MacDonald Mines Exploration Ltd.

REPORT

National Instrument 43-101 Technical Report for the SPJ Project

Report Effective Date: October 18, 2019

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TITLE PAGE

Title of Report

National Instrument 43-101 Technical Report for the SPJ Project

Project Location

Sudbury, Ontario

Authors

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Date and Signature Page

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1.0 Summary

The SPJ Project (Project) is a iron-oxide-copper-gold exploration property located 20 km northeast of Sudbury, Ontario, Canada. This technical report was prepared by MacDonald Mines Exploration Ltd. (MacDonald Mines) as it is now the company's primary exploration target.

1.1 Property Description and Ownership

1.1.1 Project Description and Location

The Project is located 20 km northeast of Sudbury Ontario and approximately 350 km north of Toronto. The Project is centered on 533695 E, 5164995 N, North American Datum 83, Zone 17N and straddles NTS map sheets 41I9 and 41I10. The Project sits within parts of MacLennan, Falconbridge, Scadding, Street, Davis, Rathbun, and Loughrin townships. Legal access is available via highway 17 from Sudbury and Kukagami road. The Project consists of 7 leases and 1,338 claims totalling 17,720 hectares.

1.1.2 Accessibility, Climate, Local Resources, Infrastructure, and Physiography

The western side of the Project is accessed by driving 21 km east of Sudbury on highway 17 then turning north and travelling 9 km on Kukagami road. Many trails and an abandoned rail line provide additional access to the western part of the Project from Kukagami road. The eastern side of the Project can be accessed by turning east off Kukagami road onto Ashigami road then travelling approximately 7 km. Taking the abandoned rail bed east from Kukagami road will also allow access to the eastern part of the Project. The Project can be accessed year-round. Kukagami road and Ashigami road can be driven with a two-wheel drive vehicle. The trails are best travelled with ATV or snowmobile.

The Project lies within the humid continental climate zone consisting of hot and humid summers with long and cold winters. Precipitation is constant throughout the year with an annual average of 83 cm. The Project occurs within the Great Lakes-St. Lawrence Forest Region which is a transitional zone between the conifer-dominated forest to the north and the deciduous dominated forest to the south. The area has a relatively consistent elevation ranging from 265 to 330 m above sea level.

The Project is located a 40-minute drive from the city of Sudbury (pop. 162,000). Sudbury's rich mining history has made the city a hub for mining and mineral exploration and includes mining supply companies, exploration and mining services, and a skilled workforce. Sudbury has an airport that is serviced by commercial and private aviation companies. The city also has an extensive rail infrastructure.

Buildings and site services for the past producing Scadding Mine on the Project were removed during the reclamation and remediation programs in the 1980's and 1990's, however, single phase power and telephone services follow the Kukagami Lake road which cuts through the Project. Most of Ashigami Lake lies within the Project and could supply any water requirements for a production facility on the Project. This was the source of water when the Project was operated by Westfield Minerals Limited in 1984 and by Orofino Resources Limited between 1985 and 1990.

1.1.3 History

Gold was first discovered in the Wahnapitae Gold Region in the late 1800s following the building of the Canadian Pacific Railway. Most of the discoveries were very small and resulted in explorers blasting pits and adits to recover small quantities of gold and copper before moving on. The most

significant gold discoveries of the region include the Scadding Mine (on MacDonald Mines Project), the Norstar Mine, and the Crystal Mine. Production totals at these mines include 663 t at 16.56 g/t Au at the Crystal Mine, 57,150 t at 6.6 g/t Au and 0.9% Cu at the Norstar Mine, and 140,000 t at 7.2 g/t Au at the Scadding Mine. Most of the mineralization has been found by prospecting, drilling, and trenching. Geophysical techniques such as EM and magnetics have had little success identifying the style of mineralization while IP has proved to have moderate success.

1.2 Geology and Mineralization

The Project is located within the 2.45-2.02 Ga (Krough et al., 1984) Paleoproterozoic Huronian Supergroup of the Southern Province. The Huronian consists of a series of steeply dipping metasedimentary rocks with subordinate metavolcanic rocks. Intrusive rocks in the region include the 1750-1700 Ma granitic intrusions called the Cutler, Killarney, and Chief Lake plutons (Davidson et al, 1992). Mafic intrusions include the 2.2-2.02 Ga Nipissing diabase suite (Corfu and Andrews, 1986), the 2.49-2.47 East Bull Lake intrusion-type (James et al, 2002), and 1.85 the Sudbury Igneous Complex (Krough et al. 1984). The Huronian is bound to the North by the Archean Superior Province and to the South by the Proterozoic Grenville Province. The Southern Province in the Sudbury area contains many small gold +/- copper deposits. These deposits are most commonly hosted within structural zones that have endured soda metasomatism (albitization). The albitite replacement alteration results in rocks becoming much harder than the surrounding rocks. During deformation, the strongly albitized rocks will deform brittlely resulting in brecciation. The brecciation allows for hydrothermal fluids, which may include sulfides and gold, to precipitate in the open space of the brecciated rock (Gates, 1991).

1.3 Exploration Status

Extensive historical exploration has been completed on the Project. A total of 330 surface diamond drill holes totaling 33,667 m and an unknown quantity of historic underground drill holes totaling 1,677 m have been drilled on the Scadding Mine Leases. Additionally, 204 drill holes totalling 17,461 m have been drilled on the claims. Geophysical surveys have been conducted on multiple areas on the Project with low to moderate success. The Scadding Mine is the only past-producing mine on the Project.

A 2018 trenching and surface mapping/sampling program was the first exploration conducted by MacDonald Mines. At the time the work was completed, the Scadding leases were not part of the Project. The trenching program was successful in determining an association between mineralization and alteration. It also established the main structural trends of the region and their association with mineralization. The information observed from trenching guided the geological sampling across the rest of the Project. This resulted in the discovery of new mineralized samples and helped improve the understanding of previously discovered mineralized zones.

MacDonald Mines' first drill program commenced on the Scadding Mine footprint on August 16, 2019. To date, four diamond drill holes totaling 484 m have been completed at the North Zone. All holes intersected significant gold mineralization. The ongoing drill program will also target the Central, South, New, and East-West Zones.

1.4 Development and Operation Status

The Project is in the exploration stage and is not currently being developed for commercial production.

1.5 Recommendations

The primary objective of MacDonald Mines' exploration program is to demonstrate that a sizeable deposit exists on the historic Scadding Mine site. This exploration program is to be realized in two phases. The first phase will include mechanical stripping near the known mineralized zones so detained structural and alteration mapping can be completed. The mapping will be used to plan drill holes to understand the geometry of the structures controlling the high-grade gold mineralization at depth.

The second phase will include a geophysical survey with the parameters adjusted to optimize the detection of the mineral assemblages directly associated with polymetallic gold mineralization in the Scadding Deposit. This will be followed by exploration drilling to extend the 5 zones of the deposit and potential discoveries with the geophysical survey and geological modelling

2.0 Introduction

This technical report has been prepared by MacDonald Mines for their Project near Sudbury, Ontario. The report has been written because the Project has been recently acquired and is now the primary exploration target for MacDonald Mines. The Project consisted of claims and Leases that have been acquired by purchase, option agreement, and staking. The report includes information from various sources including prospectors, exploration companies, government surveys, and academic researchers. The author of the report has spent significant time working on the Project.

2.1 Qualified Persons

This Technical Report was prepared by MacDonald Mines employees Quentin Yarie, P.Geo. and Nicholas Wray P.Geo.

2.1.1 Acknowledgements

MacDonald Mines would like to acknowledge the following contributors to the preparation of this Technical Report and the underlying studies under the supervision of the QP, including; Conrad Dix, P.Geo., Jean-François Montreuil, Ph.D., and Eric Steffler of MacDonald Mines.

2.2 Units

Universal Transverse Mercator (UTM) coordinates are provided in the datum of NAD83, Zone 17N. The metric system of measurement is used in this report. Historic data are typically reported in imperial units and were converted for this report using the following conversion factors:

- 1 Troy ounce per (short) ton = 34.2857 grams/tonne (g/t)
- 1 foot = 0.3048 meters

3.0 Reliance on Other Experts

For certain items in this Technical Report the QP relied on a report, opinion, or statement of another expert who is not a QP. In each case, the QP hereby disclaims responsibility for such information to the extent of his/her reliance on such reports, opinions, or statements. All the historic reports consulted in preparation of this report can be found in the exploration history section. The authors have direct ground experience with many of the Project's features and have not found reasons to doubt the accuracy of the consulted historic reports. The authors have also not come across compelling reasons to single out any exploration campaign as having unusual results outside the range of previous or subsequent surveys. Accordingly, the authors believe the historic data to be verifiable within testable parameters.

4.0 Property Description and Location

The Project is located 20 km northeast of Sudbury Ontario (Figure 4-1). The Project is centered on 533695 E, 5164995 N, North American Datum 83, Zone 17N and straddles NTS map sheets 41I9 and 41I10. The Project sits within parts of MacLennan, Falconbridge, Scadding, Street, Davis, Rathbun and Loughrin townships. Legal access is available via highway 17 from Sudbury and Kukagami road.

Figure 4-1: Geological map of Ontario showing the location of the SPJ project (Modified from the Ontario Geological Survey, 2011).

4.1 Ownership

The province of Ontario has fully implemented the third phase of modernizing the Mining Act (MAM). On April 10, 2018, Ontario converted the manual system of ground and paper taking of unpatented and patented claims to an online system (O. Reg 454/17). As a result, claims that were staked prior to April 10, 2018 were given new claim numbers. Following this conversion, the historical claim number would be thereafter known as the 'Legacy Claim Number'.

On July 18, 2018, MacDonald Mines announced in a press release that it had acquired a 100% interest in in two blocks of claims from John Brady. In the agreement MacDonald Mines agrees to pay the seller $225,000 in cash and issue the equivalent of $180,000 of the Company's common shares over the term of the option agreement (3 years); Complete a total of $465,000 of eligible exploration expenditures on the Properties over the term of the option agreement; Grant the seller a 2.5% Net Smelter Return royalty ("NSR") on the Properties. The first 1% of the NSR can be bought back for $750,000 while a second 1%, can be bought back for $1,750,000.

On July 19, 2018, MacDonald Mines announced in a press release that it had staked claims to make the 2 blocks of claims that were optioned from John Brady contiguous.

On April 30, 2019, MacDonald Mines announced in a press release that it had acquired the 51% ownership of the Scadding Mine leases and 100% ownership other claims from Northern Sphere Mining Corp. Additionally, MacDonald Mines acquired the remaining 49% ownership of the Scadding Mine leases from Currie Rose Resources Inc. In the agreement with Northern Sphere, MacDonald Mines agrees to issue 10,000,000 of the Company's common shares upon transfer of title; make a $100,000 cash payment; incur $300,000 in eligible exploration expenditures in the 12-month period following acquisition of the Scadding Mine. In the agreement with Currie Rose, MacDonald Mines agrees to issue 8,000,000 of the Company's common shares; make a $50,000 cash payment on transfer of title; incur $1.5M of eligible exploration expenditures on the leases partially comprising the Scadding Mine over a three-year period. There is a 3% NSR held on the property by Currie Rose Resources, of which 1% can be purchased back for $1,000,000.

On July 16, 2019 MacDonald Mines announced in a press release that is had entered into a purchase agreement with Blueberry Development to acquired 100% ownership of 130 claims. The claims extend the SPJ Property to cover prospective extensions of the potential IOCG system identified at the Scadding Mine. Under the terms of the agreement MacDonald Mines agreed to pay Blueberry Development $50,000 cash and 3,000,000 common shares.

On September 9, 2019 MacDonald Mines announced in a press release that is had entered into an option agreement with Klondike Bay Resources to acquired 100% ownership of 151 claims. The claims extend the SPJ Property to the north and east of the existing property boundaries and add compelling exploration targets to the current land package including the historical copper-gold Alwyn Mine, the Ashigami Showing and the Tecumseth Vein System. Under the terms of the agreement MacDonald Mines agreed to pay Klondike Bay Resources $80,000 cash and 750,000 common shares over a 3-year period, as well as granting Klondike Bay Resources a 2% NSR, of which 1% can be purchased back by MacDonald Mines at any time for $1,000,000.

On October 4, 2019 MacDonald Mines announced in a press release that is had acquired 100% ownership of 38 claims from Golden Copper Corp. The claims were acquired to fill two strategic gaps in a regional uranium anomaly associated with the Scadding Deposit. Under the terms of the agreement MacDonald Mines agreed to pay $5,000 cash and issue 1,875,000 common shares of the company upon transfer of claims. All agreements are outlined in Table 4-1 and can be seen on Figure 4-1.

Table 4-1: Net Smelter Royalties on the SPJ Property

Company	Property ID	NSR	Buy Back
John Brady	Jovan JV	2.50%	First 1% at anytime for $750,000 and second 1% for $1,750,000
John Brady	Powerline JV	2.50%	First 1% at anytime for $750,000 and second 1% for $1,750,000
Currie Rose Resources	Scadding Leases	3%	1% at anytime for $1,000,000
Klondike Bay Resources JV	Klondike Bay Resources JV	2%	1% at anytime for $1,000,000

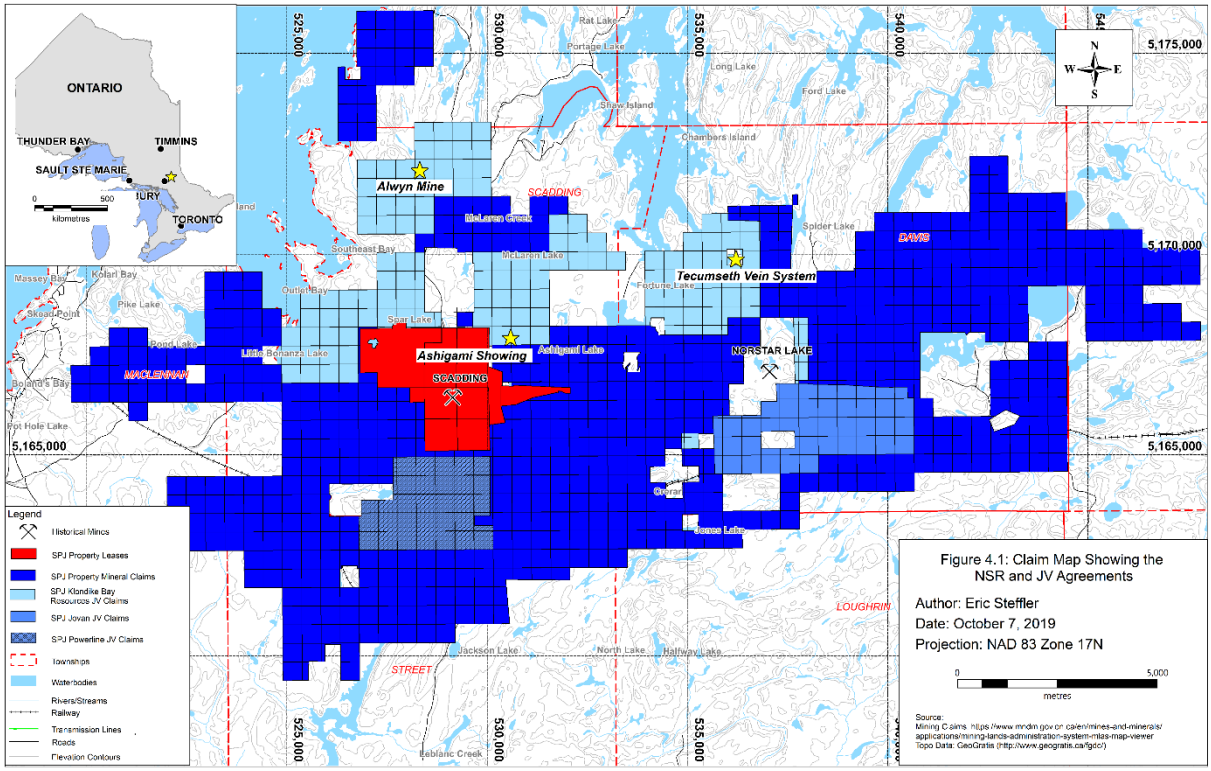

Figure 4-2: SPJ Property with NSR

4.2 Property Land Tenure

The Project Property consists of 7 leases totaling 836.3 hectares and 1,338 claims totalling 16,883.7 hectares (Figure 4-3). The leases include the mining and surface rights. MacDonald Mines holds the surface rights for the leased mining claims. MacDonald Mines does not hold the surface rights for the claims, surface rights are held by the Crown, various Townships and Municipalities, and individual who have been notified of any plans or permits that are on the claims.

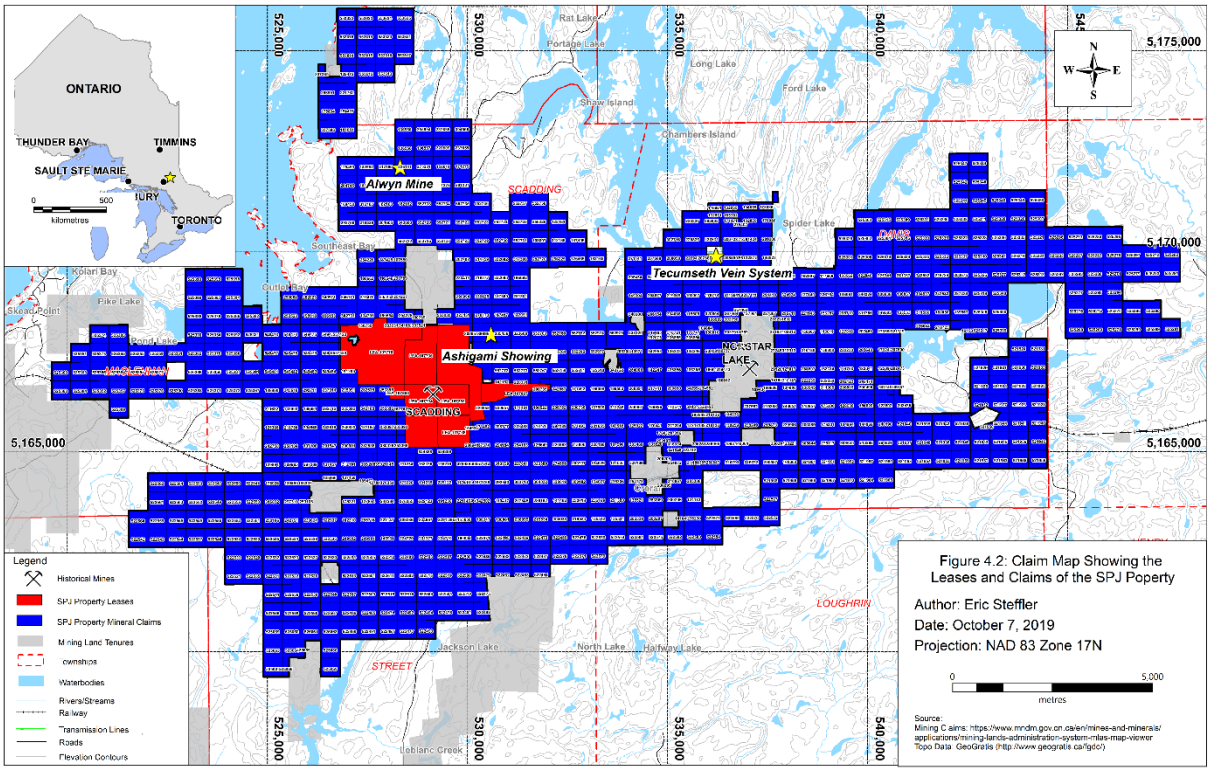

Figure 4-3: Leases and claims comprising the Property.

4.3 Permits and Authorization

In Ontario, permits are generally required for exploration on unpatented mineral claims or leases. Plan and permit applications are submitted to the Ministry of Northern Development and Mines for review, posting on the Environmental Registry (30 days) and circulation to First Nations communities who have areas of cultural significance. Plans are typically approved within 30 days and permits within 50 days. Plans are valid for two years and permits are valid for three years. Exploration activities by MacDonald Mines on the Project began in the fall of 2018 and included mechanized stripping (>100m^2 in 200m radius) on permit PR-15-10741 which expired on September 29, 2018. Currently MacDonald Mines has permits covering 3 sections of claims, but not all claims, within the Project. The permits allow for mechanized drilling, mechanized stripping, pitting and trenching, and line cutting.

In Ontario, mining leases are issued for twenty-one-year terms and may be renewed for further 21- year periods. Leases can be issued for surface and mining rights, mining rights only or surface rights only. Once issued, the lessee pays an annual rent to the province. Further, prior to a mine

coming into production, the lessee must comply with all applicable federal and provincial legislation. The 7 leases included in the Project have mining and surface rights. There may be some changes in obligations associated with land tenure over time since Scadding Township was one of the many regional townships annexed into the City of Greater Sudbury.

The Project descriptions for the subject mining leases/mining claims indicate:

- that the lessee shall not be entitled to compensation for damages to the mining rights resulting from the construction, reconstruction or maintenance of the public Kukagami Lake road for a strip of land 300 feet (91.5 metres) along the road and within the Project. The surface rights along this strip of road/land are also reserved for the Municipality of Greater Sudbury.
- surface rights over a strip of land 400 ft (122 metres) wide above the high-water mark along the shores of Bugg and Ashigami Lakes are reserved for the Crown.

4.3.1 Summary of the Agreement between MacDonald Mines and First Nation Communities

MacDonald Mines has entered into an agreement with a First Nation which articulate a mutually agreed upon process for consultation for exploration phase activities conducted within the exploration area. MacDonald Mines has entered into an agreement with the Atikameksheng Anishnawbek First Nation. The stated purpose of these agreements is to articulate a clear and mutually agreed upon consultation process to identify adverse impacts to Aboriginal and treaty rights and engage with respect to accommodation, and to establish a mutually beneficial, positive and productive relationship. In addition to supporting consultation, MacDonald Mines has agreed to support the promotion of employment opportunities for First Nation members.

While these agreements apply to exploration phase activities, the agreements contemplate the negotiation of future agreements pertaining to advanced exploration and, potentially, development.

During development of the Project, the Company agreed to the following general guidelines:

- Ensuring that Atikameksheng Anishnawbek First Nation customs are always respected
- Understand Treaty Rights and Inherent Rights
- Safety is priority for worker, general public and wildlife
- Sustainable practice intergraded into all projects dealing with environmental activities
- Protect wildlife and wildlife habitat
- Environmental impact protection
- Promoting First Nation employment opportunities

5.0 Accessibility, Climate and Physiography, Local Resources and Infrastructure

5.1 Accessibility

The western extent of the Project is located 20 km Northeast of Sudbury, Ontario and is easily accessible by roads. The western part of the Project is accessed by driving 21 km East of Sudbury on highway 17 then turning North and travelling 9 km on Kukagami road. Many trails and an abandoned rail line provide additional access to the western part of the Project from Kukagami road. The eastern part of the Project can be accessed by turning East off Kukagami road onto Ashigami road then travelling approximately 7 km. Taking the abandoned rail bed East from Kukagami road will also allow access to the eastern part of the Project (Figure 5-1). The Project can be accessed year-round. Kukagami road and Ashigami road can be driven with a two-wheel drive vehicle while the trails are best travelled with ATV or snowmobile.

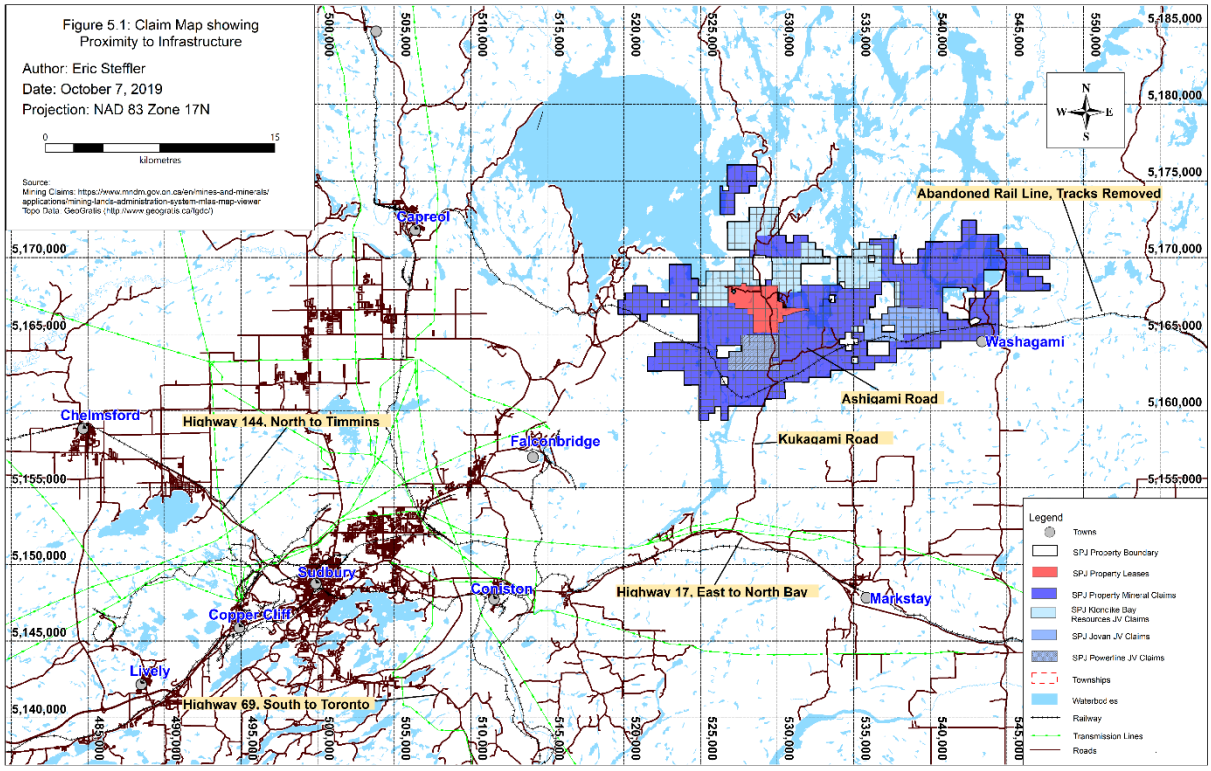

Figure 5-1:Property proximity to infrastructure.

5.2 Climate and Physiography

The Project lies within the humid continental climate zone consisting of hot and humid summers with long and cold winters. Precipitation is constant throughout the year with an annual average of 83 cm. The Project lies within the Great Lakes-St. Lawrence Forest Region with is a transitional zone between the conifer-dominated forest to the North and the deciduous dominated forest to the South. Vegetation is characterized by pine, birch, cedar, poplar, maple, oak, and elm. The area has a relatively consistent elevation ranging from 265 to 330 m above sea level. Overburden ranges from a few centimeters to multiple meters but overall there is very little outcrop exposed (<5%).

5.3 Resources and Infrastructure

The Project is located a 45-minute drive from the city of Sudbury (pop. 162,000). The area has a rich mining history. Copper, nickel, gold, and platinum-group metals were discovered in Sudbury in the late 19th century. Since then, many mineral deposits have been developed including multiple world class deposits. There are currently 8 mines and two smelters operating in the Sudbury area. Sudbury's rich mining history has made the city a hub for mining and mineral exploration and includes mining supply companies, exploration and mining services, and a skilled workforce. Sudbury has an airport that is serviced by commercial and private aviation companies. The city also has an extensive rail infrastructure. Buildings and site services for the past-producing Scadding Mine on the Project were removed during the reclamation and remediation programs in the 1980's, however, single phase power and telephone services follow the Kukagami Lake road which cuts through the center of the Project. Ashigami Lake lies immediately east of the Project and could supply any water requirements for a production facility on the Project. This was the source of water when the Project was operated by Westfield Minerals Limited in 1984 and by Orofino Resources Limited between 1985 and 1990.

6.0 Exploration History

Gold was first discovered in the Wahnapitae Gold Region in the late 1800s following the building of the Canadian Pacific Railway. Most of the discoveries were very small and resulted in explorers blasting pits and adits to recover small quantities of gold and copper before moving on. The most significant gold discoveries of the region include the Scadding Mine (on MacDonald Mines Project), the Norstar Mine, and the Crystal Mine. The Crystal Mine was discovered in 1892 and mined to 30 m depth in 1895-1898 and 1907-1908. Production from the mine totaled 662 t at 16.56 g/t (Gates, 1991). The Scadding Mine was discovered in 1973 by Gulf Minerals Canada Ltd. during a regional uranium exploration program. Small pits were mined in 1984 and a spiral ramp was constructed for mining from 1987 to 1988. Production at Scadding totalled 140,000 t at 7.22 g/t (Gates, 1991). The Norstar Mine was discovered in the late 1800s and mined on and off until 1987. Most of the production occurred in 1986 and 1987. The mine consists of a 610 m spiral decline to the 96 m level. Total production for the mine is 57,150 t at 6.6 g/t Au and 0.9% Cu (Gates, 1991).

Most of the gold mineralization has been found by prospecting, drilling, and trenching. Geophysical techniques such as EM and magnetics have had little success identifying the style of mineralization while IP has proved to have moderate success. The following outlines the substantial work that has been completed on the current Project.

6.1 Scadding Gold Mine

Note: The reader is cautioned that a qualified person has not done sufficient work to verify these values. These are historical values that may not be representative of the mineralization present.

1973-1975 Gulf Minerals Canada LTD. (41I10NE0193): Samples taken from old trenches resulted in high gold grades. This prompted trenching, mapping, geophysical surveys, geochemical surveys, and drilling. 54 diamond drill holes (S-1 to S-52) totaling 3660 meters resulted in the initial discovery of the East-West Zone at the Scadding Mine site. Gulf was originally exploring for Uranium.

1977-1980 Donald R. Watt (41I10NE0190 and 41I10NE0191): D. R. Watt purchased 40 unpatented mining claims off Gulf minerals in 1977. The terms of the purchase included a work expenditure of $200,000 within two years and a royalty of $1.00 per ton of ore removed form the claims. Work included geological mapping, geophysical surveys, and drilling. 49 diamond drill holes (W1-W49) totaling 3897 meters were drilled resulting in the discovery of the Central Zone. Claims were transferred to Scadding Gold Mines Limited.

1980-1984 Northgate Exploration LTD. (41I10NE0185): An agreement was made between Northgate and Scadding Gold Mines to acquire 207 mining claims. The terms of the deal included a payment of 110,000 shares Northgate shares, 30% net profits royalty to the vendors, assumption of the Gulf Minerals royalty, and a work commitment of one million dollars over 18 months for exploration and development to feasibility stage. Northgate drilled 56 diamond holes totaling 5066 m. The company also conducted engineering studies, built camp infrastructure, and brought 56 mining claims to 7 mining leases.

1983-1984 Westfield Minerals LTD. (41I10NE0142): In 1983, Northgate optioned the Scadding Mine to Westfield Minerals. The deal allowed Westfield to evaluate the Property through exploration and mining. Westfield acquired a 200 ton per-day mill and constructed a tailing facility. Test mining was conducted by way of small open pits on the South, East-West, and North Zones.

Between June 4 and November 13, 1984, the company mined 24,018 tons. The amount of gold recovered is not available, but the cost of production was $977,000.

1985-1990 Orofino Resources Limited- Orofino Resources purchased the Scadding Property consisting of 151 mining claims and 7 leases from Northgate. The deal also included the mill that was on site. Orofino conducted mining of the central zone by spiral ramp. The mining was done by a modified sublevel shrinkage method including benching of levels, long-hole drilling and blasting of pillars and ore haulage from the bottom of the main lens at an elevation of 199 m. Ore was milled between August 1987 and August 1990. In total, 115,724 tons of ore was milled yielding 15,769 ounces of gold.

1997-1998 Currie Rose Resources Inc (41I10NE2005 and 41I09NW0033): Currie Rose acquired the 7 leases. They drilled 43 diamond drill holes totaling 3471 m of BQ diameter at the Scadding Mine site. Multiple holes intersected high grade gold including 718.17 g/t over 0.31 m.

2003-2004 JML Resources Limited- On August 20, 2002 JML signed an agreement with Currie Rose to earn a 50% interest in the Scadding Property. The deal included a $50,000 payment to Currie Rose, issuing of 200,000 common shares to Currie Rose. Additionally, JML agreed to incur $3,000,000 in exploration expenditures on the Property over a 7-year period. JML completed 32 diamond drill holes totaling 3899 m and a magnetometer and IP survey. The agreement was not fulfilled and was terminated in 2005.

2008 MPE International Inc. - acquired the right to earn an interest in the Property, however, MPE International Inc. has not carried out any exploration work on the Property.

2009-2011 TrueClaim Exploration Inc. - Trueclaim Exploration Inc. entered into an assignment agreement with MPE International Inc. dated May 5, 2009 pursuant to which MPE assigned to Trueclaim all its rights, title and interest in its option to acquire a 100% interest in the Scadding Gold Property. Trueclaim drilled 90 holes totaling 10304.42 m of NQ diameter core between 2009 and 2011.

2017 Northern Sphere Mining Corp. – Northern Sphere Mining Corp. entered into an agreement with Currie Rose Resources Inc. and TrueClaim Exploration Inc. Six diamond drill holes were completed in 2017.

6.2 Significant exploration outside of the Scadding Mine

Note: The reader is cautioned that a qualified person has not done sufficient work to verify these values. These are historical values that may not be representative of the mineralization present.

1950 Alwyn Porcupine Mined LTD. (41I10NE0158 and 41I10NE0154): Notable borehole intersections include 3.36 g/t Au over 5.79 m, 4.46 g/t Au over 3.81 m, and 16.59 g/t over 1.52 m.

1957 Plexterre Mining Company LTD. (41I10NE0106): A ground electromagnetic survey was conducted on the Property. The best EM anomaly was in the area of the Brady-Jovan Pit, located within the Property boundary.

1967 Kayjan Mineral LTD. (41I10NE0201): One borehole completed that intersected 22.29 g/t Au over 1.5 m)

1975 Groundstar Resources (41I10NE0091, 41I10NE0094): An EM survey and mapping. A conductor that is greater than 2000 feet in length has been outlined. Field work found sulfides at the limestone trenches and surrounding area (Jovan claims).

1976 Groundstar Resources (41I09NW0037): Trenching conductive areas exposed rocks with pyrite, pyrrhotite, chalcopyrite, and arsenopyrite.

1983 New Arcadia Expl LTD (41I10NE0181): 13 Diamond drill holes. Minor anomalous gold intersected in chlorite alteration south of Scadding Mine. Hole A-13 hit 5 g/t over half a meter in a NW striking fault zone.

1984 New Arcadia Expl LTD (41I10NE0140): 16 diamond drill holes were completed on the Property. There holes hit anomalous gold in a N-S trending shear including 11.5 g/t over 0.45 m and 4.7 g.t over 1.4 m.

1984 Palkovits and Falconer (41I10NE0062): Survey outlined four strong conductors.

1984 Palkovits and Falconer (41I10NE0048): Mapping and sampling outlined zones of anomalous gold, copper, and cobalt but it was concluded that the economic potential is limited due to size of zones.

1985 OMEP (41I09NW0017): Stripping and trenching along EM conductor near the limestone trenches. Found pyrrhotite with no precious metals at most trenches but one trench contained 1.17 g/t Au.

1987 Ess Creek Resources (41I10NE0022): Initial exploration program by a new company in the area. They resampled the Palkovits #2 trench returning gold grades up to 10.15 g/t.

1987 Flag Resources Ltd. (41I14NE0047): 8 drill holes completed. Minor anomalous gold intersections.

1988 St Genevieve Resc Ltd (41I10NE0134): Mapping and sampling program found a quartz vein that assayed 102.86 g/t.

1988 Imperial Metals (41I09NW0008): Soil survey where 1067 samples were taken and 50 were considered to contain anomalous gold values in 4 zones.

1988 Kerr Addison (41I10NE0028, 41I10NE0017): Two soil sampling programs in the vicinity of the Palkovits mineralized zones. Results of the first program were disappointing as no dispersion haloes were discovered. The second survey, consisting of 2211 humus samples, showed numerous anomalous gold, copper, and arsenic values that have no apparent correlation.

1991 George Vanlith (41I10NE0013): Mechanical stripping in the limestone trenches area. Up to 7.47 g/t gold has been sampled.

1992 Palkovits (41I10NE0075): Three diamond drill holes drilled in the vicinity of the main Palkovits showing. Proved continuity of mineralized zone down to 37 m and continuity to the East. The best sample was in drill hole P92002 and included 6.78 g/t gold and 0.1% Co over 0.52 m.

1994 Vanlith and Brady (41I10NE0021): Overburden stripping to the East of the Rose Pit has uncovered an altered, sheared, albitized zone with a sample containing 25.92 g/t gold and over 1% copper.

1995 Vanlith and Brady (41I09NW0011): Further overburden stripping to the East of the Rose Pit patchy mineralization with anomalous gold (up to 18.51 g/t Au). Limestone and diabase were also uncovered.

1992 R. J. Graham (41I10NE0129): Three short drill holes and prospecting completed. One grab sample of mineralized quartz returned 27.9 g/t Au.

1997 Currie Rose Resources Inc. (41I09NW0033): 28 holes drilled on the east side of the Property. Narrow gold intersections recorded including 3.21 g/t over 0.76 m.

1999 Brady and Johnson (41I10NE2009): Mechanical stripping under the powerline, West of Kukagami road.

2000 Platinum Group Metals LTD (41I09NW2018): Geological mapping and sampling program conducted to test for platinum group metals in the Nipissing diabase and the River Valley intrusive rocks. It was concluded that the Nipissing doesn't contain anomalous platinum group metals and the River Valley intrusive rocks contain minor local anomalous gold, platinum, and palladium.

2003 John Brady (41I10NE2024): Mechanical stripping, mapping sampling completed near the powerline to the West of Kukagami road. Anomalous samples taken containing one that assayed 7.5 g/t gold over a 40 cm chip sample. Follow up work confirmed anomalous gold with the discovery of a 7.2 and 5.8 g/t gold samples.

2008 John Brady (20000003696): Prospecting and trenching West of Kukagami road resulting in two grab samples containing 1-2 g/t gold.

2010 John Brady (20000005417): Prospecting and trenching which uncovered the Brady-Jovan pit containing patchy high-grade gold, copper, and cobalt.

2010 TrueClaim Exploration Inc. (20000005511): Airborne magnetic, electromagnetic, and radiometric survey was completed on a large area (2944 line-km). 10 diamond drill holes with no significant results.

2011 Cascadero Copper (20000006243): Mapping and sampling program with 150 samples being sent for analysis. Work consisted mostly of verifying previous showing so many anomalous gold, copper, and cobalt analyses were obtained.

2013 John Brady (20000008413): Magnetometer and VLF EM surveys on the Powerline area property. Indicates some minor geophysical relief and 8 anomalies were identified.

7.0 Geological Setting and Mineralization

7.1 Regional Geology

The Project is located within the 2.45-2.02 Ga (Krough et al., 1984) Paleoproterozoic Huronian Supergroup of the Southern Province, which extends approximately 450 km from Sault Ste. Marie into western Quebec (Bennett et al. 1991; Figure 7-1). The Huronian consists of a series of steeply dipping metasedimentary rocks with subordinate metavolcanic rocks. Intrusive rocks in the region include the 1750-1700 Ma granitic intrusions called the Cutler, Killarney, and Chief Lake plutons (Davidson et al, 1992). Mafic intrusions include the 2.2-2.02 Ga Nipissing diabase suite (Corfu and Andrews, 1986), the 2.49-2.47 East Bull Lake intrusion-type (James et al, 2002), and 1.85 the Sudbury Igneous Complex (Krough et al. 1984). The Huronian is bound to the North by the Archean Superior Province and to the South by the Proterozoic Grenville Province. The Huronian rocks have endured multiple large-scale structural events. The first is the 1.87 to 1.82 Ga compressional event called the Penokean Orogeny which resulted in low greenschist to mid-amphibolite facies metamorphism in the Sudbury region (Holm et al. 2001). During the Penokean Orogeny, the 1.85 Ga Sudbury impact event occurred. The next major orogenic event was Southeast-over-Northwest ductile thrust faulting that occurred at 1.45 Ga (Shanks and Schwerdtner, 1991a). The 1.07-1.00 Ga, Northwest-Southeast compressional Grenville Orogeny (Zolnai et al, 1984) is the last major structural event to affect the region and is dominated by brittle deformation.

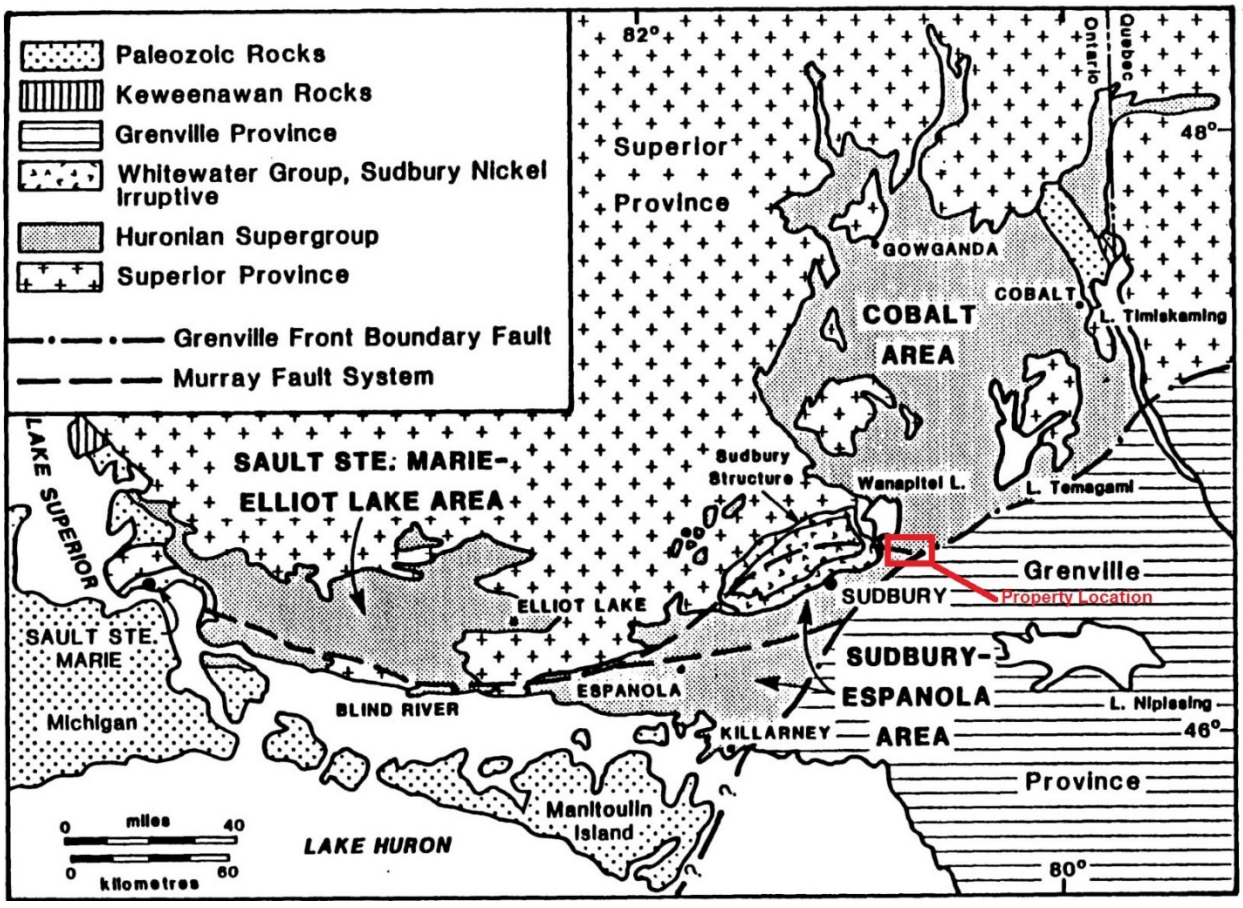

Figure 7-1: Regional geology map. Modified from Junnila (1987).

7.2 Local Geology

The Huronian Supergroup is comprised of four groups referred to as (oldest to youngest): Elliot Lake, Hough Lake, Quirke Lake, and Cobalt (Figure 7-2). These each represent a general deposition cycle consisting of conglomerate, pelite and greywacke, and quartz-feldspar sandstone with the Elliot lake group also containing volcanic rocks (Card et al, 1977). The Hough Lake, Quirke Lake, and Cobalt sedimentary sequences constitute the local geology. The upper Hough Lake to Cobalt rocks and the Nipissing diabase contain local strongly albitized corridors that are associated with gold mineralization. The 1700 +/- 2 Ma albitization event is contemporaneous with the 1700-1750 Ma granitic plutonism (Cutler, Killarney, and Chief Lake) and interpreted to have formed due to the release of brines during alkali magmatism (Schandl and Gorton, 1994). Other types of alteration that can be spatially associated with the albitization include carbonate, quartz, biotite, chlorite, and stilpnomelane.

The east-west trending Murray Fault is the largest structure in the area. The major fault system was active prior to Huronian sedimentation and continued to be active during sedimentation and into the Grenvillian deformation (Fueten and Redmond, 1992). Locally the rocks are deformed into open to sub-isoclinal folds with well developed foliations that trend parallel to sub-parallel to the Murray fault (Murphy, 1999). Another important structure is the NNW-striking McLaren Lake Fault that dips 70-85 degrees to the northeast. Potter (2009) identifies this fault, and its associated splays, as an important control on mineralization in the region.

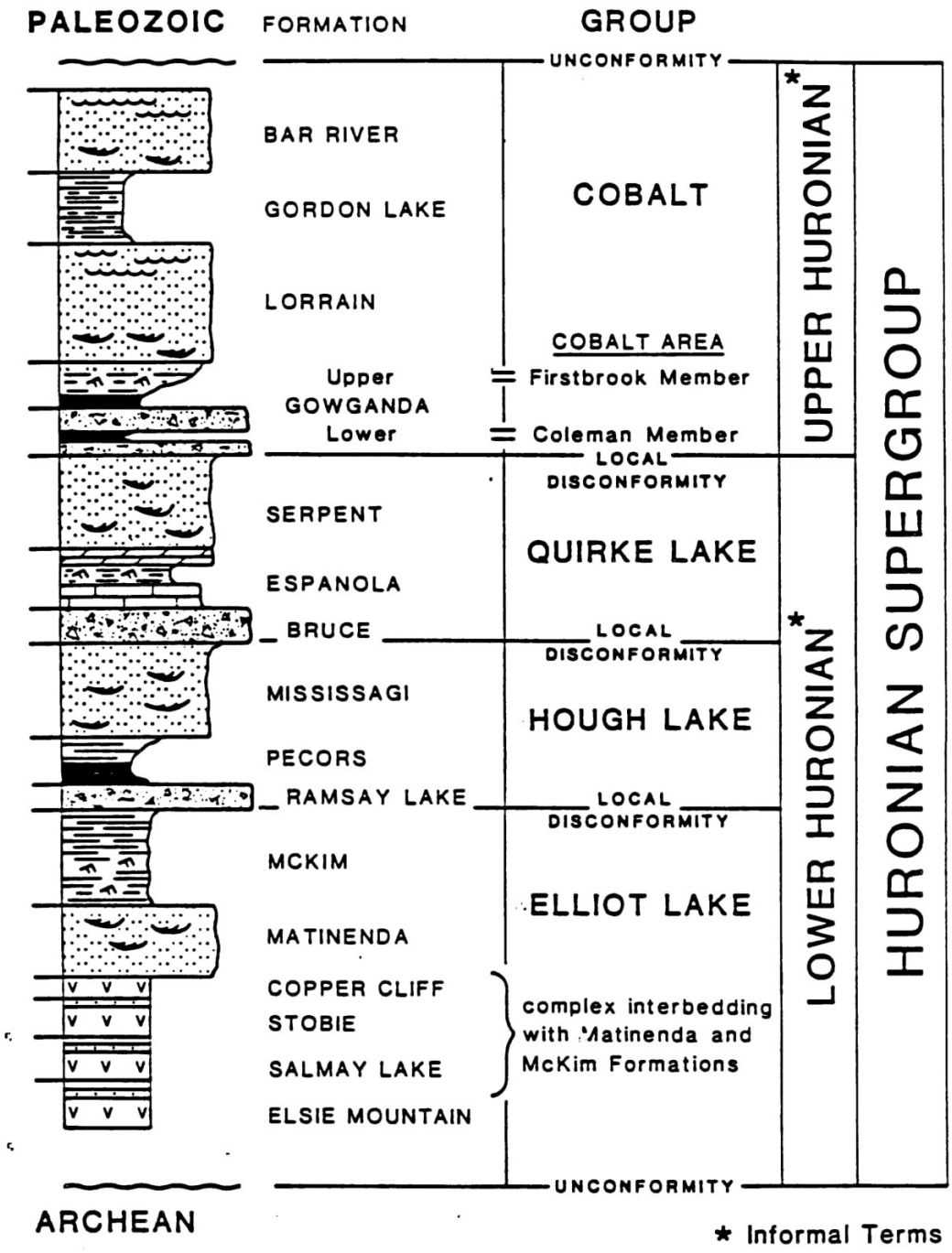

Figure 7-2: Stratigraphy of the Huronian Supergroup. From Junnia (1987).

7.3 Property Geology

The Property is underlain by conglomerate, sandstone, and mudstone of the Mississagi, Bruce, Serpent and Gowganda formations. Locally, strongly deformed horizons of limestone from the Espanola Formation occur. Nipissing sills and dikes intrude the Huronian metasedimentary rocks. Other less common intrusions on the Project include Olivine diabase and lamprophyre. The Southern part of the Project is underlain by the Grenville front which is comprised of various types of high-grade metamorphic rocks. The Ess Creek Fault lies at the contact of the Huronian with the Grenville and is marked by an abrupt increase in deformation and metamorphic grade. The Property stratigraphy and rock types are summarized in Table 7-1.

The Project contains multiple broad zones of albitization that are associated with faulting. In some areas the albitization is so strong that the protolith cannot be determined and the rock is therefore referred to as albitite. Locally the albitized rocks have been brecciated and alteration minerals such as carbonate, quartz, and chlorite form the matrix of the brecciated rock. Ductile deformation is best preserved in the lessor albitized rocks. A common foliation observed on the Project is E-NE. This deformation is related to the Ess Creek fault. Thomson and Card (1963) established the Ess Creek Fault is a south side up reverse fault that dips 60 to 80 degrees SE. There is another foliation that runs N-S which is associated with a series of faults that were identified by Easton et al (1996).

Table 7-1: Stratigraphy and rock types of the Property.

Period	Province	Group	Formation	Rock Types
Mid-Proterozoic			Olivine Diabase	Diabase
	Grenville			Tonalite, granodiorite, monzonite, granite, syenite, various gneisses
Early Proterozoic			Nipissing Sills	Hornblende gabbro, diabase
Early Proterozoic	Southern (Huronian Supergroup)	Cobalt	Gowganda	Conglomerate, sandstone, siltstone, argillite
		Quirke Lake	Espanola Bruce Serpent	Limestone, siltstone, orthoquartzite
		Hough Lake	Mississagi	Quartz-felspar sandstone, argillite and conglomerate

7.4 Regional Mineralization

The Southern Province in the Sudbury area contains many small gold +/- copper deposits. These deposits are most commonly hosted within structural zones that have endured soda metasomatism (albitization). The albitite replacement alteration results in rocks becoming much harder than the surrounding rocks. During deformation, the strongly albitized rocks will deform brittlely resulting in brecciation. The brecciation allows for hydrothermal fluids, which may include sulfides and gold, to precipitate in the open space of the brecciated rock (Gates, 1991). The size and shape of the altered and brecciated zones that host mineralization vary greatly. They range from mm-scale veinlets to kilometer long dike like structures. The zones often occur as irregular masses or pipe like bodies (Gates, 1991). The variable geometry is a result of the rocks deforming

under a brittle regime. Common alteration spatially associated with mineralized zones includes carbonate rhombs, chlorite, quartz, tremolite, stilpnomelane, magnetite, and biotite. The sulfide minerals include pyrite, arsenopyrite, chalcopyrite, and pyrrhotite. The mineralized zones can also contain anomalous concentrations of cobalt, rare earth elements, and uranium.

In the Huronian rocks, gold also occurs in quartz veins. The gold bearing quartz veins typically occur within a felsic phase of the Nipissing gabbro (Gates, 1991). This style of gold mineralization is considered less appealing because the volume of mineralized rock is typically quite small. Table 7-2 outlines the production and grade of past-producing deposits in the area and Figure 7-3 shows their locations.

Table 7-2: Production and grade of past-producing deposits on and nearby the Property.

Name	On Property?	X	Y	Status	Past Production (t)	Au (ppm)	Cu (ppm)
Scadding Mine	Yes	527323.5	5166553.6	Closed	140,000	7.20	
Norstar Lake	No	536889.2	5167388.1	Closed	57,150	6.60	9000
Crystal Mine	No	528664.0	5177594.0	Closed	662	16.56	
Sheppard	No	520944.0	5170994.3	Closed	Unknown		
Alwyn	No	528294.4	5172115.3	Closed	Unknown		
Crerar	Yes	534670.1	5165152.5	Closed	Unknown		
Beckley	No	520037.6	5156982.9	Closed	Unknown		
Ashigami	Yes	536262.1	5169829.0	Closed	Unknown		
Tecumseh	No	536262.1	5169829.0	Closed	Unknown		

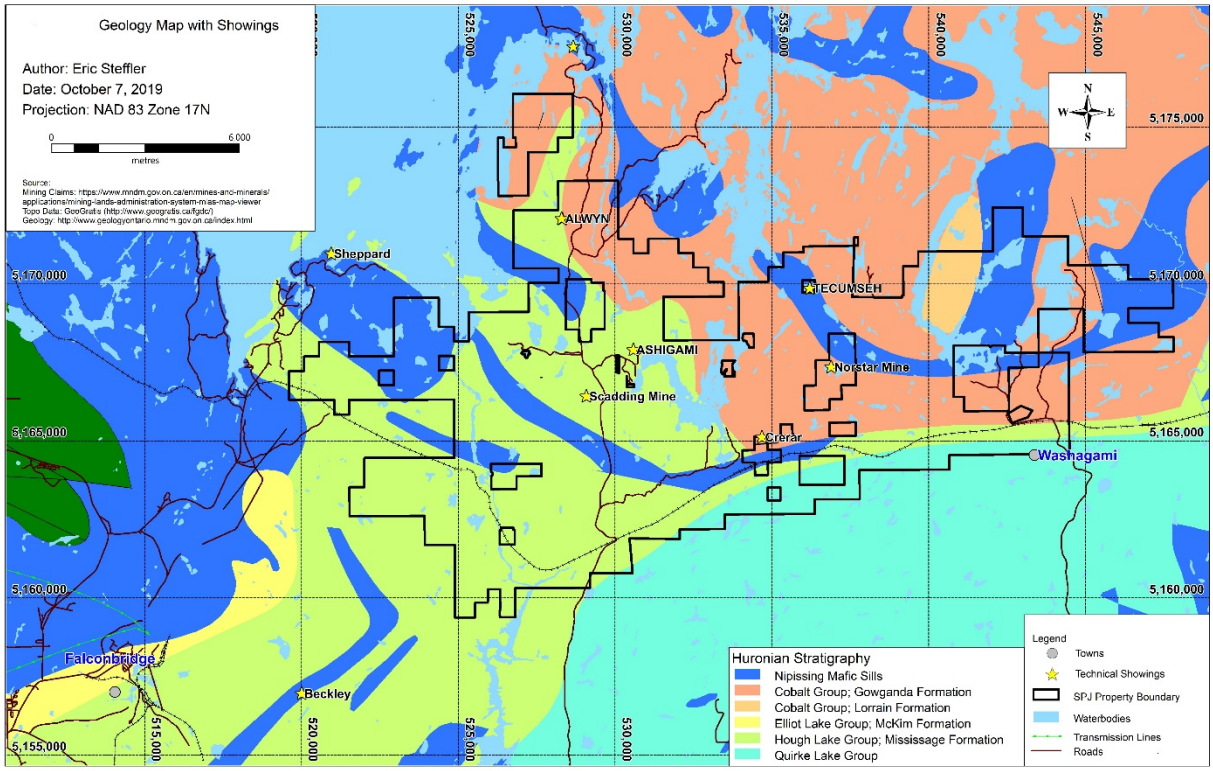

Figure 7-3: Geology Map with showings in the region

7.5 Mineralization on the SPJ Project

The most significant mineralization discovered on the Project is the Scadding mine site. The Scadding Deposit is currently formed of five main zones of gold mineralization that are named the North, Central, South, New, and EW zones. Potter (2009) reports that the North, Central and South zones are aligned along an NNW structure reported to moderately to steeply dip to the NE to ENE that parallels the regional McLaren Lake Fault. The mineralization at the East-West and New Zones has an EW orientation, but the structural controls on the zones are not well constrained. The primary structural controls for the area are NNW to NNE trending structures and a secondary control is the primary bedding of the sedimentary units (Figure 7-4). Mineralization is typically associated with an iron-rich alteration formed principally of Fe-chlorite with variable magnetite, biotite, stilpnomelane, actinolite and iron carbonates. Biotite, magnetite and actinolite are possibly part of an earlier alteration assemblage overprinted by chlorite alteration that may have variably destroyed the earlier magnetite-biotite assemblage (Schandl and Gorton, 2007). These iron-rich alteration facies are superimposed on the albitized sedimentary rocks of the Huronian Group and are occurring as broad zones of brecciation. Gold is the only commodity that was systematically quantified at the Scadding Deposit. However, multi-element geochemical analyses of drill core and surface samples suggest that significant cobalt, copper, nickel and uranium enrichments are also present in and around the Scadding Deposit. This is suggesting that zones with economic concentrations of these metals could be discovered at the Scadding Deposit and elsewhere on the Project. Figure 7-5 shows the locations of some of the highest-grade intersection at the Scadding Mine.

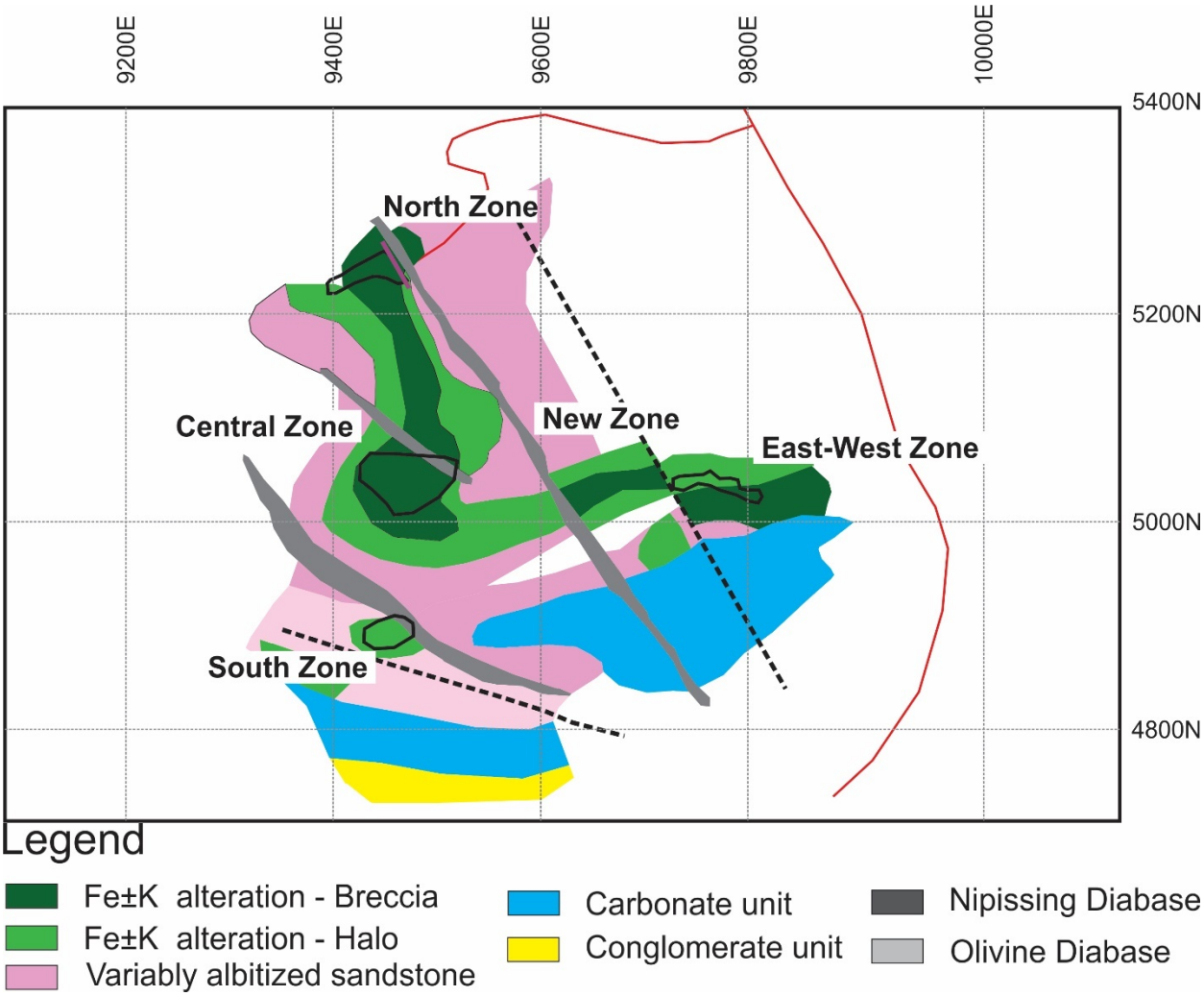

Figure 7-4: Geology and mineralized zones of the past producing Scadding Mine site. Modified from Harper (1983).

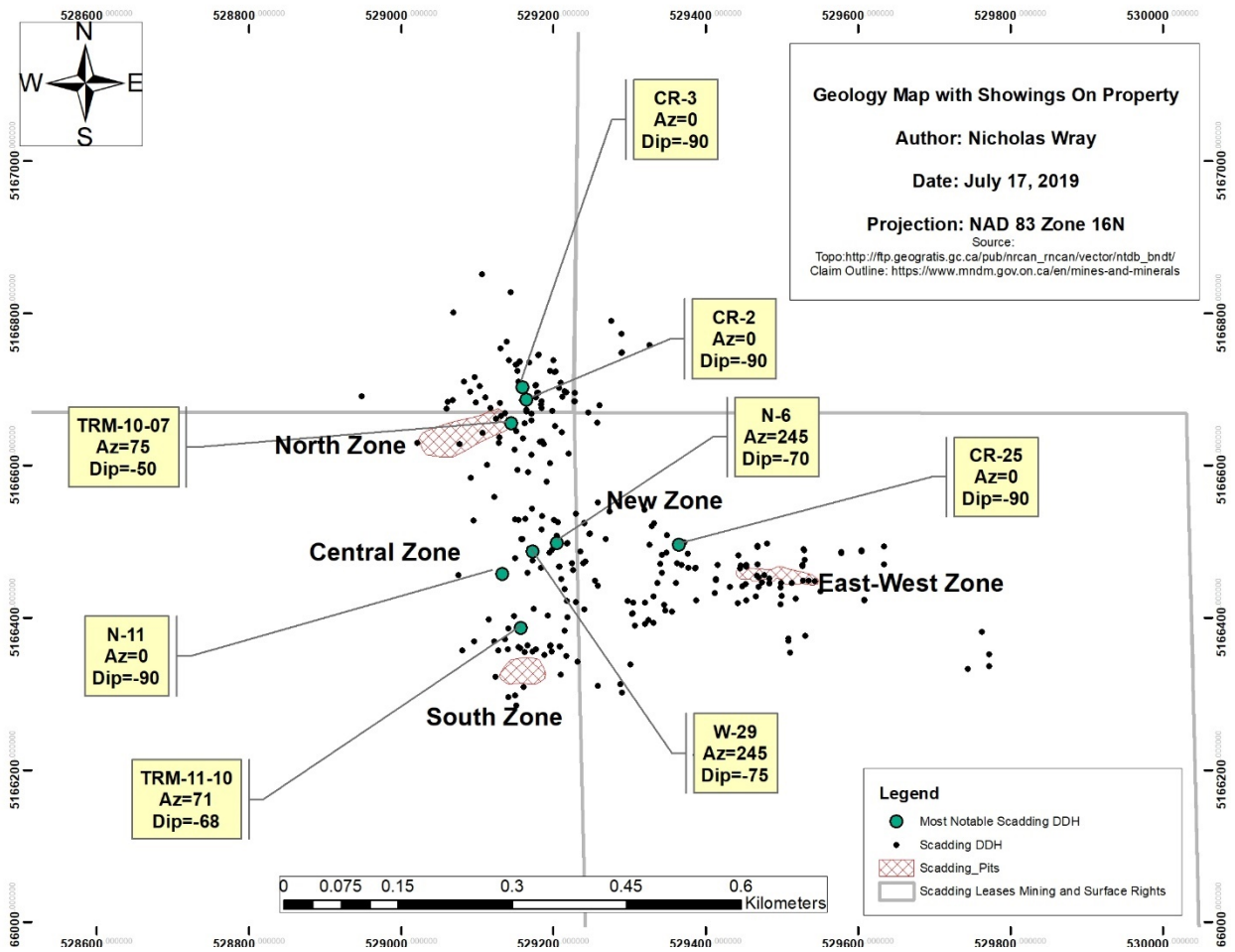

Figure 7-5:Locations of highlighted drill intersection at Scadding Mine. Reference Table 7-5 for intersections.

Outside of the Scadding Mine site, previous explorers and MacDonald Mines have discovered anomalous gold, copper, and cobalt mineralization on the Project and are described in section 9 from MacDonald Mines 2018 exploration program. Anomalous intersections and grades are outlined in Table 7-3 and the locations can be seen on Figure 7-6.

Table 7-3: Historic mineralized samples and intersections on the SPJ Project.

Name	Report	X	Y	From (m)	To (m)	Intersection (m)	Au (ppm)	Cu (ppm)	Co (ppm)
Westfield Minerals W-29	41I10NE0185	529530.6	5166376.0	91.0	123.2	32.2	12.00		
True Claims TRM-10-07	Whissell and Moss, 2010	529214.0	5166438.0	52.4	71.6	19.3	12.85	91.53	47.16
Northgate Exploration N-6	41I10NE0185	529247.6	5166511.0	87.7	101.0	13.4	20.30		
Currie Rose CR-25	41I10NE2005	529331.4	5166428.0	53.3	58.3	5.0	42.70		
TRM-11-10	Moss et al, 2011	529157.0	5166387.0	53.0	66.0	13.0	6.30	59.54	101.31

Name	Report	X	Y	From (m)	To (m)	Intersection (m)	Au (ppm)	Cu (ppm)	Co (ppm)
Currie Rose CR-2	41I10NE2005	529163.6	5166689.0	11.3	16.0	4.7	55.10		
Currie Rose CR-3	41I10NE2005	529097.6	5166683.0	6.5	11.6	5.1	30.50		
Northgate N-11	41I10NE0185	529183.4	5166466.0	57.8	67.2	9.4	5.90		
New Arcadia A-25	41I10NE0140	530223.5	5164830.9	78.0	79.4	1.4	5.14		
New Arcadia A-13	41I10NE0143	530214.2	5164693.4	48.7	49.0	0.4	6.17		
Currie Rose C-1	41I09NW0033	537774.0	5165750.0	8.8	8.9	0.1	6.13		
Currie Rose C-13	41I09NW0033	538513.0	5166122.0	41.9	42.5	0.6	0.81	8300.00	
Currie rose C-27	41I09NW0033	537674.0	5165700.0	32.5	34.1	1.6	2.20		
Palkovits P9-2002	41I10NE0075	536572.0	5165891.0	38.6	39.0	0.3	6.78	3280.00	369.00
Palkovits P9-2002	41I10NE0075	536572.0	5165891.0	33.2	33.4	0.2	4.71		
Palkovits P9-2003	41I10NE0075	536771.0	5165888.0	9.3	9.8	0.5	1.39	5080.00	245.00
Palkovits P9-2003	41I10NE0075	536771.0	5165888.0	19.3	21.2	2.0	1.62	3250.00	466.00
Palkovits P9-2003	41I10NE0075	536771.0	5165888.0	24.0	24.5	0.4	1.31	689.00	245.00
Jovan Pit Channel C326659	20000007767	536253.0	5165236.0			0.7	5.96	6170.00	3240.00
Jovan Pit Channel C326662	20000007767	536252.0	5165237.0			0.4	5.13	5990.00	1135.00
Jovan Pit Channel C326663	20000007767	536252.0	5165238.0			0.5	8.61	30300.00	1555.00
Jovan Pit Channel C326667	20000007767	536249.0	5165236.0			0.5	21.30	7560.00	492.00
Jovan Pit Channel C326670	20000007767	536248.0	5165230.0			0.3	12.45	9620.00	978.00
Au-Cu Shear Grab 6736387	20000007767	537806.0	5165696.0				6.89	10550.00	24.00
Palkovits #1 Grab	41I10NE0048	536175.0	5165774.0				1.12		
Powerline Showing Chip 27888	41I10NE2024	528593.0	5163460.0			0.4	7.54		
Alkin Grab	41I10NE0023	527323.0	5166553.0				6.35		

Note: the intersection highlighted in blue are from the Scadding Mine site – this is just a small sample of numerous historical high-grade intersections at the mine. Intersections are not true width; true width is

currently unknown. The reader is cautioned that a qualified person has not done sufficient work to verify these values. These are historical values that may not be representative of the mineralization present near the Scadding Mine.

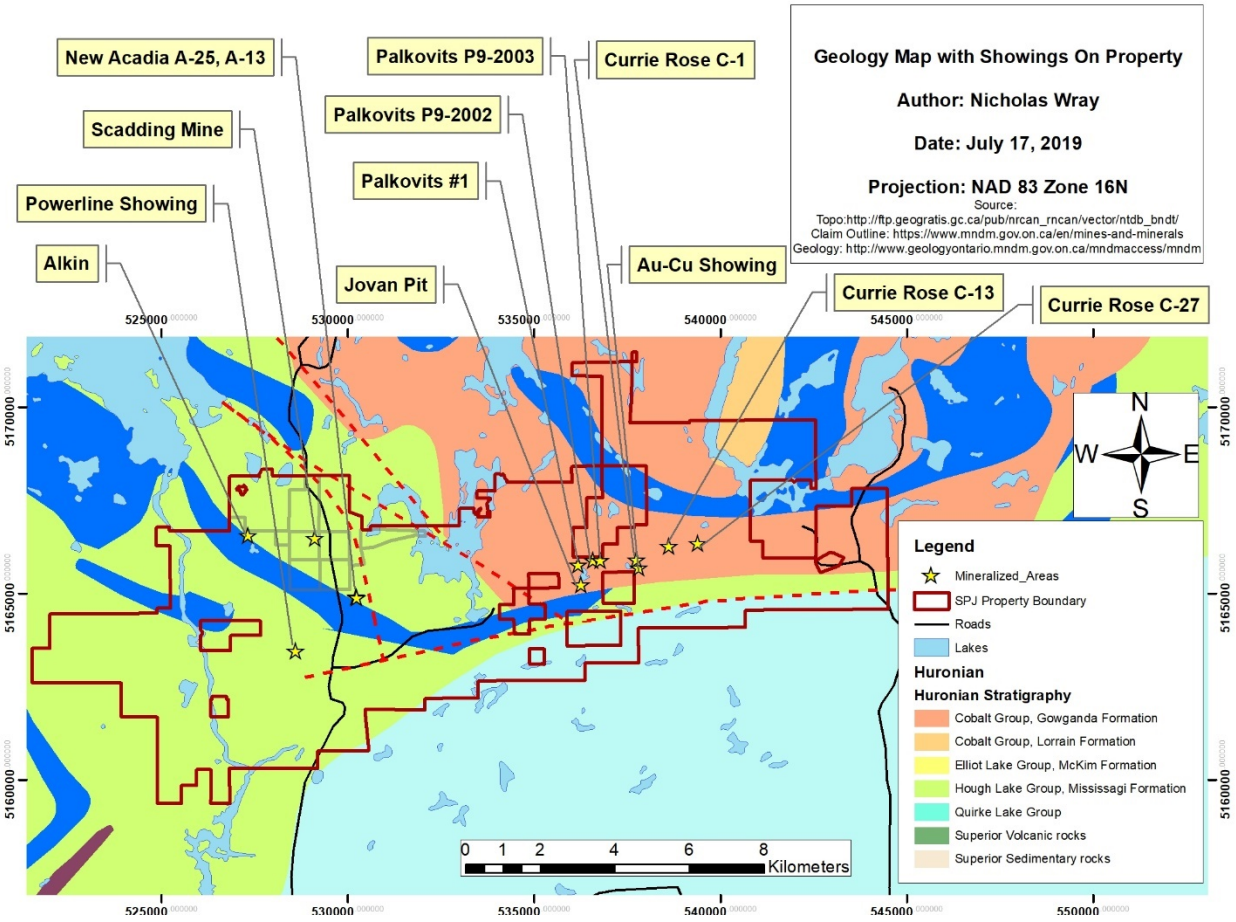

Figure 7-6: Locations of historic mineralized samples and intersections on the Jovan-Powerline Project.

8.0 Deposit Types

8.1 IOCG Style

It has been proposed by Corriveau (2007) that the gold and copper deposits in the Sudbury region may belong to the Iron oxide – copper – gold (IOCG) classification of ore deposits. IOCG deposits encompass a broad range of characteristics. The general classification criteria for IOCG deposits outlined by Barton & Johnson (2000) include:

- S-poor system with Ti-poor magnetite dominating over sulfides
- Regional corridors of sodic alteration with local brecciation
- Potassic-iron alteration associated with polymetallic mineralization
- local chlorite and white mica alteration with elevated rare earth elements
- typically hosted in metasedimentary rocks that have been intruded by plutons
- mostly Proterozoic in age
- deposits commonly occur as small clusters

IOCG deposits form from magmatic-hydrothermal brines derived from deep crustal structures due to global-scale rifting. Deposits are usually surrounded by hundreds of meters to kilometer-scale sodic-potassic-calcic alteration haloes. This results in the formation of alteration minerals such as albite, k-feldspar, biotite, sericite, and carbonates. The deposits often have and Fe-rich core that is spatially associated with mineralization (Figure 8-1). Magnetite and hematite are the dominant alteration minerals in the core of the system with mineralization dominated by chalcopyrite, pyrite, bornite, and pyrrhotite.

Since most of the Au-Cu deposits in the Sudbury area are small and inactive they have received little research pertaining to their origin. The only deposit to receive research into the mineralization style is the Scadding Mine. Schandl and Gorton (2007) determined that the Scadding Mine fulfils all the above IOCG classification criteria except that sulfides dominate over Ti-poor magnetite. For this reason, the authors concluded that Scadding Mine is a variant of an IOCG deposit. The IOCG model for the Sudbury area has recently been acknowledged by the Ontario Geological Survey as a likely ore deposit model (Farrow, 2016). Further research into the Sudbury Au-Cu ore genesis is required at different deposits to determine if the region is a large IOCG system.

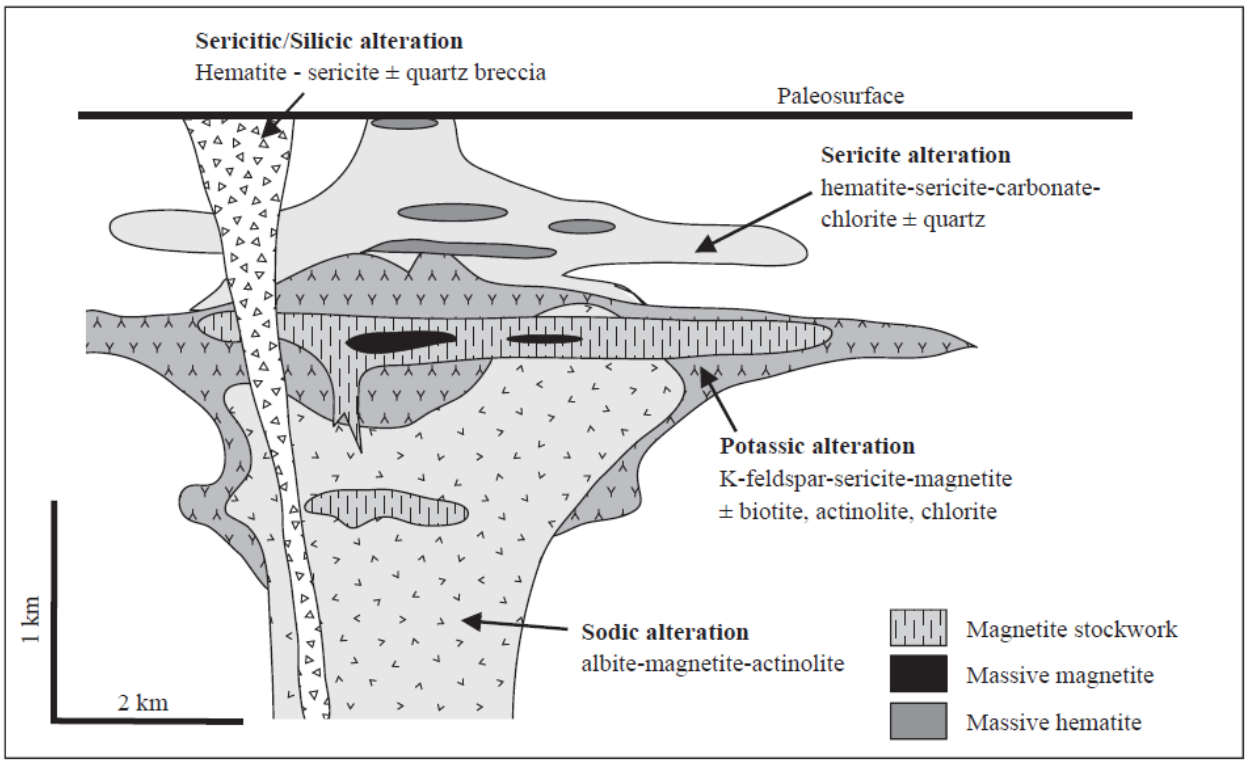

Figure 8-1: Schematic cross section of alteration distribution in IOCG deposits. From Hitzman et al. (1992).

9.0 Exploration Program

9.1 Introduction

Two exploration programs have been completed by MacDonald Mines on the Project. The first was in the fall of 2018 and the Scadding leases were not part of the Project. The work was conducted during the fall of 2018 and included prospecting and trenching. The second exploration program is currently ongoing and includes prospecting and drilling.

9.2 2018 Geological Sampling

Twenty-three days were spent geological mapping, and sampling on the Jovan and Powerline blocks. In total, 181 samples were taken which provided good spatial coverage across the priority areas of the Project. All samples were sent for geochemical analyses. A beep mat was used while traversing to identify conductive and magnetic bodies. Most of the samples targeted features that are known to host or are associated with mineralization in the area (breccias, shears, altered zones, mineralization, etc.). Samples were also taken of less prospective rocks to help characterize property scale alteration.

9.3 Highlights of 2018 Geological Sampling

A map outlining the locations of the following area can be seen in Figure 9-3 and Figure 9-4. On the Jovan side (east) of the Project, all the highlighted areas except the Brady-Jovan pit occur in an east-west trending corridor of albite alteration. Within the albitization zone is an area of magnetics/conductivity that was outlined using the beep mat. On the Powerline side (west) of the Project, mineralized samples occur in a zone of albitization that is oriented north-south. All grab samples taken in 2018 are summarized in Table 9-7. Grab samples are selective by nature and therefore not considered representative of the greater Project.

9.3.1 Jovan Pit

The Brady-Jovan pit was considered a high priority because previous explorers indicated high-grade Au, Cu, and Co mineralization. The pit can easily be accessed by truck. The showing occurs near the northern contact of a large diabase intrusion. The geology consists of a diabase wrapping around albitized metasedimentary rocks. Near the contact of the metasedimentary rock and the diabase there is net-texture to semi-massive chalcopyrite + pyrite + arsenopyrite + cobaltite within the metasedimentary rock (Figure 9-1). Mineralization does not appear strong on surface because only minor gossan has formed. It is difficult to determine the geometry of the mineralized zone because there is limited exposure, but the mineralization appears to be plunging at 115/25. Two sets of channel samples were cut into the Jovan Pit to test continuity over two mineralized domains. The channel samples confirmed the anomalous mineralization encountered by previous explorers (Table 9-1).

Table 9-1: Mineralized channel sample intersection from the Brady-Jovan

Channel Name	X	Y	Az	Length (m)	Au (g/t)	Cu (wt. %)	Co (wt. %)	Ni (wt. %)	Ag (g/t)
Jov-1	536252	5165231	12	3.60	4.42	4.31	0.011	0.013	11.15
Jov-2	536254	5165231	56	1.50	3.81	0.59	3.440	0.140	3.79

Figure 9-1: Cut surface of a channel sample taken from the Jovan Pit.

9.3.2 Palkovits #1

Anomalous gold mineralization was first identified by Palkovits in 1984. Palkovits took a grab sample that contained 1120 ppb Au at this site. Cascadero Copper took a sample containing 802 ppb Au at this showing in 2010. The site consists of a 1.5 m by 1.5 m blast pit into a vertical rock wall. The gossanous blast pit contains up to 15% pyrite but also contains copper-rich domains that include chalcopyrite, malachite, and azurite. The blast pit rocks are sheared at 090/85. The surrounding rocks are the most strongly albitized rocks on the Project and appear like a beige chert. The albitized rocks are weakly brecciated with minor sulfide and anomalous cobalt mineralization. Subtle cobalt bloom was discovered over 18 m after breaking a lot of rock (Figure 9-2). At multiple locations, the cobalt bloom was found to trend 260 degrees. This low-sulfide style of cobalt mineralization has not been previously described at Palkovits #1. Anomalous grab samples are outlined in Table 9-2.

Table 9-2: Anomalous grab samples from the Palkovits #1 showing.

Sample	X	Y	Au (g/t)	Cu (wt. %)	Co (wt. %)	S (wt. %)
918080	536182	5165782	0.11	0.166	0.0317	0.37
918081	536182	5165781	1.81	0.2590	0.0140	0.47
918077	536177	5165773	1.01	0.4490	0.1470	0.44
916659	536174	5165764	0.16	0.0028	0.0796	0.05

Figure 9-2: Cobalt bloom discovered at Palkovits #1 showing.

9.3.3 Palkovits #2

The showing was discovered by Palkovits in in 1984 and received much more exploration than Palkovits #1. The area has been mechanically stripped to expose bedrock and 4 diamond drill holes were also drilled. The geology consists of moderately brecciated and albitized metasedimentary rocks. The matrix of the breccia is composed of sulfides (arsenopyrite, pyrite, chalcopyrite), quartz, carbonate, and chlorite. The foliation of the mineralized zone trends 257 degrees. The rocks also contain quartz veins that occur in many directions. Very coarse-grained quartz also overprints the mineralization and does not contain sulfides. A mineralized grab sample is outlined in Table 9-3.

Table 9-3: Mineralized grab sample from Palkovits #2.

Sample	X	Y	Au (g/t)	Cu (wt. %)	Co (wt. %)	Ni (wt. %)
918094	536598	5165882	2.39	0.0882	0.0838	0.135

9.3.4 Au-Cu Showing

Cascadero Copper reported a sample containing 6.89 g/t gold within a 1-2 m wide shear zone at this location. The geology consists of strongly albitized metasedimentary rocks within a chlorite, quartz, and carbonate altered shear that trends 45 degrees. The shear contains minor chalcopyrite, malachite, and pyrite. A mineralized grab sample is outlined in Table 9-4.

Table 9-4: Mineralized grab sample from the Au-Cu showing

Sample	X	Y	Au (g/t)	Cu (wt. %)	Co (wt. %)	Ni (wt. %)
709964	537809	5165684	1.70	>1	0.0097	0.0592

9.3.5 Limestone Trenches

This area contains multiple historical trenches and blast pits over a strike length of 250 m. There is an old excavated trench at the western extent of the historical excavations. The trench contains limestone with moderate biotite alteration. Approximately 115 m to the East, there is a cluster of old trenches and blast pits. The trenches show a nice transition from altered limestone to a chlorite-rich rock with magnetite. Mineralization consists of blebby to semi-massive pyrrhotite and pyrite with lessor amounts of chalcopyrite. The mineralization is trending E-NE. There is another cluster of small blast pits 65 m to the East. These blast pits are composed of diabase and albitized metasedimentary rocks. They contain chlorite rich foliations that trend N and NE. Minor pyrite and pyrrhotite is present at these trenches. Anomalous samples are outlined in Table 9-5.

Table 9-5: Anomalous grab samples from the Limestone trenches.

Sample	X	Y	Au (g/t)	Cu (wt. %)	Co (wt. %)	Ni (wt. %)
918062	538152	5165654	0.05	0.128	0.066	0.082
916666	538156	5165633	0.02	0.030	0.046	0.012

9.3.6 Chlorite Breccia Zone

This area is located just off the main trail that runs through the Project. The geology consists of strongly albitized metasedimentary rocks that are being cut by anastomosing chlorite. There is only sulfide associated with the chlorite locally and no anomalous mineralization was encountered. However, the presence of chlorite within albitized rocks in particularly interesting because the Scadding mine is hosted in this alteration assemblage.

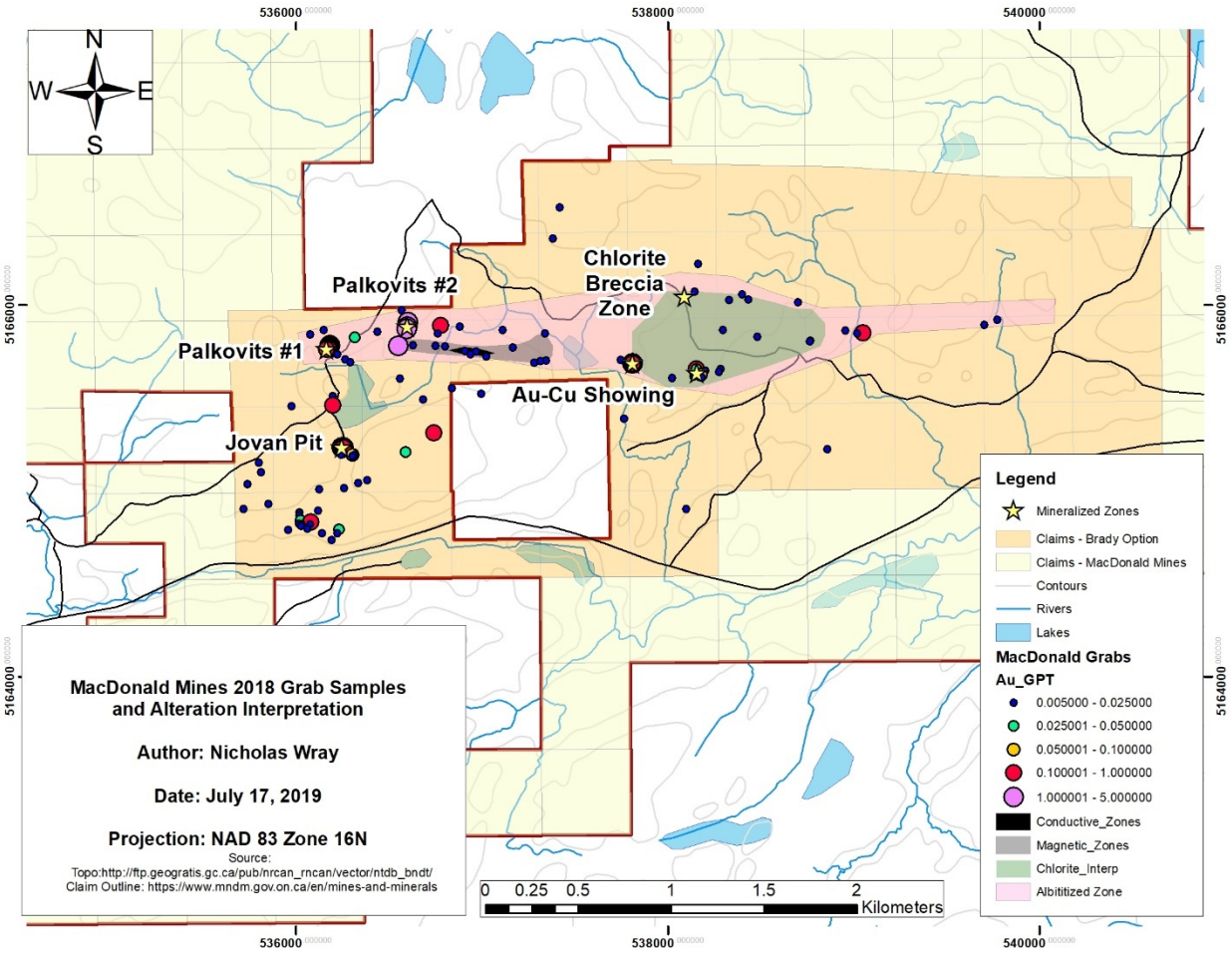

Figure 9-3: Interpreted zone of alteration and mineralized samples on the Jovan (eastern) side of the property.

9.3.7 Powerline N-S Albitization

Anomalous gold mineralization hosted in strongly albite altered metasedimentary rocks has been outlined over a strike length of 1.4 km in a north-south orientation. The mineralization is observed in historic blast pits and trenches in an area with very minimal outcrop exposure. Weak to moderate north-south shearing with a stretching lineation plunging to the east is associated with the mineralized zones. The mineralized grab samples are outlined in Table 9-6.

Table 9-6: Anomalous grab samples from the Powerline N-S Albitization zone.

Sample	X	Y	Au (g/t)	Cu (wt. %)	Co (wt. %)	Ni (wt. %)
709179	528287	5162094	0.15	0.0004	0.0011	0.0026
712018	528430	5162983	0.34	0.0005	0.0110	0.0111
709192	528589	5163444	0.25	0.0004	0.0346	0.0687

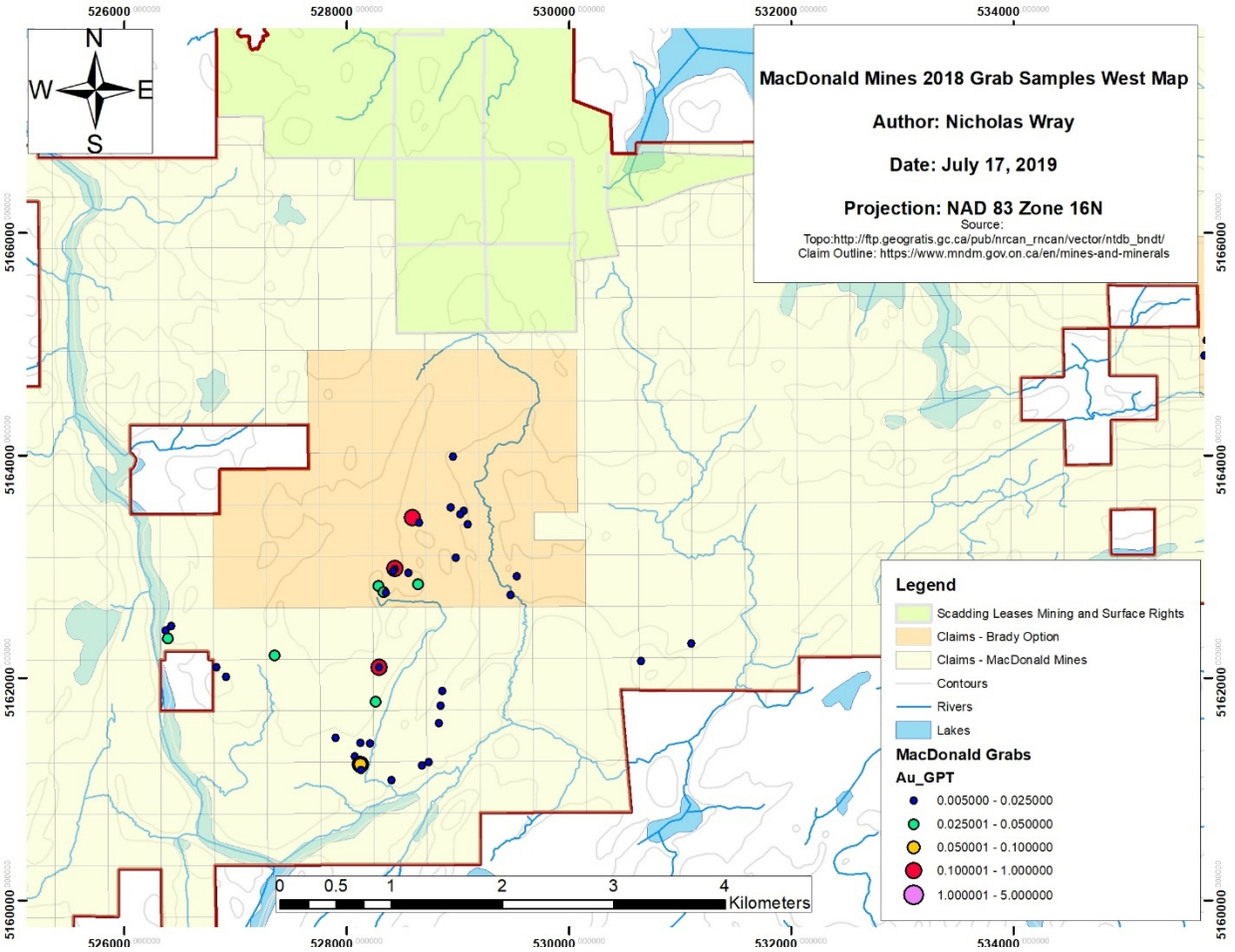

Figure 9-4: Anomalous samples on the Powerline (western) side of the property.

Table 9-7: Summary of all grab samples taken by MacDonald Mines in 2010.

Sample ID	Area	X	Y	Co (ppm)	Cu (ppm)	Au (g/t)
918095	Jovan	536598.3	5165882.4	181.00	101.00	0.02
918094	Jovan	536598.3	5165882.4	838.00	882.00	2.39
918093	Jovan	535956.3	5164789.5	14.00	139.00	0.01
918092	Jovan	536013.9	5164823.2	14.00	21.00	0.01
918091	Jovan	536077.9	5164830.8	59.00	6930.00	0.71
918090	Jovan	536059.6	5164794.4	7.00	6.00	0.01
918089	Jovan	536059.6	5164794.4	34.00	275.00	0.01
918088	Jovan	536017.6	5164867.7	7.00	9.00	0.01
918087	Jovan	536022.0	5164841.8	42.00	4.00	0.03
918086	Jovan	536030.5	5164819.8	9.00	3.00	0.02
918085	Jovan	536026.5	5164810.1	8.00	7.00	0.01
918084	Jovan	536219.4	5165735.5	12.00	10.00	0.02
918083	Jovan	536313.6	5165824.4	3.00	110.00	0.03
918082	Jovan	536262.3	5165707.0	31.00	56.00	0.01
918081	Jovan	536182.2	5165781.9	140.00	2590.00	1.81
918080	Jovan	536182.2	5165781.9	317.00	1660.00	0.11
918079	Jovan	536182.2	5165781.9	65.00	40.00	0.05
918078	Jovan	536177.6	5165773.4	353.00	1280.00	0.23
918077	Jovan	536177.6	5165773.4	1470.00	4490.00	1.01
918076	Jovan	536169.5	5165763.7	512.00	6.00	0.03
918075	Jovan	536163.8	5165762.2	17.00	48.00	0.18
918074	Jovan	536163.8	5165762.2	331.00	31.00	0.04
918073	Jovan	538089.3	5166045.4	7.00	1.00	0.01
918072	Jovan	537338.0	5165845.3	73.00	118.00	0.01
918070	Jovan	537345.3	5165700.5	14.00	65.00	0.01
918069	Jovan	537314.1	5165698.4	22.00	13.00	0.01
918068	Jovan	537279.6	5165688.4	5.00	10.00	0.01
918067	Jovan	537166.2	5165770.9	19.00	18.00	0.01
918066	Jovan	537109.7	5165864.8	17.00	33.00	0.01
918065	Jovan	537808.8	5165684.3	6.00	448.00	0.52
918064	Jovan	537808.8	5165684.3	2.00	532.00	0.23
918063	Jovan	538138.3	5165614.7	184.00	399.00	0.03
918062	Jovan	538152.5	5165654.2	655.00	1280.00	0.05
918061	Jovan	538152.5	5165654.2	301.00	1200.00	0.12
918060	Jovan	538183.4	5165610.5	20.00	54.00	0.01
918059	Jovan	538275.1	5165639.3	136.00	1330.00	0.01
918058	Jovan	538275.1	5165639.3	180.00	902.00	0.01
918057	Jovan	536762.0	5165845.6	26.00	20.00	0.01
918056	Jovan	536762.0	5165845.6	25.00	677.00	0.01
918055	Jovan	536799.4	5165777.5	20.00	10.00	0.01
918054	Jovan	536191.5	5164734.8	45.00	73.00	0.01
918053	Jovan	536018.3	5164882.9	16.00	41.00	0.01

Sample ID	Area	X	Y	Co (ppm)	Cu (ppm)	Au (g/t)
918052	Jovan	535850.2	5164930.2	51.00	52.00	0.01
918051	Jovan	535715.1	5164900.9	25.00	15.00	0.01
918050	Jovan	536118.0	5164892.9	18.00	47.00	0.01
918049	Jovan	536222.0	5164770.9	37.00	80.00	0.01
918048	Jovan	536074.2	5164818.8	9.00	4.00	0.01
918047	Jovan	537418.6	5166524.2	52.00	55.00	0.01
918046	Jovan	537381.9	5166357.0	20.00	10.00	0.01
918045	Jovan	538176.3	5165626.0	342.00	408.00	0.05
918044	Jovan	538176.3	5165626.0	181.00	1480.00	0.02
918043	Jovan	538176.3	5165626.0	124.00	254.00	0.02
918042	Jovan	538281.9	5165655.5	206.00	682.00	0.02
918040	Jovan	542839.8	5166452.4	32.00	15.00	0.01
918039	Jovan	542689.8	5166254.1	35.00	5490.00	0.09
918038	Jovan	542619.0	5166236.0	54.00	110.00	0.01
918037	Jovan	542568.8	5166264.7	24.00	6.00	0.01
918036	Jovan	538858.6	5165223.9	1.00	6.00	0.01
918035	Jovan	536566.1	5165969.8	25.00	642.00	0.01
918034	Jovan	536967.5	5165749.1	20.00	146.00	0.02
918033	Jovan	536906.0	5165752.4	26.00	25.00	0.01
918032	Jovan	536749.0	5165779.0	4.00	18.00	0.01
918031	Jovan	536548.1	5165780.0	238.00	3710.00	1.55
918030	Jovan	536437.3	5165856.2	24.00	123.00	0.01
918029	Jovan	535737.4	5165035.7	71.00	52.00	0.01
918028	Jovan	535715.1	5164900.9	32.00	614.00	0.01
918027	Jovan	535715.1	5164900.9	192.00	375.00	0.02
918026	Jovan	535715.1	5164900.9	74.00	297.00	0.01
918025	Jovan	536137.7	5164770.8	9.00	26.00	0.01
918024	Jovan	536230.8	5164792.1	51.00	1130.00	0.03
918023	Jovan	536333.3	5165042.6	22.00	28.00	0.01
918022	Jovan	539770.8	5165920.8	48.00	46.00	0.01
918021	Jovan	539770.8	5165920.8	10.00	35.00	0.01
918020	Jovan	539700.9	5165892.4	3.00	16.00	0.01
918019	Jovan	539048.8	5165850.0	39.00	24.00	0.10
918018	Jovan	539048.8	5165850.0	147.00	195.00	0.22
918017	Jovan	539019.5	5165846.8	20.00	20.00	0.02
918016	Jovan	538764.3	5165804.8	71.00	726.00	0.01
918015	Jovan	538953.9	5165861.0	20.00	57.00	0.01
918014	Jovan	538700.6	5166013.9	24.00	184.00	0.01
918013	Jovan	538431.3	5166028.6	17.00	98.00	0.01
918012	Jovan	538330.0	5166024.5	15.00	11.00	0.01
918011	Jovan	538142.7	5166072.4	5.00	3.00	0.01
918010	Jovan	538160.3	5166221.2	32.00	57.00	0.01
918009	Jovan	538480.3	5165829.8	2.00	18.00	0.01

Sample ID	Area	X	Y	Co (ppm)	Cu (ppm)	Au (g/t)
918008	Jovan	538398.7	5166056.6	5.00	3.00	0.01
918007	Jovan	538398.7	5166056.6	93.00	163.00	0.01
918006	Jovan	538398.7	5166056.6	93.00	169.00	0.02
918005	Jovan	538296.5	5165865.2	25.00	23.00	0.01
918004	Jovan	537764.6	5165387.5	25.00	116.00	0.01
918003	Jovan	537746.4	5165705.2	15.00	2.00	0.01
918002	Jovan	537792.5	5165669.4	12.00	16.00	0.01
918001	Jovan	538021.3	5165607.5	10.00	7.00	0.01
916666	Jovan	538156.7	5165633.0	459.00	301.00	0.02
916665	Jovan	535975.2	5165454.4	3.00	6.00	0.01
916664	Jovan	536074.7	5165841.6	96.00	2.00	0.01
916663	Jovan	536148.6	5165864.3	1.00	2.00	0.01
916662	Jovan	536148.6	5165864.3	-1.00	2.00	0.01
916661	Jovan	536197.6	5165507.9	42.00	8.00	0.01
916660	Jovan	536174.0	5165764.9	12.00	62.00	0.04
916659	Jovan	536174.0	5165764.9	796.00	28.00	0.16
916658	Jovan	536174.0	5165764.9	6.00	9.00	0.01
916657	Jovan	536290.4	5165691.4	6.00	4.00	0.01
916656	Jovan	536558.8	5165603.5	28.00	2.00	0.01
916655	Jovan	536628.3	5165784.2	13.00	82.00	0.01
916654	Jovan	536879.9	5165883.8	58.00	469.00	0.01
916653	Jovan	536939.0	5165734.5	3.00	12.00	0.01
916652	Jovan	536939.0	5165734.5	2.00	12.00	0.01
916651	Jovan	536682.4	5165492.2	21.00	5.00	0.01
916609	Jovan	536776.3	5165889.4	795.00	354.00	0.69
916608	Jovan	536776.3	5165889.4	74.00	40.00	0.63
916607	Jovan	537023.6	5165720.8	9.00	3.00	0.01
916606	Jovan	537023.6	5165720.8	29.00	6.00	0.01
916605	Jovan	536995.0	5165520.9	23.00	28.00	0.01
916604	Jovan	536838.6	5165553.2	24.00	10.00	0.01
916603	Jovan	536123.4	5165009.1	52.00	33.00	0.01
916602	Jovan	536257.7	5165013.4	17.00	41.00	0.01
916601	Jovan	536257.7	5165013.4	12.00	25.00	0.01
752040	Jovan	509207.0	5186792.0	49.00	3370.00	0.15
752039	Jovan	508630.0	5185089.0	54.00	174.00	0.81
752038	Jovan	536287.0	5162775.0	76.00	1460.00	0.08
752002	Jovan	536382.0	5165056.0	24.00	185.00	0.01
712024	Jovan	528347.3	5162765.0			0.02
712023	Jovan	528327.8	5162773.6			0.03
712022	Jovan	528281.6	5162827.6			0.02
712021	Jovan	528284.1	5162824.9			0.03
712020	Jovan	528414.9	5162957.0			0.01
712019	Jovan	528430.4	5162978.7			0.02

Sample ID	Area	X	Y	Co (ppm)	Cu (ppm)	Au (g/t)
712018	Jovan	528430.0	5162983.1			0.34
712017	Jovan	529021.1	5163471.4			0.03
712016	Jovan	529050.8	5163505.3			0.01
712015	Jovan	528932.4	5163535.2			0.01
712014	Jovan	528932.4	5163535.2			0.01
712013	Jovan	528935.0	5163535.0			0.01
712012	Jovan	528587.0	5163449.4			0.03
712011	Jovan	536595.5	5165871.5			1.33
712010	Jovan	536598.9	5165905.9			2.93
712008	Jovan	536316.0	5165194.0			0.02
712007	Jovan	536246.4	5165232.8			4.78
712006	Jovan	536243.0	5165194.5			0.01
712005	Jovan	536252.9	5165232.4			0.33
712004	Jovan	536252.9	5165232.4			24.20
712003	Jovan	536252.9	5165232.4			4.76
712002	Jovan	536252.9	5165232.4			0.86
712001	Jovan	536252.9	5165232.4			8.69
709966	Jovan	538097.3	5164902.9	2.00	114.00	0.01
709965	Jovan	537808.8	5165684.3	2.00	31.00	0.05
709964	Jovan	537808.8	5165684.3	104.00	> 10000	1.70
709963	Jovan	537816.1	5165696.7	7.00	11.00	0.01
709962	Jovan	538275.1	5165639.3	33.00	135.00	0.01
709961	Jovan	538275.1	5165639.3	260.00	366.00	0.01
709960	Jovan	538275.1	5165639.3	80.00	246.00	0.01
709959	Jovan	538183.4	5165610.5	198.00	1270.00	0.02
709958	Jovan	538183.4	5165610.5	92.00	264.00	0.01
709957	Jovan	538201.8	5165644.9	28.00	54.00	0.01
709956	Jovan	536196.5	5165459.9	247.00	13.00	0.12
709955	Jovan	536196.5	5165459.9	300.00	48.00	0.05
709954	Jovan	535799.4	5165150.3	20.00	7.00	0.01
709953	Jovan	535810.2	5165099.6	225.00	395.00	0.01
709952	Jovan	535810.2	5165099.6	7.00	15.00	0.01
709951	Jovan	535810.2	5165099.6	18.00	63.00	0.01
709197	Jovan	538767.5	5165807.8	66.00	560.00	0.01
709196	Jovan	536739.3	5165310.6	55.00	> 10000	0.37
709195	Jovan	536587.4	5165209.7	49.00	1170.00	0.04
709194	Jovan	536302.0	5165186.5	3.00	34.00	0.01
709193	Jovan	536302.8	5165194.8	66.00	1910.00	0.10
709192	Powerline	528589.6	5163444.4	369.00	4.00	0.25
709191	Powerline	528650.1	5163395.6	7.00	-1.00	0.01
709190	Powerline	528287.0	5162093.8	18.00	1.00	0.01
709189	Powerline	528329.9	5162770.9	328.00	15.00	0.05
709188	Powerline	528953.8	5163990.5	25.00	62.00	0.01

Sample ID	Area	X	Y	Co (ppm)	Cu (ppm)	Au (g/t)
709187	Powerline	531099.8	5162308.2	5.00	15.00	0.01
709186	Powerline	530643.6	5162149.4	2.00	10.00	0.01
709185	Powerline	528400.4	5161082.2	28.00	64.00	0.01
709184	Powerline	528672.4	5161210.0	25.00	67.00	0.01
709183	Powerline	528735.2	5161243.1	28.00	34.00	0.01
709182	Powerline	528595.4	5163460.8	143.00	4.00	0.03
709181	Powerline	528978.1	5163080.9	18.00	25.00	0.01
709180	Powerline	529085.1	5163378.7	14.00	46.00	0.01
709179	Powerline	528287.0	5162093.8	12.00	4.00	0.15
709178	Powerline	528287.0	5162093.8	22.00	5.00	0.01
709177	Powerline	528856.6	5161883.7	21.00	30.00	0.01
709176	Powerline	528843.3	5161750.9	31.00	51.00	0.01
709175	Powerline	529473.6	5162743.8	6.00	13.00	0.01
709174	Powerline	529528.7	5162913.4	21.00	44.00	0.02
709173	Powerline	528640.9	5162844.8	16.00	53.00	0.04
709172	Powerline	528552.2	5162944.6	32.00	4.00	0.02
709171	Powerline	528209.4	5161410.4	18.00	39.00	0.01
709170	Powerline	528824.8	5161594.5	15.00	36.00	0.01
709169	Powerline	526827.9	5162098.1	-1.00	4.00	0.01
709168	Powerline	526827.9	5162098.1	7.00	40.00	0.01
709167	Powerline	526911.7	5162012.0	17.00	34.00	0.01
709166	Powerline	528258.9	5161786.6	12.00	187.00	0.03
709165	Powerline	528122.9	5161417.1	77.00	146.00	0.01
709164	Powerline	528069.6	5161295.3	86.00	3.00	0.01
709163	Powerline	528094.7	5161242.3	24.00	3.00	0.01
709162	Powerline	528127.2	5161169.3	1.00	5.00	0.01
709161	Powerline	528127.2	5161169.3	20.00	4.00	0.01
709160	Powerline	528120.4	5161223.3	249.00	7.00	0.06
709159	Powerline	528120.4	5161223.3	-1.00	3.00	0.01
709158	Powerline	528120.4	5161223.3	134.00	3.00	0.21
709157	Powerline	528120.4	5161223.3	218.00	17.00	0.13
709156	Powerline	526419.4	5162468.5	15.00	21.00	0.01
709155	Powerline	526419.4	5162468.5	24.00	38.00	0.01
709154	Powerline	526388.5	5162355.2	15.00	34.00	0.04
709153	Powerline	527349.8	5162201.7	23.00	64.00	0.04
709152	Powerline	526369.6	5162425.7	20.00	4.00	0.01
709151	Powerline	527897.8	5161458.6	15.00	38.00	0.01

9.4 2019 Geological Sampling

Ten days were spent geological mapping, and sampling on the Scadding Mine leases. To date, 19 samples have been taken. All samples were sent for geochemical analyses. Most of the samples targeted features that are known to host or are associated with mineralization in the area (breccias, shears, altered zones, veins, mineralization, etc.). Samples were also taken of less prospective rocks to help characterize property scale alteration.

9.5 Highlights of 2018 Geological Sampling

A map showing the locations of the highlights of the 2018 geological sampling can be seen in Figure 9-5. Samples are outlined in Table 9-8. Samples were taken from the Scadding Mine Site and near the tailings area approximately 1 km to the South. Grab samples are selective by nature and therefore not considered representative of the greater Project.

9.5.1 Scadding Mine Site

As a first pass at the Scadding Mine site, sampling was mostly completed around the East-West Zone because there are multiple historical trenches that show important textures and structures. Mineralization can occur as pyrite, chalcopyrite, pyrrhotite, arsenopyrite, and visible gold within brecciated zone. On the Scadding Mine site the breccia matrix is dominated by chlorite-quartz and transitions to iron carbonate-quartz and you move further away. The transition to iron carbonate-quartz matrix is accompanied by a decrease in gold grade. There seems to be two main structural trends that control mineralization. One is a series of subtle north-striking (slightly variable) faults. The other is the east-west bedding. It appears that fluid over pressuring is occurring in the north-striking faults resulting in blowouts (brecciation). Infiltration of chlorite and sulfides is also occurring into the east-west bedding.

9.5.1 Near Tailings Site

Anomalous gold mineralization has been seen at multiple locations near the tailings site. The mineralization style differs from the Scadding Mine Site as it occurs in quartz veins within a medium grain intermediate phase of the Nipissing intrusion. The quartz veins exhibit a crack-seal texture composed of white quartz, smoky quartz, with fine laminations of chlorite and sulfide. Visible gold is common in these veins. The veins range from 10 cm to 2 m in width and strongly folded. The general trend of these veins appears to be northwest.

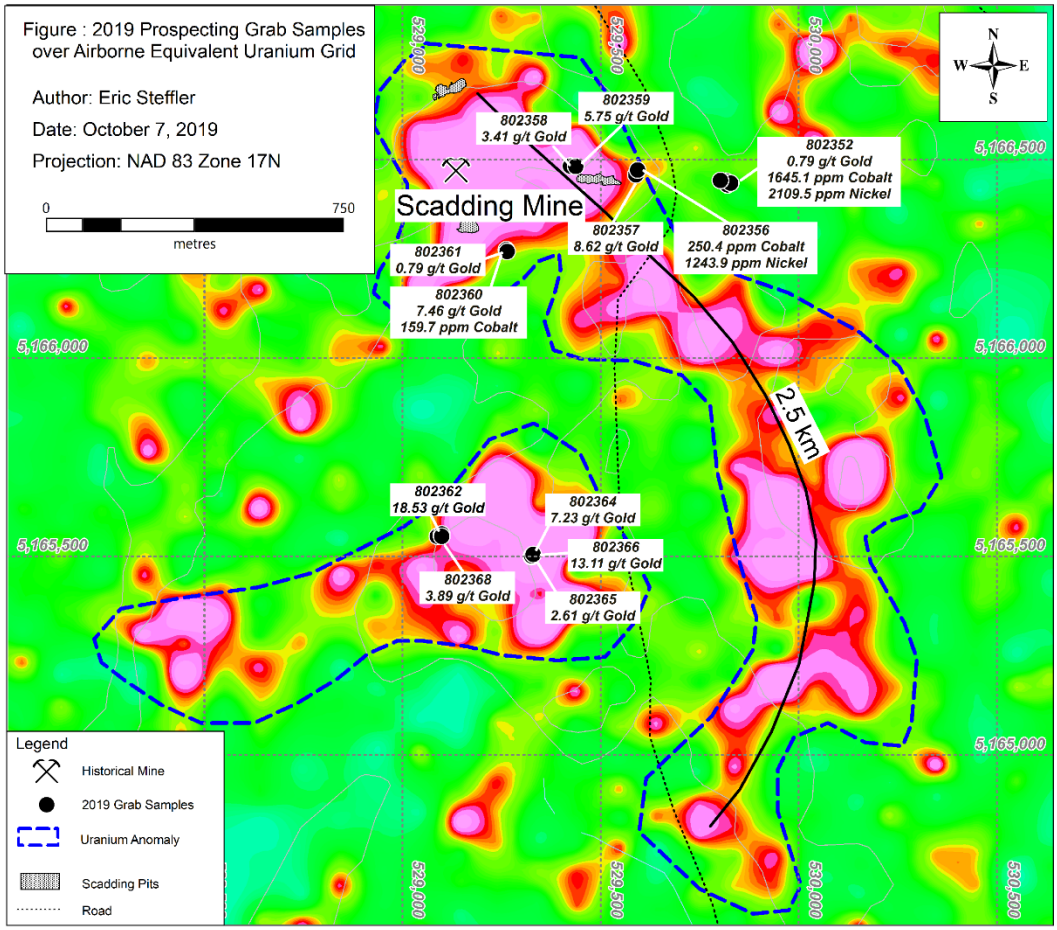

Figure 9-5: Locations of sample to date from Fall 2019 sampling

Table 9-8: Samples to date from Fall 2019 surface sampling

Sample ID	Area	X	Y	Co (ppm)	Cu (ppm)	Au (g/t)
802351	Scadding Mine Site	529816	5166448	130.4	44	0.136
802352	Scadding Mine Site	529817	5166443	1645.1	232.5	0.798
802353	Scadding Mine Site	529820	5166439	48.3	89.4	0.023
802354	Scadding Mine Site	529828	5166443	687.4	36.3	0.057
802355	Scadding Mine Site	529802	5166450	44.5	11.2	0.023
802356	Scadding Mine Site	529589	5166464	250.4	238.6	0.042
802357	Scadding Mine Site	529593	5166476	29.2	321.1	8.62
802358	Scadding Mine Site	529424	5166486	7.7	95	3.409
802359	Scadding Mine Site	529437	5166485	19.2	215.3	5.752
802360	Scadding Mine Site	529262	5166275	159.7	62.4	7.455
802361	Scadding Mine Site	529264	5166271	12.1	18.8	0.796
802362	Tailings Area	529088	5165553	12.5	46.3	18.53
802363	Tailings Area	526940	5167268	1.4	9.4	0.011
802364	Tailings Area	529325	5165502	4.8	52.6	7.23
802365	Tailings Area	529326	5165504	17.4	157.7	2.612
802366	Tailings Area	529330	5165508	18.2	98	13.11
802367	Tailings Area	529099	5165559	22.3	34.7	0.385
802368	Tailings Area	529099	5165553	16.7	77.4	3.891
802369	Scadding Mine Site	529347	5166390	32.9	91.1	0.008

9.6 2018 Trenching

Trenching locations were chosen based on the work of previous explorers and geological information from the government (Figure 9-6). The trenching was designed to target areas that contain anomalous mineralization, strong alteration, and deformed rocks (breccias and shears). Trenching was considered an appropriate exploration approach because the Project contains anomalous mineralization, but very little outcrop is exposed. The trenching location, size, and work completed is outlined in Table 9-9. Table 9-10 summarizes the gold, copper, and cobalt of every channel sample taken by MacDonald Mines in 2018. A total of 10 trenches were completed. Additional channel sampling was completed on a historic trench referred to as trench 11. Systematic channel sampling over broad zones of the trenches provides confidence that the samples are representative.

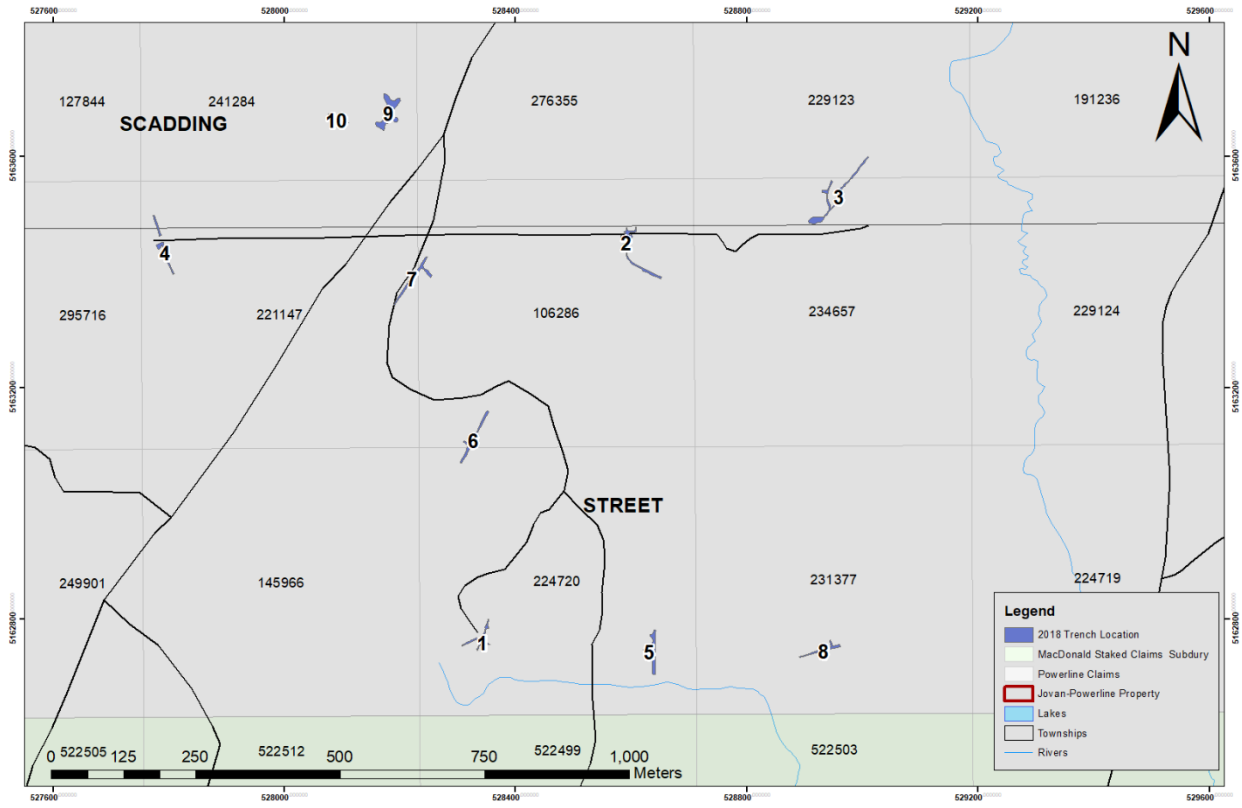

Figure 9-6: Trench locations on the Powerline claims.

Table 9-9: Trench size, location, and work completed by MacDonald Mines in 2018.

Trench	X	Y	Area (m^2)	Volume (m^3)	Excavated	Washed	Cut and Logged	Mapped	Samples cut and analyzed
Trench-1	528342	5162765	274	355	Yes	Yes	Yes	Geology and Samples	106
Trench-2	528594	5163437	524	681	Yes	Yes	Yes	Geology and Samples	97
Trench-3	528949	5163533	803	883	Yes	Yes	Yes	Geology and Samples	95

Trench	X	Y	Area (m^2)	Volume (m^3)	Excavated	Washed	Cut and Logged	Mapped	Samples cut and analyzed
Trench-4	527791	9163445	325	390	Yes	Yes	Yes	Geology and Samples	58
Trench-5	528636	5162742	470	705	Yes	Yes	Yes	Samples	45
Trench-6	528332	5163103	372	335	Yes	Yes	Yes	Samples	63
Trench-7	528223	5163392	447	357	Yes	Yes	Yes	Samples	79
Trench-8	528929	5162746	130	156	Yes	Yes	No	None	0
Trench-9	528181	5163672	876	876	Yes	Yes	Yes	Samples	57
Trench-10	528091	5163663	190	190	Yes	Yes	Yes	Samples	11

Table 9-10: Summary of all channel samples taken by MacDonald Mines in 2018.

Channel ID	Sample ID	From (m)	To (m)	Length (m)	Co (ppm)	Cu (ppm)	Au g/t
Jov-1	709698	3.60	4.60	1.00	8.80	990.00	0.02
Jov-1	709697	2.80	3.60	0.80	168.00	58900.00	2.22
Jov-1	709696	2.00	2.80	0.80	149.00	47000.00	14.74
Jov-1	709695	1.00	2.00	1.00	103.00	72000.00	2.32
Jov-1	709694	0.00	1.00	1.00	44.90	73.70	0.04
Jov-2	709701	1.50	2.50	1.00	252.00	1250.00	0.03
Jov-2	709700	0.75	1.50	0.75	68500.00	10500.00	7.36
Jov-2	709699	0.00	0.75	0.75	54.30	286.00	0.25
Trench-1	712123	22.00	23.00	1.00	13.00	21.00	0.01
Trench-1	712122	21.00	22.00	1.00	26.00	24.00	0.03
Trench-1	712121	20.00	21.00	1.00	44.00	13.00	0.04
Trench-1	712120	19.00	20.00	1.00	40.00	20.00	0.02
Trench-1	712119	18.00	19.00	1.00	18.00	22.00	0.02
Trench-1	712118	17.00	18.00	1.00	77.00	11.00	0.12
Trench-1	712117	16.00	17.00	1.00	8.00	10.00	0.01
Trench-1	712116	15.00	16.00	1.00	152.00	7.00	0.05
Trench-1	712115	14.00	15.00	1.00	127.00	23.00	0.09
Trench-1	712114	13.00	14.00	1.00	52.00	16.00	0.13
Trench-1	712113	12.00	13.00	1.00	26.00	13.00	0.07
Trench-1	712112	11.00	12.00	1.00	29.00	29.00	0.02
Trench-1	712111	10.00	11.00	1.00	83.00	27.00	0.06
Trench-1	712110	9.00	10.00	1.00	120.00	28.00	0.09
Trench-1	712109	8.00	9.00	1.00	13.00	49.00	0.01
Trench-1	712108	7.00	8.00	1.00	26.00	24.00	0.01
Trench-1	712107	6.00	7.00	1.00	15.00	40.00	0.01
Trench-1	712106	5.00	6.00	1.00	15.00	38.00	0.01
Trench-1	712105	4.00	5.00	1.00	12.00	11.00	0.01
Trench-1	712104	3.00	4.00	1.00	20.00	47.00	0.01
Trench-1	712103	2.00	3.00	1.00	48.00	247.00	0.01
Trench-1	712102	1.00	2.00	1.00	49.00	224.00	0.01

Channel ID	Sample ID	From (m)	To (m)	Length (m)	Co (ppm)	Cu (ppm)	Au g/t
Trench-1	712101	0.00	1.00	1.00	51.00	234.00	0.01
Trench-1a	709509	33.00	34.00	1.00	21.00	17.00	0.03
Trench-1a	709508	32.00	33.00	1.00	39.00	11.00	0.02
Trench-1a	709507	31.00	32.00	1.00	26.00	9.00	0.03
Trench-1a	709506	30.00	31.00	1.00	25.00	42.00	0.04
Trench-1a	709505	29.00	30.00	1.00	53.00	13.00	0.04
Trench-1a	709504	28.00	29.00	1.00	70.00	8.00	0.05
Trench-1a	709503	27.00	28.00	1.00	31.00	10.00	0.03
Trench-1a	709502	26.00	27.00	1.00	28.00	4.00	0.07
Trench-1a	709501	25.00	26.00	1.00	38.00	9.00	0.02
Trench-1a	712149	24.00	25.00	1.00	113.00	8.00	0.02
Trench-1a	712148	23.00	24.00	1.00	56.00	13.00	0.02
Trench-1a	712147	22.00	23.00	1.00	120.00	9.00	0.02
Trench-1a	712146	21.00	22.00	1.00	184.00	12.00	0.01
Trench-1a	712145	20.00	21.00	1.00	206.00	7.00	0.01
Trench-1a	712144	19.00	20.00	1.00	86.00	1.00	0.01
Trench-1a	712143	18.00	19.00	1.00	88.00	4.00	0.01
Trench-1a	712142	17.00	18.00	1.00	74.00	7.00	0.01
Trench-1a	712141	16.00	17.00	1.00	16.00	18.00	0.02
Trench-1a	712139	15.00	16.00	1.00	18.00	22.00	0.04
Trench-1a	712138	14.00	15.00	1.00	23.00	21.00	0.02
Trench-1a	712137	13.00	14.00	1.00	91.00	20.00	0.19
Trench-1a	712136	12.00	13.00	1.00	48.00	8.00	0.04
Trench-1a	712135	11.00	12.00	1.00	1.00	4.00	0.01
Trench-1a	712134	10.00	11.00	1.00	132.00	17.00	0.03
Trench-1a	712133	9.00	10.00	1.00	72.00	14.00	0.03
Trench-1a	712132	8.00	9.00	1.00	63.00	16.00	0.04
Trench-1a	712131	7.00	8.00	1.00	52.00	21.00	0.01
Trench-1a	712130	6.00	7.00	1.00	182.00	8.00	0.02
Trench-1a	712129	5.00	6.00	1.00	90.00	15.00	0.12
Trench-1a	712128	4.00	5.00	1.00	217.00	28.00	0.04
Trench-1a	712127	3.00	4.00	1.00	254.00	28.00	0.07
Trench-1a	712126	2.00	3.00	1.00	26.00	51.00	0.01
Trench-1a	712125	1.00	2.00	1.00	7.00	17.00	0.02
Trench-1a	712124	0.00	1.00	1.00	16.00	18.00	0.01
Trench-1b	709529	20.00	21.00	1.00	26.00	10.00	0.02
Trench-1b	709528	19.00	20.00	1.00	23.00	13.00	0.03
Trench-1b	709527	18.00	19.00	1.00	80.00	11.00	0.04
Trench-1b	709526	17.00	18.00	1.00	153.00	6.00	0.05
Trench-1b	709525	16.00	17.00	1.00	161.00	12.00	0.03
Trench-1b	709524	14.00	15.00	1.00	82.00	8.00	0.03

Channel ID	Sample ID	From (m)	To (m)	Length (m)	Co (ppm)	Cu (ppm)	Au g/t
Trench-1b	709523	13.00	14.00	1.00	20.00	5.00	0.02
Trench-1b	709522	12.00	13.00	1.00	19.00	10.00	0.02
Trench-1b	709521	11.00	12.00	1.00	182.00	12.00	0.02
Trench-1b	709520	10.00	11.00	1.00	59.00	17.00	0.01
Trench-1b	709519	9.00	10.00	1.00	53.00	9.00	0.01
Trench-1b	709518	8.00	9.00	1.00	139.00	4.00	0.03
Trench-1b	709517	7.00	8.00	1.00	174.00	7.00	0.02
Trench-1b	709516	6.00	7.00	1.00	29.00	51.00	0.01
Trench-1b	709515	5.00	6.00	1.00	8.00	57.00	0.01
Trench-1b	709514	4.00	5.00	1.00	22.00	31.00	0.29
Trench-1b	709513	3.00	4.00	1.00	45.00	30.00	0.44
Trench-1b	709512	2.00	3.00	1.00	190.00	43.00	1.59
Trench-1b	709511	1.00	2.00	1.00	177.00	40.00	1.54
Trench-1b	709510	0.00	1.00	1.00	29.00	10.00	0.01
Trench-1c	709544	14.00	15.00	1.00	16.00	11.00	0.01
Trench-1c	709543	13.00	14.00	1.00	9.00	13.00	0.01
Trench-1c	709542	12.00	13.00	1.00	295.00	65.00	0.28
Trench-1c	709541	11.00	12.00	1.00	391.00	29.00	0.17
Trench-1c	709539	10.00	11.00	1.00	214.00	13.00	0.05
Trench-1c	709538	9.00	10.00	1.00	196.00	43.00	0.13
Trench-1c	709537	8.00	9.00	1.00	15.00	22.00	0.01
Trench-1c	709536	7.00	8.00	1.00	13.00	13.00	0.01
Trench-1c	709535	6.00	7.00	1.00	16.00	15.00	0.01
Trench-1c	709534	5.00	6.00	1.00	14.00	14.00	0.01
Trench-1c	709533	4.00	5.00	1.00	21.00	32.00	0.01
Trench-1c	709532	3.00	4.00	1.00	220.00	8.00	0.02
Trench-1c	709531	1.00	2.00	1.00	109.00	10.00	0.01
Trench-1c	709530	0.00	1.00	1.00	45.00	13.00	2.56
Trench-1d	709547	2.00	3.00	1.00	175.00	17.00	0.02
Trench-1d	709548	2.00	3.00	1.00	11.00	71.00	0.01
Trench-1d	709546	1.00	2.00	1.00	274.00	18.00	0.07
Trench-1d	709545	0.00	1.00	1.00	137.00	62.00	0.06
Trench-1e	709689	6.60	8.00	1.40	125.00	100.00	0.01
Trench-1e	709688	5.60	6.60	1.00	17.00	31.00	0.01
Trench-1e	709687	4.60	5.60	1.00	11.00	33.00	0.01
Trench-1e	709686	3.60	4.60	1.00	10.00	70.00	0.01
Trench-1e	709685	2.60	3.60	1.00	9.00	33.00	0.01
Trench-1e	709684	1.20	2.60	1.40	10.00	51.00	0.01
Trench-1e	709683	0.00	1.20	1.20	45.00	271.00	0.01
Trench-1f	709693	2.80	3.60	0.80	160.00	25.00	0.03
Trench-1f	709692	2.00	2.80	0.80	195.00	59.00	0.08

Channel ID	Sample ID	From (m)	To (m)	Length (m)	Co (ppm)	Cu (ppm)	Au g/t
Trench-1f	709691	1.00	2.00	1.00	228.00	17.00	0.68
Trench-1f	709690	0.00	1.00	1.00	173.00	19.00	0.16
Trench-2	709203	2.00	3.00	1.00	5.00	-1.00	0.01
Trench-2	709202	1.00	2.00	1.00	6.00	-1.00	0.01
Trench-2	709201	0.00	1.00	1.00	9.00	-1.00	0.06
Trench-2a	709205	1.00	2.00	1.00	5.00	-1.00	0.01
Trench-2a	709204	0.00	1.00	1.00	3.00	-1.00	0.01
Trench-2b	709211	5.10	6.10	1.00	2.00	-1.00	0.01
Trench-2b	709210	4.10	5.10	1.00	3.00	-1.00	0.01
Trench-2b	709209	3.00	4.10	1.10	5.00	-1.00	0.01
Trench-2b	709208	2.00	3.00	1.00	3.00	-1.00	0.01
Trench-2b	709207	1.00	2.00	1.00	3.00	-1.00	0.01
Trench-2b	709206	0.00	1.00	1.00	2.00	-1.00	0.01
Trench-2c	709213	1.00	2.00	1.00	4.00	4.00	0.01
Trench-2c	709212	0.00	1.00	1.00	3.00	5.00	0.05
Trench-2d	709216	2.00	2.65	0.65	3.00	5.00	0.01
Trench-2d	709215	1.00	2.00	1.00	2.00	1.00	0.01
Trench-2d	709214	0.00	1.00	1.00	22.00	4.00	0.01
Trench-2e	709247	28.75	29.75	1.00	74.00	13.00	0.02
Trench-2e	709246	27.75	28.75	1.00	11.00	2.00	0.01
Trench-2e	709245	26.75	27.75	1.00	14.00	4.00	0.01
Trench-2e	709244	25.75	26.75	1.00	9.00	-1.00	0.01
Trench-2e	709243	24.75	25.75	1.00	16.00	2.00	0.01
Trench-2e	709242	23.75	24.75	1.00	9.00	-1.00	0.01
Trench-2e	709241	22.75	23.75	1.00	11.00	7.00	0.01
Trench-2e	709239	21.75	22.75	1.00	9.00	-1.00	0.01
Trench-2e	709238	20.75	21.75	1.00	8.00	-1.00	0.01
Trench-2e	709237	19.75	20.75	1.00	7.00	-1.00	0.02
Trench-2e	709236	18.75	19.75	1.00	3.00	-1.00	0.26
Trench-2e	709235	17.75	18.75	1.00	10.00	4.00	0.01
Trench-2e	709234	16.75	17.75	1.00	10.00	-1.00	0.01
Trench-2e	709233	15.75	16.75	1.00	13.00	-1.00	0.01
Trench-2e	709232	14.75	15.75	1.00	6.00	-1.00	0.01
Trench-2e	709231	13.75	14.75	1.00	109.00	2.00	0.02
Trench-2e	709230	12.75	13.75	1.00	145.00	3.00	0.03
Trench-2e	709229	12.00	12.75	0.75	160.00	6.00	0.02
Trench-2e	709228	11.00	12.00	1.00	33.00	13.00	0.01
Trench-2e	709227	10.00	11.00	1.00	31.00	7.00	0.01
Trench-2e	709226	9.00	10.00	1.00	60.00	19.00	0.01
Trench-2e	709225	8.00	9.00	1.00	2.00	3.00	0.01
Trench-2e	709224	7.00	8.00	1.00	2.00	5.00	0.01

Channel ID	Sample ID	From (m)	To (m)	Length (m)	Co (ppm)	Cu (ppm)	Au g/t
Trench-2e	709223	6.00	7.00	1.00	3.00	3.00	0.01
Trench-2e	709222	5.00	6.00	1.00	4.00	2.00	0.02
Trench-2e	709221	4.00	5.00	1.00	3.00	2.00	0.29
Trench-2e	709220	3.00	4.00	1.00	3.00	1.00	0.06
Trench-2e	709219	2.00	3.00	1.00	2.00	8.00	0.01
Trench-2e	709218	1.00	2.00	1.00	2.00	1.00	0.01
Trench-2e	709217	0.00	1.00	1.00	3.00	2.00	0.01
Trench-2e	709248	0.00	1.00	1.00	41.00	7.00	0.01
Trench-2f	709262	13.00	14.00	1.00	19.00	3.00	0.01
Trench-2f	709261	12.00	13.00	1.00	28.00	3.00	0.03
Trench-2f	709260	11.00	12.00	1.00	64.00	7.00	0.01
Trench-2f	709259	10.00	11.00	1.00	46.00	-1.00	0.02
Trench-2f	709258	9.00	10.00	1.00	14.00	-1.00	0.01
Trench-2f	709257	8.00	9.00	1.00	142.00	2.00	0.03
Trench-2f	709256	7.00	8.00	1.00	20.00	-1.00	0.01
Trench-2f	709255	6.00	7.00	1.00	12.00	1.00	0.01
Trench-2f	709254	5.00	6.00	1.00	19.00	3.00	0.01
Trench-2f	709253	4.00	5.00	1.00	25.00	-1.00	0.01
Trench-2f	709252	3.00	4.00	1.00	24.00	1.00	0.02
Trench-2f	709251	2.00	3.00	1.00	20.00	6.00	0.01
Trench-2f	709249	1.00	2.00	1.00	67.00	1.00	0.02
Trench-2g	709270	6.60	7.60	1.00	8.00	34.00	0.01
Trench-2g	709269	5.60	6.60	1.00	-1.00	4.00	0.01
Trench-2g	709268	5.00	5.60	0.60	25.00	5.00	0.02
Trench-2g	709267	4.00	5.00	1.00	9.00	8.00	0.01
Trench-2g	709266	3.00	4.00	1.00	16.00	5.00	0.01
Trench-2g	709265	2.00	3.00	1.00	13.00	2.00	0.01
Trench-2g	709264	1.00	2.00	1.00	18.00	3.00	0.01
Trench-2g	709263	0.00	1.00	1.00	14.00	3.00	0.01
Trench-2h	709708	5.40	6.20	0.80	3.00	6.00	0.01
Trench-2h	709707	4.30	5.40	1.10	57.00	7.00	0.02
Trench-2h	709706	3.20	4.30	1.10	328.00	8.00	0.26
Trench-2h	709705	2.00	3.20	1.20	18.00	15.00	0.01
Trench-2h	709704	1.00	2.00	1.00	12.00	61.00	0.01
Trench-2h	709703	0.00	1.00	1.00	3.00	23.00	0.01
Trench-2i	709717	7.90	8.70	0.80	89.00	19.00	0.01
Trench-2i	709716	6.80	7.90	1.10	191.00	28.00	0.25
Trench-2i	709715	6.00	6.80	0.80	319.00	35.00	0.62
Trench-2i	709714	5.00	6.00	1.00	10.00	7.00	0.01
Trench-2i	709713	4.00	5.00	1.00	27.00	13.00	0.01
Trench-2i	709712	3.00	4.00	1.00	65.00	3.00	0.01

Channel ID	Sample ID	From (m)	To (m)	Length (m)	Co (ppm)	Cu (ppm)	Au g/t
Trench-2i	709711	2.00	3.00	1.00	28.00	6.00	0.02
Trench-2i	709710	1.00	2.00	1.00	15.00	23.00	0.01
Trench-2i	709709	0.00	1.00	1.00	24.00	4.00	0.01
Trench-2j	709723	4.80	6.00	1.20	5.00	11.00	0.02
Trench-2j	709722	4.00	4.80	0.80	13.00	21.00	0.01
Trench-2j	709721	2.60	4.00	1.40	167.00	101.00	0.03
Trench-2j	709720	1.60	2.60	1.00	4.00	54.00	0.05
Trench-2j	709719	0.80	1.60	0.80	28.00	50.00	0.01
Trench-2j	709718	0.00	0.80	0.80	344.00	27.00	0.44
Trench-2k	709730	5.60	6.50	0.90	1.00	3.00	0.01
Trench-2k	709729	4.70	5.60	0.90	2.00	4.00	0.01
Trench-2k	709728	3.80	4.70	0.90	2.00	8.00	0.01
Trench-2k	709727	2.90	3.80	0.90	6.00	27.00	0.01
Trench-2k	709726	2.00	2.90	0.90	2.00	24.00	0.01
Trench-2k	709725	1.00	2.00	1.00	3.00	16.00	0.01
Trench-2k	709724	0.00	1.00	1.00	392.00	16.00	0.91
Trench-2l	709731	0.00	1.20	1.20	2.00	16.00	0.19
Trench-3	709562	11.00	12.00	1.00	21.00	48.00	0.01
Trench-3	709561	10.00	11.00	1.00	26.00	49.00	0.01
Trench-3	709560	9.00	10.00	1.00	22.00	43.00	0.02
Trench-3	709559	8.00	9.00	1.00	21.00	35.00	0.01
Trench-3	709558	7.00	8.00	1.00	17.00	35.00	0.01
Trench-3	709557	6.00	7.00	1.00	21.00	40.00	0.01
Trench-3	709556	5.00	6.00	1.00	19.00	36.00	0.01
Trench-3	709555	4.00	5.00	1.00	9.00	9.00	0.01
Trench-3	709554	3.00	4.00	1.00	13.00	33.00	0.01
Trench-3	709553	2.00	3.00	1.00	14.00	32.00	0.01
Trench-3	709552	1.00	2.00	1.00	15.00	27.00	0.01
Trench-3	709551	0.00	1.00	1.00	15.00	52.00	0.01
Trench-3a	709594	32.60	33.60	1.00	25.00	50.00	0.01
Trench-3a	709593	31.60	32.60	1.00	30.00	67.00	0.01
Trench-3a	709592	30.60	31.60	1.00	32.00	76.00	0.01
Trench-3a	709591	29.60	30.60	1.00	27.00	66.00	0.01
Trench-3a	709589	28.60	29.60	1.00	28.00	58.00	0.01
Trench-3a	709588	27.60	28.60	1.00	26.00	55.00	0.01
Trench-3a	709587	26.60	27.60	1.00	22.00	52.00	0.01
Trench-3a	709586	26.00	26.60	0.60	29.00	44.00	0.01
Trench-3a	709585	24.80	25.40	0.60	21.00	49.00	0.01
Trench-3a	709584	23.80	24.80	1.00	22.00	56.00	0.01
Trench-3a	709583	22.80	23.80	1.00	27.00	63.00	0.01
Trench-3a	709582	21.80	22.80	1.00	18.00	38.00	0.01

Channel ID	Sample ID	From (m)	To (m)	Length (m)	Co (ppm)	Cu (ppm)	Au g/t
Trench-3a	709581	20.80	21.80	1.00	16.00	37.00	0.01
Trench-3a	709580	19.80	20.80	1.00	24.00	49.00	0.07
Trench-3a	709579	18.80	19.80	1.00	21.00	41.00	0.01
Trench-3a	709578	17.80	18.80	1.00	27.00	54.00	0.01
Trench-3a	709577	16.80	17.80	1.00	19.00	26.00	0.01
Trench-3a	709576	15.80	16.80	1.00	15.00	26.00	0.01
Trench-3a	709575	14.80	15.80	1.00	21.00	39.00	0.01
Trench-3a	709574	13.80	14.80	1.00	15.00	42.00	0.01
Trench-3a	709573	10.00	10.90	0.90	15.00	41.00	0.01
Trench-3a	709572	9.00	10.00	1.00	10.00	39.00	0.01
Trench-3a	709571	8.00	9.00	1.00	18.00	48.00	0.01
Trench-3a	709570	7.00	8.00	1.00	25.00	52.00	0.01
Trench-3a	709569	6.00	7.00	1.00	21.00	42.00	0.01
Trench-3a	709568	5.00	6.00	1.00	18.00	33.00	0.01
Trench-3a	709567	4.00	5.00	1.00	18.00	24.00	0.01
Trench-3a	709566	3.00	4.00	1.00	17.00	40.00	0.01
Trench-3a	709565	2.00	3.00	1.00	19.00	44.00	0.01
Trench-3a	709564	1.00	2.00	1.00	15.00	26.00	0.01
Trench-3a	709563	0.00	1.00	1.00	25.00	106.00	0.03
Trench-3b	709307	11.00	12.00	1.00	23.00	52.00	0.01
Trench-3b	709306	10.00	11.00	1.00	20.00	37.00	0.01
Trench-3b	709305	9.00	10.00	1.00	24.00	61.00	0.01
Trench-3b	709304	8.00	8.80	0.80	18.00	56.00	0.01
Trench-3b	709303	7.00	8.00	1.00	17.00	55.00	0.01
Trench-3b	709302	6.00	7.00	1.00	20.00	42.00	0.01
Trench-3b	709301	5.00	6.00	1.00	24.00	49.00	0.01
Trench-3b	709599	4.00	5.00	1.00	30.00	52.00	0.01
Trench-3b	709598	3.00	4.00	1.00	16.00	47.00	0.01
Trench-3b	709597	2.00	3.00	1.00	19.00	36.00	0.01
Trench-3b	709596	1.00	2.00	1.00	15.00	21.00	0.01
Trench-3b	709595	0.00	1.00	1.00	25.00	54.00	0.01
Trench-3c	709330	26.60	27.60	1.00	24.00	38.00	0.01
Trench-3c	709329	25.60	26.60	1.00	22.00	40.00	0.01
Trench-3c	709328	24.60	25.60	1.00	20.00	38.00	0.01
Trench-3c	709327	23.60	24.60	1.00	22.00	43.00	0.01
Trench-3c	709326	22.60	23.60	1.00	24.00	41.00	0.01
Trench-3c	709325	21.60	22.60	1.00	16.00	35.00	0.01
Trench-3c	709324	20.60	21.60	1.00	19.00	35.00	0.01
Trench-3c	709323	19.60	20.60	1.00	19.00	53.00	0.01
Trench-3c	709322	19.00	19.60	0.60	16.00	23.00	0.01
Trench-3c	709321	18.00	19.00	1.00	19.00	30.00	0.01

Channel ID	Sample ID	From (m)	To (m)	Length (m)	Co (ppm)	Cu (ppm)	Au g/t
Trench-3c	709320	17.00	18.00	1.00	18.00	28.00	0.01
Trench-3c	709319	16.00	17.00	1.00	22.00	47.00	0.01
Trench-3c	709318	15.00	16.00	1.00	27.00	52.00	0.01
Trench-3c	709317	14.00	15.00	1.00	28.00	48.00	0.01
Trench-3c	709316	13.00	14.00	1.00	25.00	43.00	0.01
Trench-3c	709315	12.00	13.00	1.00	23.00	45.00	0.01
Trench-3c	709314	11.00	12.00	1.00	20.00	51.00	0.01
Trench-3c	709313	10.00	11.00	1.00	19.00	40.00	0.01
Trench-3c	709312	9.00	10.00	1.00	24.00	43.00	0.01
Trench-3c	709311	3.00	4.00	1.00	17.00	42.00	0.01
Trench-3c	709310	2.00	3.00	1.00	19.00	49.00	0.01
Trench-3c	709309	1.00	2.00	1.00	17.00	43.00	0.01
Trench-3c	709308	0.00	1.00	1.00	17.00	41.00	0.01
Trench-3d	709332	1.00	2.00	1.00	13.00	33.00	0.01
Trench-3d	709331	0.00	1.00	1.00	15.00	26.00	0.01
Trench-3e	709933	0.00	0.90	0.90	10.00	79.00	0.13
Trench-3f	709936	2.00	2.90	0.90	10.00	42.00	0.03
Trench-3f	709935	1.00	2.00	1.00	15.00	57.00	0.02
Trench-3f	709934	0.00	1.00	1.00	15.00	53.00	0.03
Trench-3g	709937	0.00	1.10	1.10	21.00	150.00	0.01
Trench-3h	709946	8.70	9.90	1.20	18.00	41.00	0.01
Trench-3h	709945	7.50	8.70	1.20	18.00	48.00	0.01
Trench-3h	709944	6.50	7.50	1.00	19.00	51.00	0.01
Trench-3h	709943	5.50	6.50	1.00	15.00	23.00	0.01
Trench-3h	709942	4.50	5.50	1.00	13.00	27.00	0.01
Trench-3h	709941	3.50	4.50	1.00	12.00	69.00	0.01
Trench-3h	709939	1.10	2.20	1.10	16.00	165.00	0.01
Trench-3h	709938	0.00	1.10	1.10	14.00	73.00	0.01
Trench-3i	709948	1.30	2.40	1.10	25.00	80.00	0.01
Trench-3i	709947	0.00	1.30	1.30	18.00	42.00	0.01
Trench-4a	709272	1.15	2.30	1.15	23.00	3.00	0.01
Trench-4a	709271	0.00	1.15	1.15	19.00	1.00	0.01
Trench-4b	709275	2.10	3.20	1.10	8.00	5.00	0.01
Trench-4b	709274	1.00	2.10	1.10	13.00	3.00	0.01
Trench-4b	709273	0.00	1.00	1.00	24.00	2.00	0.01
Trench-4c	709280	3.60	4.60	1.00	10.00	7.00	0.01
Trench-4c	709279	2.80	3.60	0.80	13.00	3.00	0.01
Trench-4c	709278	2.00	2.80	0.80	10.00	4.00	0.01
Trench-4c	709277	1.00	2.00	1.00	23.00	3.00	0.01
Trench-4c	709276	0.00	1.00	1.00	21.00	4.00	0.01
Trench-4d	709291	9.00	10.00	1.00	3.00	1.00	0.01

Channel ID	Sample ID	From (m)	To (m)	Length (m)	Co (ppm)	Cu (ppm)	Au g/t
Trench-4d	709289	8.00	9.00	1.00	12.00	3.00	0.01
Trench-4d	709288	7.00	8.00	1.00	7.00	24.00	0.01
Trench-4d	709287	6.00	7.00	1.00	19.00	4.00	0.01
Trench-4d	709286	5.00	6.00	1.00	23.00	1.00	0.01
Trench-4d	709285	4.00	5.00	1.00	10.00	3.00	0.01
Trench-4d	709284	3.00	4.00	1.00	9.00	1.00	0.01
Trench-4d	709283	2.00	3.00	1.00	10.00	3.00	0.01
Trench-4d	709282	1.00	2.00	1.00	7.00	1.00	0.01
Trench-4d	709281	0.00	1.00	1.00	9.00	8.00	0.01
Trench-4e	709296	4.00	5.40	1.40	17.00	5.00	0.01
Trench-4e	709295	3.00	4.00	1.00	10.00	6.00	0.01
Trench-4e	709294	2.00	3.00	1.00	2.00	3.00	0.01
Trench-4e	709293	1.00	2.00	1.00	2.00	1.00	0.01
Trench-4e	709292	0.00	1.00	1.00	4.00	2.00	0.01
Trench-4f	709299	1.80	2.60	0.80	13.00	5.00	0.01
Trench-4f	709298	1.00	1.80	0.80	-1.00	1.00	0.01
Trench-4f	709297	0.00	1.00	1.00	2.00	2.00	0.01
Trench-4g	709352	1.15	2.30	1.15	7.00	5.00	0.01
Trench-4g	709351	0.00	1.15	1.15	9.00	10.00	0.01
Trench-4h	709361	8.00	9.00	1.00	8.00	5.00	0.01
Trench-4h	709360	7.00	8.00	1.00	8.00	3.00	0.01
Trench-4h	709359	6.00	7.00	1.00	4.00	1.00	0.01
Trench-4h	709358	5.00	6.00	1.00	12.00	2.00	0.01
Trench-4h	709357	4.00	5.00	1.00	10.00	5.00	0.01
Trench-4h	709356	3.00	4.00	1.00	8.00	5.00	0.01
Trench-4h	709355	2.00	3.00	1.00	10.00	5.00	0.01
Trench-4h	709354	1.00	2.00	1.00	8.00	14.00	0.01
Trench-4h	709353	0.00	1.00	1.00	6.00	6.00	0.01
Trench-4i	709363	1.00	2.00	1.00	13.00	4.00	0.01
Trench-4i	709362	0.00	1.00	1.00	5.00	4.00	0.01
Trench-4j	709369	5.20	6.40	1.20	11.00	2.00	0.01
Trench-4j	709368	4.00	5.20	1.20	16.00	2.00	0.01
Trench-4j	709367	3.00	4.00	1.00	14.00	3.00	0.01
Trench-4j	709366	2.00	3.00	1.00	17.00	3.00	0.01
Trench-4j	709365	1.00	2.00	1.00	9.00	8.00	0.01
Trench-4j	709364	0.00	1.00	1.00	9.00	12.00	0.01
Trench-4k	709371	0.85	1.85	1.00	12.00	3.00	0.01
Trench-4k	709370	0.00	0.85	0.85	5.00	2.00	0.01
Trench-4l	709376	3.05	4.20	1.15	8.00	8.00	0.01
Trench-4l	709375	1.90	3.05	1.15	14.00	9.00	0.01
Trench-4l	709372	1.85	2.85	1.00	5.00	2.00	0.01

Channel ID	Sample ID	From (m)	To (m)	Length (m)	Co (ppm)	Cu (ppm)	Au g/t
Trench-4l	709374	0.95	1.90	0.95	17.00	2.00	0.01
Trench-4l	709373	0.00	0.95	0.95	13.00	4.00	0.01
Trench-4m	709380	3.00	4.00	1.00	12.00	3.00	0.01
Trench-4m	709379	2.00	3.00	1.00	9.00	3.00	0.01
Trench-4m	709378	1.00	2.00	1.00	6.00	5.00	0.01
Trench-4m	709377	0.00	1.00	1.00	7.00	10.00	0.01
Trench-5	709383	1.90	2.80	0.90	27.00	46.00	0.01
Trench-5	709382	1.00	1.90	0.90	22.00	36.00	0.01
Trench-5	709381	0.00	1.00	1.00	21.00	36.00	0.01
Trench-5a	709386	1.85	2.70	0.85	22.00	47.00	0.01
Trench-5a	709385	1.00	1.85	0.85	24.00	64.00	0.01
Trench-5a	709384	0.00	1.00	1.00	19.00	46.00	0.01
Trench-5b	709388	0.85	1.70	0.85	16.00	35.00	0.01
Trench-5b	709387	0.00	0.85	0.85	18.00	44.00	0.01
Trench-5c	709391	1.00	2.40	1.40	15.00	30.00	0.01
Trench-5c	709389	0.00	1.00	1.00	20.00	33.00	0.01
Trench-5d	709409	15.70	16.75	1.05	19.00	38.00	0.01
Trench-5d	709408	14.65	15.70	1.05	17.00	43.00	0.01
Trench-5d	709407	13.75	14.65	0.90	22.00	85.00	0.01
Trench-5d	709406	13.00	13.75	0.75	25.00	40.00	0.01
Trench-5d	709405	12.00	13.00	1.00	28.00	50.00	0.01
Trench-5d	709404	11.00	12.00	1.00	33.00	53.00	0.01
Trench-5d	709403	10.00	11.00	1.00	32.00	46.00	0.01
Trench-5d	709402	9.00	10.00	1.00	30.00	43.00	0.01
Trench-5d	709401	8.00	9.00	1.00	26.00	44.00	0.01
Trench-5d	709399	7.00	8.00	1.00	30.00	44.00	0.01
Trench-5d	709398	6.00	7.00	1.00	26.00	46.00	0.01
Trench-5d	709397	5.00	6.00	1.00	22.00	38.00	0.01
Trench-5d	709396	4.00	5.00	1.00	19.00	49.00	0.01
Trench-5d	709395	3.00	4.00	1.00	20.00	45.00	0.01
Trench-5d	709394	2.00	3.00	1.00	24.00	49.00	0.01
Trench-5d	709393	1.00	2.00	1.00	28.00	42.00	0.01
Trench-5d	709392	0.00	1.00	1.00	26.00	42.00	0.01
Trench-5e	709412	1.85	2.70	0.85	21.00	36.00	0.01
Trench-5e	709411	1.00	1.85	0.85	14.00	60.00	0.01
Trench-5e	709410	0.00	1.00	1.00	23.00	51.00	0.01
Trench-5f	709414	1.30	2.60	1.30	33.00	26.00	0.01
Trench-5f	709413	0.00	1.30	1.30	20.00	22.00	0.02
Trench-5g	709415	0.00	1.24	1.24	17.00	18.00	0.01
Trench-5h	709421	4.75	5.50	0.75	26.00	40.00	0.01
Trench-5h	709420	4.00	4.75	0.75	16.00	31.00	0.01

Channel ID	Sample ID	From (m)	To (m)	Length (m)	Co (ppm)	Cu (ppm)	Au g/t
Trench-5h	709419	3.00	4.00	1.00	69.00	60.00	0.03
Trench-5h	709418	2.00	3.00	1.00	22.00	73.00	0.01
Trench-5h	709417	1.00	2.00	1.00	16.00	46.00	0.01
Trench-5h	709416	0.00	1.00	1.00	22.00	65.00	0.01
Trench-5i	709425	3.20	4.40	1.20	49.00	80.00	0.01
Trench-5i	709424	2.00	3.20	1.20	25.00	46.00	0.01
Trench-5i	709423	1.00	2.00	1.00	23.00	40.00	0.01
Trench-5i	709422	0.00	1.00	1.00	13.00	37.00	0.01
Trench-5j	709427	0.85	1.70	0.85	27.00	32.00	0.03
Trench-5j	709426	0.00	0.85	0.85	23.00	46.00	0.01
Trench-6	709430	1.60	2.40	0.80	32.00	51.00	0.02
Trench-6	709429	0.80	1.60	0.80	19.00	50.00	0.01
Trench-6	709428	0.00	0.80	0.80	36.00	65.00	0.01
Trench-6a	709438	7.00	8.00	1.00	17.00	63.00	0.01
Trench-6a	709437	6.00	7.00	1.00	14.00	46.00	0.01
Trench-6a	709436	5.00	6.00	1.00	16.00	47.00	0.01
Trench-6a	709435	4.00	5.00	1.00	22.00	47.00	0.01
Trench-6a	709434	3.00	4.00	1.00	22.00	48.00	0.01
Trench-6a	709433	2.00	3.00	1.00	24.00	54.00	0.01
Trench-6a	709432	1.00	2.00	1.00	21.00	45.00	0.01
Trench-6a	709431	0.00	1.00	1.00	20.00	45.00	0.01
Trench-6b	709448	8.60	9.60	1.00	22.00	29.00	0.01
Trench-6b	709447	7.60	8.60	1.00	22.00	40.00	0.01
Trench-6b	709446	6.60	7.60	1.00	16.00	45.00	0.01
Trench-6b	709445	5.60	6.60	1.00	19.00	43.00	0.01
Trench-6b	709444	4.60	5.60	1.00	25.00	49.00	0.01
Trench-6b	709443	3.80	4.60	0.80	26.00	44.00	0.01
Trench-6b	709442	3.00	3.80	0.80	22.00	30.00	0.01
Trench-6b	709441	1.10	2.20	1.10	20.00	26.00	0.01
Trench-6b	709439	0.00	1.10	1.10	18.00	25.00	0.01
Trench-6c	709454	4.20	5.30	1.10	16.00	48.00	0.01
Trench-6c	709453	3.10	4.20	1.10	20.00	60.00	0.01
Trench-6c	709452	2.10	3.10	1.00	25.00	45.00	0.01
Trench-6c	709451	1.05	2.10	1.05	20.00	33.00	0.01
Trench-6c	709449	0.00	1.05	1.05	20.00	37.00	0.01
Trench-6d	709467	12.00	13.00	1.00	28.00	68.00	0.01
Trench-6d	709466	11.00	12.00	1.00	24.00	35.00	0.01
Trench-6d	709465	10.00	11.00	1.00	15.00	35.00	0.01
Trench-6d	709464	9.00	10.00	1.00	14.00	59.00	0.01
Trench-6d	709463	8.00	9.00	1.00	19.00	42.00	0.13
Trench-6d	709462	7.00	8.00	1.00	17.00	30.00	0.01

Channel ID	Sample ID	From (m)	To (m)	Length (m)	Co (ppm)	Cu (ppm)	Au g/t
Trench-6d	709461	6.00	7.00	1.00	17.00	27.00	0.01
Trench-6d	709460	5.00	6.00	1.00	20.00	31.00	0.01
Trench-6d	709459	4.00	5.00	1.00	17.00	35.00	0.01
Trench-6d	709458	3.00	4.00	1.00	18.00	23.00	0.02
Trench-6d	709457	2.00	3.00	1.00	25.00	30.00	0.01
Trench-6d	709456	1.00	2.00	1.00	11.00	39.00	0.01
Trench-6d	709455	0.00	1.00	1.00	16.00	33.00	0.01
Trench-6e	709471	3.80	4.80	1.00	19.00	51.00	0.01
Trench-6e	709470	2.60	3.80	1.20	18.00	41.00	0.01
Trench-6e	709469	1.20	2.60	1.40	38.00	30.00	0.01
Trench-6e	709468	0.00	1.20	1.20	21.00	30.00	0.01
Trench-6f	709477	5.90	6.90	1.00	22.00	42.00	0.01
Trench-6f	709476	4.90	5.90	1.00	24.00	50.00	0.01
Trench-6f	709475	4.00	4.90	0.90	17.00	35.00	0.01
Trench-6f	709474	2.50	4.00	1.50	19.00	45.00	0.01
Trench-6f	709473	1.30	2.50	1.20	22.00	48.00	0.02
Trench-6f	709472	0.00	1.30	1.30	29.00	49.00	0.02
Trench-6g	709482	3.15	4.15	1.00	18.00	48.00	0.01
Trench-6g	709481	2.15	3.15	1.00	76.00	13.00	0.01
Trench-6g	709479	1.15	2.15	1.00	18.00	44.00	0.01
Trench-6g	709478	0.00	1.15	1.15	22.00	38.00	0.01
Trench-6h	709486	3.35	4.35	1.00	17.00	14.00	0.01
Trench-6h	709485	2.35	3.35	1.00	8.00	9.00	0.01
Trench-6h	709484	1.35	2.35	1.00	6.00	6.00	0.01
Trench-6h	709483	0.00	1.35	1.35	13.00	14.00	0.01
Trench-6i	709490	2.80	3.80	1.00	19.00	40.00	0.01
Trench-6i	709489	1.80	2.80	1.00	20.00	52.00	0.01
Trench-6i	709488	1.00	1.80	0.80	30.00	62.00	0.02
Trench-6i	709487	0.00	1.00	1.00	25.00	45.00	0.01
Trench-6j	709493	2.70	4.00	1.30	9.00	19.00	0.04
Trench-6j	709492	1.40	2.70	1.30	16.00	61.00	0.13
Trench-6j	709491	0.00	1.40	1.40	23.00	45.00	0.01
Trench-7a	709603	2.30	3.60	1.30	25.00	63.00	0.01
Trench-7a	709602	1.00	2.30	1.30	20.00	55.00	0.01
Trench-7a	709601	0.00	1.00	1.00	21.00	54.00	0.01
Trench-7b	709608	4.00	5.00	1.00	20.00	57.00	0.01
Trench-7b	709607	3.00	4.00	1.00	23.00	54.00	0.01
Trench-7b	709606	2.00	3.00	1.00	28.00	72.00	0.01
Trench-7b	709605	1.00	2.00	1.00	24.00	56.00	0.01
Trench-7b	709604	0.00	1.00	1.00	22.00	71.00	0.01
Trench-7c	709609	0.00	1.50	1.50	20.00	53.00	0.01

Channel ID	Sample ID	From (m)	To (m)	Length (m)	Co (ppm)	Cu (ppm)	Au g/t
Trench-7d	709610	0.00	1.50	1.50	22.00	40.00	0.03
Trench-7e	709611	0.00	1.50	1.50	26.00	73.00	0.01
Trench-7f	709629	20.50	22.00	1.50	11.00	22.00	0.03
Trench-7f	709628	19.00	20.50	1.50	11.00	8.00	0.01
Trench-7f	709627	17.50	19.00	1.50	12.00	63.00	0.01
Trench-7f	709626	16.00	17.50	1.50	7.00	20.00	0.01
Trench-7f	709625	14.50	16.00	1.50	6.00	26.00	0.01
Trench-7f	709624	13.00	14.50	1.50	7.00	34.00	0.01
Trench-7f	709623	11.50	13.00	1.50	12.00	20.00	0.01
Trench-7f	709622	10.00	11.50	1.50	16.00	35.00	0.01
Trench-7f	709621	9.00	10.00	1.00	22.00	46.00	0.01
Trench-7f	709620	8.00	9.00	1.00	16.00	38.00	0.01
Trench-7f	709619	7.00	8.00	1.00	15.00	42.00	0.01
Trench-7f	709618	6.00	7.00	1.00	20.00	32.00	0.01
Trench-7f	709617	5.00	6.00	1.00	8.00	18.00	0.01
Trench-7f	709616	4.00	5.00	1.00	9.00	38.00	0.01
Trench-7f	709615	2.60	4.00	1.40	8.00	24.00	0.01
Trench-7f	709614	2.00	2.60	0.60	9.00	38.00	0.01
Trench-7f	709613	1.00	2.00	1.00	10.00	42.00	0.01
Trench-7f	709612	0.00	1.00	1.00	12.00	54.00	0.01
Trench-7g	709655	33.10	32.20	-0.90	20.00	70.00	0.01
Trench-7g	709656	32.20	33.40	1.20	16.00	49.00	0.01
Trench-7g	709654	32.10	33.10	1.00	26.00	13.00	0.01
Trench-7g	709653	30.80	32.10	1.30	23.00	24.00	0.01
Trench-7g	709652	29.50	30.80	1.30	19.00	46.00	0.01
Trench-7g	709651	28.50	29.50	1.00	38.00	38.00	0.01
Trench-7g	709649	27.00	28.50	1.50	23.00	58.00	0.01
Trench-7g	709648	25.50	27.00	1.50	28.00	56.00	0.01
Trench-7g	709647	24.00	25.50	1.50	22.00	51.00	0.01
Trench-7g	709646	22.50	24.00	1.50	19.00	58.00	0.01
Trench-7g	709645	21.00	22.50	1.50	20.00	36.00	0.01
Trench-7g	709644	19.50	21.00	1.50	27.00	26.00	0.01
Trench-7g	709643	18.00	19.50	1.50	29.00	8.00	0.01
Trench-7g	709642	16.50	18.00	1.50	24.00	9.00	0.01
Trench-7g	709641	15.00	16.50	1.50	18.00	46.00	0.01
Trench-7g	709639	13.50	15.00	1.50	22.00	63.00	0.01
Trench-7g	709638	12.00	13.50	1.50	20.00	45.00	0.01
Trench-7g	709637	10.50	12.00	1.50	13.00	41.00	0.01
Trench-7g	709636	9.00	10.50	1.50	20.00	53.00	0.01
Trench-7g	709635	7.50	9.00	1.50	16.00	41.00	0.01
Trench-7g	709634	6.00	7.50	1.50	17.00	29.00	0.01

Channel ID	Sample ID	From (m)	To (m)	Length (m)	Co (ppm)	Cu (ppm)	Au g/t
Trench-7g	709633	4.50	6.00	1.50	18.00	44.00	0.01
Trench-7g	709632	3.00	4.50	1.50	24.00	36.00	0.01
Trench-7g	709631	1.50	3.00	1.50	21.00	36.00	0.02
Trench-7g	709630	0.00	1.50	1.50	19.00	38.00	0.01
Trench-7h	709658	1.50	2.50	1.00	18.00	37.00	0.01
Trench-7h	709657	0.00	1.50	1.50	29.00	59.00	0.01
Trench-7i	709667	11.00	12.00	1.00	30.00	6.00	0.01
Trench-7i	709666	10.00	11.00	1.00	21.00	30.00	0.01
Trench-7i	709665	9.00	10.00	1.00	22.00	77.00	0.01
Trench-7i	709664	7.50	9.00	1.50	26.00	38.00	0.01
Trench-7i	709663	6.00	7.50	1.50	26.00	47.00	0.03
Trench-7i	709662	4.50	6.00	1.50	20.00	40.00	0.01
Trench-7i	709661	3.00	4.50	1.50	21.00	44.00	0.01
Trench-7i	709660	1.50	3.00	1.50	19.00	52.00	0.01
Trench-7i	709659	0.00	1.50	1.50	24.00	43.00	0.01
Trench-7j	709670	2.00	2.80	0.80	30.00	13.00	0.01
Trench-7j	709669	1.10	2.00	0.90	26.00	22.00	0.01
Trench-7j	709668	0.00	1.10	1.10	30.00	11.00	0.01
Trench-7k	709673	1.80	2.70	0.90	19.00	18.00	0.01
Trench-7k	709672	1.20	1.80	0.60	5.00	12.00	0.01
Trench-7k	709671	0.00	1.20	1.20	31.00	16.00	0.01
Trench-7l	709675	1.00	2.10	1.10	24.00	53.00	0.01
Trench-7l	709674	0.00	1.00	1.00	27.00	21.00	0.01
Trench-7m	709677	0.85	1.65	0.80	21.00	29.00	0.01
Trench-7m	709676	0.00	0.85	0.85	32.00	13.00	0.01
Trench-7n	709680	1.90	2.70	0.80	17.00	10.00	0.01
Trench-7n	709679	0.90	1.90	1.00	31.00	52.00	0.01
Trench-7n	709678	0.00	0.90	0.90	21.00	9.00	0.01
Trench-7o	709681	0.00	1.20	1.20	31.00	12.00	0.01
Trench-9a	916509	7.80	8.60	0.80	7.00	3.00	0.01
Trench-9a	916508	7.00	7.80	0.80	11.00	2.00	0.01
Trench-9a	916507	6.00	7.00	1.00	21.00	4.00	0.04
Trench-9a	916506	5.00	6.00	1.00	18.00	5.00	0.01
Trench-9a	916505	4.00	5.00	1.00	2.00	4.00	0.01
Trench-9a	916504	3.00	4.00	1.00	11.00	3.00	0.01
Trench-9a	916503	2.00	3.00	1.00	20.00	4.00	0.02
Trench-9a	916502	1.00	2.00	1.00	11.00	6.00	0.02
Trench-9a	916501	0.00	1.00	1.00	3.00	15.00	0.04
Trench-9b	916515	5.10	6.20	1.10	14.00	5.00	0.01
Trench-9b	916514	4.00	5.10	1.10	24.00	21.00	0.01
Trench-9b	916513	3.00	4.00	1.00	7.00	2.00	0.01

Channel ID	Sample ID	From (m)	To (m)	Length (m)	Co (ppm)	Cu (ppm)	Au g/t
Trench-9b	916512	2.00	3.00	1.00	18.00	4.00	0.01
Trench-9b	916511	1.00	2.00	1.00	21.00	2.00	0.02
Trench-9b	916510	0.00	1.00	1.00	21.00	2.00	0.01
Trench-9c	916518	2.00	3.30	1.30	13.00	12.00	0.01
Trench-9c	916517	1.00	2.00	1.00	23.00	5.00	0.01
Trench-9c	916516	0.00	1.00	1.00	9.00	4.00	0.01
Trench-9d	916534	15.00	16.00	1.00	10.00	16.00	0.01
Trench-9d	916533	14.00	15.00	1.00	11.00	18.00	0.01
Trench-9d	916532	13.00	14.00	1.00	22.00	5.00	0.02
Trench-9d	916531	12.00	13.00	1.00	13.00	6.00	0.01
Trench-9d	916530	11.00	12.00	1.00	22.00	5.00	0.01
Trench-9d	916529	10.00	11.00	1.00	25.00	3.00	0.01
Trench-9d	916528	9.00	10.00	1.00	16.00	3.00	0.01
Trench-9d	916527	8.00	9.00	1.00	14.00	13.00	0.01
Trench-9d	916526	7.00	8.00	1.00	33.00	2.00	0.01
Trench-9d	916525	6.00	7.00	1.00	16.00	2.00	0.01
Trench-9d	916524	5.00	6.00	1.00	8.00	3.00	0.01
Trench-9d	916523	4.00	5.00	1.00	-1.00	4.00	0.01
Trench-9d	916522	3.00	4.00	1.00	4.00	3.00	0.01
Trench-9d	916521	2.00	3.00	1.00	2.00	3.00	0.01
Trench-9d	916520	1.00	2.00	1.00	2.00	2.00	0.01
Trench-9d	916519	0.00	1.00	1.00	6.00	2.00	0.01
Trench-9e	916535	0.00	0.80	0.80	19.00	2.00	0.01
Trench-9f	916538	1.95	2.90	0.95	1.00	4.00	0.01
Trench-9f	916537	1.00	1.95	0.95	5.00	3.00	0.01
Trench-9f	916536	0.00	1.00	1.00	7.00	3.00	0.01
Trench-9g	916547	6.20	7.00	0.80	10.00	3.00	0.01
Trench-9g	916546	5.40	6.20	0.80	7.00	9.00	0.01
Trench-9g	916545	4.40	5.40	1.00	17.00	4.00	0.01
Trench-9g	916544	3.40	4.40	1.00	20.00	6.00	0.01
Trench-9g	916543	2.50	3.40	0.90	12.00	5.00	0.01
Trench-9g	916542	1.60	2.50	0.90	30.00	4.00	0.01
Trench-9g	916541	0.80	1.60	0.80	4.00	4.00	0.01
Trench-9g	916539	0.00	0.80	0.80	16.00	25.00	0.01
Trench-9h	916551	1.80	2.80	1.00	17.00	2.00	0.01
Trench-9h	916549	1.00	1.80	0.80	23.00	3.00	0.01
Trench-9h	916548	0.00	1.00	1.00	10.00	10.00	0.01
Trench-9i	916555	3.00	4.00	1.00	16.00	3.00	0.01
Trench-9i	916554	2.00	3.00	1.00	18.00	2.00	0.01
Trench-9i	916553	1.00	2.00	1.00	17.00	2.00	0.01
Trench-9i	916552	0.00	1.00	1.00	14.00	4.00	0.01

Channel ID	Sample ID	From (m)	To (m)	Length (m)	Co (ppm)	Cu (ppm)	Au g/t
Trench-9j	916559	2.90	3.80	0.90	1.00	2.00	0.01
Trench-9j	916558	2.00	2.90	0.90	5.00	3.00	0.01
Trench-9j	916557	1.00	2.00	1.00	9.00	6.00	0.01
Trench-9j	916556	0.00	1.00	1.00	10.00	2.00	0.01
Trench-10a	916564	3.80	5.20	1.40	27.00	7.00	0.01
Trench-10a	916563	3.00	3.80	0.80	27.00	912.00	0.05
Trench-10a	916562	2.00	3.00	1.00	30.00	266.00	0.01
Trench-10a	916561	1.00	2.00	1.00	22.00	205.00	0.01
Trench-10a	916560	0.00	1.00	1.00	12.00	120.00	0.01
Trench-10b	916567	2.00	3.00	1.00	26.00	106.00	0.02
Trench-10b	916566	1.00	2.00	1.00	28.00	122.00	0.01
Trench-10b	916565	0.00	1.00	1.00	23.00	72.00	0.01
Trench-10c	916570	2.00	3.00	1.00	44.00	7.00	0.02
Trench-10c	916569	1.00	2.00	1.00	32.00	8.00	0.02
Trench-10c	916568	0.00	1.00	1.00	33.00	32.00	0.01
Trench-11a	709903	2.00	3.40	1.40	28.00	4.00	0.01
Trench-11a	709902	1.00	2.00	1.00	40.00	5.00	0.01
Trench-11a	709901	0.00	1.00	1.00	24.00	10.00	0.01
Trench-11b	709904	0.00	0.60	0.60	16.00	10.00	0.01
Trench-11c	709907	1.90	2.80	0.90	56.00	15.00	0.01
Trench-11c	709906	1.00	1.90	0.90	35.00	8.00	0.01
Trench-11c	709905	0.00	1.00	1.00	24.00	7.00	0.01
Trench-11d	709915	7.00	8.00	1.00	5.00	47.00	0.01
Trench-11d	709914	6.00	7.00	1.00	15.00	66.00	0.01
Trench-11d	709913	5.00	6.00	1.00	44.00	30.00	0.01
Trench-11d	709912	4.00	5.00	1.00	148.00	36.00	0.02
Trench-11d	709911	3.00	4.00	1.00	101.00	44.00	0.01
Trench-11d	709910	2.00	3.00	1.00	42.00	31.00	0.01
Trench-11d	709909	1.00	2.00	1.00	50.00	12.00	0.04
Trench-11d	709908	0.00	1.00	1.00	50.00	34.00	0.04
Trench-11e	709932	16.00	17.40	1.40	24.00	55.00	0.01
Trench-11e	709931	15.00	16.00	1.00	27.00	29.00	0.01
Trench-11e	709930	14.00	15.00	1.00	2.00	20.00	0.01
Trench-11e	709929	13.00	14.00	1.00	2.00	57.00	0.01
Trench-11e	709928	12.00	13.00	1.00	10.00	52.00	0.01
Trench-11e	709927	11.00	12.00	1.00	6.00	74.00	0.01
Trench-11e	709926	10.00	11.00	1.00	18.00	33.00	0.02
Trench-11e	709925	9.00	10.00	1.00	17.00	21.00	0.04
Trench-11e	709924	8.00	9.00	1.00	13.00	51.00	0.02
Trench-11e	709923	7.00	8.00	1.00	40.00	44.00	0.02
Trench-11e	709922	6.00	7.00	1.00	47.00	42.00	0.06

Channel ID	Sample ID	From (m)	To (m)	Length (m)	Co (ppm)	Cu (ppm)	Au g/t
Trench-11e	709921	5.00	6.00	1.00	21.00	76.00	0.07
Trench-11e	709920	4.00	5.00	1.00	18.00	64.00	0.02
Trench-11e	709919	3.00	4.00	1.00	29.00	35.00	0.01
Trench-11e	709918	2.00	3.00	1.00	28.00	11.00	0.01
Trench-11e	709917	1.00	2.00	1.00	25.00	15.00	0.01
Trench-11e	709916	0.00	1.00	1.00	30.00	11.00	0.01

9.7 Highlights of Trenching

9.7.1 Trench 1

Trench 1 was previously mechanically stripped by John Brady. It was decided that additional trenching was necessary in the area because anomalous samples were previously taken, and the rocks consist of brecciated albitite with quartz-carbonate-pyrite matrix (Figure 9-7). The 2018 trenching was successful in extending the brecciated hydrothermal package to the North and West. The structure consists of two foliations (285/75, 027/88) and a lineation was also identified (034/74). The rocks were channel sampled and anomalous intersections are outlined in Table 9-11.

Figure 9-7: Trench 1 example of brecciated albitite with quartz-carbonate-pyrite matrix.

Table 9-11: Anomalous channel sample intersections on Trench 1.

Channel #	From	To	Length (m)	Au (g/t)	Co (ppm)
Trench-1b	1.0	5.0	4.0	1.93	105.50
Trench-1c	0.0	1.0	1.0	2.56	42.60
Trench-1c	11.0	13.0	2.0	0.23	317.50

9.7.2 Trench 2

Trench 2 was also previously trenched by John Brady. The area is referred to as the "Powerline Showing" because the previous trenching resulted in samples as high as 7.5 g/t Au. The previous trenching exposed similar mineralization as trench 1, consisting of brecciated albitite with a quartz-carbonate-pyrite matrix. The 2018 trenching exposed more of the hydrothermal package and exposed a strongly albitized zone that contacts a limestone (Figure 9-8). The albitized zone contains local minor brecciation. The mapping identified two main foliations at 087/69 and 344/64. The rocks were channel sampled and anomalous intersections are outlined in Table 9-12.

Figure 9-8: Trench 2 example of brecciated albitite with a quartz-carbonate-pyrite matrix.

Table 9-12: Anomalous channel sample intersections on Trench 2.

Channel #	From (m)	To (m)	Length (m)	Au (g/t)	Co (ppm)
Trench-2k	0.0	1.0	1.0	0.91	354.00
Trench-2i	6.0	7.9	1.9	0.41	234.30

9.7.3 Trenches 3 to 10

Trenches 3 to 10 contain only weakly anomalous Au and Co mineralization. However, valuable observations have still been concluded at these trenches. The spatial distribution of the trenches helped map albitization on the Project. It has been concluded that it is not difficult to find albitized rocks on the Project. However, the trenches proved that brecciation with a high percentage of matrix and mineralization (mostly pyrite) is required to achieve Au and Co grade. Trench 3 sampling tested a large shear zone with minor pyrite, pyrrhotite, and chalcopyrite and resulted in no anomalous Au or Co mineralization. This observation confirms that exploration efforts should be focused on the albitized and brecciated zones. Observations of all trenches are outlined in Table 9-13.

Table 9-13: Observations of all trenching from the fall 2018 program.

Trench	Dates Excavated	Nature of rocks	Mineralization
Trench-1	2018-08-23 to 2018-08-27	Strongly albitized metasedimentary rocks with local brecciation. Breccia matrix is composed of quartz, carbonate, pyrite, and minor chlorite. South end of trench is composed of diabase.	Local strong pyrite in breccia matrix, trace chalcopyrite stringers
Trench-2	2018-08-28 to 2018-08-31	Domains of albitized metasedimentary rocks and limestone. The albitized rocks are locally brecciated with quartz, carbonate, pyrite, chlorite, and biotite.	Strongly brecciated rocks have pyrite in matrix
Trench-3	2018-09-01 to 2018-09-03	The trench is dominated by a strongly sheared, clast-poor conglomerate with local zones of strong albitization	Shear zone contains minor pyrite > pyrrhotite > chalcopyrite
Trench-4	2018-09-04 to 2018-09-06	The consists of a corridor of albitite that is bound to the North and South by sandstone	Local weak pyrite specks in the albitite and sandstone, trace pyrrhotite in the sandstone to the North
Trench-5	2018-09-07 to 2018-09-10	Dominated by clast-poor conglomerate that is locally strongly sheared. Northern extent contains a zone of brecciated albitite	Weak to moderate pyrite > pyrrhotite locally in conglomerate, albitite, and brecciated albitite
Trench-6	2018-09-11 to 2018-09-13	Consists of mostly of clast-poor conglomerate with local, small intersections of albitite	Weak veinlets, patches, and disseminated pyrite in all lithologies
Trench-7	2018-09-14 to 2018-09-16	Consists of mostly of clast-poor conglomerate with local, small intersections of albitite	Weak veinlets, patches, and disseminated pyrite in all lithologies
Trench-8	2018-09-17 to 2018-09-22	Not mapped or sampled	Not mapped or sampled
Trench-9	2018-09-23 to 2018-09-26	Consists of albitite, albitized breccia, and sandstone	Mostly contains fine-grained disseminated pyrite
Trench-10	2018-09-27	Moderately albitized sandstone with minor local shearing	Minor disseminated pyrite

10.0 Drilling

10.1 Drill Program Design and Implementation

In August 2019 MacDonald Mines commenced the company's first drill program on the Project. A 2000 m drill program was planned on the Scadding Mine Site leases. The primary goals were to understand the structural controls on mineralization, establish an alteration paragenesis, and to confirm grades reported by historic drilling. Drilling was designed to start near the previously mined areas and step out along strike and down-dip of mineralized structures to test for continuity.

To date, geochemical data has been received from four diamond drill holes totalling 834 m (Table 10-1). Drilling was completed by Forage Rouillier out of Amos, Quebec using HQ (63.5 mm core diameter) drill core.

Access to the site and within the property is readily available and easily facilitated as the extensive historic work on the property has left a network of roads and trails throughout the property which are accessible via trucks, ATVs or snowmobiles. The drills were moved between drill pads on skids behind a bulldozer.

Table 10-1: MacDonald Mines highlights of holes received to date on Project.

Hole ID	From (m)	To (m)	Length (m)	Au (g/t)	Gold Zone
SM-19-001	8.60	15.90	7.30	11.2	North Zone
Including	14.90	15.90	1.0	77.16	North Zone
SM-19-001	25.20	30.70	5.50	5.73	North Zone
Including	27.30	28.80	1.50	17.17	North Zone
SM-19-001	37.80	50.10	12.30	52.02	North Zone
Including	45.90	48.90	3.0	210.23	North Zone
SM-19-002	20.20	27.83	7.63	8.56	North Zone
Including	23.0	27.21	4.21	14.04	North Zone
SM-19-002	32.34	47.63	15.29	3.21	North Zone
Including	37.0	37.93	0.93	13.44	North Zone
Including	43.15	44.02	0.87	23.15	North Zone
SM-19-003	27.88	34.02	6.14	11.10	North Zone
Including	27.88	30.55	2.67	11.39	North Zone
Including	31.42	33.0	1.58	23.32	North Zone
SM-19-003	127.07	128.87	1.8	3.29	North Zone
SM-19-004	11.20	14.20	3.0	51.5	North Zone
Including	11.20	13.20	2.0	7.4	North Zone
SM-19-004	73.75	75.12	1.37	3.03	North Zone
SM-19-004	82.77	84.75	1.98	9.02	North Zone
Including	83.91	84.75	0.84	20.38	North Zone

Note: Assays results presented over core length and are estimated to represent between 65 and 85% true width. Additional drilling is necessary to define the geometry of the intersected zones of gold mineralization.

10.1.1 Collar Survey

For drill alignment, a Reflex TN-14 gyrocompass is utilized by a MacDonald Mines geologist to align the drill head prior to casing installation. This device uses a north seeking gyro to provide high precision drill orientation.

Drill holes were spotted with a Trimble Geo 7X GPS. The handheld unit can achieve 50 cm accuracy. Upon complete of drill holes, the Trimble was used to collect the final coordinates of casing (Table 10-2, Figure 10-1). The casing was left in place and capped with a red bolt-on metal cap and attached 0.9 m flag with hole information.

Table 10-2: Details of MacDonald Mines fall 2019 drill program to date.

Hole ID	Year Drilled	X	Y	Z	Depth (m)	Az	Dip
SM-19-001	2019	529165.122	5166688.935	305.055	96	305	-84
SM-19-002	2019	529178.736	5166724.615	305.334	105	245	-49
SM-19-003	2019	529131.961	5166652.865	313.853	149	245	-48
SM-19-004	2019	529223.761	5166681.800	309.546	134	248	-52

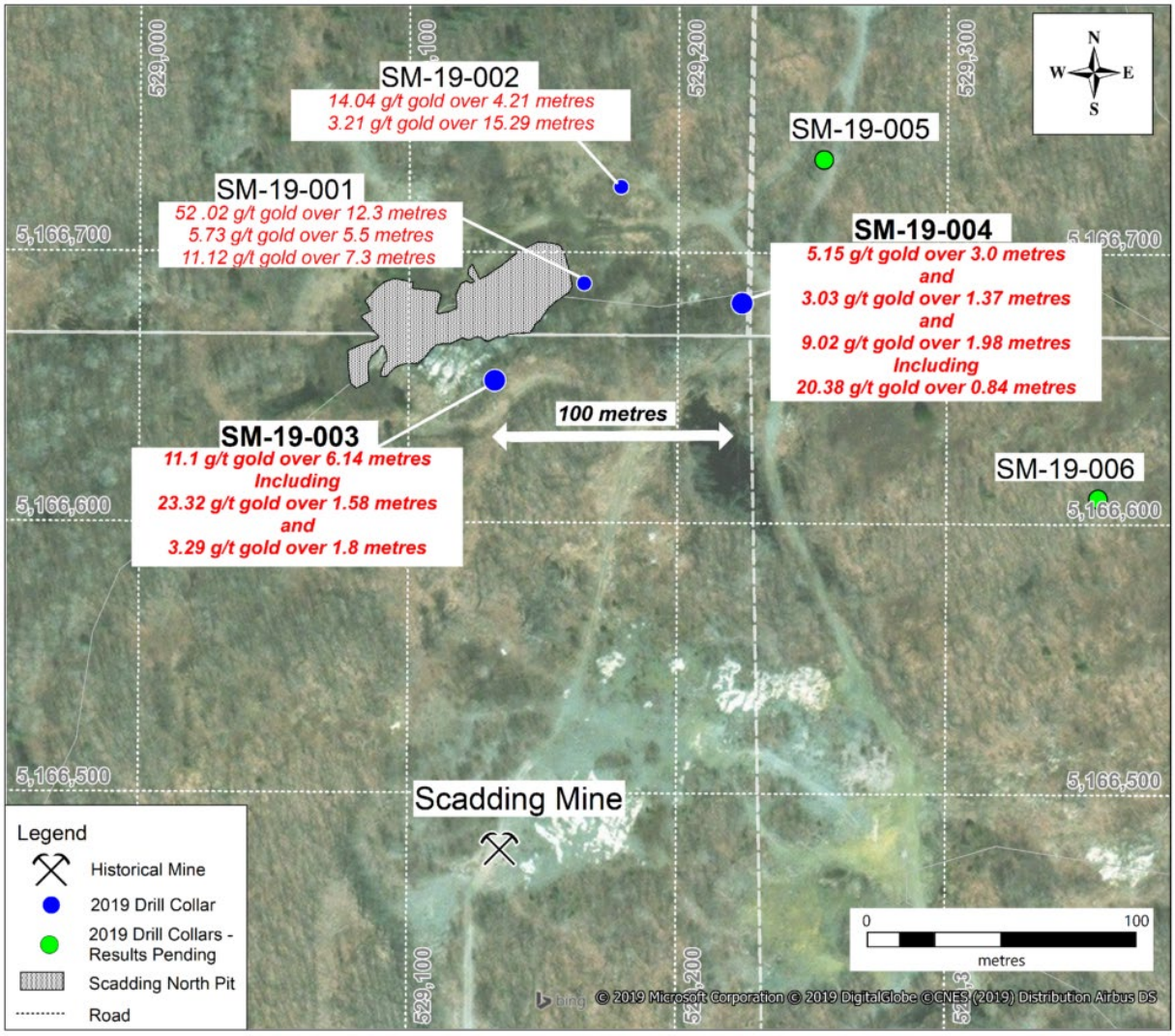

Figure 10-1: Diamond drill hole collar locations of SM-19-001, SM-19-002, SM-19-003 and SM-19-004.

10.1.2 Down Hole Survey

A down-hole survey was completed on all holes to gain as much information as possible from each drill hole. While drilling was undertaken, a Reflex easy shot was used to provide in-hole azimuth and dip. This survey was completed approximately 10 metres below the bottom of the drill casing and every 30 metres following the initial measurement. This device uses magnetism for its measurements, and it should be noted that in areas where ferromagnetism is prevalent in the rocks, measurements can be unreliable for azimuth readings. All down hole surveys were completed by Forage Rouillier at the drill.

10.1.3 Core Recovery

Core recovery is important as core orientation procedures is a strategic part of the exploration program. The core was pieced together by a MacDonald Mines technician to obtain a continuous run. Therefore, any missing core can be problematic. Extensive discussion with the drilling team were routine to ensure all efforts were made to achieve the highest possible core recovery rates.

10.1.4 Core Handling Procedure

The core was boxed at the drill and labeled with the drill hole ID and box number; meter blocks were inserted at the end of each drill run every three metres. A lid was placed on the box, taped shut, and transported by truck or ATV to the core logging facility (the core shack. The core shack is located on the Scadding Mine Site Leases within 500 m of any of the drill hole locations. After arrival at the core shack, the core boxes were opened for geotechnical processing and logging. Once a truck load of samples was accumulated in the core shack, they were subsequently shipped to the lab for assay analysis. Sequentially numbered security seals are utilized on each bag of samples to maintain secure shipping and an appropriate chain of custody.

10.1.5 Geotechnical Core Processing

Prior to the beginning of the geological logging, core pieces were properly fitted, an orientation line was drawn, and meter marks were promptly labeled referencing the blocks identified by the drillers every run (3 m); start and end of each core box was marked on the box and recorded in an Excel™ file creating a box info file. From there, the geological logging procedure was carried out by a MacDonald Mines geologist.

10.1.6 Structure

The Reflex ACTIII was used in conjunction with drilling to indicate the orientation of the drill core as it came out of the drill hole. The entire length of core was pieced together to obtain a continuous, or near continuous run from the top to bottom of each hole. Depending on the level of confidence, a solid line (>95% confidence) or dashed line (<95% confidence) was then drawn on the core connecting the orientation marks made at the drill site at the end of each run. The level of confidence of the orientation line increases with the ability to line-up multiple orientation marks. This solid or dashed line represents the bottom of the core in the hole, providing a reference line to make structural measurements. Structural features of interest were then marked on the core and measured relative to the previously mentioned line, noting the bottom of core using the alpha-beta method and level of confidence. This method utilizes a transparent tube (Holcombe Alpha-Beta Protractor) with angles relative to the long axis (alpha) and angles around the circumference of the core (beta). Structural measurements are converted to true strike-dip/trend-plunge with the use of 3D software (Leapfrog, Target) and integrated into the 3D model to assist with modelling.

10.1.7 Core Logging

The core was visually inspected and logged based on the geologist's descriptions using MXDeposit (Geosoft). A variety of analytical methods was utilized to best describe the lithological units. These included testing for magnetism with a magnet, reactivity with 10% HCL, scratch testing with a nail or tungsten scribe to estimate hardness, portable XRF reading, colour, texture, structure, and grain size. These components were used to create a lithological description of the core from the top to bottom of each hole. This log was further subdivided by lithologies with description of veining, alteration, texture, deformation, and mineralization.

10.1.8 Core Sampling

Since the Fall 2019 drilling was the first drill program undertaken by the company, SM-19-001 and SM-19-002 were sampled from top to bottom. This was done so we can geochemically characterize all rock types and understand mineralization and alteration. Each sampled interval of 0.5 m - 1.5 m was described in an Excel™ spreadsheet and later updated with the applicable assay results.

Sample tags are placed and stapled into the core boxes at the end of each sample. The core was then cut in half; one half of the core was placed in a durable plastic sample bag with a sample tag matching that of the other half remaining in core storage located on the property for future reference. Samples were then separated into groups of 4 and placed in durable rice bags for transport.

10.1.9 Core Sampling

A Terraplus KT-10 magnetic susceptibility meter was used to provide quantitative data of the magnetism of the rock at each meter down the length of the drill hole. Magnetic susceptibility measurements are important as many of the gold zones of the Project have shoulders that are selectively enriched with magnetite, forming a positive magnetic susceptibility anomaly around these gold zones. Additionally, pyrrhotite can occur within the gold zones. The magnetic susceptibility readings are downloaded and recorded in an Excel™ spreadsheet for each drill hole.

10.1.10 Core Photography

When all steps of the core logging procedure are completed and the sample tags are inserted, digital photos of each core box are taken 4-5 boxes at a time and recorded in the database. A white board is included in the photo that gives information on the hole ID, box number, meterage, and samples contained.

10.2 Historic Drilling on the Scadding Leases

The most significant drilling on the Project occurs on the Scadding Mine leases. The Scadding deposit was first drilled in 1973 and has undergone drilling programs from 7 different ownership groups since (Table 10-3, Figure 10-2). The most significant drilling campaign in recent years was completed by Trueclaim between 2009 and 2011 and therefore will be outlined in detail in this section. MacDonald Mines has not completed any drilling on the Project and doesn't identify any drill program as having any drilling, sampling, or recovery factors that may impact the accuracy and the reliability of the results. True width calculations of the mineralized zones cannot be determined until a MacDonald Mines' drill program is completed and a more robust 3D model is created. MacDonald Mines has systematically surveyed all drill collars that exist on the Project from past drill programs.

Table 10-3: Summary of drilling on the Scadding Mine leases.

Year	Company	# of Holes	Metres	Av. Length (m)
1973-1975	S Gulf Minerals Canada Ltd.	54	3660	67.8
1977-1980	W D.R. Watt	49	3897	79.53
1980-1981	N Northgate Exploration Limited	56	5066	90.46
1985-1990	87 Orofino Resources Limited Underground definition drilling	---	1677	---
1997-1998	CR Currie Rose Resources Inc.	43	3471	80.70
2003-2004	JS JML Resources Ltd.	32	3899	118.15
2009-2011	TRM Trueclaim Exploration Inc.	90	10304	114.5
2017	NSM Northern Sphere Mining	6	1693	282.17
	TOTAL	330	33667	

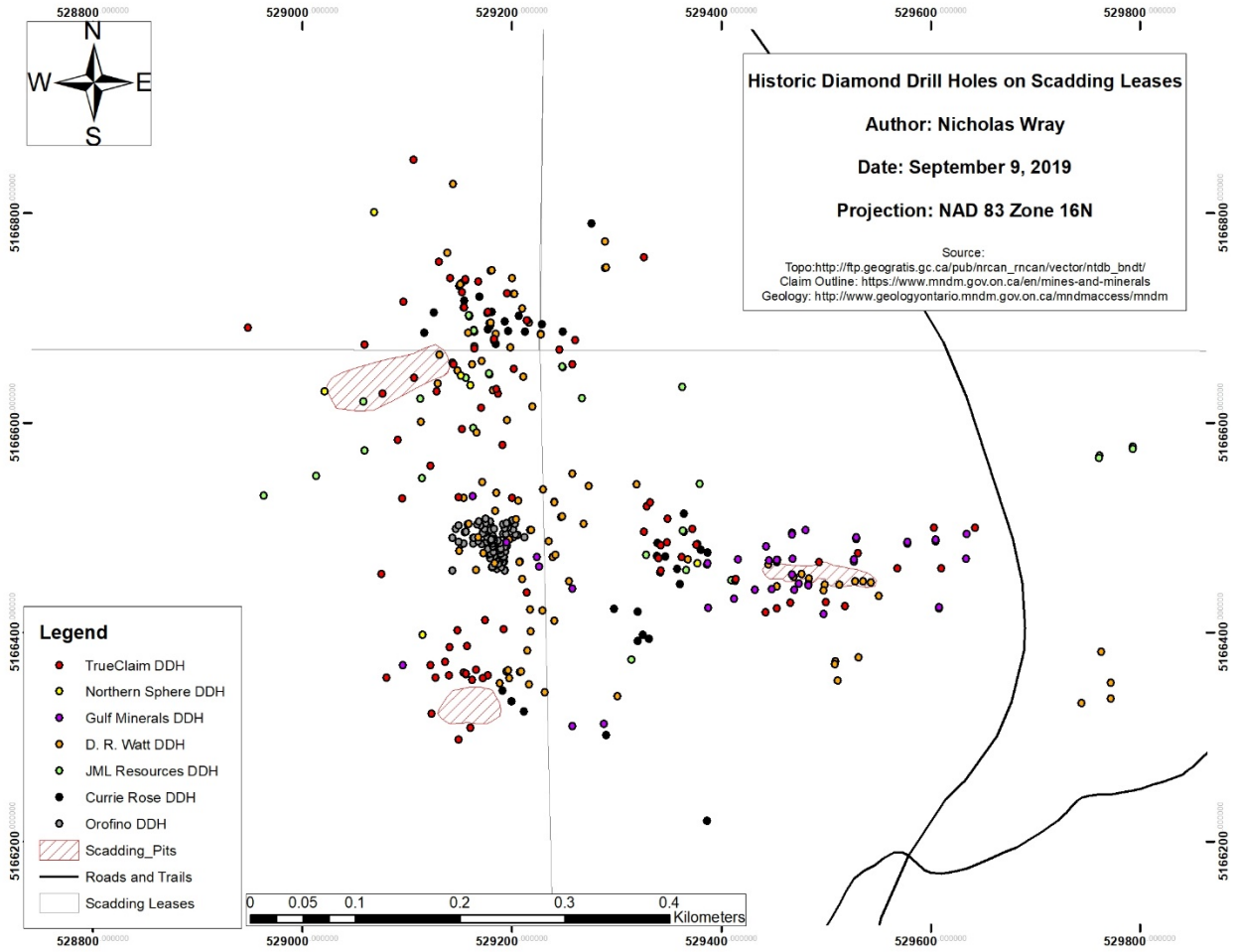

Figure 10-2: All boreholes drilled on the Scadding Mine site.

10.2.1 Trueclaim Exploration Inc. Drilling: 2009-2011

The Trueclaim diamond drilling was carried out in three separate drill programs between December 2009 and June 2011. The first drill program was designed to test multiple different zones and validate historical data. It was confirmed that gold occurs in the chlorite breccias and there is potential for expanding the footprint of the mineralized zones. The 2010 drill program tested some geophysical anomalies and all the known mineralized zones on the Project. The highest density of drilling was completed on the North Zone because geological modeling indicated it had the greatest potential for expansion. Following the 2010 drill program, it was concluded that gold is almost always associated with iron-rich chlorite and magnetic rocks. The 2011 drill program tested all the known mineralized zones but was mostly focused on the North Zone and South Zone. Oriented core data was collected with help from SRK consulting. The results of the oriented core study resulted in the planning of a wide-spaced delineation program to assess the size of the North Zone. It also helped with drill planning in the South Zone and the East-West Zone. The subsequent drilling was unable to follow the interpreted mineralized zones with any success, but local high-grade intersections were intersected. The best gold intersections by Trueclaim can be found in Table 10-4. True width calculations of the mineralized zones cannot

be determined until a MacDonald Mines' drill program is completed and a more robust 3D model is created.

Table 10-4: Significant drill hole intersections by Trueclaim Exploration.

Name	Zone	X	Y	Az.	Dip	From (m)	To (m)	Intersection (m)*	Au (ppm)
TRM-09-02	South	529139.5	5166359	170	-60	29.6	44	14.4	2.65
TRM-10-02	North	529155.1	5166736	190	-60	30.0	34.0	4.0	9.80
TRM-10-06	North	529185	5166632	2	-45	70.0	72.0	2.0	23.80
Including						71.0	71.5	0.5	77.81
TRM-10-07	North	529143.2	5166658	75	-50	52.4	71.6	19.2	12.85
Including						71.0	71.6	0.6	106.29
TRM-11-10	South	529157	5166387	71	-68	53.0	68.0	15.0	5.61
Including						56.0	62.0	6.0	11.74
TRM-11-18	New	529362	5166472	325	-63	52.8	55.7	2.9	15.59
TRM-11-22	New	529376	5166484	305	-60	32.0	33.0	1.0	141.18

* Note: intersections are not true width; true width is currently unknown. The reader is cautioned that a qualified person has not done sufficient work to verify these values. These are historical values that may not be representative of the mineralization present.

10.3 Historic Drilling on Claims

In total, 138 diamond drill holes totalling 11,888 m have been drilled on the claims. The drilling has resulted in the discovery local anomalous gold-copper-cobalt mineralization. However, mineralization seems sporadic and it remains difficult to assess if any of the mineralized intersections have potential for growth. Table 10-5 outlines anomalous intersections on claims outside of the Scadding Mine site.

Table 10-5: Anomalous drill hole intersections on the Project claims.

Name	X	Y	Az	Dip	From (m)	To (m)	Intersection (m)*	Au (g/t)
Currie Rose C-1	537774	5165750	20	-45	8.75	8.87	0.12	6.13
Currie rose C-27	537674	5165700	20	-45	32.52	34.14	1.62	2.20
Palkovits P9-2002	536572	5165891	90	-45	33.25	33.41	0.16	4.71
Palkovits P9-2002	536572	5165891	90	-45	38.63	38.96	0.33	6.78
Palkovits P9-2003	536771	5165888	90	-60	9.34	9.80	0.46	1.39
Palkovits P9-2003	536771	5165888	90	-60	19.26	21.15	1.89	1.62
Palkovits P9-2003	536771	5165888	90	-60	24.03	24.45	0.42	1.31
New Arcadia A-13	530214	5164693	270	-60	48.68	49.04	0.36	6.17
New Arcadia A-25	530213	5164608	270	-60	78.02	79.43	5.14	1.41

* Note: intersections are not true width; true width is currently unknown. Note: The reader is cautioned that a qualified person has not done sufficient work to verify these values. These are historical values that may not be representative of the mineralization present.

11.0 Sample Preparation, Analyses and Security

11.1 MacDonald Mines Surface Sampling and Trenching

All samples were taken directly from the bedrock except for one which was a soil sample. Most grab samples were taken using a hammer and chisel. A channel saw was used to cut samples from the 2018 trenches and historical trenches. Samples were bagged, given a sample tag, and locked closed with a zip tie. Standards and blanks were inserted every 20 and 25 samples for channel samples and 40 and 50 samples for grab samples respectively. A silica-rich sand was used as a blank. Four different standards with varying concentrations Au and S were used. The samples were placed in rice bags (5 to a bag) and closed with heavy-duty security zip ties. The security ties are assigned a unique number that allows for tracking the chain of custody. The samples were then taken directly to Manitoulin Transport's shipping facility in Sudbury and shipped to Activation Labs (Actlabs) in Ancaster, Ontario. The sample preparation procedure for the lab is as follows: 1) rock samples are crushed to a nominal size and separated using the minus 10 mesh (1.7 mm) 2) crushed samples are mechanically split (riffle) to obtain a representative sample 3) samples are pulverized to at least 95% minus 150 mesh (105 microns). All steel mills are composed of mild steel and do not induce Cr or Ni contamination. Also, clean sand is used between every sample to clean out the crushing and pulverization device. The quality of crushing and pulverization is routinely checked as part of their quality assurance program. Randomization of samples in larger orders (>100) provides an excellent means to monitor data for systematic errors. The data is resorted after analysis according to sample number (taken from www.actlabs.com). The samples were submitted and analyzed for elements associated with the known mineralization in the area. Multi-element analyses used a four-acid digestion for near-total digestion, followed by ICP-OES + ICP-MS (Lab code: ME-MS61). Precious metal analyses used a fire assay followed by ICP-OES (Lab code: 1C-OES). Some samples were flagged as high sulfide because the lab must adjust flux formula and the flux/rock ratio to ensure accurate results for precious metal analyses. For more detailed information on the analytical and assay procedures, go to the Actlabs website at http://www.actlabs.com. The Activation Laboratories Ltd. Website states that, "the laboratory has achieved the ultimate accreditation to international standards, the ISO 17025 standard for specific registered tests. ISO 17025 evaluates the quality system and specific analytical methodologies through proficiency testing and routine audits of the laboratory. In addition, we have achieved accreditation to CAN-P-1579, specific to mineral analysis laboratories. We are one of the few commercial laboratories which have achieved this distinction. Activation Laboratories Ltd. can also advise on methods you can use to ensure security of samples during transport to the laboratory. We have a rigorous chain of custody protocol in place to ensure security of your samples once we receive them. Analytical uncertainty is available on request. In 2007, Activation Laboratories Ltd. became accredited to NELAP in the USA."

11.2 MacDonald Mines Drilling

The core drilled to date by MacDonald Mines during the Fall 2019 drilling program was sampled in regular intervals of approximately 1.0 m within the mineralized zone and approximately 1.5 m outside the immediate mineralized zone observing lithological contacts. The core was cut in half for sampling using a core saw. A total of 162 samples were collected during this period. A total of 16 quality control quality assurance (QA/QC) certified reference material (CRM, Standards) and blanks were inserted in the sample stream every 20 samples and 25 samples, respectively.

Core samples were placed into a plastic bag together with a pre-numbered sample tag, and then sealed. Individual sample bags were then placed into larger rice bags for shipping. A numbered

security tag was placed on each rice bag containing the individual sample bags to prevent tampering. Each security tag was recorded by MacDonald Mines personnel and the information was transmitted to the receiving laboratory. The rice bags were transported by MacDonald Mines personnel to Manitoulin transport in Sudbury from where the samples were shipped to the Bureau Veritas laboratory in Timmins, Ontario.

Bureau Veritas is an ISO/IEC 17025 certified laboratory and there is no relationship between MacDonald Mines and Bureau Veritas other than MacDonald Mines commissioned Bureau Veritas to analyze drill core samples.

The half of core that wasn't sent to the laboratory is stored at MacDonald Mines secure outdoor storage facility.

11.2.1 Analytical Procedures

Two gold packages have been requested by MacDonald Mines, including:

1) Fire-assay with an AAS finish (code: FA450)
2) Metallic Screen on 1000 g sample (code: FS552-1KG)

For the fire-assay analysis, the entire sample is crushed to 85% passing -10 mesh (1.7 mm), riffle split and pulverize until 85% passing 75 microns. Fifty grams of pulverized sample is used for the assay procedure.

For the metallic screen analysis, a 1,000 g split is sieved at 100 mesh (149 µm). Assays are performed on the entire +100 mesh and on two splits of the −100 mesh fraction. The final assay is calculated using the weight and gold analysis of each fraction. Metallic screen assays were completed on every sample where visible gold was observed. All the samples with a gold grade over 10 g/t from the fire assay were systematically re-analyzed by metallic screen for validation.

In addition to gold analyses, systematic multi-element analyses (MA200) using ICP-MS and ICP-AES following a 4 acid near-complete digestion were completed on the drill core samples.

11.2.2 Quality Assurance and Quality Control Programs

Quality control (QC) measures are typically set in place to ensure the reliability and trustworthiness of exploration data. These measures include written field procedures and independent verifications of aspects such as drilling, surveying, sampling and assaying, data management, and database integrity. Appropriate documentation of QC measures and regular analysis of QC data are important as a safeguard for Project data and form the basis for the quality assurance (QA) program implemented during exploration.

Analytical control measures typically involve internal and external laboratory control measures implemented to monitor the precision and accuracy of the sampling, preparation, and assaying. They are also important to prevent sample mix-up and to monitor the voluntary or inadvertent contamination of samples. Assaying protocols typically involve regularly duplicating and replicating assays and inserting QC samples to monitor the reliability of assaying results delivered by the assaying laboratories. Check assaying is normally performed as an additional test of the reliability of assaying results. This generally involves re-assaying a set number of sample rejects and pulps at a secondary umpire laboratory.

MacDonald Mines relied partly on the internal analytical QC measures implemented by Bureau Veritas. In addition, MacDonald Mines implemented external analytical control measures consisting of the use of control samples (blanks and CRM's) inserted in all sample batches submitted for assaying. The routine insertion rate was 1 standard per 20 samples and 1 blank per

25 samples sent. Additional blanks were also inserted after samples where many specks of visible gold were observed.

Four certified gold reference materials sourced from commercial suppliers were used (Table 11-1). Silica sand referred to as Bell & Mackenzie White Lightning® 2040 was used as a blank.

The exploration work completed by MacDonald Mines was conducted using documented procedures and involved extensive verifications and validation of exploration data. During drilling, experienced MacDonald Mines geologists implement industry standard measures designed to ensure the reliability and trustworthiness of the exploration data.

MacDonald Mines monitored the analytical quality control data on a real-time basis. Failures of quality control samples were investigated, and appropriate actions taken, including potentially requesting re-assaying of certain batches of samples. There are currently not enough analyses received from the Fall 2019 drill program to perform robust review of Analytical QA/QC data.

Table 11-1: Certified reference material and blank material used by MacDonald Mines during 2019 Fall drill program to date

Standard	Used in Drilling to Date	Certified Au (g/t)	1SD	Method Name*	Matrix	Mineralization Style
OREAS 226	2	5.45	0.126	FA-MS	A blend of Archean greenstone-hosted Wilber Lode primary ore from the Andy Well Gold Mine and barren Cambrian greenstone sourced from a quarry north of Melbourne, Australia	Orogenic Lode Au
OREAS 209	2	1.58	0.044	FA-MS	A blend of Au-bearing Magdala ore from Stawell Au Mine, west-central Victoria, Australia and barren tholeiitic basalt from Epping, Victoria, Australia	Orogenic Lode Au
OREAS 218	1	0.531	0.017	FA-MS	A blend of Archean greenstone-hosted Wilber Lode primary ore from Andy Well Au Mine and barren Cambrian greenstone sourced from a quarry north of Melbourne, Australia	Orogenic Lode Au
OREAS 229	3	12.11	0.206	FA-MS	Archean greenstone-hosted Wilber Lode primary ore from the Andy Well Au Mine	Orogenic Lode Au
Blank	8				Coarse silica sand provided by Actlabs or B&M White Lightning 2040 - expected grade of <0.005 g/t Au	

11.3 Trueclaim Exploration Drilling 2009 to 2011

In total, there were 245 standards, 56 blanks, 3 duplicates, and 3344 core sample analyses in the Trueclaim geochemistry database. The relationship between Trueclaim and the various labs used for analyses is not known. However, the author does not have any reason to believe that the sample preparation, security, and analytical processes undertaken by Trueclaim to be inadequate.

11.3.1 2009-2010 Drilling

According to a report authored by Whissell et al. (2009) the following procedure was used. Cut core was stored in the cutting shack and sampling was completed periodically. Half core samples were placed in thick plastic sample bags with their corresponding sample tag. A portion of the sample tag with the sample number was stapled into the bottom of the core box. Standards were inserted every tenth sample and blanks were inserted every fiftieth. Sample bags were closed with zip ties and put in rice bags in groups of 10. Samples were taken to the lab 10 bags at a time. When drilling commenced, samples were transported to SGS Laboratories in Sudbury and duplicate samples or field samples were sent to Swastika Laboratories in Swastika. SGS Laboratories took a significant amount of time for results, so all samples were transferred to AGAT Laboratories on highway 17 in Sudbury. At AGAT the samples were pulverized to 100 mesh (149 um) and had a four acid near total digestion followed by Fire Assay – ICP-OES finish. Metallic screen was completed on certain samples.

Once all geochemistry was received, Trueclaim contacted Caracle Creek International Consulting Inc. (CCIC) to conduct a QA/QC review of the drill results that were received from AGAT Laboratories. They concluded that the quality of the blanks is good, indicating that contamination during sample preparation is rarely a problem at AGAT. The standards have no bias but have slightly high failure rates indicating moderate accuracy. The re-assay of the failed blanks standards was successful in that all the failed QC samples except for one sample which was contaminated during sample preparation. All the pulp duplicates passed except for one sample due to analytical error indicating good precision (Selway and Ilieva, 2010).

11.3.2 2011 Drilling

According to a report authored by Moss and MacMillan (2011) the following procedure was used. Core technicians bagged and wrapped samples for shipping. Project geologist, Lindsay Moss transported sample shipments from the core shack to Accurassay in Lively, Ontario. Samples were crushed 70% -8 mesh (2mm), split (500g) and pulverized to 90% -150 mesh (106 um) analyzed by fire assay with ICP finish. The report mentions that metallic screen was used but does not specify if this was on all samples or just certain samples. Standards and blanks were inserted into the sample sequence, but the report does not mention at what frequency.

11.3.3 MacDonald Mines Review of Trueclaim Analytical QA/QC Data

The Trueclaim database included assay results for the external analytical QC samples for the period 2009 to 2011. The data was provided in the form of Excel™ spreadsheets. External QC samples comprised field blanks and Certified reference materials (CRMs). The analytical quality control data produced by Trueclaim between 2009 through 2011 are summarized in Table 11-2 and presented in graphical format in Figure 11-1 through Figure 11-7.

Table 11-2: Summary of quality control data from Trueclaim Exploration drilling programs.

Type	Sample Count	>3 Stdev Failure
Blanks	56	NA
CDN-GS-1E	17	1
CDN-GS-5E	16	1
OREAS 19A	43	25
CDN-CGS-24	42	0
CDN-GS-1F	41	1
CDN-GS-P8	18	2

Typically, when the CRMs analyses were outside 3 standard deviations (SD) of the certified values it is considered a failure All of the CRMs performed very well except OREAS 19A which has 25 of 43 analyses fall outside of the 3 standard deviations. OREAS 19A was the only CRM not prepared by CDN Resource Laboratories Ltd. It is possible that the manufacturers did not ensure homogeneity of the material, but this could also just be a coincidence. All blanks performed well except for one that analyzed for 0.052 ppm Au.

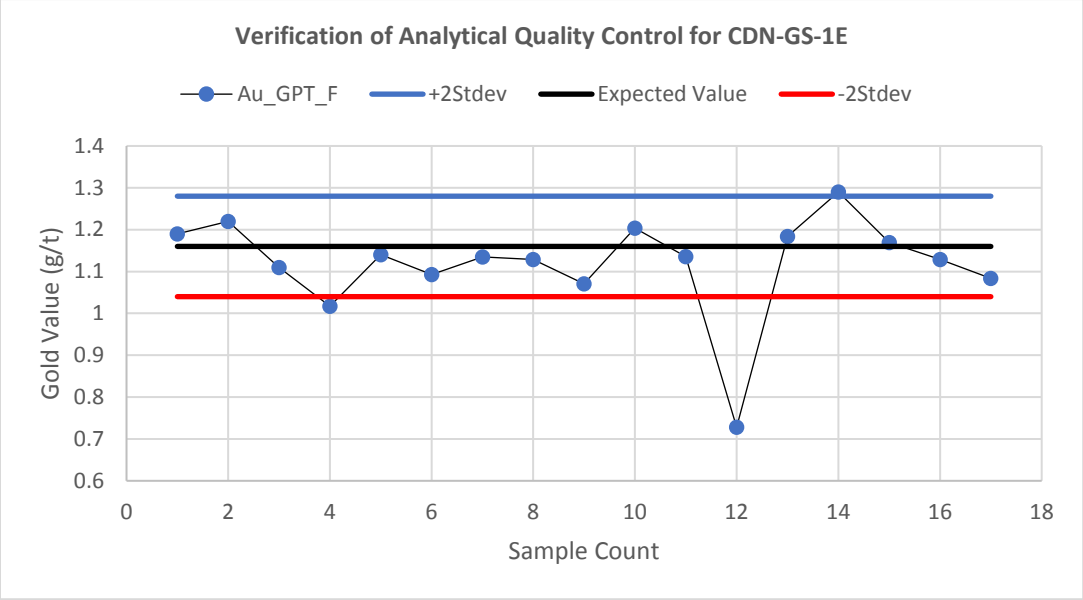

Figure 11-1: Control Chart for CRM CDN-GS-1E

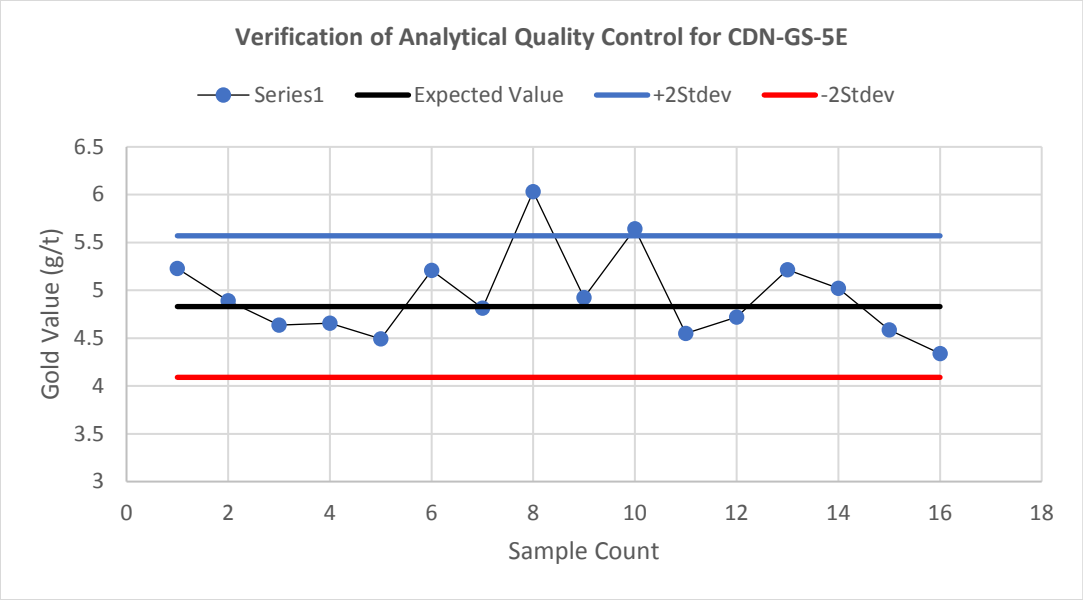

Figure 11-2: Control Chart for CRM CDN-GS-5E

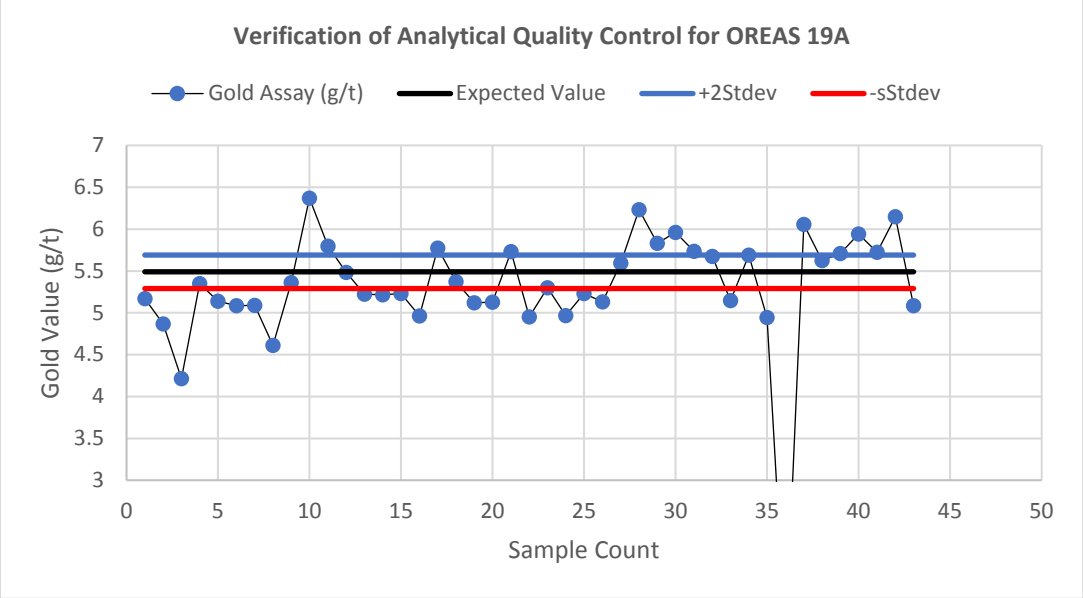

Figure 11-3: Control Chart for OREAS 19A

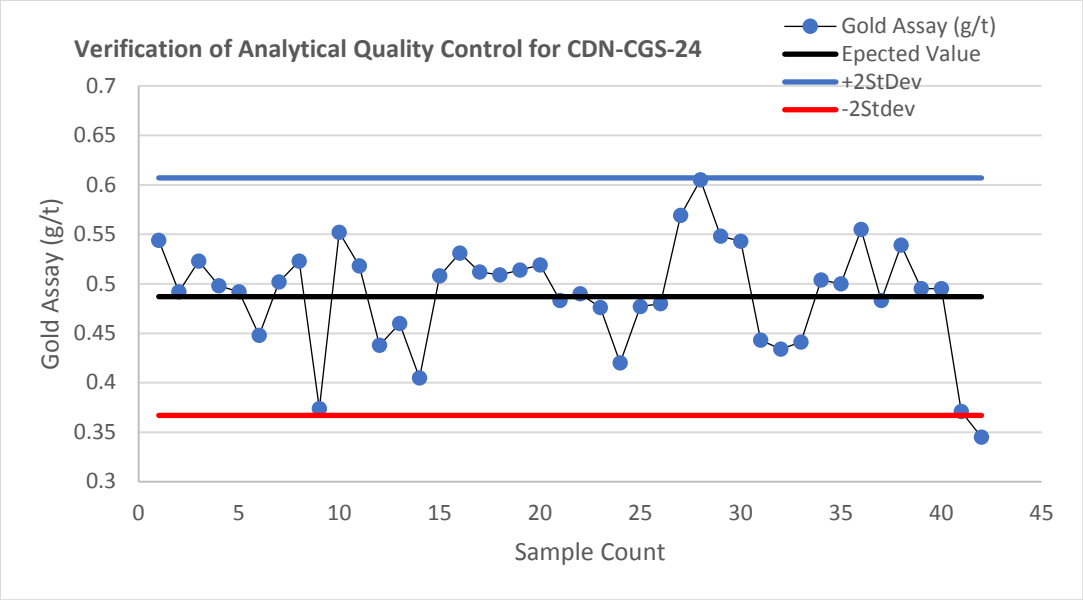

Figure 11-4: Control Chart for CRM CDN-CGS-24

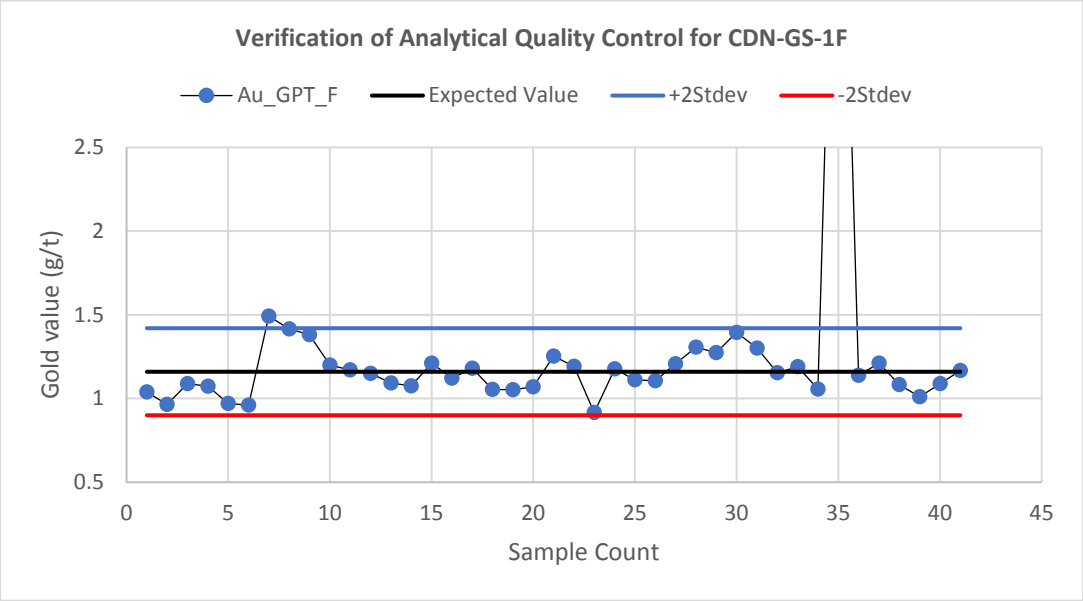

Figure 11-5: Control Chart for CRM CDN-GS-1F

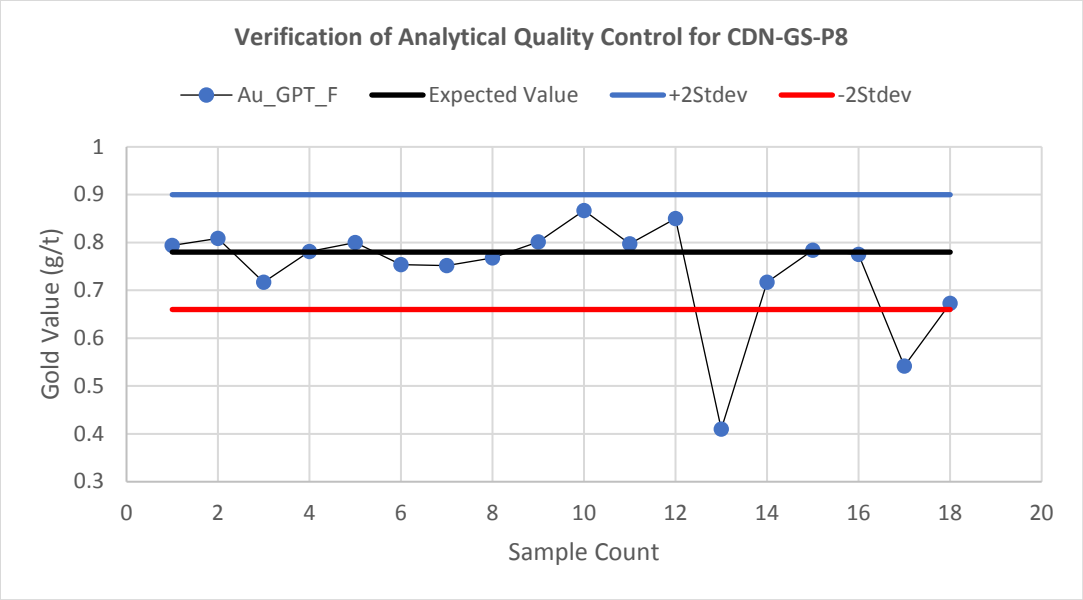

Figure 11-6: Control Chart for CRM CDN-GS-P8

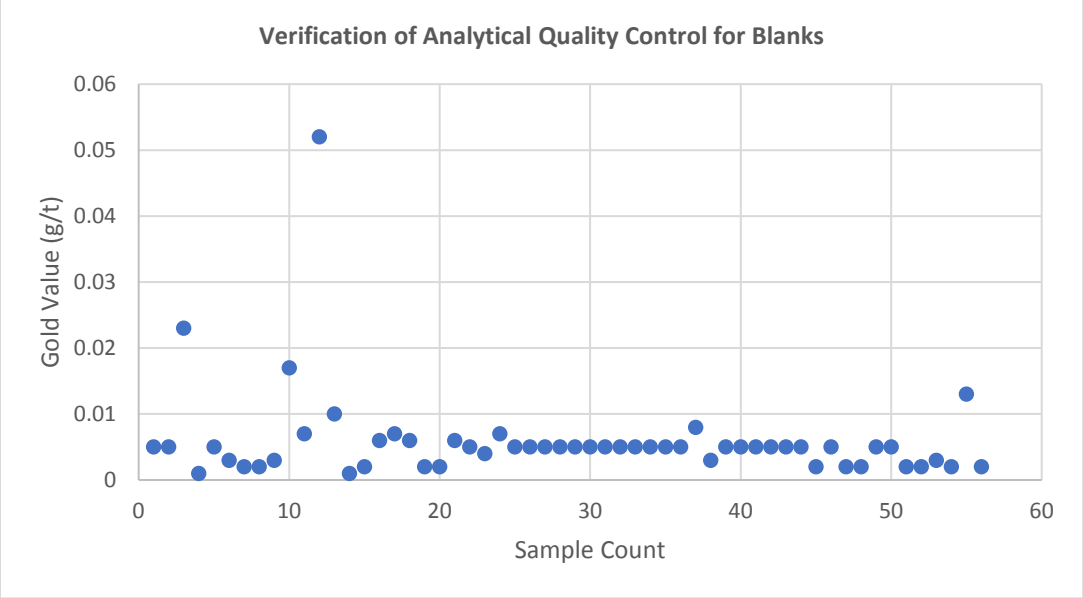

Figure 11-7: Control Chart for Blanks

11.4 JML Exploration Drilling 2003-2004

According to a report authored by Winter (2009), the following procedure was used. Core was logged by a geologist at a Sudbury core shack. Samples were selected by the geologist, typically in 1 and 1.5 m lengths. Sample lengths were decreased where visible gold was encountered. The core was then cut with a diamond blade and sampled. Half of the core remained in the box and was stored at the Sudbury logging facility. The samples were shipped to Expert Laboratories in Rouyn-Noranda, Quebec. At the lab, samples were crushed to passing 10-mesh and 100 grams were pulverized to 90% passing 150-mesh. Gold concentrations were determined by fire assay and atomic absorption. For samples greater than 1000 ppb, the assays were checked

gravimetrically. Samples containing visible gold were sent for metallic screen. At the time of analyses, Expert Laboratories Inc. was ISO 90001:2000 registered and accredited by the Standards Council of Canada: proficiency testing provider for specific mineral analysis parameters. JML sent 1185 drill core samples for gold analyses at Expert Laboratories Inc which included 112 duplicate samples. There is no mention of standard or blanks being submitted to the lab. The lab conducted a check on every twelfth sample for their internal quality control procedures. Duplicated samples almost always varied by less than 25%.

11.5 Currie Rose Drilling 1997

According to a report from Hall (2003), the following procedure was used. Core was logged by a consulting geologist P. C. McLean. The geologist marked out samples that were less than 5 feet in length. For the first 25 holes, sludge samples were taken. This was done by collecting 1 litre sample of sludge from the drill cutting over a 20 ft drill run. The core and mud samples were sent to Swastika Laboratories Ltd. in Swastika, Ontario to be analyzed for gold using fire assay – gravimetric method. Metallic fire assay was used for samples with visible gold at a separate lab called Loring Laboratories Ltd. Approximately, 35 replicate metallic fire assays and 80 duplicate fire assays were completed on a total of 633 samples sent to the labs. There is no mention of standards and blanks being used. At the time, neither of the labs were certified by a standards association.

11.6 Other Drill Programs

No information is available about the sample preparation, analyses, and security for the drill programs prior to the 1997 Currie Rose program.

12.0 Data Verification

12.1 MacDonald Mines

One of the authors of this report led the 2018 MacDonald Mines geological sampling and trenching program on the Project. The same person meticulously went though all previous assessment reports, technical reports, and relevant publications to write this report. Upon reception of the 2018 MacDonald Mines rock geochemistry, the data has been verified as accurate using standards and blanks.

12.2 Previous Explorers

12.2.1 Sample Verification

MacDonald Mines is unable to validate drilling results at the Scadding Mine site prior to the Trueclaim drilling as the core location is unknown. MacDonald Mines plans on validating samples of Trueclaim core that has been left at the Scadding Mine site once it is organized.

12.2.2 Drill Collar Inspection

MacDonald Mines conducted a drill collar inspection at the Scadding Mine site. The locations of 64 drill collar were surveyed using a Trimble FieldPoint RTX GPS which is capable of decimeter accuracy. The base station that much of the 1980s drilling was tied into was also located allowing for accurate conversion of the historical collar locations. It is concluded that the collars surveyed by MacDonald Mines match the historical locations with only minor adjustments needing to be made.

13.0 Mineral Processing and Metallurgical Testing

A report by Hall (2003) indicates that metallurgical test work was carried out by Lakefield Research Canada Limited prior to mining in 1981. Lakefield Research designed a circuit that included primary and secondary crushing, a gravity circuit, and a two-stage floatation circuit. It was determined that 67% of the gold could be recovered by floatation and 33% could be recovered by gravity.

Once processing was undertaken at the Scadding Mill, floatation concentrates were refined at the Pamour Smelter in Timmins at a cost of 5% contained gold. It was determined that gravity concentrates from the Scadding mill contained gold and silver in the ratio of 26:1, 0.3 weight % copper, and 0.1 weight % arsenic. Manns and Ellingham (1992) reported that only 14.2% of the gold extracted from the Central Zone mining could be recovered by gravity.

No mineral processing or metallurgical testing has been carried out by MacDonald Mines.

14.0 Mineral Resource

The Scadding Mine is the only place a historical resource has been completed on the Project. The reliability of the historical estimates is considered low to moderate. Integration of historical data into 3D modeling software combined with confirmation drilling with an emphasis on understanding the structural controls of mineralization is necessary to upgrade the historical estimates to a current mineral resource. A qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. MacDonald Mines is not treating the historical estimate as current mineral resources or mineral reserves. Access to documentation healed by Mr. Paul McLean was not available due to death; therefore the following information was taken from the 2009 NI43-101 completed by L.D.S. Winter, P.Geo. for Trueclaim Exploration Inc. (Winter, 2009)

In 1981 a resource estimate was made by Mr. Paul McLean, a geologist with a long history of involvement with the Property (McLean, 1981). He prepared a report indicating a total Property resource estimate for the North, East-West and Central Zones. The resources estimation method consisted of the following procedure: “Tonnage has been calculated from the surface plan and the sections, and small individual blocks have been used where possible”. In his report, the estimated resource for the Property was 253,646 tons containing 61,492 ounces of gold which represented a grade of 0.242 ounces gold per ton. This was a historical estimate and is not compliant with current NI 43-101 requirements. The results of that estimate are shown in Table 14-1.

Table 14-1: 1980 Summary of Scadding Reserves (from McLean, 1981).

Zone	Short Tons	Grade Gold (oz/st)	Contained Gold (oz)
Central	122,681	0.289	35,478
Northern	52,854	0.172	15,926
East-West	37,971	37,971	10,088
Total	253,646	0.242	61, 492

Note:

- “Drill indicated reserves” are considered to be the equivalent of indicated and inferred resources in today’s terminology.
- All resource estimates presented in this report are historical and were prepared before the introduction of National Instrument 43-101 – Standards of Disclosure for Mineral Projects (“NI 43-101”). These resource estimates may not be relied upon until they are confirmed using methods and standards that comply with those required by NI 43-101. The potential for the exploration target to replicate the historical resource, or to reach the indicated range of tonnages, is conceptual and is based on historical reports, which cite approximately lengths, widths, depths, grades and projections of the historical resource. Readers are cautioned that a qualified person has not completed sufficient exploration, test work or examination of past work to define a resource that is currently compliant with NI 43-101. The Company further cautions that there is a risk that exploration and test work will not result in the delineation of such a currently compliant resource. Neither the Company nor its personnel treat the historical resource estimate or the historical data as defining a current mineral resource, as defined under NI 43-101, nor do they rely upon the estimate or the data for evaluation purposes; however, these data are considered relevant and will

be used to guide exploration as the Company develops new data to support a current mineral/resource estimate in accordance with the requirements of NI 43-101.

The McLean "resource estimate" was subsequently reviewed in 1983 in the Hill, Goettler, DeLaporte report (Hill, 1983). This report reviewed the North, East-West, Central and South Zones, but focused on depth and grade restraints that would define mineable reserves. Therefore, a more restricted volume within these zones. "The historical estimate of "total diluted indicated and diluted inferred reserves" calculated for the four zones in the Hill report, based on a cut-off grade of 0.08 ounces gold per short ton, is 246,651 short tons of mineralization grading 0.242 ounces gold per short ton (Table 14-2). The "mineable reserve" of 140,600 short tons grading 0.27 ounces gold per short ton for the North (open pit, upper lens), East-West (open pit) and Central (72% extraction) Zones was eventually extracted by Westfield Minerals Limited and Orofino Resources Limited" (Hall, 2003). The historical reserves (Table 14-2) do not conform to the current standards of disclosure as required by National Instrument 43-101 and indicated and inferred categories of mineral resources cannot be combined. They are reported here only to provide full disclosure of historical information.

Table 14-2: 1983 Summary of Scadding Reserves (from Hill, Goettler, De Laporte, 1983).

Zone	Mining Method	Indicated & Inferred Reserves		Dilution %	Diluted Indicated & Diluted Inferred Reserves		
		Short Tons	Grade Gold (oz/st)		Waste to Ore Ratio	Short Tons	Grade Gold (oz/st)
East-West	open pit	11,340	0.482	126	1:1	25,600	0.225
	underground	7,496	0.316	48		11,059	0.220
South	underground	5,678	0.407	50		8,523	0.278
Central	underground	101,745	0.394	55		158,002	0.261
North	open pit	10,000	0.291	70	9:1	17,000	0.195
	underground	16,636	0.272	59		26,467	0.169
Total		152,895	0.376	61		246,651	0.242

Note:

- "Drill indicated reserves" are considered to be the equivalent of indicated and inferred resources in today's terminology.
- All resource estimates presented in this report are historical and were prepared before the introduction of National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101"). These resource estimates may not be relied upon until they are confirmed using methods and standards that comply with those required by NI 43-101. The potential for the exploration target to replicate the historical resource, or to reach the indicated range of tonnages, is conceptual and is based on historical reports, which cite approximately lengths, widths, depths, grades and projections of the historical resource. Readers are cautioned that a qualified person has not completed sufficient exploration, test work or examination of past work to define a resource that is currently compliant with NI 43-101. The Company further cautions that there is a risk that exploration and test work will not

result in the delineation of such a currently compliant resource. Neither the Company nor its personnel treat the historical resource estimate or the historical data as defining a current mineral resource, as defined under NI 43-101, nor do they rely upon the estimate or the data for evaluation purposes; however, these data are considered relevant and will be used to guide exploration as the Company develops new data to support a current mineral/resource estimate in accordance with the requirements of NI 43-101.

In table 20, the term “Reserve” is used. The use of this term is not consistent with the current CIM Standards and Definitions for Reserves and Resources.

In table 21 the terms used to describe the Historical Reserve Estimates are, Indicated and Inferred Reserves. This terminology is not consistent with the current CIM Standards and Definitions for Reserves and Resources.

For comparison purposes, the CIM Definitions are as follows:

Mineral Resource: A Mineral Resource is a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals in or on the Earth’s crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.

Inferred Mineral Resource: An “Inferred Mineral Resource” is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

Indicated Mineral Resource: An “Indicated Mineral Resource” is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

Measured Mineral Resource: A “Measured Mineral Resource” is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.

Mineral Reserve: A Mineral Reserve is the economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A Mineral Reserve includes diluting materials and allowances for losses that may occur when the material is mined.

Probable Mineral Reserve: A “Probable Mineral Reserve” is the economically mineable part of an Indicated and, in some circumstances, a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.

Proven Mineral Reserve: A “Proven Mineral Reserve” is the economically mineable part of a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.

No Resource Estimates have been prepared for the subject Property by Currie Rose, JML Resources, Trueclaim Exploration Inc., or MacDonald Mines.

15.0 Mineral Reserve Estimates

There are no Mineral Reserve estimates for the SPJ Project.

16.0 Mining Methods

Not applicable to this Technical Report.

17.0 Recovery Methods

Not applicable to this Technical Report.

18.0 Project Infrastructure

Not applicable to this Technical Report.

19.0 Market Studies and Contracts

Not applicable to this Technical Report.

20.0 Environmental Studies, Permitting, and Social or Community Impact

Not applicable to this Technical Report.

21.0 Capital and Operating Costs

Not applicable to this Technical Report.

22.0 Economic Analysis

Not applicable to this Technical Report.

23.0 Adjacent Properties

The most significant property that borders the Project are the patents associated with the Norstar mine. The Norstar Mine was discovered around 1898 and was put in and out of production until 1987. Most of the mining was conducted in 1986-1987. Production at the Norstar mine reached 96 m depth and totaled 57,150 t at 6.6 g/t Au and 0.9% Cu (Gates, 1991). Historic descriptions of the geology of the mine by Thompson and Card (1963) indicate that the style of mineralization is similar to that of the Scadding Mine on the Project.

24.0 Other relevant Data and Information

In October 2014, Taighwenini Technical and Environmental Services Group completed a Closure Plan for Shoreline Resource Management Inc. who had a joint venture with Trueclaim at the time. The closure plan covers the tailings site from ore that was processed at the Scadding Mine. The tailings site lies 1 km South from where mining occurred at the Scadding Mine. The objective of the plan was to reprocess existing tailings with the goal of recovering all remaining gold followed by reclamation of the tailings site. Processing equipment was mobilized onto the site and set up. However, it is believed that gold was never recovered due to inefficacies in the processing circuit.

25.0 Interpretation and Conclusions

The Project located near Sudbury, Ontario is a strong target for breccia and shear hosted gold-copper-cobalt deposits. The past-producing Scadding Mine hosts the strongest mineralization on the Project. Since the initial discovery in 1973, five gold zones associated with chlorite breccia have been discovered on the Scadding Mine site. Historical drill results indicate that high-grade mineralization occurs in areas that have not been mined. MacDonald Mines' 2019 Fall drill program has confirmed the presence of high-grade gold at the North Zone and will continue explore for new mineralization on the Project. The use of oriented core in the 2019 drill program indicates that past explorers did not understand the structures that control mineralization at the deposit, and as a result, much of the past drilling was not completed at an optimal angle to intersect the mineralized structures. This likely resulted in many of the holes missing targets. MacDonald Mines believes that understanding the structures and alteration facies associated with IOCG-style mineralization can expand the mineralized zones at the Scadding Deposit. Additionally, nearly all the exploration at the Scadding mine site has been concentrated on a small 600 m by 600 m area. The QP believes that understanding the mineralized structures may lead to discovery outside of the mine footprint. This is plausible as similar alteration and structures with sporadic gold-copper-cobalt mineralization occurs on the Project outside of the Scadding Mine. This was confirmed by prospecting and trenching conducted by MacDonald Mines in 2018.

26.0 Recommendations

The primary objective of MacDonald Mines' exploration program is to demonstrate that a sizeable deposit exists on the SPJ Project. This exploration program is to be realized in two phases, but positive results in Phase 1 may results in the immediate execution of Phase 2. Table 26-1 and Table 26-2 outline the estimated expenditures to achieve Phase 1 and Phase 2.

Phase 1 – Understanding the attributes of the Scadding Deposit high-grade gold mineralization

- Diamond drilling in the 5 zones of the deposit that contain high-grade gold mineralization to validate the structural and alteration attributes of mineralization
    - Drilling with orientated core to define the geometry of the structures controlling high-grade gold mineralization
    - pXRF and short-wave infrared data collection to define chemical and mineralogical vectors to mineralization
- Structural mapping of the key mineralized outcrops currently existing above the deposit near the E-W zone
- Mechanized stripping at the expected surface projections of the North, Central, New, and South zones of the deposits currently not exposed at surface in the extension of the shallow pits mined in the 1980s
- Structural alteration mapping of the exposed mineralization
- Prospecting other prospective zones on the Project

Table 26-1: 1983 Summary of Recommended Work Phase 1

Recommended Work	Estimated Cost $CAD
Exploration Drilling (3,000 m)	$ 525,000
Surface Exploration	$ 250,000
Total Costs	$ 775,000

Phase 2 – Finding/expanding high-grade gold mineralization in the Scadding Deposit

- Geophysical survey with parameters optimised to detect the mineral assemblages directly associated with polymetallic gold mineralization in the Scadding Deposit
    - Small geophysical surveys may also cover other prospective areas of the Project
- Exploration drilling to extend the 5 zones of the deposit and potential discoveries with the geophysical survey and geological modelling

Table 26-2: 1983 Summary of Recommended Work Phase 1

Recommended Work	Estimated Cost $CAD
Exploration Drilling (5,000 m)	$ 875,000
Surface Exploration	$ 125,000
Geophysics	$ 175,000
Total Costs	$ 1,175,000

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