



SOQUEM provides update on recent exploration activities in Québec

VAL-D'OR, October 22, 2019. SOQUEM Inc. (SOQUEM), a subsidiary of Ressources Québec, is pleased to announce the results of drilling, mapping and prospecting programs carried out in recent months on its Wagosic and Boisbriand properties and on the Pikwa Property, part of SOQUEM's James Bay Alliance with Azimut Exploration Inc. (Azimut; figure 1).

SOQUEM's exploration work in the James Bay, Northern Québec and Pontiac MRC regions has tested new areas showing potential for new types of deposits, with an emphasis on strategic minerals and particularly copper and zinc.

SOQUEM'S exploration in the Abitibi region, following recent work on the B26 lens, tested the potential of its properties in the former Selbaie mine area for new satellite lenses.

Highlights:

Boisbriand (100% SOQUEM): A new gold zone has been discovered on the property, in a metallogenic environment favourable to SEDEX mineralization in a detrital sedimentary context. **Seven (7) grab samples returned grades between 1.5 and 8.8 g/t Au.**

James Bay Alliance - Pikwa Project (Azimut and SOQUEM): A 5.2-kilometre-long mineralized boulder field with outcrops has been identified along the "Copperfield Trend". Results for the first 16 samples returned up to **9.81% Cu, 13.45 g/t Au and 37.6 g/t Ag** in outcrop and **4.94% Cu, 2.99 g/t Au, 41.3 g/t Ag** and **0.163% ppm Mo** in an angular boulder. The "Copperfield Trend" could be an Archean analogue to the Aitik deposit, a Paleoproterozoic copper-gold porphyry in Sweden.

Northern Alliance (Azimut and SOQUEM): Results are expected this fall. The target metallogenic environment is similar to that of iron oxide-copper-gold (IOCG) deposits.

Calumet South (Sphinx and SOQUEM): SOQUEM has been the operator of the Calumet South Project in the Pontiac MRC since September 25, 2019. The metallogenic environment of this area is typical of SEDEX deposits in carbonate sedimentary basins.

Wagosic (100% SOQUEM): Two massive sulphide horizons were intercepted in hole 1338-19-037 in the winter of 2019. The best interval returned **4.6% Zn, 231 g/t Ag and 1.6% Pb over 24.2 m**, including **7.5% Zn, 401 g/t Ag and 3.0% Pb over 7.7 m**.

Discovery of a new gold index on the Boisbriand Project

SOQUEM is pleased to present the results of its summer 2019 mapping and sampling program on its wholly owned Boisbriand Property. The property is located 55 kilometres east of the Renard Mine (Stornoway Diamond Corporation) in the Eeyou Istchee James Bay territory (Figure 1).

The property was acquired following the field assessment of a target generated by CONSOREM and is located at the contact between the La Grande and Opinaca subprovinces (Figure 2). Recent work revealed the potential for gold when seven (7) grab samples, taken from two outcrops, returned grades between

1.53 g/t Au and 8.80 g/t Au (Table 1 and Figure 2). These samples, collected within an outcrop 30-metre long and perpendicular to the stratigraphy, contain horizons of sulphide-rich metasomatized calc-silicate rocks in a sequence of highly deformed and folded metasedimentary rocks. The mineralized zone could be associated with an Archean SEDEX-type metallogenic environment in a detrital sedimentary environment. The mineralized zone is associated with an induced polarization (IP) anomaly.

Table 1.

Outcrop	Sample	Easting*	Northing*	Au (g/t)	Cu (%)
1401-jdfr19-016	E5976112	338518	5868993	5.43	0.15
	E5976113	338518	5868995	2.17	0.18
	E5976116	338525	5869000	1.53	0.16
1401-jdfr19-017	E5976117	338521	5868964	2.28	trace
	E5976118	338518	5868967	5.76	trace
	E5976119	338511	5868971	8.80	trace
	E5976121	338504	5868971	1.86	trace

* Coordinates in UTM NAD83 Zone 19.

In late September, detailed follow-up mapping and channel sampling was carried out on the showing. In addition, 66 till samples (C-horizon) were collected near IP anomalies in areas near the showing with no outcrop exposure. Analytical results are pending.

Two Zn-Ag-Pb-rich massive sulphide horizons intersected on the Wagosic Property

A drilling program from January to April 2019 investigated various exploration targets on the wholly owned Wagosic Property, situated 90 kilometres west of the town of Matagami (Figures 1 and 3). A total of 10,462.8 metres were drilled in 17 holes.

Hole 1338-19-037 intersected a zone composed of two massive sulphide horizons (A and B) and another zone with two stockworks (C and D). The details of the hole and analytical results are presented in Tables 2 and 3 below and its location is shown in Figure 4.

Table 2.

Drill hole	Easting*	Northing*	Elevation (m)	Azimuth (°)	Dip (°)	Length (m)
1338-19-037	642181.5	5521032.7	265.5	32.0	-63.0	770

* Coordinates in UTM NAD83 Zone 19.

Table 3.

Zone		From (m)	To (m)	Core length (m)	Zn (%)	Ag (g/t)	Pb (%)
Massive Sulphide A		220.8	245.0	24.2	4.6	231	1.6
	<i>Including</i>	222.3	230.0	7.7	7.5	401	3.0
Massive Sulphide B		257.0	262.0	5.0	4.3	73	0.5
		459.0	491.0	32.0	1.4	63	trace
Stockwork C		468.5	471.7	3.2	1.9	352	0.1
	<i>Including</i>	497.0	504.5	7.5	1.0	13	trace

Massive Sulphide A is composed of 70% pyrite, 5 to 20% sphalerite and 3 to 10% galena. Locally, from 224.2 to 228.8 m, the interval contains 15% pyrite and 5-15% sphalerite in the form of veinlets. Massive Sulphide B is composed of 80% pyrite, 5 to 10% sphalerite and 1% galena.

Stockwork C is characterized by veins and veinlets of pyrite and sphalerite with traces of galena. The thickness of the veins and veinlets varies from 1 mm to 5 cm. Locally, millimetre-scale veinlets of native silver intersect pyrite-sphalerite veinlets. Stockwork D is composed of pyrite and sphalerite veinlets ranging in thickness from 1 mm to 1 cm.

The massive sulphide horizons strike N147° with a dip of 48°. They are interpreted to be continuous over a strike distance of about 1,000 metres and are truncated by faults at each end (Figure 5). Chargeability anomalies coincide with the massive sulphide horizons (Figure 4).

A longitudinal section (Figure 4) illustrates the equivalent zinc (ZnEq) grades based on the following metal values:

- Zinc: 2,420 US \$/tonne
- Lead: 2,000 US \$/tonne
- Silver: 16 US \$/oz

About Wagosic

The Wagosic Property, known for its Zn-Cu-Au-Ag-Pb showings of massive sulphides and stockworks, is located a few kilometers east of the former Selbaie mine, and northwest of the B26 deposit, both of which occur in the same geological sequence. The Selbaie mine produced 56.5 Mt at 0.9% Cu, 1.9% Zn, 38 g/t Ag and 0.6 g/t Au. The B26 deposit (B26 Property) contains indicated resources totalling 6.97 Mt at grades of 1.32% Cu, 1.80% Zn, 0.60 g/t Au and 43 g/t Ag. Inferred resources amount to 4.41 Mt at 2.03% Cu, 0.22% Zn, 1.07 g/t Au and 9 g/t Ag (SOQUEM press release of March 4, 2018 – https://www.soquem.qc.ca/wp-content/uploads/com_soquem_fr_4_mars_final.pdf).

The property is characterized by areas of intense sodium leaching, strong sericite/chlorite alteration, a CONSOREM “ALT-PHYLLO” index greater than 80, positive europium anomalies, and enrichments in tungsten and thallium. Mineralization responds well to IP chargeability, and several IP anomalies on the property have never been tested.

Several exploration targets and showings on the Wagosic Property, such as hole 1338-19-037, warrant follow-up work. A synthesis of the geophysical, lithochemical, lithostructural and historical data for this property should provide high-potential base metal targets.

About Selbaie Camp

SOQUEM owns four properties in the area of the former Selbaie mining camp: Calixa, Wagosic, B26-Brouillan and Beschefer. In addition, SOQUEM is pursuing its option to acquire a 50% interest in the Carheil-Brouillan Property belonging to Imperial Mining Group (Figure 3).

SOQUEM is currently working on the synthesis of the Selbaie Camp to produce a global geological model that incorporates the knowledge acquired in recent years. The area has the potential to host new discoveries of massive sulphides, stockworks and epithermal mineralization.

Azimut and SOQUEM define a 5.2-km-long Cu-Au target on the Pikwa Property, James Bay region

A 5.2-kilometre-long mineralized boulder field has been identified along the “Copperfield Trend” on the Pikwa Property, part of the James Bay Alliance between SOQUEM and Azimut (Figure 1). Outcrops with copper minerals in this boulder field are scattered over a section about **700 m across** in the eastern part of the Copperfield Trend. A total of 114 copper-bearing grab samples were collected. Results from the first 16 samples indicate up to **9.81% Cu, 13.45 g/t Au and 37.6 g/t Ag** (outcrop) and **4.94% Cu, 2.99 g/t Au, 41.3 g/t Ag and 0.163% ppm Mo** (angular boulder) (see Azimut’s press release of October 17, 2019: <http://www.azimut-exploration.com>).

SOQUEM resumes its role as manager at Calumet South

Sphinx Resources and SOQUEM have agreed that SOQUEM will become manager of the exploration work on the Calumet South project as of September 25, 2019 (Figure 1). Located on Grand Calumet Island in the Pontiac Regional County Municipality, the project is adjacent to the former New Calumet mine, which produced 3.8 Mt at a grade of 5.8% Zn, 1.6% Pb, 65 g/t Ag and 0.4 g/t Au from 1944 to 1968 (reference: New Calumet Mine annual report of 1968). Between February and May 2019, Sphinx disclosed the analytical results of a drilling program conducted in January 2019, with grades of up to 4.9% Zn over 2.0 m including 8.5% Zn over 1.0 m (<https://sphinxresources.ca>).

SOQUEM and Sphinx are working closely together to integrate all geoscientific data collected over the past three years to produce a 3D model of the zinc mineralized zone and to identify future drilling targets. The main SEDEX-type zinc zone was mapped over a 1.5-kilometre length of dolomitic marble horizons several metres to tens of metres thick. The zone consists of massive bands ranging from one to several centimetres thick, containing mainly sphalerite but also disseminated pyrite and pyrrhotite.

Analysis protocols

Strict QA/QC protocols have been implemented as part of the Boisbriand and Wagosic projects, including the insertion of certified reference materials (standards) and blanks. All samples were sent for analysis to the facilities of AGAT Laboratories in Val-d'Or.

Boisbriand Project

Grab samples were weighed, crushed and pulverized, then dissolved by the 4-acid method and analyzed by ICP-OES (201-071) for the following elements: Ag, Al, As, Au, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn and Zr.

Gold (Au) was analyzed by fire assay and atomic absorption AAS (202-551). A gravimetric finish was done on samples returning grades greater than 5 g/t Au.



Wagosic Project

A total of 3,521 samples from the 2019 drilling program, including 3,329 half-core samples and 192 standards and blanks were sent to AGAT Laboratories in Val-d'Or for analysis. Samples were weighed, crushed and pulverized, then dissolved by the 4-acid method and analyzed by ICP-OES (201-070) for the following elements: Ag, Al, As, Au, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cu, Fe, Ga, In, K, La, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Rb, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn and Zr.

Gold (Au) was analyzed by fire assay with atomic absorption AAS finish (202-551). For silver grades of 500 ppm or greater, the sample was reassayed by fire assay with a gravimetric finish (202-566).

For metals such as Pb and Zn, samples with grades above 5% were reassayed by sodium peroxide fusion and ICP-OES analysis (201-079).

Qualified people

The technical information for the Pikwa Project (Azimut-SOQUEM James Bay Alliance) was prepared by geologist Jean-Marc Lulin, acting as Azimut's qualified person under National Instrument 43-101. The technical information in this press release for the Boisbriand, Wagosic and Calumet South projects was reviewed by geologist Serge Perreault, acting as SOQUEM's qualified person under National Instrument 43-101.

About SOQUEM

SOQUEM, a subsidiary of Ressources Québec, is dedicated to promoting the exploration, discovery and development of mining properties in Québec. SOQUEM also contributes to maintaining strong local economies. Proud partner and ambassador for the development of Québec's mineral wealth, SOQUEM relies on innovation, research and strategic minerals to be well positioned for the future.

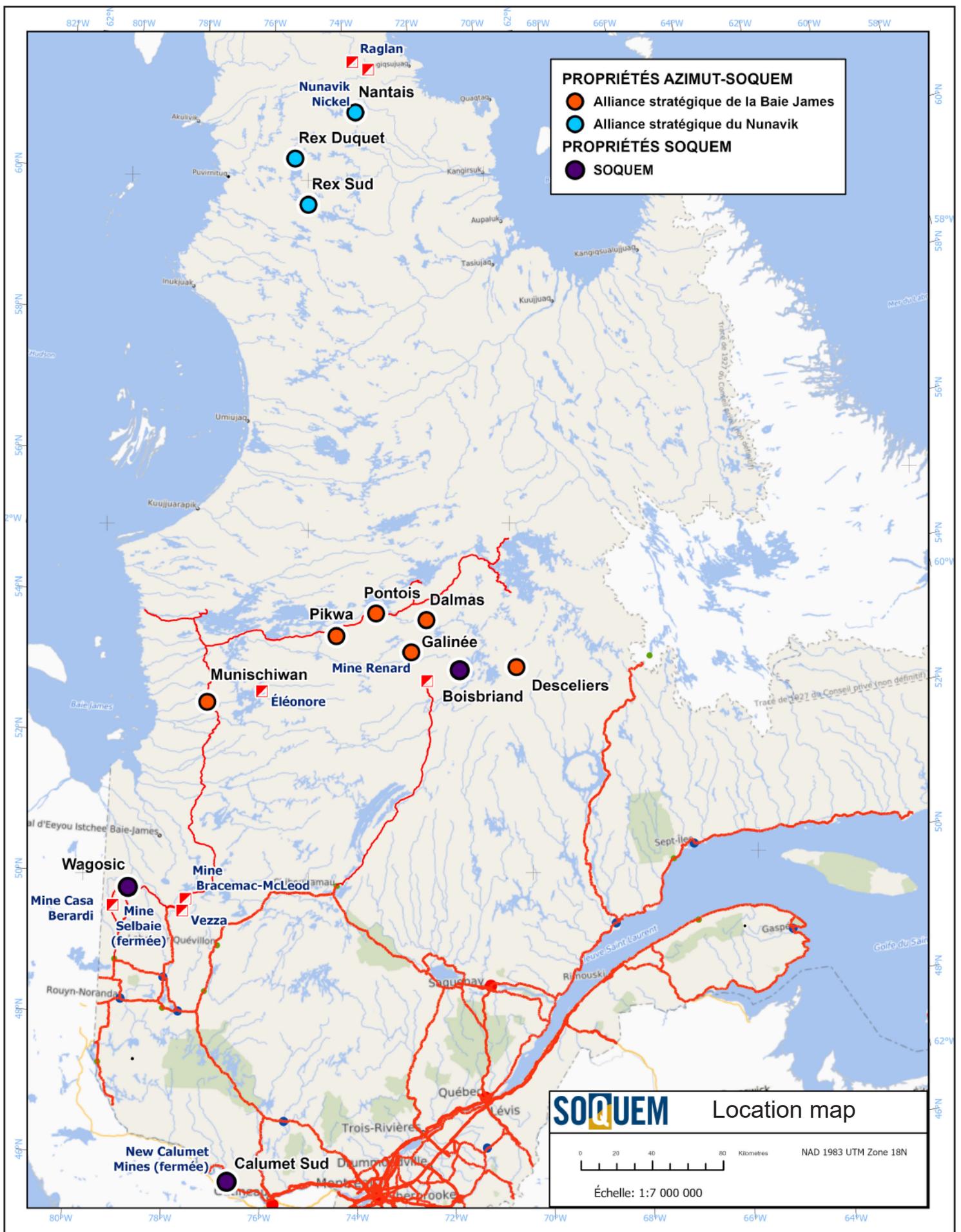


Figure 1. Project Location Map.

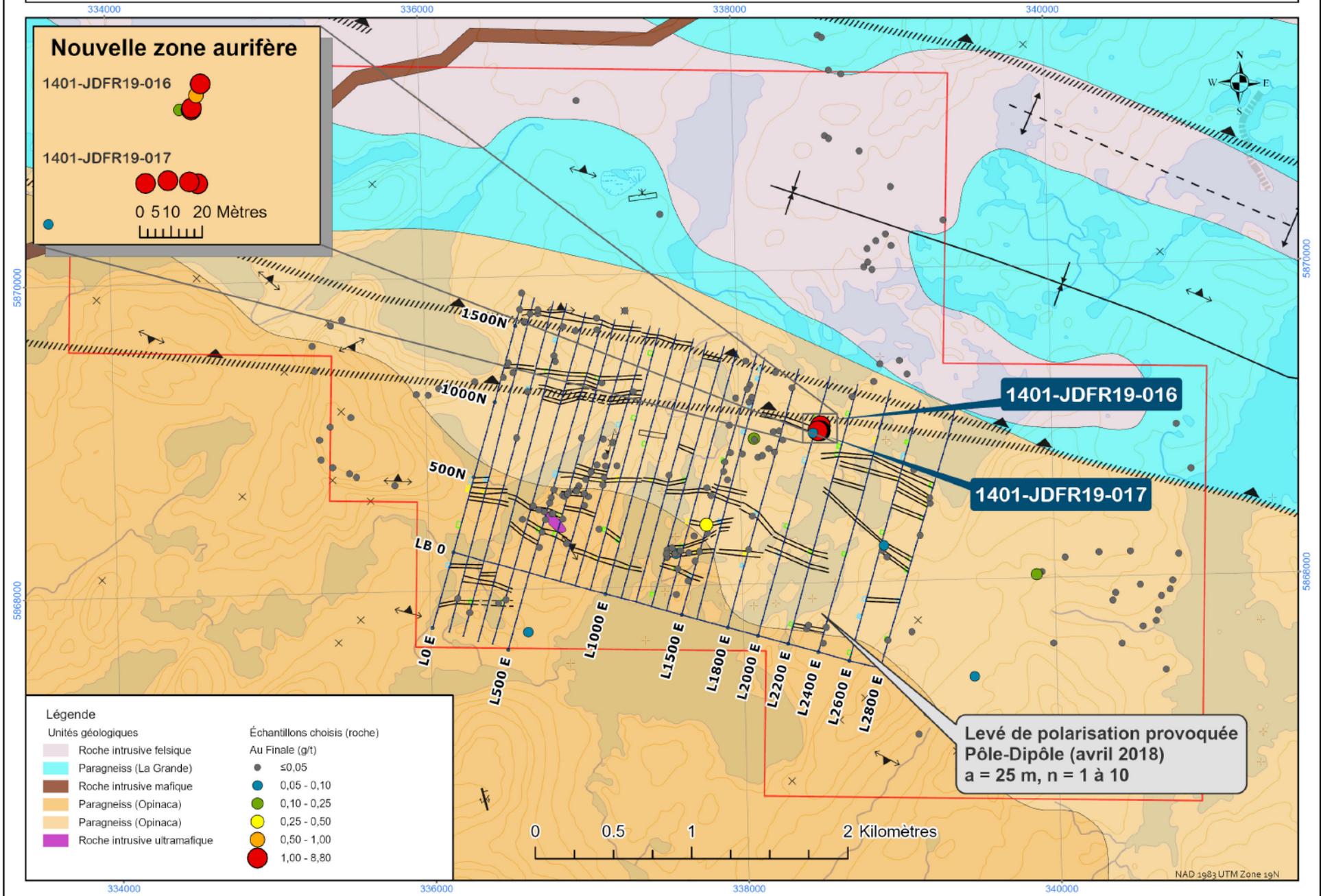


Figure 2. New gold zone discovered in the summer of 2019 on the Boisbriand Property. The box at the top left corner of the figure shows the position of the gold samples on the mineralized outcrop. Geology reproduced from SIGÉOM, map CG-2016-08, Government of Quebec.

Selbaie Block Properties

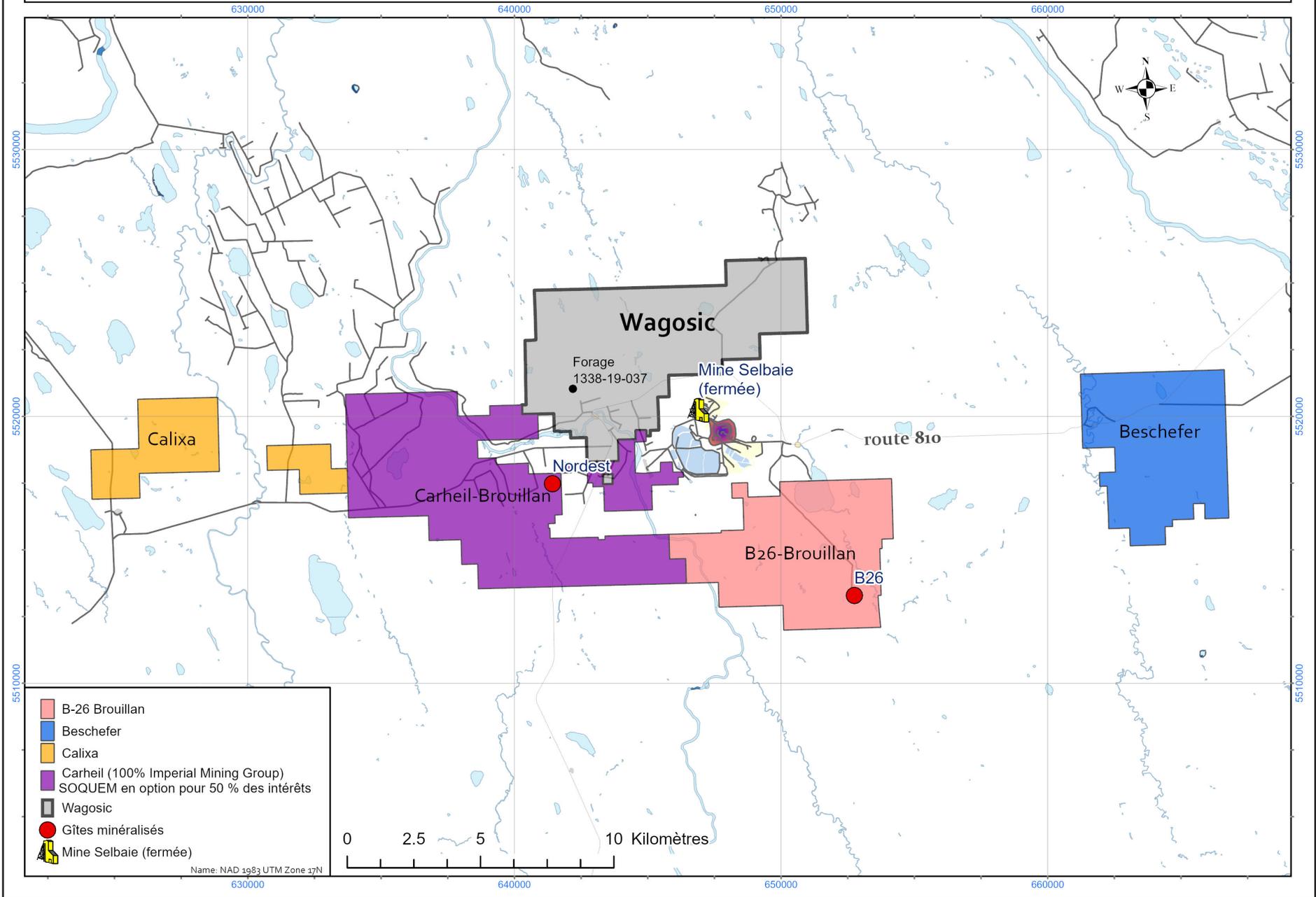


Figure 3. Location of the Wagosic Property, diamond drill hole 1338-19-037 and other mining properties of the Selbaie Block. SOQUEM has an option to acquire a 50% interest in the Carheil-Brouillan property of Imperial Mining Group.

Wagasic Property
Drill hole 1338-19-037

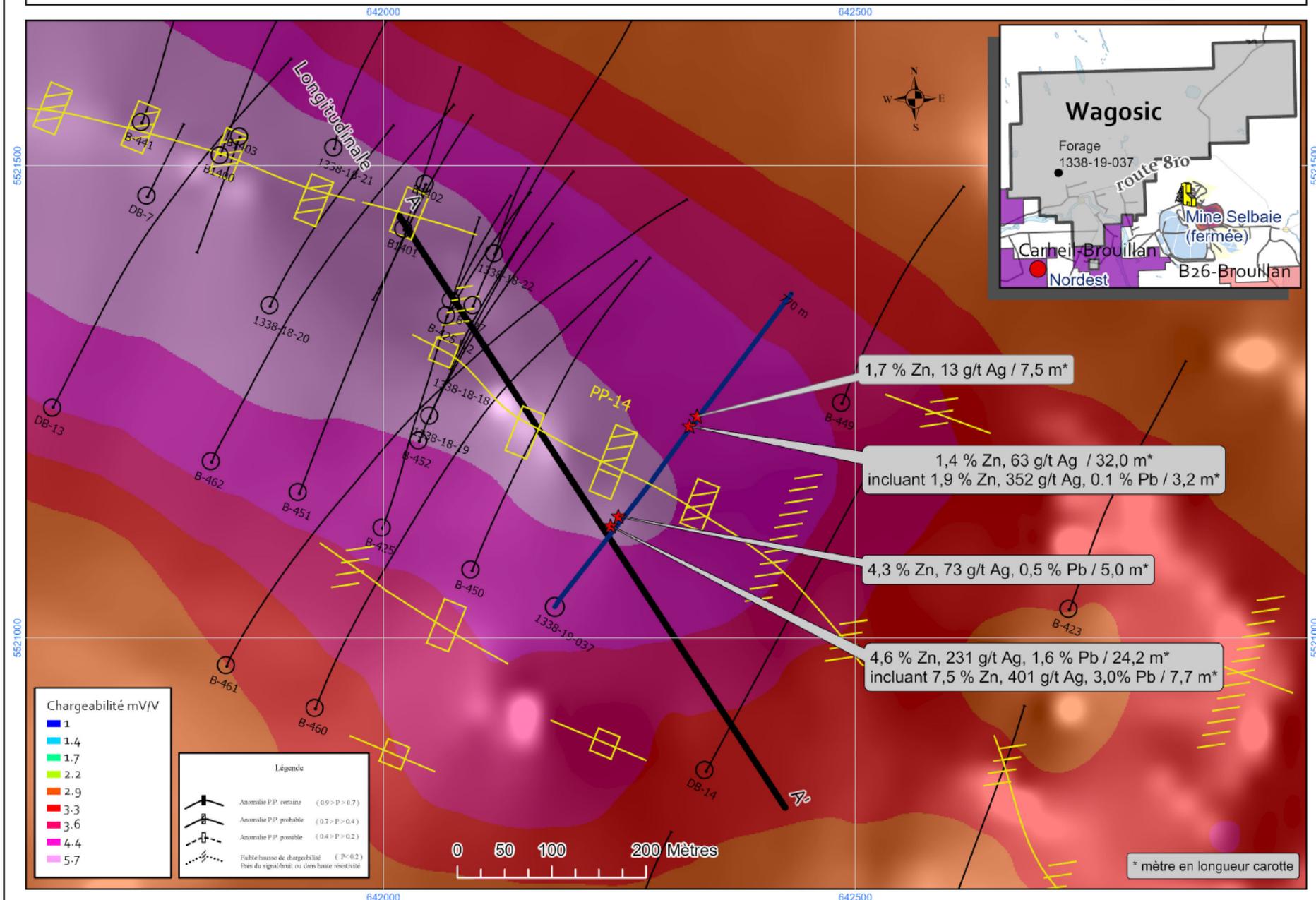


Figure 4. Location of diamond drill holes, IP anomalies and conductors around the 1338-19-037 hole on the Wagasic Property. The red stars represent the mineralized intervals along hole 1338-19-037. The line A-A' corresponds to the trace of the longitudinal section of figure 5. The background of the map represents the chargeability field value from induced polarization (IP) survey.

Wagasic Property
 Longitudinal section N147°/-48° (North view N57°)

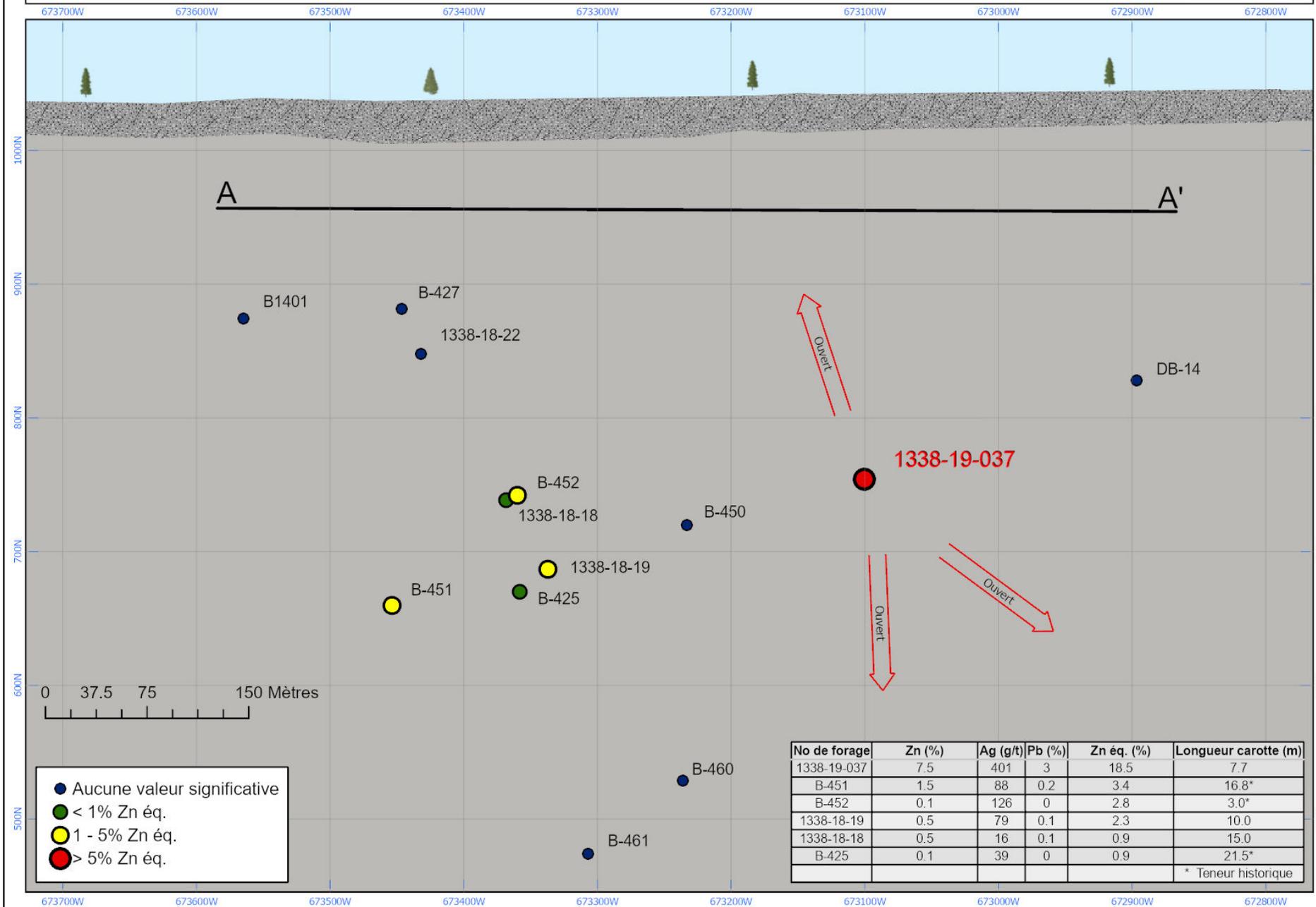


Figure 5. Longitudinal section A-A' (see Figure 4 for position) showing the location of the drill hole 1338-19-037, zinc, silver and zinc equivalent grades and mineralized intervals of six diamond drill holes.