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# TECHNICAL REPORT

**On the**

**Titan Gold Property**
**Klotz Lake Area, NTS Map 42F**
**Thunder Bay Mining District**
**Northwestern Ontario, Canada**

**Prepared for:**

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**December 12, 2021**

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# 1.0 SUMMARY

The Property consists of 37 mining claims totalling approximately 2,312.25 hectares land in Klotz Lake Area, Thunder Bay Mining District of Northwestern Ontario, Canada. SOLDERA has the option to own 100 % of the Claims by making cash payments, issuing shares, and carrying out exploration work.

Geologically, the Property is situated in the Wabigoon Subprovince of the Superior Geological Province. This Subprovince consists mainly of Archean metavolcanic and metasedimentary rock sequences intruded by larger granitoid plutons, mainly granodiorite to granite in composition. Locally, the Klotz Lake area is underlain by late Archaean rocks of the Beardmore Geraldton greenstone belt (BGB). The BGB extends from Lake Nipigon to the east of Long Lac, for a total length of approximately 150km and width of 30km. The Titan property lays on the eastern most end of the BGB. The BGB is a relatively small greenstone belt located at the boundary between the Quetico Subprovince and the eastern Wabigoon Subprovince of the Superior Province. The Onaman - Tashota greenstone belt, part of the Wabigoon Subprovince, contacts the BGB to the north. The Wabigoon is ~70% basaltic metavolcanics with thin inter-formational chemical plus clastic metasedimentary units. The metavolcanics & metasediments have been intruded by felsic to intermediate intrusives (including the gold bearing Elmhirst Lake Stock and Kaby Lake Stock), ranging from trondhjemite to granodiorite, and quartz-monzonite. The metavolcanics and metasediments have undergone greenschist metamorphism.

In the Klotz Lake region, gold mineralization is dominantly hosted within shear zone structures associated which splays off the regional Klob Lake fault structure. Several shear hosted high grade gold mineralization occurrences are on the Property, out of which most important are the Titan and Tomorrow Lake showings. The Titan showing was discovered by Goldstream in the fall of 2011. Here, the highly deformed and quartz veined volcanic/gabbro rocks contain visible gold with initial grab samples returning gold assays of 11,200 g/t Au, 5,900 g/t Au and 3,420 g/t Au. The Tomorrow Lake Showing is located proximal to the contact between mafic volcanic/gabbro rocks and a large diorite stock. During 1983, exploration work, the best results were in drill hole BO-83-34 which returned 7.91 g/t over 5.12 m.

Historical work on the Property dates back to the 1930's when claims were staked, and later Gold Showing was discovered by L. Morrow who reportedly collected a 1,833 kg sample of sheared stock -worked volcanic rocks from a pit returned 31.73 g/t Au. L. Morrow in 1958 intersected a mineralized zone 5ft wide averaging 0.17 oz/t Au (5.3 g/t) over 1.5m. The same structure was again tested by Getty Resources in 1986 which intersected mineralized tuffaceous units returning wide low grade results with several narrow high grade intercepts (e.g. 75.6 g/t Au over 0.5m and 20.2 g/t Au over 0.5m). Of most significance is that these high grade intercepts were located within a highly carbonate altered chalcopyrite(3%)-pyrrhotite(5%) portion at the end of the hole with a final assay of 223.5-224m (EOH)

returning 0.24 oz/t Au (7.5 g/t over 0.5m). A total of around seventy-two (72) holes totaling 5,666 m were drilled between 1958 and 2004 on the Property.

During 2011-12, Prodigy Gold / Goldstream Exploration Limited completed an exploration program comprising of trenching, nine-holes with 2021 m diamond drilling, assays, ground geophysics, mapping, stripping, and sampling at Titan Showing Area. The gold mineralization was traced for 200 m along strike. Visible gold is associated with strongly deformed quartz veins within sheared, fine grained, mafic volcanic or gabbro at Goldstream's newly defined "Morrow Lake Deformation Zone (MLDZ)". The showing represents a multiple vein system with at least 4 veins carrying gold. High gold grades were received from the channel sampling program. The quartz veins are smoky grey to white and often display an orange colour due to oxide staining. The Titan Trench zone is located at the site of a fault-bounded fold hinge roughly 300 m north of the regional Klob Lake Fault. Visible coarse- and fine-grained gold is found within multiple granular grey-white quartz veins (pyrite ± minor calcite) in trenches of the main showing and along hairline fractures in drill core. In some veins galena, and possibly molybdenite and malachite have been observed. These veins, hosted within gabbro, have been tightly folded about hinge axis striking on average 120 to 160 degrees. Host rocks are strongly sheared, silicified and locally carbonatized. Thirty seven of the 134 channel samples taken at the three Titan trenches assayed for gold over 0.5 g/t, 9 samples over 10 g/t. The highest assay values obtained from the channel samples was 31.1 g Au/t and 10.7 g Ag/t over 0.4 m. Only one sample, from the Titan showing, returned anomalous molybdenum, of 1,380 ppm in a sample with low gold, 0.2 g Au/t.

The best intersections from the 2012 drilling at Titan Showing include 11.16 g Au/t over a core length of 3.0 m from 122.9 m to 125.9 m, in drill hole KL 12-01, including 61.80 g Au/t over 0.5 (from 125.4 m to 125.9 m) and a second zone of 2.95 g Au/t over core length of 4.0 m from 195.3 m to 199.3 m including 7.38 g/t over 0.5 m (from 195.3 m to 195.8 m) and 7.60 g/t over 0.6 m (from 197.5 m to 198.1 m) all hosted in sheared/silicified gabbro. KL-12-02b, drilled beneath KL 12-01, encountered 2.22 g Au/t over 1.3 m from 254.3-254.7 m. Drill hole KL-120-08 approximately 80 m to the east encountered 43.78 g Au/t over 2.5 m from 48.0-50.5 m including visible gold over a 0.4 m section from 49.4-49.8 m assaying 271.00 g Au/t.

Alex Pleson, the Property Vendor carried out exploration work on the Property from November 2016 to May 2021 which included prospecting, geological mapping, trenching, channel sampling, ground geophysical surveys and assaying. During this work, a total of 53 samples were taken and 14-line kilometers area was mapped. Additionally, a total area of 200 square meter was excavated through trenching to expose bedrock and 5 kilometers of trail were made to improve access to the Property using a D5 Cat Dozer and an excavator Kubota KX040.Total cost of exploration work from September 2019 to May 2020 is $82,500 and from May 2020 to May 2021 a total of $91,732.46

The results of 2016 channel sampling indicated gold values in the range of 0.011 g/t to 51.1 g/t (1.8 ounces per ton). One channel sample came back with 5.37 g/t gold over one-meter length. The results of prospecting and geological work sampling of 2019-20 work indicated lower values of gold with only one sample indicated 2.84 g/t.

A VLF and ground magnetic survey was completed on the Iron Grid from January 5-15, 2020 with a total 14 line-km at 50m line spacing and 25m stations. Similarly, a second magnetic / VLF was completed on the Morrow Grid from May 1-10, 2020 with a total 14 line-km at 50m line spacing and 25m stations. The results of survey have shown that the mineralization trend which was explored at Morrow Lake through drilling and trenching can further extends to the east along strike for approximately two kilometres. It is recommended to fill the gap in survey grids to get a complete picture of the area and see the continuity of structures.

SOLDERA has not carried out any exploration work on the Property.

Mineralization style for the Property suggests that gold mineralization is dominantly hosted within shear zone structures associated which splays off the regional Klob Lake fault structure. One prominent characteristic of all significant gold deposits in the Superior Province is their occurrence within or immediately adjacent to greenstone belts. The faults, and associated splays, which control gold mineralization, are typically part of a larger deformational zone that can reach kilometers in thickness and several hundred kilometers in strike. There are three types of gold mineralization identified in the area: (a) in quartz veins hosted in volcanic rocks and felsic dikes within shear zones, (b) in narrow semi-massive sulphide bands filling fissures, and (c) in altered rocks within shear zones with or without quartz veins.

A total of six samples were collected to verify historical channel sampling and other exploration areas. All samples were under the care and control of the author. The samples were submitted to Polymet Labs in Cobalt, Ontario for sample preparation and analyses. The samples were assayed using Fire Assay package for gold and silver (50 g, Fire assay, AAS finish). The sample assay results indicated gold (Au) values in the range of 0.057 grams per ton (g/t) to 4.03 g/t while one sample (31523) was below laboratories detection limits (0.028 g/t). Highest Silver values of 26.31 were in sample 31518 and the lowest 1.3 g/t was sample 31523 while four samples were below the laboratories detection limits.

The data presented in this report is based on published assessment reports available from SOLDERA, Ontario ENDM (Ministry of Energy, Northern Development and Mines), the Geological Survey of Canada, and the Ontario Geological Survey. All the consulted data sources are deemed reliable. The data collected during present study is considered sufficient to provide an opinion about the merit of the Property as a viable exploration target.

Based on its favourable geological setting indicating shear hosted gold mineralization in trenches, drill holes, geophysical survey data and findings of present study, it is concluded that the Property is a property of merit, with good potential for discovery of economic concentration of gold mineralization through further exploration. Good road access, availability of exploration and mining services in the vicinity makes it a worthy mineral exploration target. The historical exploration data collected on the Property provides the basis for a follow-up work program.

**Recommendations**

In the author's opinion, the character of the Property is sufficient to merit the following phased work program, where the second phase is contingent upon the results of the first phase.

***Phase 1 – Geophysical Surveys, Prospecting, Trenching and Sampling***

The historical work at the Property was mainly focussed on the main Titan and Morrow showings, however the geophysical survey data indicates a northwest southeast trending structural corridor of 1.67 to 4 kilometres in length along strike within Morrow Lake Deformation Zone (MLDZ) which can be a potential target for further exploration. The results of ground geophysical survey indicate that magnetic anomalies provide better control of finding gold mineralization for exploration. It is recommended to fill the gap in 2020 VLF survey, and continue prospecting, trenching, and sampling work along MLDZ.

Total estimated budget for Phase 1 program is $157,630 and it will take about three months' time to complete this work.

***Phase 2 – Detailed Drilling and Resource Estimation***

If results from the first phase are positive, then a detailed drilling program would be warranted to check the most promising targets identified in Phase 1. The scope of work for drilling and location of drill holes would be determined based on the findings of Phase 1 investigations.

# 2.0 INTRODUCTION

The present report is based on published assessment reports available from the Ministry of Energy, Northern Development, Mines and Forestry (ENDM) Ontario, and published reports by the Ontario Geological Survey (OGS), the Geological Survey of Canada ("GSC"), various researchers, websites, and personal observations. All consulted sources are listed in the References section. The sources of the maps are noted on the figures.

The scope of Property inspection was to verify historical exploration work and to take geological, infrastructure, and other technical observations on the Property. The geological work performed to verify the existing data consisted of surface grab and channel sampling and visiting reported approachable historical exploration work areas.

The author has also reviewed the land tenure on the ENDM Database. The author reserves the right but will not be obliged to revise the report and conclusions if additional information becomes known after the date of this report.

# 3.0 RELIANCE ON OTHER EXPERTS

This report is based upon personal examination by the author and review of available reports on the Property. The author visited the property on various occasions throughout the 2016, 2020, and 2021 programs, to appraise the geological environment, to verify historical exploration work and assess the potential of the Property for discovery of gold and other metals.

The information, opinions and conclusions contained herein are based on:

- Information available to the author at the time of preparation of this report;
- Assumptions, conditions, and qualifications as set forth in this report; and,
- Data, reports, and other information supplied by SOLDERA and other third-party sources.

As of the date of this report, the author is not aware of any material fact or material change with respect to the subject matter of this technical report that is not presented herein, or which the omission to disclose could make this report misleading.

# 4.0 PROPERTY DESCRIPTION AND LOCATION

Twenty-six of the Property claims were originally staked on ground by erecting physical posts as required by earlier claim staking regulations in Ontario. As part of the process to update the provincial *Mining Act*, Ontario has launched a new online, self-service claim staking system in 2018. The new electronic *Mining Lands Administration System* (MLAS) replaces the province's century-old traditional ground staking methods. All the mining claims in Ontario, which existed prior to the modernization (legacy claims in the new parlance), have been converted to what are now known as cell claims or boundary claims.

A cell claim is a mining claim that relates to all the land included in one or more cells on the provincial grid. A boundary claim is a claim that is made up of only a part or parts of one or more cells. Due to current COVID 19 situation, Ontario Ministry of Mines has extended claims expiry dates and their status is defined as "Hold Special Circumstances Apply" on claim abstracts shown on MLAS). The remaining claims covering 1,640.25 hectares were staked in 2020 using online staking system and are active until May 2022.

The information posted on Ontario MLAS system is provided below:

*"The ministry acknowledges that the COVID-19 outbreak and related public health requirements are special circumstances that have created challenges for all claim holders in Ontario. As a result, we are leveraging the tools available under the Mining Act to provide claim holders with relief through simplified exclusion orders. Claim holders with claim anniversary dates on or before December 31, 2020, will be given an exclusion order by making a brief request via email. There will be no cost for COVID-19 related exclusion requests. The exclusion orders will remove the requirement to carry out assessment work for a period of time of up to 12 months."*

All cell mining claims are subject to $200 - $400 per unit worth of eligible assessment work to be undertaken before their expiry date as shown in Table 1 below. Total work commitment to maintain these claims is $44,000 per year or the other option is to pay cash in lieu.

Mining claims in Ontario do not include surface rights. The surface rights on the Property are owned by Crown where a permit is required to carry out intrusive exploration work such as line-cutting, trenching and drilling.

First Nation communities within Greenstone municipal boundaries are Long Lake 58, Lake Nipigon Ojibway, Rocky Bay and Sand Point, while Aroland and Ginoogaming First Nations are situated just outside the Municipality, adjacent to the wards of Nakina and Longlac, respectively (Source: http://greenstone.ca/). Any exploration and mining work on the Property will need to be carried out in consultation with these communities.

Claim data is summarized in Table 1, while a map showing the Claims is presented in Figure 2. There is no past producing mine on the Property and there were no historical mineral resource or mineral reserve estimates documented.

There are no known environmental liabilities. There is an existing exploration permit in the name of Alex Pleson, the Property Vendor which can be utilized to complete the recommended Phase 1 exploration work until the claims are transferred to SOLDERA after completion of the Option payments.

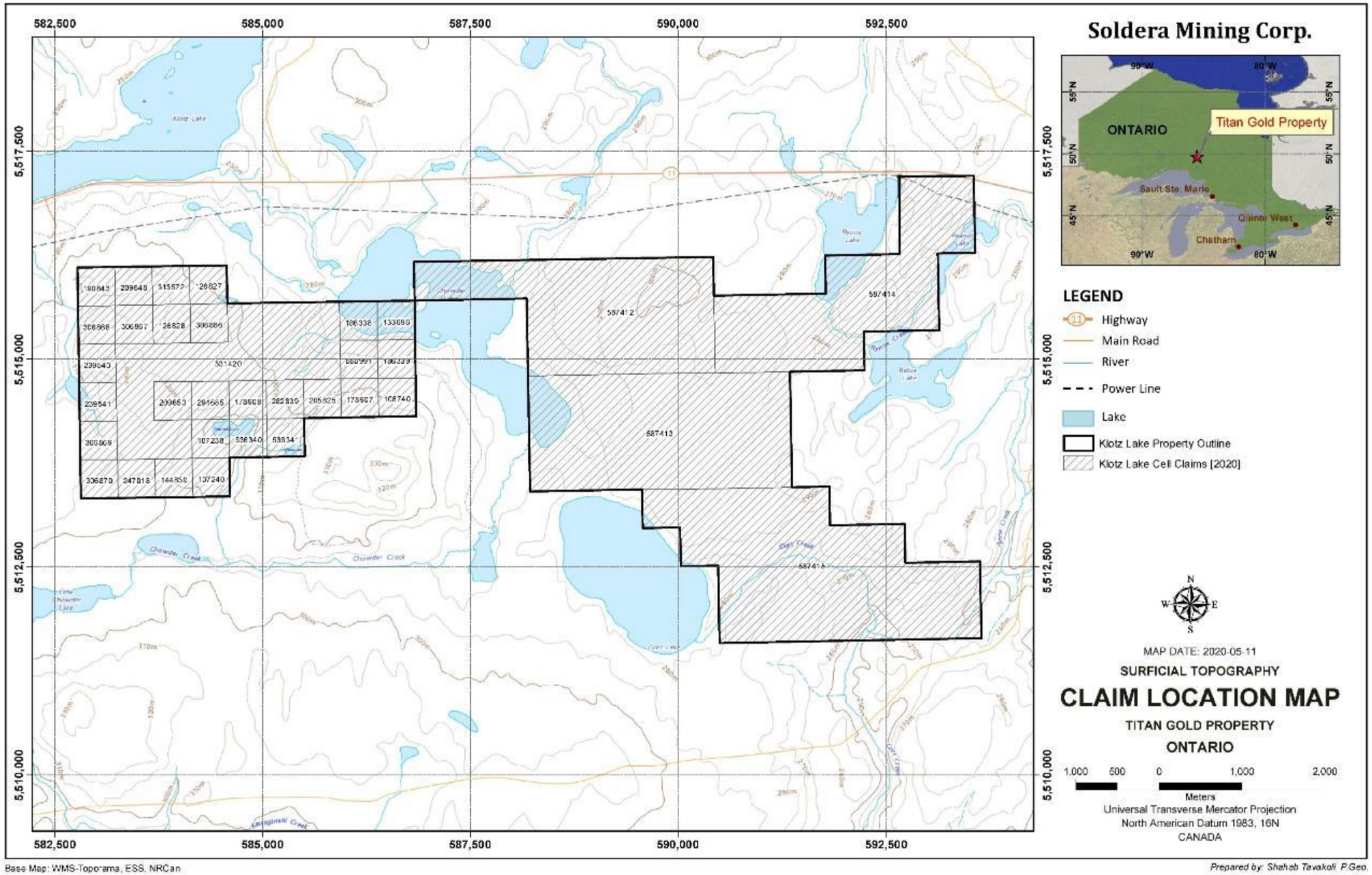
**Table 1: List of Property Claims**

| Tenure ID | Legacy Claim Id | Township / Area | Tenure Type | Status | Expiry Date | Tenure Ownership Percentage | Work Required |
|---|---|---|---|---|---|---|---|
| 531420 | | KLOTZ LAKE AREA | Multi-cell Mining Claim | Active | 2019-01-15 (Hold Special Circumstances Apply) | Alexander Pleson (100%) | $4,800 |
| 306866 | 4266307, 4280705 | KLOTZ LAKE AREA | Single Cell Mining Claim | Active | 2019-06-01 (Hold Special Circumstances Apply) | Alexander Pleson (100%) | $400 |
| 282839 | 4280705 | KLOTZ LAKE AREA | Boundary Cell Mining Claim | Active | 2019-06-01 (Hold Special Circumstances Apply) | Alexander Pleson (100%) | $200 |
| 205825 | 4280705 | KLOTZ LAKE AREA | Boundary Cell Mining Claim | Active | 2019-06-01 (Hold Special Circumstances Apply) | Alexander Pleson (100%) | $200 |
| 186339 | 4280705 | KLOTZ LAKE AREA | Boundary Cell Mining Claim | Active | 2019-06-01 (Hold Special Circumstances Apply) | Alexander Pleson (100%) | $200 |
| 186338 | 4280705 | KLOTZ LAKE AREA | Boundary Cell Mining Claim | Active | 2019-06-01 (Hold Special Circumstances Apply) | Alexander Pleson (100%) | $200 |
| 178908 | 4280705 | KLOTZ LAKE AREA | Boundary Cell Mining Claim | Active | 2019-06-01 (Hold Special Circumstances Apply) | Alexander Pleson (100%) | $200 |
| 178907 | 4280705 | KLOTZ LAKE AREA | Boundary Cell Mining Claim | Active | 2019-06-01 (Hold Special Circumstances Apply) | Alexander Pleson (100%) | $200 |
| 133696 | 4280705 | KLOTZ LAKE AREA | Boundary Cell Mining Claim | Active | 2019-06-01 (Hold Special Circumstances Apply) | Alexander Pleson (100%) | $200 |
| 108740 | 4280705 | KLOTZ LAKE AREA | Boundary Cell Mining Claim | Active | 2019-06-01 (Hold Special Circumstances Apply) | Alexander Pleson (100%) | $200 |
| 313572 | 4266307 | KLOTZ LAKE AREA | Boundary Cell Mining Claim | Active | 2020-01-15 (Hold Special Circumstances Apply) | Alexander Pleson (100%) | $200 |
| 306870 | 4266307 | KLOTZ LAKE AREA | Boundary Cell Mining Claim | Active | 2020-01-15 (Hold Special Circumstances Apply) | Alexander Pleson (100%) | $200 |
| 306869 | 4266307 | KLOTZ LAKE AREA | Boundary Cell Mining Claim | Active | 2020-01-15 (Hold Special Circumstances Apply) | Alexander Pleson (100%) | $200 |
| 306868 | 4266307 | KLOTZ LAKE AREA | Boundary Cell Mining Claim | Active | 2020-01-15 (Hold Special Circumstances Apply) | Alexander Pleson (100%) | $200 |
| 306867 | 4266307 | KLOTZ LAKE AREA | Single Cell Mining Claim | Active | 2020-01-15 (Hold Special Circumstances Apply) | Alexander Pleson (100%) | $400 |
| 247018 | 4266307 | KLOTZ LAKE AREA | Boundary Cell Mining Claim | Active | 2020-01-15 (Hold Special Circumstances Apply) | Alexander Pleson (100%) | $200 |
| 239541 | 4266307 | KLOTZ LAKE AREA | Boundary Cell Mining Claim | Active | 2020-01-15 (Hold Special Circumstances Apply) | Alexander Pleson (100%) | $200 |
| 239540 | 4266307 | KLOTZ LAKE AREA | Boundary Cell Mining Claim | Active | 2020-01-15 (Hold Special Circumstances Apply) | Alexander Pleson (100%) | $200 |
| 209650 | 4266307 | KLOTZ LAKE AREA | Single Cell Mining Claim | Active | 2020-01-15 (Hold Special Circumstances Apply) | Alexander Pleson (100%) | $400 |
| 209648 | 4266307 | KLOTZ LAKE AREA | Boundary Cell Mining Claim | Active | 2020-01-15 (Hold Special Circumstances Apply) | Alexander Pleson (100%) | $200 |
| 190843 | 4266307 | KLOTZ LAKE AREA | Boundary Cell Mining Claim | Active | 2020-01-15 (Hold Special Circumstances Apply) | Alexander Pleson (100%) | $200 |
| 144839 | 4266307 | KLOTZ LAKE AREA | Boundary Cell Mining Claim | Active | 2020-01-15 (Hold Special Circumstances Apply) | Alexander Pleson (100%) | $200 |
| 126828 | 4266307 | KLOTZ LAKE AREA | Single Cell Mining Claim | Active | 2020-01-15 (Hold Special Circumstances Apply) | Alexander Pleson (100%) | $400 |
| 126827 | 4266307 | KLOTZ LAKE AREA | Boundary Cell Mining Claim | Active | 2020-01-15 (Hold Special Circumstances Apply) | Alexander Pleson (100%) | $200 |
| 107240 | 4266307 | KLOTZ LAKE AREA | Boundary Cell Mining Claim | Active | 2020-01-15 (Hold Special Circumstances Apply) | Alexander Pleson (100%) | $200 |
| 107238 | 4266307 | KLOTZ LAKE AREA | Boundary Cell Mining Claim | Active | 2020-01-15 (Hold Special Circumstances Apply) | Alexander Pleson (100%) | $200 |
| 294685 | 4266307, 4280705 | KLOTZ LAKE AREA | Boundary Cell Mining Claim | Active | 6/1/2020 | Alexander Pleson (100%) | $200 |
| 536341 | | KLOTZ LAKE AREA | Single Cell Mining Claim | Active | 12/12/2020 | Alexander Pleson (100%) | $400 |
| 536340 | | KLOTZ LAKE AREA | Single Cell Mining Claim | Active | 12/12/2020 | Alexander Pleson (100%) | $400 |
| 550991 | | KLOTZ LAKE AREA | Single Cell Mining Claim | Active | 6/4/2021 | Alexander Pleson (100%) | $400 |
| 587415 | | BICKNELL LAKE AREA, KLOTZ LAKE AREA | Multi-cell Mining Claim | Active | 2022-05-05 | Alexander Pleson (100%) | 10000 |
| 587414 | | BICKNELL LAKE AREA | Multi-cell Mining Claim | Active | 2022-05-05 | Alexander Pleson (100%) | 6800 |
| 587413 | | BICKNELL LAKE AREA, KLOTZ LAKE AREA | Multi-cell Mining Claim | Active | 2022-05-05 | Alexander Pleson (100%) | 8400 |

| Tenure ID | Legacy Claim Id | Township / Area | Tenure Type | Status | Expiry Date | Tenure Ownership Percentage | Work Required |
|---|---|---|---|---|---|---|---|
| 587412 | | BICKNELL LAKE AREA, KLOTZ LAKE AREA | Multi-cell Mining Claim | Active | 2022-05-05 | Alexander Pleson (100%) | 7200 |
| **Total** | **34 Cell Claims** | | | | **2312.25 Hectares** | **Work Required** | **$44,400** |

**Figure 1: Property Location Map**

**Figure 2: Claim map with physiography**



# 5.0 ACCESS, CLIMATE, PHYSIOGRAPHY, LOCAL RESOURCES, AND INFRASTRUCTURE

## 5.1 Access

The Property covers two claim blocks connected to each other along corners totaling approximately 2,312.25 hectares land, located just south of Highway 11, approximately 365 kilometres from Thunder Bay (Figures 1 and 2). The nearest town to the property is Longlac situated 55 km west of the Property. To access to the Titan gold showing and drill sites, drive on the Trans-Canada Highway 11 for approximately 55 km east of Longlac. Then turn south on the Fish Creek gravel road to Tomorrow Lake where the road ends. Onwards, historical drill roads need four-wheel drive or all-terrain vehicle (ATV) along the Northshore of Morrow Lake to the Titan Gold Showing and historical drill sites.

## 5.2 Climate

The climate on the Property mirrors that of Greenstone and experiences a humid continental climate with cold winters and warm summers. The highest temperature ever recorded in the area was 40°C (104.0°F) on 11 and 12 July 1936 at Longlac. The coldest temperature ever recorded was −50.2 C (−58.4 F) on 31 January 1996 (at Geraldton Airport). The warm season lasts for 3.8 months, from May 21 to September 14, with an average daily high temperature above 61°F (16°C). The hottest day of the year is generally July 24, with an average high of 74°F (23°C) and low of 54°F (12°C). The cold season lasts for 3.0 months, from December 1 to March 1, with an average daily high temperature below 23°F(-5°C). The coldest day of the year is January 28, with an average low of -9°F (-23°C) and high of 12°F (-11°C).

The rainy period of the year lasts for 7.7 months, from March 29 to November 20, with a sliding 31-day rainfall *of* at least 0.5 inches (1.27 cm). The most rain falls during the 31 days centered around July 3, with an average total accumulation of 3.1 inches (7.87 cm). Snowfall shown in Figure 4 is in liquid-equivalent terms. The actual depth of new snowfall is typically between 5 and 10 times the liquid-equivalent amount, assuming the ground is frozen. Colder, drier snow tends to be on the higher end of that range and warmer, wetter snow on the lower end. Greenstone experiences some seasonal variation in monthly liquid-equivalent snowfall. The snowy period of the year lasts for 7.9 months, from September 27 to May 22, with a sliding 31-day liquid-equivalent snowfall of at least 0.1 inches (0.25 cm). The most snow falls during the 31 days centered around November 23, with an average total liquid-equivalent accumulation of 0.9 inches. Exploration work such as geological mapping, prospecting, trenching, and sampling can be carried out during summer months, whereas drilling and geophysical surveying can be done throughout the year.
(Climate Data Source: https://weatherspark.com/y/14340/Average-Weather-in-Greenstone-Canada-Year-Round#Sections-Humidity).

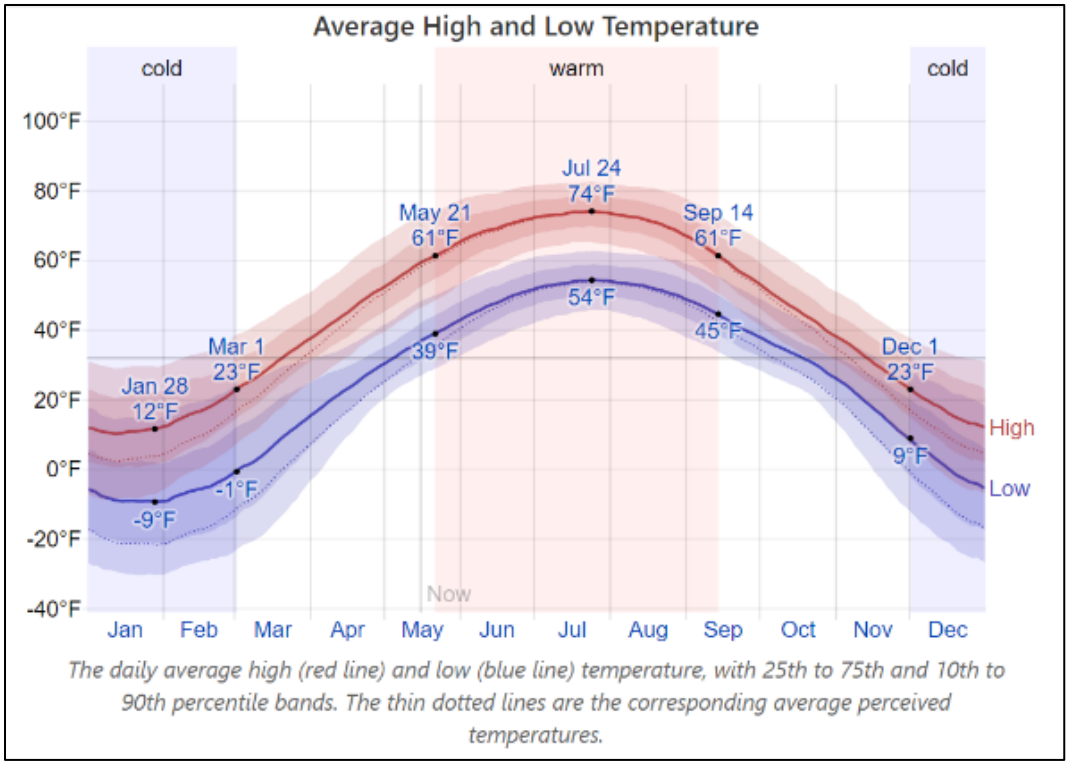



**Figure 3: Greenstone Average Annual Temperatures (Source: Weatherspark.com)**

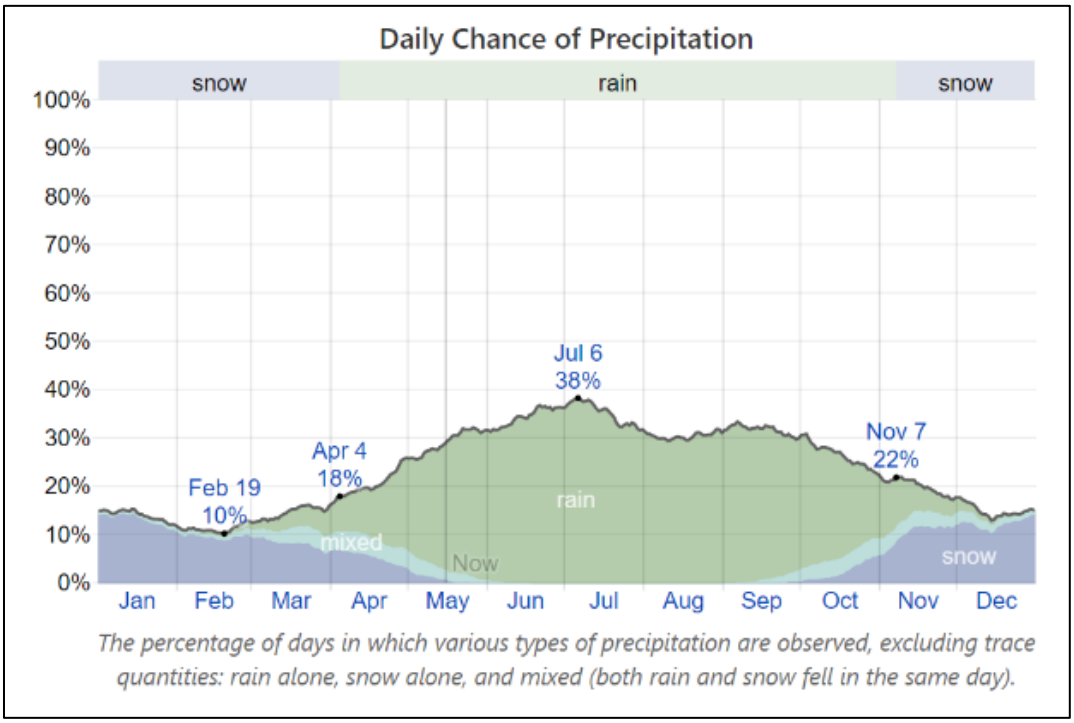



**Figure 4: Greenstone Average Annual Precipitation (Source: Weatherspark.com)**

## 5.3 Physiography

Physiography of the Property (Figure 2) is typical of the Canadian Shield, with large competent outcrops surrounded by lakes and swamps. The property comprises broadly rolling surfaces of Canadian Shield bedrock that occupies most of northwestern Ontario and which is either exposed at surface or shallowly covered with Quaternary glacial deposits. Late Wisconsinan glacial deposits cover the Property area and the physiography of the Klotz Lake region is defined by glacial activity. The elevation changes are gradual with glacial lakes, muskeg and marshes surrounded by hills, moraines, and ridges of glaciofluvial material and till. Glacial material is typically unsorted sand, silt, and gravel. The height of the land in the Titan property varies between 260 m to 290 m above sea level (Figure 2). Some small sand eskers define the topography to the northeast of the area where the 2012 drilling was focused. Large outcrops of mafic volcanic rocks also create topographic highs and hills locally. Small creeks exist throughout the region and drain into Morrow Lake. Sharp fault valleys and cliffs have been observed in the Titan showing area. Faulting appears to affect the outcrop exposure and distribution in the area which is a mixture of large expansive outcrops and low-lying swamps. The glacial overburden where the drilling was undertaken is typically between one and five metres thick.

Mature coniferous forests cover most of the property, with sporadic young regeneration of deciduous trees due to past logging operations. The Property area is covered by boreal forest with the dominant species being Jack pine and Black Spruce. Willow shrubs and grasses dominate the low marshy areas. The land surface within the area varies somewhat from the region in that there is considerable relief between the lakes in most areas and the ground surface.

## 5.4 Local Resources and Infrastructure

The nearest town to the property is Longlac situated 55 km west of the Property. Longlac is part of the Municipality of Greenstone which was created on January 1, 2001 by the amalgamation of the former municipalities of the Town of Geraldton, Town of Longlac, the Township of Nakina and the Township of Beardmore, and an extensive area of unincorporated territory including numerous settlement areas such as; Caramat, Jellicoe and MacDiarmid (Source: http://greenstone.ca/). Geraldton is the largest populated town in the region located 30 km west of Longlac and has an airport, hospital, retail, and banking facilities.

The Property has good road access, located just south of Highway 11. Canadian National Railway (CN Rail) has a northeastern corridor connecting Longlac with Toronto, Thunder Bay and Winnipeg. A high-tension powerline runs along highway 11 just north of the Property. Natural gas is also connected to Longlac. There are several lakes, rivers, and creeks in and around the Property area which can be a source of water for exploration work. The Property size is good enough for future exploration and mining operations.

The Greenstone Regional Airport, owned and operated by the Corporation of the Municipality of Greenstone, is located at Geraldton approximately 90 kilometers to the west of the Property.

Airport activity consists of movements by aircraft charters, medevac flights, and Ministry of Natural Resources fire detection and fire response aircraft. The Greenstone Regional Airport also has sea plane facilities located at Hutchison Lake, accessible from Highway 584 (at the intersection of MacOdrum Drive). (http://www.greenstone.ca/content/airports)

The town of Thunder Bay, located about 365 kilometres from the Property, is the largest city in Northwestern Ontario, serving as a regional commercial centre. The town is a major source of workforce, contracting services, and transportation for the forestry, pulp and paper and mining industry. Thunder Bay is a transportation hub for Canada, as the TransCanada highways 11 and 17 link eastern and western Canada. It is close to the Canada-U.S. border and highway 61 links Thunder Bay with Minnesota, United States. Thunder Bay has an international airport with daily flights to Toronto, Ontario and Winnipeg, Manitoba, and the United States. There is a large port facility on the St. Lawrence Seaway System which is a principal north-south route from the Upper Midwest to the Gulf of Mexico.

The city of Thunder Bay has most of the required supplies for exploration work including grocery stores, hardware stores, exploration equipment supply stores, restaurants, hotels, and a hospital. Many junior exploration and mining companies are based in Thunder Bay, and thus the city is a source of skilled mining labour.

# 6.0 HISTORY

Historical work on the Property dates back to the 1930's when the L. Morrow staked the claims, and later Gold Showing was discovered by L. Morrow who reportedly collected a 1,833 kg bulk sample of sheared stockworked volcanic rocks from a pit located at the northeast end of Tomorrow Lake in 1951. The sample reportedly returned 31.73 g/t Au. A 15-drill hole program was completed on the Property near Morrow Lake area (Figure 5). L. Morrow in 1958 intersected a mineralized zone 5ft wide averaging 0.17 oz/t Au (5.3 g/t over 1.5m). The same structure was again tested by Getty Resources in 1986 which intersected mineralized tuffaceous units returning wide low grade results with several narrow high grade intercepts (e.g. 75.6 g/t Au over 0.5m and 20.2 g/t Au over 0.5m). Of most significance is that these high grade intercepts were located within a highly carbonate altered chalcopyrite(3%)-pyrrhotite(5%) portion at the end of the hole with a final assay of 223.5-224m (EOH) returning 0.24 oz/t Au (7.5 g/t over 0.5m) (Figures 5-9, Table 4). Between 1993 and 1996, Swereda has completed Beep Mat surveys over the property outlining magnetic anomalies. These areas were subsequently trenched/stripped and blasted. (Source AFRI 2-57590-10).

**Table 2: Historical work summary 1958-2004**

| Year | Work Completed | Company | Report (AFRI) Number | Comments |
|---|---|---|---|---|
| **1958** | Diamond Drilling | L. Morrow | 42F13SW0044 | 15 drill holes (415m), one of which was drilled on SE corner of legacy claim 4266307 (hole 7). Hole 7 reported 5.0 ft at 0.17 oz/t Au (AFRI #: 42F13SW0036) |
| **1982** | Line cutting, Ground Magnetics, prospecting | Banque-Or Inc. | 42F13SW0036 | 5.5 miles of line cut with line separations of 100 and 400 ft, pickets at 50 ft. Total of 4.1 miles were surveyed by ground magnetics. |
| **1985** | Ground Mag-EM | Golden Tiger | 42F13SW0013 | Survey covers NW portion of legacy claim 4266307; 400 ft line spacing, 100 ft picket spacing. |
| **1986** | Diamond Drilling | Getty Resources Ltd. | 42F13SW0031 | 8 drill holes (1422m), only hole KL-86-23(224m) was completed on legacy claim 4266307. Intersected wide, but low-grade mineralized lapilli tuffs and narrow high-grade carbonate altered portions (e.g. 75.6 g/t Au over 0.5m and 20.2 g/t Au over 0.5m). Hole was ended in best in mineralized portion of hole. |
| **1993** | Beep Mat Survey, Soil (20) and Rock samples (16), | M. Swereda | 42F13SW2001, 42F13SW0003, 42F13SW0005 | Soil: up to 249 ppb Au, Mo anomaly(s). Rock: anomalous Cu. Beep Mat anomalies were trenched and local shear zones |
| | Trenching (600m2) | | | uncovered (slightly elevated Au results) |
| **1995** | Hand stripping | M. Swereda | 42F13SW0015 | Best sample 0.09 oz/t Au, elevated Cu |
| **1995** | Beep Mat survey | S. Shields | 42F13SW0011 | Completed over the frozen Tomorrow Lake, outlined two anomalies. |
| **1996** | Blasting | M. Swereda | 42F13SW0023 | No significant Au results |
| **2004** | Drilling | Clark | 42F13SW2003 | Only hole KL-04-02 on claim 4266331. Anomalous results returned (i.e. 0.77 g/t over 1m) |

There are two gold occurrences on the property which are summarized in in Mineral Deposit Identification (MDI) Link of Ontario Ministry of Mines and Northern Development (MNDM) online database (Table 3 and Figure 5 for location).

**Table 3 : Mineral showings summary provided in MDI database**

| | | |
|---|---|---|
| Name of Showing | Titan Gold Showing - 2012, Titan Zone - 2012, Hardrock East Project – 2012 | Morrow Prospect - 1958, Chowder Lake - 1958, Explorations Banque-or Inc. Property - 1983, Chowder Lake Gold Showing - 1980, Solarus Grid - 2012 |
| Exploration History | 2011-12: Prodigy Gold / Goldstream Exploration Limited – trenching, Diamond Drilling (DD) -9-2021 m, assays, ground geophysics, mapping, stripping, sampling | 1937: L. Morrow and A.H. Ward - staking. 1958-62: L Morrow - DD-15-1363 ft 1980-81: Exchange Mining - ground geophysics, stripping, sampling, DD-7-1043 ft, mag and VLF surveys. 1983: Exploration Banque-Or Inc.- DD-37, ground geophysics. 1983-84: Getty Canadian Metals Ltd.- airborne geophysics, DD-21-3388m, ground geophysics, mapping, and sampling over. 1985: Golden Tiger Mining Exploration Co. Ltd. - ground geophysics, DD-8-1561 ft. 1993: J. Shields - trenching and stripping. 2011: Prodigy Gold Corporation Inc. - ground geophysics, DD. 2012: Goldstream Exploration Limited - mapping, prospecting, sampling. |
| Exploration Results | At Titan, the gold mineralization was traced for 200 m along strike. Visible gold is associated with strongly deformed quartz veins within sheared, fine grained, mafic volcanic or gabbro at Goldstream's newly defined "Morrow Lake Deformation Zone". The showing represents a multiple vein system with at least 4 veins carrying gold. High gold grades were received from the channel sampling program. The quartz veins are smoky grey to white and often display an orange colour due to oxide staining. The Titan Trench zone is located at the site of a fault-bounded fold hinge roughly 300 m north of the regional Klob Lake Fault. | 03/28/2014 (A Wilson) - The best assay from the Getty drilling was 4.00 g Au/t over a core length of 1.40 m with a section of 8.65 g Au/t over 0.50 m for hole KL-84-21 that was drilled in the Five Trench Area. Drilling showed good continuity along strike of the tuff horizons which were traced for over 250 m laterally and to 60 m in vertical depth. Tight folding has locally deformed the tuffs. Copper and gold values (minor molybdenum) were noted in diamond-drill logs of Exploration Banque-Or Incorporated and Exchange Mine Holdings Limited.<br><br>12/31/1996 (B Nelson) - A mineralized zone 200 m x 6 m x 150 m (deep) was defined by Getty Minerals. Assays up to 2.34 oz/ton Au over 10 feet were realized by Exchange Mining. |
| Mineralization Comments | 03/29/2014 (A Wilson) - Grab samples collected from the Titan Zone returned values of 1.59, 1.21, and 0.96 oz/t Au. The Titan showing returned grab sample values of up to 11,200 g/t. The best intersections from the 2012 drilling include 11.16 g Au/t over a core length of 3.0 m from 122.9 m to 125.9 m, in drill | 12/31/1996 (B Nelson) - Gold is associated with a silicified and sheared zone displaying potassium and epidote alteration. In contact with the shear zone is a foliated mafic tuff hosting pyrite, pyrrhotite and extensive biotite (an alteration product). |

| | | |
|---|---|---|
| | hole KL 12-01, including 61.80 g Au/t over 0.5 (from 125.4 m to 125.9 m) and a second zone of 2.95 g Au/t over core length of 4.0 m from 195.3 m to 199.3 m including 7.38 g/t over 0.5 m (from 195.3 m to 195.8 m) and 7.60 g/t over 0.6 m (from 197.5 m to 198.1 m) all hosted in sheared/silicified gabbro. KL-12-02b, drilled beneath KL 12-01, encountered 2.22 g Au/t over 1.3 m from 254.3-254.7 m. Drill hole KL-120-08 approximately 80 m to the east encountered 43.78 g Au/t over 2.5 m from 48.0-50.5 m including visible gold over a 0.4 m section from 49.4-49.8 m assaying 271.00 g Au/t. Visible coarse and fine grained gold is found within multiple granular grey-white quartz veins (pyrite ± minor calcite) in trench A and trench C of the main showing and along hairline fractures in drill core. In some veins galena, and possibly molybdenite and malachite have been observed. These veins, hosted within gabbro, have been tightly folded about hinge axis striking on average 120 to 160 degrees. Host rocks are strongly sheared, silicified and locally carbonatized. Thirty seven of the 134 channel samples taken at the three Titan trenches assayed over 0.5 g/t, 9 samples >10 g Au/t. The highest assay values obtained from the channel samples was 31.1 g Au/t and 10.7 g Ag/t over 0.4 m Only one sample, from the Titan showing, returned anomalous molybdenum, of 1,380 ppm in a sample with low gold, 0.2 g Au/t. | |

A total of around seventy-two (72) holes totaling 5,666 m were drilled between 1958 and 2004 on the Property. The more interesting historic drill intersections for gold are presented in Table 4 and locations are shown on Figures 6-10. As several of historical drill holes are not located on the Property, large scale maps are shown on Figures 6-9, and Figure 9 shows location and ID of drill holes majority of which are not on the Property.

A majority of these holes tested gold mineralization hosted within sheared and quartz stockwork mineralized volcanic/gabbro intrusive, amphibolite and sheared diorite rocks in contact with or in close proximity to a large diorite intrusive body or stock. Visible gold was observed in drill core on occasion. Overall, most of the drilling tested gold mineralization to a vertical depth of 50 m with some holes penetrating to around the 150 m depth limit (later follow-up drill programs).

**Table 4:Highlights of historical drill intersections Tomorrow Lake Showing**

| COMPANY | HOLE No. | FROM (m) | TO (m) | LENGTH (m) | Au (g/t) |
|---|---|---|---|---|---|
| P. Martin and J. Lill (1980) | 80-1 | 28.96 | 35.37 | 6.40 | 46.63 |
| | 80-2 | 35.06 | 35.98 | 0.91 | 69.60 |
| | 80-3 | 22.56 | 23.87 | 1.31 | 6.86 |
| | 80-5 | 10.06 | 14.88 | 4.82 | 4.80 |
| Exploration Banqu-Or Inc. (1983) | BO-83-02 | 55.48 | 56.09 | 0.61 | 5.49 |
| | BO-83-06 | 2.44 | 3.96 | 1.52 | 2.18 |
| | BO-83-09 | 25.76 | 27.13 | 1.37 | 5.17 |
| | BO-83-11 | 27.60 | 30.03 | 2.43 | 3.64 |
| | BO-83-12 | 37.65 | 42.31 | 4.66 | 3.33 |
| | BO-83-13 | 41.92 | 43.45 | 1.53 | 4.97 |
| | BO-83-16 | 35.97 | 41.15 | 5.18 | 3.53 |
| | BO-83-18 | 40.55 | 42.99 | 2.44 | 3.38 |
| | BO-83-20 | 36.13 | 36.62 | 0.49 | 2.23 |
| | BO-83-21 | 34.76 | 36.28 | 1.52 | 3.33 |
| | BO-83-23 | 17.20 | 22.47 | 5.27 | 3.50 |
| | BO-83-24 | 47.71 | 51.52 | 3.81 | 2.91 |
| | BO-83-26 | 14.76 | 16.37 | 1.61 | 2.14 |
| | BO-83-27 | 9.63 | 14.24 | 4.60 | 2.26 |
| | BO-83-29 | 33.84 | 34.45 | 0.61 | 5.14 |
| | BO-83-33 | 51.77 | 66.04 | 14.27 | 2.73 |
| | BO-83-34 | 69.30 | 74.42 | 5.12 | 7.91 |
| Getty Mines Limited (1983) | KL-83-01 | 26.50 | 28.00 | 1.50 | 2.83 |
| | KL-83-03 | 106.90 | 107.90 | 1.00 | 2.73 |
| | KL-83-09 | 107.50 | 113.00 | 5.50 | 3.52 |
| | KL-83-10 | 144.50 | 151.00 | 6.50 | 2.28 |
| Novawest Resources Inc. (2004) Not on the Property | KL-04-08 | 14.00 | 14.60 | 0.60 | 3.11 |
| (Clark Exploration Consulting) Not on the Property | KL-04-09 | 73.50 | 78.40 | 4.90 | 2.93 |

*(Source: 20013940 Goldstream Drilling Assessment Report 2012. Highlighted drill holes are not on the Titan Property)*

**Figure 5: Location of Mineral Showings and Historical Drill Holes**

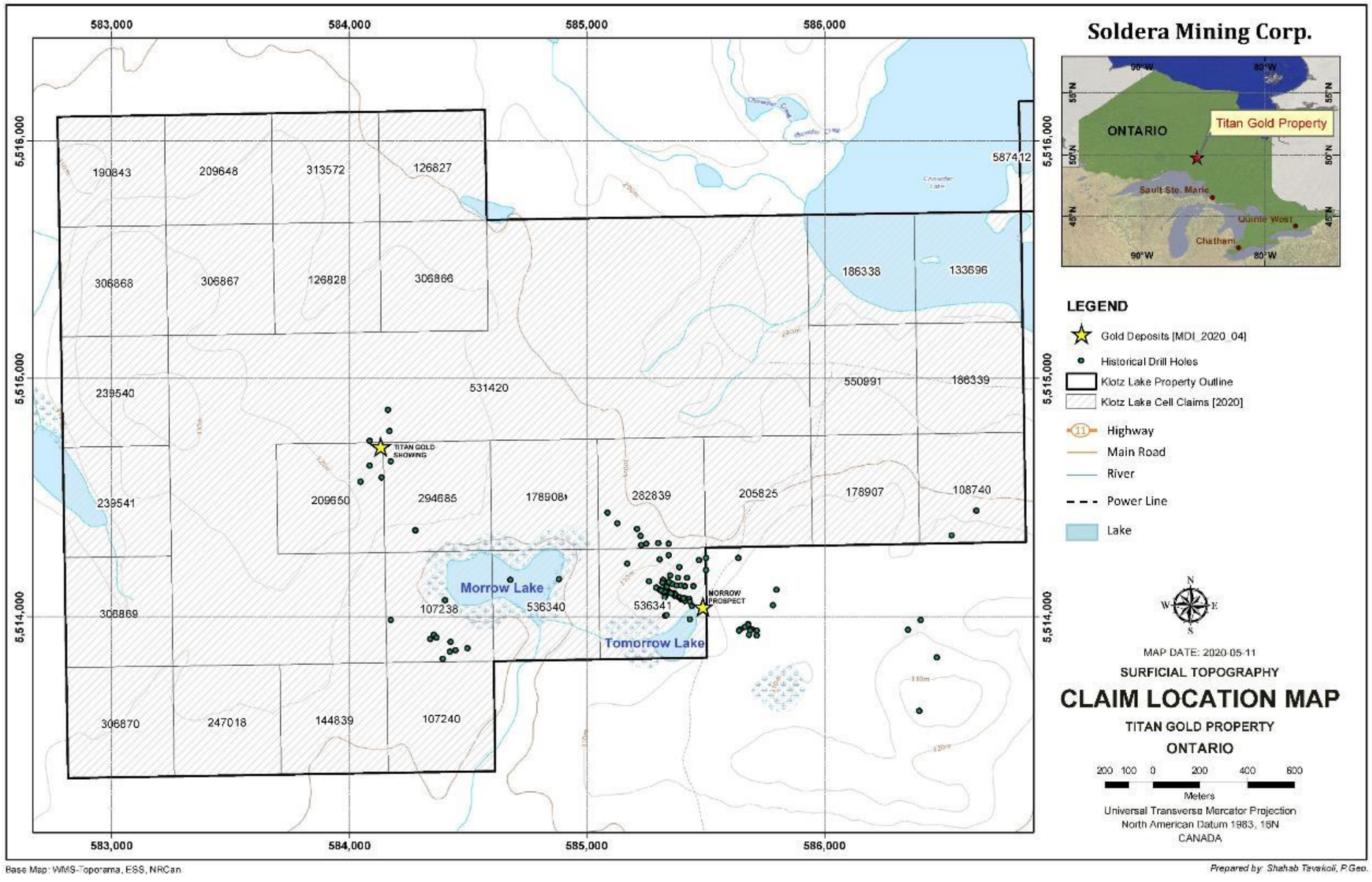


**Figure 6: Historical drill hole detailed map A**

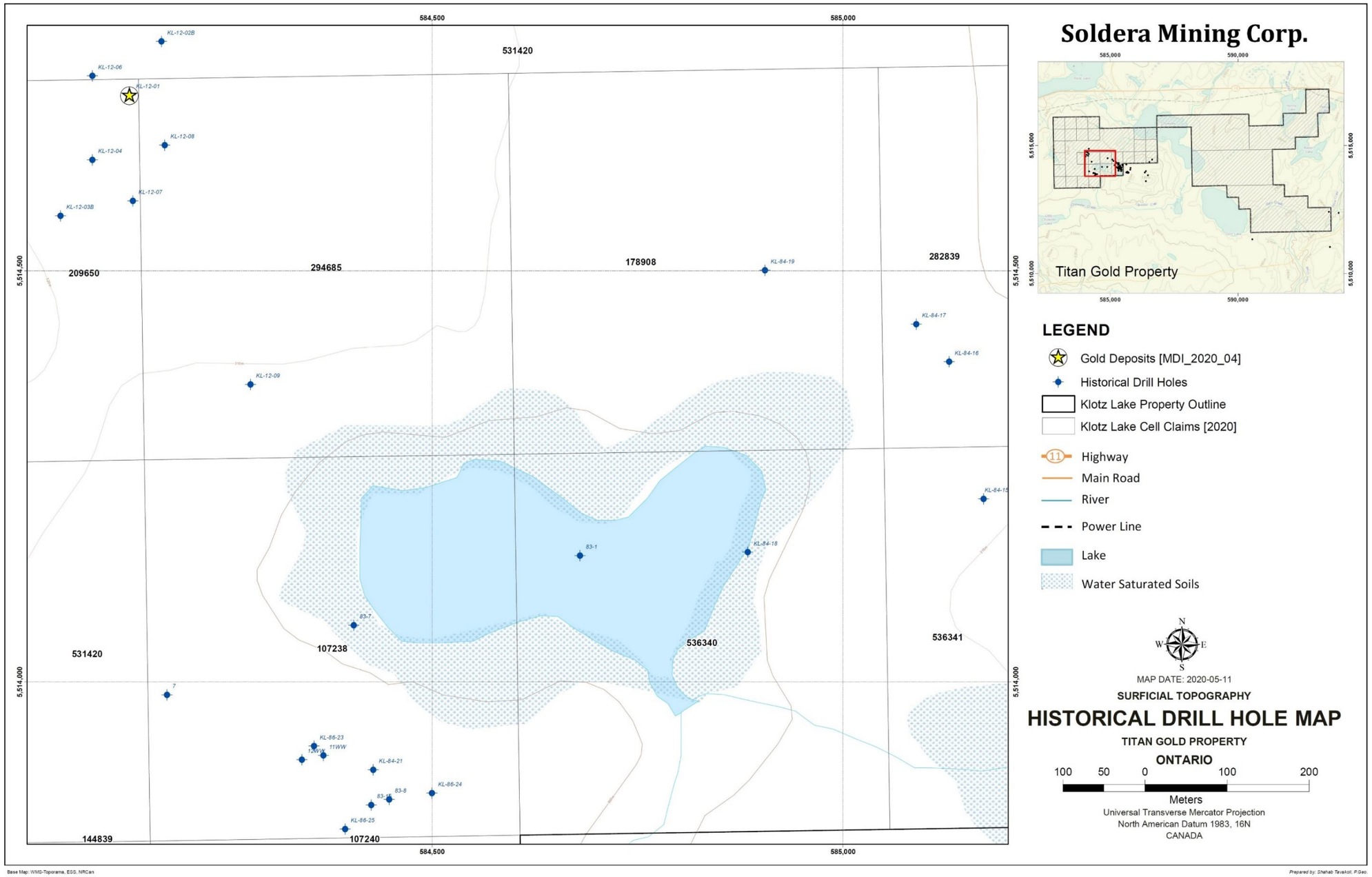


**Figure 7: Historical drill hole detailed map B**

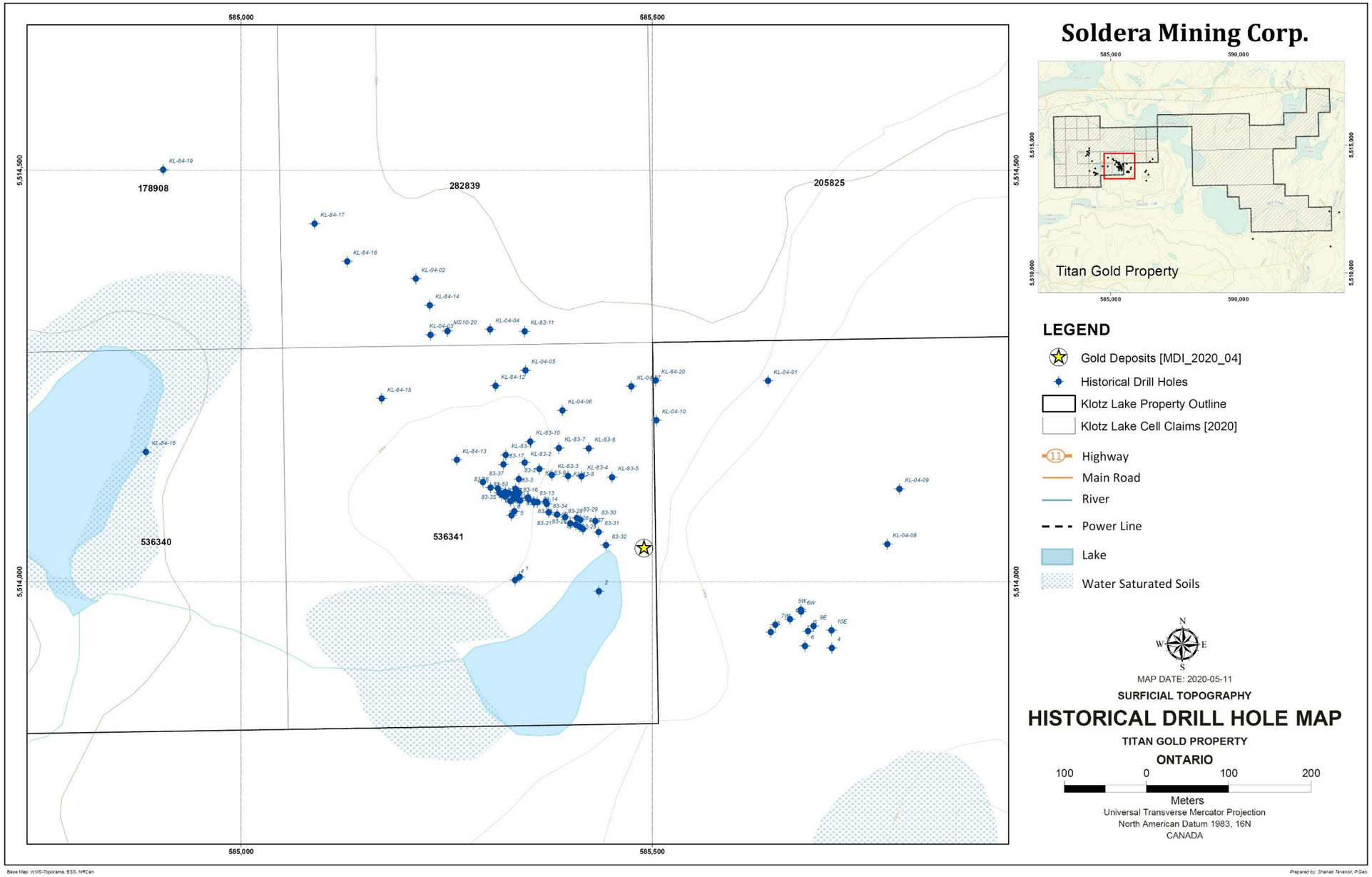


**Figure 8: Historical drill hole detailed map C**

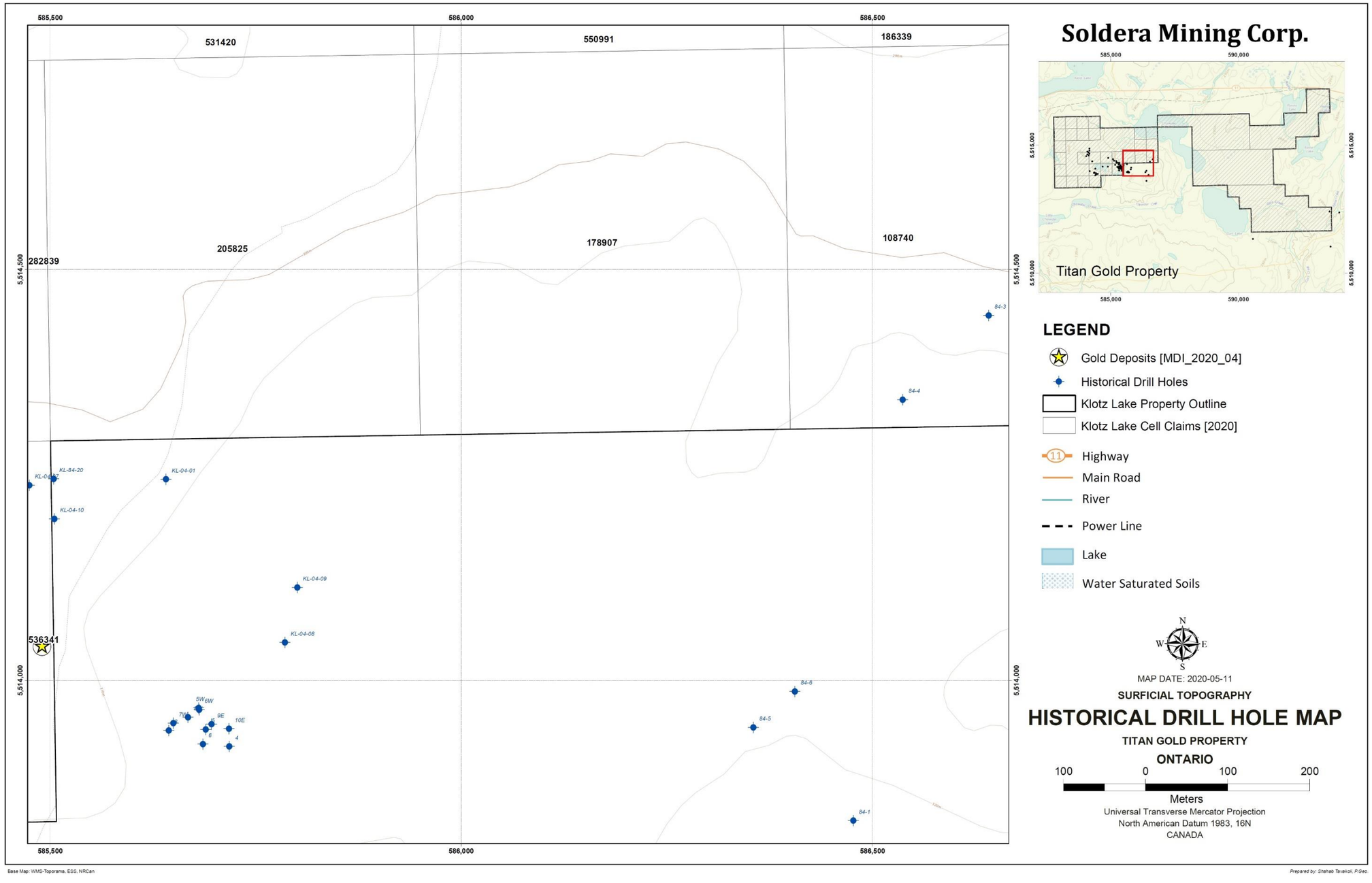
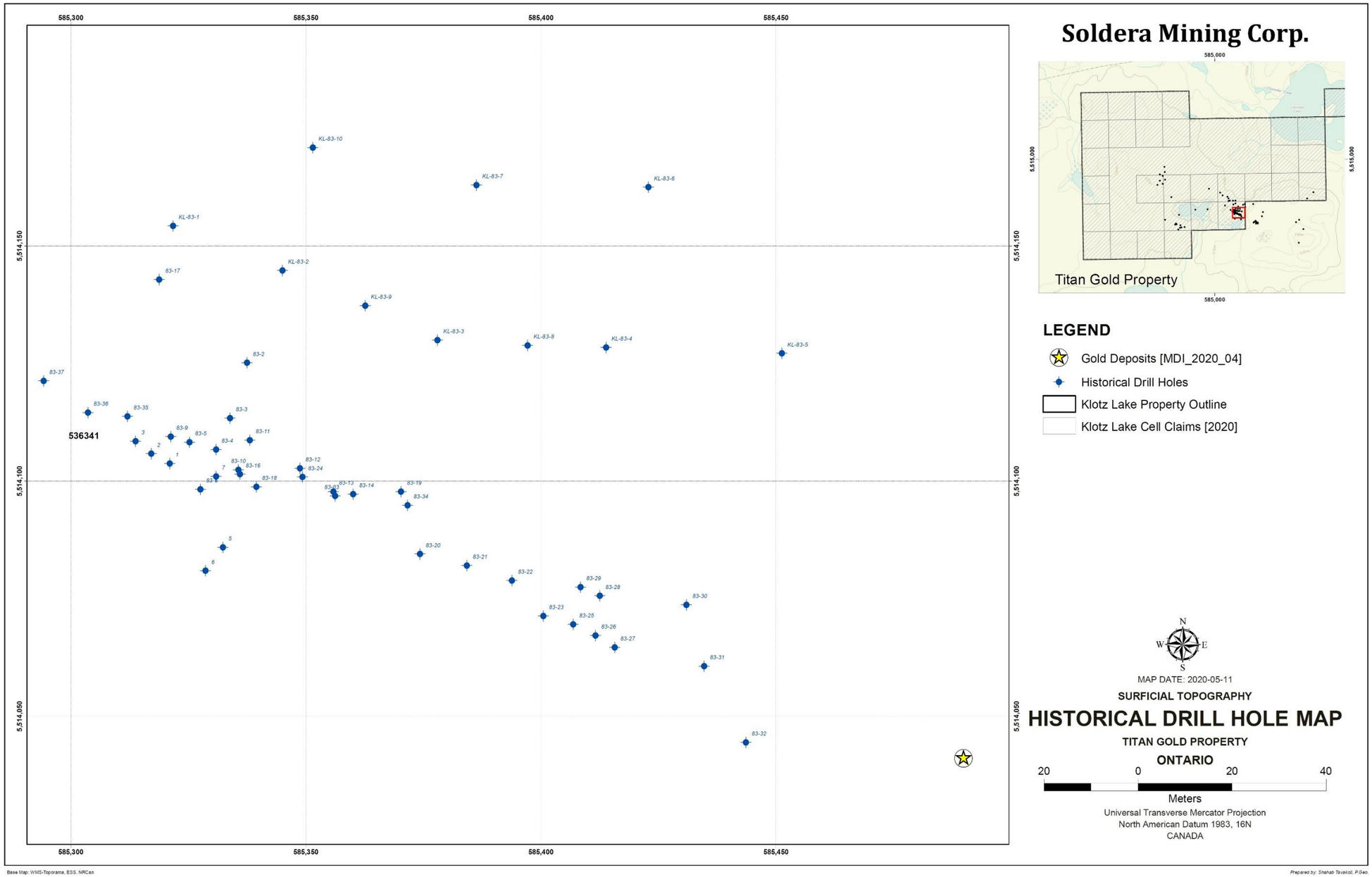


**Figure 9: Historical drill hole detailed map D**



## 6.1 Work by Goldstream and Prodigy 2011-12

### 6.1.1 Field Exploration

During 2011-12 period, Goldstream Exploration and Prodigy Gold completed a field exploration program consisting of line cutting, ground geophysical survey (Induced Polarization and Magnetic), geological mapping, trenching and channel sampling on an established grid in areas of Titan showing, Morrow Lake and Tomorrow Lake. As a result of this work, a total of 42 "high priority" targets were identified throughout the grid. Several of these anomalies coincide with five (5) known gold showings. Prospecting teams followed-up an investigation of these anomalies in the field in the fall of 2011 leading to the discovery of the Titan Showing. Here, quartz veins containing visible gold returned multiple large gold assays including 11,200 g/t Au, 5,900 g/t Au and 3,420g/t. A total of 129 channel samples were taken from three trenches at the Titan showing where gold is found in association with high silver within narrow quartz veins within strongly deformed and folded gabbro rocks. Visible gold within the quartz veins is common. Trench 1OA returned the most significant gold assay values (Table 5).

**Table 5: Highlights of 2011 Titan Showing Channel Sampling Program**

| Titan Trench | Sample No. | Au g/t | Ag ppm | Length (m) | Host Rock |
|---|---|---|---|---|---|
| **Trench A (IOA)** | C60508 | **6.24** | **1.2** | 0.3 | Gabbro |
| | C60517 | **3.89** | **2.8** | 0.67 | Quartz Veined Gabbro |
| | C60527 | **12.3** | **14.2** | 0.49 | Quartz Veined Gabbro |
| | C60575 | **31.1** | **1.6** | 0.37 | Quartz Vein |
| | C60577 | **10.9** | **3.4** | 0.39 | Quartz Vein |
| | C60591 | **4.56** | **2.9** | 0.44 | Quartz Vein |
| | C60600 | **1.7** | **4.2** | 0.24 | Gabbro |
| | C61634 | **14.2** | **20.6** | 0.58 | Quartz Veined Gabbro |
| **Trench C (IOC)** | C55809 | **1.51** | 0.3 | 0.35 | Gabbro |
| | C55810 | **1.01** | 0.7 | 0.61 | Gabbro |
| | C55816 | **25.3** | **2.2** | 0.28 | Quartz Veined Gabbro |
| | C55827 | **2.12** | 0.4 | 0.31 | Quartz Vein |
| | C55835 | **1.19** | 0.6 | 0.43 | Gabbro |

### 6.1.2 Diamond Core Drilling

Goldstream completed nine (9) drill holes totaling 2,021 m between January 22, 2012 and February 21, 2012. The holes, numbered KL-12-01 to KL-12-09, were all drilled on Titan Showing (Table 6, Figures 5 and 6). This drill program was designed to test the extent of gold mineralization located immediately beneath the Titan Gold Showing as well as test a number of additional IP

target anomalies located near surface defined by Matrix. All holes were drilled in a southwesterly direction perpendicular to the northwesterly trending foliations/veining visible at the Titan Showing and parallel to quantitative section lines.

The drilling was carried out under contract by North Star Drilling of Thunder Bay, Ontario, under the supervision of Paul Dunbar, P.Geo., the Goldstream Project Manager and Vice President of Exploration. All drilling utilized a NQ drill string.

The drill core was logged and sampled by geologists Cheyenne Sica and Marc Pateneaude at Prodigy's Bush Lake core facility located off Road 801 north of the Trans-Canada HWY 11. Drill core was split at the Bush Lake facility. During logging, the percentage core recovery and "Rock Quality Designation ("RQD") was determined and results entered into the drill logs. All drill core was photographed to provide a permanent visual record.

Drill hole collar locations were surveyed using a Trimble RTK survey grade GPS receiver. The drill casing and casing shoe were left in each hole and each casing was capped and stamped with the hole number (Report 20013940).

**Table 6: 2012 Diamond Drill Program**

| Hole No. | Collar Coordinates (Zone 16 NAD83) | | | Dip (deg) | Az. (deg) | Casing (m) | Length (m) | Start Date | Finish Date | No. of Samples |
|---|---|---|---|---|---|---|---|---|---|---|
| | Easting | Northing | Elev. (m) | | | | | | | |
| KL-12-01 | 584133 | 5514714 | 316 | -45 | 210 | 3.5 | 251 | 22-Jan-12 | 26-Jan-12 | 374 |
| KL-12-02B | 584171 | 5514779 | 316 | -45 | 210 | 3.1 | 350 | 31-Jan-12 | 4-Feb-12 | 514 |
| KL-12-03B | 584048 | 5514567 | 316 | -45 | 210 | 3.0 | 200 | 5-Feb-12 | 7-Feb-12 | 256 |
| KL-12-04 | 584087 | 5514635 | 315 | -45 | 210 | 3.2 | 113 | 7-Feb-12 | 8-Feb-12 | 167 |
| KL-12-05 | 584165 | 5514868 | 315 | -60 | 210 | 3.5 | 473 | 9-Feb-12 | 15-Feb-12 | 667 |
| KL-12-06 | 584087 | 5514737 | 317 | -45 | 210 | 3.0 | 131 | 15-Feb-12 | 16-Feb-12 | 178 |
| KL-12-07 | 584136 | 5514585 | 315 | -48 | 210 | 1.5 | 132 | 17-Feb-12 | 18-Feb-12 | 177 |
| KL-12-08 | 584175 | 5514653 | 312 | -45 | 210 | 15.0 | 201 | 18-Feb-12 | 19-Feb-12 | 289 |
| KL-12-09 | 584279 | 5514632 | 317 | -45 | 210 | 1.5 | 170 | 19-Feb-12 | 21-Feb-12 | 224 |
| **TOTALS** | | | | | | | **2,021** | | | **2,846** |

### 6.1.3 Diamond Core Drilling Results

The drilling program was designed to test the extent and nature of gold mineralization at the new Titan gold showing. The best gold drill hole intersections are presented on Table 7 below.

**Table 7: 2012 Titan Showing Drill Results Highlights**

| Hole ID | From (m) | To (m) | g/t Au / core length | Comments |
|---|---|---|---|---|
| **KL-12-01** | 122.9 | 125.9 | 11.16/3.0m | moderately sheared zone within medium-coarse grained gabbro; strong biotite + chlorite + amphibole alteration with weak to moderate carbonate + silica alteration; 10-40% quartz-carbonate stockwork throughout interval; typically 5% pyrite disseminations with up to 10% pyrite disseminations and <=1% pyrrhotite; mineralization is typically concentrated at wallrock/stockwork contacts; **main Titan shear zone(?)** |
| including | 125.4 | 125.9 | 61.8/0.5m | moderately sheared mafic to gabbroic protolith; 10% qtcsw; <=5% pyrite disseminations and <=1% pyrrhotite; hostrock is strongly biotite + chlorite + amphibole altered with moderate silica flooding; **main Titan shear zone(?)** |
| **KL-12-01** | 195.3 | 199.3 | 2.95/4.0m | moderately to strongly sheared zone within gabbro; strong biotite + chlorite + amphibole alteration with weak to strong silica flooding; 45 - 65% quartz-carbonate stockwork throughout interval; 2 - 15% pyrite disseminations +/- seams; <=5% pyrrhotite mineralized as fracture-fill |
| including | 195.3 | 195.8 | 7.38/0.5m | strongly sheared zone within a gabbro; gabbro is strongly silicified + amphibole + chlorite + biotite altered gabbro with 50-65% quartz-carbonate stockwork; 7% pyrite dissems and trace pyrrhotite |
| and | 197.5 | 198.1 | 7.60/0.6m | strongly silicified zone with weak chlorite + amphibole + biotite alteration; 70-80% quartz-carbonate stockwork; hostrock contains 15% pyrite with 5% pyrrhotite; |
| **KL-12-02B** | 42.7 | 43.2 | 1.33/0.5m | sheared gabbroic host; hostrock is strongly biotite altered with weak silica flooding; weak to moderate magnetic signature; 10% quartz carbonate veins; 7% pyrite and 1% pyrrhotite northern shear zone (north of main zone) |
| | 253.4 | 254.7 | 2.22/1.3m | moderate to strong shear zone within moderate amphibole + biotite + silicified gabbro with weak to moderate magnetic signature; 15% quartz-carbonate stockwork 2% pyrite disseminations; shear zone may be fault terminated by a northwesterly striking fault |
| **KL-12-03B** | | | | No significant assays |
| **KL-12-04** | 101.2 | 102.3 | 1.37/1.1m | sheared mafic crystal tuff to gabbro host; strongly amphibole with moderate chlorite + biotite altered; 3% quartz-carbonate veins; 2% pyrite dissems +/- pyrrhotite: southern shear zone (south of main zone) |
| **KL-12-05** | 273.1 | 273.9 | 1.30/0.8m | wkly to moderately sheared zone within fine grained to medium grained gabbro; moderate to strong amphibole + biotite alteration with wk to mod chl + sil; locally wk magnetic signature that increases with shear; 2-4% qtcsw with up to 20% carbonate stringers; 1-2% py assoc with stringers, 1-2% po; p**otential continuation of the northern zone but may also fault terminate** |
| | 275.4 | 275.8 | 1.84/0.4m | strongly sheared zone within a gabbro, augens evident; gabbro is strongly biotite altered with 70-80% carbonate stringers +/- quartz; 2-3% very fine-grained pyrite dissems +/- pyrrhotite |

| Hole ID | From (m) | To (m) | g/t Au / core length | Comments |
|---|---|---|---|---|
| **KL-12-06** | | | | No significant assays |
| **KL-12-07** | 37.3 | 37.6 | 1.99/0.3m | weak shear zone within medium to coarse grained gabbro; moderate biotite + chlorite + amphibole alteration; 2-3% quartz-carbonate stockwork; 2% pyrite disseminations associated with stockwork; **potential extension of the southern zone** |
| **KL-12-08** | 15.4 | 23.9 | 0.45/9.9m | moderately sheared zone within fine grained gabbro; moderate amphibole + silica alteration + mod to strong biotite; 5-10% quartz-carbonate stockwork with 25-80% qtcsw locally; 1-2% py dissems in hostrock; **main Titan shear zone (?)** |
| | 48 | 50.5 | 43.78/2.5m | this mineralized zone is hosted at the contact of a mafic massive flow and a fine to medium grained gabbro; both units are moderately biotite + chlorite + silica altered; <=5% qtcsw; wk to mod mag; ~2% po dissems assoc w/ biotite; 1-2% py; **main Titan shear zone (?)** |
| including | 49.4 | 49.8 | 271.00/0.4m | **Visible gold**; fine to medium grained gabbro; mod amph + chl + bio wk to mod sil; <=5% qtcsw; wk to mod mag; ~2% po dissems assoc w/ biotite; 1-2% py; **main Titan shear zone (?)** |
| **KL-12-09** | 115 | 121.5 | 0.65/6.5m | moderate to strong shear hosted by dark grey fine to medium grained gabbro with moderate to strong biotite + amphibole alteration; , str amp, wk sil, abundant fracture controlled cb alteration (10%), ~5% quartz carbonate veins increased in first 1m of section, ~2% py locally up to 5%; **extension of northern zone (?), extension of main Titan zone (?)** |

The drilling intersected mafic pillowed volcanic flows to pillow breccias and synvolcanic gabbro rocks, with smaller mafic pyroclastic and volcaniclastic units. Small, typically less than 0.5 m wide felspar porphyry dykes, often silicified, were also encountered cross cutting the main lithologies.

The program intersected numerous small shear zones, which appear to be striking sub-vertically in a northwesterly direction. The shear zones are interpreted to cross-cut lithologies. This shear system is complex and there has been no previous work completed to test the morphology of the zone. The mineralized shear zones intersected by the drilling program are narrow and typically host between 1.0g/t - 3.0g/t Au over 2.0 m - 4.0 m. High grade gold zones (61.8 g/t over 0.5 m and 271g/t over 0.4 m) are even more narrow and sporadic in nature. The mineralized zones are accompanied by increased shearing and alteration with a sulphide content of typically <5%, dominantly in the form of pyrite disseminations with subordinate pyrrhotite. The zones are hosted by a fine - coarse grained weakly to strongly amphibole + biotite + silica +/- carbonate altered hostrock, with variable amounts of quartz-carbonate stockwork and veining, typically <=5%, with localized increases in modal abundance of quartz.

## 6.2 2016 Exploration Work

In November 2016, Pleson Geoscience carried out exploration work on Legacy Claim 4266307 which included compilation of historical data, prospecting, and channel sampling of outcrops.

The data compilation work was performed by geologist Ben Kuzmich. The fieldwork was carried out from November 14-17, 2016. Results of seven channel samples indicated gold values in the range of 0.011 g/t to 51.1 g/t (1.8 ounces per ton). One channel sample came back with 5.37 g/t gold over one-meter length (AR 2.57590, March 2017). Total cost of this work was $11,734.

**Table 8: 2016 sampling results**

| Sample ID | Easting | Northing | Assay (g/t) | Type | Description |
|---|---|---|---|---|---|
| 1192101 | 584124 | 5514700 | 0.077 | Channel | Start of channel, 0-1m, azimuth 175, silicified metavolcanic, highly foliated, no sulphides. |
| 1192102 | 584124 | 5514700 | 5.37 | Channel | 1-2m same azimuth, fine grained disseminated po 3%, tr chalcopyrite, 1% fine grained blebs of pyrite associated to quartz vein in a sheared, silicified MMVOL, highly foliated. |
| 1192103 | 584124 | 5514700 | 0.986 | Channel | 2-3m, same azimuth, same lithology, and structure as last sample. Less quartz veinlets then previous sample. |
| 1192104 | 584119 | 5514697 | 0.011 | Grab | MMVOL- carb alteration, no sulphides, late stage fracture fills w/ quartz-carb. |
| 1192105 | 584111 | 5514694 | 0.085 | Grab | MMVOL- carb alteration, no sulphides, late stage fracture fills w/ quartz-carb. |
| 1192106 | 584126 | 5514701 | 51.1 | Grab | MMVOL- highly sheared siliceous, 2% bleby f.g py with strong quartz veinlets and tr cpy. |
| 1192107 | 584129 | 5514643 | 0.166 | Grab | Iron Formation sample, fragment of IF in southwest portion of MVOL shear zone, strongly fractured with blue quartz infills, tr diss py in quartz vein, highly magnetic. |

## 2.3 2019 – 20 Exploration Work by Pleson Geoscience

Alex Pleson, the Property Vendor carried out exploration work on the Property from September 2019 to May 2020 which included prospecting, geological mapping, trenching, channel sampling, ground geophysical surveys and assaying. Total cost of exploration work from September 2019 to May 2020 is $82,500 and is summarized in the following sections.

### 2.3.1 Mapping, Prospecting, Trenching, and Sampling

This work was completed in two fieldwork campaigns, where the first fieldwork was done from September 18-24, 2019 and its purpose was mainly to carry out prospecting and geological mapping in the areas adjacent to the historical showings to find extension of the targeted mineralization trend. The second round of fieldwork was completed during May 1-10, 2020 period. It included trenching and stripping in Morrow Lake and Titan areas to further expose the mineralized shear zones. This work was followed by a prospecting program.

During this work, a total of 27 samples were taken and 14-line kilometers area was mapped (Figures 10 and 11). Additionally, a total area of 200 square meter was excavated through trenching to expose bedrock and 5 kilometers of trail were made to improve access to the Property using a D5 Cat Dozer and an excavator Kubota KX040.

The results of prospecting and geological work sampling indicated lower values of gold with only one sample indicated 2.84 g/t (Table 9).

**Table 9: Grab samples details**

| Sample ID | Easting | Northing | Type | Description | Au (g/t) |
|---|---|---|---|---|---|
| 467751 | 585903 | 5514360 | Grab | Ultramafic contact to fel vol. 1% py | 0.006 |
| 467752 | 585817 | 5514480 | Grab | mafic vol with 1% on fracture planes | 0.006 |
| 467753 | 585801 | 5514478 | Grab | M. Vol on contact with F. Vol. fine grained, diss 1% py, <1% cpy | 2.84 |
| 467754 | 585827 | 5514505 | Grab | mafic w/ qtz stringers 1% py | 0.16 |
| 467755 | 585839 | 5514549 | Grab | 5cm wide qv, tr py, 2% py in wallrock | 0.006 |
| 467756 | 585744 | 5514571 | Grab | M.Vol. fine grained, trace disseminated py | 0.007 |
| 467757 | 585737 | 5514581 | Grab | old trench, felsic dyke, tr of py | 0 |
| 467758 | 585717 | 5514500 | Grab | QV, white quartz, rusty but no observed sulphides | 0.02 |
| 467759 | 585673 | 5514545 | Grab | Gabbro, magnetic, m.g. | 0.007 |
| 467760 | 585684 | 5514576 | Grab | ultramafic, >1% py | 0 |
| 467761 | 585905 | 5514614 | Grab | M. Vol, strongly foliated, siliceaous, 1.5% diss f.g py | 0.152 |
| 467762 | 585202 | 5514342 | Grab | gabbro, masssive sulphides | 0.038 |
| 467763 | 585264 | 5514448 | Grab | gabbro, tr py | 0 |

| Sample ID | Easting | Northing | Type | Description | Au (g/t) |
|---|---|---|---|---|---|
| 467764 | 585393 | 5514057 | Grab | bull qtz | 0.09 |
| 467765 | 585278 | 5514201 | Grab | Gabbro | 0.045 |
| 467766 | 584604 | 5514332 | Grab | gabbro, 1% py | 0.021 |
| 467767 | 584617 | 5514363 | Grab | 1cm wide qtz, massive py | 0.227 |
| 467768 | 584707 | 5514424 | Grab | felsic volcanic, f.g. massive texture | 0.011 |
| 467769 | 584756 | 5514406 | Grab | gabbro, tr. Bleb primary py | 0.009 |
| 467770 | 584900 | 5514570 | Grab | M.Vol | 0.021 |
| 467771 | 584901 | 5514567 | Grab | F.Vol, with minor qtz-carb stringers, no sulphides | 0.008 |
| 467772 | 585007 | 5514385 | Grab | QV, stockwork through dark v.f.g, massive m. vol, | 0.009 |
| 467773 | 585097 | 5514392 | Grab | Alt. mafic volcanic, schisty, no sulphides | 0.005 |
| 467774 | 585112 | 5514310 | Grab | QV, milky white, biotite and tourmaline on margins | 0.056 |
| 467775 | 585200 | 5514474 | Grab | QV, white, slightly rusty on margin | 0.012 |
| 467776 | 585192 | 5514589 | Grab | QV, white, slightly rusty on margin | 0.008 |
| 467777 | 585672 | 5514551 | Grab | QV, white, slightly rusty on margin | 0.017 |

**Figure 10: 2019-20 Sampling and Trench Location Map**

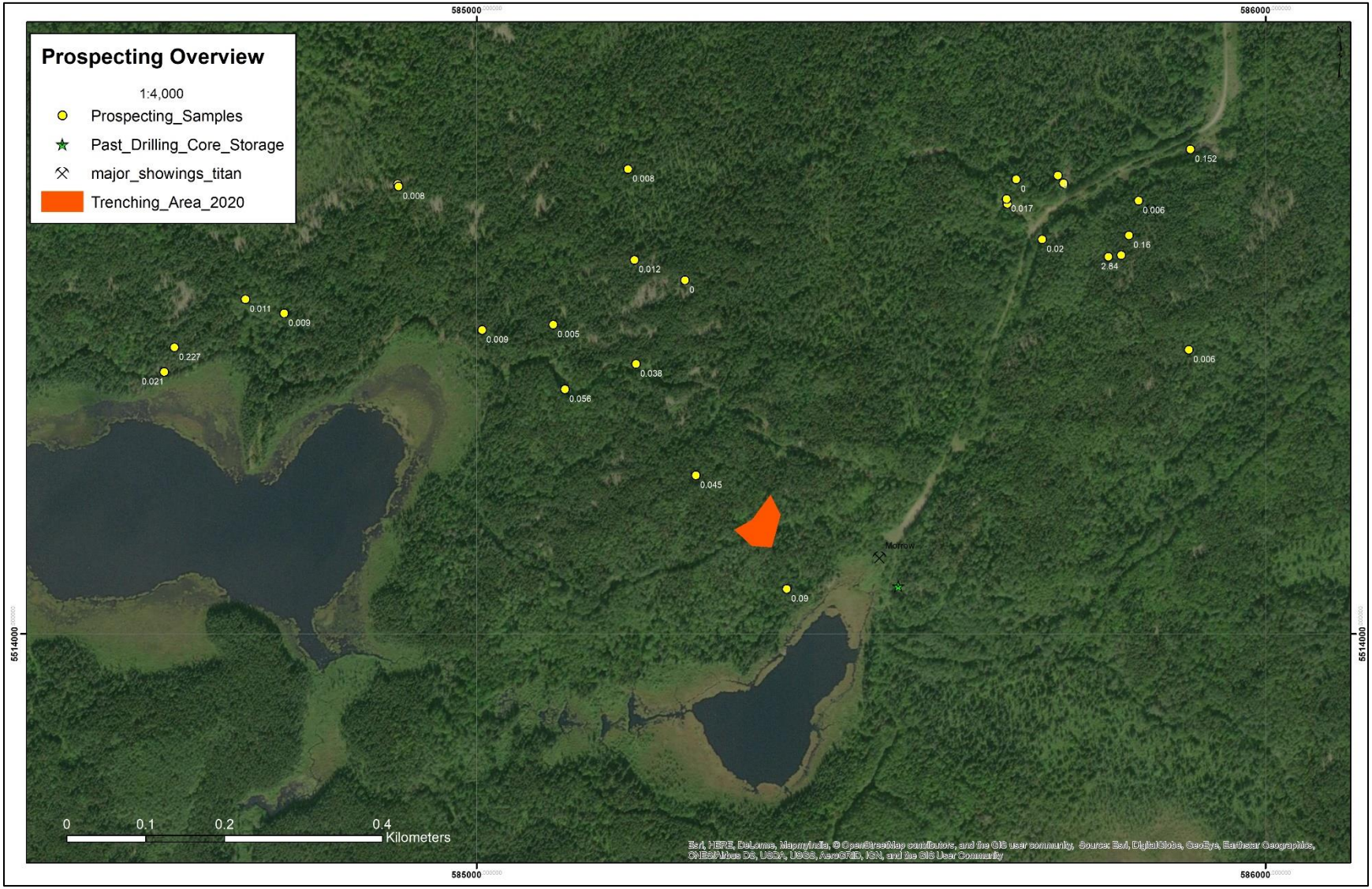
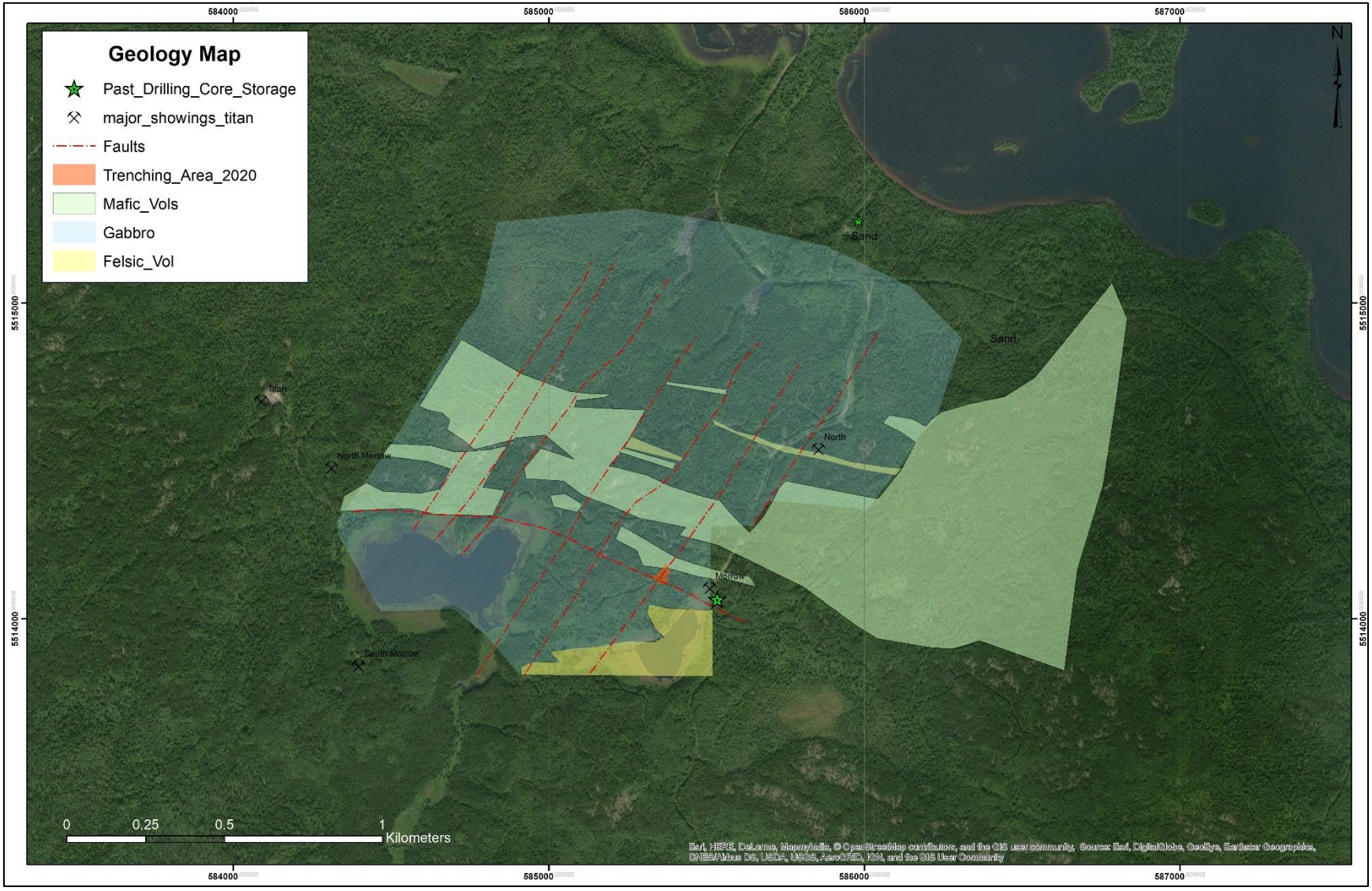


**Figure 11: 2019 Updated Map of the Property Geology**



### 2.2.3 Ground Geophysical Survey 2020

A VLF and ground magnetic survey was completed on the Iron Grid from January 5-15, 2020 with a total 14 line-km at 50m line spacing and 25m stations (Figures 12 and 13). Similarly, a second magnetic / VLF was completed on the Morrow Grid from May 1-10, 2020 with a total 14 line-km at 50m line spacing and 25m stations (Figures 12 and 14).

The magnetic surveys utilized the Scintrex IGS-MP4 proton precession magnetometer having an accuracy of -> 1 nT. The variations of the magnetic field were monitored by a Scintrex IGS-MP4 recording base station magnetometer. It was located within the grids being surveyed or within a nearby grid. The magnetometer field observations were corrected for the day-to-day and diurnal variations of the magnetic field.

The VLF-EM surveys were carried using a Geonic's model EM16 (serial# 3353). It measures the in-phase and quadrature components and the horizontal field strength of the VLF-EM field. The VLF transmitter located at Cutler, Maine (NAA) operating at a frequency of 24.0 kHz provided the primary electromagnetic field. The interpretation results of the survey are presented on Figures 13 and 14.

VLF surveying involves measurement of the earth's response to EM waves generated by transmitters a great distance from the survey site. The source fields are effectively planar and of fixed orientation, so the response depends on the orientation of subsurface lithology, mineralization and structures with respect to the source fields.

Although there is a gap of approximately 700 m between the two survey grids, the results of surveys have shown that the mineralization trend which was explored at Morrow Lake through historical drilling and trenching can further extend to the east along strike for approximately two kilometres. It is recommended to fill the gap in survey grids to get a complete picture of the area and see the continuity of structures.

**Figure 12: Ground 2019-20 geophysical survey grid location**

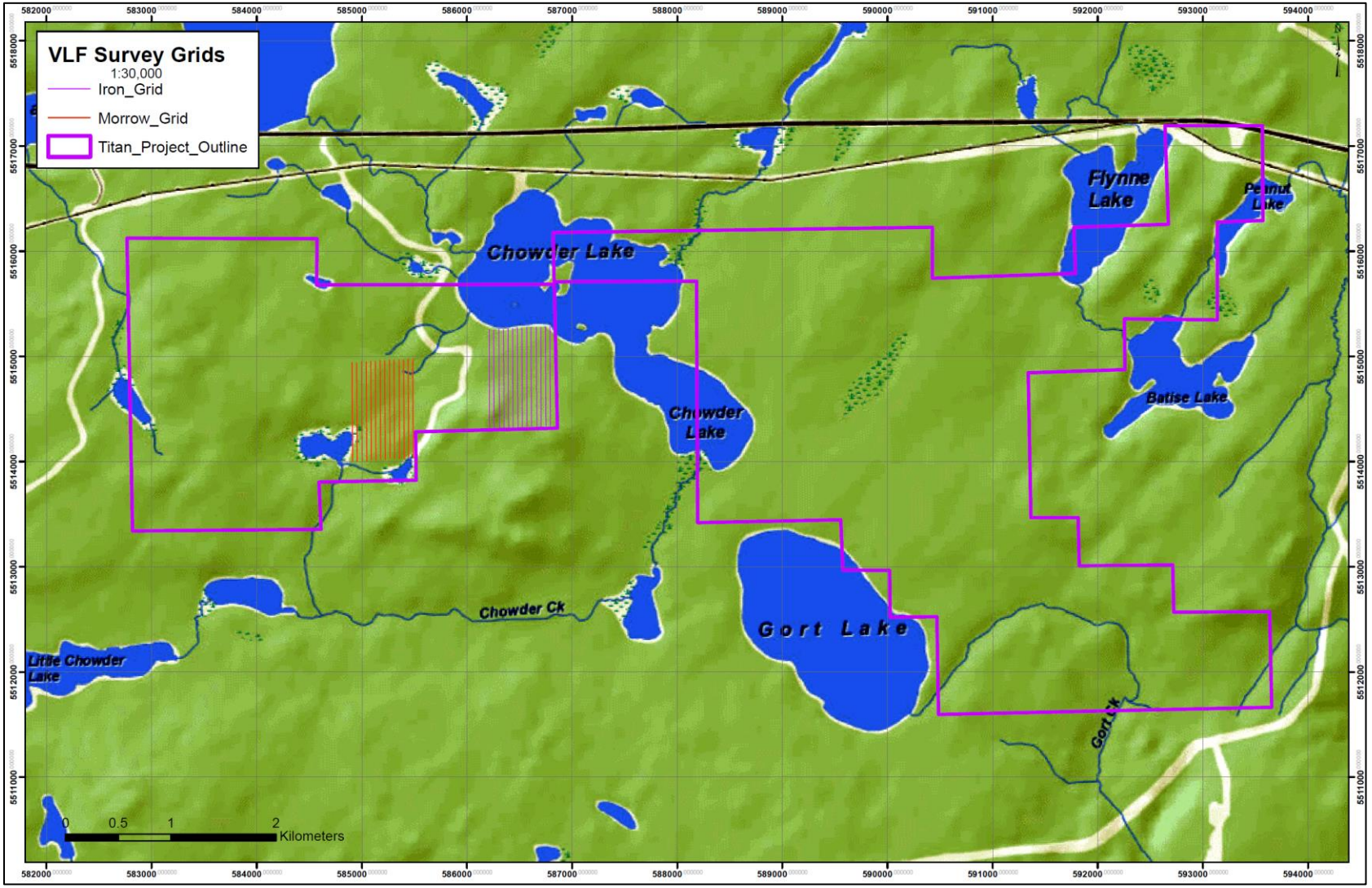


**Figure 13: Iron grid geophysical survey interpretation map**

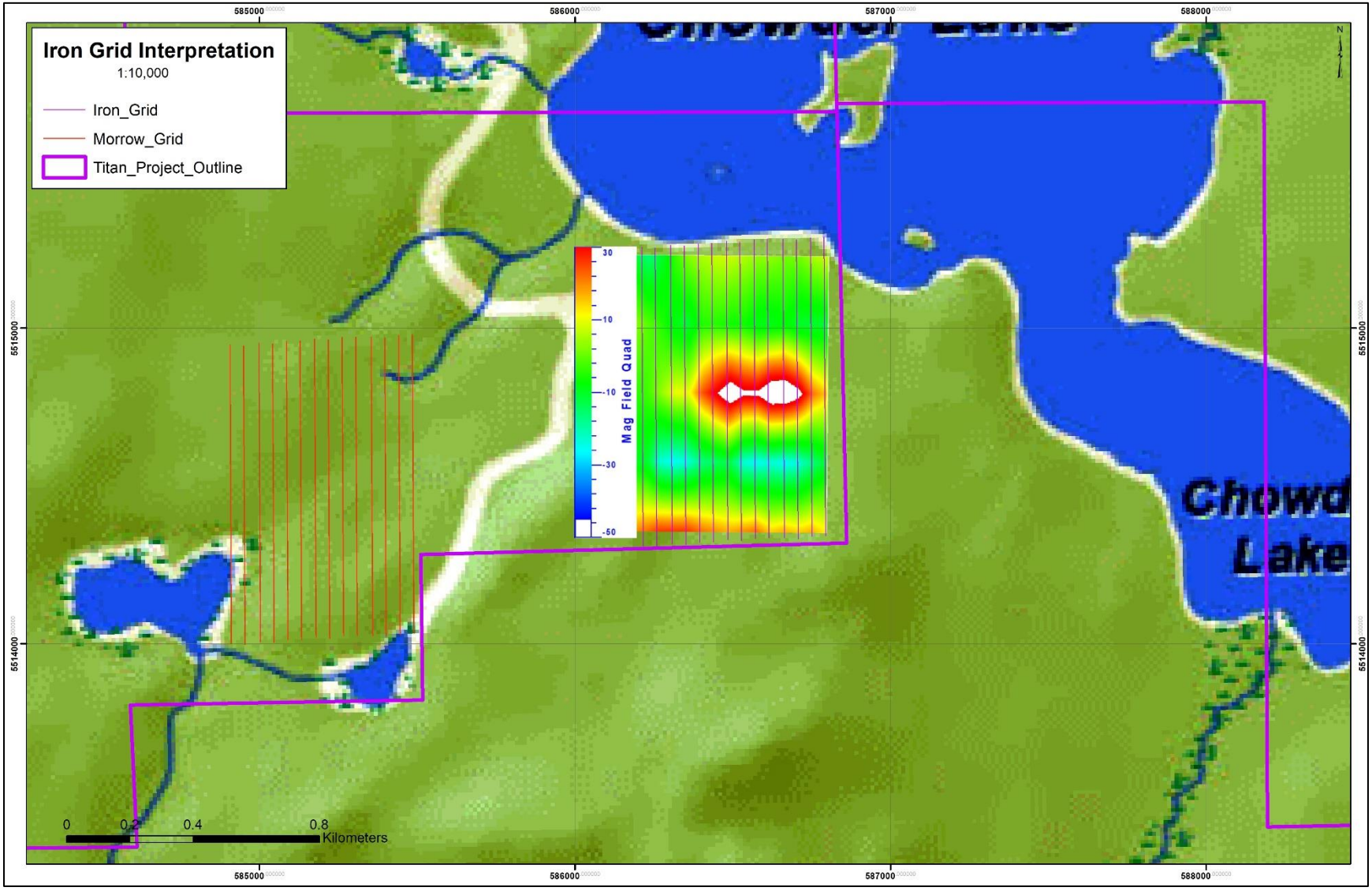
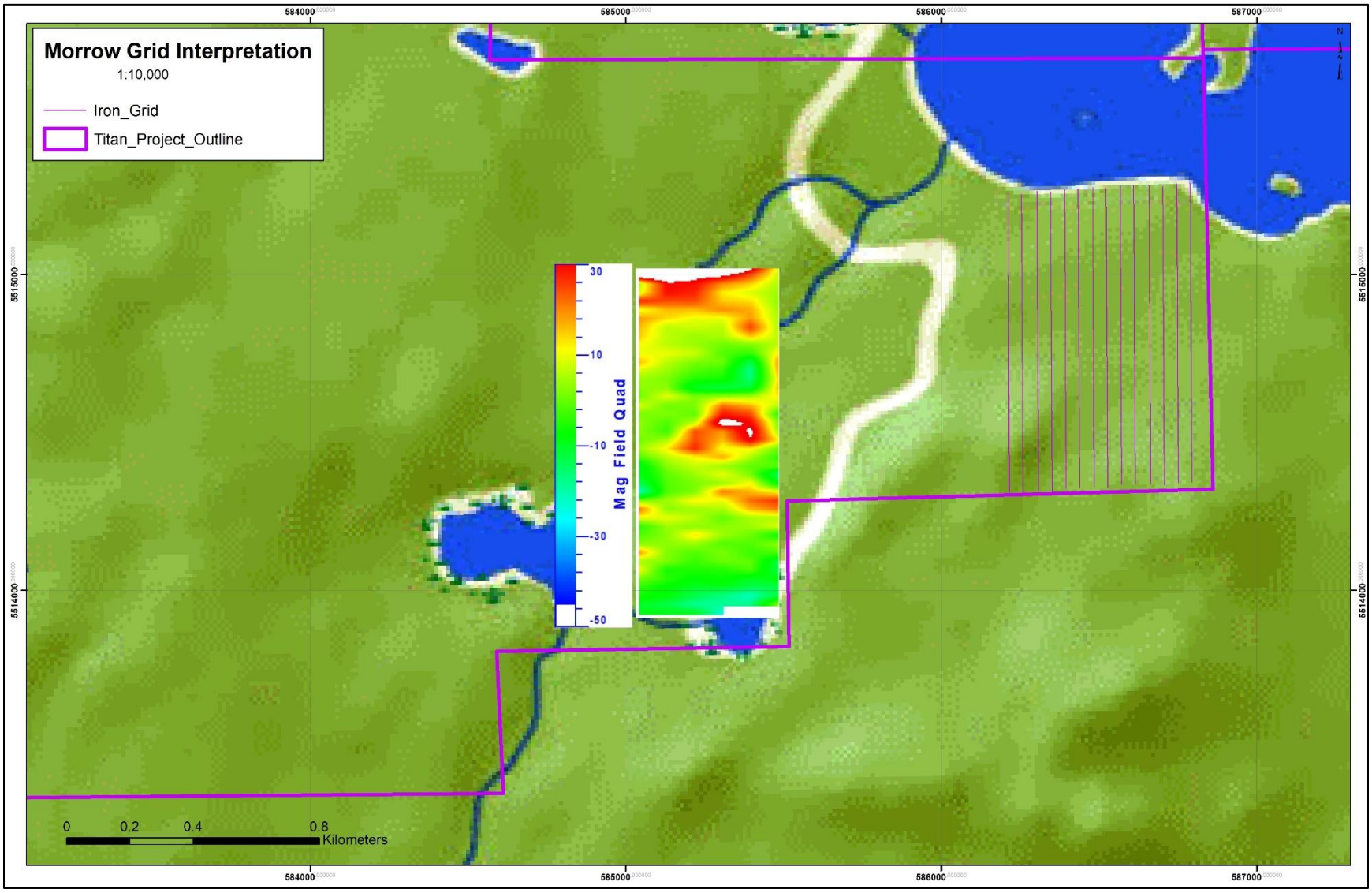


**Figure 14: Geophysical survey map of Morrow Grid**



# 7.0 GEOLOGICAL SETTING AND MINERALIZATION

## 7.1 Regional Geology

The Property is situated in the Wabigoon Subprovince of the Superior Geological Province. This Subprovince consists mainly of Archean metavolcanic and metasedimentary rock sequences intruded by larger granitoid plutons, mainly granodiorite to granite in composition (Figure 15). The Klotz Lake area is underlain by late Archaean rocks of the Beardmore Geraldton greenstone belt (BGB). The BGB extends from Lake Nipigon to the east of Long Lac, for a total length of approximately 150km and width of 30km. The Titan property lay on the eastern most end of the BGB. The BGB is a relatively small greenstone belt located at the boundary between the Quetico Subprovince and the eastern Wabigoon Subprovince of the Superior Province (Figure 15). The Onaman - Tashota greenstone belt, part of the Wabigoon Subprovince, contacts the BGB to the north. The Wabigoon is ~70% basaltic metavolcanics with thin inter-formational chemical + clastic metasedimentary units. The metavolcanics & metasediments have been intruded by felsic to intermediate intrusives (including the gold bearing Elmhirst Lake Stock and Kaby Lake Stock), ranging from trondhjemite to granodiorite, and quartz-monzonite. The metavolcanics and metasediments have undergone greenschist metamorphism (Amukun, 1984).

The Quetico Subprovince lays to the south of the BGB and is composed dominantly of clastic metasediments with inter-formational chemical metasediments. The clastic metasediments represent a strongly metamorphosed turbidite sequence varying from arenaceous to argillaceous with local conglomerates units (Smyk *et al*. 2005). Banded iron formations within the metasediments consist of ferruginous chert, oxide (magnetite-chert) and sulphide (sulphide-chert) facies with localized graphite. There are numerous pegmatite and diabase dykes cross-cutting the clastic and chemical metasediments. General younging is to the north, but there are local south overturns. The rocks of the Quetico Subprovince have undergone lower amphibolite metamorphism (Smyk *et al*., 2005).

Regional structural trends defined by lithologic contacts, foliations, gneissosity and faults are aligned mainly easterly to northeasterly in the central Wabigoon Subprovince area and indeed in most of the western Superior Province. The easterly trending boundary between the Quetico and Wabigoon subprovinces represents the most regionally extensive structural element in the area. Most structures dip subvertically although local areas of low-dip fabric are observed (Oosterman 2017, AR 2.58383)

The BGB consists of six fault-bounded belts, three metavolcanic and three metasedimentary, all trending east (Smyk *et al*., 2005). Smyk *et al.* (2005) purpose the belts to represent rock packages of tectonic thrust slices, or accretionary wedges. The southern metavolcanic belts are dominantly mafic, tholeiitic, massive, and pillowed flows, and are intruded by concordant, synvolcanic gabbro bodies. Lesser intermediate to felsic volcanics and volcaniclastics are common in the central and northern belts. The southern metasedimentary belts are characterized by clastic sequences of feldspathic and quartzofeldspathic sandstones of turbidite facies (Kresz and Zayachivsky, 1993).

Polymictic conglomerate and banded iron formations are also common in the Property claim blocks. Several large granodiorite, diorite, and quartz diorite synvolcanic intrusives exist on the Property claims and are regarded as important factors in gold re-distribution and concentration in the Geraldton area. Middle to Late Proterozoic diabase dykes post-date the granitic intrusions and crosscut all other rocks. Dykes occur as sets that strike northeast and northwest and range in thickness from 10 to 15m. Dykes are offset and terminated by numerous faults in the area (Amukun, 1984).

Regional shear or deformation zones occur along large lateral faults, typically striking east- west between terrain boundaries, such as the Paint Lake Fault. The Paint Lake Fault is a regional dextral transcurrent fault that separates the BGB from the Onaman - Tashota greenstone belt. In the eastern portion of the BGB, the Paint Lake Fault system may join with the dextral transcurrent Klob Lake Fault, which extends over the Property area. Splays (both east-west and northwest to northeasterly striking) are common suggesting regional-scale fault systems. Rocks within shear zones are typically strongly sheared and or brecciated, commonly with strong carbonate + siliceous alteration. Localized shearing is common at contacts between gabbro/mafics and the more competent felsic intrusives. Northeasterly faults are also common in the Property claim blocks.

## 7.2 Property Geology

In the Property area, the Titan Gold Showing is located approximately 300 m north of the regional east-west striking Klob Lake fault at the intersection of a set of northeasterly and northwesterly striking faults (Figures 15-18). The Klob structure is inferred to continue southeast around Morrow and Tomorrow Lakes and along the northern contact between a synvolcanic diorite body and gabbro/mafic volcanic rocks. Northwest trending faults dominate the Titan showing area and may offset rock units towards the south by 150 m to 700 m.

The local geology surrounding the Titan Showing is defined by block faulted mafic volcanics +/- volcaniclastics and gabbro dykes and sills. These units trend approximately east-west and are commonly terminated, or are offset, by the northeasterly trending faults. Some of these faults have been intruded by strongly magnetic diabase dykes. A large diorite body or stock intrudes the metavolcanic belt at Tomorrow Lake. The metavolcanic belt hosting the Titan Showing is underlain by the Southern Meta-Sedimentary Belt (SMB) of dominantly sandstone and slates and includes broadly folded iron formation units. The contact between the volcanic rocks and the SMB has been interpreted as a thrust fault.

The mineralogy of the rocks surrounding Titan showing suggests a metamorphic facies grade of upper greenschist to lower amphibolite as determined by the presence of both a greenschist facies assemblage of chlorite + albite + epidote +/- actinolite and an amphibolite mineral assemblage of hornblende + plagioclase +/- epidote, biotite, diopside, although retrograde metamorphism of amphibolite to greenschist is possible (Report 20013940).

## 7.3 Mineralization

In the Klotz Lake region, gold mineralization is dominantly hosted within shear zone structures associated which splays off the regional Klob Lake fault structure. To date, the highest gold assays, in the multiple g/t Au range, have been returned from quartz and quartz- carbonate veined gabbro intrusive rocks and to a lesser extent in granodiorite and mafic volcanic rocks. There are various shear hosted high grade gold mineralization occurrences on the Property, out of which most important are: the Titan and Tomorrow Lake showings (Figure 18) are discussed below:

***The Titan Showing***

The Titan showing was discovered by Goldstream in the fall of 2011. Here, the highly deformed and quartz veined volcanic/gabbro rocks contain visible gold with initial grab samples returning gold assays of 11,200 g/t Au, 5,900 g/t Au and 3,420 g/t Au. The showing consists of sporadic outcrop exposures covering an area measuring roughly 60 m north-south by 20 m east-west.

Visible gold is associated with strongly deformed quartz veins within sheared fine-grained mafic volcanic and gabbro rocks. The visible gold occurs as splashes and specks in associated with quartz vein fracture-fillings. The showing represents a multiple vein system with at least four gold-bearing veins. These veins are typically comprised of granular smoky grey quartz with strongly sheared and gossened wallrock along their contacts. The veins frequently displayed strong parasitic folding and canoeing, as well as augen-type shear structures. In addition to visible gold, the veins host a variety of sulphide minerals including pyrite, chalcopyrite, arsenopyrite, galena and molybdenite.

***Tomorrow Lake Showing***

The Tomorrow Lake Showing is located proximal to the contact between mafic volcanic/gabbro rocks and a large diorite stock (Figure 4). In 1983, Banque Or's best drill hole BO-83-34 returned 7.91 g/t over 5.12 m (Table 4). Gold mineralization is hosted at the shear contact between a strongly sheared chlorite + carbonate altered mafic volcanic/gabbro (2% 'bleby' pyrite clusters) to the north and a weakly sheared strongly silicified + epidote altered + oxidized diorite stock hosting 8 - 10% pyrite disseminations in the south. The hostrock is 5% quartz stockwork veined. Shearing penetrates all rock types. The showing is bounded on the east and west ends by northeasterly fault structures.

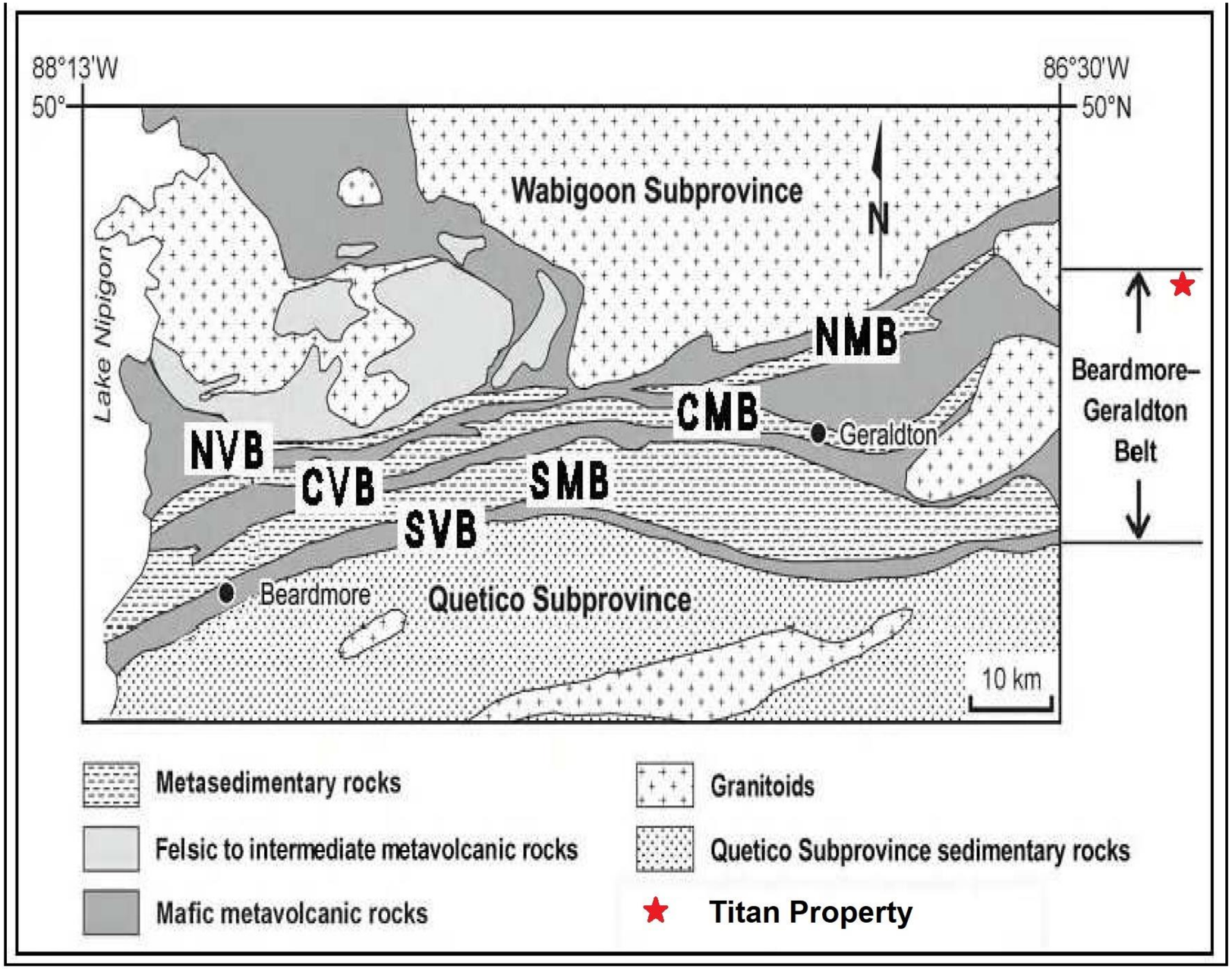
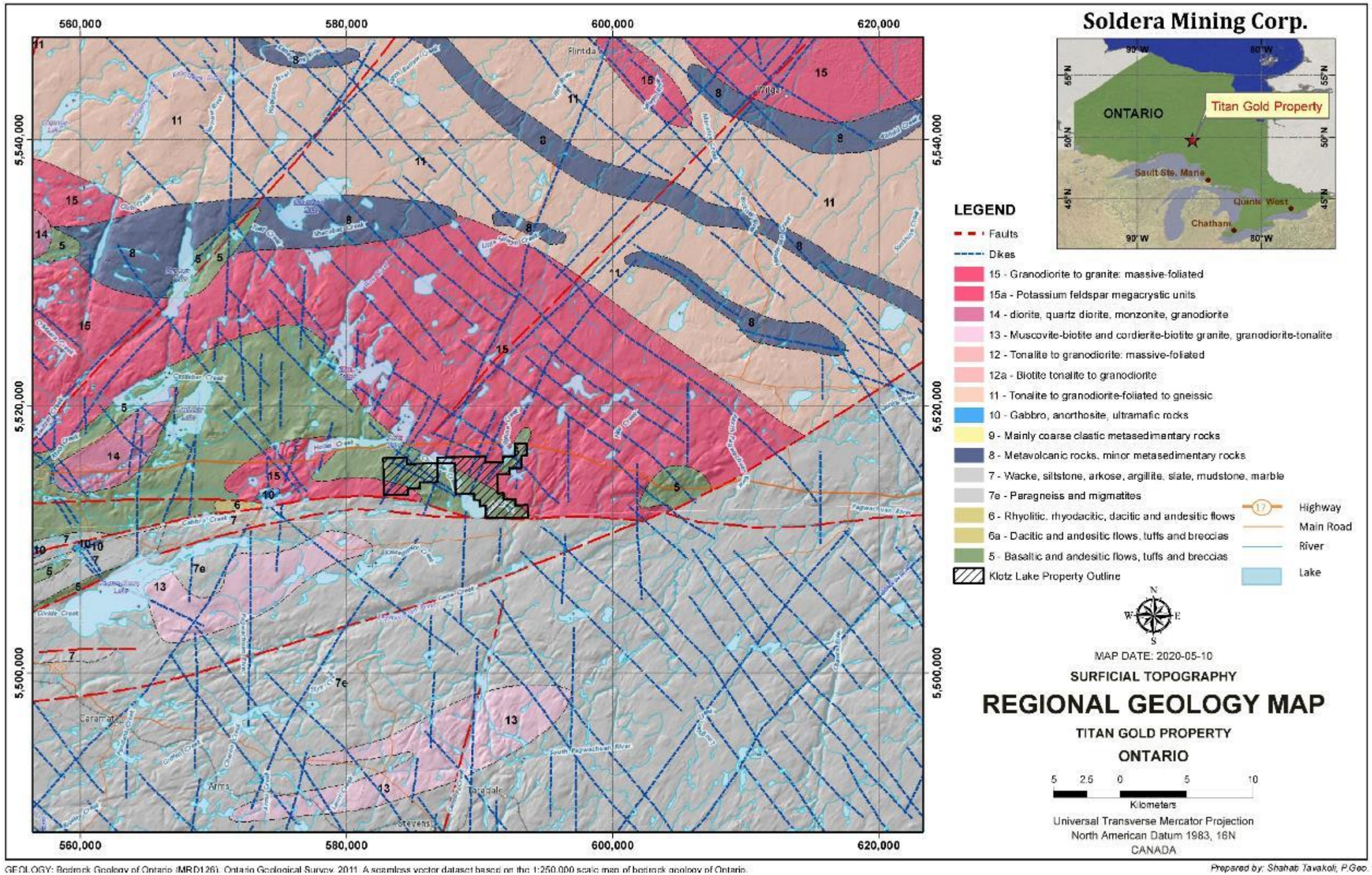



**Figure 15: Regional geology map of Beardmore – Geraldton Greenstone Belt**

**Figure 16: Regional Geology map**




GEOLOGY: Bedrock Geology of Ontario (MRD126), Ontario Geological Survey, 2011. A seamless vector dataset based on the 1:250,000 scale map of bedrock geology of Ontario.

**Figure 17: Property Geology Map**

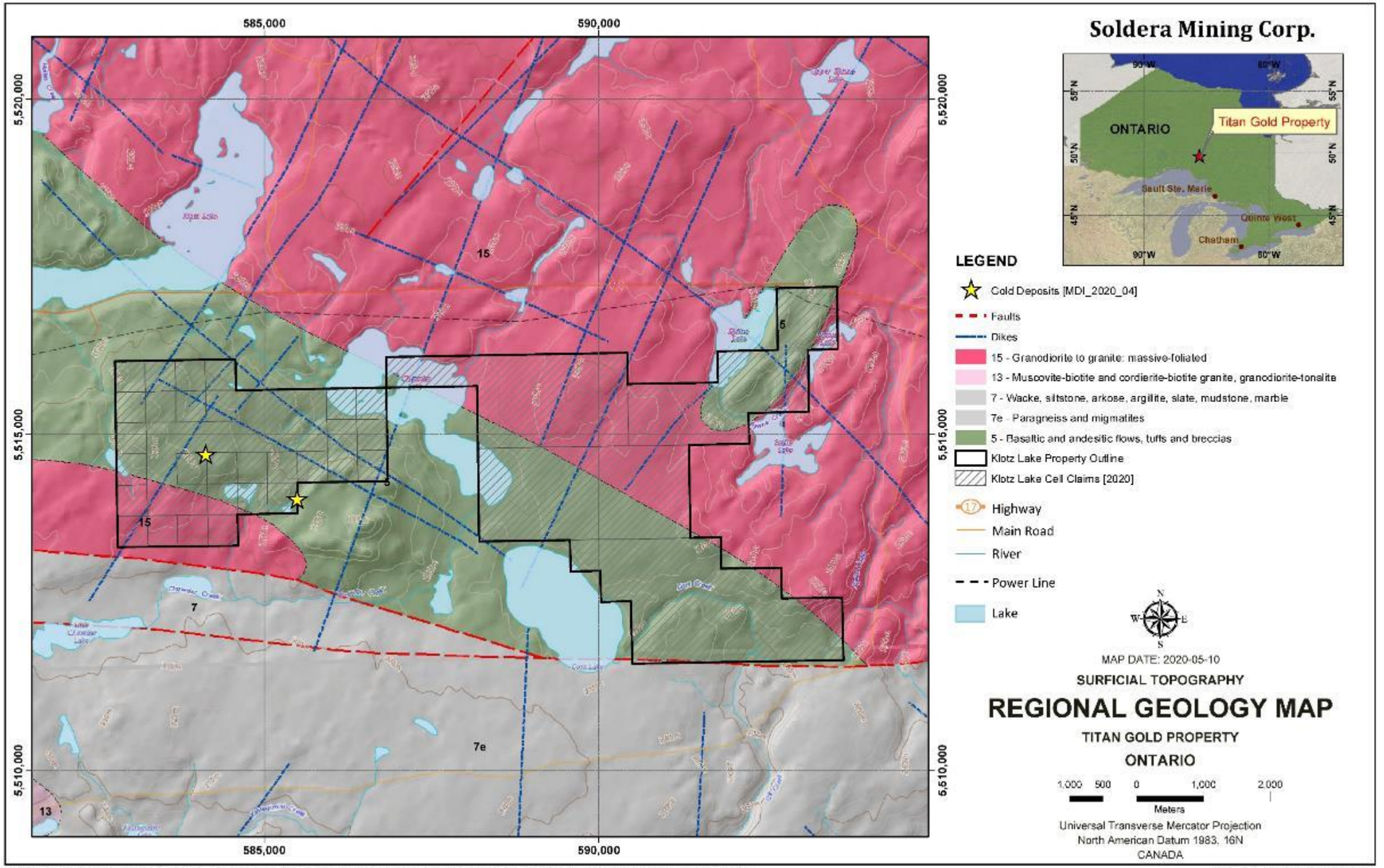
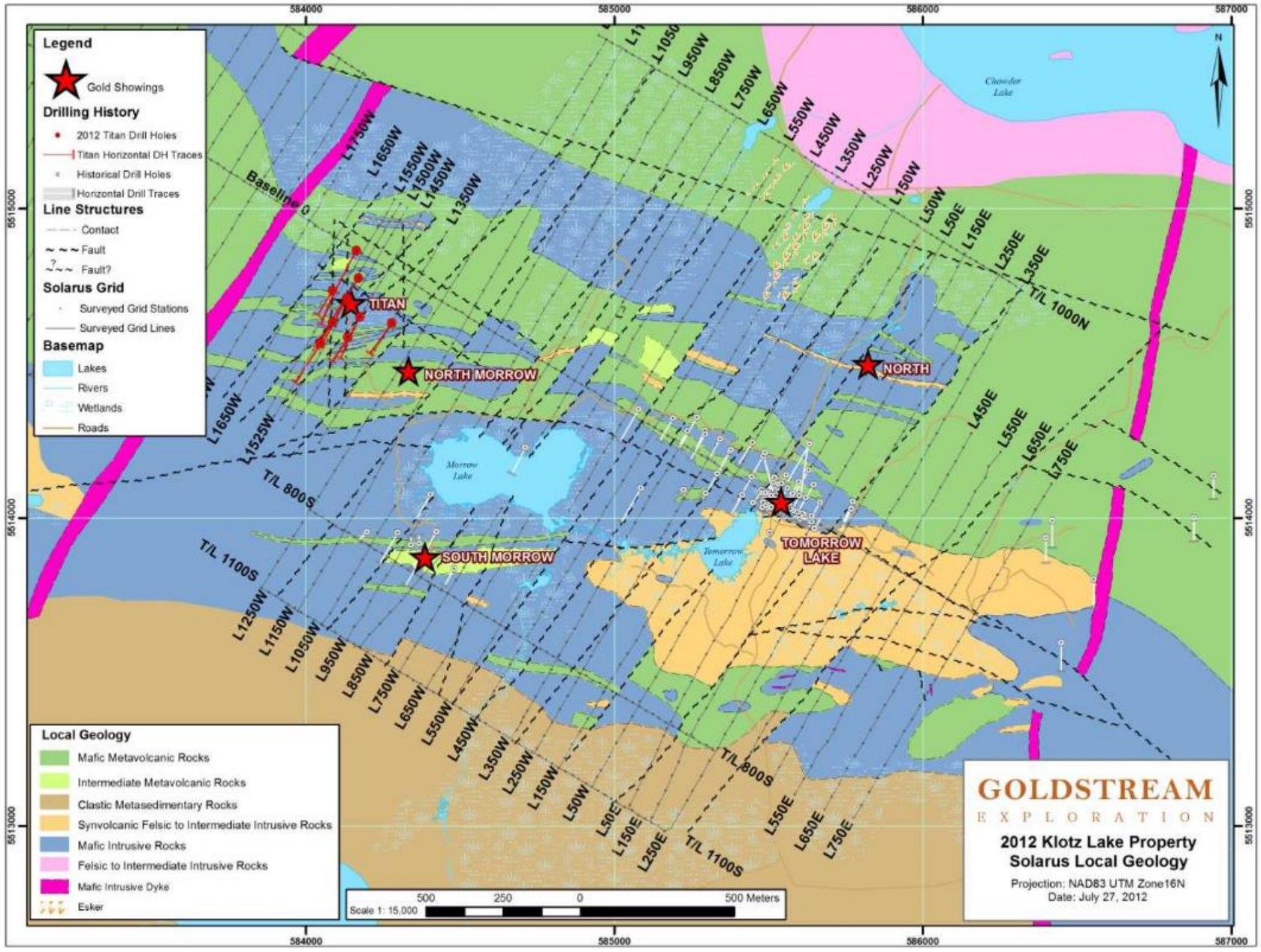


**Figure 18: Property geology map with historical Solarus Grid**




*(Source: Assessment Report 20013940)*

# 8.0 DEPOSIT TYPES

The Superior Province is the largest exposed Archean craton in the world which is known for its gold deposits. Mineralization style for Property suggests a lode type Mesothermal Archean Lode Gold deposit model.

One prominent characteristic of all significant gold deposits in the Superior Province is their occurrence within or immediately adjacent to greenstone belts. They are not, however, preferentially hosted by a specific greenstone lithology or lithological assemblage but occur within all greenstone lithologies. A second, equally prominent, characteristic of the gold deposits is their occurrence within major tectonic zones which comprise linear composite shear systems. These shear systems, or deformation zones, are commonly of regional extent, exhibit systematic orientations and sense of shear, and may truncate all Archean lithologies (Colvine A.C. et. al. 1988). The faults, and associated splays, which control gold mineralization, are typically part of a larger deformational zone that can reach kilometers in thickness and several hundred kilometers in strike (Hodgson, 1993). Structural and stratigraphic continuity are locally completely disrupted by late shearing, associated with the major deformation zones. Locally, gold mineralization at the Property scale is more controlled by regional and local structures while lithology has little control. There are three types of gold mineralization identified in the area: (a) in quartz veins hosted in volcanic rocks and felsic dikes within shear zones, (b) in narrow semi-massive sulphide bands filling fissures, and (c) in altered rocks within shear zones with or without quartz veins.

Gold-bearing quartz veins are the most common type of mineralization in the area. The veins have wispy to well-layered “crack-seal” textures, with sericite, chlorite, ferroan carbonate, 1-5% sulphides, and occasionally tourmaline along the selvedges. Gold is concentrated in the “crackseal” fractures and in selvedges along the quartz vein margins. Calcite filled fractures within quartz veins also carry gold. Narrow gold-bearing semi-massive sulphide filled fractures within fissile zones also contain significant gold values. Pervasive ferroan carbonate alteration, disseminated sulphides, and very small barren quartz veinlets characterize the fissile zones. Sulphides are predominantly pyrite, with variable amounts of chalcopyrite. The gold tenor appears to be related to the quantity of pyrite present in the wall rock and in the veins.

The following controls of gold mineralization is identified in Ontario Ministry of Northern Development and Mines report “Archean Lode Gold Deposits in Ontario” (Colvine A.C. et. al. 1988).

***A. Lithological Controls***

1. Mafic and ultramafic volcanic and intrusive rocks have been suggested as preferred host rocks to gold.
2. Clastic metasediments host mineralization in a frequency approximately proportional to their belt-wide occurrence.

3. Felsic metavolcanic rocks have a somewhat higher incidence in the mineralized areas than within greenstone belts as a whole.
4. Chemical metasediments such as banded iron formations are only a minor proportion of greenstones and more frequently associated with economically poorer deposits.
5. The post-volcanic felsic plutons are minor in volume; however, these post-volcanic intrusions are very common in mineralized areas. In several deposits, gold mineralization is either completely (e.g. The Young-Davidson Mine at Matachewan) or predominantly (e.g. the Macassa Mine at Kirkland Lake) hosted by felsic to intermediate, silica-saturated to undersaturated intrusions which cut the folded and tilted supracrustal package.

***B. Structural Controls***

1. **Zones of anomalously high strain within a deformation zone.** Examples include the mines of the Red Lake and Hemlo camps and the Detour Lake and Macassa Mines in Ontario, and the Sigma Mine at Val d'Or in Quebec. Both brittle (fracture and breccia vein systems) and ductile (replacement vein systems) deformation styles are recorded in these deposits, perhaps reflective of the depth in the crust at which they formed.
2. **pre-existing structural anisotropies.** An excellent example of this control of mineralization is the Cameron Lake deposit near Titan, in which the mineralization occurs where sympathetic, bedding-controlled splays to a shear zone intersect that shear. The plunge of the ore zone parallels the lineation formed by the intersection of the shears.
3. **a preferred lithology, where a strong competency contrast exists between adjacent rock types.** Structurally more competent lithologies can be preferentially mineralized. Examples include ore zones in the Macassa and Sigma Mines and the Duport deposit on Lake of the Woods, in which felsic intrusive rocks contain more mineralization than surrounding, less competent lithologies. The competency difference may be a result of original lithological differences or may result from alteration processes. The later control is displayed in the Dome Mine at Timmins and the Cochenour-Willans Mine at Red Lake, where metasomatic ankerite - rich units were more competent than enclosing lithologies and deformed in a brittle manner.
4. ***fold limbs and fold noses.*** Folding of sequences of rocks of contrasting thicknesses and competencies has long been known to create permeable zones that may host mineralization. Other folding - related surfaces (e.g. between layers in fold limbs, or an axial planar cleavage) may also be preferred sites for mineralization, "Saddle reef gold deposits in fold noses have long been known. Examples of this control of mineralization in Ontario include ore zones at Geraldton (Colvine *et al.* 1984) and the Musselwhite deposit at Opapimiskan Lake (Hall and Rigg 1986), where gold is hosted in fold noses and foliation - parallel veins. Many of the lode gold deposits contain an apparently complex assemblage of gold – bearing veins. However, the

types of veins, their orientations, and the temporal relationships that they display can be explained in terms of the deformation processes under which they formed.

5. **Gold - bearing veins include replacement, extension, breccia, and fracture types.** In most cases, veins transect lithological contacts, and are not restricted to a specific rock type. However, veins may be stratabound where they are controlled by the competency or chemistry of a particular unit. Such is the case at Geraldton, where veins occur largely in layers of iron formation (Macdonald 1984a).

# 9.0 2021 EXPLORATION

A comprehensive trenching program were carried out by Pleson Geoscience in the spring of 2021. Trenching was completed on the Morrow Extension Zone which consisted of VLF conductors identified in the 2020 VLF surveys and an anomalous gold sample of 4.03 g/t Au which was taken on May 23, 2020. The trenching occurred over 7 days from May 12$^{th}$ to May 18$^{th}$ 2021. A total of 26 channel samples were taken during the trenching campaign. Mike Goodman, Phil Houghton, Trystan Goodman, and Kyle Cote of Beardmore, ON assisted Alex Pleson (Geologist) of Nipigon, ON in trenching and sampling prospective areas during the campaign. A John Deere 650K bulldozer was used to clean off overburden from mineralized areas and a small Kubota Kx-040 excavator was used to remove material the bulldozer left behind. The trail into the prospective showings required a full day of work in order for the crew to access the showings.

The program intersected slightly anomalous silver values, with the highest value being 7.52 ppm Ag. Of all 26 channel samples sent to the lab only 4 samples returned values around 0.1 ppm Au and no higher values were discovered even though the trenching occurred 25 meters along strike of the 4.03 g/t Au sample taken the year before. The results of the trenching work are summarized below in the map and sample table. A total of $52,474.46 was spent on the trenching program including improving the access trail from Hwy 11 in order for the machines to gain access to the claim block.

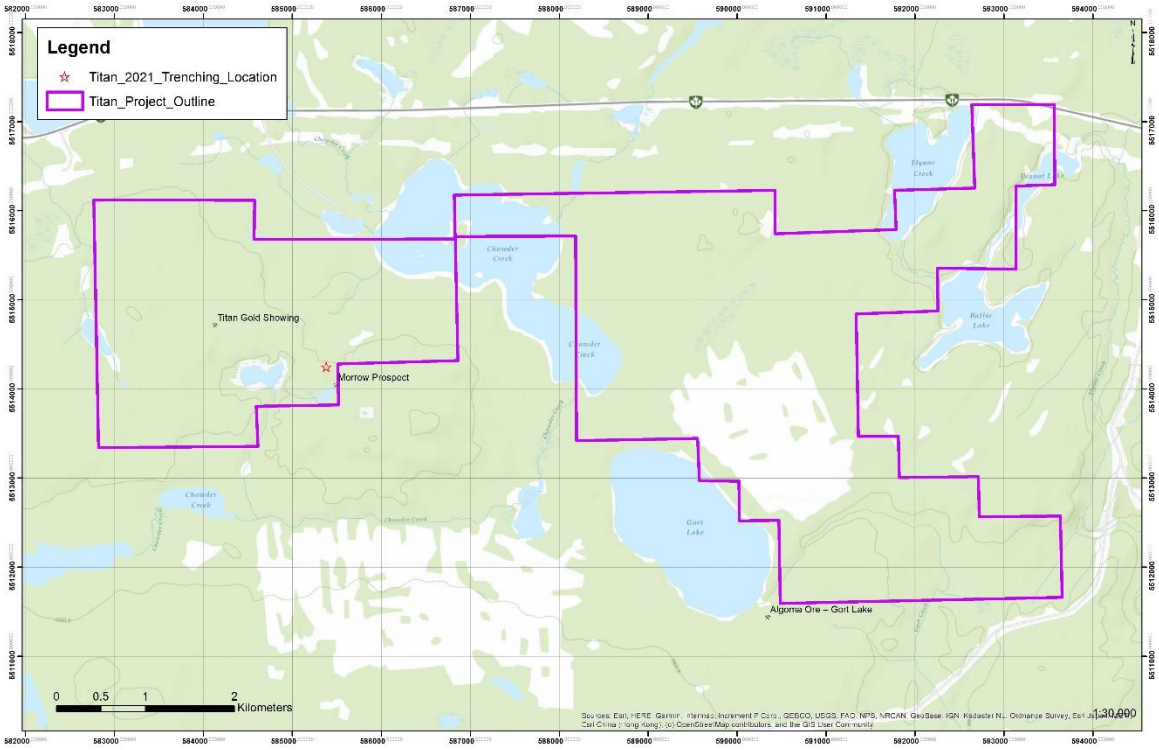



**Figure 9.1 Trenching Location Map**

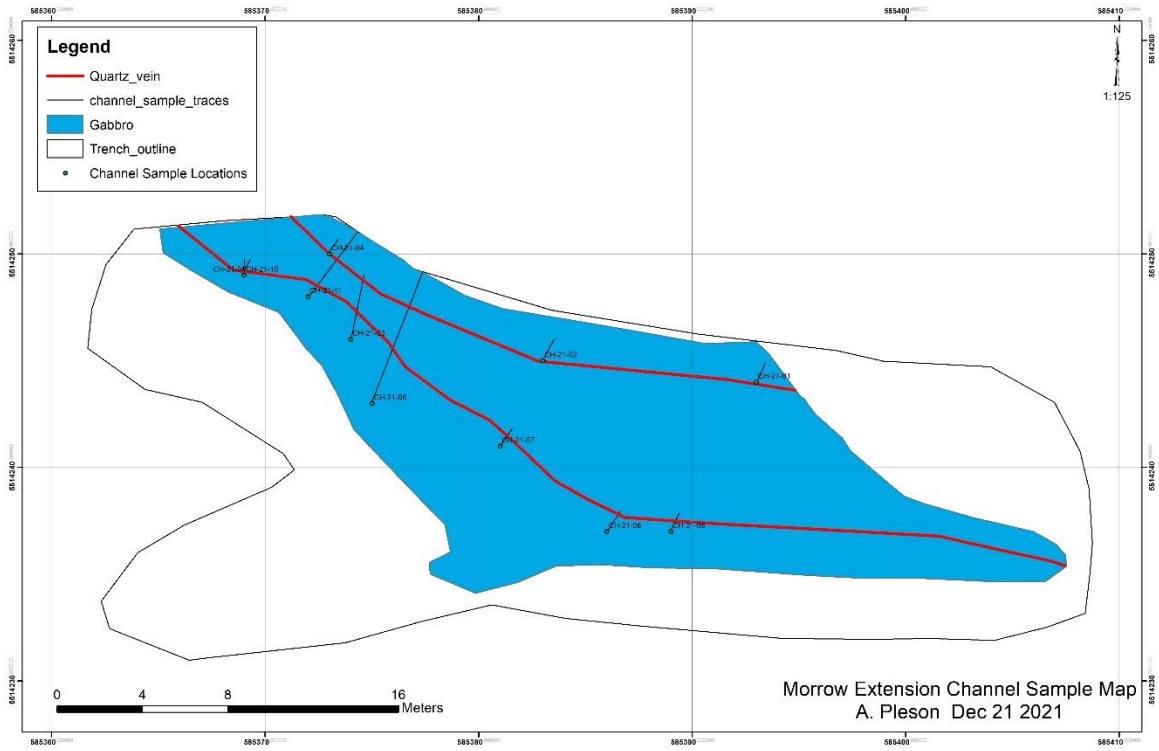



**Figure 9.2 Trenching and Sample Map**

**Table 9.1 Trenching Sample Table**

| Sample ID | Easting | Northing | Type | Channel ID | Azimuth | To (m) | From (m) | Length (m) | Au (ppm) | Ag (ppm) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 167101 | 585393 | 5514244 | Channel | CH-21-01 | 32 | 0 | 0.82 | 0.82 | 0.007 | 0.36 | main vein material |
| 167102 | 585383 | 5514245 | Channel | CH-21-02 | 12 | 0 | 0.3 | 0.3 | 0.001 | 0.16 | main vein material |
| 167103 | 585374 | 5514246 | Channel | CH-21-03 | 20 | 0 | 0.5 | 0.5 | 0.004 | 0.34 | wallrock sample |
| 167104 | | | Channel | | | 0.5 | 0.84 | 0.34 | 0.007 | 0.47 | vein |
| 167105 | | | Channel | | | 0.84 | 1.34 | 0.5 | 0.004 | 0.36 | vein |
| 167106 | 585373 | 5514250 | Channel | CH-21-04 | 54 | 0 | 0.27 | 0.27 | 0.025 | 0.72 | alt. gabbro stockwork |
| 167107 | 585389 | 5514237 | Channel | CH-21-05 | 62 | 0 | 0.14 | 0.14 | 0.109 | 5.78 | galena, py, po in qtz vein |
| 167108 | 585386 | 5514237 | Channel | CH-21-06 | 71 | 0 | 0.15 | 0.15 | 0.04 | 2.01 | py, cpy in qtz vein |
| 167109 | 585381 | 5514241 | Channel | CH-21-07 | 23 | 0 | 0.86 | 0.86 | 0.075 | 4.38 | gabbro with qtz vein, diss po |
| 167110 | 585375 | 5514243 | Channel | CH-21-08 | 24 | 0 | 1 | 1 | 0.011 | 1.04 | wallrock - gabbro |
| 167111 | | | Channel | | | 1 | 1.72 | 0.72 | 0.091 | 3.61 | vein |
| 167112 | | | Channel | | | 1.72 | 2.09 | 0.37 | 0.184 | 4.28 | vein |
| 167113 | | | Channel | | | 2.09 | 2.57 | 0.48 | 0.029 | 1.67 | vein |
| 167114 | | | Channel | | | 2.57 | 2.85 | 0.28 | 0.074 | 3.87 | vein |
| 167115 | | | Channel | | | 2.85 | 3.85 | 1 | 0.025 | 1.73 | vein |
| 167116 | | | Channel | | | 3.85 | 4.8 | 0.95 | 0.037 | 1.86 | vein |
| 167117 | | | Channel | | | 4.8 | 5.75 | 0.95 | 0.121 | 2.01 | wall rock - gabbro |
| 167118 | 585369 | 5514249 | Channel | CH-21-09 | 38 | 0 | 0.3 | 0.3 | 0.022 | 1.6 | wallrock |
| 167119 | 585369 | 5514249 | Channel | CH-21-10 | 33 | 0 | 0.6 | 0.6 | 0.034 | 2.45 | vein |
| 167120 | 585372 | 5514248 | Channel | CH-21-11 | 37 | 0 | 0.85 | 0.85 | 0.028 | 1.32 | stockwork/gabbro inclusion |
| 167121 | | | Channel | | | 0.85 | 1.01 | 0.16 | 0.179 | 7.52 | vein |
| 167122 | | | Channel | | | 1.01 | 1.61 | 0.6 | 0.011 | 0.85 | vein |
| 167123 | | | Channel | | | 1.61 | 2.26 | 0.65 | 0.02 | 1.39 | vein |
| 167124 | | | Channel | | | 2.26 | 2.76 | 0.5 | 0.026 | 1.08 | vein |
| 167125 | | | Channel | | | 2.76 | 3.36 | 0.6 | 0.027 | 2.22 | vein |
| 167126 | | | Channel | | | 3.36 | 4.36 | 1 | 0.01 | 0.59 | walllrock |

**Picture 9.1 - Dozer doing initial clearing**

**Picture 9.2 – Prospective Channel Sample**

**Picture 9.3 – Initial washing of the Morrow extension trench**

# 10.0 DRILLING

No drilling has been done on the Property by the current claim holder or vendor.

# 11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

## 11.1 2011-12 Drill Core Samples Goldstream and Prodigy

All drill core from 2011-12 was selected and sent for logging and sampling. Sample lengths, although often 1.0 m in length on average, were set up by the geologist based on lithology and mineralization, veining, and alteration. The core was split down the centre using a diamond-edge table rock saw. The bottom half was sent to the lab for assay and the top half returned to the core box for future reference. The core handling, splitting, and bagging was supervised by the drill geologist(s).

All split core samples were bagged in plastic sample bags and sample number written on the bag with black permanent marker. The bags are then secured with plastic security ties and placed in rice bags. The split samples are temporarily stored in the locked and secured core shack at Bush Lake until they can be shipped to the laboratory. Once the splitting was completed for a hole, the sample submission paperwork was filled out by the geologist on site. The samples were transported by Goldstream personnel to Activation Laboratories ("Actlabs") sample preparation facility and assay lab in Geraldton for gold analysis (method 1A3-50) by 50 gm Fire Assay/gravimetric finish. A 36 Multi-element analysis was completed on selected samples at the Actlabs located in Thunder Bay (method 1E3). Activation Laboratories is an independent group of laboratories accredited by the Standards Council of Canada to ISO/IEC 17025 guidelines for gold analysis.

A total of 2,846 core samples were taken for analyses during the drill program; samples included split cores, Canadian Standards, coarse and powdered blanks. At the completion of the 2012 diamond drilling program, Goldstream dispatched a total of 282 pulp samples, or approximately 10% of the total samples taken, from Actlabs in Geraldton to Accurassay in Thunder Bay for gold assay verification. Accurassay is an ISO certified laboratory. The sample pulps were sent directly from Actlabs to Accurassay. Each sample was assayed for gold only (Assessment Report #20013940).

## 11.2 Samples from Other Exploration Work

The samples for the 2010, 2011-12, 2016 to 2020/2021 exploration work were also analyzed at Activation Laboratories (ACTLABS) in Thunder Bay, Ontario. The procedure for Fire Assay and ICP-OES is described below:

**Fire Assay**

A sample size of 5 to 50 grams can be used but the routine size is 30 g for rock pulps, soils or sediments (exploration samples). The sample is mixed with fire assay fluxes (borax, soda ash, silica, litharge) and with Ag added as a collector and the mixture is placed in a fire clay crucible, the mixture is preheated at 850°C, heated at an intermediate 950 °C and finished at 1060 °C. The entire fusion process should last 60 minutes. The crucibles are then removed from the assay furnace and the molten slag (lighter material) is carefully poured from the crucible into a mould, leaving a lead button at the base of the mould. The lead button is then placed in a preheated cupel which absorbs the lead when cupelled at 950°C to recover the Ag (doré bead) + Au.

**ICP-OES**

The Ag doré bead is digested in hot (95°C) $HNO_3$ + HCl. After cooling for 2 hours, the sample solution is analyzed for Au by ICP-OES using a Varian 735 ICP.

**Code 1A2-ICP (Fire Assay-ICP-OES)** Detection Limits (ppb)

| Element | Detection Limit | Upper Limit |
|---|---|---|
| Au | 2 | 30,000 |

Source: http://www.actlabsint.com/page.aspx?page=1454&app=226&cat1=549&tp=12&lk=no&menu=64)

Samples from 1986 drill program were analyzed for gold by Fire Assay at Bell-White Analytical Laboratories Ltd. of Haileybury, Ontario, Canada.

## 11.3 Author Collected Samples

The samples collected by the Author during his May 23rd, 2020 visit were prepared and analyzed at Polymet Labs in Cobalt, Ontario, which was formerly established by the Ontario Ministry of Mines and Northern Development (MNDM). The samples were assayed using Fire Assay package for gold and silver (50 g, Fire assay, AAS finish). The laboratory is an independent Canadian certified lab.

In Conclusion, the author considers that the sample preparation, security, and analytical procedures of historical and current sampling are adequate to ensure credibility of the assays. The QA/QC procedures and protocols employed during historical work are sufficiently rigorous to ensure that the data are reliable.

# 12.0 DATA VERIFICATION

The author visited the Property on May 27th, 2021 to verify historical exploration work including trenching and drill programs, to examine mineralized outcrops and to collect necessary geological data. During the visit of the Property, GPS coordinates using NAD 83 datum were recorded for the drill hole casing and trench location.

A total of six samples were collected by the author from historical channel sampling and other exploration areas (Figure 19, Table 10) and were delivered to Polymet Laboratories in Cobalt, Ontario for analyses. All samples were under the care and control of the author and are considered representative.

The sample assay results (Table-10) indicated gold (Au) values in the range of 0.057 grams per ton (g/t) to 4.03 g/t while one sample (31523) was below laboratories detection limits (0.028 g/t). Highest Silver values of 26.31 were in sample 31518 and the lowest 1.3 g/t was sample 31523 while four samples were below the laboratories detection limits. These results are consistent with historical trenching results.

Overall, the author is of the opinion that the data verification process demonstrated the validity of the data and considers the Property database to be valid and of sufficient quality.

Historical exploration work from 1980s, 2011-12 Goldstream and Prodigy, and 2017-2020 by Pleson Geoscience was carried out under the supervision of professional geologists. No officer, director, employee or associate of SOLDERA was involved in sample preparation. The author was able to verify location of historical channel sampling areas during his Property visit. A limited search of tenure data on the ENDM Ontario website on May 20, 2020, conforms to the data supplied by SOLDERA However, the limited research by the author does not express a legal opinion as to the ownership status of the Property.

Historical grades and assay data are taken from ENDMF assessment reports and OGS geological reports which are deemed reliable. Historical geological descriptions taken from different sources were prepared and approved by the professional geologists or engineers and are deemed reliable.

**Photo 1: Titan showing looking NW (May Property visit)**

**Photo 2: Historical drill core (May Property visit)**

**Photo 3: Taking verification sample along historical channel cut (May Property visit).**

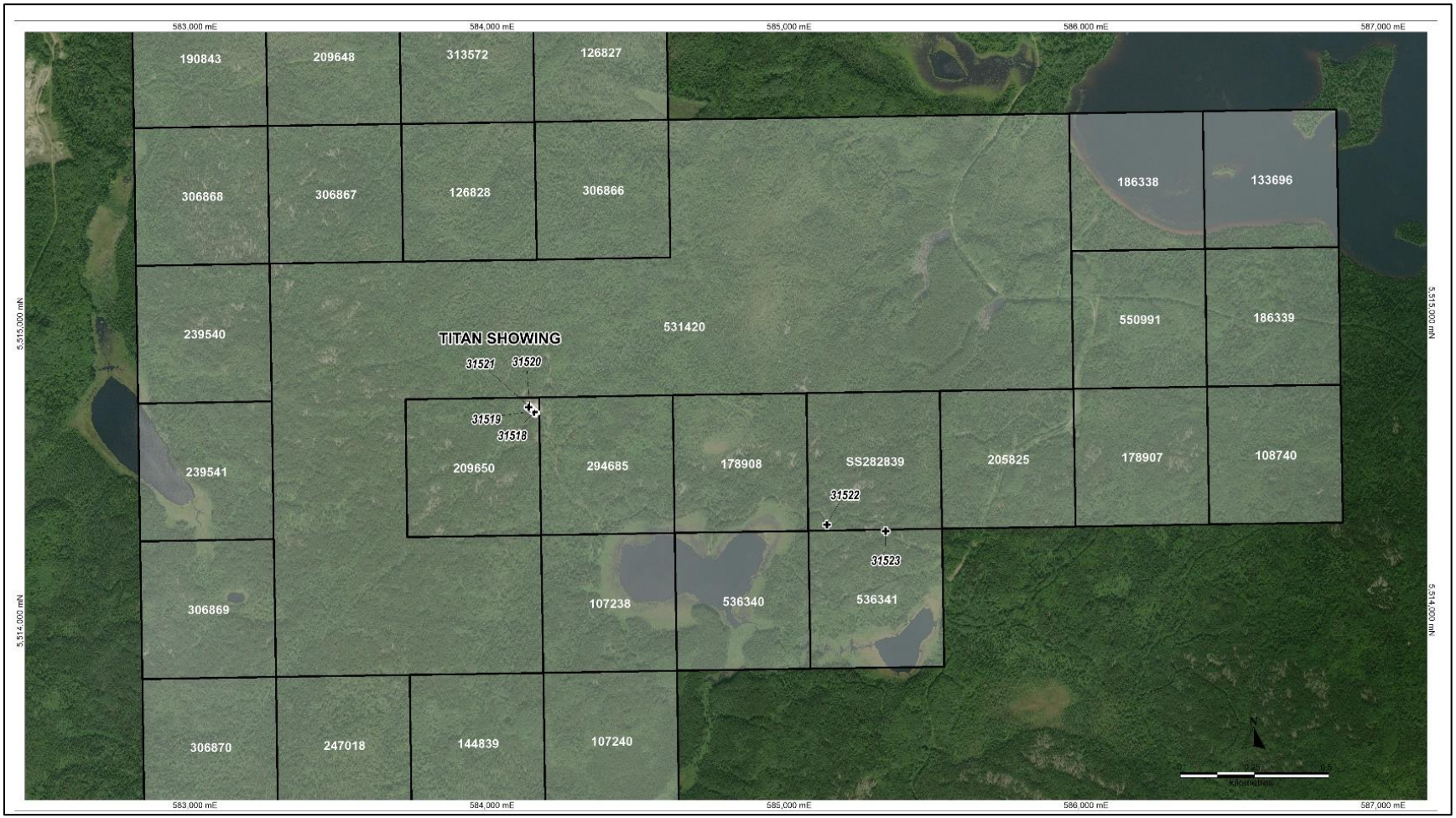
Field description and results of samples collected during the Property visit is provided in the following table.

**Table 10: Sample description from May 23, 2020 Property visit**

| Sample ID | Easting | Northing | Description | Au (ppm) g/t | Ag (ppm) g/t |
|---|---|---|---|---|---|
| 31518 | 584130 | 5514684 | Grey rusty quartz vein (taken between old sample tag 61634 and 61636) | 1.93 | 26.31 |
| 31519 | 584127 | 5514687 | Sugar textured quartz veining (taken near tag 60597) | 1.93 | <0.028 |
| 31520 | 584113 | 5514700 | Grey rusty quartz vein (taken in middle of 4 tags C-62084-c62083 top and C-62098-C62096 bottom) | 0.11 | <0.028 |
| 31521 | 584108 | 5514703 | Sulfide dark alt volc. (taken in middle of C62080-C62079) | 0.057 | <0.028 |
| 31522 | 585113 | 5514308 | Dark met volc sulf take on middle of trail (old sample 46774) | 4.03 | <0.028 |
| 31523 | 585311 | 5514286 | Dirty quatz in middle of bulldozer trail (old sample 33540) this would be good place to wash off outcrop | <0.028 | 1.3 |

The data collected during the present study is considered reliable because it was collected by the author. The data quoted from other sources is also deemed reliable because it was carried out under the supervision of professional geoscientist and geophysical contractors and taken from ENDM Ontario, published reports by the Ontario Geological Survey (OGS), the Geological Survey of Canada ("GSC"), various researchers, and personal discussions.

**Figure 19: Location of samples collected by the Author**



# 13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

No metallurgical testing was done on the Property.

# 14.0 MINERAL RESOURCE ESTIMATES

No mineral resource estimates were done on the Property.

***Items 15 to 22 are not applicable at this time.***

# 23.0 ADJACENT PROPERTIES

Titan is located in the heart of the mineral rich Canadian Shield, on the western edge of Northwestern Ontario, in close proximity to Manitoba to the east and Ontario's Ring of Fire to the west. In Ontario there are several mines and exploration projects that are in close proximity to the property (Source: http://business.Titan.ca/key-industries/mining/).

The Property is located in an active and historical mining and mineral exploration region where many operators carried out exploration and/ or development work on the Property and the surrounding area. The following information is taken from the publicly available sources which are identified in the text and in Section 27. The writer has not been able to independently verify the information contained. The information is not necessarily indicative of the mineralization on the Property, which is the subject of this technical report.

Cautionary statement: Investors are cautioned that the mineralization located on the adjacent properties may not be indicative of the potential mineralization on the Property. It has been provided only for illustration purposes.

## 23.1 Prodigy Gold's Hardrock East Project

Prodigy Gold is the owner the adjoining land which is known as Hardrock East Project. The Hardrock East Gold Project consists of a land package totaling approximately 200 square kilometres covering the eastern portion of the Beardmore-Geraldton gold camp in Northern Ontario. The land position includes claim blocks known as Milestone, Adel and Klotz Lake. In October of 2011, Goldstream entered into an agreement with Prodigy which allowed Goldstream, through various financing and work commitments, to acquire a 100% interest in the Hardrock East project. Prodigy Gold is now owned by Argonaut Gold Inc. which is listed on Toronto Stock Exchange (TSX-V: AR).

Exploration by Prodigy occurred mainly during 2010 and 2011 and included extensive geologic study and fieldwork. In December of 2012, Goldstream contracted AMEC to conduct a non-compliant resource estimate on the Milestone target. The resultant resource from this study was designated only as a mineral inventory with no economic parameters applied except for using varying cutoff grades. The zone of mineralization was modeled by Goldstream geologists and at a 0.4 g/t cut-off, AMEC determined that the

Milestone deposit contains a mineral inventory of 25.5 million tonnes grading 0.87 g/t gold for 710,713 ounces. In 2015, Argonaut acquired 100 % of the Hardrock East property.

(Source: https://www.argonautgold.com/English/assets/exploration/default.aspx)

**Figure 20: Map of Cameron Gold and other Projects of First Mining**

(Source: https://firstmininggold.com/Propertys/ontario/cameron-Property/)

## 23.2 Greenstone Gold Mines Group Viper Property

Greenstone Gold Mines is a 50/50 partnership between Centerra Gold Inc. and Premier Gold Mines Limited for the joint ownership and development of the Hardrock, Brookbank and Viper Properties.

Greenstone Gold Mine GP Inc.'s Viper Property is a contiguous block of 17 mining claims. The property covers a total approximate area of 3,410 hectares and is located in the McBean Lake Area Township.

The Viper Property resides in a location of the Beardmore-Geraldton Greenstone Belt where the Central Meta-Volcanic Unit and the Southern Meta-Sedimentary Unit are strong folded together. The central meta-volcanic unit is comprised of massive and pillowed basalts and andesite with mid-ocean ridge basalt geochemical affinity, interlayered with thin sedimentary and tuffaceous beds. The central meta-volcanic unit differs from the southern meta-volcanic unit by thicker deposits of pyroclastic rocks and an abundance of large amygdules in the flow rocks, suggesting shallow-water or subaerial volcanism (Kresz and Zayachivsky 1991). The majority of the flow rocks are andesites and dacites of calc-alkaline affinity with trace and rare-earth element patterns suggesting deposition in an emergent volcanic arc above a subduction zone (Tomlinson et al. 1996). There are also numerous young diabase dykes running roughly north-south crosscutting all other rocks. The southern meta-sedimentary unit is comprised of clastic and chemical sedimentary rocks.

Polymictic conglomerate occurs as thin horizons (<5m) within a thick sequence of thinly to thickly bedded feldspathic sandstone interlayered with thinly bedded siltstone and argillite. Banded iron formation, a minor component of the unit, occurs as fine magnetite-rich laminae and jasper-hematite beds within 3-30m thick horizons interlayered with thinly bedded green argillite, siltstone, and sandstone. In the middle of the folded southern meta-sedimentary unit there is a large felsic porphyry plug. The felsic porphyry body is folded and is only slightly younger than the surrounding clastic meta-sediments.

Cautionary statement: Investors are cautioned that the potential quantity and the mineralization indicated above has not been verified by the author and may not be indicative of the Titan Gold Property the subject of this report. It has been provided only for illustration purposes.

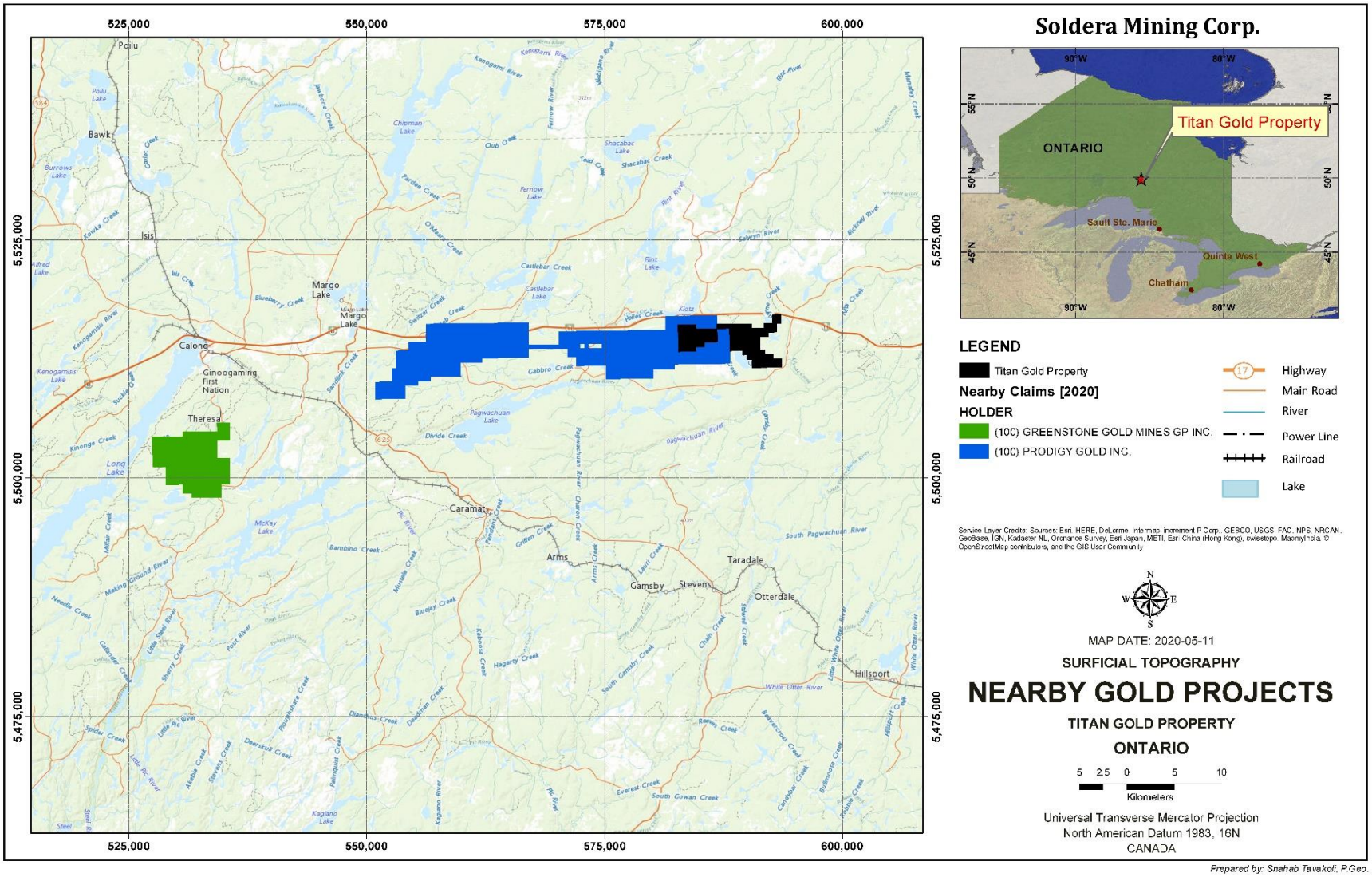



**Figure 21: Adjacent Properties Map**

# 24.0 OTHER RELEVANT DATA AND INFORMATION

## 24.1 Environmental Concerns

There is no historical production from the Property, and the author is not aware of any environmental liabilities which have accrued from historical exploration activity. An exploration work permit was issued for the Property in the name of Alex Pleson (the Vendor) which can be used for further exploration work by extending its time.

# 25.0 INTERPRETATION AND CONCLUSIONS

Geologically, the Property is situated in the Wabigoon Subprovince of the Superior Geological Province. This Subprovince consists mainly of Archean metavolcanic and metasedimentary rock sequences intruded by larger granitoid plutons, mainly granodiorite to granite in composition. Mafic volcanic rocks form ~90% of the sequence in the Titan area, typically tholeiitic mafic flows. Felsic-metavolcanic and metasedimentary units comprise the remainder of the volcanic-sedimentary lithologies. These units typically exhibit evidence of at least greenschist facies of metamorphism. Regional deformation tends to trend in the east/northeast direction which is also the direction of alignment of regional structures. Within the Property, area is dominated by a large quartz diorite intrusion that extends past its eastern boundary on contact to a tonalite pluton. The western contact of the quartz diorite consists of interlayered mafic and felsic metavolcanic rocks. Gold mineralization is typically associated near the boundaries of the major shear zones that have been previously mapped on the Property.

The historical exploration work suggests that the Titan and Morrow showings represent an exposed ductile shear zone, exposed to high stress and strain, with multiple narrow gold carrying quartz veins within the Morrow Lake Deformation Zone (MLDZ). Gold mineralization at Titan and elsewhere on the Solarus grid, is associated with splay faults emanating off the regional east- west striking Klob Lake Fault; a regional fault system that might act as the principal plumbing/conduit network for important gold bearing fluids throughout portions of the Beardmore-Geraldton Greenstone Belt.

High gold values are associated with quartz +/- carbonate stockwork veins, less just quartz veins and highly altered variably sheared mafic/gabbroic rocks. The shear zones range in thickness from 0.5 m to 30 m, cross-cut stratigraphy, and are oriented northwest / southeast. Wider auriferous zones are of lower grade, with sporadic, < 0.5 m wide, high grade shoots. Various drill programs tested potential for gold mineralization along a strike. It is also clear from the drilling that the stratigraphy dips shallow, not steeply north at around 50° north.

Drilling at Titan did not intersect gold mineralization immediately underlying the showing where visible gold was found in strongly folded narrow quartz veins. This would indicate that the vein system may dip in the opposite direction and the optimum drill direction

should have been grid north instead of grid south. The surface projection of the significantly mineralized zones from drilling also suggest that the high-grade mineralized zones may form canoe-shaped shear structures rather than simple linear shears indicating that the Titan mineralization has been strongly folded. Therefore, it is possible that the mineralization must fold or plunge to the east or west of the surface gold showings and, according to IP results, may reside at vertical depths in excess of 250 m.

Significant gold mineralized zones are typically <10.0 m wide although shear/altered zones with pyrite +/- pyrrhotite mineralization can be up to 30 m wide. Assay values for gold are typically over 1.0 g/t with high grade offshoots grading 61.80 g/t Au over a core length of 0.5 m (Hole KL-12-01) and 271.0 g/t Au over a length of 0.4 m (Hole KL-12-08). The exact depth of this mineralized system is unknown with the deepest best gold intersections occurring at a vertical depth of ~275 m (hole KL-12-05). No significant mineralization was intersected west of the Titan showing, and northwest striking fault defined by the IP survey.

In addition to folding, faulting (post and pre-mineralization events) may also add to the complexity of the exploration working model of the Property. According to the ground geophysical survey results, the resistivity and chargeability and magnetic anomalies that coincide with the Titan showing can be followed on strike east southeast to the Tomorrow Lake showing where gold mineralization has been previously drill tested. This zone appears to have been locally displaced laterally by a series of northeast trending faults. These observations imply that there is further potential to find additional gold mineralization within this structure for a minimum strike length of 1.675 km. The chargeability anomaly appears to continue widening to the west forming a semi-linear structure curving to the northwest, suggesting a continuation of the mineralization associated with Titan. The regional scale (1:20,000) airborne magnetics mirrors the chargeability anomaly suggesting a folded or semi-linear structure curving to the northwest. A combination of airborne magnetic, ground magnetic and IP survey results indicate a total strike length of this structure for a total of around 4.0 km within the MLDZ. The results of VLF / magnetic survey of 2020 have shown that the mineralization trend which was explored at Morrow Lake through drilling and trenching can further extends to the east along strike for approximately two kilometres.

To date, most of known mineralization discovered on the Solarus grid is closely associated with increased magnetic signatures. Pyrrhotite, locally up to 10 modal percent, was found in most of the shear zones intersected by the recent drill program which may account for the magnetic anomalies. Considering the magnetic anomaly appears to more closely coincide with the gold mineralization occurrences, it is possible that the magnetic anomalies may define exploration targets more accurately for future exploration programs. So far, IP and magnetic susceptibility over the west end do not show any explicit correlation, which may be due to a possible iron depleted nature of mineralized zones, if present. Furthermore, the fact that gold mineralized shear zones cross-cut

geological units suggests a structural control is more important in controlling gold mineralization than a lithological control.

Mineralization style for Property suggests a lode type Mesothermal Archean Lode Gold deposit model in Superior Geological Province. One prominent characteristic of all significant gold deposits in the Superior Province is their occurrence within or immediately adjacent to greenstone belts. The faults, and associated splays, which control gold mineralization, are typically part of a larger deformational zone that can reach kilometers in thickness and several hundred kilometers in strike. There are three types of gold mineralization identified in the area: (a) in quartz veins hosted in volcanic rocks and felsic dikes within shear zones, (b) in narrow semi-massive sulphide bands filling fissures, and (c) in altered rocks within shear zones with or without quartz veins.

The author visited the Property to verify historical exploration work, including various drill programs, trenching and channel sampling programs, mineralized outcrops and to collect necessary geological data. A total of six samples were collected by the author from historical channel sampling and other exploration areas and were delivered to Polymet Laboratories in Cobalt, Ontario for analyses. The sample assay results indicated gold (Au) values in the range of 0.057 grams per ton (g/t) to 4.03 g/t while one sample (31523) was below laboratories detection limits (0.028 g/t). Highest Silver values of 26.31 were in sample 31518 and the lowest 1.3 g/t was sample 31523 while four samples were below the laboratories detection limits. These results are consistent with historical trenching results.

The data presented in this report is based on published assessment reports available from SOLDERA, Ontario ENDMF, the Geological Survey of Canada, and the Ontario Geological Survey. All the consulted data sources are deemed reliable. The data collected during present study is considered enough to provide an opinion about the merit of the Property as a viable exploration target.

There are some risks associated with this Property. Although historical exploration work has been carried out on the Property with some good results, it is still an early stage exploration Property with no mineral resource.

Based on its favourable geological setting indicating shear hosted gold mineralization in trenches and drill holes and the findings of the present study, it is concluded that the Property is a Property of merit and possesses a good potential for discovery of economic concentration of gold mineralization through further exploration. Good road access, availability of exploration and mining services in the vicinity makes it a worthy mineral exploration target. The historical exploration data collected on the Property provides the basis for a follow-up work program.

The author believes the present study has met its original objectives.

# 26.0 RECOMMENDATIONS

In the qualified person's opinion, the character of the Property is enough to merit the following two-phase work program, where the second phase is contingent upon the results of the first phase.

***Phase 1 – Geophysical Surveys, Prospecting, Trenching and Sampling***

The historical work at the Property was mainly focussed on the main Titan and Morrow showings, however the geophysical survey data indicates a northwest southeast trending structural corridor of 1.67 to 4 kilometres in length along strike within Morrow Lake Deformation Zone (MLDZ) which can be a potential target for further exploration. The results of ground geophysical survey indicate that magnetic anomalies provide better control of finding gold mineralization for exploration. It is recommended to fill the gap in 2020 VLF survey, and continue prospecting, trenching, and sampling work along MLDZ.

Total estimated budget for Phase 1 program is $157,630 (Table 11) and it will take about three months' time to complete this work.

***Phase 2 – Detailed Drilling and Resource Estimation***

If results from the first phase are positive, then a detailed drilling program would be warranted to check the most promising targets identified during geological mapping, trenching, and sampling work in Phase 1. The scope of work for drilling and location of drill holes would be determined based on the findings of Phase 1 investigations.

## 26.1 Budget

**Table 11: Phase 1 budget**

| Item | Unit | Unit Rate ($) | Number of Units | Total |
|---|---|---|---|---|
| **Mapping, Trenching and Sampling** | | | | |
| Geological mapping (geologist 1) | days | $600 | 7 | $4,200 |
| Geological mapping (geologist 2) | days | $600 | 7 | $4,200 |
| Prospecting (2-person crew) | days | $800 | 14 | $11,200 |
| Ground geophysical survey | line-km | $2,000 | 15 | $30,000 |
| Excavator for stripping | hrs. | $120 | 60 | $7,200 |
| Mob and demob of excavator | ls | $1 | 2000 | $2,000 |
| Channel cutting and sampling | m | $500 | 25 | $12,500 |
| Accommodations and Meals | day | $250 | 100 | $25,000 |
| Supplies | ls | $5,000 | 1 | $5,000 |
| Sample Assays | sample | $100 | 150 | $15,000 |
| Transportation Road | km | $1 | 10,000 | $10,000 |
| Data Compilation | days | $700 | 10 | $7,000 |
| Report Writing | days | $700 | 10 | $7,000 |
| Project Management | days | $750 | 4 | $3,000 |
| Sub Total | | | | **$143,300** |
| Contingency 10% | | | | **$14,330** |
| **Total Phase 1 Budget** | | | | **$157,630** |

# 27.0 REFERENCES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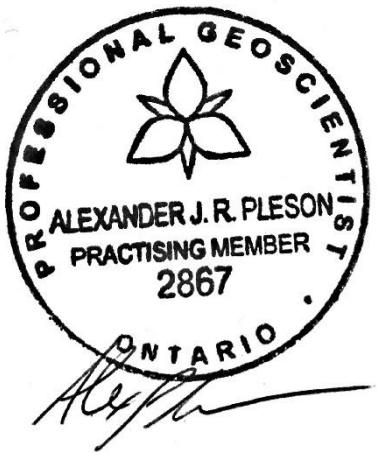
# 29.0 CERTIFICATE OF AUTHOR

I, Alexander Pleson, P.Geo., as an author of this report regarding the exploration project in the Thunder Bay Mining District, Northwestern Ontario, Canada; do hereby certify that:

1. I am a consulting geologist at Pleson Geoscience of Nipigon, ON, CA P0T 2J0
2. I have B.Sc. degree in Geology from Lakehead University.
3. I am registered as a Professional Geologist in Ontario (License #: 2867).
4. I have been practicing as a professional since 2017, and have 13 years of experience in mineral exploration.
5. The exploration work was carried out under my supervision and I was on site through the duration of the project.
6. I retain 100% ownership in the project

Dated: March 1st 2022

Signed and Sealed:



# Appendix I - VLF Equipment and Methodology

## EM16/16R Specifications

| | |
|---|---|
| **MEASURED QUANTITIES** | EM16: In-phase and Quadrature components of the secondary VLF field, as percentages of the primary field<br>EM16R: Apparent resistivity in ohm-metres, and phase angle between Ex and Hy |
| **PRIMARY FIELD SOURCE** | VLF broadcast stations |
| **SENSOR** | EM16: Ferrite-core coil<br>EM16R: Stainless-steel electrodes, separated by 10 m; sensor impedance is 100 MΩ in parallel with 0.5 pf |
| **OPERATING FREQUENCY** | 15 to 28 kHz, depending on VLF broadcasting station |
| **MEASUREMENT RANGES** | EM16: In-phase: ±150 %: Quadrature: ±40 %<br>EM16R: 300, 3000, 30000 Ω-m, Phase: 0-90° |
| **POWER SOURCE** | EM16 or EM16/16R: 9 V battery |
| **OPERATING TEMPERATURE** | -30° C to +50° C |
| **DIMENSIONS** | EM16 or EM16/16R: 53 x 30 x 22 cm |
| **WEIGHT** | EM16: Instrument: 1.8 kg; Shipping: 6.2 kg<br>EM16R: Instrument: 1.5 kg; Shipping: 6 kg |

The primary objectives of the survey were to map and characterize geological features that predominantly control the mineralized zones. The VLF survey data was compiled to measure the primary and secondary EM fields which subsequently could be interpreted to show apparent conductivity variations in bedrock geology to delineate well-mineralized structural features. The VLF transmitter located at Cutler, Maine (NAA) operating at a frequency of 24.0 kHz provided the primary electromagnetic field. This report describes the survey results and discusses data interpretation.

The EM field radiated from a VLF transmitter station over a uniform or horizontally layered earth model consists of a Vertical Electrical field component (Ey) and a Horizontal Magnetic field component (Hx), each perpendicular to the direction of the propagation. Herein, that part of the vertical field which is in-phase with the horizontal magnetic field is called the In-phase (Real Component); that part which is out of phase with the horizontal magnetic field is called the out-of-phase (quadrature Component). They are normally expressed as Tilt (Dip) Angle and Ellipticity respectively and measured as percentage (%). Processing of the VLF data included:

- Polarity reversal of alternating quadrature-phase measurements based on traverse direction.
- Correction/Removal of erroneous data points.
- Grid leveling for filtering line-by-line variations.

The in-phase component of the VLF responses was processed and interpreted with a Fraser Gradients and Karous-Hjelt (K-H) filtering approaches. The results reveal the locations of high VLF responses, which may indicate that VLF anomalies are due to conductive zones located along the profiles.

The qualitative analysis of the data along VLF traverses was carried out using Fraser Gradient method and Karous-Hjelt current density procedure developed by Karous and Hjelt (1983). The plot of filtered in-phase VLF data in terms of distance shows positive Fraser and Karous-Hjelt anomalies along the profiles, which is an indication of the probable conductive zones along each of the profiles. Geosoft Oasis montaj and a freely available KHFFILT tool (Pirttijärvi, 2004) were used to perform Karous-Hjelt and Fraser filtering on VLF data. In the following sections, these methods are briefly discussed, and the in-phase component of VLF data (for all the profiles) is interpreted and presented in gridded format.

***Fraser Gradient Filter***

Fraser Filtering, which was suggested by Fraser (1969), is a simple filtering technique that transforms crossovers into peaks, removes regional gradients and intensifies anomalies from near surface. In this report the Fraser filter has been applied to the in-phase (real) component of the VLF data. The Fraser filter shifts the data by 90 degrees and transforms the anomaly such that those parts with the maximum slope appear with the maximum positive/negative amplitude.

***Karous & Hjelt Filter***

The analysis of VLF responses in terms of buried conductors can be assisted by applying the Karous-Hjelt (K-H) linear filter to the observed in-phase component of the VLF data. Karous-Hjelt filter technique is based on discrete linear filtering of VLF data which is an extension of the Fraser filter. This approach converts in-phase response to an apparent current density pseudo-section

that involves the VLF responses for various depths and indicates the change in current density with depth. The areas with high current density correspond to good conductors. K-H filtered VLF data help to locate vertical discontinuities such as hidden geological boundaries, faults, and fractured zones. This technique also provides a useful complementary tool for the semi-quantitative analysis and target visualization up to a few meters in depth (Ramesh Babu, 2007).

The current density positive values seem always to occur within or around the conductors. The negative values on both sides of the conductor could be caused either by the length of the filter or by a reduction in current density due to current gathering. The apparent current density pseudo-section provides an illustrative indication of the depths of various current concentrations and hence the spatial distribution of subsurface geological features. As a result of this feature, current density pseudo-sections can provide analytical information for the geological targets (Ogilvy & Lee, 1991)

# Appendix 2 - VLF Expenses

## INVOICE

**Blackwater Exploration**

210 Walker St.
Beardmore, Ontario P0T 1G0
Canada

**Bill to**
**Pleson Geoscience**

Alex Pleson

ajpleson@lakeheadu.ca

| | |
|---|---|
| **Invoice Number:** | 2020-04 |
| **Invoice Date:** | June 9, 2020 |
| **Payment Due:** | June 9, 2020 |
| **Amount Due (CAD):** | **$33,323.70** |

| Items | Quantity | Price | Amount |
|---|---|---|---|
| **Ground Survey**<br>14km of VLF Klotz Lake Area - Morrow Grid | 14 | $1,500.00 | $21,000.00 |
| **Ground Survey**<br>14km of VLF on Iron Grid - Winter Grid | 1 | $1,500.00 | $1,500.00 |
| **Mobilization**<br>Winter and Spring Mob Charge (x2) | 2 | $1,345.00 | $2,690.00 |
| **Equipment**<br>ATV and Skidoo Rentals | 20 | $150.00 | $3,000.00 |
| **Data**<br>Report, Interpretation, and Misc GIS | 1 | $1,300.00 | $1,300.00 |

| | |
|---|---|
| **Subtotal:** | $29,490.00 |
| HST 13%: | $3,833.70 |
| **Total:** | $33,323.70 |
| **Amount Due (CAD):** | **$33,323.70** |

## Appendix 3 - VLF Personnel

Mike Goodman – EM-16 operator of Beardmore, Ontario

Jarryd Goodman – helper, note taker, and line flagger of Beardmore, Ontario

Both workers were on site for the entire survey as outlined in the aforementioned work description.