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Assessment Report
on the
Ferdinand Gold Project
Ferdinand Lake & Hailstone Lake Townhsip
Red Lake Mining Division
Northern Ontario
Canada
NTS 052N01 & 052O04

Prepared for

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1.0 SUMMARY

The Ferdinand Gold Project (“the Project”) consists of fifteen (15) multi-cell mining claims and two (2) single cell mining claims and lies within Ferdinand Lake and Hailstone Lake townships of the Red Lake Mining Division within northwestern Ontario. The Property is located within NTS sheets 052N01 and 052O04 and covers an area of 7163 ha. The property is located 120 km north of Sioux Lookout and 132 kilometres east of Red Lake. The nearest major city centres are Winnipeg and Thunder Bay, located 393 km southwest and 365 km southeast from the property, respectively. From Sioux Lookout, the Property can be accessed by travelling on a series of all-weather logging roads northwards to the property.

Gold exploration has been occurring in the region between Red Lake and Pickle Lake since the 1920's. The Property has not been systematically explored for gold but 3 molybdenite showings have been reported proximal to the property boundaries. Two molybdenite occurrences located 1 km north of the centre of the property have been reported: Fawthrop Lake No. 2 and Ferdinand Lake Molybdenum occurrence (Figure 4). Exploration of these occurrences expanded into the property where 3 drill holes were completed.

The Ferdinand Gold Project is situated within the Uchi sub province of the Archean Superior province (Figure 3). The Project is located within the south-eastern extension of the prolific Birch-Uchi greenstone belt that hosts a number of past producing gold mine boasting a collective production of 1.6 M oz Au (Sanborn-Barrie, *et al*., 2004). The volcanic and sedimentary rocks of the Red Lake greenstone belt in the west and Birch-Uchi greenstone belt in the east form a continuous 200 km long arcuate belt surrounding the Trout Lake batholith (Sanborn-Barrie *et al*., 2004). The English River subprovince lies at the fault-bounded south contact of the Red Lake and Uchi-Birch belts and the Berens River Batholith complex intrudes the belts in the north (Sanborn-Barrie *et al.*, 2004). The Red Lake/Birch-Uchi greenstone belt is comprised of three (3) major volcanic assemblages: Balmer, Woman and Confederation. The supracrustal rocks of the Red Lake and Birch-Uchi belts are regionally metamorphized to greenschist and amphibolite facies (Sanborn-Barrie *et al*., 2004). These rocks have been intruded by a number of bodies including the tonalitic Trout Lake plutonic suite, granophyric granodiorite to quartz-feldspar porphyry rocks of the Confederation plutonic suite, as well as the Springpole Lake Pluton to the north of the Property and the Allsion Lake Pluton in the southwest. The Birch-Uchi belt has undergone two penetrative regional deformation events, possibly an older non-penetrative event, and local strain events induced by plutonic activity within and marginal to the belt.

The supracrustal rocks of Ferdinand Lake/Hailstone Lake area consist of 90% mafic to intermediate metavolcanics, most of which are now amphibolite (Wallace, 1983). Preserved features of these units include pillows, tephra, and amygdules, allowing for differentiation of pillowed flows, massive flows, and pyroclastic rocks (Wallace, 1983). The OGS bedrock geology map confirms that the Ferdinand Gold Project is dominated by mafic to intermediate metavolcanic rocks (Figure 4). On the property, a dacitic

pyroclastic metavolcanic lens located east of Hailstone Lake and north of Hailstone Creek was mapped by Wallace (1983), and a lenticular unit of felsic to intermediate metavolcanic rock in the southern part of claim 640611 is shown in the OGS bedrock geology map (Figure 4). The majority of clastic metasedimentary units in the Ferdinand Lake/Hailstone Lake area occur along the southern margin of the main surpracrustal belt, where a semi-continuous sequence flanks the mafic metavolcanics to the north (Wallace, 1983). Chemical and clastic metasediments are rare in the area but are reported on the property between Lake ‘A’ (within claims 640608, 640626, 640630) and Senior Lake, and along Hailstone Creek (Wallace, 1983). Three (3) metagabbroic to dioritic, subconcordant tabular intrusive bodies in the eastern end of the property have been mapped by Wallace (1983) and are shown in the OGS bedrock geology map. Intrusive rocks of the area range in composition from trondhjemite to pegmatoid granite (Wallace, 1983). These intrusive units margin the north and south of the property boundaries (Figure 4). Between Ferdinand Lake and Snelgrove Lake, a trondhjemite unit of the North Bamaji Lake Intrusion displays cataclastic foliation resulting from series of west-northwest-trending faults splaying off if the Bamaji Lake Fault Zone in the east (Wallace, 1983).

Within the local supracrustal belt of the Ferdinand Lake/Hailstone Lake area, the dominant structural feature is a westerly plunging syncline, the axis of which longitudinally bisects the belt. About 3 km to the east of the nose of the fold, the westernmost part of the Bamaji-Fry Lake Belt forms a very similar narrow syncline with a moderately shallow plunge to the east. Straight Up Resources has interpreted folded stratigraphy along possible D2 structures. These crustal-scale features may have acted as hydrothermal fluid conduits and are potential hosts of gold mineralization (https://www.straightupresources.com/projects/ferdinand-gold-project/).

Prospectair Geosurveys conducted a high-resolution heliborne magnetic survey over a block on Ferdinand Gold Project consisting of 1,579 line km flown from May 27th to 30th. The survey was flown with traverse lines at 50 m spacing oriented N005 and control lines spaced every 500 m oriented N095 (Figure 5). Analysis of the magnetic response suggests that the property is comprised of a wide, east-west elongated central band of alternating sequences of mafic volcanics with sedimentary or intermediate to felsic volcanic rocks, surrounded by felsic to intermediate intrusive rock packages. The strongest anomaly of the survey, located in the northeastern part of the block, depicts a straight, northwest-southeast-oriented lineament extending for over 2 km (Figure 7). This anomaly is thought to relate to magnetite rich mafic or ultramafic intrusive rocks. The majority of magnetic lineaments found in the survey block are trending from WNW-ESE to ENE-WSW except in the area at the eastern extend of the wide central band, which seems to depict a regional fold hinge, and in a few areas where lineaments appear to be strongly curved by smaller-scale shearing or folding. The presence of these structures along with possible evidence of boundinaging, suggests that the area has undergone multiple strong deformation events. Throughout the block, structural features offset magnetic lineaments and cause abrupt interruption or changes of the magnetic response. These features are typically caused by faults, fractures and shear zones which may be relevant to gold exploration on the property.

Orix Geoscience carried out a surface geology interpretation by integrating historical geology and the new high-resolution aeromagnetic data to help identify focus area for future exploration Ferdinand project from October 2021 through November 2021. The interpretation relied heavily on magnetic signatures outlined in the recent survey as there were limitation on detailed outcrop maps and drilling information within the property boundary. At least two possible phases of deformation are identified in the structural reinterpretation of the Ferdinand Gold Property. A prospecting program with a focus on structural geology is recommended to further trace prospective units, contact and structures associated with mineralization and collect structural observations to help verify the interpretation.

2.0 INTRODUCTION

The Ferdinand Gold Project consists of fifteen (15) multi-cell mining claims and two (2) single cell mining claims and lies within Ferdinand Lake and Hailstone Lake townships of the Red Lake Mining Division within northwestern Ontario. The Property is located within NTS sheets 052N01 and 052O04 and covers an area of 7163 ha. The property is located 120 km north of Sioux Lookout and 132 kilometres east of Red Lake. The nearest major city centres are Winnipeg and Thunder Bay, located 393 km southwest and 365 km southeast from the property, respectively. From Sioux Lookout, the Property can be accessed by travelling on a series of all-weather logging roads northwards to the property. Logging roads are expected to expand into the property to allow for better access to all areas of the property.

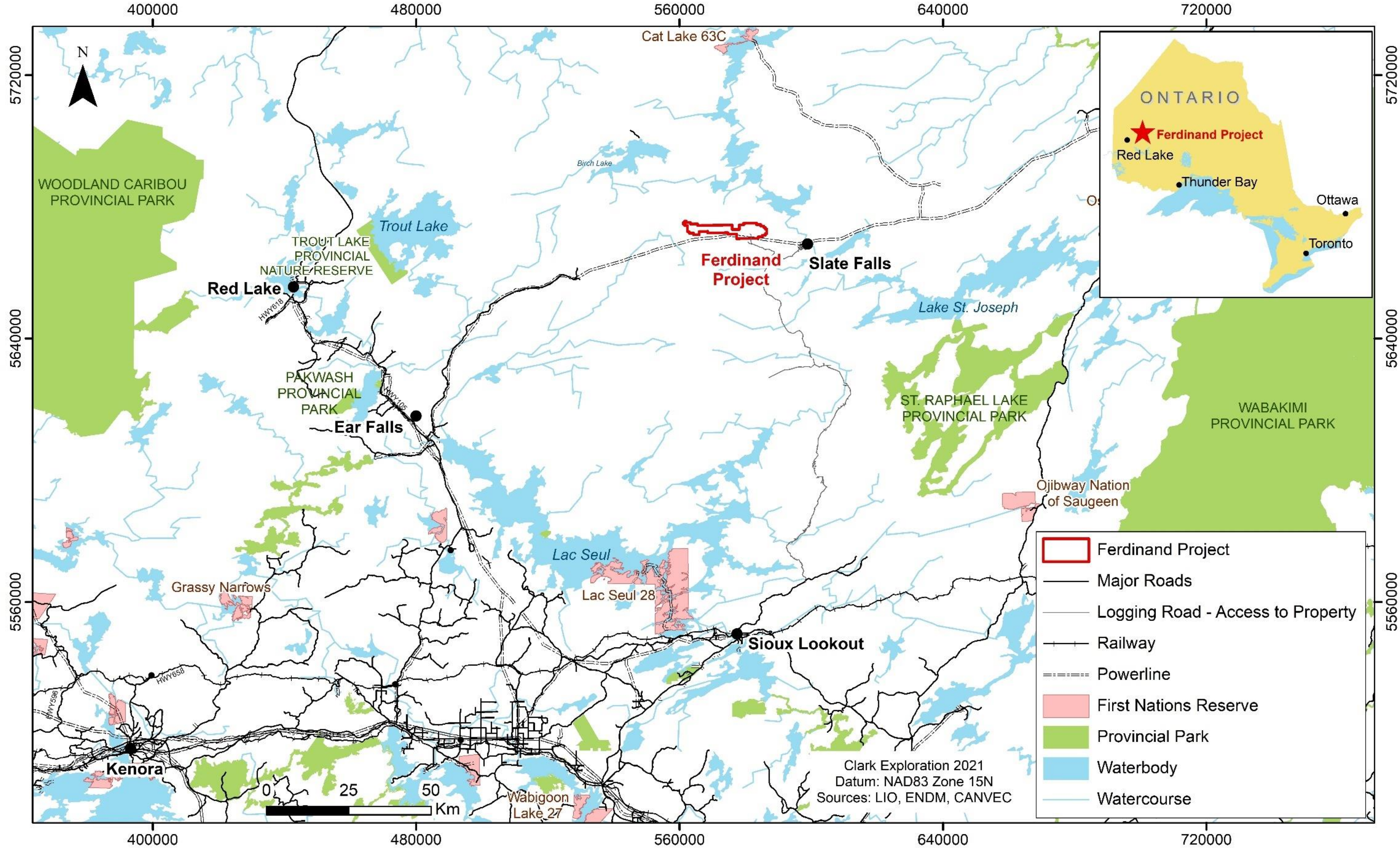
Gold exploration has been occurring in the region between Red Lake and Pickle Lake since the 1920's. The Property has not been systematically explored for gold but 3 molybdenite showings have been reported proximal to the property boundaries. Two molybdenite occurrences located 1 km north of the centre of the property have been reported: Fawthrop Lake No. 2 and Ferdinand Lake Molybdenum occurrence (Figure 4). Exploration of these occurrences expanded into the property where 3 drill holes were completed.

The Ferdinand Gold Project is situated within the Uchi sub province of the Archean Superior province (Figure 3). The Project is located within the south-eastern extension of the prolific Birch-Uchi greenstone belt that hosts a number of past producing gold mine boasting a collective production of 1.6 M oz Au (Sanborn-Barrie, *et al*., 2004). The volcanic and sedimentary rocks of the Red Lake greenstone belt in the west and Birch-Uchi greenstone belt in the east form a continuous 200 km long arcuate belt surrounding the Trout Lake batholith (Sanborn-Barrie *et al*., 2004). The English River subprovince lies at the fault-bounded south contact of the Red Lake and Uchi-Birch belts and the Berens River Batholith complex intrudes the belts in the north (Sanborn-Barrie *et al.*, 2004). The Red Lake/Birch-Uchi greenstone belt is comprised of three (3) major volcanic assemblages: Balmer, Woman and Confederation. The supracrustal rocks of the Red Lake and Birch-Uchi belts are regionally metamorphized to greenschist and amphibolite facies (Sanborn-Barrie *et al*., 2004). These rocks have been intruded by a number of bodies including the tonalitic Trout Lake plutonic suite, granophyric granodiorite to quartz-feldspar porphyry rocks of the Confederation plutonic suite, as well as the Springpole Lake Pluton to the north of the Property and the Allsion Lake Pluton in the southwest. The Birch-Uchi belt has undergone two penetrative regional deformation events, possibly an older non-penetrative event, and local strain events induced by plutonic activity within and marginal to the belt.

The supracrustal rocks of Ferdinand Lake/Hailstone Lake area consist of 90% mafic to intermediate metavolcanics, most of which are now amphibolite (Wallace, 1983). Preserved features of these units include pillows, tephra, and amygdules, allowing for differentiation of pillowed flows, massive flows, and pyroclastic rocks (Wallace, 1983). The OGS bedrock geology map confirms that the Ferdinand Gold Project is dominated by mafic to intermediate metavolcanic rocks (Figure 4). Most felsic to intermediate metavolcanics within the Ferdinand Lake/Hailstone Lake area are concentrated in small lenses up to a few hundred metres thick, traceable for up to 5 km along strike within the supracrustal belt (Wallace, 1983). On the property, a dacitic pyroclastic metavolcanic lens located east of Hailstone Lake and north of Hailstone Creek was mapped by Wallace (1983), and a lenticular unit of felsic to intermediate metavolcanic rock in the southern part of claim 640611 is shown in the OGS bedrock geology map (Figure 4). The majority of clastic metasedimentary units in the Ferdinand Lake/Hailstone Lake area occur along the southern margin of the main surpracrustal belt, where a semi-continuous sequence flanks the mafic metavolcanics to the north (Wallace, 1983). Chemical and clastic metasediments are rare in the area but are reported on the property between Lake ‘A’ (within claims 640608, 640626, 640630) and Senior Lake, and along Hailstone Creek (Wallace, 1983). Three (3) metagabbroic to dioritic, subconcordant tabular intrusive bodies in the eastern end of the property have been mapped by Wallace (1983) and are shown in the OGS bedrock geology map. Approximately 85% percent of the Ferdinand Lake/Hailstone Lake area is underlain by intrusive rocks ranging in composition from trondhjemite to pegmatoid granite (Wallace, 1983). These intrusive units margin the north and south of the property boundaries (Figure 4). Between Ferdinand Lake and Snelgrove Lake, a trondhjemite unit of the North Bamaji Lake Intrusion displays cataclastic foliation resulting from series of west-northwest-trending faults splaying off if the Bamaji Lake Fault Zone in the east (Wallace, 1983).

Within the local supracrustal belt of the Ferdinand Lake/Hailstone Lake area, the dominant structural feature is a westerly plunging syncline, the axis of which longitudinally bisects the belt. About 3 km to the east of the nose of the fold, the westernmost part of the Bamaji-Fry Lake Belt forms a very similar narrow syncline with a moderately shallow plunge to the east. Two large-scale structural domes have also been indicated around Sesikinaga Lake and west of Snelgrove Lake. Straight Up Resources also recognizes folded stratigraphy along possible D2 structures. These crustal-scale features may have acted as hydrothermal fluid conduits and are potential hosts of gold mineralization (https://www.straightupresources.com/projects/ferdinand-gold-project/).

Figure 1: Ferdinand Gold Project Location



3.0 PROPERTY DESCRIPTION AND LOCATION

The Ferdinand Gold Project consists of fifteen (15) multi-cell mining claims and two (2) single cell and lies within Ferdinand Lake and Hailstone Lake areas of the Red Lake Mining Division within northwestern Ontario (Figure 2). The property is located 120 km north of Sioux Lookout, 132 kilometres east of Red Lake and 17 km west of Slate Falls First Nation. The Property is located within NTS sheets 052N01 and 052O04. The approximate centre of the property is located 577,000 m E 5,672,000 m N and covers an area of 7163 ha (Figure 2). The total work requirement for the property annually amounts to $150,800.

On April 10, 2018, Ontario converted their manual system of ground and paper staking and maintaining unpatented mining claims to an online system. All active, unpatented claims were converted from their legally defined location by claim posts on the ground or by township survey to a cell-based provincial grid. Mining claims are now legally defined by their cell position on the grid and coordinate location in the Mining Land Administration System (“MLAS”) map viewer.

The proposed exploration program recommended in this report is subject to the guidelines, policies and legislation of the Ontario Ministry of Energy, Northern Development and Mines (“MENDM”), Ontario Ministry of Natural Resources and Federal Department of Fisheries and Oceans regarding surface exploration, stream crossings, and work being carried out near rivers and bodies of water, drilling and sludge disposal, drill casings, capping of holes, storage of core, trenching, road construction, waste and garbage disposal.

No mineral resources, reserves or mines existing prior to the mineralization described in this report are known by the Author to occur on the Property. The Authors know of no environmental liabilities associated with the Property, and there are no other known factors or risks that may affect access, title, or the right or ability to perform work on the Property. The mining claims do not give the claim holder title to or interest in the surface rights on those claims, and as the land is crown land, legal access to the claims is available by public roads which cross the Property.

Figure 2: Ferdinand Gold Project Claims

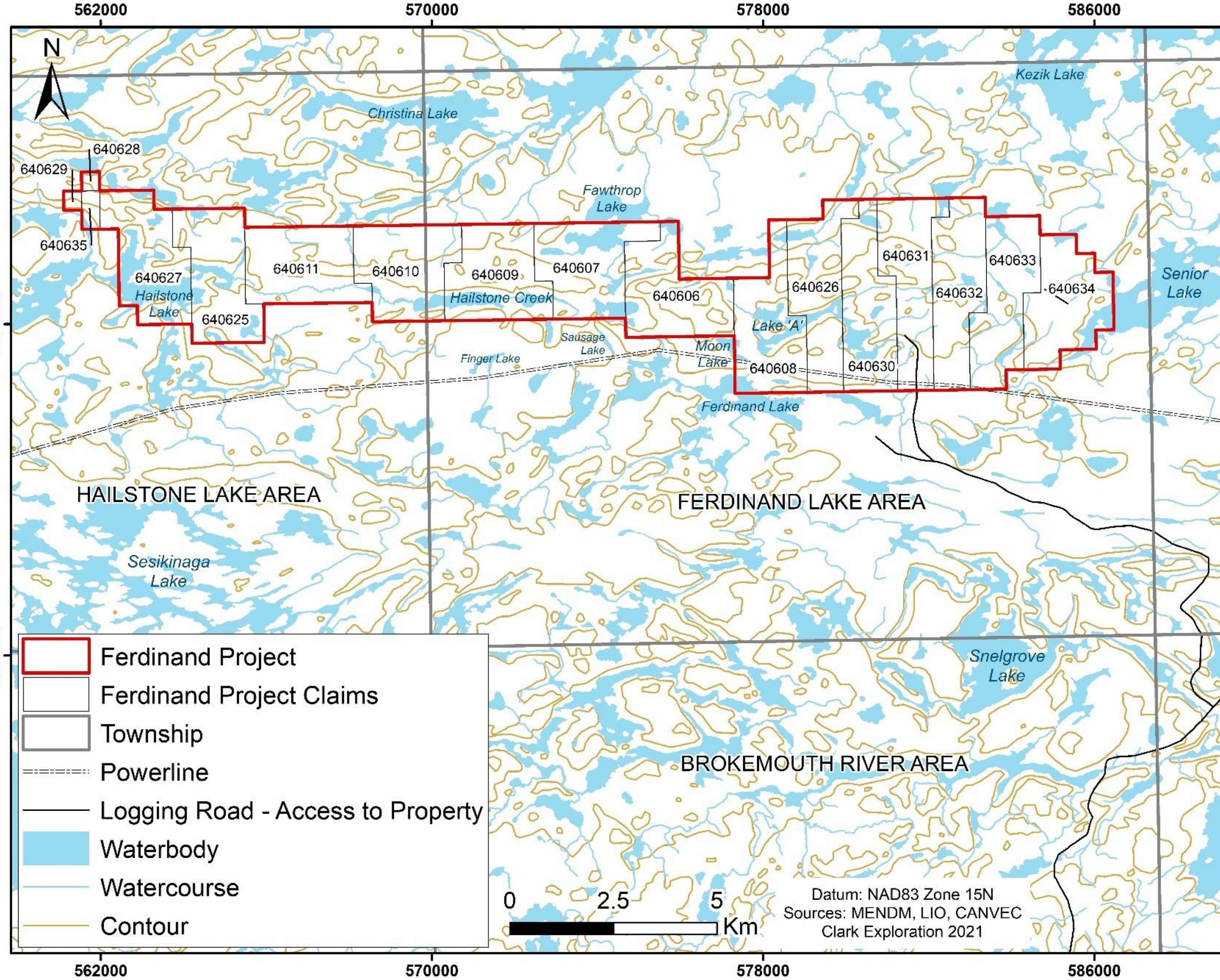


Table 1: Ferdinand Gold Project Claims

Claim Number	Claim Type	Anniversary Date	Holder	Township	Number of Cells	Annual Work Requirement
640606	Multi-cell Mining Claim	2023-03-04	(100) Solstice Gold Corp.	FERDINAND LAKE AREA	25	$10,000
640607	Multi-cell Mining Claim	2023-03-04	(100) Solstice Gold Corp.	FERDINAND LAKE AREA	25	$10,000
640608	Multi-cell Mining Claim	2023-03-04	(100) Solstice Gold Corp.	FERDINAND LAKE AREA	25	$10,000
640609	Multi-cell Mining Claim	2023-03-04	(100) Solstice Gold Corp.	FERDINAND LAKE AREA	25	$10,000
640610	Multi-cell Mining Claim	2023-03-04	(100) Solstice Gold Corp.	FERDINAND LAKE AREA	25	$10,000
640611	Multi-cell Mining Claim	2023-03-04	(100) Solstice Gold Corp.	HAILSTONE LAKE AREA	25	$10,000
640625	Multi-cell Mining Claim	2023-03-04	(100) Solstice Gold Corp.	HAILSTONE LAKE AREA	25	$10,000
640626	Multi-cell Mining Claim	2023-03-04	(100) Solstice Gold Corp.	FERDINAND LAKE AREA	25	$10,000
640627	Multi-cell Mining Claim	2023-03-04	(100) Solstice Gold Corp.	HAILSTONE LAKE AREA	25	$10,000
640628	Single Cell Mining Claim	2023-03-04	(100) Solstice Gold Corp.	HAILSTONE LAKE AREA	1	$400
640629	Single Cell Mining Claim	2023-03-04	(100) Solstice Gold Corp.	HAILSTONE LAKE AREA	1	$400
640630	Multi-cell Mining Claim	2023-03-04	(100) Solstice Gold Corp.	FERDINAND LAKE AREA	25	$10,000
640631	Multi-cell Mining Claim	2023-03-04	(100) Solstice Gold Corp.	FERDINAND LAKE AREA	25	$10,000
640632	Multi-cell Mining Claim	2023-03-04	(100) Solstice Gold Corp.	FERDINAND LAKE AREA	25	$10,000
640633	Multi-cell Mining Claim	2023-03-04	(100) Solstice Gold Corp.	FERDINAND LAKE AREA	25	$10,000
640634	Multi-cell Mining Claim	2023-03-04	(100) Solstice Gold Corp.	FERDINAND LAKE AREA	25	$10,000
640635	Multi-cell Mining Claim	2023-03-04	(100) Solstice Gold Corp.	HAILSTONE LAKE AREA	25	$10,000

4.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The property is located 120 km north of Sioux Lookout and 132 kilometres east of Red Lake within Ferdinand Lake and Hailstone Lake areas of the Red Lake Mining Division of northwestern Ontario (Figure 1). The nearest major city centres are Winnipeg and Thunder Bay, located 393 km southwest and 365 km southeast from the property, respectively.

The property can be accessed from Thunder by travelling 50 km northwest along highway 102 to Shabaqua, turning north onto Highway 11/17 and travelling 172 km northwest to the town of Ignace, turning northeast and travelling along Highway 599 for 56 km to Silver Dollar, and then turning again to the northwest and travelling to 65 km Sioux Lookout. From Sioux Lookout, traveling 27 km northeast to the intersection of a north-trending logging road and then following this logging road towards Slate Falls for 124 km leads to an intersection with a northwest-trending logging road (Figure 1 and 2). This logging road can be followed for approximately 12 km before nearing the power line that intersects part of the property. Access into the property is foreseen to improve with scheduled expansions of logging roads with forestry logging operations (https://www.straightupresources.com/projects/ferdinand-gold-project/). Several disused forestry roads were found to transect the southeastern part of the property, but these were overgrown with alders and small spruce and pine trees

The town of Sioux Lookout (population 5272 as of 2016) provides retail, healthcare, manufacturing, accommodations and transportation services. Sioux Lookout is serviced by the Sioux Lookout airport, Highway 72 and the Sioux Lookout railway station. Slate Falls, located 17 km from the property, is an Ojibwe First Nation band government with a population of 241 as of 2016. Slate Falls is accessible by float and ski planes and an airstrip provides access via a wheeled aircraft.

The city of Winnipeg, Manitoba (population 750,000), located 393 km southwest from the Property and provides access to rail, national highway, port and international airport services. Equipment and industry support relevant to the mining industry are available in Winnipeg. Similarly, the City of Thunder Bay, 365 km southeast from the Property, has a population of 110,000 and provides support services, equipment and skilled labour for both the minerals exploration and mining industries. Rail, national highway, port and international airport services are also available out of Thunder Bay.

The climate in the Sioux Lookout area is described as warm-summer humid continental (climate type Dfb according to the Köppen climate classification system). Average temperatures vary from 19.2°C in July and -15.9°C in January. Annual precipitation averages 828 mm. Snow usually starts falling during late October and starts melting during March but is not normally fully melted until late April

Bedrock exposure of the Ferdinand Lake/Hailstone Lake area is generally 20-30% and outcrops are typically bold and extensive. Relief of the area is relatively low, in the order of 30 m (Wallace, 1983). The elevation is ranging from 385 to 474 m above mean sea level (MSL) according to observations found from the 2021 geophysical survey. Typical outcrop exposure is found in a series of east-west-trending ridges interspersed with swamps or overburden (Hodgson, 2012). West of Hailstone Lake, a thick, sandy overburden cover limits outcrop exposure (Wallace, 1983). Most of the Ferdinand Lake/Hailstone Lake area is forested with black spruce and balsam fir, with poplar, white birch and jackpine populating areas of better drainage and sandy soil (Wallace, 1983). The property is intersected by several small lakes including Fawthrop Lake, Hailstone Lake and Senior Lake (Figure 2). Hailstone creek crosscuts east-west in the centre of the property. Lake ‘A’ as denoted by Wallace (1983), covers part of claims 640608, 640626, 640630 (Figure 2). Ferdinand Lake, at the centre of southern boundary of the property, drains southward through a series of small lakes and eventually to Snelgrove Lake (Hodgson, 2012).

5.0 HISTORY

Gold exploration has been occurring in the region between Red Lake and Pickle Lake since the 1920's. The Property has not been systematically explored for gold but 3 molybdenite showings have been reported proximal to the property boundaries. An occurrence along Senior Lake located at the eastern tip of the property is reported by Wallace (1983) (Figure 3). This showing consists of a mineralized quartz vein with molybdenite mineralization locally up to 15% MoS_2. Two molybdenite occurrences located 1 km north of the centre of the property have been reported: Fawthrop Lake No. 2 and Ferdinand Lake Molybdenum occurrence (Figure 4). Fawthrop Lake No. 2 was explored by Madsen Red Lake Gold Mines in 1969. This work included prospecting, trenching and diamond drilling (2 holes totalling 47 m). The Ferdinand Lake Molybdenum occurrence was explored by Umex Corp. Inc. and this work expanded onto the Property, as outlined in the exploration history timeline below.

1973 – Umex Corp. Inc. (AFRI 52O06NW0068)
An airborne geophysical survey was flown for Umex Corp Inc. by CANICo. A total of 6465 line km were surveyd over three blocks in the Crobie area. The survey covers eastern half of current Ferdinand Gold Project.

1974 – Umex Corp. Inc. (AFRI 52O04NW8968)
One hole drilled by Umex (C169) totalled 62.8 m on legacy claim KRL 356537 located in the southeast corner of the current claim 640630 (Figure 4). This hole intersected an interval of graphitic schist in “tuffite” host with massive pyrrhotite up to 50-80% between 20.7-22.9 m.

1974 – Umex Corp. Inc. (AFRI 52O04NW8969)
One hole drilled by Umex (C170) totalled 60.6 m on legacy claim KRL 356430 located on the current claim 640634 (Figure 6). This hole intersected interbedded graphitic schist with semi massive pyrrhotite from 23.5-33.5 m.

1974 – Umex Corp. Inc. (AFRI 52O04NW8970)
One hole drilled by Umex (C174) totalled 72.8 m on legacy claim KRL 356523 located in the in southern part of the current claim 640631 (Figure 4). This hole intersected an interval graphitic schist within “tuffite” occurring in bands with semi massive pyrrhotite from 29.6-49.4 m.

Wallace (1983) reports that the best values obtained from each of these three Umex drill holes are as follows: 0.08% MoS_2 over 1.38 m, 0.96% MoS_2 over 0.64 m, and 0.08% MoS_2 over 0.58 m. It is uncertain which of the three drill holes provided which results.

1984-2012 - Rand Graham Hodgson (AFRI 20000008652)
The extent of Hodgson’s Ferdinand Lake Property covers claim 640608 of the current Ferdinand Gold Project. A sample from Hodgson's reconnaissance grab sample program in 1984 returned 470 ppb in chlorite schist (Hodgson, 2012). No official record of this work has been found. Geological mapping and a VLF EM survey was conducted by

prospectors on the property in 2012 as a follow-up. The VLF EM survey covered 88 line km with line spacing of 161 m and station spacing of 16 m over Hodgson’s Ferdinand Lake Property. The conductors identified were attributed to topographic features and a power line. The 71 grab and soil samples collected and sent for assay returned values of less than 0.02 gram/tonne. Minor pyrite mineralization was recognized in chlorite schists.

6.0 GEOLOGICAL SETTING AND MINERALIZATION

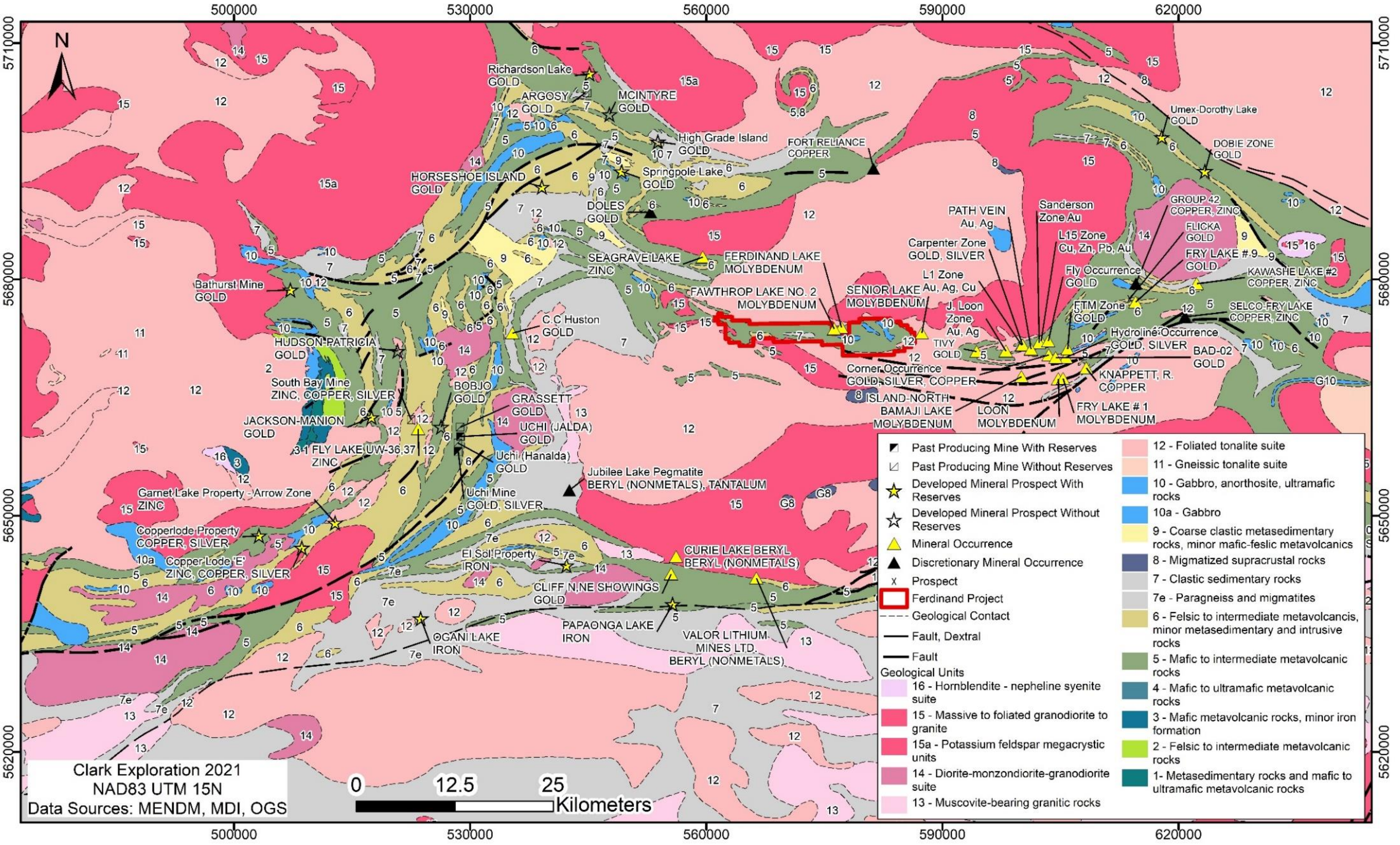
6.1 Regional Geology

The Ferdinand Gold Project is situated within the Uchi sub province of the Archean Superior province (Figure 3). The Project is located within the south-eastern extension of the prolific Birch-Uchi greenstone belt that hosts a number of past producing gold mine boasting a collective production of 1.6 M oz Au (Sanborn-Barrie, *et al*., 2004). The volcanic and sedimentary rocks of the Red Lake and Birch-Uchi greenstone belts form a continuous 200 km long arcuate belt surrounding the Trout Lake batholith (Sanborn-Barrie *et al*., 2004). The Red Lake greenstone belt (3.0-2.7 Ga) lies to the west and the Birch-Uchi belt (2.73 Ga) lies to the east of the Trout Lake batholith. The English River subprovince lies at the fault-bounded south contact of the Red Lake and Uchi-Birch belts and the Berens River Batholith complex intrudes the belts in the north (Sanborn-Barrie *et al.*, 2004).

The Red Lake/Birch-Uchi greenstone belt is comprised of three (3) major volcanic assemblages: Balmer, Woman and Confederation. The Balmer Assemblage consists mainly of tholeiitic to komatiitic flows, sills and sub-volcanic intrusions, with a lesser abundance of iron formation, rhyolitic flows and associated pyroclastic, and clastic sedimentary rock. The Woman assemblage forms a band of arc-like volcanic rocks of the Birch-Uchi belt (Sanborn-Barrie *et al*., 2004). The Confederation assemblage, the most extensive volcanic sequence in the Uchi Subprovince, dominates the stratigraphy of the Birch-Uchi belt. The three volcanic sequences of the Confederation assemblage are the Knott, Agnew and Earngey sequences. The Agnew sequence consists of mainly tholeiitic basaltic and the rhyolitic rocks of the South Bay VMS mine. (Sanborn-Barrie *et al*., 2004).

The supracrustal rocks of the Red Lake and Birch-Uchi belts are regionally metamorphized to greenschist and amphibolite facies (Sanborn-Barrie *et al*., 2004). These rocks have been intruded by a number of bodies including the tonalitic Trout Lake plutonic suite, granophyric granodiorite to quartz-feldspar porphyry rocks of the Confederation plutonic suite, as well as the Springpole Lake Pluton to the north of the Property and the Allsion Lake Pluton in the southwest. The Birch-Uchi belt has undergone two penetrative regional deformation events, possibly an older non-penetrative event, and local strain events induced by plutonic activity within and marginal to the belt.

Figure 3: Regional Geology



6.2 Local and Property Geology

The Ferdinand Gold Project and surrounding area is underlain by Archean units Birch-Uchi greenstone belt. The geology of the Ferdinand Lake area and Hailstone Lake area was mapped in detail by Wallace (1983). The supracrustal rocks of Ferdinand Lake/Hailstone Lake area consist of 90% mafic to intermediate metavolcanics, most of which are now amphibolite (Wallace, 1983). Preserved features of these units include pillows, tephra, and amygdules, allowing for differentiation of pillowed flows, massive flows, and pyroclastic rocks (Wallace, 1983). The OGS bedrock geology map confirms that the Ferdinand Gold Project is dominated by mafic to intermediate metavolcanic rocks (Figure 4). Within northeastern part of Hailstone Lake, a pillowed flow volcanic unit consisting of small pillows (<30cm along long axis) are altered to actinolite-tremolite and chlorite, suggesting an ultramafic composition (Wallace, 1983). Pillows to the northwest of Hailstone Lake are up to 1.5 m along on the long axis. Grain sixes of massive volcanic flows range from aphanitic to over 1 cm. Coarse porphyroblasts are common to both massive and pillowed flows. Toward the contact with surrounding plutonic units, mafic flows are dominated by garnetiferous amphibolites of gneissic or granoblastic textures. Mafic pyroclastic rocks are rare within the area.

The majority of felsic to intermediate metavolcanics of the Ferdinand Lake/Hailstone Lake area are identified as pyroclastic units (Wallace, 1983). Most felsic to intermediate metavolcanics are concentrated in small lenses up to a few hundred metres thick, traceable for up to 5 km along strike within the supracrustal belt. The largest of the felsic metavolcanic lenses, located east of Hailstone Lake and north of Hailstone Creek, consists of a dacitic sequence of finely to thickly bedded lithic tuff and fine lapilli-tuff units (Wallace, 1983). The OGS bedrock geology map shows a lenticular unit of felsic to intermediate metavolcanic rock in the southern part of claim 640611 (Figure 4).

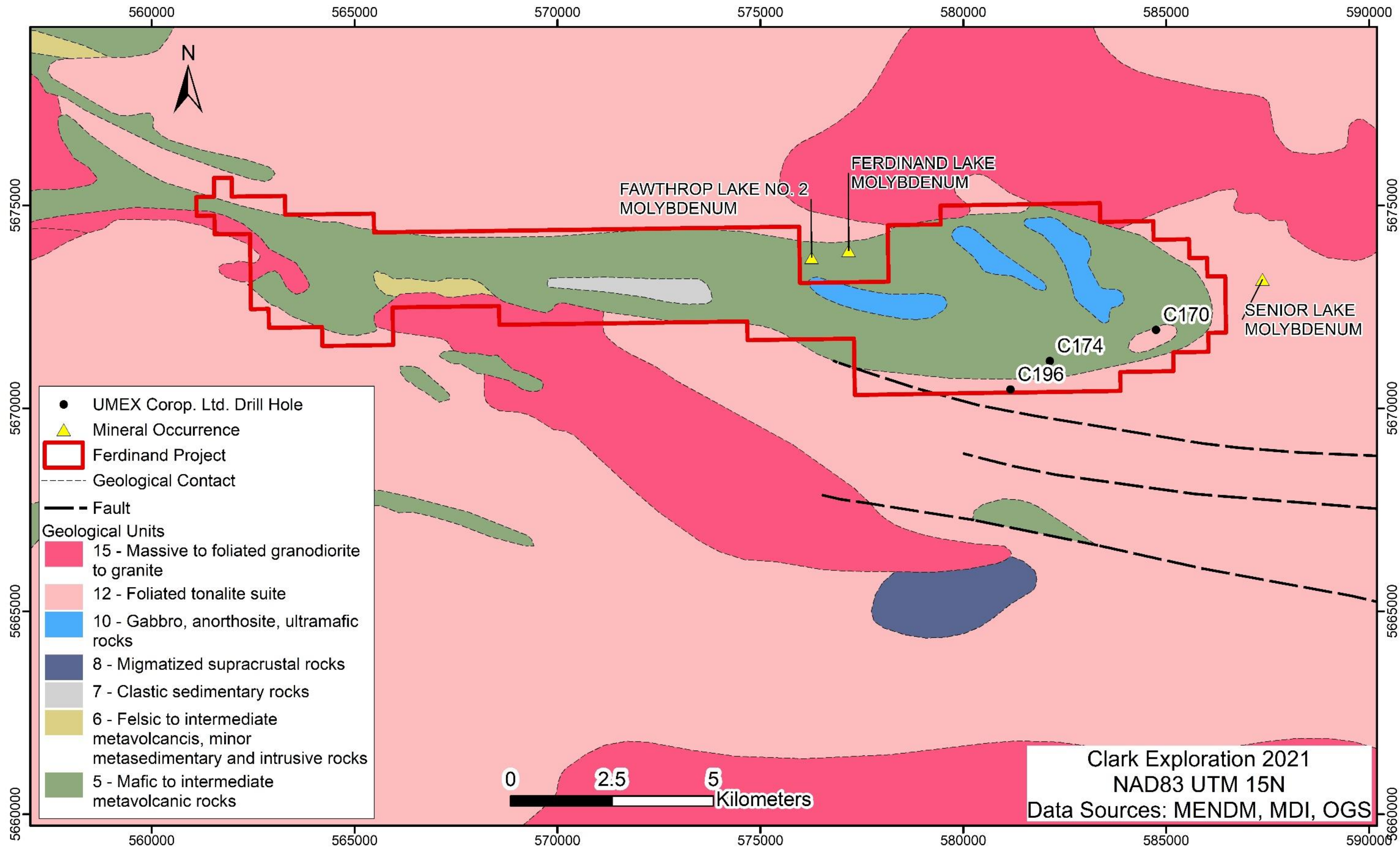
The majority of clastic metasedimentary units in the Ferdinand Lake/Hailstone Lake area occur along the southern margin of the main surpracrustal belt, where a semi-continuous sequence flanks the mafic metavolcanics to the north (Wallace, 1983). Chemical metasediments are rare in the area but one occurrence 3 km from Senior Lake (eastern tip of the Property) where a moderately strong aeromagnetic anomaly (ODM-GSC 1960a,b) extends northwestward for roughly 2.5 km (Wallace, 1983). An exposure of this unit located between Lake ‘A’ (within claims 640608, 640626, 640630) and Senior Lake reveals that this unit is composed of interbedded finely laminated chert and quartz-magnetite ironstone with rare interbeds of amphibole-calcite rocks, possibly representing limestone intercalations (Wallace, 1983). A lenticular body of clastic metasedimentary rock with potential chemical sedimentary units is shown in the OGS bedrock geology map in the center of the property along Hailstone Creek extending east-west over 4 km and is ~0.5 km wide (Figure 4). According to Wallace (1983), rocks along Hailstone Creek are brown-weathering quartz-feldspar-biotite schists which occur in poorly bedded sequences with relatively rare interbeds of slate and pebbly sandstones. Additionally, mapping by Sanborne-Barrie *et al*. (2004) shows a wedge of fine-grained clastic and siliclastic rocks of the English River assemblage extends into the western end of the property.

Mafic and ultramafic intrusive rocks of the area mainly occur as subconcordant tabular bodies between Senior Lake and Lake A (Wallace, 1983). These units are mostly metagabbroic to dioritic in composition, consisting of hornblende and plagioclase (An_{40} to An_{50}), but display textural difference within and between the bodies. These rocks are coarse- to medium-grained (average crystal size 0.2-0.8 cm) amphibolites and feature a variety of granoblastic, porphyroblastic, gneissic and blasto-flaser textures (Wallace, 1983). These mafic bodies are also shown by the OGS bedrock geology map and are depicted as approximately 3 km by 0.5 km, trending northeast to east-north-east (Figure 4). A metagabbro body underlying the eastern part of Lake A is thought to be intruded by a series of small serpentinized ultramafic masses, but this has not been confirmed (Wallace, 1983).

Approximately 85% percent of the Ferdinand Lake/Hailstone Lake area is underlain by intrusive rocks ranging in composition from trondhjemite to pegmatoid granite (Wallace, 1983). These intrusive units margin the north and south of the property boundaries (Figure 4). These rocks form several large, relatively homogeneous masses, probably representing discrete intrusions. Between Kezik Lake and Fawthrop Lakes the rocks are massive to mildly foliated hornblende-biotite quartz monzonite and granodiorite (Wallace, 1983). Between Fawthrop Lake and Gull Lake in the east and Deaddog Lake in the west, medium-grained weakly foliated biotite and hornblende-biotite trondhjemite dominates. Between Ferdinand Lake and Snelgrove Lake, a trondhjemite unit of the North Bamaji Lake Intrusion displays cataclastic foliation resulting from series of west-northwest-trending faults splaying off if the Bamaji Lake Fault Zone in the east (Wallace, 1983). Away from the faults, toward Ferdinand Lake and to the northwest around Senior Lake, cataclastic effects diminish gradually and the trondhjemite becomes a moderately to weakly foliated equigranular rock, locally exhibiting granoblastic textures. From Hailstone Creek towards Snelgrove Lake, Hornblende-biotite quartz monzonite is common (Wallace, 1983). West of Snelgrove Lake is a small, irregular shaped body of gneissic biotite trondhjemite. Around Sesikinaga Lake, a large body of medium-grained massive biotite trondhjemite is separated from rocks of similar composition to the north by a semi-continuous septum of mafic metavolcanics roughly 200-500 m wide (Wallace, 1983). The body is composed of homogeneous, weakly foliated, leucocratic rock, and is typified by very strong topographic lineaments that control the shape of Sesikinaga Lake and surrounding features (Wallace, 1983).

Within the local supracrustal belt of the Ferdinand Lake/Hailstone Lake area, the dominant structural feature is a westerly plunging syncline, the axis of which longitudinally bisects the belt. This interpretation is based on pillow top determinations mostly from the eastern part of the area, on foliation orientations and lithologic patterns, and on air photo interpretation of topographic features around the nose of the structure near Senior Lake. About 3 km to the east of the nose of the fold, the westernmost part of the Bamaji-Fry Lake Belt forms a very similar narrow syncline with a moderately shallow plunge to the east. These opposing axial plunges are thought to have once been part of the same structure but the intrusion of trondhjemtic material around North Bamaji Lake bent the fold axis upwards. Two large-scale structural domes have also been indicated around Sesikinaga Lake and west of Snelgrove Lake. West of Snelgrove lake, the dome is outlined by concentric patterns of gneissosity and distribution of xenoliths. The structure around Sesikinaga Lake is defined by strong curvilinear topographic features and relatively weak mineral foliation patterns.

Figure 4: Property Geology



6.3 Mineralization

Limited exploration has occurred on the Ferdinand Gold Project and systematic gold exploration has never been carried out. Two molybdenite showings located 1 km north of the centre of the property have been recorded: Fawthrop Lake No. 2 and Ferdinand Lake Molybdenum (Figure 3 and 4). Both showings occur close to the contacts between a trondhjemitic rocks unit and a mafic amphibolite unit. MoS_2 concentrations of up to 1.15 percent MoS2 over 2.1 m were reported during channel sampling at these showings. Drilling done on the property as a part of further exploration of these showings intersected semi-massive to massive pyrrhotite within intervals of interbedded graphitic schist (Patterson,1974a,b,c). Senior Lake occurrence on the eastern tip of the property (Figure 4) hosts a mineralized quartz vein situated in an intrusive contact between a felsite unit to the south and an epidote-biotite trondjemite to granodiorite unit to the north. Molybdenite mineralization locally up to 15% MoS_2 occurred within the quartz vein with disseminated pyrite.

Within the local supracrustal belt of the Ferdinand Lake/Hailstone Lake area, the dominant structural feature is a westerly plunging syncline, the axis of which longitudinally bisects the belt. The western most part of the Bamaji-Fry Lake Belt forms a very similar narrow syncline with a moderately shallow plunge to the east through the Property. Straight Up Resources also recognizes folded stratigraphy along possible D2 structures (https://www.straightupresources.com/projects/ferdinand-gold-project/).

7.0 EXPLORATION

7.1 High-Resolution Heliborne Magnetic Survey

Prospectair Geosurveys conducted a high-resolution heliborne magnetic survey over a block on Ferdinand Gold Project and results of the survey were interpreted Joël Dubé of Dynamic Discovery Geoscience Geosurveys. The survey consisted of 1,579 line km flown over three (3) days from May 27th to 30th. A total of 11 production flights were performed using Prospectair's Eurocopter EC120B. The helicopter and survey crew operated out of the Sioux Lookout Airport, located 120 km to the south of the block. The survey was flown with traverse lines at 50 m spacing oriented N005 and control lines spaced every 500 m oriented N095 (Figure 5).

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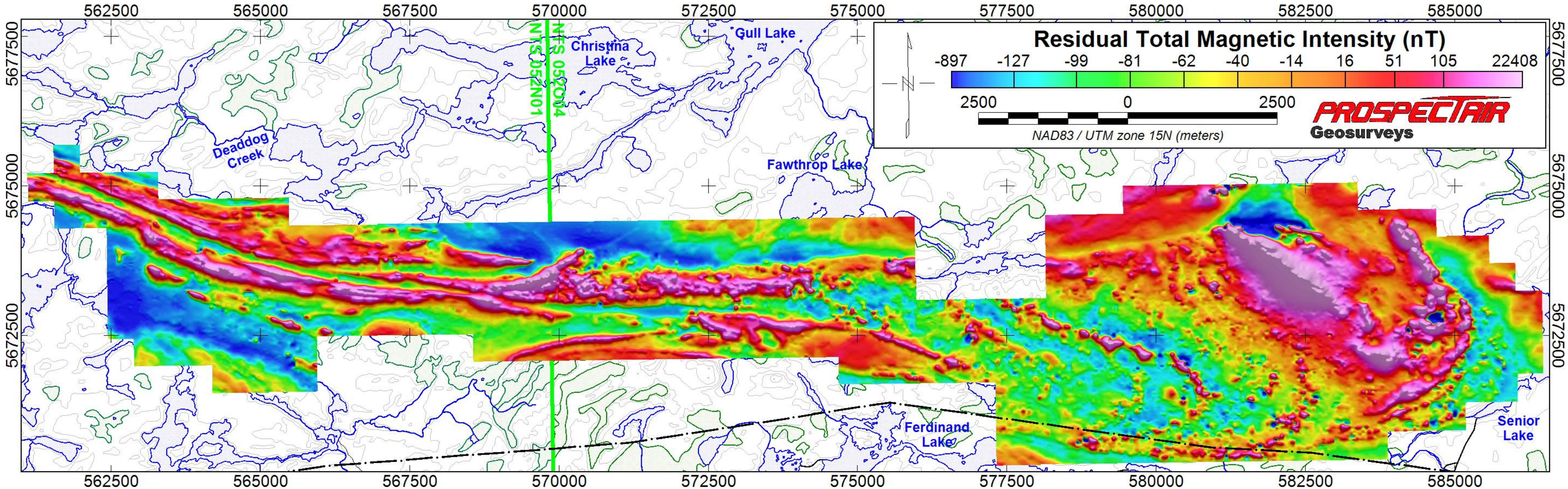
Figure 5: Total Magnetic Intensity (TMI)



7.2 Orix Geology Interpretation

Orix Geoscience carried out a surface geology interpretation by integrating historical geology and the new high-resolution aeromagnetic data to help identify focus area for future exploration Ferdinand project from October 2021 through November 2021 (See Appendix). The interpretation relied heavily on magnetic signatures outlined in the recent survey as there were limitation on detailed outcrop maps and drilling information within the property boundary. At least two possible phases of deformation are identified in the structural reinterpretation of the Ferdinand Gold Property. A prospecting program with a focus on structural geology is recommended to further trace prospective units, contact and structures associated with mineralization and collect structural observations to help verify the interpretation.

8.0 INTERPRETATION AND CONCLUSIONS

High-Resolution Heliborne Magnetic Survey

The necessary corrections and filtering were applied during the processing of the airborne magnetometer data. Once the Total Magnetic Intensity (TMI) was gridded, its First Vertical Derivative (FVD) and Second Vertical Derivative (SVD) were calculated to enhance narrow and shallow geological features. Finally, the component of the normal Earth's magnetic field, described by the International Geomagnetic Reference Field (IGRF), has been removed from the TMI to yield the residual TMI. Survey results may be influenced by the power line running through the southern portion of the property providing potential inaccuracies.

The residual Total Magnetic Intensity (TMI) of the Ferdinand Gold Project block (Figure 5) is extremely active and varies over a range of 23,305 nT, with an average of 39 nT and a standard deviation of 636 nT. The magnetic signature of the Ferdinand Gold block depicts an east-west elongated central band with dynamic signal variation and a magnetic texture dominated by linear features, surrounded by magnetically settled area. Responses observed in the wide central band are characteristic of alternating sequences of mafic volcanics with sedimentary or intermediate to felsic volcanic rocks, with probably some small size intrusive stocks or dykes locally. The more settled areas found all around are rather typical of large sized felsic to intermediate intrusive rock packages. The strongest anomaly of the survey, which is of very high amplitude in excess of 20,000 nT, occurs in the northeastern part of the block and depicts a straight, northwest-southeast-oriented lineament extending for over 2 km. This anomaly is thought to relate to magnetite rich mafic or ultramafic intrusive rocks. Stronger anomalies are apparent in Figure 7 which shows residual TMI data with a linear color distribution. Other weaker anomalies that are still relatively strong are likely associated with mafic volcanic rocks. In a few areas, mostly in the eastern half of the central band, strings of alternating series of magnetic highs and lows are aligned perpendicular to the general lineament trend are noted. This type of feature may represent boundinaged mafic rock, causing discontinuities of the magnetic sources and creating alternating sequence of magnetic highs and lows. The majority of magnetic lineaments found in the survey block are trending from WNW-ESE to ENE-WSW except in the area at the eastern extend of the wide central band, which seems to depict a regional fold hinge with an axial plane oriented east-west, and in a few areas where lineaments appear to be strongly curved by smaller-scale shearing or folding. This evidence suggests that the area has undergone multiple strong deformation events. In general terms, magnetic lineaments are related to rock formations that are enriched in magnetic minerals (magnetite and/or pyrrhotite). Throughout the block, structural features offset magnetic lineaments and cause abrupt interruption or changes of the magnetic response. These features are typically caused by faults, fractures and shear zones which may be relevant to gold exploration on the property.

Orix Geology Interpretation

The interpretation relied heavily on magnetic signatures outlined in the recent survey as there were limitations on detailed outcrop maps and drilling information within the property boundary;

- Property area is underlain by a variety of metamorphosed Early Precambrian (Archean) supracrustal and intrusive rocks belonging to the Uchi tectono-lithologic subprovince (Ayres et al. 1971).
- Most of the property area occur within the east-trending volcanic assemblage including massive to pillowed mafic volcanic flows, volcanoclastics, and amphibolite, that are intercalated with intermediate volcanic flows.
- Relatively small lenses of intermediate to felsic volcanoclastic rocks occur in the western part of the area.
- A thin sequence of clastic metasediments is found along the southern side of the main volcanic assemblage.
- Early mafic and ultramafic intrusive rocks include gabbro, diorite, and serpentinized peridotite occur in the eastern part of the property area and are intensely folded and deformed by both D1 and D2 deformation events.
- The volcanic assemblage is bounded by tonalite, granodiorite to granite intrusive units to the north, east, and south. Minor, narrow dykes of feldspar, and quartz-feldspar porphyry are interpreted within the volcanic assemblage.

At least two possible major phases of deformation are identified in the surface reinterpretation of Ferdinand Gold Property:

- D_1, is seen in the ENE to NW tight, isoclinal folded (F_1) mafic intrusive, and mafic to intermediate volcanic units.
- D_2, N-S shortening, is recognized by a sets of open to close-tight folds, possibly west plunging, with an overall S-asymmetry at the property-scale and are evidently seen at the eastern portion of the property area.
- Major D_2 shear zones are approximately parallel to the F_2 fold axial traces, locally correspond to the narrow low magnetic zones in between high magnetic anomalies.
- The possible continuation of “Fry-Bamaji Shear Zone”, or splay off, and several likely second order, or shear band ENE-striking structures, are the most predominant features within the property area.

- Post D2, brittle to brittle-ductile faults and shear zones dominantly strike N, and NE, cross- cut and locally displace the lithological units both dextrally and sinistrally.

9.0 RECOMMENDATIONS

Central and eastern portion of the property is dominated by intense superimposed folded mafic volcanic and mafic intrusive rocks. The F_2 hinge zones and the strike of fold axial traces are prospective to host gold mineralization.

Similarly, the area along the strike of the major interpreted syn-D_2 shear zones (e.g. continuation of “Fry- Bamaji Shear Zone” or splay off), as well as fault intersections seems to be the potential target areas for future exploration.

The intersection of late N-to NNE-striking structures with early D_2 E-W structures could possibly control the mineralization zones structurally by creating or enhancing dilatational sites.

Rare deformed horizons of iron formation at the eastern portion of the property area may be an important host for orogenic gold mineralization in Archean terranes.

A prospecting program with a focus on structural geology is recommended to further trace prospective units, contacts and structures associated with mineralization and collect structural observations to help verify the interpretation.

10.0 REFERENCES

Hodgson, R. G., 2012. Report on a geological, geochemical and V.L.F.-EM geophysical survey on the R Hodgson property. AFRI 20000008652.

Limion, H., 1973. Airbone Magnetometer Survey Crobie Area. Matry ‘A’, ‘B’ & ‘C’. AFRI 52O06NW0068.

ODM-GSC, 1960a: Jeanette Lake, District of Kenora-Patricia Portion; Ontario Department of Mines - Geological Survey of Canada, Aeromagnetic Map 882G, scale 1 inch to 1 mile. Survey May to November 1959.

ODM-GSC, 1960b: Wesleyan Lake, District of Kenora-Patricia Portion, Ontario Department of Mines - Geological Survey of Canada, Aeromagnetic Map 892G, scale 1 inch to 1 mile. Survey May to November 1959.

Patterson, G. C., 1974a. Diamond Drilling – Area of Ferdinand Lake. Report No. 12. Umex Corporation Limited. AFRI 52O04NW8968.

Patterson, G. C., 1974b. Diamond Drilling – Area of Ferdinand Lake. Report No. 13. Umex Corporation Limited. AFRI 52O04NW8969.

Patterson, G. C., 1974c. Diamond Drilling – Area of Ferdinand Lake. Report No. 14. Umex Corporation Limited. AFRI 52O04NW8970.

Sanborn-Barrie, M., Rogers, N; Skulski, T; Parker, J; McNicoll, V; Devaney, J. 2004. Geology and tectonostratigraphic assemblages, east Uchi Subprovince, Red Lake and Birch-Uchi belts, Ontario; Geological Survey of Canada, Open File 4256.

Wallace, H., 1983. Geology of the Ferdinand Lake Area, District of Kenora, Patricia Portion; Ontario Geological Survey, Miscellaneous Paper 109,10p.

11.0 CERTIFICATE OF QUALIFICATIONS

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CERTIFICATE OF QUALIFIED PERSON

I, Jolee Stewart G.I.T. (10879) hereby certify that:

1. I am a consulting geologist-in-training with an office at 941 Cobalt Crescent, Thunder Bay, Ontario.

2. I graduated with the degree of Honours Specialization in Geology - For Professional Registration from Western University, London, Ontario in 2019. I have worked on gold projects in Northwestern Ontario.

3. “Assessment Report” refers to the report titled “Assessment Report On the Ferdinand Gold Property, Red Lake Mining Division, Northwestern Ontario Canada” dated March 7, 2022.

4. I am a registered as a Geologist-In-Training (G.I.T) with the Association of Professional Geoscientists of Ontario (10879).

5. I am the author of this report and responsible for all sections of the Assessment Report.

6. As of the date of this certificate, and to the best of my knowledge, information and belief, the Assessment Report contains all scientific and technical information that is required to be disclosed to make the Assessment Report not misleading.

Dated this 7th day of March 2022.

“Jolee Stewart”

APPENDIX I

Technical Report

High-Resolution Heliborne Magnetic Survey

Ferdinand Gold Property, Birch-Uchi-East Greenstone Belt area, Red Lake Mining Division, Ontario, 2021

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I. INTRODUCTION

Prospectair Geosurveys conducted a heliborne high-resolution magnetic (MAG) survey for the mineral exploration company Straightup Resources Inc. on its Ferdinand Gold Property located in the eastern extension of the Birch-Uchi Greenstone Belt area, Red Lake Mining Division, Province of Ontario (Figure 1). The survey was flown from May 27th to 30th 2021.

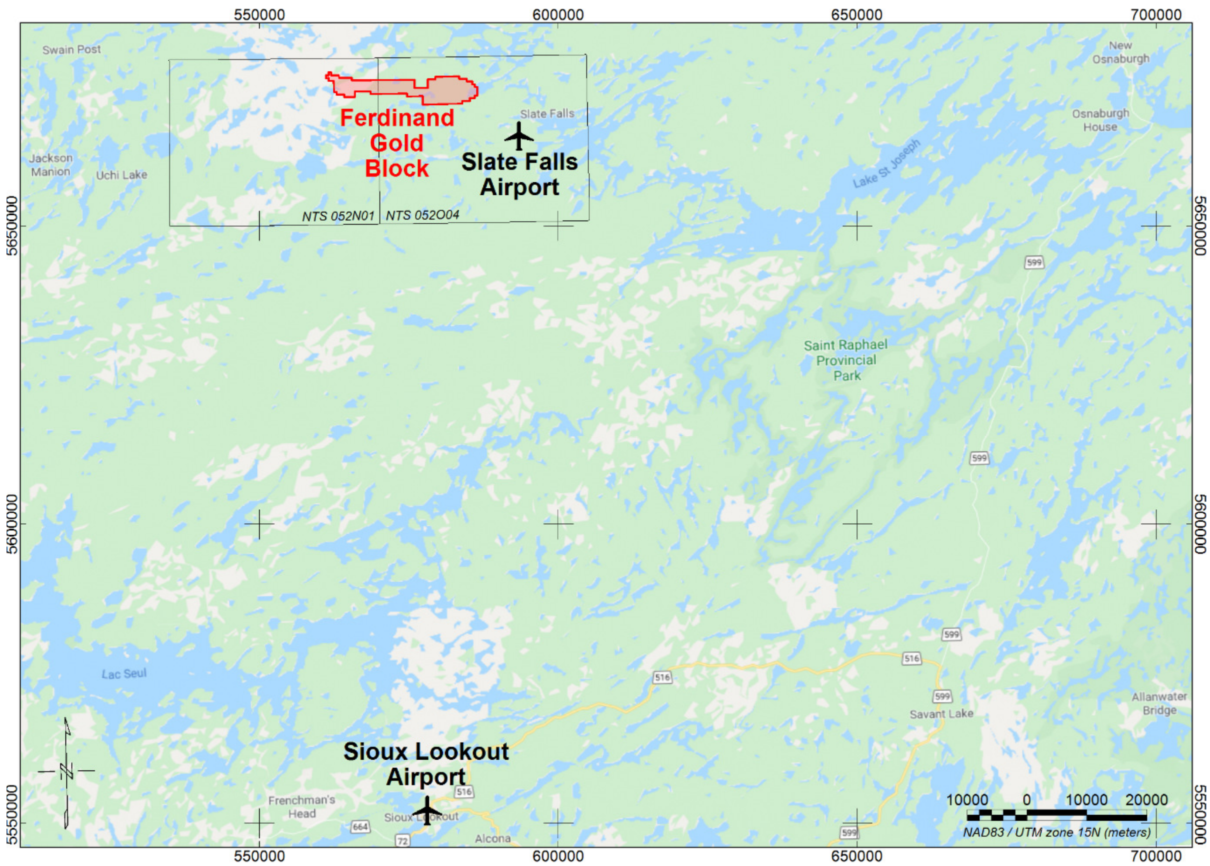
Figure 1: **General Survey Location**

One survey block was flown for a total of 1,579 l-km. A total of 11 production flights were performed using Prospectair's Eurocopter EC120B, registration C-GEDI. The helicopter and survey crew operated out of the Sioux Lookout Airport located 120 km to the south of the block, and using a fuel cache setup along the road to the Slate Falls Airport, located only 10 km to the southeast of it (Figure 2).

Table 1: **Survey block particulars**

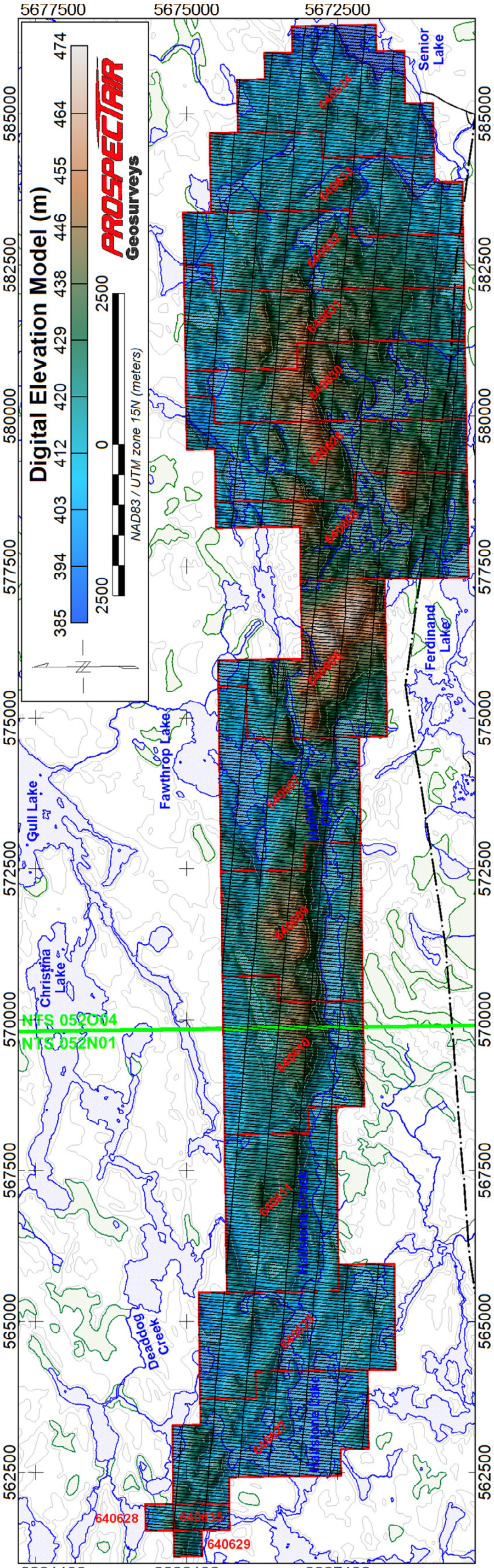
Block	NTS Mapsheet	Line-km flown	Flight numbers	Dates Flown
Ferdinand Gold	052O04 & 052N01	1,579 l-km	Flt 1 to 11	May 27th to 30th

Figure 2: **Survey Location and base of operation**



The Ferdinand Gold block was flown with traverse lines at 50 m spacing and control lines spaced every 500 m. The survey lines were oriented N005 and control lines were flown at an azimuth of N095. The average height above ground of the helicopter was 44 m and the magnetic sensor was at 25 m. The average survey flying speed was 30.5 m/s. The survey area is covered by forest, wetlands and lakes. The topography is mostly gently undulating, with a few low-level hills, which are fairly typical characteristics of the area near the Slate Falls First Nation community. The elevation is ranging from 385 to 474 m above mean sea level (MSL). The Slate Falls village is found less than 15 km to the east of the block, and can be accessed via an all-season road connecting to the town of Sioux Lookout approximately 122 km to the south. The block is roughly located in between Gull Lake to the north, Senior Lake to the east, Ferdinand Lake to the south and Hailstone Lake to the west. Coordinates outlining the survey block are given in Appendix A, with respect to NAD-83 datum, UTM projection zone 15N. The location of the Ferdinand Gold Property claims (in red) and of the survey lines is shown on Figure 3. The Property claims numbers are also listed in Appendix B.

Figure 3: **Survey lines and Ferdinand Gold Property claims**



II. SURVEY EQUIPMENT

Prospectair provided the following instrumentation for this survey:

Airborne Magnetometer

Geometrics G-822A

The heliborne system used a non-oriented (strap-down) optically-pumped Cesium split-beam sensor. These magnetometers have a sensitivity of 0.005 nT and a range of 15,000 to 100,000 nT with a sensor noise of less than 0.02 nT. The heliborne sensor was mounted in a bird made of non-magnetic material located 19 m below the helicopter when flying. Total magnetic field measurements were recorded at 10 Hz in the aircraft.

Real-Time Differential GPS

Omnistar DGPS

Prospectair uses an OmniStar differential GPS navigation system to provide real-time guidance for the pilot and to position data to an absolute accuracy of better than 5 m. The *Omnistar* receiver provides real-time differential GPS for the Agis on-board navigation system. The differential data set was relayed to the helicopter via the Omnistar network appropriate geosynchronous satellite for the survey location. The receiver optimizes the corrections for the current location.

Airborne Navigation and Data Acquisition System

Pico-Envirotec AGIS-XP system

The Airborne Geophysical Information System (AGIS-XP) is advanced, software driven instrument specifically designed for mobile aerial or ground geophysical survey work. The AGIS instrumentation package includes an advanced navigation system, real-time flight path information that is displayed over a map image of the area, and reliable data acquisition software. Thanks to simple interfacing, the radar and barometric altimeters and the Geometrics magnetometer are easily integrated into the system and digitally recorded. Automatic synchronization to the GPS position and time provides very close correlation between data and geographical position. The AGIS is equipped with a software suite allowing easy maintenance, upgrades, data QC, and project and survey area layout planning.

Magnetic Base Station

GEM GSM-19

A GEM GSM-19 Overhauser magnetometer, a computer workstation and a complement of spare parts and equipment serve as the base station. Prospectair establish the base station in a secure location with low magnetic noise. The GSM-19 magnetometer has resolution of 0.01 nT, and 0.2 nT accuracy over its operating range of 20,000- to 100,000 nT. The ground system was recording magnetic data at 1 Hz.

Altimeters

Free Flight Radar Altimeter

The Free Flight radar altimeter measures height above ground to a resolution of 0.5 m and an accuracy of 5% over a range up to 2,500 ft. The radar altimeter data is recorded and sampled at 10 Hz.

Digital Barometric Pressure Sensor

The barometric pressure sensor measures static pressure to an accuracy of ± 4 m and resolution of 2 m over a range up to 30,000 ft above sea level. The barometric altimeter data are sampled at 10 Hz.

Survey helicopter

Eurocopter EC120B (registration C-GEDI)

The survey was flown using Prospectair's EC120B helicopter that handles efficiently the equipment load and the required survey range. Table 3 presents the EC120B technical specifications and capacity, and the aircraft is shown in Figure 4.

Table 2: **Technical specifications of the EC120B Eurocopter helicopter**

Item	Specification
Powerplant	One 376kW (504hp) Turbomeca Arrius 2F
Rate of climb	1,150 ft/min
Cruise speed	223 km/h – 120 kts
Service ceiling	17,000 ft
Range with no reserve	710 km
Empty weight	991 kg
Maximum takeoff weight	1,715 kg

Figure 4: **C-GEDI Eurocopter EC120B**

III. SURVEY SPECIFICATIONS

Data Recording

The following parameters were recorded during the course of the survey:

In the helicopter:

- GPS positional data: time, latitude, longitude, altitude, heading and accuracy (PDOP) recorded at intervals of 0.1 s;
- Total magnetic field: recorded at intervals of 0.1 s;
- Pressure as measured by the barometric altimeter at intervals of 0.1 s;
- Terrain clearance as measured by the radar altimeter at intervals of 0.1 s;

At the base and remote magnetic ground stations:

- Total magnetic field: recorded at intervals of 1 s;
- GPS time recorded every 1 s to synchronize with airborne data.

Technical Specifications

The data quality control was performed on a daily basis. The following technical specifications were adhered to:

- *Height* – 50m mean terrain clearance for the helicopter except in areas where Transport Canada regulations prevent flying at this height, or as deemed by the pilot to ensure safety. Traverse lines and control lines must be flown at the same altitude at points of intersection; the altitude tolerances are limited to no more than 30 m difference between traverse lines and control lines.
- *Airborne Magnetometer Data* – A 0.5 nT noise envelope not to be exceeded for more than 500 m line-length without a reflight.
- *Diurnal Specifications* – A maximum tolerance of 5.0 nT (peak to peak) deviation from a long chord of one minute at the base station.
- *Flying Speed* – The average ground speed for the survey aircraft should be 120 kph. The acceptable high limit is 180 kph over flat topography.
- *Radar Altimeter* – minimal accuracy of 5%, minimum range of 0-2500 m.
- *Barometer* – Absolute air pressure to 0.1 kPa.
- *Flight Path Following* – The line spacing not to vary by more than 30% from the ideal spacing over a distance of more than 300 m, except as required for aviation safety.

  For Ferdinand Gold Block:

  Traverse lines: Azimuth N005, 50 m spacing.

  Control Lines: Azimuth N095, 500 m spacing.

IV. SYSTEM TESTS

Magnetometer System Calibration

The survey configuration using a bird towed 19 m below any magnetic piece of the helicopter allows the simplification of the magnetic calibration requirement. Consequently, heading error and aircraft movement noise was considered negligible and no correction was applied to the data.

Instrumentation Lag

The magnetometer lag is a combination of two factors: 1) the time difference between when a reading is sensed, and when that value is recorded by the acquisition system, and 2) the time taken for the sensor to arrive at the location of the GPS antenna. The second factor is defined by the physical distance between the GPS antenna and any given sensor, and the speed of the aircraft. The average total magnetic lag value for the AGIS acquisition system has been calculated to 0.91 s for this survey.

V. FIELD OPERATIONS

The survey operations were conducted out of the Sioux Lookout Airport and using a fuel cache setup along the road at the Slate Falls Airport, from May 27th to 30th, 2021. The data acquisition required 11 flights. At the end of each production day, the data were sent to the Dynamic Discovery Geoscience office via internet. The data were then checked for Quality Control to ensure they fulfilled contractual specifications. The full dataset was inspected prior to provide authorization for the field crew to demobilize. The GSM-19 magnetic base station was set up close to the Slate Falls airport, in a magnetically quiet area, at latitude 51.1305884°N, longitude 91.6588796°W. The survey pilot was Guy Labelle and the survey system technician was Jonathan Drolet.

Figure 5: **Example of a magnetic base station setup**

VI. DIGITAL DATA COMPILATION

Data compilation including editing and filtering, quality control, and final data processing was performed by Joël Dubé, P.Eng. Processing was performed on high performance computers optimized for quick daily QC and processing tasks. Geosoft software Oasis Montaj version 9.10 was used.

Magnetometer Data

General

The airborne magnetometer data, recorded at 10 Hz, were plotted and checked for spikes and noise on a flight basis. An average of 0.91 second lag correction was applied to the data to correct for the time delay between detection and recording of the airborne data.

Ground magnetometer data were recorded at 1 sample per second and interpolated by a spline function to 10 Hz to match airborne data. Data were inspected for cultural interference and edited where necessary. Low-pass filtering was deemed necessary on the ground station magnetometer data to remove minor high frequency noise. The diurnal variations were removed by subtracting the ground magnetometer data to the airborne data and by adding back the average of the ground magnetometer value.

The levelling corrections were applied in several steps. First of all, a correction for altitude was applied by multiplying the First Vertical Derivative (FVD) of the Total Magnetic Intensity (TMI) by the difference between the actual survey altitude and the average survey altitude. Standard levelling corrections were then performed using intersection statistics from traverse and tie lines. After statistical levelling was considered satisfactory, decorrugation was applied on the data to remove any remaining subtle non-geological features oriented in the direction of the traverse lines.

Once the Total Magnetic Intensity (TMI) was gridded, its First Vertical Derivative (FVD) and Second Vertical Derivative (SVD) were calculated to enhance narrow and shallow geological features. Finally, the component of the normal Earth's magnetic field, described by the International Geomagnetic Reference Field (IGRF), has been removed from the TMI to yield the residual TMI.

Tilt Angle Derivative

In order to enhance the subtle magnetic features some more, the Tilt Angle Derivative (TILT) was also computed for this project.

It has been shown that it is possible to use the Tilt Angle Derivative to estimate both the location and depth of magnetic sources (Salem et al., 2007).

When two body of different magnetic susceptibility are in contact, the vertical and horizontal gradients along a horizontal line perpendicular to the vertical contact are governed by the following equations:

$\delta M/\delta h=2KFc(z_c/(h^2+z_c^2))$
$\delta M/\delta z=2KFc(h/(h^2+z_c^2))$

where
K = susceptibility contrast
F = magnetic field's strength
$c = 1\text{-}\cos^2(\text{field Inclination})\sin^2(\text{field Declination})$
h = location along an horizontal axis perpendicular to the contact
z_c = contact depth
$\delta M/\delta h = \text{sqrt}((\delta M/\delta x)^2+(\delta M/\delta y)^2)$

The Tilt Angle (θ) is defined as
$\theta = \tan^{-1}[(\delta M/\delta z)/(\delta M/\delta h]$

By substitution of the gradients we get
$\theta = \tan^{-1}[h/z_c]$

This has two main implications for any given anomaly:

1- The 0° angle line is located directly above the contact between a magnetic source and the surrounding rock. This allow for accurate estimation of source location.
2- The distance between the 0° and the +45° contour lines as well as the distance between the -45° and the 0° contour lines are equal to the depth of the source at the contact. This allow for a direct estimation of the depth of the source of the anomaly. The depth estimated with this method is actually the distance between the magnetic sensor and the top of the source. Knowing that the sensor was 25 m above the ground in average enables direct depth estimates.

In practice, the signal originating from multiple sources at different depth within a same area will cause juxtaposition of the Tilt Angle values, and complicate location and depth estimation. Nevertheless, the method remains an excellent tool for rapid assessment of sources characteristics, without the need for complex assumptions to be made or heavy computer requirements, as is the case with 3D Euler deconvolution or 3D data inversions.

Gridding
The magnetic data were interpolated onto a regular grid using a bi-directional gridding algorithm to create a two-dimensional grid equally incremented in x and y directions. The final grids of the magnetic data are supplied with a 10 m grid cell size. Traverse lines were used in the gridding process.

Radar Altimeter Data
The terrain clearance measured by the radar altimeter in metres was recorded at 10 Hz. The data were filtered to remove high frequency noise using a 1 sec low pass filter. The final data were plotted and inspected for quality.

Positional Data

Real time DGPS correction provided by Omnistar was applied to the recorded GPS positional data.

Positional data were originally recorded at 10 Hz sampling rate in geographic longitude and latitude with respect to the WGS-84 datum. The delivered data locations are provided in X and Y using the UTM projection zone 15 North, with respect to the NAD-83 datum. Altitude data were initially recorded relative to the GRS-80 ellipsoid, but are delivered as orthometric heights (MSL elevation).

Terrain Data

Terrain elevation data (also referred to as digital elevation model, or DEM) are computed from the altitude of the helicopter, given by DGPS recordings, and the radar altimeter data.

VII. RESULTS AND DISCUSSION

The residual Total Magnetic Intensity (TMI) of the Ferdinand Gold block, presented in Figure 6, is extremely active and varies over a range of 23,305 nT, with an average of 39 nT and a standard deviation of 636 nT.

The magnetic signature of the Ferdinand Gold block depicts an E-W elongated central band with dynamic signal variation and a magnetic texture dominated by linear features, which is surrounded by magnetically settled area. Responses observed in the wide central band are characteristic of alternating sequences of mafic volcanics with sedimentary or intermediate to felsic volcanic rocks, with probably some small size intrusive stocks or dykes locally. The more settled areas found all around are rather typical of large size felsic to intermediate intrusive rock packages. The strongest anomaly of the survey, which is of very high amplitude, being in the excess of 20,000 nT, occurs in the northeastern part of the block, depicting a straight lineament oriented NW-SE and extending over more than 2 km, and most likely relates to magnetite rich mafic or ultramafic intrusive rocks. Stronger anomalies are best seen on Figure 7 which shows the residual TMI data with a linear color distribution. Other weaker anomalies that are still relatively strong are likely associated to mafic volcanic rocks. In a few areas, mostly in the eastern half of the central band, strings of alternating series of magnetic highs and lows aligned longitudinal to the general lineaments' trends are occurring. This type of feature possibly belongs to mafic rocks affected by boudinage effects, causing discontinuities of the magnetic sources which could explain the alternating sequence of magnetic highs and lows.

The majority of magnetic lineaments found in the survey block are generally trending from WNW-ESE to ENE-WSW, except in the area at the east end of the wide central band, which seems to depict a regional fold hinge with its axial plane oriented E-W, and in some other local areas where lineaments appear heavily curved by smaller scale shearing or folding structures. These evidences are attesting that the area underwent strong deformation events in the past. In general terms, magnetic lineaments are related to rock formations that are enriched in magnetic minerals (magnetite and/or pyrrhotite).

Throughout the block, it is possible to detect structural features offsetting observed magnetic lineaments and causing abrupt interruption or changes of the magnetic response. These features are typically caused by faults, fractures and shear zones. If they are thought to be favorable structures in the exploration context of the Ferdinand Gold project, they should be paid particular attention and should be the object of a comprehensive structural interpretation, which is beyond the scope of this report.

Shorter wavelength anomalies are greatly enhanced on the FVD (Figure 8) and on the TILT (Figure 9) products. Since the FVD attenuates longer wavelength anomalies, and the TILT enhances very weak amplitude anomalies, they are the preferred products for structural interpretation.

Regarding cultural interference, human infrastructures such as the power line located in the southeastern part of the block are known to be possible sources of non-geological noise in the magnetic data. Of course, the power line itself is directly inducing noise in the local magnetic data. In addition, when the helicopter had to steeply climb up above this infrastructure for obvious safety reasons, the magnetic response can appear somewhat blurred, with anomalies being attenuated in amplitude and increased in wavelength because of the greater sensor distance from the ground. This can also result in local stripes parallel to survey lines in the data. This effect is really local and quickly fades out on either sides of the overflown obstacle, but must be nevertheless considered when following-up on the results.

Figure 6: **Residual Total Magnetic Intensity with equal area color distribution**

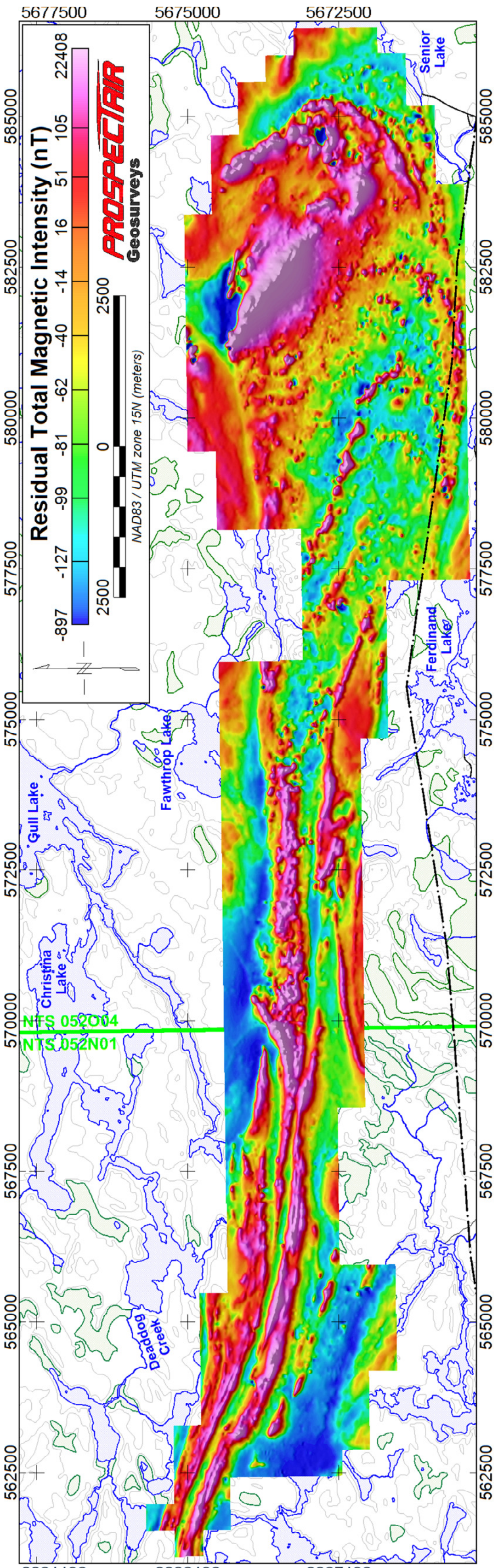


Figure 7: **Residual Total Magnetic Intensity with linear color distribution**

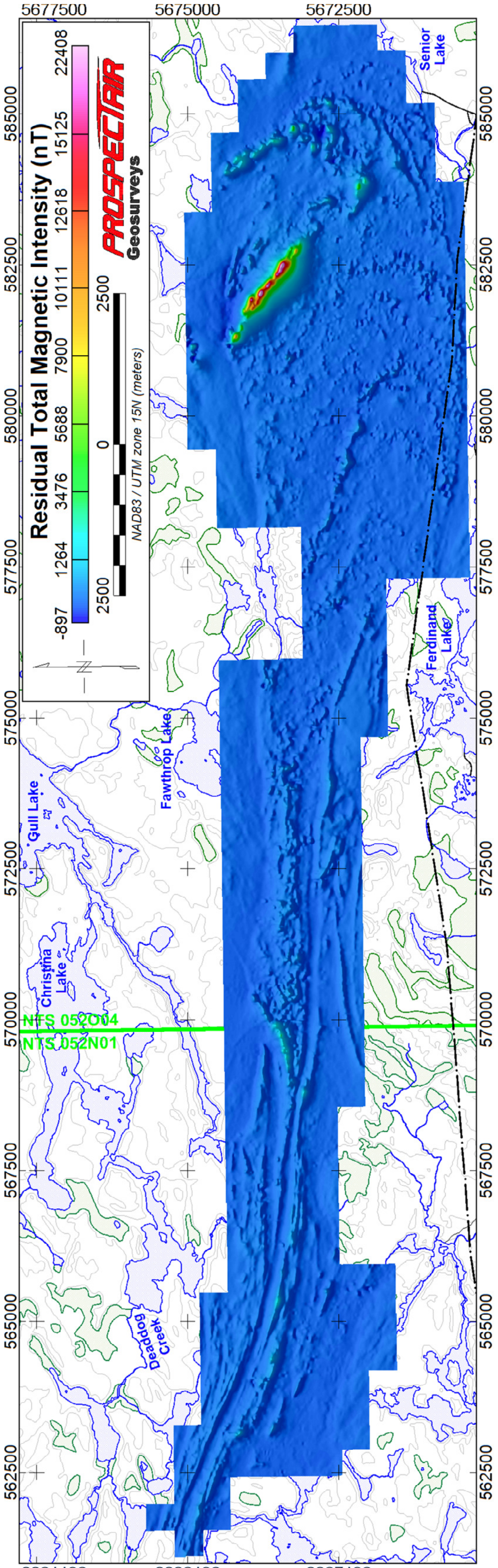


Figure 8: **First Vertical Derivative of TMI**

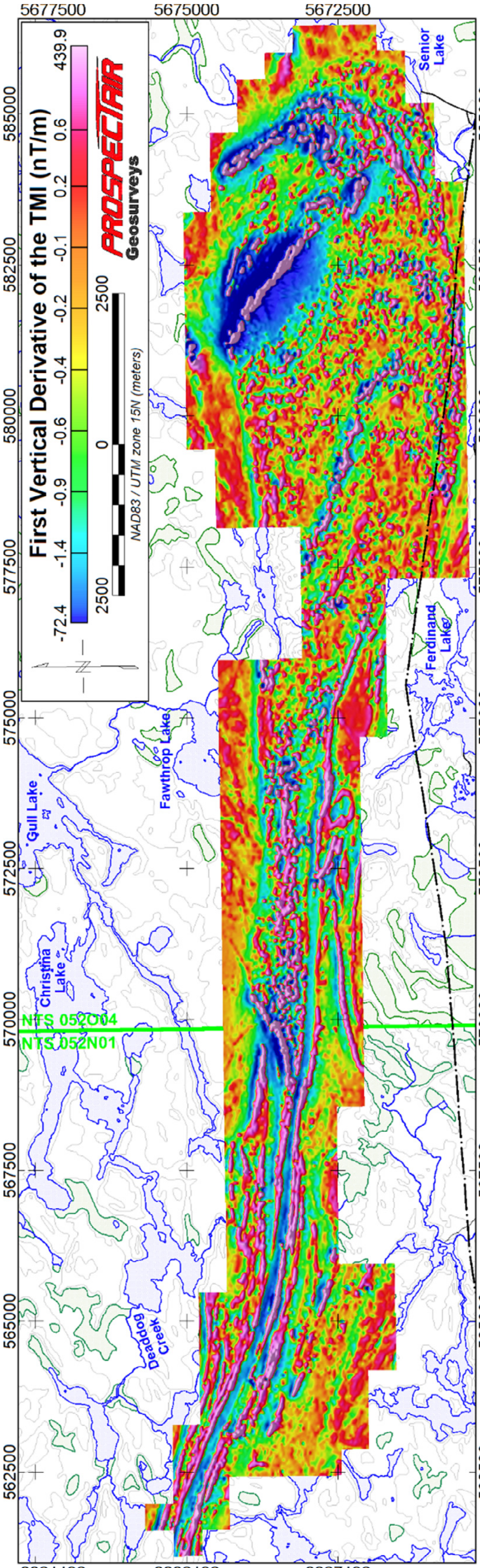
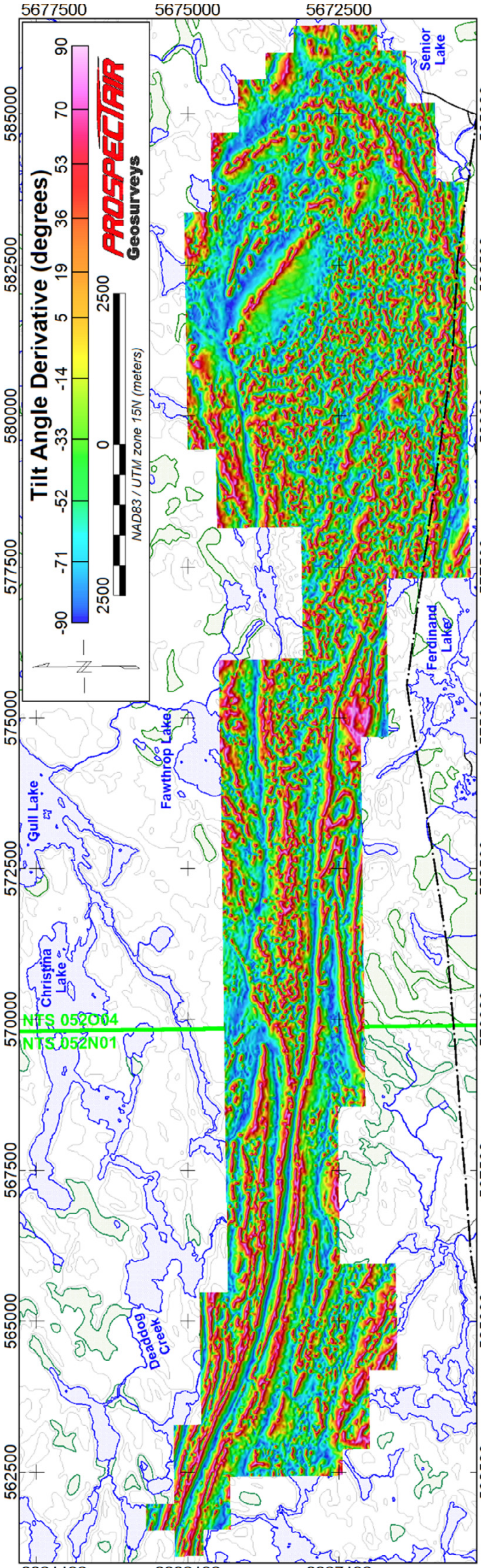


Figure 9: **Tilt Angle Derivative**



VIII. FINAL PRODUCTS

Digital Line Data

The Geosoft database is provided with the channels detailed in Table 3.

Table 3: **MAG line data channels**

No.	Name	Description	Units
1	UTM_X	UTM Easting, NAD-83, Zone 15N	m
2	UTM_Y	UTM Northing, NAD-83, Zone 15N	m
3	Lat_deg	Latitude in decimal degrees	Deg
4	Long_deg	Longitude in decimal degrees	Deg
5	Gtm_sec	Second since midnight GMT	Sec
6	Radar	Ground clearance given by the radar altimeter	m
7	CDED_DEM	CDED Digital Elevation Model (w.r.t. MSL)	m
8	Terrain	Calculated Digital Elevation Model (w.r.t. MSL)	m
9	GPS_Z	Helicopter altitude (w.r.t. MSL)	m
10	Mag_Raw	Raw magnetic data	nT
11	Mag_Lag	Lagged magnetic data	nT
12	Gnd_mag	Base station magnetic data	nT
13	Mag_Cor	Magnetic data corrected for diurnal variation	nT
14	TMI	Fully levelled Total Magnetic Intensity	nT
15	TMIres	Residual TMI (IGRF removed)	nT

Maps

All maps are referred to NAD-83 datum in the UTM projection Zone 15 North, with coordinates in metres. Maps are at a 1:15,000 scale and are provided in PDF, PNG and Geosoft MAP formats for the products detailed in Table 4.

Table 4: **Maps delivered**

No.	Name	Description
1	DEM+FlightPath+Claims	Digital Elevation Model with flight path and property claims
2	TMI	Residual Total Magnetic Intensity
3	FVD	First Vertical Derivative of the TMI
4	TILT	Tilt Angle Derivative

Grids

All grids are referred to NAD-83 in the UTM projection Zone 15 North, with coordinates in metres. Grids are provided in Geosoft GRD format, with a 10 m grid cell size, as well as in the Geotiff format for the products listed in Table 5.

Table 5: **Grids delivered**

No.	Name	Description	Units
1	DEM	CDED Digital Elevation Model	m
2	Terrain	Calculated Digital Elevation Model	m
3	TMI	Total Magnetic Intensity	nT
4	FVD	First Vertical Derivative of TMI	nT/m
5	SVD	Second Vertical Derivative of TMI	nT/m^2
6	TMIres	Residual TMI (IGRF removed)	nT
7	TILT	Tilt Angle Derivative	Degree

Project Report

The report is submitted in PDF format.

Respectfully submitted,

____

Joël Dubé, P.Eng.

June 25th 2021

IX. STATEMENT OF QUALIFICATIONS

Joël Dubé
7977 Décarie Drive
Ottawa, ON, Canada, K1C 3K3

Telephone: 819.598.8486
E-mail: jdube@ddgeoscience.ca

I, Joël Dubé, P.Eng., do hereby certify that:

1. I am a Professional Engineer specialized in geophysics, President of Dynamic Discovery Geoscience Ltd., registered in Canada.

2. I earned a Bachelor of Engineering in Geological Engineering in 1999 from the École Polytechnique de Montréal.

3. I am an Engineer registered with the Ordre des Ingénieurs du Québec, No. 122937, and a Professional Engineer with Professional Engineers Ontario, No. 100194954 (CofA No. 100219617), with the Association of Professional Engineers and Geoscientists of New Brunswick, No. L5202 (CofA No. F1853), with the Association of Professional Engineers of Nova Scotia, No. 11915 (CofC No. 51099), with Engineers Geoscientists Manitoba, No. 43414. (CofA No. 6897), with Professional Engineers & Geoscientists Newfoundland & Labrador, No. 10012 (PtoP No. N1134) and with the Northwest Territories Association of Professional Engineers & Geoscientists, No. L4447 (PtoP No. P1414).

4. I have practised my profession for 22 years in exploration geophysics.

5. I have not received and do not expect to receive a direct or indirect interest in the properties covered by this report.

Dated this 25th day of June, 2021

____
Joël Dubé, P.Eng. #100194954

X. Appendix A – Survey block outline

Ferdinand Gold Block

Easting	Northing
583880	5670431
577322	5670328
577301	5671718
574681	5671680
574674	5672143
568560	5672058
568554	5672521
565942	5672487
565940	5672456
565948	5671912
565951	5671560
564199	5671538
564194	5672001
562884	5671985
562878	5672448
562441	5672443
562419	5674296
561546	5674286
561540	5674749
561103	5674744
561098	5675213
561534	5675218
561528	5675681
561933	5675686
561970	5675682
561976	5675223
563285	5675239
563291	5674776
565473	5674803
565479	5674340
575955	5674484
575976	5673094
578153	5673127
578132	5674517
579442	5674537
579435	5675000
583368	5675063
583375	5674599
584685	5674621
584693	5674157
585566	5674172
585573	5673709
586010	5673716
586018	5673252
586454	5673260

586478	5671865
586041	5671857
586049	5671394
585175	5671379
585183	5670916
583872	5670894

XI. Appendix B – Property claims numbers covered by the survey

Tenure number	Holder
640606	(100) Gravel Ridge Resources Ltd.
640607	(100) Gravel Ridge Resources Ltd.
640608	(100) PERRY VERN ENGLISH
640609	(100) Gravel Ridge Resources Ltd.
640610	(100) Gravel Ridge Resources Ltd.
640611	(100) Gravel Ridge Resources Ltd.
640625	(100) Gravel Ridge Resources Ltd.
640626	(100) PERRY VERN ENGLISH
640627	(100) Gravel Ridge Resources Ltd.
640628	(100) Gravel Ridge Resources Ltd.
640629	(100) Gravel Ridge Resources Ltd.
640630	(100) PERRY VERN ENGLISH
640631	(100) PERRY VERN ENGLISH
640632	(100) PERRY VERN ENGLISH
640633	(100) PERRY VERN ENGLISH
640634	(100) PERRY VERN ENGLISH
640635	(100) PERRY VERN ENGLISH

Geological Interpretation of Ferdinand Gold Property

November 18, 2021

Ali Ghorbani, Project Geologist, Structural Geology

Mike Kilbourne, Senior Geology Specialist

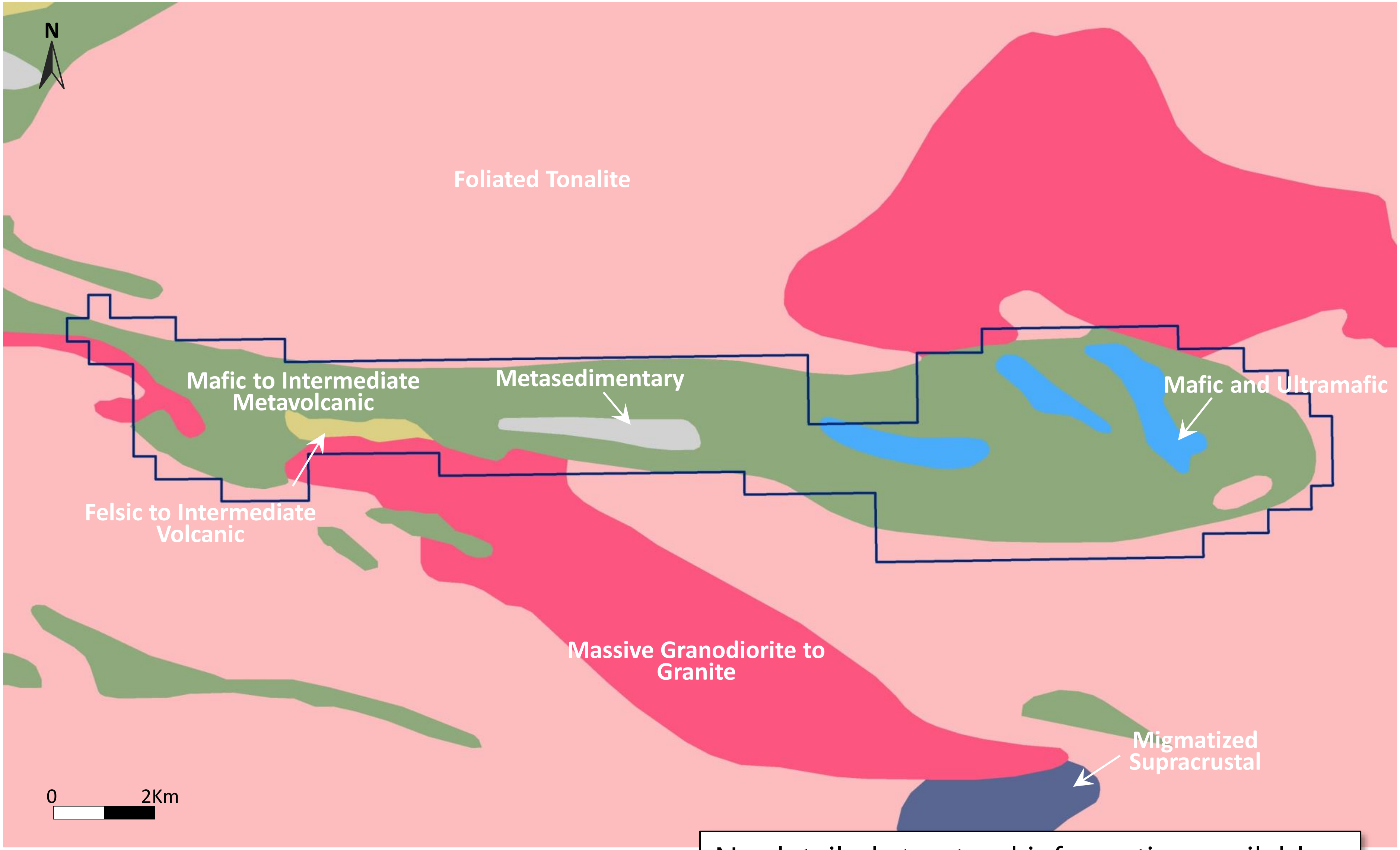
Craig Fitchett, Director of Geology, Senior Geologist

STRAIGHTUP RESOURCES INC.

Purpose and Steps

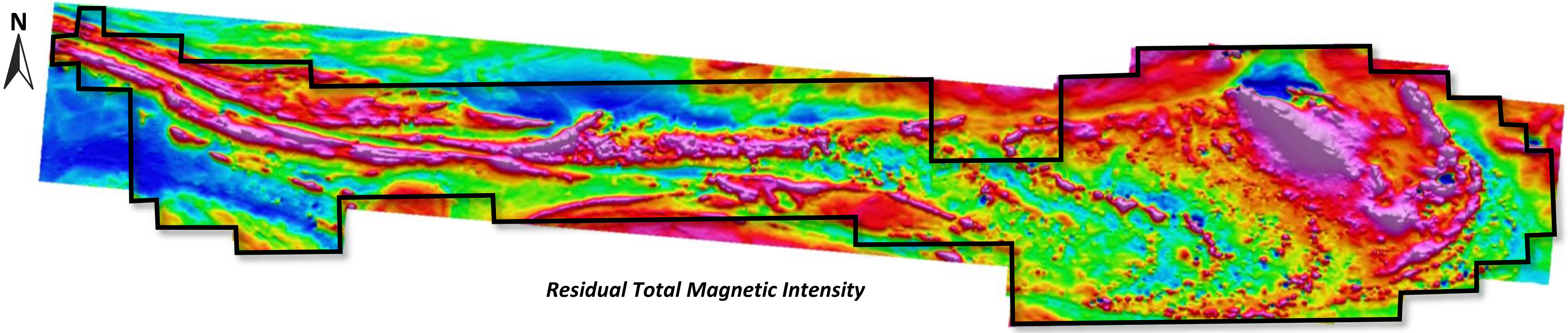
- ***Purpose***
  - Surface geology interpretation by integrating historical geology and new high-resolution aeromagnetic data to help identify focus areas for future exploration.
- ***Steps***
  - Creating preliminarily structural map and identifying major structural trends (e.g. faults, shear zones, and folds)
  - Integrating all historical lithology, geochemistry, drilling and structural data
  - Generating a new surface geological interpretation
  - Reviewing, digitizing, editing, symbolizing and formatting

Regional Geology (OGS Provincial Map)

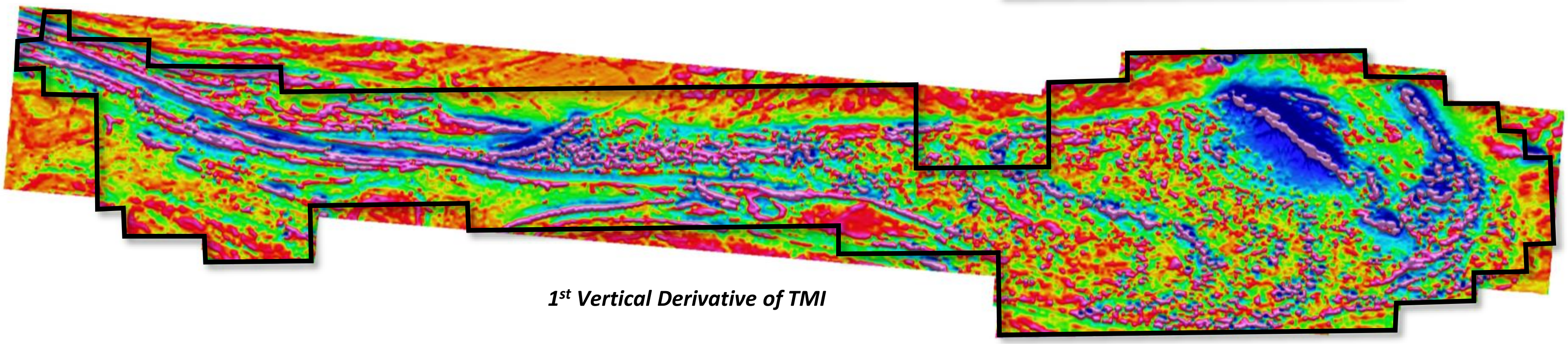


No detailed structural information available within the property at the scale.

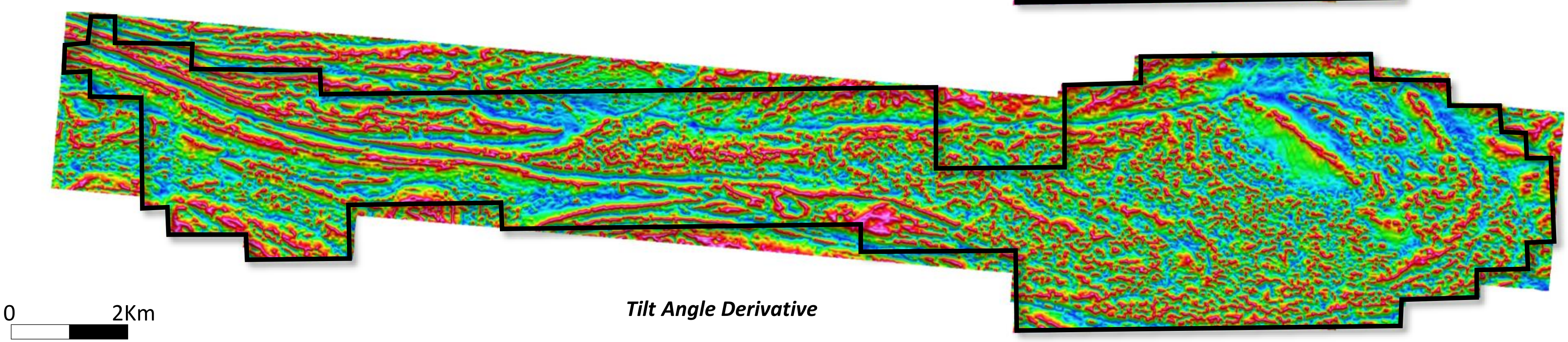
High-Resolution Heliborne Magnetic Survey



Residual Total Magnetic Intensity



1st Vertical Derivative of TMI

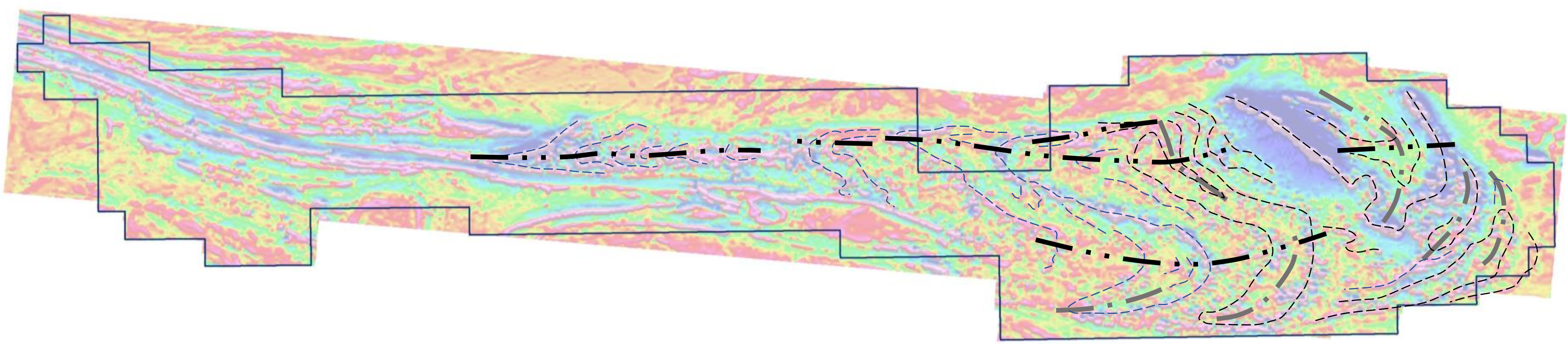


Tilt Angle Derivative

Structural Interpretation: Folds

GEOSCIENCE

N



0 2Km

Legend

Folding trace/form lines

F_2 Fold axial trace

F_1 Fold axial trace

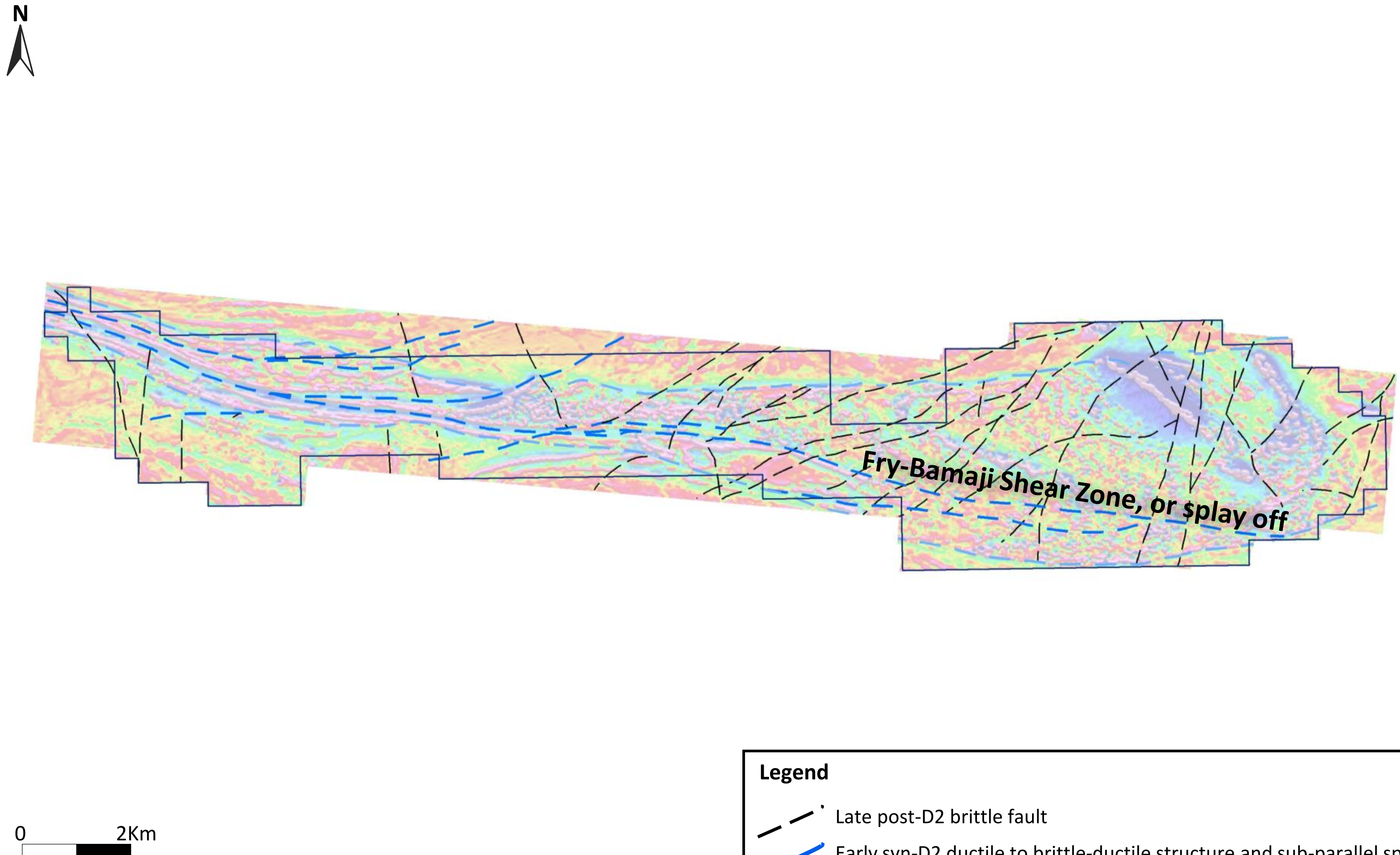
STRAIGHTUP
RESOURCES INC.

Structural Interpretation: Folds

Two major generations of folding are evident in the high-resolution magnetic survey;

1. **Early Folding (F_1)**
   - ENE, and NW-striking, tight, isoclinal folds are evident in the moderate to strong magnetic anomalies, which correspond to the mafic to ultramafic intrusive units, Iron Formation, and mafic to intermediate volcanic rocks (see also slide 11).
2. **Late Folding (F_2)**
   - F_1 is intensely getting folded by dominant E-striking F_2 folds.
   - F_2 are a sets of open to close-tight folds, possibly west plunging, with an overall S-asymmetry at the property-scale and are evidently seen at the eastern portion of the property area.

Structural Interpretation: Faults and Shears



Legend

- Late post-D2 brittle fault
- Early syn-D2 ductile to brittle-ductile structure and sub-parallel splays
- Greenstone bounding interpreted structure

Structural Interpretation: Faults and Shears

Three main sets of faults and shear zones are evident in the high-resolution magnetic survey;

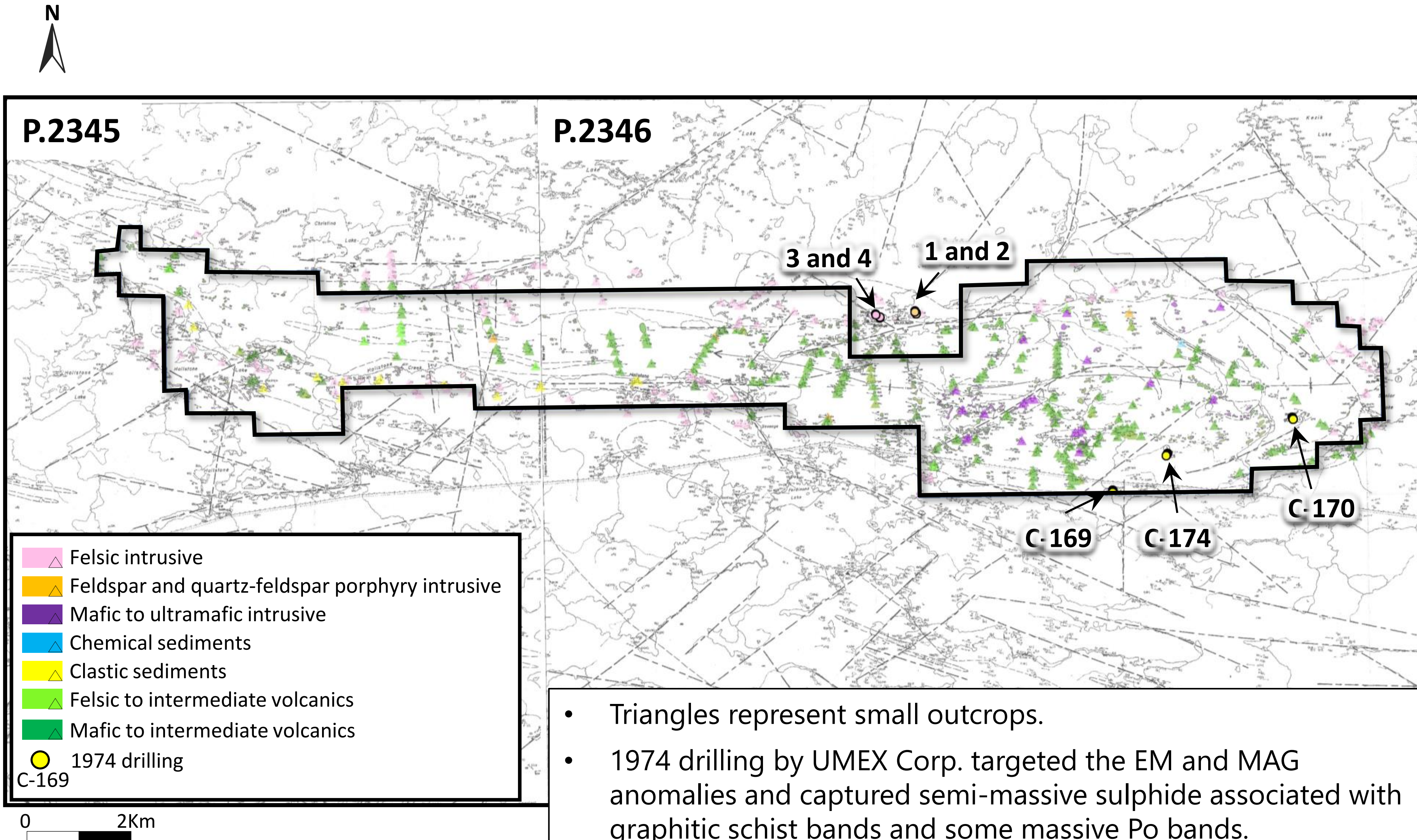
- **Bounding interpreted structures**
  - Two major bounding structures are interpreted on either side of the Greenstone, and at the contact with felsic intrusive rocks.
  - Deformed, folded units are sheared out by E-W bounding structures in the north and south of the volcanic assemblage.
- **Early Shear Zones**
  - Ductile shear zones are generally contact-parallel to sub-parallel and dominantly trend in E-W, and ENE.
  - These are approximately parallel to the F_2 fold axial trace, and locally correspond to the narrow low magnetic zones in between high magnetic anomalies.
  - The possible continuation of "Fry-Bamaji Shear Zone", or splay off it, is a major structure that traverses the whole length of the property.
  - Several possibly second order, or shear band structures strike ENE, at low angle to the interpreted "Fry-Bamaji Shear Zone" and parallel structures.

Structural Interpretation: Faults and Shears

- Although there is no information about the sense of shearing for these structures within the property area, according to the regional reports on the Fry Lake area (OGS 6208), and some detailed mapping in the Slate Falls area, the Fry-Bamaji Shear Zone within the property area might consistently be dextral.

- **Late Faults**
  - N to NE-striking, brittle to brittle-ductile structures cross-cut and locally displace the earlier ductile structures and geological units.

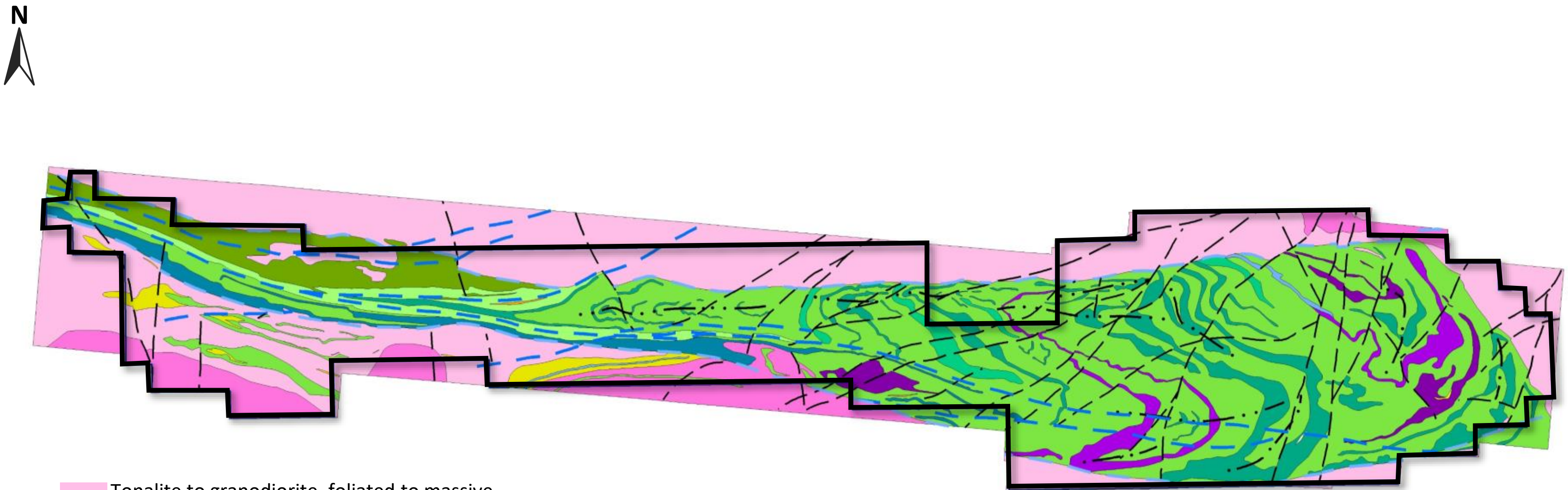
Lithology and Drilling Integration



- Triangles represent small outcrops.
- 1974 drilling by UMEX Corp. targeted the EM and MAG anomalies and captured semi-massive sulphide associated with graphitic schist bands and some massive Po bands.
- No sample and assay is associated with the drill logs.

Geology Interpretation

GEOSCIENCE



- Tonalite to granodiorite, foliated to massive
- Granodiorite to granite, massive to foliated
- Feldspar and quartz feldspar porphyry intrusive
- Chemical metasediments; Iron Formation and chert, massive to finely laminated
- Clastic metasediments; biotite-quartz-feldspar schist
- Clastic metasediments; slate, argillite, mudstone, lithic wacke, feldspathic wacke
- Felsic to intermediate volcanics and volcanoclastics
- Unsubdivided mafic to intermediate, massive to pillowed volcanic flows, amphibolite, volcanoclastics
- Mafic to intermediate pillowed to massive volcanic flows
- Massive to pillowed mafic volcanic flows, amphibolite
- Massive to pillowed, fine to coarse-grained gabbroic mafic volcanic flows, amphibolite, volcanoclastics, magnetic-rich horizons
- Massive mafic volcanic flows or intrusive, amphibolite
- Mafic to ultramafic (?) intrusive, and/or Iron Formation (?)
- Mafic to ultramafic (?) intrusive

- F_2 Fold axial trace
- F_1 Fold axial trace
- Late post-D_2 brittle fault
- Early syn-D_2 ductile to brittle-ductile structure
- Greenstone bounding interpreted structure

0 2Km

STRAIGHTUP RESOURCES INC.

Interpretation Summary: Lithology

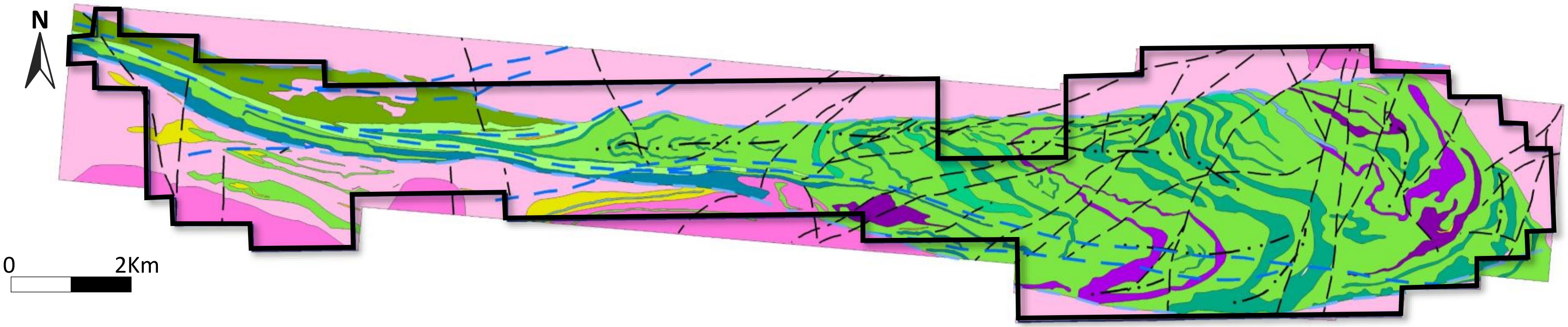
The interpretation relied heavily on magnetic signatures outlined in the recent survey as there were limitations on detailed outcrop maps and drilling information within the property boundary;

- Property area is underlain by a variety of metamorphosed Early Precambrian (Archean) supracrustal and intrusive rocks belonging to the Uchi tectono-lithologic subprovince (Ayres et al. 1971).
- Most of the property area occur within the east-trending volcanic assemblage including massive to pillowed mafic volcanic flows, volcanoclastics, and amphibolite, that are intercalated with intermediate volcanic flows.
- Relatively small lenses of intermediate to felsic volcanoclastic rocks occur in the western part of the area.
- A thin sequence of clastic metasediments is found along the southern side of the main volcanic assemblage.
- Early mafic and ultramafic intrusive rocks include gabbro, diorite, and serpentinized peridotite occur in the eastern part of the property area and are intensely folded and deformed by both D1 and D2 deformation events.
- The volcanic assemblage is bounded by tonalite, granodiorite to granite intrusive units to the north, east, and south. Minor, narrow dykes of feldspar, and quartz-feldspar porphyry are interpreted within the volcanic assemblage.

Conclusions

- At least two possible major phases of deformation are identified in the surface reinterpretation of Ferdinand Gold Property:
  - D_1, is seen in the ENE to NW tight, isoclinal folded (F_1) mafic intrusive, and mafic to intermediate volcanic units.
  - D_2, N-S shortening, is recognized by a sets of open to close-tight folds, possibly west plunging, with an overall S-asymmetry at the property-scale and are evidently seen at the eastern portion of the property area.
  - Major D_2 shear zones are approximately parallel to the F_2 fold axial traces, locally correspond to the narrow low magnetic zones in between high magnetic anomalies.
  - The possible continuation of “Fry-Bamaji Shear Zone”, or splay off, and several likely second order, or shear band ENE-striking structures, are the most predominant features within the property area.
  - Post D2, brittle to brittle-ductile faults and shear zones dominantly strike N, and NE, cross-cut and locally displace the lithological units both dextrally and sinistrally.

Recommendations



- ✓ Central and eastern portion of the property is dominated by intense superimposed folded mafic volcanic and mafic intrusive rocks. The F_2 hinge zones and the strike of fold axial traces are prospective to host gold mineralization.
- ✓ Similarly, the area along the strike of the major interpreted syn-D_2 shear zones (e.g. continuation of "Fry-Bamaji Shear Zone" or splay off), as well as fault intersections seems to be the potential target areas for future exploration.
- ✓ The intersection of late N-to NNE-striking structures with early D_2 E-W structures could possibly control the mineralization zones structurally by creating or enhancing dilatational sites.
- ✓ Rare deformed horizons of iron formation at the eastern portion of the property area may be an important host for orogenic gold mineralization in Archean terranes.
- ✓ A prospecting program with a focus on structural geology is recommended to further trace prospective units, contacts and structures associated with mineralization and collect structural observations to help verify the interpretation.

Interpretation Disclaimer

Due to the limited geological data available to incorporate and guide the interpretation, there was a significant amount of reliance on the magnetic survey data and Orix Geoscience Inc. wants to caution that the geological and structural interpretation work will need to be verified with additional geological observations from the Property. We have prepared a cautionary statement that StraightUp should consider including if the interpretation is in a press release or corporate presentation.

"The geological interpretation prepared for StraightUp Resources Inc. on November 17, 2021, for the Ferdinand Gold Property contains forward-looking information and statements, regarding geological interpretations, potential timing of events, and exploration potential. Forward-looking statements are subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance, or achievements to be materially different from those expressed or implied and reliance should not be placed on such information. Some of the risks, uncertainties, and other factors may cause actual results to be materially different from those expressed or implied by the forward-looking Information.

Forward-looking information and statements are also based on a number of assumptions that may prove to be incorrect, which may include without limitation assumptions about: structural time, structural controls, lithological units interpreted from magnetic data, and geometrical relationships between various lithological units.

The geological interpretation presented here represents the professional geological opinion based on incomplete data for the Ferdinand Gold Property. All reasonable efforts to integrate available data have been taken to reduce the number of possible solutions for the interpretation of the "High-Resolution Heli-Magnetic Dataset" acquired in the year 2021. The following dataset has been heavily relied upon for the interpretation:

High-Resolution Heli-Magnet Geophysical Survey (2021)
Ontario Regional Magnetic Dataset
Ontario Regional 250K Geology
Ontario Government Maps: P.2345 & P.2346
Assessment Reports Available from MNDM

Note: No geological information was collected from the Property by Orix Geoscience Inc., or provided to Orix Geoscience Inc. from StraightUp Resources Inc.

It is strongly recommended that additional information is collected from the Property to further validate and verify the geological interpretation which includes on the ground exploration."

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