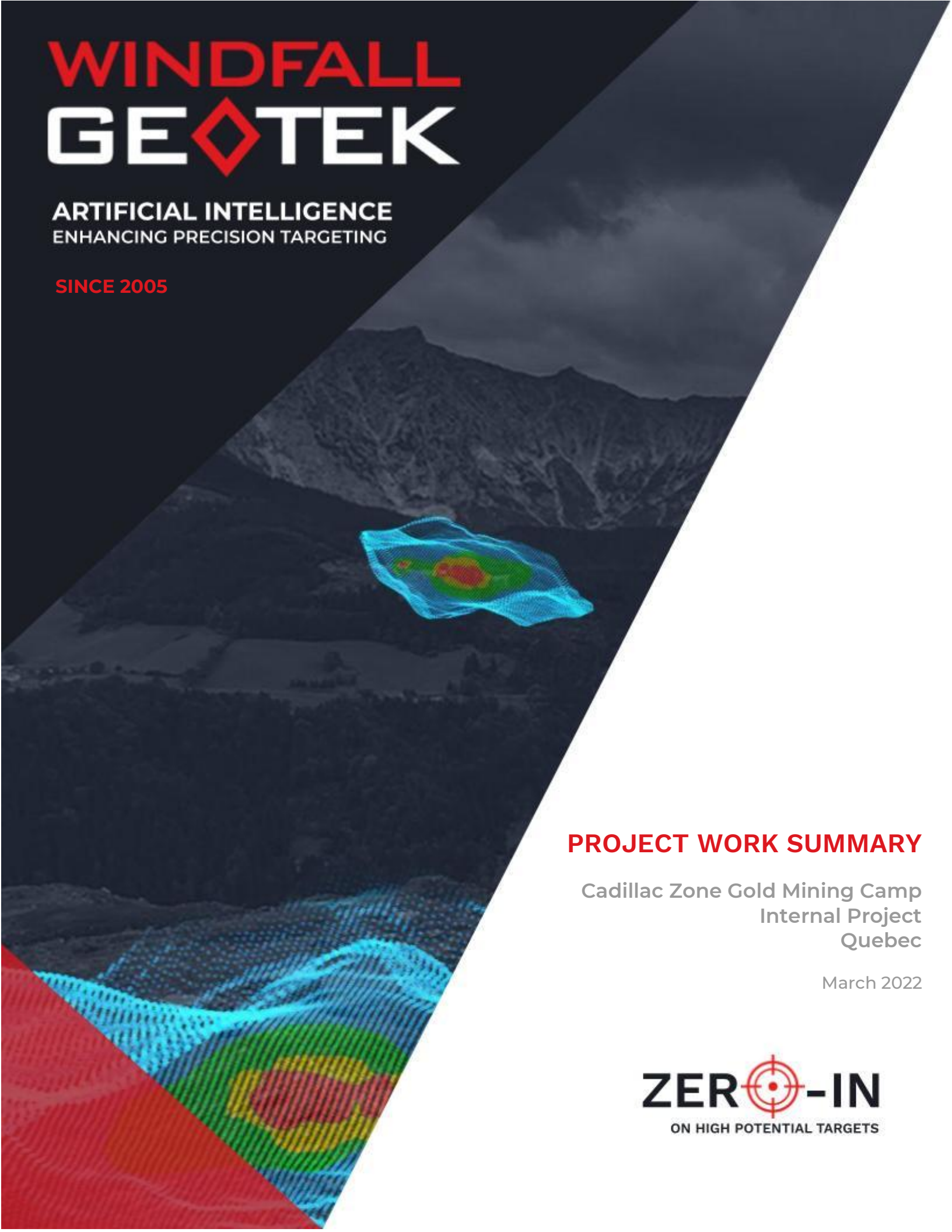
WINDFALL GEOTEK

ARTIFICIAL INTELLIGENCE
ENHANCING PRECISION TARGETING

SINCE 2005



PROJECT WORK SUMMARY

Cadillac Zone Gold Mining Camp
Internal Project
Quebec

March 2022

ZERO-IN
ON HIGH POTENTIAL TARGETS

WORK PROPOSAL SUMMARY

WINDFALL GEOTEK proposes to use to use its proprietary AI System to develop gold exploration targets over Cadillac Zone Gold Mining Camp located in in the Val-d'Or gold camp in Northeastern Quebec, 550 km northwest of Montréal, along the Cadillac Break structure in the Abitibi Greenstone Belt, a well-known geological area renowned for its high concentration of world class gold deposits (Figure 1).

Geological Context

The Cadillac Zone Gold Mining Camp project is located in the southern portion of the Abitibi sub-province of the Superior Province (Quebec), that is considered one of the most prolific areas for gold deposits in the world. The project area is underlain by mafic, and felsic volcanic rocks of Late Archean age. The volcanic domains are separated by narrow and linear belts of clastic sedimentary rocks that are spatially associated with major fault zones. Several large granitic intrusions have been emplaced into the stratigraphy.

The most prominent structural feature of the area is the Cadillac Break also known as the Cadillac Tectonic Zone (CTZ), which is situated at or near the contact between the Pontiac and the Malartic Groups. It is a major tectonic zone characterized by intense shearing and mechanical deformation that can be traced from West to East over a total distance of approximately 210 kilometers from Kirkland Lake to Louvicourt. Later subsidiary and conjugate faulting and fracturing along both north-east and, to a lesser extent, north-west trends have also occurred along its axis.

The area is renowned for its high concentration of world class orogenic gold deposits such as Canadian Malartic (684.55 t Au), Sigma-Lamaque (293.75 t Au), Goldex (101.54 t Au), Malartic Goldfield (52.9 t Au), Marban (50.23 t Au), Camflo (48.2 t Au) and Lapa (28.21 t Au). Orogenic gold deposits of the Cadillac Fault Zone are associated with three different kinds of traps: (1) quartz-carbonate +/- tourmaline veins, (2) brittle-ductile shear zones and (3) veins and porphyry units both spatially linked to alkaline intrusions.

Available Data

Public Databases:

- Magnetic and Radiometric survey (resolution 25m) originated from the Integra Gold's 2015 Gold Rush Competition Hero-X database (Figures 2 & 3)
- SRTM (topography) data at 30m resolution from USGS database.
- 551 701 gold assays compiled from Integra Gold's 2015 Gold Rush Competition Hero-X database and Sigeom - Quebec database (Figure 4)

Proposed AI Model

MODEL: Cadillac Zone Mag – Rad Model

Project Area: 1 027.37.70 sq/km

Model Resolution: 25 m

Total Variables: 506

Element to identify: Au (threshold above 3 g/t)

Proposed Work

Step 1: Data Verification

- Review of all the geophysical, drillhole and surface samples data available in a digital format
- Ensure data characterize the similar geological context
- Verify the quality and quantity of the data for target generation

Step 2: Data Preparation

- Data prep. for magnetic, radiometry and topographic data
- Data prep. for primary magnetic and topography variables and derivative variables
- Compilation of neighbouring variables
- Compilation of variables dataset
- Compilation of training dataset using drillhole and surface samples gold assays data

Step 3: Target Generation

- Use AI Proprietary method to perform high similarity gold exploration targets

For further information or explanation, don’t hesitate to contact WINDFALL GEOTEK.

Respectfully submitted

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Figure 1: Cadillac Zone Gold Mining Camp Project Location

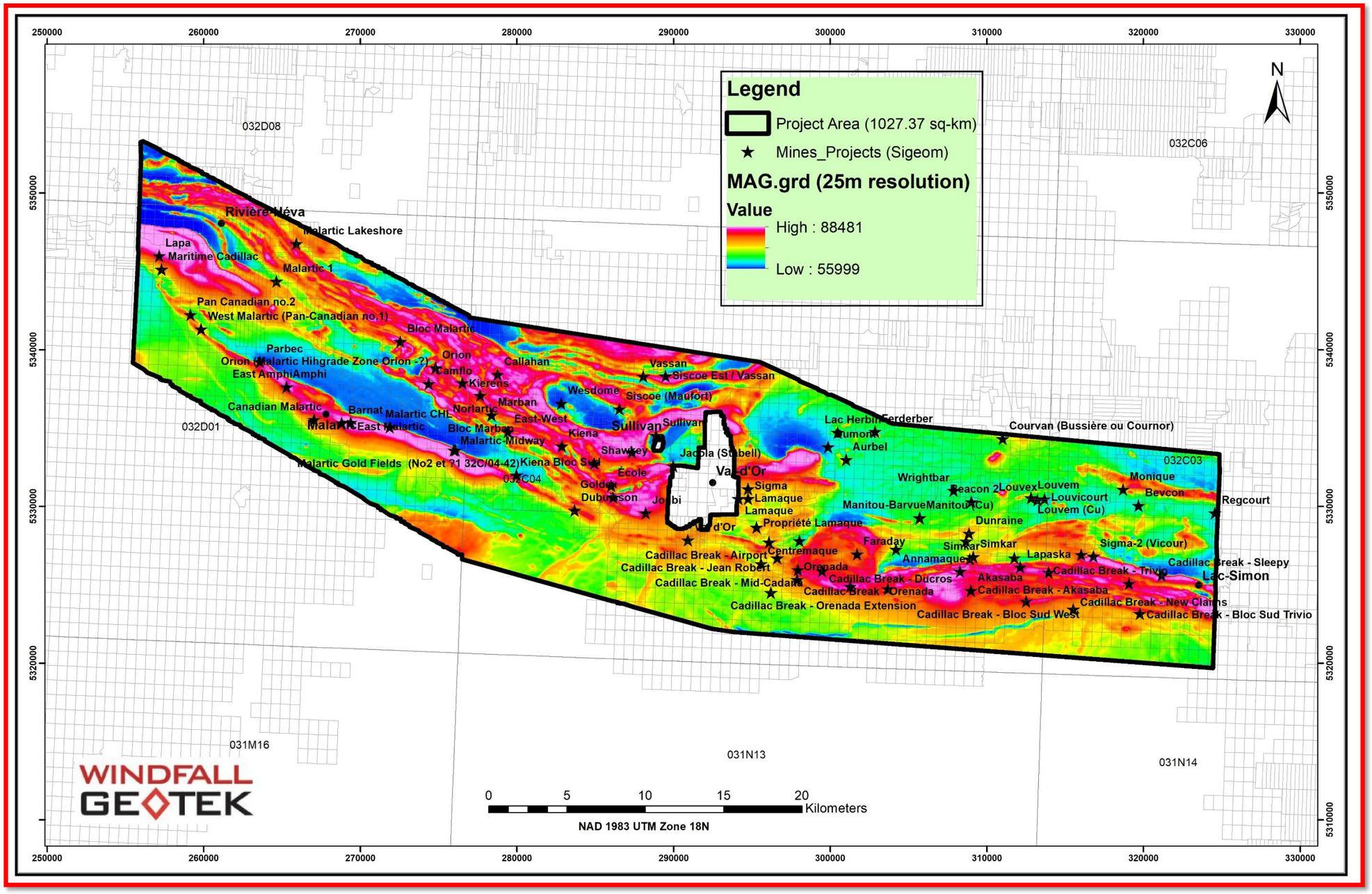

Figure 2: Magnetic data at 25m resolution (Integra Gold's 2015 Gold Rush Competition Hero-X database)

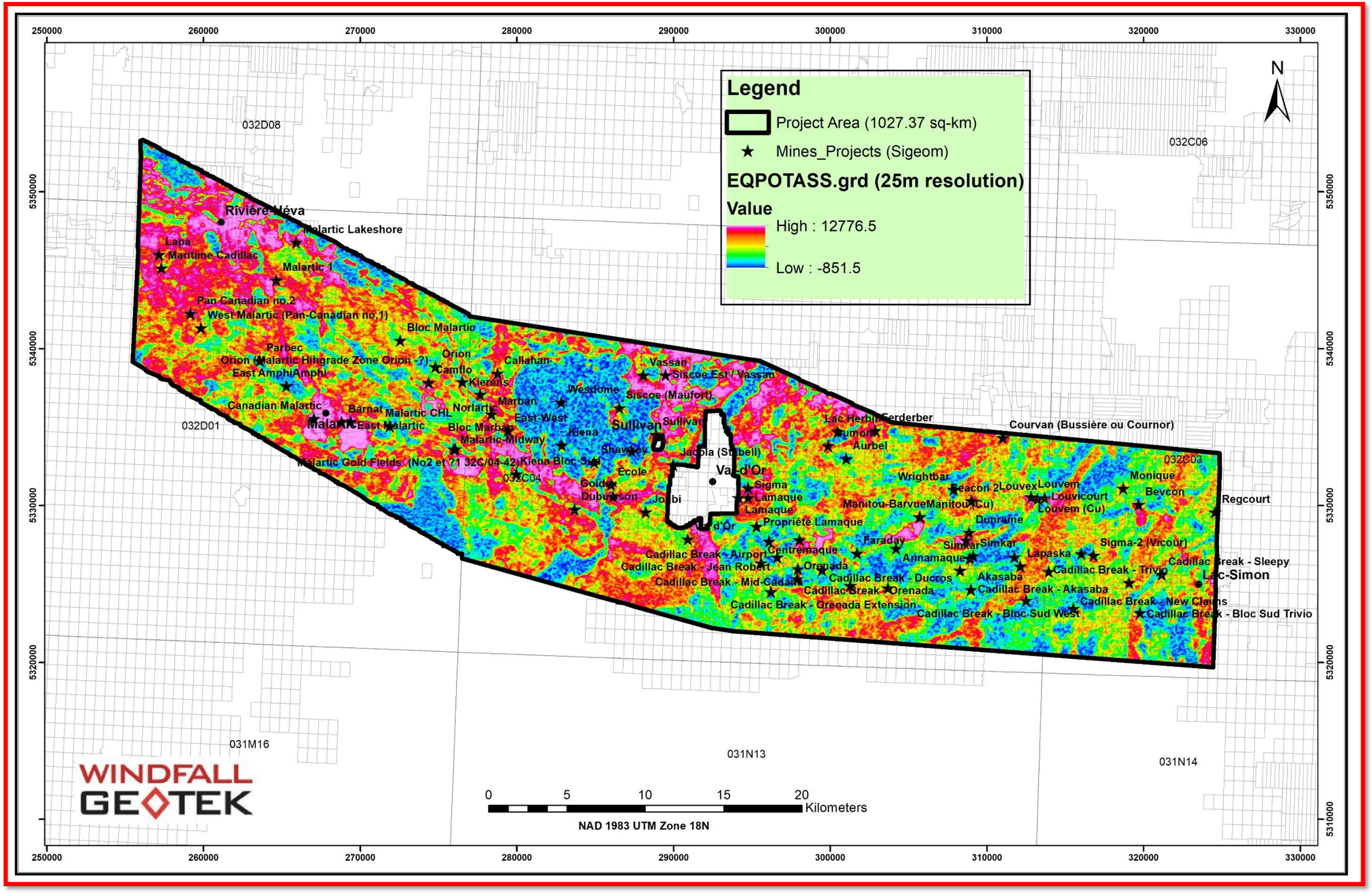

Figure 3: Radiometry data (K) at 25m resolution (Integra Gold's 2015 Gold Rush Competition Hero-X database)

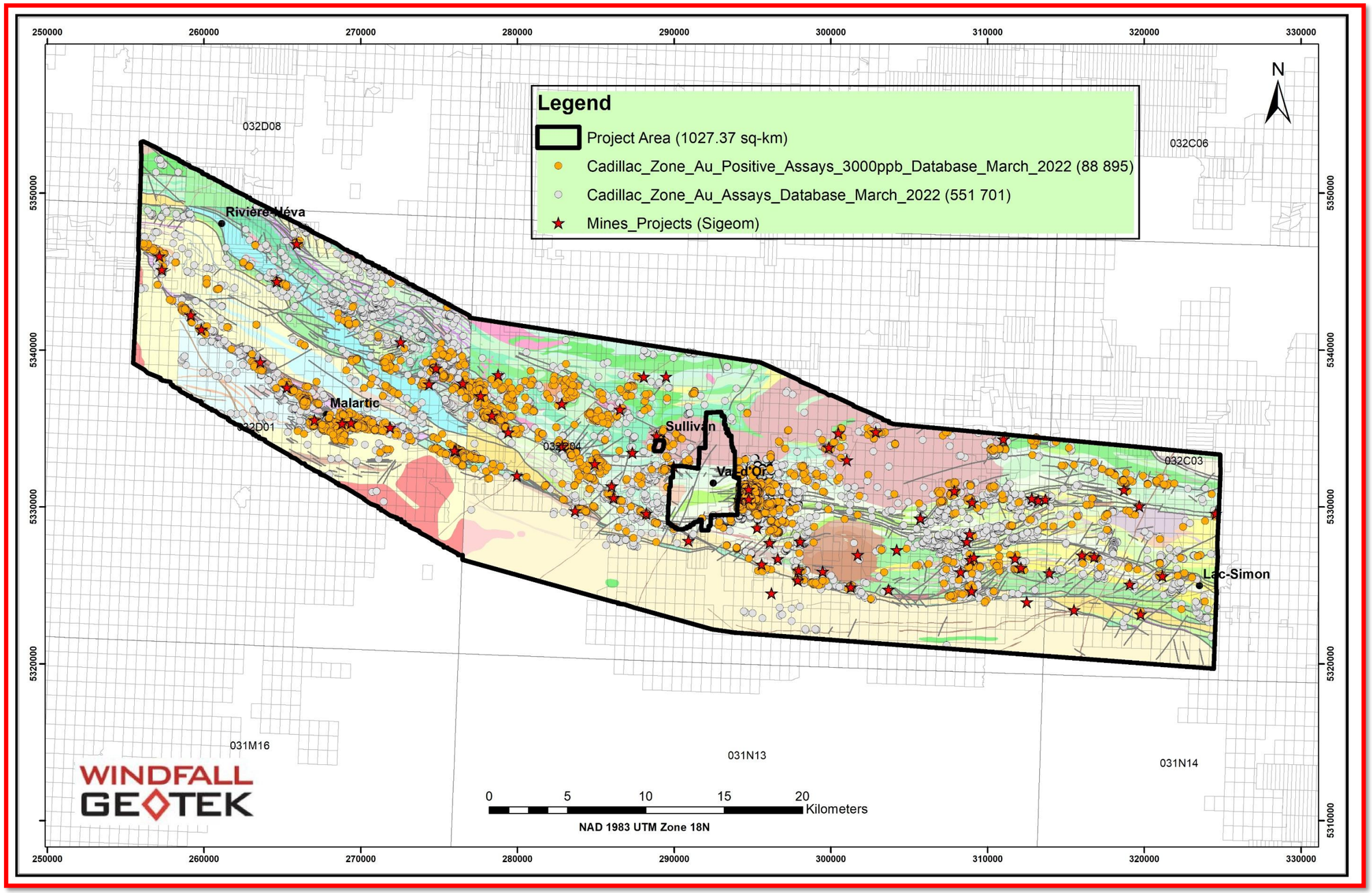

Figure 4: Gold assays data location on background geology (Sigeom)