Bodo SM project

Next major discovery in James Bay area

BODO PROJECT HIGHLIGHTS

- 100% owned without royalty.
- The Bodo project includes 761 cells with an area of nearly 41,000 hectares or 410 km².
- Hosts gold, silver, copper, zinc, nickel, cobalt, molybdenum, PGE, and lithium.
- Presence of several magnetic anomalies, EM conductors , major faults and folds.
- Historical Exploration Work (1960-1980)

Rivon Showing (Copper-Gold-Silver- Zinc- Moly)

Drilling in the 1960s found a mineralized corridor over 1.4 km long by over 600 m wide with copper values up to 9.9%, gold values up to 5.93 g/t, and silver values up to 265 g/t.

Canico Showing (Copper-Gold-Silver- Nickel)

Prospecting in the 1960s revealed significant copper, gold, and silver values from both host rock and erratic blocks. Notable results include copper values up to 9.25%, gold up to 2.20 g/t and silver up to 44 g/t.

Papas Showing (Copper-Gold- Silver, Zinc)

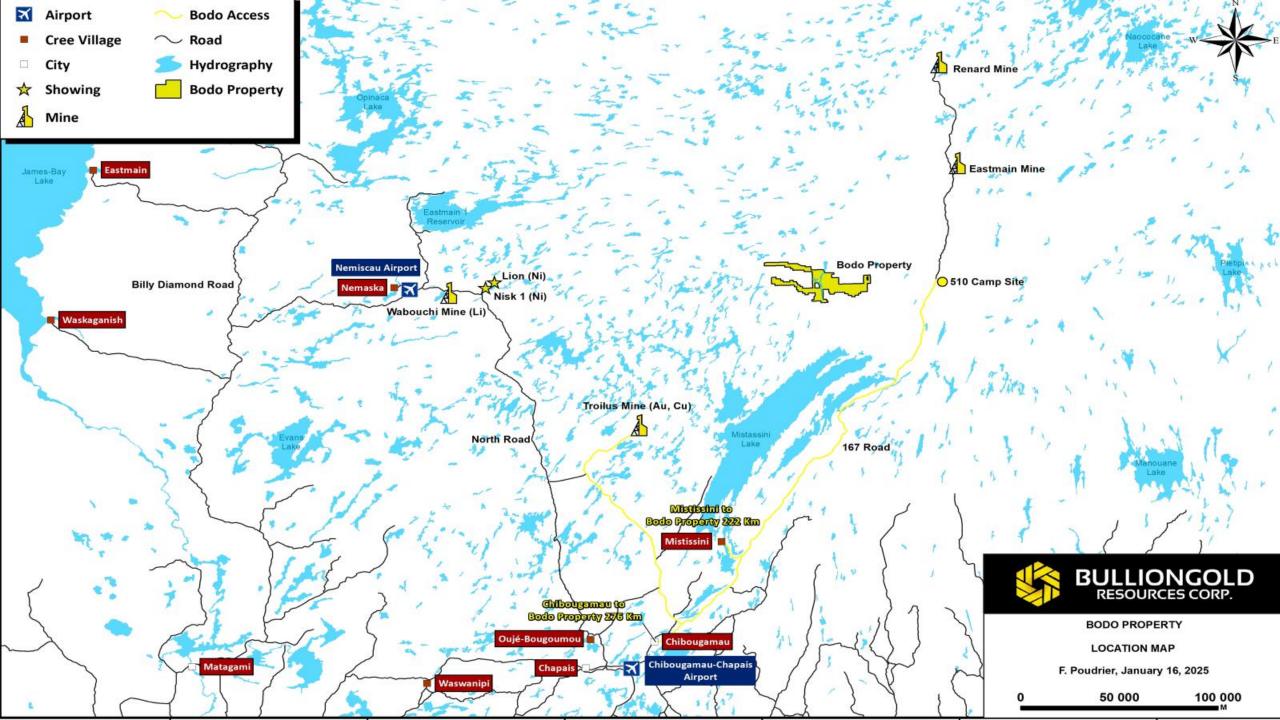
Drilling by Soquem in 1981 traced a rhyolitic lava zone with anomalous gold, silver, copper and zinc values over 90 meters indicating potential for a volcanogenic massive sulfide (VMS) deposit. High mag and EM conductors had been identified in this area.

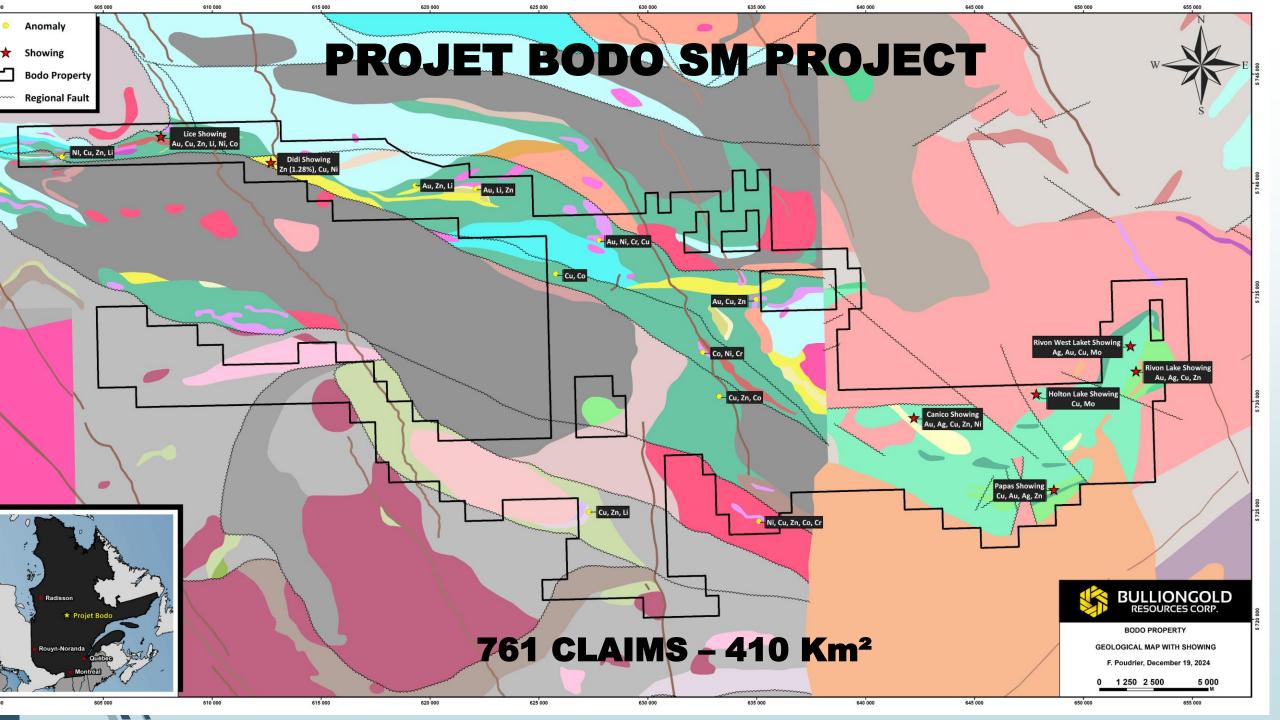
2024 BGD exploration programm (East part)

Discovery of Smiley massive sulfide showing (2 km south of Canico showing) Discovery of the south extension of Rivon Showing and confirmation of the diamond drills program done by Merryl Island on this showing in 1963. Presence of copper along high mags anomalies located south of the project Presence of cobalt along high mags anomalies

2024 MRNF exploration program (West part - BG 2024-05)

Discovery of Licé lithium and Didi zinc showings Discoveries of several significative indices in copper, zinc, gold, nickel, chrome and cobalt.





ECONOMIC GEOLOGY



The Bodo project has favorable areas for eight (8) types of mineralization:

base metal massive sulfide mineralization associated with volcanic rocks of the Lac des Montagnes, Tichégami and Michaux Groups;

base metal mineralization associated with volcanogenic massive sulfides of the Voirdye Formation;

synvolcanic gold-bearing quartz-sulfide veins associated with volcanic rocks of the Michaux Group;

exhalative sulfide mineralization hosted in sedimentary rocks of the Voirdye Formation;

gold mineralization associated with quartz pebble conglomerates and pyritic quartzites of the Voirdye Formation;

stratiform gold mineralization in Algoma-type banded iron formations of the Lac des Montagnes and Tichégami Groups;

magmatic nickel-copper mineralization (± cobalt ± platinum group elements) associated with intrusive rocks of the Nasacauso and Chamic mafic-ultramafic suites;

Ithium mineralization associated with granitic pegmatites of the Senay Suite.



Base metal massive sulfide mineralization associated with volcanic rocks of the Lac des Montagnes, Tichégami and Michaux Groups

In the study area, several evidences attest to hydrothermal and exhalative activity within the volcanic rocks of these three units. These contain several levels of iron formation with oxides, silicates and, locally, sulfides. These are Algoma-type iron formations, banded and folded, located mainly at the contact between the volcanic sequence of the Lac des Montagnes Group or the Tichégami Group and the sedimentary sequence of the Voirdye Formation. Algoma-type iron formations are commonly located stratigraphically above lenses of volcanogenic massive sulfides or represent lateral equivalents of these mineralizations (Jébrak and Marcoux, 2008).

The mineralization, mainly associated with sulfide iron formation levels and silicate iron formations, shows alternations of centimetric chert-magnetite-pyrite-chalcopyrite beds with amphibole-garnet-magnetite beds. In the study area, it is common to observe rusty zones of probably volcanogenic origin that result from the circulation and percolation of fluids in favorable levels or structures. In the Lac des Montagnes Group (Darveau favorable zone), some of these decimetric to metric thickness levels contain 1 to 50% pyrite. The basalts locally show the amphibole-garnet-pyrite-pyrrhotite-magnetite-biotite assemblage that appears to demonstrate the effects of metamorphosed hydrothermal alteration. Locally, decimetric layers of semi-massive pyrite sulfides are found in garnet-pyrite basalts. A sample from one of these layers (2024012304) yielded a value of 13.9% S and significant values for copper (234 ppm Cu) and zinc (214 ppm Zn).

A new mineralized zone discovered during our work, the Didi mineralized zone, hosted in a tuffaceous felsic volcanic rock, yields a content of 1.28% Zn . It corresponds to outcrop 2024-CD-5034 and is located within the Marée Shear Zone in the Lac des Montagnes belt. Mineralization is associated with a metric-scale biotite-garnet \pm pyrite \pm magnetite mafic horizon hosted in a fragmentary, banded, folded and crenulated felsic volcanic rock.



Base metal mineralization associated with volcanogenic massive sulfides of the Voirdye Formation

The Mistamiquechamic 1 favorable zone contains mineralization associated with a sequence of silicified and altered garnet-sillimanite rocks. These rocks, assigned to the Voirdye Formation, are derived from clastic sedimentary rocks or volcaniclastics of felsic to intermediate composition.

This sequence contains stratiform mineralization of disseminated pyrrhotite, chalcopyrite and pyrite. The mineralized horizons are characterized by silicification and aluminous alteration marked by the abundance of garnet. They contain 5 to 10% garnet, 5 to 10% aluminosilicates and 1 to 10% sulfides.



Synvolcanic goldbearing quartz-sulfide veins associated with volcanic rocks of the Michaux Group

The Lac en Crochet 2 favorable zone highlights synvolcanic quartz-sulfide veins within the volcanic rocks of the Michaux Group. This unit locally contains several families of veins associated with sericite, epidote and hematite alteration. The veins consist of quartz \pm epidote \pm sulfides and are hosted in a strongly silicified, epidotized and chloritized andesite that extends over an area of 20 m long by 15 m wide (outcrop 2024-SL-4192).

The veins are millimeter to decimeter thick and are locally sheared. The networks of veins and veinlets are preferentially oriented NW-SE. Veins of this type hosted in intermediate to mafic volcanic rocks could constitute volcanogenic gold-type mineralization (quartz-sericite-pyrite veins).



Exhalative sulfide mineralization hosted in sedimentary rocks of the Voirdye Formation

The Voirdye Formation includes exhalative sulphide (Zn-Pb) mineralization in sedimentary rocks. The Lac Bourier mineralized zone in the Lac des Montagnes belt is an example of this type of mineralization. It shows grades of up to 1.16% Zn (Richard et al., 2012) in a massive sulphide layer interbedded and associated with quartzite and iron formation. In the western part of the Lac Chamic area, the Le Veneur 2 prospective zones consist of slightly metasomatized wacke-derived paragneisses and a calc-silicate rock containing biotite locally accompanied by hornblende and calcite. These zones correspond to a silicified and metamorphosed alteration zone containing up to 5% disseminated pyrite.

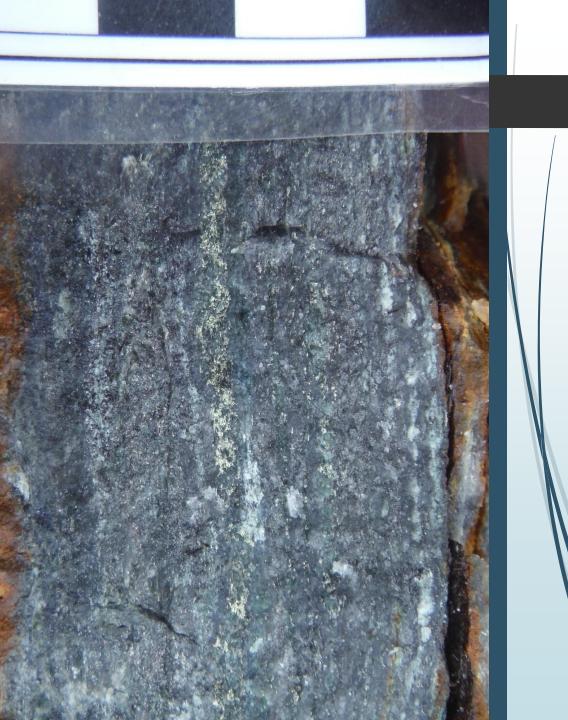
These zinc values associated with a stratigraphic context represented by the contact between the sedimentary rocks of the Voirdye Formation and the volcanic rocks of the Lac des Montagnes Group, with the contents of the favourable Gardes zones (sheet 32O16) and with the contents of the favourable Le Veneur 1 zone (sheet 32P13) could indicate that the Voirdye Formation is favourable to the presence of exhalative type mineralisations.



Gold mineralization associated with quartz pebble conglomerates and pyritic quartzites of the Voirdye Formation

The Voirdye Formation consists of a sequence of sedimentary rocks comprising, at the base, conglomerates overlain by quartzitic arenite and quartzite layers. In the study area, the conglomerates contain quartz pebbles and cobbles in a very quartzose, fine to medium-grained matrix. The fragments are moderately to strongly deformed. The matrix shows the muscovite-sillimanite-fuchsite-garnet assemblage with finely disseminated pyrite. The conglomerates are systematically associated with quartzitic arenite and quartzite units.

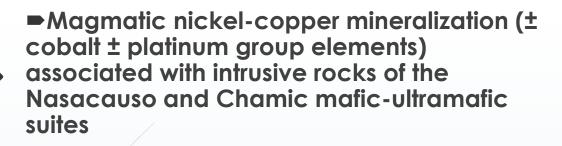
Mineralization is contained in the quartzitic layers and, locally, in a conglomeratic layer. This metric layer of conglomerate contains several 10 to 15 cm thick lenses of semi-massive sulfides within a more deformed zone. The lenses are composed of 15 to 50% pyrite-pyrrhotite-magnetite. The mineralized quartzitic layers contain between 1 and 5% pyrite and up to 25% garnet. The Baudeau 1 favorable zone groups conglomerates and quartzites with gold potential. These quartzitic conglomerates have analogies with the Apple Formation in the Sakami Lake area.



Stratiform gold mineralization in Algomatype banded iron formations of the Lac des Montagnes and Tichégami Groups

The volcanic sequences of the Lac des Montagnes and Tichégami groups include several Algoma-type iron formation levels generally located at the top of these units. The banded iron formations of the Lac des Montagnes Group are silicate, oxide and sulphide. The silicate levels define a succession of bands rich in ferruginous amphibole (grunerite) and cherty bands, while the oxide levels are characterized by alternating centimetre-wide bands of chert and bluish magnetite. These levels are interstratified with sulphide levels that can contain up to 25% finely disseminated or clustered pyrite that contain millimetre-wide laminae of chalcopyrite (outcrop 2024-NT-3039). Silicate iron formations contain sub-magnetic amphiboles and are non-magnetic, unlike oxide iron formations which are strongly so. The Cabat hot zones include Algoma-type iron formations with gold potential.

Analyses yielded significant values for zinc (223 to 345 ppm Zn), copper (127 to 189 ppm Cu) and iron (11.3 to 29.1% Fe) as well as anomalous values for arsenic (260 to 594 ppm As). The banded iron formations of the Tichégami Group are silicate and oxide. Outcrop 2024-CD-5042 shows a silicate and oxide iron formation sequence (grunerite, garnet and magnetite) interbedded with silicate horizons (hornblende and grunerite). The silicate-oxide layer contains <1% disseminated pyrite. Samples 2024012278 and 2024012319 returned values of 16.7 and 17.2% Fe. The Lac 31794-1 favorable zone, an Algoma-type iron formation layer within the Tichégami Group, also shows gold potential.



The Nasacauso and Chamic intrusions include lithologies comparable to those of the Caumont Mafic-Ultramafic Suite, located further SW in the Lac des Montagnes belt, which host several types of magmatic Ni-Cu mineralization (e.g. Nisk-1 deposit and Lac Valiquette mineralized zone) and stratiform chromite (Lac des Montagnes-Sud mineralized zone). The Lac des Montagnes belt (CLM) offers strong potential for Ni-Cu ± PGE ± Cr mineralization associated with intrusive rocks of the Nasacauso Mafic-Ultramafic Suite. In the study area, ultramafic intrusions are also observed north of the CLM intruding into the volcanic rocks of the Tichégami Group, and south of the CLM, hosted in the volcano-sedimentary rocks of the Michaux Group. These units coincide with positive magnetic anomalies of kilometric lateral extent. The mineralizations are associated with generally layered peridotite levels showing zones of cumulates of plivine or pyroxene in millimetric to centimetric crystals.

The intrusive rocks of the Nasacauso Mafic-Ultramafic Suite, generally enriched in Cr, are located near the contact between the plutono-gneissic basement of the Opatica Subprovince and the overlying mafic volcanic rocks. This stratigraphic position is similar to that of the Koper Lake Ultramafic Suite in the SE Ontario Ring of Fire, which is the host unit of several important Ni-Cu-PGE-Cr mineralizations (Houlé et al., 2015 and 2020). Analyses from ultramafic intrusions in the Nasacauso prospective zone yielded significant nickel values (1050 to 1920 ppm Ni), as well as anomalous arsenic (486 to 1470 ppm As) and chromium (1530 to 5520 ppm Cr).

Ultramafic intrusions of the Chamic Mafic-Ultramafic Suite showing potential for Ni-Cu-PGE \pm Cr mineralization form the Chamic 1 favorable zone. Analyses yielded significant values for copper (153 to 201 ppm Cu), zinc (169 to 213 ppm Zn) and anomalous values for nickel (976 to 2210 ppm Ni) and chromium (1360 to 2550 ppm Cr).



Lithium mineralization associated with granitic pegmatites of the Senay Suite

Several significant and anomalous values, as well as an index value for lithium and cesium (Licé mineralized zone) were obtained in paragneisses, quartzites and metasomatic rocks of the Voirdye Formation and basaltic amphibolites, felsic to intermediate volcanic rocks and metasomatic rocks of the Lac des Montagnes Group. Thus, values between 30 and 849 ppm Li, 8 to 31 ppm Ta and 5 to 977 ppm Cs were obtained in rocks other than granitic pegmatites. On the map (see interactive map), these analyses are distributed along a level roughly coinciding with the Marée Shear Zone which cuts the volcanosedimentary rocks of the Lac des Montagnes belt. A grab sample (assay 2024012266) of moderately deformed garnet amphibolite derived from basalt from outcrop 2024-SL-4015 yielded index values for lithium and cesium (0.2% Li and 977 ppm Cs).

One hypothesis is that the Licé mineralized zone is associated with alteration halos of unexposed lithium-bearing pegmatite intrusions, which are injected into volcanic rocks of the Lac des Montagnes belt. Fluids from the lithium-bearing pegmatite dykes are thought to be the source of these index values for lithium. The presence of spodumene pegmatites in the immediate vicinity of the metasomatized amphibolite is therefore highly probable.

