TECHNICAL REPORT UP TOWN GOLD PROPERTY – NORTHWEST TERRITORIES, CANADA
PREPARED FOR: Melius Capital Corp.

# TECHNICAL REPORT UP TOWN GOLD PROPERTY — NORTHWEST TERRITORIES, CANADA 62°30′ North, 114°24′ West, N.T.S. 85J/06 and 85J/09, NWT Mining District, Northwest Territories, Canada

Melius Capital Corp. 409 – 22 Leader Lane Toronto, ON, Canada,

Michael MacMorran, P.Geol., (IQP)

M5E 0B2

Author:

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### 1 EXECUTIVE SUMMARY

### **INTRODUCTION**

The author was commissioned by Melius Capital Corp. (Melius) to prepare an independent, Canadian National Instrument 43-101 Technical Report (NI 43-101), for the Up Town Gold property, located in the Northwest Territories, Canada. This report is prepared in accordance with the requirements of National Instrument 43-101 Standards of Disclosure for Mineral Projects.

This report provides details of gold exploration conducted to date, which shows that the property is of merit and suitable for further advancement.

### **LOCATION AND PROPERTY DESCRIPTION**

The property is located in Canada's Northwest Territories, approximately three kilometres north of the city of Yellowknife, and geographically centered at 62°30′ North latitude and 114°24′ West longitude.

The property is comprised of six mineral claims, totaling 3,267.24 hectares. The claims are located on 1:50,000 NTS map sheets 85J/08 and 85J/09. The property was initially staked by Panarc Resources Ltd. (Panarc) to cover gold showings that occur in intrusive rocks adjacent to the Yellowknife greenstone belt; a deposit model similar to the Granny Smith and Woodcutters Goldfield deposits in Australia, and the Renabie, Perron, Hammond Reef, and Cote Lake deposits in Canada.

In 2016, Panarc sold the property to Silver Range Resources (SNG), who in turn optioned the property to Rover Metals Corp. (Rover). Under this option agreement, Rover may acquire a 75% interest in the property. Once vested, Rover has the additional option to purchase the remaining 25% of the property by making an additional share payment as per the option agreement. If Rover acquires a 100% interest in the property, SNG will retain a 2% net smelter return, one half of which may be purchased for CAD\$1,000,000 prior to commencing production.

Rover and Melius have entered into an assignment and assumption agreement dated December 04, 2020, which would see Melius assume Rover's 75% interest in the property. Among other terms, Melius is required to issue shares and cash to Rover, make a payment to SNG, and complete \$1.25 million in expenditures on the property.

### ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE

The property is located within the Northwest Territories, Canada, approximately three kilometres north of the city of Yellowknife. Road access to the property is achieved via Highway 4 (Ingraham Trail), which extends north from Yellowknife. Mobility, once on the property, is limited to foot-traverse or snowmobile. The Fox South showing may be accessed from a ATV trail that joins Highway 4. The property may also be accessed by helicopter or float/ski-base fixed wing aircraft from Yellowknife.

The Yellowknife area is characterized by long, cold winters; brief, often warm summers; and short spring and autumn transition seasons.

Yellowknife, the capital of the Northwest Territories, is a significant supply centre for the territory. It is serviced by multiple airlines with daily flights that connect Yellowknife with southern Canada. A paved highway extends from Yellowknife south to Alberta, and services the region year-round since the

completion of the Deh Cho bridge over the Mackenzie River in November 2012. All logistical support, labour and professional services can be supplied from Yellowknife.

There is no infrastructure for the purposes of mineral exploration located on the property. The Snare Hydro transmission line that supplies Yellowknife with hydro-electric power transects the property.

### **HISTORY**

Gold showings in the intrusive rocks west of Giant Mine were discovered in 1960. In 1962, claims were staked by Rodstrom and partners to cover these occurrences. Exploration work in 1963 included mapping, trenching and diamond drilling on the showings north and south of Baker Lake (Figure 2). A more detailed mapping program was conducted in 1964 which was followed by additional trenching and eventually diamond drilling. A total of 57 holes were completed in 1963 and 1964 on the No. 15 vein (Rod Zone) comprising 2,684 ft., with 16 holes totaling 1,032 ft. in the No. 22 zone, and one hole in the No. 13 zone for an unknown depth.

Exploration continued in 1972 when two trenches were excavated at the Rose showing. In 1975, diamond drilling and trench sampling work re-evaluated the historic workings and a resource of 2,626 tons grading 1.15 oz./T Au (37.1 g/t Au) was calculated for the No. 15 and 22 veins (Nickerson, 1975).

The historic Rod Zone resource estimate presented in Table 2 was prepared by Nickerson (1975). The resource uses categories defined in sections 1.2 of the National Instrument 43-101 Standards of Disclosure for Mineral Projects; however, all stated historical resource estimates are inferred as defined by the Canadian Institute of Mining, Metallurgy and Petroleum (CIM): "part of a Mineral Resource for which quantity and grade or quality can be estimated on the bases of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity". The Historical Estimates were not prepared by independent Qualified Persons, nor has any of the information contained therein been audited by an independent Qualified Person. The Historical Estimates do not conform to the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") standards of reporting pursuant to requirements under National Instrument 43-101. As a result, the author wishes to clarify that there are no mineral resources and no mineral reserves on the Up Town Gold property as defined under National Instrument 43-101. Furthermore, the resource presented by Nickerson (1975) is prior to the ore extraction efforts conducted in 1976 and 1979; the resource (Nickerson, 1975) has not been updated. The author has not independently confirmed the resource (Nickerson, 1975), or the volume of rock that was removed during the 1976 and 1979 operations.

### The issuer is not treating the historical estimate as current mineral resources or mineral reserves.

A composite sample was collected in 1976 for metallurgical testing, the sample graded 2.26 oz./T Au (72.9 g/t Au) and gold recovered was reported to be 99.07%. In 1997, 2.2 tons of previously blasted and sorted material were removed from the No. 22 Vein. The weighted average gold grade of this material was reported to be 10.34 g/t (Nickerson, 1997).

The current property outline was staked in 2011 and optioned to Manson Creek Resources. Work over the next three years included property-scale mapping, sampling of the historic workings and mineral occurrences, and diamond drilling at the J7 (aka J-7) vein and Fox South Zone. Surface samples collected during this phase of exploration returned gold grades between 1.3 g/t to 113.5 g/t and silver grades greater than 100 g/t.

Since September of 2013, the property has been explored by North Sur Resources Ltd., Panarc Resources Ltd., Silver Range Resources Ltd., and Rover Metals Corp. Work has included mapping and prospecting, litho-geochemical sampling, channel sampling, ground geophysics and diamond drilling.

In 2013, North Sur Resources completed a four-hole "Winkie" diamond drill program. Two of these four holes were drilled at the north end of the Rod open pit, and two were drilled at the Fox South showing. Hole 13RD-02 drilled 27.47 g/t Au over 2.2 metres (sample length) at the Rod Zone. Hole 13FS-02 drilled 4.67 g/t Au over 2.13 metres (sample length) at the Fox South showing.

In 2015, Panarc Resources Ltd. conducted mapping, channel sampling, total magnetic field, and very low frequency electromagnetic (VLF-EM) surveys, along with diamond drilling (four holes). At the Fox South Zone, work consisted of total magnetic field and VLF-EM surveys on two grids (North and South, totaling 20.7 line-km), geological mapping and prospecting. The geophysical surveys failed to image the Fox South Shear Zone, which hosts the mineralization, but did map several rock units based on their apparent magnetic susceptibility and response character. Sample results included 30.3 g/t Au and 12.05 g/t Au from grab samples collected at the Fox South Zone. Four holes were drilled at the Rod Vein, the first of which was abandoned before hitting target depth while the remaining three holes each intersected the vein. These results extended the known strike of the vein 35 metres north of the 1979 production pit. Assays from this program included 7.91 g/t Au over 1.84 metres in hole 15RD-03 and 2.33 g/t Au over 2.50 metres in hole 15RD-02 (Power, 2015). The production pit that was developed in 1979 was dewatered during drilling operations and exposed the Rod Vein. The vein was then channel sampled in the north wall of the pit. All four channel samples returned grades greater than 10 g/t Au, including 17.27 g/t Au over 1.20 metres (Power, 2015). Drill core intervals reported from 2015 drilling are sample intervals and should not be considered true thicknesses.

Work in 2016 consisted of grid-based geological mapping and litho-geochemical sampling, prospecting and rock sampling, a one-day structural geology assessment, and an airborne total field magnetic and radiometric survey. A total of 449 stations were visited during the geochemical sampling program which covered the entire property, except the NW corner of the UTG 1 claim (i.e., Martin Lake and the small area to the NW). Observations of lithology determined that three main lithological groups were present: intermediate to felsic medium-crystalline intrusions (chiefly granite and granodiorite) of the Defeat suite, mafic meta-volcanic rocks of the Yellowknife Greenstone Belt, and diabase dykes of the Dogrib and Indin swarms. Two new discoveries of mineralized quartz veins (Southpaw showing and Right Field vein) were found during this grid mapping program, yielding results from grab samples up to 5.1 g/t Au. A principal component analysis of the geochemical data led to the proposal of two distinct domains within the property, based mainly on the dominant lithologies. The historic 11S Vein showing was located and yielded grab sample values of 145.5 g/t Au and 19.35 g/t Au from two samples about 100 metres apart along strike of the host structure (Gal, 2016). A total of 732 line-kilometres of an airborne total field magnetic and radiometrics survey were flown at a 50-metre line spacing. The magnetic data clearly delineated the metavolcanics and several diabase dykes on the property, thereby allowing a refinement of the geological map. The radiometric survey showed relatively increased U, Th, and K in the eastern half of the property, but also largely corresponding to the domain identified in principal component analysis. The K:Th ratio map seemed to weakly correspond to the western and eastern mineral belts (Gal, 2016).

The first significant diamond drill program was conducted in 2017. This program targeted the Fox South (4 holes) and Rod (10 holes) zones and totaled 803 metres. Multiple days of showing-scale geologic mapping were also completed at the Fox South, Rod, and No.1 zones to tie-in drill holes to the bedrock/outcrop map. The mapping program built on previous mapping at the Fox and Rod zones. A new area of interest was identified on the west side of the Fox Structural trend. Mineralization tends to occupy north-northwest to north-northeast trending narrow decimetre to metre scale deformation zones of quartz and quartz flooding. Gold content within these mineralized zones over decimetre scale widths, up to several tens of grams per tonne (Covello, 2017).

At the Fox South Zone, drillholes FS-17-001 and FS-17-002 were collared to test west-dipping structures beneath the historic trenches. These holes interested two mineralized shears and results support the continuity of gold mineralization to a depth of 30 metres. One interval from these holes comprised 0.32 g/t Au over 9.1 metres, including 2.16 g/t Au over 1.0 metres. Drillholes FS-17-003 and FS-17-004 were drilled approximately 200 metres to the south of the historic trenches undercutting shears that were channel sampled in 2015. Several mineralized sheared intervals were intersected. Samples collected from these intervals returned 5.12 g/t Au over 0.3 metres (sample V744310, FS-17-003) and 1.52 g/t Au over 0.65 metres (Sample V744411, FS-17-004). This drilling indicates that parallel zones of decimetre scale high-grade gold mineralization tend to carry wider sections of lower grade mineralization.

A total of ten holes were completed at the Rod Zone. This drilling concentrated on confirming the gold grades that are reported in the historic reports. A number of holes were also collared to test historic trenches located to the west of the Rod Vein. The bulk of the drillholes drilled under the open pit, or a few 10's of metres along strike to the north. Hole ROD-17-007 was collared approximately five metres north of the open pit and returned an interval of 3.73 g/t Au over 3.3 metres, including 35 g/t Au over 0.3 metres. Hole ROD-17-002 intersected the Rod Vein at the northern limit of the open pit. Analysis from this hole returned 4.28 g/t over 5.4 metres, including 22.10 g/t Au over 0.9 metres. The trenches west of the Rod Vein (main zone) were drill tested for the first time. Three holes drilled the same cross-section beneath the best gold values reported from trenches. All three holes intersected multiple mineralized shears.

### **GEOLOGICAL SETTING**

The property lies in the southern Slave Geological Province (Slave), an Archean cratonic block. Bedrock lithologies in the Slave range in age from 4.05 Ga to 2.55 Ga. The oldest rocks of the Slave are remnants of felsic granitoids and gneisses ranging between 3.2 Ga to 2.8 Ga and the Acasta gneisses between 4.05 Ga to 3.8 Ga.

The Slave is dominated by ca. 2.73 - 2.63 Ga greenstone and turbidite sequences. These rocks have been intruded by plutonic suites that range in age from ca. 2.72 - 2.58 Ga. The crust of the Slave is believed to have amalgamated during a 2.69 Ga collision event between analogous island-arc terranes (Hackett River) to the east, and a basement complex (Central Slave Basement Complex), along a N-S suture. Rocks of the Acasta Gneiss in the basement complex are the oldest recorded in situ on Earth.

The property is located in the Defeat Suite Western Plutonic Complex (2.64–2.58 Ga), west of the Yellowknife Greenstone Belt (YGB), and the Duncan Lake Group metaturbidites (2.66 Ga). The YGB consists of a northeast striking, steeply southeast dipping homocline of mafic metavolcanic and intrusive rocks of the Kam Group (2.72-2.70 Ga), structurally overlain by northeast striking intermediate and felsic metavolcanics of the Banting Group. The Defeat Suite represents a major plutonic event in the Yellowknife region. The plutonic complex, which is host to the Up Town property, is located west of the YGB (Western Plutonic Complex) belongs to this suite of granitoids. The Defeat Suite is characterized by massive to foliated, homogeneous to porphyritic biotite-trondhjemite-granodiorite-granite plutons. The age of Defeat Suite plutonism in the Yellowknife region is restricted to 2620-2630 Ma.

### **DEPOSIT TYPE**

Mineralization at the Up Town Gold property is described as Archean granitoid hosted lode gold in style. (Wyllie, 2013). This is a sub-class of Archean lode gold deposits, differing insofar as they are hosted in granitic to granitoid rocks, commonly adjacent to volcano-sedimentary greenstone belts. These targets

are mesothermal, structurally controlled, and hosted by Archean intrusive rocks. Canadian examples include: Renabie, Hammond Reef and Cote Lake.

### **MINERALIZATION**

Gold mineralization in the Western Plutonic Complex is associated primarily with north-northeast-trending, west-dipping structures (Brophy and Irwin, 1994; Covello, 2017). These orientations are consistent with the main Proterozoic (D<sub>2</sub>) structures (Stubley, 2016). Mineralization tends to occupy north northwest to north-northeast trending narrow decimetre to metre scale zones of quartz and quartz flooding (Covello, 2017). Gold tenor within these mineralized zones may be of very high grade over decimetre scale widths, up to several tens of grams per tonne. Narrow discontinuous zones of very weak sericite alteration may accompany mineralization. A narrow (<2m) north-northeast to north trending sub vertical weakly foliated and weakly sericitic envelope may also accompany mineralization.

### **EXPLORATION**

Aurora Geosciences Ltd. completed very low frequency electromagnetic (VLF) and total field magnetic (Mag) ground surveys November of 2020. The surveys were completed simultaneously over the same grid centered near the No.1 Vein gold occurrence. A total of 34 line-km of VLF and Mag were surveyed. The magnetic survey was successful at delineating several structural features that spatially correlate with the No 1. and Big Vein occurrences. The high-resolution ground survey adds value to the property-scale airborne magnetic survey and is an effective tool to evolve the structural-controlled mineralization model. The VLF-EM survey did not map any conductors that are conclusively related to the known gold occurrences. Instead, conductors are associated with overburden and other physiographic features.

A 2D dipole-dipole DC resistivity induced polarization (DCIP) survey was completed in November of 2020. The survey targeted the No.1 Vein and Big Vein gold occurrences. A total of 3.9 line-km was surveyed with 12.5 m dipole lengths and a receiver array length of 62.5 m. Modelled results identify two anomalous areas of coincident chargeability and resistivity that share a close spatial correlation with mapped veins near the No.1 Vein.

An airborne LiDAR survey was completed over the entire property in June of 2021. The survey was executed to assist in a structural interpretation of the geology and controls on gold mineralization to assist with future exploration programs. While the results of this interpretation are not complete are the time of report preparation, initial assessment shows that there are a number of linear features that may be associated with potential shear zones.

A legal survey of mineral claims K15962 and K15963 was conducted in August of 2021. The survey and application to lease was submitted to the Mining Recorder's Office in September 2021. The application is in process at the time of report preparation.

Between October 05<sup>th</sup> and 31<sup>st</sup>, 2021, a total of 976 metres of diamond drilling in 20 drill holes was completed on the property. The Fox South, No.1, J7, Baker West, R45, and No.22 Vein zones were drilled. All drillholes interested the targeted shear zone. Drill core was logged and sampled at a facility in Yellowknife and 224 samples of core and 16 QA/QC samples were submitted to the ALS preparation facility.

Analytical results from the sampling conducted during the drill program are not available at the time of report preparation.

### **MINERAL RESOURCE AND RESERVES**

There are no current mineral resource or mineral reserve estimates for the property.

### INTERPRETATION AND CONCLUSIONS

Work completed since 2012 on the Up Town Gold property has been focused at evolving an Archean intrusive hosted lode gold model. This work has delineated structural zones that are associated with mesothermal hydrothermal alteration assemblages. The structural zones are classified into the eastern Shear Domain and western Lode Gold Domain. Both domains contain numerous ductile and brittle structural zones. These zones are narrow and discontinuous; however, they are contained in broader (up to 20 metres wide) zones and are continuous over many hundreds of metres. The domains are distinguished on the mineral and alteration assemblages with which they are associated. Mineralization and structures in the Lode Gold Domain structures are associated with pervasive hematite, chlorite silica and local epidote alteration. The Eastern Shear Domain is silica and sericite altered with accessory chlorite. Regardless of the domain, gold values are associated with structural zones, but also wider lower grade deformation zones which may well connect the structures. As is expected from a lode-gold setting, gold mineralization is erratic and can range from less than 1 gram to 10's of grams over decimetres to greater than 100 grams in some grab samples.

Ground geophysics programs completed in November and December of 2020 (Magnetics, VLF and IP) provided an indirect tool for mapping lithological and structural controls on quartz veins that may refine future exploration programs.

Diamond drilling in 2021 successfully tested six mineralized zones within the target shear zone. Three of the zones were first drilled in the 1960's (J7, No.1, and No. 22). The Fox South zone was drilled in 2017, and the R45 and Baker West showings were drilled for the first time in 2021.

Mineralized zones discovered to date are exposed in outcropping bedrock on the property. Structural zones identified to date are narrow and appear to be mostly discontinuous. Expanding the mineral potential of the property will rely on identifying more zones of mineralization where continuity may be established between the currently discontinuous horizons. A comprehensive interpretation of the 2021 LiDAR survey will assist in identifying prospective structures. Early evidence suggests some correlation between mineralization and linear, overburden-rich topographic lows, many of which remain underexplored on the property.

### RECOMMENDATIONS

Mineral claims K15961, K15694, K15695, and K15696 will expire in 2022 and must be converted to Mining Leases in advance of their anniversary dates.

Diamond drilling is recommended at all zones on the property. Once the analytical results of the 2021 program are available, this information, together with findings from revie of the LiDAR survey and 2020 geophysical surveys, should be used to prioritize zones for follow-up and refine the ongoing exploration strategy.

A program consisting of lease surveying and diamond drilling is recommended. A budget of CDN\$750,000 is recommended for the next phase of exploration.

### 2 INTRODUCTION

The author was commissioned by Melius Capital Corp. (Melius) to prepare an independent, Canadian National Instrument 43-101 Technical Report (NI 43-101), for the Up Town Gold property, located in the Northwest Territories, Canada. This report is prepared in accordance with the requirements of National Instrument 43-101 Standards of Disclosure for Mineral Projects.

The report has been prepared in due diligence for Melius to confirm that the property is a property of merit. This report documents the historic and recent exploration work completed at the Up Town Gold property.

Panarc Resources Ltd. (Panarc) staked the Up Town Gold property in 2011. After this time exploration was conducted by Panarc, Manson Creek Resources Ltd. and North Sur Resources Inc. before the property was purchased by Silver Range Resources Ltd. (SNG) in 2016. In August of 2016, Rover Metals Corp. optioned the property from Silver Range Resources Ltd. and may acquire a 75% interest in the property On December 04, 2020, Rover entered into an Assignment and Assumption Agreement with Melius that would see Melius assume Rover's 75% interest in the property.

The property is located approximately three kilometres north of the city of Yellowknife, NT. It lies within the Northwest Territories Mining District and comprises six mineral claims covering 3,267.24 hectares.

The property is considered an exploration property without mineral resources or reserves under NI 43-101 definitions.

The property overlies intrusive-hosted lode gold showings and related prospective lithologies adjacent to the Yellowknife Greenstone Belt. A conceptual deposit model similar to Renabie, Perron, Hammond Reef, and Cote Lake deposits is applied.

### **TERMS OF REFERENCE**

The last Technical report for the Up Town Gold property was completed in 2017 and summarized work conducted between 2014 and 2017. While property-scale lithogeochemical sampling and mapping have provided insight into mineralized trends and identified new gold showings, most of the work has been focused on the Rod and Fox South showings. These two zones have been the target of intensive grab sampling and prospecting, channel sampling, detailed mapping including structural analysis, and three rounds of diamond drilling.

New work completed on the property since the 2017 NI 43-101 report includes ground geophysics surveys, an airborne LiDAR survey, surveying of two mineral claims (Section 9), and diamond drilling (Section 10).

### **QUALIFICATIONS OF AUTHOR**

The Author was retained to complete this report in compliance with National Instrument 43-101 of the Canadian Securities Administrators ("NI 43-101") and the guidelines in Form 43-101 F1 and is an independent "Qualified Person" within the meaning of National Instrument 43-101. The Author has over 15 years of exploration experience throughout Canada in evaluating gold, base metal, and diamond prospects, and is a registered member-in-good-standing with the NWT and Nunavut Association of Professional Engineers and Geoscientists, as well as the Association of Engineers and Geoscientists of British Columbia. The Author visited the property in 2021 and has reviewed project data and related information compiled to date.

### **SOURCES OF INFORMATION**

The Author has referenced previous reports on the property that are available in the public domain, as well as internal reports provided by Panarc Resources Ltd., Silver Range Resources Ltd., and Rover Metals Corp. Digital data has been provided by these companies as well as Melius Capital Corp. and Aurora Geosciences Ltd.

A detailed review of the historical exploration records pertaining to the property, available through the Northwest Territories Assessment Report Files was undertaken. In the preparation of this report, the Author has utilized geological maps, geological reports, claim assessment maps and claim maps prepared by the Geological Survey of Canada and the Northwest Territories Geological Survey. Most of this information is available online via the Northwest Territories Geoscience Office.

The most significant websites, from which the author drew information, are as follows:

- Northwest Territories Geologic Survey: www.nwtgeoscience.ca/
- NWT Mining Recorder's Office:
  - https://www.iti.gov.nt.ca/en/services/get-assistance-mining-recorders-office
- NWT Government and Assessment Reports:
  - https://webapps.nwtgeoscience.ca/WebAppsV2/SearchHome.aspx
- Mackenzie Valley Land and Water Board (MVLWB): https://mvlwb.com/content/acts-and-regulations

Unless otherwise indicated, the metric system of measure has been used throughout this report, including metric tonnes (t), kilograms (kg) or grams (g), kilometres (km) or metres (m), hectares (ha), grams per tonne for gold (g/t Au)

Where not explicitly documented in the relevant report, all historic metal quantities are assumed to be reported in the Imperial System (troy ounces per short ton). For the purpose of reporting historical gold grades, one troy ounce (oz.) per short ton (T) is converted to grams (g) per tonne (t) using a factor of 34.2857.

### 3 RELIANCE ON OTHER EXPERTS

### **LAND TENURE**

The Author has independently reviewed legal title to the property and believes the statements contained within this report pertaining to the claim status and ownership to be true and complete as of January 05<sup>th</sup>, 2022 (https://www.iti.gov.nt.ca/en/services/get-assistance-mining-recorders-office).

Panarc Resources Ltd staked the Up Town Gold property in 2011 and retained copies of the accepted recording forms that have been signed by the NT Mining Recorder's Office (MRO). The author believes the information presented by the MRO pertaining to the Up Town Gold property to be reliable. The reader should be cautioned that decisions made by the Mining Recorder and other departments of the territorial government may affect the tenure of the property, and the author has no way of predicting if or when such decisions may be forthcoming.

### 4 PROPERTY DESCRIPTION AND LOCATION

The property is located within Canada's Northwest Territories, approximately three kilometres north of the city of Yellowknife, NT and geographically centered at 62°30′ North latitude and 114°24′ West longitude (Figure 1). The property is comprised of six mineral claims, totaling 3,267.24 hectares (Figure 2). The claims are located on NTS map sheets 85J/08 and 85J/09. Table 1 summarizes the status of the mineral claims, current to the end of September 2017.

Table 1. Up Town Gold property claim status (effective January 05, 2022)

Claim Name Claim ID Status		Anniversary Date	Hectares	Owner	
UTG 1	UTG 1 K15961 Active		12/15/2021	1045.1	Silver Range Resources Ltd. (100%)
UTG 2	K15962	Active	12/15/2021	1045.1	Silver Range Resources Ltd. (100%)
UTG 3	K15963	Active	12/15/2021	212.06	Silver Range Resources Ltd. (100%)
UTG 4	K15964	Active	12/15/2021	180.21	Silver Range Resources Ltd. (100%)
UTG 5	K15965	Active	12/15/2021	376.28	Silver Range Resources Ltd. (100%)
UTG 6	K15966	Active	12/15/2021	408.49	Silver Range Resources Ltd. (100%)

The property was staked by Panarc in 2011. The eastern boundary of the property borders on the Giant Mine AANDC (Aboriginal Affairs and Northern Development Canada) contaminated sites land withdrawal. This land withdrawal is classified as a perpetual subsurface withdrawal and the land is the focus of ongoing mine remediation. Mineral claim UTG 6 is staked over the Fred Henne Territorial Park, operated by the Government of the Northwest Territories (GNWT) department of Industry, Tourism, and Investment (ITI).

Claims UTG 1-6 are active claims, granting the holder the right to explore for mineral deposits and hold ownership to any mineral deposits located on the claims. There are no impediments to surface access to the claims of which the author is aware. Surface rights to the area, covered by the claims, rests with the Commissioner of the Northwest Territories. To the extent known, there are no significant risks or factors that may affect access, title, or the right to perform work on the property.

In July of 2016, Silver Range Resources Ltd. (SNG) purchased the Up Town Gold property from Panarc Resources Ltd. (Panarc) as part of a seven-property deal. SNG acquired a 100% interest in each of the seven properties, free of any royalty or residual interest.

In 2016, Rover Metals Corp. (Rover) optioned the property from SNG and may acquire a 75% interest in the property over a three-year term in return for making staged cash payments totaling CDN\$300,000, common share issuance of 7.5% of Rover's outstanding shares on a fully diluted basis as of September 9th, 2016; and a work commitment of CDN\$1,600,000. Once vested, Rover has the additional option to purchase the remaining 25% of the property by making a share payment of 4.5% of Rover's shares outstanding at the time thereof. If Rover acquires a 100% interest in the property, Silver Range will retain a 2% net smelter return, one half of which may be purchased for \$1,000,000 prior to commencing production. Advance royalty payments of \$50,000 per annum would be due to Silver Range, commencing on the fifth anniversary of a definitive agreement.

In 2018, Rover and Royal Lifescience Corp. entered into an amalgamation agreement in accordance with the Business Corporations Act (British Columbia). All the property and assets of each of Rover and Royal became the property and assets of Rover.

The 2016 agreement was amended on August 15, 2017, April 6, 2018, September 5, 2018, and February 18, 2020. Effective the fifth amending agreement, SNG will retain a 2% net smelter returns royalty buyable down to one percent (1%) for \$1,000,000 with advance royalty payments of \$50,000 per annum

commencing on September 30, 2023, pertaining to all the mineral claims forming the property. Expenditures completed on the property must exceed \$500,000 on or before June 30, 2021, and \$725,000 on or before June 30, 2022. Under this agreement, Rover retains the additional option to purchase the remaining 25% of the property by issuing 2,500,000 of Rover's common shares to SNG on or before September 30, 2022.

On December 04, 2020, Rover and Melius Capital Corp. (Melius) entered into an Option Agreement, that once complete, would see Rover transfer all of its rights, obligations, interests and assets with respect to the option agreement with SNG to Melius in order for Melius to earn a 75% interest in the mineral claims that comprise the property. In consideration for the agreement, Melius agrees to:

- i. Make a \$50,000 cash payment to Rover concurrently with the execution of the Assignment Agreement, refundable only if the TSX Venture Exchange does not approve the transaction as described throughout this Assignment Agreement;
- ii. issue to Rover, within 25 business days of the Closing Date, such number of common shares of the Assignee (the "Melius Shares") as is equal to \$300,000 divided by the price per share at which Melius Shares are offered under PP2 (as defined herein);
- iii. complete an aggregate \$1,250,000 in Expenditures (as defined in the Option Agreement) as follows:
  - (1) \$500,000 by June 30, 2021; and
  - (2) an additional \$725,000 by June 30, 2022.
- iv. pay the amount of \$120,000 to SNG pursuant to, and in accordance with, Subsection 5.2(b)(vi) of the Rover-SNG Option Agreement;
- v. ensure that all mineral claims, mining leases and other mining interests into which mineral claims may have been converted are and remain in good standing until the later of: (A) one (1) year from the date of the termination of the Option; or (B) December 16, 2022; and
- vi. otherwise take all additional steps necessary to exercise the Option in accordance with the terms and conditions of the Option Agreement.

Rover will retain its option to purchase the remaining 25% of the property from SNG by issuing 2,500,000 of Rover's common shares on or before September 30, 2022, as per the original Option agreement between Rover and SNG.

Other than the terms discussed above, the property is not subject to any liens, encumbrances, litigation, or agreements of which the author is aware. The reader is cautioned that the author is not an expert in contract law, and the details of the agreements discussed above are only summaries. For a complete disclosure of the agreement details, the reader should personally examine the original agreement documents.

To retain title to the claims, the claim holder must perform physical work or scientific investigations on the property of adequate and specific value. The following excerpt is quoted from the Northwest Territories and Nunavut Mining Regulations and describes the value of the work which must be performed:

- 1. The holder of a recorded claim is entitled to hold it for a period of 10 years from the date the claim is recorded, if
  - a. during the two-year period immediately following the date the claim is recorded, he does or causes to be done representation work to the value of at least \$10 per hectare or part thereof contained in the claim; and
  - b. during each subsequent one-year period, he does or causes to be done representation work to the value of at least \$5 per hectare or part thereof contained in the claim.

- 2. Subject to subsection (4), where the value of the representation work done on a recorded claim in any period is in excess of the amount required by these Regulations, such excess shall, at the request of the holder, be credited to the value of representation work required to be done on that claim in any subsequent period and be deemed to be work done on that claim in that subsequent period.
- 3. Excess representation work referred to in subsection (3) shall not be credited to the value of representation work for a subsequent period unless a statement of the work is filed with a Mining Recorder in Form 9 of Schedule III

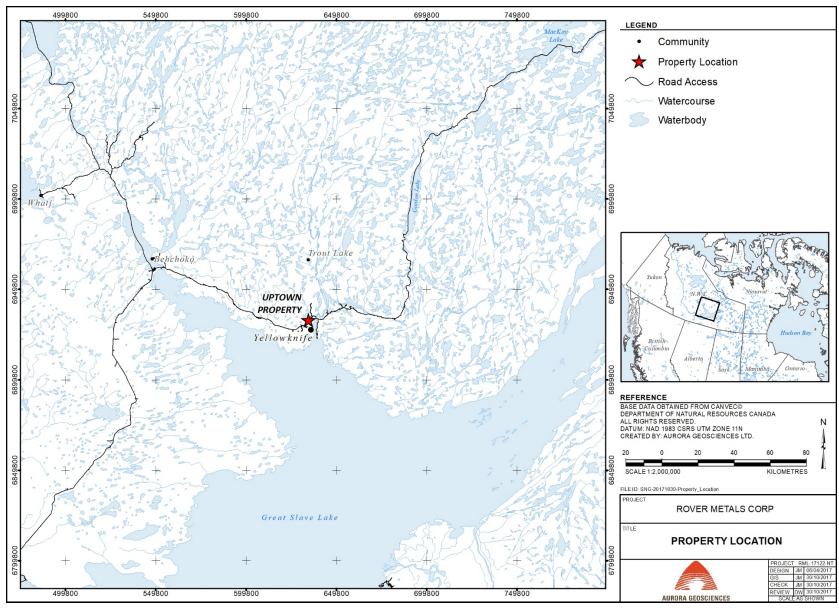


Figure 1. Property location map

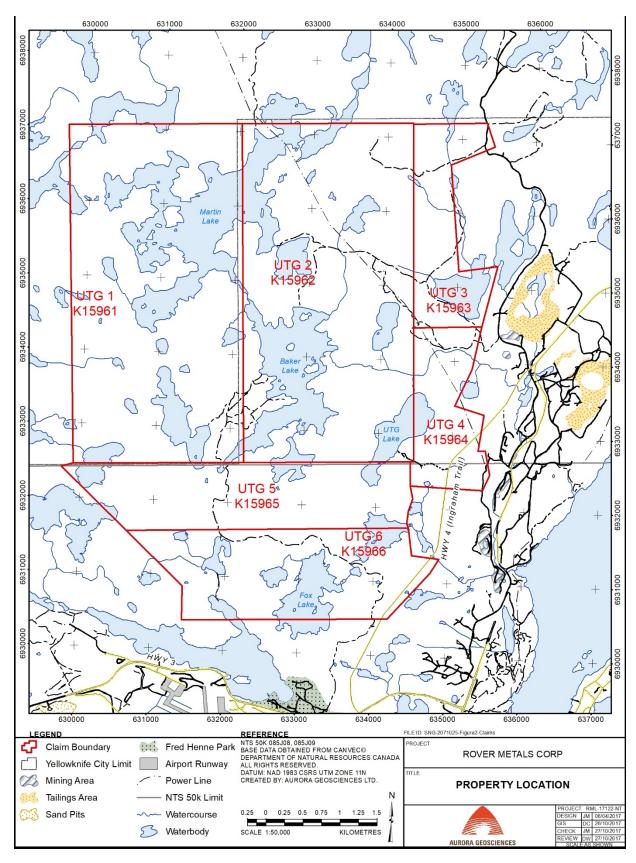


Figure 2. Property mineral claims

- a. within one year and 30 days after the expiration of the period in which the work was performed; or
- b. where a notice is given pursuant to subsection 45(1), within 60 days from the date of the notice."

If adequate representation work has not been completed and filed within the required time frame, the claim holder may apply for a one-year extension, which will be granted upon the posting of a bond equal to the value of the work to be performed. An extension, following payment in lieu of work, may be authorized three times over the active life of the claim. If the work is still not completed within the extended time limit, the claims are relinquished to the Crown.

In the Northwest Territories, a graduated system of land use permitting is in effect. As land and water disturbance increase, so do the permitting and monitoring requirements. All work completed to date on the property, and all work proposed in this report, fall within the requirements for a Class 'A' land use permit. A Class 'A' Land Use Permit for the property has been issued in the name of Silver Range Resources Ltd. This permit will remain in good standing until 2022. Land Use Permits may be renewed for a second term totaling an additional two years.

The author is not aware of any environmental liabilities to which the property may be subject.

The author is not aware of any other significant factors and risks that may affect access, title, or the right or ability to perform work on the property.

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

(Modified after Wyllie, 2013)

### Access, Infrastructure and Local Resources

The property is located within the Northwest Territories, Canada, approximately three kilometres north of the city of Yellowknife, geographically centered at 62°30′ North latitude and 114°24′ West longitude.

Road access to the property is achieved from the Ingraham Trail (Hwy 4), from 'Vee Lake' road originating off the Ingraham Trail or through Fred Henne Territorial Park. The property is then accessed by foot or snowmobile from the road(s). The property may also be accessed by helicopter or float/ski-base fixed wing aircraft from Yellowknife.

The property is usually snow covered from mid-November to late April and snow-free from May to October. Mapping and sampling programs are best carried out during the summer months. However, for programs where machine access to the property is desired, or when bogs and lakes would interfere with the proper administration of a geophysical survey or drill program, access to the property is best between January and April.

Yellowknife is a significant supply centre. It is the main service and support centre for the diamond mines to the north, has a reasonable labour pool and is home to many engineering and environmental consulting firms. This small city (pop. approx. 19,000) has many amenities. It is serviced by four commercial airlines with daily flights connecting to southern Canada. A paved highway also extends from Yellowknife south to Alberta. Highway service (trucking) is year-round. All logistical support, labour and professional services can be supplied from Yellowknife.

There is no infrastructure for the purposes of mineral exploration located on the property aside from seasonal trails. A seasonal campground is located at Fred Henne Territorial Park. The Snare Hydro transmission line that supplies Yellowknife with hydro-electric power transects the property near the No.1 Vein mineral showing.

Surface access rights to the ground that underlies the Up Town Gold property belong to, and are administered by, the Government of the Northwest Territories. Authorization for surface development is achieved through the Mackenzie Valley Land and Waterboard. This organization administers the Mackenzie Valley Land Use Regulations, which are in turn governed by the Mackenzie Valley Resource Management Act (MVLWB webpage, 2017)

The author is not aware of any significant factors and risks that may apply to mining operations, potential tailings storage areas, potential waste disposal areas, heap leach pad areas, and potential processing plant sites.

### **CLIMATE AND PHYSIOGRAPHY**

This section is modified after and extracted from Ecological Stratification Working Group (1995).

The property is located approximately 450 kilometres south of the Arctic Circle and experiences an extreme and semi-arid polar climate typical of the Taiga Shield Ecozone of Canada (Ecological Stratification Working Group, 1995). The area can further be classified as belonging to the Great Slave Lowland High Boreal ecoregion (Ecosystem Classification Group, 2008). The Northwest Territories are classified as a polar semi-desert with limited precipitation, both in the winter as snow and summer as rain.

The Great Slave Lowland HB Ecoregion occupies the low elevation level terrain (approximately 205 metres above sea level) adjacent to the North Arm of Great Slave Lake. The dominant landscape is a level plain composed of low-relief Precambrian granites that were glaciated and subsequently flooded by Glacial Lake McConnell, leaving behind discontinuous till and lacustrine veneers and blankets between bedrock outcrops and in rock fractures. Patchy conifer, mixed wood and deciduous forests with relatively diverse understories occur between rock exposures, on thin soils over bedrock, and in fractures. Jack pine and aspen stands are widespread, indicating the influence of High Boreal climates. Wetlands are common.

Low-relief Precambrian granites are the dominant terrain feature throughout the area. The entire area was once covered by thick ice and later flooded by Glacial Lake McConnell to a depth of about 100 metres. A combination of wave-washed tills, variable-textured glaciolacustrine sediments, and glaciofluvial materials occur as thin, discontinuous deposits between rock outcrops and in fractures over much of the Ecoregion and surrounding areas (Kerr and Wilson, 2000).

Forests are discontinuous and occur between or on rock outcrops where there is a sufficiently thick mineral or organic substrate. The influence of the milder High Boreal ecoclimate across this Ecoregion is indicated by the widespread occurrence of jack pine and aspen, the relatively vigorous growth of white spruce and birch in moist areas, locally extensive shrubby and sedge fens, dense variegated pond lily colonies on shallow ponds, and peat plateaus with large collapse scars.

Climate in the region is marked by cool summers and very cold winters, and has a sub-humid, high boreal ecoclimate. The mean annual temperature is approximately -5°C. The mean summer temperature is 11°C and the mean winter temperature is -21.5°C. The mean annual precipitation ranges 200-375 mm. Yellowknife has the lowest mean annual temperature of all Canadian cities (-5°C) and the lowest average nighttime winter temperature (-30°C). Wildlife includes moose, black bear, barren ground caribou, wolf, beaver, muskrat, snowshoe hare, ptarmigan and spruce grouse.

### 6 HISTORY

In 1960, Pete Rodstrom & Gunnar Fredrickson discovered Au in granites west of Giant Mine. In 1962, Rodstrom and partners staked 37 claims west of the Giant Yellowknife gold mine, in the vicinity of Martin and Baker Lakes. A company named Rodstrom Yellowknife Mines Ltd. was formed to explore and develop the claims.

In 1963, a geological mapping, trenching and diamond drill program was carried out on the north and south shores of Baker Lake (Taube and Bryne, 1963). The property was mapped at a scale of one inch to 400 ft., and individual showings were mapped at a scale of 1 inch to 20 ft. Extensive trenching and sampling were carried out over the Big Vein and No. 1 showings. Results from a trench sample collected at the No. 1 showing were as much as 1.43 oz./T (46.2 g/t) gold over 1.5 ft (Wyllie, 2013). Trench sample results on the Big Vein showing were lower, including 0.13 oz./T Au (4.2 g/t Au) over 1.9 ft. Eleven drill holes were completed in the No. 1 vein area, totaling 2,000 ft., and one hole totaling 82 ft. was completed on the Big Vein showing (Sanche and Byrne, 1963). Assay results on the sampled core were very erratic, possibly due to the coarse-grained nature of the gold distribution and the small diameter core produced during this program.

During 1964, a detailed 40-scale (1 inch = 40 feet) mapping program was carried out in the area south of Baker Lake. Trenching and sampling of the 15, 16, 20 and 22 veins were undertaken. No sampling information or results are available. Diamond drill holes were collared to intersect down-dip extensions of the 13, 15 and 22 veins (Taube and Bryne, 1963). Recorded details of the drill program are incomplete, but it appears that 57 holes were completed on the 15 Vein for a total of 2,684 ft., while 16 holes were drilled in the 22 Zone totaling 1,032 ft., and one hole was drilled in the 13 Zone for an undetermined depth.

In November 1972, two trenches were excavated and sampled on the Rose showing. One reported assay graded 0.55 oz./T Au (17 g/t Au) over an undisclosed length (Fredericks and Rasmussen, 1972).

In 1975, historic diamond drill and trench sampling work was re-evaluated, and a resource estimate was calculated (Nickerson, 1975; Table 2).

Table 2. Historic resource for the Rod Zone (Nickerson, 1975)

		MEASU	IRED			INFERI	RED	
VEIN	TONNAGE (tons)	WIDTH (ft.)	GRADE (oz./T)	GOLD (oz.)	TONNAGE (tons)	WIDTH (ft.)	GRADE (oz./T)	GOLD (oz.)
15	930	3.6	1.43	1330	1540	3.6	0.82	1260
22	156	2.5	2.74	430				
TOTAL	1086			1760	1540			1260

The historic Rod Zone resource estimate presented in Table 2 was prepared by Nickerson (1975). The resource uses categories defined in sections 1.2 of the National Instrument 43-101 Standards of Disclosure for Mineral Projects; however, all stated historical resource estimates are inferred as defined by the Canadian Institute of Mining, Metallurgy and Petroleum (CIM): "part of a Mineral Resource for which quantity and grade or quality can be estimated on the bases of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity". The Historical Estimates were not prepared by independent Qualified Persons, nor has any of the information contained therein been audited by an independent Qualified Person. The Historical Estimates do not conform to the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") standards of reporting

pursuant to requirements under National Instrument 43-101. As a result, the author wishes to clarify that there are no mineral resources and no mineral reserves on the Up Town Gold property as defined under National Instrument 43-101. Furthermore, the resource presented by Nickerson (1975) is prior to the ore extraction efforts conducted in 1976 and 1979; the resource (Nickerson, 1975) has not been updated. The author has not independently confirmed the resource (Nickerson, 1975), or the volume of rock that was removed during the 1976 and 1979 operations.

The issuer is not treating the historical estimate as current mineral resources or mineral reserves.

During the summer of 1976, a composite sample was submitted to the Consolidated Mining and Smelting Co. of Canada (Cominco) mill at Con Mine for metallurgical testing. The sample was found to grade 2.26 oz./T Au (72.9 g/t Au), and the gold recovery was determined to be 99.07% (Macphail, 1976).

In the summer of 1979, 1,500 cubic yards of material was excavated from the 15 Vein area. This material was hand sorted to produce 12.125 tons of high-grade material which was delivered to the Con Mine for milling. A total of 18.77 ounces of gold was recovered. Gold at the time was only worth \$318.37 per ounce, and the cost of mining (CDN\$19,500) made the deposit uneconomic.

In spring, 1995, a small geophysical surveying program was undertaken to investigate an overburdencovered recessive weathered zone (Nickerson, 1995). Two coincident anomalies (Beep Mat and EM 16) were identified, but no further work was reported.

In late winter of 1997, 2.2 tons of previously blasted and hand sorted material were removed from the 22 Zone (Nickerson, 1996 and 1997). This material was crushed, split, weighed, and samples were sent for analysis. The weighted average grade of the material was calculated to be 10.34 g/t (as reported in Nickerson, 1997).

The author derived the above information from documents on file with the Northwest Territories Geoscience Office, however, none of the reported tonnages/grades could be verified from lab certification. It must be noted that all historic work was undertaken before modern reporting requirements came into effect.

### 2011-2012

In 2011, the property area was re-staked by Panarc Resources Ltd.

In 2011-2012 Manson Creek conducted three exploration work programs on the property through an option agreement with Panarc Resources. In the fall, several grab samples were collected from historic showings and blast trenches at the Rod and J Zones. The Rod samples returned an average of 11.2 g/t gold, with two of the samples returning high gold grades of 49.6 g/t and 19.2 g/t Au. Silver values ranged from <0.1 g/t to greater than 100 g/t. The assays outlined high-grade zones that occur within broader halos of lower grade mineralization and alteration.

A program was conducted in spring 2012 that tested many of the historically noted mineralized zones through reconnaissance prospecting and sampling (91 samples collected). Gold mineralization, often with significant silver mineralization, was found in the Rod, Fox South, J7 and C areas of bedrock exposure. This work resulted in an average grade of 4.7 g/t Au. Specifically, 22 of the 91 samples collected during this phase of exploration returned gold grades between 1.3 g/t to 113.5 g/t, with silver grades locally in excess of 100 g/t. The results of the first pass of exploration in over fifty years on the property revealed significant gold and silver mineralization, successfully demonstrating the extensive and variable nature of the gold and silver mineralization at the Up Town property.

In fall 2012, representative channel samples were collected and a prospector drill, a JKS Winkie Drill, was utilized (Wyllie, 2013). Channel sampling was conducted at the J Zone, the C Zone and the Fox South Zone. One sample returned was 7.8 g/t gold and 23.31 g/t silver over 3.2 metres from the J Zone. One sample from the C Zone was 0.7 metres of 4.19 g/t gold and 2.1 g/t silver. Two Winkie diamond drillholes were completed in November of 2012 to test north and south extensions of the J7 Zone. One hole intercepted a broad mineralized zone of 0.47 g/t Au and 2.61 g/t Ag over 6.72 metres, including 1.29 g/t Au and 5.20 g/t Ag over 2.27 metres. The second drill hole returned 0.141 g/t Au and 0.80 g/t Ag over 1.13 metres.

Exploration continued on the property in 2013, 2015, 2016, including activities that ranged from mapping and prospecting to channel sampling and diamond drilling.

### 2015

Exploration work conducted in 2015 comprised mapping, channel-sampling, , total field magnetic and very low frequency electromagnetic (VLF-EM) ground-based geophysical surveys, and four Winkie diamond drillholes at the Rod Vein. Mapping concentrated on the Fox South Zone to delineate and assess mineralization therein. Effort was placed on defining lithologies and structural controls on gold mineralization hosted in the Fox South shear zone.

### 6.1.1 Channel Sampling

During drilling in 2015, water was removed from the 1979 Rod vein sample pit to get access to historic sample faces. The pit was pumped dry, and the Rod Vein was exposed in the bottom of the pit. Channel samples were collected across the vein (Table 3) by making three parallel pilot cuts, approximately 3 cm deep, over a width of about 10-centimetre. A gas-powered rock saw was used to cut the rock, and then hand tools were used to break the rock between cutlines for sampling. Sampling was laid out to include shoulder samples on either side of visible mineralization, not exceeding a length of 1.5 m. Sample intervals were laid out so as not to cross boundaries between different styles of mineralization. Sample tag numbers were written on flagging and metal tags and placed at the start of sample intervals.

Table 3. 2015 channel sampling at the Rod Zone open pit

Channel	UTME	UTMN	Sample Length (m)	Au (g/t)	Ag (g/t)	
RD-15-01	632050	6932412	1.2	10.36	8.8	
RD-15-02	632050.2	6932411	1.2	17.27	14.1	
RD-15-03	632050.4	6932410	0.5	16.35	34.7	
RD-15-04	632050.6	6932409	1.2	10.19	16	

### 6.1.2 Grab Sampling

Prospecting conducted in 2015 at the Fox Zone did not identify any new mineralization; however, it did refine the limits of mineralization exposed at surface. Sample results included 30.3 g/t Au from the north end of the Fox South Shear Zone (FSSZ) and 12.05 g/t Au from the south end (Power, 2016). The sampling during this program indicates that the western shears are more prospective than the shears located on the eastern side of the FSSZ. Power (2016) determined that the main mineralized interval ranged between 0.5 and 2.0 metres in width and could be mapped intermittently over approximately 500 metres along strike.

### 6.1.3 Diamond Drill Program

Panarc Resources Ltd. contracted Aurora Geosciences Ltd. to conduct a shallow diamond drilling and channel sampling program at the Rod Vein in 2015. This program was completed over four weeks between September 14 and October 14. The purpose of the program was to test beyond areas of known mineralization associated with the Rod Vein in search of new zones, as well as investigate mineralization exposed in the production pit (Power, 2016).

Similar to the drilling in 2013, a JKS Boyles Winkie drill modified with a hydraulic motor was used to complete the drilling. Drill conditions were hampered by very hard rock, which resulted in frequent breakdowns, and the drill being significantly underpowered.

A total of 76 metres were drilled in 4 holes (Table 4). Drillhole RD15-01 was abandoned at 6 metres depth and undercut by RD15-02.

Table 4. Diamond drill collars completed at the Rod Zone in 2015

Drill Hole	East_ND83z11	Nortg_ND83z11	Total Depth (m)	Dip	Azimuth	
RD15-01	632059.4	6932411.0	6.00	-70	284	
RD15-02	632059.4	6932411.0	15.60	-73	284	
RD15-03	632060.8	6932420.8	19.96	-63	284	
RD15-04	632075.3	6932437.4	34.06	-45	281	

### 6.1.4 Ground-based Total Magnetic Field and VLF-EM Survey

A total magnetic field and VLF-EM survey was conducted on the Up Town Gold property from May 30 to 31, 2015 (Power, 2016). Data were collected along lines oriented at 290 degrees and separated by 50 metres. The purpose of the program was to map structures hosting gold mineralization in the Fox South showing area.

The TMF survey shows two prominent linear magnetic highs that are inferred to be magnetic dykes. The northern grid is dominated by the magnetic response of the dyke and, without additional processing of the data, is the only feature that can be interpreted with confidence. Power (2016) interpreted three domains on the southern grid and suggested that these domains correlate with the lithologic units mapped in the corresponding report.

The VLF-EM survey map shows the results of a normal Fraser Filter applied to the vertical in-phase component of the field from the Jim Creek (Station NLK) transmitter (Figures 17-18). This transmitter is well coupled with conductors striking SSW and should energize features parallel to the dominant NE to NNE structural zones. The survey results indicate that there is no detectible electromagnetic response from the Fox South Shear Zone or any features within it (Power, 2016). Power (2016) surmises that the lack of through-going structures, such as faults, veins or shears observed in the deformation zone, and the lack of significant connected sulphide mineralization observed in the individual shear zones can be attributed to the lack of an electromagnetic response.

### 2016

In 2016, property-scale geological mapping was performed using a grid pattern of east-west oriented lines spaced 200 metres apart. Stations were established every 50 metres. This grid-based work utilized an unbiased lithogeochemical approach to the mapping process. The (major) outcropping rock type was visually identified on the basis of lithology and grain size (crystallinity). The 2016 exploration program

included four main components: grid-based geological mapping and lithogeochemical sampling, prospecting with attendant rock sampling, reconnaissance structural mapping focused on the Fox South shear zone, and an airborne magnetic and radiometric survey over the entire property.

### 6.1.5 Mapping

Reconnaissance bedrock mapping was conducted on the property in July 2016. A grid consisting of 200-metre lines and 50-metre station spacings was digitally established over the property. A grab sample, as well as observations of lithology, structure and alteration were collected at each station. A total of 449 stations were described and 14 distinct lithological units were recognized (Gal, 2017a).

Granite, granodiorite, and diabase comprise 75% of the stations described. These rock classifications are consistent with the principal lithologies mapped historically and during the 2015 and 2016 programs. Primary and secondary alteration was collectively classified into three groups: silica, potassic and chloritic. A total of 63% of the stations were described as silica altered. Potassic alteration was described at 199 stations (27%), and chloritic alteration was described at 63 stations (14%).

### 6.1.5.1 Geochemistry – Principal Component Analysis

The primary goal of the 2016 program was to geochemically sample the property, and to do so without bias. A property-scale sampling program was proposed to better map known areas of alteration, as well as new areas, which could have implications for a larger hydrothermal system. A total of 439 samples were analyzed for 51 elements.

A Principal Component Analysis (PCA) was completed on the geochemical data by Aurora Geosciences to analyze the variability in the dataset. The main goal was to aid in prediction of favourable Au mineralized areas based on geochemical correlations.

A factor analysis supported the subdivision of the property into two domains, which largely agreed with the observed domains. Factor 1 (F1) was found to account for approximately 32% of the variability in the dataset and is related to the major lithological domains of the property. These results also supported the subdivision of the property into two domains (Gal, 2017a). These domains correlate with the intrusive rocks that underlie the center of the property and the mafic volcanic rocks located near the eastern property boundary.

### 6.1.5.2 Geochemistry – bedrock types

Whole rock analysis was not completed on the samples collected during the 2016 program. None the less, the consideration of several major rock-forming elements from the data analysis of ICP sample results allows for an approximate geochemical classification of the samples. The median values of Al, Ca, Fe, K, Mg, Na, and Ti were used to classify the samples and supports historic lithological classification of largely granitic and granodioritic intrusive phases.

### 6.1.5.3 Geochemistry – alteration

The dominant ferromagnesian mineral in the intrusive phases is biotite; however, chlorite alteration was noted at several stations. Mg:Fe ratios were plotted to exploit the relationship of these two minerals and identify areas of increased chlorite alteration. Overall, there is an increase in Mg:Fe ratio on the western side of the sample grid, although it does not correspond very well with the interpreted domain boundary. While there is a zonation of the Mg:Fe ratio in the rocks collected, the sample density was not sufficient to determine the effects of metamorphism relative to potential hydrothermal alteration.

Potassium (K) was used to determine if potassic alteration of the host rocks could be mapped, or whether areas existed with increased potassic feldspar and biotite. In a general sense, K is increased on the

western side of the grid. In the southwest quadrant, increased K corresponds well to the interpreted domain boundary, while to the north the progression is more diffuse.

## 6.1.5.4 Geochemistry – mineralization and gold pathfinder elements

Geochemical data was analyzed to evaluate gold (Au) and related pathfinder elements associated with showings on the Up Town property. The data were statistically evaluated, and outliers removed in order to generate a 'normal' data distribution. Standard log-log correlation matrices of this dataset show that Au does not correlate well with common shear-hosted Au pathfinder elements (i.e. As, Sb, etc.), with the exception of silver (Ag) (R= 0.406).

Elements such as arsenic (As), antimony (Sb), and tellurium (Te) are useful indicators for Archean shear-hosted and vein gold deposits. Au does not typically show strong correlation with As (R= 0.055) in these systems. Arsenic and Sb values are highest in the east central part of the grid, and contamination from the nearby Giant Mine is considered to be a likely source of this anomaly. However, there are anomalous Sb results have been found to occur in samples in the southern part of the grid, south of Baker Lake, and in association with other gold showings on the property (e.g., Rod Vein).

Tellurium is generally higher in the western part of the grid, south of Baker Lake, as well as north of the J7 vein. Most of the higher Te values are associated with known gold-bearing rocks, however, some areas of anomalous concentrations have been found in areas without known Au showings (e.g., N of the SE corner of Martin Lake on the UTG 2 claim).

Sulphur (S) is often plotted on maps to define areas of higher sulphide minerals. Similar to Te, there is a noticeable increase in S within rocks on the western part of the grid (Gal, 2017a). Taken together with Te, Sb, As, and known Au occurrences, the distributions demarcate a western belt ("Lode Gold Domain") of possibly increased potential for shear or vein-hosted lode gold (Gal, 2017a). The Lode Gold Domain also correlates with the domain boundary from Principal Component Analysis (PCA), and the outcrops of mafic volcanic rock found in the western part of the property. The Lode Gold Domain is further illustrated in a plot of Au+Ag+S.

The eastern area of the property shows a lack of association with sulphur, where gold occurrences associated with the Fox South Zone extends further north along the eastern property boundary to areas of anomalous Te and S (Gal, 2017a).

### 6.1.6 Grab sampling

During August of 2016, a total of 14 grab samples were collected in concert with the property-scale geochemical sampling. These samples were collected from the south and west sides of Baker Lake. The historic 11S vein showing was also discovered during this program. It had been previously described by the Geological Survey of Canada to be gold-bearing; however, no values were reported. Sampling along the previously documented 300 metres strike length returned a highest grab sample result of 19.35 g/t Au (sample R459807; Gal, 2017a). This sample was collected from an 80 cm zone of laminated quartz vein within a shear plane. Another 100 metres along strike to the south, more vein mineralization was identified, sampled, and returned an assay of 145.5 g/t Au (sample R459809; Gal, 2017a). This sample was collected from a 10 cm wide laminated quartz vein showing trace pyrite and moderate oxidation at the south end of a historic trench.

In August 2016, sampling south of the Rod Vein discovered two new gold showings, the Southpaw and Right Field Veins. The Southpaw showing is a pyritic quartz vein hosted in a sheared zone that returned grab sample assays including 5.1 g/t Au (sample R459743; Gal, 2017a). The Right Field Vein is exposed over a strike length of approximately 40 metres, and grab samples returned assays including 3.8 g/t Au (sample S342159; Gal, 2017a). The host rock at both showings is granite.

### **AIRBORNE MAGNETIC AND RADIOMETRIC SURVEY**

(modified after pages 37-40 of Gal, 2016)

In 2016, Precision GeoSurveys Inc. was contracted to complete an airborne magnetic and radiometric survey of the Up Town property (Poon, 2016). The survey was conducted between August 8<sup>th</sup> and 15<sup>th</sup>, 2016. The 732 line-kilometre survey was flown at 50-metre line spacing with a line orientation of 100°/280°.

### 6.6.1 Magnetic Survey

Diabase dykes that crosscut the property and mafic volcanic rocks located along the eastern margin of the property are well defined in the survey. There also appears to be a gradual increase in magnetic intensity from SE to NW across the property.

### 6.6.2 Radiometric Survey

The potassium (K) survey results did not match those reported in rocks from grid sampling. However, these results do show some agreement with the intrusive rocks domain boundary, whereas mafic volcanic rocks on the eastern margin of the property show up as conspicuous lows. The Th and U maps are similar, essentially outlining the granitoid rocks. Results of the K:Th data correlate well with interpreted mineralized domains of the property, and a K:Th low is spatially associated with the western 'Lode Gold Domain' and eastern 'Shear Domain'. Gal (2017) recommended that the radiometric data deserved further study, but also noted that Poon (2016) advised caution in their use as the survey was flown during some light rainy periods, and both surface moisture and rainfall adversely affect the readings.

### 2017

(Modified after White, 2017: TECHNICAL REPORT, UP TOWN GOLD PROPERTY – NORTHWEST TERRITORIES, CANADA", dated November 02, 2017)

In 2017, Rover Metals completed an exploration program that included the following activities.

### 6.1.7 Mapping

Showing-scale geological mapping and prospecting in 2017 was completed at the Rod, Fox South, and No.1 Vein zones as follow-up to programs conducted in 2015 and 2016. This work focused on further delineating alteration patterns and structural controls on the gold-bearing mineralization at these zones.

### 6.1.8 Diamond Drilling

The 2017 diamond drilling program consisted of ten holes at the Rod Zone, and another four holes at the Fox South Zone. Drilling at the Rod Zone confirmed historic grades reported in drill holes outside of the open pit, tested mineralization exposed at surface west of the historic workings, and tested for the continuity of high-grade gold mineralization at depth and to the north of the open pit. The four holes at the Fox South Zone tested the FSSZ, undercut mineralized intercepts drilled in 2013, and tested the continuity of mineralization along the strike length of the zone.

Depth intervals reported in this section are down hole sample lengths only and are not true thickness.

### 6.1.8.1 Rod Zone

A total of ten holes were completed at the Rod Zone (Table 5). This drilling was completed between August 03<sup>rd</sup> and August 13<sup>th</sup>, 2017.

Table 5. Diamond drill collars completed at the Rod Zone in 2017

Drill Hole	East83z11	North83z11	Total Depth (m)	Dip	Azimuth
ROD-17-001	632063	6932403	137	-45	283
ROD-17-002	632063	6932403	41	-45	265
ROD-17-003	632063	6932403	47	-45	305
ROD-17-004	631994	6932420	27.2	-45	286
ROD-17-005	631994	6932420	65	-65	286
ROD-17-006	632065	6932416	27.2	-45	302
ROD-17-007	632065	6932416	29	-60	302
ROD-17-008	632065	6932416	26	-45	280
ROD-17-009	632098	6932440	48.12	-45	285
ROD-17-010	632123	6932465	80	-50	297

### 6.1.8.1.1 <u>Drillholes ROD-17-001, 002, 003</u>

Holes ROD-17-001, 002, 003 were collared to test mineralization beneath the open pit. These holes were drilled from the same setup by rotating the drill on the platform to the desired azimuth.

ROD-17-001 was drilled to twin hole 1505 (Taube and Bryne, 1963); however, for logistical considerations was collared nine metres to the northeast of the original location. Hole 1505 was a 48-ft. hole that drilled from east to west, beneath the open pit, and continued to depth. This hole intersected a number of isolated gold-bearing structures, including one that could be interpreted to undercut the mineralized trenches located to the west of the open pit. In hole ROD-17-001, hematite, chlorite, sericite and silica alteration were sampled regardless of visible sulphide tenure. A total of 46 samples were collected over the 137-metre hole.

Three prominent deformation zones were defined. The first zone (approximately 11-28 metres) is associated with near surface gold mineralization. A second zone was intersected at approximately 86 metres, and a third zone at approximately 121 metres depth. The second and third zones are interpreted to be correlative with structural intervals intersected in hole ROD-17-004 and 005 of the Rod West Zone. The hole is variably chlorite- and hematite-altered from 14 metres to 122.6 metres. Assay results include 0.71 g/t Au over 0.56 metres from sample V744007, collected from a sheared chlorite-jasper-hematite-bearing interval.

Hole ROD-17-002 was drilled at an azimuth of 265°. This short hole undercut the historic workings to verify the reported grades and proposed continuity of high-grade mineralization. The 41-metre hole intersected the Rod vein at 14.09 metres. One sample returned 22.1 g/t Au over 0.85 metres (sample V744060) from this zone. Gold mineralization in this hole occurs between 13.27 and 16.35 metres.

Hole ROD-17-003 was drilled at an azimuth of 305° and intersected the Rod vein north of hole ROD-17-001 and 002. This hole intersected the Rod vein at 14.68 metres. One sample (V744086) returned 1.36 g/t Au over 0.65 metres. This sample is described as a sheared and silicified granite with abundant hematite and chlorite alteration that is banded and parallel to the shear fabric.

### 6.1.8.1.2 Drillholes ROD-17-004 and 005

Holes ROD-17-004 and 005 were drilled on the same section as ROD-17-001. These collars were selected to test the continuity of mineralization sampled in trenches to the west of the Rod Vein to depth. Holes ROD-17-001 and 1505 intersected favorable structure and altered granite at depth, which is interpreted

to be the same zone that was intersected in mineralized trenches at surface. Results from hole 1505 showed that that this structure returned 41 g/t Au over 0.30 metres (Sample 717; 84.13-84.43 metres) (Byrne, 1964).

Hole ROD-17-004 drilled two mineralized shear zones located at a depth of 11.43 and 24.75 metres. Both sheared intervals show an increased fabric of the host granite adjacent to the sheared interval. The intervals are silicified (jasper and smoky quartz), pyritic, and chlorite/hematite-altered. The fine- to medium-grained crystalline pyrite is noted to be spatially associated with epidote. Sample results include 15.2 g/t Au over 0.6 metres (V744107) and 2.73 g/t Au over 0.6 metres (V744114).

Hole ROD-17-005 was drilled from the same collar as ROD-17-004 but at a steeper inclination. This hole intersected two prominent shear zones at 26.54 and 58.93 metres. The lower shear zone is associated with 0.87 metres of hematized and brecciated quartz vein. The shear zones are described as being similar to those intersected in ROD-17-004. Two continuous samples returned 1.15 g/t Au over 1 metre (V744127) and 1.01 g/t Au over 1 metre (V744128) from 28.5 to 30.5 metres.

### 6.1.8.1.3 <u>Drillholes ROD-17-006, 007, 008</u>

These three holes were drilled from a single set up located 13 metres north-northeast of ROD-17-001. Drilling in this location during the 2013 and 2015 programs showed great variability in gold content. These holes were drilled to test the continuity of high-grade gold mineralization along strike to the north of the historic workings.

Drillhole ROD-17-006 undercut the mineralized interval in hole 1522 (1.99 g/t Au over 1.5 metres; (Byrne, 1964) and crosscut drillholes RD-15-02 (2.23 g/t Au over 2.5 metres; Power, 2016) and RD-15-03 (7.91 g/t Au over 1.84 metres; Power 2016). Hole ROD-17-006 intersected the Rod vein structure at 15.48 metres. The structure is logged as laminated jasper-quartz-epidote at the hanging wall, and the remainder of the interval is described as a brecciated quartz-feldspar-chlorite unit. Late calcite veins are noted on some microfracture planes. The lower contact of the host rock, above the hanging wall of the sheared interval, is described to be strongly hematized. One sample (V744144) returned 2.03 g/t Au over 0.77 metres.

Drillhole ROD-17-007 was drilled from the same collar as hole ROD-17-006, but at a slightly steeper inclination. This hole intersected a broad zone of hematization within a smaller sheared interval. The Rod vein shear was intersected at 16.07 metres depth in hole ROD-17-007 and had a width of 0.33 metres. One sample returned 35 g/t Au over 0.33 metres (V744154).

Drillhole ROD-17-008 was drilled from the same collar position as holes -006 and -007, but at a slightly different azimuth (280°). This hole undercut hole 1526 (2.72 g/t Au over 0.30 metres; Byrne, 1964) and tested the same zone in the Rod vein as hole RD-15-03. The Rod structure was intersected at 14.84 metres, and a second weaker zone of shearing was intersected at 19.31 metres. The lower interval did not return any gold values, however, the main shear zone returned 32.6 g/t Au over 0.33 metres in sample V744166.

### 6.1.8.1.4 Drillholes ROD-17-009 and 010

These two holes were drilled to the north of the historic workings, and north of where the drilling in 2013 and 2015 focused. Gold values from historic drilling north of the mined area are typically low. Based on results from the 2015 drill program, Power (2016) inferred that mineralization was slightly offset from the main shear zone. These two holes were collared to test the offset at an angle of approximately 5-10° to the main Rod structure.

Hole ROD-17-009 was drilled to a depth of 48 metres. Two sheared intervals were intersected at 37.65 and 44.5 metres. The sheared interval at 37.65 metres is described as a 4 cm wide quartz-feldspar vein with strong hematite, chlorite, and sodic alteration. The deeper sheared interval is similar, with the

addition of epidote fracture fills. The hole is described to be pervasively hematite altered from 37 metres to the bottom of the hole. Chlorite annealed fractures are noted in the bottom three metres. A total of 14 samples were collected between 34 and 47 metres, however, and no significant mineralization was found.

Hole ROD-17-010 was drilled to the north of ROD-17-009. It was placed to test a northeast flexure in the Rod vein that strikes to the north, and to also test the continuity of gold mineralization intersected in holes 1549-53 (12.92 g/t Au over 0.51 metres in hole 1552; Byrne, 1964) at depth. Three sheared intervals were intersected in this hole at 48, 56 and 76 metres. The sheared interval at 48 metres is interpreted to be the same mineralized structure that is intersected in holes 1549-1553 (Byrne, 1964). The hole is pervasively hematite altered from 48 metres through to the bottom of the hole. Most significant is the hematization associated with the sheared interval at 76 metres. Gold-bearing samples are associated with the sheared intervals and include 0.34 g/t Au over 0.33 metres at 48 metres (V744190) and 0.58 g/t Au over 0.38 metres at 76.62 metres (V744224).

### 6.1.8.2 Fox South Zone

A total of four holes were completed in the Fox South Zone (Table 6). These holes were completed between August 14<sup>th</sup> and August 20<sup>th</sup>, 2017.

Table 6. Summary of Fox South Zone drill collars completed in 2017

Drill Hole	East83z11	North83z11	Total Depth (m)	Dip	Azimuth
FS-17-001	634387	6932735	50	-50	090
FS-17-002	634387	6932735	41	-63.5	090
FS-17-003	634356	6932527	92	-45	090
FS-17-004	634356	6932527	92	-60	090

### 6.1.8.2.1 Drillholes FS-17-001 and 002

These two holes are located at the Fox South main showing, in association with the historic trenching and diamond drilling completed in 2013. They were collared to test the continuity of mineralization intersected in holes 13FS-01 (2.62 g/t Au over 4.14 metres; Wyllie, 2013) and 13FS-02 (4.67 g/t Au over 2.13 metres; Wyllie, 2013).

Hole FS-17-001 was collared to bisect holes 12FS-01 and 02. Two sheared intervals were intersected, one at 21.2 metres and a second at 24.5 metres. The main silicified structure was intersected at 21 metres. Both shears are described as hosting quartz veins with variable amounts of chlorite and sericite. The surrounding rock is pervasively silicified and sericitized. The lower sheared interval is pyrrhotite- and pyrite-bearing. A total of 21 samples were collected from this hole. It was continuously sampled from 17 to 30 metres. The highest grade sample (V744242) returned an assay of 1.23 g/t Au over 0.7 metres.

Hole FS-17-002 was drilled from the same setup as hole FS-17-001, but at a slightly steeper inclination. This hole is interpreted to have intersected the Fox South shear at 24.79 metres and a second narrow zone at 33.05 metres. One sample from the lower sheared interval returned 2.16 g/t Au over 0.95 metres (V744275).

### 6.1.8.2.2 Drillholes FS-17-003 and FS-17-004

These two holes were drilled approximately 200 metres south of the historic Fox South showing. They drilled what is interpreted to be the southern extension of the structural zone that hosts the historic showing.

Hole FS-17-003 was collared to test four silicified shears that were mapped, and channel sampled at surface. Seven distinct sheared intervals and one 30 cm quartz vein were logged in the drill core. All sheared intervals were silicified, and chlorite and sericite altered. Pervasive sericitization and silicification is common in the host rock adjacent to the sheared intervals. Pyrite is locally present in the shears and may be weakly disseminated in adjacent host rock. One sample (V744310) returned 5.12 g/t Au over 0.33 metres.

Hole FS-17-004 was collared from the same setup as FS-17-003 and was designed to test mineralization below that observed in the previous hole. A total of ten distinct sheared intervals were logged in this hole. Not all sheared intervals in FS-17-004 are intuitively correlated with the intervals in FS-17-003, however, broader areas of shearing could explain observations of bifurcation of some shears and the discontinuous nature of others, something not uncommon in these systems. These shears are grouped into four broad zones that correlate with the deformation zones in FS-17-003. One sample returned 1.52 g/t Au over 0.65 metres (V744412).

### 7 GEOLOGICAL SETTING AND MINERALIZATION

(Modified after Power, 2016)

### **REGIONAL GEOLOGY**

The geology in the area of the Up Town Gold property has been described, mapped and compiled by various authors including Boyle (1961), Henderson and Brown (1966, 1967), Henderson (1985), Helmstaedt and Padgham (1986) and Stubley (2005). The following summary is based on these works. The regional geology in the property area is shown in Figure 3, based on the synthesis by Stubley (2005).

### 7.1.1 Tectonic setting

The property is located on the western boundary of the Yellowknife Greenstone Belt in the southern Slave Province (Slave Craton), a package of Archean granitoids, metavolcanic and metasedimentary rocks extending from Great Slave Lake north to Coronation Gulf and east from the Proterozoic Wopmay Orogen to the Churchill Province. Rocks in the Slave Craton consist of basement granitoids dated as old as 4.05 Ga (Bleeker et al., 1999) and younger (2.73 – 2.63 Ga) overlying, in-folded greenstone belts. These belts consist of mafic through felsic volcanic rocks, overlying terrigenous clastic rocks, and turbidites. Both the underlying basement rocks and overlying greenstone belts are intruded by younger Archean granitic rocks and finally by several generations of Proterozoic diabase dyke swarms.

### Stratigraphy

The following supracrustal rock units are present in the property area:

Table 7. Regional stratigraphy

Rock Unit [Age]	Name	Description		
Acg	Jackson Lake Formation	Basal breccia overlain by conglomerate (dominant rock type), sandstone and argillite deposited in fault bounded basins.		
[2680 - 2650 Ma]				
Atl – Atm	Burwash Formation	Greywacke and argillite couplets with sharp lower contacts and fining upward grading.		
[2700 – 2650 Ma]	(Duncan Lake Group)			
Avf	Prosperous Formation	Basal quartz-feldspar porphyry; mafic flows, breccias and minor tuff; and overlying felsic volcanics and volcaniclastics. Sparse interbedded conglomerates.		
[~2660 Ma]	Ingraham Formation [Banting Group]			
Aal	Walsh Formation	Argillite and siltstone turbidite flows.		
[~2660 Ma]	[Banting Group]			
Avm	Kam Group	Yellowknife Bay Formation – mafic flows, tuffs.		
[2820 – 2701 Ma]		Townsite Formation – felsic flows and intrusions Crestaurum Formation – mafic flows		
		Chan Formation – mafic flows, gabbros, sheeted dykes		

The Jackson Lake Formation is the youngest formation in the Yellowknife Greenstone Belt and is a sequence of tectonically-derived conglomerate-dominated terrigenous clastic rocks deposited in small grabens adjacent to major faults (Martel and Lin, 2006). The formation is approximately 100 metres thick and is found north and west of Walsh Lake, northeast of the Up Town Gold property. The Jackson Lake

Formation sits unconformably on the Kam Group volcanics and is in fault contact with the underlying Banting Group (ibid). Thompson (2006), in reviewing the range of ages returned from samples of this rock unit and the metamorphic history of the area, concluded it is likely that this formation was deposited between 2680 to 2650 Ma.

The Duncan Lake Group is a sequence dominated by turbidites with localized intraformational volcanic members. The predominant Burwash Formation is time transgressive and surrounds, overlies and possibly underlies the Banting Group and may rest conformably on the Kam Group in the centre of the Yellowknife Greenstone Belt basin (Helmstaedt and Padgham, 1986). The Burwash Formation is a thick sequence of fining upwards couplets of greywacke and argillite with sharp contacts interpreted to be turbidites (Henderson, 1985). They have been isoclinally folded and the true formation thickness can only be estimated at approximately 5,000 metres. The turbidite package thickens dramatically to the east of the older volcanic sequence and encloses the felsic volcanic rocks of the Prosperous Formation on the eastern flank of the Yellowknife Greenstone Belt. The unit has been variably metamorphosed to lower greenschist (Atl) and upper greenschist to amphibolite (Atm) facies (Stubley, 2005). Volcanic ash in the middle of the Burwash Formation has been dated at 2661 Ma (Bleeker et al., 1999), approximately coeval with Banting Group volcanic rocks. Given that it may lie conformably on the Kam Group, older members of the Burwash Formation may be much older (Helmstaedt and Padgham, 1986).

The Banting Group consists of the dominantly volcanic Prosperous and Ingraham Formations and the intervening turbidites of the Walsh Formation (Cousens et al., 2006). In Figure 3, both volcanic formations are grouped together as unit Avf by Stubley (2005). The lithology of the Prosperous and Ingraham Formations are similar, consisting of a basal quartz-feldspar porphyry; intermediate mafic flows and pyroclastics; and uppermost felsic tuffs. The differences between the formations appear to be largely in the proportion of the three constituent rock types. The intervening Walsh Formation consists of locally graded mudstone and siltstone, interpreted as fine grained turbidites (Stubley, 2005; Helmstaedt and Padgham, 1986). The Banting Group rests discordantly upon the underlying Kam Group; is likely enclosed within the Burwash Formation; and is in fault contact with the overlying Jackson Lake Formation (Helmstaedt and Padgham, 1986) (Martel and Lin, 2006).

The Kam Group (unit Avm in Figure 3) is a sequence of dominantly mafic volcanics subdivided into four formations. From base to top, this group consists of the Chan, Crestaurum, Townsite and Yellowknife Bay Formations. The Chan Formation is at least six kilometres thick (Helmstaedt and Padgham, 1986) and consists of massive and pillowed basalt together with subvolcanic gabbroic intrusions (Ams) and sheeted mafic dykes, capped by a chert bed. The Crestaurum Formation is similar in lithology to the Chan Formation but lacks the subvolcanic intrusions and sheeted dykes found in the latter. The Townsite Formation is a sequence of dominantly felsic (rhyodacite) breccias, welded tuffs and dacite flows of calcalkaline affinity. In part, they are subvolcanic intrusions and may be closely related to gold mineralization in the surrounding mafic volcanics (Finnigan and Duke, 2006). The Yellowknife Bay Formation consists of massive to pillowed basalts with flow-top breccias, cherty tuffs and coarse tuffaceous sandstone. Structures within the Yellowknife Bay Formation host the bulk of the gold resources mined to date in the Yellowknife area (Helmstaedt and Padgham, 1986). Felsic flows in the Kam Group have been dated from 2722-2701 Ma and the oldest detrital zircons returned ages of 2820 Ma (Cousen et al., 2006).

Underlying basement rocks are not exposed in the map area but further south a sequence of highly metamorphosed greywacke, conglomerate and amphibolites (Octopus Formation) disconformably underlies the Chan Formation (Henderson, 1985). Another indication of basement composition is tonalite

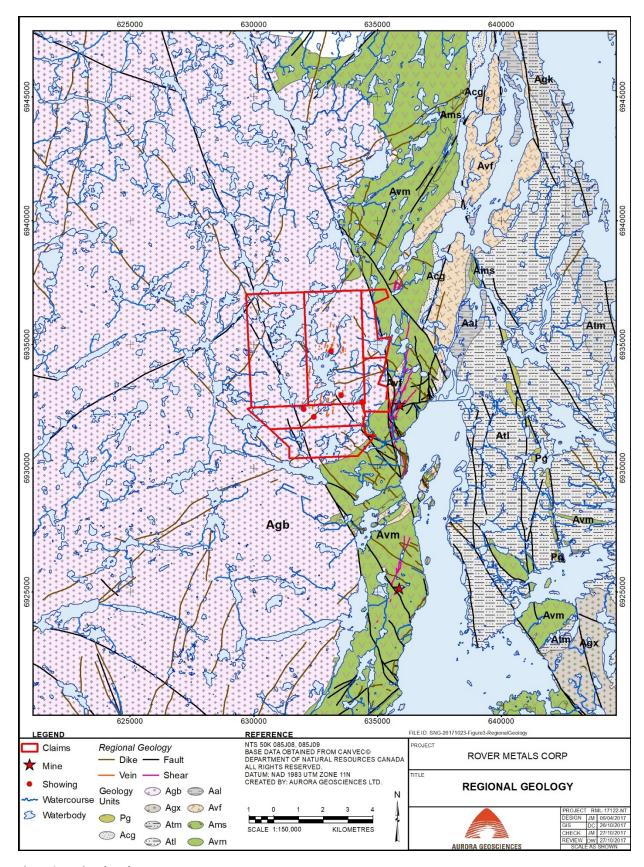


Figure 3. Regional geology

gneiss recovered from a diatreme in the Con Mine which returned discordant U-Pb ages of 3040 to 3300 Ma (Nikic et al., 1980).

The layered rocks are intruded by various igneous rock units, some of which are contemporaneous with volcanic rock unit deposition. The following igneous rock units are present in the property area:

Table 8. Regional intrusive rock units

Rock Unit [Age]	Name	Description		
Diabase Dykes [Proterozoic]	Dogrib & Indin Swarms	NNW & NNE striking Indin Dyke Swarms and ENE & WNW striking Dogrib Dyke Swarms. Medium to fine grained gabbro with plagioclase and pyroxene.		
Pg	Malley Sheet Diabase	Shallow east-dipping diabase dyke		
[Proterozoic]				
Agk	Prosperous Suite	Granodiorite, tonalite, granite; biotite- bearing, rare hornblende		
[2520 Ma]				
Agbm	Duckfish Granite	Biotite +/- hornblende rich granitoids, radiogenic, magnetite.		
[2611 Ma]				
Agb	Defeat Suite	Homogeneous granodiorite, tonalite, and granite: biotite- bearing, rare hornblende		
[2625 - 2590 Ma]				
Agx	Defeat Suite	Mixed biotite granitoids of Defeat suite with abundant supracrustal inclusions		
[2625 - 2590 Ma]	(contaminated)			
Ams	Kam Group synvolcanic	Mafic intrusions (gabbro, anorthosite, diorite)		
[2820 – 2702 Ma]	intrusions	associated with volcanic rocks; various ages represented but most assumed to be 'synvolcanic'		

Steeply-dipping Proterozoic diabase dykes cut the entire greenstone belt assemblage and range in width from a few centimetres to in excess of 100 metres (Henderson and Brown, 1966). Two generations are present. The older, shorter and subsidiary ENE trending Dogrib dykes have been dated at 2189 Ma while the cross-cutting NNW to NNE striking Indin dykes are dated at 2108 Ma (Buchan et al., 2009). Henderson & Brown (1966) describe the dykes as gabbroic in composition, medium to fine grained, with pyroxene and grey, often pseudo-ophitic plagioclase lathes.

The Prosperous Suite (Agk) intrudes the Burwash Formation east of the property area and is largely responsible for regional thermal metamorphism defined largely by cordierite in the turbidites (Henderson, 1985). This unit consists of a group of massive, medium grained biotite-muscovite granite intrusions and pegmatites. Prosperous Suite granites do not show the effects of regional metamorphism and have been dated at 2520 + 28 Ma (Davis and Bleeker, 1999).

The Defeat Suite (Agb) is a series of multiple, homogeneous granodiorite, trondhjemite, tonalite and granite plutons intruding a large area west of the Yellowknife Greenstone Belt (Henderson, 1985). Intrusions near the margins of the greenstone belt are locally contaminated with abundant supracrustal xenoliths of dominantly mafic volcanic material (Agx). The Defeat Suite has been dated at 2632 Ma (Pud Stock in Con Mine) to 2620 + 8 Ma in the main Defeat Suite stock west of Yellowknife (Thompson, 2006).

Younger ages have been recorded for these rocks elsewhere in the Slave craton (Stubley, 2005). The Duckfish Granite (Agbm) is a radiogenic, reduced (magnetite) iron-rich granite likely intruded shortly after the Defeat Suite (2611 Ma) (Davis and Bleeker, 1999).

## 7.1.2 Structure and metamorphism

Martel and Lin (2006) and Siddorn et al. (2006) document four phases of deformation in the property area:

Table 9. Deformational event summary

<b>Deformational Event</b>	Age	Description
D1	2700 - 2650 Ma	Shears, local foliation and folds generally parallel to bedding in the Kam and Banting Groups.
D2	2635 - 2600 Ma	Pervasive foliation and lineation, sub-parallel with bedding, folding and the development of north-striking regional shear zones.
D3	~2600 Ma	Localized crenulation cleavage and chevron folding adjacent to north- striking regional shear zones and reactivation of older D2 shear zones.
D4	2150 – 1870 Ma	Brittle deformation and dominantly strike-slip displacement along dominantly NNW striking, steeply dipping faults.

Greenstone rocks in the Yellowknife area were initially laid down in a NE-striking, SE-dipping homocline. First phase deformation consists of local development of foliation, isolated NE trending folds and shears parallel to flows in the Kam Formation volcanics (Henderson and Brown, 1966). D1 affects the Burwash Formation and Defeat Suite plutons cut F1 folds; consequently, D1 likely occurred between ~2700 Ma and 2620 Ma (Davis and Bleeker, 1999). The upper age limit can be constrained further. Given the occurrence of S1 only near shears in flow-top shears and other zones of primary weakness, this event is likely associated with vertical tectonics during basin formation [2700 – 2660 Ma].

The D2 event is characterized by pervasive, steeply-dipping, northeast-striking foliation (S2), a steeply-plunging stretching lineation (L2), and moderate to steeply-plunging northeast-trending folds (F2). Foliation is best developed in felsic volcanic rocks and metasediments (Martel and Lin, 2006). Also associated with D2 are north-trending ductile shear zones with strong steeply-dipping foliation and steeply-plunging stretching lineation. Prosperous Granite occurs in sheet-like saddle reefs in the hinges of F2 folds, suggesting to Davis and Bleeker (1991) a syn-D2 age of 2620 Ma. Thompson (2006) presents a comprehensive summary of the metamorphic history of the Yellowknife Greenstone Belt and concludes that peak metamorphism occurred before the intrusion of the Defeat Suite plutons (2630 – 2620 Ma) and waned significantly by 2600 Ma.

D3 deformation produced localized foliation, lineation and folding adjacent to high strain shear zones, notably the Yellowknife River Fault Zone and Homer Lake Fault, north of Yellowknife Bay. The S3 foliation is a steeply-dipping spaced crenulation cleavage, axial planar to steeply plunging Z-shaped F3 folds (Martel and Lin, 2006). At Giant, Siddorn et al. (2006) concluded that D3 represents a late-stage D2 reactivation with the same sense of displacement as D2.

Event D4 produced strike-slip brittle faults with a small vertical component, affecting all rock units in the Yellowknife Greenstone Belt and the adjacent granitoids. In the property area, the most prominent of these are the West Bay Fault (4.9 kilometres horizontal left-lateral displacement / 0.45 kilometres vertical displacement) and the Akaitcho Fault which converges north of the Up Town Gold property (Henderson, 1985). The faults are commonly only a few feet wide but cut large coincident quartz-flooded breccia zones

(Boyle, 1961). Henderson (1985) dated displacement on the D4 faults at between 2150 and 1870 Ma, based on cross-cutting relationships with diabase dykes.

## 7.1.3 Synthesis

A simplified synthesis of the geological evolution of the project area based on the summary above is described below:

- 1. Basement rocks consisting of tonalite, possibly overlain by older deformed sediments, were laid down [> 2820 Ma].
- A SE-dipping homocline or half-graben developed in the Yellowknife area, beginning around 2820
  Ma. Only the NW flank of this structure is preserved. Voluminous mafic volcanics (Kam Group)
  were deposited on the basement rocks. Syn-volcanic normal faults developed along zones of
  rheological weakness such as flow tops.
- 3. The developing basin was filled initially with volcanic material, but this was later supplanted in the deeper portions of the basin by turbidites derived from volcanic edifices near the bounding faults. Gravitational loading contributed to accelerated basin subsidence. D1 deformation occurred proximal to normal faults and shears generated in response to basin-lateral uplift and central basin subsidence.
- 4. Subsidence, partial melting, and fractionation led to the generation of felsic magmas, initially during deposition of the Kam Group (Townsite Formation) and later as a larger event leading to the deposition of the Banting Group (Ingraham Formation).
- 5. The tectonic regime changed from extensional to compressional, generating fault-bounded basins of terrigenous clastics (Jackson Formation). This formation was laid down before 2650 Ma and as compression continued, folding and faulting loaded the crust, burying the volcano- sedimentary succession and raising the metamorphic grade. Peak metamorphic grade occurred just before the intrusion of the synorogenic Defeat Suite plutons between 2630 to 2620 Ma. Intrusion of the Defeat Suite likely signaled uplift as metamorphism was clearly waning by 2600 Ma (Thompson 2006). During this phase of deformation (D2), pre-existing normal faults were reactivated as reverse faults, the succession was refolded, and a regional foliation was impressed on the rocks. Gold mineralization appears to have occurred post-peak metamorphism in the Yellowknife area (ibid).
- 6. Strike-slip ductile shearing accompanied by localized folding and development of associated foliation occurred (D3). The Yellowknife River Fault Zone and Homer Fault developed during this stage of deformation. [~2600 Ma].
- 7. The Prosperous Lake Granite was intruded into the Burwash Formation [2520 Ma].
- 8. Gabbroic diabase dikes were intruded in two regional pulses. East-northeast trending Dogrib dykes were intruded at 2189 Ma and NNW to NNE trending Indin dykes were intruded at 2108 Ma.
- 9. Brittle deformation consisting of dominant strike-slip displacement with minor vertical displacement occurred along steeply-dipping faults. This occurred principally along the West Bay and Akaitcho Faults in the property area [2150 1870 Ma].

## **PROPERTY GEOLOGY**

Property geology is illustrated in Figure 4. The Archean Western Plutonic complex (2.58 - 2.64 Ga) underlies the property and comprises mainly coarse-grained, pinkish-white-weathering, equigranular, massive granodiorite (Atkinson, 1989; Gal, 2017). The eastern boundary of the property covers the contact between the plutonic complex and the volcanic rocks of the Kam Group (2.7 Ga; Brophy and Irwin, 1994).

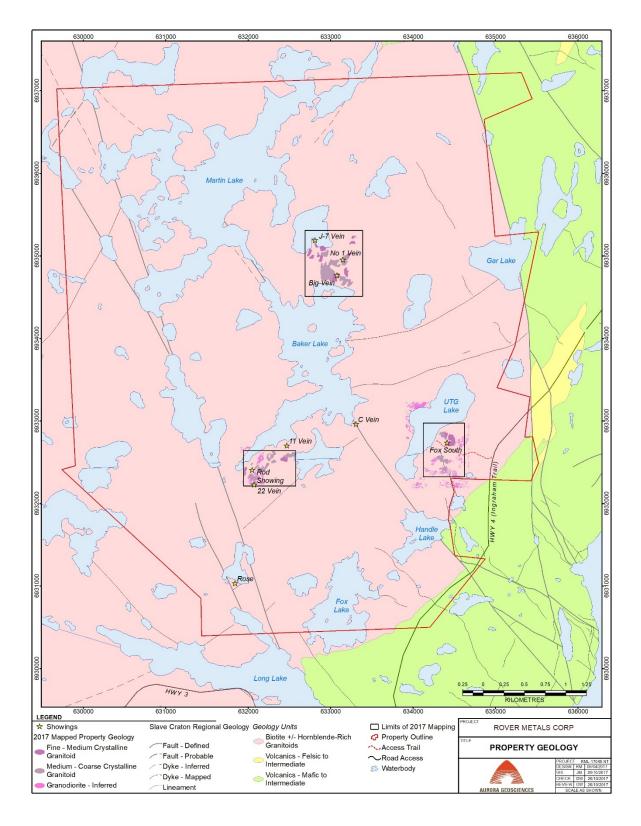


Figure 4. Property geology

aplite and pegmatite dikes and northeast- and southeast-trending Proterozoic diabase dikes crosscut the property (Brophy and Irwin, 1994).

The property area has been subjected to four phases of deformation. The volcanic succession forming the base of the greenstone belt was subjected to syn-depositional normal faulting (D1) along SE verging, generally NE striking faults with curved traces. In the Yellowknife area, these appear to represent mass wasting from an NE striking volcanic edifice. A graben is inferred between bounding faults which were in turn reactivated as the Campbell and Yellowknife Shear Zones. An originally sub-horizontal foliation (S1) developed locally in the fault zones.

Showing-scale geological mapping at the Fox Lake shear zone, Rod Zone, and No.1 zone is described in detail below.

# 7.1.4 Lithology

Four general intrusive phases are identified and include granite, granite hosting mafic xenoliths, non-magnetic granodiorite, and weakly magnetic granodiorite.

The granite unit is described as pink-tan weathering and pink mottled with dark green on fresh surfaces. It is resistant and unfoliated, porphyritic with a medium crystalline (2-4 mm) groundmass. The rock contains approximately 40% ophitic potassium feldspar phenocrysts up to 10 mm in size. Opaque anhedral light grey plagioclase (25%), glassy to white subhedral quartz (15%); anhedral dark grey-green amphibole (16%) and silver weathering muscovite (4%) comprise the rest of the rock. The rock is unaltered except for rust along some fractures (Power, 2016).

The granodiorite unit is mottled dark and light grey and weathers rusty brown. The unit consists of approximately 50% white and light grey, tabular and locally striated plagioclase and 40% black to dark green-grey, anhedral amphibole with some local distinguishing retrograde biotite. Quartz comprises approximately 10% of the rock in irregular, anhedral white to light grey opaque blebs surrounding plagioclase (Power, 2016).

The weakly magnetic granodiorite unit is distinguished from its non-magnetic counterpart largely on the basis of elevated total magnetic field response. The rock is very similar to the non-magnetic granodiorite, although amphiboles in this magnetic unit do not show retrograde biotite but instead are chloritized. This rock unit appears to underlie the northern section of the geophysical grid, north of the unnamed lake west of the Fox South Shear Zone (Power, 2016).

A fourth intrusive phase is mapped at the Rod Zone. This granitic unit is host to amphibolite xenoliths. Observed xenoliths are up to decimetre-scale in size. Regional mapping by Stubley (2005) included a subdivision of Defeat Suite plutons that was comprised of granite contaminated with a considerable percentage of xenoliths. Schiller (1965) proposed that areas of the granite containing mafic inclusions appeared to be important to mineralization.

### 7.1.5 Structure and veining

#### 7.1.5.1 Fox Zone

The Fox South Shear Zone (FSSZ) strikes north-northeast and is mapped over a length of 500 metres (Figure 5). Structures in the FSSZ are brittle and ductile and dip to the west and east, respectively. Ductile deformation fabrics show apparent dextral and sinistral sense of shear (Gal, 2017b). Between the east and west bounding shears of the principle mineralized corridor, are many subsidiary shears and strongly deformed rock that has been mylonitized, fractured and veined (Gal, 2017b; Stubley 2016). The most prominent fracture set strikes north and dips steeply to the west and best observed in the historic trenching at the main showing. Foliation, within the otherwise massive granodiorite, is developed

adjacent to the fractures and shows sub-parallel to parallel orientation (Stubley, 2016). Mineral lineations, slickenfibres, and stepped slickensides are well developed along many of the fracture surfaces, and updip west-side-up kinematics are indicated everywhere (Stubley, 2016). Strike slip displacement may be inferred from steep joints/fractures that are oriented at high angles to the FSSZ margins. A single and apparently continuous subvertical fracture, with open-fill quartz and chlorite alteration, occurs at the eastern margin of the main showing trenches. Subhorizontal lineations, associated with this fracture, may further support late strike-slip kinematics (Stubley, 2016).

Other discrete shear zones are mapped approximately 80 metres west of holes FS-17-001 and 002 (FSLG-04 05; Figure 30; Gal, 2017b). This zone strikes north-south, parallel to the FSSZ, and is approximately 55 metres in aggregate strike length. These structures are also mapped to the south and west of holes FS-17-003 and 004. At this location, a number of north-striking, east and west-dipping deformation zones are exposed at FSLG-17 to 19. These structures may be associated with those west of FS-17-001 and 002 and would increase the strike length of this western zone to approximately 300 metres.

Brittle deformation post-dates shearing. Some fracture zones are associated with quartz veins while several are associated with chlorite or hematite alteration envelopes, bleaching or silicification (Gal, 2017b).

Multiple phases of silicification occur in the FSSZ. Quartz veinlets and lenses that are associated with shearing occur within, or close to, the internal fabric of the shear zone (the S-fabric). The quartz veinlets are strained or deformed into discontinuous quartz lenses and stringers that may be folded. They are generally cm-scale (and rarely exceed 5 cm in width), are finely crystalline, and a bluish-grey or greyish colour. These veinlets may be associated with marginal chlorite and hematite alteration and are locally rusty with trace amounts of oxidized sulphides. Distinctive pink hematitic ("jasperoidal") quartz occurs locally as selvages, banding, or cross-cutting veinlets and stringers (Gal, 2017b). White 'bull quartz' veins are also observed, typically associated with brittle deformation. These are not sulphide-bearing and may crosscut earlier structures. The varying relationships relative to shear structures suggest more than one episode of this quartz veining (Gal, 2017b). Measured vein orientations not related to shear zones are SW and S trending, and NE trending in one case.

Mapping conducted approximately 700 metres to the north-northeast of the FSSZ in 2016. Stubley (2016) observed a number of discrete mylonite zones that are east-dipping and consistently show dextral kinematic indicators. Many of these zones show discontinuous quartz veins and less commonly open-fill growth textures. Stubley (2016) did not observe west-dipping reverse shears, similar to those observed at the FSSZ.

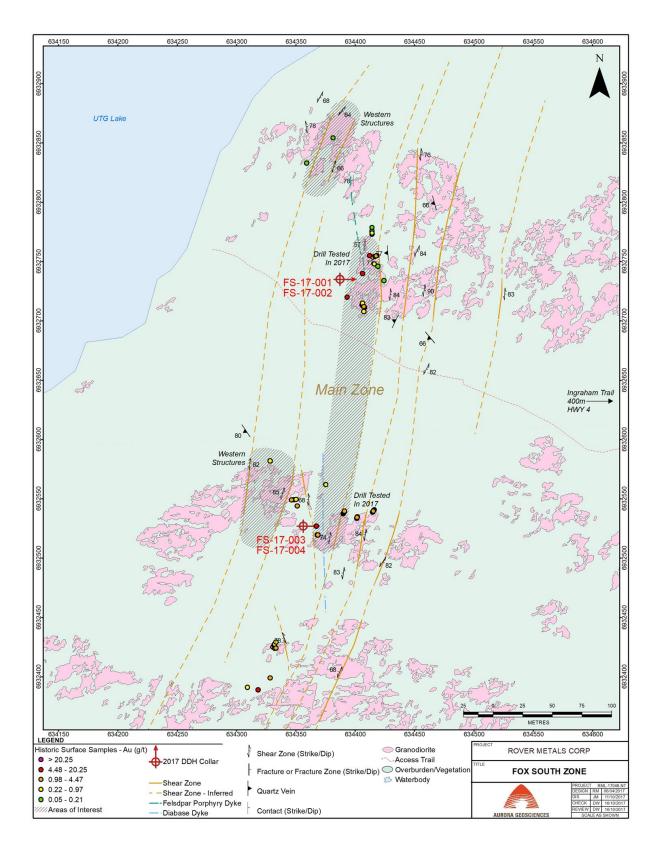


Figure 5. Summary of Fox South Mapping. A number of shears were identified to the west of the FSSZ (Main Zone).

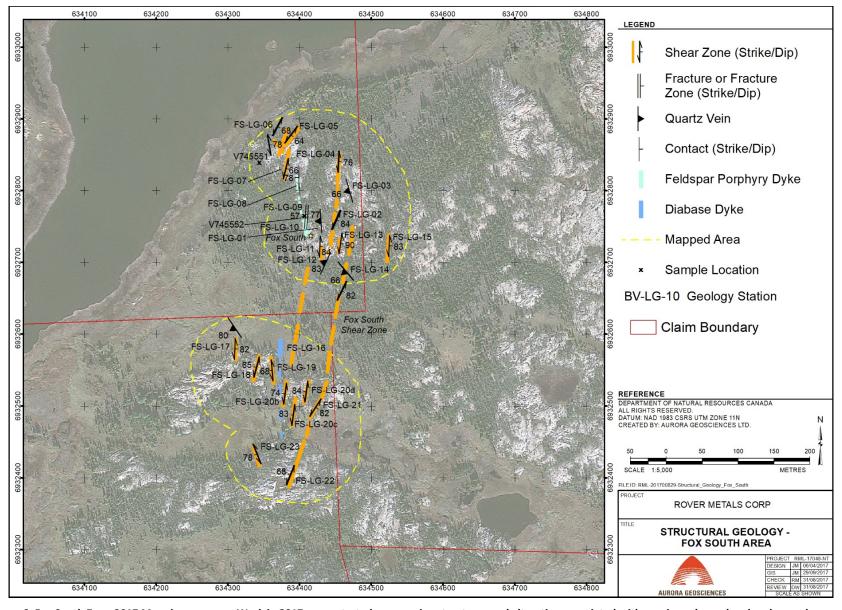


Figure 6. Fox South Zone 2017 Mapping program. Work in 2017 concentrated on mapping structures and alteration associated with previous channel and grab samples.

#### 7.1.5.2 Rod Zone

Most of the shear zones in the Rod Zone are north-striking and east-dipping (Figure 7). A probable dextral sense of shearing is determined for most of these shears. Most measured fracture sets are north-east to northwest striking and moderately to steeply east or west-dipping. Some fractures are restricted to 10-70 cm wide fracture zones, which were locally associated with strong hematite alteration, and may or may not host associated quartz veins. Fracture zones are more commonly observed east of the Rod Zone towards the No.11 Zone.

Measured vein orientations are generally north-striking and east-dipping. An exception is the 22 Vein showing, which strikes northeast and dips to the southeast. This trend is roughly parallel to the vein(s) that hosts the Rod Zone mineralization (Gal, 2017b).

Multiple generations of quartz veins are apparent, as they may be displaced by, or lie within, fractures or shears. Unlike at Fox South, open-space textures in quartz veins are not commonly noted. Pink quartz-hematite "jasperoid" veinlets are observed and associated with shears and crosscutting white bull quartz veins in shear/fracture zones.

### 7.1.5.3 No.1 Zone and surrounding area

Shear zones, at Big Vein / No.1 Vein, are consistently northerly striking and moderately to steeply east dipping. Sense of shear is dextral in all instances where shear sense can be determined (Gal, 2017b). The shear zone associated with the J7 vein is up to 4 metres wide at the southern shore of the unnamed lake, north of Baker Lake. The No.1 shear trends northeast and is mapped over a strike length of 65 metres (Figure 8). A general north-northeast trend was also mapped at the Big Vein shear. East of the Big Vein shear, other shears mapped at BVLG-08, BVLG-09 and BVLG-15 might be part of the No.1 vein shear system (Figure 32). The Big and No.1 veins are interpreted to be related and part of a larger 100-metre-wide deformation zone. Similar to observations at the Fox Zone, this zone consists of a number of apparently discontinuous structures that are variably silicified and mineralized. The No. 1 zone is mapped to be 450 metres in length.

Fractures or brittle deformation zones fall into three main groupings: 10-20 cm wide unsilicified fracture zones striking just east of south and associated with strong hematite alteration; east-trending spaced fractures sets that have hematite alteration envelopes and cut earlier structures; and northwest striking fracture sets and/or zones.

Quartz veins are largely associated with shear zones. At least two generations of quartz veining are apparent. Shears host quartz veins that are narrow (5 cm and less, but up to 30 cm in places) lensoidal, finely crystalline, grey or bluish-grey. These veins are commonly within the S-fabric, and may be folded, boudinaged or otherwise deformed. The quartz vein material may host variable sulphide content. The blast material from the trenches at the No.1 vein is rusted and sulphide-bearing, while those at the J7 vein are less so. Jasperoidal quartz was commonly observed in the sheared structures and in cross-cutting structures at both No.1 and J7 veins (Gal, 2017b).

Massive 'bull quartz' veins are observed, commonly with local traces of sulphides. These veins occur within or adjacent to shear and fracture zones. The Big Vein is up to 2 metres wide and can be traced along its associated structural zone for over 100 metres. These 'bull quartz' veins are late features that cross-cut and brecciate the intruded shear zone. In places where white bull quartz veins are not associated with shears, they exhibited northerly strikes and steep dips (Gal, 2017b).

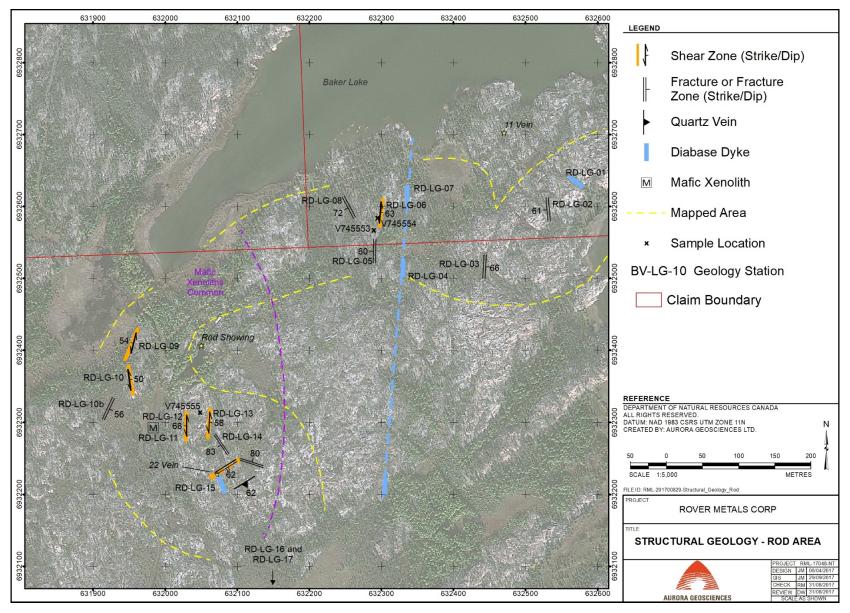


Figure 7. Rod Zone 2017 mapping program. Work focused on the showings and structures outside of the Rod Main zone.

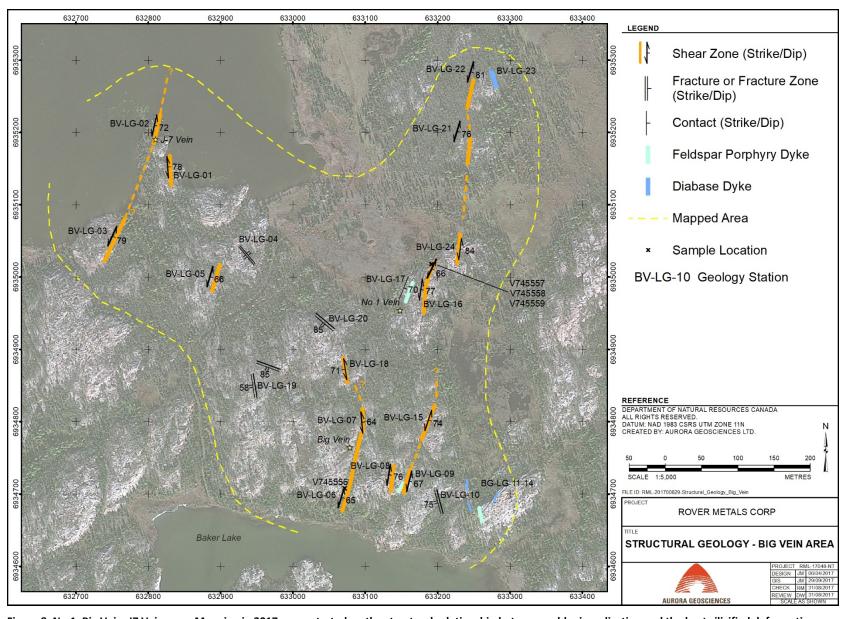


Figure 8. No.1, Big Vein, J7 Vein area. Mapping in 2017 concentrated on the structural relationship between gold mineralization and the host silicified deformation zones.

#### 7.1.5.4 Alteration

Similar alteration is described for all three zones. Alteration is limited to hematite, chlorite, silica, and sericite alteration which are observed, mainly in centimetre- to decimetre-scale halos around shears and fractures. Discrete alteration zones are not mapped because the alteration is constrained to the discontinuous structures of many relative generations. Pervasive hematization of granite units is locally observed and seemingly unassociated with significant planar structures. Pervasive hematite alteration is most prolific at the Rod Zone.

#### **MINERALIZATION**

Gold mineralization in the Western Plutonic Complex to the west of Yellowknife is associated primarily with north-northeast-trending, west-dipping structures and secondarily with north to northwesterly trending, east-dipping structures (Brophy and Irwin, 1994; Power, 2016; Stubley, 2016). These orientations are consistent with the main Proterozoic faults in the Yellowknife region. Brophy and Irwin (1994) write that the gold-bearing structures they identified were in slightly recessive-weathering zones in areas of extensive exposure.

Brophy and Irwin (1994) document three structural controls (shears, quartz veins, and breccia zones) on gold mineralization. Weakly anomalous gold mineralization is also locally associated with gossanous areas. The data presented in Section 9 of this report adds to the understanding of the controls and character of mineralization on the property.

#### **7.1.6** Shears

Brittle and ductile Shears are characterized by silicification and the local development of fabric in the granodiorite host rock. The fabric varies from a subtle, anastomosing, spaced cleavage to a penetrative cleavage defined by close-spaced chlorite slips and alignment of recrystallized quartz in a fine-grained mylonitized matrix. The shears are seldom wider than one metre and are typically 10-20 cm wide. Locally, a halo of brick red (hematite) alteration, that may be several times wider than the shear itself, is developed. Shears are also host to sericite and chlorite alteration. Quartz typically constitutes 40% to 60% of the shear zones and is present as irregular lenses, knots, and recrystallized laths. Disseminated pyrite (<1%) is also commonly associated with gold-bearing horizons within the shear zones.

# 7.1.7 Quartz veins

Quartz veins anneal fractures that show little evidence of deformation or alteration. Commonly, the wall rocks exhibit a thin selvage of chlorite. The veins, particularly the gold-bearing ones, may contain <1% disseminated pyrite and traces of chalcopyrite or galena. The veins are seldom more than 20 cm wide but may be associated with an en echelon system of parallel veins.

## 7.1.8 Breccia Zone

Breccia zones vary in width from a few centimetres to approximately one metre and contain angular fragments of granodiorite.

### 7.1.9 Gossan (halos)

Isolated occurrences of gossan are found on the property. These areas typically contain gold, may or may not be silicified, and pyrite is typically the oxidizing mineral.

# **SUMMARY OF MINERALIZED ZONES**

(Modified after Power, 2016)

This section summarizes the economic mineralization located to date on the property. The Up Town Gold property contains eight principal showings documented in the NWT mineral showing database (NORMIN), and mineralization is described with reference to this framework. The location and principal features of the showings are illustrated in Figure 9. The showings are discussed in turn and include summaries of the results of the work described in this report.

#### 7.1.10 No. 1 Vein

The J Claims at the north end of Baker Lake were staked in 1963 and covered the Big Vein, the No. 1 showing and the J-7 Vein. The No. 1 Vein and the Big Vein are shown in Figure 10. The No. 1 showing is a vein exposed intermittently in outcrop near Baker Lake that trends north to Martin Lake, over a distance of approximately 400 metres (Taube and Byrne, 1963). The vein has a northward strike and dips moderately to the east. It consists of a central quartz vein, from less than 30 cm to 1.5 metres wide, with a wider alteration envelope up to 4 metres surrounding the vein. The vein material is described as mostly pyrite and specular hematite with intermittent and subordinate concentrations of galena, sphalerite, chalcopyrite, and rare visible gold. Gangue material is described as quartz and jasper. The alteration surrounding the vein in the adjacent granite is described as "brick red". Mineralization is strongest in the northern section of the vein, from 335 to 380 metres north of Baker Lake, where a shoot approximately 45 metres long was exposed in two blast trenches along the vein. In these trenches, the vein was sampled in a series of cross-cutting channel samples and returned assays of 17 to 49 g/t Au over sample widths of 0.45 to 0.70 metres (ibid). The NORMIN report (Showing 085JNE0048) asserts that the "No 1. averaged 1.78 oz./T Au (57.8 g/t Au) across 16 inches along 110 feet". In a summary of Taube and Byrne (1963) the author can find no evidence of this in the report or maps.

Schiller and Hornbook (1964) (cited in the NORMIN) report a drill intersection of 34.3 g/t over 0.7 metres in the No. 1 showing consisting of 70% quartz with minor chlorite and up to 1% pyrite in seams and pods. Drill logs in Byrne (1964) reported an assay of 13.03 g/t Au over 0.85 metres from Hole 104. This hole was drilled into the southern portion of the ore shoot near Martin Lake where the surface samples were highest and most consistent. Other holes drilled into the vein, both south and north of this location, returned assays of 0.69 g/t Au to 2.06 g/t Au (0.02 to 0.06 OPT) over 0.3 to 1.0 metre (Byrne, 1964).

In summary, the best mineralization documented to date at the No. 1 Vein consists of a 45-metre-long zone at the north end of the 400-metre long vein near Martin Lake. This area has returned irregular surface channel samples from 17 to 49 g/t Au over 0.45 to 0.70 metres, and one drill intersection beneath the surface mineralization reported 13.03 g/t Au over 0.85 metres.

Manson Creek Resources collected grab and chip samples at various locations along the No. 1 Vein in 2012. Results reported were 6.88 g/t Au over 0.45 metres from channel J1N, and 3.11 g/t Au over 2.9 metres from channel J1S.

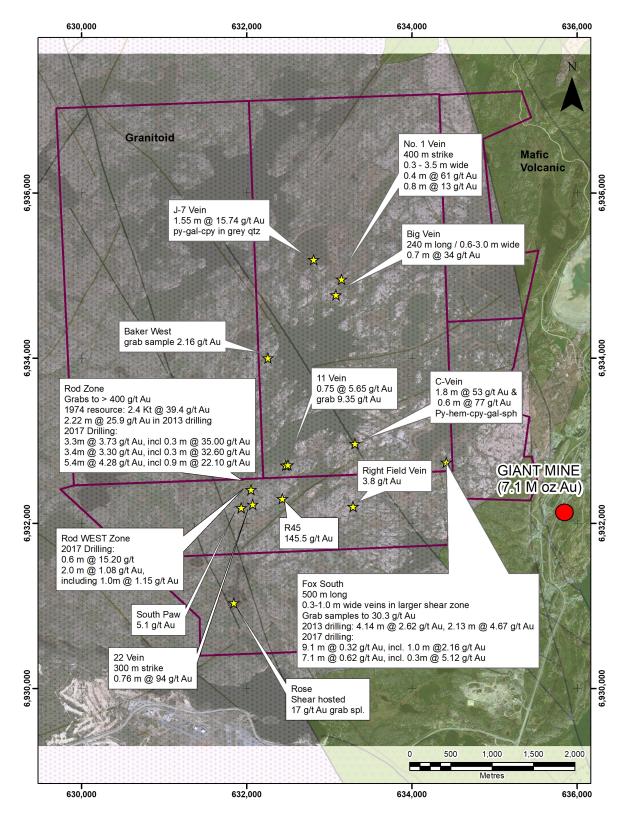


Figure 9. Up Town Gold property mineralized locations

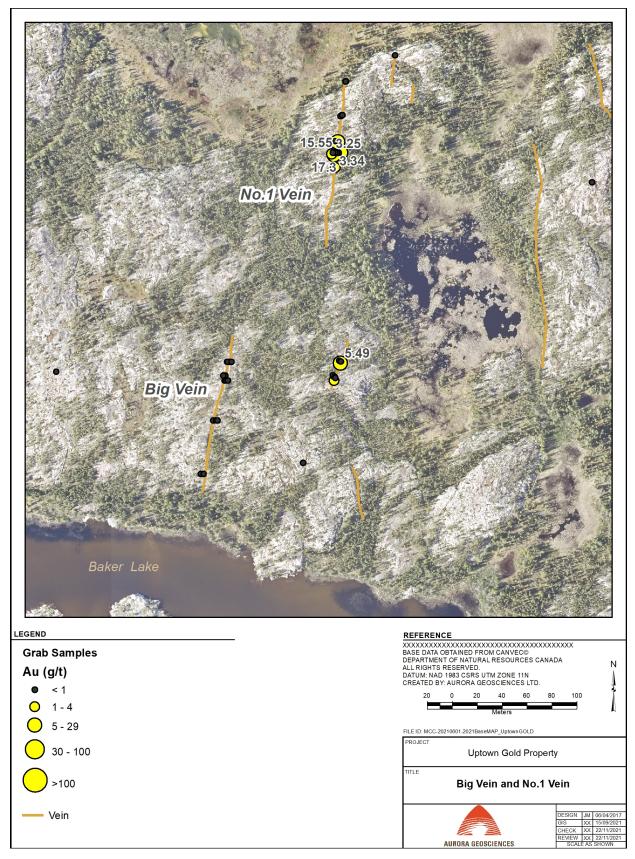


Figure 10. No.1 and Big Vein zone surface grab samples

## 7.1.11 Big Vein

The Big Vein is parallel to and 90 metres west of the No. 1 showing (Figure 10). It originates on the north shore of Baker and is exposed to the north over a strike length of approximately 200 metres, disappearing beneath muskeg at the north end. Taube and Byrne (1963) mapped the Big Vein as a shear zone hosted vein striking north and dipping to the east. The NORMIN report (Showing 085JNE0048) describes the vein as striking 010° dipping steeply to the east and exposed for 240 metres on strike. It also reports a 1963 drill intersection of 34.3 g/t over 0.7 metres, in 70% quartz containing minor chlorite, and up to 1% pyrite in seams and blobs. Best trenching results reported in Taube and Bryne (1963) were 4.46 g/t Au over 0.4 metres. There may be undocumented work on both the Big Vein and the No. 1 showing that was not filed for assessment as there are reports of activity on the claims for 1964 (Schiller, 1965) and 1965 (Thorpe, 1966).

#### 7.1.12 J7 Vein

The J-7 Vein outcrops 430 metres WNW of the north end of the No. 1 Vein on a rocky point on the south shore of a small lake named Ed Lake in Taube & Bryne (1963). The NORMIN database (085JNE0048) describes the vein as striking NE over 60 metres of exposed length and dipping steeply SE. There is another vein 240 metres north along strike on the north shore of Ed Lake. Schiller and Hornbrook (1964) describe the mineralization as follows: "Sugary, light grey quartz and minor interlayered ribbons of aplitic material constitute most of the vein. Minor pyrite, galena, and chalcopyrite were observed in two trenches in the north end of the vein." The J7 Vein was drill tested with four holes (93 metres) during early exploration which returned an intersection of 1.33 g/t over 1.77 metres (ibid). Subsequent sampling by Manson Creek in 2012 returned 7.99 g/t Au over 2.1 metres from a chip sample and 3.98 g/t Au over 6.3 metres (including 15.74 g/t Au over 1.55 metres) from a sawn channel sample (Wyllie, 2013). Holes drilled north and south of this mineralization failed to intersect material of similar tenor. The hole to the north returned samples up to 1.29 g/t Au over 2.27 metres.

## 7.1.13 C Vein

The C Group No. 13 Vein (aka C Vein) occurs on the north side of the Martin Fault in the southeast corner of Baker Lake. It is indicated as the 13 showing on the 1963 geology map in Taube and Bryne (1963). The only original documentation in the public domain known to the author is the summary of activity from Schiller (1965), where it describes the vein as being located northeast of the southeast-striking Martin Fault in a zone of post-mineralization brecciation. The vein is exposed on surface for about six metres but has been traced further to the north with drill holes. Schiller reports four holes were drilled in 1964 with two of these holes intersecting the vein. The reported intercepts were 6 feet at 1.55 oz./T Au and 15 oz./T Ag (53.1 g/t Au and 514 g/t Ag over 1.83 m) and 2.25 oz./T Au over 2 feet (77.14 g/t Au over 0.61 m). Drill hole collars for this drilling have not been located in this area and or not likely to be found. Manson Creek conducted additional exploration at the C Vein in 2012 (Wyllie, 2013). One of the chip samples (52726) returned a grade of 1.3 g/t Au over 0.4 m.

# 7.1.14 11 Vein

The 11 Vein is located on the south shore of Baker Lake, 450 metres NE of the Rod showing (Schiller, 1965) states that, "the vein has been traced for 200 feet and averages 2.5 feet wide. Parts of the vein contain lenses of high-grade material." Manson Creek chip sampled the 11 Vein in 2012 (chip C-7 – erroneously reported at the C-Vein in Wyllie 2013). This returned 5.65 g/t Au over 0.75 metres (Power, 2015).

### 7.1.15 22 Vein

The NORMIN summary for the 22 Vein (085JSE0050) asserts that it is located 550 metres WNW of the No. 15 or Rod Vein, but the maps in Taube and Byrne (1963) place it SE of the Rod Vein. Schiller (1965) reports that the vein is up to 300 metres long, strikes 050° and dips 45-50° SE. He further states that a mineralized portion of the vein was exposed over a strike length of 120 feet and that surface sampling indicated an average grade of 2.74 oz./T over 2.5 feet (94 g/t Au over 0.76 metres) over this interval. In 1964, the vein was tested with 16 drill holes (1,032 feet / 315 metres), but these failed to trace the mineralization to depth. Bittern Investments Ltd. bulk sampled the 22 Vein in 1997, collecting approximately two tons of selected material which returned an average grade of 10.34 g/t Au (Nickerson, 1997). A sample from north of the estimated location of the vein returned 37.2 g/t Au from a 0.2 metres chip sample across a shear (Power, 2015).

#### 7.1.16 Rose

The Rose showing is approximately 500 metres N of the north arm of Long Lake and 1,300 metres SSW of the Rod Zone. The date of discovery and staking are unknown, but work was filed in 1971 describing two blast trenches and the results of 5 grab samples, one of which returned 0.55 oz./T (18.9 g/t) Au (Fredericks and Rasmussen, 1971). Manson Creek collected a single grab sample from the area in 2012 which returned 31 ppb Au. The sample location is south of the reported Rose showing and was collected from material described as mafic volcanics with minor granites. The mineralized sample contained 2-5% pyrite and possible pyrrhotite and was collected from a location 100 metres south of the posted location of the Rose showing. The sample was not likely from the Rose 1 showing as the posted location is south of the claim from which the sample was taken (ibid).

#### 7.1.17 Fox South

The Fox South showing is located 1,100 metres W of the Brock Shaft at the Giant Mine. It is 600 metres W of the geologic contact between greenstones and granitic rocks on the new Ingraham Trail (Hwy 4) at approximate kilometre 3.5. The showing consists of gold mineralization extending over a length of 500 metres in a NNE-SSW trending shear/deformation zone (Fox South Shear Zone), in host granodiorite. The Fox South Shear Zone is approximately 70 metres wide and consists of numerous anastomosing, discontinuous and smaller shears, some of which are mineralized. The subordinate shears are up to tens of metres in length and composed of fractured and locally mylonitized granodiorite in subordinate shears with large blocks of undeformed rock between them. Mineralization occurs in limonite-stained altered granodiorite, quartz veinlets and minor quartz veins forming discontinuous subordinate shears within the larger shear zone. Mineralized material consists of strong limonite with lesser goethite and hematitestained and sheared granodiorite with quartz veins up to 30 cm wide but generally in veinlets a few cm wide. The quartz is notably smokey grey and semi-opaque in contrast to the more prevalent opaque white to occasionally glassy barren quartz veins in rocks surrounding the shear zone. The veins and altered granodiorite contain up to 5% rusty pyrite with rare specular hematite, galena, chalcopyrite and pyrrhotite. Sulphides occur in laminations parallel to foliation in concentrations up to 30%, and as disseminated crystals.

Fox South was the first showing discovered in granodiorite in the 1960's, and while some exploration was done here, the focus quickly shifted to the Baker and Martin Lakes area when the No. 1, Big and Rod Veins were discovered. The shear hosting the showing cuts three areas of outcrop with blast trenches excavated on each of these. During 2012 and 2013, Manson Creek Resources sawed 15 channel samples in some of the trenches and on bedrock near the trenches. In October 2013, North Sur Resources used a Winkie diamond drill to drill two drill holes into the northernmost outcrop of the zone.

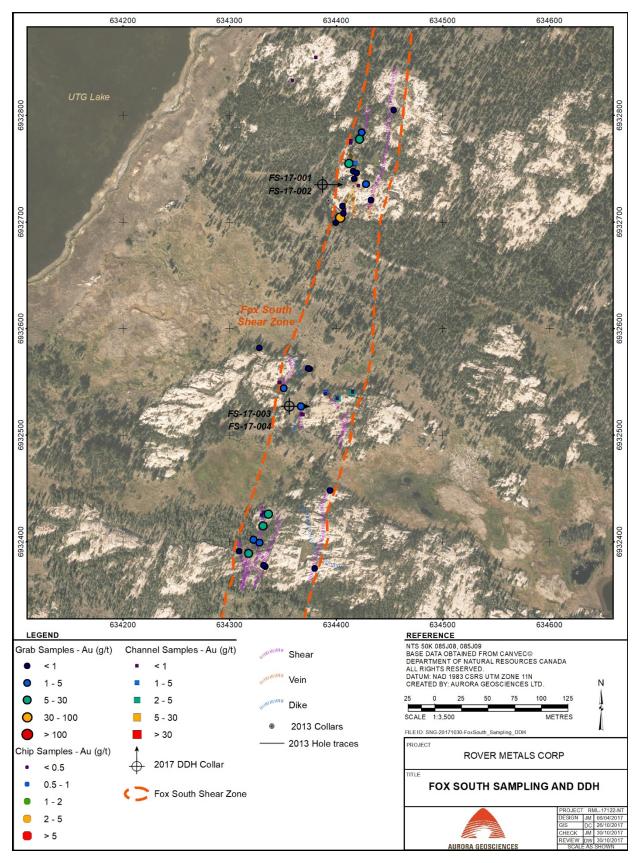


Figure 11. Surface grab samples and channel samples at the Fox South Zone

Figure 11 shows the location of grab, chip and channel samples collected in the Fox South showing area. Gold-bearing shears are predominantly in the western portion of the shear zone, where some of the highest-grade samples have been collected. At the north end of the shear zone, grab samples of 30.3 g/t Au and 17.8 g/t Au were collected in areas undercut by drill holes FS13-01 and FS13-02, respectively. Further south, at the south end of the shear zone, results included 12.1 g/t Au. Channel samples collected by Manson Creek returning more than 1.0 g/t Au are presented in Table 10.

Table 10. 2012 Fox South Zone channel sampling

Channel	Au (g/t)	Width (m)
FS-15	3.437	0.70
FS-09	2.200	1.10
FS-10	1.696	1.00
FS-03	1.113	2.50

Channels FS-09,10 and 15 were cut on the eastern side of the shear zone, midway along the span of known mineralization. Channel FS-03 was cut north of the 2013 drilling. The mineralization is not confined to the thin intervals reported above and is also present in sub-gram concentrations in the adjacent rock. As an example, channel FS-10 returned 0.65 g/t Au over 3.6 metres and FS-15 returned 0.58 g/t over 4.9 metres.

Two holes were drilled into the Fox South showing in 2013 and information on these holes is summarized in Table 11.

Table 11. 2013 Fox South diamond drill collars

Hole	UTME	UTMN	Elev (m)	Azimuth	Dip	Length (m)
13FS-01	634393	6932720	188	131	-45	28.04
13FS-02	634406	6932740	192	64	-45	28.14

The holes were designed to drill beneath historic blast trenches in the northern portion of the shear zone to try and relate intervals of mineralization at depth with those at surface. Results from these holes are summarized in Table 12.

Table 12. 2013 diamond drill assay results

Hole	From (m)	To (m)	Sample interval (m)	Au (g/t)
13FS-01	12.81	16.95	4.14	2.62
13FS-02	11.52	13.65	2.13	4.67

### 7.1.18 Rod Vein

The Rod Vein (NORMIN 085JSE0050) is located approximately 100 metres south of the tip of the SW arm of Baker Lake. The showing consists of a vein and weakly mineralized alteration halo measuring between 10 cm and 3.0 metres wide, striking roughly north-northeast, and dipping moderately toward the east. The vein has been delineated over a strike length of 100 metres (Figure 12) using mapping of surface exposures and diamond drilling. Vein material comprises a laminated quartz vein surrounded by strongly hematized and locally limonite altered granodiorite with thin quartz veinlets. Vein mineralization consists of pyrite, specular hematite and lesser galena, chalcopyrite, sphalerite, and rare visible gold within a gangue of quartz and minor chlorite. Vein margins and adjacent wall rock are strongly hematized to a brick-red colour and chlorite alteration is also present further from the vein margins. Alteration halos typically extend 1 to 2 metres from the vein margins. Both the vein and immediately adjacent wall rock carry gold, although the highest grades are returned from central vein material.

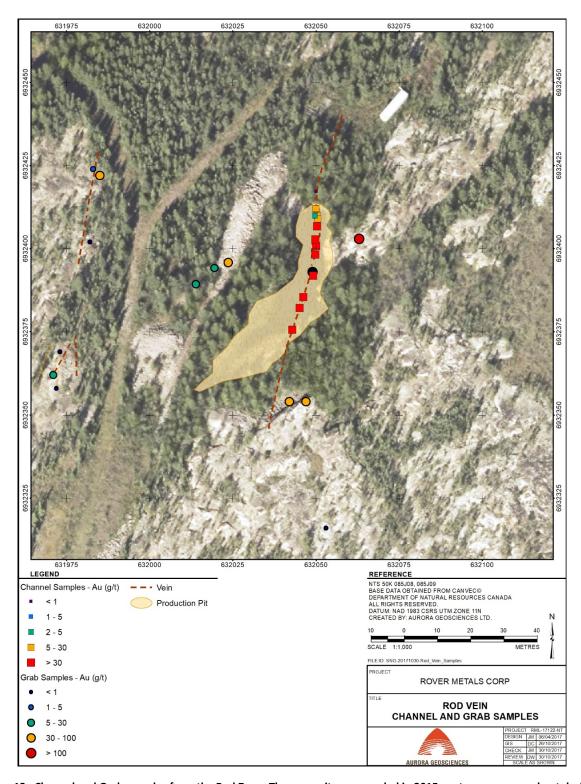


Figure 12. Channel and Grab samples from the Rod Zone. The open pit was sampled in 2015; water was pumped out during the Winkie drill program

The Rod Vein was extensively drilled to shallow depths with AX core in 1963 and 1964. During 1963, 12 holes (234 metres total) were targeted along the southern portion of the vein (Taube and Bryne, 1963). In 1964, an additional 57 holes (2,342 metres) were targeted into the vein defining an ore shoot reported to be 110 feet long at the 25-foot level and grading 1.36 oz./T Au (43.9 g/t Au) over an average width of 3.8 feet (Schiller, 1965). This work was never filed for assessment and the core at site is irretrievable. A few of the old hole plugs from this campaign are still visible showing the drilling apparently extends at least 20 metres north of the northern limit of existing drilling. Nickerson (1975) states that an unpublished report by Parker and McConnell (1964) defined a resource of 2000 T at 1.0 oz./T Au (32 g/t Au) based on the shallow drilling conducted during 1963 and 1964. The Rod Vein was estimated to have a resource of 930 tons grading 1.43 oz./T Au (46.2 g/t Au) using a mining width of 3.6 feet with an additional inferred resource of 1540 tons at 0.82 oz./T (26 g/t Au), over the same width. The data suggest that the mineralization may be controlled by shallow north raking ore shoots in the vein system. The data shown is not a complete section of the drilling on the Rod Vein but is confined to the southern portion of the vein. Investigations during 2015 have satisfied the author that the shallowest portion of this material was largely mined out during the 1979 operation. Nonetheless, it is a useful indication of the tenor, geometry, and lateral variability of both in the entire vein system.

Nickerson (1975) re-evaluated the historic workings of the No. 15 and 22 veins and calculated a resource of 2,626 tons grading 1.15 oz./T Au (37.1 g/t Au).

The historic Rod Zone resource estimate presented in Table 2 was prepared by Nickerson (1975). The resource uses categories defined in sections 1.2 of the National Instrument 43-101 Standards of Disclosure for Mineral Projects; however, all stated historical resource estimates are inferred as defined by the Canadian Institute of Mining, Metallurgy and Petroleum (CIM): "part of a Mineral Resource for which quantity and grade or quality can be estimated on the bases of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity". The Historical Estimates were not prepared by independent Qualified Persons, nor has any of the information contained therein been audited by an independent Qualified Person. The Historical Estimates do not conform to the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") standards of reporting pursuant to requirements under National Instrument 43-101. As a result, the author wishes to clarify that there are no mineral resources and no mineral reserves on the Up Town Gold property as defined under National Instrument 43-101. Furthermore, the resource presented by Nickerson (1975) is prior to the ore extraction efforts conducted in 1976 and 1979; the resource (Nickerson, 1975) has not been updated. The author has not independently confirmed the resource (Nickerson, 1975), or the volume of rock that was removed during the 1976 and 1979 operations.

## The issuer is not treating the historical estimate as current mineral resources or mineral reserves.

In August 1975, Nickerson extracted and stockpiled a bulk sample of approximately 2 tons of hand sorted ore grading 3.92 oz./T (134 g/t Au). A metallurgical report on umpire samples reported an average grade of 2.26 oz./T Au (72.9 g/t Au) and 99.07% gold recovery (MacPhail, 1976). In 1979, Knud Rasmussen conducted a high-grading operation on the property, excavating the exposed and shallow mineralization in the southern portion of the vein (Rasmussen, 1979). A total of 1,500 cubic yards (approximately 1,147 m³) of material was excavated to a depth of roughly 4.6 m and the ore was hand sorted to extract 12.125 tons (11.02 t). This material graded 1.65 oz./T Au (56.6 g/t Au). Results from four channel samples cut across mineralization exposed at the north end of the pit in 2015 are summarized in Table 13.

Table 13. 2015 Rod open pit channel sample assay summary

Channel	East83z11	North83z11	Width (m)	Au (g/t)	Ag (g/t)
RD-15-01	632050	6932412	1.2	10.36	8.8

RD-15-02	632050.2	6932411	1.2	17.27	14.1
RD-15-03	632050.4	6932410	0.5	16.35	34.7
RD-15-04	632050.6	6932409	1.2	10.19	16

High grade grab samples collected from the base of the pit during 2015 returned grades as high as 318 g/t Au (Sample N841870).

The 1979 report by Rasmussen contains a map of the location of the excavation showing the work being south of a series of trenches in bedrock. Investigations in 2015 determined that the pit was initiated in bedrock exposure at the southern series of trenches and these workings has eliminated these trenches. The northern end of the pit abuts a covered area with one shallow trench in overburden to the north. It has not been possible to conclusively locate any of the 1963 drill holes for which locations are known relative to the vein as originally mapped. It is unclear how much of the material originally identified by Nickerson remains in place.

A total of five diamond drill holes completed in 2013 and 2015 by North Sur Resources Ltd. and Panarc Resources Ltd., respectively, are tabulated in Table 14.

Table 14. Summary of Rod Zone drill collars completed in 2013 and 2015

Hole	UTME	UTMN	Elev (m)	Azim	Dip	TD (m)
13RD-01	632057.9	6932404.9	174	290	-60	27.96
13RD-02	632069.8	6932432.1	173	290	-50	27.69
15RD-02	632059.4	6932411.0	173	284	-73	15.60
15RD-03	632060.8	6932420.8	172	284	-63	19.96
15RD-04	632075.3	6932437.4	172	281	-45	34.06

Significant assay results from these holes are shown in Table 15.

Table 15. Significant results of 2013 and 2015 diamond drilling in the Rod Zone

Hole	From (m)	To (m)	Sample Interval (m)	Au (g/t)
13RD-01	No			
13RD-02	15.61	17.83	2.22	27.47
15RD-02	12	14.5	2.5	2.23
15RD-03	10.16	12	1.84	7.91
15RD-04	16.46	16.85	0.39	2.88

The recent drilling has demonstrated that the vein continues north of the current limits of the production pit and that high-grade material occurs here (Hole 13RD-02: 2.22 metres @ 27.47 g/t Au; reported sample interval). It appears from the historical record, and from the lack of any conventional diameter diamond drill holes found on site, that the vein was only drilled to a very shallow depth. The vein dips to the east at a moderate angle suggesting that it may be formed within a reverse fault. In this deformational setting, shallow dipping to flat-lying ore shoots would be expected with intervening barren sections.

### 8 DEPOSIT TYPES

Mineralization style, at the Up Town Gold property, is described as Archean granitoid hosted lode gold (Wyllie, 2013). This is a variant of Archean lode gold deposits described by Roberts (1987), differing from other Archean lode gold deposits only insofar as they are hosted in granitic to granitoid rocks adjacent

to volcano-sedimentary greenstone belts. Traditionally, gold exploration in Archean terranes focused almost exclusively within volcano-sedimentary greenstone belts, seeking structurally-controlled mesothermal lode-gold deposits. Adjacent granitoid rocks were largely ignored as hosts for gold mineralization. Despite this, several significant lode-gold deposits have been found in Archean granitic rocks. There is a growing awareness that this type of mineralization may constitute a separate deposit sub-class. These targets share the following characteristics:

- Mesothermal (high temperature hydrothermal),
- Structurally controlled (generally within faults, shear zones, breccias and damage zones), and
- Hosted by Archean granitic to granodioritic rocks adjacent to greenstone belts.

Examples of these deposits include Granny Smith and Woodcutters Goldfields (Australia); Buzwagi and Mara (Tanzania); and Renabie, Hammond Reef and Cote Lake (Canada).

Table 16. Comparison of several granitoid hosted lode gold deposits

Deposit	Host rocks	Distance from greenstones	Mineralization mechanism	Alteration
			Structurally	
			controlled,	
		Adjacent to	mesothermal lode-	
Buzwagi	Granitic rocks	greenstones	gold	unknown
			Structurally	
			controlled,	
		2 km from	mesothermal lode-	
Mara	Granite	greenstones	gold	unknown
			Structurally	
			controlled,	
Granny		Adjacent to	mesothermal lode-	
Smith	Granodiorite	metasediments	gold	unknown
			Structurally	
			controlled,	
Wood-		6 km from	mesothermal lode-	Distal epidote - proximal
cutters	Granodiorite	greenstones	gold	musc-bt
			Structurally	Proximal sericite to
		2 to 4 km from	controlled,	sericite- chlorite
Hammond	Granodiorite -	greenstone belt	mesothermal lode-	selvages around quartz
Reef	trondhjemite	rocks	gold	veins.
	Trondhjemite			
	breccias in	2 km from	Mesothermal lode	Chlorite- feldspar-
Cote Lake	gabbroid rocks	greenstones	Au in breccias	biotite and hematite.

It has long been recognized that Archean lode gold deposits are clustered around deep crustal fault systems. Geochemical evidence and ore deposit studies indicate that gold in these mineralizing systems is carried by sulphide complexes in metamorphic fluids derived from partial melting of mantle or lower crustal rocks. The deep-seated faults serve as conduits, which tap fluid reservoirs, and allow the gold-bearing fluids to rise to the general level of the brittle-ductile transition where they are deposited as veins in second and third order structures associated with the master faults and shears (Robert and Poulsen, 2001). Reverse faults seem to be preferred hosts for Archean lode gold deposits.

Mineralization at the Up Town Gold property is likely an in-board component of the system which led to the deposition of the Con and Giant deposits (Power 2016). The vein arrays on the Up Town Gold property

strike parallel to mineralized veins and shears in the adjoining Yellowknife Greenstone Belt. They are spatially associated with the greenstone belt structures and conceptually could be part of the same mineralizing system. The style of mineralization at the Up Town Gold property – laminated quartz veins and mineralized shear zones – is similar to that found at the Con and Giant Mines. The presence of these structures, in the pre-mineralization Defeat Suite Group intrusive rocks, is compatible with the tectonic history of the belt. Pre- or syn-D2 plutonism was followed by compression, regional metamorphism and post-peak mineralization (Siddorn, 2011). Compression during this event resulted in east verging deformation and eastward overturning of greenstone belt stratigraphy (Henderson and Brown 1966). Deep- seated faults were likely a component of the deformation preceding mineralization (Siddorn, 2011). Figure 13 shows a conceptual model for mineralization at the Up Town Gold property, integrating these features.

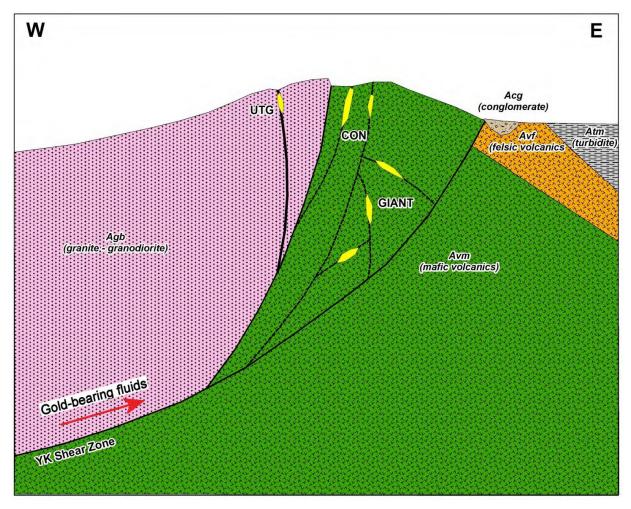


Figure 13. Conceptual model for Archean lode gold mineralization - Yellowknife Greenstone Belt (modified after Power, 2016)

## 9 EXPLORATION

## 2020

Total field magnetic (TFM), very low frequency electromagnetic (VLF), and induced polarization (IP) surveys were completed at the No.1 Vein and Big Vein showings between November 18<sup>th</sup> and December 07<sup>th</sup> of 2020.

The IP survey was completed between November 18<sup>th</sup> and 28<sup>th</sup> (Epp, 2020). Operations were based out of Yellowknife, and the survey grid was accessed by snowmachine. A total of 3.9 line-kms (Figure 14) was surveyed with 12.5 m dipole lengths and a receiver array length of 62.5 m.

The TFM and VLF surveys were conducted from November 30<sup>th</sup> to December 7<sup>th</sup> (Epp, 2020). A total of 34 line-kms was surveyed (Figure 15).

# 9.1.1 Total Magnetic Field Survey Results

The results of the continuous total field magnetic survey are presented in a map of gridded total magnetic intensity (TMI) reduced to pole (RTP) with known quartz vein and gold occurrences overlain (Figure 16). Similar to the airborne magnetic survey completed in 2016, the gridded TMI RTP data show a relatively quiet magnetic background with a NW to SE slightly negative background trend.

The western edge of the grid is dominated by a prominent magnetic high lineament striking NNE-SSW (azimuth 015°) with an amplitude of roughly 100 nT. This feature is interpreted to be a mafic dyke. There is a distinct dextral offset in the dyke between line 5300 N and 5400 N marked as X. This offset is consistent with a NW-SE striking break in the magnetic data that transects the survey grid (lineament A). North of line 5700 N, the linear magnetic high increases in size and may coincide with another magnetic lineament striking NE-SE (azimuth 060°) marked as Y.

Magnetic low lineaments, each comprising a separate strike direction, are marked with a dashed black line and labelled A through D in Figure 16. Lineament A strikes NW-SE bearing roughly 130°, lineament B strikes N-S bearing roughly 005°, lineament C strikes NNW-SSE bearing roughly 160°, and lineament D strikes NE-SW bearing roughly 050°.

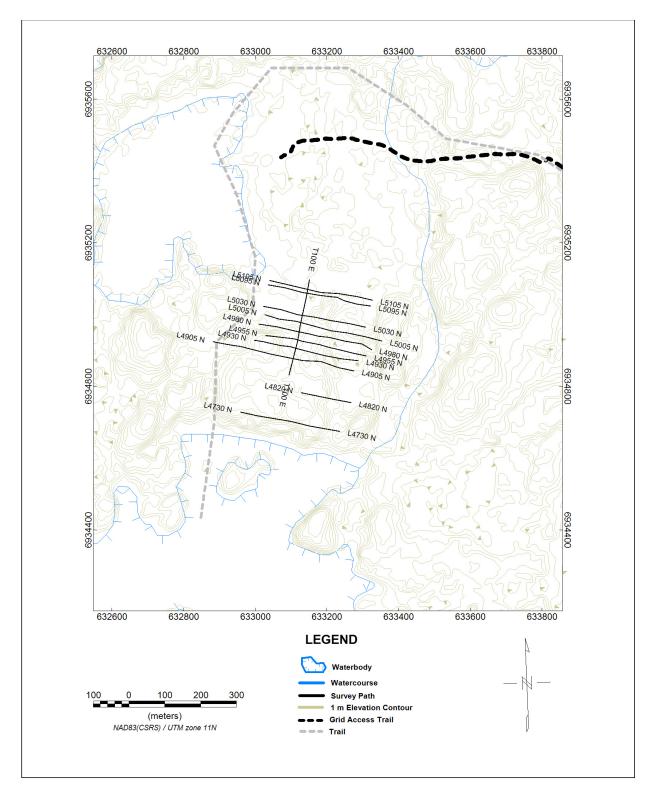


Figure 14. 2020 IP survey grid

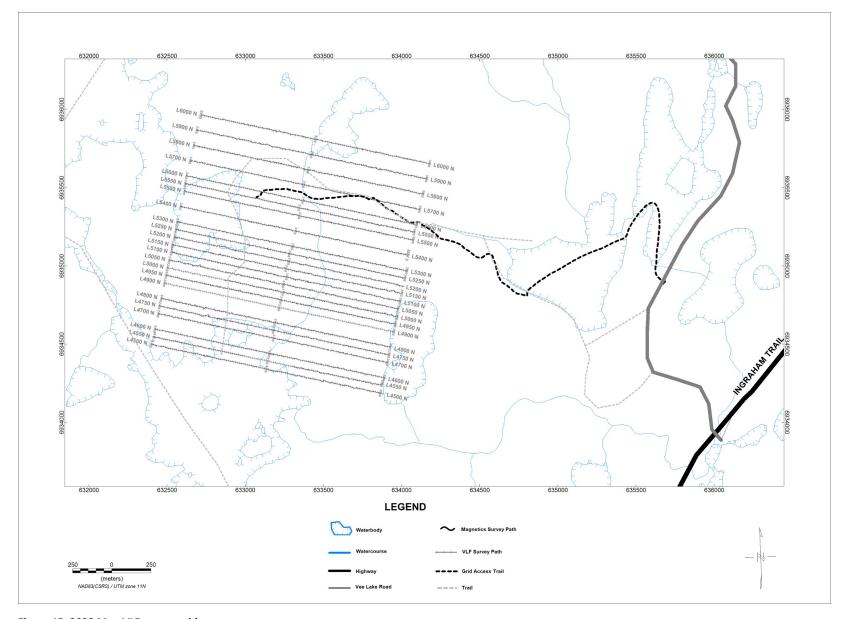


Figure 15. 2020 Mag-VLF survey grid

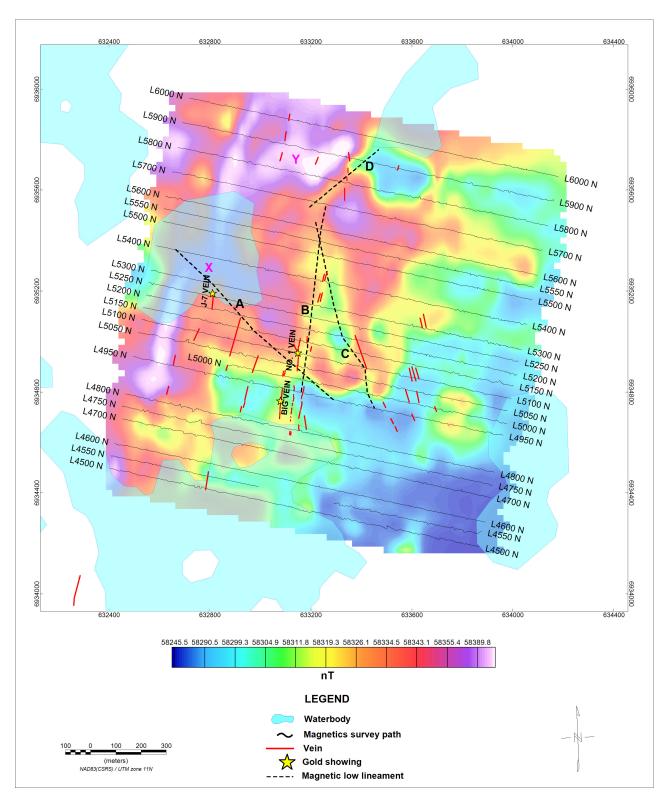


Figure 16. Gridded image of total magnetic intensity reduced to pole and lineament interpretation.

## 9.1.1.1 Magnetic Survey Discussion

Interpretation of the magnetic data in the context of delineating prospective drill targets within the survey area is based on the following set of criteria:

- Target mineralization emplacement is structurally controlled.
- Structural zones mark areas with a higher potential for fluid flow and target mineral emplacement.
- Target structure is associated with magnetic breaks/lows.

Lineament A in Figure 16 shows a dextral offset in the magnetic data and, along the strike of the lineament, is consistent with a change from dominantly magnetic low response in the south to magnetically high response in the north. The lineament is also spatially associated with the transition from outcrop to swamp from south to north, respectively. The mapped vein density is greater to the south of Lineament A and is likely a function of bedrock exposure. Lineament B shares a N/S strike with the bulk of the mapped quartz veins and is proximal to the No.1 Vein and Big Vein showings. Veins in the area of Lineament B do not appear to show an offset along Lineament A, however. Due to the limited bedrock exposure, none of the veins have been mapped to cross the linear. Lineament C trends NNW and intersects lineament B at the north end of the survey grid. Lineament C is interpreted to be constrained to the east of Lineament B. Its NNW strike is consistent with the mapped quartz veins and topographic lineaments located east of Lineament B and may be indicative of the dominant structural fabric in this area. Lineament D is mapped between lines 5700 N and 6000N, however, it may strike across the survey grid as far as Lineament A based on their proximity and orientation. Lineament D is spatially associated with a small bay in a lake located north of line 5900 N and may support dextral offset in the structure at this location.

### 9.1.2 VLF-EM Survey Results

VLF-EM data was collected for three stations: 24.8 kHz for Jim Creek, Washingtion (NLK), 25.2 kHz for La Moure, North Dakota (NML), and 24.0 kHz for Culter, Maine (NAA).

An examination of the Fraser filtered in-phase profiles for each frequency shows the following common trends:

- A lineament of high amplitude positive peaks directly correlates to the powerlines intersecting grid lines between 5400 N to 6000 N in the northeast section of the grid.
- Anomalous Fraser filtered peaks correlate spatially with areas of overburden cover flanked by outcrop and around bog edges.
- The Fraser filtered response is relatively flat on top of outcrop areas.

### 9.1.2.1 VLF Survey Discussion

Interpretation of the VLF results is based on the NLK measured data along with the following set of criteria:

- Target conductors are consistent with vertical conductor models (i.e. clay and/or water saturated shear structures or metallic mineralized veins).
- Target conductors will generate a cross-over or inflection point in the measured in-phase and out-of-phase profile.
- Target conductor source will spatially coincide along the survey profile with the in-phase/out-of-phase cross-over position.

- Positive peaks of Fraser filtered in-phase data coincide with the in-phase cross-over, and therefore map the locations of the conductive source.
- The ratio of in-phase to out-of-phase response provides a measure of target conductivity.
- The polarity of the in-phase response relative to the out-of-phase response reflects overburden conductivity.

An examination of the Fraser filtered profiles with the mapped veins and corresponding gold showings does not show any obvious direct spatial correlation with any peaks (Figure 17).

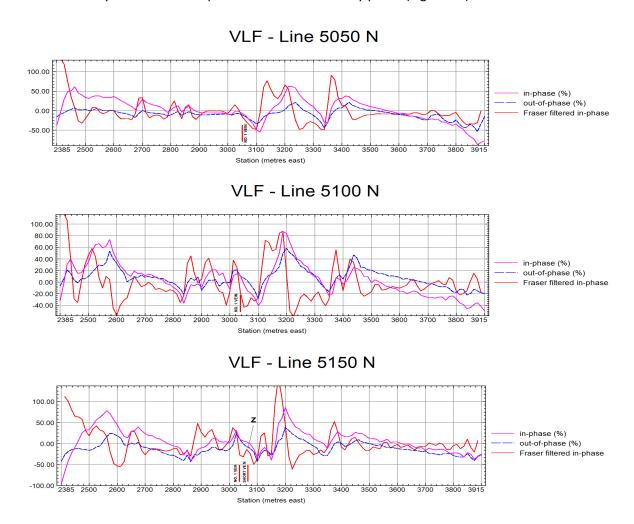


Figure 17. 24.8 kHz VLF Fraser filtered in-phase, in-phase and out-of-phase profiles for lines 5050 N, 5100 N, and 5150 N. Location of No. 1 Vein and the Big Vein intersection of survey profile is marked as red line and labelled.

The conductive VLF responses measured within the survey area primarily correlate with the edges of overburden coverage flanked by outcrop and over bogs or at bog edges. An examination of the magnetic based structural interpretation with Fraser filtered profile data show a reasonable spatial correlation between Fraser filtered peaks and interpreted structural lineaments (magnetic low linear

features/offsets). There are relatively close spatial correlations observed between magnetic inferred structural lineaments B and C and measured VLF conductivity trends; however, this trend also correlates with overburden and topographic trends and makes it hard to distinguish whether the VLF response is due to physiographic noise or a mineralized structure.

The VLF method is normally suitable for a wide range of conductivities unless the target structure is too low in metallic mineralization, lacks sufficient spatial extent, or lacks the clay/water saturation commonly associated with shear structure to provide a suitable conductivity for a VLF response. The known areas of veining and mineralization intersected by the VLF survey do not specifically generate a conductive VLF response (Figure 18).

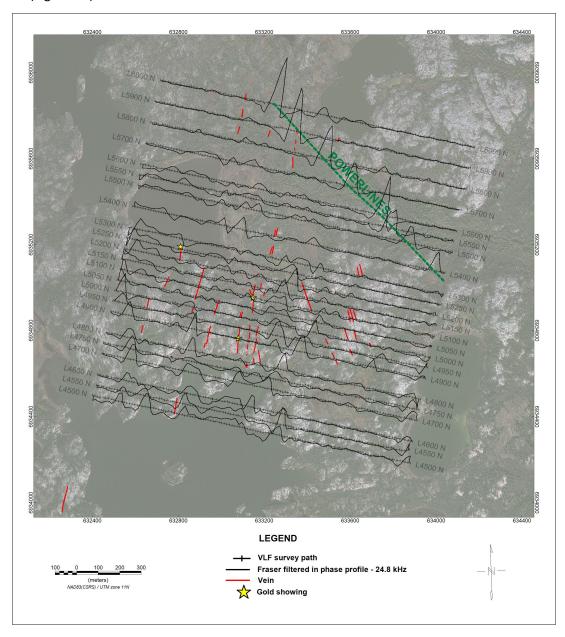


Figure 18. Grid map of Fraser filtered in-phase VLF profiles at 24.8 kHz (NLK) with results of a geological surface analysis integrated.

#### 9.1.2.2 IP Survey Results

3D modelling of the 2D IP and resistivity data is performed using Geosoft's VOXI IP and resistivity software. This software follows a two-step process. Primary voltage readings are first inverted to determine a resistivity model. This model is then used as a constraint along with the measured chargeability data to recover a chargeability model.

Model mesh parameters are determined according to the electrode array geometry and line spacing. The IP survey utilized 12.5 m dipoles and 25 m line spacing over the core survey area allowing for the receiver electrodes to be discretized by 12.5 m cells horizontally and 12.5 m cells vertically. Five additional horizontal and vertical padding cells, each with a cell expansion ratio of 1.5, are added to the mesh prior to inversion; these cells are stripped from all products attached to this report. Topography is accounted for using the Arctic digital elevation model obtained through and references orthometric heights using the CGVD2013 vertical datum.

Horizontal slices of the resistivity and chargeability 3D voxels at depths of -12 m, -25 m, and 37 m are presented in Figure 19. Modeled resistivity and chargeability results south of line 4905 N should be attributed with low confidence due to extensive gaps in survey coverage.

Low resistivity areas range from dark to light purple, moderate resistivity areas range from orange to yellow, and high resistivity areas range from light blue to white. Overall, model resistivity values range from 100 ohm\*m to 150,000 ohm\*m.

In general, the low resistivity data correlate spatially with topographic lows associated with swamp/bog and thicker overburden cover, comprised of model resistivities ranging from 300-900 ohm\*m. Moderate resistivity areas generally correlate spatially with areas of relatively thin to moderate overburden cover proximal to outcrop, comprised of the 1000-10,000 ohm\*m range of model resistivities. High resistivity areas correlate spatially with outcrop and very thin overburden cover, generally comprised of model resistivities greater than 20,000 ohm\*m.

Chargeability areas on the low end of the scale range from dark blue to light blue. Moderate chargeability areas range from green to orange. Chargeability high values range from red to magenta. Overall, model chargeability values range from 0.4 to 5.6 mV/V.

The chargeability model exhibits a small range of weakly varying values that share a similar spatial correlation to the terrain as the resistivity model (Figure 19). Low to moderate chargeability areas correspond primarily with topographic lows associated with swamp/bog and thicker overburden cover, and show model chargeability values ranging from less than 1 to 2 mV/V. Moderate to high chargeability areas correspond with more thinly covered overburden areas and outcrop, comprised primarily of chargeability values ranging from 2 to 4 mV/V

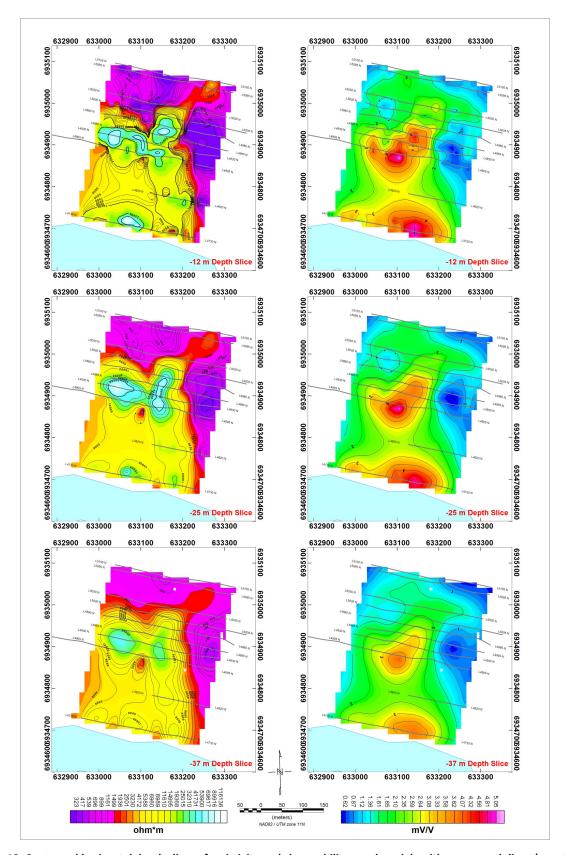


Figure 19. Contoured horizontal depth slices of resistivity and chargeability voxel models with survey path lines (grey traces) overlain

The following chargeability and resistivity structure constitute geophysical criteria associated with mineral emplacement potential:

- Anomalous resistivity lows/breaks associated with mineralized/water or clay-filled shear structure.
- Anomalous resistivity highs coinciding with chargeability highs consistent with disseminated metallic minerals associated with silicification.
- Correlation of anomalous resistivity and/or chargeability responses with known vein and gold occurrences.

There are four prominent resistivity high areas of the model marked as features A, B, C, and D in Figure 20. Features A and B are intersected by lines 4905 N and 4930 N, feature C is intersected by line 4730 N, and feature D is to the north of line 4955 N. Feature A is elongated east-west and B appears to be part of a relatively narrow N-S elongated resistivity high feature extending up to feature D. Features A and B are separated by a narrow N-S striking resistivity low (marked by a dashed grey line) that ultimately smooths over with depth in the model.

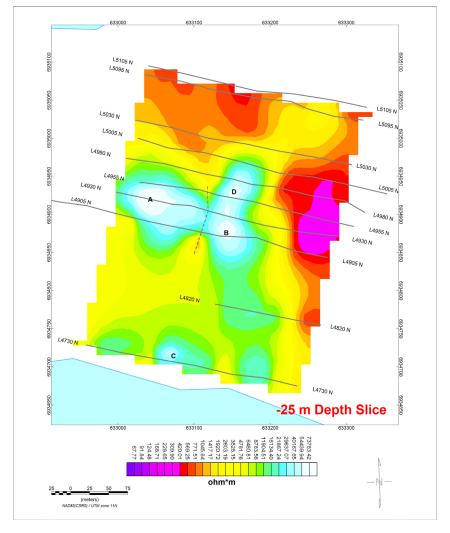


Figure 20. Horizontal depth slice of model resistivity voxel at -25 m. Survey path lines are grey traces.

There are four slightly elevated chargeability features observed in the -12 m chargeability depth slice marked as Y, Z, T, and U in Figure 21. Feature Y is located slightly off-line of line 4905 N. Features Z and T are located slightly off survey lines 4955 N and 4930 N, respectively. Feature U directly coincides with line 4730 N and is within a broad, approximately 50 m wide, elevated chargeability response extending along the survey profile.

Feature Y is the strongest chargeability. It has a peak chargeability value of approximately 5.2 mV/V is approximately 25 m wide. Feature T is comprised of a narrow N-S linear chargeability extension of feature Y that terminates at line 4930 N. It is only observed in the shallow portion of the chargeability model at the -12 m depth slice. The rest of the chargeability features tend to smooth out with model depth.

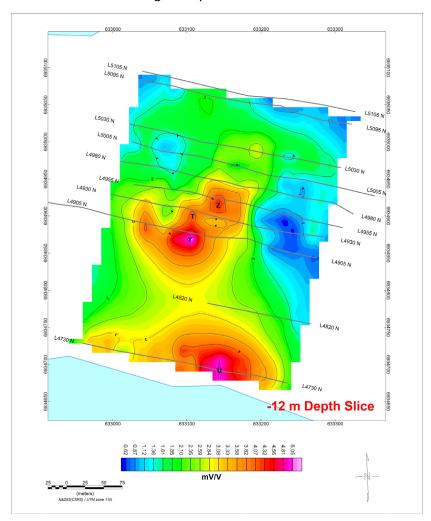


Figure 21. Horizontal depth slice of model chargeability voxel at -12 m. Survey path lines are grey traces.

There is no direct spatial correlation observed between the peak resistivity high features A, B, C, and D and chargeability high features Y, Z, T and U (Figure 22). However, in the resistivity depth slice at -12 m there is a narrow N-S resistivity lineament modelled between lines 4930 N and 4905 N that coincides with chargeability features Y and T outlined by the ellipse in Figure 22.

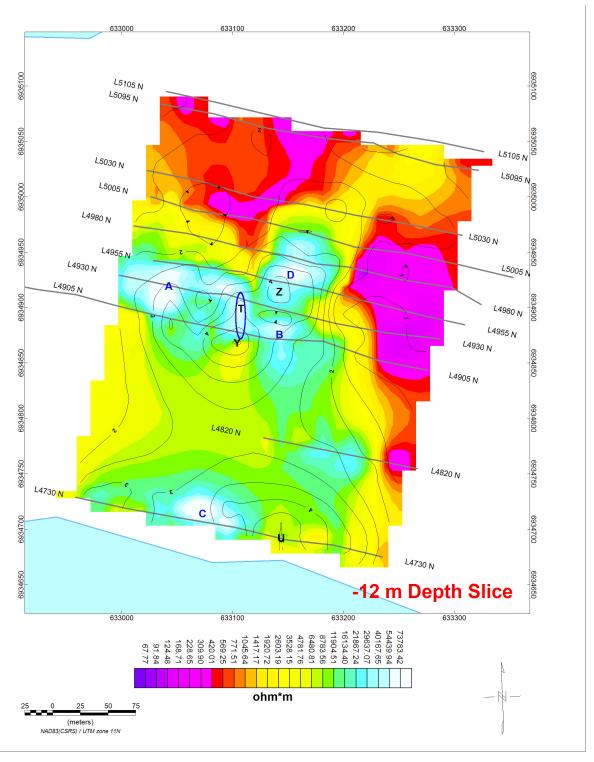


Figure 22. Horizontal depth slice of model resistivity voxel at -12 m with chargeability contours of corresponding chargeability model depth slice overlain. Survey path lines are grey traces.

Known quartz vein and gold occurrences along with the ground magnetics-based structural interpretation show a moderate spatial correlation with resistivity and chargeability features (Figure 23). There is no chargeability anomaly coinciding with the No. 1 Vein gold showing (labelled and marked as a gold star), however, chargeability feature Z coincides with part of the No. 1 Vein south of the gold showing. Close spatial correlation is observed between the N-S resistivity trend defined between resistivity features B and D and the No. 1 Vein. Line 4905 N intersects a mapped pair of short quartz veins proximal to chargeability features Y and T that coincide with the shallow resistivity high lineament. On line 4730 N, resistivity anomaly C overlaps the south end of the Big Vein, but no coinciding chargeability anomalies. East of the Big Vein on line 4730 N, the broad chargeability anomaly U coincides with a couple of quartz veins and structural lineament B.

## 9.1.2.3 IP Survey Discussion

There is an important spatial correlation observed between the N-S linear resistivity high trend between resistivity features B and D, the mapped No. 1 quartz vein, and the magnetically-inferred structural Lineament B. A partial overlap of this trend with chargeability feature Z, slightly offset from the intersection of L4955 N, satisfies the model for mineral emplacement potential (Target Area 1; Figure 23)

A similar correlation between linear chargeability feature T and a resistivity high trend between lines 4905 N and 4930 N is observed in near surface data. There is no coinciding magnetically inferred structure, however, there is a mapped pair of short quartz veins intersecting line 4905 N that are proximal to chargeability feature Y. The lack of structure indicated by the geophysics partially mitigates this targets potential for mineral emplacement. Another mitigating factor is the lack of continuity of the N-S linear resistivity and chargeability trend with depth in the models. None the less, these data are anomalous and require additional investigation. This area is outlined by a dashed circle and designated Target Area 2 in Figure 23.

Though chargeability feature U is one of the more prominent chargeability features, and it shows spatial correlation with known quartz vein occurrences, it is a single line anomaly that lies in a poorly constrained area of the model due to a lack of data.

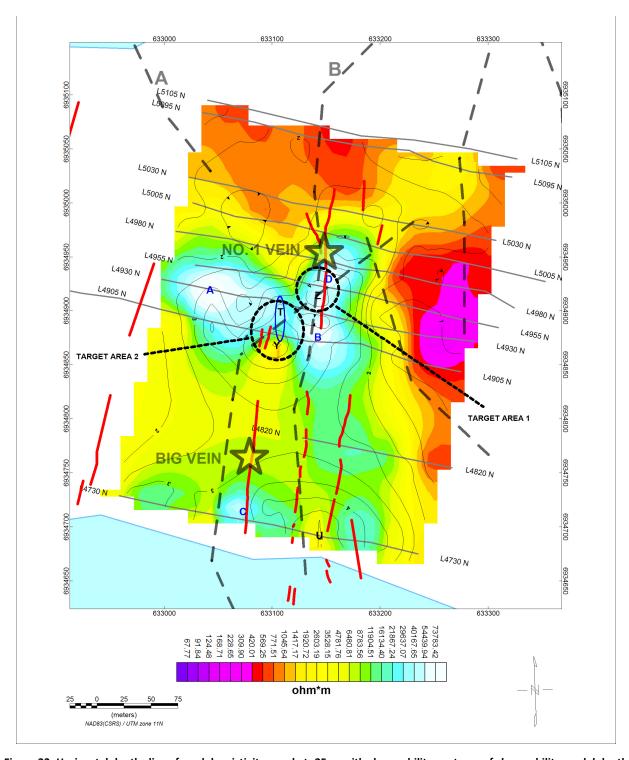


Figure 23. Horizontal depth slice of model resistivity voxel at -25 m with chargeability contours of chargeability model depth slice at -12 m overlain. Survey path lines are grey traces. Known vein and gold occurrences are indicated by red traces and the magnetic structural interpretation is marked by semi-transparent dashed black lines with primary structures labelled A and B in black text. Interpreted target areas are indicated by black dashed circles.

## 2021

An airborne LiDAR survey was completed during the summer of 2021. Eagle Mapping Ltd. was contacted to coordinate the survey and process the results. The entire Up Town property was flown on June 17<sup>th</sup>, 2021. Survey data was used to enhance the structural interpretation the property and identify new areas that may host silicified shear zones. Interpretation of survey data was in progress at the time of report preparation. A preliminary map and shear zone interpretation is included in Figure 24.

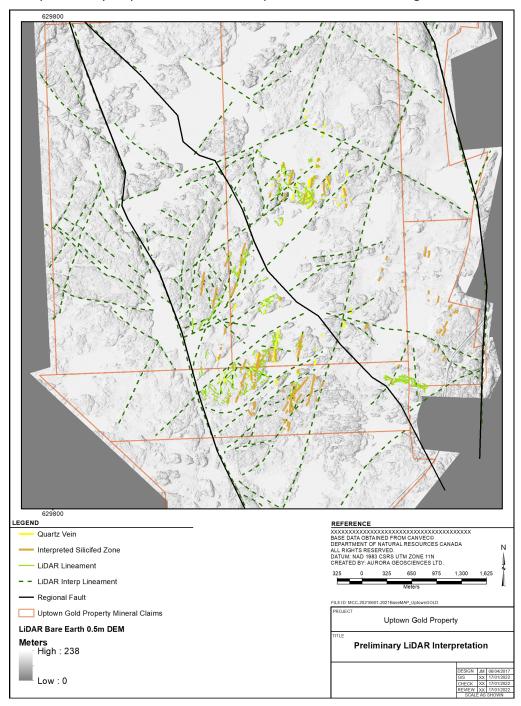


Figure 24. Preliminary Lineament Analysis of 2021 LiDAR survey data

## **LEGAL LEASE SURVEY**

Melius Capital Corp contracted Sub-Arctic Geomatics of Yellowknife to complete a Legal Survey of mineral claims K15962 and K15963. The survey was completed in August of 2021 and submitted to the Mining Recorder's Office (MRO) September 9<sup>th</sup>, 2021. The two Mining Leases will be held in good standing by way of an annual lease payment equal to \$2.50 CDN/Ha for the duration of the lease term, or until the leases are cancelled.

At the time of report preparation, the Lease application was still under review by the MRO.

## 10 DRILLING

In 2021, Melius Capital Corp contracted Aurora Geosciences Ltd. of Yellowknife to manage a diamond drill program at the Up Town Gold property. A total of 976 metres were drilled in 20 holes that were completed between October 5<sup>th</sup> and October 31<sup>st</sup>, 2021. Several areas on the property known to contain mineralized showings were drill-tested during the program. Areas tested included Fox South, No.1 zone, J7, No. 22 Vein, Baker West and R45 showings.

Drill core with a diameter of 4.75 cm was drilled for all holes. The drill core was logged, split, and sampled in Yellowknife at Aurora's warehouse. A total of 224 core samples and 16 QA/QC samples were submitted to ALS Laboratories in Yellowknife for processing. Drill core sample analyses were not available at the time of report preparation.

A summary of the drill collars completed in 2021 is presented in Table 17 and Figure 25. Plan maps for the individual zones drilled in 2021 are presented in Appendix I. Geologic drill sections for drill holes completed in 2021 are presented in Appendix II.

Table 17. Drill Program Collar Summary for 2021 drill program

DDH#	UTM_E	UTM_N	NAD 83 Zone	Total Depth	Azimuth	Dip	Zone
UTG-21-001	634302	6932412	11	58	086	-44.5	Fox South
UTG-21-002	634302	6932412	11	62	086	-68	Fox South
UTG-21-003	634302	6932412	11	38	136	-45	Fox South
UTG-21-004	634302	6932412	11	50	136	-60	Fox South
UTG-21-005	633194	6934957	11	44	320	-45	No. 1 Zone
UTG-21-006	633194	6934957	11	32	320	-65	No. 1 Zone
UTG-21-007	633194	6934957	11	25	294	-45	No. 1 Zone
UTG-21-008	633194	6934957	11	32	294	-65	No. 1 Zone
UTG-21-009	633165	6934787	11	46	073	-45	No. 1 Zone
UTG-21-010	633165	6934787	11	71	074	-58	No. 1 Zone
UTG-21-011	632801	6935182	11	35	052	-45	J7
UTG-21-012	632801	6935182	11	88	052	-55	J7
UTG-21-013	632801	6935182	11	95	024	-45	J7
UTG-21-014	632235	6933911	11	55	073	-45	Baker West
UTG-21-015	632235	6933911	11	92	074	-55	Baker West
UTG-21-016	632448	6932330	11	31	268	-45	R45
UTG-21-017	632448	6932330	11	34	295	-45	R45
UTG-21-018	632084	6932215	11	32	309	-45	22 Vein
UTG-21-019	632084	6932215	11	26	309	-65	22 Vein
UTG-21-020	632084	6932215	11	30	308	-80	22 Vein

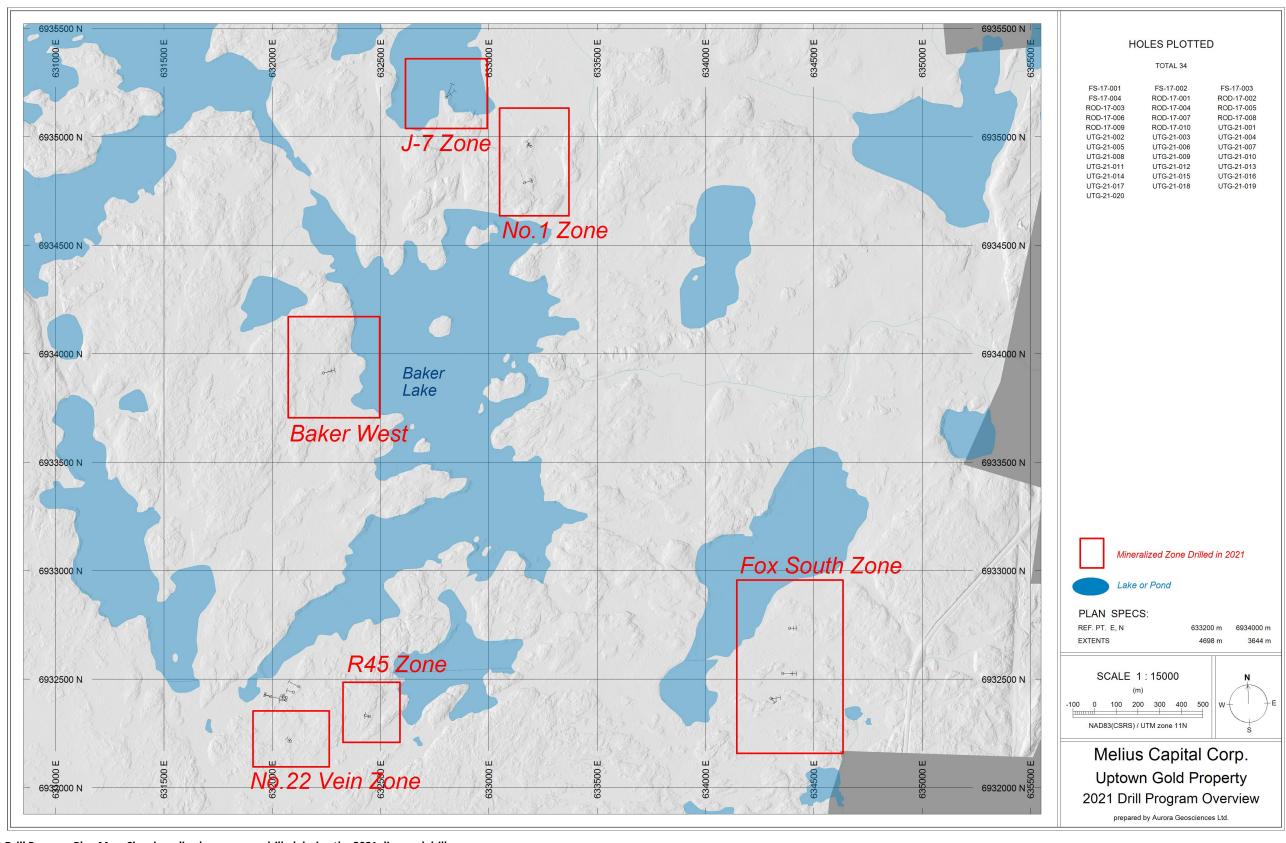


Figure 25. 2021 Drill Program Plan Map. Six mineralized zones were drilled during the 2021 diamond drill program.

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#### **FOX SOUTH ZONE**

At the Fox South zone, drill collars were selected to test the southern extension of the shear zone-hosted mineralization intersected during the 2017 drill program. A total of four holes were drilled from one setup location for a total of 208 metres (Table 18).

Table 18. Fox South 2021 Drilling Summary

DDH#	UTM_E	UTM_N	NAD 83 Zone	Total Depth	Azimuth	Dip	Zone
UTG-21-001	634302	6932412	11	58	086	-44.5	Fox South
UTG-21-002	634302	6932412	11	62	086	-68	Fox South
UTG-21-003	634302	6932412	11	38	136	-45	Fox South
UTG-21-004	634302	6932412	11	50	136	-60	Fox South

UTG-21-001 and -002 were collared at an azimuth of 086° (dipping 44.5°) and 086° (dipping 68°), respectively. These holes consist of a mottled black, white, and grey granodiorite with zones of sericite and hematite alteration that halo the sheared and silicified intervals. The hematite alteration is generally weak to moderate, giving the matrix a medium red/pink tint. Rare intervals of strong hematite alteration are thin and spatially associated with fracture networks. Moderate pervasive sericite alteration is common, giving the un-hematized core a moderate grey colour. Large intervals of sericite (argillic) alteration replace feldspar and biotite leaving a pervasively altered quartz-plagioclase rich granitoid. Trace fine-grained pyrite may be disseminated adjacent the silicified shears. The sericite alteration is associated with an increase in mm-cm-thick white to grey quartz veins, trace pyrite, and pink quartz veins.

UTG-21-003 and UTG-21-004 were collared at 136°-45° and 136°-60°, respectively. The rock composition and alteration assemblages are similar to holes UTG-21-001 and UTG-21-002 but show less argillic alteration overall. Low-angle (to core axis) grey to white quartz veins and lesser pink quartz are observed in the sheared intervals.

## No.1 Zone

The four collars drilled in the No.1 zone were selected to test the continuity of surface channel samples at depth. The channel samples were located in a historic trench that defines the central No.1 Zone mineralized occurrence. The No.1 zone was drilled in the 1960's, however, the detailed records of this drilling have been lost. In 2021, A total of 250 metres were drilled in six holes at the No.1 zone (Table 19).

Table 19. No. 1 Zone 2021 Drilling Summary

DDH#	UTM_E	UTM_N	NAD 83 Zone	Total Depth	Azimuth	Dip	Zone
UTG-21-005	633194	6934957	11	44	320	-45	No. 1 Zone
UTG-21-006	633194	6934957	11	32	320	-65	No. 1 Zone
UTG-21-007	633194	6934957	11	25	294	-45	No. 1 Zone
UTG-21-008	633194	6934957	11	32	294	-65	No. 1 Zone
UTG-21-009	633165	6934787	11	46	073	-45	No. 1 Zone
UTG-21-010	633165	6934787	11	71	074	-58	No. 1 Zone

Drillholes UTG-21-005 and UTG-21-006 were oriented at  $320^{\circ}$ - $45^{\circ}$  and  $320^{\circ}$ - $65^{\circ}$ , respectively. These holes host two distinct and intercalated granitoids. The more abundant granitoid (~75%) is a moderate pink/red

quartz-poor biotite granodiorite that displays moderate to strong hematite alteration causing the core to be stained a moderate to dark red/pink. The second granitoid is a biotite quartz monzodiorite that is dark grey in colour. The monzodiorite looks to be a later intrusive phase as it has little to no hematite alteration.

The silicified and mineralized shear zone is spatially associated with a strongly hematized fine-grained granodiorite. The shear zone is a highly strained and inter-banded zone of multiple quartz veins, hematized granodiorite, clay, and late calcite veins (Figure 26).

Drillholes UTG-21-007 and UTG-21-008 were oriented at 294°-45° and 294°-65°, respectively. These holes share a drill setup with holes UTG-21-005 and UTG-21-006. The core is host to the same lithologies as those seen in holes UTG-21-005 and UTG-21-006 but is locally more hematized.

The mineralized shear zone displays small mm-sized highly strained massive quartz veins, sericite, biotite, chlorite, and strong hematite banding.



Figure 26. The silicified shear zone in hole UTG-21-005 at 18.50 m. This interval is representative of the highly strained and banded silicification that is consistent with the gold-bearing No1. Zone.

UTG-21-009 was collared at 073°-45°. UTG-21-010 was collared at 074°-58°. The core predominantly consists of two lithologies. The more predominant lithology is a biotite granodiorite similar to that seen in holes UTG-21-005 to UTG-21-008. This phase is intruded by a moderately hematite altered, pink-quartz and k-spar rich pegmatite.

The shear zone in these holes consists of banded grey/white/pink quartz, hematite, and sericite. Large 1-2 cm quartz veins are associated with the shear zone. Coarse disseminated massive pyrite is adjacent to, and within, the quartz veins.

## J7 ZONE

J7 Zone was previously drilled tested with six holes, most recently in 2012. The 2021 drilling aimed to confirm the results of the 2012 program and prove the continuity of mineralization at depth. Detailed drill information from the four holes drilled prior to 2012 is not available in the public record. A total of three holes for 218 metres were completed at J7 (Table 20).

Table 20. J7 Zone 2021 Drilling Summary

DDH#	UTM_E	UTM_N	NAD 83 Zone	Total Depth	Azimuth	Dip	Zone
UTG-21-011	632801	6935182	11	35	052	-45	J7
UTG-21-012	632801	6935182	11	88	052	-55	J7
UTG-21-013	632801	6935182	11	95	024	-45	J7

Holes UTG-21-011 and UTG-21-012 were oriented at 052°-45° and 052°-55°, respectively. Hole UTG-21-013 has the same collar as the other two holes, but an azimuth of 024° and a dip of -45°. All three holes host similar lithologies of a grey-white unaltered biotite granodiorite, light pink potassic feldspar-rich biotite granodiorite, and pegmatite. The unaltered biotite granodiorite is white in colour and shares the same modal composition as the altered granodiorite. The pink granodiorite is similar with an increase in potassic feldspar and pink quartz. The pegmatite is comprised of 3-5 cm feldspar and pink quartz crystals. The holes also intersected short intervals of biotite and plagioclase rich granodiorites.

The shear zone is a dark grey feldspar and quartz rich zone with a quartz vein running at a low angle (~5-10°) to core axis, and sericite alteration is common between the quartz veins. Pyrite is locally present at the quartz vein margins and as massive disseminations within the veins.

#### **BAKER WEST ZONE**

The Baker West Zone is a silicified shear zone located along the western margin of Baker Lake. The drill target resulted from a surface grab sample collected in 2016 from the shear zone that returned 2.16 g/t Au. Two additional samples located along the shear zone 145 metres to the south returned 0.58 g/t Au and 0.62 g/t Au. The shear zone is interpreted to be 600 metres in length based on field and geophysical interpretation. A total of two holes were drilled from one setup to test the shear zone (Table 21).

Table 21. Baker West Zone 2021 Drilling Summary

DDH#	UTM_E	UTM_N	NAD 83 Zone	Total Depth	Azimuth	Dip	Zone
UTG-21-014	632235	6933911	11	55	073	-45	Baker West
UTG-21-015	632235	6933911	11	92	074	-55	Baker West

UTG-21-014 and UTG-21-015 were oriented at 073°-45° and 074°-55°, respectively. The core consists of unaltered, biotite-rich granodiorite, and pink quartz-rich granodiorite. The granodiorites are intruded by an melanocratic aphanitic dyke.

The shear zone consists of two 5-10 cm quartz veins with trace amounts of pyrite on the margins of the quartz veins. The sheared interval between quartz veins includes hematite and chlorite altered bands of granodiorite at a high angle ( $^{\sim}80^{\circ}$ ) to core axis.

#### **R45 ZONE**

The R45 Zone is a historic trench that has no record of corresponding drilling. Two grab samples collected from the trench in 2016 returned 145 g/t Au and 37 g/t Au. A total of 65 metres were drilled in two holes from one setup location (Table 22).

Table 22. R45 Zone 2021 Drilling Summary

DDH#	UTM_E	UTM_N	NAD 83 Zone	Total Depth	Azimuth	Dip	Zone
UTG-21-016	632448	6932330	11	31	268	-45	R45
UTG-21-017	632448	6932330	11	34	295	-45	R45

UTG-21-016 and UTG-21-017 were oriented at 268°-45° and 295°-45°, respectively. The country rock in both holes consists of a light to dark pink, weakly hematite-altered biotite granodiorite. Small intervals of plagioclase and biotite rich granodiorite were observed.

The sampled shear zone consists of minor quartz veining associated with biotite and sericite alteration. The smaller shear zones host trace disseminated pyrite.

## No.22 VEIN

The No. 22 showing was drill tested in the 1960's. Bittern Investments Ltd. bulk sampled the 22 Vein in 1997 and reported an average grade of 10.34 g/t Au from two tons of material (Nickerson, 1997). Three drillholes totaling 88 metres were completed from one setup to test the showing to depth (Table 23).

Table 23. No.22 Zone 2021 Drilling Summary

DDH#	UTM_E	UTM_N	NAD 83 Zone	Total Depth	Azimuth	Dip	Zone
UTG-21-018	632084	6932215	11	32	309	-45	22 Vein
UTG-21-019	632084	6932215	11	26	309	-65	22 Vein
UTG-21-020	632084	6932215	11	30	308	-80	22 Vein

UTG-21-018 and UTG-21-019 have an azimuth of 309° and dips of -45° and -65°, respectively. UTG-21-020 has an azimuth of 308° and a dip of -80°. All three holes contain similar lithologies consisting primarily of a biotite and plagioclase-rich granodiorite.

The shear zones consist of 2-3 quartz veins (3-7 cm thick) intercalated with a weak sericite-altered biotite-rich groundmass. Trace amounts of fine-grained pyrite is disseminated throughout the shear zone, with a slight increase in disseminated pyrite in the quartz veins.

# 11 SAMPLE PREPRATION, ANALYSES AND SECURITY

#### **2021 DIAMOND DRILLING**

At the time of repot preparation, analytical results from the 2021 diamond drill program have not been received ALS Laboratories (ALS).

All drill core samples are to be analyzed by ALS, of Vancouver, BC. Sample preparation was completed at ALS's Yellowknife preparation facility in December of 2021. ALS is an independent ISO-certified company (ISO 17027 and ISO 9001) this is not related to the issuer.

In total, 240 samples were collected comprising 210 Metallic Screening (prep code: Au-SCR21) samples and 30 Fire Assay (prep code: Au-AA25) samples (Table 24).

Table 24. 2021 Diamond Drill Program Sample Summary

Drillhole	Sequence Start	Sequence End	Standards	Blanks	Total
UTG-21-001	Y032201	Y032256	2	1	56
UTG-21-002	Y032257	Y032288	1	1	32
UTG-21-003	Y032289	Y032308	0	1	20
UTG-21-004	Y032309	Y032337	1	1	29
UTG-21-005	Y032338	Y032341	0	0	4
UTG-21-006	Y032342	Y032345	0	1	4
UTG-21-007	Y032346	Y032348	0	0	3
UTG-21-008	Y032349	Y032352	0	0	4
UTG-21-009	Y032353	Y032357	0	1	5
UTG-21-010	Y032358	Y032369	1	0	12
UTG-21-011	Y032370	Y032383	0	1	14
UTG-21-012	Y032384	Y032395	1	0	12
UTG-21-013	Y032396	Y032403	0	0	8
UTG-21-014	Y032404	Y032407	0	0	4
UTG-21-015	Y032408	Y032414	0	1	7
UTG-21-016	Y032415	Y032420	0	0	6
UTG-21-017	Y032421	Y032425	1	0	5
UTG-21-018	Y032426	Y032429	0	0	4
UTG-21-019	Y032430	Y032434	0	0	5
UTG-21-020	Y032435	Y032440	1	0	6
		SUM	8	8	240

## 11.1.1 Core handling

Drill core was placed in labelled core boxes at the drill site by the Northtech drill staff. The boxes were then sealed and transported by helicopter and truck to the Aurora logging facility in Yellowknife under the supervision of Aurora staff. The logging facility is considered a secure facility as only Aurora staff are permitted on the facility, and it is locked after hours. Visitors to the facility during the program were supervised by the program geologist.

# 11.1.2 Core cutting and sampling

Samples were identified in the core boxes by the logging geologist during the logging process. Sample tags were stapled to the core box at the start of each sample interval. The geologist marked a line on the core to indicate the required cut and the material to be sampled. Upon cutting, half the sample tag was removed from the sample box and placed in a sample bag, the bag was labelled with the sample number.

The core was halved using a wet saw. Fresh water was used to lubricate and clean the samples while cutting to prevent cross-sample contamination. Half the cut interval was returned the core box, the other half was placed in the plastic sample bag and immediately sealed.

The lab-ready samples were placed in rice bags and sealed with plastic straps. These samples were stored in the locked Aurora warehouse until they were transported to ALS. Aurora's expeditors transported the samples directly from the Aurora warehouse to ALS by truck.

## 11.1.3 Lab Analysis

Two analysis strategies were utilized during the program based on the amount of visible sulphide or gold mineralization logged in the core.

Samples that were selected for analysis based on prospective structure or alteration in the absence of visible mineralization were analyzed by Au-AA25. The samples were prepped by the PREP31-D sequence (Crush to 70% less than 2mm, riffle split off 1kg, pulverize split to better than 85% passing 75 microns).

Samples with suspected visible gold were analyzed by Au-SCR21. The samples were prepped by the PREP31-D sequence (crush to 90% less than 2mm, riffle split off 1kg, pulverize split to better than 85% passing 75um).

# 11.1.4 Sampling QA/QC

Blank or standard material was inserted in the sample matrix inserted into the sample matrix opportunistically to test the lab for sample cross-contamination as well as analytical accuracy. For example: a high-grade standard was inserted into a group of twenty, where lower gold grades are expected; or vise-versa. Or a blank may be inserted in sequence after a high-grade standard. The sample matrix would be recorded as generated.

Standard and blank material was source from CDN Resource Laboratories Ltd. All standards were silicabased and packages in 60-gram bags that were sealed at the lab.

A total of 8 blanks and 8 gold standards were inserted along with samples to measure quality assurance of the lab.

## **HISTORIC PROGRAMS**

The Author was unable to reference the sample handling, preparation, and analyses procedures that were implemented during work programs completed prior to 2011. While the Author was not directly involved in the sample preparation, security, and analytical procedures since 2017, he is familiar with Aurora Geoscience's protocols and procedures, and feels confident that they meet and/or exceed standards set by CIM.

## 12 DATA VERIFICATION

As part of the Author's review, the following verification checks on the Up Town Gold project were conducted:

- Site visit on November 24<sup>th</sup>, 2021;
- Review of geological and mineralization interpretations;
- Review of historic and recent exploration programs (Section's 6, 9 and 10);
- Reviewed legal title to the property and believes the statements contained within this report pertaining to the claim status and ownership to be true and complete;
- Review of QA/QC data protocols, methods, data integrity and validation of drilling, chip-sampling, geophysical surveying, and surface sampling data.

On November 24<sup>th</sup>, 2021, the Author visited the property and verified locations of historic workings, including trenches, drill hole collar locations, geophysical grids, and channel samples.

The Author is of the opinion that Melius' published and practiced procedures for collection of data in the field and transposition of these data into data 'products' to support evaluation work meet industry best practice guidelines.

## 13 MINERAL PROCESSING AND METALLURGICAL TESTING

The property is still considered a relatively early-stage exploration project and as such no modern mineral processing or metallurgical testing has been undertaken.

## 14 MINERAL RESOURCE ESTIMATES

This technical report does not include an estimation of mineral resources.

## 15 MINERAL RESERVE ESTIMATES

This technical report does not include an estimation of mineral reserves.

## **16 MINING METHODS**

There is no information for this section of the report.

## 17 RECOVERY METHODS

There is not information for this section of the report.

## 18 PROJECT INFRASTRUCTURE

There is no information for this section of the report as the property is not yet producing or under development.

## 19 MARKETS AND CONTRACTS

There is no information for this section of the report as the property is not yet producing or under development.

# 20 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

There is no information for this section of the report as the property is not yet producing or under development.

## 21 CAPITAL AND OPERATING COSTS

There is no information for this section of the report as the property is not yet producing or under development.

## 22 ECONOMIC ANALYSIS

There is no information for this section of the report as the property is not yet producing or under development.

## 23 ADJACENT PROPERTIES

There are no operating mines adjacent to the Up Town Gold property. Only Gold Terra Resource Corp. is actively exploring ground in the Yellowknife area (Figure 24).

Significant historic producers include the Giant, Con and Discovery mines. A total of 13.5 million ounces of gold have been produced from the Yellowknife Mining District since mining operations commenced at the Con mine in 1938. The bulk of production has been from Giant mine, which has produced over 7 million ounces of gold since operations began in 1948. Con mine has produced 5.5 million ounces of gold. Discovery Mine, which operated from 1950 to 1968 and was the smallest of the three, produced just over 1 million ounces of gold during its life. The bulk of gold production in the district occurred between 1952 and 1973. During this period, over 7.7 million ounces of gold were produced, accounting for 60% of the total (Bullen and Robb, 2006).

The author has been unable to verify the information included in this section and the information may not be indicative of the mineralization on the property that is the subject of this report.

## GOLD TERRA RESOURCE CORP.

(Information sourced December 2020 from: https://www.goldterracorp.com)

Gold Terra Resource Corp. is exploring the Yellowknife City Gold Project, which surrounds the Up Town Gold property to the North, East, and South (Figure 27). This project is a district-scale land position (800 km²) that includes gold-prospective geology in proximity to the historic Con and Giant gold mines.

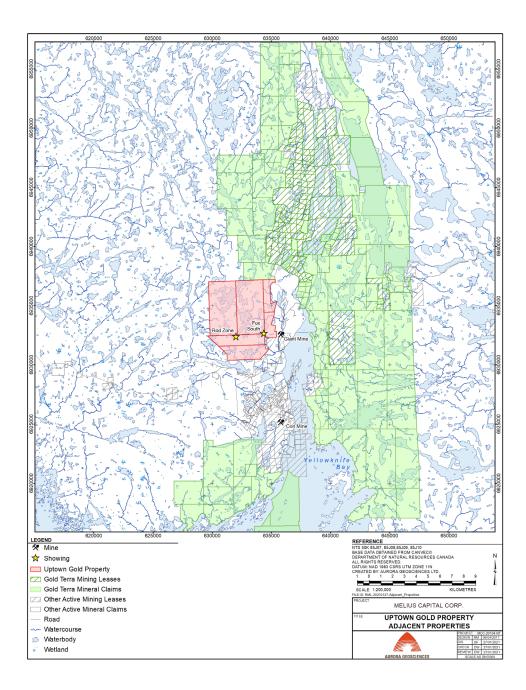


Figure 27. Adjacent properties to the Up Town Gold Property

The Yellowknife City Gold property is underlain by turbidite sediments of the Walsh Lake Formation, felsic to intermediate volcanics of the Banting Formation and mafic volcanic rocks and gabbro of the Kam Formation. A number of regional- and property-scale shear zones transect the property. Many of these shears are host to the gold that was mined at Con and Giant mines. Several discrete target areas have been identified as particularly prospective: The Mispickel, Sam Otto, Barney, Hebert-Brent, Homer Lake Gold, Crestaurum, and Campbell Shear targets.

The following mineral occurrence descriptions are summarized after Armitage (2019):

Crestaurum is a shear that hosts multi-stage quartz/ankerite veining within mafic volcanics and mafic intrusive host. Mineralization consists of pyrite, arsenopyrite, visible gold, stibnite, and other minerals associated with the quartz veining. Alteration in the shear zone consists of quartz, muscovite (sericite) and chlorite outward from the centre of mineralization with pervasive moderate carbonate. High-grade gold is restricted to quartz veining over intervals up to 5 m, typically averaging 1-3 metres.

Barney Shear is a multi-km deformation zone containing wide shears host to carbonate-quartz veins containing moderate to high levels of sulphide. The mineralized zone strikes north-south but appears to be affected by crossing structures trending NE. The best mineralization occurs in a flexure in the shear creating bulges that are interpreted to plunge shallowly. As thickness increases sulphide content and veining also increase. A felsic intrusion below the Barney Shear is also mineralized, hosting quartz vein stockworks with ubiquitous carbonate alteration and sericitic selvages on veins up to one metre wide and grading up to 30 g/t Au that have been intersected proximal to the interpreted intersection of the Barney shear with the intrusion. Associated sulphides and precious metals include significant molybdenum, chalcopyrite, and silver in the mafic volcanic rocks.

Sam Otto is the largest mineralized system discovered on the YCG Project. Sam Otto is a shear containing sericitic alteration and finely disseminated sulphides with a range of 0.10-5.0 g/t Au, averaging 0.50-1.50 g/t Au over 30-120 metre drill widths. The mineralized zone is hosted in mixed intermediate to felsic fragmental volcanic rocks.

Mispickel is contained within a wide deformation zone containing shears with abundant narrow quartz veins containing coarse-grained visible gold and low to moderate sulphides within subtle chloritic to sericitic alteration. The zone is hosted in turbiditic sediments of the Walsh Lake Formation. Quartz veins can be up to 300 g/t Au.

In 2019, a total Inferred resource estimate of 735,000 ounces was published (Armitage, 2019). The inferred mineral resource consists of:

- A pit constrained Inferred resource of 11.6 million tonnes averaging 1.4 g/t for 523,000 ounces of contained gold
- An underground Inferred resource of 1.2 million tonnes averaging 5.7 g/t for 212,000 ounces of contained gold

#### **Pit Constrained Inferred Mineral Resources**

Deposit	Tonnes	Grade (Au g/t)	Contained Gold Ounces
Crestaurum Pit (Starter)	127,000	9.41	38,000
Mispickel Pit	696,000	2.62	59,000
Sam Otto/Dave's Pond Pit	10,794,000	1.23	426,000
Pit Constrained Total	11,617,000	1.4	523,000
Underg	ground Inferre	d Mineral Resou	rces
Deposit			
Crestaurum U/G	723,000	6.56	153,000
Barney U/G	214,000	4.67	32,000
Mispickel U/G	30,000	4.99	5,000
Sam Otto/Dave's Pond U/G	185,000	3.65	22,000
U/G Total	1,152,000	5.7	212,000
	_		
Total Inferred	12,769,000	1.79	735,000

## **GIANT GOLD MINE**

(Extracted from Siddorn, 2011)

The Giant deposit is hosted by a complex system of linked, quasi-planar alteration-deformation zones. In map view, these zones appear to display a simple northeast-trending braided pattern up to 500 metres wide, with individual alteration-deformation zones, typically 30 to 60 metres wide, comprising the larger system. In cross-section, the geometry of the deformation zones is more complex, defining intersecting zones with northwest, southeast, and vertical dips. On the deposit scale, the deformation zones display lobate-cuspate features, similar to mullion structures. The presence of mullions in the Giant deformation zone-wall rock interface suggests the deformation zones were, at one-time, pre-existing incompetent layers (deformation/alteration zones) surrounded by competent wall rocks (metavolcanics) that were shortened during overprinting deformation. The Giant deposit is truncated to the southwest by the West Bay Fault.

### **CON GOLD MINE**

(Extracted from Siddorn, 2011)

The Con deposit is hosted by a system of planar deformation zones (Con, Negus-Rycon and Campbell) that lack the complex geometries observed in the Giant deposit. The Con zone comprises several different anastomosing strands forming a 35-metre-wide zone that strikes 030° and dips 65° northwest. The Negus-Rycon zones are narrow, discontinuous, deformation zones that host auriferous quartz veins that transect the Kam Group between the Campbell and Con zones. They strike 165° and dip 55° to 67° to the southwest. The Negus-Rycon zones are narrow (on average <1.5 metres wide) and have sharp quartz veinwall rock contacts, with only minor development of chlorite schist. The Campbell Zone is sub-parallel in both strike and dip to the Con Zone. The Campbell Zone was mined over a strike length of 2,500 metres and to a depth of 2,000 metres. It averages 100 metres in thickness, with a ~007° strike and 50° to 60° west dip. The Campbell Zone dip increases to between 65° and 75° west below a depth of 1,550 metres. The Campbell Zone is truncated to the east by the West Bay Fault and offset to the south by the Negus Fault.

The reader should be cautioned that although the past-producing mines discussed above are spatially near the property, they are located in substantially different geological and metallogenic settings, and no direct comparisons should be made between them and the potential mineral resources on the property.

## 24 OTHER RELEVANT DATA AND INFORMATION

There is no other relevant information pertaining to the property of which the author is aware, the omission or inclusion of which would cause any material change to the property.

# 25 INTERPRETATION AND CONCLUSIONS

Prior to 2011, exploration on the Up Town Gold property outlined a structurally-controlled gold mineralized system. Since 2011, work on the property has focused on exploring for Archean granitoid hosted lode gold mineralization, and more specifically, lower-grade larger tonnage mineralization that may be associated with such a system. It is the potential for higher tonnage (at lower grade) deposits that

separates the granitoid-hosted deposits from the more traditional, and often adjacent, greenstone hosted lode gold systems.

A growing number of Archean granitoid-hosted lode gold deposits is creating more awareness of this gold deposit sub-class. They share many of the same characteristics of greenstone hosted deposits, including temperature of formation, structural control, and economic mineralization. Key differences include sulphide tenure, alteration mineralogy and host lithology.

In addition to the ground geophysics programs completed in 2020 and the diamond drilling in 2021, exploration work has included 732 line-kilometres of airborne total field magnetic and radiometric surveying, 990.18 metres of diamond drilling in programs conducted during 2013, 2015 and 2017 at the Rod and Fox South zones, showing-scale mapping at the Rod, Fox South, and No. 1 zones, several prospecting programs, and a moderate amount of targeted channel sampling in 2015.

Gold showings on the property can be grouped into one of two linear structural trends, each with subtle variations in alteration and mineralogy (White, 2017). These trends are known as the 'Lode Gold Domain' and 'Shear Domain' and are located along the eastern and western regions of the property, respectively (White, 2017). The 'Lode Gold Domain' is defined by an elevated sulphur (sulphide) association and relatively abundant hematite alteration. The 'Shear Domain' is associated with less pervasive sulphide mineralization and contains higher amounts of silicification and sericitization in the absence of hematite alteration. Both zones are comprised of many smaller and discontinuous silicified brittle and ductile deformation zones. The deformation zones are variably mineralized laterally along strike and at depth. Grades range from 100's of grams/tonne in surface grab samples to 10's of grams/tonne over decimetresize intervals in drill core. Drilling indicates that parallel zones of decimetre scale high-grade gold mineralization tend to carry wider sections of lower grade mineralization (Covello, 2017). Mineralization at both zones may occur as two or more sub-parallel lenses spaced up to 20 metres apart (Covello, 2017).

The Mag-VLF and IP ground geophysics programs completed in November and December of 2020 at the Big Vein and No. 1 gold occurrences were not successful in directly identifying the mineralized quartz veins. Instead, these surveys have provided an indirect tool for mapping lithological and structural controls on the quartz veins that may refine future exploration programs.

Ground magnetic survey results confirm those from airborne magnetic surveys, providing more detailed information. Furthermore, VLF-EM survey conductors can discriminate magnetic responses between structures and more subtle changes in lithology.

The IP survey was an orientation survey designed to test the application of this tool and its ability to locate sulphide-bearing quartz veins. The survey produced a moderate resistivity and chargeability response over the No.1 vein, as well as some of the adjacent less mineralized veins.

Preliminary investigation of the airborne LiDAR survey has identified several previously unrecognized linear features. These lineaments may correspond with prominent NNE-SSW oriented features similar to shear zones found on the property. Further interpretation is required once lab results are available to finalize plans for on-the-ground investigation of features identified from LiDAR data.

Diamond drilling completed in 2021 was designed to test gold-bearing silicified shear zones that were sampled at surface. Some of the targeted zones (Fox South, No.1, J7, N.22 Vein) had been drilled historically; zones R45 and Baker West were newly drilled in 2021.

2021 drilling at Fox South was designed to test the continuity of the shear zone roughly 150 metres south of mineralized horizons identified in drill holes completed in 2017. All four drill holes successfully interested silicified and sulphide-bearing bedrock presumed to be related to the shear zone.

The No.1 and No.22 Vein zones were first drilled in the 1960's. Much of the historic drill information has been lost, and there is limited evidence of drill collars preserved in the field. The 2021 drill campaign aimed to repeat and test the continuity of gold values returned from recent surface sampling (2006 to 2016), including at depth. All 2021 drill holes completed at the No.1 and No.22 Vein zones successfully intersected silicified bedrock of the host shear zone.

In 2015, several short diamond drill holes were drilled at the J7 zone. This program was of limited success due to the undersized and underpowered drill and was only able to test the zone at a very shallow depth.

The 2021 drill program was successful in that it established continuity between areas of known mineralization at surface to those identified at depth, including a new shear zone at the previously unexplored R45 zone.

#### PROJECT EXPENDITURES TO MELIUS CAPITAL CORP. FOR 2020 AND 2021

Table 25. 2020 and 2021 Up Town Property Expenditures (CDN dollars excluding GST)

2020 Geophysics Program and reporting (inclusive)	\$77,617.06
2021 LiDAR Survey (inclusive)	\$25,812.50
2021 Legal Lease Survey (inclusive)	\$76,672.58
2021 Diamond Drill Program (inclusive)	\$438,554.19
TOTAL Exploration Expenditures	\$618,656.33

## **RISK AND UNCERTAINTIES**

The author does not foresee any significant risk or uncertainty pertaining to the reliability or confidence in the exploration information presented in Section 9 and Section 10 of this report and feels exploration programs were completed in a manner consistent with industry best practices.

The Up Town Gold property is an early-stage exploration property, the economic potential or economic viability of which (present or future), is beyond the scope of this report and is therefore not discussed. Any inference, or perceived inference, in this report to the economic viability of the results presented in Section 9, Section 10, or summarized in any other section, is unintentional.

## **26 RECOMMENDATIONS**

Exploration conducted on the property since 2012 has confirmed several historic gold showings, and has also identified new ones. Gold showings on the Up Town Gold property can be classified into two domains based on their mineral and alteration associations. Both domains are host to numerous north-northwest to north-northeast trending narrow, decimetre to metre-scale, zones of quartz veining and flooding (Covello, 2017). Gold tenor within these mineralized zones has been shown to contain significant gold grades over decimetre-scale widths, up to several tens of grams per tonne.

Future exploration on the property should focus on reconciling zones of small and somewhat discontinuous zones of mineralization within shears exposed in outcropping bedrock with larger coherent mineralized orebodies. Outcrop exposure on the property is characterized by extensive areas of continuous outcrop, particularly in the 'Lode Gold Domain', separated by swamps or lakes up to several hundred metres wide. If broader zones of structural failure-related gold mineralization are to be found, it will be within overburden-covered areas where softer less competent rocks may be more likely to occur. To this end, future exploration should focus on overburden covered areas.

A phased approach is recommended to continue exploring the property:

- Phase 1: under the terms and conditions of the option agreement between Melius Capital Corp. and Rover Metals Corp., Melius must keep the property in good standing. Mineral claims K15961, K15694, K15695, and K15696 will come to term in 2022 and must be legally surveyed and converted to a Mining Lease.
- Phase 2: The 2021 diamond drill program tested several historic mineralized zones within the
  property, and identified two new mineralized zones. Additional diamond drilling is recommended
  at all mineral showings on the property. The priority and amount of drilling would be determined
  following review of all results, including lab assays, from the 2021 drill program along with ground
  geophysics and LiDAR data.

A budget of CDN\$750,000 is recommended to conduct the next phase of exploration at the Up Town Gold property.

Exploration Phase	Estimated Budget CDN
Legal Survey of Mineral Claims to Mining Lease	
(Mineral claims K15961, K15694, K15695, and K15696)	\$100,000
Diamond Drilling (est. 1,500 m inclusive)	\$650,000
Total Estimated Budget	\$750,000

# **27 DATE AND SIGNATURE PAGE**

This report titled "Technical Report, Up Town Gold Property - Northwest Territories, Canada" and dated January 05, 2022, was prepared and signed by:

"Signed and Sealed by the Author"

Michael MacMorran, P.Geol.
Consulting Geologist

Dated at Maple Ridge, British Columbia on January 05, 2022

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# **CERTIFICATE OF QUALIFIED PERSON**

I, Michael MacMorran, P. Geol., do hereby certify that:

- 1. I am a Consulting Geologist, and independent of Melius Capital Corp. of Suite 409 22 Leader Lane, Toronto, ON, and Aurora Geosciences Ltd. of 3506 McDonald Drive, Yellowknife, NWT.
- 2. That I am a graduate of Simon Fraser University with a Bachelor of Science degree in Geology (2007).
- 3. I am a registered member in-good-standing of the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (Member L3257).
- 4. That I have been practicing geology since 2006, and have 15 years of gold, diamond and base metal exploration experience which qualifies me to prepare this report.
- 5. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101), and past relevant work experience, I meet the requirements to be a "Qualified Person" for the purposes of NI 43-101.
- 6. I am responsible for the preparation of all Sections of the report titled "Technical Report Up Town Gold Property Northwest Territories, Canada", dated January 5th, 2022.
- 7. I have read NI 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
- 8. I last visited the Up Town Gold Property in November 2021 and reviewed relevant information related to the project that is the subject of this report.
- 9. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
- 10. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Report, the omission to disclose which makes the Report misleading.
- 11. I am independent of the issuer applying all of the tests in Section 1.5 of NI 43-101.

Dated this 5<sup>th</sup> day of January, 2022.

"Original Signed and Sealed by Author"

Michael MacMorran, P.Geol.
Consulting Geologist

## **CONSENT**

To:

The Toronto Stock Exchange, P.O. Box 450, 3rd Floor, 130 King Street West, Toronto, ON M5X 1J2 British Columbia Securities Commission – 701 West Georgia St, P.O. Box 10142, Pacific Centre, Vancouver, BC V7Y 1L2

Alberta Securities Commission – Suite 600, 250-5th Street SW, Calgary, AB T2P 0R4
Saskatchewan Securities Commission – Financial and Consumer Affairs Authority – Suite 601, 1919
Saskatchewan Drive, Regina, SK S4P 4H2

Manitoba Securities Commission – 500, 400 ST, Mary Avenue, Winnipeg, MB R3C 4K5
Ontario Securities Commission – 20 Queen St W, 20th Floor, Toronto, ON M5N 3S8
New Brunswick Securities Commission – Financial and Consumer Services Commission – 85 Charlotte Street, Suite 300, Saint John, NB E2L 2J2

Nova Scotia Securities Commission – P.O. Box 458, Halifax, NS B3J 2P8
Prince Edward Island Securities Commission – P.O. Box 2000, Charlottetown, PEI C1A 7N8
Newfoundland Securities Commission – 100 Prince Phillip Drive, P.O. Box 8700, St. John's, NL A1B 4J6

The author consents to the public filing of the Technical Report titled "Technical Report Up Town Gold Property – Northwest Territories, Canada", dated January 05, 2022, and to extracts from, or a summary of, the Technical Report in the written disclosure being filed. The author confirms they have read the written disclosure being filed and that it fairly and accurately represents the information in the Technical Report that supports the disclosure.

This consent is dated at Maple Ridge, BC, January 5<sup>th</sup>, 2022.

"Original Signed and Sealed by Author"

Michael MacMorran, P.Geol. Consulting Geologist

Melius Capital Corp.	
APPENDIX I	
	2021 Drill Program Plan Maps
	All Zones

Melius Capital Corp.	
Appropriet	
Appendix II	2021 Drill Program Cross Sections