

## *Hiding in plain sight*

# The birth of a potential new mining district in the Abitibi

by **Patrick Lengyel**, Exploration Manager – Canada, Chalice Gold Mines Ltd.

Chalice Gold Mines Ltd ('Chalice') is among a small group of ambitious companies in the resurging gold exploration sector applying a comprehensive 'consolidate and systematically explore' approach to greenfield mineral exploration at its East Cadillac Gold Project in Quebec.

### **A forgotten area on the edge of greatness**

The East Cadillac Gold ('ECG') Project was consolidated through 14 separate acquisition / earn-in agreements and significant staking of vacant claims commencing in late 2016. Today, the Project covers a 245 km<sup>2</sup> area, encompassing 27 km of the Larder Lake – Cadillac Fault ('LLCF'), the most prolifically endowed gold trend in the southern Abitibi, with >100 Moz of gold endowment.

The ECG Project is situated in 'elephant country' within the Val-d'Or district, amongst some of the world's most significant gold mines. The large Project surrounds the historic high-grade Chimo gold mine (~0.4 Moz produced at ~5 g/t Au).

Gold districts along the LLCF have a rough periodicity of approximately 40 – 50 km, and given the ECG Project is located ~35 – 65 km east of the ~20 Moz Val d'Or gold district,

this further enhances its prospectiveness. Surprisingly, by comparison, the ECG Project area has only received a fraction of the exploration effort that Val d'Or has received over the past century.

Even though a significant number of large deposits in the Abitibi occur up to 5 km away from the LLCF, very little exploration work was completed outside of the main fault trend. Exploration in the 1980s focused along the LLCF only and very little work was completed in the 1990s and early 2000s due to highly fragmented ownership and adverse market conditions. Further focused exploration was completed from 2009 to 2011, but no comprehensive, modern exploration techniques have ever been applied to the area.

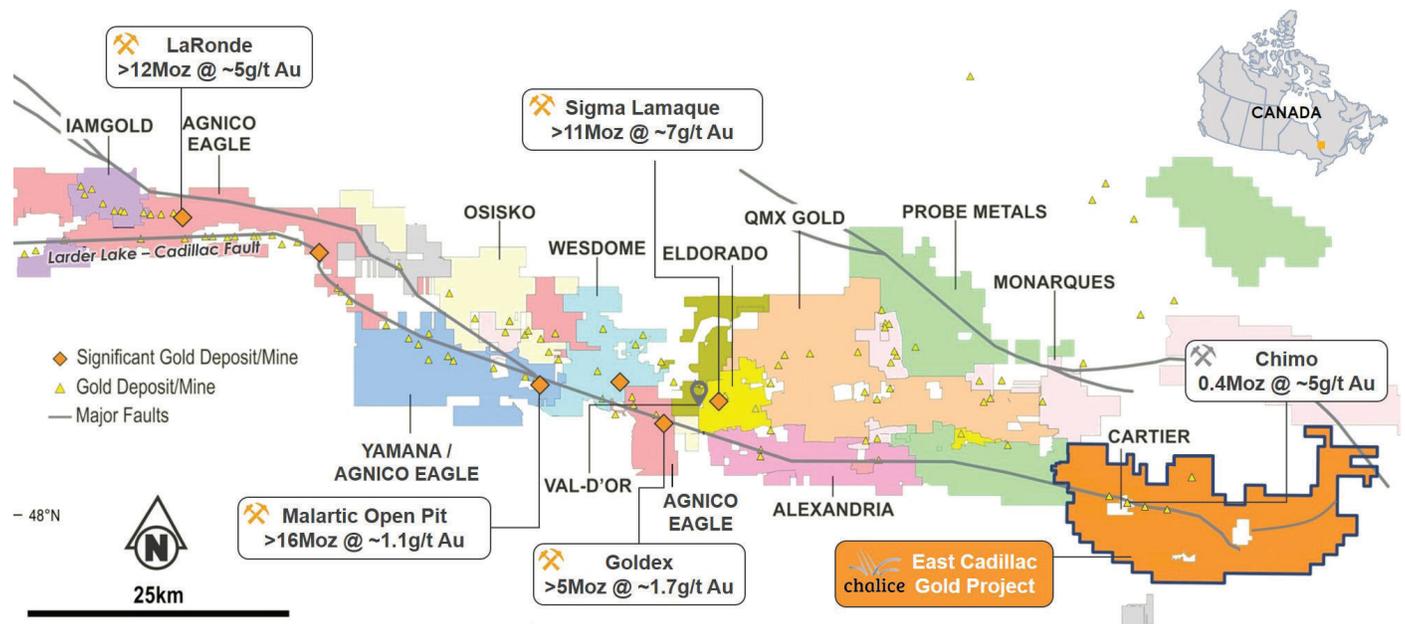
### **A new approach leads to new targets**

In 2017, Chalice initiated an extensive, ground-up, sampling and geophysics program on the western 16 km of LLCF strike. Field work included LiDAR, airborne magnetometer, VLF-EM and 200 m spaced 3D Induced Polarization geophysics, as well as reconnaissance to property-scale MMI soil, bark and rock chip geochemical sampling.

The 2017 results defined not only a series of surface geochemistry anomalies (gold and pathfinder element) along the LLCF, including several anomalies coincident with known deposits and showings, but also a large number of new, untested anomalies along strike, and to the north and south of the LLCF. ➔



**Drilling at Chalice Gold Mines' East Cadillac Gold Project in Quebec, Canada**



The East Cadillac Gold Project is on strike with several globally significant gold mines

## District-scale drilling establishes the potential for large-scale gold systems

In the space of one year, Chalice had identified several targets similar in scale to large regional deposits and similar in distribution to other mining districts in the Abitibi sub-province.

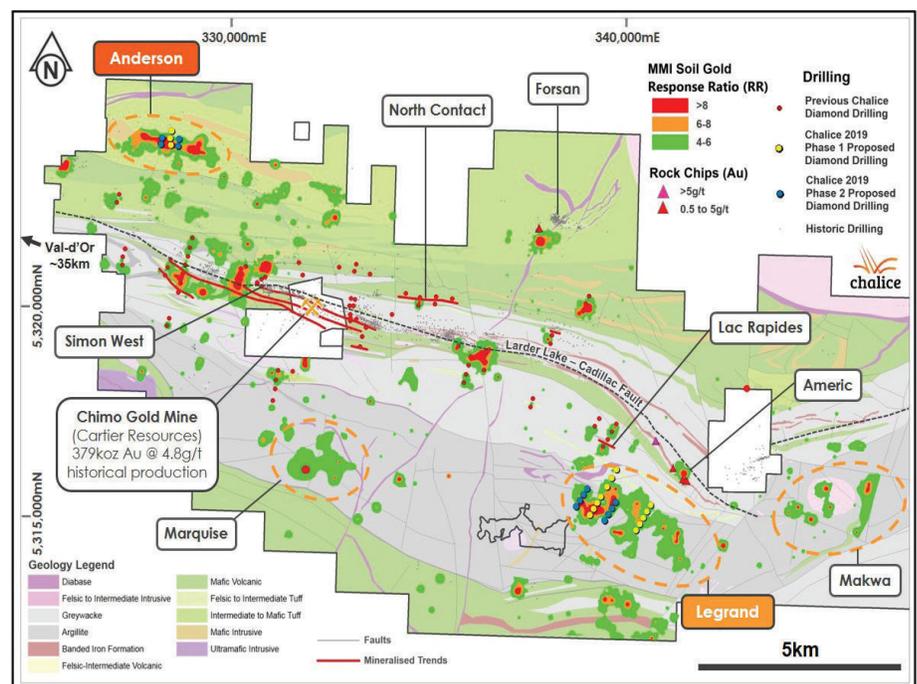
An extensive regional diamond drilling campaign was gainfully completed in the winter of 2017/2018. The regional reconnaissance program successfully tested over 23 targets with wide-spaced drilling, totaling approximately 28 800 m. Not only did the drilling down-plunge of key historic showings deliver new zones of mineralization (at Nordeau West and Simon West) but also entirely new mineralized zones were discovered at North Contact, Lac Rapides and Nordeau South. Better intersections included:

- North Contact: 23.5 m @ 1.12 g/t Au, incl. 2.0 m @ 6.86 g/t Au and 1.0 m @ 5.71 g/t Au
- Lac Rapides: 3.1 m @ 4.27 g/t Au within 20.8 m @ 0.74 g/t Au
- Simon West: 11.9 m @ 3.2 g/t Au, incl. 1.6 m @ 18.5 g/t Au

## Paving the way to discovery

Encouraged by the conversion of a previously dormant area into a potential district-scale play, Chalice expanded its land position by an additional 11 km of strike to the east

through a new acquisition. The company also conducted a further comprehensive ground-targeting program during the summer of 2018. New large geochemical anomalies were defined north and south of the LLCF. The Legrand anomaly to the south of the LLCF



2018 soil sampling has identified the large Legrand and Anderson MMI soil anomalies – new large-scale targets for drilling in January 2019

is similar in geochemistry and scale to the 16 Moz Au Canadian Malartic gold deposit, approximately 70 km to the west.

The new Legrand (3.4 km x 1.3 km) and Anderson (2.3 km x 0.5 km) Targets cover a very large area and are untested by historic drilling, so the potential of a discovery is significant. Additional 3D-IP surveying is presently underway to refine and optimize drill-hole design over these new targets. This work will culminate in an 8100 m diamond drilling program, scheduled to commence in January 2019.

The 8100 m drilling program will be executed with two rigs, drilling through the optimal winter season. Chalice is eagerly awaiting the first assay results, and given its large cash balance, has the ability to transition to infill definition drilling immediately in the case of discovery – an exciting proposition for the company and its shareholders. **C**



Core logging and analysis by the Chalice team in early 2018

## About the company

Chalice Gold Mines (TSX: CXN | ASX: CHN) is a well-funded junior explorer with district-scale exploration projects across tier-1 mining jurisdictions in Canada and Australia.

Chalice's key projects are the 100%-owned, >4500 km<sup>2</sup> Pyramid Hill Gold Project located in the globally significant Bendigo gold district of Victoria, as well as the 70 to 100%-owned East Cadillac Gold Project in the equally significant Val-d'Or gold district of Quebec.

The company is in a unique and strong financial position, with approximately AUD\$22 million in cash as of the end of November 2018, allowing Chalice to advance exploration projects quickly and at scale. The company has a proven track record of success, with prudent and well-timed asset sales generating net proceeds of c. AUD\$107 million to date. The author (Patrick Lengyel) has been with Chalice since 2015 and is an experienced geologist, consultant, and executive manager in the precious, base metal and industrial mineral exploration sector.

For further information, please visit [www.chalicegold.com](http://www.chalicegold.com) or email [info@chalicegold.com](mailto:info@chalicegold.com)



Patrick Lengyel (author, far left) with some of the Chalice team on-site at the East Cadillac Gold Project in early 2018