource estimation work.

RPA estimated Mineral Resources for the Douay deposit using the drill results available to October 23, 2019. The Mineral Resources are reported using a 0.45 g/t Au cut-off grade for open pit resources, and a 1.0 g/t Au cut-off grade for underground resources. Indicated Mineral Resource are estimated to total 8.6 million tonnes (Mt) at an average grade of 1.52 g/t Au. Inferred Mineral Resource are reported to be 71.2 Mt at an average grade of 1.03 g/t Au.

A number of mineralized lenses are supported by limited drilling. Additional infill drilling is warranted in order to better define these mineralized zones.

No Mineral Reserves have yet been estimated on the Property.

#### **RECOMMENDATIONS**

The Property hosts the Douay gold deposit, which consists of nine mineralization zones. Each zone, and the Property overall, merits considerable exploration and development work. Previous Maple Gold exploration programs, i.e., re-logging and sampling programs, have allowed Maple Gold to standardize the drill logging information and reduce the number of rock types within the database, which assisted in a better understanding of the mineralization styles at the Property.

RPA's recommendations for further exploration work are as follows:

• Focus drill targeting to extend higher grade mineralized zones, whether along strike or down dip, particularly near surface, in order to better define a potential starter pit areas.



- Complete infill drilling in areas currently excluded from the Inferred Mineral Resource due to widely spaced drilling.
- Continue the drill core re-sampling program to assay intervals that were previously left unsampled. Several instances were noted where unsampled intervals occur adjacent to assay values greater than 1 g/t Au. This represents an opportunity to possibly increase the resource estimate as well as to reduce strip ratio.
- Carry out additional bulk density measurements on the mineralization, waste, and overburden materials. There are limited density data for Northwest, Douay West, Zone 10, Zone 20, Main, and Central Zones.
- Complete a detailed structural study to advance the understanding on controls for the formation of higher grade lenses. This study should include oriented core and/or televiewer data in strategic areas.
- Initiate a geotechnical study to better determine the optimal pit slope angle of a potential open pit mine. This work would involve collecting point load test data, and continuing to collect rock quality designation (RQD) data on core, and studies on groundwater, joints, and fractures within the area of the potential pit.
- Complete additional metallurgical test work to include the new Nika Zone, and also to assess characteristics of various grade ranges.
- Continue evaluating exploration targets along the 55 km long segment of the Casa Berardi Deformation Zone (CBDZ) using ground geophysics and exploration drilling.

The primary objectives of the program proposed by Maple Gold are to upgrade and expand the Douay Mineral Resource, as well as advance the Project through metallurgical, mining, scoping desktop studies in advance of a Preliminary Economic Assessment (PEA). RPA concurs with Maple Gold's planned work program and budget of C\$3,722,000 for 2020. Details of the proposed Phase I program can be found in Table 1-2.



TABLE 1-2 PROPOSED BUDGET – PHASE I Maple Gold Mines Ltd. – Douay Gold Project

ltem	C\$
PHASE I	
Head Office Expenses and Property Holding Costs	100,000
Project Management, and Staff Cost	632,000
Diamond Drilling (7500 m all-inclusive contactor costs)	730,000
Analyses including core cutting	430,000
IP Survey (60 km)	215,000
Geophysical Interpretation & Report	25,000
Camp Costs, including food and utilities	690,000
Reporting (assessment and other)	150,000
Fuel, equipment rental and other	185,000
Environmental/Technical Baseline	100,000
Preliminary Metallurgical Test Work	75,000
Social/Consultation	50,000
Travel	40,000
Subtotal	3,422,000
Contingency	300,000
Total	3,722,000

A Phase II program could follow and include further diamond drilling and technical studies required to support a future PEA. Preliminary baseline work could commence in late 2020 with the aim of establishing an initial framework for a subsequent PEA, which could commence in 2021. The estimate of the contingent Phase II program is C\$5,000,000.

## TECHNICAL SUMMARY

#### PROPERTY DESCRIPTION AND LOCATION

The Property is located 55 km southwest of Matagami and 130 km north of Amos, in Douay Township, Quebec. The current Douay Property is centred around UTM coordinates 694,050E and 5,492,950N (UTM z17, NAD 83) or latitude 49.56°N and longitude 78.32°W.

The Property is readily accessible from Amos via Quebec Provincial Highway 109 which is an all-weather paved two lane highway that crosses the eastern portion of the Property. It is closely parallelled by one of the high tension power lines that transports electrical power from the Baie James Project to southern electrical consumption markets. The major regional population centres are the towns of Matagami and Amos.



#### LAND TENURE

The Property consists of 666 mineral claims covering 35,513 ha. Maple Gold has 100% ownership of 634 claims over an area of 34,319 ha. A contiguous block of 32 claims covering an area of 1,194 ha in the north-central part of the Property is subject to a joint venture between Maple Gold (75%) and SOQUEM (25%). These 32 claims are also subject to a 1% NSR in favour of Cambior (now IAMGOLD Corporation (IAMGOLD)).

Maple Gold acquired the first mineral claims of the Property pursuant to an exploration and option agreement entered into with Société d'Exploration Minière Vior Inc. (Vior) in 2010.

## **EXISTING INFRASTRUCTURE**

The region has a rich mining history, and the local labour force, suppliers, and services that would be required for a mining operation are available. The access road and power line are adequate for a mining operation. On the Douay West Zone, a shaft was collared and sunk to a depth of approximately 10 m (top of bedrock) and mining surface installations (headframe, hoist and two air compressors, office, etc.) were installed by Aurizon Mines Ltd. (Aurizon). Other facilities now forming part of the mining installations include an office, a kitchen, sleeping and sanitary facilities, and a core shack. A new 75-man camp was built in late 2017-early 2018 just to the west of Highway 109. The current water and electrical power supply and services are adequate for the proposed exploration activities.

There are significant sand and gravel deposits at the intersection of the highway to the access road. Highway 109 was constructed on eskers and material was previously quarried from a pit during construction.

In general, exploration and operations can be conducted throughout the year, however, occasionally, extreme weather conditions have been known to hamper activities, with extreme cold or blizzard conditions in winters and forest fires during dry summer periods.

#### **HISTORY**

The Property was originally staked by INCO Gold Ltd. (INCO) in 1976. INCO discovered three deposits, the Main Zone, 531 Zone, and the Douay West Zone, in 1976, 1986, and 1990, respectively, based on results from airborne geophysical surveys. Forty-four drill holes



totalling 8,656 m were drilled on the Douay West Zone in 1990 and 1991, resulting in a tonnage and grade estimate for the in-situ mineralization.

Vior earned a 100% interest in the Project in January 1992 and carried out extensive drilling. In 1992, SOQUEM optioned part of the Property. SOQUEM carried out ground geophysics and drilling and defined Zone 10 on the Property. SOQUEM returned the Property to Vior in 1994. During 1992 and 1993, Vior drilled targets outside the known discoveries, and further defined the 531 Zone while testing induced polarization (IP) targets.

In February 1995, Cambior entered into an agreement with Vior to earn an interest in the Douay property. Cambior defined a resource on the Douay West Zone that was accessible by using a surface ramp, however, Cambior later dropped its interest in the Property.

Aurizon optioned the Property from Vior in 1996. Following a seven-hole diamond drill campaign, Aurizon completed a feasibility study in August 1996, aimed at evaluating the resources and the profitability of the Douay West Zone. In 1997, the power line, headframe, hoist building, and accessory structures were built. The shaft at Douay West was collared down to a depth of 10 m. Aurizon also drilled five holes in the Douay West Zone and six holes in other areas of the Property between 1996 and 1999. In 2000, Aurizon relinquished its option after having spent approximately C\$5 million on the Project.

Vior reviewed all the information available on the Property in 2004, and carried out drilling in March and April 2005, resulting in the discovery of the Porphyry Zone. Various exploration campaigns continued between 2006 and 2010 which included drilling and re-logging programs on the Douay West and other zones, as well as a number of technical studies on the Project.

Maple Gold (Aurvista Gold Corporation at the time) acquired the first 216 mineral claims of the Property pursuant to an exploration and option agreement entered into with Vior in 2010.

Since 2010, in addition to significantly expanding the Property area, Maple Gold has been conducting drilling and re-logging campaigns to identify the extent of the mineralization on the Property.



#### GEOLOGY AND MINERALIZATION

The Project lies within the Archean age Harricana-Turgeon belt of the Abitibi volcano-plutonic sub-province, part of the Superior Province of the Canadian Shield. The Property straddles the CBDZ, which includes several east-west and east-southeast-west-northwest deformation corridors.

The CBDZ, oriented roughly east-west, overlaps the southern boundary of the Taïbi Basin rocks. This tectonic zone is manifested by intense brittle-ductile deformation (depending on location and host rock characteristics), and the presence of several, often, graphitic east-west faults.

The rocks of the Property are generally metamorphosed to the greenschist facies. Three distinct rock units are present, from north to south:

- A sedimentary sequence (Taïbi Group) composed of turbiditic mudstones and wacke, siltstones and conglomerates, felsic pyroclastics, iron formation with lesser mafic volcanic horizons. The Taïbi sequence rests unconformably on the Cartwright sequence.
- A predominantly mafic magmatic sequence (Cartwright Hills Group) composed mostly
  of massive and pillowed flows of Mg- and Fe-basalts of tholeitic affinity with minor
  ultramafic flows and gabbroic intrusions. The Cartwright sequence also contains
  interflow felsic pyroclastics, volcanics and sedimentary rocks, including laminated
  cherts.
- 3. An alkaline (largely syenitic) intrusive complex intruding the Cartwright sequence, including syenite (<5% modal quartz), quartz syenite and monzonite; with lesser carbonatite and alkaline gabbro.

Gold zones on the Property are generally linked to the presence or proximity of the syenitic intrusive complex. Of these occurrences, the Douay West Zone has been studied the most. There, massive and pillowed, locally variolitic or amygdaloidal basalts represent the prevalent lithological assembly. They constitute more than 75% of the volcanic sequence with a stratigraphic thickness of over 400 m.

At the property scale, the rock units form east-west to east-southeast trending litho-tectonic assemblages, indicative of a broadly north-south oriented maximum compression. The rock assemblage appears to be dissected by three main sets of easterly, northwesterly, and later northeasterly faults interpreted from drill core descriptions and inferred from breaks in the magnetic data. The easterly and northwesterly trending faults represent the Casa Berardi and



Douay regional trends, respectively. Both sets locally connect, forming an east-west, dextral transpressive fault system

Preliminary impressions are that essential requirements to develop a significant gold zone include:

- 1. Proximity of a major fault (plumbing system and structural permeability).
- 2. Interlayering of different lithological units, especially mafic with felsic units with syenitic intrusions (rheological contrasts focusing deformation, alteration, and mineralization),
- 3. Presence of chemically favourable mafic units providing iron for sulphidation of mafic minerals.
- 4. Presence (for proximal style of mineralization) or proximity (for more distal style) of syenitic intrusions, typically as irregular dyke swarms, interpreted to represent the source of metals and sulphur. Some of the thinner (millimetric) injections may in fact represent fenitic (carbonatite-related) alteration rather than magmatic injections.
- 5. A minimum abundance of sulphides (2% on average but varying from trace to over 10%).

## **EXPLORATION STATUS**

Exploration work by Maple Gold included geological mapping and sampling, airborne magnetic and electromagnetic as well as ground IP surveys, and drilling. A total of 242 diamond drill holes for 92,814 m have been completed by Maple Gold on the Property since acquisition in 2010. Further exploration is planned to continue to expand the resources as the deposit remains open in several directions. In addition, exploration targets generated during 2018 drilling and geological mapping and sampling work at the property scale, which straddles a 55 km segment of the favorable CBDZ, require further testing.

#### MINERAL RESOURCES

RPA estimated Mineral Resources for the Douay deposit using the drill hole results available to October 23, 2019. The Douay drill hole database includes 824 drill holes totalling 250,374 m, of which 674 holes for 220,347 m were drilled within the Douay resource area. The resource wireframes are intersected by 539 holes for an accumulated interval length of 34,785 m. The three-dimensional wireframe models were generated using a nominal 0.1 g/t Au for all the zones at the Project. Prior to compositing to three metre lengths, the high gold values were cut for each zone individually. Block model grades within the wireframe models were interpolated by inverse distance cubed (ID³). Density values of 2.71 t/m³ and 2.82 t/m³ were



assigned depending on the zone using the systematic density measurements from 2018 and 2019 core samples.

Mineral Resources at the Project are reported on the basis of a possible open pit mining scenario using a 0.45 g/t Au cut-off grade, and underground scenario using a 1.0 g/t Au cutoff grade. Table 1-3 lists the Project's Mineral Resources by domain.

TABLE 1-3 MINERAL RESOURCES AT DOUAY DEPOSIT PER DOMAIN AS OF **OCTOBER 23. 2019** Maple Gold Mines Ltd. - Douay Gold Project

Mineralized Zone	Tonnes (Mt)	Grade (g/t Au)	Contained Metal (koz Au)	
	Pit Constrained Min		( )	
Indicated				
Porphyry	4.4	0.95	136	
Douay West	4.2	2.13	286	
Total Indicated	8.6	1.52	422	
Inferred				
Porphyry	47.9	0.90	1,378	
Douay West	2.0	1.14	72	
531	5.8	1.51	281	
Main Zone	0.2	1.24	8	
North West	2.6	1.14	96	
Nika	3.6	0.94	109	
Central Zone	0.1	0.89	4	
Zone 10	1.2	1.18	46	
Zone 20	2.4	0.67	51	
Total Inferred	65.8	0.97	2,045	
Underground Mineral Resources				
Inferred				
Porphyry	1.6	1.63	85	
Douay West	1.0	1.91	64	
531	1.3	1.83	78	
Main Zone	1.1	1.71	59	
North West	0.1	1.86	5	
Central Zone	0.2	1.66	11	
Zone 10	0.1	1.86	4	
Total Inferred Notes:	5.4	1.75	307	

- 1. CIM (2014) definitions were followed for Mineral Resources.
- 2. A minimum mining width of three metres was applied to the Mineral Resource wireframes.
- 3. Bulk density of either 2.71 t/m³ or 2.82 t/m³ was assigned to Mineral Resources based on
- 4. Mineral Resources are reported above a cut-off grade of 0.45 g/t Au for potential open pit Mineral Resources and 1.0 g/t Au for potential underground Mineral Resources.



- 5. The Whittle pit shell used to estimate Mineral Resources used a long-term gold price of US\$1,500 per ounce, however the implied gold price for the Mineral Resources reported at the elevated cut-off grade would be significantly lower.
- 6. Mineral Resources are estimated using a recovery of 90%.
- 7. Numbers may not add due to rounding.
- 8. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- 9. Pit constrained Mineral Resources are reported within a preliminary pit shell.

There are currently no Mineral Reserves estimated for the Douay Project.



## **2 INTRODUCTION**

Roscoe Postle Associates Inc. (RPA) was retained by Maple Gold Mines Ltd (Maple Gold) to prepare an independent Technical Report on the Douay Gold Project (Douay, the Property, or the Project) located in Douay Township, Quebec, Canada. The purpose of this Technical Report is to support the disclosure of the Project's updated Mineral Resource estimate with an effective date of October 23, 2019. This Technical Report has been prepared in accordance with National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101).

Maple Gold is a TSX Venture Exchange listed (TSX.V:MGM) mineral resource company engaged in mineral exploration and development in Quebec, Canada. Maple Gold's Douay Gold Project is the subject of the current Mineral Resource estimate.

Maple Gold has 100% ownership of 634 claims over 34,319 ha. SOQUEM Inc. (SOQUEM) has 25% ownership of a contiguous block of 32 claims covering 1,189 ha in the north-central part of the Property with Maple Gold having a 75% interest. Most of the current Mineral Resource is hosted on claims 100% held by Maple Gold. The 32 claims host part a small portion of the Mineral Resource estimate (details presented in Section 14).

#### SOURCES OF INFORMATION

A site visit was carried out by Dorota El Rassi, P.Eng, RPA Senior Geological Engineer, and an independent Qualified Person (QP), on November 14, 2019.

Discussions were held with personnel from Maple Gold:

- Mr. Fred Speidel, P.Geo., Vice President Exploration,
- Mr. Even Stavre, P.Geo, Interim Project Manager,
- Mrs. Maria Sokolov, P.Geo, Senior Exploration Geologist, and
- Mr. Pavel Sokolov, Senior Technician, Maple Gold

Mrs. El-Rassi is responsible for the overall preparation of this report.

The documentation reviewed, and other sources of information, are listed at the end of this report in Section 27 References.



## **LIST OF ABBREVIATIONS**

Units of measurement used in this report conform to the metric system. All currency in this report is US dollars (US\$) unless otherwise noted.

μ	Micron	kVA	kilovolt-amperes
μg	Microgram	kW	kilowatt
a	Annum	kWh	kilowatt-hour
A	Ampere	L	litre
bbl	Barrels	lb	pound
Btu	British thermal units	L/s	litres per second
°C	degree Celsius	m	metre
C\$	Canadian dollars	M	mega (million); molar
cal	Calorie	m <sup>2</sup>	square metre
cfm	cubic feet per minute	m <sup>3</sup>	cubic metre
cm	Centimetre	MASL	metres above sea level
cm <sup>2</sup>	square centimetre	m³/h	cubic metres per hour
d	Day	mi	mile
dia	Diameter	min	minute
dmt	dry metric tonne	μm	micrometre
dwt	dead-weight ton	mm	millimetre
°F	degree Fahrenheit	mph	miles per hour
ft	Foot	MVA	megavolt-amperes
ft <sup>2</sup>	square foot	MW	megawatt
ft <sup>3</sup>	cubic foot	MWh	megawatt-hour
ft/s	foot per second	oz	Troy ounce (31.1035g)
g	Gram	oz/st, opt	ounce per short ton
g G	giga (billion)	ppb	part per billion
Gal	Imperial gallon	ppm	part per million
g/L	gram per litre	psia	pound per square inch absolute
Gpm	Imperial gallons per minute	psig	pound per square inch gauge
g/t	gram per tonne	RL	relative elevation
gr/ft <sup>3</sup>	grain per cubic foot	S	second
gr/m³	grain per cubic metre	st	short ton
ha	Hectare	stpa	short ton per year
hp	Horsepower	stpd	short ton per day
hr	Hour	t	metric tonne
Hz	Hertz	tpa	metric tonne per year
in.	Inch	tpd	metric tonne per day
in <sup>2</sup>	square inch	US\$	United States dollar
J	Joule	USg	United States gallon
k 	kilo (thousand)	USgpm	US gallon per minute
kcal	Kilocalorie	V	volt
kg	Kilogram	W	watt
km	Kilometre	wmt	wet metric tonne
km <sup>2</sup>	square kilometre	wt%	weight percent
km/h	kilometre per hour	yd <sup>3</sup>	cubic yard
kPa	Kilopascal	l yr	year



## **3 RELIANCE ON OTHER EXPERTS**

This report has been prepared by RPA for Maple Gold. The information, conclusions, opinions, and estimates contained herein are based on:

- Information available to RPA at the time of preparation of this report,
- Assumptions, conditions, and qualifications as set forth in this report.

For the purpose of this report, RPA has relied on ownership information provided by Maple Gold. RPA has not researched property title or mineral rights for the Douay Project and expresses no opinion as to the ownership status of the Property.

Except for the purposes legislated under provincial securities laws, any use of this report by any third party is at that party's sole risk.



## 4 PROPERTY DESCRIPTION AND LOCATION

## **GENERAL**

The Douay Project is located 55 km southwest of Matagami and 130 km north of Amos, in Douay Township, Quebec. The term Douay Project refers to the area within the mineral claims where the mineralized deposits or zones are located, while the term Douay property refers to the entire land package (mineral claims) under Maple Gold's control.

The Douay Property is centred around UTM coordinates 694,050E and 5,492,950N (UTM z17, NAD 83) or latitude 49.56°N and longitude 78.32°W. The Project is accessed via Provincial Highway 109 from Amos. Amos is located 70 km north of Val d'Or (Figure 4-1).

## LAND TENURE

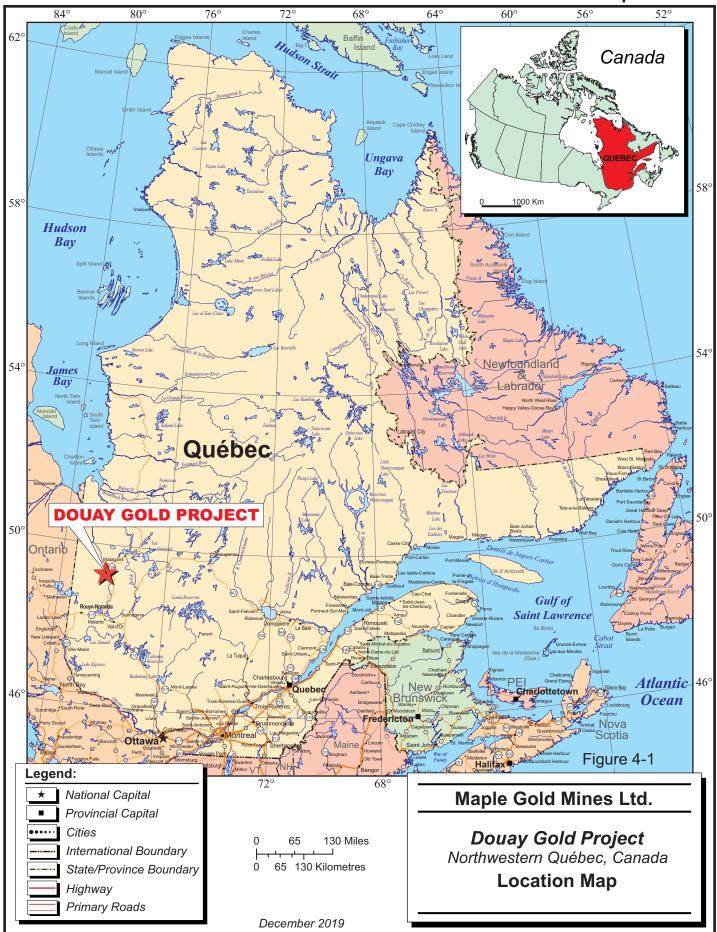
The Douay property consists of 666 mineral claims covering 35,513 ha (Figure 4-2). Maple Gold has 100% ownership of 634 claims over 34,319 ha. SOQUEM has 25% ownership and Maple Gold holds a 75% interest in a contiguous block of 32 claims covering 1,194 ha in the north-central part of the Property. These same 32 claims are also subject to a 1% net smelter return (NSR) royalty in favour of Cambior (now IAMGOLD). A complete list of claims together with the expiration dates is presented in Appendix A.

As of the effective date of this report, all the claims are in good standing and are registered in the name of Maple Gold.

For 2020-2021, assessment credits totalling \$1,078,100 and renewal fees totalling \$42,721 are required in order to renew all of the Project claims upon their respective expiration dates. Assessment credits totalling \$16,622,199 are available to renew the Property claims.

In mid-2010, Aurvista Gold Corporation (Aurvista, renamed Maple Gold in 2017) acquired an initial 25% interest in the Douay property from Société d'Exploration Minière Vior Inc. (Vior), subject to certain work commitments and payments. Aurvista's interest was gradually increased by making additional payments and exploration expenditures to the current 100%.







On January 31, 2017, Maple Gold announced that it had re-purchased and cancelled the 1.5% NSR royalty interest in 32 claims within the Project from Northern Abitibi Mining Corp. for a total cash consideration of C\$325,000. The re-purchased NSR covered the 32 contiguous claims in the north-central quadrant of the Project currently held 25% by SOQUEM and 75% by Maple Gold.

On February 8, 2017, Maple Gold exercised its option to purchase the remaining 10% interest in five mineral claims totalling 20 ha, through the payment of C\$20,000 to Northern Abitibi.

On March 29, 2017, Maple Gold announced that it had exercised an option granted to it by Vior on May 26, 2011 and acquired Vior's remaining 10% interest in the West Zone for C\$12,500. As a result, Maple Gold increased its 100% owned land package to 247 contiguous claims totalling 128.8 km², with a 75% interest (25% held by SOQUEM) in 32 additional claims totalling 11.9 km² located in the North-West Zone.

On April 5, 2017, Maple Gold announced that it had staked an additional 294 mineral claims and added 164.4 km<sup>2</sup> surrounding the Project. The Property then consisted of 573 claims covering 305 km<sup>2</sup>, with an extended strike length covering the Casa Berardi Deformation Zone.

On September 5, 2017, Maple Gold announced that it had increased the Property area by more than 26 km<sup>2</sup> to 624 claims covering 331.7 km<sup>2</sup>. Maple Gold also submitted applications for additional claims that would increase the Property size to 345 km<sup>2</sup>.

By February 13, 2018, the Project consisted of 701 contiguous mineral claims for a total area of 37,475 ha. This was increased to a maximum of 731 claims and 39,152 ha in early 2019, then reduced to the current level of 666 claims after a number of claims in the southeast corner of the Property were relinquished.

## **MINERAL RIGHTS**

In Canada, natural resources fall under provincial jurisdiction. In the Province of Quebec, the management of mineral resources and the granting of exploration and mining rights for mineral substances and their use are regulated by the Quebec Mining Act, which is administered by the Ministry of Energy and Natural Resources (Ministère de l'Énergie et des Ressources



Naturelles, or MERN). Mineral rights are owned by the Crown and are distinct from surface rights.

In Quebec, a mining lease is initially granted for a 20-year period. A mining lease can be renewed for additional 10-year periods. Maple Gold does not currently hold a lease of this type.

In Quebec, a map-designated claim is valid for two years and can be renewed indefinitely subject to the completion of necessary expenditure requirements and payment of renewal fees. Each claim gives the holder an exclusive right to search for mineral substances, except sand, gravel, clay, and other unconsolidated deposits on the land subjected to the claim. The claim also guarantees the holder's right to obtain an extraction permit upon discovery of a mineral deposit. Ownership of the mining rights confers the right to acquire the surface rights.

## SURFACE RIGHTS

The mining claims included in the Property are located on Crown land. Maple Gold has the first right to acquire the surface rights to the Property by taking it to the mining lease status. Under Quebec Mining Legislation, the owner of the mining rights can make use of the timber on the leased property by paying a nominal fee if such timber is deemed to be of commercial value. Maple Gold currently has surface rights to two areas via annually renewable leases, both of which are in good standing.

## ENVIRONMENTAL, PERMITTING AND STAKEHOLDER RELATIONS

RPA is not aware of any remediation which may have been undertaken by previous owners as related to the historic drill sites or the current infrastructure.

In 2009, Vior asked the Quebec government authorities for the renewal of an earlier bulk sampling permit and to transfer 100% of the permit to Vior, based on an Environmental study prepared by Roche for Aurizon Mines in 1997. Vior received a positive answer on November 9, 2009, for a 5,000 tonnes (t) underground sampling program. A rehabilitation plan was



submitted on December 7, 2009. As of that date, Vior had all of the necessary legal documents and authorizations to proceed with a 5,000 t bulk sample of the Douay West mineral deposit.

This permit remains in effect in Vior's name. This authorization can be transferred to Maple Gold at the company's request.

#### FIRST NATIONS AND COMMUNITY RELATIONS

On October 7, 2014, Maple Gold announced that a letter of collaboration (LOC) had been signed with the Abitibiwinni First Nation (AFN) in regard to the Douay Project. The LOC laid the groundwork for future, more detailed discussions currently taking place between Maple Gold and the AFN. This LOC represented both parties' intent to develop a collaborative relationship moving forward with the development of the Douay Project. Maple Gold believes that the completion of the LOC at the time represented a major step forward.

Where possible, Maple Gold seeks to invite entities related to AFN to bid on work contracts on the Project (e.g. forestry intervention, drilling, technical services). Such entities were hired for the winter 2018 and 2019 programs.

Maple Gold furthermore seeks to hold quarterly update meetings with AFN. A similar approach has been taken with the Lac Josee community (not a First Nations Community), which consists of the owners of several summer cottages along the east shore of Lac Josee just to the south of the 531 Zone.

## GENERAL STATEMENT REGARDING DOUAY PROPERTY

RPA is not aware of any other royalties, back-in rights, or other obligations related to the Agreement or any other underlying agreements.



## 5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

## **ACCESSIBILITY**

The Douay property is readily accessible from Amos via Provincial Highway 109, which is an all-weather paved two lane highway that crosses the Property. It is closely paralleled by a high voltage electric power line that runs between Amos and Matagami. The major population centres for the region are the towns of Amos and Matagami.

## CLIMATE

During the year, the temperature varies from -24°C to 23°C and is rarely below -35°C or above 29°C. The warm season lasts for four months, from May to September with an average daily high temperature above 16°C. The warmest month is July, with an average high of 23°C and low of 11°C. The cold season temperature (from December to March) averages below 5°C, with the coldest month being January with a low of -24°C and high of -12°C.

From June to January, southwest winds are dominant, while from February to May, the northwest winds prevail. Winds have a typical velocity varying between 11 km/h and 14 km/h, for an average of 13 km/h during the year.

The area receives an average of 928 mm of precipitation annually. Average monthly precipitation ranges from 48 mm in February to 103 mm in September. Snow can fall from October to April, however, significant accumulations are normally limited to the months of November to March. Snowfall averages 54 mm (expressed in mm of water) per month for these five months.

Exploration and operations can be conducted throughout the year, however, occasionally, extreme weather conditions have been known to hamper activities, with extreme cold or blizzard conditions in winters and forest fires during dry summer periods.



## LOCAL RESOURCES AND INFRASTRUCTURE

The region has a rich mining history. The local labour force, suppliers, and services are sufficient to support a mining operation. The closest towns are Amos (population 12,671, 2011 census), located approximately 130 km south of the deposit, and Matagami (population 1,526, 2011 census), located 55 km northeast of the deposit. Val d'Or, the nearest major centre, is approximately 200 km south of the deposit.

The access road and power line are adequate for a mining operation. On the Douay West zone, a shaft was collared and sunk to a depth of approximately 10 m (top of bedrock), and the mining surface installations (headframe, hoist and two air compressors, office, etc.) were installed by Aurizon Mines Ltd. The hoist is a Canadian Ingersol Rand 72 x 60 PE-1; Serial Number 1530-B and is fitted with a 575 V/60 Hz electric motor. This building also includes an office, a kitchen, sleeping and sanitary facilities, as well as a core shack. A new 75-man camp was built in late 2017-early 2018 just to the west of Highway 109. The current water and electrical power supply are adequate for proposed exploration work.

There are significant sand and gravel deposit at the exit from the highway to the access road. Highway 109 was constructed on eskers and material was quarried from a pit during construction.

## **PHYSIOGRAPHY**

The area is characterized by generally flat topography with occasional low relief drumlins and eskers, largely covered by black spruce forests, and swamps. The vertical relief in the area is low with a mean altitude of 290 MASL.

Very few outcrops occur on the eastern and western parts of the Property but are locally abundant in the central part. A single stripped outcrop is known within the Mineral Resource area. The overburden consists of a peat layer overlying argillaceous and sandy material, which in turn overlies beds of fluvio-glacial till with lesser clay.



## **6 HISTORY**

## PRIOR OWNERSHIP

The claims comprising the original property were staked by INCO Gold Ltd. (INCO) in 1976. Vior optioned the property from INCO in 1986 and subsequently earned a 100% interest. The original claims were segregated into several properties, including the Douay and Douay West properties

In 1992, SOQUEM optioned part of the Douay property but terminated its option in 1994.

In February 1995, Cambior Inc. (Cambior) entered into an option agreement but did not renew its option for 1996.

In 1996, Aurizon Mines Ltd. (Aurizon) entered into an option agreement whereby it could earn a 50% interest in the Douay and Douay West properties by spending C\$17 million. In 2000, Aurizon relinquished its option after having spent C\$5 million.

In mid-2010, Aurvista acquired an initial 25% interest in the Douay property from Vior, subject to certain work commitments and payments. Aurvista's interest was gradually increased by making additional payments and exploration expenditures to the current 100%. In November 2017, Aurvista changed its name to Maple Gold.

## **EXPLORATION, AND DEVELOPMENT HISTORY**

Using airborne geophysical survey results as the primary targeting tool, INCO discovered three deposits: the Main Zone (MZ), 531 Zone, and the Douay West Zone, in 1976, 1986, and 1990 respectively. Forty-four drill holes totalling 8,656 m were drilled on the Douay West Zone in 1990 and 1991. There was sufficient information to permit an initial tonnage and grade estimate.



Vior obtained an option on the Project in 1986, and earned a 100% interest in January 1992. Work on the Property by Vior during its earn-in period included extensive drilling. The initial claims were then split up into several properties, including Douay and Douay West.

In 1992, SOQUEM optioned part of the Douay property. Their exploration work included ground geophysics and diamond drilling of 22 holes totalling 6,416 m. SOQUEM defined Zone 10 and tested other induced polarization (IP) anomalies on the Property. SOQUEM returned the Property to Vior in 1994. During 1992 and 1993, Vior drilled targets outside the known discoveries, and further defined the 531 Zone.

Cambior signed an agreement with Vior in February 1995 to earn an interest in the Property. Cambior completed 13 holes in the Douay West Zone and a feasibility study to evaluate the potential of the zone. Cambior estimated a ramp accessible resource but later relinquished its interest in the Property.

Aurizon Mines Ltd. (Aurizon) optioned the property from Vior in 1996. Following a seven-hole, 2,520 m diamond drill campaign, Aurizon completed a Feasibility Study in August 1996 on the Douay West Zone. Aurizon constructed a gravel road from Highway 109 to the Douay West site. In 1997, the power line, headframe, hoist building, and accessory structures were installed. The shaft was collared down to a depth of 10 m. Aurizon also drilled five holes in the Douay West Zone and six holes in other areas, totalling 6,053 m, between 1996 and 1999. In 2000, Aurizon relinquished its option after having spent approximately C\$5 million on the Project.

Vior reviewed all the information available on the Property in 2004 and resumed exploration, drilling 3,384 m of core (NQ size) on the Douay West and Adam zones in March and April 2005, resulting in the discovery of the Porphyry Zone. Two exploration holes were drilled east of the Adam Zone, in the syenite intrusive, now known as the Porphyry Zone. In 2005, Vior commissioned Geostat Systems International Inc. (Geostat), which is now part of SGS Canada Inc., to evaluate the resources and prepare a pre-feasibility study for an open pit mine on the Douay West Zone. Geostat estimated a Probable Mineral Reserve of 269,726 tonnes with an average diluted grade of 4.74 g/t Au (Geostat, 2005).



During the 2006 to 2007 drilling campaign, 53 drill holes were completed on the Douay West and other adjacent properties. Twenty-three of these holes were on the Douay West Zone. A trench was also excavated on the syenite complex.

In 2007, Vior commissioned Geostat to update its August 2005 mineral resource estimate and supporting NI 43-101 Technical Report based on the new drilling (Vior, 2007). The Douay West Mineral Resource was updated using information from the 2006 to 2007 drilling campaign. Geostat estimated Measured and Indicated Mineral Resources at a 3 g/t Au cutoff grade. Inferred Mineral Resources were also estimated.

In 2009, Vior re-logged and re-interpreted the drill hole data associated with the Douay West Zone.

In 2010, SGS updated the Mineral Resource estimate and completed a Preliminary Economic Assessment (PEA) on the Douay West Zone. SGS estimated the resource at Douay West based on a 4 g/t Au cut-off grade.

In mid-2010, Aurvista, now Maple Gold, acquired an initial 25% interest in the Property from Vior, subject to certain work commitments and payments. Aurvista gradually increased its interest to the current 100% by making additional payments and exploration expenditures.

## HISTORICAL RESOURCE AND RESERVE ESTIMATES

#### MINERAL RESOURCES

A "historical estimate" as defined by NI 43-101 is an estimate of the quantity, grade, or metal or mineral content of a deposit that the company has not verified as a current Mineral Resource or Mineral Reserve, and which was prepared before the issuer acquiring, or entering into an agreement to acquire, an interest in the property that contains the deposit.

Several resource estimates were published on the Douay property by previous owners. Table 6-1 summarizes the historical Mineral Resource estimates on the Property. The estimates in Table 6-1 are considered to be historical in nature and should not be relied upon. A qualified person has not completed sufficient work to classify the historical estimate as a current Mineral



Resource or Mineral Reserve and Maple Gold is not treating the historical estimates as current Mineral Resources or Mineral Reserves.

TABLE 6-1 HISTORICAL MINERAL RESOURCE ESTIMATES
Maple Gold Mines Ltd. – Douay Gold Project

Year	Category	Tonnes	Grade (g/t Au)	Comments
1991		INCO		Pre-dates the inception of
	"Probable"	442,465	9.6	CIM definitions
	"Possible"	93,493	8.1	
1995	Cambior (IAMGOLD)			Pre-dates the inception of
	"Inferred"	357,000	7.2	CIM definitions
2007	Vior			Follows CIM (2005)
	Measured	236,000	6.08	definitions 3 g/t Au cut-off grade
	Indicated	735,000	5.46	
	Inferred	1,594,000	3.94	

Maple Gold's (Aurvista prior to 2017) previous Mineral Resource estimates are summarized in Table 6-2. All these estimates are superseded by the current estimate in Section 14, Mineral Resource Estimate of this report.

TABLE 6-2 PREVIOUS MINERAL RESOURCE ESTIMATES
Maple Gold Mines Ltd. – Douay Gold Project

Year	Category	Tonnes	Grade (g/t Au)	Comment
2012	Riverbend Geological Services			Riverbend Geological
	Indicated	2,689,000	2.76	Services Inc. (2012)
	Inferred	40,244,000	0.75	0.3 g/t Au cut-off grade
2015	Aurvista - PEA			P&E Mining Consultants Inc.
	Indicated	2,558,000	2.77	(2015)
	Inferred	1,413,000	1.65	0.3 g/t Au cut-off grade
2017	Aurvista			Micon International Limited
	Inferred	83,327,000	1.05	(Micon) (2017)
				0.5 g/t Au cut-off grade
2018	Maple Gold			Micon (2018)
	Indicated	9,383,000	1.59	0.45 g/t Au cut-off grade
	Inferred	84,152,000	2.76	

Note. CIM (2005) or CIM (2014) definitions were followed for all previous estimates.



#### **HISTORICAL MINERAL RESERVES**

In 2005, Vior commissioned Geostat to prepare a pre-feasibility study for an open pit mine on the Douay West Zone. Geostat estimated Probable Reserves of 269,726 tonnes with an average diluted grade of 4.74 g/t Au (Geostat, 2005). The 2005 Mineral Reserve estimate is considered historical and should not be relied upon. A qualified person has not completed sufficient work to classify the historical estimate as a current Mineral Reserve estimate.

There is no current Mineral Reserve estimate on the Property.



# 7 GEOLOGICAL SETTING AND MINERALIZATION

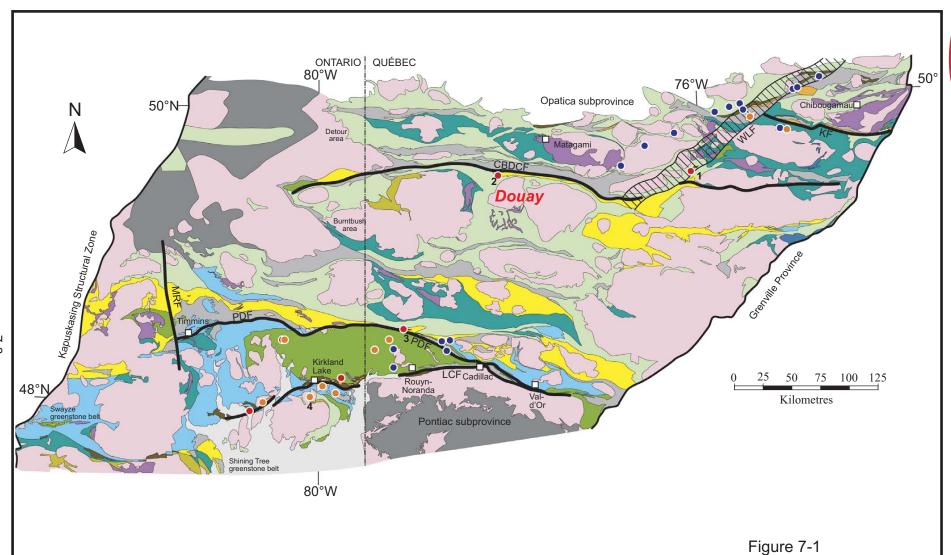
## REGIONAL GEOLOGY

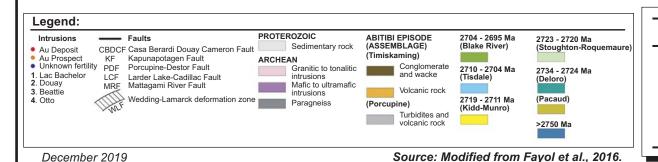
The Douay Property lies within the northern portion of the Abitibi Sub-province of the Superior Province in northwestern Quebec (Figure 7-1). In very general terms, the Abitibi Sub-province is comprised of Late Archean metavolcanic rocks, related synvolcanic intrusions, and clastic metasedimentary rocks, intruded by Archean-aged alkaline intrusions and Paleoproterozoicaged diabase dikes. The traditional Abitibi Greenstone Belt stratigraphic model envisages lithostratigraphic units deposited in autochthonous successions, with their current complex map pattern distribution developed through the interplay of multiphase folding and faulting (Heather, 1998). As now preserved, the Abitibi Greenstone Belt displays an alternation of east-west trending granitic-gneissic terrains and volcano-sedimentary belts with superimposed east-west trending folds and regional scale shear zones or faults.

The Harricana-Turgeon greenstone belt (HTGB) is the most northwesterly element of the Abitibi Sub-province and includes the Matagami, Brouillan, Joutel, and Casa Berardi mining districts. The HTGB extends in an east-west direction for 150 km, has a north-south width of 60 km to 90 km, and is divided into 12 lithotectonic domains (Lacroix et al., 1990). Eight of these consist of basaltic or basaltic to komatiitic metavolcanic accumulations containing thin horizons of pelagic sediments, representing former submarine lava plains. Two of the domains comprise basaltic to rhyolitic units and are interpreted as volcanic arcs with one or several central volcanic complexes (Brouillan-Matagami and Joutel-Raymond domains). Age dating places the volcanic activity between 2,720 Ma and 2,730 Ma. Two other domains are sedimentary (Taïbi and Matagami) and include rhythmic sequences of turbiditic sandstonesiltstone-shale, Algoma-type banded iron formations and conglomerates containing plutonic and volcanic pebbles. A maximum age of 2,696 Ma has been determined for conglomeratic sandstones from the Taïbi domain. Nineteen granitoids found within and on the edges of the HTGB have been grouped into four structural families: pre-tectonic, pre to early-tectonic, synto late-tectonic and late- to post-tectonic. The pre- to early-tectonic plutons are presumed to be subvolcanic and are generally associated with the volcanism of central complexes (Lacroix et al., 1990).



Four periods of deformation have been recognized in the region, including D1 and D2 as the two major episodes. D1 deformation produced large open folds, with axes trending in an east-west direction or in a northwesterly-southeasterly direction. D2 deformation produced a strong penetrative schistosity oriented in an east-west direction. D3 and D4 deformation events imparted crenulation cleavages oriented in northeast and north-northeast directions. The HTGB hosts a large, anastomosing network of local to regional scale shear zones, with the preferential orientations being east-west, northwesterly-southeasterly, and north-northeast-south-southwest. Deformation and/or shear zones seem to be preferentially located along the contacts between lithotectonic domains occupied by graphitic sedimentary units (Lacroix et al., 1990).





## Maple Gold Mines Ltd.

# Douay Gold Project

Northwestern Québec, Canada

Generalized Geology of the Abitibi Sub-Province



## LOCAL GEOLOGY

The rocks of the area are constituted of meta-volcanic and sedimentary rocks of the HTGB which is located in the northwestern part of the Abitibi Sub-province. The regional metamorphism is of greenschist facies. Rocks are east-west striking and sub-vertically dipping.

Four regional lithostratigraphic domains are recognized in the area: the Orvilliers-Desmazures Basaltic Domain (5 km wide), the Taïbi Sediments Domain (1.5 km wide), the Joutel-Raymond Basaltic-Rhyolitic Domain (> 5 km wide), and the Cartwright Hills Basaltic to Komatiitic Basaltic Domain (< 2 km wide).

These lithostratigraphic domains are bounded to the north by the Orvilliers pluton, which is of quartz granodiorite to monzodiorite composition, and to the south by the Mistaouac pluton, which is of a tonalite to diorite composition.

A major regional deformation zone, the Casa Berardi Deformation Zone (CBDZ), bisects the northern portion of the Property in an east-west direction, straddling the Taïbi/Cartwright Hills boundary. The CBDZ is manifested by intense ductile or brittle deformation, depending on location and host rock characteristics, as well as the presence of often graphitic east-west faults. The Casa Berardi Fault is a graphitic fault with injections of quartz-carbonate veining. Iron formations, which are well defined on magnetic maps, occur in the southern portion of the Taïbi Group.

Rocks are cut by major east-northeast to northeast trending diabase dykes.

The eastern portion of the Property straddles the contact of the Taïbi Group basinal sedimentary rocks with the Cartwright Hill Group mafic volcanic rocks. This contact represents a major lithotectonic boundary, with significantly younger Taïbi Group rocks to the north tectonically juxtaposed against older Cartwright Hills Group rocks to the south. The Taïbi Basin forms an east-west trending belt consisting of wackes, mudrocks, polymictic conglomerates, iron formations, felsic pyroclastics, and transitional mafic lava. The Cartwright Hills Group consists manly of tholeiitic basalts and ultramafic intrusions and flows (Figure 7-2).

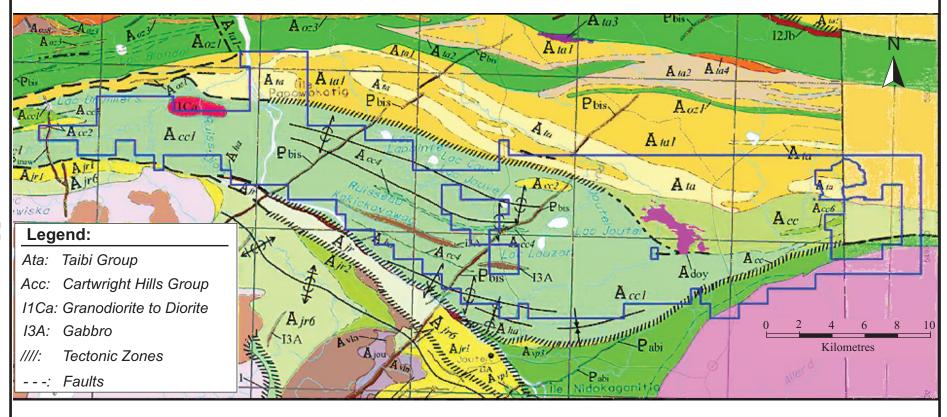


Figure 7-2

## Maple Gold Mines Ltd.

**Douay Gold Project** Northwestern Québec, Canada

Local and Property Geology Map

December 2019

Source: Maple Gold, 2019.



### PROPERTY GEOLOGY

Rocks of the Property are generally metamorphosed to the greenschist facies. Three distinct rock units are present on the Property (Micon, 2018):

- a) A sedimentary sequence (Taïbi Group) composed of turbiditic mudrocks and wacke, siltstones, iron formation, conglomerates, felsic volcanics and pyroclastics, and minor basalts. The Taïbi sequence (<2,696 Ma) rests unconformably on the Cartwright sequence (2,721 Ma) and both originate in a deep marine environment.
- b) A magmatic sequence (Cartwright Hills Group) composed mostly of massive and pillowed flows of Mg- and Fe-basalts of tholeitic affinity with minor ultramafic flows and gabbroic intrusions. The Cartwright sequence also contains a series of dykes and sills composed of co-magmatic gabbros, as well as sedimentary interflow horizons including laminated cherts, as well as interflow felsic pyroclastics and flows.
- c) An alkaline (largely syenitic) intrusive complex (2,676 Ma), mostly intruding the Cartwright sequence, including actual syenite (<5% modal quartz), quartz syenite and monzonite; with lesser carbonatite and alkaline gabbro. At least five textural types of syenitic rocks are recognized in the Douay intrusive complex:
  - 1. aphyric,
  - 2. porphyritic with feldspar phenocrysts,
  - 3. aplitic,
  - 4. porphyritic with quartz and feldspar phenocrysts, and
  - 5. pegmatitic.

Gold zones on the Property are genetically and spatially linked to the presence or proximity of the syenitic intrusive complex. Douay West is the zone that has been studied the most.

At Douay West, basalts represent the prevalent lithological assembly. They constitute more than 75% of the volcanic sequence with a stratigraphic thickness of over 400 m. They overlie gabbroic units and are primarily of two types: massive and pillowed, with minor amygdaloidal flows.

Massive basalts are of apple green to forest green colour. They are homogeneous, aphanitic to coarse grained, with equigranular fine grained texture being the most common. They are commonly moderately magnetic. Varioles are common in the basalts, rarely exceeding 5 mm in diameter. Massive basalts can be non-magnetic and poorly mineralized. Mafic dykes, shears and/or fault zones are present. The rocks are locally strongly Fe-carbonate altered, particularly in proximity to gold mineralization. Chloritization may also be significant, and weak to moderate sericitization is also common. Epidote is most common peripheral to gold mineralization.



Pillowed basalts are often interlayered with massive to variolitic basalts. The pillows seldom exceed one metre in size and can be jointed or floating in the matrix. The pillow ends generally taper to less than one centimetre and can be distinguished by the chloritic alteration associated with the chilled margins.

Gabbros constitute approximately 20% of the basalt units and are generally forest green in colour, massive, and very homogeneous. Grain size varies between one and three millimetres and diabasic texture is common. Occasionally, a glomerocrystalline texture, with less than 10% of amphiboles grains from two to four millimetres, has been observed. Diabasic texture is sometimes masked either near the contact with basalts, by the presence of a chilled zone reaching several metres locally, or near the mineralized zones by the effects of leaching and/or carbonatization. This rock is slightly to strongly magnetic.

Strongly altered and deformed basalts or fine grained gabbros are observed between graphitic shear zones. The protolith of these rocks is frequently unrecognizable, though massive or amygdaloidal facies can sometimes be identified. The alteration zones of white to greenish grey colour are the result of the intense leaching, albitization, carbonatization, silicification, sericitization, hematization, and pyritization. The most altered zones were likely volcanoclastic rocks of mafic and sometimes felsic composition. They have been described as mafic to felsic tuffs, cherts, exhalites, ferruginous sediments, iron formation, breccias, and even agglomerates by previous workers. Foliation is omnipresent and thin discontinuous graphitic horizons are frequently found in the alteration zones (Micon, 2018).

The geology of the 531 Zone is very similar to that of Douay West as described above; in both cases syenite is not an important host rock for gold mineralization. In contrast, at the Northwest, Nika, Porphyry, and Zones 10 and 20, gold mineralization is closely associated with the presence of an irregular syenitic dyke swarm, with contact and brecciated zones being of particular importance for gold mineralization.

The Main and Central Zone areas are underlain by a predominantly sedimentary sequence composed of turbiditic mudrock and wacke, felsic pyroclastics and some conglomerate, with only minor mafic volcanics. Iron formation is absent; this sequence is clearly recognized geophysically as a monotonous magnetic low.



## STRUCTURAL SETTING

At the property scale, the rock units form east-west to east-southeast trending litho-tectonic assemblages indicative of a broadly north-south oriented maximum compression. The rock assemblage appears to be dissected by three main sets of east, northwest, and possibly lesser northeast trending faults, interpreted from drill data and also inferred from breaks in the magnetic data. The east and northwest trending faults represent the Casa Berardi and Douay regional trends, respectively. Both sets locally connect to form an east-west, dextral transpressive fault system (Maple Gold, 2019).

At the scale of the drill core, foliation development is not pervasive, being instead focussed at lithological or alteration contact zones. Foliation is generally well-developed in the rhyolite, rhyodacite, sedimentary rocks, and carbonatite bodies and represent metric to decametric width, major ductile to brittle-ductile shear zones, typically but not exclusively on the margins of intrusive bodies. These structures appear to have formed with development of breccia zones of various sizes. Generally, the breccias, including crackled, chaotic, and mosaic breccia, are either monomictic or polymictic with a quartz, calcite, or chlorite matrix. In the sedimentary and felsic rock units, the shear zone foliation is locally crenulated without significant development of any new fabric. In addition, minor shear zones, joints, and veinlets with lesser veins are common structures in all rock units. The veinlets are often sheared and form extensional structures of various sizes with calcite, epidote, chlorite, or quartz infill (Maple Gold, 2019).

Graphitic shear zones are common at Douay West. They are sub-concordant with the stratigraphy and, though they reach up to 30 m in true thickness, they rarely exceed 10 m. The mafic composition of the sheared rocks reflects that of the protolith affected by this focused deformation, although sheared graphitic interflow sedimentary horizons are also present. Choritization and carbonatization (generally intense) are the most common alterations within these shear zones. Pyrite, though not characteristic, is frequently present. Anomalous gold values can sometimes be found.

Schistosity, as noted in the orientation tests in drill holes and interpreted from geological and geophysical data, appears to generally be east-southeast (090° to 110°) and is typically steeply dipping (60 to 85°) to the south; this fault set is described by Maple Gold as forming part of the Casa Berardi set. A second set of structures, generally oriented east-southeast (approximately



105°) dips more shallowly, i.e., approximately 50° to 60° to southwest. The mixed pyroclastics and sedimentary rocks located north of the principal syenitic intrusive complex are definitively more strongly and pervasively deformed.

### MINERALIZATION

#### **GENERAL**

Sulphide minerals, from most to least abundant, include pyrite, chalcopyrite, with lesser pyrrhotite and rare molybdenite, sphalerite and galena. Native gold is also occasionally noted in drill core. Brownish to pinkish pyrrhotite is generally magnetic but rarely euhedral. Pyrite occurs in several generations and varies from euhedral (cubic) to subhedral. Chalcopyrite is typically subhedral. In addition to disseminations, pyrite is also found as veinlets, fracture coatings, and can be stretched or rounded (within deformation zones). It is also found as blebs, in bands, semi-massive, in more or less deformed nodules, or framboidal. Grain size is variable, from very fine sub-millimetric to centimetric.

While pyrite abundance cannot be directly correlated to gold abundance, some fine grained pyrite (approximately 2% on average, but occasionally as little as 0.5%) is always present in gold zones.

Gold mineralization appears to be associated with the following features:

- Proximity of a major fault to provide a plumbing system and structural permeability.
- Interlayering of different lithological units, especially mafic with felsic units with syenitic intrusions. These are thought to provide rheological contrasts to focus deformation, alteration and mineralization.
- The presence of chemically favourable mafic units providing iron for sulphidation of mafic minerals.
- The presence (for proximal style of mineralisation) or nearby (for more distal style) syenitic intrusions, as bodies, dyke swarms or narrow injections, interpreted to represent the source of metals and sulphur.
- Sulphides averaging 2% but varying from trace to 5%.

There are at least four generations of pyrite. From oldest to youngest, these are:

Sedimentary pyrite: nodular, framboidal, massive or in bands, common in argillites.
 While pyrite abundance may be significant, in general this type of pyrite is not auriferous.



- 2. Disseminated pyrite (± chalcopyrite, pyrrhotite), resulting from sulphidation of existing mafic minerals (particularly hornblende) in the basalt.
- 3. Structurally controlled pyrite: "black pyrite" found in the matrix of breccias, and in grey quartz-calcite veinlets, often in proximity to major faults. This pyrite occasionally occurring in sub-millimetric veinlets of fracture fillings with some chlorite, can be identified by a more greyish, less brassy colour.
- 4. Disseminated pyrite, typically euhedral, overprinting structurally controlled pyrite; possibly auriferous.

A preliminary geochemical analysis conducted in 2018 based on X-ray fluorescence (XRF) and whole rock data suggests the following:

- The high grade zones are a combination between different features such as the alteration, structural component (fault markers: breccia/faults/steps), sulphide contribution (pyrite), and the presence of nearby felsic or basaltic rocks. The most common structural component inside mineralization zones is brecciation.
- The type of pyrite, rather than the amount, is more the determinant for gold concentrations. The gold-bearing pyrite is usually anhedral and stretched (deformed), very fine grained, disseminated, and associated with veinlets filled with quartz, carbonate-fluorite, ankerite, chlorite, and K feldspar

#### MINERALIZATION ZONES

The following section has been extracted largely from Maple Gold 2018 Assessment Report (Speidel 2019), and references therein.

#### **DOUAY WEST ZONE**

The Douay West (DW) Zone is located five to thirty metres north of a graphitic fault zone. The rock located between the fault zone and the mineralized zone is relatively competent (rock quality designation (RQD) >75%). The mineralized zone extends over a strike distance of approximately one kilometre and trends 100°. The zone is composed of several sub-parallel bodies that trend from 90° to 100°, and dip from -55° to -65° to the south. The drilled thickness of each of the individual bodies ranges from less than one metre up to 65 m, with metric distances between the mineralized lenses.

Gold bearing mineralization is associated with pyritized and altered zones (albitized, silicified, carbonatized, hematized) within mafic volcanic rocks and at the contact of a gabbroic intrusive.

Leaching, albitization, carbonatization, and pyritization are the dominant alteration and mineralization patterns. Sericitization and/or ankeritization and weak hematization are



present. Visual estimates of 1% to 30% pyrite of various types do not provide a direct estimate of expected gold grade.

Alteration is strongest in the centre of the gold zones. Weaker gold concentration in the peripheral zones is associated with weak pyritization and alteration. Foliation, laminations, and/or brecciation textures and structures are commonly present.

#### **PORPHYRY ZONE**

The Porphyry Zone hosts high tonnage, lower grade, structurally controlled gold mineralization. The name reflects the porphyritic texture of one of the phases of mineralized syenite. It is not a porphyry-style deposit type but may instead be an Intrusive-Related Gold System (IRGS), a class of mineral deposits defined in the 1990s.

The Porphyry Zone has an overall trend of 100° to 110° over a strike distance of 3.5 km. The overall width is approximately 500 m. It is composed of east-west to east-southeast oriented, subparallel mineralized lenses, with each lens typically tens of metres with some over 100 m thick. The lenses dip to the south at -60° to -65°.

### **NORTHWEST ZONE**

The Northwest (NW) Zone has an overall east-southeast trend over a strike distance of approximately 900 m. The overall width is approximately 400 m not including what is now called the Nika Zone. It is composed of sub-parallel mineralized lenses trending 95° to 100°, with each lens typically approximately 100 m to less than 900 m long. The mineralized bodies dip to the south at -50° to -65°, separated by less than one metre to 100 m intervals of barren rock. The lenses ranged from a drilled width of less than one metre to 40 m, with an average drilled width of 11 m.

As is also the case at Nika and Porphyry zones, the NW Zone is underlain by a mixed basalt-syenite sequence. Carbonatization (calcite and ankerite) and epidote are the main alteration types seen in this area. Secondary silicification and chloritization occur. Epidote alteration is mostly restricted to basalt. Calcite, ankerite, and chlorite occur in all rock types. Silicification is associated preferentially with felsic and intermediate rocks.



#### NIKA ZONE

The Nika Zone has an overall east-southeast trend over a strike distance of 840 m. The overall width is 350 m. It is composed of several individual sub-parallel to joined, or multi-limbed, lenses trending 100°, with each lens typically 100 m to 1,900 m long. The mineralized bodies dip to the south at -70° to -85°, separated by less than one metre to 70 m intervals of barren rock. The lenses ranged from a drilled width of less than one metre to 60 m, with an average drilled width of 8.5 m. Geologically, the Nika Zone is very similar to the Porphyry Zone; both are underlain by a mixed basalt-syenite sequence, including some thick syenitic dykes that are well mineralized.

#### ZONE 20

Zone 20 (Z20) occurs south of the central part of the Porphyry Zone, has an overall trend of 125° over a strike distance of 600 m and a width of 300 m. Portions of the zone appear related and on trend (at 110°) with mineralized bodies at the south portion of the western Porphyry Zone; the geological context is also similar, with significant volumes of syenitic rocks mixed with somewhat less basalts in both cases. This zone is unique in its orientation when compared to the other zones on the Property.

Zone 20 is composed of sub-parallel sub-continuous lenses trending 125°, with each lens typically 100 m to 500 m long. The mineralized bodies dip to the south at -45° to -50°, separated by less than one metre to 60 m intervals of barren rock. The lenses range from one metre to 40 m wide, however are usually less than 10 m to 20 m wide.

#### **ZONE 10**

Zone 10 (Z10) has a trend of 90° to 115° over a strike distance of 600 km. The overall width is 200 120 m. It is composed of several sub-parallel mineralized, sub-continuous lenses trending 90° to 110°, with each lens typically 100 m to 500 m long. The mineralized bodies dip to the south at -65° to -85°, separated by one metre to 70 m intervals of barren rock. The lenses range from a drilled width of one metre to 60 m, with an average drilled width of 10 m.

Zone 10 is underlain by mixed basalt with multiple interflow sedimentary horizons and only minor syenite, mainly present in the western portion. Geologically, this zone is therefore more similar to the relatively distal (with regard to the syenitic intrusive complex) 531 Zone.

Higher grade mineralization within Zone 10 is characterized by:



- 1. Intense (polyphase?) brecciation: More than one type of breccia may be present; intense fracturing, brecciation, shearing, and fault gouge are all present, and are interpreted to mostly reflect formation of a fault breccia.
- 2. Pyritization: The high grade gold zone contains up to 15% pyrite, compared to 1% to 3% in the surrounding rock. Pyrite is predominantly euhedral and fracture-controlled, however, due to the intensity of fracturing and its high abundance, it also appears to be disseminated.
- 3. Silicification/sericitization: The rock is pervasively silicified and sericitized overprinting the composition and textures of the protolith.
- 4. Felsic unit: Due to intense alteration and brecciation, it is not possible to determine the protolith of the unit with certainty. However, fingers of what appear to be syenitic injections or feldspathic alteration are noted immediately below the high grade zone. On the other hand, pyroclastic fragments are also present, which are indicative of felsic volcanism. Therefore, this high grade zone appears to be associated with a unit of felsic composition, whether that is a syenitic intrusion, felsic volcanic, or both.

#### **531 ZONE**

The 531 Zone has a trend of 90° to 105° over a strike distance of approximately 500 m. The overall width is 300 m. It is composed of several sub-parallel mineralized, sub-continuous lenses trending 90° to 105°, with each lens typically 100 m to 500 m long. The mineralized bodies dip to the south at -60° to -75°, separated by one metre to 70 m intervals of barren rock. The lenses ranged from a drilled width of one metre to 60 m, with an average drilled width of 11 m.

Gold mineralization in the 531 Zone can be characterized in terms of lithology, structure, alteration, and sulphide mineralization. In general, the area is underlain by a mafic to ultramafic sequence with multiple interflow sedimentary (argillite and chert) horizons. Two styles of gold mineralization can be distinguished:

- Anomalous to low gold grades (100 ppb Au to 700 ppb Au) are often found associated with abundant (5% to 15%) pyrite as disseminations or aggregates. Rarely, thin (centimetric), semi-massive pyrite bands can be observed within or very close to fractured chert beds and/or argillites ("exhalites") between strongly sheared and/or fractured basaltic flows.
- 2. Gold grades tend to increase significantly, from 1.5 g/t Au to over 10 g/t Au, when discrete (one to five metre thick) structural features such as brecciation, strong fracturing, and/or shearing intersect syenite-contaminated (or feldspar-carbonate altered) and silicified and carbonate altered basalts. Pyrite content in these zones tends to be between 2% and 5% mainly as fine (sub- to one millimetre) disseminated subhedral grains and hairline fracture-filling veinlets.



Syenitic or feldspathic injections, some of which may reflect alteration rather than intrusive processes, vary in thickness from a few centimetres to a few metres. Within thicker (up to 50 m) injections, higher grade gold zones tend to be closely associated with relatively narrow intervals of brecciation and/or shearing.

Based on these characteristics of gold mineralization in 531 Zone, some exploration criteria can be developed to help explore for new gold targets in areas of similar geology:

- Low to anomalous gold values appear to be associated with pyrite mineralization along structural features (shear/brecciation) at or near lithological contacts (e.g., basalts/sediments).
- High grade gold zones appear to be closely associated with similar structural features that have intersected either syenite-contaminated or silicified and carbonate altered basalts.
- The size of the zones appears to be related to both the size of the structures and the volume of feldspathic injections and/or intrusions.

#### **MAIN ZONE**

The Main Zone (MZ), the original discovery area from 1976, occurs at the sheared contact between mainly mafic volcanics to the south and a volcano-sedimentary sequence to the north. Several of the highest gold drill intercepts at Douay were obtained here.

The Main Zone has an overall trend of 105° over a strike distance of 850 m. The overall width is 350 m. It is composed of several sub-parallel mineralized, sub-continuous lenses trending 90° to 100°, with each lens typically 100 m to 500 m long. The mineralized bodies dip to the south at -75° to -80°, separated by five metre to 200 m intervals of barren rock.

The lenses ranged from a drilled width of less than one metre to 49 m, with an average drilled width of 7.5 m. The grade shells were modelled considering composites of ≥0.1 ppm Au.

#### 3D MODEL

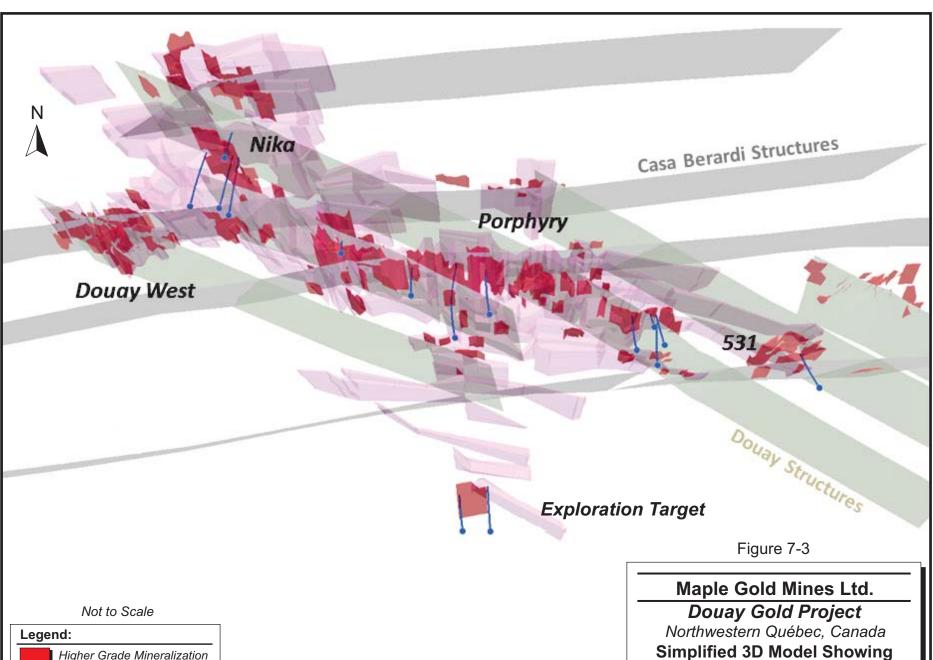
Starting in late 2018, Maple Gold interpreted and constructed a three dimensional (3D) geological model of key features including: 0.1 g/t Au wireframes, 2 g/t Au wireframes, lithology, and structure (Figure 7-3). This 3D model served to guide drill targeting and to constrain the grade wireframes. In particular, the models of syenite and mixed syenite/basalt, the two main hosts for gold mineralization, and those for the Casa Berardi (east-west) and



Douay (northwest-southeast) fault sets were also used to refine the resource domain wireframes.

Association between Mineralization,

**Syenite and Faults Sets** 



Higher Grade Mineralization
Syenite Hosted Mineralization
2019 Drill Program

December 2019

Source: Maple Gold, 2019.



## 8 DEPOSIT TYPES

Gold mineralization on the Property includes a large, disseminated, pyritic, quartz-poor, structurally controlled style of mineralization, with more distal (with regard to the syenitic intrusive complex) higher grade zones such as at Douay West and 531 Zone, as well as more proximal lower grade zones such as NW, Nika, Porphyry Zone, and Zone 20. The Main and Central zones are distinct both geologically and geophysically, with narrow higher grade mineralisation found at a magnetically depressed lithological contact.

Collectively, this style of mineralization is best described as forming part of the IRGS rather than a true, classic gold porphyry. The alteration zonation and multi-phase stockwork systems typical of classic porphyry systems are absent at Douay. The mineralized zones within and surrounding the locally porphyritic syenitic intrusive complex are likely related to the corresponding intrusive-hydrothermal system, and are predominantly controlled by rock permeability, created either by rheological contrasts between the different lithologies and their associated alteration and/or by deformation zones, particularly along lithological contacts.

The IRGS deposit class is relatively new, and is associated with granitic intrusive rocks. It includes a relatively broad spectrum of deposits; therefore, Douay is best compared to other examples of the alkalic subclass, rather than to IRGS deposits in general. In addition to gold, this type of deposit can also be a significant source for bismuth, tellurium, tungsten, and tin. While these intrusive-related deposits may occur within or near a deformation zone, they are distinct from typical orogenic deposits in that the latter are not generally directly intrusive-associated and tend to be quartz-rich either with quartz veins or silicification.



## 9 EXPLORATION

Exploration carried out on the Property prior to Maple Gold's involvement is described in Section 6, History of this report.

## **2011 MAG SURVEY**

In 2011, Novatem Inc. (Novatem) was contracted by Vior, in partnership with Maple Gold (Aurvista Gold at the time), to complete a high-resolution helicopter magnetic survey over the Douay resource area and extending up to approximately nine kilometres beyond it. The goal was to evaluate the geophysical characteristics of the Property. The survey began on January 28, 2011 and was completed by February 2, 2011. The report is available in the Province of Quebec's online data system (SIGEOM) as report number GM67182.

The final database for this survey consisted of 1,968 line-km. Novatem used a Geometrics cesium vapour magnetometer at the end of the stinger mounted on a Bell 206 helicopter. The related equipment included a fluxgate APS, a differential global positioning system (GPS) coupled to a gyroscopic compass, an Optech laser altimeter, and a GSM19 base station.

Survey lines were flown north-south, on 100 m spacing at 25 m above surface. The end product consists of three maps on a scale of 1:25,000, representing the intensity of the total field, the vertical gradient, and a digital model of the ground surface.

Novatem recommended that the principal geological features visible on the maps be identified on the ground, so that their geophysical characteristics could be correlated with the properties of the rocks. The survey showed that the Douay deposits are associated with a distinctive "mottled" pattern that includes both magnetic highs, that generally correspond to metasomatized basalts, and depressions that typically correspond to syenitic rocks, both of which can host gold mineralization. A prominent, highly magnetic structure crosses the central part of the Douay resource area in a north-south direction nearly perpendicular to the overall east-southeast trending magnetic trend. This has been interpreted as a large-scale fault that passes through the Porphyry Zone. Two historic holes drilled in this area south of the Porphyry Zone intersected magnetic basalt and syenite, with sporadic gold mineralization up to 0.7 g/t Au.



## **2011 IP SURVEY**

In 2011, Abitibi Geophysics Inc. (Abitibi Geophysics) completed a resistivity/IP survey, using the IPOWER 3D system, on a portion of the Property, covering the northern half of the Porphyry Zone and the Douay West, Nika, and NW zones. Between March 8 and March 30, 2011, a total of 60 km of time domain resistivity/IP surveying was completed. The purpose of this survey was to obtain 3D information on the known zones of mineralization and to locate additional exploration targets.

Although the overburden thickness is in excess of 50 m over much of this grid, the IPOWER 3D survey successfully delineated some of the known zones of mineralization. Additional chargeable zones were also identified. The survey was not successful in detecting the known zone in the north block (NW Zone) or on the southern edge of the east block (Porphyry Zone). Four additional targets were identified for follow-up. These include three drill targets and one prospecting area.

Abitibi Geophysics suggested that, depending on the availability and geometry of existing drill holes, a hole-to-hole 3D IP survey may allow improved imaging beneath the thick overburden. The report is available in SIGEOM as GM67181.

#### 2013 IP SURVEY

In 2013, Abitibi Geophysics completed a resistivity/IP survey, using the OreVision system, on a portion of the Property. A total of six lines were run at 100 m spacing, for a total of 11 line-km. Five of the lines extended southward from the limits of the Porphyry Zone and a sixth was run over the central part of NW Zone, in an area already covered by the 2011 survey. Cover, in part conductive, is 30 m to 50 m thick in this area.

Chargeability anomalies observed on the Porphyry Zone grid are weak (5 mV/V to 25mV/V), however, they are generally well defined and have good lateral continuity. The low magnitudes observed may be in part due to the significant shielding effect of the conductive cover in the area.



Chargeability anomalies observed on the only line over the NW Zone were particularly subtle, with no values greater than 2.5 mV/V. Despite these low magnitudes, anomalies were identified.

## 2017 GEOCHEMISTRY STUDY

Maple Gold conducted a preliminary geochemical interpretation, using whole rock and XRF data collected during pre-2018 drilling campaigns, to determine potential correlations between major and trace elements and their potential associations with gold.

To differentiate between populations of mafic or felsic rocks, the XRF values for zirconium, were plotted against magnesium and titanium on logarithmic XY charts. The plots yielded similar results; however, due to its immobility, titanium was determined to be most useful in discriminating between different rock types.

Elemental ratio plots suggests that alkalic rocks are enriched with niobium. It was therefore used as a proxy for alkalinity, a key element in discriminating between rock groups.

The  $Fe_2O_3$ -CaO-MgO ternary plot shows that majority of the samples plotted closer to the  $Fe_2O_3$  and CaO fields, suggesting that the rocks are more enriched in those elements, and carbonate or ankerite could be considered the main alterations. A trend towards MgO could represent epidote and chlorite alteration, or a basalt enriched in magnesium.

## 2018 TOP OF BEDROCK DRILLING

From March 8 to 30, 2018, a total of 1,471.3 m were drilled in 57 shallow RC (top of bedrock) holes to test two covered areas without outcrop (Burden, 2018).

These areas are located at the extreme western and in the south central part of the Property. A total of 55 bedrock samples as well as 211 till and gravel samples were obtained. Bedrock chips show that the areas are predominantly underlain by locally pyritic mafic volcanic rocks of the Cartwright Hills Group. No syenitic bedrock was intersected.



Several gold-in-till anomalies were obtained, with 11 samples in eight separate holes yielding over 10 gold grains, with a maximum of 35 gold grains in one sample. Of these, ten samples in seven holes were from the western area. Bedrock alteration was not visually obvious, however, whole rock and trace element geochemistry results indicate that the rocks have been altered, including: >3% K<sub>2</sub>O (unusual for basalts), >10% LOI (probably reflecting combined carbonate, sericite, and chlorite alteration), <1% Na<sub>2</sub>O (reflecting Na depletion common in VMS areas), and Zn >120 ppm. Geophysical follow-up is warranted.

## 2018 MAPPING AND GRAB SAMPLING PROGRAM

Between June and October 2018, Maple Gold completed a geological mapping and sampling program over the western third of the current Property, where outcrop is locally quite abundant (Speidel and Elbourki, 2018).

A total of 336 samples were taken and analyzed (multi-acid multi-element inductively coupled plasma (ICP)) and 211 structural measurements were taken. The area is underlain by a sequence of mafic volcanic (massive, pillowed and amygdaloidal basalts, minor andesites) and intrusive equivalents (fine to medium grained gabbro and diorite), with minor interflow felsic volcanics and pyroclastics and graphitic sedimentary units (argillite/chert), typical of the Cartwright Hills Group, as also noted in the Douay West and 531 Zone areas. While dioritic outcrops were mapped, no syenitic intrusives were noted. From west to east, structural trends are predominantly northwest-southeast, with several north-northwest cross structures; the northwest-southeast trend becomes more east-west towards the Douay resource area, consistent with a similar jog in the orientation of the CBDZ.

#### Key observations included:

- Generally low sulphide content (and hence value of S% analyses). Only three areas had S>0.3%.
- Au anomalies are weak (maximum 96 ppb) and are found in two sectors associated with anomalous Cu (>150 ppm).
- Cu anomalies (>150 ppm) are linear (i.e., extensive along strike but limited across strike) and are coincident with S%, reflecting observed chalcopyrite.
- Zn anomalies (>150 ppm) generally coincide with those for Cu and S. The maximum Zn value of 0.11% corresponds with an interflow sedimentary unit with graphitic argillite and laminated chert.



Results support the interpretation of five new areas of interest with Cu-Zn-S anomalies, possible volcanogenic massive sulphide (VMS) targets. Two of these could be associated with the eastern continuity of the felsic Estrades Horizon which hosts the deposit of the same name further west. These areas of interest require geophysical and geological follow-up.

### 2015-2018 DRILL RE-LOGGING AND SAMPLING PROGRAM

In 2015, Maple Gold initiated a systematic drill core re-logging program to consolidate the geological data from 40 years of drilling and improve the geological model of the Douay Property. The work also served as validation of historical assay results.

By December 2016, 97,492 m of core from 302 drill holes had been re-logged and selectively measured with a handheld XRF. In addition, 3,135 samples were assayed for gold and a multi-element package, and 1,115 samples were included in a lithogeochemical study. A quality control protocol was followed during the sampling procedure including blanks and certified reference materials.

The main purpose of the sampling from 71 drill holes was to obtain geochemical and lithogeochemical signatures of the different lithologies and mineralized zones. Thirty mineralized zones were re-sampled, and the assay results confirm the historical values from earlier drilling programs.

Two complementary re-logging campaigns were undertaken in 2017. The first spanned January to July, and the later occurred between October and December. Targeted re-logging work has been ongoing since. The earlier program was a continuance of work that has been ongoing since 2015, which was an attempt to better understand the controls on gold mineralization and, when necessary, to fill existing sampling gaps. During the first period in 2017, 110 drill holes for 34,292 m were re-logged. During the second period in 2017, a further 50 drill holes for 18,044 m were re-logged.

The geological information was entered directly into the database using GeoticLog. The previous lithological information was archived within the same database as a reference. MPP (magnetic susceptibility and electromagnetic conductivity) readings were taken at 0.5 m intervals. The core was photographed wet and/or dry.



During the first re-logging phase of 2017, 22,490 samples from 264 drill holes, measuring 4 cm to 10 cm each, were collected into core trays to await XRF. Of these, 9,587 samples were subjected to XRF readings, however, the results have not been further processed.

The unsampled intervals in 48 holes from within the existing Douay resource area were cut and sampled. The samples were stockpiled into a locked, secure container throughout the season, shipped to the laboratory in August 2017, and the results for these 7,027 core samples and the associated control samples (standards, blanks, and duplicates) were returned in September 2017. Of these samples, 53% had gold values less than detection limit, 41% were less than 0.1 g/t Au, and 10 samples returned results of greater than 1 g/t Au. This suggests that the selective sampling from the original logging was only missing the occasional mineralized interval, although unsampled intervals adjacent to historical samples of greater than 1 g/t Au continue to be found during re-logging.

The later program (October 2017 to December 2017) concentrated on better understanding the geological (including structural) controls on gold concentrations, as well as the corresponding petrophysical response, in areas of the Property that showed better gold grades and metal accumulations. Chargeability measurements were added to the petrophysical work. During this period, 18,044 m in 50 drill holes were re-logged.

Geological information has been entered directly into the database using GeoticLog, replacing the prior revisions. The previous lithological information has been archived within the same database as a reference. MPP readings were taken at 0.5 m intervals, the results have been imported into the database, and the export files are stored on the site server. The core has been photographed both wet and dry.

This later selective re-logging has led to the following key observations and findings:

- There are at least four textural varieties of syenite, ranging from fine grained aplitic to coarsely porphyritic. Defining the relationship between these different syenites and gold mineralization will aid targeting and is one focus of continuing studies.
- 2. Although there is a broad association of pyrite mineralization and gold tenor, there are at least four generations of pyrite, not all of which appear to correlate with gold. Additional detailed analytical and petrographic work is planned to understand the deportment of gold within the pyrite generations.
- 3. Deformation and gold mineralization are often localized on the margins of syenite bodies, where major shear zones/faults define tectonic contacts with the volcanic and



sedimentary wallrocks. Brecciation zones, occasionally with associated silicification, extend up to several tens of metres away from either side of the shear zones/faults. Defining and correlating these zones of high structural permeability is expected to improve targeting for higher grade gold mineralization.

In 2018, Maple Gold relogged 27,233 m from 78 drill holes in order to understand the local lithologies and to characterize the mineralization. The drill holes were representative of most zones and were re-logged for lithology and some intervals were selected to receive testing by portable XRF. No additional samples were collected for analysis.

### **2019 IP PROGRAM**

A 40.4 line-km OreVision IP survey, consisting of 11 lines spaced 400 m apart, was completed in the northeast portion of the Property from March 27 to April 6, 2019. The survey area covers the eastern extension of the Douay resource area, with the northern part of the survey straddling the CBDZ, a major lithotectonic contact separating the basalt-dominant Cartwright Hills Group to the south and the predominantly sedimentary Taïbi Group to the north. The survey targeted additional disseminated sulphide systems, whether of the intrusive-related or orogenic gold type.

Results showed moderate resistivities ( $100 \ \Omega m$  to  $4,500 \ \Omega m$ ), in part reflecting  $10 \ m$  to  $15 \ m$ , to greater than  $50 \ m$  of conductive overburden, with thinner overburden in the central part of the survey. Several weakly chargeable ( $2 \ mV/V$  to  $8 \ mV/V$ ) zones were also observed in the northern portion of the grid. The weak chargeability response is likely attenuated by the thick, partly conductive, overburden cover as also noted for the 2013 survey in the Douay resource area. The northern anomalies show good line to line continuity, extending over a strike length of  $2.8 \ km$ .

## **EXPLORATION POTENTIAL**

The potential tonnage and grade of additional underground mineralization below the resource reporting pit shells could be 10 Mt to 30 Mt, grading between 1.5 g/t Au and 2.5 g/t Au for approximately 0.5 million ounces (Moz) to 1.5 Moz gold. Figure 9-1 shows the reporting shapes (green) used to report underground resource in mineralized blocks at various grades below the pit shells that were not included in the reporting shapes, and therefore are not

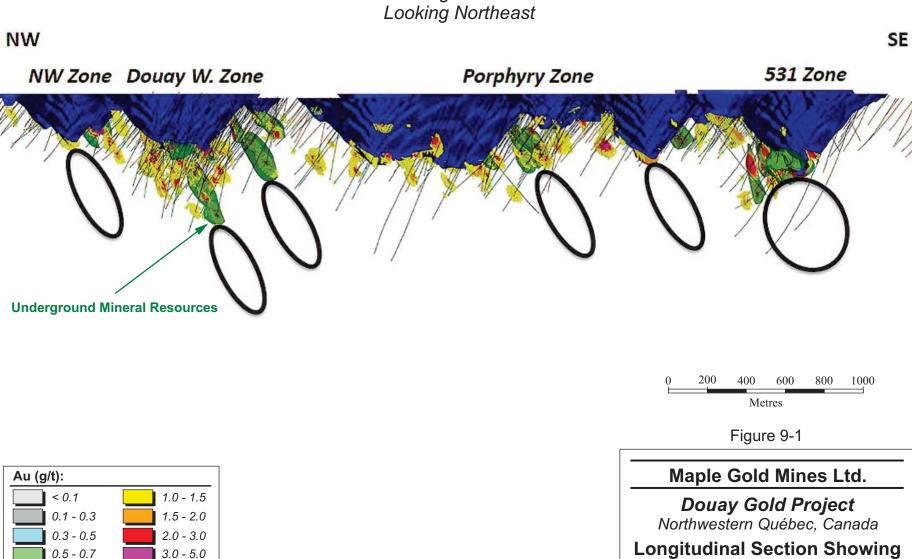


reported in the current Mineral Resource statement, due to insufficient drilling. The black ellipses in Figure 9-1 below highlight further exploration potential at depth.

The potential quantity and grade is conceptual in nature as there has been insufficient exploration to define a Mineral Resource along strike from the Douay resource area, and it is uncertain if further exploration will result in the target being delineated as a Mineral Resource.

Blocks Above 1 g/t Au

## Vertical Longitudinal Section Looking Northeast



Source: Maple Gold, 2019.

0.7 - 1.0

December 2019

> 5.0



## 10 DRILLING

## HISTORICAL DRILLING

Historical drilling on the Property from 1976 to 2010, prior to Aurvista's acquisition of the Property consisted of 575 holes totalling 155,691 m. Table 10-1 lists the historical drilling on the Property.

TABLE 10-1 HISTORICAL DIAMOND DRILLING BETWEEN 1976 AND 2010 Maple Gold Mines Ltd. – Douay Gold Project

Year	Company	<b>Drill Holes</b>	Length (m)
1976	INCO	4	579
1977	INCO	10	1,103
1978	INCO	19	2,975
1979	INCO	9	1,308
1980	INCO	4	546
1981	INCO	14	3,380
1983	INCO	3	682
1985	INCO	7	1,115
1986	Vior	30	7,208
1987	Vior	44	12,861
1988	Vior	17	3,800
1989	Vior	13	2,641
1990	Vior	63	16,356
1991	Vior	34	10,521
1992	SOQUEM/Vior	39	14,396
1993	SOQUEM/Vior	60	17,238
1994	Vior	27	6,156
1995	Cambior/Vior	31	6,894
1996	Aurizon	7	1,921
1997	Aurizon	30	8,740
1999	Aurizon	3	2,486
2004	Vior	1	375
2005	Vior	16	3,693
2006	Vior	55	16,956
2007	Vior	28	7,844
2010	Vior	7	3,917
Totals		575	155,691



### **DRILLING FROM 1976 TO 1999**

INCO's drilling program in 1976 resulted in the discovery of the Douay Main Zone. Drilling was targeted on anomalies detected using an airborne magnetic-electromagnetic survey. Subsequent detailed ground magnetic and IP surveys were used to identify targets that were drilled and identified as Zone 10, 531 Zone, and Douay West Zone. Several other gold bearing intersections were also encountered on the Property.

The drilling was carried out by INCO and Vior before 1992, and SOQUEM from 1992 to 1994. In 1995, Cambior optioned the ground and continued the drilling program. Aurizon optioned the ground in 1996, drilled some additional definition holes, and cemented the collars of the existing holes. In 1995, a professional surveyor surveyed the position of the drill hole collars still visible on the Property. The dip and azimuth of the intended holes were marked using pickets. After drilling, the downhole deviation was measured by acid tests, Tropari, or both. The core from the drill holes was boxed at the drill and transported intact to a core logging facility nearby. The core was checked, logged, and the sample intervals marked out, by a competent professional geologist. A log of all the drill hole information was recorded on paper, and each sample interval was given a unique identifying label. The samples would have been either split or sawn in half with one half retained and the other half placed in a sample bag along with a tag containing a unique sample number.

Descriptions of the data verification and quality assurance and quality control (QA/QC) procedures are only available from 2005 onwards. Most documentation and observations prior to 2005 indicate that half-core samples were taken and sent to analytical laboratories to assay for gold content. Between 1976 and 2005, there were generally common industry standard procedures and practices in place, although these were not as well documented as they are now. However, exploration companies such as Vior, Aurizon, SOQUEM, and Cambior were well reputed for conducting well-managed exploration programs.

#### DRILLING FROM 2000 TO 2010

Vior reviewed all the information available on the Property in 2004 and resumed exploration, including 3,384 m of diamond drilling (NQ (47.6 mm) size) on the Douay West Zone and the Adam Zone between March and April 2005, resulting in the discovery of the Porphyry Zone. Two exploration drill holes were drilled east of the Adam Zone, in the syenite intrusive, which is now known as the Porphyry Zone.



For the holes drilled in 2005, markers were placed on the Property by the land surveyors, to be used as reference points for chain measuring of the drill hole collar locations in the main drilling area. Drill holes further away from the main drilling area had their locations surveyed traditionally. The 2006 to 2007 drill hole collars were surveyed with a handheld high precision GPS in UTM NAD 83 coordinates, with an accuracy of less than one metre.

The QA/QC protocol initiated by Vior in 2005 has been applied in subsequent drilling campaigns. Vior's QA/QC program consisted of the systematic addition of alternating blank samples and certified standard materials to each batch of 10 samples sent for gold analysis at commercial laboratories.

Samples coming from half cut NQ cores, with lengths varying from 0.5 m to 1.5 m, were sent for analysis to Laboratoire Expert Inc.(Laboratoire Expert) in Rouyn-Noranda. Samples were assayed by fire assay followed by atomic absorption or gravimetry, according to industry standards. The laboratory itself is not an accredited or certified facility and their certificates of analysis are not sealed by a chemist. There are, however, strict written procedures for the preparation and analysis of the samples.

Vior sent each pulp with gold assay values over 500 ppb to a second laboratory, in order to verify the results. This second laboratory was ALS-Chemex in Val d'Or, a certified laboratory. Its methodology is documented, and internal quality control is in place. The certificates were signed by a chemist. The ALS-Chemex laboratory conforms with requirements of CAN-P-1579, CAN-P-4E (ISO/IEC 17025:2005).

Since 2005, Vior and Maple Gold have performed quality control corresponding to industry standards for gold exploration programs. Blanks, standards, and duplicates were added to the sample stream by the geologists to verify the accuracy and precision of assay results, supplementing a variety of internal QA/QC tests performed by the independent laboratories utilized, such as ALS Minerals, X-Ray Assay Laboratories (XRAL), Activation Laboratories Ltd. (Actlabs), and Laboratoire Expert.

A strict protocol for logging and sampling was developed and describes all steps from the drilling pad to the delivery of samples to the laboratories.



## **CURRENT DRILLING**

Maple Gold's predecessor Aurvista acquired the Property in 2010. Drilling from 2011 to 2019 is summarized in Table 10-2.

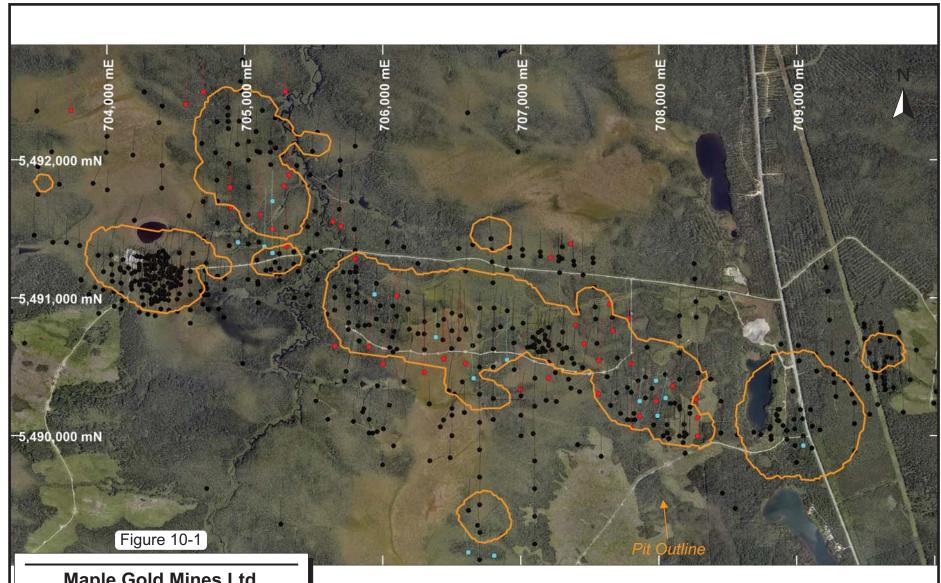
TABLE 10-2 DIAMOND DRILLING BETWEEN 2011 AND 2019
Maple Gold Mines Ltd. – Douay Gold Project

Year	<b>Drill Holes</b>	<b>Total Metres</b>
2011	42	15,645
2012	36	12,751
2013	28	10,776
2014	14	1,602
2016	3	1,403
2017	52	23,040
2018	52	21,144
2019	15	6,513
Total	242	92,814

The drill campaigns targeted relatively shallow (i.e., the top 400 m vertically) mineralization within the Porphyry Zone in particular, and its possible extensions along strike, including Zone 10 and the Central Zone, as well as several other smaller zones. Maple Gold was successful in further outlining the extents of the large tonnage – low grade gold deposit (Porphyry Zone) earlier identified by Vior. Furthermore, the 2018 and 2019 campaigns resulted in the discovery and definition of a new mineralized zone located in the gap between the Porphyry, Douay West, and NW zones, now known as the Nika Zone. The 2019 campaign also included one hole in the 531 Zone, which had not been drilled since 2007. The 2019 results there were not only far superior to the original discovery hole at the 531 Zone, but also among the top five ever drilled on the Property.

In general, core recovery for the diamond drill holes at the Douay West Zone has exceeded 98% and no core loss due to poor drilling methods or procedures was experienced. There are no core loss concerns for any of the drilling conducted on the Property.

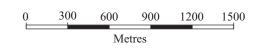
Figure 10-1 shows the drill hole collar locations up to 2017 drilling programs (black dots), 2018 drilling (red dots), and 2019 drill collars (blue dots) in the general resource area. Drill data from the 2018 and 2019 campaigns were included in the current Mineral Resource estimate for the first time.



## Maple Gold Mines Ltd.

**Douay Gold Project** Northwestern Québec, Canada

**Drill Hole Plan** 



**Drilling by Year:** 

2019

2018

Historical Holes

December 2019

Source: Douay, 2019.



### **DRILLING METHODS**

Core samples from diamond drilling are retrieved via the use of a lifter tube, lowered inside the rod string by a winch cable until it stops inside the core barrel. As drilling proceeds, the core barrel slides over the core as it is cut. The winch is then retracted, pulling the core barrel to the surface. Once the core barrel is removed from the hole, the core is removed and catalogued. The core is washed, measured, and broken into smaller pieces to make it fit into the sample trays.

In general, for the 2011 to 2016 drill programs, the approximate location of the diamond drill hole was marked with a handheld GPS. After clearing the drill pad, the drill hole location was marked with a high precision SX-Blue GPS. Surveying of the 2018 and 2019 collars is being planned; for now the collar coordinates are those of standard handheld GPS, which have a precision of three to five metres. All information for the drill hole, including name, azimuth, dip, and proposed length, is recorded on the collar picket. Two pickets are placed in front of the drill hole collar along the target azimuth. They are aligned with a compass; starting with the 2019 drill program, a high precision Reflex TN-14 device was used to align the drills. If there was magnetic interference, the pickets are then located with the precision GPS. Once the drill is on the drill site, the geologist verifies the drill alignment and the tower position (inclination). Once the drill hole is completed, the casing position was re-surveyed using the high precision SX-Blue GPS.

Since 2018, in order to ensure drilling quality and assess downhole survey integrity, short depth survey readings have been taken at approximately three metre intervals near the top of the holes. Overall intervals for downhole surveying would average 30 m to 40 m.

Core boxes were securely closed at the drill site, and forwarded to the logging facilities by truck, when the roads were available, or by a muskeg tractor, when drilling was in boggy ground. Core boxes were placed in order on the logging tables and opened for core logging and identification of sample intervals by a Maple Gold geologist or consultant geologist. After logging and sampling, the core boxes were securely stored in roofed core racks near the logging facility. All of the core boxes were given an aluminum tag that was labelled with the drill hole number, core box number, and from-to interval in metres.



Core was logged directly into the Geotic drill hole database management software running on Microsoft Access. All logging and sampling were conducted by Maple Gold employees and consultants hired by Maple Gold. The observations of lithology, alteration, structure, mineralization, vein widths and orientation, geotechnical data, and sample numbers and locations were recorded. All 2018 and 2019 drill core was photographed wet and dry for better geological assessment and also geotechnical purposes.

#### 2018 DRILLING PROGRAM

Maple Gold drilled 52 drill holes for 21,143.84 m between January 16 and May 2, 2018 in the Porphyry Zone and area now known as the Nika Zone located between the Porphyry, Douay West, and NW zones (Table 10-3). The drill holes ranged in length from 155.6 m to 747.0 m and reached a maximum vertical depth of 590 m from surface.

TABLE 10-3 SUMMARY OF THE 2018 DRILLING PROGRAM Maple Gold Mines Ltd. – Douay Gold Project

Ownership	Count	Length (m)
Maple Gold Mines	41	17,819.54
SOQUEM-MGM Joint Venture Area	11	3,324.3
Total	52	21,143.84

Table supplied by Maple Gold. Holes drilled partly in Maple Gold and partly in JV area were ascribed to the JV in terms of count, but metreage was distributed.

Of these, 41 drill holes, for 17,819.54 m, were drilled on the Maple Gold claims, and 11 drill holes, for 3,324.3 m, were either completely or partially drilled on claims included in the Maple Gold-SOQUEM joint venture. The average core recovery was 98.8%, ranging from 96.5% to 99.8% by hole. There was 100% recovery in 70% of the runs. There were five instances of 0% recovery for a run, in faulted or otherwise difficult ground. The open core trays are stored under cover on metal racks at Douay's secure site.

Drilling was conducted using drill rigs from Forage Pikogan Inc. (Pikogan) from Val d'Or, QC, Forage Hébert Inc. (Hébert), from Amos, QC, and RJLL Forage (RJLL) from Rouyn-Noranda, QC. Pikogan utilized two Orbit Garant YS 1500 skid-mounted core rigs, Hébert used five track-mounted JKS Boyles B20 rigs, and RJLL used one Marcotte HTM 2500 skid-mounted core rig. All drills used metric 3-m NQ rods. Each drill operated 24 hours per day, except when broken



down or understaffed. The drilling rates averaged 50.5 m per day, ranging from 35.7 m/day to 93.0 m/day depending on the drill rig and the location. These averages include breakdown or idle times.

Geological and sampling information was entered directly into GeoticLog, according to established protocols consistent with CIM exploration best practice guidelines. Geotechnical information, such as core recovery and RQD, was collected onto paper and then entered into a spreadsheet. Core box information was written onto paper and archived.

Collar locations were determined using Garmin handheld GPS units (precision of three to five metres). Downhole surveys were exported from the Reflex EZ-gyro and/or EZ-Trac tools, imported into GeoticLog, and saved onto the site server.

Geological technicians collected various downhole petrophysical data. Magnetic susceptibility and conductivity readings were taken on core every 0.5 m using an Instrumentation GDD MPP Probe. Small samples collected every three metres were also subjected to:

- 1. Elemental composition readings using a portable Olympus Vanta XRF device,
- 2. Apparent resistivity and time domain IP measured using an Instrumentation GDD Sample Core IP Tester (SCIP) device, and
- 3. Specific gravity measurements using the Archimedes method.

The digital export files were saved on the site server, with periodic offsite backups kept in Toronto, Ontario.

The main objectives of the 2018 drilling included:

- 1. Outline higher grade gold mineralization in the Porphyry Zone with gold grades ranging from 3 g/t Au to over 10 g/t Au.
- 2. Outline additional mineralized zones by drilling in areas with prior scattered higher grade assays but insufficient drilling to allow defining mineralized zones and inclusion as pit-constrained resources, notably in the sparsely drilled gap between the Porphyry, Douay West, and NW zones.
- 3. Test discovery targets along the westerly and easterly extensions of the northern margin of the CBDZ.

Gold mineralization mainly occurs in different phases (some porphyritic) of syenitic intrusive rocks, iron-rich basalt host rocks, and mixed syenite and basalt, a common occurrence given



that the Douay intrusive complex consists of several dyke swarms rather than a single pluton. Based on lithogeochemical data interpreted to indicate the presence of syenite up to 8.5 km to the west-northwest and 7.5 km to the east-northeast, the main structural corridor was interpreted to be prospective for gold mineralization over a strike length of over 21 km.

A summary of the 2018 drill hole location and collar information is contained in Table 10-4. The easting and northings in each of the tables are based on NAD83, Z17 UTM coordinates.

TABLE 10-4 SUMMARY OF THE 2018 DRILL HOLE INFORMATION Maple Gold Mines Ltd. – Douay Gold Project

Hole ID	Easting*	Northing*	Elevation	Length (m)	Azimuth**	Dip**	Start	End
DO-18-203	706999	5490336	295	747	350	-51	16-Jan-18	03-Feb-18
DO-18-204	707561	5490305	290	528	350	-52	03-Feb-18	13-Feb-18
DO-18-205	708271	5490264	303	282	352	-50.5	14-Feb-18	20-Feb-18
DO-18-206	707665	5490759	290	270	360	-55	14-Feb-18	18-Feb-18
DO-18-207	707642	5490953	290	162	360	-60	18-Feb-18	19-Feb-18
DO-18-208	707776	5490851	292	213.25	360	-51.5	20-Feb-18	21-Feb-18
DO-18-209	708280	5490130	300	447	358	-51	20-Feb-18	02-Mar-18
DO-18-210	707400	5490800	293	300	360	-61	22-Feb-18	26-Feb-18
DO-18-211	707362	5491391	290	180	360	-50	26-Feb-18	01-Mar-18
DO-18-212	704892	5491799	295	296.24	360	-60	27-Feb-18	04-Mar-18
DO-18-213	707213	5491290	293	279	360	-60	01-Mar-18	05-Mar-18
DO-18-214	705321	5491889	295	477	8.5	-48	01-Mar-18	07-Mar-18
DO-18-215	708280	5489999	347	155.6	360	-50	02-Mar-18	13-Mar-18
DO-18-216	706600	5490525	290	609	341	-49	05-Mar-18	13-Mar-18
DO-18-217	705112	5491600	295	498	353	-47	04-Mar-18	13-Mar-18
DO-18-218	705200	5491498	300	480	1.8	-46	07-Mar-18	23-Mar-18
DO-18-219	703737	5492358	279	400.2	355	-48	07-Mar-18	14-Mar-18
DO-18-220	712912	5491775	300	468	355	-50	08-Mar-18	16-Mar-18
DO-18-221	706299	5490461	281	729	360	-60	13-Mar-18	25-Mar-18
DO-18-222	707800	5490054	300	350	360	-50	13-Mar-18	22-Mar-18
DO-18-223	704702	5492498	300	351	352.99	-52.96	26-Mar-18	04-Apr-18
DO-18-224	696401	5494219	295	402	33	-50	22-Mar-18	26-Mar-18
DO-18-225	695675	5494784	284	414	360	-50	14-Mar-18	19-Mar-18
DO-18-226	707798	5490522	300	300	9.53	-44.15	22-Mar-18	11-Apr-18
DO-18-227	704897	5491660	300	447	358.88	-60.36	25-Mar-18	04-Apr-18
DO-18-228	712354	5491936	300	348	356.03	-53.11	22-Mar-18	28-Mar-18
DO-18-229	706440	5490559	300	501	359.46	-44.27	24-Mar-18	29-Mar-18
DO-18-230	705899	5490645	285	570	358.56	-54.29	25-Mar-18	05-Apr-18
DO-18-231	697054	5494193	300	409.5	10.74	-55.65	26-Mar-18	30-Mar-18
DO-18-232	712451	5492301	300	393	360	-51	28-Mar-18	02-Apr-18
DO-18-233	705283	5491808	300	366	359.8	-51.3	04-Apr-18	09-Apr-18



Hole ID	Easting*	Northing*	Elevation	Length (m)	Azimuth**	Dip**	Start	End
DO-18-234	706000	5490520	300	612	359.02	-58.59	05-Apr-18	15-Apr-18
DO-18-235	715442	5492017	300	414	360	-50	17-Apr-18	21-Apr-18
DO-18-236	704570	5492400	300	351.15	3	-50	04-Apr-18	13-Apr-18
DO-18-237	697810	5493250	300	360	311.46	-50.98	06-Apr-18	09-Apr-18
DO-18-238	716819	5492517	300	402	358.73	-51.34	06-Apr-18	11-Apr-18
DO-18-239	707200	5490420	300	509.4	4	-56	06-Apr-18	17-Apr-18
DO-18-240	706100	5491015	300	302.5	0.83	-56.07	07-Apr-18	13-Apr-18
DO-18-241	705303	5491371	300	510	359.79	-53.24	09-Apr-18	23-Apr-18
DO-18-242	697123	5493566	300	405	15.45	-49.53	10-Apr-18	15-Apr-18
DO-18-243	716140	5492464	300	408	359.99	-51	11-Apr-18	17-Apr-18
DO-18-244	708100	5490360	300	210	356.22	-49.47	11-Apr-18	15-Apr-18
DO-18-245	705292	5492495	300	351	360	-50	14-Apr-18	24-Apr-18
DO-18-246	705800	5491284	300	309	355.69	-49.98	13-Apr-18	16-Apr-18
DO-18-247	707860	5490140	300	458	360	-50	15-Apr-18	25-Apr-18
DO-18-248	705652	5490651	300	604	356.54	-63.17	16-Apr-18	27-Apr-18
DO-18-249	705635	5491547	300	420	360	-50	17-Apr-18	21-Apr-18
DO-18-250	707458	5490667	290	465	359.28	-55.8	18-Apr-18	23-Apr-18
DO-18-251	714879	5492159	300	450	0.35	-51.7	21-Apr-18	24-Apr-18
DO-18-252	705695	5491517	300	276	0	-50	21-Apr-18	24-Apr-18
DO-18-253	707564	5490545	300	606	3.71	-55.26	24-Apr-18	30-Apr-18
DO-18-254	707980	5490250	300	348	0	-50	27-Apr-18	02-May-18

21,143.84

Table supplied by Maple Gold.

#### Notes:

#### The 2018 drill objectives were largely achieved:

- Higher grade gold mineralization was outlined in the Porphyry Zone, notably in holes DO-18-216 (52 m of 3.53 g/t Au uncapped between 441 m and 493 m) and DO-18-247 (21 m of 3.49 g/t Au uncapped between 365 m and 386 m), both of which showed visible gold.
- 2. Drilling in the sparsely drilled gap between the Porphyry, Douay West, and NW zones resulted in the discovery of the Nika Zone, with the key intercept in discovery hole DO-18-218 (50 m of 1.77 g/t Au between 297 m and 347 m).
- 3. Drill testing of discovery targets along the westerly and easterly extensions of the northern margin of the CBDZ yielded strong alteration and sulphide mineralization but no significant gold intercepts.

<sup>\*</sup>UTM NAD83 Zone 11, by handheld GPS unit

<sup>\*\*</sup>Azimuth and dip at collar



#### 2019 DRILLING PROGRAM

Maple Gold drilled 15 drill holes for 6,045.5 m between March 25 and April 26, 2019 in the Nika, Porphyry, and 531 zones (Table 10-5). The drill holes ranged in length from 180 m to 675 m.

TABLE 10-5 SUMMARY OF THE 2019 DRILLING PROGRAM Maple Gold Mines Ltd. – Douay Gold Project

Ownership	2019			
Ownership	Count	Metreage		
Maple Gold Mines	11	5,566.3		
SOQUEM-MGM Joint	4	479.2		
Total	15	6,045.5		

Note: Table supplied by Maple Gold. Holes drilled partly in Maple Gold and partly in JV area were ascribed to the JV in terms of count, but meterage was distributed.

Of these, 11 drill holes, for 5,566.3 m were drilled on the Maple Gold claims, and four drill holes, for 479.2 m, were either completely or partially drilled on claims included in the Maple Gold-SOQUEM joint venture. The average core recovery was 99.0%, ranging from 56.7% to 100% by run. There was 100% recovery in 66% of the runs. The open core trays are stored under cover on metal racks at Douay's secure site.

Drilling was conducted using drill rigs from Forage Pikogan Inc. (Pikogan) and Orbit Garant, both from Val d'Or, QC. Pikogan utilized two Orbit Garant YS 1500, and Orbit Garant used two Orbit Garant YS 1000, all of which were skid-mounted core rigs. All drills used metric 3-m NQ rods. Each drill operated 24 hours per day, except when broken down or understaffed. The drilling rates averaged 32.2 m per shift, with a maximum of 90 m in a single shift by one of the Pikogan drills. These averages include breakdown or idle times

Work methodology was unchanged from the 2018 program, as detailed above.

The main objectives of the 2019 drilling included:

- 1. Follow up on higher grade gold mineralization from 2018 as well as from historical holes in the Porphyry Zone.
- 2. Follow up on the better intercepts, in terms of both grade and thickness (i.e. accumulation), from 2018 in the Nika Zone, both near surface and depth extensions.



3. Test depth extension of 531 Zone mineralization at base-of-pit depths.

A summary of the 2019 drill hole location and collar information is contained in Table 10-6. The easting and northings in each of the tables are based on NAD83, Z17 UTM coordinates.

TABLE 10-6 SUMMARY OF THE 2019 DRILL HOLE INFORMATION Maple Gold Mines Ltd. - Douay Gold Project

Hole ID	Easting*	Northing*	Elevation	Length(m)	Azimuth**	Dip**	Start Date	<b>End Date</b>
DO-19-105X	704949	5491402	286.44	582	360.0	-45.0	2019-04-23	2019-04-29
DO-19-255	705199	5491708	285	354	358.3	-51.5	2019-03-26	2019-03-30
DO-19-256	705937	5491023	288	180	356.7	-61.3	2019-03-27	2019-03-29
DO-19-257	705203	5491325	286	675	356.7	-48.3	2019-03-30	2019-04-10
DO-19-258	706385	5490712	291	342	358.2	-55.1	2019-03-30	2019-04-03
DO-19-259	706623	5489152	290	336	358.9	-55.3	2019-04-03	2019-04-07
DO-19-260	706898	5490552	295	564	357.5	-59.7	2019-04-03	2019-04-11
DO-19-261	706806	5489137	290	363	358.7	-46.3	2019-04-07	2019-04-13
DO-19-262	709046	5489923	308	432	358.2	-59.1	2019-04-13	2019-04-18
DO-19-263	707858	5490252	302	357	1.8	-51.3	2019-04-06	2019-04-10
DO-19-264	706659	5490415	293	651	352.2	-46.4	2019-04-13	2019-04-24
DO-19-265	707988	5490144	303	417	12.1	-48.2	2019-04-14	2019-04-19
DO-19-266	705142	5491377	286	651	360.0	-50.0	2019-04-11	2019-04-22
DO-19-267	707986	5490395	303	252	14.1	-70.9	2019-04-10	2019-04-12
DO-19-268	708045	5490273	304	357	359.7	-56.1	2019-04-11	2019-04-14
				21.143.84				

Table supplied by Maple Gold.

#### Notes.

#### 2019 DRILLING RESULTS

The objectives of the 2019 drill campaign were largely achieved:

- 1. Follow-up on higher grade gold mineralization outlined in 2018 and historical holes in the Porphyry Zone yielded significant intercepts, although not as spectacular as some of the 2018 intercepts. Some of the better results include DO-19-258 (40 m of 1.41 q/t Au from 274 m to 314 m) and DO-18-256 (16 m of 1.57 g/t Au from 77 m to 93 m), the latter result lending support to a starter pit search area in this sector.
- 2. Follow-up on the better intercepts from 2018 in the Nika Zone, both near surface and at depth, yielded broad zones of mineralization, however, no intercepts compared to the 2018 discovery hole. Deepening of DO-12-105, however, gave 42.5 m of 1.75 g/t Au from 465 m to 567.5 m near the west end of the Nika Zone.

<sup>\*</sup>UTM NAD83 Zone 11, by handheld GPS unit

<sup>\*\*</sup>Azimuth and dip at collar



3. Drilling of the depth extension at the 531 Zone at base-of-pit depths not only confirmed down-dip continuity of the zone being tested but yielded significantly broader and higher grade mineralization. DO-19-262 cut 51 m of 2.81 g/t Au from 378 m to 429 m. In addition, an upper zone was also cut with 28 m of 2.55 g/t Au from 302 m to 330 m. Both zones combined are significantly more important than the original 531 Zone discovery hole and rank among the top five intercepts ever drilled on the Property.



## 11 SAMPLE PREPARATION, ANALYSES AND SECURITY

## PRE-2016 SAMPLE PREPARATION, ANALYSES AND QA/QC

#### DATA QUALITY CONTROL

The QA/QC procedure included a systematic addition of blank samples and certified standards inserted at predetermined locations in the sequence of sample tags. The insertion frequency varied from every 10 to 20 samples.

Insertion of coarse and pulp duplicates has been documented since 2011, however, the selected duplicates were not a duplicate of the previous sample in the sequence but were obtained from a random selection of pulps or rejects collected from previous holes and grading over 0.3 g/t Au. This procedure is more a check assay program than a duplicate sampling of pulps and rejects.

Blank samples were used to check for possible contamination, however, the blanks originated from drilled intersections of seemingly barren basalt from previous drill holes. This methodology resulted in occasional assay values as high as 800 parts per billion (ppb) Au.

Certified standards, or reference material, were added to determine the analytical accuracy and precision of the laboratories.

Samples derived from half-cut NQ core, with the lengths varying from 1.0 m to 1.5 m, were sent for analysis to Laboratoire Expert, in Rouyn-Noranda. Samples were assayed initially by fire assay, followed by atomic absorption or gravimetry as per industry standards. As Laboratoire Expert is not a certified laboratory, it was standard procedure to send all pulps with results higher than 500 ppb (>0.5 g/t Au) to the certified ALS Minerals laboratory (ALS Minerals) in Val D'Or. The ALS Minerals methodology is well documented, and the laboratory has an internal QC program, with the insertion of duplicate pulps, rejects, blanks, and certified reference material.



Logging software [Prolog (Pre-2007), Geobase (2007-2010), and Geotic (2010-)] was used to help avoid interval errors, gaps, and overlaps. It allowed for fewer errors in a large interrelational database.

#### DATA VERIFICATION EXTERNAL LABORATORIES

At the end of the analytical process, 5% to 10% of the sample pulps were re-analyzed by a different laboratory for comparative purposes. Multi-element predominant and trace element geochemistry was performed on every tenth to fifteenth sample for rock type identification and alteration vectoring.

ALS Minerals is an independent laboratory which is ISO 9001:2008 certified for survey/inspection activity and ISO 17025:2005 certified for laboratory analysis. Each sample was prepared using the Prep31 preparation code, consisting of crushing to 70% passing ( $P_{70}$ ) less than two millimetres, riffle splitting 250 g, and subsequently pulverizing the split to more than 85% passing ( $P_{85}$ ) 75  $\mu$ m. A portion of the pulverized samples, 30 g, were analyzed for gold by fire assay with an inductively coupled plasma atomic emission spectrometry (ICP-AES) (ICP21) finish. This method has detection limits of 0.001 g/t Au to 10.0 g/t Au. The multi-element determinations requested on about 10% of the samples used the ME-MS81d and ME-4ACD81 methods, for a combination of rare earth and trace elements, plus a whole rock package. From 2018 onward, the ME-MS61 method was preferred for trace element analysis.

Actlabs, which was used as an independent verification laboratory, is ISO 17025 accredited and/or certified to 9001: 2008, OMAFRA and NELAC accredited, Health Canada Licensed, and audited by the FDA.

Laboratoire Expert, while not certified, is a reputable independent laboratory, which follows industry approved methods for sample acceptance, laboratory analysis, and reporting; using internal QC with the insertion of blanks, commercial certified material, and approximately 10% pulp duplicates.

One of the older laboratories used, XRAL, closed its doors in the Rouyn area years ago, and no certification details have been found.



## PERFORMANCE OF CRM (STANDARDS) FOR HISTORICAL ASSAY RESULTS

Since 2005, sixteen different certified reference materials (CRM) (standards) have been used to produce between 14 and 214 repeated assays, for a total of 975 inserted standards.

All QA/QC data were recorded in the logging software (Geotic), which produces an ongoing review of QC and an account of duplicates and placement of control samples.

No formal monthly or annual QA/QC report was produced. Follow-up on the performance of the assaying was not optimal, although a spreadsheet file reports failure, and requests for reassay of assay batches that failed. The reject and pulp duplicates were regularly inserted in the sample stream and differences in assay results, were monitored closely.

#### PERFORMANCE OF BLANK MATERIAL FOR HISTORICAL ASSAY RESULTS

Between 2005 and 2014, a total of 1,487 blanks were inserted in the sampling sequence, with the results contained in the database. The material for the blank sample consisted principally of core from local drill holes with seemingly barren intersections.

The average grade for the blank samples is 0.009 g/t Au, with the median at 0.001 g/t Au. Few results reveal anomalous gold values, with a close examination of the highest values (0.4 g/t Au to 0.8 g/t Au) inside the sample sequence showing no contamination from pulverization. These anomalous blanks typically do not follow samples with high grades in the sequence. The most reasonable explanation for the anomalous results is that the blanks were not as barren as expected.

## **MAPLE GOLD 2016-2017**

#### RE-SAMPLING PROGRAM

#### SAMPLING PROCEDURE

In 2016, Maple Gold initiated a program of re-logging and sampling strategic historical and recent drill holes. This program was initiated to standardize drill logging information, reduce rock types in the database and build a lithogeochemical database in order to better define alteration patterns. A total of 302 holes have been described and re-sampled in 2016, with an additional 160 drill holes re-logged in 2017.



The sampling procedure for re-logged drill core included

- Samples every three metres are passed through an XRF instrument.
- Regular sampling of mineralized intervals (1/4 core) to validate earlier gold results or untested intervals (1/2 core), with each sample assayed for gold and a multi-elements package.
- Every 100 m, a small sample is collected for a lithogeochemical evaluation.

#### **QUALITY CONTROL SAMPLES**

Between 2016 and 2017, Maple Gold re-sampled 11,416 drill core intervals for gold assaying and submitted 1,497 lithochemical samples for whole rock and multi-element analysis. The generated drill hole samples included 2,014 intervals that were not previously sampled.

The control samples included:

- Coarse duplicates
- Field duplicates
- CRM:
  - o 45 OREAS 214 (3.031±0.082 g/t Au).
  - o 36 OREAS 215 (3.54 ± 0.097 g/t Au).
  - 77 OREAS 218 (0.531±0.017 g/t Au).
- Blanks:
  - Granite ¾ in. stones
  - White ornamental ¾ in. to 1 in. marble

A comparison between previously assayed samples and the new assay results indicated that there is very little variation between the two. Thus, the results support a conclusion that there was no material difference between the historical and the current assay results.

## **DRILLING PROGRAM**

### SAMPLING PROCEDURE

Since 2016, Maple Gold implemented new protocols pertaining to the planning and placing of drill holes in the field, drilling and retrieving the NQ-sized drill core, drill hole surveying and core transport to the Douay camp.

Geologists described the drill core and marked intervals showing signs of metallic mineralization for sampling. Additionally, geologists marked the core to be sampled with a coloured wax pencil (usually in red) indicating the beginning and end of each interval



Most samples were taken at 1.5 m intervals; however, the interval length was adjusted to respect lithological and/or mineralogical contacts and to isolate narrow veins or other structures that may yield higher grades.

Technicians sawed the core of the sample intervals in half, following the line marked by the geologists. One half of the core was returned to the box for storage, while the remainder was bagged and tagged with one of the dual sample tags from the ALS Minerals. Individual sample bags were sealed and placed into shipping pails and/or nylon shipping bags, sealed, and marked with the contents. The samples were delivered by Maple Gold personnel to the ALS Laboratory Group facility in Val-d'Or, Quebec, for processing, crushing, pulverizing and analysis.

#### SAMPLE ANALYSIS

#### Certified Reference Material (Standards)

Results of the regular submission of CRMs were used to monitor analytical accuracy and to identify potential problems with specific batches. Previously Maple Gold used Rocklabs Standards and uncertified blank cobbles or ornamental gravel sourced at local hardware stores for standard and blank materials, respectively. Beginning in April 2017, the certified refence material was obtained from Analytical Solution Laboratory (ASL), including certified blank granite pebbles (½ in. to ¾ in. diameter).

The following CRMs were inserted every 50 samples alternating between a high-grade and low-grade standard:

High: OREAS 214 (3.031 g/t Au)

• High: OREAS 215 (3.540 g/t Au)

• Low: OREAS 218 (0.531 g/t Au)

VMS: OREAS 623 (Zn: 1.03%, Cu: 1.73%, Au: 0.87g/t)

The failure rate in 2016 and the first quarter of 2017 was caused principally by incomplete digestion of the CRM. Every failure was checked, and neighbouring samples were rerun. None of the re-assayed results diverged significantly from the original values. The original certificates were not overwritten. CRM failures accounted for were 2.27% of all assayed CRMs (9 out of 396 CRM assayed)



Once the new CRMs were selected in April 2017, with the composition of the matrix closer to the type of rocks in the Douay property, failure rate dropped drastically in the CRM population. Few failures were caused by clerical errors, where the wrong CRM name was entered in the database.

#### **Blanks**

Each type of blank material was identified in the Maple Gold database. Approximately 500 g of material was prepared for each blank and inserted every 20 samples, following a mineralized core sample to identify possible contamination in the crushing and pulverizing processes. In 2016 and the first quarter of 2017, Maple Gold used the blank material made of ornamental cobbles that are considered barren of gold, rather than blank material from drill holes on the Property. Since April 2017 Maple Gold has replaced the blank material with blank granite (estimated value: <0.001 g/t Au).

Purchase of certified blank from ASL in April 2017, did not impact the blank's contamination rate, which has historically been low and deemed by ALS as acceptable "carry-over" from samples with higher grades treated previously.

A total of 1,009 blanks were inserted in 2017 to 2018. Blank failures accounted for 0.89% (9 out of 1,009 blanks assayed). All contamination issues were addressed and considered as acceptable carry-over by the laboratory. The low grade contamination of blanks with values from 0.004 g/t Au to 0.02 g/t Au was considered negligible, with no material impact on the database. Only nine false failures were caused by clerical errors, due to incorrect identification of the standards or blanks

#### **Duplicates**

Technicians inserted sample duplicates, previously identified by geologists, every 20 samples alternating between field and coarse material.

The field duplicates were generated using a quarter split of the half-sampled core and inserted approximately every 40 samples. List of coarse samples were provided to the laboratory with instructions to prepare a coarse duplicate from homogenized, crushed material. The coarse material was taken immediately following the initial crushing and splitting. Both the original and the coarse duplicate samples were submitted to the same laboratory, in the same sample



batch using a different sample number in order to go through the same procedure. The pulp duplicates were selected by the laboratory as part of its internal QC procedure, usually every 20 samples.

## MAPLE GOLD 2018 TO 2019 DRILLING PROGRAM

#### SAMPLE PREPARATION

Core was photographed wet and dry, logged, and marked for sampling. Logging was performed by qualified Maple Gold personnel, who also determined the sampled intervals. Geologists marked the samples according to lithology, mineralization, and alteration. Sample lengths ranged from 0.08 m to 3.0 m. The preferred range of between 0.30 m and 1.0 m included 95% of the samples; 79% of the samples were 1.0 m. Most holes were continuously sampled from top to bottom; with exception of holes outside of the resource area which were selectively sampled. Half of the core sample was sent for analysis, while the other half was retained in the core tray at site.

Samples were tracked using three part ticket booklets. One tag was stapled into the core box at the start of the appropriate sample interval, one tag was placed into the sample bag, and the final tag was retained in the sample booklet for future reference. For each sample, the date, drill hole number, property name, and sample interval depths were noted in the sample booklet.

Drill core was cut using an Almonte automated continuous-feed saw equipped with a Fordia water management and filtration system. The containerized unit was assembled in Val d'Or, Quebec. Trained geological technicians cut the core, bagged the samples, inserted the control samples, and prepared the samples for shipment.

RPA confirmed the adequacy of the samples taken by Maple Gold, its QA/QC program, and the security of its shipping procedures.

#### PREPARATION AND ANALYSES

ALS Global (ALS) prepared and analyzed samples for gold and a suite of other elements.



ALS has strategically designed processes and a global quality management system that satisfies all the requirements of International Standards ISO/IEC 17025:2017 and ISO 9001:2015. All ALS geochemical hub laboratories are accredited to ISO/IEC 17025:2017 for specific analytical procedures.

The ALS quality program includes QC steps which are implemented throughout sample preparation and analysis, inter-laboratory test programs, and regular internal audits. These steps are an integral part of day-to-day activities, involve all levels of ALS staff, and are continuously monitored by management.

Samples were crushed to  $P_{70}$  less than two millimetres, and 250 g pulverized to more than  $P_{85}$  75 µm. Samples were then split to the appropriate sizes for the analytical procedure.

A 30 g portion of the pulverized samples was analyzed for gold by fire assay with an ICP-AES finish. Samples with over-grade gold (Au >= 10 ppm) were re-analyzed by 30 g fire assay with a gravimetric finish.

For multi-element analysis, a 0.25 g sample was processed for a 48 element suite using four-acid digestion with an ICP-MS finish. For whole rock analysis, a 0.1 g sample was oven-fused into a bead that was digested and analyzed by ICP-AES.

In all cases, an over-grade assay result has precedence over the original result. All pulps and selected rejects were returned to Douay within 90 days.

During the 2018 and 2019 drilling seasons, 24,372 samples, including 1,589 control samples, were submitted for gold and multi-element analysis. Every sample was analyzed for gold, for every 15<sup>th</sup> to 20<sup>th</sup> sample multi-element analysis was conducted, and specific samples were selected for whole rock analysis (Table 11-1).



TABLE 11-1 ANALYTICAL METHODS AT DOUAY Maple Gold Mines Ltd. – Douay Gold Project

Element	Method	2018	2019	Total
Gold	Au-ICP21	18,428	5,944	24,372
Gold	Au-GRA21	9	4	13
Multi-element	ME-MS61	1156	296	1452
Whole Rock	ICP06	236	1	237

#### QUALITY ASSURANCE AND QUALITY CONTROL

Maple Gold implemented a QA/QC program that included the blind insertion of commercial CRMs, field blanks, field duplicates, and preparation (coarse) duplicates into the sample stream according to a pre-determined schedule. Table 11-2 summarizes all the analytical QA/QC sampling in 2018 and 2019.

TABLE 11-2 SUMMARY OF DRILLING PROGRAM SAMPLES
Maple Gold Mines Ltd. – Douay Gold Project

Sample Code	Sample Type	2018	2019	Total
Core	Core (1/2 or 1/4 split)	17,226	5,557	22,783
CDN-GS-P1A	CRM (60 g packet)	154	55	209
OREAS 214	CRM (60 g packet)	150	45	195
OREAS 218	CRM (60 g packet)	46	0	46
OREAS 251	CRM (60 g packet)	102	45	147
Blank	White garden stone	367	119	486
Field Duplicate	Core (1/4 split)	193	63	256
Prep Duplicate	Split of crushed	190	60	250
Total	·	18,428	5944	24,372

Control samples were vetted immediately after the results were received from the laboratories using database queries that employed the rules established by Maple Gold for evaluation.

#### **STANDARDS**

Gold standards that were used to monitor the accuracy of the laboratories were purchased from Canadian sources. Table 11-3 provides a summary of the gold standards used during 2018 and 2019. A standard in rotation was inserted every 48 samples.



TABLE 11-3 GOLD STANDARDS USED DURING 2018 AND 2019
Maple Gold Mines Ltd. – Douay Gold Project

Standard Name	Au Mean (ppm)	St Dev (ppm)	Manufacturer	Distributer
CDN-GS-P1A	0.143	0.008	CDNLabs	CDNLabs
OREAS 214	3.03	0.082	OREAS	ASL
OREAS 218	0.531	0.038	OREAS	ASL
OREAS 251	0.504	0.015	OREAS	ASL

Note. St Dev - standard deviation

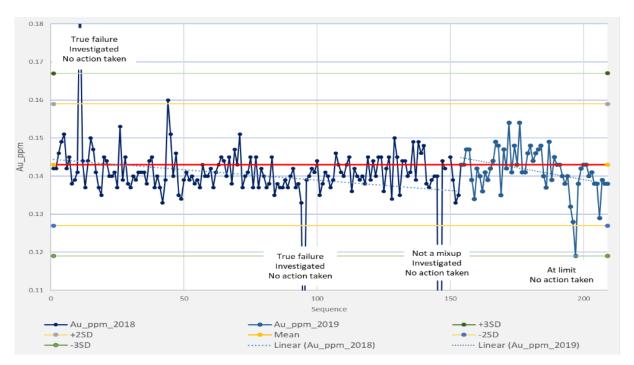
If a result falls outside of three standard deviations from the mean value of the standard, Maple Gold sends samples between the nearest control samples with valid results to be re-assayed.

If the results of two consecutive samples fall outside of two standard deviations from the mean value of the standard, on the same side of the mean, then they have failed. The samples between the nearest control samples with valid results will be re-assayed. If the failure is due to a sample mix-up, then the error is corrected, but no new assay is required. If the failure occurs within a batch of insignificant results, however, then the samples may not be re-assayed.

The control charts for standards CDN-GS-P1A, OREAS 214, OREAS 218, and OREAS 251 are shown as Figures 11-1 to 11-4.







## FIGURE 11-2 STANDARD OREAS 214

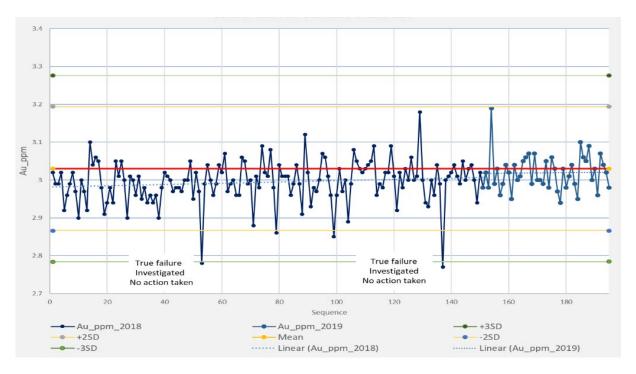
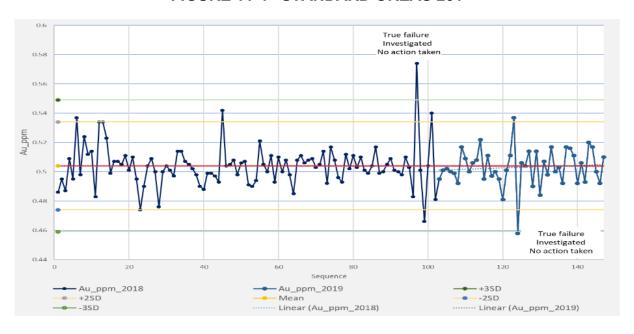








FIGURE 11-4 STANDARD OREAS 251



Standard CDN-GS-P1A had three true failures out of the 209 samples analyzed during 2018 and 2019, for a failure rate of 1.43%. One of the results was found to be similar to that expected of a blank, however, the sample submitted was a pulp with the expected mass, so it was determined that a mix-up did not occur. The nearby samples, within the range of the nearest



passed standards, had gold values that were insignificant or below detection, therefore, no corrective actions were taken, and the results were accepted.

A single sample fell outside two standard deviations from the mean. Another sample was reported as having a non-sufficient size (NSS, excluded from the chart), which suggests that the laboratory had an internal QC issue that required the standard to be run again.

Standard OREAS 214 had two true failures out of the 195 samples analyzed, for a failure rate of 1.03%. The nearby samples, within the range of the nearest passed standards, had gold values that were insignificant or were detection; therefore, no corrective actions were taken, and the results were accepted.

Approximately 56.5% of the results were below or equal to the mean suggesting a very weak negative bias for this standard. Over time, there was a weak to moderate negative trend.

There were no true failures for standard OREAS 218; this standard performed well.

Standard OREAS 251 had two true failures for the 147 samples analyzed, for a failure rate of 1.36%. One failure was due to a contaminated crucible. A section of samples was reanalyzed, and the new results were accepted. A second failure was accepted as is because the nearby samples, within the range of the nearest passed standards, had gold values that were insignificant or below detection.

#### **BLANKS**

Blanks were used to monitor contamination and sample mix-ups. Blank material consisted of commercial white garden stone (marble). A blank was inserted every 48 samples.

If a result is greater than ten times the lower detection level for the element, then a warning is triggered. The cause of the warning is then investigated by Maple Gold personnel and corrective action is taken if required.

The results for nine out of 486 blanks fell at or above ten times the detection limit of 0.01 ppm Au, for a warning rate of 1.85%. The highest result of 0.06 ppm Au is insignificant. All results were accepted (Figure 11-5).



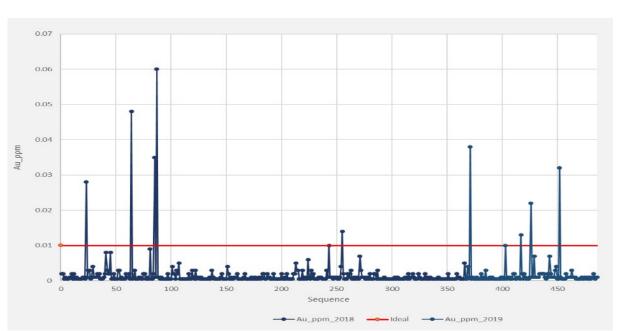


FIGURE 11-5 FIELD BLANKS

There were 22 sample mix-ups between blanks and standards. In all of these cases, the sample properties were checked, the coding in the database was corrected, and the result was re-vetted. There were no subsequent failures.

#### **DUPLICATES**

If a duplicate pair deviates widely from the ideal, Maple Gold investigates the reason and corrective action is take if necessary.

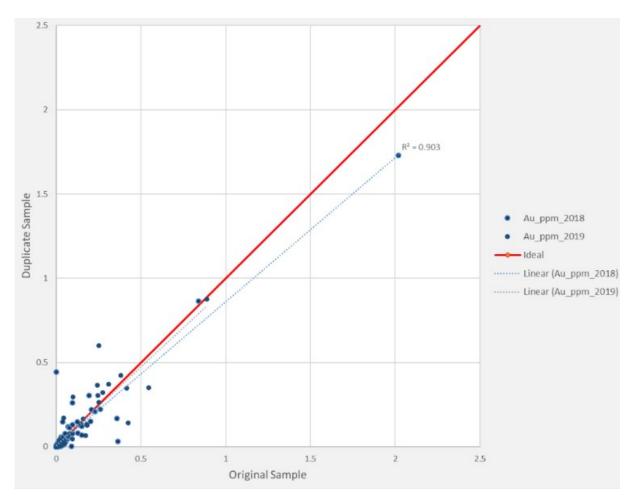
#### **Field Duplicates**

Field duplicates, which were used to measure the precision and reproducibly of the analytical result of the core, were created by halving the halved core, and submitting each quarter as a unique sample. A field duplicate was inserted every 96 samples.

Figures 11-6 and 11-7 compare the original versus the field duplicate value of 256 duplicate pairs showing equal but widespread scatter about an idealized trend. The results appear biased toward the original sample. The coefficient of determination (R²), value of 90.3% for the 2018 samples is adequate, but shows that there is variability between the two samples, especially at higher gold concentrations. The R² value of 80.6% for the 2019 samples shows that there is wider variability between the two samples, although the trendline is close to the mean.



## FIGURE 11-6 FIELD DUPLICATES - FULL RANGE





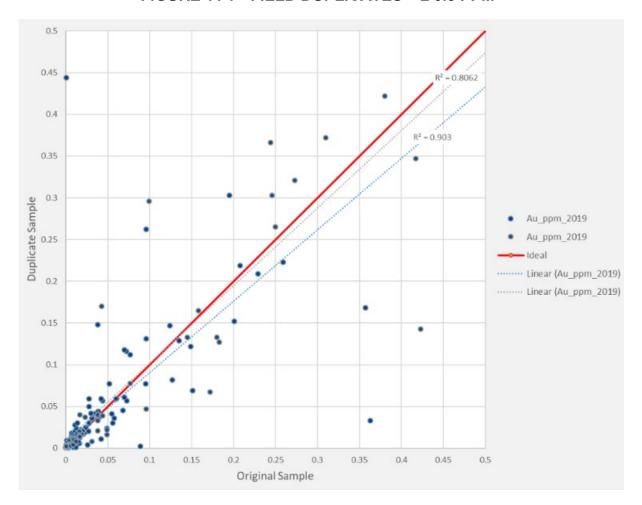


FIGURE 11-7 FIELD DUPLICATES - ≤ 0.5 PPM

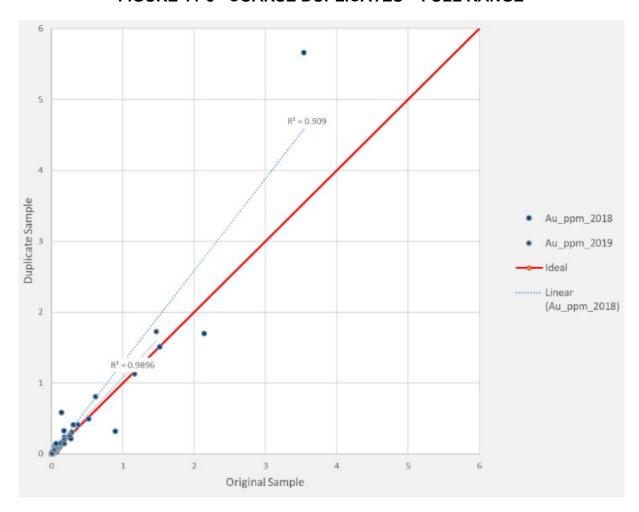
## Coarse (Prep) Duplicates

Coarse or prep duplicates, which were used to measure the precision and reproducibility of the analytical result of the sample after the crushing stage, were split by the laboratory on request. Maple Gold submitted an in-sequence tag in an empty numbered bag for this purpose. A prep duplicate was inserted every 96 samples.

Figures 11-8 and 11-9 compare the original versus the preparation (prep) duplicate value of 250 duplicate pairs scattered about an idealized trend. The results are biased toward the duplicate sample. The R² value of 90.9% for the 2018 samples is adequate but shows that there is variability between the two samples, especially at higher gold concentrations. The R² value of 99% for the 2019 samples is excellent, and the results, usually at the lower concentrations, are scattered tightly about the mean.



## FIGURE 11-8 COARSE DUPLICATES - FULL RANGE





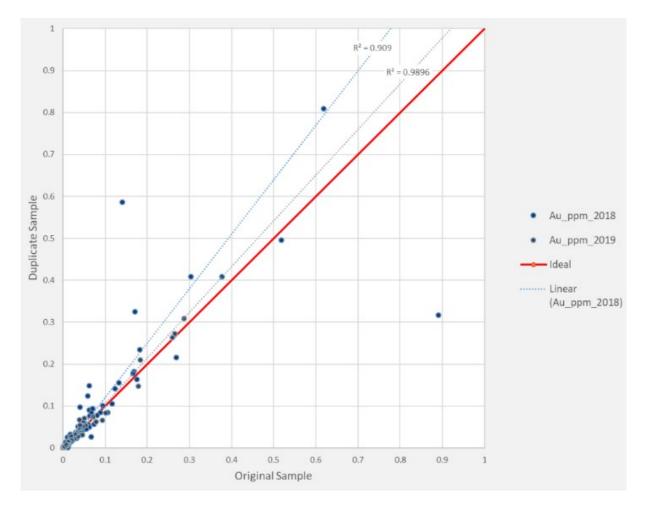


FIGURE 11-9 COARSE DUPLICATES - ≤ 0.5 PPM

## **Pulp Duplicates**

Pulp duplicates, used to measure the precision and reproducibility of the analytical result of the sample after pulverization, were created as part of the laboratory QA/QC program. Pulp duplicates were included every 20 to 40 samples.

The pulp duplicates performed well with an excellent R<sup>2</sup> value of 99.7%, and the trend follows the idealized trend with no bias.

In addition to the systematic duplicates collected, additional field or prep duplicates should be ordered from rocks that look mineralized, fall within expected mineralized zones, or return results in varying gold concentrations.



## **SAMPLE SECURITY**

Core logging is conducted in a large facility that is part of the main office and dry building. Core cutting and sampling occur in an adjacent container perpendicular to the main building. A sample storage and shipping preparation container abuts the core cutting facility. The metal core racks are located behind the main building. The building and containers are locked when not in use. All these facilities are located within a fenced area on the Property. Workers monitor the area during the drilling season; private security is employed at all other times.

The core samples are prepared for shipment by the geological technicians within the core sawing or storage containers. Samples are placed into numbered fiber bags, which are sealed with a numbered plastic locking tag. The contents of each bag are recorded. The geologists prepare the appropriate forms. A paper copy of the sample submittal is placed in the lead bag of each shipment, and a digital version is emailed directly to the laboratory.

On the day of shipping, the closed fiber bags are placed onto wooden pallets and wrapped with plastic film. Aldée Naud Transport, of Amos, Quebec retrieve a shipment every Monday, Wednesday, and Friday, and deliver them directly to the ALS preparation laboratory in Val d'Or, Quebec.

If required in order to expedite processing, ALS would re-distribute samples from Val d'Or for preparation at other laboratories such as Timmins, Thunder Bay, Sudbury, or Yellowknife. All samples were analyzed in Vancouver.

There were no reported incidences of tampering. The laboratory reported damage to the fiber and/or sample bags on three occasions in 2018. This damage was documented in the drill hole database. In most cases, the affected samples were salvaged and analyzed normally; however, two damaged samples from 2018 were not analyzed.

In RPA's opinion, the sample preparation, analysis, QA/QC program, and security procedures at the Project are adequate for use in the estimation of Mineral Resources.



## 12 DATA VERIFICATION

Data verification of the drill hole database included manual verification against hardcopy and original digital sources, a series of digital queries, and a review of Maple Gold's QA/QC procedures and results which are described in Section 11, Sample Preparation, Analyses and Security. RPA is of the opinion that database verification procedures for the Property comply with industry standards and are adequate for the purposes of Mineral Resource estimation.

Dorota El Rassi, P.Eng., RPA Senior Geological Engineer and an independent QP, visited the Property and other related facilities on November 14, 2019. Ms. El Rassi visited the core shack, examined drill core and outcrop, and held discussion with Maple Gold geological and technical staff.

## MANUAL DATABASE VERIFICATION

The review of the resource database included the collar, survey, lithology, assay, and density tables. Database verification was performed using tools provided within Leapfrog Geo Version 4.4.2 software package (Leapfrog). As well, the assay and density tables were reviewed for outliers. A visual check on the drill hole Leapfrog collar elevations and drill hole traces was completed. No discrepancies were identified.

RPA compared assay records for gold in the resource database to the digital laboratory certificates of analysis, which were received directly from ALS. This included fifty certificates containing 7,176 assays. No discrepancies were found.

### OTHER DATA VERIFICATION TESTS

Previous operators, at the end of the analytical process, sent 5% to 10% of the sample pulps to a different laboratory for comparative purposes.

Maple Gold is planning to implement a similar umpire sample check for the 2018 and 2019 drill programs upon receiving all assay results.



# 13 MINERAL PROCESSING AND METALLURGICAL TESTING

This section is largely based on the 2018 Technical Report (Micon, 2018). No further test work has been carried since that report.

## INTRODUCTION

On behalf of Maple Gold, BASE Metallurgical Laboratories Ltd. (BML) located in Kamloops, British Columbia, completed a program of preliminary metallurgical test work in early 2017, using samples from the Project. The samples selected by Maple Gold were representative of a number of identified zones within the deposit. A total of 10 composites, representing Zone 10, were evaluated by BML, using direct cyanidation, flotation and gravity separation, to ascertain preliminary recovery estimates and basic process parameters for preliminary process cost estimation.

## METALLURGICAL SAMPLES

This metallurgical program investigated several discrete zones of the Project. Samples were selected by Maple Gold to represent a wide spatial coverage of each zone, with a range of gold feed grades that were close to the nominal mineral resource grades. A summary of the 10 composites, including a selection of the chemical analyses, is provided in Table 13-1.

TABLE 13-1 METALLURGICAL SAMPLE ANALYSES
Maple Gold Mines Ltd. – Douay Gold Project

	No. of	Weight	Feed Analyses							
Composite	Holes	(kg)	Au (g/t)	Ag (g//t)	S (%)	С <sub>тот</sub> (%)	C <sub>ORG</sub> (%)	Cu (g/t)	Zn (g/t)	As (g/t)
NW1	9	26.6	1.70	0.6	1.17	2.45	0.03	40	60	146
NW2	3	37.3	0.78	2.5	1.50	3.11	0.02	50	110	100
Z20	3	44.9	0.78	0.3	0.46	1.45	0.01	70	60	<2
Z531	6	38.7	2.37	8.0	1.67	3.02	0.02	120	280	9
POR1	6	65.9	1.74	0.7	1.36	2.12	0.01	110	70	4
POR2	3	57.2	2.11	0.7	1.55	3.04	0.01	150	80	65
MZ	8	36.6	1.66	1.3	1.04	2.10	0.01	40	150	38



	No. of	Weight		Feed Analyses						
Composite	Holes	(kg)	Au (g/t)	Ag (g//t)	S (%)	С <sub>тот</sub> (%)	C <sub>ORG</sub> (%)	Cu (g/t)	Zn (g/t)	As (g/t)
DW1	5	48.1	1.23	0.7	1.56	2.40	0.02	110	90	8
DW2	3	53.1	4.00	1.0	1.57	2.62	0.02	110	70	3
Z10	4	63.2	2.57	0.6	2.96	2.60	0.02	100	60	5
Average			1.89	0.9	1.48	2.49	0.02	100	100	42

The samples contained between 0.8 g/t Au and 4.0 g/t Au and 0.3 g/t Ag and 2.5 g/t Ag. The sulphur values ranged from 0.46% to 2.96%, indicating the presence of sulphides. Mineralogical studies showed that the overwhelming majority of the sulphide mineralization occurs as pyrite. The NW 1 and NW 2 composites contained relatively higher concentrations of arsenic at 146 g/t and 100 g/t, respectively.

#### MINERALOGICAL CHARACTERIZATION

The mineral composition of the samples was determined by completing a Bulk Mineral Analysis (BMA) on an unsized sample from each of the composites.

The samples consisted of mainly feldspars, quartz, and carbonate minerals. The carbonate minerals observed were calcite, dolomite, and ankerite. There were some minor base metal sulphides (Cu, Pb, and Zn) identified in the samples, however, pyrite made up 97.2% to 99.3% of the total sulphides. Although the two samples from the NW Zone had elevated levels of arsenic, no measurable levels of arsenopyrite were detected in the mineralogical scan.

#### COMMINUTION TEST WORK

A single Master Composite was prepared from all the 10 composites and subjected to standard Bond ball mill work index (BWi) testing. The BWi value of the Master Composite was determined to be 18.5 kWh/t, which is considered relatively hard. A BWi for each sample was estimated by comparing the open circuit grind calibration test results for all the individual composites with the Master Composite of known BWi. The results of the comparative BWi tests are shown in Table 13-2.



TABLE 13-2 COMPARATIVE BOND BALL WORK INDEX TEST RESULTS
Maple Gold Mines Ltd. – Douay Gold Project

Composite	Comparative BWi (kWh/t)
NW1	13.3
NW2	18.7
Z20	21.9
Z531	15.6
POR1	18.7
POR2	18.7
MZ	14.1
DW1	20.3
DW2	23.4
Z10	20.3
Average	18.5

## METALLURGICAL TEST WORK

The 10 discrete zone samples were evaluated on a bench scale using typical gold extraction processes. These included whole sample leach tests, gravity concentration tests, rougher flotation tests, and leaching of flotation concentrates.

#### WHOLE SAMPLE LEACH TESTS

Standard 48-hour cyanidation bottle roll tests were conducted on each of the composite samples, ground to a nominal 80% passing ( $P_{80}$ ) of 75  $\mu$ m. Sodium cyanide concentration of 1,000 ppm was utilized while the pH was maintained at 11.0, using lime. The results of these tests are presented in Table 13-3.

TABLE 13-3 SUMMARY OF THE WHOLE SAMPLE LEACH TEST RESULTS
Maple Gold Mines Ltd. – Douay Gold Project

0	Au Extraction	Au	Reagent Consumption (kg/t)		
Composite	mposite (%) Residue Grade (g/t)		NaCN	Lime	
NW1	52.1	0.90	0.1	1.0	
NW2	52.5	0.43	0.3	1.4	
Z20	92.2	0.06	0.2	1.4	
Z531	92.5	0.17	0.2	1.4	
POR1	94.1	0.09	0.3	1.5	
POR2	91.7	0.16	0.9	1.8	
MZ	83.4	0.29	0.2	1.1	



	Au Extraction Au		Reagent Consumption (kg/t		
Composite	(%)	Residue Grade (g/t)	NaCN	Lime	
DW1	80.4	0.35	0.2	1.2	
DW2	86.0	0.40	0.2	1.4	
Z10	87.9	0.36	0.7	1.4	
Average	81.3	0.32	0.3	1.4	

Gold extraction from the composites was between 52% and 94%, averaging approximately 81%. Gold recovery from the NW1 and NW2 samples was low at approximately 52%. Most of the samples displayed relatively fast cyanide leach kinetics, reaching a plateau at approximately six hours. The only exception was the Z20 composite, which showed continuing extraction up until 48 hours.

Average sodium cyanide and lime consumptions were 0.3 kg/t and 1.4 kg/t, respectively.

Although not reported in the table above, silver leach extractions ranged from 65% to 89%. It was reported that the silver leach kinetics were typically slower than gold.

#### **GRAVITY AND ROUGHER FLOTATION TESTS**

Gravity separation, followed by flotation of the gravity tailings, was carried out on samples of each composite to assess gold extraction by gravity and flotation.

A primary grind size ( $P_{80}$ ) of 75 µm was targeted for these tests. The gravity circuit comprised a laboratory Knelson concentrator for primary recovery, the concentrate from which was cleaned by panning. Both the Knelson and pan tailings were fed to open circuit rougher flotation that used natural pH and Potassium Amyl Xanthate (PAX) as the collector.

A summary of the gravity and flotation test results is presented in Table 13-4.

TABLE 13-4 SUMMARY OF THE GRAVITY AND FLOTATION TEST RESULTS

Maple Gold Mines Ltd. – Douay Gold Project

Composito	Mass Pull	ull Au Recovery (%)			Con. Grade – Au (g/t)		
Composite	(%)	Grav.	Flot.	Total	Grav.	Float.	
NW1	8.4	26.8	70.1	96.9	59.0	18.8	
NW2	9.3	34.9	56.7	91.6	31.1	5.7	
Z20	5.8	19.7	68.2	87.9	18.5	7.5	



Composito	Mass Pull	Mass Pull Au Recovery (%)			Con. Grade – Au (g/t)		
Composite	(%)	Grav.	Flot.	Total	Grav.	Float.	
Z531	9.3	29.2	63.8	93.0	61.0	13.9	
POR1	9.3	45.8	49.4	95.2	71.0	9.1	
POR2	9.9	23.9	66.1	90.0	34.9	11.2	
MZ	8.7	40.0	53.9	93.9	96.0	12.4	
DW1	8.7	14.3	76.4	90.7	29.0	15.8	
DW2	9.0	15.5	73.6	89.1	48.0	18.9	
Z10	11.1	15.2	78	93.1	31.4	17.9	
Average	9.0	26.5	65.6	92.1	48.0	13.1	

Gold recovery from gravity concentration varied between 14% and 46% into pan concentrates grading between 19 g/t and 96 g/t. Flotation of the sulphides was successful at recovering a significant proportion of the remaining gold bearing minerals into a rougher flotation concentrate grading between 6 g/t Au and 19 g/t Au. The combined gold recovery performance was relatively consistent, with total gold recovery ranging from 88% to 97% (average 92%).

The typical sulphur recovery for the composites was 91% into a combined gravity and rougher concentrate. This suggests that there is a strong association between gold and sulphide sulphur.

It is noted that it is unlikely that the combined concentrate would be of sufficiently high grade to market directly as a gold bearing sulphide concentrate, although cleaning has potential to upgrade the concentrates further.

#### CYANIDATION OF GRAVITY AND FLOTATION CONCENTRATES

Additional gravity and rougher flotation tests, followed by cyanide leaching of the combined rougher concentrate, were also completed by BML. The flotation concentrates for each composite were split into two identical fractions then reground to two size fractions, with a target size  $P_{80}$  20  $\mu$ m and 15  $\mu$ m. These reground concentrates were then leached for 48 hours using cyanide to extract the gold. A summary of these test results is presented in Table 13-5.



TABLE 13-5 SUMMARY OF THE GRAVITY AND FLOTATION TEST RESULTS

Maple Gold Mines Ltd. – Douay Gold Project

	Float Mass F			Au Recovery (%)			Reagent Consumption (kg/t)	
Composite	Test	Pull (%)	P <sub>80</sub> (μm)	Grav.	Flot- Leach.	Total	NaCN	Lime
NW1	Regrind	12.0	17.1	13.6	57.3	70.9	0.1	0.3
INVVI	Fine regrind	12.0	14.5	13.6	62.9	76.5	0.2	0.3
NIVA/O	Regrind	11.4	23.2	12.6	45.1	57.7	0.1	0.2
NW2	Fine regrind	11.4	14.7	12.6	49.5	62.1	0.2	0.3
720	Regrind	11.6	16.5	20.0	65.8	85.8	0.1	0.3
Z20	Fine regrind	11.6	12.6	20.0	66.1	86.1	0.1	0.3
7524	Regrind	11.4	18.0	13.4	77.8	91.2	0.2	0.3
Z531	Fine regrind	11.4	15.4	13.4	78.9	92.3	0.2	0.4
DOD4	Regrind	11.3	17.2	24.1	69.2	93.3	0.1	0.3
POR1	Fine regrind	11.3	13.4	24.1	69.9	94.0	0.2	0.4
POR2	Regrind	12.0	18.6	9.3	77.0	86.3	0.2	0.3
PURZ	Fine regrind	12.0	12.6	9.3	78.6	87.9	0.3	0.4
MZ	Regrind	10.9	16.6	26.7	57.3	84.0	0.1	0.3
MZ	Fine regrind	10.9	14.7	26.7	58.3	85.0	0.1	0.3
DW1	Regrind	15.9	15.2	6.3	76.7	83.0	0.3	0.5
DVVI	Fine regrind	15.9	10.6	6.3	80.0	86.3	0.3	0.6
DW2	Regrind	11.8	15.9	9.3	78.5	87.8	0.2	0.5
DVVZ	Fine regrind	11.8	11.8	9.3	79.1	88.4	0.3	0.4
710	Regrind	11.9	19.7	6.6	82.0	88.6	0.2	0.3
Z10	Fine regrind	11.9	12.2	6.6	84.5	91.1	0.3	0.4
Average	Regrind	12.0	17.8	14.2	68.7	82.9	0.2	0.3
Average	Fine regrind	12.0	13.3	14.2	70.8	85.0	0.2	0.4

Gravity plus leach extraction from the rougher flotation concentrate reground to an average  $P_{80}$  of 18 µm varied between 58% and 93%, averaging approximately 83%. For the finer regrind tests, average  $P_{80}$  of 13 µm, recoveries ranged between 62% and 94%, averaging approximately 85%. It is noted that, although these recoveries are generally higher than for the whole sample leach tests, there will be some losses from the gravity concentrate as it is either upgraded to a saleable or direct smelter grade or processed using intensive cyanidation to recover contained gold.

Average sodium cyanide and lime consumptions were approximately 0.2 kg/t and 0.4 kg/t, respectively.



## 14 MINERAL RESOURCE ESTIMATE

## SUMMARY

Mineral Resources at Douay are reported on the basis of a possible open pit mining scenario using a 0.45 g/t Au cut-off grade, and underground scenario using a 1.0 g/t Au cut-off grade. The Douay Project is currently composed of nine mineralization zones: Porphyry, Douay West, Zone 531, Main Zone, North West, Nika, Central Zone, Zone 10, and Zone 20. The Douay West and Porphyry zones account for the majority of the Mineral Resources. Figure 14-1 shows the location of the nine mineralized zones.

The Douay drill hole database includes 824 drill holes totalling 250,374 m, of which 674 drill holes and 220,347 m were drilled within the Douay resource area. The estimation domains are intersected by 539 holes for an aggregate interval length of 34,785 m. The three-dimensional (3D) wireframe models were generated using a nominal 0.1 g/t Au threshold value. Prior to compositing to three metre lengths, high gold values were cut for each zone individually. Block model grades within the wireframe models were interpolated by inverse distance cubed (ID³). Density values of 2.71 t/m³ and 2.82 t/m³ were assigned using density measurements from core samples.

RPA estimated Mineral Resources for the Douay deposit using the drill hole results available to October 23, 2019 (Table 14-1). Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves (CIM (2014) definitions) were used for Mineral Resource classification.

TABLE 14-1 MINERAL RESOURCES AT DOUAY DEPOSIT PER DOMAIN AS OF OCTOBER 23, 2019

Maple Gold Mines Ltd. – Douay Gold Project

Mineralized Zone	Tonnes (Mt)	Grade (g/t Au)	Contained Metal (koz Au)
	Pit Constrained Mi	neral Resources	
Indicated			
Porphyry	4.4	0.95	136
Douay West	4.2	2.13	286
<b>Total Indicated</b>	8.6	1.52	422



Mineralized Zone	Tonnes (Mt)	Grade (g/t Au)	Contained Metal (koz Au)
Inferred			•
Porphyry	47.9	0.90	1,378
Douay West	2.0	1.14	72
531	5.8	1.51	281
Main Zone	0.2	1.24	8
North West	2.6	1.14	96
Nika	3.6	0.94	109
Central Zone	0.1	0.89	4
Zone 10	1.2	1.18	46
Zone 20	2.4	0.67	51
Total Inferred	65.8	0.97	2,045

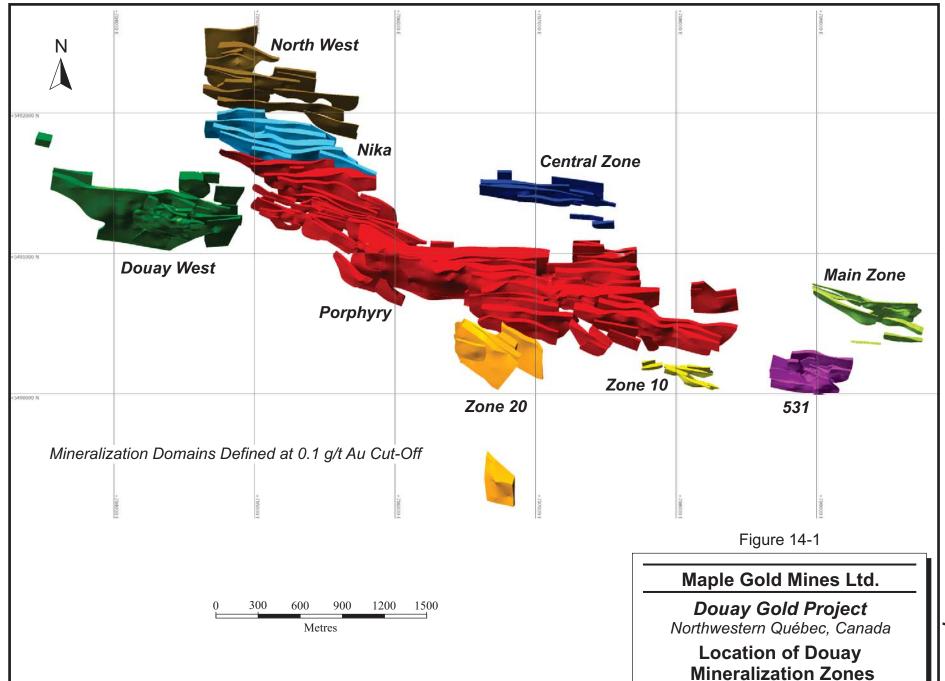
### **Underground Mineral Resources**

Inferred			
Porphyry	1.6	1.63	85
Douay West	1.0	1.91	64
531	1.3	1.83	78
Main Zone	1.1	1.71	59
North West	0.1	1.86	5
Central Zone	0.2	1.66	11
Zone 10	0.1	1.86	4
Total Inferred	5.4	1.75	307

#### Notes:

- 1. CIM (2014) definitions were followed for Mineral Resources.
- 2. A minimum mining width of three metres was applied to the Mineral Resource wireframes.
- 3. Bulk density of either 2.71 t/m³ or 2.82 t/m³ was assigned to Mineral Resources based on the zone.
- 4. Mineral Resources are reported above a cut-off grade of 0.45 g/t Au for a potential open pit scenario and 1.0 g/t Au for a potential underground scenario.
- 5. The Whittle pit shell used to estimate Mineral Resources used a long-term gold price of US\$1,500 per ounce, however the implied gold price for the Mineral Resources reported at the elevated cut-off grade would be significantly lower.
- 6. Mineral Resources are estimated using a recovery of 90%
- 7. Numbers may not add due to rounding.
- 8. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- 9. Pit constrained Mineral Resources are reported within a preliminary pit shell.

RPA is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource estimate.



December 2019

Source: RPA, 2019.



## RESOURCE DATABASE

RPA received header, survey, assay, alteration, and geology data from Maple Gold in Microsoft Access format. Data was amalgamated and parsed as required, converted to ASCII, and imported into Leapfrog Geo 4.5.0 software (Leapfrog). Maple Gold also provided the latest 3D geological interpretation in DXF format.

A summary of records for the Douay resource database is listed below:

Holes: 674

Assays: 135,097Lithology: 8,813Density measurements: 4,761

Data verification of the drill hole database included manual verification against hardcopy and original digital sources, a series of digital queries, and a review of Maple Gold's QA/QC procedures and results. No discrepancies were identified and RPA is of the opinion that the drill hole database is valid and suitable to estimate Mineral Resources for the Douay deposit.

## **GEOLOGICAL INTERPRETATION AND 3D SOLIDS**

RPA used the lithological interpretation, structural trends, and gold assay intervals to constrain the block grade interpolation process. A Leapfrog vein system modelling tool was used to generate interpretation of the mineralization at a nominal cut-off grade of 0.10 g/t Au. A minimum thickness of three metres was applied, with rare exceptions where a two metre thickness was used to allow for a better continuity of the modelled domain. Occasionally, lower grade intersections were included to maintain continuity. At model extremities, the wireframe models were extrapolated up to 50 m beyond the last drill hole section, however, when a thin intersection was at the edge of the wireframe, the domain was extended to only 25 m. The continuity of the structural trends allowed the wireframes to be extended up dip towards the surface.

Based on a preliminary interpretation provided by Maple Gold, RPA built 133 domains in the nine main areas: Porphyry, Douay West, Zone 531, Main Zone, North West, Nika, Central Zone, Zone 10, and Zone 20 (Figure 14-1). A description of each modelled domain follows:



- The Porphyry (POR) Zone is the largest area at Douay. It consists of 59 subparallel lenses, extending to 800 m below surface. The strike of the domains varies between 90° and 110° over a distance of 3,700 m, dipping to the south at 58° to 65°. The thickness of individual domains ranges from two metres to 173 m, and averages 22 m.
- The Nika Zone (Nika) represents the second largest area. It is made of seven subparallel lenses extending to 500 m below surface. The zone strikes 100° over a distance of 1,000 m, and dips to the south at 65°. The thickness of individual domains ranges from two metres to 103 m, and averages 31 m.
- Douay West Zone (DW) is currently the highest grade gold zone and third largest by volume. It is made of 19 subparallel lenses, extending to 780 m below surface. The strike of the domains varies between 90° and 105° over a distance of 1,300 m, dipping to the south at 58° to 68°. The thickness of individual domains ranges from two metres to 75 m, and averages 15 m.
- Zone 531 (531) is the second highest grade gold area. It is made of six subparallel lenses extending to 500 m below surface. The thickness of the overburden in this area is can exceed 130 m. The zone strikes at 100° over a distance of 500 m, dipping to the south at 63° to 73°. The thickness of individual domains ranges from two metres to 54 m, and averages 18 m.
- The Main Zone (MZ) is made up of eight subparallel lenses extending to 800 m below the surface. The strike of the domains varies between 90° and 105° over a distance of 820 m, dipping to the south at 65° to 79°. The thickness of individual domains ranges from two metres to 50 m, and averages 13 m.
- The North West Zone (NW) is made up of 13 subparallel lenses extending to 350 m below the surface. The strike of the domains varies between 90° and 105° over a distance of 1,100 m, dipping to the south at 50° to 79°. The thickness of individual domains ranges from two metres to 40 m, and averages 11 m.
- The Central Zone (CZ) is made up of eight subparallel lenses extending to 350 m below the surface. The strike of the domains varies from 95° to 105° over a distance of 1,000 m, dipping to the south at 68° to 75°. The thickness of individual domains ranges from two metres to 38 m, and averages 11 m.
- Zone 10 (Z10) is made up of six subparallel lenses extending to 320 m below the surface. The overburden thickness exceeds 70 m in this area. The strike of the domains varies from 80° to 112° over a distance of 500 m, dipping to the south at 72° to 79°. The thickness of individual domains ranges from two metres to 30 m, and averages 15 m.
- Zone 20 (Z20) is made up of six subparallel lenses extending to 480 m below the surface. One smaller domain is located 670 m to the south from the other five lenses. The strike of the domains is 120° over a distance of 480 m, dipping to the south at 52°. The thickness of individual domains ranges from two metres to 85 m, and averages 24 m.



Maple Gold provided RPA with 25 m  $\times$  25 m grid vertices, from which a topographic surface was created in Leapfrog. The topographic surface of the Douay Project is relatively flat, with elevations range from 290 MASL to 315 MASL.

## STATISTICAL ANALYSIS

Assay values located inside the wireframe models were tagged with domain identifiers and exported for statistical analysis. Results were used to help verify the modelling process. Statistics by zone are summarized in Table 14-2.

TABLE 14-2 DESCRIPTIVE STATISTICS OF RESOURCE ASSAY VALUES

Maple Gold Mines Ltd. – Douay Gold Project

Zone	Count	Min (g/t Au)	Max (g/t Au)	Mean (g/t Au)	St Dev (g/t Au)	Variance	cv
POR	16,427	0.00	2,888.01	0.41	14.83	219.85	35.77
DW	4,877	0.00	73.03	0.94	3.06	9.35	3.25
531	1,343	0.00	25.07	0.70	1.87	3.49	2.68
MZ	1,487	0.00	327.98	0.63	6.10	37.22	9.70
NW	877	0.00	25.83	0.47	1.53	2.33	3.25
Nika	2,289	0.00	21.10	0.30	0.91	0.83	2.98
CZ	1,034	0.00	18.89	0.30	1.12	1.26	3.69
Z10	771	0.00	22.30	0.56	1.45	2.10	2.58
Z20	929	0.00	17.45	0.29	0.84	0.71	2.89

Note: St Dev - standard deviation; CV - coefficient of variation; length weighted statistics

## TREATMENT OF HIGH GRADE VALUES

Where the assay distribution is skewed positively or approaches log-normal, erratic high grade assay values can have a disproportionate effect on the average grade of a deposit. One method of treating these outliers in order to reduce their influence on the average grade is to cut, or cap, them at a specific grade level. In the absence of production data to calibrate the capping level, inspection of the assay distribution can be used to estimate a "first pass" capping level.

Review of the resource assay exploratory data analysis (EDA) including histograms and probability plots within the wireframe domains in each zone, and a visual inspection of high grade values on vertical sections suggest that cutting of erratic values is warranted and



appropriate for Douay. Table 14-3 summarizes capping levels for each domain and Table 14-4 lists the descriptive statistics of cut resource assay values by zone.

TABLE 14-3 CAPPING LEVELS

Maple Gold Mines Ltd. – Douay Gold Project

Zone	Capped Value (g/t Au)	Number Capped	Mean (g/t Au)	Capped Mean (g/t Au)	%Metal Loss	CV
POR	15	15	0.41	0.33	4	2.64
DW	26	20	0.94	0.91	2	3.00
531	10	10	0.70	0.65	7	2.19
MZ	10	22	0.63	0.43	32	3.00
NW	8	10	0.47	0.42	10	2.42
Nika	7	7	0.30	0.29	6	2.16
CZ	7	7	0.30	0.28	9	3.14
Z10	6	9	0.56	0.51	9	1.94
Z20	4	6	0.29	0.26	10	1.91

Note: CV – coefficient of variation; length weighted statistics

TABLE 14-4 DESCRIPTIVE STATISTICS OF CAPPED RESOURCE ASSAY VALUES

Maple Gold Mines Ltd. - Douay Gold Project

Zone	Count	Min (g/t Au)	Max (g/t Au)	Mean (g/t Au)	St Dev (g/t Au)	Variance (g/t Au)	cv
POR	16,427	0.00	15.00	0.33	0.85	0.73	2.61
DW	4,877	0.00	26.00	0.91	2.69	7.26	2.95
531	1,343	0.00	10.00	0.65	1.48	2.18	2.27
MZ	1,487	0.00	10.00	0.43	1.17	1.37	2.74
NW	877	0.00	8.00	0.42	1.02	1.05	2.43
Nika	2,289	0.00	7.00	0.29	0.61	0.37	2.12
CZ	1,034	0.00	7.00	0.28	0.81	0.66	2.93
Z10	771	0.00	6.00	0.51	1.02	1.05	2.00
Z20	929	0.00	4.00	0.26	0.50	0.25	1.89

Note: St Dev – standard deviation; CV – coefficient of variation

### COMPOSITING

Sample lengths range from 0.1 m to 4.7 m within the resource domain wireframe models. The majority of the samples taken at one or one and a half metres (Figure 14-2). Given these distributions, and considering the width of the mineralization, RPA chose to composite to three



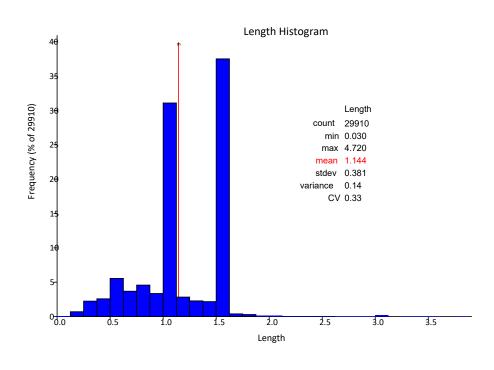
metre lengths. Assays within the wireframe domains were composited using the downhole compositing method, which starts at the first mineralized wireframe boundary from the collar and resets at each new wireframe boundary. Composites less than 0.3 m, located at the bottom of the mineralized intercept, were removed from the database. Table 14-5 lists descriptive statistics of the composites by zone.

TABLE 14-5 DESCRIPTIVE STATISTICS OF COMPOSITES
Maple Gold Mines Ltd. – Douay Gold Project

Zone	Count	Min (g/t Au)	Max (g/t Au)	Mean (g/t Au)	St Dev (g/t Au)	Variance (g/t Au)	CV
POR	6,652	0.00	11.08	0.33	0.61	0.37	1.87
DW	1,939	0.00	24.48	0.93	2.33	5.45	2.51
531	661	0.00	7.27	0.63	1.22	1.50	1.95
MZ	548	0.00	7.66	0.43	0.81	0.65	1.89
NW	401	0.00	8.00	0.43	0.93	0.86	2.13
Nika	865	0.00	5.82	0.29	0.46	0.21	1.60
CZ	284	0.00	4.89	0.27	0.56	0.32	2.11
Z10	359	0.00	6.00	0.51	0.87	0.77	1.73
Z20	466	0.00	2.40	0.27	0.36	0.13	1.37

Note: CV - coefficient of variation

FIGURE 14-2 ASSAY LENGTH HISTOGRAM





## **DENSITY**

In 2018 and 2019, Maple Gold collected several thousand density measurements. Density measurements were conducted on drill core samples, using the Archimedes method, by the company at the core shack.

A total of 4,761 density measurements were provided to RPA for the entire Douay Project. The density data was coded with the resource domain wireframes. After removing outliers from the low and high ends of the distribution (below 2.5 t/m³ and above 3.0 t/m³), RPA used the average of these measurements for each area (Table 14-6).

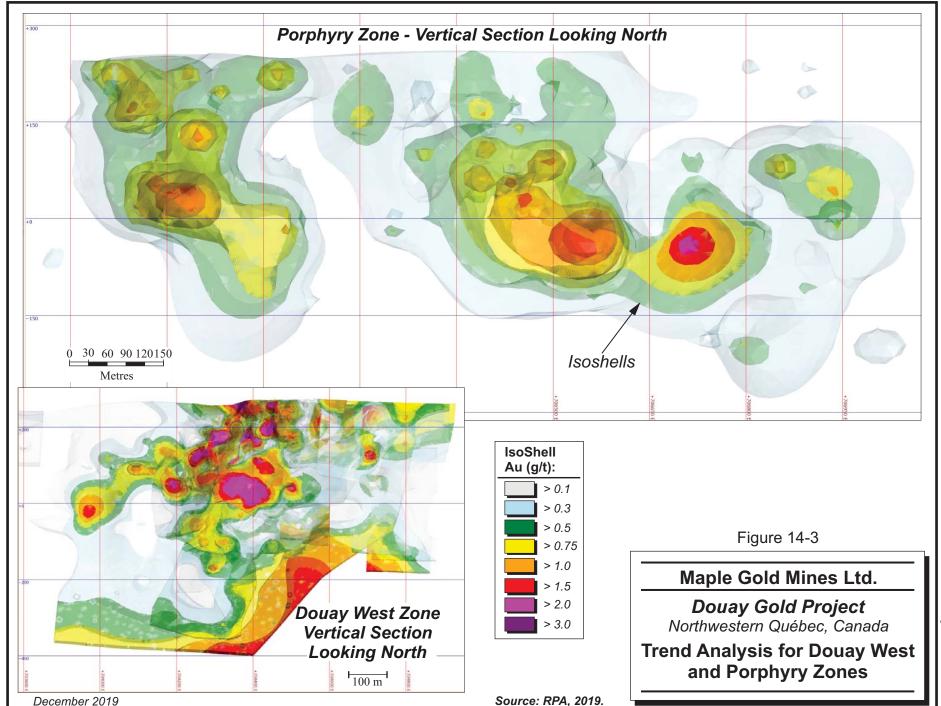
TABLE 14-6 AVERAGE DENSITY WITHIN THE INDIVIDUAL MINERALIZED ZONES

Maple Gold Mines Ltd. – Douay Gold Project

					Mean (outliers	
Domain	Count	Min (t/m³)	Max (t/m³)	Mean (t/m³)	removed) (t/m³)	Assigned (t/m³)
POR	547	2.43	3.47	2.71	2.71	2.71
DW	26	2.66	2.91	2.82	2.82	2.82
531	13	2.48	2.95	2.79	2.82	2.82
MZ	0	-	-	-	-	2.71
NW	10	2.60	2.79	2.67	2.67	2.71
Nika	337	2.19	3.59	2.71	2.71	2.71
CZ	17	2.61	3.26	2.72	2.69	2.71
Z10	8	2.67	2.97	2.82	2.82	2.82
Z20	4	2.63	2.78	2.70	2.70	2.71
Waste	3,799	1.00	5.28	2.77	2.75	2.75
Overburden	0	-	-	-	-	2.00
All	4,761	1.00	5.28	2.76	2.75	-

### GRADE CONTINUITY ANALYSIS

The gold grade continuity for the Douay Project was investigated by generating a set of grade shells in Leapfrog for each zone within the mineralized envelopes. Several subvertical trends, plunging from southeast in the Porphyry to southwest in the Douay West Zone, were identified (Figure 14-3). The orientation of those trends assisted in variogram calculations.





RPA generated downhole, omni-directional, and directional variograms and correlograms using the three-metre composite. Au values located within the mineralized wireframes. A model was fit for each experimental variogram or correlogram in the three main directions of anisotropy. The nugget effect was estimated from the downhole variograms. Figure 14-4 shows the calculated correlograms for Zone 531.

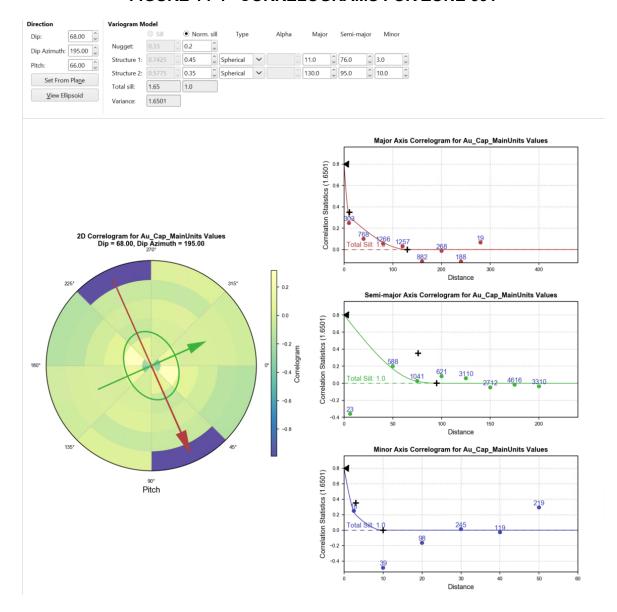


FIGURE 14-4 CORRELOGRAMS FOR ZONE 531

Stable variograms were not obtained using data for the entire Porphyry Zone; instead parameters from the Porphyry\_1 vein were applied to the other domains within the zone. For



a few domains, it was not possible to find an adequate continuity model due to widely spaced drill holes. In these domains, ID<sup>3</sup> was implemented as the interpolation method.

The variograms were used to support search ellipsoid anisotropy, linear trends observed in the data, and Mineral Resource classification decisions.

#### INTERPOLATION PARAMETERS

Grades were interpolated by ID³ with a minimum of four to a maximum of eight composites per block estimate for the first pass, and a minimum of two to a maximum of twelve composites per block estimate in the second pass. A minimum of two drill holes and a maximum of three composites per drill hole were applied during the first pass (Table 14-7). Hard boundaries were used to limit the use of composites between wireframe boundaries. Soft boundaries were applied between the DW\_1, DW\_3, and DW\_5 domains limited to three metres from the boundary (one composite length) as they locally share hanging wall and footwall surfaces where they form a combined domain and exhibit similar grade distribution.

RPA was able to calculate global variograms for a few zones; the obtained results pertain mostly to the continuity of the low grade rather than the high grade mineralization. After reviewing the block grades on sections and level plans, RPA decided to report the resources based on the ID<sup>3</sup> interpolation results. Results of ordinary kriging (OK) that used assumed variogram models were used for comparison purposes.

Overall, the Douay mineralized zones show a strike of 95° to 110°, with individual lenses showing variance in orientation and dip. In order to reproduce the direction of those trends, RPA employed a Variable Orientation tool in Leapfrog. The tool allows the search to be locally adjusted to orientation of the mineralization, which results in improved local grade estimates (Figure 14-5). RPA used hanging wall, footwall, as well as the centreline of each domain to guide the variable direction search. In addition, where available, the variogram directions were employed to improve the variable search.



TABLE 14-7 BLOCK ESTIMATE SEARCH STRATEGY Maple Gold Mines Ltd. – Douay Gold Project

Parameter	Pass 1	Pass 2
Search Ranges: X, Y, Z (m)	100,100,5	250,250,25
Min number composites	4	2
Max number composites	8	12
Max composites per hole	3	-
Orientation of the search	Variable	Variable

After reviewing the grade distribution in the block model, RPA chose to further limit the influence of the higher grade composites by employing spatial restriction. RPA used the Leapfrog restrictive search tool "clamp" that reduces the high value to a threshold value once the maximum distance is reached rather than discarding the high grade composite completely. The maximum distance of influence was set at 50 m x 50 m x 2.5 m for all zones in the first pass and 50 m x 50

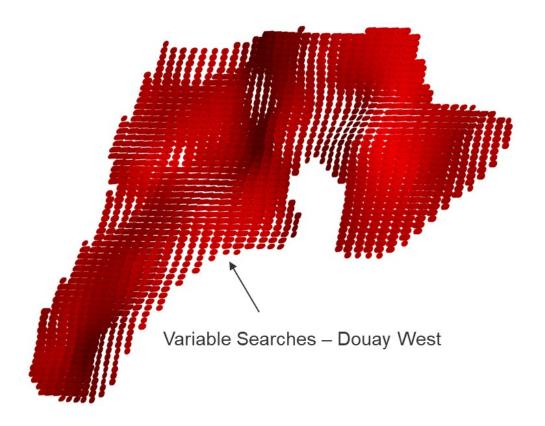
TABLE 14-8 BLOCK ESTIMATE HIGH GRADE RESTRICTIONS
Maple Gold Mines Ltd. – Douay Gold Project

. . . . . .

Zone	Threshold Value (g/t Au)	Number of Affected Composites
POR	6	13
DW	12	27
531	5	19 (Second Pass Only)
MZ	4	(Second Pass Only)
NW	3	7 (Second Pass Only)
Nika	-	-
CZ	-	-
Z10	3	10 (Second Pass Only)
Z20	-	-



FIGURE 14-5 LOCALLY ADJUSTED ORIENTATION TOOL



#### **BLOCK MODEL**

One single block model covering the entire deposit was constructed in Leapfrog EDGE software to estimate Mineral Resources in the Douay Project. Each block is 10.0 m long by 2.0 m wide by 5.0 m high. A summary of the definition data for the block model is provided in Table 14-9.

TABLE 14-9 SUMMARY OF INFORMATION FOR THE DOUAY PROJECT BLOCK MODEL

Maple Gold Mines Ltd. - Douay Gold Project

Description	<b>Easting</b>	Northing	Elevation
Origin (m)	709,670	5,488,630	335
Block Size (m)	10	2	5
Number of Blocks	676	1,590	182
Boundary Size (m)	6,760	3,180	910
Rotation	10°	clockwise	



#### **CUT-OFF GRADE AND WHITTLE PARAMETERS**

To fulfill the CIM requirement of "reasonable prospects for eventual economic extraction", RPA performed pit optimization analyses on the Mineral Resource to determine the economics of extraction by open pit methods. The pit shell was generated using Whittle software. Table 14-10 lists the common parameters used to calculate gold cut-off grades and items used to optimize a preliminary pit shell to report Mineral Resources.

Whittle calculates a final break-even pit shell based on all operating costs (mining, processing, and general and administration (G&A)) required to mine a given block of material. Since all blocks within the break-even pit shell must be mined (regardless if they are waste or mineral), any block that has sufficient revenue to cover the costs of processing and G&A is sent to the processing plant. The open pit Mineral Resources were reported from within the pit shell using a cut-off grade of 0.19 g/t Au based on a C\$8.50/t processing cost and C\$2.50/t G&A cost. Figure 14-6 shows the final Whittle shells with blocks above 0.45 g/t Au.

TABLE 14-10 WHITTLE PARAMETERS
Maple Gold Mines Ltd. – Douay Gold Project

Parameters	Unit	Base Case Scenario
Gold price	US\$/oz	1,500
Exchange rate	C\$/US\$	0.70
Process recovery	%	90
Pit slope overburden/rock	degrees	25/50
Open pit mining rate estimate	tpd	150,000
Milling rate estimate	t/plant day	25,000
Mining cost rock	C\$/t mined	2.80
Mining cost overburden	C\$/t mined	2.10
Process cost	C\$/t milled	8.50
G&A cost	C\$/t milled	2.50
Underground mining cost assumption	US\$/t processed	48.00

Mineral Resources located outside the pit shell were reported on the basis of a potential underground mining operation at a gold cut-off grade of 1.0 g/t Au. This cut-off grade was based on mining costs of US\$48/t and the same processing and G&A assumptions as listed in Table 14-10.



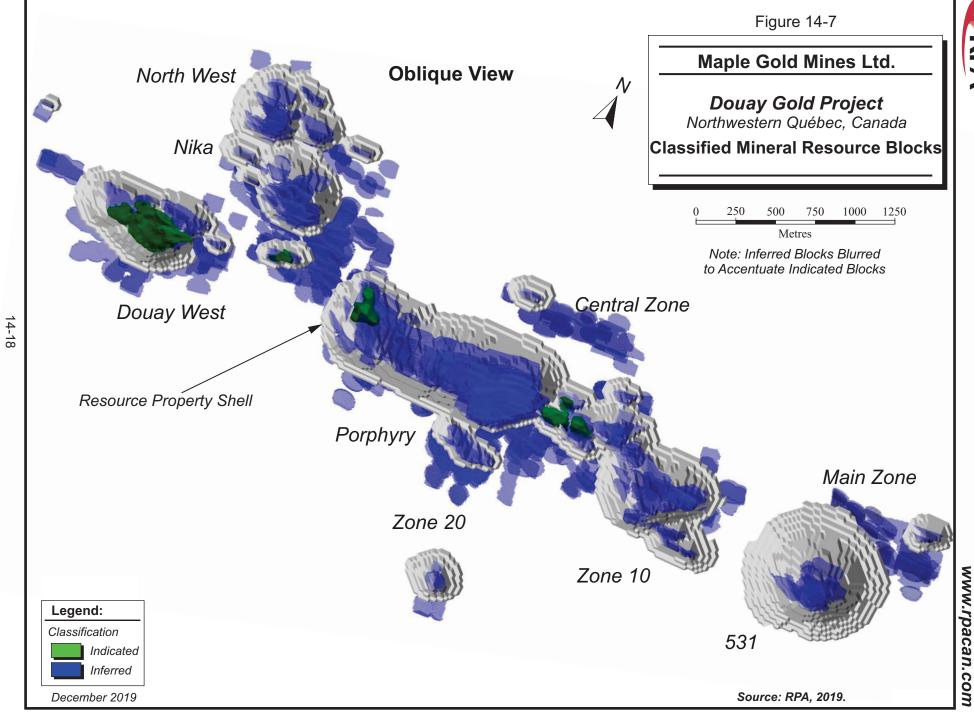
#### **CLASSIFICATION**

Definitions for resource categories used in this report are consistent with CIM (2014) definitions incorporated by reference into NI 43-101. In the CIM classification, a Mineral Resource is defined as "a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity, and other geological characteristics of a Mineral Resource are known, estimated, or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are classified into Measured, Indicated, and Inferred categories. A Mineral Reserve is defined as the "economically mineable part of a Measured and/or Indicated Mineral Resource" demonstrated by studies at pre-feasibility or feasibility level as appropriate. Mineral Reserves are classified into Proven and Probable categories. No Mineral Reserves have been estimated for the Douay deposit.

The Mineral Resource classification at the Douay deposit is based on drill hole spacing, confidence in the available data, and the apparent continuity of mineralization. RPA classified Mineral Resources inside the preliminary pit shell as Indicated within 50 m to 60 m from the drill hole. The Inferred category was assigned to blocks located within 75 m from the drill hole. The Porphyry Zone exhibits greater continuity and thicker intersections of the gold mineralization; hence the Inferred category was extended 100 m in the up dip direction in three of the porphyry domains. Inferred classification was assigned to the underground portion of the Mineral Resources, where only areas above 1.0 g/t Au and informed by at least two drill holes were classified as Inferred. All other blocks outside the pit shell remain unclassified.

Figure 14-7 shows the extent of the Indicated blocks within the limits of the optimized pit shells at the Douay Project. (Note that the block classified as Inferred are more transparent to enhance Indicated blocks.)

The Mineral Resources are open in several directions.





#### MINERAL RESOURCE VALIDATION

RPA validated the block model by visual inspection, volumetric comparison, and scatterplots. Visual comparison on vertical sections and plan views, and a series of swath plots found good overall correlation between the block grade estimates and supporting composite grades.

The estimated total volume of the wireframe models is 322,929,003 m<sup>3</sup>, while the volume of the block model at a zero grade cut-off is 322,543,100 m<sup>3</sup> showing 0.12% difference. Results are listed by zone in Table 14-11.

**TABLE 14-11 VOLUME COMPARISON Maple Gold Mines Ltd. – Douay Gold Project** 

Zone	Wireframe Volume (m³)	Block Volume (m³)
POR	195,471,084	195,496,300
DW	22,125,680	21,666,100
531	10,652,140	10,648,200
MZ	10,772,360	10,786,500
NW	13,539,870	13,543,500
Nika	43,484,900	43,511,900
CZ	7,344,849	7,346,900
Z10	2,702,950	2,713,500
Z20	16,835,170	16,830,200
Total	322,929,003	322,543,100

The average grade of the composites within the mineralized envelope was compared to the average grade of all blocks estimated by the ID<sup>3</sup> and nearest neighbour (NN) interpolation methods. Table 14-12 summarizes the results of this comparison.

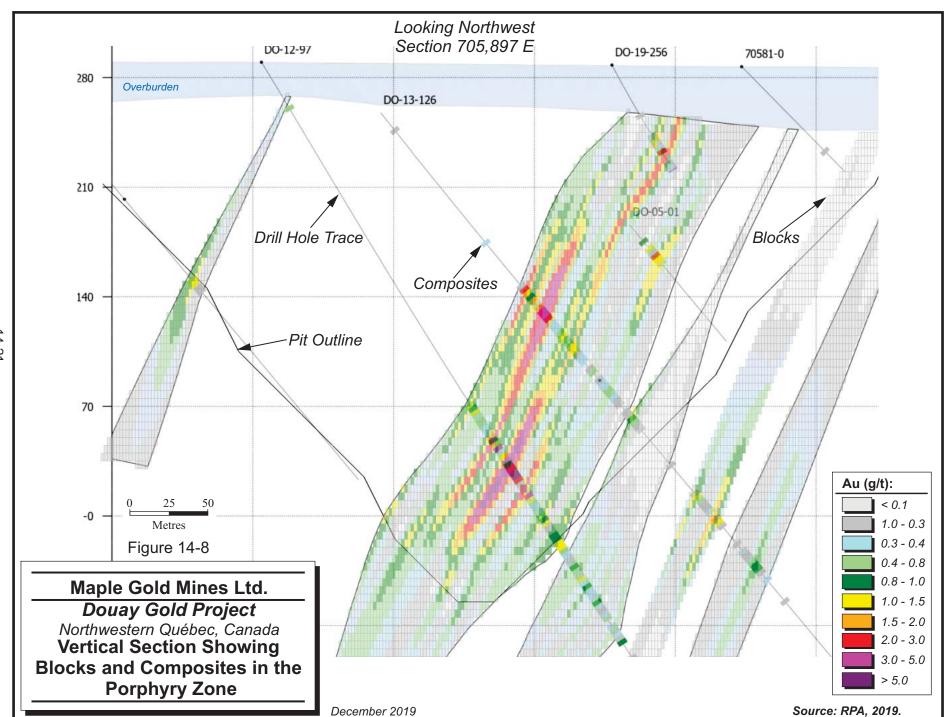
Block grade estimates compared well with the informing data, indicating that the estimation parameters used in the interpolation of grades are appropriate. In most cases, the average grade of the block model is slightly lower than the average grade of the composites. The mean of the Douay West block estimated by the ID<sup>3</sup> and NN methods is significantly lower than the mean of the capped composites, which could result from higher grades being concentrated within one domain that is volumetrically smaller than the rest of the Douay West area.



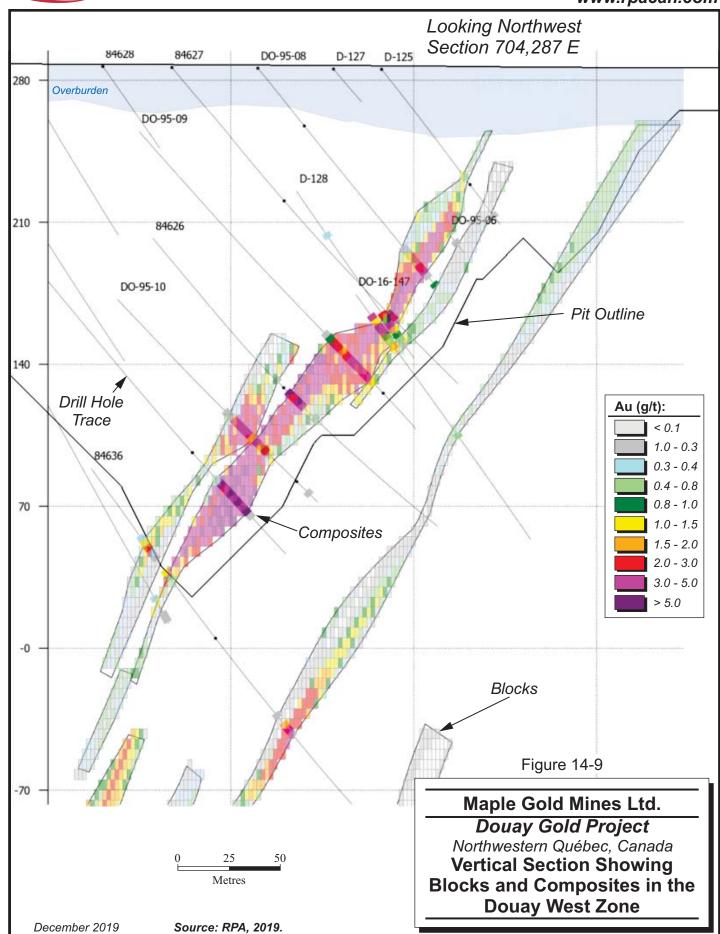
TABLE 14-12 COMPOSITE VERSUS BLOCK DATA Maple Gold Mines Ltd. – Douay Gold Project

	Сарр	ed Comp (g/t Au)	osites	Bloc	k Model l (g/t Au)	ID³	В	lock Mode (g/t Au	
Zone	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean
POR	0.001	11.08	0.33	0.001	11.07	0.29	0.001	11.08	0.30
DW	0.001	24.48	0.93	0.001	22.77	0.42	0.001	24.48	0.45
531	0.001	7.28	0.63	0.001	7.07	0.61	0.001	7.28	0.52
MZ	0.001	7.66	0.43	0.001	6.43	0.32	0.001	7.66	0.38
NW	0.001	8.00	0.43	0.001	7.91	0.37	0.001	8.00	0.39
Nika	0.001	5.82	0.29	0.001	5.81	0.27	0.001	5.82	0.29
CZ	0.001	4.89	0.27	0.001	4.88	0.23	0.001	4.89	0.27
Z10	0.001	6.00	0.51	0.001	5.73	0.43	0.001	6.00	0.51
Z20	0.003	2.40	0.27	0.003	2.39	0.26	0.003	2.40	0.27

The block models and drill hole intercepts were reviewed on vertical sections, to ensure that the grade distribution in the blocks was honouring the drill hole data. Figures 14-8 and 14-9 are typical vertical sections for the Porphyry and Douay West zones, respectively. The agreement between the block grades and the drill hole intercepts is satisfactory.









The block model grades and the grades of the informing composites were compared by swath plots, examples of which are shown in Figures 14-10 and 14-11.

#### FIGURE 14-10 SWATH PLOT - PORPHYRY ZONE

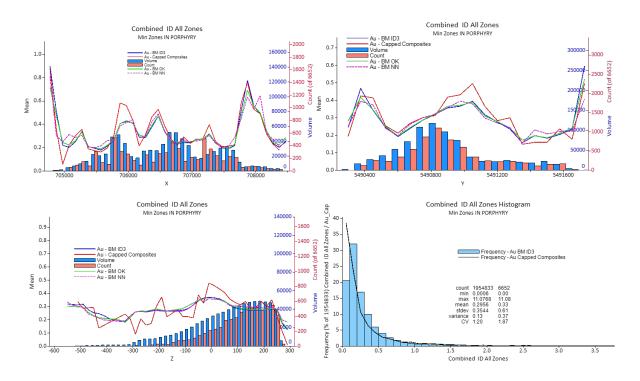
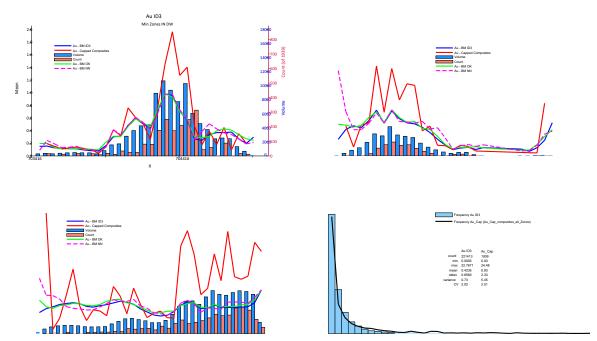




FIGURE 14-11 SWATH PLOTS - DW ZONE



The swath plots indicate that there is good spatial correlation between the composite grades and block model grades.

#### MINERAL RESOURCE STATEMENT

The Mineral Resource estimate has an effective date of October 23, 2019 (Table 14-13).

TABLE 14-13 MINERAL RESOURCE STATEMENT AS OF OCTOBER 23, 2019
Maple Gold Mines Ltd. – Douay Gold Project

Resource Category	Tonnes (Mt)	Grade (g/t Au)	Contained Metal (koz Au)
Pit Constraine	d Mineral Reso	urces	
Indicated	8.6	1.52	422
Inferred	65.8	0.97	2,045
Underground	Mineral Resour	ces	
Inferred	5.4	1.75	307
Total Mineral I	Resources		
Indicated	8.6	1.52	422
Inferred	71.2	1.03	2,352

Notes:

<sup>1.</sup> CIM (2014) definitions were followed for Mineral Resources.



- 2. A minimum mining width of three metres was applied to the resource domain wireframes.
- 3. Bulk density of either 2.71 t/m³ or 2.82 t/m³ were used to convert volume to tonnage based on the zone.
- 4. Mineral Resources are reported above a cut-off grade of 0.45 g/t Au for a potential open pit scenario and 1.0 g/t Au for a potential underground scenario.
- 5. The Whittle pit shell used to estimate Mineral Resources used a long-term gold price of US\$1,500 per ounce, however the implied gold price for the Mineral Resources reported at the elevated cut-off grade would be significantly lower.
- 6. Mineral Resources are estimated using a recovery of 90%
- 7. Numbers may not add due to rounding.
- 8. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- 9. Pit constrained Mineral Resources are reported within a preliminary pit shell.

Mineral Resources by mineralized domain are presented in Table 14-14.

TABLE 14-14 MINERAL RESOURCE STATEMENT AS OF OCTOBER 23, 2019 BY DOMAIN

Maple Gold Mines Ltd. - Douay Gold Project

Resource Category	Domain	Tonnes (Mt)	Grade (g/t Au)	Contained Metal (koz Au)
	Pit Constraine	d Mineral Reso	ources	
	Porphyry	4.4	0.95	136
Indicated	Douay West	4.2	2.13	286
	Total	8.6	1.52	422
	Porphyry	47.9	0.90	1,378
	Douay West	2.0	1.14	72
	531	5.8	1.51	281
	Main Zone	0.2	1.24	8
Inferred	North West	2.6	1.14	96
interrea	Nika	3.6	0.94	109
	Central Zone	0.1	0.89	4
	Zone 10	1.2	1.18	46
	Zone 20	2.4	0.67	51
	Total	65.8	0.97	2,045
Undergrou	nd Mineral Reso	ources		
	Porphyry	1.6	1.63	85
	Douay West	1.1	1.91	64
	531	1.3	1.83	78
l <b>f</b>	Main Zone	1.1	1.71	59
Inferred	North West	0.1	1.86	5
	Central Zone	0.2	1.66	11
	Zone10	0.1	1.86	4
	Total	5.4	1.75	307



Resource Category	Domain	Tonnes (Mt)	Grade (g/t Au)	Contained Metal (koz Au)
<b>Total Mine</b>	ral Resources			
Indicated	Porphyry	4.4	0.95	136
maicalea	Douay West	4.2	2.13	286
Total Indic	ated	8.6	1.52	422
	Porphyry	49.5	0.92	1,464
	Douay West	3.0	1.40	137
	531	7.1	1.57	359
	Main Zone	1.3	1.63	67
Inferred	North West	2.7	1.16	101
	Nika	3.6	0.94	109
	Central Zone	0.4	1.35	16
	Zone 10	1.3	1.22	49
	Zone 20	2.4	0.67	51
Total Infer	red	71.2	1.03	2,352

Notes: See Table 14-3.

Table 14-15 and Figures 14-12 and 14-13 show the sensitivity of the Mineral Resources to various cut-off grades from 0.05 g/t Au to 2.5 g/t Au at global quantities.

TABLE 14-15 DOUAY TONNAGE AND GRADE REPORT – OCTOBER 23, 2019

Maple Gold Mines Ltd. – Douay Gold Project

Indicated Mineral Resources			Inferred Mineral Resources			
<b>Cut-off Grade</b>	Tonnes	Grade	<b>Cut-off Grade</b>	Tonnes	Grade	
(g/t Au)	(Mt)	(g/t Au)	(g/t Au)	(Mt)	(g/t Au)	
0.20	12.5	1.14	0.20	136.3	0.63	
0.25	11.6	1.22	0.25	116.5	0.69	
0.30	10.7	1.30	0.30	100.3	0.76	
0.35	9.9	1.38	0.35	86.6	0.83	
0.40	9.2	1.45	0.40	75.3	0.90	
0.45	8.6	1.52	0.45	65.8	0.97	
0.50	8.1	1.59	0.50	57.5	1.04	
0.55	7.5	1.67	0.55	50.6	1.11	
0.60	7.0	1.75	0.60	44.7	1.18	
0.65	6.6	1.83	0.65	39.6	1.25	
0.70	6.1	1.91	0.70	35.3	1.32	

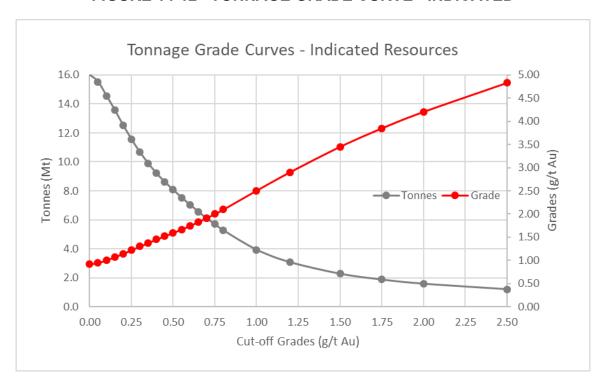
#### Notes:

- 1. CIM (2014) definitions were followed for Mineral Resources.
- 2. A minimum mining width of three metres was applied to the Mineral Resource wireframes.
- 3. Bulk density of either 2.71 t/m³ or 2.82 t/m³ was assigned to Mineral Resources based on the zone.
- 4. Mineral Resources are reported above a cut-off grade of 0.45 g/t Au for a potential open pit scenario and 1.0 g/t Au for a potential underground scenario.



- 5. The Whittle pit shell used to estimate Mineral Resources used a long-term gold price of US\$1,500 per ounce, however the implied gold price for the Mineral Resources reported at the elevated cut-off grade would be significantly lower.
- 6. Mineral Resources are estimated using a recovery of 90%.
- 7. Numbers may not add due to rounding.
- 8. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- 9. Pit constrained Mineral Resources are reported within a preliminary pit shell.

#### FIGURE 14-12 TONNAGE GRADE CURVE - INDICATED





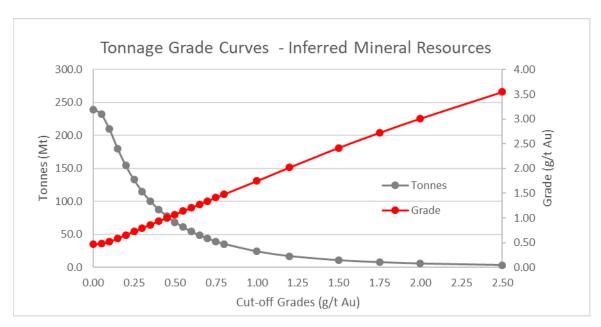


FIGURE 14-13 TONNAGE GRADE CURVE - INFERRED

As noted in Section 4, Property Description and Location, SOQUEM has 25% ownership of 32 claims covering 1,194 ha in the north-central part of the Property. Mineral Resources extend onto these claims. Table 14-16 reports Mineral Resource within and outside these claims.

TABLE 14-16 MINERAL RESOURCE STATEMENT BY CLAIM AREA Maple Gold Mines Ltd. – Douay Gold Project

Resource Category	Tonnes (Mt)	Grade (g/t Au)	Contained Metal (koz Au)
Outside SOQL	JEM JV Area		
Indicated	8.6	1.52	422
Inferred	67.3	1.02	2,218
SOQUEM JV A	Area – 75% Map	le Gold	
Indicated	-	-	-
Inferred	3.9	1.07	134
Total Mineral	Resources		
Indicated	8.6	1.52	422
Inferred	71.2	1.03	2,352

Notes: See Table 14-3.

Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability. At the present time, RPA is not aware of any environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues that may have a material impact on the Mineral Resource estimate.



## 15 MINERAL RESERVE ESTIMATE

There is no current Mineral Reserve estimate on the Project.



## **16 MINING METHODS**



## 17 RECOVERY METHODS



## **18 PROJECT INFRASTRUCTURE**



## 19 MARKET STUDIES AND CONTRACTS



# 20 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT



## 21 CAPITAL AND OPERATING COSTS



## 22 ECONOMIC ANALYSIS



#### 23 ADJACENT PROPERTIES

The Project straddles a 55 km long segment of the CBDZ, which includes all of the main types of gold deposits found in the Abitibi Greenstone Belt: orogenic gold systems (gold-bearing quartz veins or silicification zones), gold-rich VMS, and IRGS. Adjacent properties of note along the CBDZ include, from west to east, Hecla's Casa Berardi Mine, Galway's Estrades property, Agnico Eagle's Joutel property, Midland-SOQUEM's Jouvex JV, Radisson Mining's Douay property, Opus One's Vezza North and Vezza extension properties, and Nottaway's Vezza mine.

Hecla's Casa Berardi deposit was discovered by INCO in 1981. Gold mineralization is located at a major (volcanic-sedimentary) lithotectonic boundary and consists of mostly sediment hosted multi-phase gold-quartz veins and stockworks with only minor sulphides, predominantly arsenopyrite. Initial production began in 1988, with the first closure in 1997 due to poor ground conditions. In 1998, Aurizon purchased Casa Berardi. Aurizon then completed feasibility studies, underground development, shaft sinking and construction, with commercial production beginning in 2007 and ongoing with current operator Hecla. Up to end of 2018, past production plus reserves total approximately 4.4 Moz Au (Hecla, 2019).

Galway's Estrades polymetallic VMS deposit is contiguous to the west with the Douay property. Mineralization is associated with narrow felsic horizons within an overall mafic package. The deposit was discovered in 1985, with brief production from July 1990 to May 1991 totalling 174,946 tonnes at a grade of 1.1% Cu, 13% Zn, 6.35 g/t Au, and 172 g/t Ag. Current Indicated Mineral Resources are estimated to be 1.5 Mt averaging 7.2% Zn, 1.1% Cu, 0.6% Pb 3.6 g/t Au, and 122.9 g/t Ag. In addition, Inferred Mineral Resources are estimated to be 2.2 Mt averaging 4.7% Zn, 1.0% Cu, 0.3%Pb, 1.9 g/t Au, and 72.9 g/t Ag (RPA, 2018).

Midland-SOQUEM's Jouvex property occurs immediately north of the Douay property. The Jouvex property covers a volcano-sedimentary assemblage straddling the CBDZ, including iron formation, with numerous gold showings, with up to 1.0 g/t Au over 12.7 m (Midland website).



Agnico Eagles Mines Limited's Joutel property includes the past producing Eagle-Telbel mine and surrounding exploration claims. The Eagle-Telbel pyritic gold deposit, described as being of VMS-epithermal affinity, was discovered by drilling combined magnetic and electromagnetic anomalies in 1962, with production from 1974 to 1993 totalling 1.15 Moz Au at an average grade of 6.5 g/t Au. Additional gold showings on the property have yielded values of up to 4.1 g/t Au over three metres (anonymous internal report).

Radisson Mining Resources Inc.'s (Radisson) Douay property is surrounded by Maple Gold's Douay claims in the eastern portion of the Property. The claim group was acquired by Radisson in 1984. Since then, Radisson conducted ground geophysical surveys (magnetic, horizontal loop electromagnetic (HLEM), resistivity, and IP surveys) and drilled 36 holes totalling 10,209 m. In early 1987, Radisson completed additional IP and magnetic surveys. Drilling identified two major fault zones: the Douay deformation zone (DDZ) and the Harricana deformation zone (HDZ). The DDZ forms a tectonic corridor 100 m to 300 m wide marked by the presence of graphitic and cherty horizons, and strong sericite and carbonate alteration. The HDZ, located 700 m further south, was intersected over a width of nearly 200 m and consists of altered and sheared ultramafic rocks, specifically chlorite-talc-dolomite schists, and occasionally green carbonate breccias (fuchsite). Gold intersections along these two major deformation zones yielded results of up to 5.82 g/t Au over 2.35m, including 13.71 g/t Au over 0.9 m (www.radissonmining.com).

Opus One Resources Inc. (previously GFK Resources Inc.) acquired the Vezza North and Extension properties in mid-2016 from Probe Metals. These have several historical gold showings, including up to 1.4 g/t Au over 36.1 m; mineralization is generally associated with quartz-carbonate-(tourmaline)-sulphide veins, although gold bearing sulphidic zones with silicification without veining are also noted. Results of a winter 2017 drill program at Vezza Extension and Vezza North yielded values of up to 12.9 g/t Au over 0.5 m (Brisson, 2017, GM70165).

Nottaway Resources Inc.'s Vezza mine, now closed, has past production plus resources of approximately 0.5 Moz averaging approximately 5 g/t Au from a mineralized body measuring approximately 450 m along strike, 750 m in depth, and one to ten metres in width. Mineralization is associated with structurally controlled silicification and carbonatization with minor disseminated pyrite, arsenopyrite, and lesser pyrrhotite. It is best described as a



sediment-hosted hydrothermal replacement body (Bouchard, 2017). Its most recent period of production was from 2016 to 2019.

RPA has not independently verified the information from the adjacent properties and this information is not necessarily indicative of the mineralization at the Property.



## 24 OTHER RELEVANT DATA AND INFORMATION

No additional information or explanation is necessary to make this Technical Report understandable and not misleading.



### 25 INTERPRETATION AND CONCLUSIONS

The Property is located within the Archean age Harricana-Turgeon belt of the Abitibi volcanoplutonic sub-province, part of the Superior Province of the Canadian Shield.

The Project is underlain by a northern assemblage of sedimentary, felsic pyroclastic and lesser mafic volcanic rocks (Taïbi Group), tectonically juxtaposed against a southern assemblage consisting of basalts and co-genetic gabbros, with lesser felsic volcanic and interflow sedimentary rocks, including cherts (Cartwright Hills Group). The Cartwright Hills Group is intruded by the 6.5 km x 2.0 km Douay alkaline intrusive complex (syenite to monzonite, alkali gabbro, and carbonatite) with its associated gold mineralization.

Gold zones on the Property are spatially and genetically linked to the presence or proximity of the syenitic intrusive complex. Proximal styles of mineralization (e.g., Porphyry and Nika zones) are associated with a significant proportion of syenitic rocks. More distal styles of mineralization, such as much of the Douay West and 531 zones, are associated with predominantly basaltic assemblages with multiple interflow sedimentary units with only minor syenite.

Maple Gold's protocols for drilling, sampling, analysis, security, and database management meet industry standard practices. The drill hole database was verified by RPA and is suitable for Mineral Resource estimation work.

RPA estimated Mineral Resources for the Douay deposit using the drill results available to October 23, 2019. The Mineral Resources are reported using a 0.45 g/t Au cut-off grade for open pit resources, and a 1.0 g/t Au cut-off grade for underground resources. Indicated Mineral Resource are estimated to total 8.6 Mt at an average grade of 1.52 g/t Au. Inferred Mineral Resource are reported to be 71.2 Mt at an average grade of 1.03 g/t Au.

A number of mineralized lenses are supported by limited drilling. Additional infill drilling is warranted in order to better define these mineralized zones.

No Mineral Reserves have yet been estimated on the Property.



### **26 RECOMMENDATIONS**

The Property hosts the Douay gold deposit, which consists of nine mineralization zones. Each zone, and the Property overall, merits considerable exploration and development work. Previous Maple Gold exploration programs, i.e., re-logging and sampling programs, have allowed Maple Gold to standardize the drill logging information and reduce the number of rock types within the database, which assisted in a better understanding of the mineralization styles at the Property.

RPA's recommendations for further exploration work are as follows:

- Focus drill targeting to extend higher grade mineralized zones, whether along strike or down dip, particularly near surface, in order to better define a potential starter pit areas.
- Complete infill drilling in areas currently excluded from the Inferred Mineral Resource due to widely spaced drilling.
- Continue the drill core re-sampling program to assay intervals that were previously left unsampled. Several instances were noted where unsampled intervals occur adjacent to assay values greater than 1 g/t Au. This represents an opportunity to possibly increase the resource estimate as well as to reduce strip ratio.
- Carry out additional bulk density measurements on the mineralization, waste, and overburden materials. There are limited density data for Northwest, Douay West, Zone 10, Zone 20, Main, and Central Zones.
- Complete a detailed structural study to advance the understanding on controls for the formation of higher grade lenses. This study should include oriented core and/or televiewer data in strategic areas.
- Initiate a geotechnical study to better determine the optimal pit slope angle of a potential open pit mine. This work would involve collecting point load test data, and continuing to collect RQD data on core, and studies on groundwater, joints, and fractures within the area of the potential pit.
- Complete additional metallurgical test work to include the new Nika Zone, and also to assess characteristics of various grade ranges.
- Continue evaluating exploration targets along the 55 km long segment of the CBDZ using ground geophysics and exploration drilling.

The primary objectives of the program proposed by Maple Gold are to upgrade and expand the Douay Mineral Resource, as well as advance the Project through metallurgical, mining,



scoping desktop studies in advance of a PEA. RPA concurs with Maple Gold's planned work program and budget of C\$3,722,000 for 2020. Details of the proposed Phase I program can be found in Table 26-1.

TABLE 26-1 PROPOSED BUDGET – PHASE I Maple Gold Mines Ltd. – Douay Gold Project

Item	C\$
PHASE I	
Head Office Expenses and Property Holding Costs	100,000
Project Management, and Staff Cost	632,000
Diamond Drilling (7500 m all-inclusive contactor costs)	730,000
Analyses including core cutting	430,000
IP Survey (60 km)	215,000
Geophysical Interpretation & Report	25,000
Camp Costs, including food and utilities	690,000
Reporting (assessment and other)	150,000
Fuel, equipment rental and other	185,000
Environmental/Technical Baseline	100,000
Preliminary Metallurgical Test Work	75,000
Social/Consultation	50,000
Travel	40,000
Subtotal	3,422,000
Contingency	300,000
Total	3,722,000

A Phase II program could follow and include further diamond drilling and technical studies required to support a future PEA. Preliminary baseline work could commence in late 2020 with the aim of establishing an initial framework for a subsequent PEA, which could commence in 2021. The estimate of the contingent Phase II program is C\$5,000,000.



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## 28 DATE AND SIGNATURE PAGE

This report titled "Technical Report on the Douay Gold Project, Northwestern Quebec, Canada" and dated December 6, 2019 was prepared and signed by the following author:

(Signed and Sealed) Dorota El Rassi

Dated at Toronto, ON December 6, 2019

Dorota El Rassi, M.Sc., P.Eng. Senior Geological Engineer



## 29 CERTIFICATE OF QUALIFIED PERSON

#### **DOROTA EL RASSI**

I, Dorota El Rassi, M.Sc., P.Eng., as the author of this report entitled "Technical Report on the Douay Gold Project, Northwestern Quebec, Canada" prepared for Maple Gold Mines Ltd. and dated December 6, 2019, do hereby certify that:

- 1. I am Senior Geological Engineer with Roscoe Postle Associates Inc. of Suite 501, 55 University Ave., Toronto, ON M5J 2H7.
- 2. I am a graduate of the University of Toronto in 1997 with a B.A.Sc.(Hons.) degree in Geological and Mining Engineering and in 2000 with a M.Sc. degree in Geology and Mechanical Engineering.
- 3. I am registered as a Professional Geological Engineer in the Province of Ontario (Reg.# 100012348). I have worked as a geologist for a total of 20 years since my graduation. My relevant experience for the purpose of the Technical Report is:
  - Review and report on exploration and mining projects for due diligence and regulatory requirements
  - Mineral Resource estimates on a variety of commodities including gold, silver, copper, nickel, zinc, PGE, and industrial mineral deposits
  - Experienced user of Gemcom, Leapfrog, Phinar's x10-Geo, and Gslib software
- 4. 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 to be a "qualified person" for the purposes of NI 43-101.
- 5. I visited the Douay Project on November 14, 2019.
- 6. I am responsible for overall preparation of the Technical Report.
- 7. I am independent of the Issuer applying the test set out in Section 1.5 of NI 43-101.
- 8. I have had no prior involvement with the property that is the subject of the Technical Report.
- 9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
- 10. At the effective date of the Technical Report, 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 6<sup>th</sup> day of December, 2019

#### (Signed and Sealed) Dorota El Rassi

Dorota El Rassi, M.Sc., P.Eng.



## **30 APPENDIX A**

#### **CLAIM LIST**

Table A-1 shows a complete list of claims together with the expiration dates.



## TABLE A-1 MINERAL CLAIM INFORMATION Maple Gold Mines Ltd. – Douay Gold Project

Claim ID	Owner	Expiry Date	Claim ID	Owner	Expiry Date	Claim ID	Owner	Expiry Date
101773	MGM(100%)	15-Nov-19	1133259	MGM(100%)	06-Jun-19	2193327	MGM(100%)	02-Nov-19
101774	MGM(100%)	15-Nov-19	1133260	MGM(100%)	06-Jun-19	2193328	MGM(100%)	02-Nov-19
101775	MGM(100%)	15-Nov-19	1133261	MGM(100%)	06-Jun-19	2193329	MGM(100%)	02-Nov-19
101776	MGM(100%)	15-Nov-19	1133262	MGM(100%)	06-Jun-19	2193330	MGM(100%)	02-Nov-19
101777	MGM(100%)	15-Nov-19	1133263	MGM(100%)	06-Jun-19	2193331	MGM(100%)	02-Nov-19
101778	MGM(100%)	15-Nov-19	1133264	MGM(100%)	06-Jun-19	2193333	MGM(100%)	02-Nov-19
101779	MGM(100%)	15-Nov-19	1133265	MGM(100%)	06-Jun-19	2355500	SOQUEM(25%)- MGM(75%)	25-Feb-21
101780	MGM(100%)	15-Nov-19	1133266	MGM(100%)	06-Jun-19	2355501	SOQUEM(25%)- MGM(75%)	25-Feb-21
101781	MGM(100%)	15-Nov-19	1133267	MGM(100%)	06-Jun-19	2355502	SOQUEM(25%)- MGM(75%)	25-Feb-21
101782	MGM(100%)	15-Nov-19	1133268	MGM(100%)	06-Jun-19	2355503	SOQUEM(25%)- MGM(75%)	25-Feb-21
101783	MGM(100%)	15-Nov-19	1133269	MGM(100%)	06-Jun-19	2355504	SOQUEM(25%)- MGM(75%)	25-Feb-21
101789	MGM(100%)	15-Nov-19	1133270	MGM(100%)	06-Jun-19	2355505	SOQUEM(25%)- MGM(75%)	25-Feb-21
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1133107	MGM(100%)	06-Oct-21	2193315	MGM(100%)	02-Nov-19	2355518	SOQUEM(25%)- MGM(75%)	25-Feb-21
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Claim ID	Owner	Expiry Date	Claim ID	Owner	Expiry Date	Claim ID	Owner	Expiry Date
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1133120	MGM(100%)	06-Oct-21	2355531	Soquem(25%)- MGM(75%)	25-Feb-21	2486523	MGM(100%)	21-Mar-21
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1133153	MGM(100%)	06-Oct-21	2486510	MGM(100%)	21-Mar-21	2486556	MGM(100%)	21-Mar-21
1133154	MGM(100%)	06-Oct-21	2486511	MGM(100%)	21-Mar-21	2486557	MGM(100%)	21-Mar-21
1133155	MGM(100%)	06-Oct-21	2486512	MGM(100%)	21-Mar-21	2486558	MGM(100%)	21-Mar-21
1133156	MGM(100%)	06-Oct-21	2486513	MGM(100%)	21-Mar-21	2486559	MGM(100%)	21-Mar-21
1133157	MGM(100%)	06-Oct-21	2486514	MGM(100%)	21-Mar-21	2486560	MGM(100%)	21-Mar-21
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Claim ID	Owner	Expiry Date	Claim ID	Owner	Expiry Date	Claim ID	Owner	Expiry Date
1133158	MGM(100%)	06-Oct-21	2486515	MGM(100%)	21-Mar-21	2486561	MGM(100%)	21-Mar-21
1133159	MGM(100%)	06-Oct-21	2486516	MGM(100%)	21-Mar-21	2486562	MGM(100%)	21-Mar-21
1133160	MGM(100%)	06-Oct-21	2486517	MGM(100%)	21-Mar-21	2486563	MGM(100%)	21-Mar-21
1133161	MGM(100%)	06-Oct-21	2486518	MGM(100%)	21-Mar-21	2486564	MGM(100%)	21-Mar-21
1133162	MGM(100%)	06-Oct-21	2486519	MGM(100%)	21-Mar-21	2486565	MGM(100%)	21-Mar-21
1133163	MGM(100%)	06-Oct-21	2486520	MGM(100%)	21-Mar-21	2486566	MGM(100%)	21-Mar-21
1133164	MGM(100%)	06-Oct-21	2486521	MGM(100%)	21-Mar-21	2486567	MGM(100%)	21-Mar-21
1133165	MGM(100%)	06-Oct-21	2486568	MGM(100%)	21-Mar-21	2487054	MGM(100%)	22-Mar-21
1133166	MGM(100%)	06-Oct-21	2486569	MGM(100%)	21-Mar-21	2487055	MGM(100%)	22-Mar-21
1133167	MGM(100%)	06-Oct-21	2486570	MGM(100%)	21-Mar-21	2487056	MGM(100%)	22-Mar-21
1133168	MGM(100%)	06-Oct-21	2486571	MGM(100%)	21-Mar-21	2487057	MGM(100%)	22-Mar-21
1133169	MGM(100%)	06-Oct-21	2486572	MGM(100%)	21-Mar-21	2487058	MGM(100%)	22-Mar-21
1133170	MGM(100%)	06-Oct-21	2486573	MGM(100%)	21-Mar-21	2487059	MGM(100%)	22-Mar-21
1133171	MGM(100%)	06-Oct-21	2486574	MGM(100%)	21-Mar-21	2487060	MGM(100%)	22-Mar-21
1133172	MGM(100%)	06-Oct-21	2486849	MGM(100%)	22-Mar-21	2487061	MGM(100%)	22-Mar-21
1133173	MGM(100%)	06-Oct-21	2486850	MGM(100%)	22-Mar-21	2487062	MGM(100%)	22-Mar-21
1133174	MGM(100%)	06-Oct-21	2486851	MGM(100%)	22-Mar-21	2487063	MGM(100%)	22-Mar-21
1133175	MGM(100%)	06-Oct-21	2486852	MGM(100%)	22-Mar-21	2487064	MGM(100%)	22-Mar-21
1133176	MGM(100%)	06-Oct-21	2486853	MGM(100%)	22-Mar-21	2487065	MGM(100%)	22-Mar-21
1133177	MGM(100%)	06-Oct-21	2486854	MGM(100%)	22-Mar-21	2487066	MGM(100%)	22-Mar-21
1133178	MGM(100%)	06-Oct-21	2486855	MGM(100%)	22-Mar-21	2487067	MGM(100%)	22-Mar-21
1133179	MGM(100%)	06-Oct-21	2486856	MGM(100%)	22-Mar-21	2487068	MGM(100%)	22-Mar-21
1133180	MGM(100%)	06-Oct-21	2486857	MGM(100%)	22-Mar-21	2487069	MGM(100%)	22-Mar-21
1133181	MGM(100%)	06-Oct-21	2486858	MGM(100%)	22-Mar-21	2487070	MGM(100%)	22-Mar-21
1133182	MGM(100%)	06-Oct-21	2486859	MGM(100%)	22-Mar-21	2487071	MGM(100%)	22-Mar-21
1133183	MGM(100%)	06-Oct-21	2486860	MGM(100%)	22-Mar-21	2487072	MGM(100%)	22-Mar-21
1133184	MGM(100%)	06-Oct-21	2486861	MGM(100%)	22-Mar-21	2487073	MGM(100%)	22-Mar-21
1133185	MGM(100%)	06-Oct-21	2486862	MGM(100%)	22-Mar-21	2487074	MGM(100%)	22-Mar-21
1133186	MGM(100%)	06-Oct-21	2486863	MGM(100%)	22-Mar-21	2487075	MGM(100%)	22-Mar-21
1133187	MGM(100%)	06-Oct-21	2486864	MGM(100%)	22-Mar-21	2487076	MGM(100%)	22-Mar-21
1133188	MGM(100%)	06-Oct-21	2486865	MGM(100%)	22-Mar-21	2487077	MGM(100%)	22-Mar-21
1133189	MGM(100%)	06-Oct-21	2486866	MGM(100%)	22-Mar-21	2487078	MGM(100%)	22-Mar-21
1133190	MGM(100%)	06-Oct-21	2486867	MGM(100%)	22-Mar-21	2487079	MGM(100%)	22-Mar-21
1133191	MGM(100%)	06-Oct-21	2486868	MGM(100%)	22-Mar-21	2487080	MGM(100%)	22-Mar-21
1133192	MGM(100%)	06-Oct-21	2486869	MGM(100%)	22-Mar-21	2487081	MGM(100%)	22-Mar-21
1133193	MGM(100%)	06-Oct-21	2486870	MGM(100%)	22-Mar-21	2487082	MGM(100%)	22-Mar-21
1133194	MGM(100%)	06-Oct-21	2486871	MGM(100%)	22-Mar-21	2487083	MGM(100%)	22-Mar-21
1133195	MGM(100%)	06-Oct-21	2486872	MGM(100%)	22-Mar-21	2487084	MGM(100%)	22-Mar-21
1133196	MGM(100%)	06-Oct-21	2486873	MGM(100%)	22-Mar-21	2487085	MGM(100%)	22-Mar-21
1133197	MGM(100%)	06-Oct-21	2486874	MGM(100%)	22-Mar-21	2487086	MGM(100%)	22-Mar-21
1133198	MGM(100%)	06-Oct-21	2486875	MGM(100%)	22-Mar-21	2487087	MGM(100%)	22-Mar-21
1133199	MGM(100%)	06-Oct-21	2486876	MGM(100%)	22-Mar-21	2487088	MGM(100%)	22-Mar-21
1133200	MGM(100%)	06-Oct-21	2486877	MGM(100%)	22-Mar-21	2487089	MGM(100%)	22-Mar-21
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Claim ID	Owner	Expiry Date	Claim ID	Owner	Expiry Date	Claim ID	Owner	Expiry Date
1133201	MGM(100%)	06-Oct-21	2486878	MGM(100%)	22-Mar-21	2487090	MGM(100%)	22-Mar-21
1133202	MGM(100%)	06-Oct-21	2486879	MGM(100%)	22-Mar-21	2487091	MGM(100%)	22-Mar-21
1133203	MGM(100%)	06-Oct-21	2486880	MGM(100%)	22-Mar-21	2487092	MGM(100%)	22-Mar-21
1133204	MGM(100%)	06-Oct-21	2486881	MGM(100%)	22-Mar-21	2487107	MGM(100%)	22-Mar-21
1133205	MGM(100%)	06-Oct-21	2486882	MGM(100%)	22-Mar-21	2487108	MGM(100%)	22-Mar-21
1133206	MGM(100%)	06-Oct-21	2486883	MGM(100%)	22-Mar-21	2487109	MGM(100%)	22-Mar-21
1133207	MGM(100%)	06-Oct-21	2486884	MGM(100%)	22-Mar-21	2487129	MGM(100%)	22-Mar-21
1133208	MGM(100%)	06-Oct-21	2486885	MGM(100%)	22-Mar-21	2487162	MGM(100%)	22-Mar-21
1133209	MGM(100%)	06-Oct-21	2486886	MGM(100%)	22-Mar-21	2487163	MGM(100%)	22-Mar-21
1133210	MGM(100%)	06-Oct-21	2486887	MGM(100%)	22-Mar-21	2487164	MGM(100%)	22-Mar-21
1133211	MGM(100%)	06-Oct-21	2487165	MGM(100%)	22-Mar-21	2487690	MGM(100%)	23-Mar-21
1133212	MGM(100%)	06-Oct-21	2487166	MGM(100%)	22-Mar-21	2487691	MGM(100%)	23-Mar-21
1133213	MGM(100%)	06-Oct-21	2487167	MGM(100%)	22-Mar-21	2487692	MGM(100%)	23-Mar-21
1133214	MGM(100%)	06-Oct-21	2487168	MGM(100%)	22-Mar-21	2487693	MGM(100%)	23-Mar-21
1133215	MGM(100%)	06-Oct-21	2487169	MGM(100%)	22-Mar-21	2487694	MGM(100%)	23-Mar-21
1133216	MGM(100%)	06-Oct-21	2487170	MGM(100%)	22-Mar-21	2487695	MGM(100%)	23-Mar-21
1133217	MGM(100%)	06-Oct-21	2487171	MGM(100%)	22-Mar-21	2487696	MGM(100%)	23-Mar-21
1133218	MGM(100%)	06-Oct-21	2487172	MGM(100%)	22-Mar-21	2487697	MGM(100%)	23-Mar-21
1133219	MGM(100%)	06-Oct-21	2487173	MGM(100%)	22-Mar-21	2487698	MGM(100%)	23-Mar-21
1133220	MGM(100%)	06-Oct-21	2487653	MGM(100%)	23-Mar-21	2487699	MGM(100%)	23-Mar-21
1133221	MGM(100%)	06-Oct-21	2487654	MGM(100%)	23-Mar-21	2487700	MGM(100%)	23-Mar-21
1133222	MGM(100%)	06-Oct-21	2487655	MGM(100%)	23-Mar-21	2487701	MGM(100%)	23-Mar-21
1133223	MGM(100%)	06-Oct-21	2487656	MGM(100%)	23-Mar-21	2487702	MGM(100%)	23-Mar-21
1133224	MGM(100%)	06-Oct-21	2487657	MGM(100%)	23-Mar-21	2487703	MGM(100%)	23-Mar-21
1133225	MGM(100%)	06-Oct-21	2487658	MGM(100%)	23-Mar-21	2487704	MGM(100%)	23-Mar-21
1133226	MGM(100%)	06-Oct-21	2487659	MGM(100%)	23-Mar-21	2487705	MGM(100%)	23-Mar-21
1133227	MGM(100%)	06-Oct-21	2487660	MGM(100%)	23-Mar-21	2487706	MGM(100%)	23-Mar-21
1133228	MGM(100%)	06-Oct-21	2487661	MGM(100%)	23-Mar-21	2487775	MGM(100%)	23-Mar-21
1133229	MGM(100%)	06-Oct-21	2487662	MGM(100%)	23-Mar-21	2487776	MGM(100%)	23-Mar-21
1133230	MGM(100%)	06-Oct-21	2487663	MGM(100%)	23-Mar-21	2487777	MGM(100%)	23-Mar-21
1133231	MGM(100%)	06-Oct-21	2487664	MGM(100%)	23-Mar-21	2487778	MGM(100%)	23-Mar-21
1133232	MGM(100%)	06-Oct-21	2487665	MGM(100%)	23-Mar-21	2487779	MGM(100%)	23-Mar-21
1133233	MGM(100%)	06-Oct-21	2487666	MGM(100%)	23-Mar-21	2487780	MGM(100%)	23-Mar-21
1133234	MGM(100%)	06-Oct-21	2487667	MGM(100%)	23-Mar-21	2487781	MGM(100%)	23-Mar-21
1133235	MGM(100%)	06-Oct-21	2487668	MGM(100%)	23-Mar-21	2487782	MGM(100%)	23-Mar-21
1133236	MGM(100%)	06-Oct-21	2487669	MGM(100%)	23-Mar-21	2487783	MGM(100%)	23-Mar-21
1133237	MGM(100%)	06-Oct-21	2487670	MGM(100%)	23-Mar-21	2487784	MGM(100%)	23-Mar-21
1133238	MGM(100%)	06-Oct-21	2487671	MGM(100%)	23-Mar-21	2487785	MGM(100%)	23-Mar-21
1133239	MGM(100%)	06-Oct-21	2487672	MGM(100%)	23-Mar-21	2487786	MGM(100%)	23-Mar-21
1133240	MGM(100%)	06-Oct-21	2487673	MGM(100%)	23-Mar-21	2495005	MGM(100%)	03-Jun-19
1133241	MGM(100%)	06-Oct-21	2487674	MGM(100%)	23-Mar-21	2495006	MGM(100%)	03-Jun-19
1133242	MGM(100%)	17-Jun-19	2487675	MGM(100%)	23-Mar-21	2495007	MGM(100%)	03-Jun-19
1133244	MGM(100%)	13-Jul-19	2487676	MGM(100%)	23-Mar-21	2495008	MGM(100%)	03-Jun-19



Claim ID	Owner	Expiry Date	Claim ID	Owner	Expiry Date	Claim ID	Owner	Expiry Date
1133246	MGM(100%)	13-Jul-19	2487677	MGM(100%)	23-Mar-21	2495009	MGM(100%)	03-Jun-19
1133247	MGM(100%)	06-Jun-19	2487678	MGM(100%)	23-Mar-21	2495010	MGM(100%)	03-Jun-19
1133248	MGM(100%)	06-Jun-19	2487679	MGM(100%)	23-Mar-21	2495011	MGM(100%)	03-Jun-19
1133249	MGM(100%)	06-Jun-19	2487680	MGM(100%)	23-Mar-21	2495012	MGM(100%)	03-Jun-19
1133250	MGM(100%)	06-Jun-19	2487681	MGM(100%)	23-Mar-21	2495013	MGM(100%)	03-Jun-19
1133251	MGM(100%)	06-Jun-19	2487682	MGM(100%)	23-Mar-21	2495014	MGM(100%)	03-Jun-19
1133252	MGM(100%)	06-Jun-19	2487683	MGM(100%)	23-Mar-21	2498188	MGM(100%)	23-Jul-19
1133253	MGM(100%)	06-Jun-19	2487684	MGM(100%)	23-Mar-21	2498189	MGM(100%)	23-Jul-19
1133254	MGM(100%)	06-Jun-19	2487685	MGM(100%)	23-Mar-21	2498190	MGM(100%)	23-Jul-19
1133255	MGM(100%)	06-Jun-19	2487686	MGM(100%)	23-Mar-21	2498191	MGM(100%)	23-Jul-19
1133256	MGM(100%)	06-Jun-19	2487687	MGM(100%)	23-Mar-21	2498192	MGM(100%)	23-Jul-19
1133257	MGM(100%)	06-Jun-19	2487688	MGM(100%)	23-Mar-21	2498193	MGM(100%)	23-Jul-19
1133258	MGM(100%)	06-Jun-19	2487689	MGM(100%)	23-Mar-21	2498194	MGM(100%)	23-Jul-19
2498195	MGM(100%)	23-Jul-19	2503634	MGM(100%)	10-Oct-19	2503741	MGM(100%)	18-Oct-19
2498196	MGM(100%)	23-Jul-19	2503635	MGM(100%)	10-Oct-19	2503742	MGM(100%)	18-Oct-19
2498197	MGM(100%)	23-Jul-19	2503636	MGM(100%)	10-Oct-19	2503743	MGM(100%)	18-Oct-19
2498198	MGM(100%)	23-Jul-19	2503637	MGM(100%)	10-Oct-19	2503744	MGM(100%)	18-Oct-19
2498199	MGM(100%)	23-Jul-19	2503638	MGM(100%)	10-Oct-19	2503745	MGM(100%)	18-Oct-19
2498200	MGM(100%)	23-Jul-19	2503639	MGM(100%)	10-Oct-19	2503746	MGM(100%)	18-Oct-19
2498201	MGM(100%)	23-Jul-19	2503640	MGM(100%)	10-Oct-19	2503747	MGM(100%)	18-Oct-19
2498202	MGM(100%)	23-Jul-19	2503641	MGM(100%)	10-Oct-19	2503748	MGM(100%)	18-Oct-19
2498203	MGM(100%)	23-Jul-19	2503642	MGM(100%)	10-Oct-19	2503749	MGM(100%)	18-Oct-19
2498204	MGM(100%)	23-Jul-19	2503643	MGM(100%)	10-Oct-19	2503750	MGM(100%)	18-Oct-19
2498205	MGM(100%)	23-Jul-19	2503644	MGM(100%)	10-Oct-19	2503751	MGM(100%)	18-Oct-19
2498206	MGM(100%)	23-Jul-19	2503645	MGM(100%)	10-Oct-19	2503752	MGM(100%)	18-Oct-19
2498207	MGM(100%)	23-Jul-19	2503646	MGM(100%)	10-Oct-19	2503753	MGM(100%)	18-Oct-19
2498208	MGM(100%)	23-Jul-19	2503647	MGM(100%)	10-Oct-19	2507434	MGM(100%)	03-Dec-19
2498209	MGM(100%)	23-Jul-19	2503648	MGM(100%)	10-Oct-19	2507435	MGM(100%)	03-Dec-19
2498210	MGM(100%)	23-Jul-19	2503649	MGM(100%)	10-Oct-19	2507737	MGM(100%)	11-Dec-19
2498211	MGM(100%)	23-Jul-19	2503650	MGM(100%)	10-Oct-19	2507738	MGM(100%)	11-Dec-19
2498212	MGM(100%)	23-Jul-19	2503651	MGM(100%)	10-Oct-19	2507739	MGM(100%)	11-Dec-19
2498213	MGM(100%)	23-Jul-19	2503652	MGM(100%)	10-Oct-19	2507740	MGM(100%)	11-Dec-19
2498214	MGM(100%)	23-Jul-19	2503653	MGM(100%)	10-Oct-19	2515257	MGM(100%)	06-Mar-20
2498215	MGM(100%)	23-Jul-19	2503654	MGM(100%)	10-Oct-19	2515258	MGM(100%)	06-Mar-20
2498216	MGM(100%)	23-Jul-19	2503655	MGM(100%)	10-Oct-19	2515259	MGM(100%)	06-Mar-20
2498217	MGM(100%)	23-Jul-19	2503656	MGM(100%)	10-Oct-19	2515260	MGM(100%)	06-Mar-20
2498218	MGM(100%)	23-Jul-19	2503657	MGM(100%)	10-Oct-19	2515261	MGM(100%)	06-Mar-20
2498219	MGM(100%)	23-Jul-19	2503658	MGM(100%)	10-Oct-19	2529099	MGM(100%)	10-Dec-20
2498220	MGM(100%)	23-Jul-19	2503659	MGM(100%)	10-Oct-19	2529100	MGM(100%)	10-Dec-20
2498221	MGM(100%)	23-Jul-19	2503660	MGM(100%)	10-Oct-19	2529101	MGM(100%)	10-Dec-20
2498222	MGM(100%)	23-Jul-19	2503661	MGM(100%)	10-Oct-19	2529102	MGM(100%)	10-Dec-20
2498223	MGM(100%)	23-Jul-19	2503662	MGM(100%)	10-Oct-19	2529103	MGM(100%)	10-Dec-20
2498224	MGM(100%)	23-Jul-19	2503663	MGM(100%)	10-Oct-19	2529104	MGM(100%)	10-Dec-20
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Claim ID	Owner	Expiry Date	Claim ID	Owner	Expiry Date	Claim ID	Owner	Expiry Date
2498225	MGM(100%)	23-Jul-19	2503725	MGM(100%)	18-Oct-19	2529105	MGM(100%)	10-Dec-20
2498226	MGM(100%)	23-Jul-19	2503726	MGM(100%)	18-Oct-19	2529106	MGM(100%)	10-Dec-20
2498227	MGM(100%)	23-Jul-19	2503727	MGM(100%)	18-Oct-19	2529107	MGM(100%)	10-Dec-20
2498228	MGM(100%)	23-Jul-19	2503728	MGM(100%)	18-Oct-19	2529108	MGM(100%)	10-Dec-20
2503559	MGM(100%)	10-Oct-19	2503729	MGM(100%)	18-Oct-19	2529109	MGM(100%)	10-Dec-20
2503560	MGM(100%)	10-Oct-19	2503730	MGM(100%)	18-Oct-19	2529110	MGM(100%)	10-Dec-20
2503624	MGM(100%)	10-Oct-19	2503731	MGM(100%)	18-Oct-19	2529111	MGM(100%)	10-Dec-20
2503625	MGM(100%)	10-Oct-19	2503732	MGM(100%)	18-Oct-19	2529112	MGM(100%)	10-Dec-20
2503626	MGM(100%)	10-Oct-19	2503733	MGM(100%)	18-Oct-19	2529113	MGM(100%)	10-Dec-20
2503627	MGM(100%)	10-Oct-19	2503734	MGM(100%)	18-Oct-19	2529114	MGM(100%)	10-Dec-20
2503628	MGM(100%)	10-Oct-19	2503735	MGM(100%)	18-Oct-19	2529115	MGM(100%)	10-Dec-20
2503629	MGM(100%)	10-Oct-19	2503736	MGM(100%)	18-Oct-19	2529116	MGM(100%)	10-Dec-20
2503630	MGM(100%)	10-Oct-19	2503737	MGM(100%)	18-Oct-19	2529117	MGM(100%)	10-Dec-20
2503631	MGM(100%)	10-Oct-19	2503738	MGM(100%)	18-Oct-19	2532445	MGM(100%)	28-Feb-21
2503632	MGM(100%)	10-Oct-19	2503739	MGM(100%)	18-Oct-19	2532446	MGM(100%)	28-Feb-21
2503633	MGM(100%)	10-Oct-19	2503740	MGM(100%)	18-Oct-19	2532447	MGM(100%)	28-Feb-21
2532448	MGM(100%)	28-Feb-21	2532450	MGM(100%)	28-Feb-21	2532452	MGM(100%)	28-Feb-21
2532449	MGM(100%)	28-Feb-21	2532451	MGM(100%)	28-Feb-21	2535698	MGM(100%)	4-Apr-21