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National Instrument 43-101 Technical Report for the Wawa Gold Project

Report Effective Date: August 18, 2021

Resource Effective Date: May 31, 2019

Submitted to:

Red Pine Exploration Inc.

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Submitted by:

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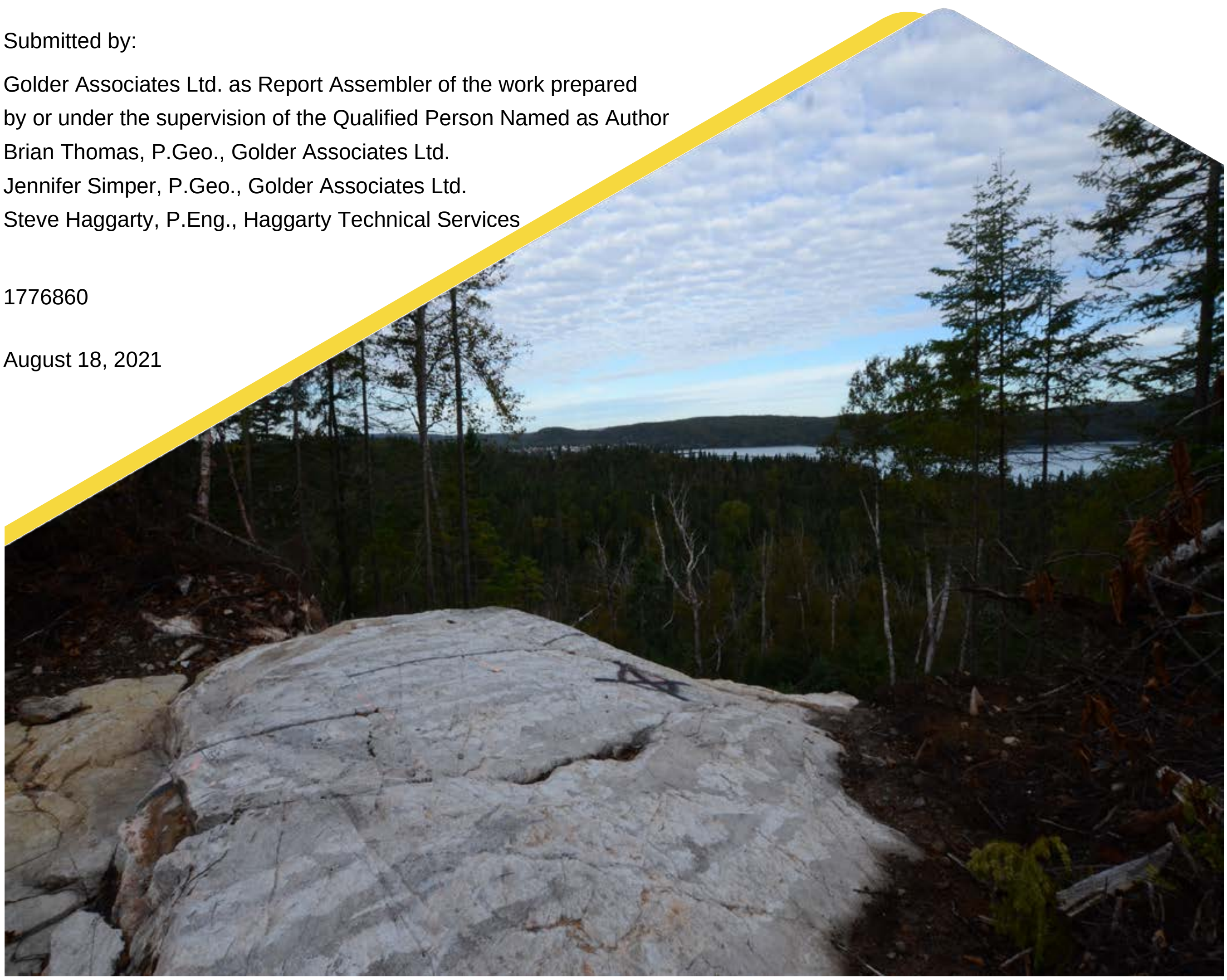
August 18, 2021



NOTICE TO READERS

This National Instrument 43-101 Technical Report for the Wawa Gold Project (the Project) was prepared and executed by Brian Thomas, P.Geo. (the Author), and Jennifer Simper, P.Geo. (Author), of Golder Associates Ltd. (Golder) and Steve Haggarty, P.Eng. (Author), of Haggarty Technical Services. This Report contains the expressions of professional opinions of the Authors based on (i) information available at the time of preparation, (ii) data supplied by Red Pine Exploration Inc. (Red Pine), and (iii) the assumptions, conditions, and qualifications set forth in this Report. The quality of information, conclusions, and estimates contained herein are consistent with the stated levels of accuracy as well as the circumstances and constraints under which the mandate was performed. This Report is intended to be used solely by Red Pine, subject to the terms and conditions of its contract with Golder. This contract permits Red Pine to file this report as a Technical Report with Canadian securities regulators pursuant to *National Instrument 43-101 - Standards of Disclosure for Mineral Projects*. Except for the purposes legislated under Canadian securities law, any use of this Report by any third party is at that party's sole risk.

DATE AND SIGNATURE PAGE

This Technical Report on the Wawa Gold Project is submitted to Red Pine Exploration Inc. and is effective as of August 18, 2021.

Qualified Person	Responsible for Parts
Signed by Brian Thomas Brian Thomas, P.Geo. (Golder Associates Ltd.) Date Signed: August 18, 2021	Responsible for Items 1.6, 1.7, 1.8, 2, 3, 12, 14, 23 - 27

Qualified Person	Responsible for Parts
Signed by Jennifer Simper Jennifer Simper, P.Geo. (Golder Associates Ltd.) Date Signed: August 18, 2021	Responsible for Items 1.1 – 1.4, 4 – 11

Qualified Person	Responsible for Parts
Signed by Steve Haggarty Steve Haggarty, P.Eng. (Haggarty Technical Services) Date Signed: August 18, 2021	Responsible for Items 1.5, 1.8.1.1, 1.8.2.2, 13, 25.2.1, 26.2

CERTIFICATE OF QUALIFIED PERSON BRIAN THOMAS

I, Brian Thomas, P.Geo., state that:

(a) I am a Geologist at:
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33 Mackenzie Street, Suite 100
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(b) This certificate applies to the technical report titled "National Instrument 43-101 Technical Report for the Wawa Gold Project" with an effective date of: August 18, 2021 (the "Technical Report").

(c) I am a "qualified person" for the purposes of National Instrument 43-101 (the "Instrument"). My qualifications as a qualified person are as follows. I am a graduate of Laurentian University with a B.Sc. in Geology from 1994, am a member in good standing of the Association of Professional Geoscientists of Ontario (#1366) and a member in good standing of the Engineers and Geoscientists of British Columbia (#38094). My relevant experience after graduation includes over twenty-seven years of experience in mine geology and mineral resource evaluation of mineral projects nationally and internationally in a variety of commodities including 9 years of direct working experience in gold mining operations located in northern Ontario.

(d) My most recent personal inspection of the property described in the Technical Report occurred on March 21st and 22nd, 2019.

(e) I am responsible for Item(s) 1.6 - 1.8, 2, 3, 12, 14, 23 - 27 of the Technical Report.

(f) I am independent of the issuer as described in section 1.5 of NI 43-101.

(g) My prior involvement with the property that is the subject of the Technical Report is as follows. I have previously participated in the 2019 Mineral Resource estimate and Technical Report as publicly announced in the June 13, 2019 press release titled, "**Red Pine announces New Mineral Resource Estimate for the Surluga Gold Deposit at its Wawa Gold Project, Ontario**". I was also involved with the initial resource estimate of the Minto Mine South project as publicly announced in the November 15, 2018 press release titled, "**Red Pine Announces Initial Mineral Resource estimate for its Minto Mine South Project**" as well as the definition of Exploration Targets as publicly announced in the October 26th, 2017 press release titled, "Red **Pine Exploration Reports Exploration Targets at its Wawa Gold Project**".

(h) I have read NI 43-101 and the part of the Technical Report for which I am responsible has been prepared in compliance with NI 43-101; and

(i) At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the parts of Technical Report for which I am responsible, contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated at Sudbury, Ontario this 18 of August, 2021

(original signed and sealed) Brian Thomas

Brian Thomas, P. Geo.
Senior Resource Geologist
Golder Associates Ltd.

CERTIFICATE OF QUALIFIED PERSON JENNIFER SIMPER

I, Jennifer Simper, P.Geo., state that:

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(b) This certificate applies to the technical report titled “National Instrument 43-101 Technical Report for the Wawa Gold Project” with an effective date of: August 18, 2021 (the “Technical Report”).

(c) I am a “qualified person” for the purposes of National Instrument 43-101 (“NI 43-101”). My qualifications as a qualified person are as follows. I am a graduate of University of Calgary with a B.Sc. in Geology, 2006, and I am a member in good standing of the Association of Professional Engineers and Geoscientists of Alberta (#79249). My relevant experience after graduation and over 15 years for the purpose of the Technical Report includes exploration, consulting geology and resource estimation on a variety of commodities including 3+ years of experience working on gold exploration projects.

(d) The requirement for a site visit is not applicable to me.

(e) I am responsible for Item(s) 1.1 – 1.4 and 4 – 11 of the Technical Report.

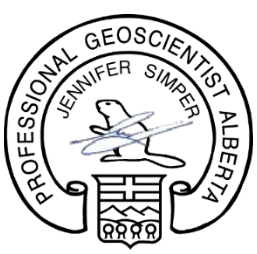
(f) I am independent of the issuer as described in section 1.5 of NI 43-101.

(g) I have not had prior involvement with the property that is the subject of the Technical Report.

(h) I have read NI 43-101 and the part of the Technical Report for which I am responsible has been prepared in compliance with NI 43-101; and

(i) At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the parts of Technical Report for which I am responsible, contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated at Calgary, Alberta this 18 of August, 2021



Jennifer Simper, P.Geo.
Senior Project Geologist
Golder Associates Ltd.

CERTIFICATE OF QUALIFIED PERSON STEVEN HAGGARTY

I, Steven Haggarty, P. Eng., state that:

(a) I am an independent Metallurgist at:
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(b) This certificate applies to the technical report titled "National Instrument 43-101 Technical Report for the Wawa Gold Project" with an effective date of: August 18, 2021 (the "Technical Report").

(c) I am a "qualified person" for the purposes of National Instrument 43-101 ("NI 43-101"). My qualifications as a qualified person are as follows. I am a graduate of McGill University with a B.Eng. in Metallurgy from 1980, am a member in good standing of the Association of Professional Engineers of Ontario (#100177647). My relevant experience after graduation includes over 40 years of experience in mine site development, mine site operations, mineral processing, metallurgy and exposure to mineral projects nationally and internationally in a variety of commodities including copper, molybdenum, gold, silver, palladium, platinum with companies including Teck Corporation, International Corona, Homestake Mining, Barrick Gold Corporation, and Haggarty Technical Services.

(d) I have not yet had the opportunity to tour the property described in the Technical Report but was involved directly in the definition and completion of associated metallurgical testwork at McClelland Laboratories in Sparks, Nevada.

(e) I am responsible for Item(s) 1.3.1, 1.6.1.1, 1.6.2.2, 13, 25.2.1, 26.1.1 of the Technical Report.

(f) I am independent of the issuer as described in section 1.5 of NI 43-101.

(g) I have not had prior involvement with the property that is the subject of the Technical Report.

(h) I have read NI 43-101 and the part of the Technical Report for which I am responsible has been prepared in compliance with NI 43-101; and

(i) At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the parts of Technical Report for which I am responsible, contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated at Burlington, Ontario this 18 of August, 2021

Steven Haggarty, P. Eng.
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Brian Thomas, P.Geo.
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CONSENT OF QUALIFIED PERSON

I, Brian Thomas, state that I am responsible for preparing or supervising the preparation of Items 1.6 - 1.8, 2, 3, 12, 14, 23 - 27 of the technical report summary titled "National Instrument 43-101 Technical Report for the Wawa Gold Project" with an effective date of August 18, 2021, as signed and certified by me (the "Technical Report Summary").

Furthermore, I state that:

(a) I consent to the public filing of the Technical Report Summary by Red Pine;

(b) The document that the Technical Report Summary supports is "Red Pine Files Updated Technical Report including positive metallurgical results for the Wawa Gold Project with gold recoveries over 90%", dated July 08, 2021 (the "Document");

(c) I consent to the use of my name, or any quotation from or summarization, in the Document of the parts of the Technical Report Summary for which I am responsible, and to the filing of the Technical Report Summary as an exhibit to the Document; and

(d) I confirm that I have read the Document, and that the Document fairly and accurately reflects, in the form and context in which it appears, the information in the Technical Report Summary or in the part(s) thereof for which I am responsible.

Dated at Sudbury, Ontario this 18 of August, 2021.

(original signed and sealed) Brian Thomas

____

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CONSENT OF QUALIFIED PERSON

I, Jennifer Simper, state that I am responsible for preparing or supervising the preparation of Items 1.1 – 1.4 and 4 – 11 of the technical report summary titled "National Instrument 43-101 Technical Report for the Wawa Gold Project" with an effective date of August 18, 2021, as signed and certified by me (the "Technical Report Summary").

Furthermore, I state that:

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(d) I confirm that I have read the Document, and that the Document fairly and accurately reflects, in the form and context in which it appears, the information in the Technical Report Summary or in the part(s) thereof for which I am responsible.

Dated at Calgary, Alberta this 18 of August, 2021.

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JENNIFER SIMPER

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I, Steven Haggarty, state that I am responsible for preparing or supervising the preparation of Items 1.3.1, 1.6.1.1, 1.6.2.2, 13, 25.2.1, 26.1.1 of the technical report summary titled "National Instrument 43-101 Technical Report for the Wawa Gold Project" with an effective date of August 18, 2021, as signed and certified by me (the "Technical Report Summary").

Furthermore, I state that:

(a) I consent to the public filing of the Technical Report Summary by Red Pine;

(b) the document that the Technical Report Summary supports is "Red Pine Files Updated Technical Report including positive metallurgical results for the Wawa Gold Project with gold recoveries over 90%", dated July 08, 2021 (the "Document");

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(d) I confirm that I have read the Document, and that the Document fairly and accurately reflects, in the form and context in which it appears, the information in the Technical Report Summary or in the part(s) thereof for which I am responsible.

Dated at Burlington, Ontario this 18 of August, 2021.

Steven Haggarty, P. Eng.
Haggarty Technical Services Corp.

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1.0 SUMMARY

The Wawa Gold exploration Project is located near Wawa, Ontario, Canada. Red Pine owns a 100% effective interest in the Project, after the completion of an acquisition of the outstanding Citabar Limited Partnership (Citabar) interest.

This Technical Report was prepared for Red Pine and presents updated exploration data for the Project including the Surluga and Minto Mine South deposits. New exploration data include metallurgical test results for both deposits and additional drilling, trenching and surface mapping results for many of the mineralized structures of the Property.

The Mineral Resource estimates and Technical Report were prepared by Golder in collaboration with Haggarty Technical Services Corp. (Haggarty) for the metallurgy section. The Mineral Resources are disclosed in accordance with the Canadian Securities Administrators' National Instrument (NI) 43-101 and this Technical Report follows the requirements of Form 43-101F1.

Mineral Resource estimates were determined following the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Estimation of Mineral Resource and Mineral Reserves Best Practices Guidelines (November 2003) and were classified following the CIM Definition Standards for Mineral Resources & Mineral Reserves (May 2014). Mineral Resource estimates remain unchanged from the July 16, 2019, Technical Report, titled "National Instrument 43-101 Technical Report for the Wawa Gold Project."

The Qualified Persons (QPs) for this Technical Report are Mr. Brian Thomas, P.Geo., and Ms. Jennifer Simper, P.Geo., both are independent QPs, as defined under NI 43-101 and employees of Golder. The QP for metallurgy is Mr. Steve Haggarty, P.Eng., an independent QP, as defined under NI 43-101 and an employee Haggarty Technical Services, based in Burlington, Ontario, Canada. The Report effective date is August 18, 2021.

A QP personal site inspection of the Project was last conducted by Brian Thomas between March 21, 2019, and March 22, 2019, in order to observe site conditions, review geological data collection and Quality Assurance and Quality Control (QA/QC) procedures and results, confirm drill collar locations, and complete verification sampling of drill core.

1.1 Property Description and Ownership

1.1.1 Project Description and Location

The Project is located 2 kilometres (km) east of the Town of Wawa, Ontario and approximately 650 kilometres (km) northwest of Toronto (Figure 4-1). The Project is within the McMurray Township (NTS 41/n14) and centred on Universal Trans Mercator (UTM) North American 1983 Datum (NAD83) (Zone 16N) 669,800 m east (east or E) and 5,315,000 metres (m) north (north or N). Legal access is available via Highway 101 from Wawa and the Surluga Mine Road, a private road owned and maintained by Red Pine.

Red Pine holds a 100% interest in the Project after the March 2021 acquisition of Citabar.

The Project consists of 286 unpatented and 122 patented or leased mining claims, totalling 6,803 hectares (Ha).

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

The Wawa Gold property can be accessed by driving 2 km on Highway 101 from the Town of Wawa, ON, and then turning south (south or S) onto a gravel road using a 2-wheel drive vehicle. During the winter months, the main access road to the property from Highway 101 is ploughed. Areas off the main road can be accessed by snowmobiles, or All-Terrain Vehicles (ATVs).

Wawa is located at 289 metres above mean sea level (m asl) and the property is hilly with a range of elevations from 300 m to 400 m asl. Steep ridges exist locally. The property is forested with spruce, pine, poplar and birch being the dominant species.

The vicinity to Lake Superior has a significant impact on the climate on the property. Environment Canada has recorded weather details in Wawa since 1981 (http://climate.weather.gc.ca) and showed that the warmest temperatures are recorded in July and August (daily mean 15°C; daily maximum 20.8°C). The coldest temperatures are typically recorded in January (daily mean −14°C; daily minimum −20.2°C). September and October are the months with the most rainfall (~122 millimetres [mm] and ~107 mm, respectively) and the highest snowfall occurs in December (~80 centimetres [cm]). The Project site can be operated year-round.

Wawa has a population of 2,905 people (2016) (https://www12.statcan.gc.ca/census-recensement/index-eng.cfm). A 230-kV power line crosses the southern part of the property, and a second power line crosses the western part of the property. Wawa Municipal Airport is located 3.1 km south southwest of Wawa along highway 17 N, although no commercial airlines operate from the airport. Canadian National Railway acquired Algoma Central Railway in October of 2001 and ceased operation of the Sault Ste Marie to Hearst line in July of 2015. The government subsidy still stands, and the regional stakeholders are seeking a new rail operator. There is enough water available from lakes and streams on the property to support exploration and mining.

1.1.3 History

The Wawa area has been explored for gold since the 1860s (Rupert, 1997) and gold was first discovered by William Teddy in 1897 (Frey, 1987). A staking rush followed the change in claim staking adopted by the Ontario Government to encourage staking in 1895 (MacMillan and Rupert, 1990). The staking rush resulted in several discoveries and the first mine to start production was the Grace Mine (1901). In the 1930s, several mines commenced production, including the Parkhill, Minto, and Jubilee Mines (MacMillan and Rupert, 1990). By the early 1940s, 15 mines produced gold in the Wawa area (Frey, 1987).

The Surluga Mine was discovered in the early 1960s (Sage, 1991) and commenced production shortly after (Kuryliw, 1970 & 1972). The Surluga Mine continued production until the mid-1970s. The early 1980s saw the consolidation of various properties from previous owners into one land package. In the mid-1980s the Surluga Mine was dewatered and the mine shaft was refurbished as part of restarting the mining operations, and mining operations continued until the Surluga mine ceased operations in 1990 (Rupert, 1997). The 1990s was a period when the Project was optioned multiple times by different groups to evaluate the various mines and a period of limited exploration; with the acquisition of the Sunrise-Mickelson vein systems and the Van Sickle mine to the land package (Bradshaw, 1991; Bowdidge, 1996; Rupert, 1997). The late 2000s saw the rejuvenation of exploration on the Project with extensive drilling starting near the end of the decade and extensive exploration taking place at the Surluga mine and surrounding areas (Gow, 2011). Yearly exploration has continued at the Project since the late 2000s and is ongoing. Eight past-producing mines exist on the Project: Cooper, Minto, Jubilee, Surluga, Parkhill, Grace-Darwin, Mariposa and Van Sickle.

In 2016, SRK estimated a Mineral Resource based on information from 2,007 historical drill holes (126,067 m) drilled between 1960 and 1990, core drilled respectively by Wawa GP Inc. and Augustine Ventures in 2007 and 2011, and an additional 26 drill holes (5,594 m) drilled by Red Pine in 2014 and 2015. SRK reported the tonnage and grade estimates at two cut-off grades: 0.4 g/t and 2.5 g/t gold for open pit and underground Mineral Resources, respectively. This estimation was completed in conformity with CIM Mineral Resource and Mineral Reserves Estimation Best Practices Guidelines (November 2003). The blocks were classified according to CIM Definition Standards for Mineral Resources and Mineral Reserves (May 2014) guidelines. This estimation does not represent Mineral Reserves and has not demonstrated economic viability. The effective date of the Mineral Resource estimate was May 26, 2015 (Ronacher et al. 2015). This Mineral Resource estimate is no longer current and has been superseded by this Technical Report. Refer to Item 6.7.3 for more details.

1.2 Geology and Mineralization

The property is in the Michipicoten greenstone belt of the Wawa Sub-province (Superior Province). The Michipicoten greenstone belt consists of three cycles of mafic and felsic metavolcanic rocks with associated subvolcanic intrusions and metasedimentary rocks (Sage, 1994). The Jubilee Stock, which hosts the mineralization on the property, is described as a high-level intrusion of dioritic to a dominantly granodioritic composition with many intrusive facies (Frey, 1987; Sage, 1993). The core of the Jubilee Stock is curved-shaped into a sigmoid form. Its long axis is oriented at 20° and it has a 6 km x 1.3 km surface expression. The grain size of the intrusion composing the Jubilee Stock is fine to medium grained and locally porphyritic. It intruded its host volcanic sequence around 2,745 ± 3 Million years before present (Ma) (Sullivan et al. 1985).

Gold mineralization is conspicuous throughout the Project and mineralization is closely related to the structural setting of the property characterized by numerous shear zones, fractures, and faults of variable orientations.

The zones of gold mineralization of the Wawa Gold Corridor formed after felsic to mafic hosts. Gold concentration typically relates to finely disseminated sulphides (pyrite or arsenopyrite) in quartz veins, and in silicified and sericitized lenses and pods within shear and breccia zones.

In zones of gold mineralization formed after mafic rocks, gold concentration is typically related to quartz veins associated with chlorite and iron carbonate alteration with disseminated pyrite and/or pyrrhotite with weak to moderate sericitization.

1.3 Exploration Status

Extensive historical exploration has been completed on the property. A total of 872 historical and recent surface diamond drill holes totalling 153,369 m and 1,444 historical underground drill holes totalling 46,975 m have been drilled on the Project since the first drill hole was drilled in the 1930s. Eight past-producing mines exist on the property.

1.3.1 Exploration Drilling

Red Pine commenced drilling on the Project in December of 2014. A total of 299 diamond drill holes were drilled since 2014 totalling 73,168.88 m. A total of 43,248 core samples were analyzed; 38,642 core samples were analyzed at Activation Laboratories (Actlabs) in their facilities in Timmins and Ancaster, and 4,606 samples were analyzed by SGS at their facilities in Cochrane and Lakefield. Two routine gold analytical packages were selected by Red Pine for the analysis completed by SGS and Actlabs.

1.3.2 Surface Exploration

In the summers and falls of 2015, 2016, 2017, 2018, 2019, and 2020, a surface exploration program on the Project focussed on the gold showings and then the broader footprint of the Jubilee Stock. The objectives were to identify and confirm the geological and structural attributes of gold mineralization near historical showings, and to identify new zones of gold mineralization on the property. In total, 916 rocks samples were taken on the property, with gold grades ranged from below detection to 143 grams per tonne (g/t) gold (Au). The reader is cautioned that grab samples are selective by nature and are not representative of the actual grade of a mineralized target.

1.3.3 Geophysical Surveys

A ground magnetic survey was conducted by Red Pine, between December 3, 2014, and January 26, 2015. A total of 69.7 line-kms were collected covering an area of 2.23 km^2. The ground magnetic survey outlined the strike of the Jubilee shear zone that is expressed as a magnetic low striking approximately 015°. Areas of increased magnetization coincide with the Jubilee shear plane. Linear features, oriented east to west, are observed in the magnetic data.

Red Pine contracted Clearview Geophysics Inc. ("Clearview") to conduct Spectral Induced Polarization and Resistivity ("Spectral IP/Res") surveys on the Project between December 12, 2014, and December 16, 2014. The objective of the survey was to determine if the Spectral IP/Res results could be used to enhance drill targeting for gold mineralization. The survey array geometry constituted a Pole-Dipole "Combo" array, whereby the dipole spacing ("a") for n = 1-6 was a = 50 m, and for n = 7-8, a = 100 m. A total of four lines were surveyed covering 3.08 line-km. Three anomalous features were selected by Clearview from the survey results. Red Pine furthered the interpretation of the Spectral IP/Res by contracting Abitibi Geophysics Inc. ("Abitibi Geophysics") to complete an inversion of the Spectral IP dataset using the RES2DINV inversion code developed by Geotomo Software Sdn. Bhd. The purpose of the inversion was to appropriately place the chargeability and apparent resistivity features at depth and relate them to the known Jubilee shear plane. The inversion results of both resistivity and chargeability reflect the easterly dip of the Jubilee shear zone, with higher resistivity values east and above the shear zone. A broad chargeability contrast is also associated with the shear zone.

Red Pine contracted Scott Hogg & Associates Ltd. ("Scott Hogg") to fly a helicopter-towed gradient magnetic survey in February 2015. A total of 928 line-km of data were collected, covering an area of 37 km^2. Significant structures such as the Hornblende Shear, the Jubilee Shear, the Parkhill fault, and the extension of the Jubilee Shear Zone south of the Parkhill fault could be identified from this survey data.

In October 2015, Red Pine contracted Clearview to complete a ground magnetic survey at the Sunrise-Mickelson area, following-up on the 2015 sampling program in the area. The purpose of this work was to identify magnetic anomalies and identify zones and trends to help guide gold exploration. A total of 12.3-line kms were collected at 20-m line spacing, covering an area of 0.17 km^2. The survey delineated several subtle ENE trending magnetic linear features, including one associated with the southeastern arm of the Surluga grade shell.

In October 2015, subsequent to the magnetic survey, Clearview completed a ground horizontal loop electromagnetic ("HLEM") on the Project. The survey was completed using an Apex MaxMin system and is often referred to as a "MaxMin" survey ("MaxMin"). The purpose of this work was to locate electromagnetic anomalies and identify zones and trends that help guide gold exploration. Two cable separations were recorded: 50 m and 100 m, in horizontal-coplanar orientation. The 50-m transmitter ("Tx") to receiver ("Rx") separation consisted of 6.3 line-km, covering 0.112 km^2 and the 100 m Tx-Rx separation consisted of 4.2 line-km, covering 0.052 km^2.

Eleven anomalies were selected from the 50 m Tx-Rx separation based on the in-phase and quadrature responses.

In June of 2017, Red Pine contracted EMPulse to conduct a Transient Magnetotelluric Survey on the Project, a total of 137 impedance-tipper stations were collected at a spacing of ~300 m. The survey was conducted to map the shallow poorly conducting gold-bearing shear zones of the Surluga Deposit as well as the deep conductive/structural sources that likely tie together the mineral occurrences that have been identified and outline any potential structural controls and sources of mineralization that exists at depth along the Wawa Gold Corridor.

In March of 2019, Red Pine contracted Abitibi Geophysics to conduct a high-resolution ground gravity survey on the project. The gravity survey was undertaken to detect abandoned underground workings of the Jubilee Mine, to delineate prospective targets for gold mineralization and to trace the southern extension of the Jubilee Stock. The gravity method mapped the Jubilee Stock by negative residual responses and confirmed the extension of the Jubilee Stock to the SW of where historical mapping defined its boundary.

In May 2020, Red Pine contracted Clearview Geophysics Inc. to conduct a cross-hole IP/resistivity survey on the Surluga Deposit. The purpose of the work was to map trends and zones in three-dimensions (3D) to assist with planning follow-up exploration drilling. The cross-hole survey identified variations that could indicate cross-cutting trends and structures such as folds. Highest priority for follow-up should be at areas with weak to strong chargeability high responses.

1.3.4 Channel Sampling

Concurrently with its drilling, historical core sampling and surface exploration programs, Red Pine completed numerous trenching and channel sampling programs that continued during the summers and falls of 2015, 2016, 2017, 2018, 2019, and 2020. A total of 1,539 channel samples were collected from 511 channels from 62 different areas. The main objective of the trenching programs was to characterize the surface geology and mineralization of recently discovered and historical showings along the Wawa Gold Corridor. These showings include: the Root Vein, Cooper-Ganley, Mickelson-Sunrise, Jubilee Shear Zone, and its extension south of the Parkhill Fault, Surluga Road Shear Zone, Hornblende Shear zone, Algoma, Minto Mine South, Minto B, Grace Shear Zone and also prospective structures identified from the geophysical surveys. Trenching and channel sampling was also completed in areas where limited surface work had been done to date, but that exhibited similar geophysical signatures as known mineralization.

1.3.5 Historic Drill Core Sampling

In June of 2016, Red Pine started an extensive sampling program of the remaining 42,000 m of historical drill core that was preserved and that had been selectively sampled in the Jubilee Shear Zone and virtually unsampled outside the Jubilee Shear Zone. It was evident from the review of historical and recent drilling that many sampling gaps in the historical holes, used to estimate the 2015 Inferred Mineral Resource (Ronacher et al., 2015), existed. A total of 10,627 samples were taken and 21,413 m of core was processed.

1.4 Data Verification

For the QA/QC monitoring, Red Pine relied partly on the internal analytical QC measures implemented by SGS and Actlabs and implemented its own external analytical control measures consisting of the use of control samples (blanks, certified reference materials [CRMs]) inserted in all sample batches submitted for assaying. Umpire check assaying was not performed. The routine insertion rate for CRMs and blanks was 1 standard per 20 samples and 1 blank per 25 samples sent. Additional blanks were also inserted after vein samples when many specks of native gold were observed in the sampled vein. Red Pine also implemented a systematic check of the higher-grade samples analyzed by routine fire assay. Every sample containing gold equal or greater than 2 g/t gold on the fire assay was systematically re-analyzed by metallic screen fire assay. A total of 4,018 CRMs and blanks were analyzed; 3,562 were analyzed by Actlabs in their facilities in Timmins and Ancaster, and 459 were analyzed by SGS at their facilities in Cochrane and Lakefield.

1.5 Mineral Processing and Metallurgical Testing

During the summer of 2019, Red Pine Exploration Inc. commissioned McClelland Laboratories Inc., located in Sparks, Nevada, to determine the amenability of gold mineralization in the Surluga and Minto Mine South deposits to CIL cyanidation and flotation treatment. The metallurgical study was conducted on a total of eleven (11) samples of quartered HQ drill core.

In the Surluga deposit, gold mineralization principally occurs as arrays of quartz veins of different thickness associated with pyrite (FeS_2) as the main sulfide (pyrite-dominant mineralization). Accessory to absent pyrrhotite and arsenopyrite, and minor to absent chalcopyrite, occasional native gold, sphalerite and galena complete the main mineral assemblage. Pyrite-dominant mineralization is absent from the Minto Mine South deposit. In the Minto Mine South deposit, and in certain zones of the Surluga deposit, gold mineralization is associated with quartz-tourmaline veins with variable pyrite, accessory pyrrhotite, minor to trace chalcopyrite, common native gold and accessory to absent gold-bismuth alloys (e.g., maldonite – Au_2Bi), native bismuth and bismuthinite. A third style of gold mineralization has arsenopyrite (FeAsS) as the main sulfide (arsenopyrite-dominant). It occurs as variably preserved relicts in the resource of the Surluga deposit and is absent from the Minto Mine South deposit. Where observed in the Surluga deposit, it is formed of zones with extremely deformed arsenopyrite-bearing schists with or without strong quartz veining. Within the Surluga deposit, arsenopyrite-dominant mineralization tends to be spatially restricted to discrete zones and is more commonly blended as an accessory to minor components in larger zones formed by pyrite-dominant and Minto mineralization.

For the metallurgical study, three (3) samples from the Minto Mine South deposit were selected to characterize Minto mineralization. Five (5) samples were selected in the Surluga Deposit to represent a blend of pyrite-dominant with accessory to absent arsenopyrite-dominant mineralization to characterize the most likely metallurgical behavior of gold mineralization during production. Three (3) samples were also specifically selected to characterize the metallurgical behavior of primary arsenopyrite mineralization that is locally preserved in discrete zones of the Surluga Deposit.

The main observations from the metallurgical testing includes:

- CIL cyanidation and gravity recoverable gold average of 90.28% for representative blends of pyrite-dominant with accessory to absent arsenopyrite-dominant mineralization that is anticipated to form the bulk of the resource of the Surluga Deposit.
- Flotation and gravity recoverable gold average of 93.3% for the localized domains of arsenopyrite-dominant mineralization in the Surluga Deposit.
- CIL cyanidation and gravity recoverable gold average of 95.4% for Minto mineralization forming the Minto Mine South deposit and locally present in the Surluga Deposit.

The positive response of Surluga and Minto Mine South mineralization to conventional, industrially proven processes provides flexibility for project definition, design, and potential treatment of respective material types. A processing strategy involving Grinding/Gravity Concentration/Flotation/CIL is considered capable of yielding consistent Au extraction independent of the style of mineralization present. While the majority of recovered values would be as doré gold bullion, the marketability of a bi-product sulphide concentrate with payable gold is viewed as reasonable either at operations applying acid pressure oxidation or regional smelters, both accessible by highway or rail transport.

1.6 Development and Operations Status

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

1.7 Mineral Resource Estimates

The Mineral Resource estimates and other information in this Item are forward-looking information. The factors that could cause actual results to differ materially from the forward-looking information include any significant differences from one or more of the following material factors or assumptions that were applied in drawing the conclusions or making the estimates, forecasts or projections set forth in this Item, including: **the accuracy of historical assay database, the assumptions used by the QP to prepare the data for resource estimation, the highly structurally deformed nature of the deposit resulting in high grade variability, the presence of narrow Lamprophyre dykes that are typically barren but difficult to interpret, the interpretation of the controlling structural environment and mineral domain models, the selection of grade interpolation method, sample search and estimation parameters used for grade interpolation, treatment of high-grade outlier sample data, continuity of mineralization and reasonable prospects for economic extraction.**

The Mineral Resource estimates for the Surluga and Minto deposits outlined in the following Items were derived from geological models and drill hole data provided by Red Pine, using a 3D block modelling approach in Datamine Studio RM (Datamine) software.

The Mineral Resource estimate is based upon data provided from recent surface diamond drilling, completed by Red Pine, along with historical drill hole data from previous owner/operators. The drill hole database cut-off dates of March 20, 2019 (Surluga), and October 2, 2018 (Minto). Approximately 84% of the samples were considered to be historical (legacy) data for the Surluga deposit and 11% for the Minto.

For the Surluga deposit, three shear zone solids, consisting of Upper, Main, and Lower Jubilee shears were modelled by Red Pine and used to constrain mineralization in the model. For the purpose of grade estimation, all three shear zones were treated as a single mineral domain.

The Minto Mine South mineralization was modelled in two zones, consisting of a broad Shear Zone (Zone 1) and a narrow Vein Zone (Zone 2).

Three-dimensional (3D) block models were constructed for estimating gold (Au) grades based on Inverse Distance Cubed (ID^3) interpolation. High-grade, outlier samples were controlled by top-cutting assay values.

A mean bulk density value of 2.75 tonnes per metre cubed (t/m^3) was assigned to the Surluga deposit and 2.77 (t/m^3) applied to the Minto Mine South deposit. Areas of historical mining from both deposits were depleted from the block model.

Cut-off grades of 2.7 g/t (Surluga) and 3.5 g/t (Minto) were selected for Mineral Resource reporting and represent approximate break-even mining costs for underground longhole and cut-and-fill mining, respectively.

Mineral Resources are not Mineral Reserves, and do not demonstrate economic viability. There is no certainty that all, or any part, of this Mineral Resource will be converted into Mineral Reserve. Inferred Resources are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as Mineral Reserves.

Table 1-1 reports the Indicated and Inferred Mineral Resources for the Surluga Project. Mineral Resources were evaluated for mining continuity by reporting within a 2 g/t reporting envelope.

Table 1-1: Surluga Mineral Resource Estimate (Effective Date May 31, 2019)

Resource Category	Tonnes	Au Grade (g/t)	Contained Au (Oz)
Indicated	1,202,000	5.31	205,000
Total Indicated	**1,202,000**	**5.31**	**205,000**
Inferred	2,362,000	5.22	396,000
Total Inferred	**2,362,000**	**5.22**	**396,000**

Notes:
1) All Mineral Resources reported at a 2.7 g/t Au cut-off from within a 2-g/t envelope.
2) A 2.7 g/t cut-off is supported for potential underground longhole mining by the following economic assumptions: Gold Price: US$1,200, Gold Recovery: 90%, Operating Expense (OPEX): CA$125/tonne ($85 mining, $25 milling, $15 G&A).
3) Tonnage estimates are rounded to the nearest 1,000 tonnes.
4) g/t – grams per tonne.
5) Ozs – troy ounces.

Table 1-2: Minto Mine South Mineral Resource Estimate (Effective Date November 7, 2018)

Resource Category	Tonnes	Au Grade (g/t)	Contained Au (Oz)
Indicated	105,000	7.5	25,000
Total Indicated	**105,000**	**7.5**	**25,000**
Inferred	354,000	6.6	75,000
Total Inferred	**354,000**	**6.6**	**75,000**

Notes:
1) All Mineral Resources reported at a 3.5 g/t Au cut-off.
2) A 3.5 g/t cut-off is supported by the following economic assumptions for potential underground cut-and-fill mining: Gold Price: US$1,200, Gold Recovery: 90%, Operating Expense (OPEX): CA$160 / tonne ($120 mining, $25 milling, $15 G&A).
3) Tonnage estimates are rounded to the nearest 1,000 tonnes.
4) g/t – grams per tonne.
5) Ozs – troy ounces.

Table 1-3: Wawa Gold Project Combined Mineral Resource Estimate

Deposit	Resource Category	Tonnes	Au Grade (g/t)	Contained Au (Oz)
Surluga	Indicated	1,202,000	5.31	205,000
Minto Mine South	Indicated	105,000	7.50	25,000
Total	**Indicated**	**1,307,000**	**5.47**	**230,000**
Surluga	Inferred	2,362,000	5.22	396,000
Minto Mine South	Inferred	354,000	6.60	75,000
Total	**Inferred**	**2,716,000**	**5.39**	**471,000**

Notes:

1) Surluga Mineral Resources reported at a 2.7 g/t cut-off from within a 2-g/t envelope. The 2.7 g/t cut-off is supported by the following economic assumptions for potential underground longhole mining: Gold Price: US$1,200, Gold Recovery: 90%, Operating Expense (OPEX): CA$125 / tonne ($85 mining, $25 milling, $15 G&A).
2) Minto Mineral Resources reported at a 3.5 g/t cut-off which is supported by the following economic assumptions for potential underground cut-and-fill mining: Gold Price: US$1,200, Gold Recovery: 90%, Operating Expense (OPEX): CA$160 / tonne ($120 mining, $25 milling, $15 G&A).
3) Tonnage estimates are rounded to the nearest 1,000 tonnes.
4) g/t – grams per tonne.
5) Ozs – troy ounces.

There have been no material changes to the Surluga and Minto Mineral Resource estimates since the effective dates stated in the previous summary tables.

1.8 QP Conclusions and Recommendations

1.8.1 Conclusions

It is the Mineral Resource QP's opinion that the information presented in this Technical Report is representative of the Project and based on the data verification completed, concludes that the sample database is of suitable quality to provide the basis of the conclusions and recommendations reached in this Technical Report.

The QP has taken reasonable steps to ensure the block model and Mineral Resource estimate are representative of the Red Pine data, but notes that there are risks related to the accuracy of the estimates related to the following:

- The accuracy and quality of the historical data
- The assumptions used by the QP to prepare the data for resource estimation
- The accuracy of the Red Pine shear zone interpretation
- The variable and structurally complex nature of the deposit geology
- The presence of Lamprophyre dykes that are difficult to model and are generally barren
- The impact of outlier grade data
- Estimation parameters used by the QP

For these and other reasons, actual results may differ materially from these estimates.

1.8.1.1 Metallurgical Conclusions

It is the Metallurgy QP's opinion that the samples used for metallurgical testing were representative of the styles of mineralization found in the Surluga and Minto Mine South deposits.

For the three (3) samples representative of Minto mineralization, CIL cyanidation and gravity recoverable gold average of 95.4%. For the five (5) samples representative of the blends of pyrite-dominant with accessory to absent arsenopyrite-dominant mineralization types in the Surluga Deposit, CIL cyanidation and gravity recoverable gold average of 90.3 %. The three (3) samples selected to specifically characterize arsenopyrite-dominant mineralization in the Surluga Deposit yielded a range of CIL cyanidation and gravity recoveries between 48.9% to 78.2% (average of 61.2%).

Samples representative of the main zones of mineralization in the Surluga and Minto Mine South deposits were amenable to gravity recovery and bulk sulphide flotation at the 80%-75 µm feed size. For the three (3) samples representative of Minto mineralization, bulk sulphide flotation and gravity recoverable gold averaged 95.6%. For the five (5) samples representative of the blends of pyrite-dominant with accessory to absent arsenopyrite-dominant mineralization in the Surluga Deposit, bulk sulphide flotation and gravity recoverable gold averaged 86.6 %. For the three (3) samples selected to specifically characterize arsenopyrite-dominant mineralization in the Surluga Deposit, bulk sulphide flotation and gravity recoverable gold averaged 93.3%.

Potential processing alternatives applicable to the Wawa Gold Project are suggested as including:

i) Gravity concentration followed by sulphide flotation which would be applicable to all material types with products potentially shipped to a third party for smelting.

ii) Whole ore cyanidation applying CIL which would be applicable to materials lower than a threshold sulphide and arsenopyrite concentration which exhibited lower gold recoveries in test work.

iii) A hybrid circuit involving gravity concentration, sulphide flotation and CIL on flotation tailings which would be expected as yielding highest possible Au recovery and be applicable to all materials types.

1.8.2 Recommendations

The QPs recommend a 25,000-m drill program to potentially expand the extents of the Surluga and Minto South deposits by drilling along strike and down-dip in the Jubilee and Minto Mine South shear zones. The QPs recommend that approximately 16,250 m to 20,000 m of the drill program to be focused on testing the extensions of the known deposits and increase the level of confidence in the existing mineral resources.

The remaining 5,000 m to 8,750 m of the drill program is recommended for exploration purposes to be completed in the mineralized structures on the property that have the potential to host significant zones of gold mineralization, including the Hornblende Shear Zone, the Minto B Shear Zone, the Grace Shear Zone, the Nyman Shear Zone, the Parkhill #4 Shear Zone, and the extension of the Jubilee Shear Zone south of the Parkhill Fault.

Targeted surface exploration consisting of mapping and sampling is also recommended for high priority exploration targets in zones of known mineralization.

A historical core sampling program is also recommended to further assess the quality of the legacy data. This program would include a statistically significant number of samples (approximately 1,000) selected from the remaining half-split AQ-sized core drilled during the 1980s.

The cost of the proposed exploration program is estimated to be approximately $6,275,000, as summarized in Table 1-4.

Table 1-4: Summary of Recommended Work Program

Recommended Work	Estimated Cost CA$
Diamond drilling	$5,000,000
Targeted field mapping and sampling	$50,000
Historic core sampling	$50,000
Overhead and corporate G&A	$875,000
Contingency 5%	$300,000
Total Costs	**$6,275,000**

1.8.2.1 QA/QC and Database

The QP recommends the use of duplicate samples (field, pulp, and umpire) in order to help quantify deposit variability and identify any potential laboratory bias. It is also recommended that the assay database be updated using all of the available metallic screened assays as the final assay result, as these results are deemed to be the highest quality. In order to improve data security and reduce the risk of introducing errors, it is recommended to store drill hole and assay data in a relational database system rather than relying on Excel™ spreadsheets.

1.8.2.2 Metallurgical Recommendations

Additional work is required to fully characterise the distribution of the pyrite-dominant, Minto and arsenopyrite-dominant mineralization types to define metallurgical domains and approximate composition of the blend of mineralization styles in the Surluga Deposit. This can be achieved with the digitization of the sulfide assemblages recorded in the historic drill logs, and diamond drilling for targeted verification of historic data and for areas of the deposit where the sulfides assemblages were not historically recorded. Additional diamond drilling will also be required for the petrographic studies of arsenopyrite-dominant mineralization identified in historic logs located in zones where historic core is not available and where not recent drilling was completed.

Once this work is completed, additional metallurgical samples representative of the ranges of blends of mineralization types in the Surluga deposit will be tested to further define and characterize the overall metallurgical behavior of higher-grade zones of the deposit. Additional metallurgical samples of the arsenopyrite-dominant mineralization will be pursued based on the textural attributes of arsenopyrite following petrographic work. This sampling will provide a better representation of the full range of metallurgical behavior of arsenopyrite-bearing mineralization based on the variable deportment of gold to support process flowsheet definition.

2.0 INTRODUCTION

The Wawa Gold Project is a gold exploration project located near Wawa, Ontario, Canada. Red Pine holds a 100% interest in the Project after the March 2021 acquisition of Citabar.

This Technical Report was prepared for Red Pine and presents updated exploration data for the Project on the Surluga and Minto Mine South deposits. New exploration data include metallurgical results for both deposits and additional drilling, trenching and surface mapping results for many of the mineralized structures of the Property. The majority of the new drilling is outside of the existing Surluga and Minto Mine South resource areas. There is minor new drilling inside the Surluga deposit from the 2020 drill program, however, as these were all exploration holes and located a considerable distance away from the main deposit, they have no material impact on the existing resource estimate.

The Mineral Resource estimates and Technical Report were prepared by Golder in collaboration with Haggarty Technical Services Corp. (Haggarty) for the metallurgy section. The Mineral Resources are disclosed in accordance with the Canadian Securities Administrators' National Instrument (NI) 43-101 and this Technical Report follows the requirements of Form 43-101F1. Mineral Resource estimates remain unchanged from the July 16, 2019, Technical Report titled National Instrument 43-101 Technical Report for the Wawa Gold Project.

Mineral Resource estimates were determined following the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Estimation of Mineral Resource and Mineral Reserves Best Practices Guidelines (November 2003) and were classified by following the CIM Definition Standards for Mineral Resources & Mineral Reserves (May 2014).

The Mineral Resource estimate and supporting data summarized in this Technical Report are considered by the QPs to meet the requirements of NI 43-101. The report effective date is of this Technical Report is August 18, 2021.

2.1 Source of Information

This Resource Estimate and Technical Report are based on information provided by Red Pine, including:

- Drill hole database consisting of:
  - Gold (Au) assays
  - Lithology, mineralogy, alteration, and structural descriptions
  - Collar coordinates and down-hole survey data
  - Bulk density measurements
- Assay certificates
- Jubilee Shear Zone interpretation
- Diabase dyke interpretation
- Metallurgical study on the Surluga and Minto Mine South deposits completed by McClelland Laboratories Inc.
- Historical mine development voids

- Red Pine reports
- Red Pine standard operating procedures (SOPs)

Further sources of information, utilized by the authors, and references are listed in Item 3.0 and Item 27.0.

2.2 Qualified Persons and Site Inspection

The QPs for this Technical Report are Mr. Brian Thomas, P.Geo., and Ms. Jennifer Simper, P.Geo., both are independent QPs, as defined under NI 43-101 and employees of Golder. The QP for metallurgy is Mr. Steve Haggarty, P.Eng., an independent QP, as defined under NI 43-101 and an employee Haggarty Technical Services. Please refer to the Date and Signature page (page ii) of this Technical Report for further details.

A QP personal site inspection of the Project was last conducted by Brian Thomas between March 21, 2019, and March 22, 2019, in order to observe site conditions, review geological data collection and QA/QC procedures and results, confirm drill collar locations, and complete verification sampling and logging of drill core.

2.2.1 Acknowledgements

Golder and Red Pine would like to acknowledge the following contributors to the preparation of this Technical Report and the underlying studies under the supervision of the QPs, including; Jean-François Montreuil, P.Geo., Ph.D., and Eric Steffler of Red Pine, as well as, Greg Warren of Golder for his contributions to the block modelling and grade estimation procedures, Jerry DeWolfe, P.Geo., and Paul Palmer, P.Eng., of Golder for peer reviews, and William Kyle, of Golder, for his contributions to editing, formatting, and compilation.

2.3 Units of Measure and Abbreviations

Unit of Measure	Abbreviation
Capital expenditure	CAPEX
Centimetre	cm
Copper	Cu
Cubic centimetre	cm^3
Cubic metre	m^3
Degree	°
Degrees Celsius	°C
Gamma (1 x 10^{-9} Tesla = 1 nanoTesla)	ɣ
Gold	Au
Gold grams per million tonnes	gAu/mt
Gram	g
Grams per tonne	g/t
Greater than	>
Foot (0.3048 metres)	ft
Hectare (10,000 m^2)	ha
Internal rate of return	IRR
Kilogram	kg
Kilograms per cubic metre	kg/m^3
Kilograms per square metre	kg/m^2
Kilometre	km
Less than	<
Magnetotellurics Geophysical Survey	MT
Metre	m
Metres above sea level	m asl
Mile (1.609344 kilometers)	mi
Millimetre	mm
Million	M
Million tonnes	Mt
Million tonnes per annum	Mtpa
nanoTesla	nT
Operating expense	OPEX
Ounce (troy ounce, 31.1035 grams)	oz
Ounce per short ton (34.2857 grams per tonne)	oz/t
Percent	%
Pound(s)	lb
Parts per million	ppm
Parts per billion	ppb
Relative Percentage Difference	RPD
Square kilometer	km^2
Square metre	m^2
Short Tons (907 kgs)	tons
Silver	Ag
Silver grams per million tonnes	gAg/mt
Tonnes (1000 kgs)	t
Tonnes per day	t/d
United States Dollars in Millions	US$M
Universal Transverse Mercator	UTM
Zinc	Zn

3.0 RELIANCE ON OTHER EXPERTS

For certain items in this Technical Report the QPs have relied on a report, opinion, or statement of another expert who is not a QP, or on information provided by Red Pine, concerning legal, political, environmental, or tax matters relevant to the Technical Report. In each case, the QPs hereby disclaim responsibility for such information to the extent of his/her reliance on such reports, opinions, or statements. This reliance applies to all information provided by Red Pine for Item 4.1 (Ownership), Item 4.2 (Property Land Tenure), Item 4.3 (Permits and Authorization), and Item 4.4 (Environmental Considerations) of this Report. The QPs have relied upon fully and believe there is a reasonable basis for this reliance on, information provided by Red Pine regarding mineral tenure, surface rights, ownership details, royalties, environmental obligations, and applicable legislation relevant to the Project. The QPs have not independently verified the information in these sub-Items and have fully relied upon, and disclaimed responsibility for, information provided by Red Pine in these sub-Items.

4.0 PROPERTY DESCRIPTION AND LOCATION

The Project is located 2 km east of the Town of Wawa, Ontario and approximately 650 km northwest of Toronto (Figure 4-1). The Project is within the McMurray Township (NTS 41/N15). The property is centred on UTM NAD83 (Zone 16N) 669,800 m E and 5,315,000 m N. Legal access is available via Highway 101 from Wawa and the Surluga Mine Road, a private road owned and maintained by Red Pine.

4.1 Ownership

On December 10, 2014, Red Pine entered into an assignment and assumption agreement (the "Assumption Agreement") with Citabar Limited Partnership ("Citabar") and Augustine Ventures Inc. ("Augustine"), pursuant to which, among other things, Citabar and Augustine agreed to amend the Surluga Property Option Agreement dated April 16, 2009, as amended, between Augustine and Citabar to permit Red Pine to earn up to a 45% interest in the Project in exchange for Red Pine assuming certain obligations of Augustine. Effective August 15, 2015, Red Pine acquired a 30% interest in the Project pursuant to the terms of the Assumption Agreement and the joint venture agreement between Citabar, Red Pine and Augustine became effective (the "Joint Venture Agreement"). A copy of the Joint Venture Agreement is appended as a schedule to the Assumption Agreement. As of the effective date of the Joint Venture Agreement, the initial participating interests in the Project were divided as follows: 40% owned by Citabar, 30% owned by Augustine and 30% owned by Red Pine.

On February 3, 2017, Red Pine announced that it had completed the acquisition of all of the outstanding shares of Augustine by way of a plan of arrangement under the Business Corporations Act (Ontario) (the "Arrangement") and pursuant to an arrangement agreement between Red Pine and Augustine dated November 14, 2016 (the "Arrangement Agreement"). As a result of the completion of the Arrangement, Augustine became a wholly owned subsidiary of Red Pine and Red Pine beneficially acquired Augustine's 30% interest in the Project, such that it then held an aggregate 60% interest in the Project.

On March 30, 2021, Red Pine announced that it had completed the acquisition of the partnership interests in Citabar (the "Citabar Acquisition") pursuant to a securities purchase agreement (the "Purchase Agreement") with the holders of such partnership interests dated February 22, 2021. Immediately prior to the completion of the Citabar Acquisition, Red Pine held a 63.31% interest in the Project; the additional 3.31% of the Project was acquired by Red Pine as a result of Citabar suffering dilution of its interest after electing not to fund certain of its portion of the exploration programs under the Joint Venture Agreement. As a result of the completion of the Citabar Acquisition, Red Pine now holds a 100% interest in the Project.

Copies of the Assumption Agreement, the Joint Venture Agreement and the Purchase Agreement can be found under Red Pine's SEDAR profile on www.sedar.com. A copy of the Arrangement Agreement can be found under Augustine's SEDAR profile. The descriptions of these agreements contained herein are qualified in their entirety by the full text of these agreements. The reader is encouraged to refer to the agreements for further information.

4.2 Property Land Tenure

The Project consists of 286 unpatented and 122 patented or leased mining claims, totalling 6,803 Ha. Red Pine owns the majority surface and mining rights on the patented mining claims with the Crown, various Townships and Municipalities and private individuals owning the remaining. Specifically, Red Pine owns the surface rights for 5 of the 17 leases. Red Pine does not hold the surface rights for the unpatented or leased mining claims, surface rights are held by the Crown, various Townships and Municipalities, and private individuals (Figure 4-2, Figure 4-3, and Table 4-1, Table 4-2, and Table 4-3, respectively). The unpatented and patented or and leased mining claims are in good standing and are contingent upon applicable taxes being paid to the Municipality of Wawa or the Ministry of Natural Resources and Forestry of Ontario (MNRF), which Red Pine continues to do, as mandated in the claim’s terms and conditions. A list of patents, or leases, with tax obligations are listed in Table 4-1, Table 4-2, and Table 4-3, respectively. A list of unpatented mining claims in good standing and Net Smelter Returns (NSRs) are listed in Table 4-4. The obligations to maintain the property for 2020 amount to, Mining Land Tax: $5,475.69, Municipal Tax: $66,898.60, MNRF Tenant Tax: $21,932.98 and Lease Rents: $2,369.26. The regulator work obligations for unpatented (Cell) claims amount to $82,000.00.

NSRs are payable to the parties indicated in Table 4-4. All the other components of the land tenure are free of outstanding NSR. 1.5% of the 2% NSR granted to an affiliate of the Vendors (874253 Ontario Limited and the estate of Bernard Sherman) is subject to a buyback for a total cost of $1,750,000.

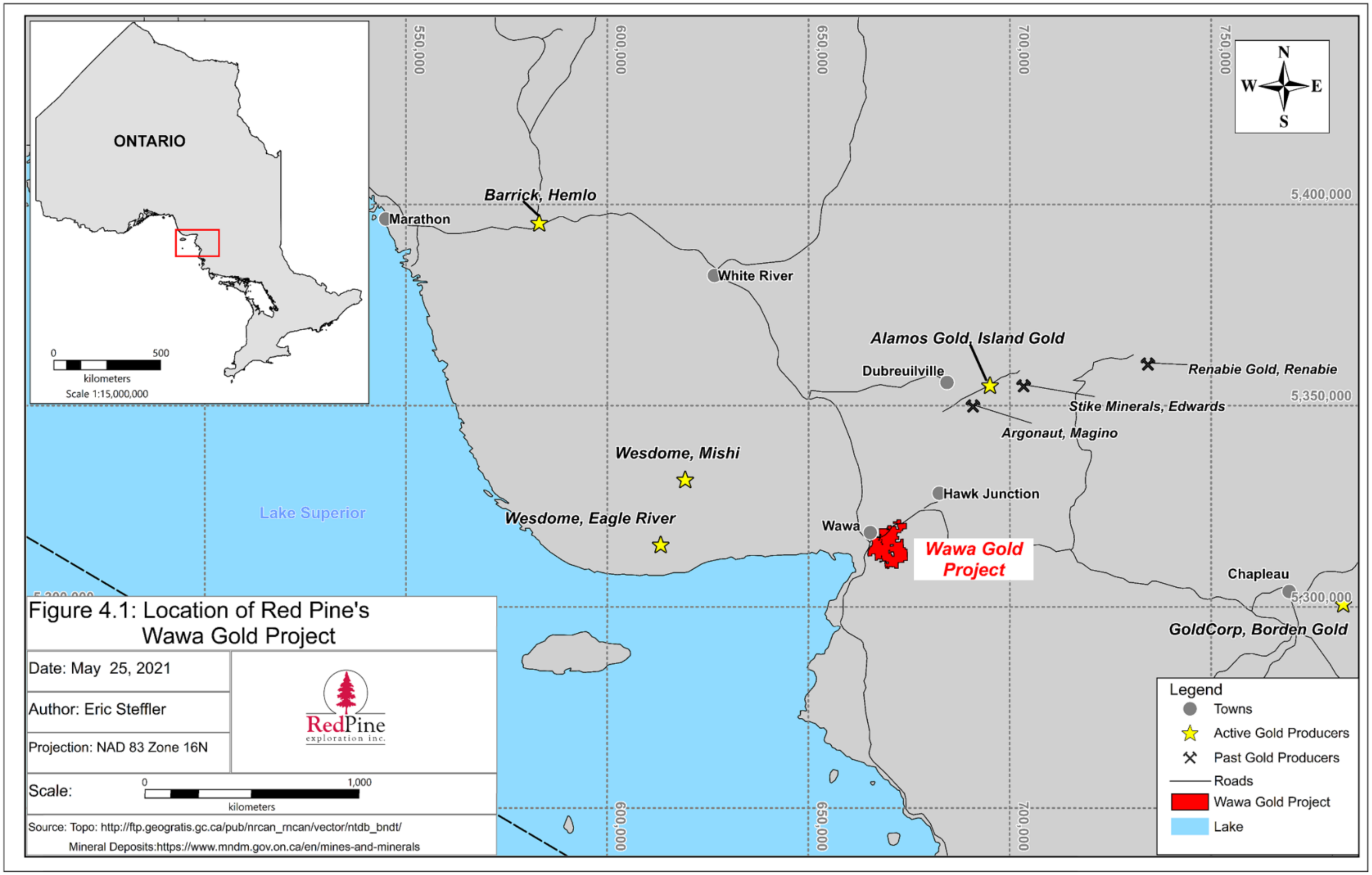

Figure 4-1: Location of Red Pine's Wawa Gold Project

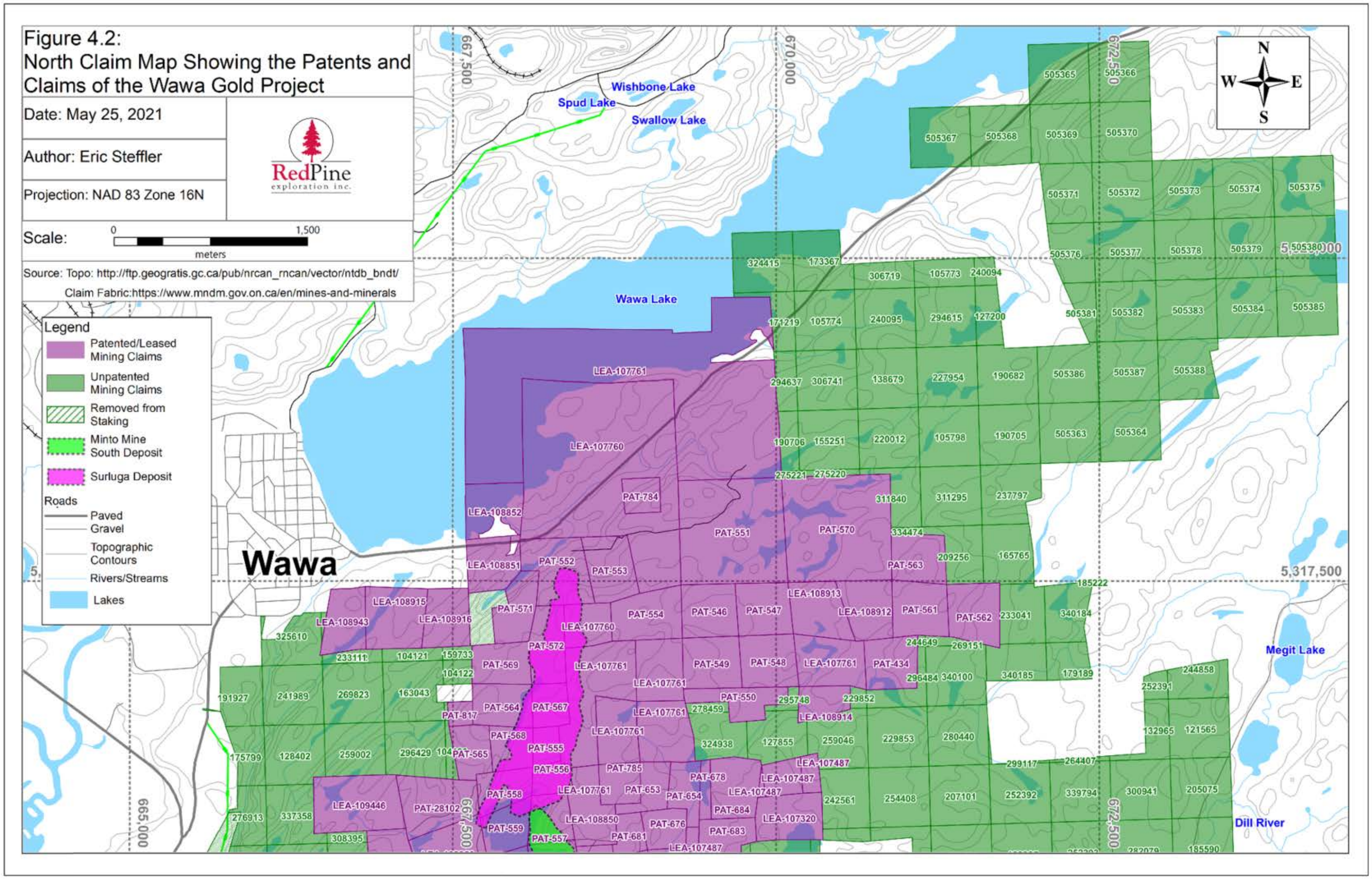

Figure 4-2: North Claim Map Showing the Patents and Claims of the Wawa Gold Project

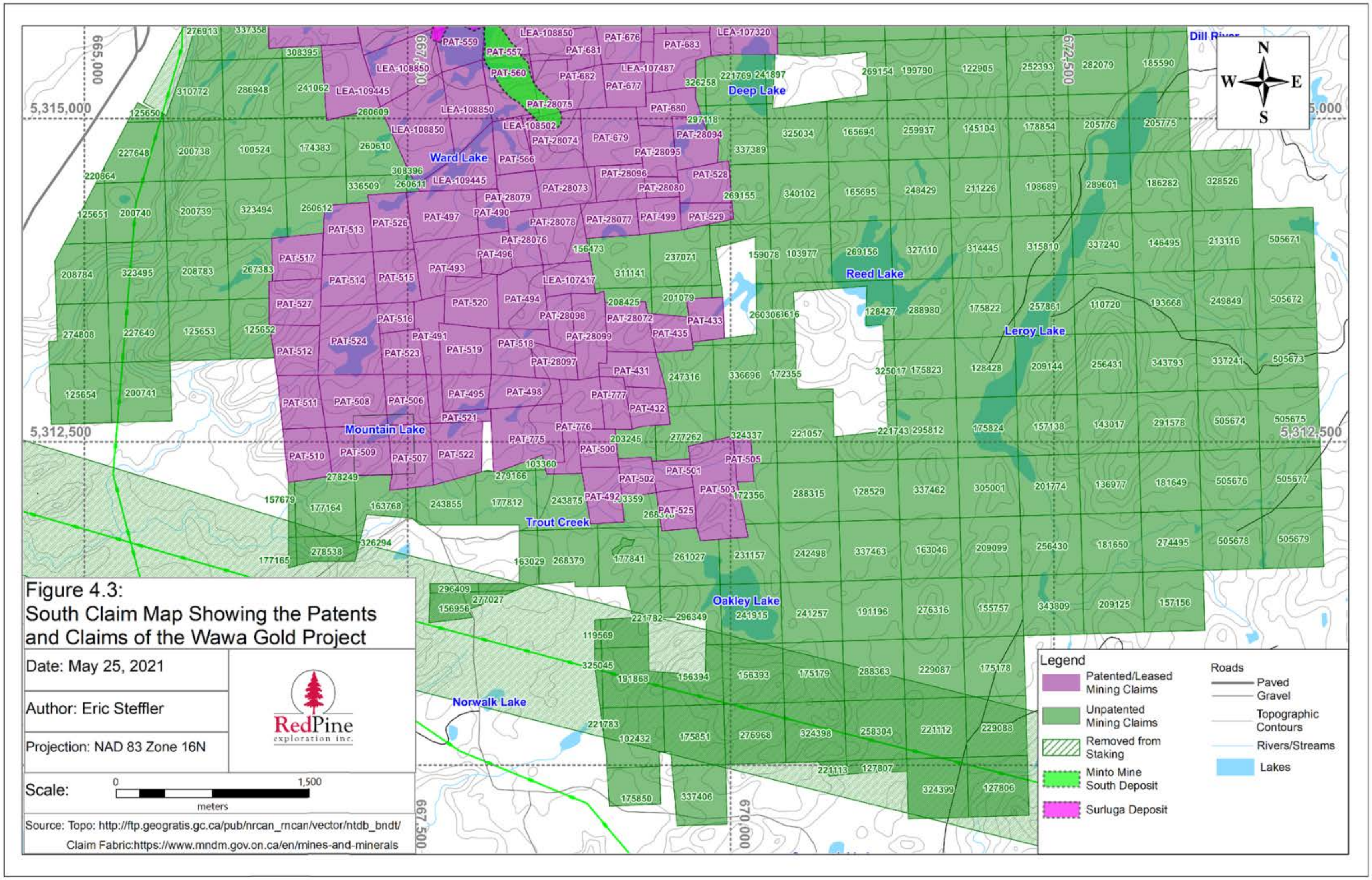

Figure 4-3: South Claim Map Showing the Patents and Claims of the Wawa Gold Project

Table 4-1: List of Surface Rights Taxes on Leases and Patents (for Municipality of Wawa and MNRF Tenant Tax)

	Tenure ID									
Claim ID	PIN	MLAS ID	Lease	Tenure Type	Surface Rights	Mineral Rights	Holder	Municipal Tax Roll #	2020 Taxes	Status
SSM433 (JL105)	31169-0270	PAT-784	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001612900.0000	$ 515.18	Active
SSM3090 (part of Y110)	31169-0648	PAT-551	Not Applicable	Fee Simple Absolute	Y	Y	Citadel Gold Mines Inc	00001613100.0000	$ 600.40	Active
SSM3089 (part of Y110)	31169-0648	PAT-551	Not Applicable	Fee Simple Absolute	Y	Y	Citadel Gold Mines Inc	00001613900.0000	$ 600.40	Active
SSM4020 (part of Y110)	31169-0648	PAT-551	Not Applicable	Fee Simple Absolute	Y	Y	Citadel Gold Mines Inc	00001622900.0000	$ 600.40	Active
SSM3531 (part of Y110)	31169-0648	PAT-551	Not Applicable	Fee Simple Absolute	Y	Y	Citadel Gold Mines Inc	00001623000.0000	$ 600.40	Active
SSM3555 (part of WR61)	31169-0648	PAT-570	Not Applicable	Fee Simple Absolute	Y	Y	Citadel Gold Mines Inc	00001614000.0000	$ 600.40	Active
SSM3556 (part of WR61)	31169-0648	PAT-570	Not Applicable	Fee Simple Absolute	Y	Y	Citadel Gold Mines Inc	00001614800.0000	$ 600.40	Active
SSM3557 (part of WR61)	31169-0648	PAT-570	Not Applicable	Fee Simple Absolute	Y	Y	Citadel Gold Mines Inc	00001622000.0000	$ 600.40	Active
SSM3558(part of WR61)	31169-0648	PAT-570	Not Applicable	Fee Simple Absolute	Y	Y	Citadel Gold Mines Inc	00001621900.0000	$ 600.40	Active
SSM3232	31169-0648	PAT-562	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001621200.0000	$ 627.51	Active
SSM3256	31169-0648	PAT-563	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001621400.0000	$ 584.90	Active
SSM3231	31169-0648	PAT-561	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001621500.0000	$ 615.89	Active
SSM3678	31169-0304	PAT-434	Not Applicable	Fee Simple Absolute	Y	Y	Citadel Gold Mines Inc	00001621700.0000	$ 588.78	Active
SSM4507	31169-0648	PAT-550	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001622600.0000	$ 569.41	Active
SSM3193	31169-0648	PAT-548	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001622700.0000	$ 627.51	Active
SSM3192	31169-0648	PAT-547	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001622800.0000	$ 600.40	Active
SSM3191	31169-0648	PAT-546	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001623100.0000	$ 604.27	Active
SSM3194	31169-0648	PAT-549	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001623200.0000	$ 619.77	Active
SSM3108	31169-0289	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001623400.0000	$ 650.76	Active
SSM3107	31169-0289	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001623500.0000	$ 623.64	Active
SSM3538 (SSM4720)	31169-0648	PAT-554	Not Applicable	Fee Simple Absolute	Y	Y	Citadel Gold Mines Inc	00001623600.0000	$ 627.51	Active
SSM4318 (SSM7492)	31169-0649	PAT-553	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001623800.0000	$ 619.77	Active
SSM3105	31169-0289	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001624000.0000	$ 592.65	Active
SSM3106	31169-0289	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001624200.0000	$ 561.66	Active
SSM3104	31169-0289	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001624300.0000	$ 604.27	Active
SSM4317	31169-0648	PAT-552	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001624500.0000	$ 813.44	Active
SSM59662	31169-1824	PAT-572	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001624600.0000	$ 755.34	Active
SSM3407	31169-0649	PAT-567	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001624700.0000	$ 530.67	Active
SSM3130	31169-0649	PAT-555	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001624800.0000	$ 480.31	Active
SSM3408	31169-0649	PAT-568	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001624900.0000	$ 662.37	Active
SSM3400	31169-0649	PAT-564	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001625000.0000	$ 735.97	Active
SSM3455	31169-0649	PAT-569	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001625100.0000	$ 751.47	Active
SSM60942	31169-1809	PAT-571	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001625200.0000	$ 735.97	Active
SSM3401	31169-0649	PAT-565	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001625500.0000	$ 697.24	Active
SSM4678	31169-0315	PAT-817	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001625600.0000	$ 453.20	Active
SSM61530	31169-0212	LEA-108851	108851	Lease	Y	Y	Citadel Gold Mines Inc	00001626002.0000	$ 697.24	Active
SSM3378	31169-0308	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001629400.0000	$ 832.82	Active
SSM3379	31169-0308	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001629500.0000	$ 794.07	Active
SSM4316	31169-0318	PAT-28102	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001629600.0000	$ 813.44	Active
SSM3133	31169-0649	PAT-558	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001629700.0000	$ 689.49	Active
SSM3134	31169-0649	PAT-559	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001629800.0000	$ 708.86	Active
SSM469257	31169-0215	LEA-109445	109445	Lease	Y	Y	Citadel Gold Mines Inc	00001629900.0000	$ 565.54	Active
SSM430258	31169-0216	LEA-109445	109445	Lease	Y	Y	Citadel Gold Mines Inc	00001630050.0000	$ 441.58	Active
SSM3307	31169-0308	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001630000.0000	$ 774.71	Active
SSM3406	31169-0649	PAT-566	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001630100.0000	$ 550.05	Active
SSM3135	31169-0649	PAT-560	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001630200.0000	$ 763.08	Active
SSM3132	31169-0649	PAT-557	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001630300.0000	$ 685.62	Active

Claim ID	Tenure ID			Tenure Type	Surface Rights	Mineral Rights	Holder	Municipal Tax Roll #	2020 Taxes	Status
	PIN	MLAS ID	Lease							
SSM3131	31169-0649	PAT-556	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001630400.0000	$ 491.94	Active
SSM3306	31169-0307	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001630600.0000	$ 708.86	Active
SSM3129	31169-0284	PAT-28075	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001630700.0000	$ 658.50	Active
SSM3124	31169-0284	PAT-28074	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001630800.0000	$ 774.71	Active
SSM60	31169-0274	PAT-679	Not Applicable	Fee Simple Absolute	Y	Y	Van Sickle Lloyd A Estate	00001631000.0000	$ 646.88	Active
SSM4142	31169-0305	PAT-682	Not Applicable	Fee Simple Absolute	Y	Y	Van Sickle Lloyd A Estate	00001631100.0000	$ 612.02	Active
SSM4192	31169-0309	PAT-677	Not Applicable	Fee Simple Absolute	Y	Y	Van Sickle Lloyd A Estate	00001631200.0000	$ 519.06	Active
ES170	31169-0268	PAT-676	Not Applicable	Fee Simple Absolute	Y	Y	Van Sickle Lloyd A Estate	00001631300.0000	$ 522.93	Active
SSM4141	31169-0306	PAT-681	Not Applicable	Fee Simple Absolute	Y	Y	Van Sickle Lloyd A Estate	00001631400.0000	$ 612.02	Active
SSM58	31169-0276	PAT-785	Not Applicable	Fee Simple Absolute	Y	Y	Van Sickle Lloyd A Estate	00001631500.0000	$ 526.80	Active
SSM3047	31169-0281	PAT-653	Not Applicable	Fee Simple Absolute	Y	Y	Van Sickle Lloyd A Estate	00001631600.0000	$ 522.93	Active
SSM3136	31169-0283	PAT-654	Not Applicable	Fee Simple Absolute	Y	Y	Van Sickle Lloyd A Estate	00001631700.0000	$ 511.30	Active
SSM7921	31169-0341	PAT-678	Not Applicable	Fee Simple Absolute	Y	Y	Van Sickle Lloyd A Estate	00001631900.0000	$ 460.95	Active
Y462	31169-0872	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001632100.0000	$ 488.07	Active
Y461	31169-0872	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001632200.0000	$ 534.55	Active
SSM3565	31169-0297	PAT-680	Not Applicable	Fee Simple Absolute	Y	Y	Van Sickle Lloyd A Estate	00001632300.0000	$ 530.67	Active
SSM3566	31169-0297	PAT-683	Not Applicable	Fee Simple Absolute	Y	Y	Van Sickle Lloyd A Estate	00001632400.0000	$ 627.51	Active
SSM65 (JD16)	31169-0273	PAT-684	Not Applicable	Fee Simple Absolute	Y	Y	Van Sickle Lloyd A Estate	00001632500.0000	$ 604.27	Active
SSM2583	31169-0549	PAT-433	Not Applicable	Fee Simple Absolute	Y	Y	Citadel Gold Mines Inc	00001638700.0000	$ 511.30	Active
SSM7389	31169-0872	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001638900.0000	$ 460.95	Active
SSM4390	31169-0316	PAT-435	Not Applicable	Fee Simple Absolute	Y	Y	Citadel Gold Mines Inc	00001639200.0000	$ 511.30	Active
SSM4391	31169-0317	PAT-431	Not Applicable	Fee Simple Absolute	Y	Y	Citadel Gold Mines Inc	00001639300.0000	$ 526.80	Active
SSM886	31169-0272	PAT-28072	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001639400.0000	$ 550.05	Active
SSM3470	31169-0872	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001639600.0000	$ 681.75	Active
Y463	31169-0872	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001639700.0000	$ 538.43	Active
SSM3109	31169-0286	PAT-28073	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001639800.0000	$ 712.73	Active
SSM3471	31169-0295	PAT-28078	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001639900.0000	$ 766.96	Active
SSM2403	31169-0280	PAT-28099	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001640100.0000	$ 503.56	Active
SSM2401	31169-0280	PAT-28097	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001640200.0000	$ 635.26	Active
SSM2402	31169-0280	PAT-28098	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001640300.0000	$ 503.56	Active
M1052 (DJ7)	31169-0255	PAT-518	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001640400.0000	$ 774.71	Active
SSM3301	31169-0295	PAT-28076	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001640600.0000	$ 522.93	Active
SSM3493	31169-0285	PAT-28079	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001640700.0000	$ 515.18	Active
R738 (SSM253)	31169-0642	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001641000.0000	$ 596.53	Active
M968 (DJ8)	31169-0255	PAT-519	Not Applicable	Fee Simple Absolute	Y	Y	Wawa GP Inc	00001641100.0000	$ 604.27	Active
SSM4392	31169-0317	PAT-432	Not Applicable	Fee Simple Absolute	Y	Y	Citadel Gold Mines Inc	00001645800.0000	$ 522.93	Active
SSM176	31169-0643	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001640800.0000	$ -	Active
SSM177	31169-0643	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001641200.0000	$ -	Active
SSM182	31169-0643	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001641300.0000	$ -	Active
SSM183	31169-0643	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001640500.0000	$ 13,738.16	Active
SSM191	31169-0643	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001644300.0000	$ -	Active
SSM194	31169-0643	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001640900.0000	$ -	Active
SSM195	31169-0643	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001641400.0000	$ -	Active
SSM201	31169-0643	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001644900.0000	$ -	Active
SSM212	31169-0695	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001639000.0000	$ 526.80	Active
SSM224	31169-0643	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001644100.0000	$ -	Active

Tenure ID				Tenure Type	Surface Rights	Mineral Rights	Holder	Municipal Tax Roll #	2020 Taxes	Status
Claim ID	PIN	MLAS ID	Lease							
SSM241	31169-0643	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001644000.0000	$ -	Active
SSM242	31169-0643	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001643800.0000	$ -	Active
SSM243	31169-0643	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001643900.0000	$ -	Active
SSM244	31169-0643	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001643600.0000	$ -	Active
SSM245	31169-0643	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001643700.0000	$ -	Active
SSM246	31169-0643	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001642600.0000	$ -	Active
SSM247	31169-0643	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001642100.0000	$ -	Active
SSM248	31169-0643	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001642000.0000	$ -	Active
SSM249	31169-0643	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001641600.0000	$ -	Active
SSM250	31169-0643	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001641700.0000	$ -	Active
SSM252	31169-0643	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001642400.0000	$ -	Active
SSM138	31169-0643	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001644200.0000	$ -	Active
SSM139	31169-0643	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001644400.0000	$ -	Active
SSM140	31169-0643	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001641800.0000	$ -	Active
SSM141	31169-0643	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001641900.0000	$ -	Active
SSM258	31169-0643	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001641500.0000	$ -	Active
SSM259	31169-0643	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001642500.0000	$ -	Active
SSM261	31169-0695	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001638100.0000	$ 573.28	Active
SSM262	31169-0695	Not Applicable	Not Applicable	Fee Simple Absolute	Y	N	Wawa GP Inc	00001638200.0000	$ 484.19	Active

Table 4-2: List of Lease Rent Obligations (MNDM)

Leasee	Status	Tenure ID				Tenure Type	Surface Rights	Mining Rights	MENDM Account	MENDM Lease Rent (per lease)	Annual Rent Due Date	Lease Expiry Date
		Claim ID	PIN	Lease	MLAS ID							
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM61530	31169-0212	108851	LEA-108851	Lease	Y	Y	LA**0090	$ 43.83	August 1, 2021	July 31, 2032
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM469257	31169-0215	109445	LEA-109445	Lease	Y	Y	LA**0071	$ 111.69	June 1, 2022	May 31, 2033
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM430258	31169-0216	109445	LEA-109445	Lease	Y	Y	LA**0071			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active - Renewal Application Being Processed	SSM76721	31169-0199	107320	LEA-107320	Lease	Y	Y	LA**0065	$ 52.11	May 1, 2022	April 30, 2021
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM321118	31169-0202 and 31169-0265	107487	LEA-107487	Lease	Y	Y	LA**0065	$ 45.31	February 1, 2022	January 30, 2025
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM407822	31169-0201	107487	LEA-107487	Lease	Y	Y	LA**0065			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM59663	31169-0203	107760	LEA-107760	Lease	Y	Y	LA**0079	$ 486.61	June 1, 2022	May 31, 2026
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM61531	31169-0204	107760	LEA-107760	Lease	Y	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM61958	31169-0204	107760	LEA-107760	Lease	Y	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM61959	31169-0204	107760	LEA-107760	Lease	Y	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM61963	31169-0204	107760	LEA-107760	Lease	Y	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM61965	31169-0204	107760	LEA-107760	Lease	Y	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM61966	31169-0204	107760	LEA-107760	Lease	Y	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM61967	31169-0204	107760	LEA-107760	Lease	Y	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM61968	31169-0204	107760	LEA-107760	Lease	Y	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM61971	31169-0204	107760	LEA-107760	Lease	Y	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM61972	31169-0204	107760	LEA-107760	Lease	Y	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM469255	31169-0217	109446	LEA-109446	Lease	N	Y	LA**0071	$ 64.24	June 1, 2022	May 31, 2033
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM469256	31169-0217	109446	LEA-109446	Lease	N	Y	LA**0071			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM59664	31169-0205	107761	LEA-107761	Lease	N	Y	LA**0079	$ 957.53	June 1, 2022	May 31, 2026
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM60183	31169-0205	107761	LEA-107761	Lease	N	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM60184	31169-0205	107761	LEA-107761	Lease	N	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM60185	31169-0205	107761	LEA-107761	Lease	N	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM60362	31169-0205	107761	LEA-107761	Lease	N	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM60363	31169-0205	107761	LEA-107761	Lease	N	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM61532	31169-0206	107761	LEA-107761	Lease	N	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM61533	31169-0206	107761	LEA-107761	Lease	N	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM61954	31169-0206	107761	LEA-107761	Lease	N	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM61955	31169-0206	107761	LEA-107761	Lease	N	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM61956	31169-0206	107761	LEA-107761	Lease	N	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM61960	31169-0206	107761	LEA-107761	Lease	N	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM61961	31169-0206	107761	LEA-107761	Lease	N	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM61962	31169-0206	107761	LEA-107761	Lease	N	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM61964	31169-0206	107761	LEA-107761	Lease	N	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM61969	31169-0206	107761	LEA-107761	Lease	N	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM61970	31169-0206	107761	LEA-107761	Lease	N	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM64595	31169-0206	107761	LEA-107761	Lease	N	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM64702	31169-0207	107761	LEA-107761	Lease	N	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM64934	31169-0206	107761	LEA-107761	Lease	N	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM64955	31169-0206	107761	LEA-107761	Lease	N	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM542856	31160-0200	107417	LEA-107417	Lease	N	Y	LA**0071	$ 27.97	August 1, 2021	July 31, 2023
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM61957	31160-0211	108852	LEA-108852	Lease	N	Y	LA**0090	$ 46.01	August 1, 2021	July 31, 2032
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM64704	31169-0194	108916	LEA-108916	Lease	N	Y	LA**0029	$ 51.19	December 1, 2021	November 30, 2032
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM64705	31169-0193	108915	LEA-108915	Lease	N	Y	LA**0029	$ 61.12	December 1, 2021	November 30, 2032
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM64703	31169-0195	108914	LEA-108914	Lease	N	Y	LA**0029	$ 23.27	December 1, 2021	November 30, 2032
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM64700	31169-0196	108913	LEA-108913	Lease	N	Y	LA**0029	$ 59.09	December 1, 2021	November 30, 2032
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM64701	31169-0197	108912	LEA-108912	Lease	N	Y	LA**0029	$ 48.17	December 1, 2021	November 30, 2032
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM64706	31169-0198	108943	LEA-108943	Lease	N	Y	LA**0029	$ 48.17	February 1, 2022	January 31, 2033
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM581686	31169-0210	108502	LEA-108502	Lease	N	Y	LA**0071	$ 3.62	February 1, 2022	January 31, 2031
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM430232	31169-0213	108850	LEA-108850	Lease	N	Y	LA**0079	$ 239.33	September 1, 2021	August 31, 2032
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM430233	31169-0214	108850	LEA-108850	Lease	N	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM430234	31169-0214	108850	LEA-108850	Lease	N	Y	LA**0079			
(196462) RED PINE EXPLORATION INC., (409536) WAWA GP INC.	Active	SSM430235	31169-0214	108850	LEA-108850	Lease	N	Y	LA**0079			

Table 4-3: List of Mining Tax Obligations (MNDM)

Owner	Status	PIN	MLAS ID	Tenure Type	Surface Rights	Mining Rights	MNDM Account	MNDM Sub Account	2021 Mining Tax
Red Pine (60%), Wawa GP (40%)	Active	31169-0270	PAT-784	Fee Simple Absolute	Y	Y	A***0148	0001	$ 35.11
Red Pine (60%), Wawa GP (40%)	Active	31169-0648	PAT-551	Fee Simple Absolute	Y	Y	A***0043	0006	$ 259.00
Red Pine (60%), Wawa GP (40%)	Active	31169-0648	PAT-551	Fee Simple Absolute	Y	Y	A***0043	0006	
Red Pine (60%), Wawa GP (40%)	Active	31169-0648	PAT-551	Fee Simple Absolute	Y	Y	A***0043	0006	
Red Pine (60%), Wawa GP (40%)	Active	31169-0648	PAT-551	Fee Simple Absolute	Y	Y	A***0043	0006	
Red Pine (60%), Wawa GP (40%)	Active	31169-0648	PAT-570	Fee Simple Absolute	Y	Y	A***0043	0025	$ 259.00
Red Pine (60%), Wawa GP (40%)	Active	31169-0648	PAT-570	Fee Simple Absolute	Y	Y	A***0043	0025	
Red Pine (60%), Wawa GP (40%)	Active	31169-0648	PAT-570	Fee Simple Absolute	Y	Y	A***0043	0025	
Red Pine (60%), Wawa GP (40%)	Active	31169-0648	PAT-570	Fee Simple Absolute	Y	Y	A***0043	0025	
Red Pine (60%), Wawa GP (40%)	Active	31169-0648	PAT-562	Fee Simple Absolute	Y	Y	A***0043	0017	$ 74.95
Red Pine (60%), Wawa GP (40%)	Active	31169-0648	PAT-563	Fee Simple Absolute	Y	Y	A***0043	0018	$ 59.89
Red Pine (60%), Wawa GP (40%)	Active	31169-0648	PAT-561	Fee Simple Absolute	Y	Y	A***0043	0016	$ 70.74
Red Pine (60%), Wawa GP (40%)	Active	31169-0304	PAT-434	Fee Simple Absolute	Y	Y	A***0026	0004	$ 60.54
Red Pine (60%), Wawa GP (40%)	Active	31169-0648	PAT-550	Fee Simple Absolute	Y	Y	A***0043	0005	$ 54.55
Red Pine (60%), Wawa GP (40%)	Active	31169-0648	PAT-548	Fee Simple Absolute	Y	Y	A***0043	0003	$ 74.95
Red Pine (60%), Wawa GP (40%)	Active	31169-0648	PAT-547	Fee Simple Absolute	Y	Y	A***0043	0002	$ 65.24
Red Pine (60%), Wawa GP (40%)	Active	31169-0648	PAT-546	Fee Simple Absolute	Y	Y	A***0043	0001	$ 66.69
Red Pine (60%), Wawa GP (40%)	Active	31169-0648	PAT-549	Fee Simple Absolute	Y	Y	A***0043	0004	$ 72.04
Red Pine (60%), Wawa GP (40%)	Active	31169-0648	PAT-554	Fee Simple Absolute	Y	Y	A***0043	0009	$ 75.11
Red Pine (60%), Wawa GP (40%)	Active	31169-0649	PAT-553	Fee Simple Absolute	Y	Y	A***0043	0008	$ 71.22
Red Pine (60%), Wawa GP (40%)	Active	31169-0648	PAT-552	Fee Simple Absolute	Y	Y	A***0043	0007	$ 87.41
Red Pine (60%), Wawa GP (40%)	Active	31169-1824	PAT-572	Fee Simple Absolute	Y	Y	A***0043	0027	$ 65.87
Red Pine (60%), Wawa GP (40%)	Active	31169-0649	PAT-567	Fee Simple Absolute	Y	Y	A***0043	0022	$ 39.82
Red Pine (60%), Wawa GP (40%)	Active	31169-0649	PAT-555	Fee Simple Absolute	Y	Y	A***0043	0010	$ 22.66
Red Pine (60%), Wawa GP (40%)	Active	31169-0649	PAT-568	Fee Simple Absolute	Y	Y	A***0043	0023	$ 39.98
Red Pine (60%), Wawa GP (40%)	Active	31169-0649	PAT-564	Fee Simple Absolute	Y	Y	A***0043	0019	$ 60.22
Red Pine (60%), Wawa GP (40%)	Active	31169-0649	PAT-569	Fee Simple Absolute	Y	Y	A***0043	0024	$ 51.80
Red Pine (60%), Wawa GP (40%)	Active	31169-1809	PAT-571	Fee Simple Absolute	Y	Y	A***0043	0026	$ 61.06
Red Pine (60%), Wawa GP (40%)	Active	31169-0649	PAT-565	Fee Simple Absolute	Y	Y	A***0043	0020	$ 49.86
Red Pine (60%), Wawa GP (40%)	Active	31169-0315	PAT-817	Fee Simple Absolute	Y	Y	A***0196	0001	$ 12.95
Red Pine (60%), Wawa GP (40%)	Active	31169-0318	PAT-28102	Fee Simple Absolute	Y	Y	A***0026	0021	$ 87.41
Red Pine (60%), Wawa GP (40%)	Active	31169-0649	PAT-558	Fee Simple Absolute	Y	Y	A***0043	0013	$ 47.27
Red Pine (60%), Wawa GP (40%)	Active	31169-0649	PAT-559	Fee Simple Absolute	Y	Y	A***0043	0014	$ 52.77
Red Pine (60%), Wawa GP (40%)	Active	31169-0649	PAT-566	Fee Simple Absolute	Y	Y	A***0043	0021	$ 47.27
Red Pine (60%), Wawa GP (40%)	Active	31169-0649	PAT-560	Fee Simple Absolute	Y	Y	A***0043	0015	$ 67.99
Red Pine (60%), Wawa GP (40%)	Active	31169-0649	PAT-557	Fee Simple Absolute	Y	Y	A***0043	0012	$ 45.97
Red Pine (60%), Wawa GP (40%)	Active	31169-0649	PAT-556	Fee Simple Absolute	Y	Y	A***0043	0011	$ 26.22
Red Pine (60%), Wawa GP (40%)	Active	31169-0284	PAT-28075	Fee Simple Absolute	Y	Y	A***0026	0009	$ 38.69
Red Pine (60%), Wawa GP (40%)	Active	31169-0284	PAT-28074	Fee Simple Absolute	Y	Y	A***0026	0008	$ 73.98
Red Pine (60%), Wawa GP (40%)	Active	31169-0274	PAT-679	Fee Simple Absolute	Y	Y	A***0092	0004	$ 83.04
Red Pine (60%), Wawa GP (40%)	Active	31169-0305	PAT-682	Fee Simple Absolute	Y	Y	A***0092	0007	$ 25.90
Red Pine (60%), Wawa GP (40%)	Active	31169-0309	PAT-677	Fee Simple Absolute	Y	Y	A***0092	0002	$ 35.61
Red Pine (60%), Wawa GP (40%)	Active	31169-0268	PAT-676	Fee Simple Absolute	Y	Y	A***0092	0001	$ 37.76
Red Pine (60%), Wawa GP (40%)	Active	31169-0306	PAT-681	Fee Simple Absolute	Y	Y	A***0092	0006	$ 25.90
Red Pine (60%), Wawa GP (40%)	Active	31169-0276	PAT-785	Fee Simple Absolute	Y	Y	A***0149	0001	$ 39.34
Red Pine (60%), Wawa GP (40%)	Active	31169-0281	PAT-653	Fee Simple Absolute	Y	Y	A***0072	0001	$ 35.13
Red Pine (60%), Wawa GP (40%)	Active	31169-0283	PAT-654	Fee Simple Absolute	Y	Y	A***0072	0002	$ 33.99
Red Pine (60%), Wawa GP (40%)	Active	31169-0341	PAT-678	Fee Simple Absolute	Y	Y	A***0092	0003	$ 14.94
Red Pine (60%), Wawa GP (40%)	Active	31169-0260	PAT-28095	Fee Simple Absolute	N	Y	A***0026	0016	$ 29.14
Red Pine (60%), Wawa GP (40%)	Active	31169-0260	PAT-28094	Fee Simple Absolute	N	Y	A***0026	0015	$ 30.76
Red Pine (60%), Wawa GP (40%)	Active	31169-0297	PAT-680	Fee Simple Absolute	Y	Y	A***0092	0005	$ 40.47
Red Pine (60%), Wawa GP (40%)	Active	31169-0297	PAT-683	Fee Simple Absolute	Y	Y	A***0092	0008	$ 74.46

Owner	Status	PIN	MLAS ID	Tenure Type	Surface Rights	Mining Rights	MNDM Account	MNDM Sub Account	2021 Mining Tax
Red Pine (60%), Wawa GP (40%)	Active	31169-0273	PAT-684	Fee Simple Absolute	Y	Y	A***0092	0009	$ 67.99
Red Pine (60%), Wawa GP (40%)	Active	31169-0549	PAT-433	Fee Simple Absolute	Y	Y	A***0026	0003	$ 33.99
Red Pine (60%), Wawa GP (40%)	Active	31169-0338	PAT-28080	Fee Simple Absolute	N	Y	A***0026	0014	$ 15.46
Red Pine (60%), Wawa GP (40%)	Active	31169-0316	PAT-435	Fee Simple Absolute	Y	Y	A***0026	0005	$ 33.99
Red Pine (60%), Wawa GP (40%)	Active	31169-0317	PAT-431	Fee Simple Absolute	Y	Y	A***0026	0001	$ 38.85
Red Pine (60%), Wawa GP (40%)	Active	31169-0272	PAT-28072	Fee Simple Absolute	Y	Y	A***0026	0006	$ 47.43
Red Pine (60%), Wawa GP (40%)	Active	31169-0295	PAT-28077	Fee Simple Absolute	N	Y	A***0026	0011	$ 44.84
Red Pine (60%), Wawa GP (40%)	Active	31169-0260	PAT-28096	Fee Simple Absolute	N	Y	A***0026	0017	$ 41.19
Red Pine (60%), Wawa GP (40%)	Active	31169-0286	PAT-28073	Fee Simple Absolute	Y	Y	A***0026	0007	$ 53.58
Red Pine (60%), Wawa GP (40%)	Active	31169-0295	PAT-28078	Fee Simple Absolute	Y	Y	A***0026	0012	$ 69.28
Red Pine (60%), Wawa GP (40%)	Active	31169-0280	PAT-28099	Fee Simple Absolute	Y	Y	A***0026	0020	$ 64.75
Red Pine (60%), Wawa GP (40%)	Active	31169-0280	PAT-28097	Fee Simple Absolute	Y	Y	A***0026	0018	$ 30.76
Red Pine (60%), Wawa GP (40%)	Active	31169-0280	PAT-28098	Fee Simple Absolute	Y	Y	A***0026	0019	$ 31.73
Red Pine (60%), Wawa GP (40%)	Active	31169-0255	PAT-518	Fee Simple Absolute	Y	Y	A***0035	0029	$ 74.46
Red Pine (60%), Wawa GP (40%)	Active	31169-0295	PAT-28076	Fee Simple Absolute	Y	Y	A***0026	0010	$ 37.23
Red Pine (60%), Wawa GP (40%)	Active	31169-0285	PAT-28079	Fee Simple Absolute	Y	Y	A***0026	0013	$ 35.45
Red Pine (60%), Wawa GP (40%)	Active	31169-0221	PAT-520	Fee Simple Absolute	N	Y	A***0035	0031	$ 63.13
Red Pine (60%), Wawa GP (40%)	Active	31169-0255	PAT-519	Fee Simple Absolute	Y	Y	A***0035	0030	$ 66.37
Red Pine (60%), Wawa GP (40%)	Active	31169-0317	PAT-432	Fee Simple Absolute	Y	Y	A***0026	0002	$ 37.23
Red Pine (60%), Wawa GP (40%)	Active	31169-0277	PAT-490	Fee Simple Absolute	N	Y	A***0035	0001	$ 32.38
Red Pine (60%), Wawa GP (40%)	Active	31169-0277	PAT-491	Fee Simple Absolute	N	Y	A***0035	0002	$ 29.14
Red Pine (60%), Wawa GP (40%)	Active	31169-0278	PAT-492	Fee Simple Absolute	N	Y	A***0035	0003	$ 63.13
Red Pine (60%), Wawa GP (40%)	Active	31169-0277	PAT-493	Fee Simple Absolute	N	Y	A***0035	0004	$ 58.28
Red Pine (60%), Wawa GP (40%)	Active	31169-0277	PAT-494	Fee Simple Absolute	N	Y	A***0035	0005	$ 66.37
Red Pine (60%), Wawa GP (40%)	Active	31169-0277	PAT-495	Fee Simple Absolute	N	Y	A***0035	0006	$ 43.71
Red Pine (60%), Wawa GP (40%)	Active	31169-0277	PAT-496	Fee Simple Absolute	N	Y	A***0035	0007	$ 22.66
Red Pine (60%), Wawa GP (40%)	Active	31169-0277	PAT-497	Fee Simple Absolute	N	Y	A***0035	0008	$ 77.70
Red Pine (60%), Wawa GP (40%)	Active	31169-0277	PAT-498	Fee Simple Absolute	N	Y	A***0035	0009	$ 50.18
Red Pine (60%), Wawa GP (40%)	Active	31169-0279	PAT-499	Fee Simple Absolute	N	Y	A***0035	0010	$ 38.85
Red Pine (60%), Wawa GP (40%)	Active	31169-0278	PAT-500	Fee Simple Absolute	N	Y	A***0035	0011	$ 33.99
Red Pine (60%), Wawa GP (40%)	Active	31169-0278	PAT-501	Fee Simple Absolute	N	Y	A***0035	0012	$ 25.90
Red Pine (60%), Wawa GP (40%)	Active	31169-0278	PAT-502	Fee Simple Absolute	N	Y	A***0035	0013	$ 29.14
Red Pine (60%), Wawa GP (40%)	Active	31169-0278	PAT-503	Fee Simple Absolute	N	Y	A***0035	0014	$ 59.89
Red Pine (60%), Wawa GP (40%)	Active	31169-0278	PAT-504	Fee Simple Absolute	N	Y	A***0035	0015	$ 42.09
Red Pine (60%), Wawa GP (40%)	Active	31169-0278	PAT-505	Fee Simple Absolute	N	Y	A***0035	0016	$ 19.42
Red Pine (60%), Wawa GP (40%)	Active	31169-0277	PAT-506	Fee Simple Absolute	N	Y	A***0035	0017	$ 50.18
Red Pine (60%), Wawa GP (40%)	Active	31169-0277	PAT-507	Fee Simple Absolute	N	Y	A***0035	0018	$ 66.37
Red Pine (60%), Wawa GP (40%)	Active	31169-0277	PAT-508	Fee Simple Absolute	N	Y	A***0035	0019	$ 72.84
Red Pine (60%), Wawa GP (40%)	Active	31169-0277	PAT-509	Fee Simple Absolute	N	Y	A***0035	0020	$ 59.89
Red Pine (60%), Wawa GP (40%)	Active	31169-0277	PAT-510	Fee Simple Absolute	N	Y	A***0035	0021	$ 51.80
Red Pine (60%), Wawa GP (40%)	Active	31169-0277	PAT-511	Fee Simple Absolute	N	Y	A***0035	0022	$ 55.04
Red Pine (60%), Wawa GP (40%)	Active	31169-0277	PAT-512	Fee Simple Absolute	N	Y	A***0035	0023	$ 53.42
Red Pine (60%), Wawa GP (40%)	Active	31169-0277	PAT-513	Fee Simple Absolute	N	Y	A***0035	0024	$ 58.28
Red Pine (60%), Wawa GP (40%)	Active	31169-0277	PAT-514	Fee Simple Absolute	N	Y	A***0035	0025	$ 66.37
Red Pine (60%), Wawa GP (40%)	Active	31169-0277	PAT-515	Fee Simple Absolute	N	Y	A***0035	0026	$ 58.28
Red Pine (60%), Wawa GP (40%)	Active	31169-0277	PAT-516	Fee Simple Absolute	N	Y	A***0035	0027	$ 19.42
Red Pine (60%), Wawa GP (40%)	Active	31169-0277	PAT-517	Fee Simple Absolute	N	Y	A***0035	0028	$ 55.04
Red Pine (60%), Wawa GP (40%)	Active	31169-0277	PAT-521	Fee Simple Absolute	N	Y	A***0035	0032	$ 17.81
Red Pine (60%), Wawa GP (40%)	Active	31169-0277	PAT-522	Fee Simple Absolute	N	Y	A***0035	0033	$ 64.75
Red Pine (60%), Wawa GP (40%)	Active	31169-0277	PAT-523	Fee Simple Absolute	N	Y	A***0035	0034	$ 50.18
Red Pine (60%), Wawa GP (40%)	Active	31169-0277	PAT-524	Fee Simple Absolute	N	Y	A***0035	0035	$ 85.79
Red Pine (60%), Wawa GP (40%)	Active	31169-0278	PAT-525	Fee Simple Absolute	N	Y	A***0035	0036	$ 30.76
Red Pine (60%), Wawa GP (40%)	Active	31169-0277	PAT-526	Fee Simple Absolute	N	Y	A***0035	0037	$ 58.28
Red Pine (60%), Wawa GP (40%)	Active	31169-0277	PAT-527	Fee Simple Absolute	N	Y	A***0035	0038	$ 56.66
Red Pine (60%), Wawa GP (40%)	Active	31169-0279	PAT-528	Fee Simple Absolute	N	Y	A***0035	0039	$ 55.04
Red Pine (60%), Wawa GP (40%)	Active	31169-0279	PAT-529	Fee Simple Absolute	N	Y	A***0035	0040	$ 24.28

Table 4-4: List of Unpatented Mining Claims and NSRs on the Wawa Gold Project in Good Standing

Claim ID	Type	Cell ID	Status	Issue Date	Anniversary Date	Owner	NSR
505363	Single Cell Mining Claim	41N15J010	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505364	Single Cell Mining Claim	41N15J011	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505365	Single Cell Mining Claim	42C02B290	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505366	Single Cell Mining Claim	42C02B291	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505367	Single Cell Mining Claim	42C02B308	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505368	Single Cell Mining Claim	42C02B309	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505369	Single Cell Mining Claim	42C02B310	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505370	Single Cell Mining Claim	42C02B311	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505371	Single Cell Mining Claim	42C02B330	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505372	Single Cell Mining Claim	42C02B331	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505373	Single Cell Mining Claim	42C02B332	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505374	Single Cell Mining Claim	42C02B333	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505375	Single Cell Mining Claim	42C02B334	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505376	Single Cell Mining Claim	42C02B350	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505377	Single Cell Mining Claim	42C02B351	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505378	Single Cell Mining Claim	42C02B352	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505379	Single Cell Mining Claim	42C02B353	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505380	Single Cell Mining Claim	42C02B354	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505381	Single Cell Mining Claim	42C02B370	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505382	Single Cell Mining Claim	42C02B371	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505383	Single Cell Mining Claim	42C02B372	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505384	Single Cell Mining Claim	42C02B373	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505385	Single Cell Mining Claim	42C02B374	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505386	Single Cell Mining Claim	42C02B390	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505387	Single Cell Mining Claim	42C02B391	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505388	Single Cell Mining Claim	42C02B392	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505671	Single Cell Mining Claim	41N15J214	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%

Claim ID	Type	Cell ID	Status	Issue Date	Anniversary Date	Owner	NSR
505672	Single Cell Mining Claim	41N15J234	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505673	Single Cell Mining Claim	41N15J254	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505674	Single Cell Mining Claim	41N15J273	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505675	Single Cell Mining Claim	41N15J274	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505676	Single Cell Mining Claim	41N15J293	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505677	Single Cell Mining Claim	41N15J294	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505678	Single Cell Mining Claim	41N15J313	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
505679	Single Cell Mining Claim	41N15J314	Active	4/10/2018	4/10/2022	(100) RED PINE EXPLORATION INC.	2%
100524	Single Cell Mining Claim	41N15K177	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
102432	Single Cell Mining Claim	41N15J363	Active	4/10/2018	3/28/2022	(100) RED PINE EXPLORATION INC.	2%
103359	Single Cell Mining Claim	41N15J283	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
103360	Single Cell Mining Claim	41N15J262	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
103977	Single Cell Mining Claim	41N15J206	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
104121	Single Cell Mining Claim	41N15K079	Active	4/10/2018	7/28/2022	(100) RED PINE EXPLORATION INC.	3%
104122	Single Cell Mining Claim	41N15K100	Active	4/10/2018	7/28/2022	(100) RED PINE EXPLORATION INC.	3%
104123	Single Cell Mining Claim	41N15K120	Active	4/10/2018	7/28/2022	(100) RED PINE EXPLORATION INC.	3%
105773	Single Cell Mining Claim	42C02B348	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
105774	Single Cell Mining Claim	42C02B366	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
105798	Single Cell Mining Claim	41N15J008	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
108689	Single Cell Mining Claim	41N15J190	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
110720	Single Cell Mining Claim	41N15J231	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
119569	Boundary Cell Mining Claim	41N15J322	Active	4/10/2018	3/28/2022	(100) RED PINE EXPLORATION INC.	2%
121273	Boundary Cell Mining Claim	41N15K099	Active	4/10/2018	7/28/2022	(100) RED PINE EXPLORATION INC.	3%
121565	Single Cell Mining Claim	41N15J112	Active	4/10/2018	2/13/2022	(100) RED PINE EXPLORATION INC.	2%
122905	Single Cell Mining Claim	41N15J149	Active	4/10/2018	2/13/2022	(100) RED PINE EXPLORATION INC.	2%
125650	Single Cell Mining Claim	41N15K155	Active	4/10/2018	3/07/2022	(100) RED PINE EXPLORATION INC.	2%
125651	Single Cell Mining Claim	41N15K194	Active	4/10/2018	3/07/2022	(100) RED PINE EXPLORATION INC.	2%

Claim ID	Type	Cell ID	Status	Issue Date	Anniversary Date	Owner	NSR
125652	Single Cell Mining Claim	41N15K237	Active	4/10/2018	3/07/2022	(100) RED PINE EXPLORATION INC.	2%
125653	Single Cell Mining Claim	41N15K236	Active	4/10/2018	3/07/2022	(100) RED PINE EXPLORATION INC.	2%
125654	Single Cell Mining Claim	41N15K254	Active	4/10/2018	3/07/2022	(100) RED PINE EXPLORATION INC.	2%
127200	Single Cell Mining Claim	42C02B369	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
127806	Single Cell Mining Claim	41N15J389	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
127807	Boundary Cell Mining Claim	41N15J387	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
127855	Single Cell Mining Claim	41N15J105	Active	4/10/2018	9/10/2022	(100) RED PINE EXPLORATION INC.	2%
128402	Single Cell Mining Claim	41N15K117	Active	4/10/2018	6/29/2022	(100) RED PINE EXPLORATION INC.	2%
128427	Single Cell Mining Claim	41N15J227	Active	4/10/2018	10/02/2022	(100) RED PINE EXPLORATION INC.	2%
128428	Single Cell Mining Claim	41N15J249	Active	4/10/2018	10/02/2022	(100) RED PINE EXPLORATION INC.	2%
128529	Single Cell Mining Claim	41N15J287	Active	4/10/2018	10/02/2022	(100) RED PINE EXPLORATION INC.	2%
132965	Single Cell Mining Claim	41N15J111	Active	4/10/2018	2/13/2022	(100) RED PINE EXPLORATION INC.	2%
136977	Single Cell Mining Claim	41N15J291	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
138679	Single Cell Mining Claim	42C02B387	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
143017	Single Cell Mining Claim	41N15J271	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
145104	Single Cell Mining Claim	41N15J169	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
146495	Single Cell Mining Claim	41N15J212	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
155251	Single Cell Mining Claim	41N15J006	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
155757	Single Cell Mining Claim	41N15J329	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
156393	Single Cell Mining Claim	41N15J345	Active	4/10/2018	3/28/2022	(100) RED PINE EXPLORATION INC.	2%
156394	Single Cell Mining Claim	41N15J344	Active	4/10/2018	3/28/2022	(100) RED PINE EXPLORATION INC.	2%
156473	Single Cell Mining Claim	41N15J202	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
156956	Boundary Cell Mining Claim	41N15K340	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
156972	Boundary Cell Mining Claim	41N15K078	Active	4/10/2018	6/29/2022	(100) RED PINE EXPLORATION INC.	2%
157138	Single Cell Mining Claim	41N15J270	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
157156	Single Cell Mining Claim	41N15J332	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
157679	Boundary Cell Mining Claim	41N15K297	Active	4/10/2018	10/02/2022	(100) RED PINE EXPLORATION INC.	2%

Claim ID	Type	Cell ID	Status	Issue Date	Anniversary Date	Owner	NSR
159078	Single Cell Mining Claim	41N15J205	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
159733	Single Cell Mining Claim	41N15K080	Active	4/10/2018	7/28/2022	(100) RED PINE EXPLORATION INC.	3%
163029	Boundary Cell Mining Claim	41N15J301	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
163043	Boundary Cell Mining Claim	41N15K099	Active	4/10/2018	6/29/2022	(100) RED PINE EXPLORATION INC.	3%
163046	Single Cell Mining Claim	41N15J308	Active	4/10/2018	10/02/2022	(100) RED PINE EXPLORATION INC.	2%
163768	Boundary Cell Mining Claim	41N15K299	Active	4/10/2018	10/02/2022	(100) RED PINE EXPLORATION INC.	2%
165694	Single Cell Mining Claim	41N15J167	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
165695	Single Cell Mining Claim	41N15J187	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
165765	Single Cell Mining Claim	41N15J049	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
166331	Boundary Cell Mining Claim	41N15K119	Active	4/10/2018	7/28/2022	(100) RED PINE EXPLORATION INC.	3%
171219	Single Cell Mining Claim	42C02B365	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
172355	Single Cell Mining Claim	41N15J246	Active	4/10/2018	8/25/2022	(100) RED PINE EXPLORATION INC.	2%
172356	Single Cell Mining Claim	41N15J285	Active	4/10/2018	8/25/2022	(100) RED PINE EXPLORATION INC.	2%
173367	Single Cell Mining Claim	42C02B346	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
174383	Single Cell Mining Claim	41N15K178	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
175178	Single Cell Mining Claim	41N15J349	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
175179	Single Cell Mining Claim	41N15J346	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
175799	Single Cell Mining Claim	41N15K116	Active	4/10/2018	6/29/2022	(100) RED PINE EXPLORATION INC.	2%
175822	Single Cell Mining Claim	41N15J229	Active	4/10/2018	10/02/2022	(100) RED PINE EXPLORATION INC.	2%
175823	Single Cell Mining Claim	41N15J248	Active	4/10/2018	10/02/2022	(100) RED PINE EXPLORATION INC.	2%
175824	Single Cell Mining Claim	41N15J269	Active	4/10/2018	10/02/2022	(100) RED PINE EXPLORATION INC.	2%
175850	Single Cell Mining Claim	41N15J383	Active	4/10/2018	3/28/2022	(100) RED PINE EXPLORATION INC.	2%
175851	Single Cell Mining Claim	41N15J364	Active	4/10/2018	3/28/2022	(100) RED PINE EXPLORATION INC.	2%
176564	Single Cell Mining Claim	41N15J083	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
177164	Single Cell Mining Claim	41N15K298	Active	4/10/2018	10/02/2022	(100) RED PINE EXPLORATION INC.	2%
177165	Boundary Cell Mining Claim	41N15K317	Active	4/10/2018	10/02/2022	(100) RED PINE EXPLORATION INC.	2%
177812	Boundary Cell Mining Claim	41N15J281	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%

Claim ID	Type	Cell ID	Status	Issue Date	Anniversary Date	Owner	NSR
177841	Single Cell Mining Claim	41N15J303	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
178616	Single Cell Mining Claim	41N15J226	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
178854	Single Cell Mining Claim	41N15J170	Active	4/10/2018	2/13/2022	(100) RED PINE EXPLORATION INC.	2%
179189	Single Cell Mining Claim	41N15J090	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
181649	Single Cell Mining Claim	41N15J292	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
181650	Single Cell Mining Claim	41N15J311	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
185222	Single Cell Mining Claim	41N15J050	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
185590	Single Cell Mining Claim	41N15J152	Active	4/10/2018	2/13/2022	(100) RED PINE EXPLORATION INC.	2%
186282	Single Cell Mining Claim	41N15J192	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
190682	Single Cell Mining Claim	42C02B389	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
190705	Single Cell Mining Claim	41N15J009	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
190706	Single Cell Mining Claim	41N15J005	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
191196	Single Cell Mining Claim	41N15J327	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
191868	Single Cell Mining Claim	41N15J343	Active	4/10/2018	3/28/2022	(100) RED PINE EXPLORATION INC.	2%
191927	Single Cell Mining Claim	41N15K096	Active	4/10/2018	6/29/2022	(100) RED PINE EXPLORATION INC.	2%
193668	Single Cell Mining Claim	41N15J232	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
199790	Single Cell Mining Claim	41N15J148	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
200738	Single Cell Mining Claim	41N15K176	Active	4/10/2018	3/07/2022	(100) RED PINE EXPLORATION INC.	2%
200739	Single Cell Mining Claim	41N15K196	Active	4/10/2018	3/07/2022	(100) RED PINE EXPLORATION INC.	2%
200740	Single Cell Mining Claim	41N15K195	Active	4/10/2018	3/07/2022	(100) RED PINE EXPLORATION INC.	2%
200741	Single Cell Mining Claim	41N15K255	Active	4/10/2018	3/07/2022	(100) RED PINE EXPLORATION INC.	2%
201079	Single Cell Mining Claim	41N15J224	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
201774	Single Cell Mining Claim	41N15J290	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
203245	Single Cell Mining Claim	41N15J263	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
205075	Single Cell Mining Claim	41N15J132	Active	4/10/2018	2/13/2022	(100) RED PINE EXPLORATION INC.	2%
205775	Single Cell Mining Claim	41N15J172	Active	4/10/2018	2/13/2022	(100) RED PINE EXPLORATION INC.	2%
205776	Single Cell Mining Claim	41N15J171	Active	4/10/2018	2/13/2022	(100) RED PINE EXPLORATION INC.	2%

Claim ID	Type	Cell ID	Status	Issue Date	Anniversary Date	Owner	NSR
207101	Single Cell Mining Claim	41N15J128	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
208425	Single Cell Mining Claim	41N15J223	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
208783	Single Cell Mining Claim	41N15K216	Active	4/10/2018	3/07/2022	(100) RED PINE EXPLORATION INC.	2%
208784	Single Cell Mining Claim	41N15K214	Active	4/10/2018	3/07/2022	(100) RED PINE EXPLORATION INC.	2%
209099	Single Cell Mining Claim	41N15J309	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
209125	Single Cell Mining Claim	41N15J331	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
209144	Single Cell Mining Claim	41N15J250	Active	4/10/2018	3/15/2022	(100) RED PINE EXPLORATION INC.	2%
209256	Single Cell Mining Claim	41N15J048	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
211226	Single Cell Mining Claim	41N15J189	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
213116	Single Cell Mining Claim	41N15J213	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
220012	Single Cell Mining Claim	41N15J007	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
220864	Single Cell Mining Claim	41N15K174	Active	4/10/2018	3/07/2022	(100) RED PINE EXPLORATION INC.	2%
221057	Single Cell Mining Claim	41N15J266	Active	4/10/2018	10/02/2022	(100) RED PINE EXPLORATION INC.	2%
221112	Single Cell Mining Claim	41N15J368	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
221113	Boundary Cell Mining Claim	41N15J386	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
221743	Single Cell Mining Claim	41N15J267	Active	4/10/2018	10/02/2022	(100) RED PINE EXPLORATION INC.	2%
221769	Single Cell Mining Claim	41N15J145	Active	4/10/2018	9/10/2022	(100) RED PINE EXPLORATION INC.	2%
221782	Single Cell Mining Claim	41N15J323	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
221783	Boundary Cell Mining Claim	41N15J362	Active	4/10/2018	3/28/2022	(100) RED PINE EXPLORATION INC.	2%
227648	Single Cell Mining Claim	41N15K175	Active	4/10/2018	3/07/2022	(100) RED PINE EXPLORATION INC.	2%
227649	Single Cell Mining Claim	41N15K235	Active	4/10/2018	3/07/2022	(100) RED PINE EXPLORATION INC.	2%
227954	Single Cell Mining Claim	42C02B388	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
229087	Single Cell Mining Claim	41N15J348	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
229088	Single Cell Mining Claim	41N15J369	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
229852	Single Cell Mining Claim	41N15J086	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
229853	Single Cell Mining Claim	41N15J107	Active	4/10/2018	9/15/2022	(100) RED PINE EXPLORATION INC.	2%
231157	Single Cell Mining Claim	41N15J305	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%

Claim ID	Type	Cell ID	Status	Issue Date	Anniversary Date	Owner	NSR
233041	Single Cell Mining Claim	41N15J069	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
233111	Boundary Cell Mining Claim	41N15K078	Active	4/10/2018	7/28/2022	(100) RED PINE EXPLORATION INC.	2%
237070	Single Cell Mining Claim	41N15J184	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
237071	Single Cell Mining Claim	41N15J204	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
237797	Single Cell Mining Claim	41N15J029	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
240094	Single Cell Mining Claim	42C02B349	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
240095	Single Cell Mining Claim	42C02B367	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
241062	Single Cell Mining Claim	41N15K158	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
241257	Single Cell Mining Claim	41N15J326	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
241897	Single Cell Mining Claim	41N15J146	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
241915	Single Cell Mining Claim	41N15J325	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
241989	Single Cell Mining Claim	41N15K097	Active	4/10/2018	6/29/2022	(100) RED PINE EXPLORATION INC.	2%
242498	Single Cell Mining Claim	41N15J306	Active	4/10/2018	10/02/2022	(100) RED PINE EXPLORATION INC.	2%
242561	Single Cell Mining Claim	41N15J126	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
243855	Boundary Cell Mining Claim	41N15K300	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
243875	Single Cell Mining Claim	41N15J282	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
244649	Single Cell Mining Claim	41N15J067	Active	4/10/2018	9/15/2022	(100) RED PINE EXPLORATION INC.	2%
244858	Single Cell Mining Claim	41N15J092	Active	4/10/2018	2/13/2022	(100) RED PINE EXPLORATION INC.	2%
247316	Single Cell Mining Claim	41N15J244	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
248429	Single Cell Mining Claim	41N15J188	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
249849	Single Cell Mining Claim	41N15J233	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
252391	Single Cell Mining Claim	41N15J091	Active	4/10/2018	2/13/2022	(100) RED PINE EXPLORATION INC.	2%
252392	Single Cell Mining Claim	41N15J129	Active	4/10/2018	2/13/2022	(100) RED PINE EXPLORATION INC.	2%
252393	Single Cell Mining Claim	41N15J150	Active	4/10/2018	2/13/2022	(100) RED PINE EXPLORATION INC.	2%
254408	Single Cell Mining Claim	41N15J127	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
256430	Single Cell Mining Claim	41N15J310	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
256431	Single Cell Mining Claim	41N15J251	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%

Claim ID	Type	Cell ID	Status	Issue Date	Anniversary Date	Owner	NSR
257861	Single Cell Mining Claim	41N15J230	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
258304	Single Cell Mining Claim	41N15J367	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
259001	Boundary Cell Mining Claim	41N15K098	Active	4/10/2018	6/29/2022	(100) RED PINE EXPLORATION INC.	2%
259002	Single Cell Mining Claim	41N15K118	Active	4/10/2018	6/29/2022	(100) RED PINE EXPLORATION INC.	2%
259046	Single Cell Mining Claim	41N15J106	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
259937	Single Cell Mining Claim	41N15J168	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
260306	Single Cell Mining Claim	41N15J225	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
260609	Single Cell Mining Claim	41N15K159	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
260610	Single Cell Mining Claim	41N15K179	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
260611	Single Cell Mining Claim	41N15K200	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
260612	Single Cell Mining Claim	41N15K198	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
261027	Single Cell Mining Claim	41N15J304	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
264407	Single Cell Mining Claim	41N15J110	Active	4/10/2018	2/13/2022	(100) RED PINE EXPLORATION INC.	2%
267383	Single Cell Mining Claim	41N15K217	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
268378	Single Cell Mining Claim	41N15J284	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
268379	Boundary Cell Mining Claim	41N15J302	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
269151	Single Cell Mining Claim	41N15J068	Active	4/10/2018	9/15/2022	(100) RED PINE EXPLORATION INC.	2%
269154	Single Cell Mining Claim	41N15J147	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
269155	Single Cell Mining Claim	41N15J185	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
269156	Single Cell Mining Claim	41N15J207	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
269823	Boundary Cell Mining Claim	41N15K098	Active	4/10/2018	7/28/2022	(100) RED PINE EXPLORATION INC.	2%
274495	Single Cell Mining Claim	41N15J312	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
274808	Single Cell Mining Claim	41N15K234	Active	4/10/2018	3/07/2022	(100) RED PINE EXPLORATION INC.	2%
275220	Single Cell Mining Claim	41N15J026	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
275221	Single Cell Mining Claim	41N15J025	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
276316	Single Cell Mining Claim	41N15J328	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
276913	Single Cell Mining Claim	41N15K136	Active	4/10/2018	3/07/2022	(100) RED PINE EXPLORATION INC.	2%

Claim ID	Type	Cell ID	Status	Issue Date	Anniversary Date	Owner	NSR
276968	Single Cell Mining Claim	41N15J365	Active	4/10/2018	3/28/2022	(100) RED PINE EXPLORATION INC.	2%
277027	Boundary Cell Mining Claim	41N15J321	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
277262	Single Cell Mining Claim	41N15J264	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
278249	Single Cell Mining Claim	41N15K278	Active	4/10/2018	10/02/2022	(100) RED PINE EXPLORATION INC.	2%
278459	Single Cell Mining Claim	41N15J084	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
278538	Boundary Cell Mining Claim	41N15K318	Active	4/10/2018	10/02/2022	(100) RED PINE EXPLORATION INC.	2%
279166	Single Cell Mining Claim	41N15J261	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
280440	Single Cell Mining Claim	41N15J108	Active	4/10/2018	9/15/2022	(100) RED PINE EXPLORATION INC.	2%
282079	Single Cell Mining Claim	41N15J151	Active	4/10/2018	2/13/2022	(100) RED PINE EXPLORATION INC.	2%
286948	Single Cell Mining Claim	41N15K157	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
288315	Single Cell Mining Claim	41N15J286	Active	4/10/2018	10/02/2022	(100) RED PINE EXPLORATION INC.	2%
288363	Single Cell Mining Claim	41N15J347	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
288980	Single Cell Mining Claim	41N15J228	Active	4/10/2018	10/02/2022	(100) RED PINE EXPLORATION INC.	2%
289601	Single Cell Mining Claim	41N15J191	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
291578	Single Cell Mining Claim	41N15J272	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
294615	Single Cell Mining Claim	42C02B368	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
294637	Single Cell Mining Claim	42C02B385	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
295748	Single Cell Mining Claim	41N15J085	Active	4/10/2018	6/29/2022	(100) RED PINE EXPLORATION INC.	2%
295812	Single Cell Mining Claim	41N15J268	Active	4/10/2018	10/02/2022	(100) RED PINE EXPLORATION INC.	2%
296349	Single Cell Mining Claim	41N15J324	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
296409	Boundary Cell Mining Claim	41N15K320	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
296429	Boundary Cell Mining Claim	41N15K119	Active	4/10/2018	6/29/2022	(100) RED PINE EXPLORATION INC.	2%
296484	Single Cell Mining Claim	41N15J087	Active	4/10/2018	9/15/2022	(100) RED PINE EXPLORATION INC.	2%
297118	Single Cell Mining Claim	41N15J164	Active	4/10/2018	9/10/2022	(100) RED PINE EXPLORATION INC.	2%
297169	Single Cell Mining Claim	41N15K279	Active	4/10/2018	10/02/2022	(100) RED PINE EXPLORATION INC.	2%
299117	Single Cell Mining Claim	41N15J109	Active	4/10/2018	9/15/2022	(100) RED PINE EXPLORATION INC.	2%
300941	Single Cell Mining Claim	41N15J131	Active	4/10/2018	2/13/2022	(100) RED PINE EXPLORATION INC.	2%

Claim ID	Type	Cell ID	Status	Issue Date	Anniversary Date	Owner	NSR
305001	Single Cell Mining Claim	41N15J289	Active	4/10/2018	3/15/2022	(100) RED PINE EXPLORATION INC.	2%
306719	Single Cell Mining Claim	42C02B347	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
306741	Single Cell Mining Claim	42C02B386	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
308395	Single Cell Mining Claim	41N15K138	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
308396	Single Cell Mining Claim	41N15K180	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
310772	Single Cell Mining Claim	41N15K156	Active	4/10/2018	3/07/2022	(100) RED PINE EXPLORATION INC.	2%
311141	Single Cell Mining Claim	41N15J203	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
311295	Single Cell Mining Claim	41N15J028	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
311840	Single Cell Mining Claim	41N15J027	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
314445	Single Cell Mining Claim	41N15J209	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
315810	Single Cell Mining Claim	41N15J210	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
323494	Single Cell Mining Claim	41N15K197	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
323495	Single Cell Mining Claim	41N15K215	Active	4/10/2018	3/07/2022	(100) RED PINE EXPLORATION INC.	2%
324337	Single Cell Mining Claim	41N15J265	Active	4/10/2018	8/25/2022	(100) RED PINE EXPLORATION INC.	2%
324398	Single Cell Mining Claim	41N15J366	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
324399	Single Cell Mining Claim	41N15J388	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
324415	Single Cell Mining Claim	42C02B345	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
324938	Single Cell Mining Claim	41N15J104	Active	4/10/2018	9/10/2022	(100) RED PINE EXPLORATION INC.	2%
325017	Single Cell Mining Claim	41N15J247	Active	4/10/2018	10/02/2022	(100) RED PINE EXPLORATION INC.	2%
325034	Single Cell Mining Claim	41N15J166	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
325045	Boundary Cell Mining Claim	41N15J342	Active	4/10/2018	3/28/2022	(100) RED PINE EXPLORATION INC.	2%
325610	Single Cell Mining Claim	41N15K077	Active	4/10/2018	6/29/2022	(100) RED PINE EXPLORATION INC.	2%
326258	Single Cell Mining Claim	41N15J144	Active	4/10/2018	9/10/2022	(100) RED PINE EXPLORATION INC.	2%
326294	Boundary Cell Mining Claim	41N15K319	Active	4/10/2018	10/02/2022	(100) RED PINE EXPLORATION INC.	2%
327110	Single Cell Mining Claim	41N15J208	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
328526	Single Cell Mining Claim	41N15J193	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
334474	Single Cell Mining Claim	41N15J047	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%

Claim ID	Type	Cell ID	Status	Issue Date	Anniversary Date	Owner	NSR
336509	Single Cell Mining Claim	41N15K199	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
336696	Single Cell Mining Claim	41N15J245	Active	4/10/2018	8/25/2022	(100) RED PINE EXPLORATION INC.	2%
337240	Single Cell Mining Claim	41N15J211	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
337241	Single Cell Mining Claim	41N15J253	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
337358	Single Cell Mining Claim	41N15K137	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
337389	Single Cell Mining Claim	41N15J165	Active	4/10/2018	9/10/2022	(100) RED PINE EXPLORATION INC.	2%
337406	Single Cell Mining Claim	41N15J384	Active	4/10/2018	3/28/2022	(100) RED PINE EXPLORATION INC.	2%
337462	Single Cell Mining Claim	41N15J288	Active	4/10/2018	10/02/2022	(100) RED PINE EXPLORATION INC.	2%
337463	Single Cell Mining Claim	41N15J307	Active	4/10/2018	10/02/2022	(100) RED PINE EXPLORATION INC.	2%
339794	Single Cell Mining Claim	41N15J130	Active	4/10/2018	2/13/2022	(100) RED PINE EXPLORATION INC.	2%
340100	Single Cell Mining Claim	41N15J088	Active	4/10/2018	9/15/2022	(100) RED PINE EXPLORATION INC.	2%
340102	Single Cell Mining Claim	41N15J186	Active	4/10/2018	1/20/2022	(100) RED PINE EXPLORATION INC.	2%
340184	Single Cell Mining Claim	41N15J070	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
340185	Single Cell Mining Claim	41N15J089	Active	4/10/2018	2/09/2022	(100) RED PINE EXPLORATION INC.	2%
343793	Single Cell Mining Claim	41N15J252	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%
343809	Single Cell Mining Claim	41N15J330	Active	4/10/2018	3/29/2022	(100) RED PINE EXPLORATION INC.	2%

4.3 Permits and Authorization

In Ontario, permits are required for exploration on unpatented mineral claims or leases. Exploration activities by Red Pine on the Project became active in 2014 and include geophysical activities requiring a power generator, line cutting where the line width is less than 1.5 m, mechanized drilling where the total weight of the rig is less than 150 kilogram (kg), mechanized surface stripping where the total stripped area is less than 100 m^2, or pitting and trenching of a volume of 1 to 3 m^3. Exploration on unpatented mineral claims or leases requires an exploration plan. 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.

No exploration plans or permits are required for fee simple absolute patents and for areas that are part of a closure plan. All surface rights holders must be notified of the application in advance of the submission. Thus, for the 2014-2020 drilling seasons, no permit was required. However, a magnetotellurics geophysical survey was completed on unpatented or leased mining claims and required a permit. Exploration permit PR-19-000238 has been active since October 24, 2019, and covers the claims and leases of the property near key exploration targets on which exploration permits are required to conduct certain exploration activities as indicated in the Mining Act of Ontario. The exploration permit is valid to October 23, 2022. The mining claim numbers covered by the permit are 105774, 155251, 171219, 173367, 190706, 275220, 275221, 294637, 306741, 324415, and the lease numbers are 107760 and 107761.

4.3.1 Summary of the Agreement between Red Pine and First Nation Communities

Red Pine has entered into agreements with certain First Nations which articulate a mutually agreed upon process for consultation for exploration phase activities conducted within the exploration area. Red Pine has entered into separate agreements with the Batchewana First Nation, the Garden River First Nation, and the Michipicoten 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, Red Pine 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 Batchewana, Garden River and Michipicoten 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.

4.4 Environmental Considerations

Red Pine is in the process of completing a mine closure plan. All patented mining claims for which mining rights are held are part of the closure plan. The QP is relying on the expert opinion of Demetri N. Georgiou, P.Eng., and Paul J. Brugger, P.Eng., of exp Global ("exp"). Exp provided Red Pine with a description of items that are being worked on at the time of the effective date of this report.

Since 2015, Red Pine has capped mine shafts that were exposed to the environment to bring all open shafts up to environmental standards.

4.4.1 Summary of the Environmental Studies Completed as Part of the Mine Closure Plan

On March 1, 2017, expert Global brought to Red Pines' attention that the following, as discussed in the coming sub-Items, environmental concerns would need to be addressed.

4.4.1.1 Item 1: Capping of Exposed Mine Shafts

The main shaft at the Minto Mine site was capped in 2009 and the concrete pad that was located next to the shaft opening has been broken, graded, and covered. The vent raise concrete cap was reinstalled to Code requirements in the spring of 2009 and is considered complete. The waste rock dump was re-contoured to a flatter profile in October 2009.

The main shaft at the Van Sickle Mine site was capped in 2009.

The main shaft at the Park Hill Mine site was backfilled with cemented mine waste in 1995. The Parkhill Mine zone of thin crown pillars was closed by blasting prior to 1996 and the open stope was filled prior to 1997.

During the winters of 2019 and 2020, Red Pine initiated the remediation and filling of the Mackey Point pits. The completion of that remediation work, which implies completing the filling of the two historical pits, remains outstanding.

4.4.1.2 Item 2: Revegetation

Due to the ongoing exploration by Red Pine Exploration, Item 2 – Revegetation has been delayed.

4.4.1.3 Item 3: Surface and Ground Water

Run-off is directed from the Parkhill and Grace to Darwin sites in a southerly direction toward Trout Creek. Trout Creek eventually enters the Michipicoten River south of the property. The Ontario Ministry of the Environment (MOE) has issued an Ontario Water Resources Act, Section 53 Certificate of Approval (COA) No. 4-0101-88-896 in 1989 with respect to the Minto Lake Tailings Dam and Pond. As per the conditions of the COA, which includes a comprehensive surface water monitoring program, the result of surface water sampling and analysis are that effluent quality continues to remain within COA limits.

No ground water issues are expected to require management at the time of final closure.

4.4.1.4 Item 4: Aquatic Plant and Animal Life

Minto Lake has been supporting a fish community of brook trout, white suckers and cyprinids and is managed by the Ministry of Natural Resources. Post closure, it is not anticipated that this arrangement will change.

4.4.1.5 Item 5: Road Spillway Construction

The reconstruction of the spillway out of Minto Lake, as per the Closure Plan. The initial design and survey work were completed in 2009 with construction completed in summer 2010.

4.4.1.6 Item 6: Acid Drainage Potential

In 2009, representative waste rock samples from the Parkhill site were sent to ALS Chemex in Vancouver for analysis of acid generating potential. The results from these samples confirmed the earlier CANMET findings (i.e., that buffering capacity is moderate to high in all rock samples found at the sites).

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

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

5.1 Accessibility

The Town of Wawa is located on Highway 17 (Trans-Canada Highway), approximately 480 km east of Thunder Bay, Ontario, approximately 225 km north of Sault St. Marie, Ontario, and approximately 650 km northwest of Toronto, Ontario. The property can be accessed by driving 2 km east on Highway 101 from Wawa and then turning south onto Surluga Road using a 2-wheel drive vehicle. During the winter months, the main access road to the property from Highway 101 is plowed. Areas off the main road can be accessed by snowmobiles and ATVs.

5.2 Local Resources and Infrastructure

Skilled and unskilled labour is expected to be available in Wawa because of the long mining history of the area. Wawa has a population of 2,905 people (2016) (https://www12.statcan.gc.ca/census-recensement/index-eng.cfm).

A 230-kV power line crosses the southern part of the property, and a second power line crosses the western part of the property. Wawa Municipal Airport is located 3.1 km south southwest of Wawa along highway 17 N, no commercial airlines operate from the airport. Canadian National Railway acquired Algoma Central Railway in October of 2001 and ceased operation of the Sault Ste Marie to Hearst line in July of 2015. Passenger service no longer exists to Hawk Junction, 23 km northeast of Wawa.

Enough water is available from lakes and streams on the property and surface rights for a large part of the property are held by Red Pine’s joint venture partners and are enough for any potential mining operation.

There is sufficient space for tailings storage areas, potential waste disposal areas, heap leach pad areas and potential processing plant sites.

5.3 Climate

The vicinity of the property to Lake Superior has a significant impact on the local climate. Environment Canada has recorded weather details in Wawa since 1981 (http://climate.weather.gc.ca) and showed that the warmest temperatures are recorded in July and August (daily mean 15°C; daily maximum 20.8°C). The coldest temperatures are typically recorded in January (daily mean −14°C; daily minimum −20.2°C). September and October are the months with the most rainfall (~122 mm and ~107 mm, respectively) and the highest snowfall occurs in December (~80 cm). Exploration and mining can be completed on the property year-round.

5.4 Physiography

The Town of Wawa is located at 289 metres above sea level (masl). The area of the property (Figure 5-1) is hilly with a range of elevations from 300 masl to 400 masl. Steep ridges exist locally. The property is forested with spruce, pine, poplar, and birch being the dominant species.

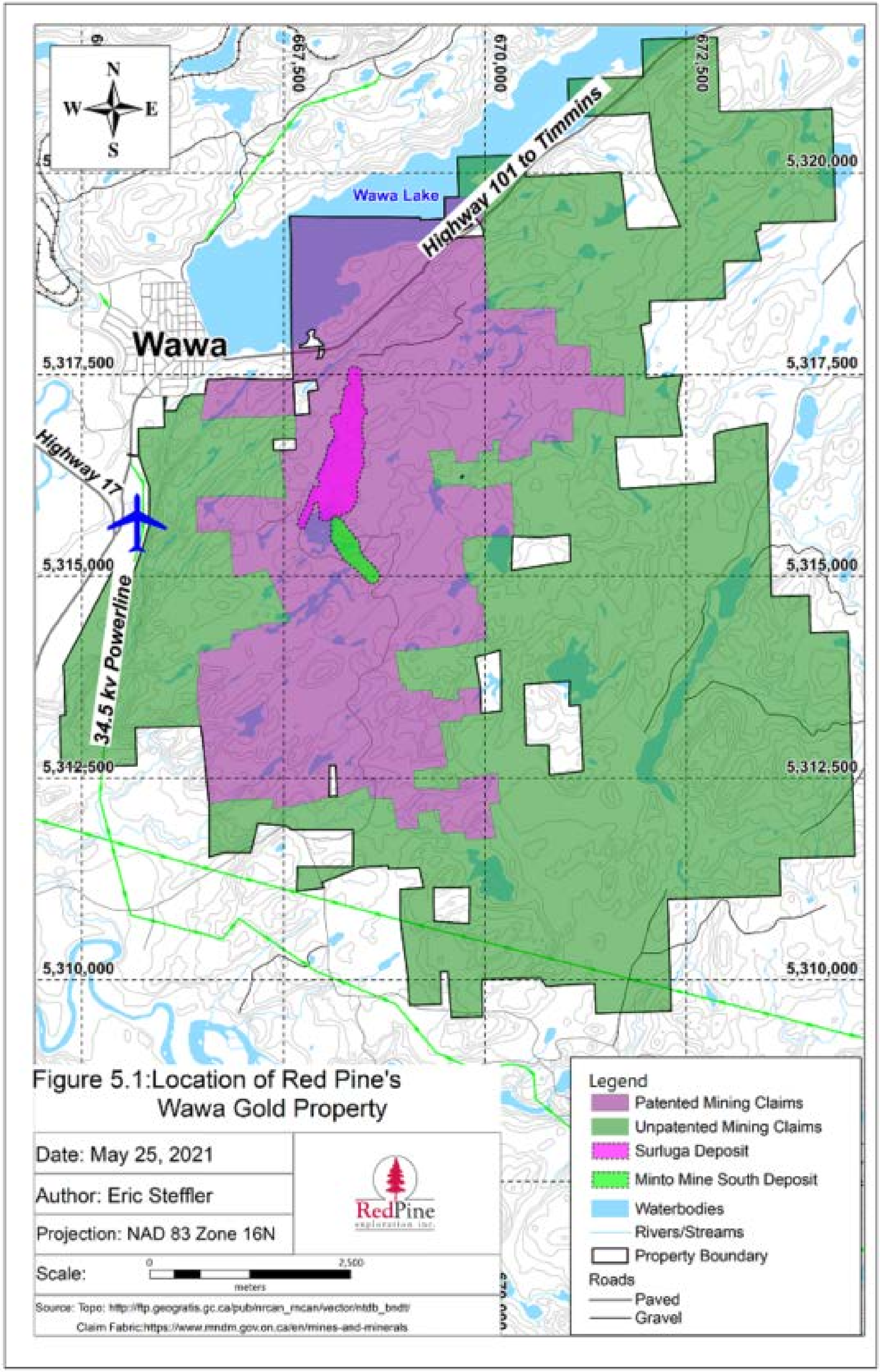

Figure 5-1: Location of Red Pine's Wawa Gold Property

6.0 HISTORY

The Project has a long exploration history that began in the late 1800s and has been discontinuously explored and worked since discovery. This long period of activity resulted in the exploitation of 8 gold mines. Preserved records of production have been summarized by Sage (1993) and Rupert (1997) who also provided a detailed overview of historical exploration that was extensive in some parts of the property (Table 6-1; Figure 6-1).

A total of 127,489 m of historical drilling from 580 surface diamond drill holes and 1,444 underground diamond drill holes have been recorded and compiled in Red Pine's drilling database (Figure 6-2). Widespread stripping and sampling of trenches, the sinking of shafts and the collection of numerous samples has also been completed on the property. This Item presents the history of exploration and mining activity that occurred on the Project and stages of the amalgamation of the different land packages that now form the current Project.

Table 6-1: Historical Gold Mine and Gold Production Once Active on the Wawa Gold Project

Mine	Tonnes Milled	Gold Grade (g/t)	Gold Recovered (oz)
Mariposa	8	72.99	19
Grace+Darwin	41,302	13.27	17,634
Parkhill	114,096	14.81	54,298
Van Sickle	8,372	6.34	1,710
Cooper	4,435	11.42	1,627
Jubilee	107,930	4.29	36,178
Minto	57,335	12.56	
Surluga	86,082	3.12	8,626
Total	**419,560**	**9.04**	**120,093**

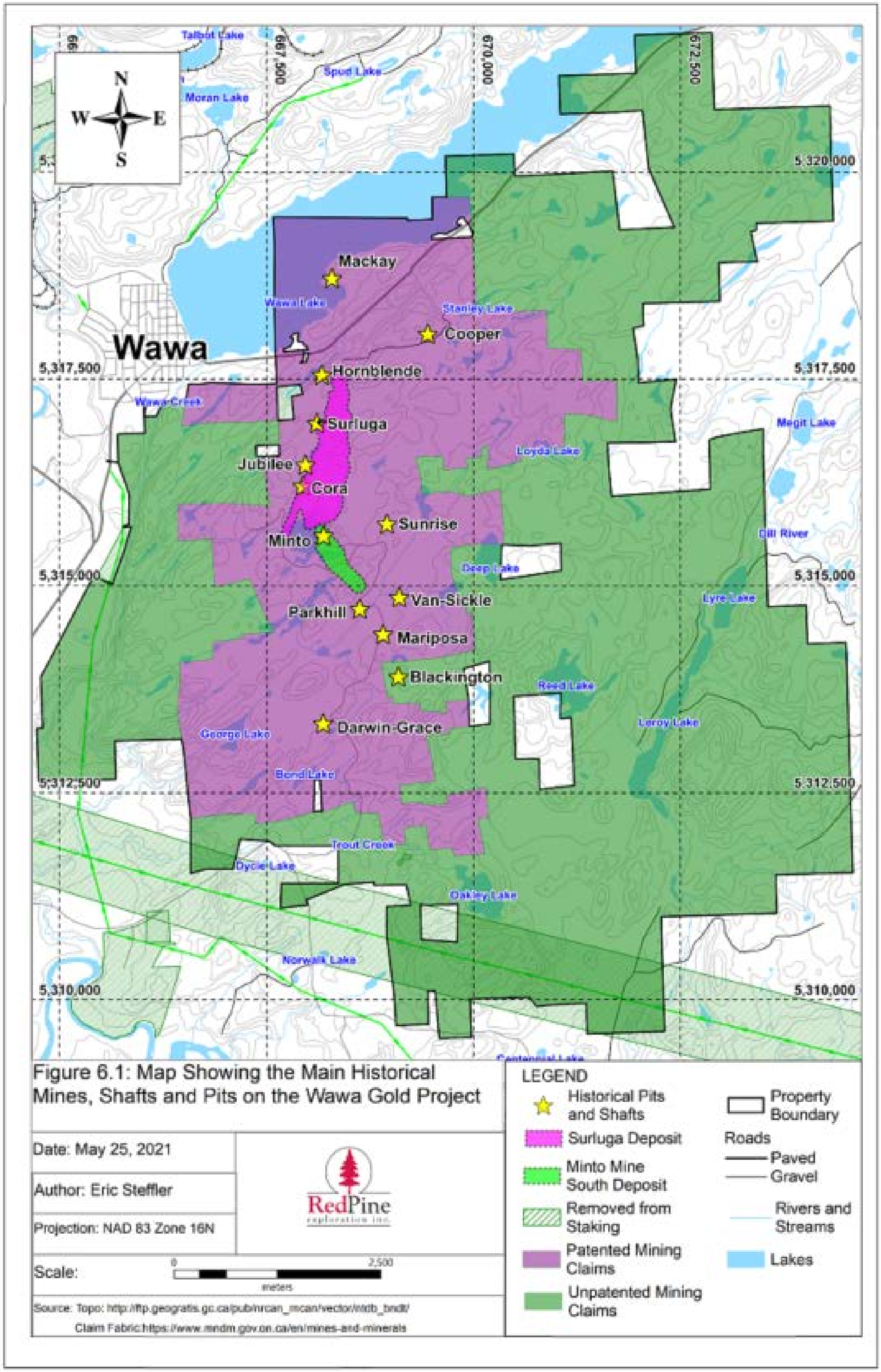

Figure 6-1: Map Showing the Main Historical Mines, Shafts, and Pits on the Wawa Gold Project

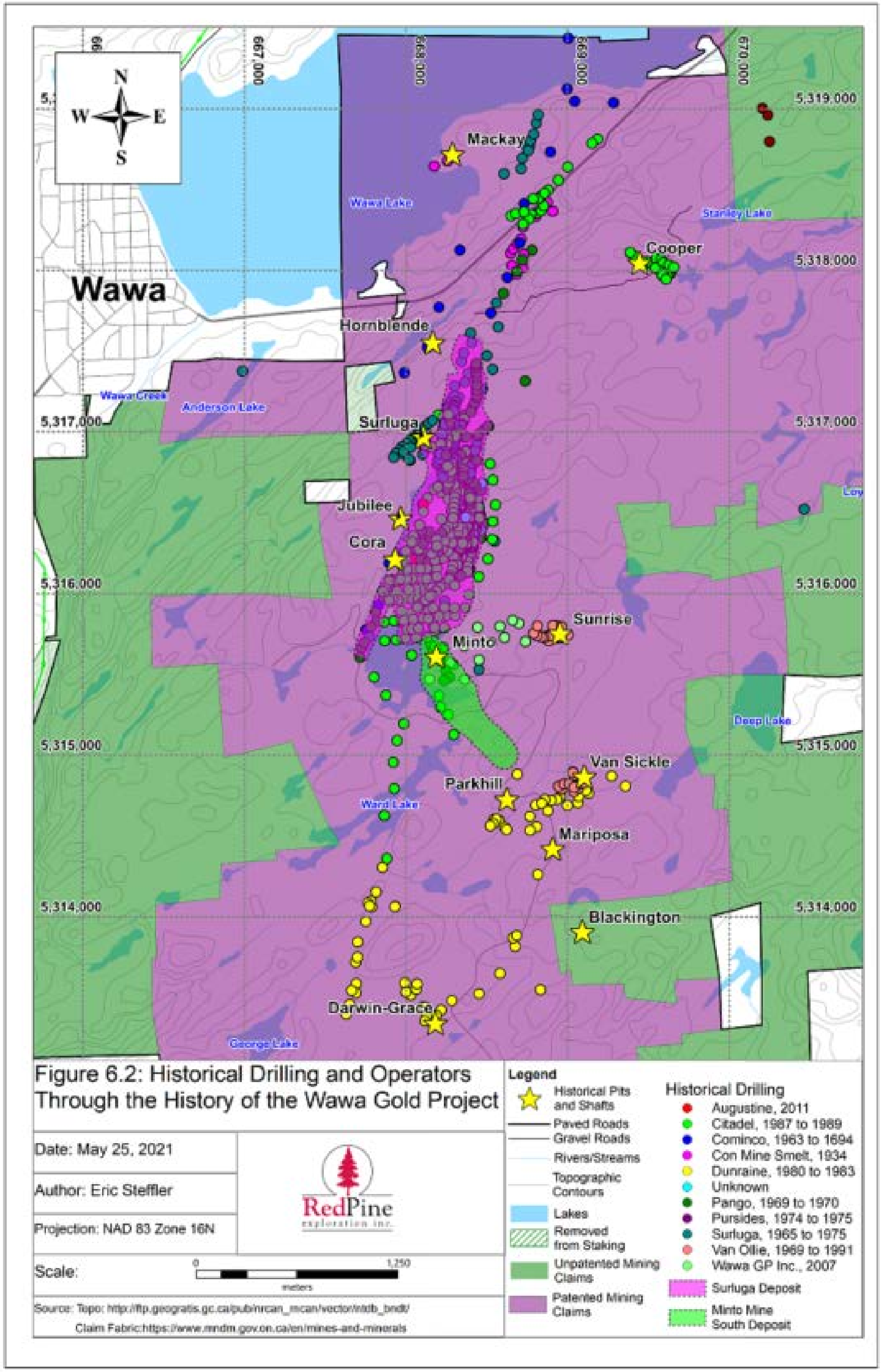

Figure 6-2: Historical Drilling and Operators though the History of the Wawa Gold Project

6.1 Discovery Period – 1897 to 1910

The Wawa area has been explored for gold since the 1860s (Rupert, 1997). Gold was first discovered by William Teddy in 1897 at Mackay Point and panned along the south shore of Wawa Lake at Mackey (Frey, 1987; Table 6-2). A staking rush followed the discovery and benefited from the change in claim staking adopted by the Ontario Government to encourage staking in 1895 (MacMillan and Rupert, 1990). This early rush period resulted in multiple discoveries.

Attempts to produce gold from bedrock started in 1897 with the sinking of multiple shafts and the digging of many test pits throughout the property. In 1897 and 1898 on the Jubilee Shear Zone west (west or W) of Jubilee Lake, a 103-foot (ft) shaft was sunk by the Great Northern Mining Company Ltd. In sericite schists (Sage, 1993). Gold values encountered in that shaft were described as negligible. In 1897, S. Beraildt discovered the Minto Mine and sold it to D. Tisdale who sank a 130-ft inclined shaft on the vein. Work on the Minto Mine was suspended in 1900. In 1898, Mr. A. B. Blackington and Mr. W.H. Lewis discovered the Blackington vein (now known as the Mariposa Vein). In 1900, the Edey Gold Mining Company sunk a 33-ft shaft and dug many 25-ft deep pits (Sage 1993).

Table 6-2 : Historical Exploration and Mining Activity during the Discovery Period of the Wawa Gold Project

Company	Years	Exploration	Results	Reference
William Teddy, and J.J. Mackay and J.L. Caverhill	1897-1900	Discovery of gold on the shore of Wawa Lake at Mackay point Pitting and trenching of auriferous quartz veins	Staking rush in the Wawa area and discovery of Wawa Gold Camp Sinking of an 8 by 10 by 40-ft shaft	Sage, 1993
Great Northern Mining Company Ltd.	1897-1898	Discovery of auriferous sericitic schists west of Jubilee Lake related to Jubilee Shear Zone; Sinking of a 103-ft shaft	Gold grade in shear zone were described as negligible; Operation abandoned	Sage, 1993
S. Beraildt and D. Tisdale	1897-1900	Discovery of the Minto Mine; Stripping and pitting; Sinking of a 133-foot inclined shaft	Records lost	Sage, 1993
Mr. A. B. Blackington and Mr. W.H. Lewis, and Edey Gold Mining Company	1898-1900	Discovery of the Mariposa Vein; Sinking of the 33-foot Blackington shaft on the vein; Digging of several 25-ft-deep pits	Records lost	Sage, 1993
Peter Nissen and Hornblende Mining Company	1899-1900	Discovery of the Hornblende Shear Zone; Sinking of two shafts and construction of a test mill near Hornblende Lake	Results lost	Sage, 1993
J. George and Algoma Commercial Company	1900-1903	Discovery of the Grace vein; Sinking of the 304-ft shaft on the Grace Mine	Gold production from 6,097 tons of ore through a 10 ton per day stamp mill ending in 1902; Company went into receivership in 1903	Sage, 1993
Sunrise Mining Company	1902-1903	Sinking of a 100-ft inclined shaft and a 20-ft vertical shaft on the Sunrise vein	Records lost	Sage, 1993
Mariposa Gold Company	1902-1904	Discovery of the northern extension of the Mariposa vein; Sinking of the 208-ft Mariposa shaft	Limited gold production of 18 oz of gold from two levels at 100 and 200 ft	Sage, 1993
Stanley Newton Syndicate	1903	Sampling, geological assessment	Several Au-bearing veins located; conclusions “Michipicoten gold district will become one of the important gold camps of America”	Boss, 1903 (41N15NE0039)
Lepage Gold Mining Company	1907-1910	Rehabilitation and operation of the Grace Mine	Production of 4,260 tons of ore from the Grace vein	Sage, 1993

In 1899, Mr. Peter Nissen discovered gold in the Hornblende shear Zone. Two inclined shafts of 22 ft and 32 ft were sunk and a test mill was constructed in 1900 near Hornblende Lake by the Hornblende Mining Company. In

1902 and 1903, the Mariposa Gold Company sunk the 208-ft Mariposa shaft, inclined at 80°NE in the footwall of the Mariposa Vein with two drifted levels at 100 ft and 200 ft (Sage, 1993).

Gold production on a larger scale started in 1900, following the discovery of the Grace vein. The Algoma Commercial Company started the Grace Mine by sinking a 304-ft shaft on the Grace vein and produced 6,097 tons of ore (Sage, 1993). Commercial gold production at the Grace mine ceased in 1903 and resumed between 1907 and 1910 when the mine was operated by the Lepage Gold Mining Company who produced 4,260 tons of ore.

6.2 Peak of Mining Activity – 1925 to 1938

During the period between 1910 and 1925, the Project saw an exploration and production hiatus characterized by brief periods of activity and many land transactions between different parties (Sage, 1993). The following period, extending from the mid-late 1920s to the late 1930s, saw the peak of mining activity on the property with several mines in operation. Production records exist for eight of the mines during this period (Cooper, Minto, Jubilee, Parkhill, Grace-Darwin, Mariposa, and Van Sickle, Figure 6-2, Table 6-2, Table 6-3, and Table 6-4, MacMillan and Rupert, 1990; Sage, 1993). The Cora vein, located in the Jubilee Shear Zone, was also briefly mined in the Cora shaft in 1927 and constitutes the first area mined of the Jubilee Shear Zone. The other larger mine from that period, extracting gold from the Jubilee Shear Zone, was the Jubilee Mine that produced 107,930 t at 4.29 g/t gold. The largest producer of that period was the Parkhill Mine, active between 1929 and 1938 and produced 54,298 oz of gold from 114,096 t at 14.81 g/t gold (Table 6-2). By the late 1930s, 15 mines produced gold in the Wawa area (Frey, 1987).

6.3 Surluga Mine Discovery and First Mining Operation – 1960 to 1976

The 1940s and 1950s was characterized by little exploration and salvaging operations at the Grace-Darwin and Deep Lake Mines. In the 1950s, Tom Surluga became quite active in the region and initiated many land transactions to consolidate separate land packages covering what is now the Surluga Deposit (Sage, 1993).

Exploration and development activity resumed in 1960 when Tom Surluga interested W.D. Sutherland in the region (Table 6 3 and Table 6 4). Sutherland and company continued the consolidation of the property and in 1960 to 1961 and drilled 25 holes in what is now the northern extension of the Surluga Deposit (Table 6 5). In 1962, following the successes of the 1960 to 1961 drill programs, Sutherland and company formed Surluga Gold Mines Limited, which continued land consolidation and surface drilling over the Surluga Deposit (Table 6 5). The property was optioned to Consolidated Mining and Smelting Limited in 1964 who drilled 20 surface diamond drill holes and dropped the option in June 1964. Between 1964 and 1968, Surluga Gold Mines Limited sank a 950-ft shaft with 7 levels, forming what is now known as the Surluga mine. The shaft included 7 levels spaced by 150 ft. In 1967, Surluga Gold Mines Limited constructed a 750 ton-per-day mill on the property and started an extensive underground drilling program (Table 6 6 and Table 6 7). The mill was in operation in 1968 and 1969, although underground development continued past 1969. Development of the Surluga Mine and exploration between 1969 and 1971, was in partnership with Pango Gold Mines Limited, which became part owner of the Surluga Mine, and was a subsidiary of Prado Exploration Limited, and Surluga Gold Mines Limited (Sage, 1993). Extensive surface drilling, drifting, and underground drilling in the Surluga Deposit occurred during that period, resulting in the discovery of the “6 to 5 ramp” high-grade zone.

Table 6-3: Historical Exploration and Mining Activity during the Peak of Mining Activity on the Wawa Gold Project

Company	Year(s)	Exploration	Results	Reference
Anglo Huronian Ltd. And Cooper Gold Mines	1926–1929	26 surface diamond drill holes and underground development at Jubilee Mine	No results reported	Rupert, 1997
Cooper Gold Mine Limited	1926-1930	Diamond drilling and exploration of Minto, Jubilee, Cooper and Trout Creek (Parkhill) mines Gold production from the Minto Mine	Exploration results lost; Sinking of a 3-compartment vertical shaft in the Minto Mine w ith levels at 125, 225 and 325 ft; 5,818 ft of lateral drifting	Sage, 1993
Pow er and Mines syndicate	1926-1930	Resumption of mining in the Grace Mine; Discovery of Nyman vein	Sinking of the shaft to 440 ft; Production of 750 tons of ore	Sage, 1993
Cora Gold Mines Limited	1927	Sinking of Cora shaft, 3 diamond drill holes	Records lost	Sage, 1993
Parkhill Gold Mines	1929–1938	Shaft started in 1930; Operated Parkhill mine	Production of 54,298 oz of gold; Bankruptcy in 1938; Ore grade material reported left at the 14th level	41N15NE0087 (Amalgamation of several reports)
Minto Gold Mines	1930–1939	Purchase and operation of the Cooper, Minto, and Jubilee Mines; Operation of a 75 ton per day cyanide mill	Gold production from the Cooper (1,627 oz of gold), Jubilee and Minto Mines (combined production of 36,178 oz of gold)	Sage, 1993 Rupert, 1997
L.A. Van Sickle and S.B. Smith	1933-1936	Discovery and operation of the Van Sickle mine	Sinking of a 289-ft shaft w ith levels at 119 and 261 ft; 50 ton per day mill erected; Production of 1,710 oz of gold	Sage, 1993 Rupert, 1997
Mackay Point Syndicate	1933/34	Metallurgical testing, 15 drill holes	Up to 17 g/t Au over 0.3 m in core	Mackey Point Syndicate, 1933 (42C02SE0021)
Darw in Gold Mines Limited	1934-1937	Gold production from the Darw in Mine	Deepening of inclined shaft to 500 ft; Sinking of a vertical shaft to 800 ft; 10,400 ft of drifting, 2,900 ft of cross-cutting and 4,000 ft of raising; Total gold production from Darw in-Grace mine of 17,634 oz of gold	Sage, 1993 Rupert, 1997
W.J. Hocking and J.C. Canfield	1934-1939	Discovery and operation of Deep Lake Mine	Construction of 20 ton per day mill; Sinking of a 200-ft tw o compartment shaft w ith tw o levels;	
Mackay Point Gold Mines Limited	1936-?	Trenching, pitting and 4,285 ft of diamond drilling at Mackay Point and on Root vein	Records lost	Sage, 1993
Waw a Gold Fields Limited	Pre-1934	Trenching and stripping of Figgus vein	Assays betw een $0.70 across 24 inches to $262.85 across 18 inches reported (gold betw een $20.5 and $35/oz in 1934)	Rupert (1979)

Table 6-4: Historical Exploration and Mining Activity during the First Development of the Surluga Mine

Company	Year(s)	Exploration	Results	Reference
Tom Surluga and W.D. Sutherland	1960-1962	Consolidation of land package over Surluga Deposit and 25 surface drill holes	Discovery of Surluga Mine S022 drilled in 1961contained 10.27 g/t gold over 15.12 m	Sage, 1993
Surluga Gold Mines	1962-1964	Surluga Gold Mines Incorporated; 64 surface drill holes	Extension of Surluga high-grade zone; Mine construction started; Intersection of broad zones of mineralization in the footwall of Jubilee Shear Zone in S087 and S088	Kuryliw, 1970 & 1972 (41N15NE0036)
Cominco	1964	Optioned property; mapping; geophysics (no specific method mentioned); 20 drill holes	Geophysics inconclusive; VG in one drill hole	Morris, 1964 (42C02SE9043)
Surluga Gold Mines	1964–1969	3 shafts sunk, levels 1, 2, 3 and 5 developed; Surluga mine brought into production; Surface and underground diamond drilling from 1964 to 1969	Mine operated from 1968 to 1969; drilling intersected numerous gold- rich zones leading to the discovery of the 6-5 ramp zone; One of discovery hole (U0769L6) contained 6.15 g/t gold over 66.29 m	Surluga Gold Mines Annual Report (41N15NE0063) Kuryliw, 1972 (41N15NE0036) Kuryliw, 1969 (41N15NW0037)
Pango Gold Mines Ltd.	1969-1971	JV with Surluga Gold Mines: expansion of underground workings, underground drilling; detailed surface mapping. Ground mag survey 1 Ground mag survey 2	New drifts and adits; “good” grades returned from drill holes (no assay data available). Ground mag survey 1: Oct-Nov 1969. Line spacing 400 ft, Tie spacing 2000 ft. An inclined gabbro plug E of Jubilee Lake containing disseminated pentlandite-chalcopyrite-pyrrhotite mineralization was found to have highly magnetic pyrrhotite-pentlandite but the gabbroic rock itself was found to have low magnetics, notable lower than the biotitic syenite intruded by the gabbro. A 1000 gamma anomaly was identified and noted to be associated with disseminated pentlandite-pyrrhotite mineralization in the gabbro, east of Jubilee Lake. The un-mineralized gabbro was noted to have a flat magnetic response. Additional magnetic anomalies are noted to be associated with peridotite plugs and are part of the Pango intrusive complex. Ground mag survey 2: April-July 1970. 74.82 line-mi at 400-ft line spacing, 3000-ft tie lines, and 100-ft station spacing. July 1970, 6.3 line-mi of ground mag completed at 100-ft stations. Magnetic flat response, indicating a uniform suite of rocks. One 2000 gamma anomaly was noted, adjacent to a carbonatite plug	Kuryliw, 1972 (41N15NE0036) Kuryliw, 1969 (41N15NW0037) Tindale, 1970a (42C02SE0208) Tindale, 1970b (41N15NE0008)
JDS Bohme Property	1970	Ground mag survey	Survey completed at 400-ft line spacing. Only magnetic linear anomalies noted, interpreted to be gabbroic intrusive dykes	Kuryliw, 1970 & 1972 (41N15NE0516)
Pango Gold Mines Ltd.	1971	Ground mag survey; 1 drill hole north shore of Reed Lake into mag anomaly	Ground mag survey: 100-ft intervals. Anomaly found – recommended for follow up drilling: ultramafic rock with magnetite, minor sulphides, no gold	Kuryliw, 1971a (41N15NE9035) Kuryliw, 1971b (41N15NE0088)
Surluga Gold Mines (under the name of Pursides Gold Mines Ltd.)	1973-1975	Mine reopened; new drifting on the 6th level, decline between 6th and 7th level; underground diamond drilling	Resources delineated based on drilling	41N15NE0036 (Amalgamation of reports. P. 79)

Company	Year(s)	Exploration	Results	Reference
Consolidated Morrison Explorations Ltd	1974	Airborne magnetic and radiometric survey (Aerodat)	Mag and radiometric anomaly related to carbonatite	Boyko, 1974 (42C02SE1210)
Pursides Gold Mines	1974-1975	VLF-EM survey	VLF-EM: Summer 1974, w inter 1975. 8 anomalies detected, 1 recommended for follow -up	Crone, 1975 (41N15NE0082)

Pango Gold Mines completed limited drilling on other prospects on the property (Cooper Mine, Reed Lake mafic-ultramafic complex) as well as surface exploration, geological mapping, and geophysical surveys. Limited exploration conducted by other parties also took place on the property in that period. In 1973, Surluga Gold Mines changed its name to Pursides Gold Mines Limited and conducted an underground exploration program in the Surluga Deposit and the development of levels 6 and 7. All exploration and development activities on the Surluga Deposit stopped in 1975 and Pursides Gold Mines Limited was forced in receivership in 1976.

Table 6-5: Historical Surface Diamond Drill Holes Completed on the Wawa Gold Project in the 1960 to 1975 Period

Company	Year Drilled	No. of Holes	Meterage (m)
Sutherland	1960	8	744
Sutherland	1961	17	2,136
Surluga	1962	51	5,976
Surluga	1963	13	2,093
Cominco	1964	20	2,633
Surluga	1968	16	1,673
Surluga	1969	13	2,875
Pango	1969	43	6,811

Table 6-6: Historical Underground Diamond Drill Holes Completed in the Surluga Deposit in the 1960 to 1975 Period

Company	Year Drilled	No. of Drill Holes	Meterage (m)
Surluga	1967	9	244
Surluga	1968	261	8,276
Surluga	1969	57	1,184
Pango	1969	309	10,654
Pango	1970	100	3,596
Pursides	1974	31	787
Pursides	1975	170	4,217
Surluga	1975	1	6
Log Missing	?	47	1,749

Table 6-7: Highlight from Surface Holes Drilled in the Surluga Deposit between 1960 and 1969

Hole No.	Year Drilled	From (m)	To (m)	Interval (m)*	Au (g/t)
S012	1961	35.81	87.94	52.13	1.31
S022	1961	71.35	133.84	62.49	2.91
S023	1961	76.35	126.49	50.14	1.96
S028	1962	57.61	121.31	63.7	2.78
S030	1962	78.03	132.92	54.89	1.01
S048	1962	80.16	132.89	52.73	1.16
S056	1962	73.61	109.88	36.27	1.5
S062	1962	56.39	91.29	34.9	2.39
S063	1962	16.28	44.01	27.73	2.46
S141	1969	118.57	184.71	66.14	0.77

Note: *Intervals listed here do not represent true thickness.

6.4 Exploration Concentrated the Southern Part of the Wawa Gold Project – 1980 to 1986

The bankruptcy of Pursides Gold Mines, and its reorganization as Citadel Gold Mines Inc. ("Citadel") in 1980, corresponds to a hiatus in development and exploration activities on the Surluga Deposit. Between 1982 and 1986, Citadel consolidated various properties from previous owners into one land package. Limited surface exploration, till sampling and geophysics (ground magnetic and VLF-EM surveys) were done by Pango Gold Mines on Citadel-Pango land package (Table 6-8).

Most of the exploration activities between 1980 and 1986 were conducted by or on behalf of Dunraine Mines Ltd. ("Dunraine") and were centered on the historical Parkhill, Van Sickle, and Grace-Darwin gold mines (Table 6-8). In 1980, Dunraine focused its efforts on drilling around the Parkhill and Van Sickle Mines. In 1981, Dunraine drilled a topographic lineament named Darwin Shear Zone that is now recognized as the extension of the Jubilee Shear Zone south of the Parkhill Fault (Table 6-9**;** Harper 1981a, b). Between 1982 and 1984, Dunraine continued drilling as well as trenching and surface mapping, with most of the efforts focused on the Jubilee Shear Zone and the Grace-Darwin mine with limited testing of other known gold showings south of the Parkhill fault.

Dunraine also dewatered, sampled, and mapped the upper 6 levels of the Parkhill Mine and tested the grade of the Parkhill Mine tailings (Gignac, 1983; Studemeister, 1983, 1984). Dunraine also proposed a syn-genetic gold model to explore the property. In 1986, Goldun Age Resources Inc. entered an option agreement with Dunraine in 1986 and continued the dewatering of the underground workings on the Parkhill property. The underground workings were mapped, sampled, and evaluated. Tilsley (1986) concluded that gold remained in pillars, floors, and backs of stopes, particularly above the 1st level, but that little minable material was left below the third level. He reports that, broken material and material washed from the stopes had grades comparable to the ones reported from the stopes except for material from the Mill Vein on third level, which had grades up to 3 oz per ton (102.86 g/t Au; average grade 24 g/t Au; Tilsley, 1986). Tilsley (1986) also concluded, that the mined lenses would not extend up dip to the property boundary and that there are no undiscovered lenses.

Table 6-8: Historical Exploration during the 1980 to 1986 Period

Company	Year(s)	Exploration	Results	Reference
Golden Goose Gold Mines Ltd.	1978	Acquires Deep Lake Mine		Rupert, 1990 (41N15NE9036)
Dunraine Mines Ltd.	1980	38 surface drill holes (3385.1 m); sampling of Parkhill tailings (235 samples)	Best intersection in D80-18: 46.22g/t Au over 0.88 m; average grade of Parkhill tailings 0.86 g/t	Harper, 1981a (41N15NE0054)
Golden Goose Gold Mines Ltd.	1980	35 channel samples of Surface expression of Deep Lake Mine Ground mag survey VLF-EM survey	Below detection limit to 0.91 g/t (average: 0.31 g/t Au); Rupert (1980a) concluded that no economic potential exists at the mine.	Rupert, 1980a (41N15NE9036) Rupert, 1980b (41N15NE0078)
Pango Gold Mines Ltd.	1980	Ground mag survey	Ground mag and VLF-EM: no significant anomalies noted; Two structural/lithological features identified: 1. E-W trend related to metavolcanic rocks, 2. NW-SE trend related to diabase dyke. Two oval shaped anomalies identified, mapped as gabbroic- diorite intrusions	Kuryliw, 1980 (41N15NE0077) Piaza, 1984 (41N15NW0026)
Dunraine Mines Ltd.	1981	20 surface drill holes on Darwin Shear Zone (4919.7 m); dewatering of Parkhill mine	Best intersection in D81-2: 34.97 g/t Au over 0.15 m	Harper, 1981b (41N15NE0061)
Dunraine Mines Ltd.	1982	8 surface drill holes (410.6 m); continued dewatering of Parkhill	Best intersection in D82-4: 7.61 g/t Au over 1.5 m	Harper, 1982 (41N15NE0061) Gignac, 1983 (41N15NE0055)
Pango Gold Mines Ltd.	1982	VLF-EM survey 1 (April 19-21, 1982) VLF-EM survey 2 (April-May 1982)	VLF-EM survey 1: 3 conductors identified, two recommended for drilling VLF-EM survey 2: 10 conductive anomalies identified, thought to be caused by bedrock sources; IP recommended as follow-up tool for prioritization	Kuryliw, 1982 (41N15NE0057) Piaza, 1984 (41N15NW0026)
Northern Horizon Resources Ltd.	1981	Ground mag survey	300-ft line spacing. One horseshoe-shaped magnetic anomaly identified, interpreted as possible folded structure	Kuryliw, 1981 (41N15NE0524)
Canbec Explorations Ltd.	1983	Ground mag survey (May 1983) VLF-EM survey (May- June 1983)	Ground mag survey: 5.9-line mi were run at 200-ft and 400-ft line spacing, with station spacing of 50 ft over 3 claims. Results showed weak overall magnetic signature, with anomalies identified as diabase dykes and felsic volcanic flow unit. VLF-EM survey: 5.9 line-mi at 200-ft and 400-ft line spacing and 100-ft station spacing. One anomaly noted, trending N-S and in strike with the Darwin Shear. Noise related to the power line was noted.	Archibald, 1983a (41N15NW0029) Archibald, 1983b (41N15NW0029)

Company	Year(s)	Exploration	Results	Reference
Dunraine Mines Ltd.	1983	Mapping, drilling (6 drill holes; 738.2 m): 83-1 to -6; rock sampling, VLF- EM Survey	Outlined shear-zone hosting Au; proposed syngenetic genesis; 0.9–1.8 m of 3.4 g/t in 3 drill holes; geochemical survey indicated Au only near Darwin shear VLF-EM survey: Phase 1 covered the Darwin EW grid extending from Moody Pit to the Darwin Shear. Phase 2 covered southern half of Darwin Shear. The northern half of the Darwin Shear was not able to be surveyed due to remanence of the power and telephone lines; 5 conductors were found in the vicinity of the Darwin Mine; The Darwin Shear was noted to be a conductive structure, and areas where E-W striking conductors intersect the structure were considered prospective. Geochemical surveys were recommended for follow-up	Studemeister, 1983 (41N15NE0041)
Northern Horizon Resources Ltd.	1983	Dighem III FDEM	April 1-4, 1983, 298 line-km and 300 m line spacing, 30 m EM sensor height, 45 m mag sensor height. 20 anomalies identified as moderate-high priority	Smith and Dvorak,1983 (42C02SE0505)
Pango Gold Mines Ltd.	1984	Till sampling: 47 overburden holes	Anomalous zones near faults and shears identified but no economic significance attributed to anomalies	Gillis, 1984 (41N15NW0027)
Monte Christo Resources	1984	Ground mag survey VLF-EM Survey Geologic mapping EM-17 HLEM 3 drill holes targeting conductors (W-1, -2, -2A, -3)	Ground mag and VLF-EM survey: Completed on 11 claims in Feb 1984 and April 1984. A total of 18.7 line-mi of mag data and 16 line-mi of VLF-EM data were collected. One large conductive anomaly was found to be high priority and recommended for drill testing with three drill holes Geologic mapping: shear zones identified during mapping. EM-17 HLEM: July 1984. 6 line-mi collected at 300-ft coil separation, as a follow-up survey on the conductors identified by the VLF survey. Weak HLEM conductors were noted in the same trend, interpreted as a possible shear zone, and were recommended for drilling. Drilling: one drill holes intersected shear zone with "consistent anomalous gold values," two were abandoned	Kuryliw, 1984a (41N15NE0048) Kuryliw, 1984b (41N15NE0064)
Dunraine Mines Ltd.	1984	5 surface drill holes (887.9 m)	10.29 g/t Au over 0.3 m	Studemeister, 1984 (41N15NE0046)

Table 6-9: Historical Drilling by Dunraine Mines on the Wawa Gold Project during the 1980 to 1986 Period

Year	No. of Drill Holes	Total Metres	Best Intersection*	Main Target of Program
1980	38	3,385.10	46.22 g/t Au over 0.88 m	Parkhill and Van Sickle mines
1981	20	4,919.70	34.97 g/t Au over 0.15 m	Darwin Shear Zone
1982	8	410.6	7.61 g/t Au over 1. 5 m	Darwin Shear Zone
1983	6	738.2	5.96 g/t Au over 1.5 m	Grace-Darwin Mine
1984	5	887.9	10.29 g/t Au over 0.3 m	Grace-Darwin Mine

Note: *Intervals listed do not represent true thickness.

6.5 Second Mining of the Surluga Mine by Citadel Gold Mines – 1986 to 1991

6.5.1 Citadel Gold Mines

In 1986, the Surluga mine was dewatered, the Surluga mine shaft was refurbished, and the mill was reconstructed. A 3-year program of surface and underground drilling was started, including a mapping program throughout the Surluga Deposit as part of the restarting of the mining operation (Table 6-10 to Table 6-13; Rupert, 1997). In 1988, to optimize its exploration and development model of the Surluga Mine, Citadel commissioned a study of the structural setting of the Surluga deposit. Helmstaedt (1988) concluded that the quartz-gold veins predate some of the ductile shear movement along the Jubilee Shear Zone and that the geometry of the high-grade zone of the deposit is controlled by a strong stretching lineation in the shear zone. Helmstaedt (1988) described the stretching lineation as shallowly plunging to the S-SE. Citadel also commissioned an ore recovery study, including gravity concentration by various means, flotation, and cyanidation (Lakefield Research, 1988). Cyanidation recovered ~90% of the gold, sulphide flotation ~86%. Gravity concentration using the Knelson Concentrator was unsuccessful but upgrading gravity with a Mozley Mineral Separator recovered +20% of contained gold. Mining in the Surluga Deposit stopped again, in 1989 because of the mill inefficiency, the un-optimized design of the mine, including the difficulties of mechanizing production and problems with dilution control because of the cryptic boundaries of the high-grade zone (E. Hoffman, pers. Comm.). One exploration success following the end of the mining operations in 1989 was the discovery of the Old Tom zone, in the southernmost part of the Surluga Deposit.

During the Surluga Mine operation and development, between 1986 and 1990, Citadel also undertook an extensive exploration program of its property to find additional gold to feed the newly constructed mill. This included diamond drilling of Root and Cooper-Ganley vein systems, stripping, trenching, channel sampling and geological mapping, as well as many airborne and ground geophysical surveys. Citadel also continued the consolidation of the Wawa Gold Property by optioning the Henderson property east of Leroy Lake in the southeast corner of McMurray Township in 1987. Osmani (1987) mapped the property and concluded that the mineralization was independent of rock-type and structurally controlled. He recommended further exploration including geophysical surveys, mapping, and prospecting on the property. In 1987, Citadel purchased from Dunraine the Parkhill and Grace-Darwin Mine properties (Rupert, 1997)

Table 6-10: Historical Exploration and Mining Activity during the Second Development of the Surluga Mine

Company	Year	Exploration	Results	Reference
Citadel Gold Mines	1986-1987	Surluga mine dewatered; underground development; surface and underground drilling. Mill refurbished; mapping/sampling on Henderson property (SE McMurray Twp.)	Drilling: Intersected 20.42 m at 3.74 g/t Au Dighem III: 454 line-km flown with Dighem III FDEM in October 1986. Several discrete bedrock conductors identified and recommended for follow-up work. Mineralization independent of host rock but structurally controlled (140°–160°, 010°–060°)	Rupert, 1997 Kilty, 1986 (42C02SE0504) Osmani, 1987 (41N15NW0028)
Robert Henderson	1986	Dighem III Survey Terraquest airborne mag VLF-EM survey	Terraquest fixed-wing airborne magnetic and VLF-EM survey flown July 22, 1986. 100 line-km at 200 m line spacing and 100 m terrain clearance. Several structural and conductive anomalies were located and recommended for follow-up surveying	Barrie, 1986 (41N15NE0033)
Allied Northern Resources Ltd.	1988	Mapping, rock sampling Ground mag VLF-EM survey 1 Ground mag VLF-EM survey 2 Ground mag VLF-EM survey 3	Mapping, rock sampling: six rock types observed and described; various quartz veins observed (no assay results available) Ground mag, VLF-EM survey 1: Aug 12-Sept 17, 1988. 19.25 line-km of ground mag and VLF-EM collected. Ground mag station spacing = 25 m. Magnetic results highlight diabase dykes and geologic contacts. VLF-EM results identified 2 high-priority conductors Ground mag, VLF-EM survey 2: Aug 12-Dec 10, 1988. A total of 50.85 line-km of ground mag and VLF-EM were conducted on 31 claims at 120 m line spacing. No significant anomalies were identified. Ground mag, VLF-EM survey 3: Aug 15-Nov 10, 1988.	Sears and Gasparetto, 1988 (41N15NE0027) Sears, 1989 (41N15NW0021) Sears and Gasparetto, 1989 (41N15NW0022)
Citadel Gold Mines	1988	Ore recovery studies Structural studies	Cyanidation recovered 90% of the gold, flotation 86% Gold-bearing quartz veins predate shearing along Jubilee Zone High-grade zone geometry and distribution in Jubilee Shear Zone controlled by stretching lineation	Lakefield Research,1988 Helmstaedt, 1988
Citadel Gold Mines	1988-1990	Exploratory underground development; Underground and Surface drilling; Panel sampling in Surluga mine; Ground mag survey IP survey 1 Ground mag survey 2 Ground mag survey 3 Surluga mine closed in 1989 Extensive surface exploration program throughout the property. Reinterpretation of geophysical surveys, Trenching; mapping in Deep Lake area, Acquisition of Parkhill and Grace-Darwin from Dunraine	Discovery of Old Tom and Peter Zones in the southern extremity of Surluga Deposit; Ground mag survey 1: Summer 1988 on Block B to establish base data for future mapping. IP survey 1: Pole-dipole and gradient array methods in time-domain IP mode. Results found the shear zone was not distinguishable from background Ground mag survey 2: June-July 1988. Targeted follow-up of anomalies on Block C. Line spacing 400 ft. Several magnetic anomalies were identified. Ground mag survey 3: Dec 1988 – Mar 1989. Ground magnetic survey conducted at 400-ft line spacing to improve resolution of airborne magnetic anomaly. The anomaly was interpreted as iron formation. Geophysics deemed of “marginal utility” but soil sampling effective. Stripping and/or sampling, and geological mapping of Minto, Mariposa, Parkhill, Grace-Darwin, Darwin Shear Zone Drilling and stripping of Root and Cooper Ganley. Regional exploration throughout the property anomalous Au grades in Deep Lake area but economic questionable (best results 0.41 g/t Au)	Rupert and Leroy, 1989 (42C02SE0220) Rupert, 1989a (41N15NE0023) Rupert, 1989b (41N15NE0021) Rupert, 1990 (42C02SE0500) Reed, 1990 (42C02SE0500, p. 27) Rupert, 1997

Company	Year	Exploration	Results	Reference
Allied Northern Resources Ltd.	1989	Mapping	Mapping: 4 target areas delineated	Sears, 1989 (41N15NW0021)
Allied Northern Resources Ltd.	1990	Mapping, soil, and rock sampling, 6 drill holes (AN-90-1 to 6)	3 vein systems located, several weak soil anomalies; drilling intersected the Villeneuve vein	Sears, 1990b (41N15NE0014) Sears, 1990c (41N15NE0013) Sears, 1990e (41N15NE0025)
Van Ollie Exploration Ltd.	1990	Mapping, soil geochemistry, drilling Ground mag and VLF-EM survey	Mapping, soil geochemistry, drilling: more Au anomalies in soil over intrusive rocks than volcanic rocks; down dip of Mickelson vein system confirmed Mag, VLF-EM: Jan 11-Feb 4, 1990. 41.1 line-km of magnetic data and 38.1 line-km of VLF-EM data collected. Several magnetic and conductive anomalies were identified from the respected surveys and recommended for follow-up work.	Sears, 1990a (41N15NE0011) Sears, 1990d (41N15NE0016) Reid, 1990 (41N15NE0011)
Van Ollie Exploration Ltd.	1991	6 drill holes (195.76 m) on Sunrise #1 vein (S-91-0 to -6)	Best assays between 1.23 and 4.87 g/t Au but no intervals reported	Delisle, 1991(41N15NE0069)

Table 6-11: Historical Surface Diamond Drill Holes from the Second Development Stage of the Surluga Mine

Company	Year Drilled	No. of Drill Holes	Meterage (m)
Citadel	1987	100	18,089.94
Citadel	1988	30	4,879.91
Citadel	1989	51	6,812.36

Table 6-12: Historical Underground Diamond Drill Holes from the Second Development Stage of the Surluga Mine

Company	Year Drilled	No. of Drill Holes	Meterage (m)
Citadel	1987	396	12,430.43
Citadel	1988	9	669.95
Citadel	1989	55	3,205.27

Table 6-13: Highlights from Citadel Surface Drilling on the Surluga Deposit between 1987 and 1989

Hole No.	From (m)	To (m)	Interval (m)*	Au (g/t)
S204	147.22	202.24	55.02	1.55
S232	177.09	221.29	44.2	3.88
S240	46.63	74.22	27.59	4.29
S273	187.76	230.74	42.98	2.82
S274	194.98	247.2	52.22	1.56
S279	146.55	168.55	22	2.74
S280	199.65	244.3	44.65	1.73
S285	112.47	167.03	54.56	1.42
S290	213.66	255.73	42.07	1.77
S307	290.93	347.48	56.55	1.57
S327	43.89	66.14	22.25	2.56

Note: *Intervals listed do not represent true thickness.

6.5.2 Van Ollie Exploration

Between 1989 and 1991, Van Ollie Exploration Ltd. ("Van Ollie") conducted an extensive exploration program around the Sunrise-Mickelson vein system and the Van Sickle mine; that included diamond drilling, stripping, channel sampling and surface mapping. Several veins, including the Van Sickle Vein, Captain Vein and Road Vein, were stripped. Mapping, prospecting and rock sampling delineated several targets that correspond with zones of soil and geophysical anomalies. The Van Sickle vein system was traced for 200 m and Sears (1990a) concluded it was the extension of the Park Hill vein system.

Van Ollie drilled thirty-one diamond drill holes totalling 1,445.88 m in 1989, thirty-four diamond drill holes totalling 1,447.22 m in 1990 and six diamond drill holes totalling 195.76 m in 1991 (Table 6-14, Table 6-15). The drilling targeted the Van Sickle, Mickelson, and Captain Veins. In 1991, Van Ollie drilled six diamond drill holes totalling 195.76 m at the Sunrise No. 1 Vein (Delisle, 1991). The best assay results ranged from 1.23 g/t Au to 4.87 g/t Au; however, the intervals for these grades were not reported in Delisle (1991).

Table 6-14: Historical Surface Diamond Drill Holes Drilled by Van Ollie

Company	Year Drilled	No. of Holes	Meterage (m)
Van Ollie	1989	31	1,445.88
Van Ollie	1990	34	1,445.22
Van Ollie	1991	6	196.76

Table 6-15: Intersection Highlights from Historical Holes of Van Ollie

Hole No.	From (m)	To (m)	Interval (m)*	Au (g/t)	Target
VO-89-01	1.83	2.19	0.36	142.42	Van Sickle Mine
VO-89-01	1.22	1.52	0.3	44.91	Van Sickle Mine
VO-89-01	2.49	2.8	0.31	17.55	Van Sickle Mine
VO-89-02	6.76	6.91	0.15	38.19	Van Sickle Mine
VO-89-04	27.74	27.91	0.17	34.9	Van Sickle Mine
VO-89-10	45.54	45.62	0.08	11.86	Mickelson
VO-89-12	28.65	28.93	0.28	10.08	Mickelson
VO-89-14	2.97	3.15	0.18	57.12	Van Sickle Mine
VO-89-14	5.31	5.54	0.23	32.57	Van Sickle Mine
VO-89-14	5.87	6.1	0.23	14.67	Van Sickle Mine
VO-89-23	31.55	31.85	0.3	75.43	Mickelson
VO-89-23	30.23	30.3	0.07	41.73	Mickelson
VO-89-24	16.74	17.22	0.48	81.63	Mickelson
VO-90-39	10.62	10.72	0.1	109.89	Van Sickle Mine
VO-90-43	34.31	34.44	0.13	28.77	Mickelson
VO-90-45	12.32	12.75	0.43	14.64	Van Sickle Mine
VO-90-50	32.74	32.92	0.18	20.95	Van Sickle Mine
VO-90-51	29.41	30.48	1.07	46.87	Mickelson
VO-90-51	28.19	29.41	1.22	29.01	Mickelson
VO-90-53	37.85	38	0.15	53.55	Mickelson
VO-90-63	13.01	13.14	0.13	23.55	Mickelson
VO-S-91-6	8.73	8.93	0.2	14.71	Sunrise

Note: *Intervals listed do not represent true thickness.

6.5.3 Allied Northern Resources

In 1988, Allied Northern Resources completed a geological (mapping and sampling) and geophysical (magnetics and VLF-EM) survey (Sears and Gasparetto, 1988). Several quartz veins were found, but assay data is not available. In 1990, Allied Northern Resources completed small exploration programs on their claims in the southern part of McMurray Township at the boundary of McMurray Township with Rabazo and Naveau townships. The program consisted of prospecting, stripping, rock and soil sampling and mapping (Sears, 1990b). Three quartz-carbonate veins and several weak soil anomalies in the eastern part of the property were delineated. One of the veins had low gold values. In addition, six diamond drill holes totalling 320.95 m were drilled (Sears, 1990c). All six drill holes intersected the Villeneuve vein system (Sears, 1990e).

6.6 Optioning of the Surluga Deposit – 1990 to 1996

The optioning period marks a contrasted transition in the evaluation and exploration model of the Project (Table 6-17). Following the difficulties of selective underground mining, this period represents the first attempts to quantify if a large tonnage and lower grade resource amenable to open pit mining exists on the Project.

6.6.1 Pan Orvana Resources Inc. – 1990 to 1992

Pan Orvana Resource Inc. ("Pan Orvana") entered into an option agreement with Citadel to evaluate the Surluga Deposit. Between 1990 and 1992, Pan Orvana reviewed historical information including drilling. Pan Orvana also completed a soil sampling survey that delineated an Au anomaly over the main shear zone, sampled the underground workings of the Jubilee Mine after dewatering the mine and sampled unsampled sections of a selection of historical holes (Bradshaw, 1991). The best intersection in unsampled material in the Jubilee Shear Zone was in hole S240 in which unsampled core contained 5.04 g/t gold over 5.18 m. From the limited sampling they have done, Bradshaw (1991) also observed that 10% of the unsampled core in the Jubilee Shear Zone contains over 0.684 g/t gold. Bradshaw (1991) concluded based on the underground sampling that "significant gold grades" were left in the margins of the Jubilee Mine workings, and that the grade, thicknesses and sub-cropping nature of the Surluga Deposit are favorable for open pit mining, but that additional work remains to define a viable resource. Pan Orvana dropped the option in 1992.

6.6.2 Goldbrook Exploration Limited – 1996 to 1997

In 1996, Goldbrook Exploration Limited ("Goldbrook") entered into an option agreement with Citadel to evaluate the Surluga Deposit. Bowdidge (1996) reviewed all the available data for the Surluga Deposit and postulated that the Jubilee Shear Zone is a large-scale structure up to 150 ft thick and contains widespread low-grade mineralization. Using only the surface hole results, Bowdidge evaluated that a substantial resource of low-grade mineralization existed in the Jubilee Shear Zone (Table 6-18). However, following Part 2.4 of the NI 43-101 Standards of Disclosure for Mineral Projects, the QP has not completed any work to classify this historical estimate as a current Mineral Resource or Mineral Reserve; and as such, Red Pine is not treating this historical estimate as a current Mineral Resource or Mineral Reserve. This historical estimate does not state Mineral Resource categories, as defined by CIM Definition Standards for Mineral Resources and Mineral Reserves (May 2014) and the QP is unaware of what key assumptions, parameters or methods were used to prepare this historical estimate; and therefore, this historical estimate should not be relied upon. Current Mineral Resource estimates are stated in Item 14 of this Report. Because Goldbrook was unable to raise funds under market conditions to meet their financial commitments, Citadel dropped the option with Goldbrook in 1997 (Rupert, 1997).

Table 6-16: Historical Work Performed during the Optioning Period of the Surluga Deposit

Company	Year	Exploration	Results	Reference
Pan-Orvana (option agreement with Citadel)	1990-1992	Soil sampling, review of historical data; sampling of underground workings	Au anomaly over the shear zone; sampling revealed "considerable variability" in gold content of the shear zone; Sampling of unsampled historical holes uncovered 5.04 g/t gold over 5.18 m in S240. Possibility that sufficient low-grade resources available; Additional work necessary to define a viable open pit resource	Bradshaw, 1991 (42C02SE0518)
Goldbrook Exploration Limited	1996-1997	Review of historical data; Resource evaluation in the Surluga Deposit	A substantial resource of low-grade mineralization exists in the Jubilee Shear Zone; Citadel revoked the option in 1997 as Goldbrook did not meet the financial commitments	Bowdidge, 1996 Rupert, 1997

Table 6-17: Historical Resource Estimate for the Surluga Deposit by Bowdidge (1996)

Cut-off Grade (g/t Au)	Tonnes	Au (g/t)
1.03	9,319,000	1.75
1.54	6,594,000	2.02

Note: This Mineral Resource estimate is historical in nature and the QP has not completed sufficient work to classify this historical estimate as a current Mineral Resource; and therefore, it should not be relied upon. Current Mineral Resource estimates are stated in Item 14 of this Report.

6.7 Recent Period – Redevelopment of the Surluga Deposit 2007 to 2016

The period between the end of extensive exploration activity in 1991 and the resumption of the large drill programs in 2007 only saw sporadic and smaller-scale exploration programs completed (Table 6-18). In 1997, Citadel acquired the properties of Van Ollie exploration, including the Sunrise-Mickelson vein systems and the Van Sickle mine (Rupert, 1997). Following 2007, the Surluga Deposit and its surroundings have seen extensive exploration.

Table 6-18: Exploration Programs of the 1991 to 2007 Period

Company	Year	Exploration	Results	Reference
Transgold Exploration and Investment Inc.	1994-1995	Mapping, sampling (1994); VLF-EM survey HLEM survey Ground mag survey Prospecting, rock/soil sampling (1995) in Leroy Lake area	No significant Au results in 1994; weak B-horizon soil anomaly (57 ppb) All ground geophysics conducted between July -September 1995, on a 100 m line-spaced grid. VLF-EM: 25 m station spacing, HLEM: 25 m station spacing, Ground mag: 12.5 m station spacing. Several anomalies were identified from these surveys and displayed on related maps.	Drost, 1994 (41N15NE0004) Drost, 1995 (41N15NE0029)
Lawrence Melnick	1995-1996	VLF-EM survey Ground mag survey	VLF-EM: Oct 1995. Line spacing 100 m, station spacing 25 m. One conductive anomaly was identified. Ground mag survey: Oct 1996. Line spacing 60 m, station spacing 30 m. 2 anomalies identified as high priority for follow-up	Archibald, 1996b (42C02SE0026)
Elliot Feder	1996-1998	VLF-EM survey Ground mag survey Till sampling	VLF-EM: Oct 1996. 12.2 line-km collected, 100 m line spacing, 25 m station spacing. 3 anomalies identified as possible shear zones, recommended for follow-up Ground mag survey: Oct 1996. 12.2 line-km. Anomalies identified related to Firesand Carbonatite Complex Till sampling: 1997-1998. Gold-bearing vein averaging 8.7 g/t Au located in southern and northern parts of McMurray Twp.	Archibald, 1996a (42C02SE0022) Thomas, 1997a (42C02SE2001) Thomas, 1997b (42C02SE2002) Archibald, 1998 (42C02SE2003)
Transgold Exploration and Investment Inc.	1998	IP survey	IP test survey on weak VLF-EM anomalies. Time domain IP survey. Dipole-dipole array, a spacing = 25 m, N = 1-3. Three chargeable features were identified and	Anderson, 1998 (41N15NE2002)
John Leadbetter	1998-2000	Beepmat survey Prospecting and sampling near Deep Lake	No conductors; best Au assay: 442 ppb	Leadbetter, 1998 (41N15NE2003) Leadbetter, 2000 (41N15NE1005)
Tri Origin (option Agreement with Citadel)	2000	6 drill holes(789 m), ground geophysics	Best Au assay: 609 ppb over 1.3 m	Gow, 2004
3814793 Canada Inc. P.L. Mousseau	2004	Ground mag survey VLF-EM survey	Between Oct 15, 2003 and July 18, 2004 Ground mag survey: 62.2 line-km. 25 m and 50 m line spacing, 15 m station spacing. Ground magnetic results have been used to further delineate airborne anomalies and outcrops. VLF-EM survey: 24.5 line-km, 50 m line spacing, 15 m station spacing. Anomalies identified were interpreted to be associated with fault and shear systems)	Archibald, 2004 (42C02SE2014)

6.7.1 Wawa General Partnership – 2007

In 2007, the Wawa General Partnership, on behalf of Citabar, completed a 8,401 m NQ-size diamond drill program at their Jubilee–Surluga property; targeting the down dip extension of the Jubilee shear zone and following the geological modelling of the interpreted deeper extension of the structure (Table 6-19 and Table 6-20; Gow, 2011). This drilling program proved successful and the best results achieved were of potential economic interest, especially the 3.40-m intersection at 11.40 g/t Au in drill hole 07-391 (Gow, 2011). However, during the drill program, Citabar determined it had insufficient storage space for all the drill core generated and a decision was taken to dispose of most of the core that was considered un-mineralized based on the logging. Scott Wilson from RPA in 2011 indicates that this disposal of the core was regrettable, considering the many problems identified with the logging and sampling procedures applied during the 2007 drilling program (Gow, 2011). Gow (2011) also concluded that a twinning program of historical holes was necessary to confirm the results from the historical holes before a resource evaluation was undertaken.

Table 6-19: Surface Diamond Drill Holes from the 2007 Drilling Program

Company	Year Drilled	No. of Drill Holes	Meterage (m)
Wawa GP Inc.	2007	14	8,410.20

Table 6-20: Selected Assay Highlights for Wawa GP's 2007 Drilling Program

Hole No.	From (m)	To (m)	Interval (m)*	Au (g/t)
07-383	452	453.9	1.9	6
including	452.6	453.4	0.8	11.21
07-384	555.06	562.2	7.14	1.18
including	555.6	555.8	0.2	13.39
	564.4	576.4	12	1.15
including	569.7	570.15	0.45	5.49
07-385	61.1	62.4	1.3	10.38
07-386B	586	590	4	2.06
including	586	587.2	1.2	6.22
07-387	476.1	485.5	9.4	1.78
including	480.7	481.7	1	3.37
including	483.5	484.5	1	4.61
07-388	48.25	49.18	0.93	4.28
	507.35	508.2	0.85	1.35
7-389	559.6	562.6	3	7.24
7-391	600.9	604.3	3.4	11.44
7-392	844.1	844.6	0.5	5.12
7-393	680.5	680.9	0.4	4.5
	691.1	692.8	1.7	10.67
	734.2	735.7	1.5	5.73
07-393B	686.25	688.8	2.55	6.21
including	686.25	686.4	0.15	93.7
	716.8	717.6	0.8	10.95
07-394	558.1	559.2	1.1	7.92
	51.1	52.1	1	8.68

Note: *Intervals listed here do not represent true thickness.

6.7.2 Augustine Ventures Inc. – 2009 to 2014

Augustine acquired the Surluga Project pursuant to the terms of an option agreement (the “Option Agreement”), dated April 16, 2009, entered into between Citabar, Citadel Gold Mines Inc. (“Citadel”), Delta Uranium Inc. (“Delta”) and Delta Precious Metals (Ontario) Inc. (“DPMI”), and also pursuant to the terms of an assignment agreement (the “Assignment Agreement”), dated September 15, 2010, entered into between Delta, DPMI, Citadel, Citabar and the Company. Pursuant to the terms of the Assignment Agreement, Citabar and Citadel consented to Delta and DPMI assigning their rights under the Option Agreement to the Company, whereby Delta and DPMI grant the Corporation the exclusive right to earn an undivided 60% interest in the Surluga Project (Augustine Ventures MDA, July 24, 2015).

In September 2010, Augustine Ventures Inc. (Augustine) satisfied the conditions and assumed the obligations of Delta PM and Delta Uranium Inc.

In January 2011, Augustine contracted Geotech Ltd. To collect 412 line-km of helicopter-borne Versatile Time Domain Electromagnetic data (“VTEM”) at 100-m line spacing (Duke, 2012). Several magnetic-conductive features were noted within the survey to coincide with the Parkhill fault. Six conductive anomalies were identified as potential follow-up targets (Duke, 2012).

In 2011, Augustine drilled 2,944 m in 18 diamond drill holes (core diameter: NQ; Table 6-21and Table 6-22). The purpose of the drilling was to confirm historical drilling results (13 drill holes) and define the mineralization around the Jubilee mine (5 drill holes; Duke, 2012). The holes were surveyed every 10 m using a Flex-IT down-hole survey tool. Twelve of the holes twinned historical holes. The twin holes did not reproduce the results of the historical database. Duke (2012) concluded that the nugget effect cannot be used to explain the discrepancy between the two data sets, which remained unexplained.

Table 6-21: Augustine’s 2011 Drilling Program

Company	Year Drilled	No. of Drill Holes	Meterage (m)
Augustine Ventures	2011	18	2,944

Table 6-22: Assay Highlights for Augustine's 2011 Drilling Program

Hole No.	From (m)	To (m)	Interval (m)*	Au (g/t)
AV-11-002	91.81	93.38	1.57	5.67
	97.09	103.58	6.49	1.94
including	98.58	99.17	0.59	7.24
AV-11-05	171.17	173.66	2.49	2.87
including	171.56	172.05	0.49	5.85
AV-11-006	133	136.59	3.59	7.03
including	133.56	134.12	0.56	21.87
AV-11-007	35.19	37.7	2.51	2.83
including	35.92	36.17	0.25	17.32
AV-11-008	30.56	36.6	6.04	3.23
including	31.28	31.8	0.52	10.69
and	32.5	32.93	0.43	8.83
AV-11-009	45.23	53.17	7.94	5.33
including	46.15	46.46	0.31	43.77
and	51.3	51.74	0.44	8.82
AV-11-010	162.92	164.6	1.68	20.18
AV-11-011	48.17	51.77	3.6	3.76
AV-11-012	161.54	171.44	9.9	1.93
including	161.54	161.98	0.44	14.36
and	170.15	170.55	0.4	10.47
AV-11-14	126.85	135.75	8.9	3.09
including	133.3	133.7	0.4	23.14
and	134.16	134.62	0.46	11.19
	144.68	145.42	0.74	22.77
AV-11-15	190.74	219.65	28.91	2.57
AV-11-16	155.92	161.39	5.47	3.06
AV-11-18	147.55	156.84	9.29	2.6

Note: *Intervals listed here do not represent true thickness.

Subsequently, Augustine commissioned Watts, Griffis and McOuat Consulting Geologists and Engineers ("WGM") to complete a resource estimate that included Augustine's current and previous drill holes (Duke, 2012). WGM estimated the Surluga deposit contained 32.2 Mt grading 1.14 g/t Au (cut-off: 0.2 g/t Au). The historical estimate should no longer be relied upon as it has been superseded by the current estimate (Item 14: Mineral Resource Estimates), which upgraded the historical estimate. The historical estimate used the categories set out in the CIM Definition Standards on Mineral Resources and Mineral Reserves (May 2014). The estimate was completed using ordinary kriging and validated using the inverse distance method. Red Pine is not treating the historical estimate as current, because the QP has not completed sufficient work to classify the historical estimate as current.

Augustine also collected 200 grab samples on the property in 2011. Table 6-23 lists samples with >1 g/t Au. Although Augustine completed a Lidar survey, no details of the survey (year, contractor, survey parameters, and so forth) are known to the company.

Table 6-23: Assay Highlights of the Grab Samples Collected by Augustine in 2011

Sample No.	Easting	Northing	Au (g/t)	Location
1003978	668180	5315784	14.03	Minto
1003953	668166	5315867	8.3	Minto
1003903	668382	5315387	5.64	Minto
1003920	668242	5315144	3.95	Minto
1003894	668397	5315385	2.96	Minto
1003963	668242	5315971	2.06	Minto
1003976	668170	5315779	1.88	Minto
1003873	668447	5315431	1.49	Minto
1003921	668243	5315145	1.27	Minto

6.7.3 2015 Mineral Resource Estimate

Red Pine commissioned Ronacher Mckenzie Geoscience and SRK Consulting to complete a NI 43-101 Mineral Resource estimate and Technical Report, titled “Independent Technical Report; Wawa Gold Project, Ontario,” and had an effective date of June 5, 2015. The 2015 Mineral Resource estimate is now historical as it has been superseded by the 2019 Technical Report which is based on material new data compiled by Red Pine since 2015. The QP has not completed sufficient work to consider the 2015 Mineral Resource estimate as current; and therefore, Red Pine is not treating this historical estimate as a current Mineral Resource and it should no longer be relied upon.

The 2015 Technical Report was completed in accordance with NI 43-101 and following the requirements of Form 43-101F1. The Mineral Resource estimates followed CIM Estimation of Mineral Resource and Mineral Reserves Best Practices Guidelines (November 2003) and were classified according to CIM Definition Standards for Mineral Resources & Mineral Reserves (May 2014).

The Mineral Resource estimates were derived using a geostatistical block modelling approach using Ordinary Kriging of the drill hole assay data available at the time of reporting. The Mineral Resource estimate stated Inferred Mineral Resource estimates for an open-pit mining scenario at a 0.4 g/t cut-off along with underground Mineral Resources below the open-pit envelope stated at a 2.5 g/t cut-off, as summarized in Table 6-24. For more information, the reader may refer to the 2015 Technical Report.

Table 6-24: 2015 Mineral Resource Estimate*

Resource Category	Cut-off Gold (g/t)	Quantity (000s t)	Grade Gold (g/t)	Contained Metal Gold (000s oz)
Inferred**				
Inside Pit	0.40	10,239	2.05	676
Outside Pit	0.40	8,630	1.07	298
Underground	2.50	955	3.73	114
Total	**0.50**	**19,824**	**1.71**	**1,088**

Notes:

* Mineral Resources are not Mineral Reserves and have not demonstrated economic viability. All figures are rounded to reflect the relatvie accuracy of the estimate. Composites have been capped, where appropriate.

** Pit Mineral Resources are reported at a cut-off grade of 0.40 g/t gold in relation with a conceptual pit shell constructed by SRK. Underground Mineral Resources include classified modelled blocks below the conceptual pit shell and above a cut-off grade of 2.50 g/t gold. Cut-off grades are based on a gold price of US$1,250 per ounce and a gold recovery 95%.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

The Project is in the southern part of the Michipicoten greenstone belt, one of two greenstone belts that form the Wawa Sub-province (Figure 7-1) of the Superior Province, the world's largest Archean craton (Ronacher et al., 2015). The Wawa Sub-province extends from Minnesota in the west to the Kapuskasing structural zone in the east. The Superior Province was formed by the amalgamation of numerous sub-provinces of various origins and compositions (plutonic, volcanic-plutonic, gneissic, sedimentary) that range in age from 3.0 Ga to 2.65 Ga (Polat and Kerrich, 2000).

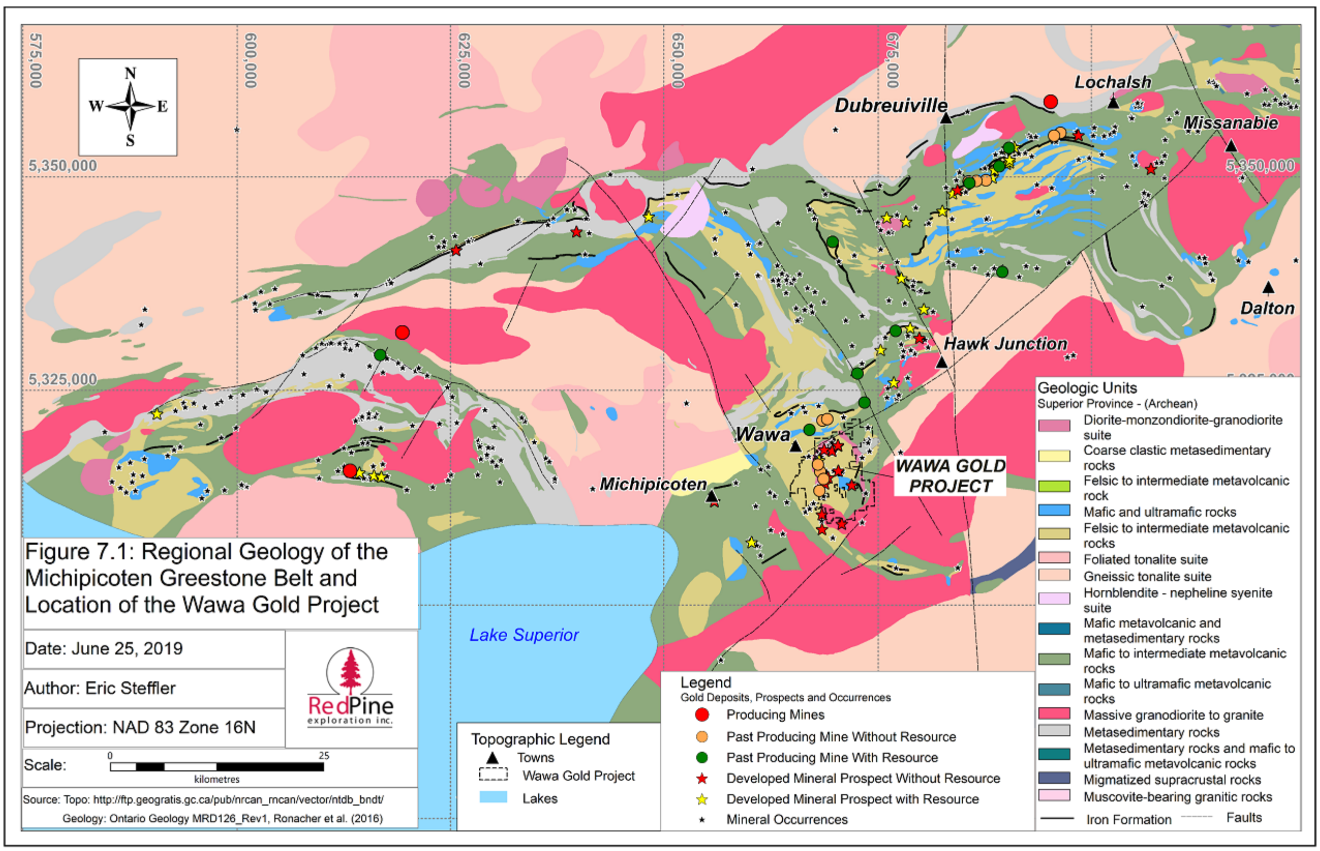

Figure 7-1: Regional Geology of the Michipicoten Greenstone Belt and Location of the Wawa Gold Project (Labelled in the Figure as "Wawa Gold Project")

7.2 Local Geology

The Michipicoten greenstone belt is an amalgamation of three cycles of mafic to felsic volcanism associated with concomitant subvolcanic intrusions (Sage, 1994). Zircon U-Pb ages date volcanic Cycle 1 to 2.9 Ga, volcanic Cycle 2 to 2.75 Ga and volcanic Cycle 3 to 2.7 Ga. Like other greenstone belts within the Superior Province, the mafic portion of the Michipicoten greenstone belt ranges in composition from basaltic to komatiitic. In the southern part of the Michipicoten greenstone belt, the main subvolcanic intrusions, emplaced during cycles 1 and 2 are the Hawk Lake Granitic Complex and the Jubilee Lake Stock. These intrusions have been interpreted to delineate the centers of calderas and to be the intrusive equivalent of the felsic to intermediate volcanic rocks within the main greenstones (Sage, 1984). The hiatus between volcanic Cycles 2 and 3 was marked by extensive banded iron formations.

Post-Archean magmatism includes diabase dykes and the emplacement of the Firesand River Carbonatite intruded along the Wawa-Hawk Lake-Manitowik Lake Fault System. The Project is located within the southern part of the Michipicoten greenstone belt (Sherman, 2005).

A prominent structure in the southern Michipicoten greenstone belt is the Wawa-Hawk Lake-Manitowik Lake Fault System, which defines the boundary between a lamprophyre-rich domain to the south and lamprophyre-free domain to the north (Figure 7-2). The emplacement of the Firesand River Carbonatite along the Wawa-Hawk Lake-Manitowik Lake Fault System at the intersection with the Firesand river fault suggests that the fault is deep-seated, whereas the location of the Jubilee Stock and Hawk Granite Complex along the fault indicate that it may follow an older structure active during the formation of Michipicoten greenstone belt. All the rocks of the Michipicoten greenstone belt are metamorphosed at greenschist facies and its volcano-plutonic sequences have been repeatedly deformed and folded (Sage, 1994).

7.3 Property Geology

The core of the known gold corridor of the Project is centered on the Jubilee Stock, a composite intrusion formed of porphyritic to phaneritic intrusive facies ranging from mafic to felsic in composition. Almost every historical mine on the property is located within or at the margins of the Jubilee Stock.

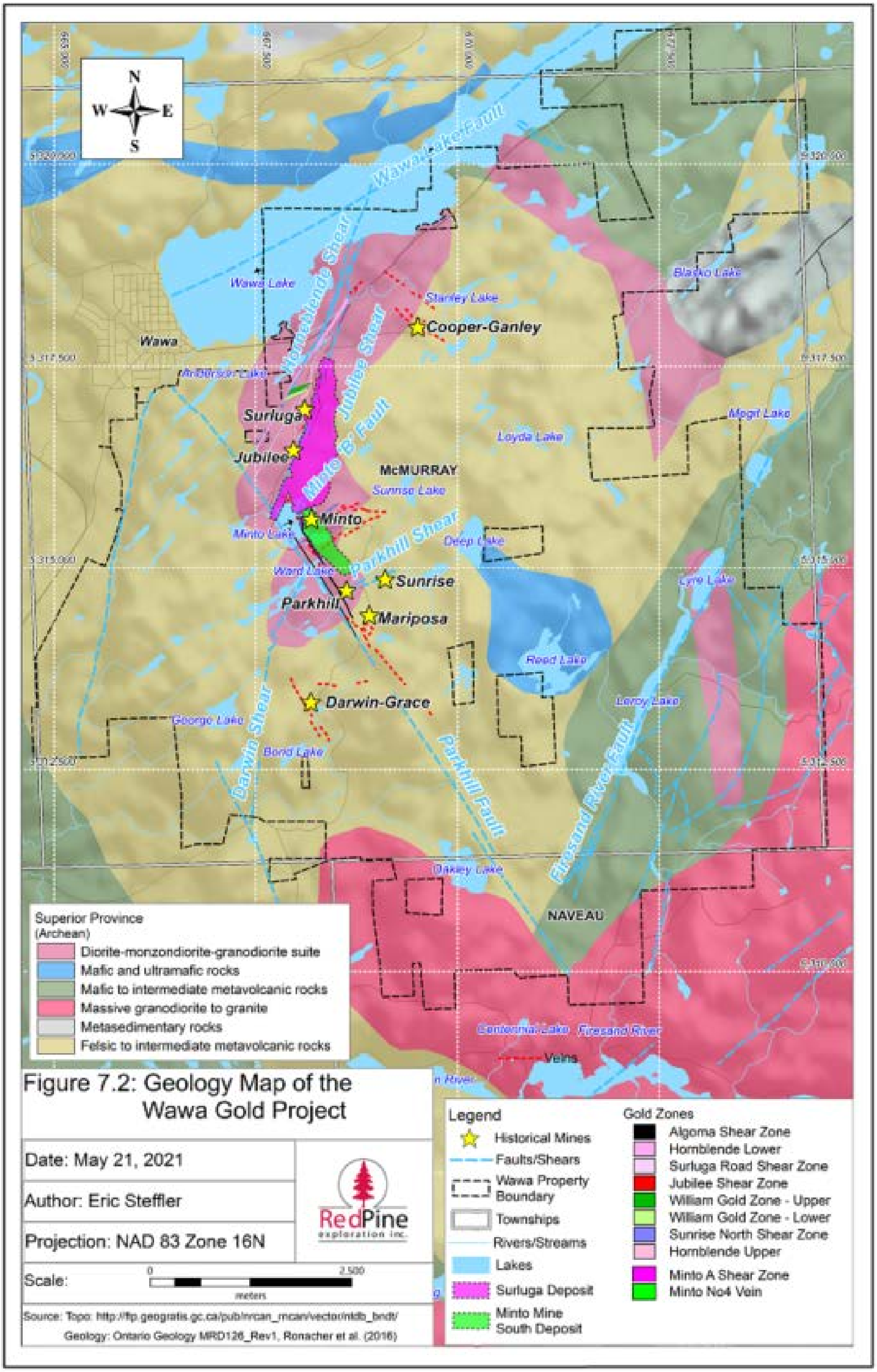

Figure 7-2: Geology Map of the Wawa Gold Project from Ronacher et al. (2015)

7.3.1 Jubilee Stock

The Jubilee Stock is a high-level calc-alkaline intrusive complex of mafic to felsic composition and is formed by multiple individual intrusions (Frey, 1987; Sage, 1993; Figure 7-3). The center of the Jubilee stock is characterized by more than 75 % phaneritic intrusive facies forming a core zone with a 6 x 1.3 km surface expression, which is occurring as a curved-shaped sigmoid form with its long axis is oriented at 20°. The core of the Jubilee Stock is the only component of the intrusive complex currently subdivided and represented on the geology maps of the property. The intrusions in the core of the Jubilee Stock are medium- to coarse-grained and intermediate to felsic intrusions with a lesser component of mafic intrusions. The remaining 25% of the core zone is formed of undivided porphyritic intrusions that are also surrounding the core zones of the Jubilee Stock. On the current geology map of the property, the porphyritic intrusions are not divided from their host volcanic rocks.

The age of emplacement of 2,745 ± 3 Ma of the Jubilee Stock, is coeval within error to the age of the surrounding volcanic rocks of the second cycle (Sullivan et al. 1985). Sage (1993) interpreted the Jubilee Stock to have been formed in a shallow magma chamber underlying a caldera complex from which the volcanic units originated. The compositional and geometrical complexity of the Jubilee Stock comprising many contact zones between rocks of different rheology are interpreted to be critical controls on the geometry and distribution of the gold zones. The main intrusive facies of the Jubilee Stock encountered by Red Pine are described below.

7.3.1.1 Medium-grained Intrusions of the Jubilee Stocks

Almost all the medium-grained to coarse-grained intrusions of the Jubilee Stock were described and classified by the historical operators of the Project as diorite without consideration for actual proportion in the intrusions of quartz, plagioclase, and alkali feldspar. To preserve the continuity with the nomenclature system used by historical operators, Red Pine kept the term diorite to describe and classify the phaneritic intrusive facies of the Jubilee Stock. The core of the Jubilee Sock includes of multiple intrusions of variable composition that ranges from mafic to felsic (Figure 7-3 and Figure 7-4). Reported petrographic work from Sage (1993) on the intrusions forming the core of the Jubilee Stock indicate a mode of 10-30% quartz, 40-55% plagioclase and 10-20% biotite without clear mention of alkali feldspar, which underlies a quartz dioritic to tonalitic composition for most of the individual intrusions forming the core of the Jubilee Stock. The mafic intrusions of the Jubilee Stock are forming magma mixing textures with the felsic to intermediate intrusions of the Jubilee Stock (Walker, 2011). Some of the mafic intrusions of the Jubilee Stock host zones of Ni-Cu mineralization that occur as disseminated clusters of pyrrhotite-chalcopyrite in which the pyrrhotite is likely intermingled with pentlandite. Some of the observed contacts between intrusions forming the core zone of the Jubilee Stock and other intrusive or volcanic rock are striking SE and dip moderately to shallowly to the SW.

For simplicity, the generic field classification of the intrusions forming the core of the Jubilee Stock as diorite is used in that report to refer to those intrusions.

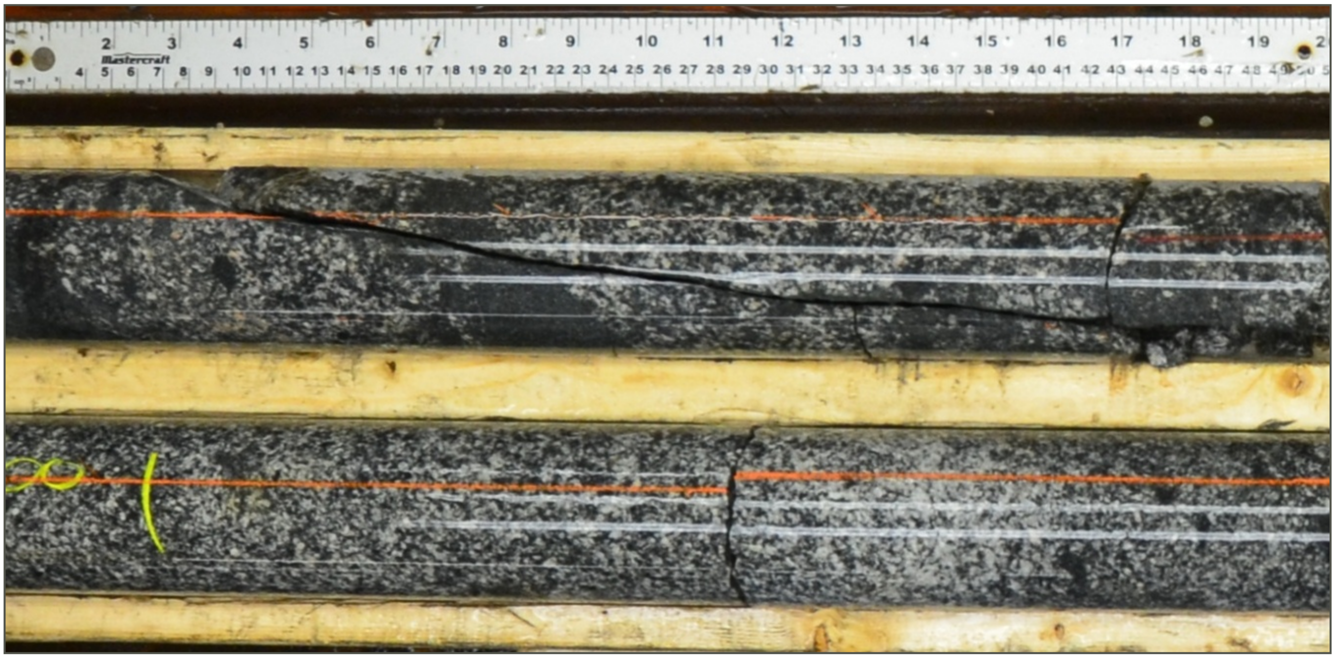

Figure 7-3: Medium- to Coarse-Grained Facies of the Jubilee Stock Diorite near the Contact with the Volcanic Units Containing Enclaves of Volcanic Rocks

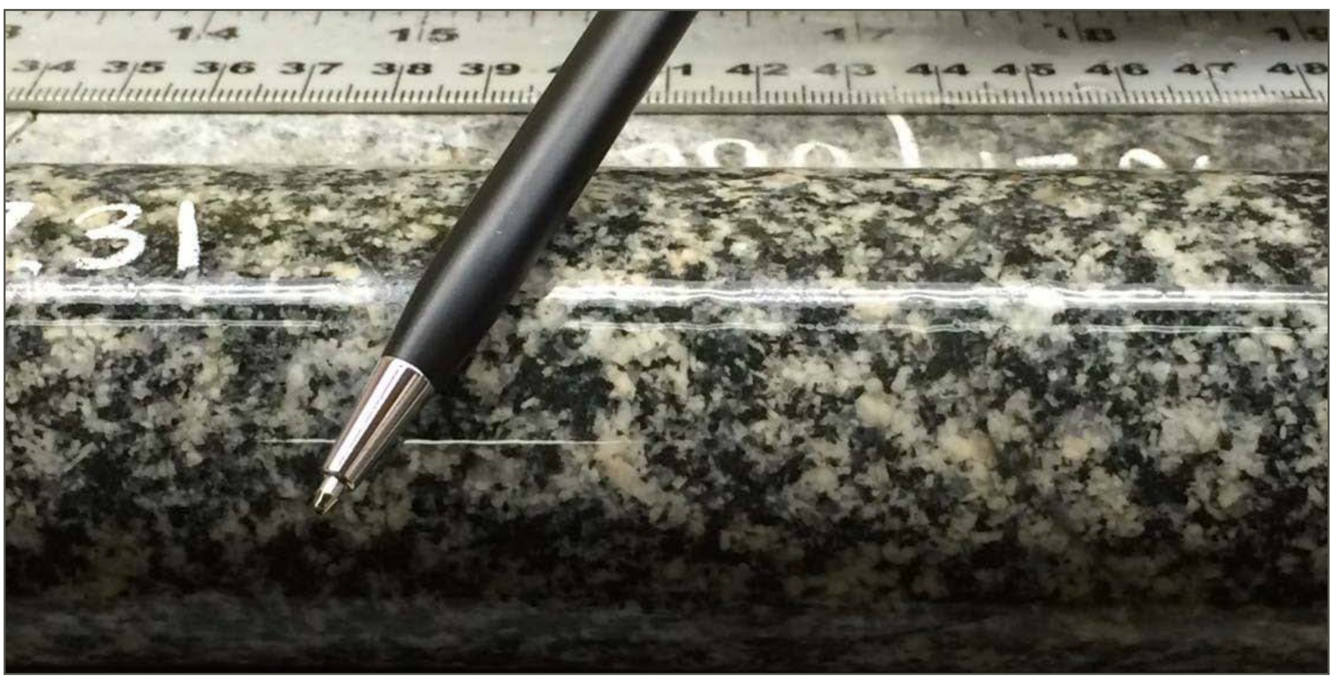

Figure 7-4: Typical Jubilee Stock Diorite in the Core of the Jubilee Stock

7.3.1.2 Porphyritic Intrusions

Many porphyritic intrusions surrounding the core of Jubilee Stock and were hypothesized by Sage (1993) to occupy the ring fracture of a large caldera centred on the Jubilee Stock (Figure 7-5). The main primary phenocryst assemblages observed in the porphyritic units are feldspar, biotite-feldspar, quartz-feldspar, and quartz. A compositional continuum and visual gradation between the medium- to coarse-grained diorite and intrusions of the feldspar-phyric, biotite-feldspar-phyric and biotite-phyric units were commonly observed, indicating the comagmatic nature of those units. Because of the variability in the mapping and logging of the porphyritic units, the porphyritic units of the Jubilee Stock remain undivided and not broken down into single intrusions at the time of this Report.

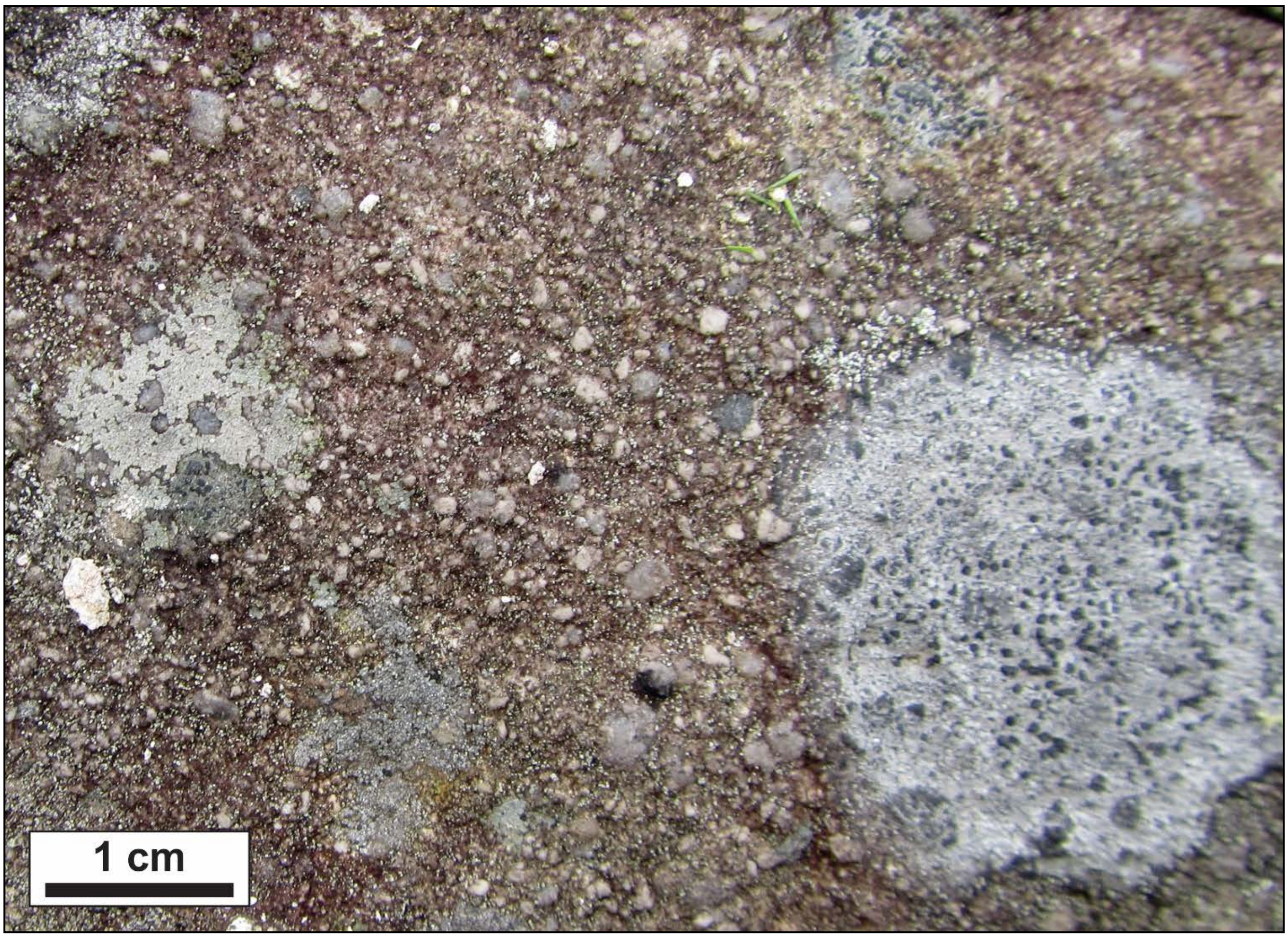

Figure 7-5: Feldspar-Quartz Porphyritic Intrusion Surface Exposure near the Surluga Deposit

7.3.1.3 Silicified/Albitized unit

This unit corresponds to albitized to strongly albitized and silicified diorite, volcanic units and porphyritic intrusions and prevails in certain zones of the Wawa Gold Corridor (Figure 7-6). The unit may relate to the hornfelsed units described by Sage (1993) as occurring along some of the contacts between the Jubilee Stock and the volcanic rocks. In zones of intense alteration, the primary textures of the host rocks are generally destroyed, and the unit becomes quite homogeneous making protolith identification difficult. In the transitional zones, strong alteration fronts are seen to replace the host units. The predominant precursor unit is most likely fine-grained volcanic units intruded by the Jubilee stock in which albitization was preferentially partitioned.

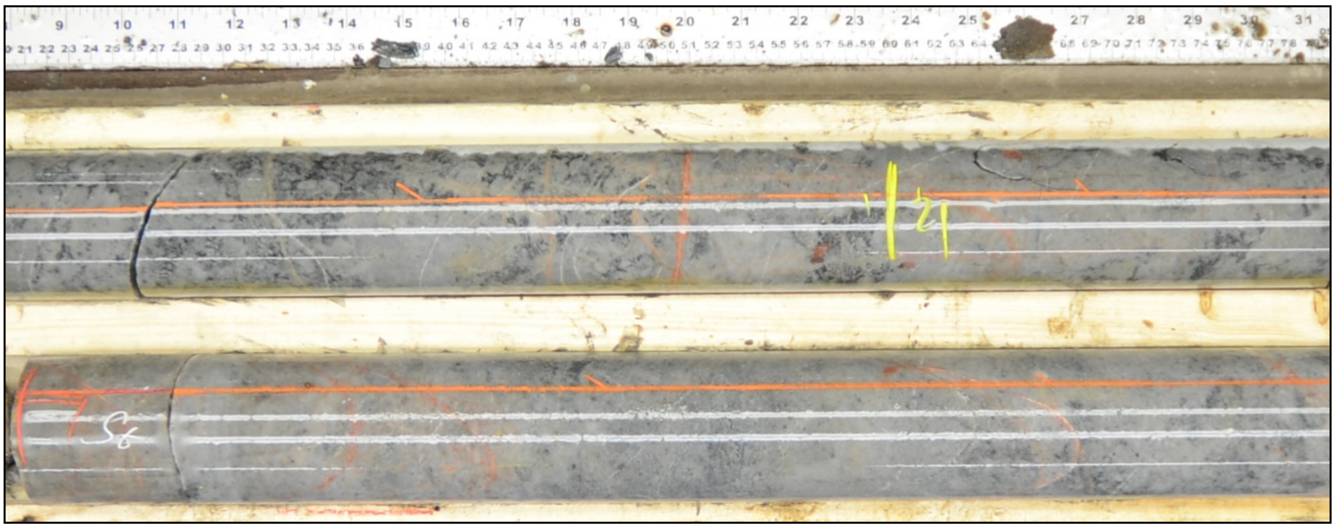

Figure 7-6: Albitized Unit Formed near the Contacts between the Jubilee Stock and the Volcanic Units

7.3.1.4 Intrusive Breccias

Intrusive breccias are formed in many contact zones between the different intrusions forming the Jubilee Stock where different intrusive facies of the stock are intermixed (Figure 7-7). The zones of intrusive breccia were observed in drill core over core length exceeding 200 m. The ratio of matrix versus clasts varies considerably in the breccia zones, although there is a generally increase of the intrusive matrix proportions toward the center of the intrusion injecting the older unit. The injecting intrusions forming the matrix of the intrusive breccias are typically the diorites of the core zone of the Jubilee Stock, whereas the fragments are either the porphyritic facies of the stock or the volcanic rocks (Figure 7-8). The fragments vary considerably in size, ranging from a few millimetres to tens of metres and some are partially assimilated by the dioritic magma. As reported by Sage (1993) and noted by Red Pine geologists, the transitional nature of that unit and the poorly define geometry of its contact the older rock units is making the mapping of this unit, especially in drill cores, particularly challenging.

Figure 7-7: Intrusive Breccia Formed at the Contact between the Jubilee Stock Medium- to Coarse-Grained Diorite and the Volcanic Units at the Sunrise #4 Gold Showing

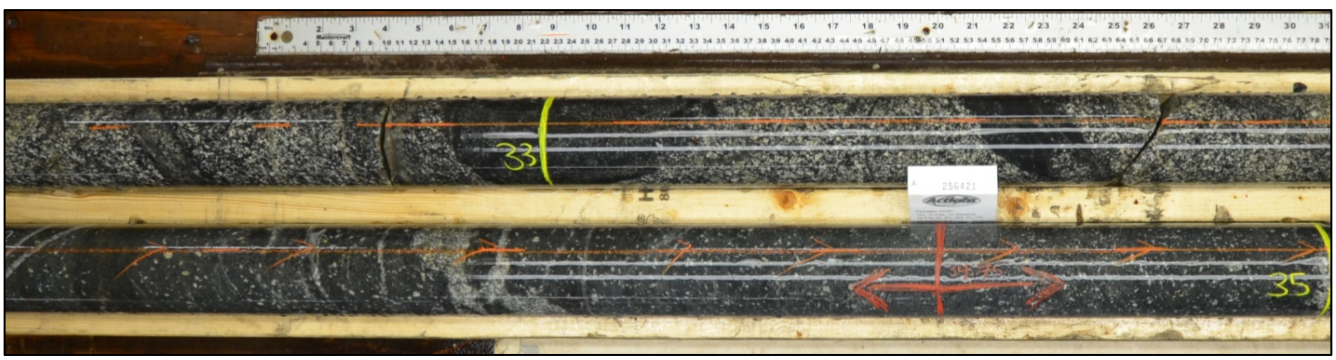

Figure 7-8: Intrusive Breccia Texture in Drill Hole and Melanocratic Feldspar-Phyric Unit in the Contact Zone between the Jubilee Stock Coarse-Grained Diorite and the Volcanic Units

7.3.2 Tholeiitic Intrusions

A distinct generation of mafic to ultramafic intrusions is documented on the Project based on their compositional attributes and their timing relation with the other intrusions of the Jubilee Stock. Compositionally, these mafic intrusions are transitional to tholeiitic and are coarse-grained in the centre of the larger intrusions (Figure 7-9) to fine-grained at the margins of the larger intrusions or for the smaller intrusions. (Figure 7-10). The intrusive complex related to the tholeiitic suite is centred on Reed Lake and forms the Reed Lake mafic-ultramafic complex, which is composed of diorite, quartz-gabbro, leuco- to meta-gabbro and pyroxenite.

Away from the Reed Lake Complex, the tholeiitic mafic intrusions occur as dykes that are cross-cutting most of the calc-alkaline intrusions of the Jubilee Stock. However, the observation of tholeiitic intrusions as fragments in intrusive breccias suggests that they are contemporaneous to the formation of the Jubilee Stock.

The dykes of that intrusive suite are principally striking SE and are shallowly to moderately dipping to the SW, parallel to some of the intrusive contacts observed in the core of the Jubilee Stock. The tholeiitic mafic intrusions are important metallotects on the Project as they are commonly adjacent to the zones of higher-grade mineralization in the gold-bearing shear zones of the property. The presence of these intrusion is observed to widen the mineralized structures and they may also act as chemical traps to concentrate gold in more discrete sections of the mineralized structures. The largest dyke pertaining to that suite of intrusions are pictured on the geology map of the property.

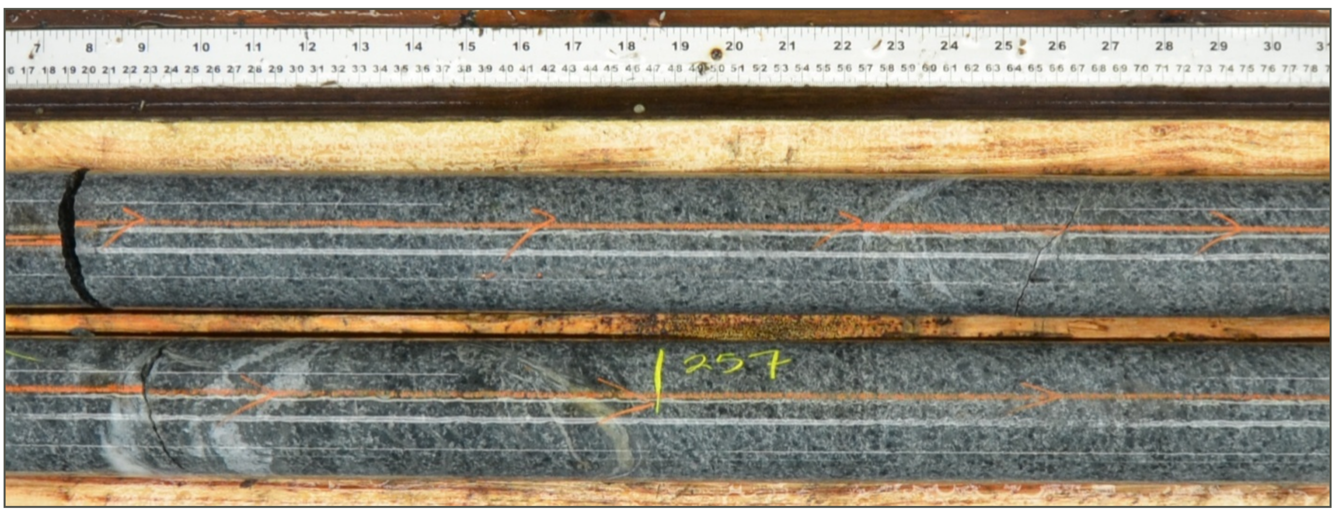

Figure 7-9: Coarse-Grained Tholeiitic Gabbroic Intrusion in the Jubilee Stock

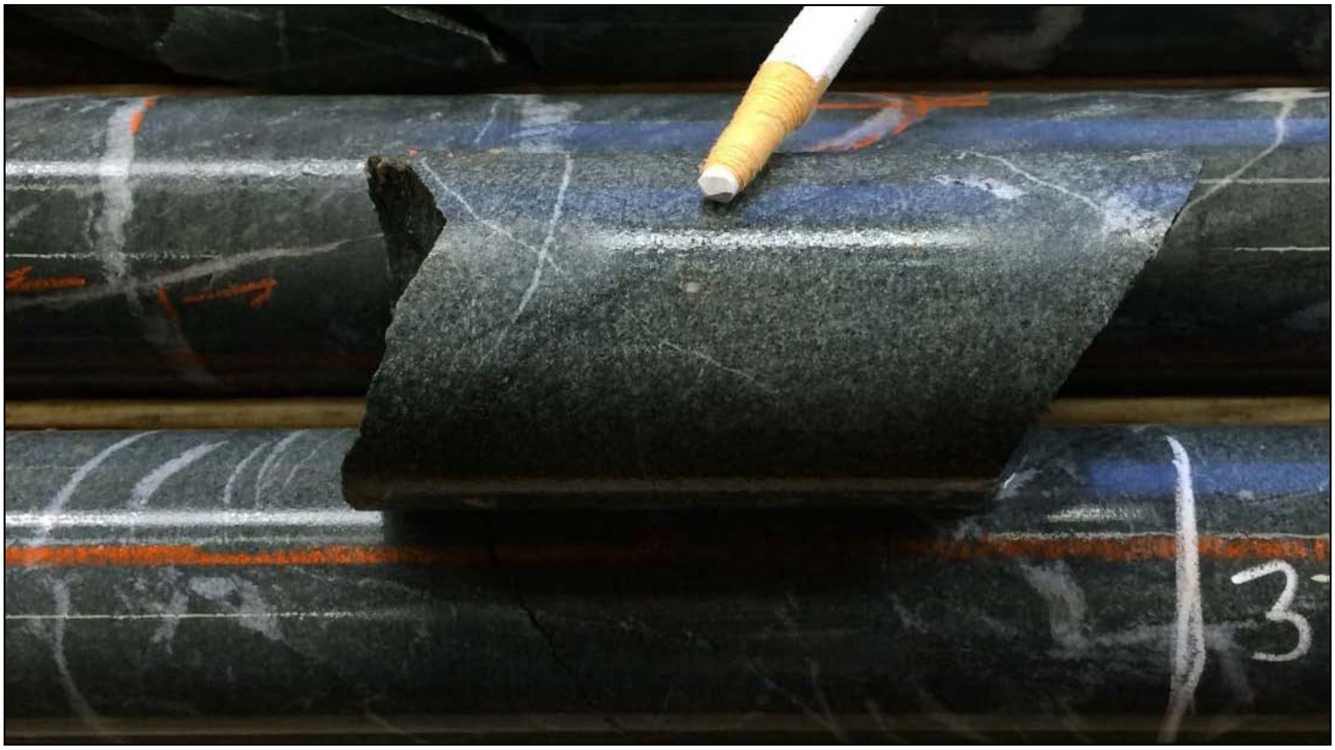

Figure 7-10: Fine-Grained Tholeiitic Gabbro in the Jubilee Stock

7.3.3 Volcanic Units

For most of the Project, the descriptions of the volcanic units are constantly evolving depending on the opinion of the geologist, exploration model and time period. In many cases, the sub-volcanic porphyritic intrusions, part of the Jubilee Stock, and the volcanic units, are confused and their classification inter-changed. No systematic framework to classify and map the volcanic units of the property has so far been developed. In historical logs, many volcanic units are described as fragmental volcaniclastic units, but re-examination for some of them indicate sheared porphyritic intrusions or zones of intrusive breccias. Some of the described fragmental volcanic units are also zones of fluid-assisted brecciation during brittle-ductile deformation in the shear zones of the property and are Au mineralized.

7.3.3.1 Diabase and Lamprophyre Dykes

Swarms of lamprophyre, diabase, and carbonatite dykes are observed on the Project. The dykes are typically emplaced along pre-existing zones of weakness in large fracture or fault systems. The diabase dykes are magnetic, have chilled margins and a well-developed diabasic texture in their core which make them easily recognizable. The emplacement timing of the diabase dykes remains unconstrained, but they are observed to cross-cut the gold zones of the Project and are post-dating mineralization.

Lamprophyre dykes are pervasive throughout the Project and at least two generations of lamprophyre exist. One generation is late-stage and has cross-cut all the gold mineralized zones of the property. Dykes of that generation are black, porphyritic, medium-grained, and strongly magnetic with a blue amphibole alteration halo. Another possible set of lamprophyres is likely older and generally smaller. Their primary mineralogy is partially to completely replaced, which gives them a dark- to pale-greenish color. One dyke of this set is also possibly gold mineralized, indicating that some of the lamprophyre dykes could have been emplaced prior to the formation of the gold system. A few carbonatite dykes are likely related to the Firesand Carbonatite. They are located a few hundred metres east of the northeastern corner of the property and were also observed in drill holes in the Surluga Deposit.

7.4 Structure and Gold Mineralization

7.4.1 Deformation and Mineralization Periods on the Wawa Gold Project

Gold mineralization is obvious throughout the Project and is spatially related to the numerous shear zones, fractures and replacement zones of variable strike and dip that were formed through a protracted deformation and mineralization period in which three main periods of deformation and mineralization were identified. The Surluga Deposit forms the largest gold concentration currently defined on the Project. The deposit is entirely hosted in the Jubilee Shear Zone that cross-cuts the various intrusive rocks of the Jubilee Stock.

Early deformation observed on the Project resulted in the formation NW to WNW-oriented shear zones dipping 55-75° to the NE to NNE with a stretching lineation trending around 135º/37º. It is called the Grace Deformation Period. The main gold-bearing shear zone pertaining to that period of deformation is the Grace Shear Zone hosting the Grace zone of the Darwin-Grace Mine. These structures, from Red Pine's drilling in the Grace Shear Zone, are known to contain high-grade gold mineralization. The current mapping on the property indicate that the tectonic fabrics related to those early structures are constrained to the vicinity of the gold-bearing structures.

Peak deformation is associated with a second period of gold mineralization and is called the Jubilee Deformation Period. This deformation period is characterized by the formation of discrete shear zones striking 0-35° and dipping 30-55° to the E to ESE and a penetrative stretching lineation trending 160°-190° and plunging 20-35°. The stretching lineation prevails over the foliation in the shear zones formed peak deformation (Figure 7-11). The largest shear zones formed during that event identified so far on the Project includes the Jubilee Shear Zone and the Hornblende Shear Zone. Centered on the Hornblende-Jubilee Shear Zone, those deformation zones are grouped into the Wawa Gold Corridor. The Minto B Shear Zone is forming the approximate eastern boundary of the Wawa Gold Corridor and the footprints the tectonic fabrics associated to that peak deformation event are interpreted to extent laterally over a minimum surface width of 1 km west of the Minto B Shear Zone. Outside of the main shear zones, tectonic deformation related to peak deformation also formed many domains of L-tectonite in the intrusive units of the Jubilee Stock.

Deformation post-dating peak deformation, called the Minto Deformation period, is associated with a third set of mineralized shear zones and to the formation of networks of shear zones striking 300-327° and dipping 45-55° to the NNE to NE. A moderately to strongly developed stretching lineation, raking around 150°, is developed in those structures and locally prevails over the foliation. Two significant networks of mineralized shear zones associated to that deformation event are identified on the property, the Minto Corridor that includes the Minto Mine South and the Parkhill # 4 shear zone, and the Cooper Corridor that includes the Cooper Shear Zone. The tectonic fabrics related to that deformation event can be observed between the main shear zones, but strong and penetrative deformation remains constrained to the immediate vicinity of the shear zones.

Many zones of mineralization on the property are also striking 060-090° and are dipping 35-70° to the SSE to S. Significant mineralized structures on that orientation include the Parkhill Shear Zone, hosting the Parkhill and Van Sickle mines, the Mickelson-Sunrise networks of quartz veins, the Darwin/Nyman Shear Zone of the Darwin-Grace Mine and the Minto C structure. Careful observation and measurement of the stretching lineations on ESE-E striking structures near the Cooper Mine, the Surluga Mine shaft, the Darwin-Grace mine and the Minto C structure indicate that these shear zones may have been formed during the Jubilee Deformation Period (pos. Darwin/Nyman Shear Zone of the Darwin-Grace Mine, Minto C) or during the Minto Deformation Period. No stretching lineation have yet been measured in the Parkhill Shear Zone.

The following sub-Item summarizes the main attributes of significant zones of gold mineralization tested in Red Pine's 2014 to 2020 exploration programs.

Figure 7-11: Characteristic Stretching Lineation of the Wawa Gold Corridor Preferentially Partitioned in a Mafic Dyke (William Gold Zone)

7.4.2 Grace Shear Zone

The Grace Shear Zone was mined in the upper levels of the Darwin-Grace Mine. It is formed after the porphyritic and phaneritic facies of the Jubilee Stock, has been traced over a strike length of 0.75 km, strikes approximately 327° and dips 60-75° degrees to the NW. In the mature area of the shear zones, its strongly deformed core has an average width, defined from surface exposure and diamond drilling of approximately 2 to 4 m. Outside the mature areas of the shear zone, the width of the high-strain core of the structure varies between 0.5 to 1.5 m. In the high-strain domain of the Grace Shear Zone, L>S to L>>S tectonites generally prevail over L<S to L<<S tectonites.

Mineralization in the Grace Shear Zone is characterized by quartz veining associated with arsenopyrite, pyrite and pyrrhotite, and variable native gold (Figure 7-12). The quartz veins and arsenopyrite are transposed and stretched in the Grace Shear Zone stretching lineation and are also variably transposed and stretched by tectonic fabrics characteristics of the Jubilee Shear Zone that are variably overprinting the tectonic fabrics of the Grace Shear Zone. Hydrothermal alteration related to gold mineralization in the Grace Shear Zone includes early albitization and biotite alteration progressively overprinted by a white mica-chlorite-iron carbonate assemblage related to the mineralized quartz veins.

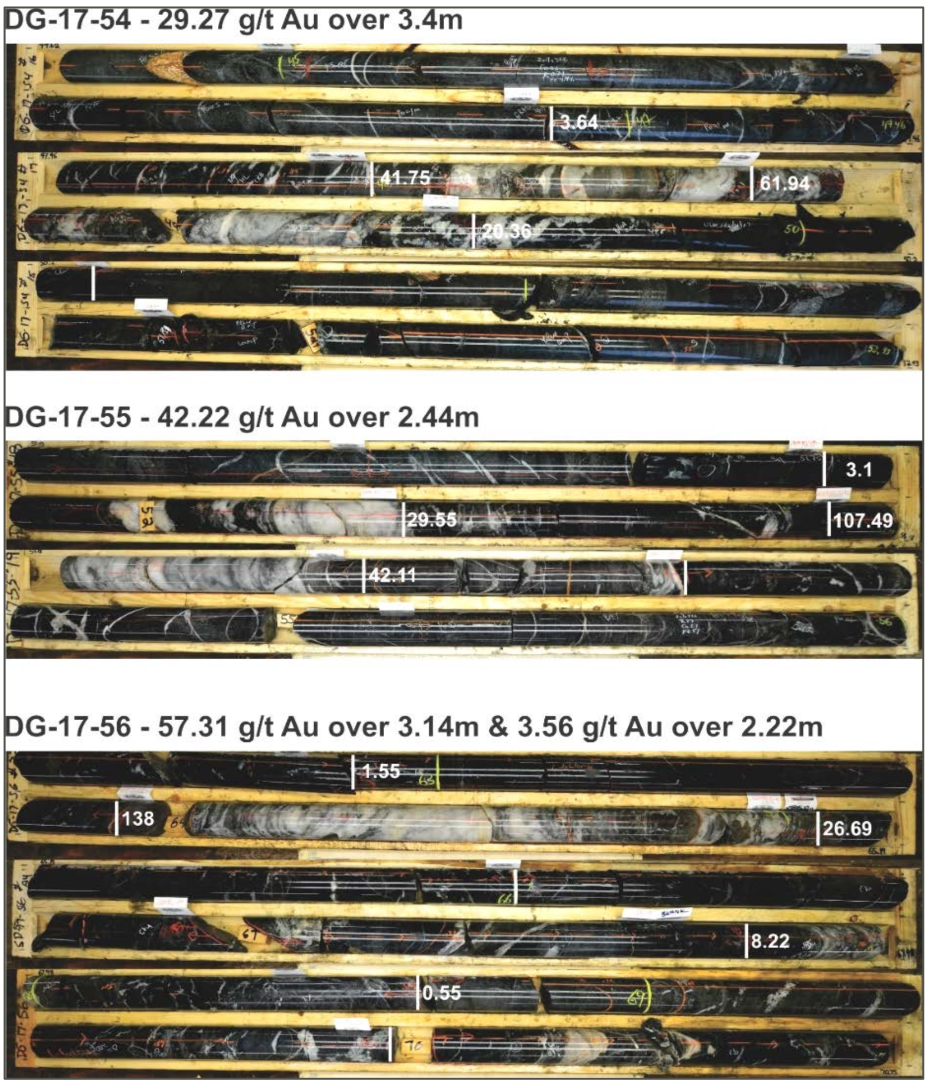

Figure 7-12: Gold Mineralization in the Grace Deformation Zone Related to the Historical Darwin-Grace Mine

7.4.3 Wawa Gold Corridor – Jubilee Shear Zone (JSZ)

The Jubilee shear zone is a large deformation zone which formed in the Wawa Gold Corridor into the intrusive units of the Jubilee Stock. Including its extension south of the Parkhill Fault, the Jubilee Shear Zone is now conclusively traced over a strike length of 5.5 km. The tectonic fabrics observed in the Jubilee Shear Zone predominantly relate to the Jubilee Deformation Period, but relicts of tectonic fabrics from the Grace Deformation Period and superimposed tectonic fabrics of the Minto Deformation Period are also observed in the structure. The Jubilee Shear Zone is made of alternating high-strain and low-strain domains forming a deformation zone ranging in width from 20 m to 120 m. Within the Jubilee Shear Zone, three continuous domains of stronger deformation where identified. The geometry of the domains of stronger deformation is strongly influenced by the compositional variability of the Jubilee Stock. In areas where the Jubilee Shear Zone is intercepting highly heterogeneous zones of the Jubilee Stock with multiple and closely spaced intrusive contacts, the domains of stronger deformation tend to widen, and the intensity of tectonic deformation increases. In areas where the Jubilee Stock is homogenous or the contacts between individual intrusions are widely spaced, the zones of stronger deformation tend to narrow and tectonic deformation decreases in intensity. The largest domain of stronger deformation is located at the center of the structure and host most of the mineralized zones of the Jubilee Shear Zone. The central domain of the Jubilee Shear Zone ranges in width between 2 m and 40 m. The upper and lower domains of stronger deformation in the Jubilee Shear Zone are not as consistently deformed and mineralized as the central domain and are on average not as thick. The lower and upper domains are more discrete in the northern extension of the Surluga deposit than in its southern and central extension, where the upper and lower domain tends to coalesce more frequently with the central domain.

In the northern extension of the Surluga Deposit, the Jubilee Shear Zone strikes 0-15° and dips 25–55°. In the central zone of the Surluga Deposit, the Jubilee Shear Zone progressively bends to strike 0 35° in the southern extension of the Surluga Deposit (Figure 7-13).

Within the Jubilee Shear Zone, the stretching lineation characteristic of the Jubilee Deformation Period prevails over the tectonic foliation to form L>S to L>>S tectonites. Domains of L tectonite also exist in the structure and are not as favorable for gold mineralization as the domains of L>S and L>>S tectonite. The stretching lineation in the Jubilee Shear Zone typically rakes 150° in the plane of the foliation and the trend and plunge of the stretching lineation vary with the rotation of the strike of the structure.

Stripped outcrop of the Main domain of the Jubilee Shear Zone exposing the strong stretching lineation forming a L>S tectonite that is characteristic of the Jubilee Shear Zone. The stretching lineation is plunging toward the right of the picture

Figure 7-13: Stripped Outcrop of the Main Domain of the Jubilee Shear Zone

Multiple generations of mineralized quartz veins are present in the Jubilee Shear Zone and can be divided in three discrete populations, veins early to syn Jubilee Deformation Period, veins syn to late Jubilee Deformation Period, veins of the Minto Deformation Period. Gold mineralization in the Surluga Deposit is principally associated with the veins of the early to syn Jubilee Deformation Period.

Early to syn Jubilee Deformation Period veins are composed of grey to pinkish white quartz and are forming arrays of quartz lenses stretched in the Jubilee Shear Zone stretching lineation that is defining its main direction of continuity for zones of higher-grade mineralization. The largest veins of that generation can be a few metres thick, and the smallest are a few mm wide and are forming eyes of quartz in the plane perpendicular to the stretching lineation. The veins are surrounded by stretched sericite-iron carbonate or sericite-chlorite-iron carbonate schists with variable sulphide content and assemblages of sulphides. The prevailing sulphide assemblage observed around the veins of the early to syn Jubilee Deformation Period is comprised of pyrite with occasional native gold and locally minor chalcopyrite, galena and sphalerite (Figure 7-14 and Figure 7-15). A secondary sulphide assemblage observed around some of the early veins is comprised of arsenopyrite with accessory pyrite, local pyrrhotite and occasional native gold. The arsenopyrite-dominant assemblage of sulphides is variably overprinted in the deposit by the pyrite-dominant assemblage of sulphides. Where arsenopyrite-rich assemblages prevail in the high-grade zones of the Surluga Deposit, relicts of tectonic foliations parallel to the Grace Shear Zone, and an alteration mineralogy comparable to what is observed in the Grace Shear Zone, can be observed. This is suggesting that early structures, potentially in the Grace Shear Zone orientation, may have contributed to the formation of high-grade mineralization in the Jubilee Shear Zone.

The veins syn to late Jubilee Deformation Period are localized and not abundant in the Jubilee Shear Zone. They cross-cut the stretched veins of the early to syn Jubilee Deformation Period and are themselves weakly to non-stretched in the Jubilee stretching lineation. There are characterized by a sulphide assemblage comprised of pyrite and pyrrhotite with possible chalcopyrite.

Quartz-tourmaline veins of the Minto Deformation Period are locally abundant in certain zones of the Jubilee Shear Zone (Figure 7-16). They are cross-cutting and folding the tectonites formed peak Jubilee Deformation and can be weakly to moderately transposed in the Jubilee foliation. They are composed of quartz with abundant tourmaline, accessory iron carbonate and a sulphide assemblage comprised of pyrite and pyrrhotite with accessory chalcopyrite and localized native gold. Large nuggets of native gold are also observed in these veins that are characterized by a strong nugget effect.

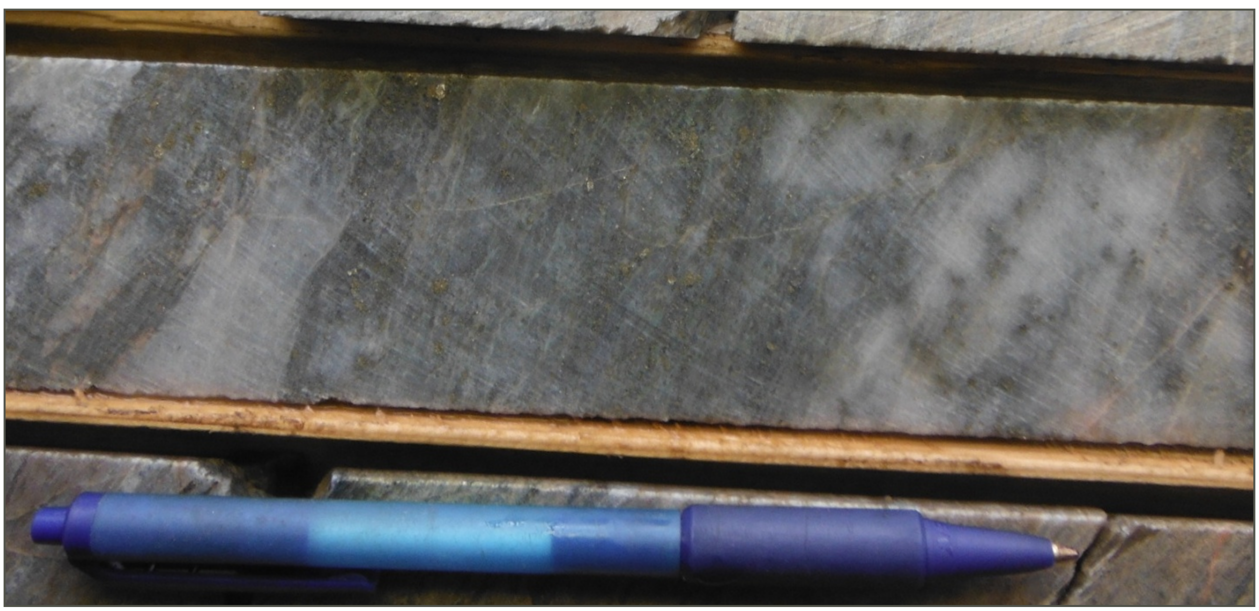

Figure 7-14: Grey Quartz Vein with Pyrite Representative of the Higher-Grade Zones of the Pyritic Gold Zones of the Surluga Deposit

The core sample on top of the picture is showing the plane perpendicular to the stretching lineation.

Figure 7-15: Quartz Vein Stretched in the Stretching Lineation Characteristic of the Jubilee Shear Zone

Figure 7-16: Quartz-Tourmaline Veins of the Minto Deformation Period in the Surluga Deposit

7.4.4 Wawa Gold Corridor – Hornblende Shear Zone

The Hornblende Shear Zone is located west of the Jubilee Shear Zone. Near the main vertical shaft of the Surluga Mine, the Hornblende Shear Zone outcrops at an approximate horizontal distance of 350 m from the central domain of the Jubilee Shear Zone. The Hornblende Shear Zone was also developed underground over a strike length of 200 m at the seventh level of the Surluga Mine. To the North of the Surluga Mine shaft, historical and recent mapping of the property indicate that the Hornblende and Jubilee shear zones are progressively converging and near highway 101. A horizontal distance of approximately 175 m to 200 m separates the main splay of the Jubilee Shear Zone from the Hornblende Shear Zone. Along its 3.5 km of potential strike north of the Parkhill Fault, historical and Red Pine’s surface mapping and diamond drilling confirmed the strike length of the Hornblende Shear Zone over 2.5 km to depths of up to 350 m below surface.

Similar to the Jubilee Shear Zone, the Hornblende Shear Zone is made of alternating high-strain and low-strain domains that are forming a deformation zone up to 100 m in thickness. However, not enough drilling and mapping data are available to precisely map the boundaries of the high-strain and low-strain domains forming the Hornblende Shear Zone. The high-strain domains of the Hornblende Shear Zone are characterized by the development of penetrative stretching lineations and tectonic foliations in which the lineations are typically stronger than the foliations. The width of the individual high-strain domains varies between 5 m and 15 m. The thickness of the high-strain domains of the Hornblende Shear Zone increased considerably where the structure cross-cut zones of the Jubilee Stock with multiple intrusive facies. The low strain domains are characterized by weakly penetrative tectonic fabrics. The main tectonic foliations and stretching lineations observed in the Hornblende Shear Zone parallel those observed in the Jubilee Shear Zone, indicating that the two structures are part of the same deformation system.

Similar to the Jubilee Shear Zone, gold mineralization is diversified in the Hornblende Shear Zone and occurred at different periods during the formation of the structure. The main mineralization zones occur as early to syn-peak Jubilee Deformation quartz veins of variable width that are transposed in the main tectonic foliation and stretched parallel to the stretching lineation. These veins are surrounded by haloes of white mica, chlorite, iron carbonate and silica alteration. The main sulphide assemblages are either arsenopyrite with accessory pyrite and pyrrhotite or pyrite with accessory pyrrhotite. Native gold is occasionally present in these zones of mineralization and is a typical indicator of high-grade gold. The main direction of continuity of these zones of mineralization is parallel to the stretching lineation.

In certain areas of the Hornblende Shear Zone, gold mineralization occurs as Minto-like quartz-tourmaline veins with variable pyrite-pyrrhotite-chalcopyrite. The early tectonic fabrics are folded in proximity to the quartz-tourmaline veins, indicating that, similar to the timing relation observed in the Jubilee Shear Zone, their emplacement post-dated peak-deformation in the Hornblende Shear Zone (Figure 7-17).

Figure 7-17: Hornblende Shear Zone Exposure

7.4.5 Wawa Gold Corridor – Replacement-like Mineralization

Some of the gold zones observed in the Wawa Gold Corridor form a style of gold mineralization that contrasts with the shear-hosted gold zones. Because they are characterized by weak visual indicators, these zones of mineralization were first identified during the fall 2015 drill program. The tectonic fabrics (planar and linear) are generally weak to locally strong and the zones of mineralization are variably transposed along the Jubilee stretching alteration. Hydrothermal alteration is characterized by an early silica-sodic alteration. The sodic-altered rocks are subsequently variably brecciated and veined by networks of biotite stringers containing variable pyrite and locally arsenopyrite. The assay data in drill core and on trenches indicate that gold mineralization is spatially associated with some of the zones with abundant biotite stringers (Figure 7-18).

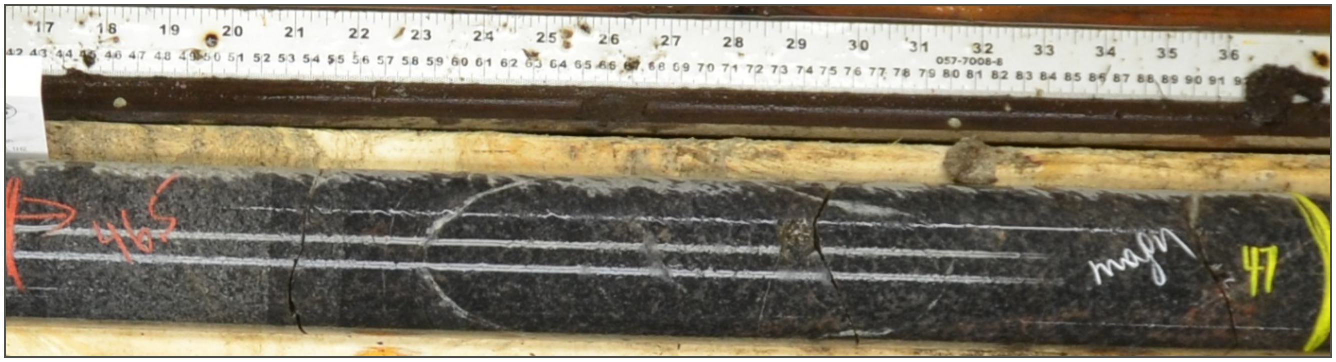

Figure 7-18: Replacement-like Mineralization in the Jubilee Shear Zone Hanging Wall

7.4.6 Minto Mine Shear Zone (MMSZ)

The Minto vein is hosted in the Minto Mine Shear Zone, which was the focus of mining in the Minto Mine (historically 23,100 oz @ 12.56 g/t). The Minto Mine Shear Zone is a 3 to 20 m wide Shear Zone hosting a domain of higher-grade mineralization centered on a quartz-tourmaline quartz vein. On the Project, the Minto Mine Shear Zone has been traced with sufficient confidence with diamond drilling and geological modelling over a strike length of 1.3 km and a down-dip distance of 730 m. To the north, the Minto Mine Shear Zone is cross-cut and offset by the Minto B Shear Zone. The Resource estimate presented in this technical report stops at the Minto B Shear Zone. The offset of the Minto Mine Shear Zone is visible by the progressive bending of the Minto Mine underground developments as the mine was getting closer to the Minto B Shear Zone. The Minto Mine Shear Zone was interpreted to continue west of the Minto B Shear Zone over the nearby Surluga Deposit along the trace of a shear zone parallel to the Minto Mine Shear Zone. However, it cannot at the time of this report, be determined with a reasonable degree of confidence that the structure west of the Minto B Shear Zone is the actual extension of the Minto Mine Shear Zone. To the South, the Minto Mine Shear Zone has been traced by diamond drilling to the vicinities of the historical Parkhill Mine and remains open for further extension.

Outside of the zones of mineralization and strong veining, the tectonic foliation and lineations of the Minto Mine Shear Zone are poorly developed and not penetrative, making the structure sometimes hard to identify. Inside the zones of strong veining and mineralization, the structure has well-developed and penetrative tectonic foliation and lineations. Overall, the structural shear envelope of Minto Mine Zone is dipping approximately 48° to the NE and the zones of higher-grade mineralization are raking approximately 60° to the right of an observer looking down the structure parallel to the dip direction. The domains of higher-grade mineralization in the Minto Mine Shear Zone are characterized by the presence of a domain, between 0.3 m to 5 m wide, where a single shear-hosted quartz vein or stacks of closely spaced shear hosted quartz veins are formed. The main domain of shear hosted veining initially exploited in the Minto Mine is quite continuous in the Minto Mine Shear Zone and was followed down-plunge over 600 m. Where a mature quartz domain is developed in the Minto Mine Shear Zone, a strongly sheared mafic unit is present either in the hanging wall or the footwall of the high-grade vein.

The gangue minerals of the mineralized quartz shears veins in the Minto Mine Shear Zone comprise light to dark grey quartz, tourmaline, and iron carbonate. Gold mineralization postdates the initial quartz stage and occurs in brittle fractures cross-cutting the early quartz. The earliest sulphides formed in the veins predates the main gold introduction period and includes subhedral to euhedral pyrite and pyrrhotite. During the main gold mineralization event, the early pyrite and pyrrhotite are overprinted by a new generation of anhedral pyrite and pyrrhotite associated with variable chalcopyrite, common native gold, and locally bismuthinite and gold-bismuth alloys (e.g., maldonite – Au2Bi). A generation of white quartz veining is cross-cutting the sulphides and early grey quartz. The observation of native gold in some zones of white quartz indicate either remobilization of gold from the main stage of mineralization or that the introduction of gold in the Minto Shear Zone postdates the emplacement of the white quartz veins. The strongly sheared mafic rocks around the domains of veining are overprinted by strong chlorite and carbonate replacement, whereas the surrounding intermediate to felsic rocks are overprinted by moderate to strong sericitic and iron carbonate replacement. Around the mature zones of the Minto Mine Shear Zone, a well-defined sericitic and carbonate alteration halo extends approximately 10 m to 20 m away from the vein. In the immature and poorly developed zones of the structures, white mica and carbonate alteration is confined to the weakly to moderately developed higher strain domains marking the presence of the structure.

The Minto Mine Shear Zone is one component of a network of parallel shear zones present on the Project. Another structure, mined in the historical Parkhill Mine and historically known as the #4 vein of the Parkhill Mine, is parallel to the Minto Mine Shear Zone (Figure 7-19). That structure was intersected by Red Pine diamond drilling and was observed at surface in historical trenches. That structure has been traced over a strike length 1.3 km. Tisley (1986) reports that from the historical records of the Parkhill Mine, the quartz veining, like the Minto Mine Shear zone, was continuous in the structure and that in the well-mineralized zones of the vein, the grade of the vein ranges between 8.57 g/t and 10.28 g/t gold.

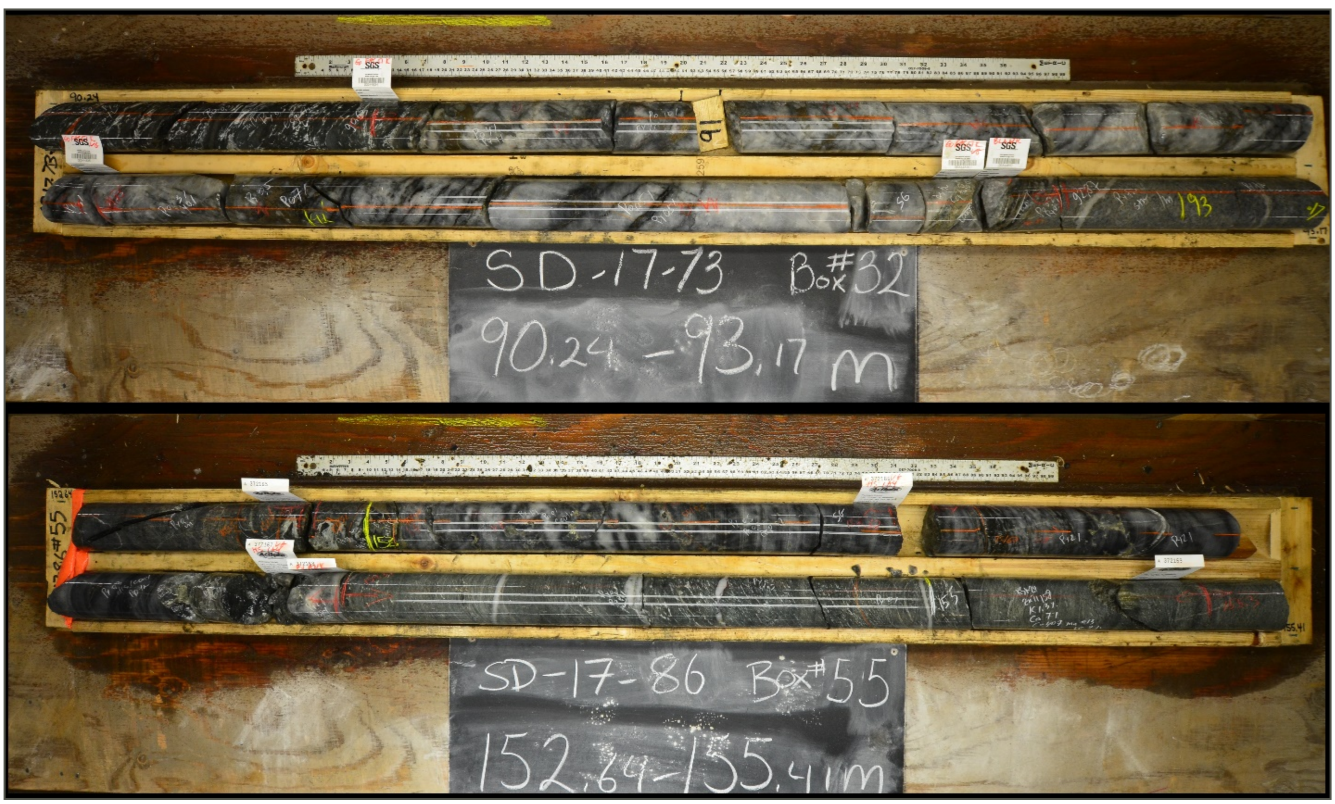

Figure 7-19: Intersection of the Minto A Shear Zone, Related to the Minto Mine

7.4.7 Cooper Shear Zone

The Cooper Shear Zone, hosting the historical Cooper Mine, is located 1.2-km ENE of the northern end of the Surluga Deposit resource. Recent and historical work along the Cooper Shear Zone confirmed a strike length of at least 800 metres for the structure that remains open in both directions. The Cooper Shear Zone is striking WNW to NW and dips 45°. The stretching lineation in the Cooper Shear Zone rakes 150° and locally prevails over the foliation in the structure. The core zone of deformation of the Cooper Shear Zone varies in width from 2 m to 5 m in the mature zones of the structures can narrow to less than 1m in the less mature part of the structure. Like the Minto Mine South Shear Zone, the widest domains of the Cooper Shear Zone include a deformed mafic dyke.

Mineralization in the Cooper Shear Zone occurs as a quartz-tourmaline shear vein containing variable pyrite, pyrrhotite and chalcopyrite (Figure 7-20). Short-wave infrared data acquired on tourmaline in the quartz veins of the Cooper Shear Zone indicates that its tourmaline is compositionally similar to tourmaline in the Minto Mine Shear Zone. Chemically, the mineralized quartz domains in the Cooper Shear Zone contain elevated Bi, resulting in a chemical signature comparable to the mineralized quartz domains of the Minto Mine structure.

Figure 7-20: Cooper Shear Zone

7.4.8 Minto B Shear Zone

The Minto B Shear Zone overlain the Jubilee Shear Zone and has been traced so far over a strike length of 1 km. It is formed after the porphyritic and phaneritic facies of the Jubilee Stock. In zones where the Minto B Shear Zone overprints domains of the Jubilee Stock with more than one intrusive facies, the strongly deformed core of the shear zone has an average width of 10 m. Where the Minto B Shear Zone occurs in the domains of the Jubilee Stock formed of a single intrusive facies, the shear zone tends to splay in multiples high-strain domains averaging in width of 2 m to 3 m. The Minto B Shear Zone, where exposed at surface, is characterized by well-developed tectonic foliations striking at 035° and steeply dipping at 80° to the ESE. Reversal of the dip direction of the foliation to a WNW orientation occurs in certain domains of the structure. The stretching lineation in the Minto B Shear Zone is poorly developed in most of the strain domains observed in the structure so far. Where observed, the trend/plunge of the stretching lineation was measured as 070º/45°. The Minto B Shear Zone transposed the Minto Mine Shear Zone, indicating that it is a late deformation event on the Project that is also post-dating Grace and Jubilee deformation.

Gold mineralization in the Minto B Shear Zone occurs as zones of stronger silicification, quartz veining, iron carbonate alteration, and white mica alteration in intermediate/felsic intrusive facies, or chlorite in the mafic intrusive facies (Figure 7-21). The zones of gold mineralization are systematically transposed in the Minto B foliation and where it is more developed, are stretched in the Minto B stretching lineation. The sulphide assemblages associated with gold mineralization vary considerably in the Minto B Shear Zone. Typically, the main sulphide assemblage is comprised of pyrite with accessory pyrrhotite and minor chalcopyrite, but locally arsenopyrite prevails in the sulphide assemblages. It is interpreted that the main zone of mineralization in the Minto B Shear Zone reflect the remobilization and transposition of earlier gold mineralization events. Weakening of the intrusive facies of the Jubilee Stock because of hydrothermal alteration forming micas may have also contributed to the formation of the Minto B Shear Zone.

Figure 7-21: Zone of Higher-Grade Mineralization in the Minto B Shear Zone

7.4.9 Late Brittle Faulting

The main brittle fault of the Project is the NW-oriented and sub-vertical Parkhill Fault. Following Sage (1993), the Parkhill Fault is the southeastern extension of the northwest-striking Black Trout Lake Fault. The age of the Parkhill Fault remains uncertain and its intrusions by gabbroic rocks, interpreted to be Archean, indicate that it is possibly a long-lived structure in the area, even possibly formed during the evolution of the gold system. The late movement along the Parkhill Fault, considering the interpreted offset of the Jubilee Shear Zone, is left-lateral.

7.5 Alteration

Carbonatization, white mica alteration, chloritization and silicification are characteristic alteration spatially overlapping or forming haloes around zones of gold mineralization. The width and intensity of white mica and quartz alteration in the shear zones generally correlates well with the intensity of deformation, the intensity of quartz veining and the intensity of gold mineralization (Figure 7-22). With increasing depth in the Jubilee Shear Zone, white mica and biotite alteration are beginning to alternatively prevail in association with zones of higher-grade gold mineralization in the structure. Pervasive biotite alteration of the intrusions of the Jubilee Stock also occurs away from the mineralized shear zones of the project. Epidote, tourmaline, and K-feldspar were also observed. Pink K-feldspar alteration variably overprints the white mica alteration. Outward from the mineralization, pre-mineralization sodic and silica-sodic alteration is prevalent. Many generations of biotite veins and a broad halo of chlorite-carbonate alteration also predate mineralization.

Figure 7-22: Sericitic Alteration Fronts Formed in the Shoulders of the Wawa Gold Shear Zone

8.0 DEPOSIT TYPES

Following Dube et al. (2015), gold mineralization on the Project is best classified as greenstone-hosted quartz-carbonate vein deposits that are part of Precambrian Lode Gold deposits. Precambrian Lode Gold Deposits are typically related to mesothermal mineralizing systems formed around the brittle-ductile transition in continental crust close to deep crustal, compressional and trans-tensional fault zones with complex structural histories (Dubé and Gosselin, 2007). The deposits are typically located in secondary and tertiary structures adjacent to the boundaries between geological domains of a geological province and are typically formed during the late stages of orogeny (Goldfarb et al., 2005). The host greenstone belts are characterized by tholeiitic basalts and ultramafic komatiitic flows later intruded by intermediate to felsic porphyritic intrusions, and less often by swarms of albitite and lamprophyre dykes. Metamorphic fluids are interpreted to be responsible for gold transport as bi-sulphide complexes. However, gold may have been sequestered from rocks predating the metamorphic event and remobilized during a later event (Goldfarb et al., 2005) These epigenetic gold deposits in Precambrian shields have yielded 23,000 t Au to 25,000 t Au (Goldfarb et al., 2005).

Mineralization is hosted by veins filling shear zones and faults. Mineralization is concentrated at jogs or changes in strike along the larger-scale fault zones. The timing of the mineralization is typically syn to late deformation. Stockworks, breccias, crack-seal veins, sigmoidal veins, and disseminations in deeper parts are all common.

Typical hydrothermal alteration facies associated with this family of deposit, of which the mineralogy is strongly influenced by the composition of the host rock, include:

- Potassic alteration forming muscovite and fuchsite, or biotite and K-feldspar
- Sodic alteration characterized by the formation of albite as early alteration and dykes
- Carbonatization characterized by the zoned formation of carbonate and iron carbonate
- Sulphidization characterized by the formation of pyrite, arsenopyrite, and pyrrhotite
- Tourmalinization
- Chloritization

The typical sulphide content of these deposits is 2% to 5% with arsenopyrite and pyrite being the dominant sulphides. Pyrrhotite occurs in higher-temperature systems. Base metals are rare but W-, B-, and Te-bearing phases can occur (Goldfarb et al., 2005). Native gold and electrum are common in some deposits but absent in others. Typical gangue minerals are quartz and carbonate. Carbonates, muscovite, chlorite, K-feldspar, biotite, tourmaline, and albite are typical alteration minerals. Intermittent pressure changes in the shear zones and the resulting fluid un-mixing and water–rock interaction and associated de-sulphidation are considered the dominant precipitation mechanisms. Metamorphic fluids are interpreted to be responsible for gold transport. However, gold may have been sequestered from rocks predating the metamorphic event (Goldfarb et al., 2005).

Economically significant orogenic deposits tend to be between 2 km and 10 km long, ~1 km wide and can be mined to depths of 2 to 3 km. Examples of orogenic deposits/districts are Muruntau (Uzbekistan), Ashanti (West Africa) and Golden Mile (West Australia). Canadian examples include McIntyre–Hollinger (Ontario), Red Lake (Ontario) and Kirkland Lake (Ontario).

9.0 EXPLORATION

9.1 2014 to 2020 Rock Sampling

Red Pine completed surface sampling field programs from 2014 to 2020 and collected a total of 921 grab samples. Brad Leonard, P.Geo., a consultant to Red Pine completed the first rock sampling program during the fall of 2014; subsequent rock sampling programs were completed by Red Pine geologists.

Based on the field observations and sampling, gold mineralization producing gold grades over 0.1 g/t are restricted to shear zones, the immediate vicinity of the shear zones and zones of weak deformation and moderate-strong hydrothermal alteration. Gold grades over 5 g/t are restricted to mineralization zones rich in quartz veins (shear, tension, and networks of fine quartz stringers), and some shear and alteration zones with elevated arsenopyrite.

The purpose of the programs was to collect structural data and samples from the property showings and from areas identified as having potential for gold mineralization. The gold grades ranged from below detection to 143 g/t gold. A summary of the rock sampling programs is listed in Table 9-1. Highlights from the assay results for grab samples collected on the Project are listed in Table 9-2. Figure 9-1 shows the location of the rock samples and Figure 9-2 shows the location of the highlighted assay results.

Table 9-1: Summary of Rock Samples Collected 2014 – 2020

Parameters	Year	Total
Rock samples collected	2014	82
Rock samples collected	2015	283
Rock samples collected	2016	141
Rock samples collected	2017	13
Rock samples collected	2018	22
Rock samples collected	2019	155
Rock samples collected	2020	218
Total number of samples		**914**

Table 9-2: List of Samples Collected by Red Pine in 2104 – 2020

Sample	Area	Year	X	Y	Au (g/t) FA GRA	Au (ppb) FA AA
33919	Blackington	2014	668889.0162	5314086.889	0.005	5
33920	Blackington	2014	668889.0162	5314086.889	0.01	10
33918	Blackington	2014	668969.5112	5314060.554	0.005	5
33915	Blackington	2014	668987.638	5314081.775	0.008	8
33914	Blackington	2014	668995.9362	5314102.045	0.005	5
33916	Blackington	2014	669017.6829	5314061.195	0.077	77
33917	Blackington	2014	669038.2454	5314086.048	0.01	10
22311	Cooper	2014	669587.89	5319122.83	0.02	20
22312	Cooper	2014	669587.89	5319122.83	0.077	77
22309	Cooper	2014	669592.19	5319119.29	0.028	28
22310	Cooper	2014	669592.19	5319119.29	0.005	5
33912	DarwinGrace	2014	667019	5312868	0.005	5
22205	DarwinGrace	2014	668029.4	5313445.51	13.5	5000
22206	DarwinGrace	2014	668029.4	5313445.51	0.005	5
33921	DarwinGrace	2014	668275.2613	5313490.406	0.005	5
22207	DarwinGrace	2014	668470.26	5313570.63	0.068	68
22316	Jubilee	2014	667930.73	5316219.63	2.3	2300
22317	Jubilee	2014	667930.73	5316219.63	0.018	18
22318	Jubilee	2014	667930.73	5316219.63	0.177	177
22319	Jubilee	2014	667930.73	5316219.63	0.112	112
22325	Jubilee	2014	667973.13	5316472.7	0.005	5
22322	Jubilee	2014	667997.14	5316477.52	0.037	37
22323	Jubilee	2014	667997.14	5316477.52	0.005	5
22324	Jubilee	2014	667997.14	5316477.52	0.016	16
33910	Jubilee	2014	668000	5316145	0.005	5
22321	Jubilee	2014	668002.7	5316478.9	0.022	22
33908	Jubilee	2014	668348	5316420	0.005	5
33909	Jubilee	2014	668348	5316420	0.007	7
22313	Mackay Point	2014	668762.9	5318440.6	5.63	5000
22314	Mackay Point	2014	668791.58	5318470.47	14.7	5000
22213	Mariposa	2014	668781.14	5314180.38	0.137	137
22214	Mariposa	2014	668781.14	5314180.38	0.364	364
22215	Mariposa	2014	668781.14	5314180.38	0.016	16
22201	Mariposa	2014	668794.68	5314282.11	11	5000
22202	Mariposa	2014	668804.75	5314279.74	0.241	241
22203	Mariposa	2014	668810.28	5314254.54	0.01	10
22204	Mariposa	2014	668843.27	5314224.7	0.163	163
22331	Minto	2014	667976.07	5315863.9	0.011	11
22332	Minto	2014	667976.07	5315863.9	0.014	14
22333	Minto	2014	667976.07	5315863.9	0.005	5
22330	Minto	2014	668141.4	5315833.92	0.062	62
22326	Minto	2014	668161.93	5315781.02	0.638	638
22329	Minto	2014	668165.91	5315787.14	0.012	12
22327	Minto	2014	668190.68	5315788.87	17	5000
22328	Minto	2014	668190.68	5315788.87	5.51	5000
22350	Parkhill	2014	668544.12	5314669.54	0.28	280
22347	Parkhill	2014	668555.8	5314701.36	0.025	25
22348	Parkhill	2014	668555.8	5314701.36	0.025	25
22349	Parkhill	2014	668555.8	5314701.36	0.005	5

Sample	Area	Year	X	Y	Au (g/t) FA GRA	Au (ppb) FA AA
22345	Sunrise	2014	668687.47	5315821.54	0.971	971
22344	Sunrise	2014	668702.92	5315821.88	0.016	16
22346	Sunrise	2014	668712.56	5315808.92	0.009	9
22343	Sunrise	2014	668718.1	5315826.11	0.238	238
22340	Sunrise	2014	668724.44	5315744.65	15	5000
22341	Sunrise	2014	668724.44	5315744.65	0.013	13
22342	Sunrise	2014	668724.44	5315744.65	0.005	5
22339	Sunrise	2014	668926.39	5315679.38	0.015	15
22338	Sunrise	2014	668932.31	5315689.24	27	5000
22336	Sunrise	2014	668942.06	5315753.7	31.9	5000
223361	Sunrise	2014	668942.06	5315753.7	0.036	36
22337	Sunrise	2014	668942.06	5315753.7	0.01	10
22334	Sunrise	2014	668942.45	5315760.72	9.25	5000
22335	Sunrise	2014	668942.45	5315760.72	0.008	8
22315	Surluga	2014	667960.39	5316853.18	0.005	5
33911	Surluga	2014	668228	5316912	0.017	17
22306	Surluga	2014	668230.34	5317910.54	0.019	19
33913	Surluga	2014	668235	5316659	0.015	15
22307	Surluga	2014	668251.34	5317927.73	0.009	9
22308	Surluga	2014	668251.34	5317927.73	0.007	7
33906	Surluga	2014	668254	5317193	0.007	7
33907	Surluga	2014	668300	5316854	0.005	5
22320	Surluga	2014	668311.01	5316955.31	0.005	5
33905	Surluga	2014	668402	5316621	0.005	5
33901	Surluga	2014	668436	5316800	0.005	5
33902	Surluga	2014	668436	5316800	0.005	5
33903	Surluga	2014	668436	5316800	0.005	5
33904	Surluga	2014	668436	5316800	0.005	5
22208	Van Sickle	2014	668991.57	5314866.3	3.48	3480
22209	Van Sickle	2014	668991.57	5314866.3	0.005	5
22210	Van Sickle	2014	668991.57	5314866.3	0.007	7
22211	Van Sickle	2014	668991.57	5314866.3	0.005	5
22212	Van Sickle	2014	668991.57	5314866.3	0.005	5
1473093	Cooper	2015	669158.06	5318737.34	0.005	5
1473013	Cooper	2015	669193	5318715	0.017	17
1473014	Cooper	2015	669218	5318685	0.006	6
1473016	Cooper	2015	669253	5318591	0.005	5
1473015	Cooper	2015	669258	5318686	0.005	5
1473022	Cooper	2015	669282	5318622	0.005	5
1473021	Cooper	2015	669353	5318575	0.005	5
1473020	Cooper	2015	669376	5318535	0.02	20
1473018	Cooper	2015	669449	5318461	0.241	241
1473019	Cooper	2015	669449	5318461	0.126	126
1473017	Cooper	2015	669469	5318429	0.005	5
1473051	Cooper	2015	669518.1	5317996.2	34.1	5000
1473052	Cooper	2015	669518.1	5317996.2	3.14	3140
1473053	Cooper	2015	669518.1	5317996.2	0.281	281
1473054	Cooper	2015	669575.8	5317989.19	0.005	5
1473055	Cooper	2015	669635.41	5317921.79	0.009	9

Sample	Area	Year	X	Y	Au (g/t) FA GRA	Au (ppb) FA AA
1473061	Cooper	2015	669645.8	5318218.91	0.009	9
1473062	Cooper	2015	669645.8	5318218.91	0.005	5
1473063	Cooper	2015	669645.8	5318218.91	0.008	8
1473056	Cooper	2015	669653.19	5317918.05	0.94	940
1473057	Cooper	2015	669653.19	5317918.05	1.01	1010
1473058	Cooper	2015	669653.19	5317918.05	0.005	5
1473059	Cooper	2015	669653.19	5317918.05	25.4	5000
1473060	Cooper	2015	669653.19	5317918.05	0.048	48
1473066	Cooper	2015	669763.31	5318605.39	0.005	5
1473067	Cooper	2015	669763.31	5318605.39	0.039	39
1473068	Cooper	2015	669763.31	5318605.39	0.005	5
1473069	Cooper	2015	669763.31	5318605.39	0.005	5
1473064	Cooper	2015	669765.69	5318613.06	0.005	5
1473065	Cooper	2015	669765.69	5318613.06	0.035	35
1473071	Cooper	2015	669789.47	5318465.08	0.005	5
1473072	Cooper	2015	669789.47	5318465.08	0.005	5
1473073	Cooper	2015	669789.47	5318465.08	0.005	5
1473074	Cooper	2015	669795.68	5318452.84	0.005	5
1473070	Cooper	2015	669846.51	5318514.23	0.005	5
983855	Cooper	2015	670155	5316510	0.006	6
11747	DarwinGrace	2015	667936	5313545	0.021	21
11748	DarwinGrace	2015	667936	5313545	0.005	5
11750	DarwinGrace	2015	667946	5313522	0.006	6
11744	DarwinGrace	2015	667962	5313532	0.006	6
11745	DarwinGrace	2015	667982	5313544	0.016	16
11742	DarwinGrace	2015	668025	5313447	1.27	1270
11743	DarwinGrace	2015	668025	5313447	18.4	5000
11746	DarwinGrace	2015	668042	5313597	0.005	5
11751	DarwinGrace	2015	668104	5313613	0.005	5
11752	DarwinGrace	2015	668167	5313464	0.005	5
11753	DarwinGrace	2015	668167	5313464	0.005	5
11749	DarwinGrace	2015	668197	5313285	0.054	54
11754	DarwinGrace	2015	668278	5313485	0.057	57
11669	Jubilee	2015	667722	5316226	0.005	5
1473023	Jubilee	2015	667930	5316243	50.8	5000
33857	Jubilee	2015	668247	5316175	0.007	7
1099304	Jubilee West	2015	665795	5316422	0.005	5
1099302	Jubilee West	2015	665814	5316329	0.005	5
1099303	Jubilee West	2015	665825	5316333	0.005	5
33956	Jubilee West	2015	666051	5316717	0.005	5
33957	Jubilee West	2015	666084	5316745	0.005	5
33958	Jubilee West	2015	666084	5316745	0.005	5
1099305	Jubilee West	2015	666140	5316758	0.006	6
1099301	Jubilee West	2015	666142	5316768	1.15	1150
1099306	Jubilee West	2015	666157	5316771	0.096	96
1099307	Jubilee West	2015	666182	5316721	1.78	1780
983854	Jubilee West	2015	666434	5315955	0.007	7
983851	Jubilee West	2015	666671	5316903	0.02	20
983852	Jubilee West	2015	666785	5316940	0.006	6

Sample	Area	Year	X	Y	Au (g/t) FA GRA	Au (ppb) FA AA
983853	Jubilee West	2015	666971	5316467	0.011	11
11511	Mackay Point	2015	668317	5318147	0.005	5
1099312	Mackay Point	2015	668555.57	5318182.58	0.006	6
11534	Mackay Point	2015	668640	5318226	1.36	2040
11535	Mackay Point	2015	668640	5318226	0.105	105
11532	Mackay Point	2015	668755.64	5318441.87	16.6	5000
11533	Mackay Point	2015	668755.64	5318441.87	0.441	441
1099311	Mackay Point	2015	668760.68	5318447.14	0.055	55
11527	Mackay Point	2015	668761	5318448	0.592	592
11528	Mackay Point	2015	668761	5318448	0.142	142
11529	Mackay Point	2015	668761	5318448	0.108	108
11530	Mackay Point	2015	668766	5318449	2.4	2470
11522	Mackay Point	2015	668769	5318466	0.129	129
11523	Mackay Point	2015	668769	5318466	0.734	734
1473001	Mariposa	2015	668770.8983	5314283.943	1.16	1160
1473002	Mariposa	2015	668781.9932	5314282.24	0.013	13
1473003	Mariposa	2015	668785.0161	5314282.18	1.82	1820
1473004	Mariposa	2015	668791.0687	5314280.777	0.022	22
1473005	Mariposa	2015	668795.4021	5314280.559	0.008	8
1473006	Mariposa	2015	668799.4513	5314281.446	0.296	296
1473007	Mariposa	2015	668804.1129	5314281.098	0.154	154
1473012	Mariposa	2015	668826	5314237	1.27	1270
1473008	Mariposa	2015	668839.2578	5314224.636	0.052	52
1473009	Mariposa	2015	668853.1822	5314224.054	0.167	167
1473010	Mariposa	2015	668865.7338	5314232.414	0.173	173
1473011	Mariposa	2015	668881.6549	5314226.29	0.301	301
11700	Minto	2015	667158	5315472	0.06	60
11699	Minto	2015	667241	5315514	0.005	5
11740	Minto	2015	667248	5315851	0.005	5
11741	Minto	2015	667253	5315841	0.005	5
11684	Minto	2015	667329	5315388	0.005	5
11683	Minto	2015	667385	5315528	0.009	9
11678	Minto	2015	667464	5315489	0.005	5
11695	Minto	2015	667489	5314915	0.005	5
11696	Minto	2015	667489	5314915	0.005	5
11698	Minto	2015	667501	5315048	0.008	8
11679	Minto	2015	667518	5315656	0.007	7
11680	Minto	2015	667518	5315656	0.005	5
11681	Minto	2015	667518	5315653	0.017	17
11682	Minto	2015	667527	5315668	0.165	165
11693	Minto	2015	667527	5314962	0.297	297
11697	Minto	2015	667527	5315026	0.005	5
11694	Minto	2015	667540	5314976	0.005	5
11738	Minto	2015	667543	5315921	0.01	10
11739	Minto	2015	667543	5315921	0.005	5
11692	Minto	2015	667550	5315045	0.385	385
11676	Minto	2015	667576	5315505	0.005	5
11677	Minto	2015	667576	5315505	0.005	5
11671	Minto	2015	667584	5315344	0.005	5

Sample	Area	Year	X	Y	Au (g/t) FA GRA	Au (ppb) FA AA
11672	Minto	2015	667638	5315387	0.005	5
11674	Minto	2015	667650	5315448	0.005	5
11675	Minto	2015	667650	5315448	0.005	5
11670	Minto	2015	667653	5315325	0.006	6
11673	Minto	2015	667701	5315473	0.005	5
11689	Minto	2015	667864	5314890	0.005	5
11690	Minto	2015	667864	5314890	0.005	5
11691	Minto	2015	667869	5314921	0.005	5
1473082	Minto	2015	667883.84	5315941.08	0.005	5
1473090	Minto	2015	667883.84	5315941.08	0.005	5
1473095	Minto	2015	667883.87	5315952.57	0.005	5
11688	Minto	2015	667889	5314873	0.005	5
1473083	Minto	2015	667914.61	5315966.13	0.005	5
11687	Minto	2015	667930	5314879	0.005	5
1099309	Minto	2015	667938.41	5315188.71	0.199	199
1473088	Minto	2015	667977.11	5315850.36	0.229	229
1473094	Minto	2015	667977.11	5315850.36	0.007	7
11686	Minto	2015	668074	5315113	0.096	96
11685	Minto	2015	668133	5315109	0.005	5
11541	Minto	2015	668176	5315788	0.053	53
11542	Minto	2015	668176	5315788	0.131	131
11543	Minto	2015	668176	5315788	0.409	409
11544	Minto	2015	668176	5315788	0.285	285
11545	Minto	2015	668176	5315788	0.013	13
11546	Minto	2015	668176	5315788	0.009	9
1099318	Minto	2015	668179.37	5315892.44	0.005	5
1099313	Minto	2015	668190.88	5315785.42	0.005	5
11592	Minto	2015	668221	5315962	0.012	12
11593	Minto	2015	668221	5315962	0.05	50
11591	Minto	2015	668223	5315964	0.014	14
11585	Minto	2015	668226	5315962	0.007	7
11586	Minto	2015	668226	5315962	0.006	6
11587	Minto	2015	668226	5315962	0.012	12
11588	Minto	2015	668226	5315962	0.041	41
11594	Minto	2015	668228	5315936	0.143	143
11595	Minto	2015	668246	5315995	0.182	182
1099310	Minto	2015	668285.43	5316042.72	0.026	26
1099316	Minto	2015	668288.02	5315826.45	0.215	215
1099317	Minto	2015	668288.02	5315826.45	0.037	37
1099308	Minto	2015	668398.82	5315384.02	0.005	5
1099320	Minto	2015	668398.82	5315384.02	0.271	271
1099321	Minto	2015	668398.82	5315384.02	0.005	5
1099322	Minto	2015	668398.82	5315384.02	0.005	5
1099323	Minto	2015	668398.82	5315384.02	3.68	5000
1099319	Minto	2015	668447	5315382	1.67	1670
11596	Minto	2015	668463	5315777	0.01	10
11597	Minto	2015	668463	5315777	10.5	5000
1099324	Minto	2015	668502.96	5315441.21	0.005	5
11626	Parkhill	2015	668746	5314695	12.9	5000

Sample	Area	Year	X	Y	Au (g/t) FA GRA	Au (ppb) FA AA
11619	Parkhill	2015	668764	5314700	54.1	5000
11627	Parkhill	2015	668773	5314711	0.005	5
1473104	South Blackington	2015	669626	5312815	0.005	5
1473102	South Blackington	2015	669678	5312802	0.005	5
1473101	South Blackington	2015	669710	5312710	0.005	5
1473105	South Blackington	2015	669926	5312432	0.005	5
11711	Sunrise	2015	668574	5315679	0.005	5
11456	Sunrise	2015	668601	5315750	0.005	5
11457	Sunrise	2015	668601	5315750	0.005	5
11709	Sunrise	2015	668653	5315730	0.062	62
11710	Sunrise	2015	668653	5315730	0.005	5
11707	Sunrise	2015	668663	5315718	0.005	5
11708	Sunrise	2015	668663	5315718	0.005	5
11458	Sunrise	2015	668670	5315792	0.006	6
11706	Sunrise	2015	668682	5315732	0.005	5
11712	Sunrise	2015	668690	5315823	1.8	1800
11459	Sunrise	2015	668722	5315761	0.005	5
11724	Sunrise	2015	668723	5315749	0.041	41
11725	Sunrise	2015	668723	5315749	6.9	5000
11705	Sunrise	2015	668751	5315714	0.033	33
11704	Sunrise	2015	668767	5315707	0.005	5
11460	Sunrise	2015	668767	5315709	0.005	5
11723	Sunrise	2015	668776	5315828	0.037	37
11702	Sunrise	2015	668790	5315707	0.038	38
11703	Sunrise	2015	668790	5315707	6.86	5000
11713	Sunrise	2015	668791	5315836	0.026	26
11714	Sunrise	2015	668791	5315831	0.038	38
11461	Sunrise	2015	668812	5315733	0.005	5
11462	Sunrise	2015	668832	5315787	0.005	5
11715	Sunrise	2015	668833	5315820	0.013	13
11726	Sunrise	2015	668858	5315696	0.005	5
11727	Sunrise	2015	668858	5315696	0.077	77
11716	Sunrise	2015	668870	5315823	0.023	23
11728	Sunrise	2015	668884	5315692	93	5000
11463	Sunrise	2015	668900	5315809	0.005	5
11635	Sunrise	2015	668905.44	5315687.21	0.005	5
11645	Sunrise	2015	668906.84	5315695.51	0.071	71
11644	Sunrise	2015	668907.04	5315695.06	3.39	3080
11643	Sunrise	2015	668907.1	5315694.71	0.009	9
11634	Sunrise	2015	668909.07	5315687.41	0.153	153
11633	Sunrise	2015	668909.772	5315688.61	0.622	622
11632	Sunrise	2015	668912.585	5315689.1	0.123	123
11464	Sunrise	2015	668914	5315818	0.016	16
11701	Sunrise	2015	668944	5315749	36.3	5000
11465	Sunrise	2015	668966	5315680	24.9	0
1473081	Sunrise	2015	669019.1	5315700.5	0.066	66
1473089	Sunrise	2015	669170	5315691.4	0.747	747
1473092	Sunrise	2015	669170	5315691.4	0.005	5
11722	Sunrise	2015	669199	5315668	0.159	159

Sample	Area	Year	X	Y	Au (g/t) FA GRA	Au (ppb) FA AA
1473076	Sunrise	2015	669202.68	5315668.07	0.005	5
1473077	Sunrise	2015	669202.68	5315668.07	0.006	6
1473079	Sunrise	2015	669210.22	5315669.97	0.005	5
1473091	Sunrise	2015	669210.22	5315669.97	0.683	683
1473078	Sunrise	2015	669214.13	5315663.96	0.005	5
1473080	Sunrise	2015	669214.13	5315663.96	0.005	5
11721	Sunrise	2015	669354	5315932	0.005	5
11717	Sunrise	2015	669367	5315805	0.005	5
11718	Sunrise	2015	669367	5315805	0.005	5
983856	Sunrise	2015	669374	5315809	0.005	5
983857	Sunrise	2015	669374	5315809	0.008	8
11719	Sunrise	2015	669428	5315788	0.005	5
11720	Sunrise	2015	669460	5315811	0.005	5
33955	Surluga	2015	667506	5316691	0.007	7
33954	Surluga	2015	667648	5316793	0.023	23
11666	Surluga	2015	667658	5317001	0.043	43
11736	Surluga	2015	667703	5316720	0.008	8
11737	Surluga	2015	667703	5316720	0.021	21
11667	Surluga	2015	667734	5316845	0.022	22
11665	Surluga	2015	667745	5316900	0.018	18
11668	Surluga	2015	667746	5316826	0.007	7
11729	Surluga	2015	667755	5316781	0.005	5
11730	Surluga	2015	667755	5316781	0.371	371
11731	Surluga	2015	667776	5316765	0.005	5
11732	Surluga	2015	667784	5316768	0.075	75
11733	Surluga	2015	667836	5316774	0.005	5
11734	Surluga	2015	667836	5316774	0.005	5
11735	Surluga	2015	667874	5316765	0.005	5
33951	Surluga	2015	668041	5317375	0.005	5
11662	Surluga	2015	668042	5317449	0.852	852
1473087	Surluga	2015	668042.49	5317459.75	3.15	3130
11664	Surluga	2015	668065	5317535	0.01	10
1473075	Surluga	2015	668072.48	5317515.32	0.012	12
1473086	Surluga	2015	668072.48	5317515.32	0.024	24
11663	Surluga	2015	668077	5317498	24.4	5000
1473084	Surluga	2015	668079.27	5317534.24	3.86	3070
1473085	Surluga	2015	668079.27	5317534.24	1.52	1520
33952	Surluga	2015	668080	5317399	0.005	5
11507	Surluga	2015	668088	5317842	0.005	5
11508	Surluga	2015	668088	5317842	0.005	5
11652	Surluga	2015	668102	5317831	0.025	25
11653	Surluga	2015	668102	5317831	0.256	256
11654	Surluga	2015	668102	5317831	0.013	13
11661	Surluga	2015	668109	5317639	0.014	14
11655	Surluga	2015	668115	5317779	0.005	5
11656	Surluga	2015	668115	5317779	0.018	18
11660	Surluga	2015	668120	5317686	0.005	5
33953	Surluga	2015	668124	5317402	0.046	46
11657	Surluga	2015	668128	5317727	0.005	5

Sample	Area	Year	X	Y	Au (g/t) FA GRA	Au (ppb) FA AA
11658	Surluga	2015	668135	5317735	0.005	5
11659	Surluga	2015	668163	5317760	0.006	6
11505	Surluga	2015	668179	5317884	0.005	5
11506	Surluga	2015	668179	5317884	0.007	7
11503	Surluga	2015	668222	5317904	0.005	5
11504	Surluga	2015	668222	5317904	0.005	5
1099314	Surluga	2015	668222	5317904	0.073	73
11509	Surluga	2015	668230	5317907	0.005	5
11510	Surluga	2015	668230	5317907	0.005	5
1473024	Surluga	2015	668238	5317259	0.018	18
1473026	Surluga	2015	668258	5317338	0.02	20
11501	Surluga	2015	668260	5317931	0.014	14
11502	Surluga	2015	668260	5317931	0.012	12
1099315	Surluga	2015	668260	5317931	0.005	5
1473025	Surluga	2015	668272	5317319	0.036	36
1473027	Surluga	2015	668310	5317531	0.018	18
11615	Van Sickle	2015	668937	5314835	0.007	7
11616	Van Sickle	2015	668937	5314835	0.494	494
11617	Van Sickle	2015	668937	5314835	0.012	12
11618	Van Sickle	2015	668958	5314842	2.71	5000
11620	Van Sickle	2015	668958	5314842	0.009	9
1099325	Van Sickle	2015	669050.62	5314889.98	0.01	10
1473991	Blackington	2016	669008.7	5314032.27	0.027	27
1473998	Blackington	2016	669031.58	5314050.18	0.036	36
1473999	Blackington	2016	669031.58	5314050.18	0.079	79
1474000	Blackington	2016	669034.69	5314067.33	0.007	7
1473992	Blackington	2016	669038.95	5314019.99	0.007	7
1473993	Blackington	2016	669038.95	5314019.99	0.079	79
1473994	Blackington	2016	669038.95	5314019.99	0.113	113
1473995	Blackington	2016	669038.95	5314019.99	0.032	32
1473996	Blackington	2016	669038.95	5314019.99	0.009	9
1473997	Blackington	2016	669038.95	5314019.99	0.005	5
18454	Blackington	2016	669398.9	5313687.42	0.005	5
18452	Blackington	2016	669406.3	5313685.6	0.005	5
18453	Blackington	2016	669407.39	5313682.48	0.005	5
18451	Blackington	2016	669413.3	5313693.22	0.005	5
18461	Blackington	2016	669435.8	5313622.7	0.011	11
18455	Blackington	2016	669439.03	5313622.79	0.097	97
18456	Blackington	2016	669439.03	5313622.79	0.012	12
18457	Blackington	2016	669439.03	5313622.79	0.018	18
18458	Blackington	2016	669439.03	5313622.79	0.071	71
18459	Blackington	2016	669450.58	5313607.19	0.132	132
18460	Blackington	2016	669452.03	5313600	0.01	10
1473395	Cooper	2016	669703.93	5318682.06	0.005	5
1473396	Cooper	2016	669703.93	5318682.06	0.005	5
1473400	Cooper	2016	669752.16	5318881.85	0.005	5
1473393	Cooper	2016	669770.9	5318710.73	0.005	5
1473394	Cooper	2016	669778.98	5318723.39	0.029	29
1473398	Cooper	2016	669889.95	5319010.32	0.005	5

Sample	Area	Year	X	Y	Au (g/t) FA GRA	Au (ppb) FA AA
1473399	Cooper	2016	669889.95	5319010.32	0.005	5
1473397	Cooper	2016	670012.49	5319225.47	0.005	5
1473988	Cooper	2016	670071.16	5318571.29	0.006	6
1473986	Cooper	2016	670382.32	5318912.36	0.005	5
1473987	Cooper	2016	670382.32	5318912.36	0.005	5
18491	DarwinGrace	2016	667512.21	5313564.18	0.006	6
18490	DarwinGrace	2016	667520.09	5313558.85	0.005	5
18489	DarwinGrace	2016	667569.26	5313525.24	0.005	5
18487	DarwinGrace	2016	667587.98	5313528.2	0.005	5
18488	DarwinGrace	2016	667587.98	5313528.2	0.005	5
18474	DarwinGrace	2016	667652.5	5313677.27	0.017	17
18473	DarwinGrace	2016	667652.59	5313699.89	0.019	19
18486	DarwinGrace	2016	667668.57	5313407.82	0.005	5
18472	DarwinGrace	2016	667674.3	5313715.73	0.005	5
18475	DarwinGrace	2016	667722.01	5313591.05	0.008	8
18485	DarwinGrace	2016	667723.63	5313360.3	0.005	5
18471	DarwinGrace	2016	667728.5	5313787.19	0.216	216
18469	DarwinGrace	2016	667751.59	5313768.59	0.005	5
18470	DarwinGrace	2016	667756.79	5313778.01	0.005	5
18467	DarwinGrace	2016	667763.3	5313759.84	0.005	5
18468	DarwinGrace	2016	667763.3	5313759.84	0.005	5
18466	DarwinGrace	2016	667805.9	5313716.78	0.005	5
18465	DarwinGrace	2016	667844.87	5313686.96	0.082	82
18476	DarwinGrace	2016	667937.98	5313543.22	0.017	17
18464	DarwinGrace	2016	667952.48	5313635.22	0.364	364
18492	DarwinGrace	2016	668292.2	5313477.92	1.65	1650
18493	DarwinGrace	2016	668292.2	5313477.92	3.42	2180
18484	DarwinGrace	2016	668446.42	5313565.67	0.078	78
18481	DarwinGrace	2016	668469	5313564.48	0.01	10
18482	DarwinGrace	2016	668469	5313564.48	143.1	0
18483	DarwinGrace	2016	668469	5313564.48	0.02	20
1473386	Jubilee	2016	668197.62	5316248.9	0.03	30
1473387	Jubilee	2016	668205.34	5316248.75	0.005	5
1473983	Jubilee	2016	668247	5316482	0.026	26
1473388	Jubilee	2016	668248.57	5316273	0.008	8
1473391	Jubilee	2016	668257.31	5316348.9	0.005	5
1473392	Jubilee	2016	668257.31	5316348.9	0.022	22
1473390	Jubilee	2016	668260.87	5316333.43	0.005	5
1473389	Jubilee	2016	668271.7	5316303.71	0.01	10
1473974	Jubilee	2016	668290.5351	5316332.32	0.005	5
1473975	Jubilee	2016	668290.5351	5316332.32	0.005	5
1473384	Jubilee	2016	668292.21	5316321.74	0.005	5
1473385	Jubilee	2016	668292.21	5316321.74	0.008	8
1473976	Jubilee	2016	668303.8093	5316350.852	0.005	5
1473984	Jubilee	2016	668357	5316505	0.005	5
1473985	Jubilee	2016	668385	5316317	0.005	5
18410	Jubilee South	2016	667706.58	5314116.73	0.02	20
18406	Jubilee South	2016	667737.04	5314139.49	0.03	30
18407	Jubilee South	2016	667737.04	5314139.49	0.005	5

Sample	Area	Year	X	Y	Au (g/t) FA GRA	Au (ppb) FA AA
18408	Jubilee South	2016	667737.04	5314139.49	0.02	20
18409	Jubilee South	2016	667737.04	5314139.49	0.114	114
18403	Jubilee South	2016	667777.14	5314212.22	0.007	7
18404	Jubilee South	2016	667777.14	5314212.22	0.011	11
18405	Jubilee South	2016	667777.14	5314212.22	0.088	88
18402	Jubilee South	2016	667848.65	5314266.39	0.005	5
1473382	Minto	2016	667679.17	5315411.95	0.005	5
1473383	Minto	2016	667679.17	5315411.95	0.032	32
1473381	Minto	2016	667679.58	5315393.61	0.005	5
1473380	Minto	2016	667737.59	5315240.13	1.32	1320
1473379	Minto	2016	667765.37	5315256.52	0.015	15
1473378	Minto	2016	667783.58	5315208.29	0.009	9
1473377	Minto	2016	667787.56	5315225.65	0.005	5
1473368	Minto	2016	667819.27	5315034.88	0.005	5
1473370	Minto	2016	667830.01	5315050.77	3.16	2710
1473371	Minto	2016	667830.18	5315096.19	0.221	221
1473372	Minto	2016	667832.78	5315143.73	0.005	5
1473369	Minto	2016	667833.68	5315048.84	0.277	277
1473951	Minto	2016	668140	5315522	0.017	17
1473958	Minto	2016	668249	5315968	0.01	10
1473959	Minto	2016	668249	5315968	0.06	60
1473960	Minto	2016	668249	5315968	0.017	17
1473373	Minto	2016	668596.03	5315515.31	0.005	5
1473374	Minto	2016	668596.03	5315515.31	0.017	17
1473375	Minto	2016	668606.21	5315512.27	0.019	19
1473376	Minto	2016	668606.21	5315512.27	2.48	2480
18401	Parkhill	2016	668336.1	5314480.66	0.005	5
1473355	South Blackington	2016	669379	5312185	0.005	5
1473354	South Blackington	2016	670250	5312301	0.005	5
1473352	South Blackington	2016	670300	5312474	0.005	5
1473353	South Blackington	2016	670432	5312424	0.005	5
1473966	Surluga	2016	667819	5316883	0.005	5
1473967	Surluga	2016	667819	5316883	0.005	5
1473968	Surluga	2016	667917	5316814	0.005	5
18480	Surluga	2016	667980.42	5316747.17	0.005	5
18479	Surluga	2016	667993.02	5316729.18	0.011	11
1473965	Surluga	2016	667994	5316729	0.021	21
18477	Surluga	2016	668003.15	5316723.36	0.005	5
18478	Surluga	2016	668003.15	5316723.36	0.032	32
1473956	Surluga	2016	668013	5316714	0.02	20
1473957	Surluga	2016	668013	5316714	0.023	23
1473955	Surluga	2016	668016	5316711	5.33	0
1473954	Surluga	2016	668040	5316695	1.54	1540
1473351	Surluga	2016	668044	5316687	20.9	7490
1473952	Surluga	2016	668050	5316691	0.005	5
1473953	Surluga	2016	668050	5316691	12.4	0
1473964	Surluga	2016	668113	5316586	3.15	3.15
1473973	Surluga	2016	668193	5316994	3.51	2300
17363	Surluga	2016	668232.218	5317279.364	0.046	46

Sample	Area	Year	X	Y	Au (g/t) FA GRA	Au (ppb) FA AA
17364	Surluga	2016	668233.2021	5317279.096	0.012	12
17365	Surluga	2016	668234.0668	5317278.229	0.011	11
17366	Surluga	2016	668234.6709	5317277.652	0.012	12
1473977	Surluga	2016	668235.0621	5316818.446	64.9	0
1473961	Surluga	2016	668252	5317002	0.005	5
18462	Surluga	2016	668270.98	5317017.61	0.005	5
18463	Surluga	2016	668270.98	5317017.61	0.005	5
1473962	Surluga	2016	668272	5316997	0.005	5
1473963	Surluga	2016	668289	5316731	43.1	43.1
1473978	Surluga	2016	668366	5317910	0.046	46
1473979	Surluga	2016	668366	5317910	0.007	7
1473980	Surluga	2016	668366	5317910	0.035	35
1473990	Surluga	2016	668419.85	5317896.44	0.049	49
1473989	Surluga	2016	668419.9	5317894.96	0.005	5
1473981	Surluga	2016	668517.07	5317984.57	1.53	1530
1473982	Surluga	2016	668517.07	5317984.57	0.061	61
18006	Jubilee South	2017	667684.52	5313985.5	0	0
18005	Jubilee South	2017	667694.15	5314053.93	0	0
18004	Jubilee South	2017	667793.61	5314287.67	0	0
18002	Jubilee South	2017	667808.43	5314422.35	0	0
18003	Jubilee South	2017	667810.9	5314422.31	0	0
18001	Jubilee South	2017	667836.98	5314508.94	0	0
17926	Minto	2017	668264	5314908	0.011	11
17924	Minto	2017	668334	5315026	0.005	5
17925	Minto	2017	668334	5315026	0.005	5
18256	Minto	2017	668377	5314950	0.223	223
17927	Minto	2017	668424	5314867	0.006	6
17928	Minto	2017	668424	5314867	0.007	7
18255	Minto	2017	668533	5314945	0.005	5
18439	Minto	2018	668346	5314928	0.005	5
18438	Minto	2018	668350	5314907	0.207	207
18418	Minto	2018	668372	5314950	0.005	5
18419	Minto	2018	668372	5314950	0.314	314
18420	Minto	2018	668372	5314950	0.005	5
18429	Minto	2018	668377	5314950	0.005	5
18430	Minto	2018	668377	5314950	0.005	5
18431	Minto	2018	668377	5314950	0.006	6
18432	Minto	2018	668393	5314946	0.005	5
18422	Minto	2018	668395	5314947	0.005	5
18423	Minto	2018	668395	5314947	0.019	19
18424	Minto	2018	668395	5314947	0.005	5
18425	Minto	2018	668395	5314947	0.006	6
18426	Minto	2018	668395	5314947	0.007	7
18427	Minto	2018	668395	5314947	0.033	33
18428	Minto	2018	668395	5314947	0.045	45
18433	Minto	2018	668402	5314935	0.066	66
18421	Minto	2018	668403	5314944	0.676	676
18434	Minto	2018	668412	5314937	4.43	0
18435	Minto	2018	668413	5314934	0.097	97

Sample	Area	Year	X	Y	Au (g/t) FA GRA	Au (ppb) FA AA
18436	Minto	2018	668429	5314929	0.005	5
18437	Minto	2018	668435	5314923	0.005	5
769247	CG East	2019	669913	5317615	0.005	5
769246	CG East	2019	670105	5317629	0.025	25
769252	CG East	2019	670257	5317131	0.005	5
769251	CG East	2019	670620	5317885	0.005	5
769154	CooperGanley	2019	668993	5318461	0.843	843
769153	CooperGanley	2019	668994	5318460	0.128	128
500439	CooperGanley	2019	669010	5318113	0.005	5
769151	CooperGanley	2019	669032	5318640	0.005	5
769152	CooperGanley	2019	669032	5318640	0.01	10
500449	CooperGanley	2019	669140	5318735	0.006	6
500447	CooperGanley	2019	669159	5318755	0.007	7
500448	CooperGanley	2019	669159	5318755	0.005	5
500446	CooperGanley	2019	669164	5318747	0.006	6
500433	CooperGanley	2019	669244	5318067	0.005	5
500434	CooperGanley	2019	669248	5318061	0.005	5
500436	CooperGanley	2019	669271	5318287	0.029	29
500437	CooperGanley	2019	669271	5318287	0.005	5
500414	CooperGanley	2019	669274	5318232	0.005	5
500435	CooperGanley	2019	669275	5318272	0.023	23
500425	CooperGanley	2019	669278	5318019	0.508	508
500426	CooperGanley	2019	669278	5318019	0.242	242
500443	CooperGanley	2019	669283	5318635	0.008	8
500444	CooperGanley	2019	669283	5318635	0.021	21
500412	CooperGanley	2019	669285	5318197	0.016	16
500413	CooperGanley	2019	669285	5318197	0.03	30
500417	CooperGanley	2019	669285	5318249	0.014	14
500442	CooperGanley	2019	669287	5318269	0.008	8
500411	CooperGanley	2019	669306	5318154	2.62	2620
500432	CooperGanley	2019	669319	5318193	0.005	5
500430	CooperGanley	2019	669351	5318245	0.005	5
500431	CooperGanley	2019	669351	5318245	0.014	14
500440	CooperGanley	2019	669352	5318580	0.006	6
500441	CooperGanley	2019	669352	5318580	0.01	10
500418	CooperGanley	2019	669378	5318196	0.005	5
500438	CooperGanley	2019	669378	5318529	0.044	44
500427	CooperGanley	2019	669430	5318112	0.008	8
500428	CooperGanley	2019	669430	5318112	0.005	5
500429	CooperGanley	2019	669520	5318257	0.005	5
500415	CooperGanley	2019	669550	5318055	0.516	516
500421	CooperGanley	2019	669575	5317994	0.005	5
500423	CooperGanley	2019	669610	5318242	0.01	10
500424	CooperGanley	2019	669610	5318242	0.005	5
500416	CooperGanley	2019	669638	5317921	0.418	418
500422	CooperGanley	2019	669656	5318148	0.005	5
500410	CooperGanley	2019	669706	5317899	0.045	45
500419	CooperGanley	2019	669727	5317976	0.005	5
500420	CooperGanley	2019	669794	5318001	0.005	5

Sample	Area	Year	X	Y	Au (g/t) FA GRA	Au (ppb) FA AA
769208	DGJSZ	2019	667201	5313389	0.005	5
769217	DGJSZ	2019	667216	5313616	0.005	5
769204	DGJSZ	2019	667254	5313268	0.005	5
769193	DGJSZ	2019	667285	5312881	0.024	24
769207	DGJSZ	2019	667304	5313466	0.005	5
769244	DGJSZ	2019	667305	5314106	0.005	5
769198	DGJSZ	2019	667320	5313131	0.005	5
769224	DGJSZ	2019	667347	5313907	0.027	27
769243	DGJSZ	2019	667348	5314131	0.005	5
769203	DGJSZ	2019	667361	5313320	0.005	5
769216	DGJSZ	2019	667390	5313723	0.005	5
769237	DGJSZ	2019	667393	5314369	0.005	5
769192	DGJSZ	2019	667405	5312966	0.01	10
769206	DGJSZ	2019	667426	5313531	0.005	5
769242	DGJSZ	2019	667431	5314332	0.009	9
769186	DGJSZ	2019	667443	5312782	0.008	8
769238	DGJSZ	2019	667450	5314449	0.008	8
769191	DGJSZ	2019	667451	5312995	0.005	5
769223	DGJSZ	2019	667454	5313995	0.006	6
769241	DGJSZ	2019	667456	5314700	0.017	17
769202	DGJSZ	2019	667457	5313425	0.005	5
769240	DGJSZ	2019	667476	5314908	0.005	5
769185	DGJSZ	2019	667502	5312688	0.005	5
769215	DGJSZ	2019	667513	5313770	0.005	5
769187	DGJSZ	2019	667519	5312844	0.009	9
769188	DGJSZ	2019	667519	5312844	0.005	5
769197	DGJSZ	2019	667519	5313299	0.005	5
769201	DGJSZ	2019	667546	5313488	0.005	5
769228	DGJSZ	2019	667548	5314972	0.008	8
769229	DGJSZ	2019	667548	5314972	0.005	5
769196	DGJSZ	2019	667565	5313396	0.007	7
769189	DGJSZ	2019	667568	5313099	0.005	5
769195	DGJSZ	2019	667569	5313300	0.005	5
769205	DGJSZ	2019	667603	5313679	0.005	5
769199	DGJSZ	2019	667604	5313542	0.005	5
769214	DGJSZ	2019	667627	5313841	0.005	5
769233	DGJSZ	2019	667656	5314278	0.008	8
769232	DGJSZ	2019	667665	5314386	0.005	5
769213	DGJSZ	2019	667672	5313896	0.005	5
769235	DGJSZ	2019	667689	5314409	0.005	5
769222	DGJSZ	2019	667697	5314092	0.008	8
769236	DGJSZ	2019	667711	5314461	0.005	5
769221	DGJSZ	2019	667717	5314145	0.02	20
769220	DGJSZ	2019	667772	5314214	0.215	215
769231	DGJSZ	2019	667779	5314411	0.005	5
769194	DGJSZ	2019	667866	5313497	0.058	58
769212	DGJSZ	2019	667876	5314057	0.01	10
769227	DGJSZ	2019	667881	5314868	0.014	14
769226	DGJSZ	2019	668007	5315004	0.005	5

Sample	Area	Year	X	Y	Au (g/t) FA GRA	Au (ppb) FA AA
769211	DGJSZ	2019	668018	5313960	0.005	5
769239	DGJSZ	2019	668019	5314896	0.041	41
769225	DGJSZ	2019	668061	5315038	0.006	6
769218	DGJSZ	2019	668062	5314392	0.01	10
769219	DGJSZ	2019	668062	5314392	0.005	5
769234	DGJSZ	2019	668067	5314822	0.066	66
769245	DGJSZ	2019	668330	5314757	0.429	429
769182	JSZ Footwall	2019	666927	5316239	0.389	389
769183	JSZ Footwall	2019	667021	5316268	0.005	5
769181	JSZ Footwall	2019	667213	5316102	0.007	7
769179	JSZ Footwall	2019	667229	5316564	0.166	166
769184	JSZ Footwall	2019	667252	5315837	0.005	5
769178	JSZ Footwall	2019	667261	5316722	0.005	5
769180	JSZ Footwall	2019	667278	5316392	0.005	5
769176	JSZ Footwall	2019	667396	5316890	0.005	5
769175	JSZ Footwall	2019	667430	5316918	0.005	5
769166	JSZ Footwall	2019	667600	5317117	0.241	241
769167	JSZ Footwall	2019	667606	5316994	0.005	5
769174	JSZ Footwall	2019	667634	5316812	0.005	5
769173	JSZ Footwall	2019	667664	5316801	0.041	41
769164	JSZ Footwall	2019	667671	5317149	0.005	5
769168	JSZ Footwall	2019	667694	5316897	0.1	100
769169	JSZ Footwall	2019	667694	5316897	0.005	5
769163	JSZ Footwall	2019	667714	5317212	0.026	26
769177	JSZ Footwall	2019	667724	5316280	0.062	62
769162	JSZ Footwall	2019	667744	5317225	0.005	5
769171	JSZ Footwall	2019	667758	5316735	0.029	29
769172	JSZ Footwall	2019	667758	5316735	0.005	5
769170	JSZ Footwall	2019	667759	5316819	0.143	143
769158	JSZ Footwall	2019	667843	5317236	0.033	33
769165	JSZ Footwall	2019	667853	5316996	0.518	518
769157	JSZ Footwall	2019	667908	5317347	0.005	5
769159	JSZ Footwall	2019	667918	5317182	0.047	47
769160	JSZ Footwall	2019	667936	5317054	0.006	6
769161	JSZ Footwall	2019	667936	5317054	0.005	5
769156	JSZ Footwall	2019	667993	5317458	0.005	5
769155	JSZ Footwall	2019	668074	5317542	0.005	5
500401	Mackay Point	2019	668265	5318627	0.037	37
500402	Mackay Point	2019	668265	5318627	2.64	2640
500403	Mackay Point	2019	668265	5318627	0.425	425
500404	Mackay Point	2019	668265	5318627	2.49	0
500405	Mackay Point	2019	668265	5318640	0.014	14
500406	Mackay Point	2019	668265	5318640	0.008	8
500407	Mackay Point	2019	668265	5318640	0.015	15
500408	Mackay Point	2019	668286	5318635	0.048	48
500409	Mackay Point	2019	668286	5318635	14	0
769257	Stanley Mine	2019	669649	5319152	0.007	7
769255	Stanley Mine	2019	669729	5318997	0.202	202
769256	Stanley Mine	2019	669729	5318997	0.054	54

Sample	Area	Year	X	Y	Au (g/t) FA GRA	Au (ppb) FA AA
769258	Stanley Mine	2019	669872	5319141	0.005	5
769253	Stanley Mine	2019	669879	5318633	0.006	6
769254	Stanley Mine	2019	669946	5318790	0.005	5
769262	Stanley Mine	2019	670022	5319167	0.005	5
769263	Stanley Mine	2019	670022	5319167	0.005	5
769260	Stanley Mine	2019	670196	5318998	0.005	5
769261	Stanley Mine	2019	670196	5318998	0.006	6
769259	Stanley Mine	2019	670203	5318997	0.005	5
769248	Stanley Mine	2019	670313	5318879	0.321	321
769249	Stanley Mine	2019	670313	5318879	0.157	157
774882	JSZ South	2020	666749	5314627	0.007	7
774893	JSZ South	2020	666751	5314501	0.007	7
774894	JSZ South	2020	666754	5314439	0.005	5
774895	JSZ South	2020	666754	5314439	0.005	5
774942	JSZ South	2020	666859	5313645	0.005	5
774896	JSZ South	2020	666872	5314350	0.005	5
774888	JSZ South	2020	666883	5314896	0.006	6
774883	JSZ South	2020	666887	5314593	0.005	5
774889	JSZ South	2020	666915	5314760	0.005	5
774927	JSZ South	2020	666916	5314192	0.005	5
774944	JSZ South	2020	666954	5313437	0.005	5
774926	JSZ South	2020	666975	5314223	0.005	5
774881	JSZ South	2020	666976	5314646	0.005	5
774943	JSZ South	2020	666980	5313530	0.005	5
774892	JSZ South	2020	666999	5314417	0.017	17
774885	JSZ South	2020	667027	5315054	0.005	5
774886	JSZ South	2020	667055	5314916	0.005	5
774933	JSZ South	2020	667077	5313826	0.005	5
774945	JSZ South	2020	667100	5313355	0.007	7
774941	JSZ South	2020	667153	5313699	0.005	5
774897	JSZ South	2020	667162	5314281	0.005	5
774928	JSZ South	2020	667194	5314075	0.005	5
774876	JSZ South	2020	667200	5314990	0.03	30
774880	JSZ South	2020	667204	5314588	0.069	69
774925	JSZ South	2020	667205	5314166	0.005	5
774891	JSZ South	2020	667219	5314403	0.005	5
774887	JSZ South	2020	667226	5314795	0.02	20
774939	JSZ South	2020	667230	5313675	0.005	5
774890	JSZ South	2020	667237	5314725	0.005	5
774877	JSZ South	2020	667254	5314343	0.008	8
774878	JSZ South	2020	667254	5314343	0.006	6
774938	JSZ South	2020	667255	5313538	0.044	44
774899	JSZ South	2020	667264	5314233	0.006	6
774929	JSZ South	2020	667266	5313954	0.005	5
774871	JSZ South	2020	667278	5315124	0.011	11
774934	JSZ South	2020	667292	5313747	0.005	5
774982	JSZ South	2020	667317	5313184	0.005	5
774983	JSZ South	2020	667317	5313184	0.02	20
774984	JSZ South	2020	667322	5313075	0.008	8

Sample	Area	Year	X	Y	Au (g/t) FA GRA	Au (ppb) FA AA
774932	JSZ South	2020	667336	5313843	0.005	5
774935	JSZ South	2020	667355	5313719	0.007	7
774936	JSZ South	2020	667355	5313719	0.025	25
774985	JSZ South	2020	667356	5313063	0.005	5
774875	JSZ South	2020	667357	5315003	0.011	11
774901	JSZ South	2020	667360	5314203	0.005	5
774879	JSZ South	2020	667385	5314580	0.164	164
774937	JSZ South	2020	667385	5313722	0.008	8
774931	JSZ South	2020	667403	5313775	0.005	5
774872	JSZ South	2020	667427	5315049	0.548	548
774873	JSZ South	2020	667427	5315049	0.007	7
774924	JSZ South	2020	667461	5314093	0.006	6
774981	JSZ South	2020	667464	5313146	0.005	5
774904	JSZ South	2020	667471	5314309	0.172	172
774874	JSZ South	2020	667474	5315061	0.063	63
774902	JSZ South	2020	667532	5314137	0.005	5
774870	JSZ South	2020	667533	5315126	0.005	5
774979	JSZ South	2020	667537	5313111	0.005	5
774930	JSZ South	2020	667546	5313772	0.005	5
774923	JSZ South	2020	667590	5314069	0.005	5
774884	JSZ South	2020	667597	5315238	0.005	5
774903	JSZ South	2020	667621	5314135	0.036	36
774975	JSZ South	2020	667639	5313077	0.012	12
774974	JSZ South	2020	667649	5313220	0.03	30
774853	JSZ South	2020	667652	5313631	0.006	6
774954	JSZ South	2020	667666	5313389	0.005	5
774955	JSZ South	2020	667666	5313389	0.005	5
774973	JSZ South	2020	667705	5313215	0.005	5
774869	JSZ South	2020	667713	5315150	0.005	5
774956	JSZ South	2020	667718	5313266	0.007	7
774868	JSZ South	2020	667725	5315152	0.005	5
774918	JSZ South	2020	667742	5313967	0.005	5
774796	JSZ South	2020	667773	5314212	0.022	22
774852	JSZ South	2020	667778	5313574	0.035	35
774795	JSZ South	2020	667780	5314213	0.01	10
774791	JSZ South	2020	667782	5314417	0.005	5
774792	JSZ South	2020	667783	5314401	0.017	17
774972	JSZ South	2020	667785	5313172	0.005	5
774986	JSZ South	2020	667786	5312923	0.018	18
774957	JSZ South	2020	667806	5313263	0.005	5
774866	JSZ South	2020	667826	5315376	0.032	32
774867	JSZ South	2020	667826	5315376	0.016	16
774797	JSZ South	2020	667829	5314162	0.009	9
774854	JSZ South	2020	667833	5313642	0.377	377
774953	JSZ South	2020	667839	5313441	0.006	6
774793	JSZ South	2020	667842	5314381	0.006	6
774919	JSZ South	2020	667856	5313984	0.005	5
774976	JSZ South	2020	667901	5312992	0.005	5
774851	JSZ South	2020	667903	5313515	0.007	7

Sample	Area	Year	X	Y	Au (g/t) FA GRA	Au (ppb) FA AA
774952	JSZ South	2020	667933	5313347	0.02	20
774799	JSZ South	2020	667937	5313505	0.007	7
774864	JSZ South	2020	667952	5313700	0.033	33
774991	JSZ South	2020	667967	5312679	0.408	408
774971	JSZ South	2020	667978	5313093	0.301	301
774920	JSZ South	2020	668021	5313928	0.005	5
774921	JSZ South	2020	668021	5313928	0.005	5
774794	JSZ South	2020	668030	5314340	0.005	5
774990	JSZ South	2020	668038	5312721	0.039	39
774855	JSZ South	2020	668045	5313591	0.006	6
774856	JSZ South	2020	668045	5313591	0.005	5
774987	JSZ South	2020	668068	5312848	0.005	5
774798	JSZ South	2020	668088	5313473	0.276	276
774865	JSZ South	2020	668102	5313759	0.012	12
774977	JSZ South	2020	668109	5312937	0.005	5
774958	JSZ South	2020	668164	5313118	0.005	5
774968	JSZ South	2020	668183	5313085	8.92	> 5000
774969	JSZ South	2020	668183	5313085	0.005	5
774863	JSZ South	2020	668187	5313614	67.9	> 5000
774912	JSZ South	2020	668199	5314376	0.009	9
774967	JSZ South	2020	668206	5313104	0.009	9
774916	JSZ South	2020	668221	5314097	0.014	14
774908	JSZ South	2020	668222	5314537	0.006	6
774909	JSZ South	2020	668222	5314537	0.02	20
774948	JSZ South	2020	668249	5313233	0.005	5
774949	JSZ South	2020	668249	5313233	0.005	5
774970	JSZ South	2020	668265	5312993	0.015	15
774910	JSZ South	2020	668282	5314577	0.005	5
774911	JSZ South	2020	668282	5314577	0.005	5
774951	JSZ South	2020	668291	5313281	0.024	24
774978	JSZ South	2020	668300	5313042	0.005	5
774905	JSZ South	2020	668305	5314744	0.005	5
774906	JSZ South	2020	668305	5314744	0.006	6
774922	JSZ South	2020	668338	5313841	0.005	5
774917	JSZ South	2020	668372	5314012	0.005	5
774966	JSZ South	2020	668381	5313090	0.006	6
774907	JSZ South	2020	668387	5314555	0.029	29
774947	JSZ South	2020	668393	5313301	0.006	6
774915	JSZ South	2020	668403	5314109	0.022	22
774965	JSZ South	2020	668408	5313088	0.282	282
774959	JSZ South	2020	668410	5313180	0.007	7
774964	JSZ South	2020	668486	5313066	0.079	79
774960	JSZ South	2020	668586	5313098	0.058	58
774963	JSZ South	2020	668592	5313030	0.012	12
774946	JSZ South	2020	668618	5313239	0.005	5
774913	JSZ South	2020	668673	5314023	6.12	> 5000
774914	JSZ South	2020	668673	5314023	11.5	> 5000
774962	JSZ South	2020	668683	5312985	0.005	5
774961	JSZ South	2020	668802	5313051	0.006	6

Sample	Area	Year	X	Y	Au (g/t) FA GRA	Au (ppb) FA AA
774510	Minto 7 Trench	2020	668057	5315214	0.005	
774787	Moody Pit	2020	668628	5313967	0.006	6
774788	Moody Pit	2020	668630	5313963	0.007	7
774785	Moody Pit	2020	668634	5313907	0.033	33
774786	Moody Pit	2020	668638	5313948	0.008	8
774784	Moody Pit	2020	668642	5313915	0.013	13
774790	Moody Pit	2020	668674	5313986	0.019	19
774789	Moody Pit	2020	668686	5314010	0.006	6
774862	Nyman Vein	2020	668331	5313585	0.005	5
774861	Nyman Vein	2020	668423	5313573	0.032	32
774859	Nyman Vein	2020	668471	5313669	0.005	5
774857	Nyman Vein	2020	668586	5313574	4.1	4100
774858	Nyman Vein	2020	668586	5313574	0.009	9
769289	Sunrise	2020	668199	5315969	0.024	24
769288	Sunrise	2020	668204	5315791	5.23	> 5000
774761	Sunrise	2020	668248	5315798	0.035	35
774759	Sunrise	2020	668265	5315663	0.006	6
769295	Sunrise	2020	668281	5316056	0.013	13
774757	Sunrise	2020	668300	5315608	0.016	16
774758	Sunrise	2020	668300	5315608	0.012	12
769294	Sunrise	2020	668335	5316003	0.025	25
769287	Sunrise	2020	668341	5315746	0.007	7
774752	Sunrise	2020	668373	5316252	0.007	7
769293	Sunrise	2020	668380	5315968	0.012	12
769284	Sunrise	2020	668391	5315855	0.008	8
774760	Sunrise	2020	668399	5315569	0.045	45
769291	Sunrise	2020	668402	5315951	0.047	47
769292	Sunrise	2020	668402	5315951	0.01	10
769290	Sunrise	2020	668437	5315842	0.012	12
769285	Sunrise	2020	668453	5315712	0.005	5
769282	Sunrise	2020	668460	5315778	0.005	5
769296	Sunrise	2020	668461	5316051	0.014	14
769297	Sunrise	2020	668461	5316051	0.016	16
769283	Sunrise	2020	668468	5315774	0.056	56
769275	Sunrise	2020	668497	5315215	0.005	5
769276	Sunrise	2020	668497	5315215	0.023	23
769278	Sunrise	2020	668503	5315795	0.072	72
769280	Sunrise	2020	668505	5315709	0.01	10
769286	Sunrise	2020	668506	5315683	0.005	5
774753	Sunrise	2020	668515	5316330	0.005	5
769279	Sunrise	2020	668518	5315707	0.005	5
774751	Sunrise	2020	668523	5316135	0.028	28
769299	Sunrise	2020	668528	5316136	0.006	6
769277	Sunrise	2020	668545	5315903	0.006	6
774762	Sunrise	2020	668564	5316352	0.009	9
774802	Sunrise	2020	668565	5315705	0.008	8
769298	Sunrise	2020	668644	5316095	0.042	42
774803	Sunrise	2020	668662	5315647	0.008	8
774801	Sunrise	2020	668664	5315551	0.034	34

Sample	Area	Year	X	Y	Au (g/t) FA GRA	Au (ppb) FA AA
774804	Sunrise	2020	668669	5315633	0.008	8
769266	Sunrise	2020	668671	5315907	0.005	5
769267	Sunrise	2020	668679	5316000	0.005	5
769269	Sunrise	2020	668689	5316032	0.006	6
774763	Sunrise	2020	668689	5316288	0.048	48
769273	Sunrise	2020	668720	5315743	0.024	24
769274	Sunrise	2020	668720	5315743	0.039	39
774768	Sunrise	2020	668721	5316403	0.005	5
774754	Sunrise	2020	668736	5316132	0.006	6
769268	Sunrise	2020	668763	5315903	0.005	5
774769	Sunrise	2020	668778	5316442	0.008	8
774770	Sunrise	2020	668781	5316443	0.005	5
769271	Sunrise	2020	668791	5316088	0.005	5
774776	Sunrise	2020	668801	5316669	0.011	11
769270	Sunrise	2020	668814	5316000	0.005	5
769272	Sunrise	2020	668901	5315986	0.006	6
774755	Sunrise	2020	668918	5316006	2.5	2380
774771	Sunrise	2020	668987	5316345	0.022	22
774764	Sunrise	2020	668989	5316086	0.011	11
774767	Sunrise	2020	668991	5316224	0.007	7
774775	Sunrise	2020	669023	5316416	0.079	79
774772	Sunrise	2020	669105	5316243	0.011	11
774777	Sunrise	2020	669142	5316455	0.006	6
774779	Sunrise	2020	669149	5316739	0.005	5
774782	Sunrise	2020	669172	5316510	0.069	69
774765	Sunrise	2020	669206	5315898	0.005	5
774773	Sunrise	2020	669221	5316184	0.012	12
774774	Sunrise	2020	669275	5316270	0.007	7
774766	Sunrise	2020	669290	5315982	0.006	6
774778	Sunrise	2020	669294	5316390	0.006	6
774781	Sunrise	2020	669455	5316582	0.005	5
774783	Sunrise	2020	669539	5316534	0.007	7

Note: Grab samples are selective by nature and are not necessarily representative of the mineralization hosted on the property.

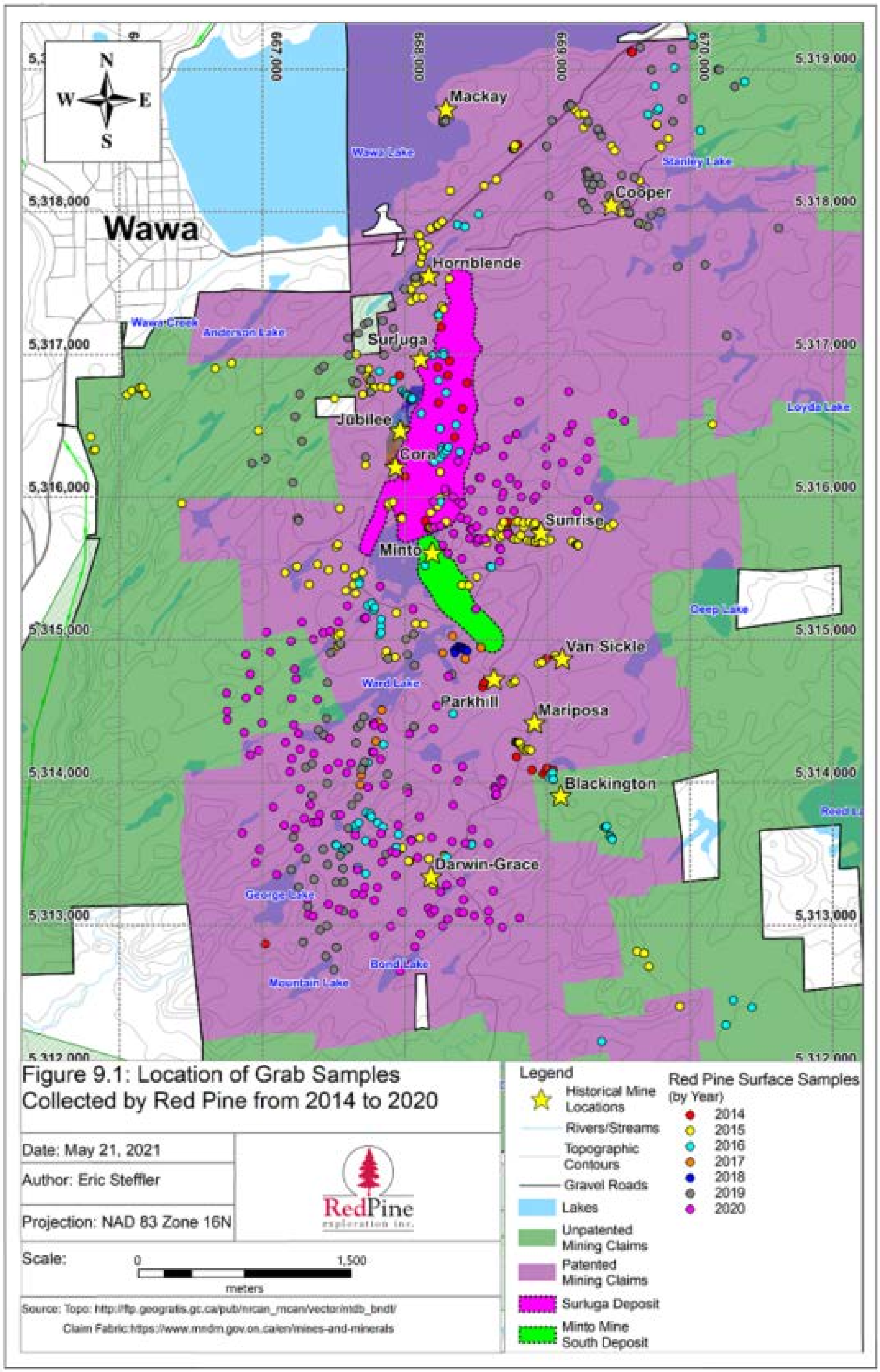

Figure 9-1: Location of Grab Samples Collected by Red Pine from 2014 to 2018

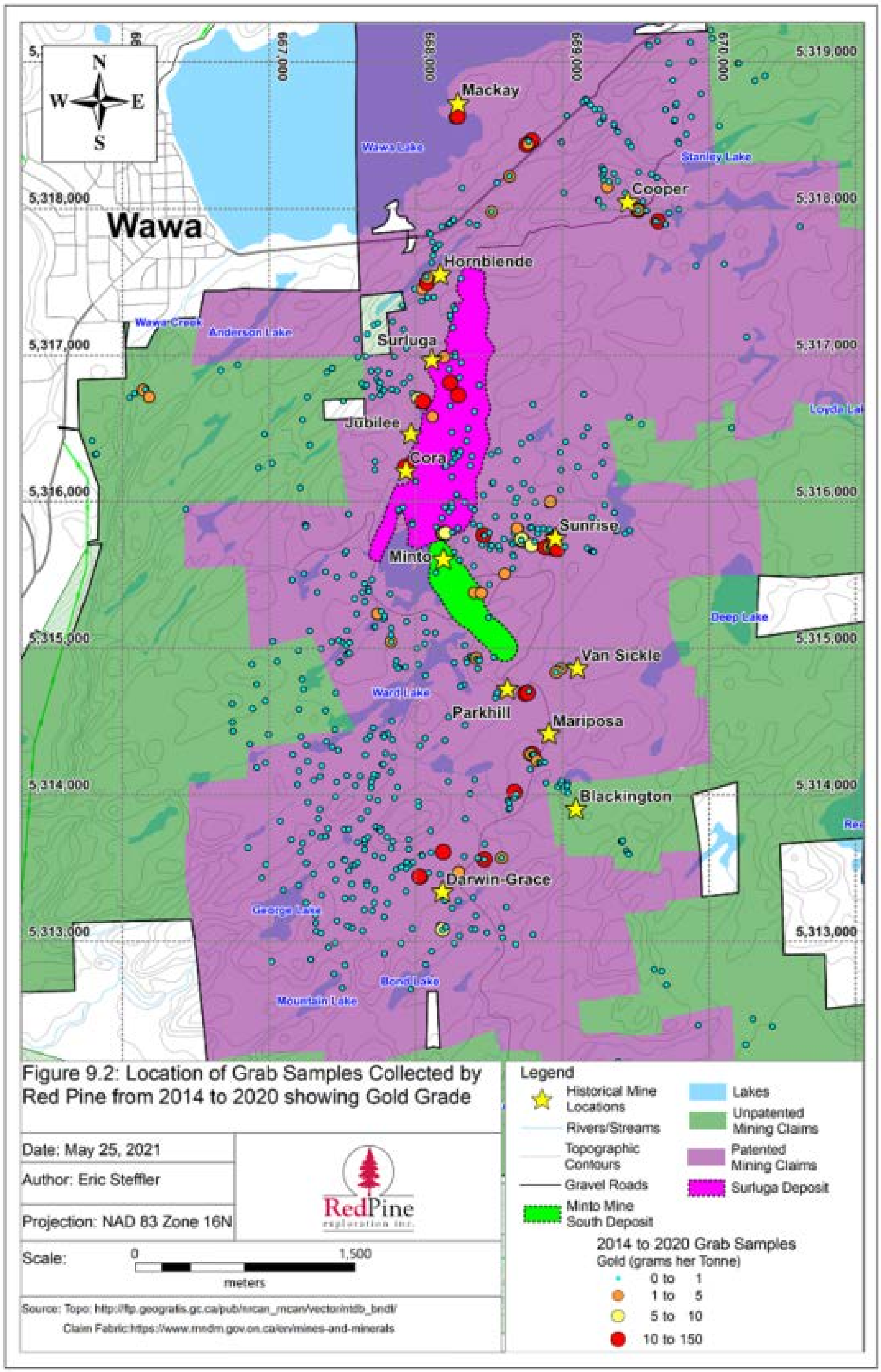

Figure 9-2: Location of Grab Samples Collected by Red Pine from 2014 to 2018, showing Gold Grade

9.2 Geophysics

9.2.1 Ground Magnetic Surveying (December 2014 to January 2015)

Members of the Red Pine team conducted a ground magnetic survey of the Surluga Mine and surrounding area between December 3, 2014, and January 26, 2015.

The survey data was collected using a GEM Systems GSMP-35 Magnetometer, an optically pumped potassium magnetometer. The data was collected at 1 Hz and the system is reported to have an accuracy of ±0.05 nT (GEM Systems Inc., 2013). The magnetic diurnal was observed using a stationary GSM-19 magnetometer and was collected at 0.2 Hz. The corrected total magnetic field was calculated during nightly processing of the data.

Most survey lines were collected in an east-west orientation, perpendicular to the strike of the Jubilee shear zone. The survey line spacing was 50 m. An additional four lines were surveyed over the cut line path of the IP lines discussed in Item 9.2.2 – Spectral Induced Polarization and Resistivity Surveys. Additional lines oblique to the main east-west orientation were collected and included in the final database.

The corrected total magnetic intensity was examined in profile format and found to be of sufficient quality and delineates the western edge of the presently defined extent of the Surluga Mine. A few east-west trending magnetic lineaments, extending eastward from the Surluga Mine, are under-sampled with the present east-west ground magnetic line orientation; and therefore, are not as well delineated in the magnetic image. Since the delineation of these units was not the primary focus of this survey, this sampling is considered satisfactory.

The ground magnetic survey defined the strike of the Jubilee shear zone and is expressed as a magnetic low striking approximately 015°. There are areas of increased magnetization within the Jubilee shear plane that require further investigation in 3D through constrained inversion, as they may be related to the shear zone. Linear features oriented east-west are observed in the magnetic data.

The gridded results of the total magnetic intensity are displayed in Figure 9-3. A total of 69.7 line-km was collected in GPS mode. This represents a total area surveyed of 2.23 km^2.

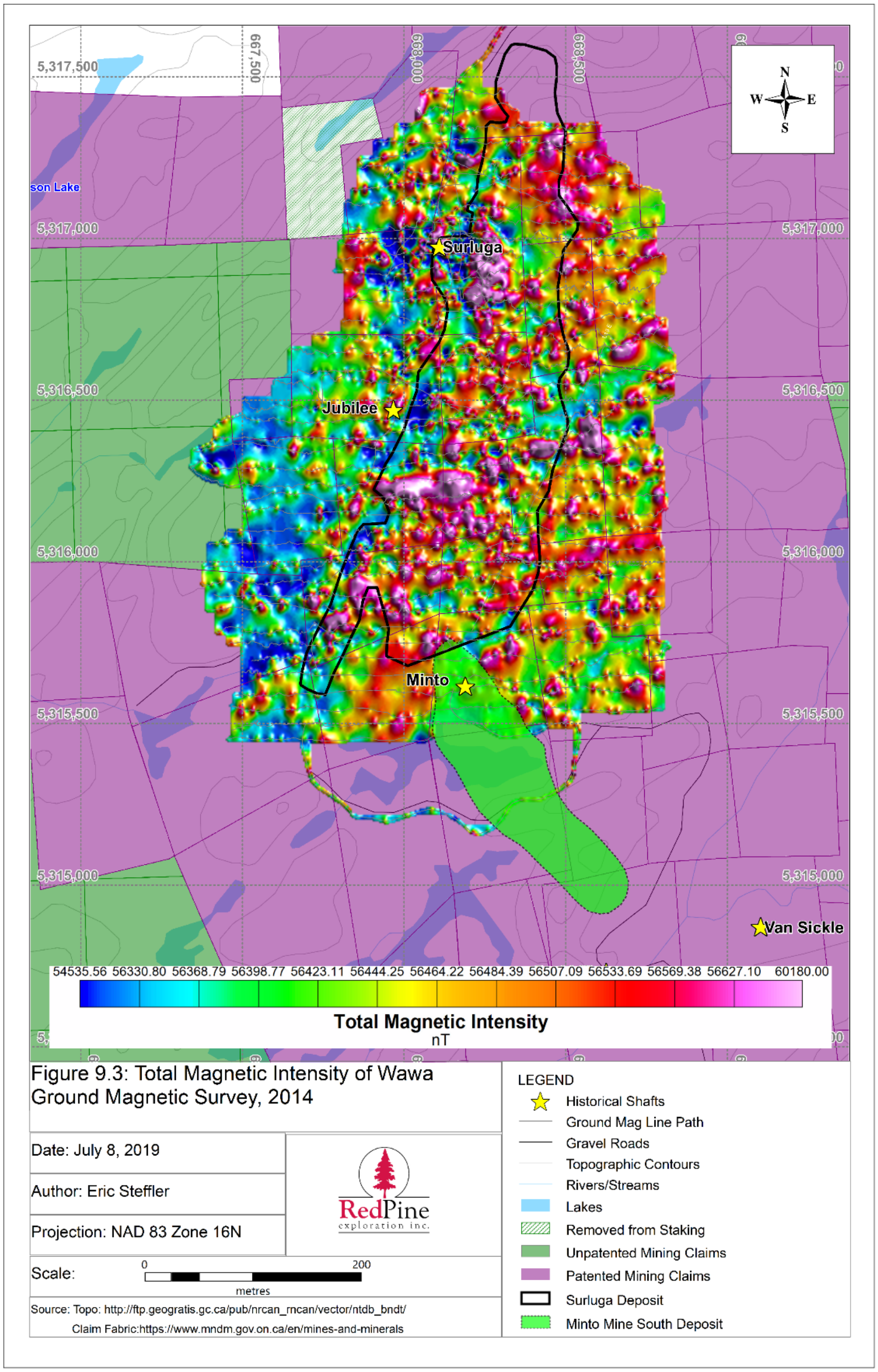

Figure 9-3: Total Magnetic Intensity of Wawa Ground Magnetic Survey

9.2.2 Spectral Induced Polarization and Resistivity Surveys (2014)

Red Pine contracted Clearview to conduct Spectral Induced Polarization and Resistivity (“Spectral IP/Res”) surveys on the Surluga Property. The work was completed December 12-16, 2014. The objective of the survey was to determine if the Spectral IP/Res results could be used to enhance drill targeting for gold mineralization (Mihelcic, 2014).

The survey array geometry was a Pole-Dipole “Combo” array, whereby the dipole spacing (“a”) for n = 1-6 was a = 50 m, and for n= 7-8, a= 100 m. Voltage drops were measured for each dipole, and the transmitter operator measured the contact resistance and electric current passing through the current electrodes during each reading. This information was relayed to the receiver operator and entered in the receiver instrument to calculate apparent resistivity (Mihelcic, 2014).

A total of four lines were surveyed covering 3.08 line-km, with each line ranging from 600-950 m. Lines 1 – 3 were surveyed orthogonal to the Jubilee shear zone, and Line 4 was surveyed parallel to the strike of the Jubilee shear zone, approximately 430 m southeast of the top surface. Line 4 is considered the Base Line.

A final database was provided to Red Pine containing Spectral IP/Res parameters calculated during the survey: chargeability, DC resistivity and spectral tau calculated from Cole-Cole decay fitting. The data was collected using a Scintrex IPR-12 Multi-channel IP-Receiver, and the original dump files were provided to Ronacher McKenzie for review in Geosoft Oasis Montaj. Over a period of two seconds of on-off time, eleven samples were taken to map the chargeability decay per sample point. The decay curves were examined visually for each line and no abnormalities were noted. The samples are considered representative and no factors are thought to have resulted in sample bias.

Three features were identified by Clearview in the Spectral IP/Res and are listed in Table 9-3. A location of the survey lines is found in Figure 9-4.

Table 9-3: Features Identified from Spectral IP/Res Data by Clearview Geophysics Inc. Coordinates are Listed in NAD83, UTM Zone 16N

Feature ID	Easting	Northing	Elevation (m)	Description
A	668415	5317121	128.5	Gold mineralization noted at this point; there is a 128.5 contact of low resistivity to the west and high resistivity to1he east at this point; Spectral Tau is relatively short compared to adjacent areas online
B	668449	5316382	177.8	Gold mineralization noted at this point; broad 177.8 chargeability response of 12mVN at 100m depth; Spectral Tau is relatively short
C	668129	5316091	174.8	Gold mineralization noted at this point; chargeability response is broad 14mVN and located between low resistivity zones; Spectral Tau is relatively short

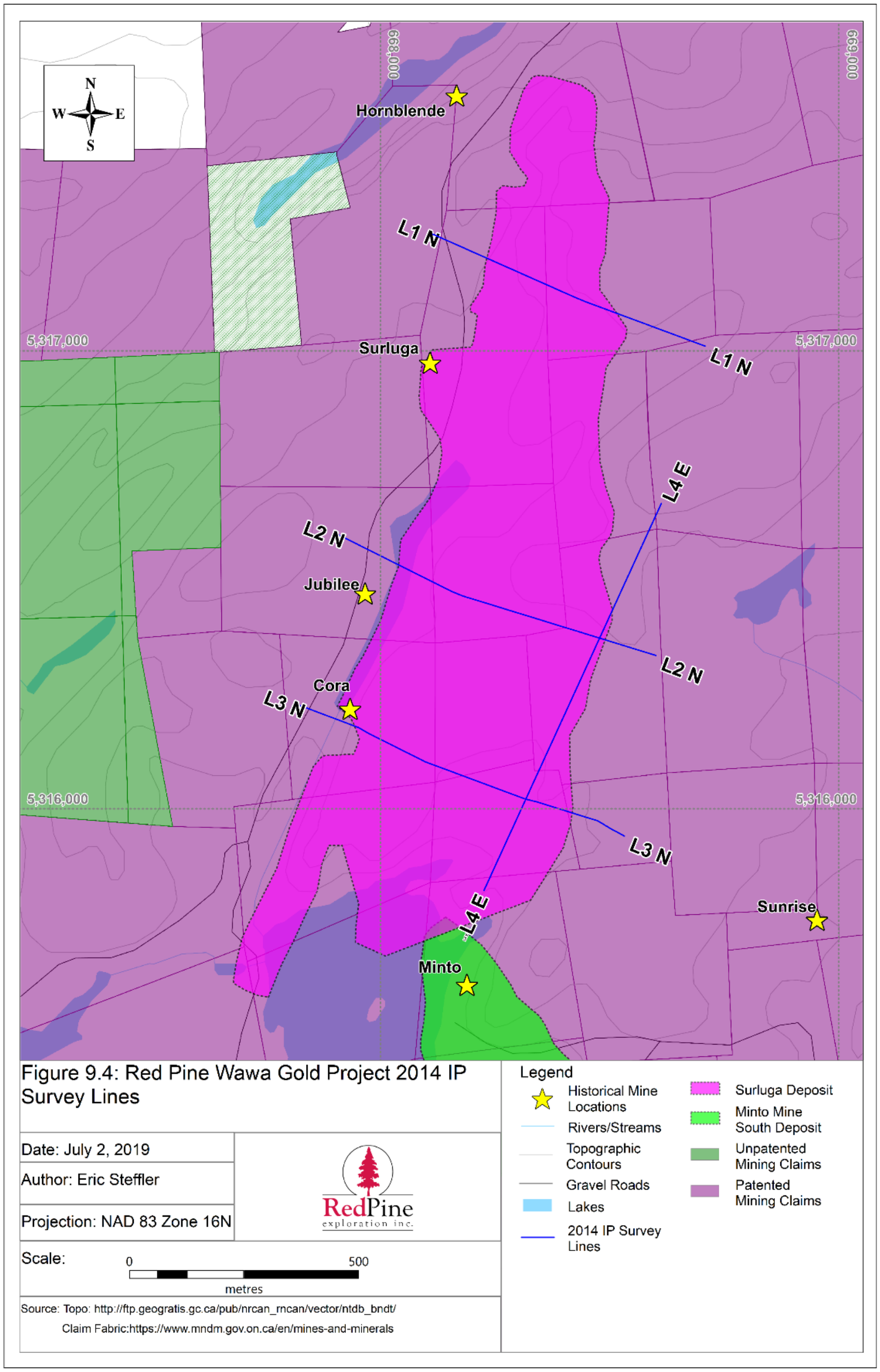

Figure 9-4: Red Pine Wawa Gold Project 2014 IP Survey Lines

9.2.3 Ground Magnetic Surveying (October 2015)

Red Pine contracted Clearview to complete a ground magnetic survey on the Project, in the Sunrise area (See Figure 7-2). The purpose of this work was to locate magnetic anomalies, as well as identify zones and trends to help guide gold exploration. The survey was completed in October 2015 (Mihelcic, 2015).

Table 9-4: Parameters of the Ground Magnetic Survey (October 2015)

Survey Parameter	Details
Survey dates	October 18-19, 2015
Line-km	12.3 km
Line direction	170°
Line spacing	20 m
Terrain clearance	2 m
Magnetic sensor	Scintrex ENVI Cesium magnetometer
Magnetic sensor resolution	0.01 nT
Magnetic sensor sampling rate	10 Hz
Magnetic base station sensor	GSM-19 v7.0 Overhauser magnetometer
Magnetic base station sensor resolution	0.01 nT
magnetic base station	1 Hz
Magnetic base station location (Long/Lat)	84.7378W, 47.9714N

The corrected total magnetic intensity was examined in profile format and found to be of sufficient quality and representative of the magnetite distribution of the subsurface. No factors are noted to cause sample biases. The gridded results of the total magnetic intensity are displayed in Figure 9-6 (Item 9.2.4). A total of 12.3 line- km were collected in GPS mode. This represents a total area surveyed of 0.17 km^2.

This survey represents a higher-resolution magnetic survey over the Sunrise area. The survey delineates several subtle ENE trending magnetic linear features, including one associated with the southeastern end of the Surluga grade shell.

9.2.4 Ground Horizontal Loop Electromagnetic Surveying (October 2015)

Red Pine contracted Clearview to complete a ground horizontal loop electromagnetic (“HLEM”) on the Project. The survey was completed using an Apex MaxMin system and is often referred to as a ‘’MaxMin” survey (“MaxMin”). The purpose of this work was to locate electromagnetic anomalies, as well as identifying zones and trends that help guide gold exploration. The survey was completed in October 2015 (Mihelcic, 2015).

Two cable separations were recorded: 50 m and 100 m. The coils were kept horizontal-parallel to each other. The receiver (“Rx”) led the transmitter (“Tx”) along survey fines and the slope difference between the Rx and Tx was adjusted using an inclinometer. The 110 Hz setting was used to ‘null’ the in-phase response of small adjustments to the Tx-Rx coil separation. Readings were recorded as the secondary field percentage of the primary transmitter field (Mihelcic, 2015). Survey specifications can be found in Table 9-5. Profile responses for the 100 m Tx-Rx separation and infill 50 m Tx-Rx separation are found in Figure 9-6.

The highest quadrature response profiles for the 100 m Tx-Rx separation were noted on the southern part of lines L1480E – L1600E. The in-phase responses were noted to be relatively weak and highly variable in the south part of L1540E – L1600E (Mihelcic, 2015).

Table 9-5: HLEM Survey Parameters

Survey Parameter	Details
Survey dates	October 9-18, 2015
Cable lengths	50 m and 100 m
Line-km	50 m: 6.3 line-km, 100 m: 4.2 line-km
Area covered	50 m: 0.112 km2, 100 m: 0.052 km2
Line direction	170°
Line spacing	20 m
Station spacing – 50 m cable separation	5 m
Station spacing – 100 m cable separation	12.5 m
Coil orientation	Horizontal-parallel to each other
Slope Calculation	Inclinometer
Rx, Tx configuration	Rx in front, tx trailing
System	Apex MaxMin 1-10 EM System
Frequencies recorded (Hz) – 50m separation	L1460E, L1400E, north of 130N on L1380N; 110, 220, 880, 1760, 3520, 7040, 14080, 28160, 56320 All other lines: 110, 7040, 14080, 28160, 56320
Frequencies recorded (Hz) – 100 m cable	All lines: 110, 220, 880, 1760, 3520, 7040, 14080, 28160, 56320
Parameters measured	In-phase and quadrature components of secondary magnetic field, in % of primary field

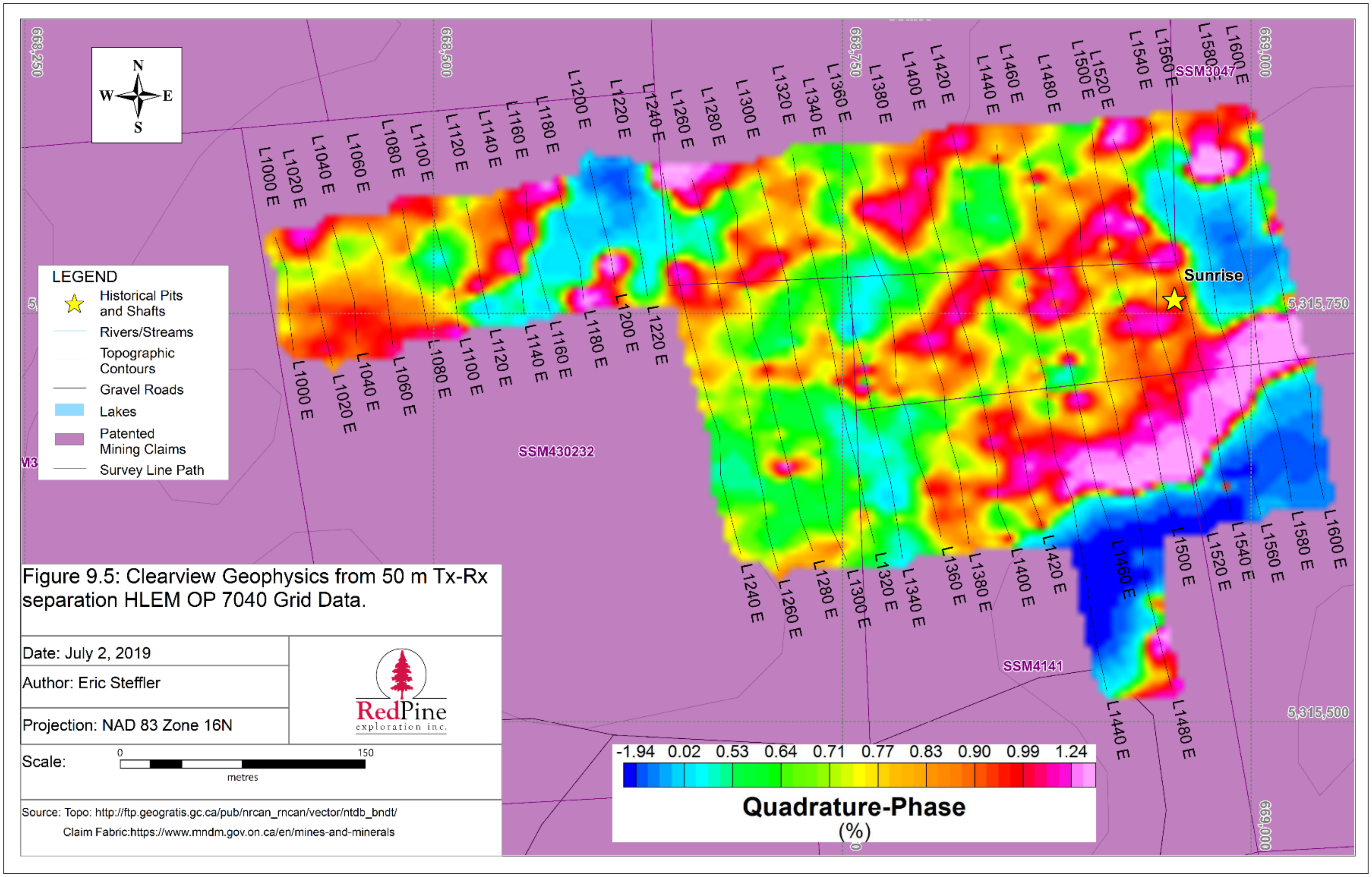

Figure 9-5: Clearview Geophysics from 50 m Tx-Rx Separation HLEM OP 7040 Grid Data

Eleven anomalies were selected by ClearView from the 50 m Tx-Rx separation based on the in-phase and quadrature response and are listed in Table 9-6. They are displayed graphically in Figure 9-6.

Table 9-6: Interpreted Anomalies of 50 m Tx-Rx Separation Survey Selected by ClearView

Anomaly ID	Description
A	Strong in-phase and quadrature responses, especially on L11SOE and L'1200E; width of anomaly is less than 25 m suggesting a near or at surface source.
B	Centre of 25 m wide quadrature and alternating in-phase response; anomaly extends to outcrops where samples were taken.
C	Centre of 25 m wide quadrature and alternating in-phase response; anomaly extends to outcrops where samples were taken.
D	Located in northeast corner of grid, best defined on 14 kHz data. Response is less than 15 m wide indicating weak near or at surface source.
E	Located in northeast corner of grid, best defined on 14 kHz data. Response is less than 15 m wide indicating weak near or at surface source.
F	Located in northeast corner of grid, best defined on 14 kHz data. Response is less than 15 m wide indicating weak near or at surface source.
G	Anomaly noted to coincide with elevated gold assays, consist of very weak (less than 3%) 56 kHz quadrature anomalies over a width of approximately 50 m. Anomaly likely the result of subtle variations from the bedrock.
H	Anomaly noted to coincide with elevated gold assays, consist of very weak (less than 3%) 56 kHz quadrature anomalies over a width of approximately 50 m. Anomaly likely the result of subtle variations from the bedrock.
I	Similar, and immediately south to anomalies G and H.
J	Located at southeast corner of grid, one of the highest amplitude anomalies detected marks the boundary between positive and negative quadrature response. This boundary does not correlate with the edge of the swamp; postulated to be a bedrock source.
K	Located at southeast comer of grid, one of the highest amplitude anomalies detected. Although the anomaly axis is in a flat overburden-filled area, the source could result from a bedrock fault zone.

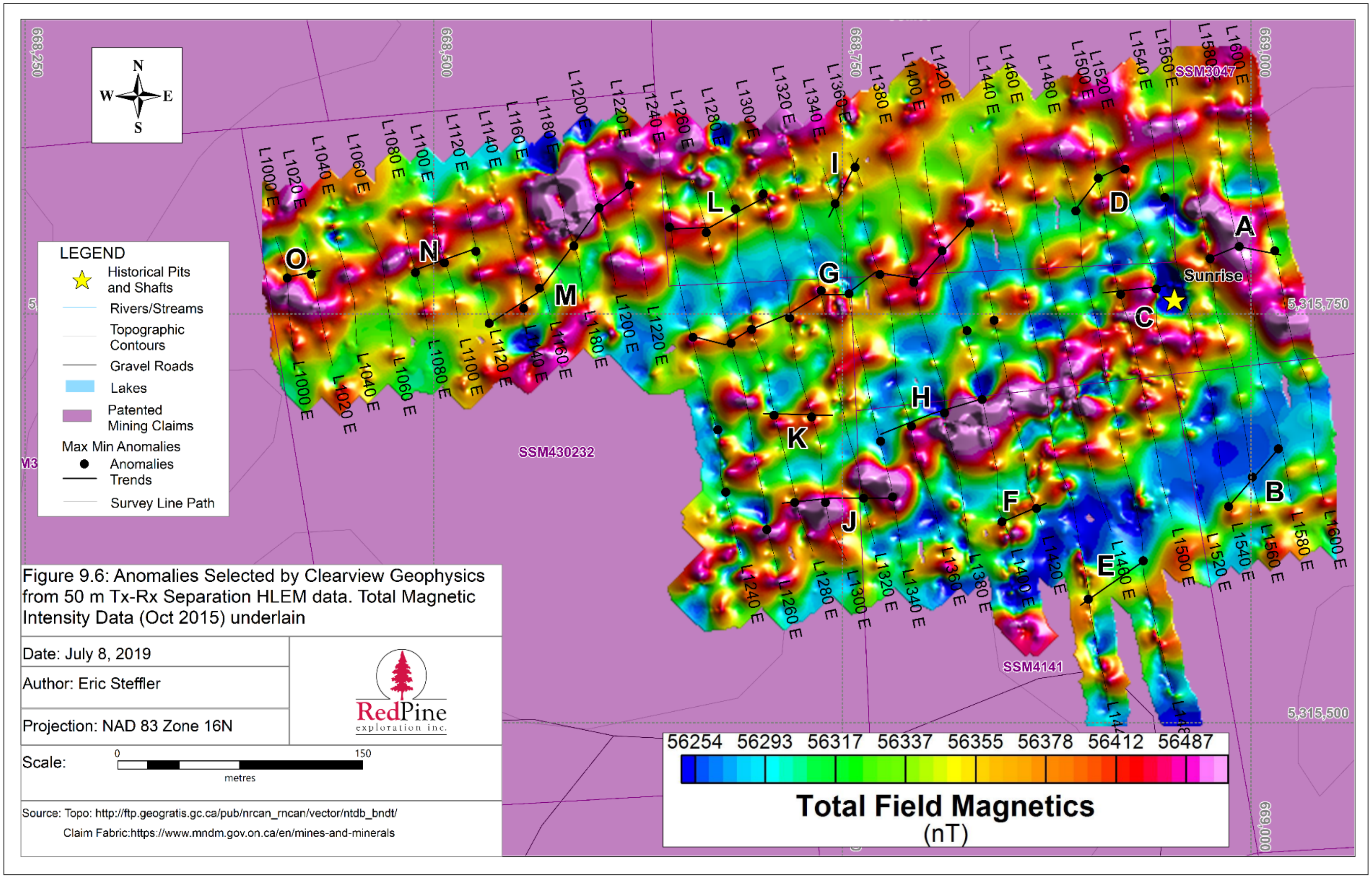

Figure 9-6: Anomalies Selected by Clearview Geophysics from 50 m Tx-Rx Separation HLEM Data (Total Magnetic Intensity Data [Oct 2015] Underlain

9.2.5 Helicopter-borne Gradient Magnetic Survey (Feb 2015)

Red Pine contracted Scott Hogg & associates Ltd. ("Scott Hogg") to conduct a helicopter-towed gradient magnetic survey on the Project. The survey was completed from February 12, 2015, to February 17, 2015. A total of 928 line-km of data were collected (Munro, 2015). The survey covered an area of 37 km^2. The survey parameters are presented in Table 9-7.

Table 9-7: Helicopter-Borne Gradient Magnetic Survey Parameters

Survey Parameter	Details
Survey dates	February 12-17, 2015
Line-km	928 line-km
Area	37 km^2
Line direction	090°
line spacing	50 m
Tie line direction	000°
Tie line spacing	500 m
Terrain clearance	30 m
Magnetic sensor	Heli-GT (contains 4 Scintrex CS3 cesium sensors in an orthogonal array)
Magnetic sensor separation	3 m within the array
magnetic sensor resolution	0.005 nT
Magnetic sensor sampling rate	10 Hz
Fluxgate magnetometer	Billingsley TFM100G2 3-axis
Fluxgate magnetometer sampling rate	10 Hz
Radar altimeter	Terra TRA 3500 / TR 140
Radar altimeter sampling rate	10 Hz
Additional data recorded	VLF, GPS
Magnetic base station	GEM SSM19TW proton magnetometer
Alternate diurnal recording	Natural Resources Canada – Ottawa

It was noted that there were times throughout surveying that the magnetic base station operated by Scott Hogg was unable to record due to cold weather conditions. During this time, diurnal magnetic data recorded by Natural Resources Canada in Ottawa was reviewed for determination of magnetic storms during surveying (Munro, 2015). Scott Hogg confirmed that the base station channels were used to monitor diurnal activity, but the diurnal correction occurs during the tie-line levelling phase. It is industry-practice to employ at least one base magnetometer at a survey site to monitor diurnal activity. The diurnal activity recorded by Natural Resources Canada does not suggest any abnormal solar storm occurring, but the lack of this on-site base station magnetometer could introduce bias in the sampling of the magnetic data. Red Pine was made aware of the base magnetometer failure and elected to continue with surveying.

The Scott Hogg Heli-GT system consists of a towed bird that contains all the geophysical sensors as well as altimeter and GPS antennae (Munro, 2015). The system contains four magnetometers and allows for calculation of three magnetic gradients G1, G2, and G3, measured from the nose sensor to each of the radial sensors (Munro, 2015). The sensor in the bird's nose ("Mag4") is used as the principal total field profile. A minor lag is applied to the Mag4 sensor to align the data with the GPS antennae array (Munro, 2015).

The pitch, roll, and yaw of the bird are recorded by Scott Hogg and mathematically used to rotate the measured gradients to G-north, G-east and G-down, representing the XYZ orthogonal components of the magnetic field. The GPS altitude data was applied to the lagged magnetic data to produce an altitude correction. This altitude-corrected data underwent tie-line levelling and final micro-levelling (Munro, 2015).

Scott Hogg used proprietary gradient tensor software program GT-Grid to produce a total magnetic field grid from the recorded total magnetic field sensor (Mag4) and the recorded gradients. The data was also pole-reduced for the Project using a Fast Fourier Transform ("FFT") filter. An FFT filter was also applied to the data to produce a first vertical derivative grid (''CVG"), calculated from the pole-reduced total field grid, as can be seen in Figure 9-7. A half-cosine roll-off filter was included with the vertical derivative operator to reduce short-wavelength noise. The full wavelength of the noise filter was 30 m (Munro, 2015). A digital terrain model ("DTM") was calculated by subtracting the radar altimeter data from the GPS altitude, and was corrected by micro- levelling (Munro, 2015).

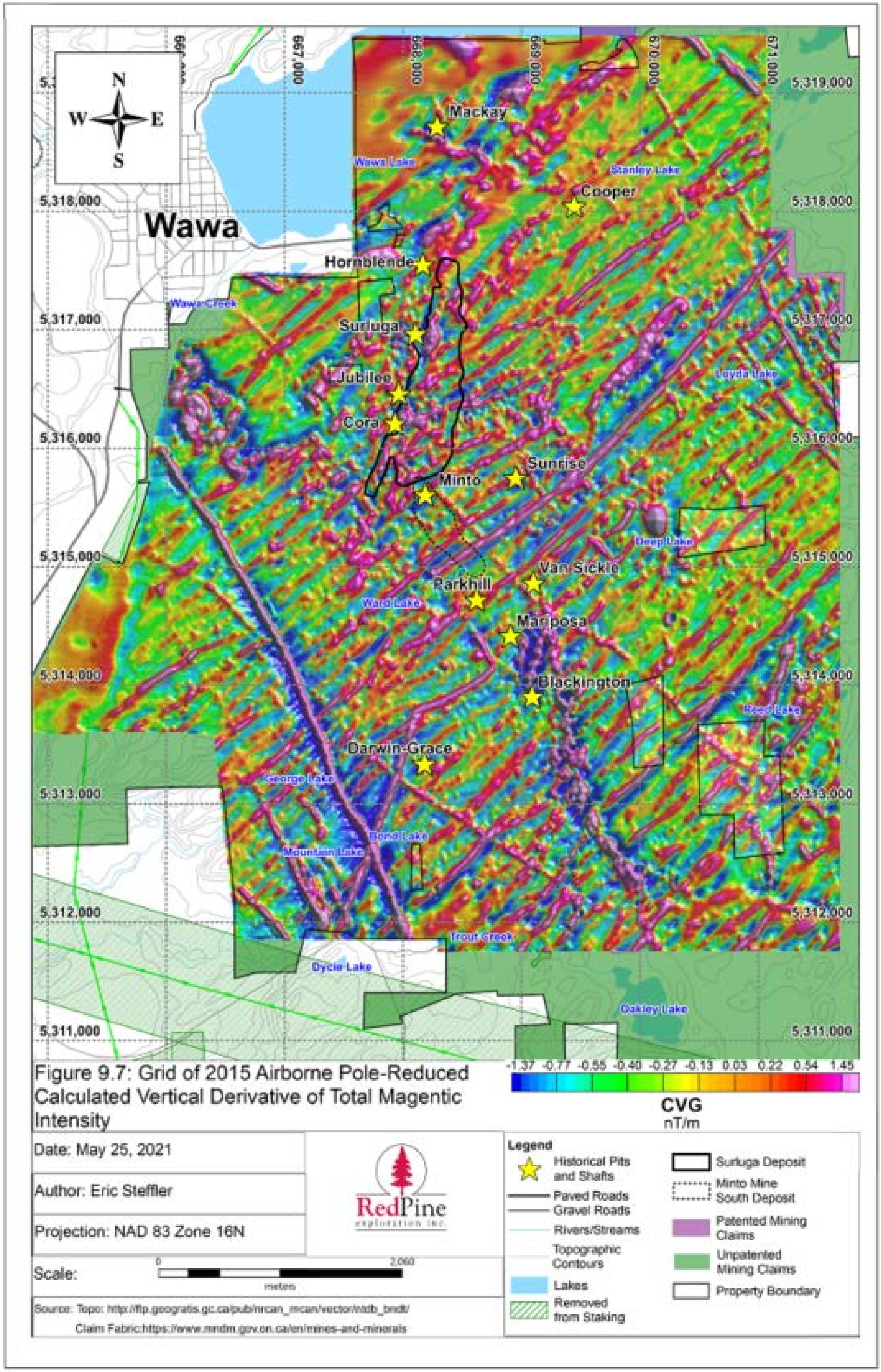

Figure 9-7: Grid of Pole-Reduced Calculated Vertical Derivative of Total Magnetic Intensity

9.2.6 mT Survey

Red Pine engaged Empulse Geophysics Ltd. To conduct a transient magnetotelluric (mT) survey of the Project. The mT survey is used to infer the earth's subsurface electrical conductivity from measurements of the earth's natural geomagnetic and geoelectric field variations. The earth's electrical structure at depth may be estimated from surface measurements of naturally occurring fluctuations in the earth's geomagnetic field along with electric field fluctuations induced within the earth by the former.

The survey was collected using a SFERIC Transient AMT system in which 137 stations at approximately 300 m spacing was collected on 19 parallel lines enclosing an area of approximately 2.5 km E-W by 5.5 km N-S (Figure 9-8). The mT results show that the Project lies east of a deep (1.5 km or greater), major regional structure which may be hydraulically connected to the Jubilee Lake area (Figure 9-3). Further, between 1,500 m and 2,000 m, there is evidence of several deep "roots" or resistivity lows that exist below shallower anomalies in the upper several hundred metres. The location of these resistivity low anomalies exists north of Minto Lake, near the old Mariposa mine. In addition, there are strong resistivity lows in the upper several hundred metres at the west end of the northern-most lines, under Lake Wawa and at the end of line three (L3) at shallow depths (less than (<) 200 m) where a conducted airborne EM survey has been completed in the past and has responded strongly to the feature.

Data quality is fair to good for this dataset with dead-band effects generally smaller than expected. Due to thick bush and a dense root network on the forest floor, induction coil installations were generally difficult and remained quite susceptible to motion noise, especially the vertical coil. As a result, the impedance tensor and tipper, typically wind noise, dominated below approximately 20 hertz (Hz).

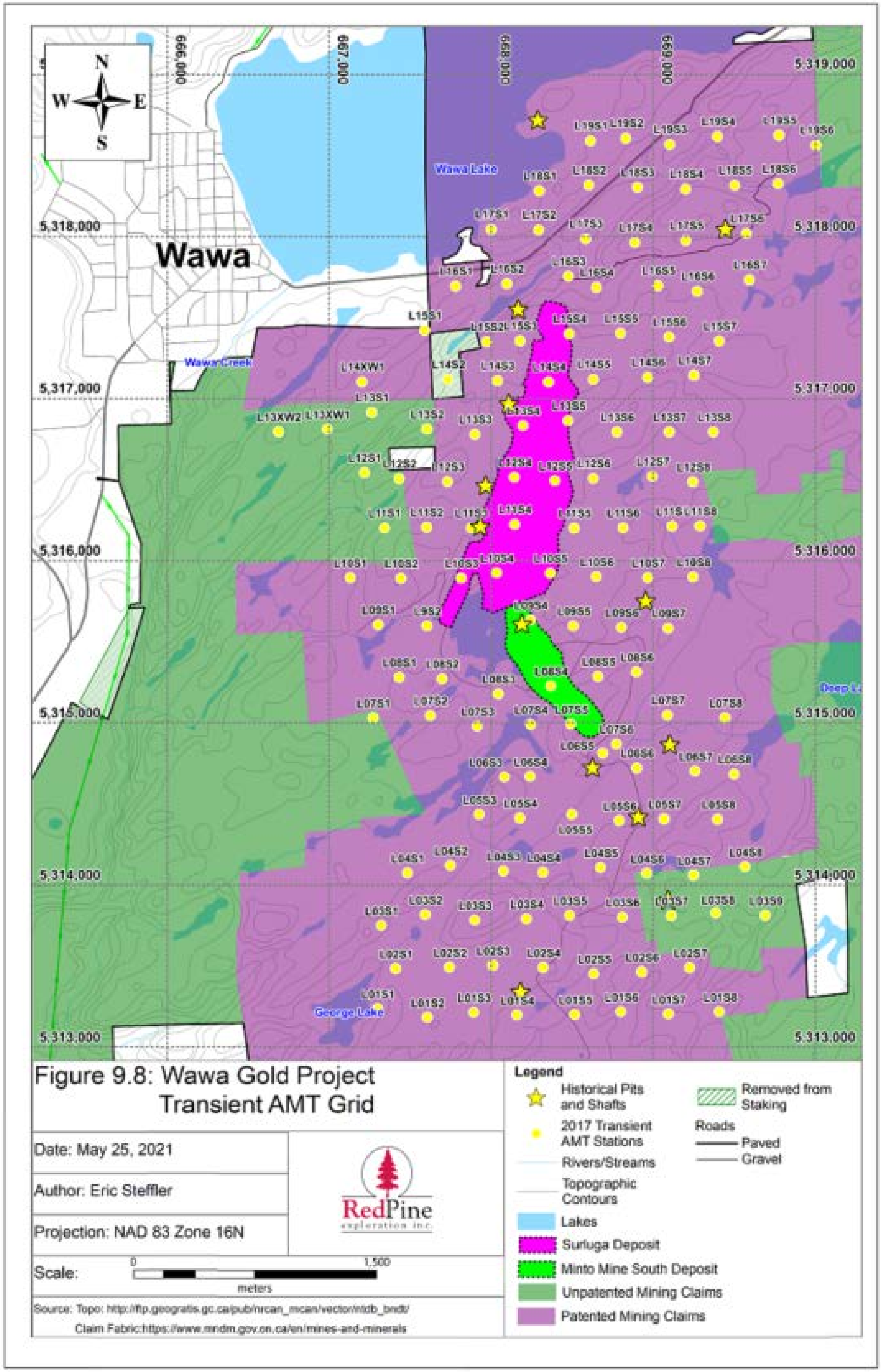

Figure 9-8: Wawa Gold Project Transient AMT Grid

9.2.7 Inversion of 2011 VTEM Data

In 2017, Red Pine contracted AARHUSGEO to complete an inversion with Cole-Cole parameters of the VTEM survey data flown by Augustine Ventures in 2011. The purpose of the project was to recover improved electrical resistivities by means of Cole-Cole modelling to maximum possible depths for VTEM system in current geology. SCI inversion was effective in delineating the chargeable areas, which result in strong IP effects in VTEM data. SCI inversion misfit normalized by the standard deviation is shown in Figure 9-9.

AARHUSGEO concluded, there is no particular correlation between electrical conductivity and gold content. The Surluga deposit has a strong conductive signature, in cases with Jubilee, Minto, Deep Lake mine and Van Sickle, there is some conductive response, but to a small degree, in other cases (e.g. Hornblende pit, Mariposa and Cooper), there is no conductive response. From the magnetic 3D modelling carried out for the area surrounding the Surluga deposit, the conductive target to the west of Surluga deposit shares similar magnetic signature. The latter could be attributed to presence of non-magnetic Jubilee shear zone in case with Surluga deposit and similar processes, which led to destruction of magnetic minerals in case with the adjacent anomaly, subject to advanced modelling (Kaminski et al, 2017).

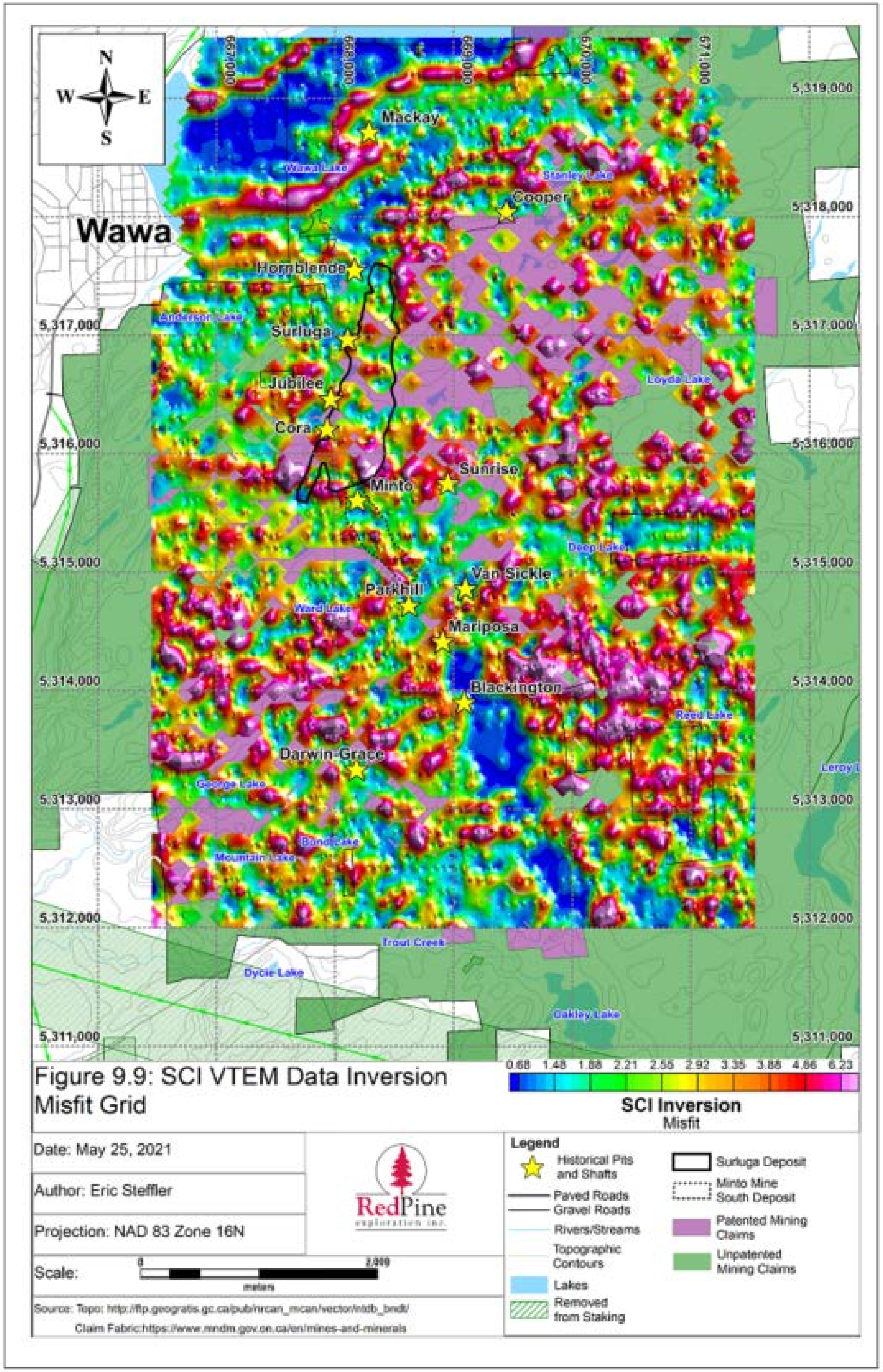

Figure 9-9: SCI VTEM Data Inversion Misfit Grid

9.2.8 Gravity Survey (2019)

Red Pine Exploration contracted Abitibi Geophysics to conduct a high-resolution ground gravity survey, which was completed between March 19th and March 29th, 2019. A Scintrex CG-6 and a CG-5u AutoGrav gravity meter were used. These gravity meters use quartz sensor technology and offer fast, reliable, and precise gravity measurements which includes an array of mapping and post processing functionality. The software used was SCTutil and USB Stick Interface for data transfer to a PC, and Gravity and Terrain Correction (Oasis Montaj ver 9.5.2 module from Geosoft) for all remaining gravity processing. Real-time Kinematic (RTK) GPS surveying was done, with an expected accuracy better than 5 cm in elevation and horizontal positioning. A Leica 1200 base station and Leica Viva GS15 rover were used in tandem with LEICA Geo-Office 8.2.

The gravity survey was undertaken to detect abandoned underground workings of the Jubilee Mine, to delineate prospective targets for gold mineralization and to trace the southern extension of the Jubilee Stock. The survey (L 1+00E, L 2+00E and L 3+00E) carried out around the Jubilee Lake, was to detect abandoned underground workings of the Jubilee Mine, while the purpose of the two NW-SE long traverses (L 4+00N and L 5+00N), 2.7 km apart, was to delineate prospective targets for gold mineralization. Along the long traverses, 143 gravity readings divided into two NW-SE profiles and spaced every 50 m were measured. The gravity data was reduced to the sea-level datum by standard reductions (Tide, drift, height, temperature, pressure, tilt, free air, buguer and terrain corrections) using a bouguer density of 2.75 g/cm3 to reflect the diorite to granodiorite rocks that constitute the Jubilee Stock.

The gravity method mapped the Jubilee Stock by negative residual responses and confirmed the extension of the Jubilee Stock to the SW of where historical mapping defined its boundary (Figure 9-10). The direct association between the zone(s) of gold mineralization identified on the Wawa Gold Project and the Jubilee Stock indicate its importance in controlling the deposition of gold. This southerly extension of the Jubilee Stock identifies new areas for gold exploration on the property. The gravity data supports our interpretation of the extension of the Wawa Gold Corridor much further to the south and extending the potential mineralization strike length to over 6 km.

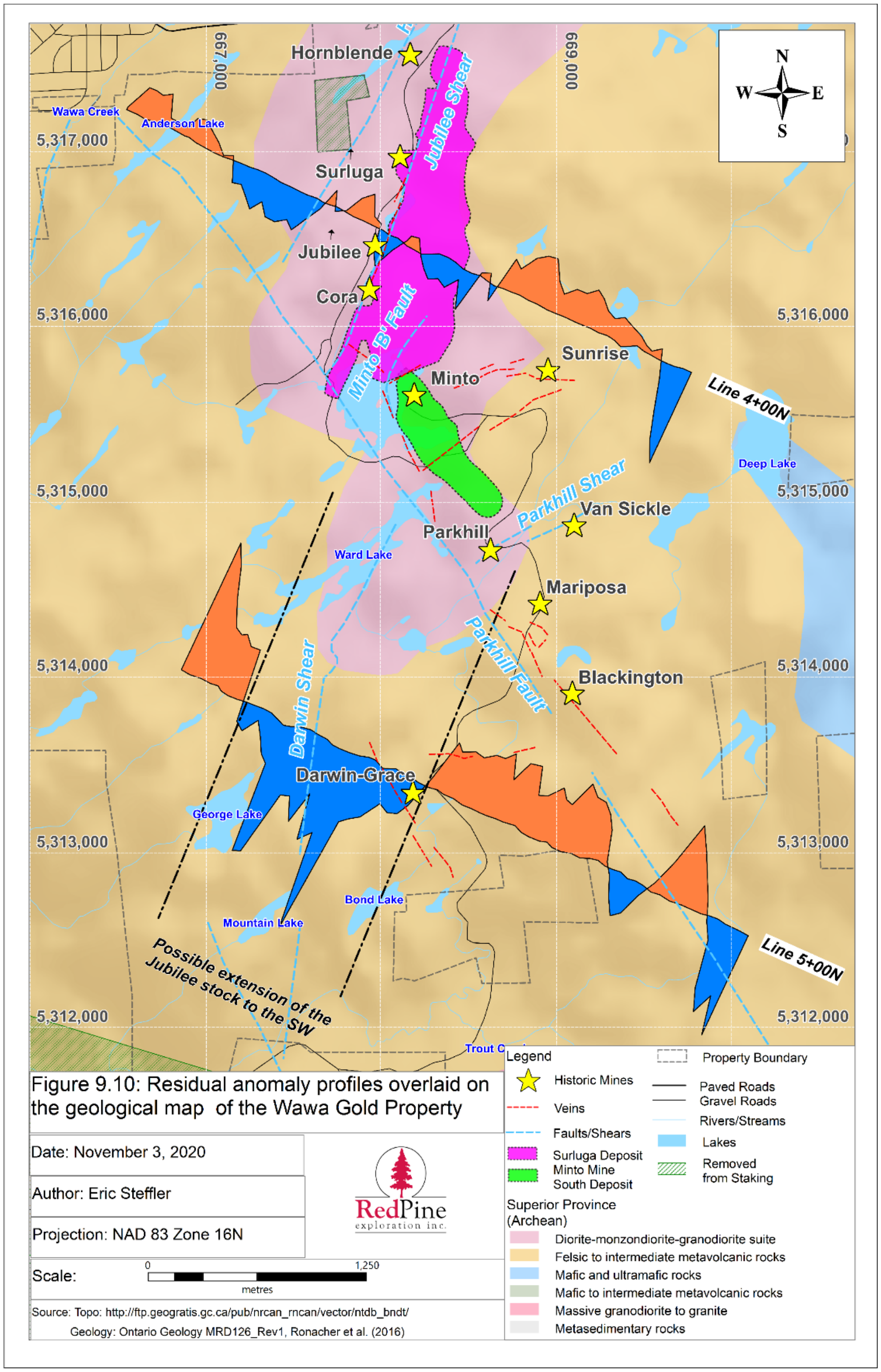

Figure 9-10: Residual Anomaly Profiles Overlaid on the Geological Map of the Wawa Gold Property

9.2.9 Cross-hole IP/Resistivity Survey (2020)

During the spring of 2020, Red Pine contracted Clearview Geophysics Inc. to carry a out cross-hole IP/Resistivity survey on the Surluga Deposit. The purpose of the work was to map trends and zones in 3D to assist with planning follow-up exploration drilling. Table 9-8 summarizes the parameters of the cross-hole on IP/resistivity survey. Nine drill hole pairs were logged: SD-18-241 and SD-18-243A, SD-18-241 and SD-15-20, SD-18-241 and SD-15-21, SD-18-243A and SD-18-255, SD-18-250 and SD-20-289, SD-18-255 and SD-20-285A, SD-18-255 and SD-20-287, SD-20-287 and SD-20-289, SD-20-289, and SD-20-285A (Figure 9-11).

Table 9-8: Parameters of the Cross-hole IP/Resistivity Survey

Survey Parameter	Details
Survey dates	May 18-26, 2020
System	Scintrex IPR12 Rx,
	Walcer 10 kW Tx
Reading Location - P1	Fixed several metres from anchor hole collar
Reading Location - P2	Down anchor hole
Reading Location - P3	Down paired-hole
Reading Time	Cyclical DC pulses of 2 seconds on positive followed by 2 seconds off and then 2 seconds on negative followed by 2 seconds off
Reading Intervals - Anchor-hole P2	Typically @ 50m & 100m intervals
Reading Intervals - Paired-hole P3	Typically @ 5m, 10 m, 20 m & 30m intervals
Transmitter Electrodes	C1: 668135 mE / 5316903 mN
	C2: 668737 mE / 5315007 mN
Cross-hole pairs	Nine (9)

The cross-hole IP/Resistivity survey consisted of injecting electric current into the ground through transmitter electrodes located 2 km apart. The transmitter current averaged 2,050 milliampere. The anchor drill hole is the drill hole at which the receiver operator was positioned. The P1 reference receiver electrode was positioned several metres from the collar of the anchor drill hole. The P2 receiver electrode was used in the anchor drill hole and was generally moved at 50-m or 100-m increments. The P3 receiver electrode was used in the paired cross-hole and generally moved at 5-m, 10-m, 20-m, or 30-m intervals. For each electrode positioned in the anchor drill hole, the complete suite of equally spaced readings was taken at the paired hole. Two dipoles were recorded for each reading. Dipole 1 consisted of P1-P2, and Dipole 2 consisted of P2-P3. The receiver was set to synchronize to the transmitter pulse for Dipole 1. Dipole 1 is a quality control dipole used to remotely monitor the transmitter current and to ensure the timing of the receiver pulse is consistent for all readings.

The cross-hole survey identified variations that could indicate cross-cutting trends and structures, such as folds. Highest priority for follow-up should be at areas with weak to strong chargeability high responses.

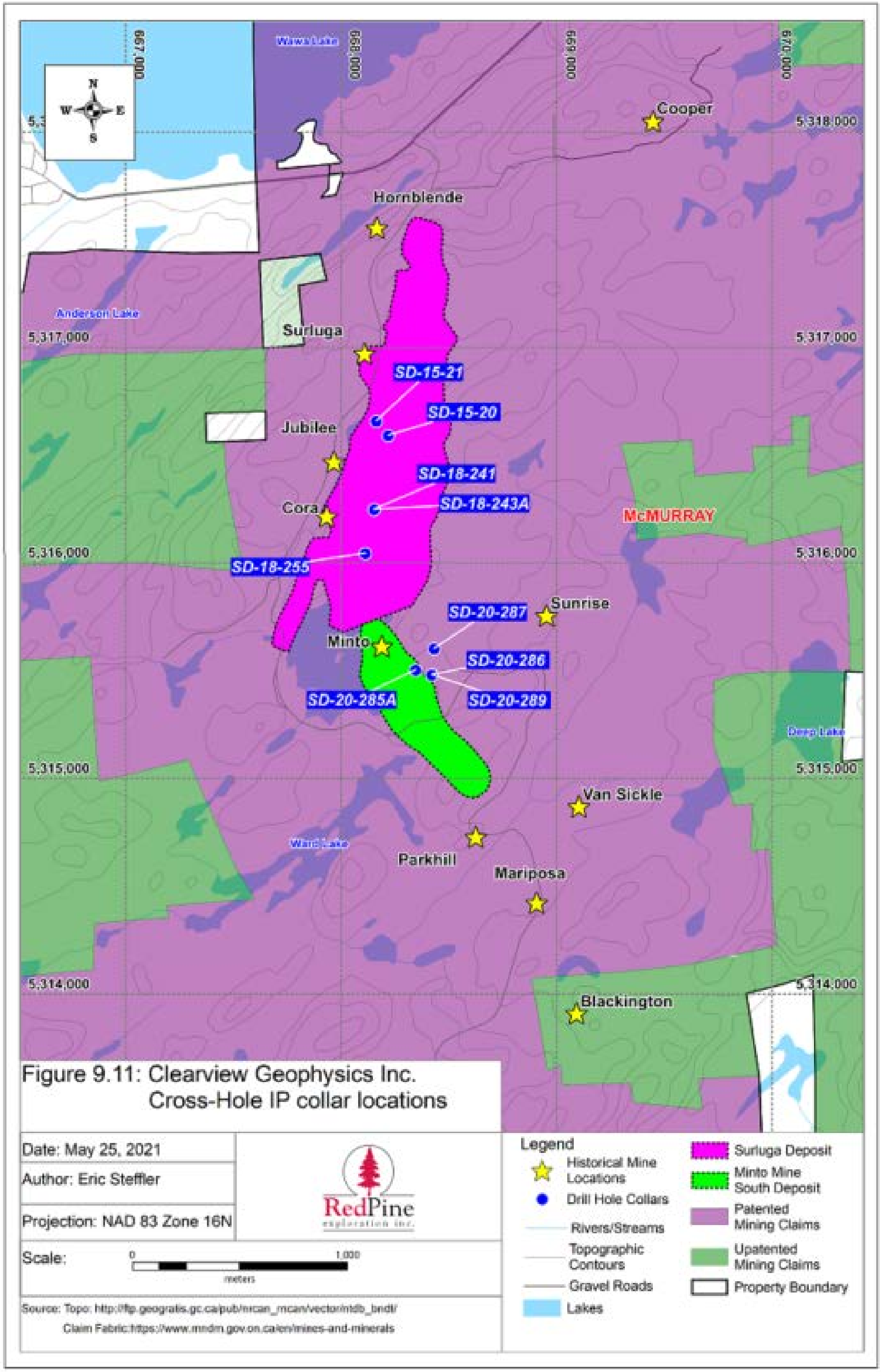

Figure 9-11: Clearview Geophysics Inc. Cross-Hole IP Collar Locations

9.3 Channel Sampling 2015 to 2020

During the summers of 2015 to 2020, Red Pine personnel were on site at the Project to carry out mechanized stripping and channel sampling of the exposed outcrops. A total of 1,539 channel samples were collected over 511 channels from 62 different areas. Table 9-9 lists the channels, their length and orientation. The main objective of the trenching program was to characterize the surface geology and mineralization of historical showings within or proximal to the Surluga Deposit. These showings include: Root Vein, Grace Shear Zone, Cooper-Ganley structure, Jubilee Shear Zone (JSZ) and its extension south of the Parkhill Fault, Hornblende Shear zone (HBSZ), William Shear Zone (WSZ), Algoma, Minto Mine Shear Zone, Parkhill #4 Shear Zone, Minto B, Sunrise-Mickelson, Van Sickle, Parkhill, and prospective structures identified from traverses, mapping and geophysical surveys. Modelling of historical data provided targets for drill testing, but confirmation of historical results was also required. Trenching and channel sampling was also completed in areas where limited surface work had been done to date, but that exhibited similar geophysical signatures as known mineralization. Channel samples are representative of the outcrop from which they were collected.

Channel samples were cut using a channel saw and their length (true width cannot be calculated due to surface irregularities along the series of channel samples) and azimuth were recorded. Samples were collected in approximately 1 m intervals (intervals range from 0.1 m to 1.5 m) and their location recorded using a differential GPS, channel; assay highlights of channel samples with grades above 0.5 Au g/t are listed in Table 9-10. Figure 9-12 shows the locations of all areas where stripping and channel sampling was completed. Figure 9-13 shows the area of the highlighted channel sampling assay results.

Table 9-9: Location, Length, and Orientation of Channels Collected during the 2015 to 2020 Programs

Trench ID	Year	Trench Area	X	Y	Z	Length (m)*	Az (°)
15WG-AC-001	2015	Root Vein	668803	5318479	297.4	4.4	150
15WG-AC-001A	2015	Root Vein	668803	5318479	297.4	3.5	240
15WG-AC-004	2015	Root Vein	668766	5318449	300.3	1.5	148
15WG-AC-006	2015	Minto C	668212	5315821	350.1	4.8	332
15WG-AC-008	2015	Minto C	668163	5315777	348.1	6	326
15WG-AC-009	2015	Minto C	668159	5315862	348.1	6	326
15WG-AC-010	2015	Minto C	668154	5315864	348.5	4	309
15WG-AC-011	2015	Minto B	668215	5315948	349.4	10	315
15WG-AC-012	2015	Minto B	668251	5315988	351.6	11.5	312
15WG-AC-014	2015	Minto B	668226	5315952	348.9	1.6	350
15WG-JFM-017	2015	Root Vein	668758	5318439	301.3	1	329
15WG-AC-018	2015	Van Sickle	669020	5314854	347.4	1.7	338
15WG-AC-019	2015	Van Sickle	669033	5314876	345.9	3	347
15WG-AC-020	2015	Van Sickle	669035	5314877	345.7	0.6	347
15WG-AC-021	2015	Van Sickle	669046	5314879	344.8	1	43
15WG-AC-022	2015	Van Sickle	669054	5314880	343.3	3	358
15WG-AC-023A	2015	Van Sickle	669086	5314882	341.4	0.3	333
15WG-AC-023B	2015	Van Sickle	669086	5314882	341.4	0.4	333
15WG-AC-023C	2015	Van Sickle	669086	5314882	341.4	0.5	333
15WG-AC-025	2015	Parkhill	668764	5314700	339	4	162
15WG-AC-026	2015	Sunrise	668943	5315696	351.7	1.5	17
15WG-AC-031	2015	Sunrise	668904.4	5315687.1	352.5	2.3	332
15WG-AC-032	2015	Sunrise	668903	5315695	353.6	2.4	337
15WG-AC-034A	2015	Sunrise	668896	5315692	353.5	0.4	20
15WG-AC-034B	2015	Sunrise	668896	5315692	353.5	0.2	20
15WG-AC-035	2015	Sunrise	668912.9	5315682.6	351.5	2.8	359
15WG-AC-121	2015	Sunrise	668796	5315832	367	8	326
15WG-AC-122	2015	Sunrise	668787	5315834	366.5	2	314
15WG-AC-123	2015	Sunrise	668756	5315817	367.1	5.8	321
15WG-AC-124	2015	Sunrise	668753	5315821	366.9	3	229
15WG-AC-125A	2015	Sunrise	668721	5315745	370.9	3.2	329
15WG-AC-125B	2015	Sunrise	668721	5315745	370.9	0.8	329
Mariposa1	2015	Mariposa	668799	5314286	357.5	4	180
Mariposa2	2015	Mariposa	668806	5314278	357.4	3	360
Mickelson1	2015	Mickelson	668931	5315680	350.2	4.5	177
Mickelson2	2015	Mickelson	668930	5315683	350.4	0.4	177
Mickelson3	2015	Mickelson	668885	5315690	354	2.8	177
Mickelson4	2015	Mickelson	668884	5315689.7	353.8	0.6	177
Mickelson5	2015	Mickelson	668883	5315690.3	353.5	1.6	177
Mickelson6	2015	Mickelson	668882	5315690.5	355.3	1.2	177
Mickelson7	2015	Mickelson	668881	5315692	353.1	0.9	177
TR-16-1A	2016	Jubilee Shear Zone	668103.7	5317427.6	337.9	1	151.8
TR-16-1B	2016	Jubilee Shear Zone	668104.7	5317429.3	337.8	6	146.1
TR-16-1C	2016	Jubilee Shear Zone	668108.4	5317424.5	339.7	11	153.3
TR-16-1D	2016	Jubilee Shear Zone	668112	5317421	339.9	1	239.2
TR-16-1E	2016	Jubilee Shear Zone	668113.8	5317415.3	337	1	188.5
TR-16-1F	2016	Jubilee Shear Zone	668114	5317414.3	336.6	1	184.8
TR-16-1G	2016	Jubilee Shear Zone	668115.5	5317421.7	338.4	3	161.5
TR-16-1H	2016	Jubilee Shear Zone	668116.8	5317418.9	336.9	2	159.6

Trench ID	Year	Trench Area	X	Y	Z	Length (m)*	Az (°)
TR-16-1I	2016	Jubilee Shear Zone	668115.6	5317411.6	339.6	3.6	153.3
TR-16-1J	2016	Jubilee Shear Zone	668117.4	5317408.2	336.7	2	146.1
TR-16-1K	2016	Jubilee Shear Zone	668131.3	5317389.2	337.2	4	116.4
TR-16-1L	2016	Jubilee Shear Zone	668132.8	5317387.8	340	1	129.1
TR-16-1M	2016	Jubilee Shear Zone	668133.7	5317386.4	340.7	1	126.7
TR-16-1N	2016	Jubilee Shear Zone	668133.8	5317384	341.5	1	106.6
TR-16-1O	2016	Jubilee Shear Zone	668134.4	5317385.5	341.3	6	141.2
TR-16-1P	2016	Jubilee Shear Zone	668143.9	5317374.7	342.6	1.8	153.3
TR-16-1Q	2016	Jubilee Shear Zone	668143.8	5317372.8	343.7	2	141.9
TR-16-1R	2016	Jubilee Shear Zone	668144.6	5317370.9	344.1	1	120.8
TR-16-1S	2016	Jubilee Shear Zone	668145.1	5317370	343.8	4	136.8
TR-16-1T	2016	Jubilee Shear Zone	668160.7	5317356.1	343.5	2.8	146.1
TR-16-1U	2016	Jubilee Shear Zone	668162.1	5317354.7	343.6	1	33.9
TR-16-1V	2016	Jubilee Shear Zone	668162.5	5317354.3	343.7	2	155.9
TR-16-1W	2016	Jubilee Shear Zone	668165.6	5317352.3	348	1	139.2
TR-16-1X	2016	Jubilee Shear Zone	668167	5317351.4	343.7	9	153.3
TR-16-1Y	2016	Jubilee Shear Zone	668171.9	5317344.6	349	8	114.1
TR-16-1Z	2016	Jubilee Shear Zone	668179	5317338	346.6	8	141.9
TR-16-1AA	2016	Jubilee Shear Zone	668185	5317332.6	347.3	3	159
TR-16-1BB	2016	Jubilee Shear Zone	668185.9	5317329.9	347.5	1	196.1
TR-16-1CC	2016	Jubilee Shear Zone	668184.4	5317329.4	347.1	3	146.1
TR-16-1DD	2016	Jubilee Shear Zone	668186.5	5317327	346	1	173.6
TR-16-2A	2016	Hornblende Shear Zone	668050.2	5317469.3	334.3	6	143
TR-16-2B	2016	Hornblende Shear Zone	668052.8	5317464.6	337.3	1	146
TR-16-2C	2016	Hornblende Shear Zone	668061.4	5317480.8	332	1	124
TR-16-2D	2016	Hornblende Shear Zone	668062.9	5317480.1	333.2	2	130
TR-16-2E	2016	Hornblende Shear Zone	668059.1	5317479.4	332	2	127
TR-16-2F	2016	Hornblende Shear Zone	668060.8	5317477.9	334.2	1.9	146
TR-16-2G	2016	Hornblende Shear Zone	668061.4	5317476.2	335.3	3.4	116
TR-16-2H	2016	Hornblende Shear Zone	668062.9	5317474.2	337.5	7	137
TR-16-2I	2016	Hornblende Shear Zone	668066.5	5317468.5	339.9	2	170
TR-16-2J	2016	Hornblende Shear Zone	668067.3	5317466.7	339.6	1	146
TR-16-2K	2016	Hornblende Shear Zone	668071.2	5317463.2	340.2	5	138
TR-16-2L	2016	Hornblende Shear Zone	668075.2	5317460.3	341.2	1	143
TR-16-2M	2016	Hornblende Shear Zone	668075.7	5317459.4	340.9	3	138
TR-16-2N	2016	Hornblende Shear Zone	668080.2	5317455.5	340.3	8	132
TR-16-2O	2016	Hornblende Shear Zone	668091.5	5317448.8	343.6	4	165
TR-16-3A	2016	Jubilee South	667720	5315769.2	306.5	11	90
TR-16-3B	2016	Jubilee South	667723	5315768.5	306.9	3	102.9
TR-16-3C	2016	Jubilee South	667730	5315771.3	309	7	67.9
TR-16-4A	2016	Williams	668085.4	5317233.2	347.1	18	96.5
TR-16-4B	2016	Williams	668087.2	5317233.9	347.1	3	99.4
TR-16-4C	2016	Williams	668090.1	5317233.4	348.3	5	18.6
TR-16-4D	2016	Williams	668092	5317236.3	348	1	38.9
TR-16-4E	2016	Williams	668094.2	5317229.2	347.5	14.5	6.4
TR-16-4F	2016	Williams	668097.9	5317234.4	348.2	2.5	14.1
TR-16-4G	2016	Williams	668098.8	5317237.7	348.4	1	90
TR-16-4H	2016	Williams	668100.6	5317234.2	348.3	2.5	12.6
TR16-4I	2016	Williams	668084.4	5317234.7	346.5	0.5	103.9

Trench ID	Year	Trench Area	X	Y	Z	Length (m)*	Az (º)
TR16-4J	2016	Williams	668088.5	5317238.2	346.7	0.5	161.4
TR16-4K	2016	Williams	668087.5	5317236	346.7	6	90
TR16-4L	2016	Williams	668091.3	5317240.8	346.8	2.5	90
TR16-4M	2016	Williams	668074.7	5317239.8	345.8	1.2	314.8
TR16-4N	2016	Williams	668076	5317240.6	346.1	0.7	310.4
TR-16-5A	2016	North trench	668195.5	5317507.2	334.1	1.6	156
TR-16-5B	2016	North trench	668194.6	5317507	334	13	137
TR-16-6A	2016	Minto A	667917.6	5315860.4	319.3	7	45.2
TR-16-6B	2016	Minto A	667922	5315865.9	320.4	13	56.5
TR-16-6C	2016	Minto A	667931.9	5315873.1	321.7	1	318.2
TR-16-6D	2016	Minto A	667932	5315873.8	321.8	23	65.9
TR-16-6E	2016	Minto A	667949.3	5315885.3	319.2	3	57.5
TR-16-6F	2016	Minto A	667953.3	5315886.3	318.5	4	90
TR-16-6G	2016	Minto A	667955.3	5315885.8	317.8	1	56.5
TR-16-6H	2016	Minto A	667951.4	5315883	318.8	3	79.5
TR-16-6I	2016	Minto A	667965	5315894.5	318.2	2	59.2
TR-16-6J	2016	Minto A	667967.4	5315894.6	318.4	11	63.6
TR-16-6K	2016	Minto A	667976.7	5315899.6	321.2	2	43.2
TR-16-6L	2016	Minto A	667977.8	5315900.9	320.1	1	296.4
TR-16-6M	2016	Minto A	667980.5	5315901	320.3	10	65.9
TR-16-7A	2016	Airstrip	667513	5315508.4	306.7	1	309.6
TR-16-7B	2016	Airstrip	667510.6	5315510.5	306.7	7	306.7
TR-16-7C	2016	Airstrip	667499.2	5315520.3	303.9	2	303.5
TR-16-7D	2016	Airstrip	667497.4	5315519.5	303.9	1	314.8
TR-16-7E	2016	Airstrip	667496.9	5315520.7	304.5	9	321.9
TR-16-7F	2016	Airstrip	667486.5	5315529.3	306.6	1	67
TR-16-7G	2016	Airstrip	667486.6	5315530.6	306.6	1	73.4
TR-16-7H	2016	Airstrip	667482.6	5315535.5	306.3	1	335.9
TR-16-7I	2016	Airstrip	667481.7	5315534.2	305.8	4	335.9
TR-16-7J	2016	Airstrip	667476.8	5315536.2	304.5	1	353.6
TR-16-7K	2016	Airstrip	667455.1	5315553.2	302.9	1	281.2
TR-16-7L	2016	Airstrip	667451.3	5315557.2	304.1	1	63.6
TR-16-7M	2016	Airstrip	667450	5315559.5	305.1	1	228.2
TR-16-7N	2016	Airstrip	667445.7	5315556.6	305.3	1	335.9
TR-16-7O	2016	Airstrip	667451.8	5315555.9	303.6	2	306.7
TR-16-7P	2016	Airstrip	667449.9	5315556.6	304.2	5	316.2
TR-16-7Q	2016	Airstrip	667443.9	5315561.9	303.4	1	311.8
TR-16-7R	2016	Airstrip	667441.7	5315560.6	303.4	2	314.8
TR-16-7S	2016	Airstrip	667439.7	5315561.8	302.8	4	330.1
TR16-8A	2016	Minto B	668257.4	5315960.1	319.4	12	298.4
TR16-8B	2016	Minto B	668250.7	5315963.8	316.3	2	290.4
TR16-8C	2016	Minto B	668245	5315966.2	314	11	309.6
TR16-8D	2016	Minto B	668236.5	5315970.9	315.3	1	318.2
TR16-8E	2016	Minto B	668236.2	5315971.9	315.3	2	304.5
TR16-8F	2016	Minto B	668234.2	5315972.8	315.8	4	309.6
TR16-8H	2016	Minto B	668231	5315974.7	315.8	4	306.7
TR16-8G	2016	Minto B	668229.9	5315974.6	315.7	1	318.2
TR16-9A	2016	Coreshack trench	667940.8	5316791.6	356.2	1	345
TR16-9B	2016	Coreshack trench	667929.4	5316799	358.3	23	341.4

Trench ID	Year	Trench Area	X	Y	Z	Length (m)*	Az (º)
TR16-9C	2016	Coreshack trench	667915.9	5316816.6	359.5	1	18.6
TR16-9D	2016	Coreshack trench	667915.1	5316816.1	359.6	2	326.1
TR16-9E	2016	Coreshack trench	667914.4	5316817.8	359.3	3	326.1
TR-16-10A	2016	Jubilee Seacans	668137.2	5316901.6	354.1	4	97.7
TR-16-10B	2016	Jubilee Seacans	668140.5	5316901.8	354.6	1	270
TR-16-10C	2016	Jubilee Seacans	668140.2	5316902.1	354.7	1	0
TR-16-10D	2016	Jubilee Seacans	668137.2	5316902.9	354.3	4	292.1
TR16-11A	2016	Minto B North	668491.2	5316184.1	376.9	3	321.9
TR16-11B	2016	Minto B North	668488.7	5316185.7	377.7	4	318.2
TR16-11C	2016	Minto B North	668480.4	5316192.7	378.5	2	304.1
TR16-11D	2016	Minto B North	668470.3	5316198.5	379.5	1	311.8
TR16-11E	2016	Minto B North	668463.6	5316201.8	379.6	1	326.1
TR16-11F	2016	Minto B North	668454.8	5316205.4	380.5	5	290.4
TR16-11G	2016	Minto B North	668449.7	5316206.6	380.1	10	313
TR16-11H	2016	Minto B North	668438.7	5316212.5	379.6	7	296.4
TR16-11I	2016	Minto B North	668433.2	5316216.5	378.3	3	323.3
TR16-11J	2016	Minto B North	668430.2	5316217.2	378.1	7	318.2
TR16-11K	2016	Minto B North	668420.7	5316223.3	374.1	8	311.8
TR16-11L	2016	Minto B North	668416.8	5316226.3	374.6	18	289
TR16-11M	2016	Minto B North	668401.3	5316233.2	373.1	4	309.1
TR16-11N	2016	Minto B North	668400.1	5316236.9	368.1	5	317.3
TR16-13A	2016	Shaft Trench	668013.5	5316953.8	356	20	316.8
TR16-13B	2016	Shaft Trench	668002	5316957.2	356.8	4	65.9
TR16-13C	2016	Shaft Trench	668005.2	5316959.3	356.8	8	61.6
TR16-13D	2016	Shaft Trench	668011.3	5316964.6	357.1	8	63.6
TR16-13E	2016	Shaft Trench	668013.2	5316971	356.7	1	195
TR16-13F	2016	Shaft Trench	668017	5316969.6	356	1	326.1
TR16-13G	2016	Shaft Trench	668017.6	5316967.3	355.7	2	5.5
TR16-13H	2016	Shaft Trench	668005.4	5316960.3	357.1	1	33.9
TR16-13I	2016	Shaft Trench	668011.3	5316958	356.8	1	18.6
TR16-13J	2016	Shaft Trench	668013.9	5316957.1	356.3	1	341.4
TR16-14A	2016	Algoma Zone	668251.6	5316806.7	355.4	21	306.7
TR16-14B	2016	Algoma Zone	668235	5316818.8	353.7	6	314.8
TR16-14C	2016	Algoma Zone	668230.2	5316820.5	354.1	9	303.5
TR16-15A	2016	SR Zone TR16-1A extension	668203.1	5317305.5	343.6	11	146.1
TR16-15B	2016	SR Zone TR16-1A extension	668210.7	5317298.9	348.9	6	131.8
TR16-15C	2016	SR Zone TR16-1A extension	668214.4	5317294.2	348.8	4	124.5
TR16-15D	2016	SR Zone TR16-1A extension	668218.1	5317292.3	348.4	2	169.6
TR16-15E	2016	SR Zone TR16-1A extension	668220.3	5317291.8	348.5	6	131.8
TR16-15F	2016	SR Zone TR16-1A extension	668224.6	5317287.8	346.9	11	138.2
TR16-16A	2016	Jubilee North extension trench	668380.7	5317608.1	325.2	15	326.1
TR16-16B	2016	Jubilee North extension trench	668374.6	5317620.7	317.8	2	308.5
TR16-16C	2016	Jubilee North extension trench	668373.8	5317622.4	318	1	314.8
TR16-16D	2016	Jubilee North extension trench	668373.5	5317623.4	318	1	300.8
TR16-16E	2016	Jubilee North extension trench	668373.4	5317624.6	318.1	4	313
TR16-17A	2016	New Jubilee	668252	5317338.6	349.3	1	5.5
TR16-17B	2016	New Jubilee	668252.5	5317338.1	349.7	4.4	90
TR16-17C	2016	New Jubilee	668256.3	5317338.4	350.8	3	102.9
TR16-17D	2016	New Jubilee	668261.9	5317337.9	350.8	1.5	132.5

Trench ID	Year	Trench Area	X	Y	Z	Length (m)*	Az (º)
TR16-17E	2016	New Jubilee	668263.4	5317338.4	351	3.1	96.5
TR16-17F	2016	New Jubilee	668266	5317337.8	351.7	1	112.1
TR16-17G	2016	New Jubilee	668266.1	5317339	351.4	7.4	90
TR16-17H	2016	New Jubilee	668273.3	5317338.1	354.7	6.9	114.1
TR16-17I	2016	New Jubilee	668277.1	5317335.1	355.7	0.6	15
TR16-17J	2016	New Jubilee	668277.7	5317334.2	355.2	0.6	345
TR16-17K	2016	New Jubilee	668279.8	5317333.7	354.4	3	123.5
TR16-17L	2016	New Jubilee	668231	5317355.2	347.4	0.9	213.9
TR16-17M	2016	New Jubilee	668231.6	5317357.1	346.5	0.3	138.2
TR16-18A	2016	Mid	668283.5	5317518	339.2	8	102.9
TR16-18B	2016	Mid	668290.1	5317511.4	337.4	1.9	110.4
TR16-18C	2016	Mid	668294.1	5317515.4	337.9	4.6	134.8
TR16-18D	2016	Mid	668296.9	5317509.6	339	9	126.7
TR16-18E	2016	Mid	668304.1	5317508.1	339.2	7	118.4
RV-1	2017	Root Vein	668775.1	5318460.6	301.9	5.6	318
RV-2	2017	Root Vein	668776.9	5318461.2	302.1	7	322
RV-3	2017	Root Vein	668779.6	5318464.6	302.4	10	307
RV-4	2017	Root Vein	668781.3	5318466.7	302.7	8	316
RV-5	2017	Root Vein	668781.2	5318457.2	299.3	3	334
RV-6	2017	Root Vein	668784.1	5318458.7	299.5	5	321
RV-7	2017	Root Vein	668785.7	5318460.4	299.5	4	323
RV-8	2017	Root Vein	668785.1	5318461.9	300	1	315
RV-9	2017	Root Vein	668771.1	5318468.4	304.9	7	307
CG-1	2018	Cooper Ganley	669582.6	5317951.2	363.2	0.7	170
CG-2	2018	Cooper Ganley	669579.9	5317949.7	362.1	2	234
CG-3	2018	Cooper Ganley	669578.1	5317949.5	362	0.6	220
CG-4	2018	Cooper Ganley	669577.7	5317949.3	362	1.5	220
CG-5	2018	Cooper Ganley	669576.1	5317949.3	362	3.4	230
CG-6	2018	Cooper Ganley	669571.8	5317944.2	364.1	2.2	336
Cooper-11-1	2019	Cooper Ganley	669243.6	5318067.2	364.9	4	55
Cooper-11-2	2019	Cooper Ganley	669252.2	5318068.2	365.5	6.9	237
Cooper-11-3	2019	Cooper Ganley	669240.3	5318071.6	366.2	3	139
Cooper-11-4	2019	Cooper Ganley	669243.9	5318063.1	364.5	1.5	128
Cooper-11-5	2019	Cooper Ganley	669243.6	5318069.3	365.4	1.5	72
Cooper-11-6	2019	Cooper Ganley	669244.7	5318070.5	365.5	1.3	67
Cooper-4-1	2019	Cooper Ganley	669311.2	5318165.8	371.9	1.9	58
Cooper-4-2	2019	Cooper Ganley	669307.5	5318165	371.1	1.5	14
CG-1-1	2019	Cooper Ganley	669360.3	5318111.9	379.2	4.4	225
CG-1-2	2019	Cooper Ganley	669365.3	5318105.9	379.4	4.3	229
CG-1-3	2019	Cooper Ganley	669354.4	5318091.9	380.4	7	177
CG-1-4	2019	Cooper Ganley	669372.7	5318115.2	381	2.6	186
Ganley-3a-1	2019	Cooper Ganley	669396.5	5318182.7	371.4	1.5	208
Cooper-1-1	2019	Cooper Ganley	669317.4	5318159.9	375.1	1.5	253
Cooper-1-2	2019	Cooper Ganley	669315.7	5318159.3	374.9	3.4	248
Cooper-1-3	2019	Cooper Ganley	669303.4	5318148.1	374.7	1.5	308
Cooper-6a-1	2019	Cooper Ganley	669295.4	5318177.5	371.9	1.1	307
Cooper-6a-2	2019	Cooper Ganley	669294	5318179.7	371.9	0.9	307
Cooper-5a-1	2019	Cooper Ganley	669851	5317822.4	358.4	4.1	70
Ganley-3b-1	2019	Cooper Ganley	669380.2	5318188.3	370.3	3.6	350

Trench ID	Year	Trench Area	X	Y	Z	Length (m)*	Az (º)
Ganley-3b-2	2019	Cooper Ganley	669380.5	5318191	370.1	1.2	27
Ganley-3-1	2019	Cooper Ganley	669401.5	5318159.8	373.3	5.8	338
Cooper-8-1	2019	Cooper Ganley	669278.1	5318246.9	368	2.8	51
Cooper-8-2	2019	Cooper Ganley	669278.3	5318250.6	367	1.1	83
Cooper-10-4	2019	Cooper Ganley	669272.6	5318290	364.5	1	180
Cooper-10-1	2019	Cooper Ganley	669271.6	5318295.5	363.3	5.8	227
Cooper-10-2	2019	Cooper Ganley	669267.1	5318295.8	362.4	3	208
Cooper-10-3	2019	Cooper Ganley	669274.6	5318294.5	364	5.4	125
Cooper-6-1	2019	Cooper Ganley	669291.6	5318196.8	375.2	2.4	248
Cooper-6-2	2019	Cooper Ganley	669285.7	5318197.4	375.6	2.7	20
Cooper-2-1	2019	Cooper Ganley	669637.3	5317918.2	361.7	3	42
Cooper-2-5	2019	Cooper Ganley	669637.9	5317920.6	361.1	1.1	8
Cooper-2-1a	2019	Cooper Ganley	669639.5	5317922	361.7	3.7	27
Cooper-2-6	2019	Cooper Ganley	669639	5317921.5	361.5	0.6	0
Cooper-2-2	2019	Cooper Ganley	669653	5317935.1	361.2	2.6	195
Cooper-2-3	2019	Cooper Ganley	669626.5	5317911.4	362.5	4.5	345
Cooper-2-4	2019	Cooper Ganley	669632.9	5317917.7	362.2	5.9	19
Cooper-5b-1	2019	Cooper Ganley	669831.8	5317816.7	357.9	8.9	58
Cooper-5b-2	2019	Cooper Ganley	669838	5317816.7	357.4	1.4	349
Cooper-5b-3	2019	Cooper Ganley	669841.1	5317813.4	357.8	1.4	13
Cooper-5a-2	2019	Cooper Ganley	669857.4	5317830.2	359.4	5.4	100
Cooper-5a-3	2019	Cooper Ganley	669863.4	5317832.2	358.5	1.4	105
Cooper-5a-4	2019	Cooper Ganley	669881.6	5317855.2	358.3	1.5	186
Ganley-1-1	2019	Cooper Ganley	669538.6	5318057.5	370.9	8.8	65
Ganley-1-2	2019	Cooper Ganley	669547.6	5318052.5	370.2	2.9	38
Cooper-3-1	2019	Cooper Ganley	669769.8	5317855.6	358.9	7.2	42
Cooper-3-2	2019	Cooper Ganley	669767.6	5317860.2	356.5	1.5	0
Cooper-3-3	2019	Cooper Ganley	669753	5317843.5	360.7	2.2	296
Trench-2-1	2019	Grace	668036.4	5313442.1	344.7	2.6	237
Trench-2-2	2019	Grace	668034.5	5313440.2	344.8	1.3	245
Trench-2-4	2019	Grace	668033.6	5313438.8	344.9	1.5	244
Trench-2-3	2019	Grace	668023.6	5313438.4	345.7	3.2	58
Trench-4-1	2019	Grace	668121.3	5313257.9	340.7	3	318
Trench-4-2	2019	Grace	668132	5313261.9	337.5	1.5	180
Trench-4-3	2019	Grace	668133.9	5313262.2	336.8	1.5	239
Trench-3A-1	2019	Grace	668055.5	5313405.9	345.3	2.8	26
Trench-3A-2	2019	Grace	668059.5	5313409.2	346.5	1.5	82
Trench-3A-3	2019	Grace	668062.2	5313407.6	346.1	2	312
Trench-3B-1	2019	Grace	668040.4	5313400.2	344.9	1.5	6
Trench-3B-2	2019	Grace	668026.1	5313379.3	344.6	1.5	9
Trench-3B-3	2019	Grace	668016.7	5313376.8	345.8	2.5	122
Trench-3B-4	2019	Grace	668013.3	5313376	345.8	1.5	53
Gulch-A-1	2019	Gulch	669765.6	5318728	353.4	1.4	100
Gulch-A-2	2019	Gulch	669772.7	5318727.5	352.2	2.5	270
Gulch-B-1	2019	Gulch	669782.6	5318725.5	359.6	0.6	352.3
Gulch-B-2	2019	Gulch	669780.6	5318724.3	355.9	1.1	352.3
Gulch-B-3	2019	Gulch	669781.3	5318725.6	357.1	0.8	352.3
Trench-5A-1	2019	Grace	667939.4	5313623.3	353.6	1.5	94
Trench-5A-2	2019	Grace	667941	5313623.2	353.3	3.6	64

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Trench-5A-3	2019	Grace	667944.2	5313624.4	350.8	1.5	57
Trench-5A-6	2019	Grace	667944.5	5313626.1	353.1	1.5	52
Trench-5A-4	2019	Grace	667946.2	5313627	352.7	3.1	48
Trench-5A-5	2019	Grace	667949	5313628.5	352	2.3	50
Trench-5B-1	2019	Grace	667958.6	5313613.7	346.6	1.7	70
Trench-5B-2	2019	Grace	667969.8	5313621	349	0.9	303
Trench-5B-3	2019	Grace	667955.9	5313610.8	346.9	1.8	53
Trench-5B-4	2019	Grace	667963.9	5313617	348.5	1.5	19
Trench-5B-5	2019	Grace	667957.2	5313612	347.2	0.7	45
Trench-5C-1	2019	Grace	667934.1	5313600.7	342.6	3	40
Trench-5C-2	2019	Grace	667928.3	5313598.5	342.5	4.5	53
Trench-5C-3	2019	Grace	667939.8	5313605.3	343.3	1	53
Trench-1-1	2019	Grace	667980.8	5313494.8	343.5	1	316
Trench-1-2	2019	Grace	667993.3	5313502.9	345.6	1.5	48
Trench-1-3	2019	Grace	667999.8	5313508.6	344.7	3	53
Trench-1-4	2019	Grace	668002.8	5313508.6	344.5	4.2	39
Trench-1-5	2019	Grace	668018	5313519.1	343.3	1.5	143
Trench-1-6	2019	Grace	668018.8	5313518.1	342.6	1	143
Trench-1-7	2019	Grace	667975.9	5313492.1	344.3	1.6	64
Jubilee-SouthA-1	2019	Jubilee South	667621.4	5314040.3	360.4	5.4	103
Jubilee-SouthA-2	2019	Jubilee South	667620.8	5314039.2	360.4	1.1	10
Jubilee-SouthA-3	2019	Jubilee South	667626.4	5314038.9	359.3	3	97
Jubilee-SouthA-4	2019	Jubilee South	667628.8	5314039.1	358.7	3.6	108
Jubilee-SouthA-5	2019	Jubilee South	667615	5314041	359.7	1.8	133
Jubilee-SouthA-6	2019	Jubilee South	667616.8	5314040.5	359.7	0.7	135
Jubilee-SouthA-7	2019	Jubilee South	667617.7	5314040.6	360.1	3	118
Jubilee-SouthA-8	2019	Jubilee South	667633.2	5314038.6	357.5	1.5	144
Jubilee-SouthA-9	2019	Jubilee South	667635.3	5314038.9	357.5	1.6	142
JSZ_SouthB-1	2019	Jubilee South	667638.2	5314038.2	358	1.2	96
JSZ_SouthB-2	2019	Jubilee South	667638.4	5314037.2	358.5	4	97
JSZ_SouthB-3	2019	Jubilee South	667641.3	5314035.1	359.1	0.7	72
JSZ_SouthB-4	2019	Jubilee South	667642.6	5314035.2	359.1	9.8	124
JSZ_SouthC-1	2019	Jubilee South	667658.5	5314025.6	357.4	1	175
JSZ_SouthC-2	2019	Jubilee South	667659.5	5314026.7	357.8	1	135
JSZ_SouthC-3	2019	Jubilee South	667666	5314023	357.5	1.8	121
JSZ_SouthC-4	2019	Jubilee South	667668.4	5314022.1	358.2	2.8	170
JSZ_SouthC-5	2019	Jubilee South	667670.2	5314019.6	358.8	1.2	140
JSZ_SouthC-6	2019	Jubilee South	667670.8	5314020.1	359	2.2	137
JSZ_SouthC-7	2019	Jubilee South	667671.9	5314018.2	358.7	1.2	139
JSZ_SouthC-8	2019	Jubilee South	667673.5	5314019.6	358.4	1.3	120
JSZ_SouthC-9	2019	Jubilee South	667674.6	5314019	357.8	1.6	107
JSZ_SouthC-10	2019	Jubilee South	667676.1	5314018.3	357.2	1.8	127
JSZ_SouthC-11	2019	Jubilee South	667677.6	5314017.7	356.3	2.4	124
JSZ_SouthC-12	2019	Jubilee South	667679.3	5314016.1	355.8	1	132
JSZ_SouthC-13	2019	Jubilee South	667680.9	5314016.8	355.2	1.2	146
JSZ_SouthC-14	2019	Jubilee South	667681.1	5314015.7	354.8	0.8	141
JSZ_SouthC-15	2019	Jubilee South	667682.3	5314016.3	354.6	1.5	130
JSZ_SouthC-16	2019	Jubilee South	667682.8	5314017.1	354.8	2.2	135
JSZ_South2-6	2019	Jubilee South	667665.6	5313977	358.3	5.1	130

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JSZ_South2-8	2019	Jubilee South	667676	5313978.5	354.5	7.5	116
JSZ_South2-1	2019	Jubilee South	667655.8	5313965	360.8	3.3	75
JSZ_South2-2	2019	Jubilee South	667656.7	5313968.3	360.5	2.5	103
JSZ_South2-3	2019	Jubilee South	667659.1	5313968.8	360.9	1.4	90
JSZ_South2-7	2019	Jubilee South	667668.7	5313978.5	357.3	7.5	116
JSZ_South3B-1	2019	Jubilee South	667641.3	5314145.2	343	1.1	78
JSZ_South3B-2	2019	Jubilee South	667642.3	5314144.8	343	1	139
JSZ_South3B-3	2019	Jubilee South	667643.7	5314144.2	343.1	3.2	135
JSZ_South3B-4	2019	Jubilee South	667647.9	5314142.7	344	0.8	133
JSZ_South3B-5	2019	Jubilee South	667648.8	5314142.1	344.1	5.3	123
JSZ_South3B-6	2019	Jubilee South	667656.9	5314136.9	343.1	3	138
JSZ_South3B-7	2019	Jubilee South	667659.8	5314135.9	344.6	2.9	130
JSZ_South3B-8	2019	Jubilee South	667663.1	5314133.8	344.4	3.6	133
JSZ_South3B-9	2019	Jubilee South	667666.6	5314130.8	344	1	103
JSZ_South3B-10	2019	Jubilee South	667667.7	5314130.5	344.5	1.1	76
JSZ_South3B-11	2019	Jubilee South	667669.3	5314131.2	345.1	1	150
JSZ_South3B-12	2019	Jubilee South	667669.9	5314130	345.5	5.8	127
JSZ_South3B-13	2019	Jubilee South	667674.3	5314126.6	344.8	3.6	123
JSZ_South3B-14	2019	Jubilee South	667677.9	5314125.5	344.1	2.7	119
JSZ_South2-4	2019	Jubilee South	667659.4	5313971.8	360.3	5	116
JSZ_South2-5	2019	Jubilee South	667663.1	5313972.3	359.9	3.5	13
JSZ_South3A-1	2019	Jubilee South	667684	5314121.1	343.7	1.9	127
JSZ_South3A-2	2019	Jubilee South	667685	5314118.3	346.9	0.8	146
JSZ_South3A-3	2019	Jubilee South	667685.5	5314117.5	346.9	3.6	150
JSZ_South3A-4	2019	Jubilee South	667692	5314116	348.3	2	130
JSZ_South3A-5	2019	Jubilee South	667694.9	5314116.7	348.2	2	122
JSZ_South3A-6	2019	Jubilee South	667695.5	5314114.5	349.2	3	123
JSZ_South3A-7	2019	Jubilee South	667698.2	5314114.2	347.9	2.9	123
JSZ_South3A-8	2019	Jubilee South	667700.6	5314113.2	346.6	6.8	124
JSZ_South3A-9	2019	Jubilee South	667706.4	5314109.2	344.5	2	138
JSZ_South3A-10	2019	Jubilee South	667708.1	5314108.7	344.3	4.3	124
Minto-08D	2020	Minto	668269.9	5315157.9	345.2	2	204
Minto-08C	2020	Minto	668257.4	5315149.6	342.8	0.8	119
Minto-08B	2020	Minto	668242.8	5315141.1	343.4	1	50
Minto-08A	2020	Minto	668239.2	5315140.9	344	3.4	62
Minto-06-2	2020	Minto	668028.8	5315248.9	345.2	1	75
Minto-06-1	2020	Minto	668027.1	5315249	344.9	0.8	53
Minto-07-4	2020	Minto	668063.6	5315203.4	342.8	1.1	150
Minto-07-3	2020	Minto	668064.4	5315206	342.7	0.7	161
Minto-07-2	2020	Minto	668063.6	5315205.3	342.8	2.4	47
Trench-6-8	2020	Grace	667823.2	5313735.4	379.9	1	42
Trench-6-7	2020	Grace	667880.9	5313772.7	383.1	1.5	81
Trench-6-6	2020	Grace	667872.9	5313764.1	383.3	3	354
Trench-6-5	2020	Grace	667846.2	5313751.2	380.8	1.5	6
Trench-6-4	2020	Grace	667838.9	5313746.6	380.8	3	64
Trench-6-3	2020	Grace	667825.8	5313738	380.5	1.3	20
Trench-6-2	2020	Grace	667818.1	5313730.9	380.2	1	70
Trench-6-1	2020	Grace	667816.4	5313730	380.2	1.5	104
Trench-7B-2	2020	Grace	668011.6	5313559.2	346.4	1.5	55

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Trench-7B-1	2020	Grace	668011.1	5313557.1	345.7	5.9	341
Trench-7A-9	2020	Grace	667984.3	5313543	348.6	2.7	166
Trench-7A-8	2020	Grace	667985.1	5313544.5	348.5	1.3	190
Trench-7A-7	2020	Grace	667983	5313537.9	347.5	0.7	172
Trench-7A-6	2020	Grace	667981.2	5313539.7	348.2	2.3	120
Trench-7A-5	2020	Grace	667979.3	5313542.9	348.5	2.3	60
Trench-7A-4	2020	Grace	667975.2	5313538.8	348.3	5.9	43
Trench-7A-3	2020	Grace	667974	5313537.5	348	2.2	11
Trench-7A-2	2020	Grace	667972.7	5313536.2	347.7	1.8	44
Trench-7A-1	2020	Grace	667972.3	5313537.8	347.9	1.3	59
Minto-07-1	2020	Minto	668061	5315209.9	342.2	3.7	146
Mickelson-1N	2020	Mickelson	668916.2	5315681.1	350.7	1.3	199
Mickelson-1M	2020	Mickelson	668913.8	5315682.6	350.6	1.3	80
Mickelson-1L	2020	Mickelson	668914.2	5315683.4	350.7	0.8	185
Mickelson-1K	2020	Mickelson	668912.6	5315684.3	351	2.3	191
Mickelson-1J	2020	Mickelson	668910.1	5315683.4	351.1	1.1	197
Mickelson-1I	2020	Mickelson	668909.2	5315685.7	352.1	2.2	166
Mickelson-1H	2020	Mickelson	668917.1	5315692.3	351.9	1.3	180
Mickelson-1G	2020	Mickelson	668901.6	5315689.1	351.8	0.5	146
Mickelson-1F	2020	Mickelson	668901.8	5315690.7	351.9	1.3	193
Mickelson-1E	2020	Mickelson	668895.8	5315690.3	352.8	0.8	185
Mickelson-1D	2020	Mickelson	668884.6	5315692.9	353.4	3.1	174
Mickelson-1C	2020	Mickelson	668887	5315695	353.4	2.1	166
Mickelson-1B	2020	Mickelson	668886.5	5315695.3	353.2	0.8	186
Mickelson-1A	2020	Mickelson	668884.1	5315698	352.8	2	101
Minto-04N	2020	Minto	668950.4	5314227.5	358.7	1.3	133
Minto-04M	2020	Minto	668947	5314225.4	359.5	1.4	20
Minto-04L	2020	Minto	668943.1	5314222.8	360.2	1.5	144
Minto-04K	2020	Minto	668932.1	5314215.5	360.5	1.5	141
Minto-04J	2020	Minto	668925.1	5314212.1	359.5	1.3	37
Minto-04I	2020	Minto	668924.1	5314211	359.8	1.2	152
Minto-04H	2020	Minto	668922.8	5314207.9	360.1	3.8	57
Minto-04G	2020	Minto	668918	5314206.1	359.3	2.6	150
Minto-04F	2020	Minto	668916.2	5314203.5	360.1	1.3	109
Minto-04E	2020	Minto	668910.2	5314201.9	359.3	1.3	152
Minto-04D	2020	Minto	668902.5	5314198.7	358.9	1	138
Minto-04C	2020	Minto	668895.4	5314189.2	361.3	1.5	123
Minto-04B	2020	Minto	668887.7	5314176.7	364.6	1.5	136
Minto-04A	2020	Minto	668860.3	5314143.9	365.8	1.2	22
Minto-03D	2020	Minto	668474.5	5314645.2	346.7	1.5	175
Minto-03C	2020	Minto	668470	5314641	346.6	1	167
Minto-03B	2020	Minto	668467.1	5314638.2	346.9	1.5	17
Minto-03A	2020	Minto	668398.8	5314617.3	342.2	1.4	170
Minto-02G	2020	Minto	668334.7	5314758.9	341.1	1.5	135
Minto-02F	2020	Minto	668337.4	5314759.6	341.6	1.5	29
Minto-02E	2020	Minto	668338.4	5314761.3	341.3	1.5	36
Minto-02D	2020	Minto	668372.7	5314778.1	349.1	1.3	149
Minto-02C	2020	Minto	668445	5314824.3	356.8	1.2	150
Minto-02B	2020	Minto	668448.3	5314826.3	357.1	1	161

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Minto-02A	2020	Minto	668461.6	5314835.8	358.6	1.4	135
Minto-01V	2020	Minto	668414.3	5314944.6	358.5	1.9	207
Minto-01U	2020	Minto	668411.5	5314944.6	358.3	1.1	170
Minto-01T	2020	Minto	668410.2	5314945	358.2	1.1	175
Minto-01S	2020	Minto	668408.8	5314944.3	357.7	0.8	141
Minto-01R	2020	Minto	668404.3	5314944.9	356.9	0.6	170
Minto-01Q	2020	Minto	668403.4	5314944.1	356.8	1.3	167
Minto-01P	2020	Minto	668400.6	5314945.8	356.5	1.5	170
Minto-01O	2020	Minto	668397.7	5314944.1	355.3	1.1	166
Minto-01N	2020	Minto	668397.3	5314942.3	353.7	0.5	146
Minto-01M	2020	Minto	668394.8	5314944.1	354.6	1.1	167
Minto-01L	2020	Minto	668389	5314944.4	353.1	1.8	161
Minto-01K	2020	Minto	668380.7	5314943.2	352.6	1	150
Minto-01J	2020	Minto	668378.8	5314944	351.8	0.8	156
Minto-01I	2020	Minto	668366.1	5314945.8	349.6	1.5	143
Minto-01H	2020	Minto	668368.9	5314948.3	350.2	1.2	79
Minto-01G	2020	Minto	668368.3	5314945.3	350.4	1.3	170
Minto-01F	2020	Minto	668359.6	5314936.6	349.4	0.7	165
Minto-01E	2020	Minto	668355.6	5314935.4	349.2	0.8	156
Minto-01D	2020	Minto	668355.1	5314936.5	349.9	0.8	159
Minto-01C	2020	Minto	668345	5314933.2	348.8	1.2	180
Minto-01B	2020	Minto	668293.4	5314917.3	348.7	1.5	110
Minto-01A	2020	Minto	668288.4	5314920	346.7	1.5	107
Minto-05U	2020	Minto	668888.1	5314105.1	368.7	1.2	152
Minto-05T	2020	Minto	668884.9	5314099.3	368.7	0.8	186
Minto-05S	2020	Minto	668878	5314099.3	367.4	3.7	55
Minto-05R	2020	Minto	668878	5314100.4	367.9	1.1	58
Minto-05Q	2020	Minto	668880.9	5314090.5	367.6	0.9	43
Minto-05P	2020	Minto	668880.6	5314088.5	367.5	1.1	8
Minto-05O	2020	Minto	668877.1	5314096.2	368.6	2	142
Minto-05N	2020	Minto	668876.8	5314093.7	368.4	0.8	28
Minto-05M	2020	Minto	668873.7	5314093.7	368.2	2.1	172
Minto-05L	2020	Minto	668874	5314095.7	368	1	142
Minto-05K	2020	Minto	668875.5	5314095.3	368	3.4	186
Minto-05J	2020	Minto	668872.2	5314091.6	368.1	1.4	99
Minto-05I	2020	Minto	668871.4	5314094.4	368	5	50
Minto-05H	2020	Minto	668870.1	5314096.6	367	1.3	149
Minto-05G	2020	Minto	668868.7	5314095.6	367	1.2	158
Minto-05F	2020	Minto	668863	5314091	366.3	0.7	146
Minto-05E	2020	Minto	668852.9	5314081.6	367.2	2.6	141
Minto-05D	2020	Minto	668844.7	5314074.5	366.7	1.2	107
Minto-05C	2020	Minto	668845.3	5314072.7	367	1.3	48
Minto-05B	2020	Minto	668843.5	5314073.2	366.1	1.5	161
Minto-05A	2020	Minto	668812.2	5314040.6	361.6	1.3	56
Minto-04P	2020	Parkhill	668946	5314225	359.4	2.8	137
Minto-04O	2020	Parkhill	668945.1	5314222.3	360	4.5	45
Parkhill-01X	2020	Parkhill	668615.9	5315076.8	367.5	2.1	90
Parkhill-01W	2020	Parkhill	668616.5	5315078.4	367.6	0.9	170
Parkhill-01V	2020	Parkhill	668614.6	5315078.9	367.3	0.9	72

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Parkhill-01U	2020	Parkhill	668612	5315082	367.4	0.6	127
Parkhill-01T	2020	Parkhill	668607	5315085.6	368.6	1.2	143
Parkhill-01S	2020	Parkhill	668600.7	5315091.6	369.8	0.9	26
Parkhill-01R	2020	Parkhill	668592.9	5315099.7	369.9	1.2	152
Parkhill-01Q	2020	Parkhill	668587.5	5315105.3	369.2	1.8	114
Parkhill-01P	2020	Parkhill	668575.5	5315127.7	364	1.9	112
Parkhill-01O	2020	Parkhill	668560	5315176.1	359.7	0.6	352
Parkhill-01N	2020	Parkhill	668560.2	5315176.7	359.7	0.7	345
Parkhill-01M	2020	Parkhill	668553.8	5315197	363.7	1.5	185
Parkhill-01L	2020	Parkhill	668549.8	5315205.6	364.1	1.2	165
Parkhill-01K	2020	Parkhill	668545.7	5315221.1	363.3	1.2	156
Parkhill-01J	2020	Parkhill	668544.6	5315223.5	365.7	2.4	158
Parkhill-01I	2020	Parkhill	668543.3	5315229.2	367.2	1.2	146
Parkhill-01H	2020	Parkhill	668542.4	5315232.5	368.3	1.5	136
Parkhill-01G	2020	Parkhill	668540.3	5315237.9	368.4	1.1	169
Parkhill-01F	2020	Parkhill	668539	5315239.6	368.7	1.3	141
Parkhill-01E	2020	Parkhill	668537.2	5315240.9	368.3	1.3	154
Parkhill-01D	2020	Parkhill	668532.4	5315247.5	368.4	0.6	247
Parkhill-01C	2020	Parkhill	668524	5315256.8	370.7	0.9	180
Parkhill-01B	2020	Parkhill	668523.1	5315258.8	370.8	1.4	190
Parkhill-01A	2020	Parkhill	668519.9	5315259.8	370.1	0.9	164

Note: *True width cannot be calculated due to surface irregularities along the series of channel samples.

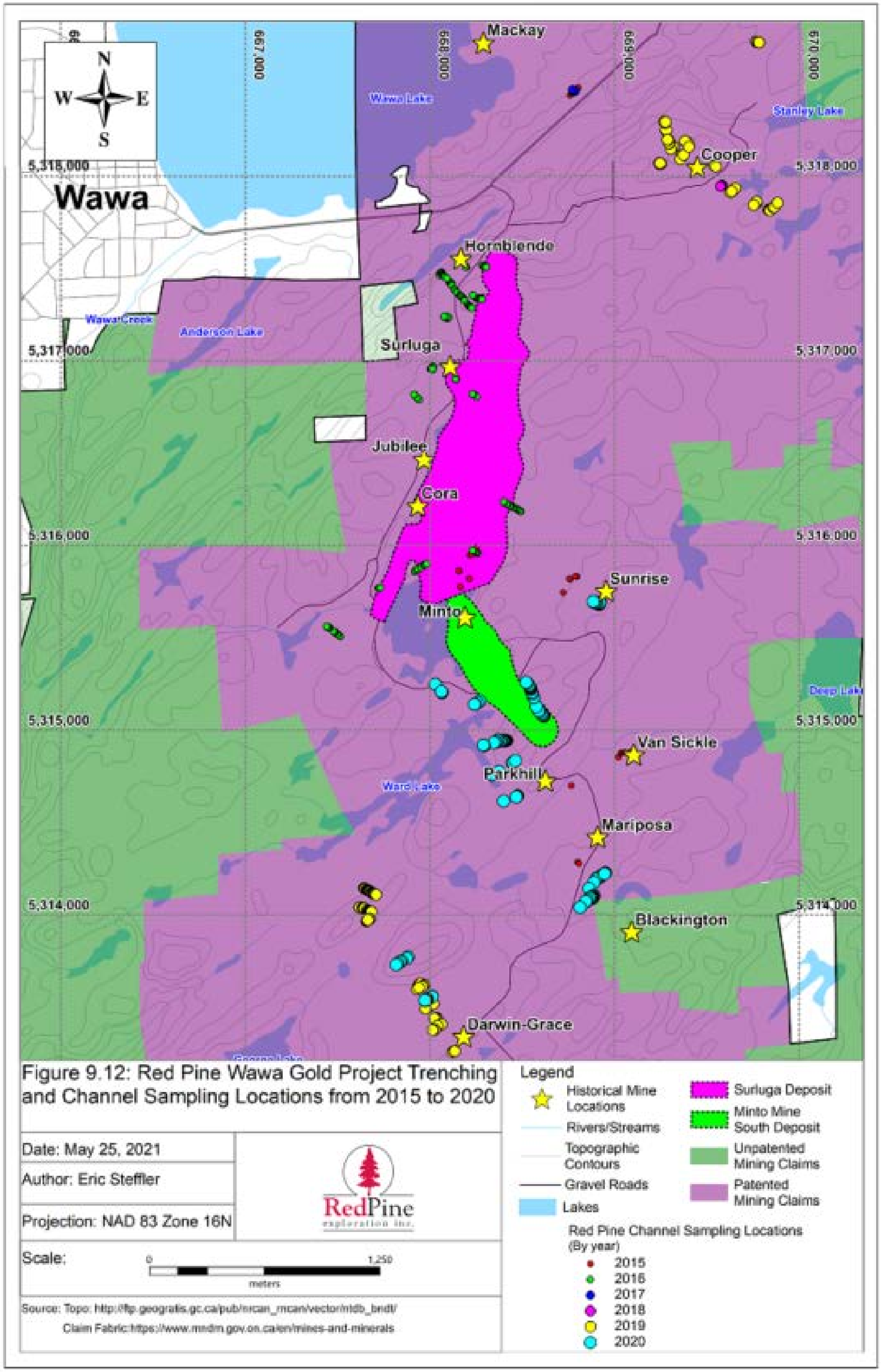

Figure 9-12: Red Pine Wawa Gold Project Trenching and Channel Sampling Locations from 2015 to 2020

Table 9-10: Assay Highlights of Channel Samples Collected during the 2015 to 2020 Programs (> 0.5 g/t Au)

Trench ID	Year	From (m)	To (m)	Length (m)*	Au (g/t)	X	Y	Z
15WG-AC-001	2015	0	1	1	2.25	668803.25	5318478.57	297.36
15WG-AC-001	2015	1	2	1	6.06	668803.75	5318477.7	297.36
15WG-AC-001	2015	2	2.8	0.8	0.69	668804.2	5318476.92	297.36
15WG-AC-001	2015	2.8	4	1.2	1.9	668804.7	5318476.06	297.36
15WG-AC-001A	2015	0.5	1.5	1	0.51	668802.13	5318478.5	297.36
15WG-AC-001A	2015	1.5	2.5	1	7.1	668801.27	5318478	297.36
15WG-AC-001A	2015	2.5	2.88	0.38	53.7	668800.67	5318477.66	297.36
15WG-AC-004	2015	0	0.75	0.75	2.4	668766.2	5318448.68	300.26
15WG-AC-004	2015	0.75	1.5	0.75	1.55	668766.6	5318448.05	300.26
15WG-AC-008	2015	2	3	1	0.86	668161.6	5315779.07	348.1
15WG-AC-008	2015	3	4	1	1.39	668161.04	5315779.9	348.1
15WG-AC-008	2015	4	5	1	3.17	668160.48	5315780.73	348.1
15WG-AC-008	2015	5	6	1	5.16	668159.92	5315781.56	348.1
15WG-AC-012	2015	10	11	1	3.04	668243.2	5315995.03	351.64
15WG-AC-014	2015	0	0.6	0.6	1.18	668225.95	5315952.3	348.89
15WG-JFM-017	2015	0.17	0.51	0.34	23.7	668757.82	5318439.29	301.31
15WG-AC-020	2015	0	0.25	0.25	0.74	669034.97	5314877.12	345.68
15WG-AC-022	2015	0	1	1	1.48	669053.98	5314880.5	343.28
15WG-AC-022	2015	1	2	1	0.83	669053.95	5314881.5	343.28
15WG-AC-023A	2015	0	0.25	0.25	0.54	669086.07	5314882.1	341.42
15WG-AC-023B	2015	0	0.35	0.35	1.44	669085.99	5314882.17	341.42
15WG-AC-025	2015	2	2.5	0.5	18.4	668764.7	5314697.86	338.95
15WG-AC-026	2015	1	1.1	0.1	88.1	668943.31	5315697	351.72
15WG-AC-026	2015	1.1	1.5	0.4	8.77	668943.38	5315697.24	351.72
15WG-AC-031	2015	0.7	1.25	0.55	0.94	668903.98	5315688	352.52
15WG-AC-031	2015	1.95	2.25	0.3	4.02	668903.45	5315688.99	352.52
15WG-AC-032	2015	0.9	1.9	1	0.65	668902.45	5315696.29	353.56
15WG-AC-032	2015	1.9	2.35	0.45	1.15	668902.17	5315696.96	353.56
15WG-AC-034A	2015	0	0.35	0.35	0.85	668896.11	5315692.13	353.53
15WG-AC-035	2015	0	0.7	0.7	69.5	668912.85	5315682.95	351.53
15WG-AC-035	2015	0.7	1.5	0.8	20.6	668912.84	5315683.7	351.53
15WG-AC-035	2015	1.5	2.2	0.7	17.1	668912.83	5315684.45	351.53
15WG-AC-123	2015	3	4	1	2.1	668753.8	5315819.72	367.14
15WG-AC-123	2015	4.9	5.75	0.85	0.56	668752.65	5315821.14	367.14
15WG-AC-125A	2015	0.5	1.5	1	4.37	668720.48	5315745.86	370.89
15WG-AC-125A	2015	1.5	2.25	0.75	54.2	668720.03	5315746.61	370.89
15WG-AC-125A	2015	2.25	3.15	0.9	0.62	668719.61	5315747.31	370.89
Mickelson1	2015	2.1	3.45	1.35	8.85	668931.15	5315677.23	350.2

Trench ID	Year	From (m)	To (m)	Length (m)*	Au (g/t)	X	Y	Z
Mickelson3	2015	0	0.85	0.85	8.18	668885.02	5315689.58	354
Mickelson5	2015	0	0.5	0.5	5.57	668883.01	5315690.05	353.5
Mickelson5	2015	0.5	0.9	0.4	1.22	668883.04	5315689.6	353.5
Mickelson5	2015	0.9	1.6	0.7	38.2	668883.07	5315689.05	353.5
Mickelson6	2015	0.55	1	0.45	42.8	668882.04	5315689.73	355.3
Mickelson7	2015	0	0.85	0.85	1.48	668881.02	5315691.58	353.1
TR-16-1K	2016	1	2	1	0.76	668132.63	5317388.54	337.16
TR-16-1K	2016	3	4	1	0.51	668134.38	5317387.59	337.16
TR-16-1M	2016	0	1	1	2.77	668134.07	5317386.05	340.69
TR-16-1N	2016	0	1	1	6.92	668134.3	5317383.88	341.47
TR-16-2A	2016	4	5	1	1.76	668053.02	5317465.82	334.26
TR-16-2A	2016	5	6	1	2.83	668053.75	5317465.13	334.26
TR-16-2N	2016	4	5	1	0.87	668083.42	5317452.3	340.31
TR-16-3B	2016	0	1	1	6.74	667723.53	5315768.4	306.87
TR-16-3B	2016	1	2	1	0.71	667724.53	5315768.37	306.87
TR-16-4A	2016	0	1	1	1.08	668085.91	5317233.16	347.1
TR-16-4A	2016	2	3	1	0.72	668087.91	5317233.13	347.1
TR-16-4A	2016	4	5	1	1.51	668089.91	5317233.03	347.1
TR-16-4A	2016	5	6	1	0.91	668090.91	5317233.02	347.1
TR-16-4A	2016	6	7	1	0.65	668091.9	5317232.93	347.1
TR-16-4A	2016	7	8	1	1.29	668092.9	5317232.89	347.1
TR-16-4A	2016	8	9	1	0.66	668093.9	5317232.89	347.1
TR-16-4B	2016	1	2	1	0.64	668088.72	5317233.72	347.1
TR-16-4B	2016	2	3	1	1.08	668089.72	5317233.7	347.1
TR-16-6K	2016	1	2	1	0.6	667977.79	5315900.58	321.21
TR-16-7S	2016	0	0.5	0.5	0.71	667439.56	5315561.98	302.79
TR-16-7S	2016	0.5	1	0.5	0.73	667439.33	5315562.43	302.79
TR16-8F	2016	1	2	1	0.57	668232.98	5315973.7	315.76
TR16-8F	2016	3.2	4	0.8	1.78	668231.2	5315974.75	315.76
TR16-11K	2016	3	4	1	1.13	668417.69	5316224.84	374.09
TR16-13C	2016	6	7	1	0.86	668010.33	5316963.22	356.81
TR16-17G	2016	0	1	1	0.56	668266.59	5317338.98	351.41
TR16-17H	2016	0	0.8	0.8	1.22	668273.63	5317337.91	354.73
TR16-17I	2016	0	0.6	0.6	0.85	668277.14	5317335.37	355.71
RV-1	2017	0	1	1	4.37	668774.79	5318460.93	301.92
RV-1	2017	1	2	1	0.86	668774.11	5318461.66	301.92
RV-1	2017	2	3	1	2.38	668773.4	5318462.37	301.92
RV-1	2017	3	4	1	1.74	668772.87	5318463.22	301.92
RV-1	2017	4	5.6	1.6	2.76	668772.16	5318464.3	301.92

Trench ID	Year	From (m)	To (m)	Length (m)*	Au (g/t)	X	Y	Z
RV-2	2017	0	1	1	1.95	668776.58	5318461.63	302.05
RV-2	2017	1	2	1	2.38	668776	5318462.44	302.05
RV-2	2017	2	3	1	0.72	668775.34	5318463.19	302.05
RV-2	2017	3	4	1	5.97	668774.65	5318463.92	302.05
RV-2	2017	4	5	1	2.22	668774	5318464.67	302.05
RV-2	2017	5	6	1	4.48	668773.16	5318465.21	302.05
RV-2	2017	6	7	1	6.82	668772.32	5318465.76	302.05
RV-3	2017	1	2	1	0.56	668778.62	5318465.72	302.44
RV-3	2017	2	3	1	1.2	668777.92	5318466.44	302.44
RV-3	2017	3	4	1	1.13	668777.22	5318467.15	302.44
RV-3	2017	4	5	1	1.29	668776.56	5318467.9	302.44
RV-3	2017	5	6	1	4.35	668775.91	5318468.66	302.44
RV-3	2017	6	7	1	9.75	668775.28	5318469.43	302.44
RV-3	2017	8	9	1	1.37	668773.91	5318470.89	302.44
RV-3	2017	9	10	1	2.14	668773.23	5318471.63	302.44
RV-4	2017	0	1	1	7.9	668780.95	5318467.1	302.7
RV-4	2017	2	3	1	1.93	668779.75	5318468.7	302.7
RV-4	2017	4	5	1	3.79	668778.46	5318470.22	302.7
RV-4	2017	5	6	1	0.74	668777.82	5318470.99	302.7
RV-5	2017	0	1	1	2.03	668780.98	5318457.59	299.3
RV-5	2017	1	2	1	20.3	668780.39	5318458.39	299.3
RV-5	2017	2	3	1	1.96	668779.72	5318459.13	299.3
RV-6	2017	0	1	1	1.27	668783.75	5318459.07	299.5
RV-6	2017	3	4	1	12.8	668782.1	5318461.54	299.5
RV-6	2017	4	5	1	8.75	668781.56	5318462.38	299.5
RV-7	2017	0	1	1	88.5	668785.36	5318460.83	299.53
RV-7	2017	1	2	1	0.74	668784.67	5318461.55	299.53
RV-7	2017	2	3	1	3.48	668783.99	5318462.28	299.53
RV-7	2017	3	4	1	10.2	668783.26	5318462.96	299.53
RV-8	2017	0	1	1	79.7	668784.8	5318462.29	299.95
RV-9	2017	1	2	1	3.36	668769.87	5318469.29	304.86
RV-9	2017	3	4	1	1.08	668768.3	5318470.52	304.86
RV-9	2017	4	5	1	0.59	668767.68	5318471.31	304.86
RV-9	2017	6	7	1	5.66	668766.31	5318472.77	304.86
CG-2	2018	1.6	2.02	0.42	9.58	669578.44	5317948.61	325.23
CG-3	2018	0	0.31	0.31	27	669577.98	5317949.41	325.38
CG-5	2018	0.78	1.23	0.45	3.19	669575.39	5317948.69	325.61
CG-5	2018	1.23	2.23	1	3.67	669574.85	5317948.24	325.8
CG-1-1	2019	1.5	2	0.5	26.9	669359.2	5318110.55	379.2
CG-1-2	2019	1.4	1.9	0.5	42.8	669364.02	5318104.86	379.4

Trench ID	Year	From (m)	To (m)	Length (m)*	Au (g/t)	X	Y	Z
CG-1-2	2019	1.9	2.8	0.9	28.5	669363.5	5318104.39	379.4
Cooper-10-2	2019	0	0.67	0.67	0.64	669266.95	5318295.5	362.4
Cooper-10-2	2019	1.49	2.99	1.5	3.57	669265.97	5318293.87	362.4
Cooper-11-2	2019	1.5	1.9	0.4	12.8	669251	5318067.01	365.5
Cooper-2-4	2019	3.93	4.54	0.61	2.51	669634.01	5317921.78	362.2
Cooper-3-1	2019	1.8	2.85	1.05	2.58	669771.34	5317857.34	358.9
Cooper-3-1	2019	2.85	3.9	1.05	34.1	669771.99	5317858.16	358.9
Cooper-3-1	2019	4.8	5.7	0.9	1.13	669772.99	5317859.75	358.9
Cooper-3-1	2019	5.7	7.2	1.5	8.01	669773.66	5317860.75	358.9
Cooper-5a-1	2019	3	4.1	1.1	0.66	669854.34	5317823.58	358.4
Cooper-5b-2	2019	0	1.4	1.4	14.1	669837.87	5317817.39	357.4
Cooper-5b-3	2019	0	1.4	1.4	3.23	669841.26	5317814.08	357.8
Cooper-6-1	2019	0	0.92	0.92	1.04	669291.16	5318196.65	375.2
Cooper-6-1	2019	0.92	1.58	0.66	0.54	669290.39	5318196.52	375.2
Ganley-1-2	2019	1.8	2.9	1.1	6.29	669549.03	5318054.36	370.2
JSZ_South3B-5	2019	1	1.85	0.85	2.56	667649.91	5314141.21	344.1
JSZ_South3B-6	2019	0	1	1	0.59	667657.21	5314136.51	343.1
JSZ_South3B-6	2019	2	3	1	1.48	667658.22	5314134.78	343.1
Trench-2-1	2019	1.5	2.55	1.05	7.56	668034.61	5313441.15	344.7
Trench-5A-4	2019	2.1	3.1	1	3.75	667948.35	5313628.45	352.7
Trench-5A-5	2019	0	0.9	0.9	2.01	667949.36	5313628.76	352
Trench-5B-1	2019	0	0.6	0.6	16.49	667958.88	5313613.8	346.6
Trench-5B-1	2019	0.6	1.65	1.05	0.86	667959.67	5313614.04	346.6
Mickelson-1B	2020	0	0.75	0.75	1.89	668886.46	5315694.93	353.2
Mickelson-1C	2020	0	1.05	1.05	10.2	668887.14	5315694.49	353.4
Mickelson-1D	2020	0	0.8	0.8	16.35	668884.64	5315692.5	353.4
Mickelson-1D	2020	0.8	1.5	0.7	0.85	668884.72	5315691.76	353.4
Mickelson-1D	2020	1.5	2.2	0.7	0.69	668884.79	5315691.06	353.4
Mickelson-1E	2020	0	0.75	0.75	39.88	668895.77	5315689.93	352.8
Mickelson-1F	2020	0	1.3	1.3	1.06	668901.65	5315690.07	351.9
Mickelson-1G	2020	0	0.45	0.45	2.97	668901.73	5315688.91	351.8
Mickelson-1I	2020	1.05	2.15	1.1	1.4	668909.48	5315684.13	352.1
Mickelson-1J	2020	0	1.1	1.1	21.31	668909.94	5315682.87	351.1
Mickelson-1K	2020	0	1.15	1.15	28.84	668912.49	5315683.74	351
Mickelson-1L	2020	0	0.8	0.8	25.78	668914.17	5315683	350.7
Minto-01F	2020	0	0.7	0.7	0.52	668359.69	5314936.26	349.4
Minto-04I	2020	0	1.2	1.2	0.57	668924.38	5314210.47	359.8
Minto-04L	2020	0	1.5	1.5	0.91	668943.54	5314222.19	360.2
Minto-04M	2020	0	1.4	1.4	4.04	668947.24	5314226.06	359.5
Minto-04O	2020	1.2	2.4	1.2	0.99	668946.4	5314223.54	360

Trench ID	Year	From (m)	To (m)	Length (m)*	Au (g/t)	X	Y	Z
Minto-05G	2020	0	1.2	1.2	0.55	668868.92	5314095.04	367
Minto-05H	2020	0	1.3	1.3	1.46	668870.43	5314096.04	367
Minto-08A	2020	1.25	2.05	0.8	0.68	668240.69	5315141.62	344
Minto-08A	2020	2.05	2.8	0.75	0.79	668241.36	5315141.99	344
Minto-08B	2020	0	1	1	1.02	668243.18	5315141.42	343.4
Minto-08D	2020	0.7	1.3	0.6	0.52	668269.46	5315157	345.2
Trench-7A-4	2020	1.75	2.75	1	0.84	667976.67	5313540.51	348.3
Mickelson-1K	2020	0	1.15	1.15	28.84	668912.4	5315683.7	351
Mickelson-1E	2020	0	0.75	0.75	39.88	668895.8	5315690	352.8

Note: *True width cannot be calculated due to surface irregularities along the series of channel samples.

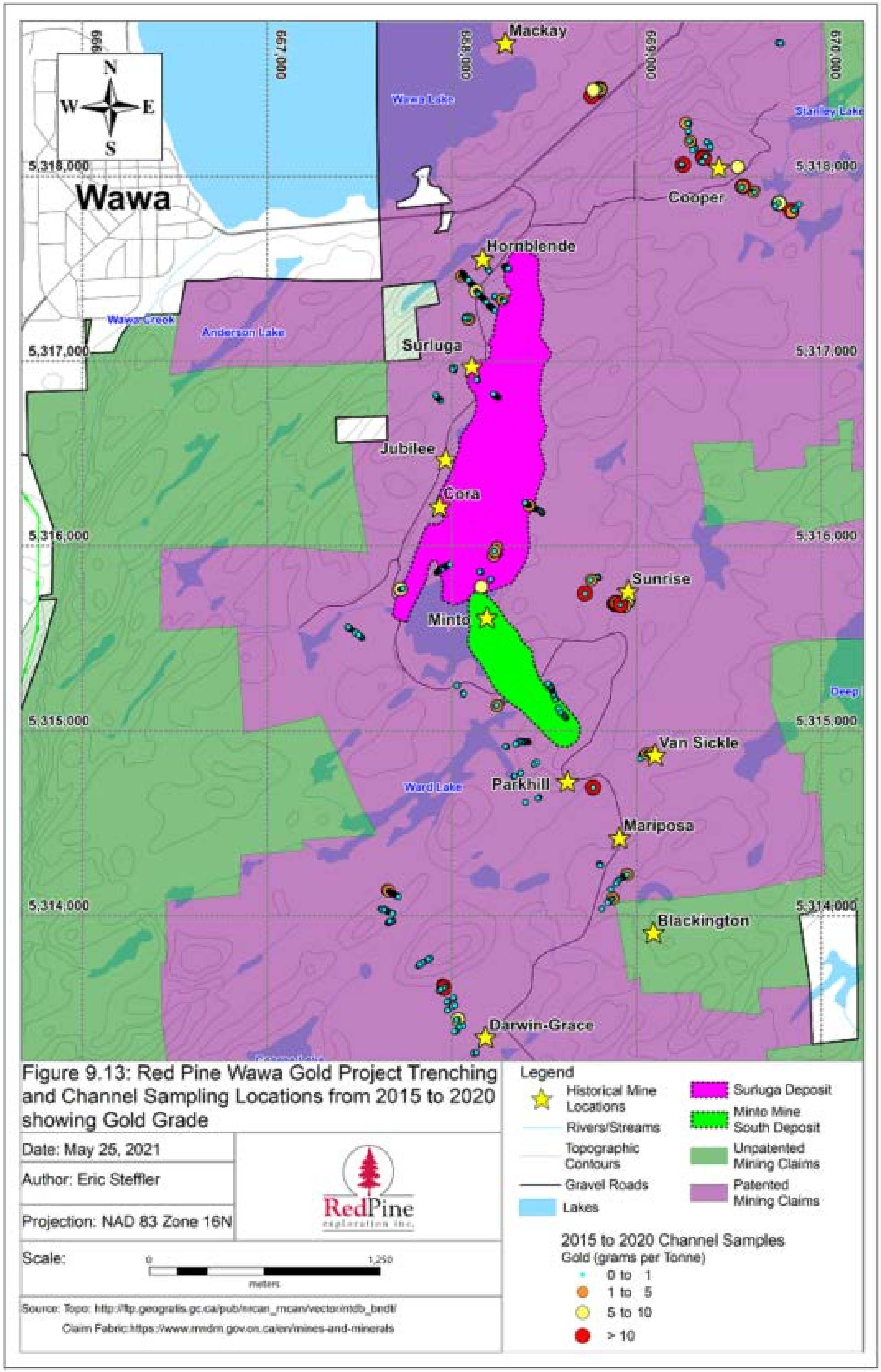

Figure 9-13: Red Pine Wawa Gold Project Trenching and Channel Sampling Locations from 2015 to 2020 showing Gold Grade

9.4 Historical Holes Sampling Program (2016, 2018)

Previously drilled core that had been stored on site was visually inspected and logged based on the field geologist's descriptions. The information was then input into a Microsoft Excel™ spreadsheet for our records. The incorporation of a variety of analytical methods was utilized to best describe the lithological units. These included testing for magnetism with a magnet, reactivity with 10% hydrochloric acid (HCL), scratch testing with a tungsten carbide scribe to estimate hardness, magnetic susceptibility ("MagSus") measurements, portable X-ray fluorescence (XRF) readings, Short Wave Infrared Reflectance ("SWIR") data points, colour, texture, structure, grain size, pervasive alteration, and contact definitions. These components were then used to create a lithological description of the core from intervals of the drill hole that could be recovered. This log was further subdivided by lithologies with description of alteration and mineralization.

Alteration and rock type identification were supported by spot measurements using a portable XRF if uncertainty existed. The portable XRF units used by the company are programmed with predefined element ratios that characterize favourability for gold (white mica intensity ratio derived from internal work) and the nature of the host rocks (Zr/TiO2).

SWIR and MagSus measurements were not collected during the 2018 historical holes sampling program.

Of the 42,000 m of historical core available at the beginning of the sampling program, Red Pine took 10,627 assays from 21,416 m of core by processing 40,481 m of drill core distributed in 525 drill holes during the 2016 and 2018 sampling programs. Program details are listed in Table 9-11. Historical hole details and year sampled is detailed in Table 9-12 and locations are in Figure 9-14. Table 9-13 highlights assay results of historical drill hole sampling with intersections greater than 2.0 g/t Au. True width has not been calculated and intercept is reported as drilled length. Figure 9-15 shows the location of the intersections and gold grade. In total, 130 surface (holes starting with "S") and 395 underground drill holes (holes starting with "U") were processed. Included with the assaying, 705 CRMs were processed to ensure quality control.

Table 9-11: Attributes of the Historical Core Sampling Program

Program Details	Value
Total number of holes sampled	525
Number of holes sampled 2016	158
Number of holes sampled 2018	367
Number of surface holes sampled	130
Number of underground holes sampled	395
Total meterage covered (m)	40,481
Total meterage sampled (m)	21,416
Total number of assays taken	10,627
Total number of CRM samples	705

Table 9-12: Historical Holes Sampled by Red Pine during the 2016 and 2018 Sampling Programs

Hole ID	Company	Year Drilled	Year Sampled	X	Y	Z	Az	Dip	Depth
S145	Surluga	1969	2018	667775	5315738	345.4	0	-90	76
S156	Pango	1969	2018	668139	5316198	385.2	0	-90	199
S160	Pango	1969	2018	668722	5318072	301.4	0	-90	156
S161	Pango	1969	2018	668781	5318131	302.3	0	-90	196
S162	Pango	1969	2018	668204	5316265	377.6	0	-90	225
S164	Pango	1969	2018	668107	5316316	376.7	0	-90	148
S168	Pango	1969	2018	667716	5315611	345.1	0	-90	96
S170	Pango	1969	2018	668097	5316396	354.6	0	-90	156
S172	Pango	1969	2018	668267	5316454	381.3	0	-90	203
S173	Pango	1969	2018	668290	5316498	383.7	0	-90	233
S174	Pango	1969	2018	668328	5316572	385	0	-90	216
S174W1	Pango	1969	2018	668328	5316572	220.1	0	-90	172
S174W2	Pango	1969	2018	668328	5316572	224.3	0	-90	207
S175	Pango	1969	2018	668466	5316350	377.7	0	-90	310
S175W	Pango	1969	2018	668466	5316350	377.7	0	-90	307
S176	Pango	1969	2018	668482	5316441	380.6	0	-90	329
S177	Pango	1969	2018	668171	5316149	369.8	0	-90	229
S178	Pango	1969	2018	668246	5315532	363.1	0	-90	189
S180	Pango	1969	2018	668167	5315653	345.8	0	-90	147
S181	Pango	1969	2018	668270	5315487	352.5	0	-90	155
S182	Pango	1969	2018	668235	5315466	352	0	-90	151
S183	Pango	1969	2018	668152	5315693	345.4	0	-90	126
S184c1	Pango	1969	2018	669580	5318025	368.4	0	-90	85
S185c2	Pango	1969	2018	669552	5318036	367.4	0	-90	114
S186c3	Pango	1969	2018	669532	5318061	370.9	0	-90	80
S187c4	Pango	1969	2018	669608	5318007	362.2	0	-90	77
S188c5	Pango	1969	2018	669641	5317989	355.9	0	-90	91
S191	Citadel	1987	2018	667877	5315377	345.9	0	-90	79
S192	Citadel	1987	2018	668281	5316521	384	0	-90	201
S194	Citadel	1987	2018	668304	5316584	380	0	-90	201
S195	Citadel	1987	2018	668294	5315565	371	0	-90	237
S196	Citadel	1987	2018	668232	5315670	353.6	0	-90	244
S197	Citadel	1987	2018	668179	5315769	347.6	0	-90	319
S198	Citadel	1987	2018	668034	5315887	358.5	0	-90	174
S199	Citadel	1987	2018	667991	5315972	374.3	0	-90	176
S200	Citadel	1987	2018	667945	5316022	375.8	0	-90	130
S201	Citadel	1987	2018	668193	5316161	370.6	0	-90	229
S202	Citadel	1987	2018	668226	5316223	370.4	0	-90	229
S203	Citadel	1987	2018	668180	5316212	382.7	0	-90	229
S204	Citadel	1987	2018	668161	5316251	381.1	0	-90	229
S205	Citadel	1987	2018	668262	5316265	379.8	0	-90	225
S206	Citadel	1987	2018	668225	5316280	375.8	0	-90	229
S207	Citadel	1987	2018	668187	5316290	378.8	0	-90	231
S208	Citadel	1987	2018	668287	5316320	375	0	-90	229
S209	Citadel	1987	2018	668241	5316329	372.7	0	-90	229
S210	Citadel	1987	2018	668190	5316340	372.5	0	-90	213
S211	Citadel	1987	2018	668279	5316376	370.4	0	-90	216
S212	Citadel	1987	2018	668249	5316412	372.3	0	-90	214
S213	Citadel	1987	2016	668328.8	5316692	376.9	0	-90	182

Hole ID	Company	Year Drilled	Year Sampled	X	Y	Z	Az	Dip	Depth
S214	Citadel	1987	2016	668324	5316378	375.3	0	-90	246
S215	Citadel	1987	2016	668219	5316466	378.8	0	-90	201
S216	Citadel	1987	2018	668335	5316638	367.2	0	-90	197
S217	Citadel	1987	2018	669550	5318080	373.4	0	-90	123
S218	Citadel	1987	2018	669579	5318073	376.1	0	-90	123
S219	Citadel	1987	2018	669593	5318052	368.2	0	-90	123
S220	Citadel	1987	2018	669629	5318040	369.1	0	-90	122
S221	Citadel	1987	2018	669659	5318026	364.1	0	-90	126
S222	Citadel	1987	2018	669621	5317972	363	0	-90	62
S223	Citadel	1987	2018	669595	5317989	357.5	0	-90	49
S224A	Citadel	1987	2018	669566	5318007	367.5	0	-90	62
S225	Citadel	1987	2018	669542	5318021	366.3	0	-90	47
S226	Citadel	1987	2018	669517	5318038	366.9	0	-90	46
S227	Citadel	1987	2016	667901	5316086	360.6	0	-90	63
S228	Citadel	1987	2018	667951	5316086	372.5	0	-90	124
S229	Citadel	1987	2018	667981	5316086	380	0	-90	139
S230	Citadel	1987	2018	668038	5316098	383.7	0	-90	197
S231	Citadel	1987	2018	668100	5316098	379.5	0	-90	206
S232	Citadel	1987	2018	668160	5316097	366.2	0	-90	229
S233	Citadel	1987	2018	668165	5315986	363.8	0	-90	276
S234	Citadel	1987	2018	668111	5315975	367.7	0	-90	252
S235	Citadel	1987	2016	668040	5315973	374.2	0	-90	222
S236	Citadel	1987	2018	667984	5316156	371.1	0	-90	124
S237	Citadel	1987	2016	667952	5315966	369.6	0	-90	155
S239	Citadel	1987	2016	667897	5315965	370.8	0	-90	124
S240	Citadel	1987	2018	668022	5316338	372.7	0	-90	76
S241	Citadel	1987	2018	668053	5316335	371	0	-90	110
S242	Citadel	1987	2018	667866	5315830	355.5	0	-90	139
S244	Citadel	1987	2016	667989	5315839	345.5	0	-90	200
S246	Citadel	1987	2018	668107	5315853	345.6	0	-90	276
S247	Citadel	1987	2016	668169	5315848	351.4	0	-90	322
S252	Citadel	1987	2018	668064	5315732	345.4	0	-90	261
S253	Citadel	1987	2018	667997	5315730	345.4	0	-90	222
S255	Citadel	1987	2016	667869	5315714	345.4	0	-90	158
S258	Citadel	1987	2018	668037	5315625	345.5	0	-90	313
S259	Citadel	1987	2018	667871	5316035	357.5	0	-90	76
S260	Citadel	1987	2016	667857	5316019	356.1	0	-90	76
S261	Citadel	1987	2018	668300	5316677	350.6	0	-90	170
S263	Citadel	1987	2018	668003	5316216	376.8	0	-90	106
S264	Citadel	1987	2018	668054	5316214	379.6	0	-90	155
S265	Citadel	1987	2018	668081	5316279	380.2	0	-90	179
S266	Citadel	1987	2018	668263	5316646	353.6	0	-90	161
S267	Citadel	1987	2018	668263	5316590	374.1	0	-90	146
S268	Citadel	1987	2018	668220	5316633	357.3	0	-90	150
S269	Citadel	1987	2018	668175	5316651	353.2	0	-90	109
S272	Citadel	1987	2016	668128	5316160	378	0	-90	207
S274	Citadel	1987	2016	668161	5316040	368.3	0	-90	249
S276	Citadel	1987	2016	668193	5316110	362.2	0	-90	262
S277	Citadel	1987	2016	668087	5316038	378.6	0	-90	219

Hole ID	Company	Year Drilled	Year Sampled	X	Y	Z	Az	Dip	Depth
S278	Citadel	1987	2018	668060	5316034	381.8	0	-90	201
S279	Citadel	1987	2018	668019	5316032	380.9	0	-90	194
S280	Citadel	1987	2018	668134	5315978	364.8	0	-90	262
S281	Citadel	1987	2016	668074	5315973	374.3	0	-90	216
S282	Citadel	1987	2016	668106	5315913	353.4	0	-90	262
S283	Citadel	1987	2018	668139	5315912	346.6	0	-90	277
S284	Citadel	1987	2018	668169	5315918	345.4	0	-90	289
S285	Citadel	1987	2018	668052	5316159	378.3	0	-90	167
S286	Citadel	1987	2018	668090	5316159	381	0	-90	191
S287	Citadel	1987	2018	667972	5315897	356.1	0	-90	169
S288	Citadel	1987	2018	668008	5315784	345.4	0	-90	225
S289	Citadel	1987	2018	668038	5315788	345.5	0	-90	252
S290	Citadel	1987	2018	668078	5315790	345.4	0	-90	289
S291	Citadel	1987	2018	668206	5315373	345.6	240	-45	91
S292	Citadel	1987	2018	668262	5315256	349.4	240	-45	91
S293	Citadel	1987	2018	668297	5315132	342.1	240	-45	97
S300	Citadel	1988	2018	667987	5315200	346.5	261	-45	97
S301	Citadel	1988	2018	667922	5314961	345.3	263	-45	97
S302	Citadel	1988	2018	667868	5314632	340.8	260	-45	139
S303	Citadel	1988	2018	667928	5314798	343.1	267	-45	97
S304	Citadel	1988	2018	667946	5315096	346.9	269	-45	95
S305	Citadel	1988	2018	667882	5314366	345.4	263	-45	185
S306	Citadel	1988	2018	667988	5315200	346.6	269	-60	161
S307	Citadel	1988	2018	668252	5315868	350.6	0	-90	398
S308	Citadel	1988	2016	668240	5315920	348.6	0	-90	353
S309	Citadel	1988	2016	668239	5315920	348.6	294	-60	91
S310	Citadel	1988	2018	668206	5315864	351.4	0	-90	350
S311	Citadel	1988	2018	668177	5315795	349.7	0	-90	334
S312	Citadel	1988	2018	668131	5315737	345.5	0	-90	340
S313	Citadel	1988	2018	668131	5315737	345.5	294	-90	91
S314	Citadel	1988	2018	668193	5315645	351.2	294	-70	361
S316	Citadel	1988	2018	668238	5315795	350.4	0	-90	383
U0002L6	Pursides	1975	2018	668437	5316464	116.3	292.5	-1	12
U0011AL6	Pursides	1975	2018	668388	5316409	140.1	121	0	28
U0014L6	Pursides	1975	2018	668387	5316419	141.6	298	0	8
U0019L6	Pursides	1975	2018	668382	5316397	139.5	113	2	30
U0020L6	Pursides	1975	2018	668380	5316397	139.4	293	-2	10
U0026L6	Pursides	1975	2018	668378	5316373	131.6	295	0	14
U0265L3	Surluga	1968	2018	668341	5317044	228.9	124	-20	50
U0324L3	Pango	1969	2018	668330	5316804	228.6	9	-45	45
U0348L5	Pango	1969	2016	668463	5316646	152.9	143	-52	93
U0351L5	Pango	1969	2018	668462	5316648	152.9	85	-51	77
U0352L5	Pango	1969	2016	668462	5316647	152.8	182	-54	79
U0353L3	Pango?	1969	2018	668316	5316862	228.1	110	-67	30
U0353L5	Pango	1969	2016	668460	5316647	152.8	263.5	-35	59
U0354L5	Pango	1969	2016	668451	5316656	152.7	268	-52	50
U0355L5	Pango	1969	2016	668452	5316656	152.9	268	-71	49
U0356L5	Pango	1969	2016	668452	5316657	153	359	-55	58
U0357L5	Pango	1969	2016	668452	5316657	153.2	0	-90	47

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U0360L5	Pango	1969	2018	668380	5316441	154.4	285	0	33
U0361L5	Pango	1969	2018	668373	5316411	154.6	282	0	33
U0363L5	Pango	1969	2018	668358	5316352	154.9	287	0	59
U0431L3	Pango	1969	2018	668443	5317220	230.4	93.5	40	23
U0433L3	Pango	1969	2018	668442	5317251	230.7	86	36	31
U0443L3	Pango	1969	2018	668341	5316864	190	157.5	36	38
U0446L3	Pango	1969	2018	668342	5316865	190.6	63	36	34
U0447L3	Pango	1969	2018	668436	5317312	230.5	271	0	62
U0448L3	Pango	1969	2018	668440	5317312	231.1	92.5	41	34
U0450L3	Pango	1969	2018	668376	5316851	190.2	95	30	18
U0451L5	Pango	1969	2018	668399	5316523	154.3	286	0	36
U0452L3	Pango	1969	2018	668374	5316851	190.2	0	90	11
U0452L5	Pango	1969	2018	668400	5316522	153.4	284	-62	29
U0453L5	Pango	1969	2018	668401	5316522	154.3	105	0	36
U0454L5	Pango	1969	2018	668399	5316515	154.3	287	0	26
U0455L5	Pango	1969	2018	668400	5316515	153.4	287	-66	25
U0456L5	Pango	1969	2018	668402	5316514	154.3	107	0	23
U0457L5	Pango	1969	2018	668399	5316507	154.4	284	0	32
U0458L5	Pango	1969	2018	668399	5316507	153.4	284	-60	24
U0459L5	Pango	1969	2018	668401	5316506	154.4	106	0	29
U0460L5	Pango	1969	2018	668397	5316500	153.5	282	-56	30
U0461L5	Pango	1969	2018	668399	5316499	154.3	105	0	29
U0465L5	Pango	1969	2018	668393	5316485	154.4	288	0	32
U0466L5	Pango	1969	2018	668394	5316485	153.5	286.5	-60	26
U0469L5	Pango	1969	2018	668392	5316477	153.5	288	-61	24
U0471L5	Pango	1969	2018	668390	5316470	153.5	288	-60	20
U0475L5	Pango	1969	2018	668391	5316462	154.4	107	0	32
U0478L5	Pango	1969	2018	668389	5316454	154.9	107	0	24
U0479L5	Pango	1969	2018	668384	5316448	154.6	286	0	20
U0484L5	Pango	1969	2018	668381	5316433	154.5	285	0	39
U0485L5	Pango	1969	2018	668381	5316433	153.5	285	-60	31
U0488L5	Pango	1969	2018	668380	5316425	153.5	286	-60	29
U0490L5	Pango	1969	2018	668377	5316418	154.5	283	0	35
U0491L5	Pango	1969	2018	668378	5316418	153.6	286	-65	27
U0492L5	Pango	1969	2018	668380	5316418	154.5	106	0	26
U0493L5	Pango	1969	2018	668376	5316410	153.6	285	-58	31
U0494L5	Pango	1969	2016	668378	5316410	154.4	103	0	23
U0495L5	Pango	1969	2018	668374	5316403	154.5	286	0	40
U0499L5	Pango	1969	2018	668373	5316396	153.7	286	-57	17
U0503L5	Pango	1969	2018	668373	5316388	154.6	104	0	33
U0506L5	Pango	1969	2018	668367	5316374	154.5	287	0	42
U0507L5	Pango	1969	2018	668367	5316374	153.8	284	-57	22
U0508L5	Pango	1969	2018	668369	5316373	154.5	103	0	23
U0509L5	Pango	1969	2018	668365	5316366	154.8	285	0	48
U0511L5	Pango	1969	2018	668367	5316366	154.8	105	0	37
U0512L5	Pango	1969	2018	668363	5316359	155	288	0	55
U0513L5	Pango	1969	2018	668364	5316359	153.9	288	-60	27
U0514L5	Pango	1969	2018	668365	5316358	155	104	0	28
U0515L5	Pango	1969	2018	668364	5316351	154.9	103	0	13

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U0518L5	Pango	1969	2018	668362	5316344	154.9	104	0	25
U0525L5	Pango	1969	2018	668349	5316315	155.1	286	0	20
U0531L5	Pango	1969	2018	668401	5316545	153.9	100	0	27
U0532L5	Pango	1969	2018	668399	5316545	153.9	280	0	29
U0533L5	Pango	1969	2018	668401	5316560	153.9	102	0	30
U0534L5	Pango	1969	2018	668401	5316576	153.9	98	0	32
U0536L5	Pango	1969	2018	668401	5316592	153.9	103	0	31
U0537L5	Pango	1969	2018	668400	5316608	153.8	103	0	26
U0538L5	Pango	1969	2018	668398	5316609	153.9	280	0	26
U0539L5	Pango	1969	2018	668395	5316623	153.8	106	0	28
U0540L5	Pango	1969	2018	668370	5316727	154.8	183	46	40
U0541L5	Pango	1969	2018	668370	5316728	155.3	0	90	31
U0542L5	Pango	1969	2018	668370	5316730	155	5	42	51
U0543L5	Pango	1969	2018	668357	5316729	155.2	182	56	47
U0544L5	Pango	1969	2018	668357	5316730	155.5	0	90	40
U0545L5	Pango	1969	2018	668357	5316731	155.1	1	59	46
U0546L5	Pango	1969	2016	668356	5316730	155.5	236	65	45
U0547L5	Pango	1969	2018	668356	5316731	155.5	317	60	46
U0548L3	Pango	1969	2018	668360	5316975	227.8	276	-49	45
U0552L3	Pango	1969	2018	668374	5316978	228.5	340	-26	43
U0553L3	Pango	1969	2018	668374	5316978	228	340	-47	62
U0554L3	Pango	1969	2018	668374	5316977	228.1	0	-90	47
U0555L3	Pango	1969	2018	668375	5316978	228	30	-38	48
U0558L7	Pango	1969	2016	668108	5316923	74.5	210	-46	33
U0559L7	Pango	1969	2016	668108	5316924	74.7	0	-90	26
U0561L7	Pango	1969	2016	668131	5316905	74.9	255	-52	50
U0562L7	Pango	1969	2016	668132	5316905	75	224	-55	62
U0563L7	Pango	1969	2016	668130	5316904	74.7	0	-90	53
U0564L7	Pango	1969	2018	668132	5316906	74.7	35	-60	63
U0565L7	Pango	1969	2018	668131	5316906	74.8	4	-50	47
U0566L5	Pango	1969	2018	668398	5316714	154	94	0	26
U0567L5	Pango	1969	2016	668392	5316709	154	285	0	14
U0568L5	Pango	1969	2016	668391	5316690	155.6	94	0	24
U0569L5	Pango	1969	2016	668388	5316675	153.8	271	0	23
U0569L7	Pursides	1974	2016	668416	5316307	97.1	119	46	22
U0571L5	Pango	1969	2018	668391	5316667	153.9	93	0	21
U0572L5	Pango	1969	2016	668392	5316660	153.8	89	0	21
U0573L5	Pango	1969	2016	668388	5316653	153.8	273	0	18
U0574L5	Pango	1969	2018	668392	5316653	153.8	93	0	26
U0575L5	Pango	1969	2018	668393	5316637	153.8	83	0	20
U0576L5	Pango	1969	2016	668390	5316637	153.8	263	0	22
U0577L5	Pango	1969	2018	668393	5316622	153.7	269	0	27
U0577L7	Pursides	1974	2018	668392	5316220	81.1	119	0	44
U0581L3	Pango	1969	2016	668440	5317266	228.7	268	-48	27
U0585L3	Pango	1969	2018	668440	5317296	229.7	89	0	18
U0586L3	Pango	1969	2016	668436	5317346	229.7	270	0	49
U0587L3	Pango	1969	2018	668439	5317346	229.8	92	0	30
U0588L3	Pango	1969	2018	668435	5317376	230.2	276	0	47
U0589L3	Pango	1969	2016	668438	5317376	230.4	94	0	31

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U0590L3	Pango	1969	2016	668431	5317405	230.3	268	0	46
U0591L3	Pango	1969	2018	668437	5317405	230.2	86	-2	44
U0592L3	Pango	1969	2016	668434	5317429	230.2	293	0	47
U0593L3	Pango	1969	2018	668437	5317429	230.2	93	0	30
U0593L7	Pursides	1975	2018	668426	5316387	112.1	105	-60	23
U0594L5	Pango	1969	2016	668486	5317020	154	272	0	47
U0596L5	Pango	1969	2016	668489	5317020	155.2	90	45	44
U0597L5	Pango	1969	2016	668508	5317042	154	280	0	61
U0598L5	Pango	1969	2016	668509	5317042	154	334	-90	64
U0598L7	Pursides	1975	2018	668421	5316338	103.5	120	45	15
U0599L5	Pango	1969	2016	668512	5317041	154	100	0	63
U0600L5	Pango	1969	2016	668511	5317041	153.1	100	-42	53
U0604L5	Pango	1969	2018	668464	5316645	154.8	133	49	62
U0605L5	Pango	1969	2018	668344	5316304	155	296	0	36
U0606L5	Pango	1969	2018	668347	5316303	155	116	0	25
U0607L5	Pango	1969	2018	668338	5316297	155	297	0	55
U0609L5	Pango	1969	2018	668343	5316295	155	117	0	23
U0610L5	Pango	1969	2018	668340	5316296	156.7	116	47	16
U0612L5	Pango	1969	2018	668340	5316287	155.1	118	0	22
U0613L5	Pango	1969	2018	668335	5316282	155.2	296	0	32
U0614L5	Pango	1969	2018	668337	5316281	155.2	114	0	32
U0615L5	Pango	1969	2018	668332	5316274	155.1	296	0	32
U0616L5	Pango	1969	2018	668334	5316274	155.1	113	0	18
U0617L5	Pango	1969	2018	668326	5316269	155.1	298	2	56
U0618L5	Pango	1969	2018	668326	5316269	154.5	298	-60	24
U0619L5	Pango	1969	2018	668331	5316267	155.1	117	0	39
U0621L5	Pango	1969	2018	668325	5316261	155.1	296	0	28
U0622L5	Pango	1969	2018	668328	5316260	155.1	115	0	22
U0623L5	Pango	1969	2018	668322	5316254	155.2	295	0	30
U0624L5	Pango	1969	2018	668325	5316253	155.2	116	0	31
U0627L5	Pango	1969	2018	668314	5316241	155.3	296	0	52
U0629L5	Pango	1969	2018	668319	5316239	155.3	116	0	25
U0631L5	Pango	1969	2018	668314	5316234	155.2	296	0	27
U0635L5	Pango	1969	2018	668307.4	5316218	155.2	295	0	29
U0637L5	Pango	1969	2018	668303	5316213	155.3	296	0	26
U0638L5	Pango	1969	2018	668305	5316212	154.5	293	-60	32
U0639L5	Pango	1969	2018	668307	5316211	155.3	113	0	25
U0640L5	Pango	1969	2018	668307	5316211	156.4	114	42	16
U0641L5	Pango	1969	2018	668302	5316205	155.3	295	0	31
U0642L5	Pango	1969	2018	668304	5316204	155.3	115	0	22
U0643L5	Surluga	1969	2018	668299	5316198	155.3	291	0	29
U0644L5	Pango	1969	2018	668301	5316197	155.3	113	0	23
U0645L5	Pango	1969	2018	668296	5316191	155.5	292	0	31
U0646L5	Pango	1969	2018	668298	5316190	155.4	120	0	17
U0647L5	Pango	1969	2018	668293	5316184	155.5	298	0	31
U0648L5	Pango	1969	2018	668293	5316184	154.6	295	-61	23
U0649L5	Pango	1969	2018	668295	5316183	155.5	116	0	18
U0650L5	Pango	1969	2018	668293	5316183	156.3	114	40	17
U0651L5	Pango	1969	2018	668350	5316872	152.6	84	0	15

Hole ID	Company	Year Drilled	Year Sampled	X	Y	Z	Az	Dip	Depth
U0652L5	Pango	1969	2018	668350	5316871	152.6	122	0	18
U0653L5	Pango	1969	2018	668396	5316830	153.7	272	1	49
U0654L5	Pango	1969	2016	668435	5316828	152.8	269	-50	70
U0655L5	Pango	1969	2018	668291	5316179	155.3	247	0	33
U0656L5	Pango	1969	2018	668293	5316178	155.3	155	0	32
U0657L5	Pango	1969	2018	668300	5316197	156.9	113	61	16
U0658L5	Pango	1969	2018	668304	5316205	156.9	113	60	15
U0659L5	Pango	1969	2018	668314	5316234	154.6	296	-60	20
U0660L5	Pango	1969	2018	668316	5316233	156.9	114	60	15
U0661L5	Pango	1969	2018	668320	5316246	154.3	294	-60	21
U0664L5	Pango	1969	2018	668345	5316304	153.9	117	-60	28
U0665L5	Pango	1969	2016	668509	5317041	153.5	269	-60	258
U0666L5	Pango	1969	2016	668441	5316827	152.5	114	-66	45
U0667L5	Pango	1970	2018	668415	5316456	153.8	186	-31	78
U0668L5	Pango	1970	2018	668414	5316456	153.8	245	-25	41
U0669L5	Pango	1970	2016	668414	5316458	153.8	320	-23	41
U0670L5	Pango	1970	2018	668415	5316458	153.9	9	-28	50
U0671L5	Pango	1970	2018	668415	5316458	153.8	0	-90	32
U0672L5	Pango	1969	2016	668431	5316454	154.2	187	-50	62
U0673L5	Pango	1969	2016	668431	5316454	154.1	146	-52	66
U0674L5	Pango	1970	2018	668431	5316455	153.6	105	-60	77
U0675L5	Pango	1970	2016	668431	5316455	153.6	48	-51	61
U0676L5	Pango	1970	2018	668430	5316455	156.7	5	-49	56
U0677L5	Pango	1970	2016	668431	5316455	153.6	0	-90	46
U0678L5	Pango	1970	2016	668431	5316454	154.2	187	-68	58
U0679L5	Pango	1970	2016	668438	5316828	152.8	288	-53	259
U0683L5	Pango	1970	2018	668340	5316419	156	14	50	45
U0684L5	Pango	1970	2018	668340	5316417	155.9	196	46	40
U0686L5	Pango	1970	2018	668331	5316421	156.5	17	60	20
U0688L5	Pango	1970	2018	668414	5316370	154.1	201	-66	73
U0689L5	Pango	1970	2018	668414	5316371	154.1	0	-90	69
U0690L5	Pango	1970	2016	668414	5316371	154.1	6	-62	80
U0691L5	Pango	1970	2018	668392	5316374	154	192	-50	55
U0692L5	Pango	1970	2018	668391	5316375	154	288	-60	48
U0693L5	Pango	1970	2018	668392	5316376	154	9	-50	53
U0694L5	Pango	1970	2016	668414	5316370	154.1	287	-63	61
U0695L5	Pango	1970	2016	668461	5316401	153.8	12	-62	98
U0696L5	Pango	1970	2016	668460	5316400	153.8	0	-90	108
U0697L5	Pango	1970	2016	668269	5316094	155.8	289	0	113
U0698L5	Pango	1970	2018	668272	5316093	155.8	109	0	77
U0700L5	Pango	1970	2016	668460	5316399	155.8	195	-65	60
U0701L5	Log Missing		2018	668397	5316415	153.6	11	-49	46
U0702L5	Log Missing		2018	668396	5316414	153.6	0	-90	40
U0703L5	Log Missing		2018	668396	5316413	153.6	191	-60	46
U0705L5	Log Missing		2018	668422	5316408	153.7	0	-90	51
U0706L5	Log Missing		2016	668421	5316407	153.7	191	-57	61
U0708L5	Log Missing		2018	668286	5316152	155.4	104	0	24
U0710L5	Log Missing		2016	668285	5316146	155.4	106	0	30
U0711L5	Log Missing		2016	668282	5316139	154.5	0	-90	34

Hole ID	Company	Year Drilled	Year Sampled	X	Y	Z	Az	Dip	Depth
U0712L5	Log Missing		2018	668280	5316132	154.5	0	-90	34
U0713L5	Log Missing		2016	668278	5316123	154.5	0	-90	75
U0714L5	Log Missing		2016	668277	5316123	154.5	288	-45	74
U0715L5	Log Missing		2016	668441	5316405	153.7	13	-62	54
U0716L5	Log Missing		2016	668441	5316403	153.7	195	-62	64
U0717L5	Log Missing		2016	668441	5316404	153.7	0	-90	54
U0718L5	Log Missing		2018	668462	5316401	153.8	60	-70	85
U0719L5	Log Missing		2018	668461	5316400	153.8	151	-70	77
U0720L5	Log Missing		2018	668415	5316370	154.1	145	-69	62
U0721L5	Log Missing		2016	668414	5316370	154.4	190	-45	77
U0722L5	Log Missing		2016	668404	5316371	154.2	195	-40	62
U0727L5	Log Missing		2018	668386	5316511	167.5	340	0	41
U0727L7	Pursides	1975	2016	668396	5316159	80.3	118	-40	212
U0728L5	Log Missing		2018	668386	5316511	166.6	340	-45	31
U0729L5	Pango	1970	2018	668386	5316510	167.5	270	0	48
U0730L5	Log Missing		2018	668386	5316510	166.5	272	-45	32
U0731L5	Log Missing		2018	668323	5316503	194.2	0	90	39
U0732L5	Pango	1970	2018	668324	5316503	193.6	100	60	23
U0733L5	Log Missing		2018	668332	5316498	188.1	110	60	22
U0734L5	Log Missing		2018	668336	5316496	185.9	110	60	17
U0735L5	Log Missing		2018	668342	5316493	182.1	110	60	17
U0736L5	Pango	1970	2018	668347	5316490	178.6	104	60	17
U0739L5	Log Missing		2018	668366	5316480	165.4	98	60	25
U0742L5	Log Missing		2018	668299	5316447	193.8	103	60	31
U0743L5	Log Missing		2018	668305	5316444	189.9	105	59	18
U0744L5	Log Missing		2018	668311	5316441	185.8	96	60	17
U0746L5	Log Missing		2018	668322	5316435	178.6	103	60	18
U0748L5	Log Missing		2018	668335	5316428	170.7	112	60	18
U0749L5	Log Missing		2018	668337	5316423	168.1	110	60	19
U0751L5	Pango	1970	2018	668351	5316419	160.4	101	60	18
U0763L6	Pango	1970	2016	668431	5316675	124.1	150	60	21
U0764L6	Pango	1970	2018	668435	5316671	121.4	160	60	22
U0766L5	Pango	1970	2018	668391	5316468	156.3	108	67	15
U0767L5	Pango	1970	2018	668398	5316460	153.7	293	-60	17
U0768L5	Pango	1970	2016	668422	5316456	153.6	293	-66	34
U0772L6	Pango	1970	2018	668393	5316351	116.9	115	0	46
U0774L6	Pango	1970	2018	668396	5316358	116.9	117	0	42
U0776L6	Pango	1970	2016	668399	5316365	116.8	117	0	44
U0777L6	Pango	1970	2018	668421	5316422	115.3	114	-70	15
U0781L6	Pango	1970	2018	668402	5316380	116.4	293	0	13
U0784L6	Pango	1970	2018	668410	5316393	116.3	114	0	37
U0793L6	Pango	1970	2018	668420	5316422	116	294	-19	17
U0798L6	Pango	1970	2018	668430	5316442	116.1	118	0	30
U0810L6	Pango	1970	2018	668444	5316486	115.9	295	0	15
U0812L6	Pango	1970	2018	668451	5316499	116	293	0	22
U0825L6	Pango	1970	2016	668417	5316493	135.7	104	60	12
U0846L6	Pursides	1974	2018	668399	5316431	130.6	123	0	37
U0847L6	Pursides	1974	2018	668409	5316426	123.6	122	0	39
U0848L6	Pursides	1974	2018	668431	5316484	124.6	123	0	25

Hole ID	Company	Year Drilled	Year Sampled	X	Y	Z	Az	Dip	Depth
U0851L6	Pursides	1974	2018	668417	5316492	131.8	300	0	13
U0852L6	Pursides	1974	2018	668382	5316441	146.9	114	0	31
U0857L6	Pursides	1974	2018	668372	5316310	115.8	0	-90	15
U0863L6	Pursides	1975	2018	668353	5316268	117.1	294	0	16
U0868L6	Pursides	1975	2016	668352	5316251	116.4	114	-20.5	61
U0869L6	Pursides	1975	2016	668352	5316251	117	116	3	45
U0870L6	Pursides	1975	2018	668351	5316252	118.7	0	90	33
U0871L6	Pursides	1975	2018	668334	5316210	116.9	116	-20	61
U0882L6	Pursides	1975	2016	668372	5316293	118.1	115	45	27
U0883L6	Pursides	1975	2018	668371	5316293	118.4	0	90	30
U0889L6	Pursides	1975	2018	668387	5316337	115.9	117	-20	13
U0893L6	Pursides	1975	2018	668384	5316337	118.2	300	69	29
U0898L6	Pursides	1975	2018	668381	5316323	118.2	111	46.5	27
U0904L6	Pursides	1975	2016	668375	5316308	116.7	117	-2	41
U0905L6	Pursides	1975	2016	668375	5316309	116.2	118	-22	13
U0906L6	Pursides	1975	2016	668372	5316301	116.8	113	-1	28
U0907L6	Pursides	1975	2018	668372	5316301	116.5	113	-12.5	28
U0916L6	Pursides	1975	2018	668363	5316280	118	114	45	14
U0920L6	Pursides	1975	2018	668360	5316273	118	118	45	13
U0922L6	Pursides	1975	2016	668358	5316266	117	114	0	23
U0925L6	Pursides	1975	2016	668356	5316267	118.5	0	90	19
U0926L6	Pursides	1975	2016	668355	5316259	116.9	113	1.5	22
U0927L6	Pursides	1975	2016	668355	5316260	116.6	112	-20.5	61
U0935L6	Pursides	1975	2018	668346	5316238	116.6	113	-20	17
U0946L6	Pursides	1975	2016	668338	5316217	117.3	117	1	41
U0959L6	Pursides	1975	2018	668325	5316189	117	114	-23	8
U0966L6	Pursides	1975	2016	668320	5316174	117.5	114	0.5	29
U0970L6	Pursides	1975	2016	668314	5316160	117.7	117	-0.5	45
U0971L6	Pursides	1975	2016	668314	5316161	117.3	116	-20	62
U0972L6	Pursides	1975	2016	668313	5316161	118.9	116	45.5	26
U0979L6	Pursides	1975	2018	668311	5316156	118	204	6.5	26
U0984L6	Pursides	1975	2018	668392	5316352	118.3	114	60	24
U0986L6	Pursides	1975	2018	668391	5316352	118.3	294	69	30
U0991L6	Pursides	1975	2018	668414	5316408	115.5	293	-60	9
U0992L6	Pursides	1975	2018	668427	5316434	116.4	113	-1.5	24
U0995L6	Pursides	1975	2018	668426	5316436	118	296	62	21
U0996L6	Pursides	1975	2018	668433	5316448	116.4	112	0	24
U0997L6	Pursides	1975	2018	668433	5316450	118	112	60	14
U0998L6	Pursides	1975	2016	668430	5316449	116.5	293	0	11
U0999L6	Pursides	1975	2018	668439	5316463	116.4	112	0	5
U1027L2	Citadel	1987	2018	668245	5316900	268.8	190	52	32
U1033L2	Citadel	1987	2018	668236	5316778	266.9	0	-90	6
U1037L2	Citadel	1987	2018	668229	5316687	268.1	90	0	21
U1043L6	Citadel	1987	2016	668318	5316167	118.6	114	45	23
U1108L3	Citadel	1987	2018	668286	5316779	230.7	0	90	22
U1113L3	Citadel	1987	2018	668297	5316917	229.2	90	-15	52
U1117L3	Citadel	1987	2018	668325.5	5317039	230.7	270	80	37
U1220L6	Citadel	1987	2016	668453	5316507	114.9	294	-45	25
U1226L6	Citadel	1987	2016	668453	5316524	117.7	114	45	25

Hole ID	Company	Year Drilled	Year Sampled	X	Y	Z	Az	Dip	Depth
U1231L6	Citadel	1987	2018	668446	5316560	113.4	294	0	19
U1233L6	Citadel	1987	2018	668446	5316576	115.2	114	64	34
U1235L6	Citadel	1987	2018	668443	5316593	115.2	114	63	45
U1258L5	Citadel	1987	2018	668324	5316255	154.4	294	-45	49
U1265L5	Citadel	1987	2018	668330	5316269	154.2	0	-90	29
U1335L5	Citadel	1987	2018	668404	5316478	153.5	0	-90	25
U1359L5	Citadel	1987	2018	668399	5316597	155.1	294	67	26
U1360L5	Citadel	1987	2018	668399	5316597	153	294	-60	20
U1362L5	Citadel	1987	2016	668297	5316057	154.7	0	-90	77
U1367L7	Citadel	1987	2016	668379	5316183	82.9	0	90	30
U1393L7	Citadel	1987	2018	668406	5316271	87.2	294	58	33
U1402L7	Citadel	1987	2018	668410	5316302	94.5	294	0	37
U1403L7	Citadel	1987	2016	668411	5316302	96	294	70	32
U1404L7	Citadel	1987	2018	668412	5316309	98.2	294	67	43
U1434L7	Citadel	1987	2016	668435	5316416	118.9	114	-45	58
U1442L7	Citadel	1987	2018	668452	5316474	119.8	114	62	7
U1443L7	Citadel	1987	2018	668453	5316474	117	114	-90	21
U1470L7	Citadel	1987	2016	668387	5316237	81.7	294	0	55
U1471L7	Citadel	1987	2016	668406	5316247	82.6	114	0	44
U1478L7	Citadel	1987	2018	668418	5316332	101.5	114	0	36
U1480L7	Citadel	1987	2016	668416	5316316	98.2	114	0	30
U1500L5	Citadel	1987	2016	668272	5316104	155.8	294	-45	55
U1501L5	Citadel	1987	2016	668273	5316103	154.5	294	0	55
U1502L5	Citadel	1987	2018	668270	5316088	155.6	294	0	68
U1503L5	Citadel	1987	2016	668272	5316087	154.5	0	-90	106
U1507L5	Citadel	1987	2016	668298	5316058	155.6	24	-65	104
U1508L5	Citadel	1987	2016	668298	5316058	155.6	24	-47	132
U1509L5	Citadel	1987	2016	668299	5316057	155.6	114	-65	138
U1610L4	Citadel	1987	2018	668360	5316782	191.7	90	47	19
U1650L5	Citadel	1988	2016	668240	5316067	156	294	0	119
U1651L5	Citadel	1988	2018	668241	5316068	155	294	-45	71
U1652L5	Citadel	1988	2016	668213	5316044	156	294	0	91
U1654L5	Citadel	1988	2018	668188	5316023	156.6	294	0	74
U1655L5	Citadel	1988	2016	668189	5316023	155.5	299	-45	61
U1656L5	Citadel	1988	2016	668189	5316022	155.4	0	-90	58
U1657L5	Citadel	1988	2018	668161	5316001	156.9	294	0	77
U1658L5	Citadel	1988	2018	668162	5316001	155.7	294	-45	51
U1659L5	Citadel	1989	2018	668163	5316000	155.5	0	-90	61
U1660L5	Citadel	1989	2018	668134	5315978	156.9	294	0	61
U1661L5	Citadel	1989	2016	668135	5315978	156.1	294	-45	52
U1662L5	Citadel	1989	2016	668108	5315956	157	294	0	49
U1663L5	Citadel	1989	2016	668109	5315956	156.1	294	-45	31
U1664L5	Citadel	1989	2016	668109	5315955	155.9	0	-90	53
U1665L5	Citadel	1989	2016	668111	5315955	157.1	114	0	21
U1666L5	Citadel	1989	2016	668085	5315932	157.2	106	2	25
U1667L5	Citadel	1989	2016	668081	5315933	157.2	285	1	31
U1669L5	Citadel	1989	2016	668084	5315933	158.5	103	45	20
U1671L5	Citadel	1989	2018	668070	5315921	157.2	230	1.5	71
U1672L5	Citadel	1989	2016	668071	5315921	157.2	211	2	109

Hole ID	Company	Year Drilled	Year Sampled	X	Y	Z	Az	Dip	Depth
U1673L5	Citadel	1989	2016	668071	5315921	157.2	220	1	107
U1675L5	Citadel	1989	2016	668122	5315967	157.1	294	0	43
U1676L5	Citadel	1989	2018	668122	5315967	156.3	293	-25	34
U1677L5	Citadel	1989	2018	668148	5315989	156.2	294	-25	48
U1679L5	Citadel	1989	2016	668242	5316065	156.4	114	-5	94
U1680L5	Citadel	1989	2016	668269	5316094	156.3	294	5	140
U1683L5	Citadel	1989	2016	668302	5316056	156.5	111	3	137
U1686L4	Citadel	1989	2016	668313	5316664	191.8	116	-3	46
U1687L4	Citadel	1989	2016	668312	5316663	192.9	116	37	37
U1688L4	Citadel	1989	2016	668309	5316632	192	114	0	70
U1689L4	Citadel	1989	2016	668309	5316632	193.2	114	45	39
U1690L4	Citadel	1989	2016	668308	5316633	193.5	298	69	43
U1691L4	Citadel	1989	2016	668306	5316601	192.2	112	1	67
U1692L4	Citadel	1989	2016	668305	5316601	193.2	111	45	46
U1693L4	Citadel	1989	2016	668303	5316602	192.1	290	0	24
U1694L4	Citadel	1989	2016	668303	5316569	192.5	114	0	61
U1695L4	Citadel	1989	2016	668302	5316569	193.4	117	50	46
U1697L4	Citadel	1989	2016	668300	5316537	192.8	115	1	56
U1698L4	Citadel	1989	2016	668297	5316538	192.8	295	0	27
U1699L4	Citadel	1989	2016	668298	5316503	192.9	122	1	75
U1700L4	Citadel	1989	2016	668297	5316503	194	126	46	46
U1701L4	Citadel	1989	2016	668295	5316505	192.9	304	1	30
U1702L4	Citadel	1989	2016	668295	5316505	191.9	308	-47	21
U1703L4	Citadel	1989	2016	668296	5316473	192.8	117	1	64
U1705L4	Citadel	1989	2016	668293	5316474	192.9	298	1	37
U1707L4	Citadel	1989	2016	668295	5316441	193.1	117	3	67
U1708L4	Citadel	1989	2016	668292	5316443	193.1	296	0	43
U1709L4	Citadel	1989	2016	668292	5316443	192	297	-43	24
U1710L4	Citadel	1989	2016	668260	5316421	193.2	118	0	63
U1711L4	Citadel	1989	2016	668260	5316421	194.6	117	43	40
U1712L4	Citadel	1989	2016	668242	5316400	193.5	207	1	92
U1713L4	Citadel	1989	2018	668243	5316400	193.4	185	0	92
U1722L5	Citadel	1989	2016	668296	5316232	155.6	305	1	61
U1723L5	Citadel	1989	2016	668296	5316232	154.8	294	-40	61
U1725L5	Citadel	1989	2018	668296	5316232	156.4	307	20	107

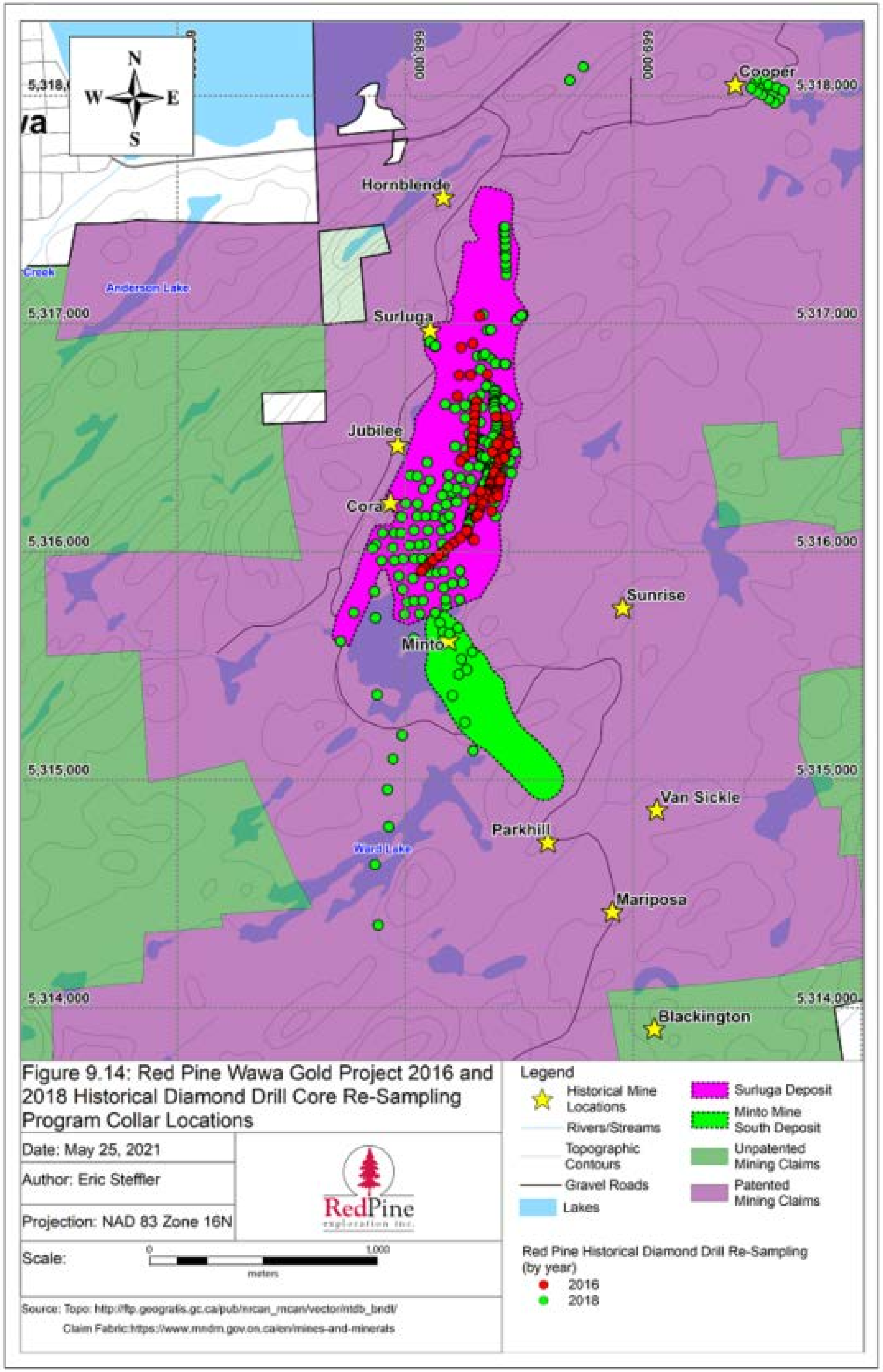


Figure 9-14: Red Pine Wawa Gold Project 2016 and 2018 Historical Diamond Drill Core Re-Sampling Program Collar Locations

Table 9-13: Highlights of Assays Results of Historical Holes Sampled by Red Pine during the 2016 and 2018 Sampling Programs (> 2.0 g/t Au)

Hole ID	From (m)	To (m)	Length (m)*	Au g/t	Hole ID	From (m)	To (m)	Length (m)*	Au g/t
S156	169.77	170.99	1.22	9.6	S204	159.93	162.67	2.74	3.1
S156	171.6	172.52	0.92	6.98	S204	164.29	170.9	6.61	10.06
S156	178	178.31	0.31	2.4	S204	172.21	174.96	2.75	2.87
S156	189.59	191.11	1.52	13.5	S205	184.25	185.93	1.68	2.61
S162	89	89.15	0.15	3.43	S206	167.94	176.33	8.39	2.23
S162	166.42	166.73	0.31	4.46	S206	177.06	177.39	0.33	2.88
S164	118.26	119.18	0.92	20.91	S206	178.31	179.22	0.91	2.06
S164	121.62	123.14	1.52	7.64	S208	216.41	225.55	9.14	2.49
S170	66.75	69.19	2.44	3.77	S209	159.72	164.62	4.9	2.42
S170	70.71	71.26	0.55	2.4	S210	150.66	152.19	1.53	2.61
S170	73.76	74.68	0.92	3.09	S210	197.51	199.03	1.52	2.4
S172	5.64	6.25	0.61	6.51	S211	167.49	168.1	0.61	17.42
S173	161.54	162.46	0.92	2.06	S211	185.62	189.43	3.81	2.59
S173	186.54	192.63	6.09	4.38	S211	199.8	200.25	0.45	2.74
S174	184.56	185.17	0.61	2.4	S211	201.93	203.15	1.22	2.26
S174	192.33	193.24	0.91	6.86	S212	67.67	69.86	2.19	7.95
S174W2	174.65	178.61	3.96	3.66	S213	140.88	142.4	1.52	2.13
S174W2	191.72	192.63	0.91	4.8	S213	150.57	156.36	5.79	2.09
S175	272.03	274.32	2.29	3.56	S214	83.82	90.22	6.4	2.32
S175	275.08	276.3	1.22	2.36	S214	93.12	93.88	0.76	3.7
S175W	271.27	272.49	1.22	13.37	S214	192.63	194.77	2.14	3.27
S175W	276.33	277.06	0.73	3.43	S214	205.13	210.01	4.88	5
S176	294.13	295.66	1.53	5.19	S215	144.17	145.69	1.52	2.47
S177	183.49	185.32	1.83	2.06	S215	153.01	157.58	4.57	2.02
S177	190.5	191.26	0.76	8.91	S216	157.58	158.19	0.61	3.29
S177	193.24	195.07	1.83	3.08	S217	76.66	77.27	0.61	3.18
S178	111.56	114.3	2.74	9.84	S219	16.15	16.92	0.77	13.51
S178	145.69	146.3	0.61	2.06	S220	66.84	67.76	0.92	2.4
S182	102.11	104.7	2.59	3.95	S221	101.19	102.72	1.53	2.3
S183	107.29	107.9	0.61	42.86	S226	24.99	26.82	1.83	3.84
S184c1	33.22	34.75	1.53	10.97	S227	16.76	17.07	0.31	17.52
S184c1	71.02	71.48	0.46	2.4	S229	103.78	104.55	0.77	5.79
S185c2	23.93	32	8.07	4.66	S229	104.85	112.17	7.32	2.55
S187c4	43.98	44.59	0.61	6.17	S230	153.68	156.76	3.08	2.27
S188c5	43.07	43.59	0.52	13.37	S231	179.37	181.2	1.83	2.06
S192	158.65	159.93	1.28	2.26	S231	195.5	196.2	0.7	2.26
S192	160.29	160.93	0.64	3.77	S232	187.21	201.17	13.96	4.93
S192	169.22	171.75	2.53	2.58	S232	202.08	212.6	10.52	9.38
S192	179.83	185.93	6.1	27.84	S233	9.14	11.28	2.14	3.41
S195	210.46	211.23	0.77	2.88	S233	227.62	230.49	2.87	2.14
S196	221.28	221.56	0.28	2.13	S233	232.2	233.42	1.22	2.19
S197	307.73	308.76	1.03	2.47	S233	234.39	235.92	1.53	2.74
S201	183.64	187.76	4.12	2.16	S233	256.21	262.25	6.04	2.96
S201	200.25	201.17	0.92	2.67	S234	200.31	213.66	13.35	2.76
S203	178.49	179.19	0.7	2.06	S234	216.35	217.26	0.91	5.28
S203	182.51	183.03	0.52	6.86	S234	226.92	227.9	0.98	2.13
S203	185.93	188.55	2.62	2.04	S235	156.67	158.5	1.83	2.32
S203	190.8	191.11	0.31	3.02	S235	175.56	177.39	1.83	2.33
S203	216.01	217.47	1.46	2.34	S235	178.31	179.22	0.91	2.74

Hole ID	From (m)	To (m)	Length (m)*	Au g/t	Hole ID	From (m)	To (m)	Length (m)*	Au g/t
S237	63.25	63.86	0.61	2.61	S279	146.55	163.1	16.55	3.4
S237	109.58	111.1	1.52	2.74	S280	181.36	183.18	1.82	5.19
S239	86.56	88.09	1.53	2.67	S280	224.33	235.31	10.98	3.67
S239	89.61	91.14	1.53	3.84	S280	235.92	237.13	1.21	3.63
S240	47.55	55.78	8.23	4.1	S280	240.49	244.3	3.81	6.52
S240	56.39	63.09	6.7	16.4	S280	260.76	261.52	0.76	4.99
S241	77.11	78.03	0.92	2.26	S281	185.01	202.69	17.68	2.26
S241	81.69	92.05	10.36	3.41	S282	209.25	218.97	9.72	2.29
S242	94.18	98.76	4.58	2.11	S282	220.49	225.77	5.28	5
S244	145.88	149.32	3.44	2.01	S283	223.14	231.65	8.51	2.43
S244	153.77	163.83	10.06	2.46	S283	246.28	255.27	8.99	2.41
S244	165.75	168.58	2.83	2.66	S284	156.36	157.89	1.53	10.49
S244	170.11	172.85	2.74	2.45	S284	194.46	197.36	2.9	3.13
S244	174.38	175.9	1.52	2.33	S284	224.33	225.55	1.22	2.26
S246	236.68	242.32	5.64	4.21	S284	229.51	233.93	4.42	2.22
S246	244.75	245.67	0.92	2.06	S285	127.41	135.94	8.53	5.6
S246	248.87	254.51	5.64	2.49	S285	137.77	143.87	6.1	4.87
S247	85.16	95.25	10.09	3.29	S286	115.98	118.57	2.59	2.29
S247	96.62	101.77	5.15	3.74	S286	156.06	159.56	3.5	2.1
S247	127.41	129.69	2.28	2.42	S287	19.2	20.42	1.22	3.02
S247	256.21	258.78	2.57	3.64	S287	50.44	54.56	4.12	2.44
S247	288.95	294.44	5.49	2.3	S287	132.59	134.84	2.25	22.8
S255	133.81	137.16	3.35	2.41	S287	145.69	146.61	0.92	3.02
S261	125.58	128.11	2.53	2.15	S288	176.48	190.04	13.56	2.15
S261	130.76	135.33	4.57	2.35	S288	195.68	198.42	2.74	2.04
S261	139.9	141.76	1.86	2.15	S290	219.46	248.72	29.26	2.26
S263	79.86	80.77	0.91	2.33	S291	23.47	26.82	3.35	3.26
S265	106.38	114.45	8.07	2.12	S291	36.42	37.34	0.92	3.43
S265	117.04	118.57	1.53	2.47	S293	87.78	89.31	1.53	2.13
S265	120.09	128.63	8.54	2.75	S300	81.38	86.87	5.49	2.82
S266	122.74	126.77	4.03	2.11	S302	39.44	40.54	1.1	3.99
S267	141.82	143.26	1.44	2.67	S306	39.01	39.93	0.92	2.33
S268	51.97	55.78	3.81	3.8	S307	249.54	252.68	3.14	3.09
S268	60.2	61.72	1.52	2.54	S307	292.15	316.08	23.93	3.21
S268	141.73	142.43	0.7	8.37	S307	329.79	331.01	1.22	2.47
S272	174.56	177.7	3.14	2.22	S308	90.83	92.05	1.22	12.55
S272	185.47	190.26	4.79	2.16	S308	109.73	112.01	2.28	2.94
S274	216.38	228.72	12.34	2.2	S308	168.86	169.77	0.91	2.67
S274	233.96	240.82	6.86	4.92	S308	171.6	173.43	1.83	2.55
S276	62.48	63.4	0.92	3.57	S308	246.43	247.65	1.22	3.22
S276	198.73	199.95	1.22	2.19	S309	71.02	75.74	4.72	2.31
S276	226.47	229.82	3.35	2.22	S310	72.85	74.07	1.22	3.5
S277	180.11	180.9	0.79	2.95	S310	76.2	77.72	1.52	2.26
S277	190.8	193.09	2.29	2.03	S310	313.64	316.69	3.05	2.87
S277	194.61	197.66	3.05	3.53	S311	265.79	273.1	7.31	2.57
S277	198.88	200.41	1.53	2.33	S312	241.86	244.14	2.28	2.14
S278	117.35	119.79	2.44	2.5	S314	99.67	105.77	6.1	2.24
S278	170.08	171.6	1.52	2.06	S316	323.39	325.83	2.44	2.11
S278	179.53	181.2	1.67	2.33	S316	330.71	344.58	13.87	2.4

Hole ID	From (m)	To (m)	Length (m)*	Au g/t	Hole ID	From (m)	To (m)	Length (m)*	Au g/t
U0002L6	5.33	5.94	0.61	2.91	U0475L5	2.13	3.05	0.92	2.06
U0011AL6	1.22	2.77	1.55	2.41	U0475L5	3.66	18.59	14.93	6.09
U0011AL6	22.56	28.04	5.48	3.32	U0478L5	2.74	13.41	10.67	7.92
U0014L6	0	2.87	2.87	6.96	U0479L5	0	3.05	3.05	2.08
U0019L6	0	5.49	5.49	7.37	U0479L5	3.96	4.42	0.46	2.4
U0019L6	17.43	21.18	3.75	3.36	U0484L5	1.83	7.01	5.18	6.35
U0020L6	0	2.13	2.13	10.1	U0484L5	7.92	9.14	1.22	2.23
U0026L6	6.55	7.25	0.7	2.22	U0484L5	14.17	14.94	0.77	2.74
U0265L3	30.94	33.22	2.28	5.18	U0484L5	18.29	23.47	5.18	4.42
U0324L3	23.77	25.3	1.53	2.13	U0484L5	32.16	32.61	0.45	5.83
U0324L3	25.91	30.18	4.27	4.64	U0485L5	3.66	4.88	1.22	3.43
U0348L5	75.44	76.87	1.43	3.13	U0485L5	5.49	8.23	2.74	10.64
U0354L5	29.26	29.57	0.31	7.54	U0485L5	16.31	19.81	3.5	7.26
U0354L5	29.87	31.24	1.37	5.94	U0488L5	1.83	7.62	5.79	3.17
U0355L5	34.75	36.58	1.83	2.63	U0488L5	16.15	16.61	0.46	2.74
U0360L5	0.61	2.9	2.29	9.7	U0490L5	3.35	10.67	7.32	11.2
U0361L5	0	6.86	6.86	16.51	U0490L5	11.89	12.5	0.61	3.43
U0361L5	10.36	11.28	0.92	9.6	U0490L5	25.15	28.35	3.2	3.76
U0361L5	24.08	26.52	2.44	2.07	U0491L5	2.44	8.23	5.79	12.98
U0363L5	2.29	7.62	5.33	5.62	U0491L5	20.12	20.73	0.61	5.49
U0363L5	41.76	42.52	0.76	2.06	U0492L5	12.19	14.48	2.29	2.18
U0363L5	45.42	46.48	1.06	2.62	U0492L5	17.37	22.86	5.49	5.38
U0363L5	46.94	49.68	2.74	3.03	U0493L5	0.61	8.23	7.62	4.39
U0443L3	14.63	22.25	7.62	9.42	U0493L5	17.37	18.29	0.92	2.06
U0443L3	33.83	36.27	2.44	2.51	U0493L5	19.2	20.12	0.92	2.06
U0446L3	14.63	14.94	0.31	12.69	U0494L5	0	0.61	0.61	2.4
U0446L3	15.7	16.76	1.06	42.51	U0494L5	2.29	3.05	0.76	2.74
U0447L3	30.18	31.24	1.06	3.76	U0494L5	18.29	19.2	0.91	2.4
U0448L3	2.44	2.74	0.3	6.86	U0495L5	0	7.32	7.32	13.49
U0450L3	2.29	3.05	0.76	2.06	U0495L5	8.23	9.3	1.07	2.06
U0451L5	0.91	6.1	5.19	4.32	U0495L5	16.03	16.92	0.89	3.49
U0452L3	1.52	2.29	0.77	2.74	U0495L5	17.22	18.59	1.37	3.93
U0452L5	1.52	3.96	2.44	3.14	U0499L5	0.3	4.27	3.97	9.59
U0452L5	4.57	6.86	2.29	2.98	U0499L5	5.49	6.4	0.91	2.06
U0453L5	0	4.88	4.88	9.14	U0499L5	15.24	15.54	0.3	5.83
U0453L5	7.92	8.53	0.61	2.74	U0503L5	0	3.05	3.05	4.85
U0454L5	3.05	4.88	1.83	15.47	U0503L5	6.4	7.92	1.52	2.33
U0454L5	11.58	14.02	2.44	2.63	U0506L5	0	10.67	10.67	3.82
U0455L5	1.83	3.96	2.13	16.25	U0506L5	16.15	18.29	2.14	2.23
U0456L5	0.61	7.16	6.55	12.81	U0506L5	22.86	25.91	3.05	3.57
U0457L5	3.96	6.1	2.14	6.6	U0507L5	0.61	7.32	6.71	3.69
U0457L5	8.23	9.14	0.91	2.4	U0507L5	8.84	12.5	3.66	12.91
U0457L5	11.28	12.5	1.22	4.11	U0507L5	14.02	18.44	4.42	2.13
U0458L5	2.9	4.42	1.52	2.75	U0508L5	14.02	16.46	2.44	2.32
U0459L5	5.33	7.62	2.29	7.72	U0509L5	4.88	10.52	5.64	4.69
U0461L5	0.61	10.67	10.06	7.4	U0509L5	29.72	30.48	0.76	2.06
U0465L5	17.83	18.59	0.76	3.09	U0509L5	35.97	36.58	0.61	3.09
U0469L5	0.91	3.2	2.29	3.52	U0511L5	0	1.52	1.52	2.23
U0471L5	0.61	3.2	2.59	3.99	U0511L5	7.92	8.53	0.61	4.79

Hole ID	From (m)	To (m)	Length (m)*	Au g/t	Hole ID	From (m)	To (m)	Length (m)*	Au g/t
U0512L5	4.57	7.62	3.05	8.89	U0558L7	31.39	32.92	1.53	7.13
U0512L5	32	32.77	0.77	3.09	U0562L7	44.81	45.72	0.91	6.51
U0512L5	37.64	38.4	0.76	2.74	U0566L5	13.72	16.76	3.04	14.89
U0513L5	2.44	3.51	1.07	2.06	U0567L5	0	4.57	4.57	3.55
U0513L5	4.27	6.1	1.83	2.56	U0567L5	5.33	6.1	0.77	6.51
U0513L5	6.86	10.06	3.2	2.54	U0568L5	0	3.35	3.35	25.23
U0513L5	12.04	12.8	0.76	25.37	U0568L5	14.02	19.81	5.79	2.21
U0513L5	17.37	17.98	0.61	4.46	U0568L5	22.1	22.86	0.76	2.06
U0514L5	0	0.61	0.61	2.74	U0571L5	0	5.18	5.18	11.47
U0514L5	5.33	7.92	2.59	2.02	U0571L5	6.4	16.46	10.06	2.6
U0515L5	0	1.52	1.52	2.23	U0572L5	0	6.1	6.1	2.26
U0525L5	6.86	13.72	6.86	6.46	U0572L5	12.34	17.07	4.73	5.38
U0531L5	3.05	3.35	0.3	2.4	U0574L5	0.76	4.88	4.12	2.26
U0532L5	0.3	0.91	0.61	2.06	U0574L5	13.11	14.63	1.52	9.36
U0532L5	11.98	13.72	1.74	2.79	U0587L3	9.14	10.97	1.83	2.63
U0532L5	15.85	19.2	3.35	2.93	U0587L3	15.24	16.76	1.52	2.12
U0533L5	0	1.22	1.22	5.14	U0588L3	22.56	25.42	2.86	4.53
U0534L5	0	2.13	2.13	2.89	U0589L3	17.53	19.81	2.28	8.72
U0536L5	6.4	7.01	0.61	3.77	U0589L3	29.87	30.78	0.91	3.09
U0536L5	9.45	10.36	0.91	7.89	U0590L3	19.35	20.12	0.77	2.06
U0536L5	11.89	12.5	0.61	2.74	U0590L3	24.87	25.73	0.86	109
U0537L5	0	1.83	1.83	2.63	U0593L3	1.52	3.66	2.14	23.13
U0537L5	4.57	5.33	0.76	2.74	U0593L3	4.57	5.03	0.46	9.26
U0537L5	10.67	13.41	2.74	2.24	U0593L3	29.11	29.87	0.76	2.4
U0538L5	6.4	6.71	0.31	5.49	U0593L7	19.96	21.73	1.77	15
U0539L5	9.14	10.06	0.92	2.06	U0593L7	22.04	23.16	1.12	2.23
U0539L5	11.28	11.73	0.45	18.17	U0598L7	10.18	10.67	0.49	2.06
U0540L5	24.08	24.99	0.91	2.06	U0605L5	10.97	14.33	3.36	2.46
U0541L5	16	19.2	3.2	3.84	U0607L5	0	4.57	4.57	2.1
U0542L5	25.3	29.57	4.27	2.18	U0607L5	9.75	10.82	1.07	2.21
U0543L5	35.05	36.27	1.22	2.4	U0607L5	12.8	13.41	0.61	2.4
U0545L5	42.98	43.89	0.91	4.36	U0609L5	1.52	3.05	1.53	2.81
U0548L3	3.2	6.4	3.2	6.48	U0610L5	0	0.76	0.76	2.4
U0548L3	7.92	9.3	1.38	3.07	U0613L5	0	1.52	1.52	2.47
U0548L3	15.39	15.85	0.46	3.09	U0614L5	21.34	22.86	1.52	2.21
U0552L3	20.42	21.34	0.92	24.69	U0615L5	0	3.05	3.05	3.13
U0552L3	22.1	24.08	1.98	18.47	U0615L5	4.57	5.33	0.76	2.74
U0552L3	26.97	27.74	0.77	2.06	U0615L5	14.78	18.75	3.97	2.44
U0552L3	29.26	31.85	2.59	3.31	U0617L5	0	2.29	2.29	2.05
U0553L3	10.82	12.19	1.37	2.85	U0617L5	4.75	5.33	0.58	3.09
U0553L3	19.05	21.49	2.44	32.83	U0617L5	9.45	12.34	2.89	3.2
U0553L3	22.1	24.69	2.59	11.57	U0617L5	44.2	44.65	0.45	5.14
U0553L3	25.6	27.13	1.53	5.02	U0618L5	1.68	3.66	1.98	2.06
U0553L3	30.33	30.78	0.45	2.4	U0618L5	8.53	9.14	0.61	2.06
U0554L3	13.72	14.48	0.76	2.74	U0618L5	10.06	11.28	1.22	2.06
U0554L3	18.9	23.16	4.26	10.14	U0621L5	0	3.05	3.05	4.72
U0555L3	22.71	24.99	2.28	2.05	U0621L5	3.81	7.62	3.81	6.81
U0555L3	28.35	29.11	0.76	3.09	U0621L5	8.23	10.67	2.44	2.43
U0558L7	22.25	24.54	2.29	2.3	U0621L5	12.19	13.72	1.53	2.05

Hole ID	From (m)	To (m)	Length (m)*	Au g/t	Hole ID	From (m)	To (m)	Length (m)*	Au g/t
U0622L5	0.76	3.05	2.29	3.44	U0667L5	23.93	31.7	7.77	5.41
U0623L5	0	1.98	1.98	3.46	U0667L5	36.27	38.4	2.13	3.89
U0623L5	3.66	8.23	4.57	3.46	U0667L5	42.98	44.81	1.83	2.15
U0623L5	8.84	11.58	2.74	2.64	U0667L5	47.24	49.99	2.75	2.4
U0624L5	17.07	17.98	0.91	2.4	U0667L5	51.82	55.17	3.35	2.07
U0627L5	0	3.66	3.66	8.97	U0667L5	55.93	57.76	1.83	10.64
U0627L5	4.57	7.47	2.9	3.61	U0667L5	63.25	67.36	4.11	12.26
U0627L5	8.08	8.38	0.3	3.43	U0667L5	69.49	71.93	2.44	5.85
U0629L5	13.72	16	2.28	4.2	U0668L5	5.49	17.07	11.58	5.22
U0631L5	1.83	3.66	1.83	2.07	U0668L5	17.83	27.43	9.6	6.34
U0631L5	8.84	11.28	2.44	6.09	U0668L5	32.31	34.75	2.44	4.37
U0631L5	11.89	13.72	1.83	3.46	U0669L5	9.3	15.24	5.94	59.14
U0631L5	14.63	16.76	2.13	2.5	U0669L5	16.15	16.76	0.61	3.09
U0635L5	1.52	3.81	2.29	2.52	U0669L5	18.59	21.34	2.75	2.36
U0638L5	0	3.05	3.05	2.09	U0670L5	28.65	29.87	1.22	9.77
U0638L5	5.79	12.5	6.71	2.61	U0670L5	31.09	34.44	3.35	4.34
U0639L5	12.95	13.72	0.77	33.94	U0670L5	39.01	41	1.99	2.11
U0642L5	15.24	18.44	3.2	9.67	U0670L5	41.91	43.59	1.68	5.35
U0644L5	12.95	16.15	3.2	4.02	U0671L5	6.1	8.23	2.13	7.05
U0645L5	0.76	1.52	0.76	2.74	U0671L5	11.28	12.34	1.06	8.23
U0645L5	3.05	4.11	1.06	2.06	U0671L5	12.5	13.41	0.91	2.4
U0645L5	14.94	20.12	5.18	2.73	U0671L5	13.56	14.33	0.77	2.74
U0645L5	21.24	22.56	1.32	2.65	U0671L5	16.15	18.59	2.44	18.51
U0646L5	0	0.91	0.91	2.06	U0671L5	21.34	22.1	0.76	2.06
U0646L5	12.95	13.72	0.77	6.86	U0672L5	24.69	28.96	4.27	6.17
U0647L5	0	3.81	3.81	2.88	U0672L5	31.39	33.38	1.99	2.76
U0647L5	15.24	16.46	1.22	2.06	U0672L5	34.44	36.12	1.68	17.59
U0648L5	0	5.03	5.03	2.69	U0672L5	36.88	39.93	3.05	4.41
U0652L5	15.85	16.31	0.46	7.54	U0672L5	41	51.97	10.97	15.25
U0654L5	2.13	4.57	2.44	6.36	U0672L5	55.78	56.54	0.76	4.8
U0654L5	5.18	6.25	1.07	14.74	U0673L5	55.17	58.22	3.05	5.9
U0654L5	53.34	53.95	0.61	9.26	U0673L5	61.87	65.07	3.2	7.64
U0655L5	0.76	3.81	3.05	2.05	U0674L5	51.82	57.61	5.79	2.21
U0657L5	0	2.29	2.29	2.17	U0674L5	64.62	66.75	2.13	2.64
U0659L5	0.3	5.94	5.64	3.92	U0676L5	25.6	30.78	5.18	2.46
U0659L5	8.23	9.6	1.37	5.79	U0676L5	32.31	35.97	3.66	4.15
U0661L5	0.76	5.33	4.57	2.19	U0676L5	39.01	39.62	0.61	2.06
U0661L5	6.71	9.45	2.74	5.94	U0676L5	44.81	46.63	1.82	2.23
U0661L5	17.07	18.29	1.22	5.49	U0676L5	47.55	48.16	0.61	2.4
U0664L5	4.27	5.79	1.52	2.06	U0677L5	20.12	20.42	0.3	22.29
U0664L5	7.32	7.92	0.6	2.06	U0677L5	21.18	22.56	1.38	81.6
U0664L5	11.43	12.95	1.52	2.06	U0677L5	23.47	26.21	2.74	2.4
U0664L5	17.37	18.29	0.92	3.09	U0677L5	27.13	30.78	3.65	3.09
U0664L5	25.45	26.37	0.92	2.4	U0677L5	31.7	34.44	2.74	3.91
U0665L5	2.59	3.35	0.76	2.06	U0677L5	36.88	37.8	0.92	18.19
U0666L5	13.72	14.33	0.61	7.54	U0678L5	26.82	34.44	7.62	5.59
U0666L5	25.91	28.04	2.13	3.28	U0678L5	42.67	47.09	4.42	2.3
U0667L5	16.76	20.12	3.36	2.15	U0679L5	5.64	7.47	1.83	8.23
U0667L5	21.03	23.16	2.13	2.63	U0683L5	11.58	16.15	4.57	2.26

Hole ID	From (m)	To (m)	Length (m)*	Au g/t	Hole ID	From (m)	To (m)	Length (m)*	Au g/t
U0683L5	18.29	21.85	3.56	5.15	U0705L5	41.45	43.13	1.68	2
U0683L5	24.23	24.99	0.76	2.74	U0705L5	44.04	46.94	2.9	2.22
U0683L5	37.49	39.24	1.75	2.63	U0706L5	13.11	13.72	0.61	9.94
U0683L5	40.39	43.89	3.5	3.5	U0706L5	20.12	34.14	14.02	5
U0684L5	9.91	12.19	2.28	22.74	U0706L5	35.36	44.81	9.45	7.96
U0684L5	14.48	15.85	1.37	2.63	U0712L5	31.85	32.31	0.46	2.74
U0684L5	18.9	24.38	5.48	2.17	U0713L5	32.92	34.14	1.22	2.06
U0684L5	38.4	39.32	0.92	2.4	U0714L5	54.25	55.17	0.92	2.06
U0688L5	13.72	14.48	0.76	2.06	U0715L5	31.7	38.4	6.7	3.13
U0688L5	17.68	22.86	5.18	4.45	U0715L5	39.32	43.89	4.57	2.01
U0688L5	23.16	28.5	5.34	2.79	U0715L5	44.2	45.72	1.52	14.3
U0688L5	29.87	34.05	4.18	2.8	U0715L5	47.24	51.21	3.97	2.86
U0688L5	34.44	36.73	2.29	3.23	U0715L5	52.12	53.64	1.52	4.86
U0688L5	38.56	39.32	0.76	2.06	U0716L5	26.21	27.13	0.92	3.09
U0689L5	9.75	35.66	25.91	4.76	U0716L5	39.32	46.63	7.31	3.99
U0689L5	36.58	42.52	5.94	5.33	U0716L5	49.99	51.82	1.83	2.17
U0690L5	11.89	12.8	0.91	2.4	U0717L5	27.13	27.89	0.76	7.54
U0690L5	26.06	27.74	1.68	2.02	U0717L5	40.23	41.15	0.92	3.09
U0690L5	28.65	42.82	14.17	8.64	U0717L5	41.61	43.74	2.13	2.57
U0690L5	46.79	49.68	2.89	2.75	U0717L5	49.68	52.58	2.9	3.02
U0691L5	4.75	5.49	0.74	2.06	U0718L5	66.75	67.21	0.46	3.73
U0691L5	10.06	16.46	6.4	2.97	U0718L5	73.3	73.61	0.31	8.91
U0691L5	26.21	36.58	10.37	6.24	U0719L5	65.38	67.82	2.44	20.34
U0692L5	10.36	19.05	8.69	8.31	U0719L5	68.28	69.49	1.21	20.37
U0693L5	10.52	20.12	9.6	2.04	U0720L5	26.82	31.09	4.27	5.81
U0693L5	22.56	23.47	0.91	4.11	U0720L5	32.31	38.25	5.94	6.07
U0693L5	26.21	31.24	5.03	3.4	U0720L5	42.06	43.13	1.07	3.77
U0693L5	40.84	42.37	1.53	2.4	U0720L5	48.92	49.68	0.76	4.46
U0694L5	15.24	15.85	0.61	2.74	U0721L5	21.34	22.1	0.76	2.06
U0694L5	21.18	25.6	4.42	3.26	U0721L5	26.97	41.45	14.48	4.35
U0695L5	53.95	54.25	0.3	13.03	U0721L5	42.06	42.98	0.92	3.09
U0696L5	53.64	54.86	1.22	3.09	U0721L5	45.42	51.82	6.4	2.24
U0697L5	56.69	57.61	0.92	2.4	U0721L5	54.86	56.39	1.53	2.06
U0701L5	6.1	7.32	1.22	6.86	U0722L5	15.24	19.66	4.42	2.45
U0701L5	14.78	21.49	6.71	8.3	U0722L5	22.71	23.77	1.06	3.09
U0701L5	23.77	26.06	2.29	5.35	U0722L5	37.64	43.28	5.64	5
U0701L5	31.39	33.38	1.99	2.65	U0722L5	44.04	52.43	8.39	4.81
U0702L5	3.35	5.03	1.68	2.65	U0727L5	3.05	3.96	0.91	14.06
U0702L5	7.01	7.62	0.61	3.09	U0727L5	4.57	18.9	14.33	20.82
U0702L5	15.85	19.81	3.96	6.44	U0727L7	58.67	59.44	0.77	8.23
U0702L5	29.87	30.94	1.07	2.4	U0728L5	1.52	9.45	7.93	8.72
U0703L5	1.22	4.57	3.35	12.42	U0728L5	15.85	16.31	0.46	2.4
U0703L5	9.45	10.06	0.61	2.06	U0728L5	23.77	26.52	2.75	8.78
U0703L5	12.5	13.72	1.22	2.06	U0729L5	1.83	6.1	4.27	3.13
U0703L5	18.59	28.65	10.06	4.55	U0729L5	10.36	11.13	0.77	19.54
U0705L5	13.72	14.84	1.12	2.19	U0729L5	12.04	15.24	3.2	21.66
U0705L5	17.83	30.18	12.35	3.48	U0729L5	18.14	20.42	2.28	2.09
U0705L5	32.61	33.22	0.61	2.06	U0729L5	25.15	29.57	4.42	7.83
U0705L5	38.71	40.54	1.83	6.71	U0729L5	33.53	40.54	7.01	3.19

Hole ID	From (m)	To (m)	Length (m)*	Au g/t	Hole ID	From (m)	To (m)	Length (m)*	Au g/t
U0730L5	0	3.35	3.35	3.37	U0784L6	16.46	18.29	1.83	3.24
U0730L5	4.27	7.92	3.65	2.32	U0784L6	18.9	20.27	1.37	5.86
U0731L5	8.53	9.45	0.92	2.06	U0784L6	23.38	26.82	3.44	2.87
U0733L5	12.19	15.54	3.35	3.98	U0784L6	27.74	29.26	1.52	2.4
U0734L5	10.67	14.63	3.96	2.36	U0793L6	0	2.44	2.44	13.2
U0734L5	14.78	15.39	0.61	5.83	U0793L6	4.11	4.72	0.61	5.83
U0735L5	4.42	14.33	9.91	4.42	U0798L6	1.52	3.35	1.83	2.22
U0735L5	14.94	15.54	0.6	4.8	U0798L6	6.71	7.62	0.91	6.51
U0736L5	2.9	3.96	1.06	2.06	U0798L6	11.28	11.89	0.61	9.26
U0736L5	7.16	16.31	9.15	5.11	U0798L6	13.11	15.24	2.13	3.18
U0739L5	1.83	4.11	2.28	5.01	U0810L6	5.49	6.4	0.91	15.43
U0739L5	19.51	23.29	3.78	2.63	U0810L6	10.97	12.5	1.53	3.15
U0742L5	13.56	14.33	0.77	2.06	U0812L6	1.83	3.66	1.83	3.1
U0742L5	21.64	21.95	0.31	60.34	U0812L6	4.27	7.01	2.74	10.22
U0743L5	9.75	10.67	0.92	2.06	U0812L6	9.45	10.06	0.61	2.74
U0743L5	16.15	16.61	0.46	4.46	U0812L6	10.97	11.58	0.61	5.83
U0746L5	16.15	18.29	2.14	6.38	U0812L6	14.63	19.2	4.57	3.01
U0748L5	14.17	17.53	3.36	5.12	U0825L6	0	1.22	1.22	12.81
U0749L5	1.22	2.13	0.91	21.94	U0846L6	3.6	4.08	0.48	3.09
U0751L5	0.3	1.22	0.92	7.54	U0846L6	5.33	9.14	3.81	4.31
U0751L5	1.52	1.98	0.46	4.11	U0846L6	10.67	15.24	4.57	5.81
U0751L5	13.41	17.68	4.27	2.92	U0846L6	16.76	17.53	0.77	2.74
U0763L6	0	6.1	6.1	8.45	U0846L6	21.34	24.84	3.5	2.06
U0763L6	7.62	7.92	0.3	6.51	U0846L6	28.96	30.48	1.52	2.23
U0763L6	12.19	12.8	0.61	2.06	U0847L6	1.52	3.26	1.74	3.31
U0763L6	14.02	14.63	0.61	12.34	U0847L6	3.57	6.1	2.53	2.18
U0764L6	0.61	5.49	4.88	8.4	U0847L6	7.62	8.72	1.1	4.01
U0766L5	0	4.88	4.88	3.6	U0847L6	12.44	15.09	2.65	4.08
U0766L5	7.32	10.06	2.74	2.4	U0847L6	19.81	22.86	3.05	13.16
U0767L5	0.61	3.35	2.74	2.34	U0847L6	24.38	24.99	0.61	2.74
U0768L5	10.52	11.13	0.61	2.4	U0847L6	25.91	26.67	0.76	2.4
U0768L5	15.7	20.73	5.03	10.28	U0848L6	0	0.76	0.76	7.89
U0768L5	26.52	29.26	2.74	3.44	U0851L6	0	2.74	2.74	4.88
U0772L6	15.24	16.31	1.07	2.4	U0852L6	0	1.83	1.83	4.51
U0772L6	17.83	27.43	9.6	12.6	U0852L6	5.33	10.06	4.73	4.11
U0772L6	28.35	33.53	5.18	2.24	U0852L6	11.43	15.24	3.81	6.31
U0774L6	11.89	15.24	3.35	5.55	U0852L6	20.57	22.1	1.53	4.78
U0774L6	16.76	19.51	2.75	2.85	U0868L6	0	6.1	6.1	2.92
U0774L6	20.12	36.73	16.61	3.03	U0868L6	6.71	7.35	0.64	5.83
U0776L6	4.57	5.49	0.92	2.4	U0868L6	7.86	12.92	5.06	6.14
U0776L6	6.1	7.01	0.91	2.06	U0868L6	15.24	18.29	3.05	5.25
U0776L6	13.11	14.02	0.91	2.74	U0868L6	19.81	32	12.19	7.58
U0776L6	18.14	27.43	9.29	5.91	U0868L6	33.07	33.53	0.46	3.6
U0776L6	28.04	29.87	1.83	2.17	U0868L6	41.15	41.76	0.61	2.57
U0776L6	33.53	34.75	1.22	2.23	U0869L6	0	6.68	6.68	6.71
U0776L6	36.42	36.88	0.46	2.06	U0869L6	8.5	9.39	0.89	3.09
U0776L6	42.06	42.98	0.92	2.06	U0870L6	0	6.83	6.83	2.37
U0777L6	0.61	4.88	4.27	4.09	U0871L6	9.91	10.67	0.76	2.06
U0784L6	7.32	13.72	6.4	11.45	U0871L6	26.03	28.32	2.29	5.13

Hole ID	From (m)	To (m)	Length (m)*	Au g/t	Hole ID	From (m)	To (m)	Length (m)*	Au g/t
U0871L6	29.75	30.11	0.36	2.74	U0991L6	4.57	5.12	0.55	2.06
U0871L6	32.16	34.44	2.28	2.11	U0992L6	0.61	1.37	0.76	3.43
U0882L6	0	10.06	10.06	4.49	U0992L6	2.13	3.66	1.53	8.04
U0883L6	0	6.49	6.49	8.26	U0992L6	7.16	14.33	7.17	2.74
U0883L6	7.25	9.75	2.5	2.17	U0992L6	15.54	17.62	2.08	2.73
U0883L6	11.89	12.71	0.82	3.09	U0992L6	18.29	20.42	2.13	2.65
U0883L6	14.02	15.54	1.52	3.31	U0995L6	5.91	20.42	14.51	8.93
U0893L6	7.62	15.09	7.47	7.84	U0996L6	4.11	4.85	0.74	3.26
U0893L6	16.95	18.2	1.25	2.11	U0996L6	12.8	13.69	0.89	4.39
U0898L6	2.96	5.43	2.47	4.12	U0996L6	15.7	16.34	0.64	3.43
U0898L6	5.73	9.85	4.12	6.36	U0997L6	4.97	6.4	1.43	4.28
U0904L6	0	1.98	1.98	4.46	U0998L6	2.44	5.39	2.95	2.2
U0904L6	6.52	10.15	3.63	6.78	U1027L2	17.68	29.57	11.89	6.09
U0904L6	14.87	15.33	0.46	2.06	U1027L2	30.48	31.85	1.37	2.81
U0904L6	20.27	21.34	1.07	2.06	U1043L6	0	6.71	6.71	2.67
U0904L6	22.01	23.13	1.12	5.39	U1108L3	0	2.44	2.44	2.03
U0905L6	0	0.76	0.76	9.26	U1113L3	23.77	33.95	10.18	2.35
U0905L6	1.52	2.44	0.92	4.11	U1113L3	34.9	36.42	1.52	2.61
U0906L6	5.49	10.82	5.33	2.89	U1117L3	16.46	32.49	16.03	2.86
U0906L6	12.5	22.56	10.06	2.92	U1220L6	2.44	12.04	9.6	4.83
U0907L6	24.08	28.35	4.27	2.33	U1220L6	17.68	19.35	1.67	2.33
U0916L6	0	3.78	3.78	4.35	U1226L6	0.91	1.83	0.92	2.13
U0916L6	4.3	7.32	3.02	2.41	U1258L5	0	3.35	3.35	6.62
U0920L6	4.18	5.61	1.43	2.64	U1258L5	18.44	20.57	2.13	2.43
U0922L6	10.97	11.58	0.61	6.86	U1265L5	6.71	15.85	9.14	2.21
U0925L6	0	6.07	6.07	2.33	U1265L5	19.35	23.77	4.42	2.42
U0925L6	12.5	14.63	2.13	2.07	U1335L5	0	8.38	8.38	2.39
U0926L6	0	4.42	4.42	2.67	U1335L5	10.97	14.02	3.05	2.29
U0926L6	5.18	6.04	0.86	2.06	U1362L5	58.52	60.05	1.53	4.59
U0927L6	0	8.96	8.96	4.43	U1362L5	60.35	61.63	1.28	4.59
U0927L6	9.63	10.3	0.67	2.06	U1403L7	10.06	14.63	4.57	2.18
U0927L6	50.29	51.51	1.22	2.13	U1403L7	16.15	17.68	1.53	2.4
U0946L6	6.1	16.18	10.08	4.33	U1404L7	8.53	25.6	17.07	4.59
U0966L6	8.53	9.45	0.92	2.23	U1434L7	0	6.4	6.4	5.62
U0966L6	10.67	11.37	0.7	2.57	U1434L7	7.92	22.25	14.33	2.92
U0966L6	16.7	17.98	1.28	2.11	U1434L7	31.55	37.03	5.48	2.14
U0970L6	26.18	26.55	0.37	2.57	U1443L7	2.44	8.84	6.4	2.18
U0971L6	0	1.34	1.34	24.17	U1443L7	9.75	10.76	1.01	2.13
U0971L6	35.42	42.34	6.92	4.11	U1502L5	56.6	60.53	3.93	2.22
U0972L6	5.12	6.43	1.31	2.25	U1507L5	40.84	41.76	0.92	2.33
U0979L6	8.02	11.61	3.59	4.75	U1507L5	61.14	62.48	1.34	2.19
U0984L6	3.54	6.1	2.56	2.12	U1508L5	42.98	51.51	8.53	3.09
U0984L6	7.32	9.51	2.19	2.2	U1508L5	62.42	85.07	22.65	3.72
U0984L6	9.75	16.15	6.4	6.94	U1508L5	90.22	94.18	3.96	3.92
U0984L6	18.9	19.81	0.91	2.06	U1509L5	21.95	23.16	1.21	3.36
U0984L6	20.42	21.34	0.92	2.57	U1509L5	34.29	35.36	1.07	2.13
U0986L6	7.32	17.59	10.27	6.14	U1509L5	55.47	66.42	10.95	2.23
U0986L6	18.44	21.95	3.51	6.07	U1509L5	69.8	73.91	4.11	7.2
U0991L6	0	2.44	2.44	7.12	U1509L5	86.87	91.44	4.57	2.34

Hole ID	From (m)	To (m)	Length (m)*	Au g/t	Hole ID	From (m)	To (m)	Length (m)*	Au g/t
U1509L5	93.57	104.09	10.52	2.54	U1673L5	7.92	10.09	2.17	2.73
U1509L5	125.67	127.01	1.34	3.22	U1673L5	88.39	101.19	12.8	2.3
U1610L4	0	2.29	2.29	2.03	U1675L5	7.01	21.03	14.02	5.86
U1650L5	29.41	30.33	0.92	2.54	U1676L5	0	18.9	18.9	2.29
U1650L5	34.9	35.81	0.91	4.25	U1677L5	9.45	11.28	1.83	3.51
U1650L5	39.62	40.39	0.77	2.08	U1677L5	11.89	24.54	12.65	4.38
U1650L5	41.76	44.35	2.59	3.06	U1677L5	24.99	35.05	10.06	7.14
U1650L5	47.4	48.77	1.37	2.67	U1680L5	54.25	62.48	8.23	2.05
U1650L5	66.14	67.06	0.92	2.33	U1680L5	96.01	97.99	1.98	4.39
U1650L5	71.63	72.24	0.61	2.61	U1680L5	108.81	122.38	13.57	3.68
U1650L5	79.25	97.99	18.74	5.65	U1680L5	122.99	129.24	6.25	2.79
U1651L5	10.52	12.95	2.43	2.05	U1683L5	0	6.1	6.1	4.69
U1651L5	32.92	34.75	1.83	10.38	U1686L4	7.62	8.53	0.91	3.09
U1651L5	49.38	51.51	2.13	4.8	U1686L4	28.8	30.33	1.53	2.26
U1652L5	41.91	43.43	1.52	2.13	U1686L4	33.53	37.19	3.66	4.35
U1652L5	48.77	50.29	1.52	2.26	U1686L4	39.17	40.84	1.67	11.51
U1652L5	52.88	78.64	25.76	4.17	U1687L4	15.85	24.38	8.53	6.73
U1652L5	79.25	82.45	3.2	7.61	U1688L4	5.79	22.1	16.31	3.77
U1654L5	46.94	48.31	1.37	3.29	U1688L4	40.69	43.74	3.05	2.09
U1654L5	49.23	74.37	25.14	4.49	U1688L4	56.69	58.22	1.53	2.88
U1655L5	3.35	4.57	1.22	2.4	U1689L4	2.13	13.11	10.98	2.24
U1655L5	17.37	24.38	7.01	2.6	U1690L4	11.55	16.46	4.91	2.65
U1655L5	25.91	33.07	7.16	3.1	U1691L4	53.19	57.91	4.72	13.29
U1655L5	38.98	48.77	9.79	2.44	U1691L4	59.13	63.25	4.12	3.23
U1656L5	2.9	5.94	3.04	2.67	U1692L4	8.53	10.91	2.38	3.23
U1656L5	48.77	52.73	3.96	2.14	U1692L4	24.08	26.52	2.44	4.91
U1657L5	27.74	36.27	8.53	2.11	U1693L4	17.53	19.54	2.01	2.09
U1657L5	37.19	39.93	2.74	2.35	U1694L4	1.83	3.69	1.86	2.28
U1657L5	44.81	59.44	14.63	9.67	U1694L4	5.36	7.32	1.96	4.94
U1658L5	14.78	27.43	12.65	2.39	U1694L4	28.96	29.87	0.91	2.06
U1659L5	6.71	12.04	5.33	2.63	U1694L4	31.39	39.62	8.23	2.22
U1659L5	21.64	22.86	1.22	2.06	U1694L4	41.45	44.81	3.36	3.73
U1659L5	38.07	38.71	0.64	3.98	U1694L4	45.87	57.3	11.43	8.76
U1659L5	44.5	48.62	4.12	3.32	U1695L4	25.6	26.52	0.92	2.4
U1660L5	10.97	14.78	3.81	2.1	U1697L4	0	3.96	3.96	3.37
U1660L5	17.07	17.98	0.91	3.57	U1697L4	39.93	41	1.07	2.23
U1660L5	18.44	23.77	5.33	2.43	U1699L4	48.62	51.21	2.59	2.56
U1660L5	27.89	31.09	3.2	2.51	U1700L4	20.12	21.03	0.91	3.22
U1660L5	41.76	42.82	1.06	3.36	U1701L4	0	6.86	6.86	3.76
U1661L5	4.27	31.7	27.43	2.94	U1702L4	0	2.74	2.74	3.82
U1662L5	3.66	17.68	14.02	2.58	U1703L4	18.9	19.81	0.91	10.8
U1663L5	0.61	6.71	6.1	6.56	U1703L4	24.69	29.57	4.88	2.75
U1664L5	3.35	19.05	15.7	3.61	U1703L4	38.71	47.55	8.84	4.07
U1665L5	0	4.11	4.11	3.1	U1705L4	7.32	10.67	3.35	2.14
U1666L5	8.53	10.52	1.99	2.12	U1705L4	11.58	12.8	1.22	2.09
U1667L5	7.92	8.84	0.92	2.13	U1708L4	30.48	33.38	2.9	16.64
U1669L5	2.13	3.66	1.53	5.69	U1709L4	7.16	13.11	5.95	15.24
U1671L5	0	1.98	1.98	5.21	U1710L4	8.23	10.82	2.59	2.46
U1671L5	45.72	46.63	0.91	2.33	U1722L5	0	2.13	2.13	2.55

Hole ID	From (m)	To (m)	Length (m)*	Au g/t
U1722L5	3.81	4.42	0.61	2.13
U1722L5	16.76	17.37	0.61	4.11
U1722L5	31.39	32.46	1.07	4.94
U1723L5	10.67	13.56	2.89	4.5
U1723L5	20.57	23.47	2.9	3.19
U1725L5	0	0.91	0.91	2.47
U1725L5	23.16	24.08	0.92	2.78

Note: *True width not calculated, intercept reported as drilled length

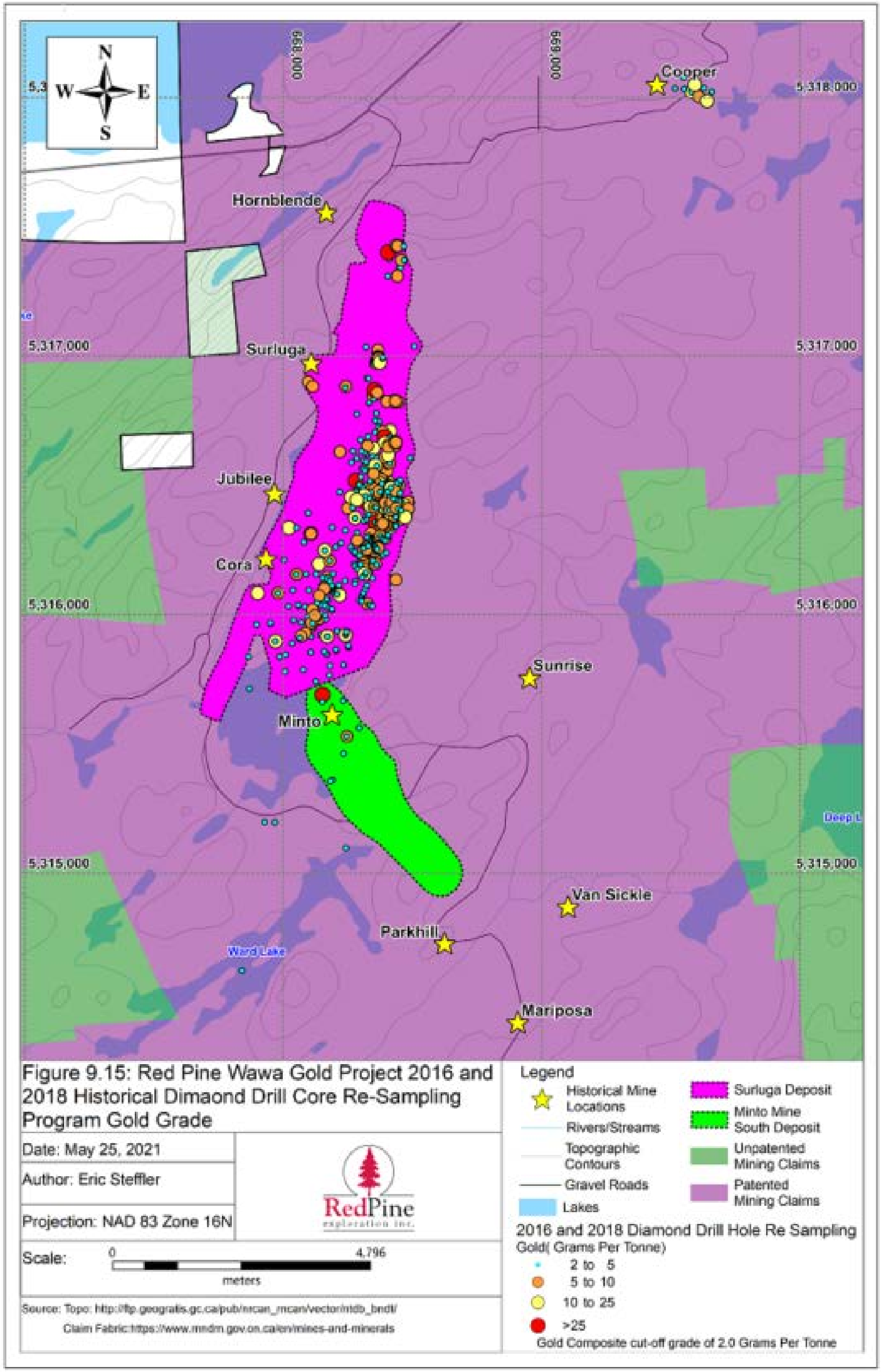


Figure 9-15: Red Pine Wawa Gold Project 2016 and 2018 Historical Diamond Drill Core Re-Sampling Program Gold Grade

10.0 DRILLING

10.1 Drill Program Design and Implementation

The 2014 to 2020 drilling programs were initiated to further develop the gold inventory of the Project. Each program was approached strategically based on the newest information available. These strategic approaches included drilling along plunge of the high-grade zones and testing for parallel high-grade zones along the plane of the current resource and targeting areas of high probability based on the historical drilling sampling program. Along with drilling near the current resource, drill programs were designed to test the hanging wall and footwall targets to better understand the geometry of these mineralized zones. Along with these targets, several other historical mine sites of the property were tested to confirm historical results, to develop a structural model of the property and to determine if mineralized material remains outside of the mined areas reported. These areas include the Parkhill, Van Sickle, Darwin-Grace, and Minto Mine sites.

Over the course of the Project, 269 diamond drill holes have been completed for a total of 73,168.9 m of core drilled. Norex Drilling, out of Timmins, Ontario, completed the first drill program at the end of 2014; drilling six NQ (47.6-mm core diameter) drill holes for a total of 1,573 m. Rouillier Drilling, of Amos, Quebec, was contracted in 2015 and completed each drill program from that year forward, drilling a total of 293 HQ (63.5-mm core diameter) drill holes totalling 71,595.9 m of drilling. Table 10-1 summaries the details of the drill programs per year and highlights of the drill programs is listed in Table 10-2.

Access to the site and within the property is readily available and easily facilitated as the extensive historical 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: Summary of the 2014 to 2020 Wawa Gold Project Drill Holes

Year	Number of Holes	Metres Drilled	Company	Drilling Company
2014	6	1,573.00	Red Pine Exploration	Norex Drilling
2015	32	5,538.80	Red Pine Exploration	Rouillier Drilling
2016	6	1,722.00	Red Pine Exploration	Rouillier Drilling
2017	135	29,800.00	Red Pine Exploration	Rouillier Drilling
2018	90	24,864.00	Red Pine Exploration	Rouillier Drilling
2019	20	4,349.00	Red Pine Exploration	Rouillier Drilling
2020	10	5,322.18	Red Pine Exploration	Rouillier Drilling
Total	**299**	**73,168.90**		

Table 10-2: Drill hole Highlights by Red Pine on the Wawa Gold Project During 2014 to 2020

Hole ID	From (m)	To (m)	Length (m)	Calculated True Width (m)	Au (g/t)	Gold Zone
SD-14-04	274.6	277.35	2.75	2.47	36.21	Jubilee Shear Zone
Including	276.6	277.35	0.75	0.67	104	Jubilee Shear Zone
SD-14-06	320.46	321.5	1.04	0.84	42.3	Jubilee Shear Zone
SD-15-11	195.5	196.5	1		53.2	Tension Vein
SD-15-11	216	217	1		51.7	Tension Vein
SD-16-45	147.27	148.27	1	0.99	44.41	Jubilee Shear Zone
SD-16-45	154.6	156.14	1.54	1.52	89.26	Jubilee Shear Zone
Including	155.36	156.14	0.78	0.77	176	Jubilee Shear Zone
SD-16-45	159.74	160.43	0.69	0.68	36.8	Jubilee Shear Zone
DG-17-54	48	50.28	2.28		41.87	Grace Shear Zone
Including	48.64	50.28	1.64		61.94	Grace Shear Zone
DG-17-55	51.75	54.19	2.44		42.22	Grace Shear Zone
Including	53.15	53.69	0.54		107.49	Grace Shear Zone
DG-17-56	62.86	65.06	2.2		70.4	Grace Shear Zone
Including	63.95	65.06	1.11		138	Grace Shear Zone
SD-17-73	90.63	91.75	1.12	0.89	39	Minto Mine South
SD-17-78	55.3	56.1	0.8	0.79	51	Minto Mine South
SD-17-86	152.93	154.31	1.38	1.3	36.08	Minto Mine South
SD-17-101	206.4	207.4	1		34.6	Tension Vein
SD-17-107	197	198	1	1	56.79	Jubilee Shear Zone
SD-17-117	127	128	1	0.56	40.15	Minto Mine South
SD-17-131	108.3	110.3	2		41.2	Tension Vein
Including	108.3	109.32	1.02		48.41	Tension Vein
SD-17-131	244.21	245.3	1.09	0.72	35.1	Minto Mine South
SD-17-172	90.57	91.59	1.02	0.54	40.2	Jubilee Shear Zone
SD-18-222	257.88	258.6	0.72	0.52	46.5	Minto Mine South
SD-18-234	272.77	274.7	1.93	1.88	42.57	Jubilee Shear Zone
Including	273.7	274.7	1	0.98	60.22	Jubilee Shear Zone
SD-18-243A	205.96	208.77	2.81	2.74	43.48	Jubilee Shear Zone
Including	205.96	207.01	1.05	1.03	72.1	Jubilee Shear Zone
SD-18-255	188.93	192.8	3.87	3.49	36.01	Jubilee Shear Zone
Including	190.41	191.2	0.79	0.71	98.6	Jubilee Shear Zone
	191.2	191.94	0.74	0.67	68.1	Jubilee Shear Zone

10.1.1 Collar Survey

For the 2015 to 2020 drill programs, a Reflex TN-14 gyrocompass was utilized by a Red Pine geologist to align the drill head prior to casing installation. This device uses a north seeking gyro to provide high precision drill orientation. With several drill holes coming near historical underground workings, this tool was instrumental in obtaining precise azimuth and dip from surface. The drill holes from 2014 were aligned using a compass and front sights.

Drill collars were spotted prior to drilling using either a handheld Garmin Oregon GPS or a TopCon RTK GPS. The Garmin Oregon GPS is limited to an accuracy of ± 5 m with minimal tree cover and moderately clear skies. In areas requiring higher precision, such as targets close to historical mine workings, a TopCon RTK GPS with sub-cm accuracy was utilised to ensure precise collar location. Upon completion of all drill holes, the collar location was surveyed using a TopCon RTK GPS to provide high precision collar location and elevation. A full list of collar locations, year drilled, hole depth, azimuth, and dip for each hole drilled during the 2014 to 2020 drill programs can be found in Table 10-3 and on Figure 10-1. Both the initial collar location and precise follow up positioning were completed by Red Pine personnel. The casing for all drill holes was left in place and capped with a red bolt-on metal cap and attached 0.9-m flag (Table 10-3).

Table 10-3: Details of 2014 to 2020 Drill Programs

Hole ID	Year Drilled	X	Y	Z	Depth (m)	Az	Dip
SD-14-01	2014	668306.4	5316786	362.1	127	317.5	-62
SD-14-02	2014	668306.7	5316786.3	362.1	231	328	-65
SD-14-03	2014	668441.6	5316566.9	386.2	309	340.1	-62
SD-14-04	2014	668449.3	5316299.7	373.1	330	340	-65
SD-14-05	2014	668364.9	5317012.9	365.5	234	225	-47
SD-14-06	2014	668205.3	5315774.9	347.9	342	345	-45
SD-15-07	2015	668240.6	5315919.4	347.6	279	305	-56
SD-15-08	2015	668546	5316250.6	375	363.8	324	-60
SD-15-09	2015	668314.5	5316459.6	378.1	240	302	-57
SD-15-10	2015	668342.7	5316351.7	374.2	255	338	-57
SD-15-11	2015	668271.7	5316498	384.2	228	300	-57
SD-15-12	2015	668270.7	5316496.9	383.9	163.1	320	-60
SD-15-13	2015	668321.9	5316531.7	386.1	213	318	-65
SD-15-14	2015	668341.2	5316089.5	360.8	291	323	-56
SD-15-15	2015	668218.6	5316237.4	371.5	195	323	-55
SD-15-16	2015	668255.9	5316336.3	370.7	180	321	-55
SD-15-17	2015	668289	5316374.2	370.5	210	337	-62
SD-15-18	2015	668172.4	5316366.7	371.2	115.8	325	-60
SD-15-19	2015	668141.1	5316463.4	364.3	135	326	-59
SD-15-20	2015	668219	5316593	369.5	123	326	-59
SD-15-21	2015	668162.7	5316660.3	352.7	75	320	-50
SD-15-22	2015	668248.4	5316728.8	352.8	99.1	320	-60
SD-15-23	2015	668186.3	5316801.9	351.3	99	320	-50
SD-15-24	2015	668165.8	5316869.4	352.7	171	314	-56
SD-15-25	2015	668454.9	5317006.4	369.2	240	224.5	-55
SD-15-26	2015	668498	5316262.5	382.9	345.2	325	-67
HS-15-27	2015	668091.3	5317471.4	340.7	130	345	-65
HS-15-28	2015	668056.9	5317403	340.8	82.8	342	-65
HS-15-29	2015	668122.2	5317297	344.3	211	350	-70
HS-15-30	2015	668093.6	5317232.9	348.7	208	350	-70
HS-15-31	2015	668252.6	5316810.3	357.6	385	310	-56
SM-15-32	2018	668917.5	5315677.5	351	53.8	325	-47
SM-15-33	2015	668939.2	5315706.5	352.5	82	215	-47
SM-15-34	2015	668962.1	5315707.5	352.4	82	215	-47
SM-15-35	2015	668963.9	5315707.3	352.4	100	145	-45
SM-15-36	2015	668951.3	5315771.5	348.2	52	210	-50
SM-15-37	2015	668896.8	5315674.8	351.9	58	325	-47
SM-15-38	2015	668720	5315742	371.1	75	25	-47
SM-15-39	2015	668724	5315758	369.8	52	190	-50
SD-16-40	2016	668302	5316950	359.1	429	273	-48
SD-16-41	2016	668451.2	5317538.8	370.9	223	293	-50
SD-16-42	2016	668385.3	5317570.3	337.5	265	290	-47
SD-16-43	2016	668633.8	5318040.6	312.7	249	290	-47
SD-16-44	2016	668492.2	5317385.7	388.8	259	297	-64
SD-16-45	2016	668492.2	5317385.7	388.8	297	297	-47
SD-17-46	2017	668391.7	5317277.1	376.4	196	292.4	-47.5
SD-17-47	2017	668397.1	5317246.3	372.3	199	292	-47.5
SD-17-48	2017	668518.6	5317469.4	375.4	238	301.3	-62.4
SD-17-49	2017	668482	5317618	344.3	223	226.5	-59.9

Hole ID	Year Drilled	X	Y	Z	Depth (m)	Az	Dip
SD-17-50	2017	668210.2	5316939.6	361.5	427	278	-47
SD-17-51	2017	668265.2	5317083.6	365.3	400	290.1	-47.1
SD-17-52	2017	668304.3	5317328.7	349.3	337	289.5	-46.5
DG-17-53	2017	668086	5313422.2	348.5	111	300	-45
DG-17-54	2017	668086	5313422.2	348.5	139	293	-60
DG-17-55	2017	668062.4	5313504.5	337.4	127	293	-50
DG-17-56	2017	668062.4	5313504.5	337.4	154	303	-70
DG-17-57	2017	668157	5313379	342.2	81.7	268	-55
DG-17-58	2017	668157	5313379	342.2	87.1	289	-62
DG-17-59	2017	668133	5313452	347	31	304	-77
DG-17-59A	2017	668133	5313452	347	116.3	303	-75
DG-17-60	2017	668027.3	5313530.3	344.4	106	303	-45
DG-17-61	2017	668027.3	5313530.3	344.4	157	327	-63
DG-17-62	2017	668287	5313455	338.4	109	19.6	-50
DG-17-63	2017	668178.9	5313268.8	331.9	100	298	-51
DG-17-64	2017	668221.2	5313186.3	327.4	100	270.5	-50
DG-17-65	2017	668173.8	5313370.2	342.7	151	290.1	-55.1
DG-17-66	2017	668455	5313548	346.2	82	45	-50
PH-17-67	2017	668812.7	5314625.6	339.1	120	15	-60
SM-17-68	2017	668948	5315534	345.1	199	340	-45
PH-17-69	2017	668615.6	5314543.8	338.9	147.5	300.4	-54.6
PH-17-70	2017	668727.6	5314638.5	341.2	121	358	-54
PH-17-71	2017	668559	5314640	343.9	187	125	-75
PH-17-72	2017	669077.2	5314579.1	348.1	256	289.8	-60.2
SD-17-73	2017	668212.2	5315440.5	348.3	121	291.3	-57.8
SD-17-74	2017	668229.4	5315453.4	352.3	190	199.9	-44.9
SD-17-75	2017	668230.1	5315454.6	352.3	127	237	-69
SD-17-76	2017	668229	5315455.5	352.4	157	185	-69
SD-17-77	2017	668148.8	5315477.1	348.6	31	302.1	-52.2
SD-17-77A	2017	668148.8	5315477.1	348.6	451	304.1	-51.8
SD-17-78	2017	668148.9	5315473.9	348.3	94	225	-45
SD-17-79	2017	668152.1	5315474.3	348	100	170	-45
SD-17-80	2017	668174.3	5315512.3	346.4	415	300	-45
SD-17-81	2017	668172.9	5315509.7	346.1	103	70	-75
SD-17-82	2017	668172.5	5315511.9	346	154	150	-65
SD-17-83	2017	668200.9	5315641.8	352.5	373	285	-45
SD-17-84	2017	668258.4	5316943.8	363.3	418.5	270.9	-50.9
SD-17-85	2017	668309.4	5315466.3	346.6	172	250.4	-60
SD-17-86	2017	668309.4	5315466.4	346.6	184	215.4	-55.1
SD-17-87	2017	668491.1	5317385	389	354	278.5	-55.1
SD-17-88	2017	668302.2	5315276.9	354.1	139	306.8	-45.1
SD-17-89	2017	668309.2	5315467	346.5	202	195.4	-65
SD-17-90	2017	668309.2	5315466.9	346.5	196	193	-50
SD-17-91	2017	668491.6	5317382.9	388.8	264	240.1	-60.1
SD-17-92	2017	668311.8	5315461.7	346.1	181	315	-45
SD-17-93	2017	668493	5317384.1	388.8	39	191.8	-75
SD-17-93A	2017	668493	5317384.1	388.8	240	191.8	-75
SD-17-94	2017	668463.3	5315371.1	350.8	241	267	-45.8
SD-17-95	2017	668456.6	5317214.5	389.7	249	293.3	-48.1

Hole ID	Year Drilled	X	Y	Z	Depth (m)	Az	Dip
SD-17-96	2017	668464.2	5315371.2	350.9	262	268.4	-67
SD-17-97	2017	668457	5317214.4	389.7	297	315	-55.2
SD-17-98	2017	668456.2	5317214	389.7	261	249.7	-79.2
SD-17-99	2017	668466.1	5315371	351.1	238	252	-51
SD-17-100	2017	668461.8	5317131.6	387.9	255	275	-45
SD-17-101	2017	668466.1	5315371	351.1	286	243	-62
SD-17-102	2017	668461.8	5317131.6	387.9	273	320	-45
SD-17-103A	2017	668465.2	5315368.9	350.8	250	282	-51.9
SD-17-104	2017	668461.8	5317131.6	387.9	270	315.1	-66.5
SD-17-105	2017	668302.2	5315277.5	354.2	142	320.2	-61.9
SD-17-106	2017	668302.9	5315276.3	354	193	120.1	-68.8
SD-17-107	2017	668461.8	5317131.4	387.9	258	295	-55
SD-17-108	2017	668300.3	5315277	354	148	324.6	-46.7
SD-17-109	2017	668461.8	5317131.6	387.9	252	274.8	-77.8
SD-17-110A	2017	668301.8	5315278.3	354	159	354.6	-71.7
SD-17-111	2017	668303.1	5315277.7	353.9	81	20.1	-44.8
SD-17-112	2017	668303	5315278.8	354	144	42.1	-62.1
SD-17-113	2017	668461.8	5317131.6	387.9	267	340	-77
SD-17-114	2017	668303.1	5315277.5	353.9	164	59.9	-77.1
SD-17-115	2017	668303.8	5315273.5	354	160	115.4	-82
SD-17-116	2017	668461.8	5317131.6	387.9	285	359.7	-66.9
SD-17-117	2017	668303.6	5315272.3	354.1	190	147	-57
SD-17-118	2017	668461.8	5317131.6	387.9	279	199.6	-70.4
SD-17-119	2017	668301.3	5315275.3	353.9	112	245	-78
SD-17-120	2017	668302.2	5315277.1	354.1	115	285	-45
SD-17-121	2017	668425.6	5315287.1	362.5	217	205	-66
SD-17-122	2017	668461.8	5317131.6	387.9	267	210.3	-57.3
SD-17-123	2017	668423.4	5315288.9	362.5	235	239.1	-69
SD-17-124	2017	668528	5317057.8	379.9	285	303.9	-66
SD-17-125	2017	668423.2	5315289.3	362.4	262	266	-78
SD-17-126	2017	668424.3	5315289.8	362.5	211	272	-67
SD-17-127	2017	668528	5317057.8	379.9	303	358	-67
SD-17-128	2017	668424.6	5315289.7	362.5	223	288.2	-50.4
SD-17-129	2017	668426.3	5315290.6	362.5	292	324.7	-57.1
SD-17-130	2017	668530.3	5317060.8	380	306	242	-57.1
SD-17-131	2017	668426.4	5315290.2	362.5	277	325	-78
SD-17-132	2017	668425.8	5315288.4	362.6	106	10	-50
SD-17-133	2017	668425.6	5315288.6	362.5	160	50	-45
SD-17-134	2017	668531.9	5317051.7	379.7	312	41.1	-76.2
SD-17-135	2017	668425.3	5315290	362.5	313	339.4	-63
SD-17-136	2017	668425.5	5315289.8	362.3	313	348	-72
SD-17-137	2017	668530.3	5317060.8	364.3	348	125.6	-75.9
SD-17-138	2017	668424.7	5315289.4	364.5	340	355	-66
SD-17-139	2017	668390.9	5316832	373.6	286.4	3.9	-68.1
SD-17-140	2017	668426.5	5315289.2	362.5	298	8.8	-82.2
SD-17-141	2017	668428.2	5315288.6	362.7	301	100.5	-84.2
SD-17-142	2017	668390.9	5316831.9	373.6	399	4.1	-80.1
SD-17-143	2017	668425.5	5315289.1	362.4	253	267.6	-88
SD-17-144A	2017	668425.8	5315290.1	362.5	235	308.3	-62

Hole ID	Year Drilled	X	Y	Z	Depth (m)	Az	Dip
SD-17-145	2017	668425.5	5315287.3	362.5	226	204	-80
SD-17-146	2017	668390.7	5316832.1	373.7	319	6	-57
SD-17-147	2017	667975.4	5315166.7	347.8	145	307.8	-47
SD-17-148	2017	667973.2	5315164	347.8	127	220	-46
SD-17-149	2017	667973	5315165.9	347.7	124	270	-65
SD-17-150	2017	668390.7	5316831.8	373.7	310	132.3	-70.8
SD-17-151	2017	668413.1	5315206.1	362	226	280	-73.9
SD-17-152	2017	668411.9	5315207.2	362.4	163	262	-45
SD-17-153	2017	668390.1	5316833.9	373.8	385	139.9	-64.8
SD-17-154	2017	668413	5315209.1	362.5	34	245	-62
SD-17-154A	2017	668413	5315209.1	362.5	178.2	245	-62
SD-17-155	2017	668390.7	5316831.8	373.7	309	73	-73
SD-17-156	2017	668408.3	5315211.8	362.4	141	227.3	-45
SD-17-157	2017	668390.7	5316834.7	373.8	370	193.9	-50
SD-17-158	2017	668408.3	5315211.8	362.4	190	199.9	-78.3
SD-17-159	2017	668408.3	5315211.8	362.4	223	205	-56
SD-17-160	2017	668390.7	5316834.7	373.8	387	311.1	-74.1
SD-17-161	2017	668409.9	5315212	363.8	256	187	-47
SD-17-162	2017	668408.9	5315197.6	360.2	225.3	158.8	-49.1
SD-17-163	2017	668268.8	5316742.2	364.2	247	173.1	-61.7
SD-17-164	2017	668411.1	5315212.9	364.2	241	131.8	-70
SD-17-165	2017	668269.8	5316766.5	354.6	199	122.2	-62
SD-17-166	2017	668408.9	5315196.6	360.2	229	179	-63.2
SD-17-167	2017	668269.6	5316767.9	353.5	505	305	-54
SD-17-168	2017	668411	5315213	362.6	127	166.1	-56.3
SD-17-169	2017	668409	5315197	360.2	205	324.8	-76.1
SD-17-170	2017	668084.2	5316426.3	353.1	271	60	-50.9
SD-17-171	2017	668413	5315218.2	363.3	229	325	-63
SD-17-172	2017	668084.2	5316426.3	353.5	214	130.1	-66.1
SD-17-173	2017	668084.2	5316426.3	353.5	472	305	-53.8
SD-17-174	2017	668412.2	5315217.1	363.1	250	142	-79
SD-17-175	2017	668413.1	5315218.2	362.6	268	150	-58.8
SD-17-176	2017	668084.2	5316426.3	353.5	223	205	-45.1
SD-18-177	2018	668413	5315218	363.3	220	168	-55
SD-18-178	2018	667965.6	5316498.4	354	478	305	-59
SD-18-179	2018	668413	5315218	363.3	232	164	-69
RV-18-180	2018	668754.1	5318517.6	319.5	138	160.2	-45.1
SD-18-181	2018	668409.9	5315212	363.8	31	50	-84
SD-18-181A	2018	668409.9	5315212	363.8	220	50	-84
RV-18-182	2018	668721	5318476.9	314.2	259.2	304.7	-50.1
SD-18-183	2018	668410.3	5315210.4	363.9	271	41	-78
SD-18-184	2018	668410.3	5315210.4	363.9	313	95	-77
RV-18-185	2018	668717	5318478	314.3	69	159.6	-44.9
SD-18-186	2018	668007.8	5316884.8	351	114	179.9	-69.8
SD-18-187	2018	668424.6	5315400.1	349	246	284.9	-45.1
SD-18-188	2018	668427	5315400	348.5	250	292	-55
SD-18-189	2018	668424.6	5315400.1	349	256	300.1	-45
PH-18-190	2018	668799.2	5314220.6	359.8	505	6.1	-69
SD-18-191	2018	668425.5	5315399.7	349.1	250	299.6	-65

Hole ID	Year Drilled	X	Y	Z	Depth (m)	Az	Dip
SD-18-192	2018	668425	5315400.4	348.9	295	323	-51
SD-18-193	2018	668605.1	5315078	368.5	277	298	-61
SD-18-194	2018	668605.1	5315078	368.5	289	300.4	-70
SD-18-195	2018	668232	5315463	353	157	172	-53
SD-18-196	2018	668230.8	5315461.6	351.3	115	222	-45
SD-18-197	2018	668608.6	5315078.7	367.7	355	282.1	-84.9
SD-18-198	2018	668231.2	5315463.8	351.4	157	293	-58
SD-18-199	2018	668232	5315463.4	351.4	154	353.7	-80.2
SD-18-200	2018	668234.1	5315463.5	351.5	226	35	-65
SD-18-201	2018	668225.4	5315451.5	352.2	140	180	-45.8
SD-18-202	2018	668608	5315079	368.4	268	250.8	-64.6
SD-18-203	2018	668606.4	5315079.9	367.9	295	257	-45
SD-18-204	2018	668606.9	5315078.2	367.9	256	264	-56
SD-18-205	2018	668609.1	5315079	367.6	328	324	-62
SD-18-206	2018	668607.8	5315077.9	368.4	340	316	-76
SD-18-207	2018	668609	5315078.6	368.4	304	312	-59
SD-18-208	2018	668430.4	5314966.1	365.6	223	247	-75
SD-18-209	2018	668429.2	5314965.5	364.6	205	247	-45
SD-18-210	2018	668485.3	5314893.5	369.9	196	244	-54
SD-18-211	2018	668485	5314892.8	369.8	223	191.2	-54.1
SD-18-212	2018	668487.8	5314892.1	369.6	313	165	-45.3
SD-18-213	2018	668712.6	5314805.8	345.9	289	219.9	-45.3
SD-18-214	2018	668713.2	5314806.5	346	289	231.2	-55.8
SD-18-215	2018	668712.8	5314806.7	345.9	286	249.9	-50.9
SD-18-216	2018	668601.8	5315073	368.2	331	331.7	-72.2
SD-18-217	2018	668601.3	5315073	368.2	331	322.3	-66.1
SD-18-218	2018	668601.1	5315073.2	368.3	352	322.2	-53.1
SD-18-219	2018	668602.6	5315072.9	368.2	277	285.8	-76.7
SD-18-220	2018	668602.7	5315073.1	368.2	274	290.5	-68.4
SD-18-221	2018	668602.6	5315073.3	368.2	262	279.3	-61.3
SD-18-222	2018	668602.7	5315074.9	368.2	325	179.4	-81.1
SD-18-223	2018	668602.2	5315075.2	368.2	349	226.1	-46.3
SD-18-224	2018	668602.9	5315075.4	368.2	259	210	-65.8
SD-18-225	2018	668698.4	5315042.5	344	337	276.2	-81.9
SD-18-226	2018	668698.2	5315043.4	344	319	206	-72
SD-18-227	2018	668697.9	5315043.2	343.9	277	219	-54.2
SD-18-228	2018	668491.8	5316349.2	379.5	328	308	-50
SD-18-229	2018	668492.4	5316348.8	379.5	313	313.9	-63.1
SD-18-230	2018	668492.6	5316348.5	379.6	316	314.1	-74.3
SD-18-231	2018	668492	5316349.2	379.4	352	327	-46.1
SD-18-232	2018	668493	5316349.1	379.6	364	339	-50
SD-18-233	2018	668493.2	5316348.9	379.5	343	341	-58
SD-18-234	2018	668494.2	5316351.5	379.8	319	272.1	-63.6
SD-18-235	2018	668494	5316351.3	379.9	346	248.1	-60
SD-18-236	2018	668493.7	5316350.6	379.6	376	233.9	-51.8
SD-18-237	2018	668523.5	5316747.2	393.5	343	249	-64.7
SD-18-238	2018	668386.9	5316834.9	373.8	313	232.8	-63.2
SD-18-239	2018	668453.3	5317011.2	369.2	289	256.7	-51.2
SD-18-240	2018	668153	5316251	381.7	232	339.7	-62.9

Hole ID	Year Drilled	X	Y	Z	Depth (m)	Az	Dip
SD-18-241	2018	668153	5316251	381.7	214	343.9	-78.1
SD-18-242	2018	668153	5316251	381.7	226	353	-56.1
SD-18-243A	2018	668153	5316251	381.7	265	175.1	-72
SD-18-244	2018	668153	5316251	381.7	220	214.3	-65.9
SD-18-245	2018	668078	5316293.2	380.6	136	260.2	-56.5
SD-18-246	2018	668077.4	5316292.8	380.9	154	218.3	-49.1
SD-18-247	2018	668169.3	5315847.9	351.2	325	226.8	-78.2
SD-18-248	2018	668077.6	5316294.8	380.8	160	19.9	-73.8
SD-18-249	2018	668111.7	5316044.5	376.3	250	358.7	-64
SD-18-250	2018	668331	5315818	362.8	409	289	-78
SD-18-251	2018	668110.5	5316045	376.8	232	323.2	-61
SD-18-252	2018	668110.2	5316044.4	376.6	238	306	-75.9
SD-18-253	2018	668326.5	5315819.5	361.6	449	357.9	-59.1
SD-18-254	2018	668109.9	5316045.1	376.7	211	279.3	-52.8
SD-18-255	2018	668112.1	5316046.3	376.6	214	248.8	-49.1
SD-18-256	2018	668371	5315922.9	357.7	367	334.9	-52.8
SD-18-257	2018	667984.9	5315988	376.2	181	202.9	-66.2
SD-18-258	2018	668170.3	5315846.2	351.4	307	313.2	-77.1
SD-18-259	2018	668371	5315922.9	357.7	364	357	-67.2
SD-18-260	2018	668389.8	5315728.9	375.5	460	315	-72.1
SD-18-261	2018	668371	5315922.9	357.7	397	344	-59.9
SD-18-262	2018	668371	5315922.9	357.7	403	5	-62.2
SD-18-263	2018	668359.6	5316062	364.9	397	239.9	-51
SD-18-264	2018	668245	5316785.9	354.4	472	291.9	-55.2
CG-19-265	2019	669612.2	5317944	361.9	79	279.8	-45
CG-19-266	2019	669665.2	5317938	360.5	79	270	-44.9
CG-19-267	2019	669665.7	5317937.7	360.5	88	100	-65
CG-19-268	2019	669665.5	5317938	360.4	121	4.9	-54.2
CG-19-269	2019	669730.4	5317912.1	357.9	82	326.2	-56
CG-19-270	2019	669731.5	5317912.6	357.9	76	200.3	-55.1
CG-19-271	2019	669731.5	5317912.6	357.9	166	15.2	-52.7
CG-19-272	2019	669886.4	5317816	358.8	76	199.8	-45
CG-19-273	2019	669886.4	5317816	358.8	82	306	-44.8
CG-19-274	2019	669584.9	5318082.1	376.2	136	165	-45.2
CG-19-275	2019	669310	5318067	373.6	79	272.1	-45.1
SD-19-276	2019	667932.8	5316529	354.7	376	303.9	-58.2
SD-19-277	2019	667907	5316631	357.3	403	305	-57
SD-19-278	2019	667972	5316140.1	370.8	199	345	-45.1
SD-19-279	2019	667972	5316140.1	370.8	172	169.8	-80.3
SD-19-280	2019	667972	5316140.1	370.8	190	280	-45.3
SD-19-281	2019	668506	5316208.1	376.6	415	346	-69.1
SD-19-282	2019	668506	5316208.1	376.6	454	244.3	-81.2
SD-19-283	2019	668638	5316118.2	376.9	502	305	-76.1
SD-19-284	2019	668751.6	5316047.9	369.9	574	301	-70.2
SD-20-285	2020	668347.1	5315505.1	350.6	25	309	-68.1
SD-20-285A	2020	668347.1	5315505.1	350.6	526.2	308.9	-68.1
SD-20-286	2020	668423.8	5315483.7	348.3	601	282.1	-75
SD-20-287	2020	668429	5315608	363.8	511	309	-62
SD-20-288	2020	668429	5315608	363.8	529	336.3	-63

Hole ID	Year Drilled	X	Y	Z	Depth (m)	Az	Dip
SD-20-289	2020	668421	5315482	347.8	652	275	-77.9
SD-20-290	2020	668421	5315482	347.8	577	311.6	-65.1
SD-20-291	2020	668421	5315482	347.8	664	311.9	-77.7
SD-20-292	2020	668421	5315482	347.8	600	328	-72
SD-20-293	2020	668421	5315482	347.8	637	314.9	-82

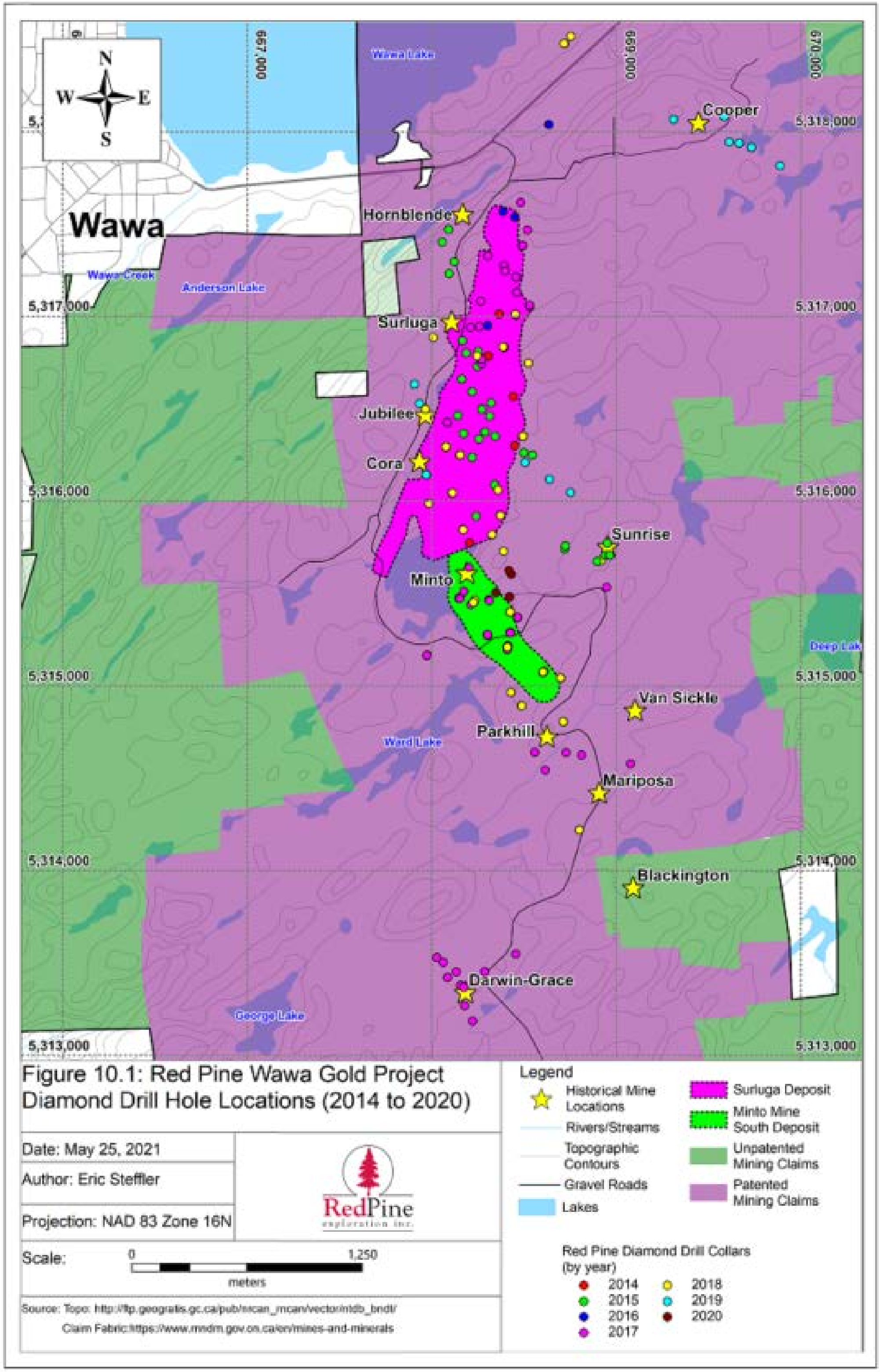


Figure 10-1: Diamond Drill Hole Collar Location 2014 to 2018

Figure 10-2: Drill Collar Location for SD-18-216 through SD-18-221

10.1.2 Down-Hole Survey

A down-hole survey was completed on all holes during the 2014 to 2020 drill programs 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 m below the bottom of the drill casing and every 30 m 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 Norex Drilling and Rouillier Drilling at the drill.

The down-hole survey was an important aspect to drilling, as the drill holes typically flatten and bend to the right. This effectively decreases the dip and increases the azimuth. With underground workings in the area, it was integral to ensure that not only the location of the collar was correct, but also to effectively track the path of the drill holes as they progressed to target depth.

10.1.3 Core Recovery

Core recovery was important to each drilling program as core orientation procedures were a strategic part of the exploration program. The core was pieced together by a Red Pine geologist or Red Pine core technician to obtain a continuous run. Therefore, any missing core can be problematic. Discussions with the drilling team were routine to ensure all efforts were made to achieve the highest possible core recovery rates. As such, a high level of core recovery (>95%) was achieved throughout the drilling programs.

10.1.4 Core Handling Procedure

The core was boxed at the drill and labelled with the drill hole ID and box number. Metre 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, ATV or snowmobile from the drill to the core logging facility (the core shack). For the 2014 drilling program, these steps were completed at the drill by Norex Drilling personnel and the 2015 to 2020 drilling programs were completed at the drill by Rouillier Drilling personnel. The core shack is located on the property, near the town of Wawa, no more than 3 km from any of the drill hole locations. After arrival at the core shack, the core boxes were opened and, in the winter, moved inside to defrost prior to 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.

10.2 Geotechnical Core Processing

Prior to the beginning of the geological logging, core pieces were properly fitted, an orientation line was drawn, and metre marks were promptly labelled 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 Red Pine geologist.

10.2.1 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 validated (QA/QC) with the use of 3D software (Leapfrog, Target) and known structural orientation of intended target. All structure data was processed by Red Pine and used for modelling and targeting.

10.2.2 SWIR

Short Wave Infrared Reflectance (SWIR) data was systematically acquired on every metre of core. The data was acquired using a TerraSpec 4 Hi-Res Mineral Spectrometer designed by PANalytical (Figure 10-3). At the beginning of every data acquisition period, the spectrometer was allowed a 30-minute period of warming up to stabilize the signal. To obtain reflectance values that were comparable between drill holes, a Spectralon® certified reflectance standard was used during data acquisition. To correct for drifting and changing light conditions, a standard measurement was taken every 10 to 15 minutes. The spectrometer conditions were optimized at the beginning of each period of measurement, and every two hours during data acquisition or whenever there were drastic changes of light conditions.

SWIR data was acquired on a metre-by-metre basis to simplify the acquisition procedures and provide more flexibility in the order in which the core was measured. For each metre, between 4 and 6 equally spaced individual spot measurements were taken along the core. Signal biasing was addressed by avoiding taking measurements in local features (e.g., small veins). The raw spectra which was acquired using the customized software that came with the spectrometer was then processed using The Spectral Geologist (TSGTM) software to get the spectral mineralogy of each spot measurements. Different spectral scalars, specific to white micas, chlorite, carbonate, biotite, and tourmaline, which were the minerals found to be directly related to the metasomatic processes related to the gold mineralizing fluids, were then calculated for each hole being measured.

Figure 10-3: TerraSpec 4 Hi-Res Mineral Spectrometer and Data Acquisition Computer on the Rolling Table Used to Acquire SWIR Data on Historical Core

Using a proprietary script developed for the R software (R Project for Statistical Computing - https://www.r-project.org/), the data for each metre was consolidated to one point for each set of minerals. This consolidation was based on the minerals identified by TSGTM. For each of the identified minerals in a metre, the specific spectral scalars for each data point were averaged for the entire row. The script then assigned a 'from – to' for each point and created graphics to portray the down-hole variations of spectral scalars of interest known to be spatially related to gold zones. These graphs and the detection of certain minerals help to ensure that even zones with cryptic gold indicators were sampled and the three-dimensional integration of the data was used to map the maturity of the shear zone at the edges for future exploration.

10.3 Core Logging and Analyses

10.3.1 Core Logging

The core was visually inspected and logged based on the geologist's descriptions and from 2014 to the spring of 2017, recorded in Gemslogger software, an extension of Microsoft access. In the spring of 2017, Red Pine switched logging software and started using MXDeposit (Geosoft). Through this conversion, new lithology tables and abbreviations were created, which are included with the complete logs in the drill hole database. The incorporation of 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, grain size, pervasive alteration and contacts definition. 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, Red Pine's gold zones, and mineral abundances included.

Alteration and rock type identification were systematically supported by the SWIR analyses and by spot measurements using a portable XRF. The portable XRF units used by the company are programmed with predefined element ratios that characterize favourability for gold (white mica intensity ratio derived from internal work) and the nature of the host rocks (Zr/TiO_2).

10.3.2 Core Sampling

Core sampling intervals were based on favourable visual indicators known to be associated with gold mineralization and the presence of favourable alterations detected by the SWIR and portable XRF analyzers. For the Project, the key visual indicators of gold mineralization, based on Red Pine's experience on the Project, are shearing, pervasively disseminated sulphides in the core (mostly pyrite), quartz veining, pervasive white mica alteration, contact zones between two units with indications of shearing and fluid circulation, and pervasive chloritization with iron carbonate alteration in mafic units. Each sampled interval of 0.5 m to 1.5 m was described in an Excel™ spreadsheet and later updated with the applicable assay results.

Upon completion of logging, samples tags are inserted in 0.5-m to 1.5-m intervals and at lithological contacts within the zone of mineralization. Sample tags are placed and stapled into the core boxes at the end of each sample. Once sample locations were determined, the core was cut in half and 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 5 to 6 and placed in durable rice bags for transport.

10.3.3 Magnetic Susceptibility

A Terraplus KT-10 magnetic susceptibility meter was used to provide quantitative data of the magnetism of the rock at each metre 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 that are themselves demagnetized. The magnetic susceptibility readings are downloaded and recorded in an Excel™ spreadsheet for each drill hole.

10.3.4 Density Measurements

Specific gravity (SG) measurements were collected on all drill holes based on representative 10 cm intervals selected by a Red Pine geologist. One or two pieces of core were selected per major lithological unit and marked for measurement by the geologist or core technician and recorded in an Excel™ spreadsheet for each drill hole. The SG was determined by weighing a piece of core in air and in water and calculating SG using formula:

$$SG = \frac{Sample\ Weight\ in\ Air}{Sample\ Weight\ in\ Air - Sample\ Weight\ in\ Water}$$

10.3.5 Core Photography

Digital photographs were taken of all core drilled on the 2014 to 2020 drilling programs. When all steps of the core logging procedure are completed and the sample tags are inserted, digital photos of each core box are taken individually and recorded in the database. A chalk board with the Hole ID, box number and meterage contained in the box is utilized for labelling purposes. If sample tag IDs are visible on the camera then photos are deemed to be in focus and complete.

10.3.6 Core Sampling QA/QC Protocol

As part of the QA/QC protocols, a CRM standard is regularly inserted into the sampling order with a standard every 20 samples and blank every 25 samples. The standards used were Ore Research & Exploration Pty Ltd (OREAS) 205, 209, 210, 12a, 216, 218, 226, 229, 229B, and 235. These were routinely inserted into sample tag books prior to sampling to ensure appropriate spacing and regular insertion. The blanks were 200 g Bell & Mackenzie White Lightning® 2040) and are also pre-recorded in tag books. Short descriptions of the CRM and blanks are provided in Item 11.0.

10.4 Assay Results

A summary of assay results (>2.7 g/t Au) from the 2014 to 2020 drilling programs is presented in Table 10-4. Assay highlights listed in Table 10-2 are highlighted in grey and italics. True widths have been calculated, when necessary, information is available based on orientation of the gold zone.

Table 10-4: Summary of Assay Results (> 2.7 g/t Au) and Gold Zone intersected from 2014 to 2020 Drilling Programs

Hole ID	From (m)	To (m)	Length (m)	Calculated True Width (m)*	Au (g/t)	Gold Zone
SD-14-01	77	78.1	1.1	1.06	4.72	Algoma
SD-14-01	107.07	108.5	1.43	1.37	3.25	Jubilee Shear Zone
SD-14-01	108.5	109.6	1.1	1.06	3.02	Jubilee Shear Zone
SD-14-02	80.5	82.5	2	1.87	3.85	Algoma
SD-14-02	119.5	120.5	1	0.93	8.28	Jubilee Shear Zone
SD-14-02	120.5	121.5	1	0.93	4.35	Jubilee Shear Zone
SD-14-02	121.5	122.42	0.92	0.86	6.06	Jubilee Shear Zone
SD-14-02	125.5	126.5	1	0.93	11.3	Jubilee Shear Zone
SD-14-03	255	256	1	0.9	3.47	Jubilee Shear Zone
SD-14-03	257	258	1	0.9	8.17	Jubilee Shear Zone
SD-14-03	265.1	266.2	1.1	0.99	20.5	Jubilee Shear Zone
SD-14-03	266.53	267.3	0.77	0.69	15	Jubilee Shear Zone
SD-14-03	268.5	269.65	1.15	1.03	13.9	Jubilee Shear Zone
SD-14-03	269.65	270.7	1.05	0.94	14.6	Jubilee Shear Zone
SD-14-04	256.5	257.5	1	0.9	8.24	Jubilee Shear Zone
SD-14-04	260.75	262	1.25	1.12	4.09	Jubilee Shear Zone
SD-14-04	263	264	1	0.9	11.6	Jubilee Shear Zone
SD-14-04	264	265	1	0.9	6.37	Jubilee Shear Zone
SD-14-04	265	266	1	0.9	7.85	Jubilee Shear Zone
SD-14-04	266	267	1	0.9	3.8	Jubilee Shear Zone
SD-14-04	267	267.77	0.77	0.69	11.6	Jubilee Shear Zone
SD-14-04	267.77	268.9	1.13	1.01	6.42	Jubilee Shear Zone
SD-14-04	270	271.12	1.12	1.01	13.1	Jubilee Shear Zone
SD-14-04	271.12	272.37	1.25	1.12	3.72	Jubilee Shear Zone
SD-14-04	273.64	274.6	0.96	0.86	8.87	Jubilee Shear Zone
SD-14-04	*274.6*	*275.6*	*1*	*0.9*	*9.77*	*Jubilee Shear Zone*
SD-14-04	275.6	276.6	1	0.9	11.8	Jubilee Shear Zone
SD-14-04	*276.6*	*277.35*	*0.75*	*0.67*	*104*	*Jubilee Shear Zone*
SD-14-04	281.5	282.5	1	0.9	11.4	Jubilee Shear Zone
SD-14-05	151.2	152.2	1	0.76	3.81	Jubilee Shear Zone
SD-14-05	155	156	1	0.76	5.79	Jubilee Shear Zone
SD-14-05	156	157	1	0.76	10.3	Jubilee Shear Zone
SD-14-05	157	158	1	0.76	11.6	Jubilee Shear Zone
SD-14-05	158	159	1	0.76	22.6	Jubilee Shear Zone
SD-14-05	159	160	1	0.76	18.3	Jubilee Shear Zone
SD-14-05	160	161	1	0.76	23.4	Jubilee Shear Zone
SD-14-06	10.61	12.45	1.84		6.05	Minto C Shear Zone
SD-14-06	301.1	302.2	1.1	0.89	4.85	Jubilee Shear Zone
SD-14-06	302.2	303.3	1.1	0.89	11.9	Jubilee Shear Zone
SD-14-06	303.3	304.4	1.1	0.89	2.82	Jubilee Shear Zone
SD-14-06	*320.46*	*321.5*	*1.04*	*0.84*	*42.3*	*Jubilee Shear Zone*
SD-15-07	66	67	1	0.69	10.7	Minto B Shear Zone
SD-15-07	67	68	1	0.69	16.6	Minto B Shear Zone
SD-15-07	243	244	1	0.69	3.54	Jubilee Shear Zone
SD-15-07	246	247	1	0.69	2.75	Jubilee Shear Zone
SD-15-07	247	248	1	0.69	9.25	Jubilee Shear Zone
SD-15-08	328.35	329.35	1	0.95	11.5	Jubilee Shear Zone
SD-15-10	228.39	229.4	1.01	0.9	16.2	Jubilee Shear Zone

Hole ID	From (m)	To (m)	Length (m)	Calculated True Width (m)*	Au (g/t)	Gold Zone
SD-15-11	*195.5*	*196.5*	*1*		*53.2*	*Tension Vein*
SD-15-11	*216*	*217*	*1*		*51.7*	*Tension Vein*
SD-15-12	151.1	152.1	1	0.96	5	Jubilee Shear Zone
SD-15-13	172.35	173.7	1.35	1.29	2.81	Jubilee Shear Zone
SD-15-14	254.11	255	0.89	0.84	8.49	Jubilee Shear Zone
SD-15-14	268.8	269.8	1	0.95	9.99	Jubilee Shear Zone
SD-15-14	272.2	273	0.8	0.76	2.71	Jubilee Shear Zone
SD-15-14	273	273.18	0.18	0.17	5	Jubilee Shear Zone
SD-15-14	282	283	1	0.95	11.2	Jubilee Shear Zone
SD-15-17	141.9	143.48	1.58		2.73	Replacement Zone
SD-15-19	74.48	75.5	1.02	0.96	4.95	Jubilee Shear Zone
SD-15-19	75.5	76.5	1	0.94	4.8	Jubilee Shear Zone
SD-15-19	84.6	85.6	1	0.94	5.11	Jubilee Shear Zone
SD-15-22	56.04	57	0.96	0.92	5.67	Jubilee Shear Zone
SD-15-22	72	73	1	0.96	3.21	Jubilee Shear Zone
SD-15-23	30.6	31.6	1	0.95	3.86	Jubilee Shear Zone
SD-15-24	161	162	1		2.88	Replacement Zone
SD-15-25	198.75	199.75	1	0.81	4.46	Jubilee Shear Zone
SD-15-25	201.75	202.75	1	0.81	3.42	Jubilee Shear Zone
SD-15-25	202.75	203.75	1	0.81	3.49	Jubilee Shear Zone
SD-15-25	204.75	205.75	1	0.81	3.96	Jubilee Shear Zone
SD-15-26	275	276	1	0.94	3.24	Jubilee Shear Zone
SD-15-26	277	278	1	0.94	4.53	Jubilee Shear Zone
SD-15-26	280	281	1	0.94	2.8	Jubilee Shear Zone
SD-15-26	281	282	1	0.94	3.16	Jubilee Shear Zone
SD-15-26	283.03	284	0.97	0.91	3.39	Jubilee Shear Zone
SD-15-26	285.11	286.1	0.99	0.93	4.01	Jubilee Shear Zone
SD-15-26	286.1	287.1	1	0.94	8.49	Jubilee Shear Zone
SD-15-26	287.1	288.1	1	0.94	17.89	Jubilee Shear Zone
SD-15-26	290	291.1	1.1	1.04	4.78	Jubilee Shear Zone
SD-15-26	291.1	292	0.9	0.85	4.07	Jubilee Shear Zone
SD-15-26	292	292.97	0.97	0.91	2.99	Jubilee Shear Zone
SD-15-26	293.85	294.85	1	0.94	4.53	Jubilee Shear Zone
SD-15-26	298.13	299.13	1	0.94	11.2	Jubilee Shear Zone
HS-15-27	26	27.4	1.4	1.23	9.7	Hornblende Shear Zone
HS-15-27	28.4	29.73	1.33	1.17	3.23	Hornblende Shear Zone
HS-15-27	31	32.1	1.1	0.97	3.28	Hornblende Shear Zone
HS-15-28	27	27.82	0.82	0.73	2.84	Hornblende Shear Zone
HS-15-28	29.5	30.5	1	0.89	5.77	Hornblende Shear Zone
HS-15-29	148	149	1	0.87	3.1	Hornblende Shear Zone
HS-15-30	1.5	2.5	1		3.77	William Gold Zone
HS-15-30	10	11.4	1.4		3.82	William Gold Zone
HS-15-30	12.84	14	1.16		5.39	William Gold Zone
HS-15-30	155.97	157.52	1.55	1.35	3.21	Hornblende Shear Zone
HS-15-31	63	64	1	0.98	2.72	Jubilee Shear Zone
HS-15-31	65	66	1	0.98	3.06	Jubilee Shear Zone
HS-15-31	72	73	1	0.98	23.5	Jubilee Shear Zone
HS-15-31	75	76	1	0.98	5.59	Jubilee Shear Zone
HS-15-31	76	77	1	0.98	3.91	Jubilee Shear Zone
HS-15-31	77	78	1	0.98	15.4	Jubilee Shear Zone

Hole ID	From (m)	To (m)	Length (m)	Calculated True Width (m)*	Au (g/t)	Gold Zone
HS-15-31	80	81	1	0.98	3.45	Jubilee Shear Zone
HS-15-31	350.5	351.5	1	0.98	30.21	Hornblende Shear Zone
HS-15-31	352.5	353.4	0.9	0.88	13.93	Hornblende Shear Zone
SM-15-32	21.4	22	0.6		6.65	Mickelson Shear Zone
SM-15-35	41	41.75	0.75		28.6	Mickelson Shear Zone
SD-16-40	93	94	1	0.98	6.88	Jubilee Shear Zone
SD-16-40	141.1	142.1	1	0.98	33.08	Jubilee Shear Zone
SD-16-41	161.33	162.09	0.76	0.76	13.46	Jubilee Shear Zone
SD-16-43	48.65	49.5	0.85	0.84	4.35	
SD-16-43	50.1	51.03	0.93	0.92	7.56	
SD-16-44	24.57	25.3	0.73		11.61	Tension Vein
SD-16-44	37.8	38.8	1		7.07	Tension Vein
SD-16-44	41.43	42.25	0.82		10.7	Tension Vein
SD-16-44	49.82	50.82	1		15.83	Tension Vein
SD-16-45	*147.27*	*148.27*	*1*	*0.99*	*44.41*	*Jubilee Shear Zone*
SD-16-45	*155.36*	*156.14*	*0.78*	*0.77*	*176*	*Jubilee Shear Zone*
SD-16-45	*159.74*	*160.43*	*0.69*	*0.68*	*36.8*	*Jubilee Shear Zone*
SD-16-45	160.43	161.49	1.06	1.05	9.27	Jubilee Shear Zone
SD-16-45	161.49	162.5	1.01	1	2.75	Jubilee Shear Zone
SD-16-45	257.25	258	0.75	0.74	11.56	Jubilee Shear Zone
SD-16-45	258	258.71	0.71	0.7	6.35	Jubilee Shear Zone
SD-16-45	258.71	259.3	0.59	0.58	7.85	Jubilee Shear Zone
SD-16-45	259.3	259.85	0.55	0.54	3.78	Jubilee Shear Zone
SD-17-46	73	74	1	0.99	3.55	Jubilee Shear Zone
SD-17-46	164.5	165.37	0.87	0.86	10.7	Jubilee Shear Zone
SD-17-47	88.81	89.93	1.12	1.11	3.45	Jubilee Shear Zone
SD-17-49	169.37	170.58	1.21	1.01	4.21	Jubilee Shear Zone
SD-17-50	96.6	97.6	1	0.98	11.8	Jubilee Shear Zone
SD-17-50	101.75	102.52	0.77	0.76	4.95	Jubilee Shear Zone
SD-17-50	123.72	124.6	0.88	0.86	5.15	Jubilee Shear Zone
SD-17-50	213.38	214.38	1		7.46	Replacement Zone
SD-17-51	61.1	62.1	1	0.99	3.63	Jubilee Shear Zone
SD-17-51	328	328.8	0.8	0.79	12.7	Hornblende Shear Zone
SD-17-52	8	8.74	0.74	0.73	9.81	Jubilee Shear Zone
SD-17-52	24	25	1	0.99	7.49	Jubilee Shear Zone
SD-17-52	210.24	210.97	0.73	0.72	11	Hornblende Shear Zone
DG-17-54	46.88	48	1.12		3.64	Grace Shear Zone
DG-17-54	*48*	*48.64*	*0.64*		*41.75*	Grace Shear Zone
DG-17-54	*48.64*	*49.49*	*0.85*		*61.94*	*Grace Shear Zone*
DG-17-54	*49.49*	*50.28*	*0.79*		*20.36*	Grace Shear Zone
DG-17-55	*51.75*	*52.41*	*0.66*		*3.1*	Grace Shear Zone
DG-17-55	*52.41*	*53.15*	*0.74*		*29.55*	Grace Shear Zone
DG-17-55	*53.15*	*53.69*	*0.54*		*107.49*	*Grace Shear Zone*
DG-17-55	*53.69*	*54.19*	*0.5*		*42.11*	Grace Shear Zone
DG-17-56	*63.95*	*65.06*	*1.11*		*138*	Grace Shear Zone
DG-17-56	65.06	66	0.94		26.69	Grace Shear Zone
DG-17-56	67.78	68.65	0.87		8.22	Grace Shear Zone
DG-17-63	73.74	74.71	0.97		8.26	Grace Shear Zone
DG-17-63	76.77	77.77	1		4.29	Grace Shear Zone

Hole ID	From (m)	To (m)	Length (m)	Calculated True Width (m)*	Au (g/t)	Gold Zone
DG-17-66	15.18	16	0.82		10.1	Nyman Vein
PH-17-70	38.49	40	1.51		6.23	Parkhill Shear Zone
PH-17-71	52.68	53.59	0.91		4.25	Parkhill Shear Zone
PH-17-71	63.32	64	0.68		3.95	Parkhill Shear Zone
PH-17-71	155.07	156	0.93		8.13	Parkhill #4 Shear Zone
SD-17-73	43.28	44.28	1		3.39	Tension Vein
SD-17-73	*90.63*	*91.75*	*1.12*	*0.89*	*39*	*Minto Mine South*
SD-17-73	91.75	92.87	1.12	0.89	14.1	Minto Mine South
SD-17-74	107.61	108.54	0.93	0.83	12	Minto Mine South
SD-17-74	108.54	109.34	0.8	0.71	3.11	Minto Mine South
SD-17-75	103.13	104.13	1	0.89	4.8	Minto Mine South
SD-17-77A	45.96	46.77	0.81	0.57	9.17	Minto Mine South
SD-17-77A	49	49.9	0.9	0.63	2.76	Minto Mine South
SD-17-77A	229.24	230.3	1.06	0.75	4.36	Minto B Shear Zone
SD-17-78	*55.3*	*56.1*	*0.8*	*0.79*	*51*	Minto Mine South
SD-17-79	78.41	79.15	0.74	0.5	14	Minto Mine South
SD-17-79	79.15	79.88	0.73	0.5	3.62	Minto Mine South
SD-17-80	240.89	241.55	0.66	0.54	6.06	Minto B Shear Zone
SD-17-82	119.5	121	1.5		3.44	Shear Zone
SD-17-82	128.5	130	1.5	0.93	2.97	Minto Mine South
SD-17-82	149.25	150	0.75		4.15	Shear Zone
SD-17-83	292.35	293.57	1.22	1.2	4.09	Jubilee Shear Zone
SD-17-84	36	36.63	0.63	0.62	3.22	Jubilee Shear Zone
SD-17-84	67.75	69	1.25	1.22	5.2	Jubilee Shear Zone
SD-17-84	210	211.08	1.08		2.81	Replacement Zone
SD-17-85	54.8	55.82	1.02		4.72	Shear Zone
SD-17-85	151	151.75	0.75	0.71	6.7	Minto Mine South
SD-17-85	151.75	152.3	0.55	0.52	6.3	Minto Mine South
SD-17-86	*152.93*	*153.62*	*0.69*	*0.65*	*47.18*	Minto Mine South
SD-17-86	*153.62*	*154.31*	*0.69*	*0.65*	*24.98*	Minto Mine South
SD-17-87	324.51	325.87	1.36	1.35	3.79	Hornblende Shear Zone
SD-17-88	110	110.87	0.87	0.56	16.9	Minto Mine South
SD-17-89	166.86	167.86	1	0.84	7.58	Minto Mine South
SD-17-89	167.86	168.73	0.87	0.73	9.74	Minto Mine South
SD-17-89	168.73	169.53	0.8	0.67	7.21	Minto Mine South
SD-17-89	169.53	170.33	0.8	0.67	9.82	Minto Mine South
SD-17-90	166.97	168	1.03	0.88	4.44	Minto Mine South
SD-17-90	168	169	1	0.86	26.54	Minto Mine South
SD-17-91	144.25	145	0.75	0.68	6.3	Jubilee Shear Zone
SD-17-92	165.35	166.3	0.95	0.55	8.64	Minto Mine South
SD-17-94	12.5	13.7	1.2		23.4	Minto E
SD-17-94	121	122	1	0.92	5.06	Minto Mine South
SD-17-95	135.4	136.26	0.86	0.85	3.53	Algoma
SD-17-95	179.68	180.67	0.99	0.98	3.28	Jubilee Shear Zone
SD-17-95	186.16	187.33	1.17	1.16	28.8	Jubilee Shear Zone
SD-17-96	4.6	5.6	1		6.58	Minto E
SD-17-97	214.06	215.1	1.04	1.01	3.31	Jubilee Shear Zone
SD-17-97	215.1	216.12	1.02	0.99	10.4	Jubilee Shear Zone
SD-17-97	216.12	217.15	1.03	1	3.21	Jubilee Shear Zone

Hole ID	From (m)	To (m)	Length (m)	Calculated True Width (m)*	Au (g/t)	Gold Zone
SD-17-98	115.14	115.9	0.76	0.67	13.6	Algoma
SD-17-99	3.63	4.4	0.77		7.29	Minto E
SD-17-99	18.14	19.16	1.02		31.2	Minto E
SD-17-99	211.5	212.26	0.76	0.74	5.85	Minto Mine South
SD-17-101	*206.4*	*207.4*	*1*		*34.6*	*Tension Vein*
SD-17-102	124.02	125.1	1.08	1.01	4.31	Algoma
SD-17-102	240.83	241.75	0.92	0.86	11.49	Jubilee Shear Zone
SD-17-103A	234.62	235.62	1	0.85	6.6	Minto Mine South
SD-17-104	172.45	173.45	1	0.96	3.1	Jubilee Shear Zone
SD-17-104	180.5	181.54	1.04	1	3.6	Jubilee Shear Zone
SD-17-104	181.54	182.87	1.33	1.27	4.89	Jubilee Shear Zone
SD-17-104	182.87	183.88	1.01	0.97	3.14	Jubilee Shear Zone
SD-17-104	256.4	257.28	0.88		4.15	Shear Zone
SD-17-104	260.12	261.1	0.98		10.1	Shear Zone
SD-17-105	63.82	64.69	0.87		4.54	Minto E
SD-17-105	92	92.97	0.97	0.61	16.21	Minto Mine South
SD-17-105	94	95	1	0.63	11.07	Minto Mine South
SD-17-105	95	96	1	0.63	2.72	Minto Mine South
SD-17-106	136.62	137.4	0.78	0.39	7.8	Minto Mine South
SD-17-106	137.4	138.35	0.95	0.48	8.34	Minto Mine South
SD-17-106	141.76	142.7	0.94	0.47	10.2	Minto Mine South
SD-17-106	142.7	143.6	0.9	0.45	7.56	Minto Mine South
SD-17-106	143.6	144.48	0.88	0.44	3.56	Minto Mine South
SD-17-107	169.35	170.08	0.73	0.73	3.21	Jubilee Shear Zone
SD-17-107	*197*	*198*	*1*	*1*	*56.79*	*Jubilee Shear Zone*
SD-17-108	133.77	134.38	0.61	0.31	10.5	Minto Mine South
SD-17-108	134.38	135	0.62	0.32	8.49	Minto Mine South
SD-17-109	182.5	183.43	0.93	0.86	6.24	Jubilee Shear Zone
SD-17-109	184.08	184.58	0.5	0.46	17.03	Jubilee Shear Zone
SD-17-109	184.58	185.44	0.86	0.79	19.49	Jubilee Shear Zone
SD-17-110A	96.36	97.12	0.76		3.74	Shear Zone
SD-17-110A	122.08	123	0.92	0.49	4.11	Minto Mine South
SD-17-111	54.88	55.81	0.93		5.53	Minto E
SD-17-113	121.19	121.98	0.79		4.13	Tension Vein
SD-17-113	121.98	122.67	0.69		15	Tension Vein
SD-17-113	224.14	225	0.86		3.38	Jubilee Shear Zone
SD-17-114	134.15	135.02	0.87	0.42	2.9	Minto Mine South
SD-17-114	138.8	139.8	1	0.49	5.06	Minto Mine South
SD-17-115	108.93	109.96	1.03	0.63	12.07	Minto Mine South
SD-17-115	109.96	110.96	1	0.61	16.4	Minto Mine South
SD-17-115	114.9	115.88	0.98	0.6	3.47	Minto Mine South
SD-17-117	126	127	1	0.56	9.27	Minto Mine South
SD-17-117	*127*	*128*	*1*	*0.56*	*40.15*	Minto Mine South
SD-17-117	129	130	1	0.56	5.38	Minto Mine South
SD-17-117	182	183	1		29.9	Tension Vein
SD-17-118	198.08	198.69	0.61	0.47	2.8	Jubilee Shear Zone
SD-17-121	120.96	121.96	1		3.7	Tension Vein
SD-17-121	180	180.85	0.85	0.74	10.9	Minto Mine South
SD-17-123	138.5	139.5	1		3.92	Tension Vein

Hole ID	From (m)	To (m)	Length (m)	Calculated True Width (m)*	Au (g/t)	Gold Zone
SD-17-123	178.36	179.1	0.74	0.66	8.06	Minto Mine South
SD-17-124	218.26	219.12	0.86	0.84	2.97	Jubilee Shear Zone
SD-17-125	219.37	220.66	1.29	0	11.4	Tension Vein
SD-17-126	142.49	143.25	0.76		8.41	Tension Vein
SD-17-126	160	161	1		6.8	Tension Vein
SD-17-126	186.65	187.42	0.77	0.66	28.2	Minto Mine South
SD-17-129	82.25	83	0.75		3.03	Tension Vein
SD-17-130	217.8	218.8	1	0.9	2.98	Jubilee Shear Zone
SD-17-131	*108.3*	*109.32*	*1.02*	*0.67*	*48.41*	*Tension Vein*
SD-17-131	*109.32*	*110.3*	*0.98*		*33.7*	Tension Vein
SD-17-131	*244.21*	*245.3*	*1.09*	*0.72*	*35.1*	*Minto Mine South*
SD-17-135	81.65	82.57	0.92		6.98	Tension Vein
SD-17-139	230.08	230.7	0.62	0.51	5.69	Jubilee Shear Zone
SD-17-140	78	79	1		5.5	Tension Vein
SD-17-140	136	136.94	0.94		4.71	Tension Vein
SD-17-142	189.7	190.5	0.8	0.67	3.41	Jubilee Shear Zone
SD-17-145	193.5	194.5	1		14.7	Tension Vein
SD-17-146	211	211.9	0.9	0.69	3.04	Jubilee Shear Zone
SD-17-150	240.44	241.44	1	0.6	3.93	Jubilee Shear Zone
SD-17-150	252.13	253.2	1.07	0.64	2.99	Jubilee Shear Zone
SD-17-150	255.2	256.2	1	0.6	4.41	Jubilee Shear Zone
SD-17-151	147.06	148	0.94	0.75	8.59	Minto Mine South
SD-17-153	353.8	354.82	1.02	0.54	7.76	Jubilee Shear Zone
SD-17-153	357.38	358.2	0.82	0.44	5.73	Jubilee Shear Zone
SD-17-157	221.6	222.53	0.93	0.55	4.13	Jubilee Shear Zone
SD-17-157	240.7	241.7	1	0.6	5.36	Jubilee Shear Zone
SD-17-157	244.75	245.73	0.98	0.58	3.57	Jubilee Shear Zone
SD-17-158	155.2	155.92	0.72	0.58	7.36	Jubilee Shear Zone
SD-17-159	157	158.5	1.5		3.54	Tension Vein
SD-17-159	168.86	169.7	0.84		3.02	Tension Vein
SD-17-160	182.93	183.8	0.87	0.81	4.31	Jubilee Shear Zone
SD-17-162	177.55	179.05	1.5		3.12	Tension Vein
SD-17-162	203.8	204.5	0.7	0.43	4.17	Minto Mine South
SD-17-162	204.5	205.25	0.75	0.46	3.44	Minto Mine South
SD-17-162	211.35	212.33	0.98	0.6	4.05	Minto Mine South
SD-17-163	56.8	57.8	1		12.8	Tension Vein
SD-17-163	117.28	118	0.72	0.44	5.95	Jubilee Shear Zone
SD-17-163	119.3	120.15	0.85	0.51	10.3	Jubilee Shear Zone
SD-17-163	150.16	151.14	0.98	0.59	4.09	Jubilee Shear Zone
SD-17-163	177	178	1	0.6	2.76	Jubilee Shear Zone
SD-17-164	222.5	223.5	1	0.57	6.12	Minto Mine South
SD-17-164	237.6	238.3	0.7	0.4	3.7	Minto Mine South
SD-17-167	82	82.84	0.84	0.83	7.64	Jubilee Shear Zone
SD-17-167	455.17	455.96	0.79		3	Shear Zone
SD-17-169	187.4	188.4	1	0.66	5.39	Minto Mine South
SD-17-170	89.2	90.25	1.05	0.43	3.24	Jubilee Shear Zone
SD-17-170	92	93	1	0.41	3.89	Jubilee Shear Zone
SD-17-170	96	97	1	0.41	11.4	Jubilee Shear Zone
SD-17-170	111.9	112.73	0.83	0.34	14.8	Jubilee Shear Zone

Hole ID	From (m)	To (m)	Length (m)	Calculated True Width (m)*	Au (g/t)	Gold Zone
SD-17-170	112.73	113.56	0.83	0.34	10.9	Jubilee Shear Zone
SD-17-170	114.75	115.77	1.02	0.42	3.24	Jubilee Shear Zone
SD-17-170	244.95	246.25	1.3		7.77	Tension Vein
SD-17-171	200.38	201.39	1.01	0.61	15.48	Minto Mine South
SD-17-171	201.39	202.3	0.91	0.55	14.26	Minto Mine South
SD-17-172	72.6	73.6	1	0.53	10.7	Jubilee Shear Zone
SD-17-172	75.6	76.6	1	0.53	4.59	Jubilee Shear Zone
SD-17-172	77.6	78.65	1.05	0.55	10.2	Jubilee Shear Zone
SD-17-172	78.65	79.56	0.91	0.48	3.47	Jubilee Shear Zone
SD-17-172	79.56	80.6	1.04	0.55	7.73	Jubilee Shear Zone
SD-17-172	86.52	87.59	1.07	0.56	2.9	Jubilee Shear Zone
SD-17-172	*90.57*	*91.59*	*1.02*	*0.54*	*40.2*	*Jubilee Shear Zone*
SD-17-172	118.83	119.91	1.08	0.57	13.6	Jubilee Shear Zone
SD-17-172	148.53	149.5	0.97	0.51	21.1	Jubilee Shear Zone
SD-17-173	44.5	45.53	1.03	1.02	28.63	Jubilee Shear Zone
SD-17-173	48.36	49.25	0.89	0.88	12.94	Jubilee Shear Zone
SD-17-173	49.25	50.1	0.85	0.84	8.68	Jubilee Shear Zone
SD-17-173	50.75	51.4	0.65	0.64	12.58	Jubilee Shear Zone
SD-17-173	55.4	56.4	1	0.99	12.01	Jubilee Shear Zone
SD-17-173	58.4	59.29	0.89	0.88	2.85	Jubilee Shear Zone
SD-17-173	78.08	79.09	1.01	1	4.88	Jubilee Shear Zone
SD-17-174	193.6	194.36	0.76	0.49	17.48	Minto Mine South
SD-17-174	194.36	195.27	0.91	0.59	21.34	Minto Mine South
SD-17-174	195.27	196.18	0.91	0.59	3.29	Minto Mine South
SD-17-174	196.18	197.09	0.91	0.59	4.65	Minto Mine South
SD-17-174	197.09	198	0.91	0.59	4.96	Minto Mine South
SD-17-174	198	198.91	0.91	0.59	8.94	Minto Mine South
SD-17-174	198.91	199.82	0.91	0.59	5.92	Minto Mine South
SD-17-175	218.7	219.7	1	0.6	7.03	Minto Mine South
SD-17-176	73.4	74.53	1.13	0.7	4.84	Jubilee Shear Zone
SD-17-176	78.8	79.6	0.8	0.5	13.4	Jubilee Shear Zone
SD-17-176	84.2	85.12	0.92	0.57	4.61	Jubilee Shear Zone
SD-17-176	85.12	86	0.88	0.55	3.08	Jubilee Shear Zone
SD-18-178	131.09	132.1	1.01		7.05	Shear Zone
SD-18-178	224.92	226	1.08		13	Hornblende Shear Zone
SD-18-181A	203.85	204.83	0.98	0.57	2.85	Minto Mine South
SD-18-181A	204.83	205.82	0.99	0.58	5.77	Minto Mine South
RV-18-182	232.96	233.75	0.79	0.78	25.6	Hornblende Shear Zone
SD-18-188	230.25	231	0.75	0.59	5.34	Minto Mine South
SD-18-188	231	232	1	0.78	3.04	Minto Mine South
SD-18-188	235.94	236.9	0.96	0.75	3.71	Minto Mine South
SD-18-189	107	107.98	0.98		16.81	Tension Vein
SD-18-189	125.58	126.58	1		15.52	Tension Vein
SD-18-189	149.3	150.05	0.75		8.93	Tension Vein
SD-18-189	199.18	200	0.82		3.28	Tension Vein
SD-18-189	223	223.9	0.9		4.31	Tension Vein
PH-18-190	204	205	1		6.06	Parkhill #4 Shear Zone
SD-18-192	248.65	249.44	0.79	0.44	19.41	Minto Mine South
SD-18-193	256.89	257.63	0.74	0.56	4.42	Minto Mine South

Hole ID	From (m)	To (m)	Length (m)	Calculated True Width (m)*	Au (g/t)	Gold Zone
SD-18-194	272.74	273.53	0.79	0.58	6.7	Minto Mine South
SD-18-195	46.6	47.6	1		3.19	Tension Vein
SD-18-195	134.14	134.98	0.84	0.61	16.51	Minto Mine South
SD-18-195	134.98	135.83	0.85	0.62	12.29	Minto Mine South
SD-18-196	83	84	1		3.9	Tension Vein
SD-18-196	100.48	101.38	0.9	0.89	5.85	Minto Mine South
SD-18-196	102.15	103.25	1.1	1.08	10.3	Minto Mine South
SD-18-201	122.68	123.4	0.72	0.54	3.78	Minto Mine South
SD-18-203	191.77	192.7	0.93	0.9	4.9	Minto Mine South
SD-18-206	302.52	303.6	1.08	0.76	4	Minto Mine South
SD-18-207	289.71	290.42	0.71	0.48	5.42	Minto Mine South
SD-18-212	262	263	1		5.28	Parkhill #4 Shear Zone
SD-18-212	276.2	276.75	0.55		13.6	Parkhill #4 Shear Zone
SD-18-213	90.25	91	0.75		4.69	Shear Zone
SD-18-213	184.45	185.5	1.05		6.76	Shear Zone
SD-18-213	258.3	258.88	0.58		16.3	Parkhill #4 Shear Zone
SD-18-217	308.2	309	0.8	0.5	4.75	Minto Mine South
SD-18-218	321	321.9	0.9	0.51	3.29	Minto Mine South
SD-18-219	91.45	92.52	1.07		19.8	Tension Vein
SD-18-219	239.44	240.47	1.03		4.54	Tension Vein
SD-18-219	253.7	254.6	0.9	0.69	3.33	Minto Mine South
SD-18-220	206.75	207.36	0.61		3.92	Tension Vein
SD-18-221	227.2	227.94	0.74	0.63	3.57	Minto Mine South
SD-18-222	246	247	1		7	Tension Vein
SD-18-222	252.5	253.2	0.7	0.5	3.31	Minto Mine South
SD-18-222	*257.88*	*258.6*	*0.72*	*0.52*	*46.5*	*Minto Mine South*
SD-18-222	283	284	1		4.5	Tension Vein
SD-18-223	156.9	158.02	1.12	1.11	13.4	Minto Mine South
SD-18-223	167.12	168.13	1.01	1	6.14	Minto Mine South
SD-18-223	168.13	169	0.87	0.86	7.94	Minto Mine South
SD-18-223	169	169.98	0.98	0.97	16	Minto Mine South
SD-18-223	170.78	171.84	1.06	1.05	4.31	Minto Mine South
SD-18-225	200.31	201.24	0.93		3.62	Tension Vein
SD-18-225	232.41	233.4	0.99		19.6	Tension Vein
SD-18-226	250.92	251.92	1	0.83	3.56	Minto Mine South
SD-18-228	257	257.95	0.95	0.93	2.71	Jubilee Shear Zone
SD-18-228	257.95	259	1.05	1.03	4.91	Jubilee Shear Zone
SD-18-228	262	263	1	0.98	19.7	Jubilee Shear Zone
SD-18-228	267.5	268.5	1	0.98	3.38	Jubilee Shear Zone
SD-18-228	268.5	269	0.5	0.49	33.7	Jubilee Shear Zone
SD-18-228	272	273	1	0.98	6.67	Jubilee Shear Zone
SD-18-228	273	274	1	0.98	9.62	Jubilee Shear Zone
SD-18-228	279	280	1	0.98	24.2	Jubilee Shear Zone
SD-18-228	281	282	1	0.98	3.78	Jubilee Shear Zone
SD-18-228	284	285	1	0.98	4.37	Jubilee Shear Zone
SD-18-229	262.64	263.64	1	0.97	4.91	Jubilee Shear Zone
SD-18-229	263.64	264.63	0.99	0.96	3.54	Jubilee Shear Zone
SD-18-229	264.63	265.63	1	0.97	4.28	Jubilee Shear Zone
SD-18-229	265.63	266.73	1.1	1.06	4.39	Jubilee Shear Zone

Hole ID	From (m)	To (m)	Length (m)	Calculated True Width (m)*	Au (g/t)	Gold Zone
SD-18-229	266.73	267.53	0.8	0.77	3.45	Jubilee Shear Zone
SD-18-229	269.6	270.63	1.03	1	7.91	Jubilee Shear Zone
SD-18-229	270.63	271.63	1	0.97	16.3	Jubilee Shear Zone
SD-18-229	271.63	272.66	1.03	1	2.82	Jubilee Shear Zone
SD-18-229	272.66	273.62	0.96	0.93	6.81	Jubilee Shear Zone
SD-18-229	274.3	275.4	1.1	1.06	6.77	Jubilee Shear Zone
SD-18-229	275.4	276.39	0.99	0.96	3.75	Jubilee Shear Zone
SD-18-229	281.56	282.75	1.19	1.15	9.52	Jubilee Shear Zone
SD-18-230	272.95	273.9	0.95	0.88	7.6	Jubilee Shear Zone
SD-18-230	273.9	274.58	0.68	0.63	3.93	Jubilee Shear Zone
SD-18-230	288.42	289.4	0.98	0.91	3.92	Jubilee Shear Zone
SD-18-230	289.4	290.28	0.88	0.82	3.63	Jubilee Shear Zone
SD-18-231	289.1	290.1	1	0.91	8.38	Jubilee Shear Zone
SD-18-231	290.1	291.11	1.01	0.92	5.24	Jubilee Shear Zone
SD-18-231	294.26	295.18	0.92	0.84	5.67	Jubilee Shear Zone
SD-18-232	312.85	314	1.15	1	3.33	Jubilee Shear Zone
SD-18-233	83.3	84.25	0.95		8.01	Shear Zone
SD-18-233	311.5	312.35	0.85		16.03	Jubilee Shear Zone
SD-18-233	312.35	313.2	0.85		12.9	Jubilee Shear Zone
SD-18-233	313.2	314	0.8		14.21	Jubilee Shear Zone
SD-18-233	314	314.91	0.91		7.94	Jubilee Shear Zone
SD-18-234	272.77	273.7	0.93	0.91	23.6	Jubilee Shear Zone
SD-18-234	*273.7*	*274.7*	*1*	*0.98*	*60.22*	Jubilee Shear Zone
SD-18-234	274.7	275.68	0.98	0.96	14.58	Jubilee Shear Zone
SD-18-234	280	280.77	0.77	0.75	3.53	Jubilee Shear Zone
SD-18-235	288.14	289.07	0.93	0.87	4.38	Jubilee Shear Zone
SD-18-235	290	290.57	0.57	0.53	9.48	Jubilee Shear Zone
SD-18-235	290.57	291.43	0.86	0.8	14.7	Jubilee Shear Zone
SD-18-235	291.43	292.38	0.95	0.88	12.2	Jubilee Shear Zone
SD-18-235	294.06	295	0.94	0.87	3.55	Jubilee Shear Zone
SD-18-235	298.79	299.4	0.61	0.57	12.1	Jubilee Shear Zone
SD-18-235	303.58	304.3	0.72	0.67	2.73	Jubilee Shear Zone
SD-18-235	309.41	310.37	0.96	0.89	8.22	Jubilee Shear Zone
SD-18-236	318.68	319.54	0.86	0.72	12.08	Jubilee Shear Zone
SD-18-236	319.54	320.54	1	0.84	2.79	Jubilee Shear Zone
SD-18-236	320.54	321.54	1	0.84	9.1	Jubilee Shear Zone
SD-18-236	321.54	322.54	1	0.84	4.88	Jubilee Shear Zone
SD-18-236	322.54	323.54	1	0.84	4.45	Jubilee Shear Zone
SD-18-236	328.65	329.55	0.9	0.76	2.73	Jubilee Shear Zone
SD-18-237	278.8	279.8	1	0.93	15.4	Jubilee Shear Zone
SD-18-238	177.3	178.3	1	0.87	7.83	Jubilee Shear Zone
SD-18-238	178.3	179.3	1	0.87	11.9	Jubilee Shear Zone
SD-18-238	179.3	180.33	1.03	0.9	16.13	Jubilee Shear Zone
SD-18-238	180.33	181.34	1.01	0.88	15.62	Jubilee Shear Zone
SD-18-238	181.34	182.35	1.01	0.88	8.74	Jubilee Shear Zone
SD-18-238	207.75	208.7	0.95	0.83	10.8	Jubilee Shear Zone
SD-18-239	174.64	175.6	0.96	0.9	3.34	Jubilee Shear Zone
SD-18-239	194	195	1	0.94	3.25	Jubilee Shear Zone
SD-18-239	224.38	225.4	1.02	0.96	3.67	Jubilee Shear Zone

Hole ID	From (m)	To (m)	Length (m)	Calculated True Width (m)*	Au (g/t)	Gold Zone
SD-18-240	143.7	144.7	1	0.9	4.6	Jubilee Shear Zone
SD-18-240	144.7	145.7	1	0.9	3.67	Jubilee Shear Zone
SD-18-240	146.7	147.7	1	0.9	4.24	Jubilee Shear Zone
SD-18-240	149.7	150.7	1	0.9	5.14	Jubilee Shear Zone
SD-18-240	202.37	203.3	0.93	0.84	5.88	Jubilee Shear Zone
SD-18-241	148.57	149.47	0.9	0.78	3.14	Jubilee Shear Zone
SD-18-241	149.47	150.5	1.03	0.9	12.37	Jubilee Shear Zone
SD-18-241	150.5	151.3	0.8	0.7	7.63	Jubilee Shear Zone
SD-18-241	151.3	151.85	0.55	0.48	17.39	Jubilee Shear Zone
SD-18-241	151.85	152.5	0.65	0.57	32.91	Jubilee Shear Zone
SD-18-241	152.5	153.11	0.61	0.53	4.93	Jubilee Shear Zone
SD-18-241	153.11	154	0.89	0.78	6.96	Jubilee Shear Zone
SD-18-241	154	155	1	0.87	3.99	Jubilee Shear Zone
SD-18-241	155	156.05	1.05	0.91	5.24	Jubilee Shear Zone
SD-18-241	157.6	158.38	0.78	0.68	6.35	Jubilee Shear Zone
SD-18-241	162	162.61	0.61	0.53	8.36	Jubilee Shear Zone
SD-18-241	*166.45*	*167.45*	*1*	*0.87*	*4.54*	Jubilee Shear Zone
SD-18-243A	*205.96*	*207.01*	*1.05*	*0.74*	*72.1*	Jubilee Shear Zone
SD-18-243A	207.01	208	0.99	0.7	34.1	Jubilee Shear Zone
SD-18-243A	208	208.77	0.77	0.54	16.5	Jubilee Shear Zone
SD-18-243A	211.33	212.17	0.84	0.59	3.1	Jubilee Shear Zone
SD-18-243A	212.17	212.68	0.51	0.36	6.52	Jubilee Shear Zone
SD-18-243A	212.68	213.37	0.69	0.49	9.5	Jubilee Shear Zone
SD-18-243A	213.37	214.25	0.88	0.62	6.04	Jubilee Shear Zone
SD-18-243A	219.38	220.4	1.02	0.72	9.21	Jubilee Shear Zone
SD-18-243A	220.4	221.41	1.01	0.71	3.91	Jubilee Shear Zone
SD-18-243A	230.71	231.67	0.96	0.68	11.2	Jubilee Shear Zone
SD-18-244	174.34	175.16	0.82	0.66	6.72	Jubilee Shear Zone
SD-18-244	175.16	176	0.84	0.68	10.7	Jubilee Shear Zone
SD-18-244	176	177.14	1.14	0.92	7.11	Jubilee Shear Zone
SD-18-244	177.14	178.11	0.97	0.78	3.39	Jubilee Shear Zone
SD-18-244	179.17	180.22	1.05	0.85	5.91	Jubilee Shear Zone
SD-18-244	191.05	192	0.95	0.77	3.67	Jubilee Shear Zone
SD-18-245	103.46	104.49	1.03	0.99	4.3	Jubilee Shear Zone
SD-18-247	91.85	92.98	1.13	0.24	8.75	Minto B Shear Zone
SD-18-247	115.87	116.77	0.9	0.19	4.4	Minto B Shear Zone
SD-18-247	120.5	121.5	1	0.21	5.47	Minto B Shear Zone
SD-18-247	121.5	122.5	1	0.21	4.71	Minto B Shear Zone
SD-18-247	127.5	128.5	1	0.21	10.1	Minto B Shear Zone
SD-18-247	128.5	129.52	1.02	0.22	9.39	Minto B Shear Zone
SD-18-248	103.83	104.66	0.83	0.65	15.7	Jubilee Shear Zone
SD-18-248	104.66	105.45	0.79	0.62	8.64	Jubilee Shear Zone
SD-18-248	105.45	106.28	0.83	0.65	4.21	Jubilee Shear Zone
SD-18-248	115.1	116.14	1.04	0.82	5.48	Jubilee Shear Zone
SD-18-248	121.18	122.17	0.99	0.78	5.39	Jubilee Shear Zone
SD-18-248	123.84	124.83	0.99	0.78	5.57	Jubilee Shear Zone
SD-18-248	124.83	125.67	0.84	0.66	4.61	Jubilee Shear Zone
SD-18-249	198.54	199.57	1.03	0.85	3.39	Jubilee Shear Zone
SD-18-250	359.82	360.82	1	0.92	2.79	Jubilee Shear Zone

Hole ID	From (m)	To (m)	Length (m)	Calculated True Width (m)*	Au (g/t)	Gold Zone
SD-18-250	360.82	361.53	0.71	0.65	2.78	Jubilee Shear Zone
SD-18-251	173.28	174.16	0.88	0.84	7.99	Jubilee Shear Zone
SD-18-251	175.06	176.18	1.12	1.06	3.46	Jubilee Shear Zone
SD-18-252	171.28	172.07	0.79	0.73	3.31	Jubilee Shear Zone
SD-18-253	302.18	303.07	0.89	0.72	12.8	Jubilee Shear Zone
SD-18-253	359.85	360.85	1	0.81	3.93	Jubilee Shear Zone
SD-18-253	360.85	361.73	0.88	0.72	3.43	Jubilee Shear Zone
SD-18-254	168.93	169.97	1.04	1.03	6.02	Jubilee Shear Zone
SD-18-254	174.15	175.17	1.02	1.01	3.3	Jubilee Shear Zone
SD-18-255	*189.79*	*190.41*	*0.62*	*0.56*	*11.3*	Jubilee Shear Zone
SD-18-255	*190.41*	*191.2*	*0.79*	*0.71*	*98.6*	Jubilee Shear Zone
SD-18-255	*191.2*	*191.94*	*0.74*	*0.67*	*68.1*	Jubilee Shear Zone
SD-18-255	191.94	192.8	0.86	0.78	3.97	Jubilee Shear Zone
SD-18-256	105	106	1		7.91	Shear Zone
SD-18-256	106	107.16	1.16		10.3	Shear Zone
SD-18-256	247.22	248.33	1.11		3.92	Minto B Shear Zone
SD-18-256	248.33	249.43	1.1		6.9	Minto B Shear Zone
SD-18-256	250.62	251.67	1.05		3.11	Minto B Shear Zone
SD-18-258	240.9	241.96	1.06	0.97	5.93	Jubilee Shear Zone
SD-18-258	246.84	247.53	0.69	0.63	3.77	Jubilee Shear Zone
SD-18-258	247.53	248.21	0.68	0.62	10.03	Jubilee Shear Zone
SD-18-258	249.17	250.18	1.01	0.93	7.75	Jubilee Shear Zone
SD-18-258	257.88	259	1.12	1.03	4.5	Jubilee Shear Zone
SD-18-258	263.13	263.82	0.69	0.63	5.03	Jubilee Shear Zone
SD-18-258	263.82	264.83	1.01	0.93	3.94	Jubilee Shear Zone
SD-18-258	264.83	265.88	1.05	0.96	8.49	Jubilee Shear Zone
SD-18-258	265.88	266.91	1.03	0.94	8.25	Jubilee Shear Zone
SD-18-258	268.79	269.79	1	0.92	4.32	Jubilee Shear Zone
SD-18-259	75.13	76.05	0.92		14.7	Shear Zone
SD-18-259	316.26	317.3	1.04		3.38	Jubilee Shear Zone
SD-18-259	334.4	335.04	0.64		4.2	Jubilee Shear Zone
SD-18-261	288.7	289.7	1	0.88	3.17	Jubilee Shear Zone
SD-18-261	307.33	308.3	0.97	0.85	7.38	Jubilee Shear Zone
SD-18-264	52	53	1	1	3.13	Jubilee Shear Zone
SD-18-264	178.5	179.13	0.63		4.52	Shear Zone
SD-18-264	179.13	179.67	0.54		7.55	Shear Zone
SD-19-276	262.45	263.21	0.76	0.75	2.79	Hornblende Shear Zone
SD-19-276	289	290	1	0.98	3.13	Hornblende Shear Zone
SD-19-276	290	290.88	0.88	0.86	4.51	Hornblende Shear Zone
SD-19-277	80.48	81.5	1.02		3.63	Shear Zone
SD-19-277	87.55	88.55	1		6.74	Shear Zone
SD-19-277	89.39	90.32	0.93		5.75	Shear Zone
SD-19-277	124.35	125.23	0.88		4.7	Shear Zone
SD-19-277	218.2	219.1	0.9	0.88	6.09	Hornblende Shear Zone
SD-19-277	219.1	220	0.9	0.88	4.16	Hornblende Shear Zone
SD-19-280	56.52	57.37	0.85	0.83	3.93	Jubilee Shear Zone
SD-19-280	61.94	62.65	0.71	0.69	3.16	Jubilee Shear Zone
SD-19-282	33.32	34.32	1		4.7	Shear Zone
SD-19-282	243.2	244.2	1		3	Minto B Shear Zone

Hole ID	From (m)	To (m)	Length (m)	Calculated True Width (m)*	Au (g/t)	Gold Zone
SD-19-282	257.68	258.4	0.72		6.89	Minto B Shear Zone
SD-19-282	313	314	1	0.87	5.21	Jubilee Shear Zone
SD-19-283	152.46	152.98	0.52		8.06	Shear Zone
SD-19-283	152.98	153.51	0.53		9.67	Shear Zone
SD-19-283	154.96	155.61	0.65		12.38	Shear Zone
SD-20-285A	444	444.66	0.66	0.62	5.69	Jubilee Shear Zone
SD-20-286	541	541.95	0.95	0.88	5.22	Jubilee Shear Zone
SD-20-286	556.07	557.21	1.14	1.05	5.54	Jubilee Shear Zone
SD-20-286	566.35	567.35	1	0.92	3.42	Jubilee Shear Zone
SD-20-287	205.38	206.42	1.04	1	3.46	Shear Zone
SD-20-287	457.46	458.44	0.98	0.95	4.1	Jubilee Shear Zone
SD-20-289	568.35	569.54	1.19	1.07	15.7	Jubilee Shear Zone
SD-20-289	571	572.01	1.01	0.91	12.5	Jubilee Shear Zone
SD-20-291	546.45	547.63	1.18	1.05	3.67	Jubilee Shear Zone
SD-20-291	547.63	548.6	0.97	0.87	7.45	Jubilee Shear Zone
SD-20-291	554.77	555.93	1.16	1.03	3.46	Jubilee Shear Zone
SD-20-291	559.09	560.12	1.03	0.92	3.25	Jubilee Shear Zone
SD-20-292	507.78	508.79	1.01	0.88	17.32	Jubilee Shear Zone
SD-20-292	520.57	521.54	0.97	0.84	14.72	Jubilee Shear Zone
SD-20-293	554.44	555.53	1.09	0.94	6.92	Jubilee Shear Zone
SD-20-293	565	565.9	0.9	0.78	17.1	Jubilee Shear Zone
SD-20-293	565.9	566.91	1.01	0.87	13.71	Jubilee Shear Zone

Note: N/A - additional drilling is necessary to estimate the true width of the intersected zones.
*Assay results reported over intersection length for gold zones labelled: Tension Vein, Nyman Vein, Shear Zone, Parkhill #4, Mickelson Shear Zone, Minto E, Replacement Zone, Parkhill Shear Zone and William Gold Zone and Grace Shear Zone. Additional holes required to calculated true width.

11.0 SAMPLING PREPARATION, ANALYSES, AND SECURITY

11.1 Historical Drilling Programs

For the drilling programs prior to 2007, no information is available about the sample preparation, analyses and security of historical drill core. However, from visual observations of the historical core boxes, the core was split using a mechanical core splitter. Duke (2012) also indicated that samples may have been analyzed by an assay laboratory on site initially. In the 1980s and 1990s, the samples were likely sent to Wawa Assay Laboratory, an unaccredited laboratory in Wawa. Duke (2012) assumed the assay method to have been fire assay with a gravimetric finish. No information about quality control measures and sample security is available.

Details about the sample preparation, analyses and security of core samples from Wawa GP's 2007 drilling program were described by Duke (2012). The core was cut in half using a core saw; one half was returned to the core box, the other half was put in a sample bag and sent to Accurassay Laboratories (Accurassay) in Thunder Bay, Ontario. Accurassay is accredited for gold under the ISO/IEC 17025 guideline. At Accurassay, the samples were dried, crushed, split and pulverized. A 30-g aliquot was used for fire assay analysis with an atomic absorption spectroscopy finish. Accurassay was independent of Wawa GP (Duke 2012). Wawa GP inserted 12 blanks and three standards into the sample stream. In addition, Accurassay repeated one analysis for every 10 samples (Duke, 2012). Sample security was described by Dow (2011): core was moved from the drill rig to the logging area by the drillers. Samples were transported to Accurassay by a bonded carrier.

Duke (2012) described the sampling procedure for the drill core from Augustine's 2011 drilling program. The core was transported from the drill rig to Augustine's secure logging and storage facility in Wawa. The core was cut in half using a core saw. One half was returned to the core box, the other half was put in a sample bag with a pre-numbered sample tag. Multiple sample bags were collected in rice bags; the rice bags were sealed, placed in pails, and shipped to Accurassay by Greyhound. Accurassay is accredited for gold under the ISO/IEC 17025 guideline. Accurassay is independent of Augustine.

Accurassay dried and crushed the sample to -8 mesh (2.38 mm). A subsample was pulverized, and 30 g of the pulverized material was analyzed by fire assay with an atomic absorption spectroscopy finish. Duke (2012) concluded that the sample collection, preparation, and security for the 2011 drilling program were adequate.

11.2 Red Pine 2014 to 2020 Sampling

The core collected by Red Pine during the 2014 to 2020 drilling programs 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 43,248 samples were collected during this period. A total of 4,018 QA/QC CRM standards and blanks were inserted in the sample stream every 20 samples and 25 samples, respectively. The CRM and blanks used are listed in Table 11-1. A total of 2,198 CRMs and 2,133 blanks were inserted and are listed in Table 11-2).

For the 2014 to 2020 drilling programs, 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. For the 2014 and 2015 drilling programs, the rice bags containing the samples were transported from site to Actlabs in Timmins by Red Pine personnel.

For the 2016 to 2020 drilling programs, a numbered security tag was placed on each rice bag containing the individual sample bags to prevent tampering. Each security tag was recorded by Red Pine personnel and the information was transmitted to the receiving laboratory. The rice bags were transported by Red Pine personnel to

Manitoulin transport in Wawa from where the samples were shipped to the laboratory. Red Pine, in collaboration with Manitoulin and the laboratories, kept track of each shipment upon its reception at the laboratory and the laboratory validated that the security tags on each rice bag were intact upon reception of the samples.

Other than the period between February 1, 2017, and June 8, 2017, when the core samples were shipped to SGS Canada (“SGS”), in Cochrane, Ontario, all core samples during the 2016 to 2020 drill programs were shipped to Activation Laboratories Ltd. (“Actlabs”) in Ancaster Ontario. Both Actlabs and SGS are ISO/IEC 17025 certified laboratories and there is no relationship between Red Pine and Actlabs and SGS other than that Red Pine commissioned Actlabs and SGS to analyze drill core samples from the Project.

The remaining drill core is stored in Red Pine’s secure drill core logging and outdoor storage facility (Figure 11-1).

Figure 11-1: Secure Core Storage Area Next to Red Pine’s Core Logging Facility in Wawa, Ontario

11.2.1 Analytical Procedures

Two independent certified laboratories were used for the gold analyses of the Project. A total of 38,642 core samples were analyzed at Activation Laboratories (Actlabs) in their facilities in Timmins and Ancaster, and 4,606 samples were analyzed by SGS at their facilities in Cochrane and Lakefield. Two routine gold analytical packages were selected by Red Pine for the analysis completed by Actlabs and SGS, including:

1) Fire-assay with an AAS finish (SGS method GO FAI515, Actlabs method 1A2-50).

2) Metallic Screen on 1000 g of samples (SGS method GO FAS51K; Actlabs method 1A4).

For the fire-assay analysis, the entire sample is crushed to −10 mesh (1.7 mm), mechanically split and an aliquot of 250 g is pulverized to at least 95% −150 mesh (105 µm). Fifty grams of the pulverized sample is used for the fire assay procedure. Gold analysis was completed by AAS at Actlabs and ICP-AES at SGS.

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 samples of the Minto vein where coarse gold is relatively abundant. All the samples with a gold grade over 2 g/t from the fire assay were systematically re-analyzed by metallic screen for validation.

In addition to gold analyses, systematic multi-element analyses using ICP-MS and ICP-AES following a 4 acid near-complete digestion were completed on the drill core samples from the 2014 and 2017 to 2020 drilling programs.

Red Pine used the multi-element package GE ICM40B from SGS and the package ME-MS61 (2014-2018) UT-6M (after 2018) of Actlabs.

11.2.2 Physical Rock Property Measurements

Magnetic susceptibility and specific gravity ("SG") on the drill core were recorded by Red Pine. SG was determined by weighing a piece of core in air and in water (Figure 11-2) and by calculating SG using the formula:

$$SG = \frac{Sample\ Weight\ in\ Air}{Sample\ Weight\ in\ Air - Sample\ Weight\ in\ Water}$$

Figure 11-2: SG Measurement at Red Pine's Core Logging Facility

11.2.3 Red Pine Data Management

All existing exploration data for the Project, including historical data as well as that collected during the 2014 to 2020 exploration programs, is amalgamated into three central Excel™ based databases maintained internally by Red Pine. Starting in the spring of 2017, all drilling data were first collected and validated with internal validation checks with MXDeposit, then exported and amalgamated into the central Excel™ based database. One database is for the drilling data, one database is for the trenching data and one database is for the prospecting sample data. Updates are made to the databases as new data, like geological drill logs or analytical results, becomes available or when Red Pine's internal validation procedures detect errors in the databases. Routine procedure for the validations of the CRMs inserted in every sample batches are also implemented into the drilling database of Red Pine and QA/QC checks are also run in Oasis Montaj Drilling Module (Geosoft). All the geological modelling and interpretations made for the Project are using the data collected and validated in the main databases.

11.2.4 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 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.

Red Pine relied partly on the internal analytical QC measures implemented by Actlabs and SGS. In addition, Red Pine implemented external analytical control measures consisting of the use of control samples (blanks and CRMs) inserted in all sample batches submitted for assaying. Umpire check assaying was not performed. The routine insertion rate was 1 standard per 20 samples and 1 blank per 25 samples sent. Additional blanks were also inserted after vein samples when many specks of native gold were observed in the sampled vein.

Ten certified gold reference materials sourced from commercial suppliers were used (Table 11-1). Silica sand provided by Actlabs was used in 2014 and 2015 as blanks and Bell & Mackenzie White Lightning® 2040 sand was used from 2016 to 2020 as blanks.

During the first part of 2017, Actlabs turnaround time on sample analysis was longer than industry standard and Red Pine made the strategic decision to switch to SGS Canada in Cochrane, Ontario.

Through Red Pine’s QA/QC checks (OREAS 12a, 11.79 g/t Au), it was discovered that SGS Canada in Cochrane had not been running over limits on OREAS 12a when analysing over 10 g/t Au, this was due to a communication error between SGS and Red Pine. This is evident in Figure 11-9, displaying a flat line at 10 g/t Au for a period.

Table 11-1: CRM Standard and Blank Material Used by Red Pine during the 2014 to 2018 Drilling Programs

Standard	Certified Au (g/t)	1SD	2SD (Low)	2SD (High)	3SD (Low)	3SD (High)	Method Name*	Matrix	Mineralization Style
OREAS 205	1.244	0.053	1.138	1.35	1.085	1.402	FA-MS	A blend of gold bearing Magdala ore from the Stawell Gold Mine, west-central Victoria, Australia and barren tholeiitic basalt from Epping, Victoria, Australia.	Orogenic Lode Au
OREAS 209	1.58	0.044	1.49	1.66	1.44	1.71	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 210	5.49	0.15	5.18	5.79	5.03	5.94	FA-MS	Alkali olivine basalt and sulfide-bearing (pyrite, arsenopyrite) Au ore in quart-sericite-carbonate schist assemblage	Orogenic Lode Au
OREAS 12a	11.79	0.24	11.31	12.27	11.07	12.51	FA-MS	Gold-bearing Magdala ore from the Stawell Gold Mine, west-central Victoria, Australia	Orogenic Lode Au
OREAS 216	6.66	0.155	6.34	6.97	6.19	7.12	FA-MS	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 218	0.531	0.017	0.497	0.565	0.48	0.582	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 226	5.45	0.126	5.2	5.7	5.07	5.83	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 229	12.11	0.206	11.7	12.53	11.49	12.73	FA-MS	Archean greenstone-hosted Wilber Lode primary ore from the Andy Well Au Mine	Orogenic Lode Au
OREAS 229B	11.95	0.288	11.37	12.53	11.09	12.82	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 235	1.59	0.038	1.51	1.66	1.47	1.7	FA-MS	A blend of high grade gold-bearing ore and barren metasediments. The ore was sourced from the Fosterville Mine, located 20km from the city of Bendigo in the state of Victoria, Australia.	Orogenic Lode Au
Blank								Coarse silica sand provided by Actlabs or B&M White Lightning 2040 - expected grade of <0.005 g/t Au	

Note: *All standards are produced by Ore Research & Exploration Pty.

A summary of the total number of QA/QC samples inserted is presented in Table 11-2.

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

Red Pine 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.

11.2.4.1 Review of Analytical QA/QC Data

Red Pine provided assay results for the external analytical QC samples for the period 2014 to 2020. The data was provided in the form of Excel™ spreadsheets. External QC samples comprised field blanks and CRMs.

Sample blanks and CRM’s data were summarized on a series of control charts to highlight the performance of the control samples.

The analytical quality control data produced by Red Pine between 2014 through 2018 are summarized in Table 11-2 and presented in graphical format in Figure 11-3 through Figure 11-14.

Table 11-2: QA/QC Sample Count

Sample	Count
Blanks	2133
QC samples	2198
OREAS 205	82
OREAS 209	557
OREAS 210	601
OREAS 12a	88
OREAS 216	24
OREAS 218	518
OREAS 226	99
OREAS 229	212
OREAS 229B	5
OREAS 235	12
Field Duplicates	0

Typically, a CRM failure was considered when the CRMs analyses were outside 3 standard deviations (SD) of the certified values. In those situations, Red Pine requested the laboratory to re-analyze the CRM and a certain number of core samples around the CRM that failed. In the few cases where multiple CRM failures were observed in one assay certificate or when many CRMs were outside the 2SD range of the certified value, Red Pine requested that the entire certificate to be re-tested. In a retrospective analysis, some of the outliers in the QA/QC data were found to be caused by sample misidentification whereas others were related to analytical problems at the laboratory.

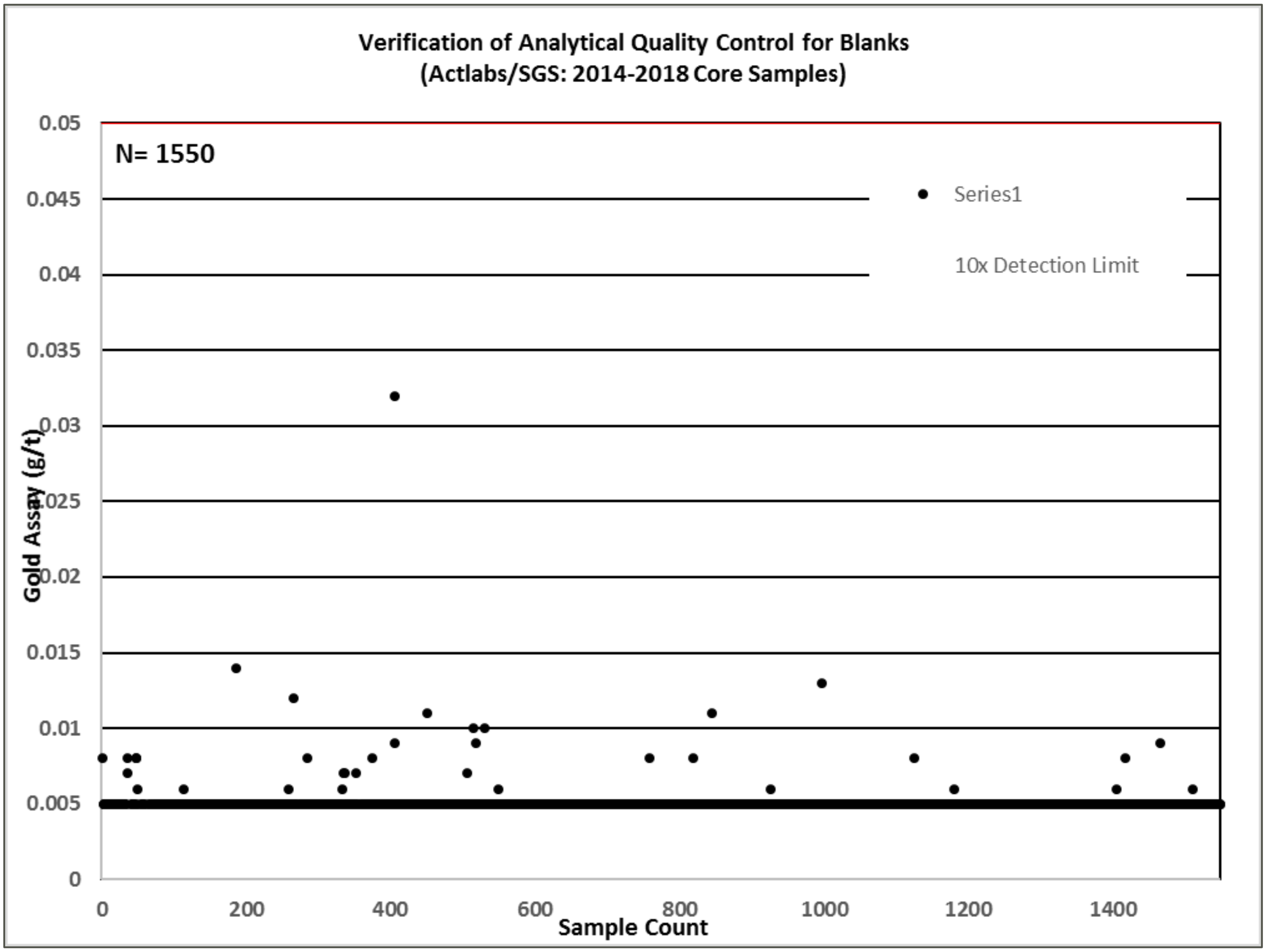


Figure 11-3: Control Chart for Blanks between 2014 and 2018

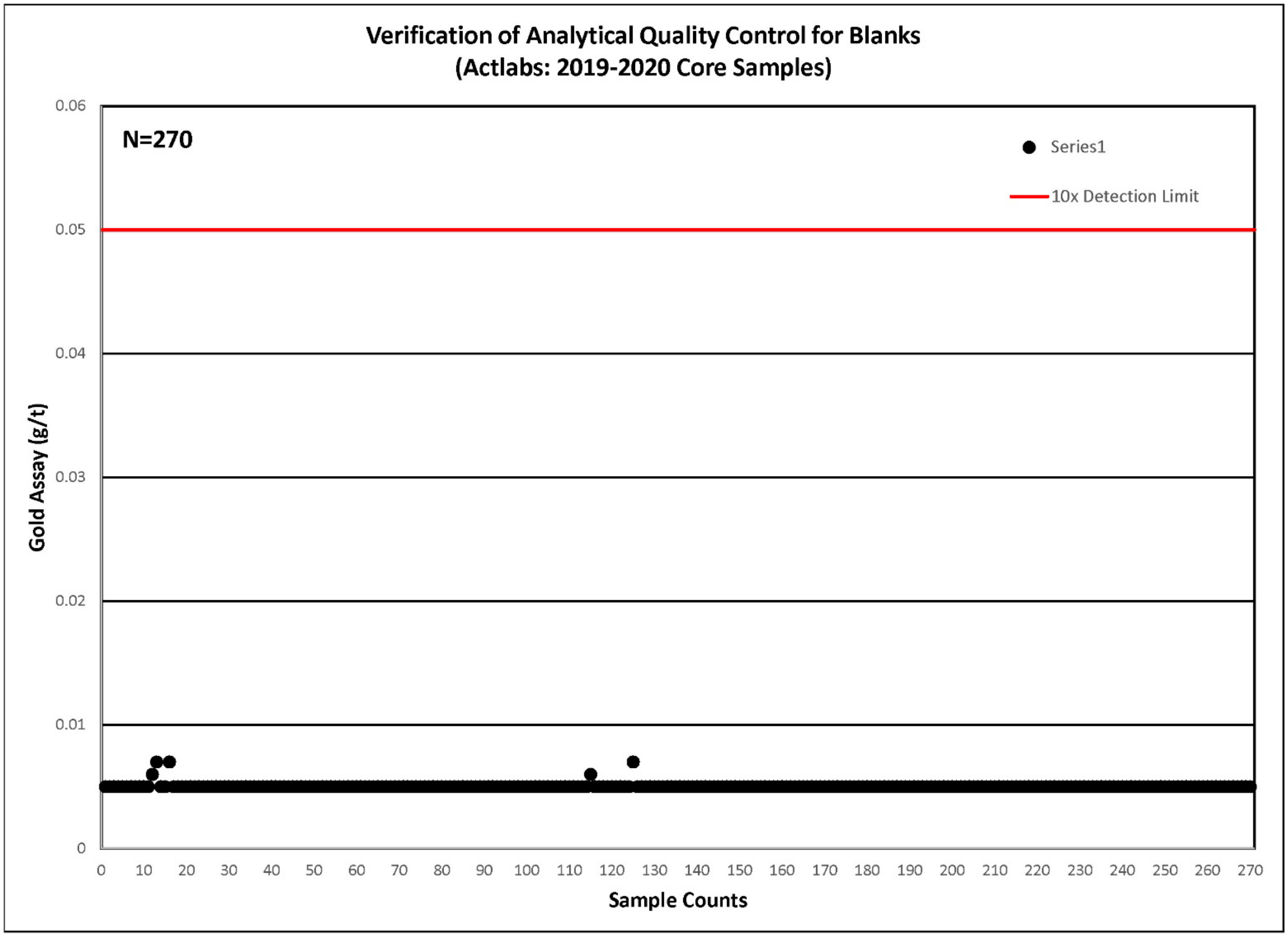


Figure 11-4: Control Chart for Blanks between 2019 and 2020

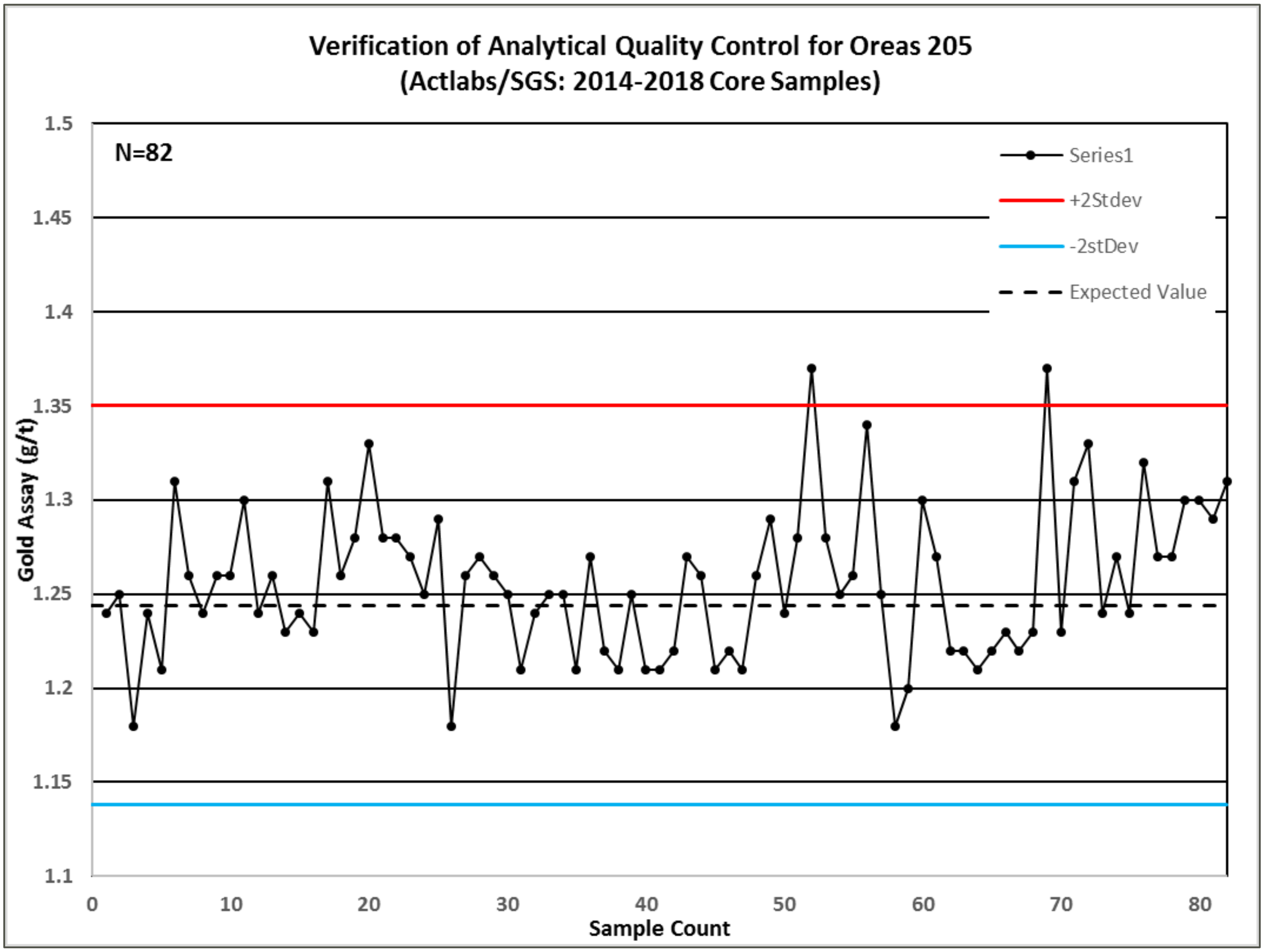


Figure 11-5: Control Chart for CRM OREAS 205 between 2014 and 2018

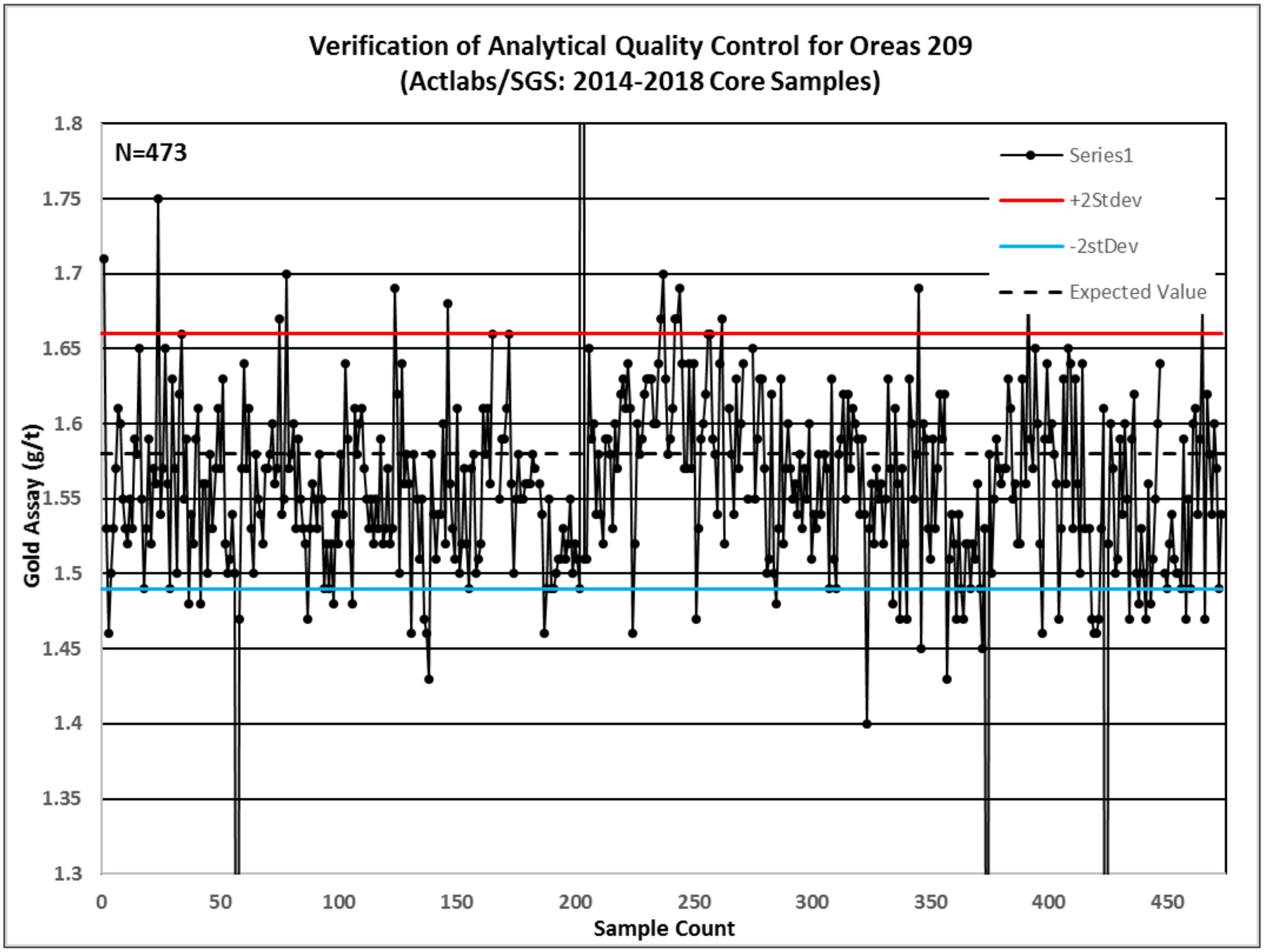


Figure 11-6: Control Chart for CRM OREAS 209 between 2014 and 2018

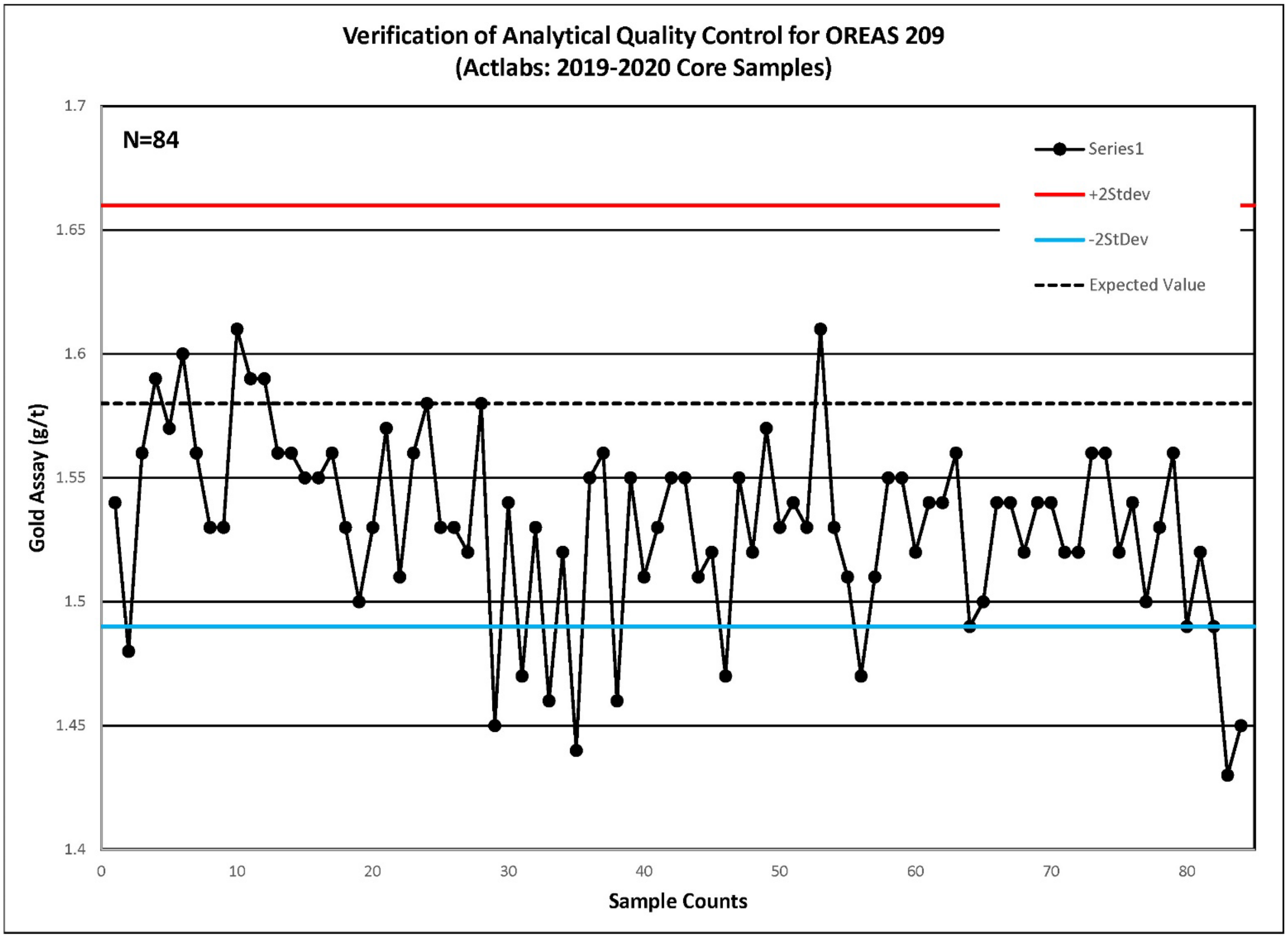


Figure 11-7: Control Chart for CRM OREAS 209 between 2019 and 2020

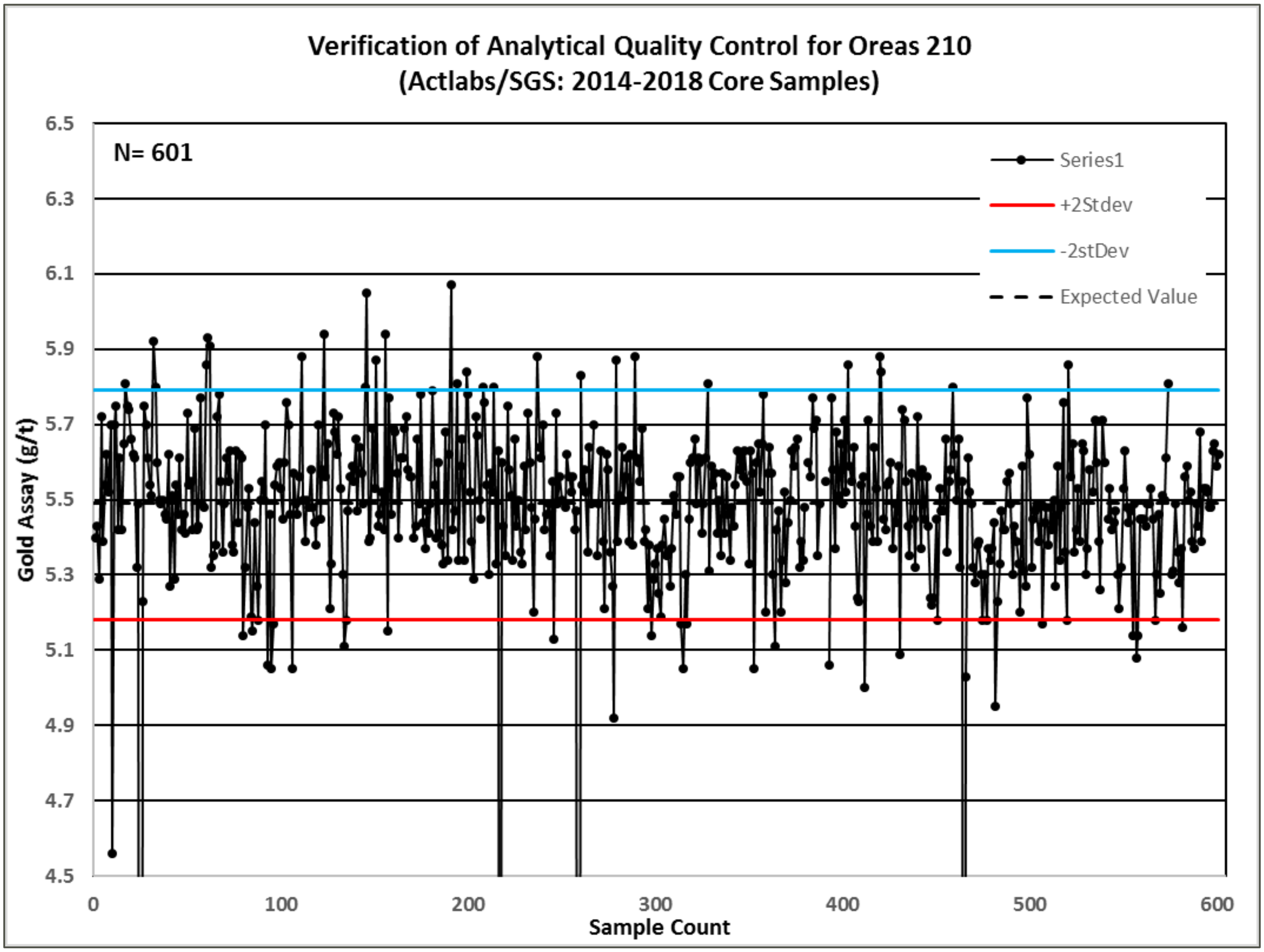


Figure 11-8: Control Chart for CRM OREAS 210 between 2014 and 2018

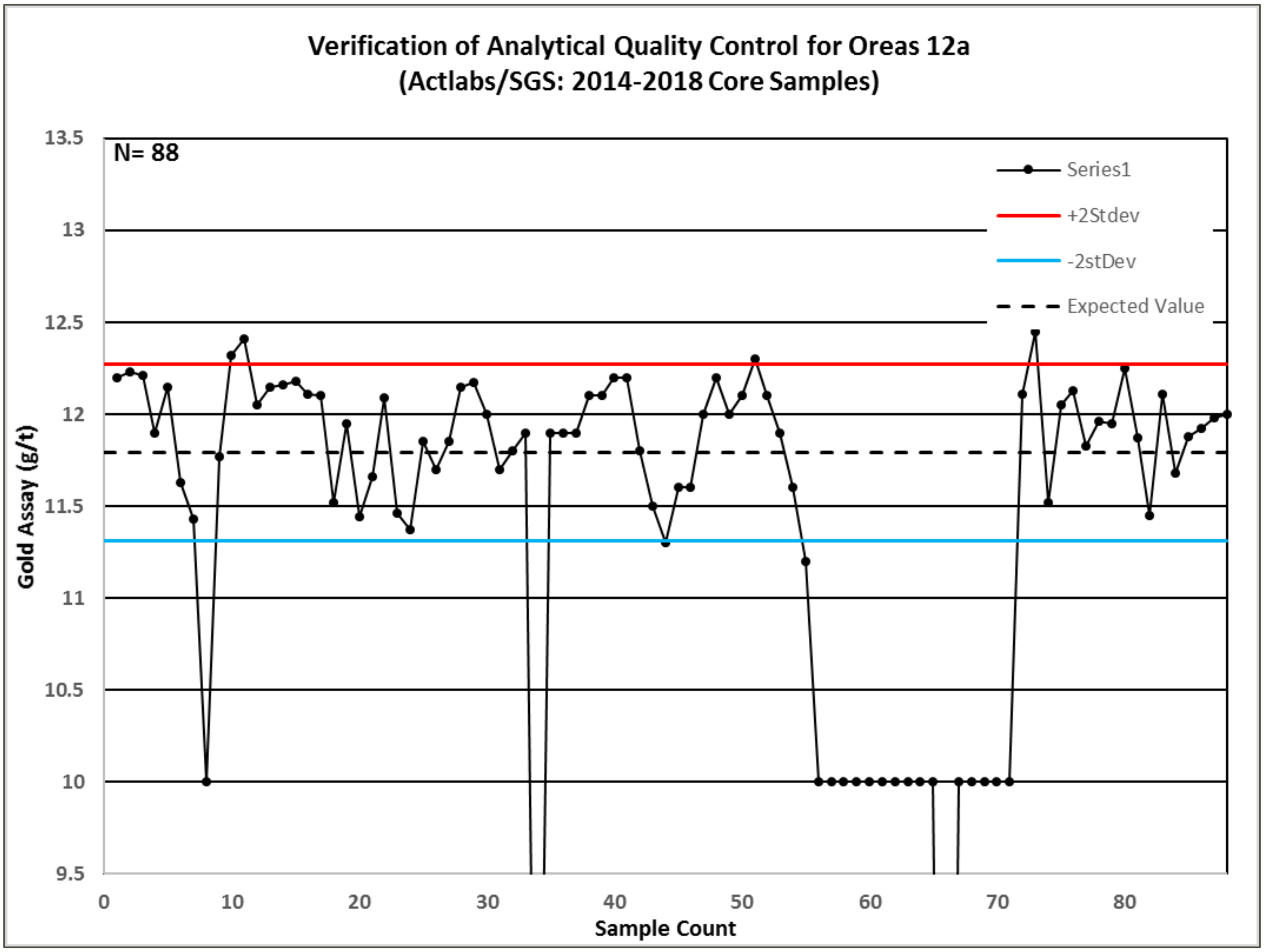


Figure 11-9: Control Chart for CRM OREAS 12a between 2014 and 2018

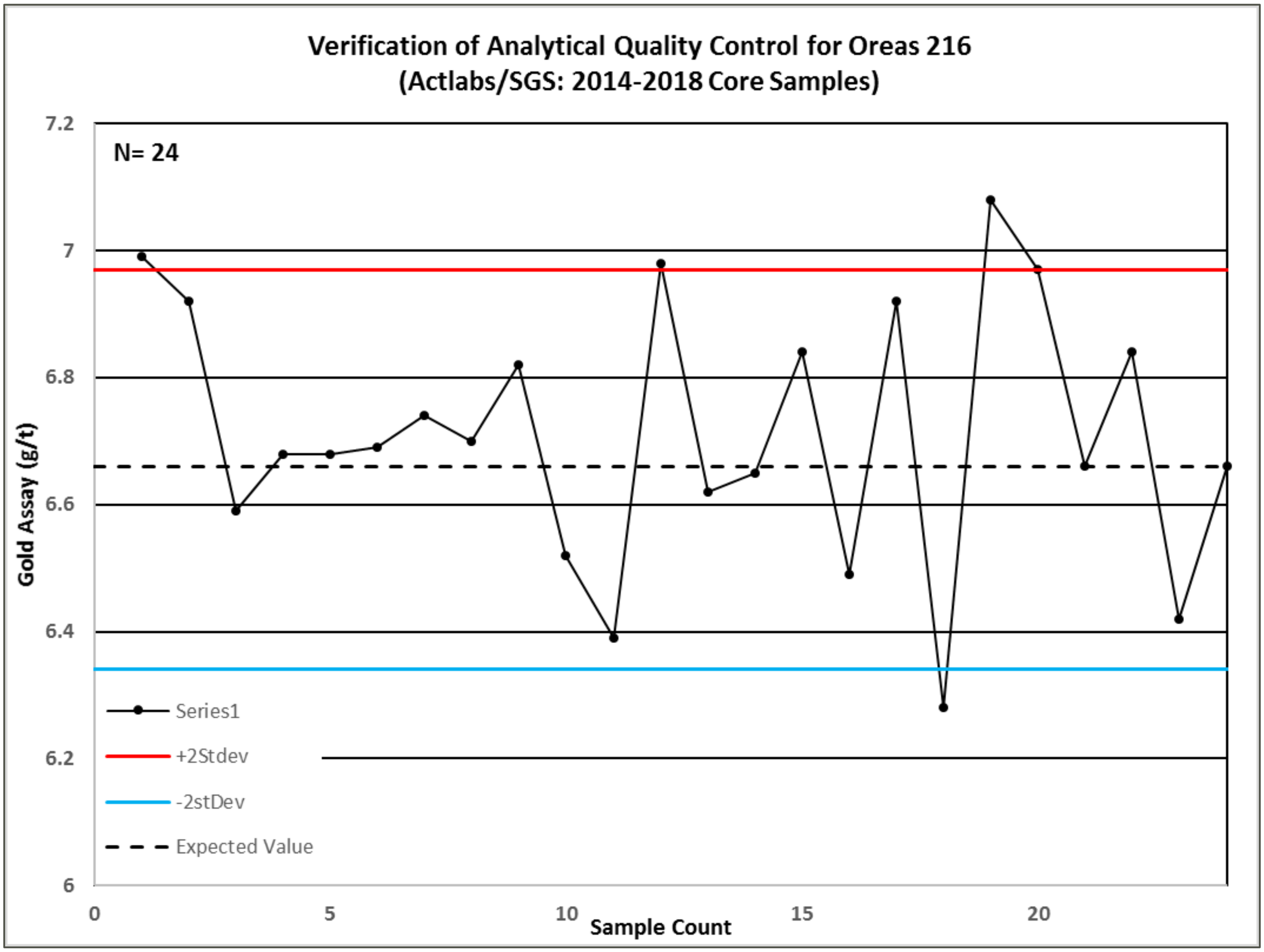


Figure 11-10: Control Chart for CRM OREAS 216 between 2014 and 2018

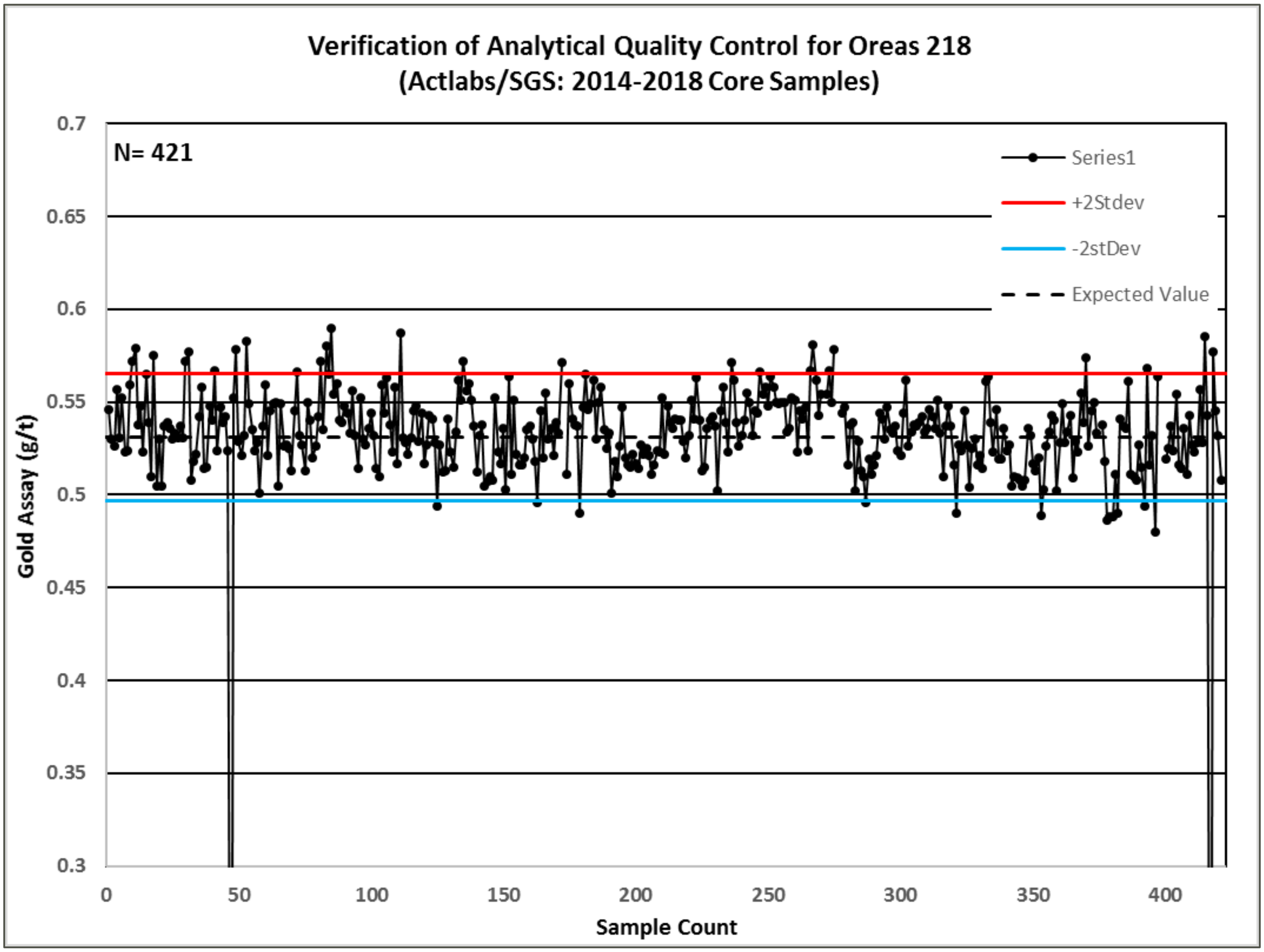


Figure 11-11: Control Chart for CRM OREAS 218 between 2014 and 2018

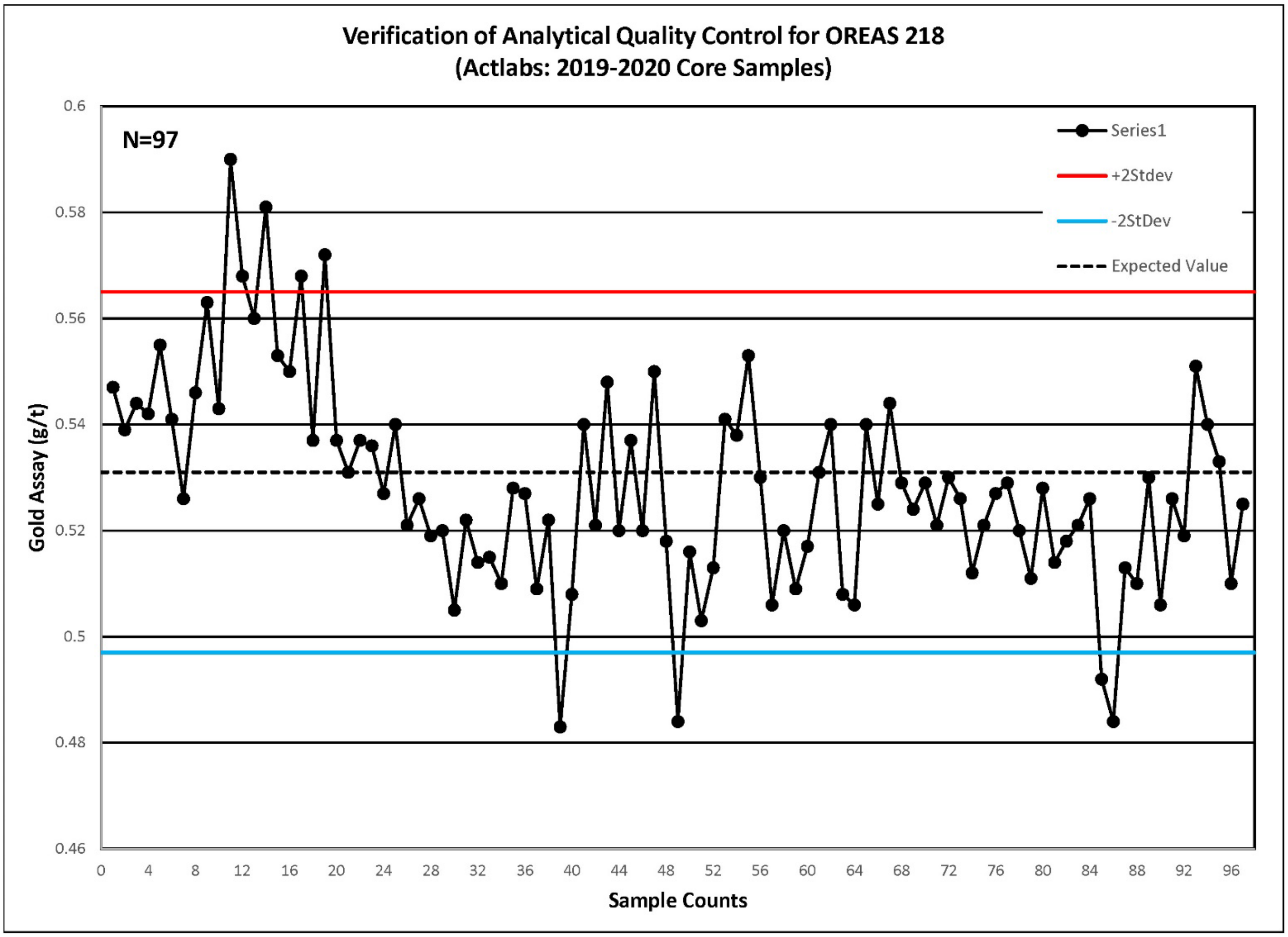


Figure 11-12: Control Chart for CRM OREAS 218 between 2019 and 2020

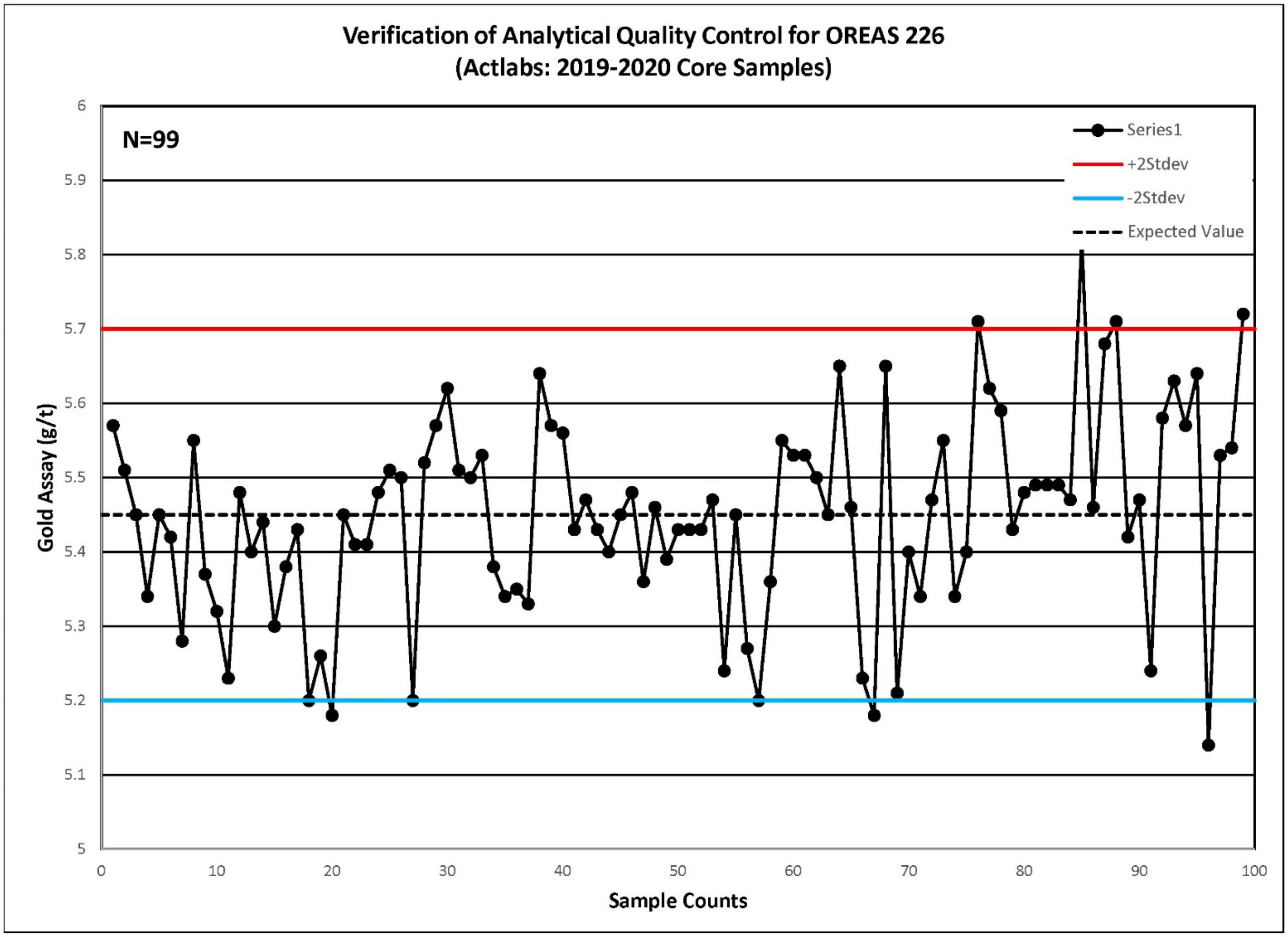


Figure 11-13: Control Chart for CRM OREAS 226 between 2019 and 2020

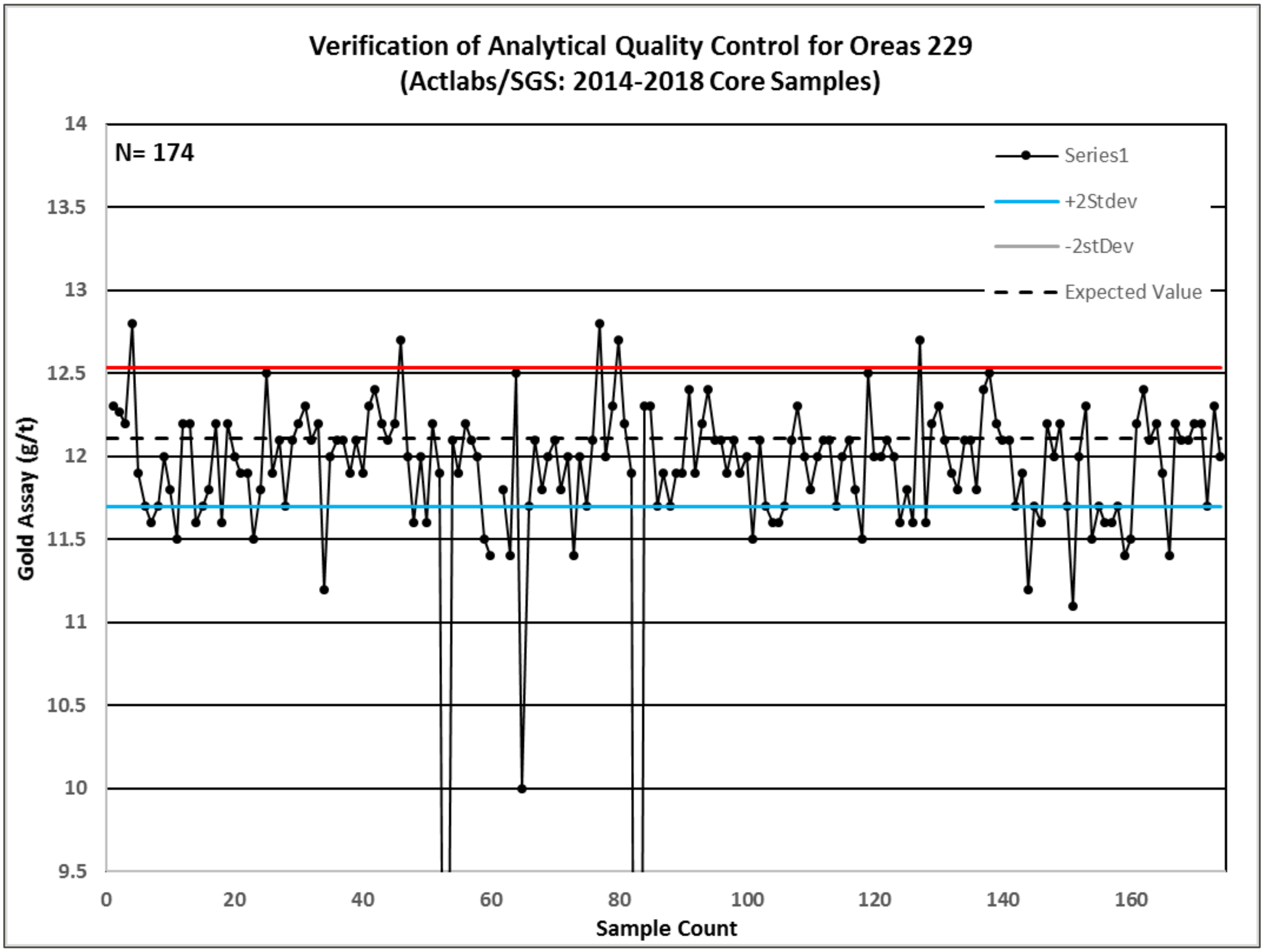


Figure 11-14: Control Chart for CRM OREAS 229 between 2014 and 2018

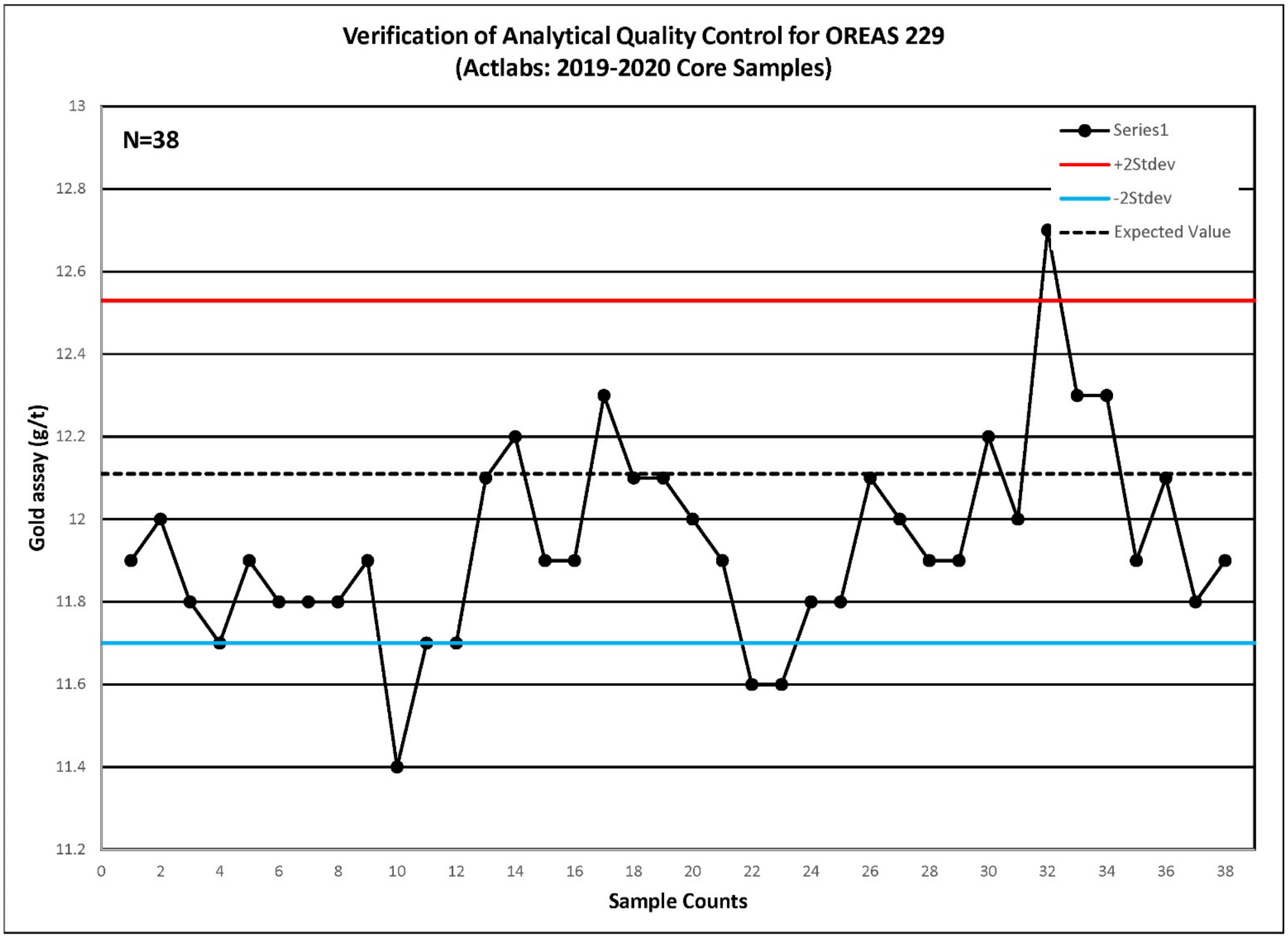


Figure 11-15: Control Chart for CRM OREAS 229 between 2019 and 2020

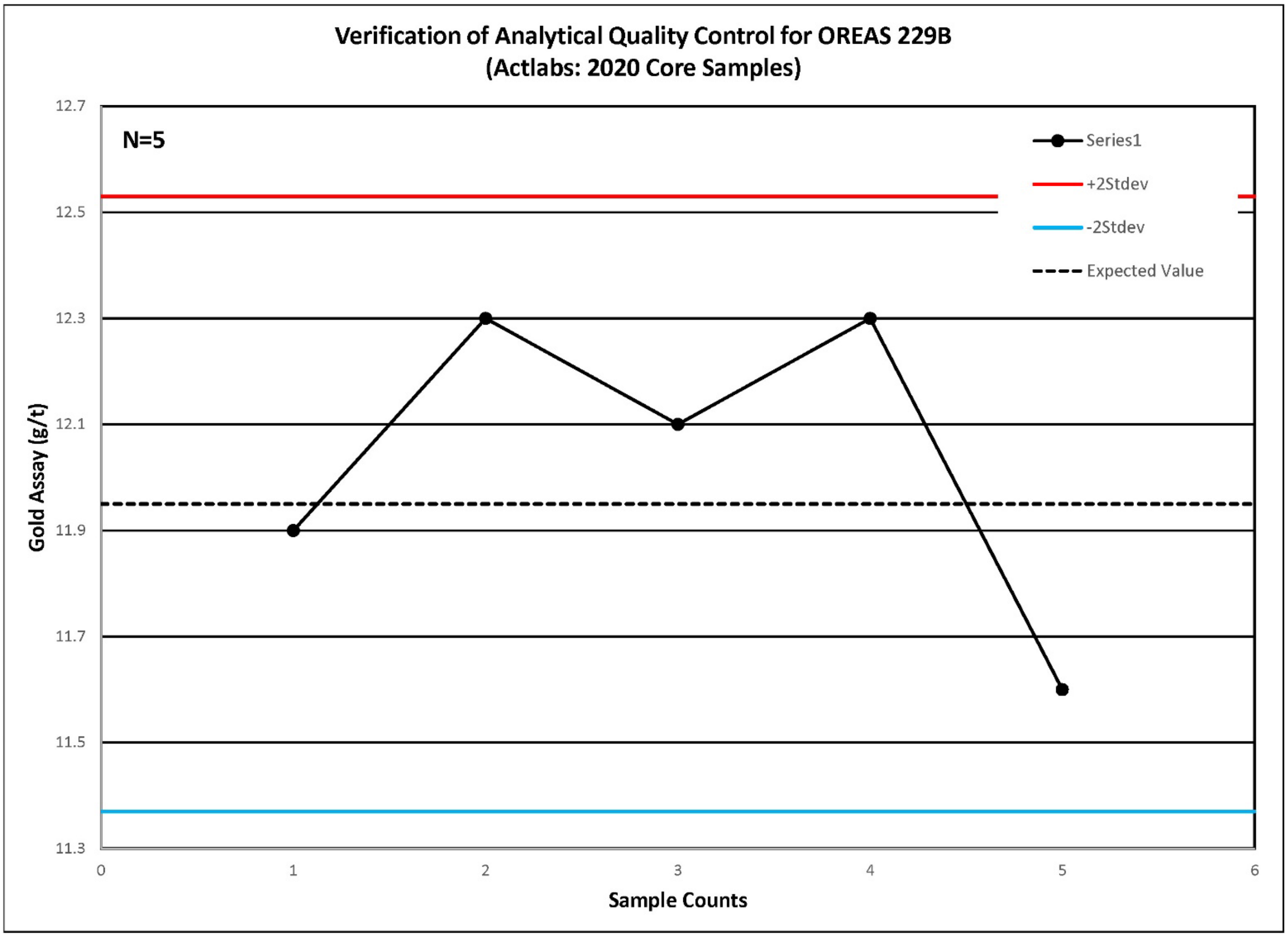


Figure 11-16: Control Chart for CRM OREAS 229B for 2020

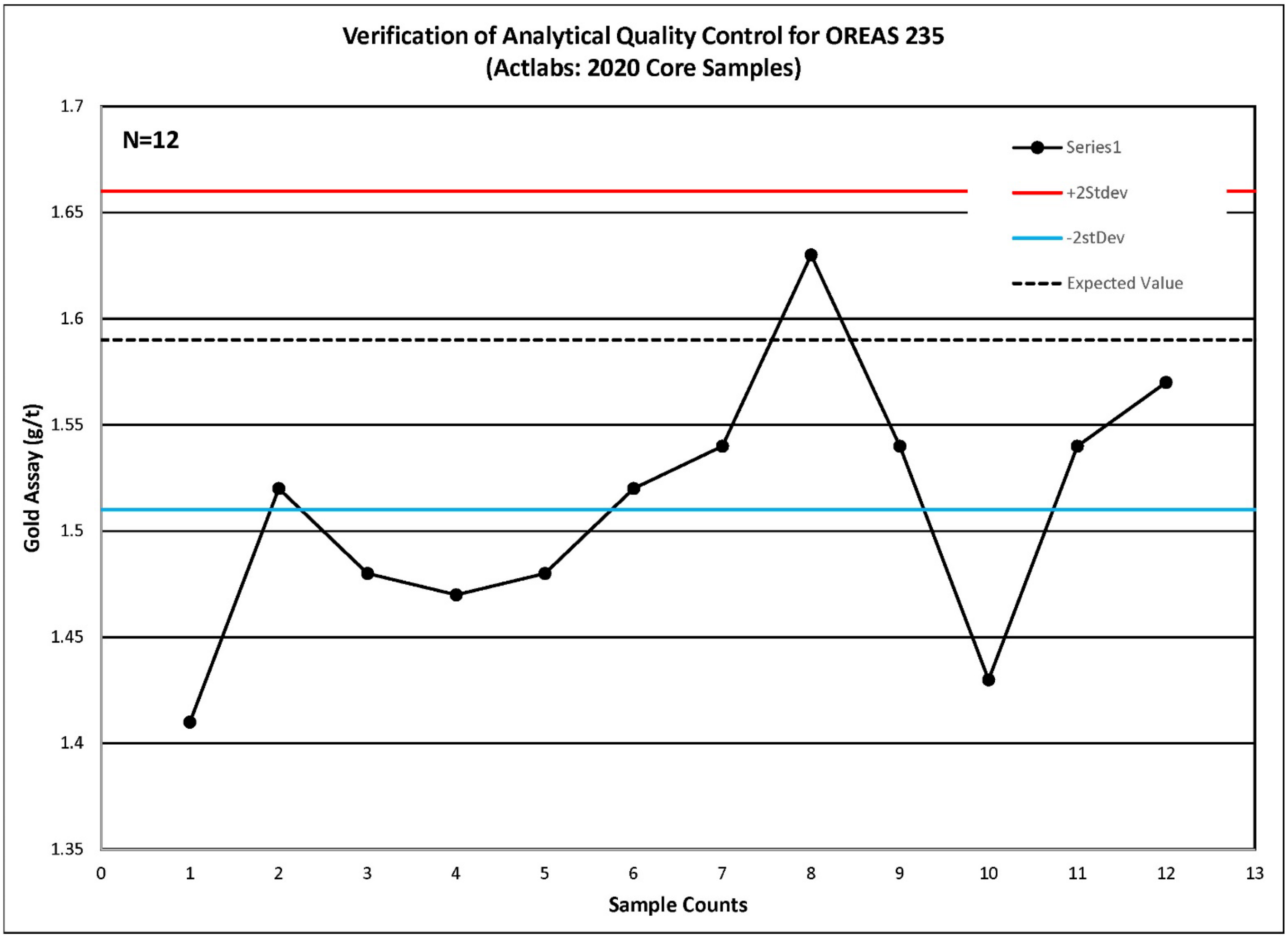


Figure 11-17: Control Chart for CRM OREAS 235 for 2020

11.3 QP Comments on QA/QC

It is the QP's opinion that the sample preparation, security, and analytical procedures used by Red Pine are consistent with industry standard practices and that the analytical results delivered by SGS and Actlabs are sufficiently reliable to inform Mineral Resource estimation. The QP has no material concerns with the current Red Pine geological or analytical procedures used or the quality of the Red Pine data.

The QP recommends that the use of duplicate samples (field, pulp, and umpire) in order to help quantify deposit variability and identify any potential laboratory bias.

In order to improve data security and reduce the risk of introducing errors, it is recommended to store drill hole and assay data in a relational database system rather than relying on Excel™ spreadsheets.

12.0 DATA VERIFICATION

The QP completed several data verification checks for the 2019 Surluga and 2018 Minto South Mineral Resource estimates. The verification process included two, 2-day site visits to the Project site to review geological procedures, chain of custody of drill core samples, drill collar inspections and the collection of independent samples for metal verification. Other data verification included an 11-hole confirmation drill hole program for Surluga, spot check comparisons of Au assays from the drill hole database against original assay records (lab certificates) and a review of QA/QC performance for drilling completed between 2016-2019.

12.1 Surluga

12.1.1 Site Visit

A site visit to the Project site was carried out by Brian Thomas, P.Geo., from March 21, 2019, to March 22, 2019. The site visit included the following activities:

- Confirmation core logging and independent assay verification on selected drill core samples
- Inspection of drill hole collar locations
- Review of procedures and collection of data

Details of the site visit and data verification are summarized in the following sub-Items.

12.1.2 Independent Logging and Sample Verification

The QP selected intervals from eight drill holes from the 2017 and 2018 drill programs for independent logging and sample analysis. Figure 12-1 and Figure 12-2 provide examples of verification intervals from drill holes SD-17-173 and SD-18-248, showing examples of quartz veining hosted in hydrothermally altered and highly sheared diorite. The Red Pine drill logs were found to match the observed core reasonably well and no material issues were identified.

Nine quarter-sawn verification samples were composited over 16 Red Pine core sample intervals. The QP did not use the same analytical methods as Red Pine and the volume of sampled material was not the same since Red Pine samples were based on half-sawn HQ core (63.5-millimetre core diameter) and the verification samples were based on quarter-sawn HQ core. The QP chose fire assay analysis (50 g pulp from a 1 kg split) with Atomic Absorption (AA) finish, and gravimetric finish for samples greater than 10 g/t. Red Pine primarily used fire assay with AA finish and metallic screening analysis for all samples greater than 2 g/t. Five pulp samples from the 2016-2018 historical sample program were also analyzed and compared. Table 12-1 summarizes the core intervals sampled and compares the verification results to the Red Pine assay values.

Historical core could not be inspected or sampled at the time of the site visit due to the amount of snow cover present.

Figure 12-1: SD-17-173

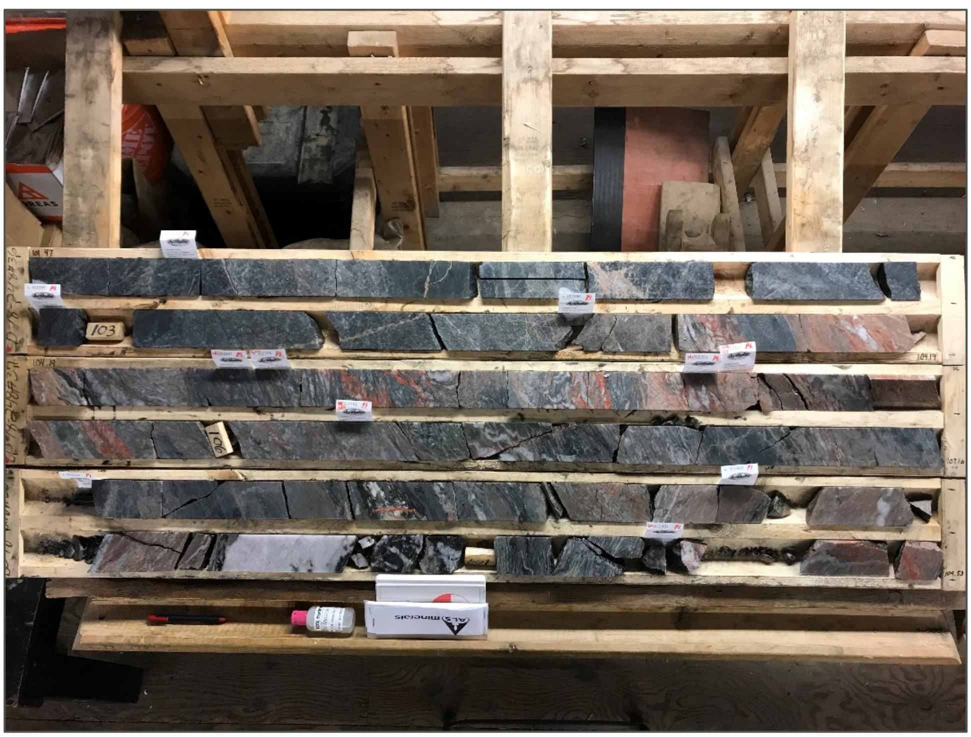


Figure 12-2: SD-18-248

Table 12-1: Independent Sample Verification Intervals

Hole ID	From (m)	To (m)	Length (m)	Red Pine Au (g/t)	Red Pine Composite Au (g/t)	Golder Composite Au (g/t)
SD-18-233	311.5	312.35	0.85	16.03	14.47	8.78
SD-18-233	312.35	313.2	0.85	12.9		
SD-18-233	313.2	314	0.8	14.21	10.87	6.41
SD-18-233	314	314.91	0.91	7.94		
SD-18-228	272	273	1	6.67	8.15	9.19
SD-18-228	273	274	1	9.62		
SD-18-244	174.34	175.16	0.82	6.72	8.73	11.3
SD-18-244	175.16	176	0.84	10.7		
SD-18-248	103.83	104.66	0.83	15.7	15.7	16.5
SD-18-248	104.66	105.45	0.79	8.64	6.37	6.41
SD-18-248	105.45	106.28	0.83	4.21		
SD-18-247	127.5	128.5	1	10.1	9.75	5.1
SD-18-247	128.5	129.5	1	9.39		
SD-17-173	44.5	45.53	1.03	28.63	28.63	37.4
SD-17-173	48.36	49.25	0.89	12.94	10.86	4.17
SD-17-173	49.25	50.1	0.85	8.68		
S235	185.32	185.96	0.64	0.74	NA	0.88
S235	188.82	189.74	0.92	0.2	NA	0.22
S235	189.74	190.74	1	0.08	NA	0.08
S239	107.41	108.81	1.4	0.55	NA	0.64
S244	99.67	100.49	0.82	0.13	NA	0.2

Figure 12-3 provides a graphical comparison of the verification and Red Pine assays. The QP did not identify any material bias in the Red Pine sample data and the comparison results were found to be reasonable given the nature of mineralization in the deposit.

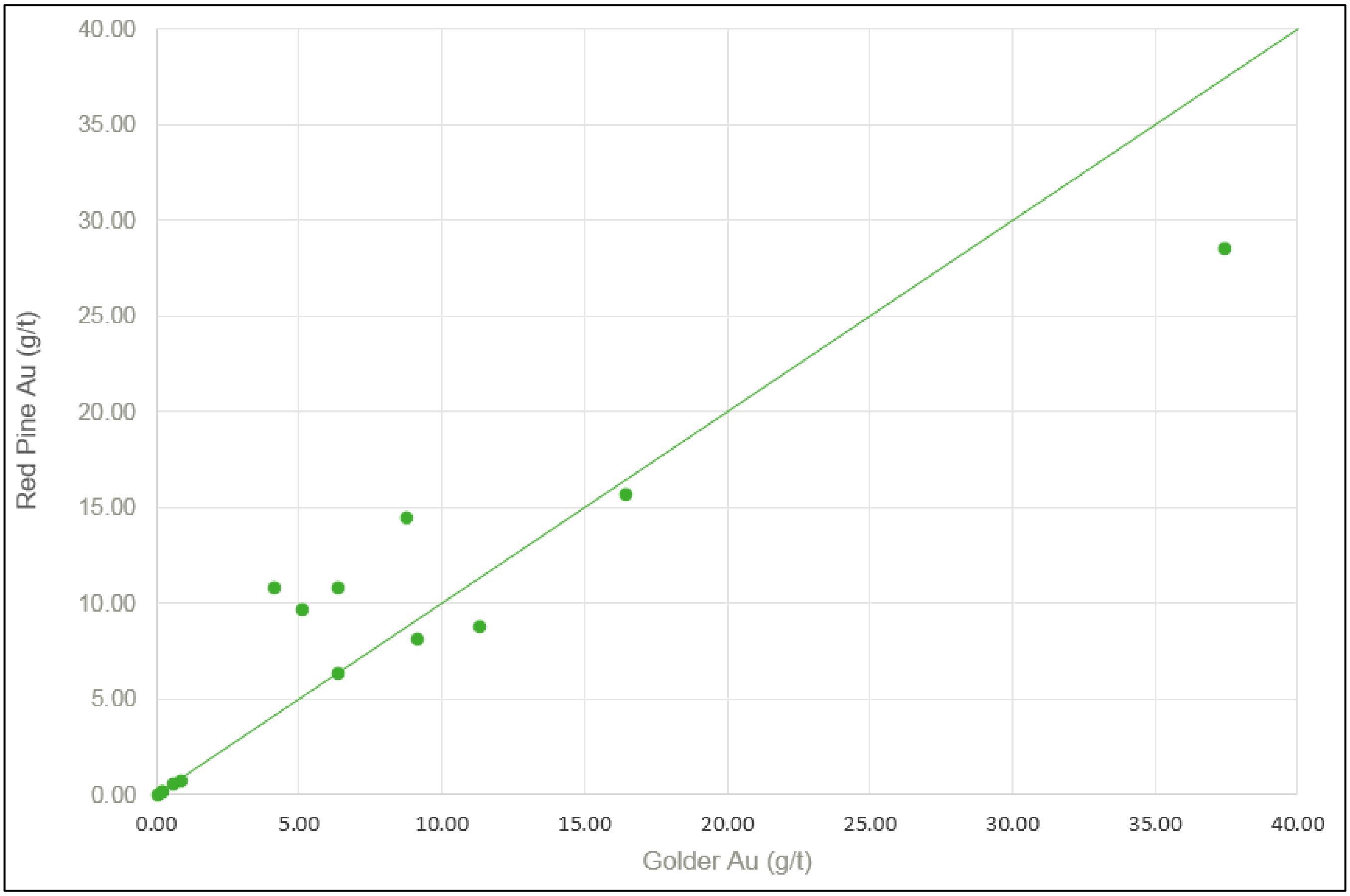


Figure 12-3: XY Scatterplot Comparison of Verification Sample Results

12.1.3 Drill Collar Inspection

Four drill collar locations were visited and surveyed using a handheld GPS to confirm the collar survey data provided by Red Pine. All collar locations were found to be within the accuracy of the GPS as summarized in Table 12-2. Figure 12-4 represents the collar location for drill hole SD-18-230. No drills were active at the time of the site inspection.

Historical collar locations could not be confirmed due to the amount of snow cover present at the time of the site visit. The QP has reviewed the 2015 historical data verification completed by Ronacher, Mackenzie, and Bernier and is satisfied that the historical collar data is sufficiently accurate.

Table 12-2: Comparison of Drill Hole Collar Coordinates

Hole ID	Easting Golder (UTM)	Easting Red Pine (UTM)	Difference Easting (m)	Northing Golder (UTM)	Northing Red Pine (UTM)	Difference Northing (m)
SD-17-170	668084.5	668084.2	0.3	5316428.3	5316426.3	2
SD-18-230	668492.2	668492.6	-0.4	5316349.2	5316348.5	0.7
SD-18-247	668164.6	668169.3	-4.7	5315846.5	5315847.9	-1.4
SD-18-249	668109.6	668111.7	-2.1	5316045.8	5316044.5	1.3

Figure 12-4: Drill Hole Collar Location of Hole SD-18-230

12.1.4 Confirmation Drill Hole Program

The QP designed a confirmation drill hole program for Red Pine in order to confirm general locations and grades from the historical holes, fill in gaps where there was missing sample data due to selective sampling practices from historical operators, and to confirm that areas of the deposit were not mined out. The program was completed by Red Pine in 2018 and consisted of 11 HQ-sized holes, located in densely drilled and developed areas, as outlined in red in Figure 12-5.

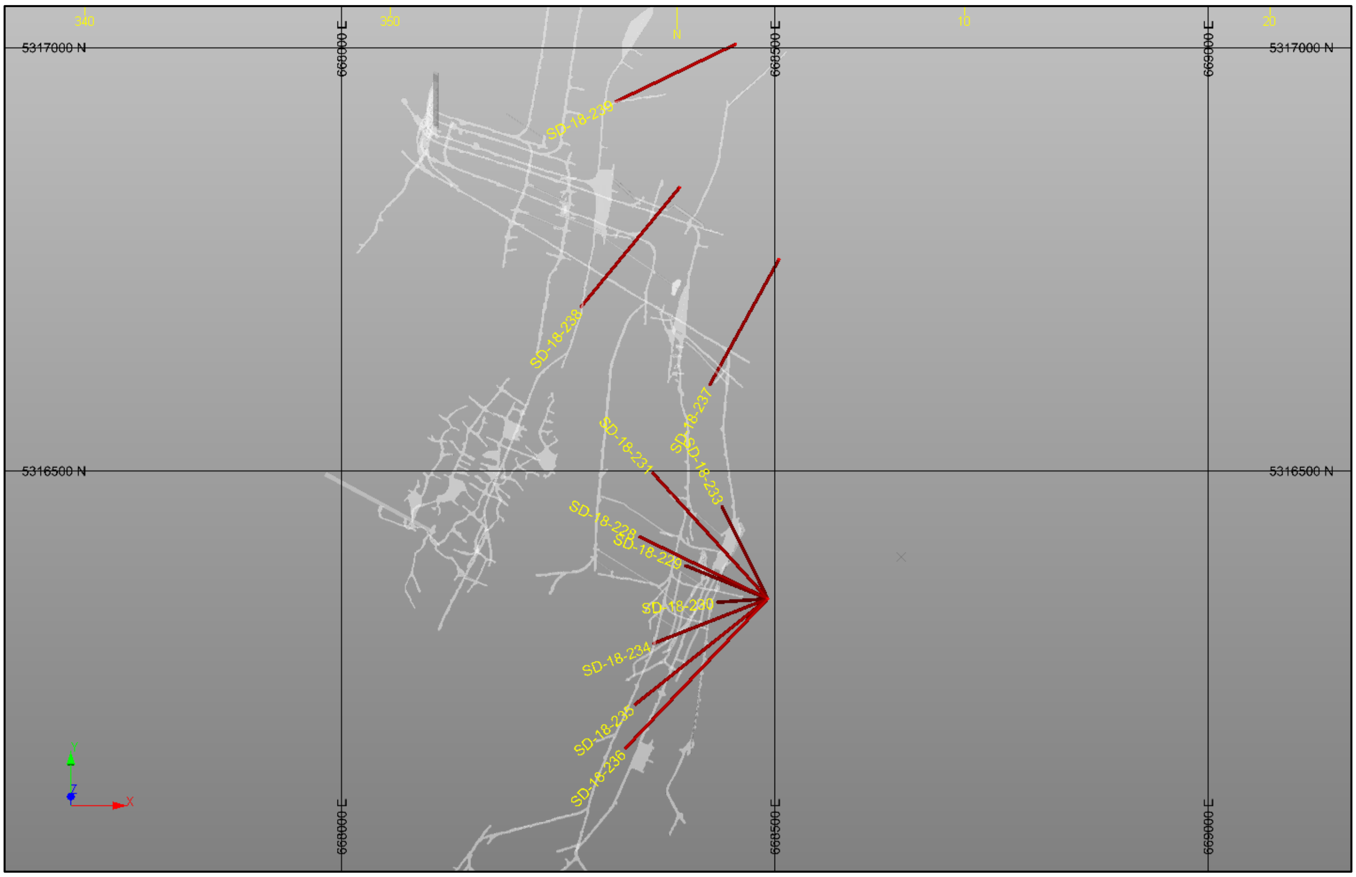


Figure 12-5: 2018 Confirmation Drill Hole Locations (Plan View)

Figure 12-6 to Figure 12-8 provide examples of visual comparisons between confirmation holes (in yellow) and neighbouring historical holes. Based on a qualitative visual assessment, the confirmation holes indicate a reasonable correlation of distribution and grade tenor of mineralization and confirm the presence of local, low-grade mineralization in unsampled historically drilled areas. No underground openings were intersected during the program.

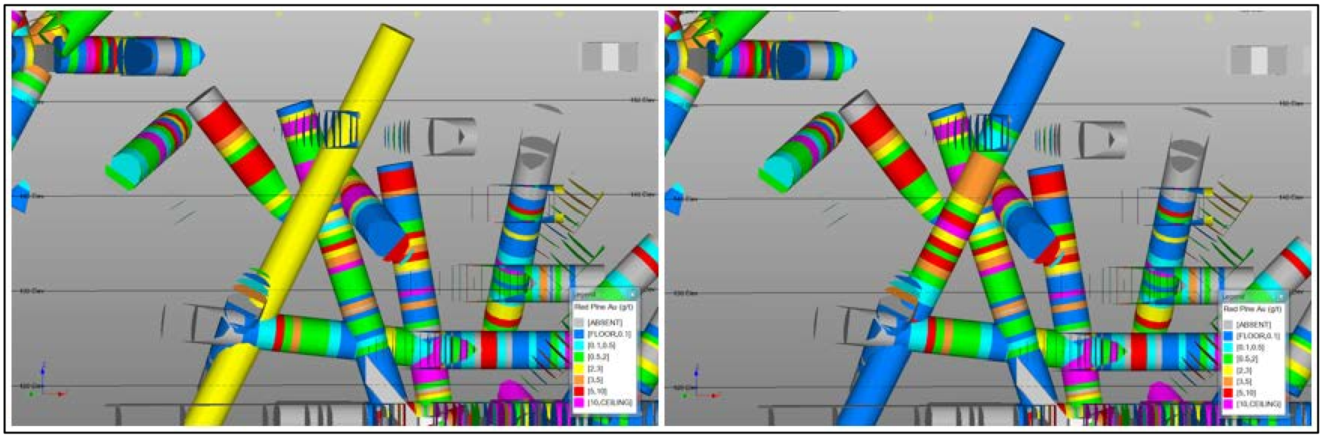


Figure 12-6: Confirmation Hole SD-18-229

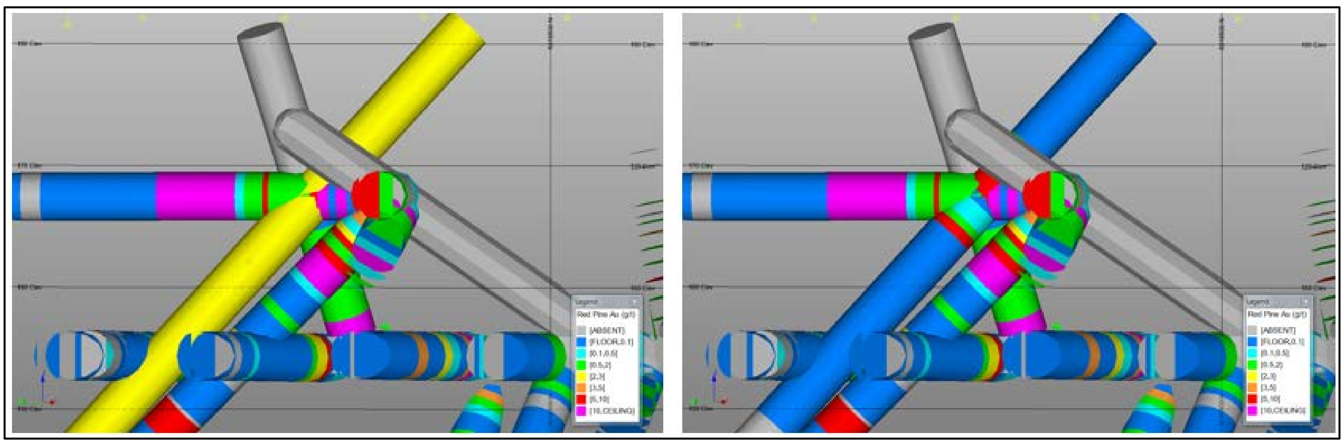


Figure 12-7: Confirmation Hole SD-18-231

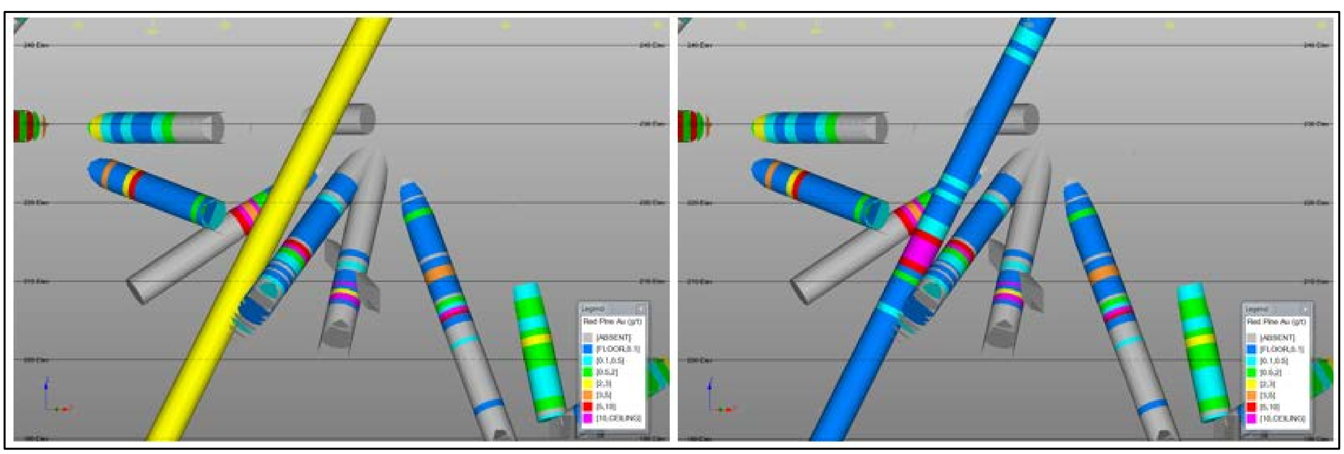


Figure 12-8: Confirmation Hole SD-18-238

The confirmation holes were not designed to be “twinned” with any other specific holes; and therefore, no direct assay comparisons or statistical analyses were completed. It is expected that there will be grade variability between current and historical data due to differences in core size, sampling procedures, analytical techniques, drilling orientations, and the highly strained nature of the deposit that can result in highly variable gold distribution over short distances.

12.1.5 QA/QC Review

The QP independently reviewed the QA/QC data provided by Red Pine for drilling completed in the Surluga deposit between 2016 to present. The data consisted of assay values for CRMs, consisting of standards and blanks, no duplicate analyses were completed by Red Pine. The assay results were analyzed for the most commonly used standards which consisted of Oreas 209 (1.58 g/t), Oreas 210 (5.49 g/t), and Oreas 218 (0.53 g/t) as well as all blanks. Out of 704 standard, and 319 blank samples analyzed, 14 issues were found where the assayed values were considered to be a “hard failure,” outside of plus or minus 3 standard deviations of the certified mean value. On review of these failures, it was determined that Red Pine had followed up on these issues and appropriate actions had been taken to ensure the quality of the data.

No QA/QC data is available for the historical assay data. During the time periods of the historical drilling, it was common that mining and exploration companies would rely on the internal QA/QC procedures used by the laboratories, but none of that information is currently available.

The QP recommends the use of duplicate samples (field, pulp, and umpire) in order to help quantify deposit variability and identify any potential laboratory bias.

12.1.6 Assay Database Verification

A total of 341 samples were chosen for database verification, to be compared to original laboratory certificates. These samples were selected from within the Jubilee Shear zones and represent all samples with grades greater than 3 g/t with sample dates ranging from 2011 to 2019.

The historical database assays could not be verified in this manner as Red Pine does not have the assay certificates for historical drill programs prior to 2011 so the historical assay data could not be directly confirmed.

Table 12-3 provides a summary of the assay verification results. An issue was identified where 32 of the metallic screened assay results were not used as the final assay result in the database and the original fire assays with AA finish were selected instead. The differences between the AA results and the metallic screened results for these samples were compared and it is the QP’s opinion that the differences are not material to the Project. Although the majority of the assays in the database are based on the fire assay / AA finish analytical technique, the QP recommends updating the assay database, using all of the available metallic screened assays as the final assay result for any future updates to the Mineral Resource estimate.

Table 12-3: Summary of Assay Comparisons to Original Certificates

No. Samples	No. Samples Matching	No. Samples Not Matching	No. Samples Missing Certificate
341	309	32	0

12.2 Minto Mine South

Data verification related to the Minto Mine South deposit was previously disclosed in the 2018 NI 43-101 Technical Report, titled “National Instrument 43-101 Initial Technical Report for the Minto Mine South Property; Report Effective Date: December 31, 2018.” Item 12.2 was copied in its entirety from the 2018 Technical Report and the QP confirms there has been no material changes to this information from the reporting date.

12.2.1 Site Visit

A site visit to the Minto South Project site was carried out by Brian Thomas, P.Geo., QP for this Mineral Resource estimate, from June 28, 2018, to June 29, 2018. The site visit included the following activities:

- Review of site geology, mineralization and structural controls on mineralization.
- Review of drilling, logging, sampling, analytical, and QA/QC procedures.
- Review of bulk density measurement procedures.
- Review of site security and chain of custody of drill core from the drill to the assay lab.
- Confirmation of drill logs and independent assay verification on selected drill core samples.
- Inspection of drill hole collar locations.

No significant issues were identified during the site visit and the geological data collection procedures and the chain of custody were all found to be consistent with industry standards and in accordance with Red Pine internal procedures.

12.2.2 Drill Collar Inspection

Three drill set-up locations were visited during the site visit. The QP surveyed drill hole collar locations with a handheld GPS at two of these locations to confirm the collar survey data provided by Red Pine. Figure 12-9 to Figure 12-10 represent the collar locations for drill hole SD-17-131 and the drill set-up that was active at the time of the site visit.

Figure 12-9: Drill hole SD-17-131 Visited during Site Visit

Figure 12-10: Drill Hole SD-17-131 Visited during Site Visit, with Active Rouiller Drilling Rig

Collar coordinates were compared for drill holes SD-17-131 and SD-18-177 against the Red Pine collar survey data and found to be within the 3 m accuracy of the handheld GPS. Comparison of collar coordinates are summarized in Table 12-4.

Table 12-4: Comparison of Drill Hole Collar Coordinates

Hole ID	Easting Golder (UTM)	Easting Red Pine (UTM)	Difference Easting (m)	Northing Golder (UTM)	Northing Red Pine (UTM)	Difference Northing (m)
SD-17-131	668,429.5	668,426.4	3.1	5,315,288.7	5,315,290.2	-1.5
SD-18-177	668,411.7	668,413.0	-1.3	5,315,214.4	5,315,218.0	-3.6

12.2.3 Independent Logging and Sampling

The QP selected intervals from six drill holes from the 2017-2018 drill program for validation logging and independent sample analysis, as outlined in Table 12-5. Figure 12-11, and Figure 12-12 provide examples of verification intervals from drill holes SD-17-174 and SD-18-195, respectively.

Figure 12-11: Drill Hole SD-17-174 Core Logged and Sampled by QP

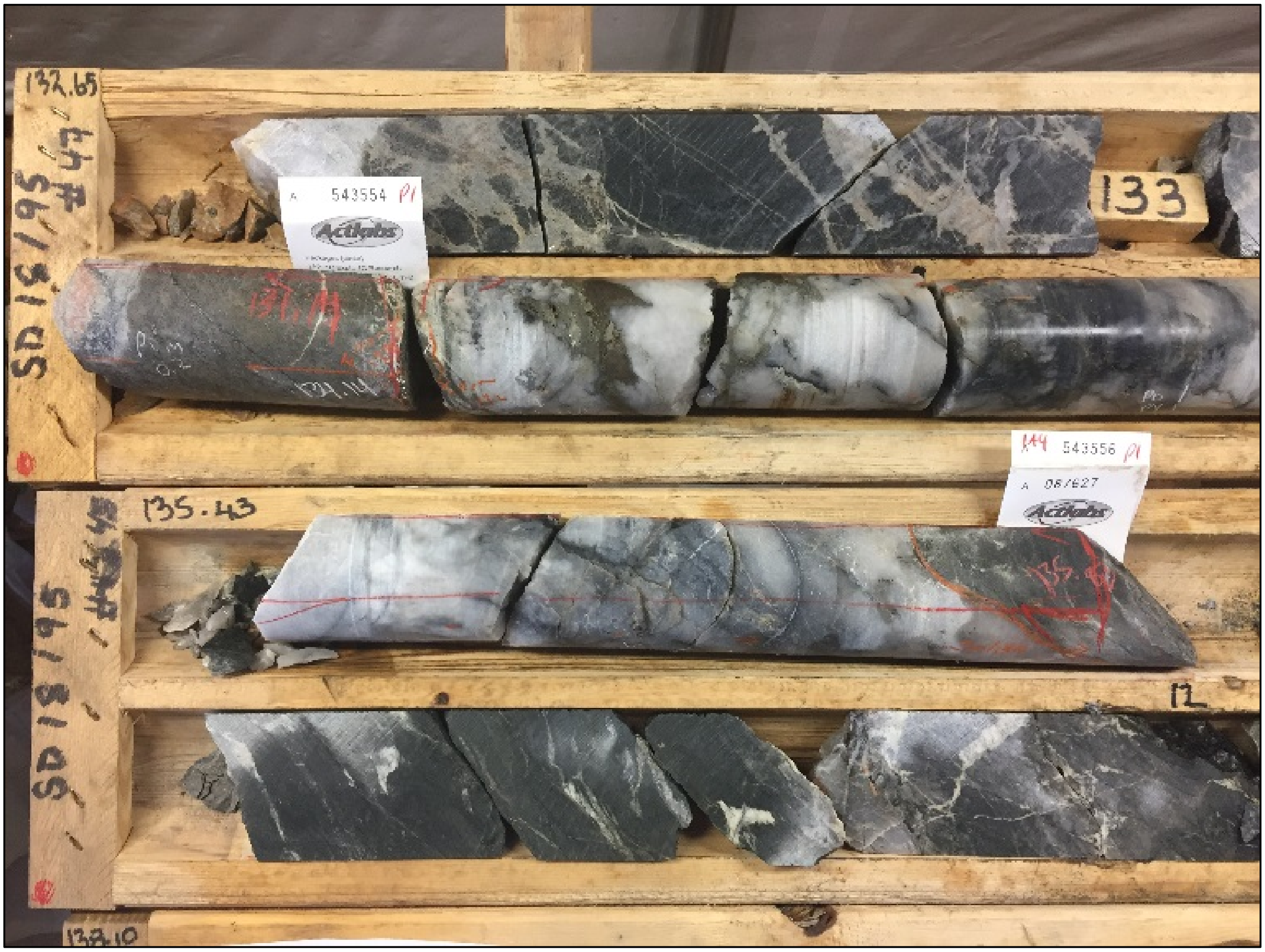


Figure 12-12: Drill Hole SD-18-195 Core Logged and Sampled by QP

Six quarter-sawn HQ core samples and two control samples (2 CRM standards) were submitted to ALS Chemex for gold fire assay analysis from a 50 g pulp and AA finish (Au-AA24). Two samples having assays greater than 10 g/t were re-assayed using gravimetric finish (Au-GRA22). These analytical procedures were chosen for the purpose of general verification of gold mineralization on the Minto property and are not consistent with analytical procedures used by Red Pine. It should be noted that the 2017-2018 Red Pine assay data is based on a larger volume of core (half-sawn HQ and NQ core) and they have chosen screen metallic analytical processes for vein sample analysis, as outlined in Item 11 and is consistent with industry standard practice for nuggety gold distribution.

Table 12-5 and Figure 12-13 summarize the assay verification results between the verification samples and Red Pine samples. There is good agreement between most samples with the exception of two of the high-grade samples from drill holes SD-17-117 and SD-17-131. The QP believes that these differences may be due to the uneven distribution of gold within those sample intervals, differences in sample volumes or possibly the result of differences in analytical procedures.

Table 12-5: Comparison of Assay Verification Results

Hole ID	From (m)	To (m)	Sample No. Golder	Au Golder (ppm)	Sample No. Red Pine	Au Red Pine (ppm)
SD-17-117	127.00	128.00	P449080	9.88	498250	40.20
SD-17-73	91.75	92.87	P449081	14.95	344836	14.10
SD-17-174	195.27	196.18	P449082	4.39	543582	3.29
SD-17-131	244.21	245.30	P449083	1.75	524441	35.10
SD-18-195	134.98	135.83	P449084	9.33	543556	12.30
SD-18-188	235.94	236.90	P449085	2.26	524709	5.34
Oreas 210	-	-	P449086	5.56	Oreas 210	5.49
Oreas 229	-	-	P449087	12.50	Oreas 229	12.20

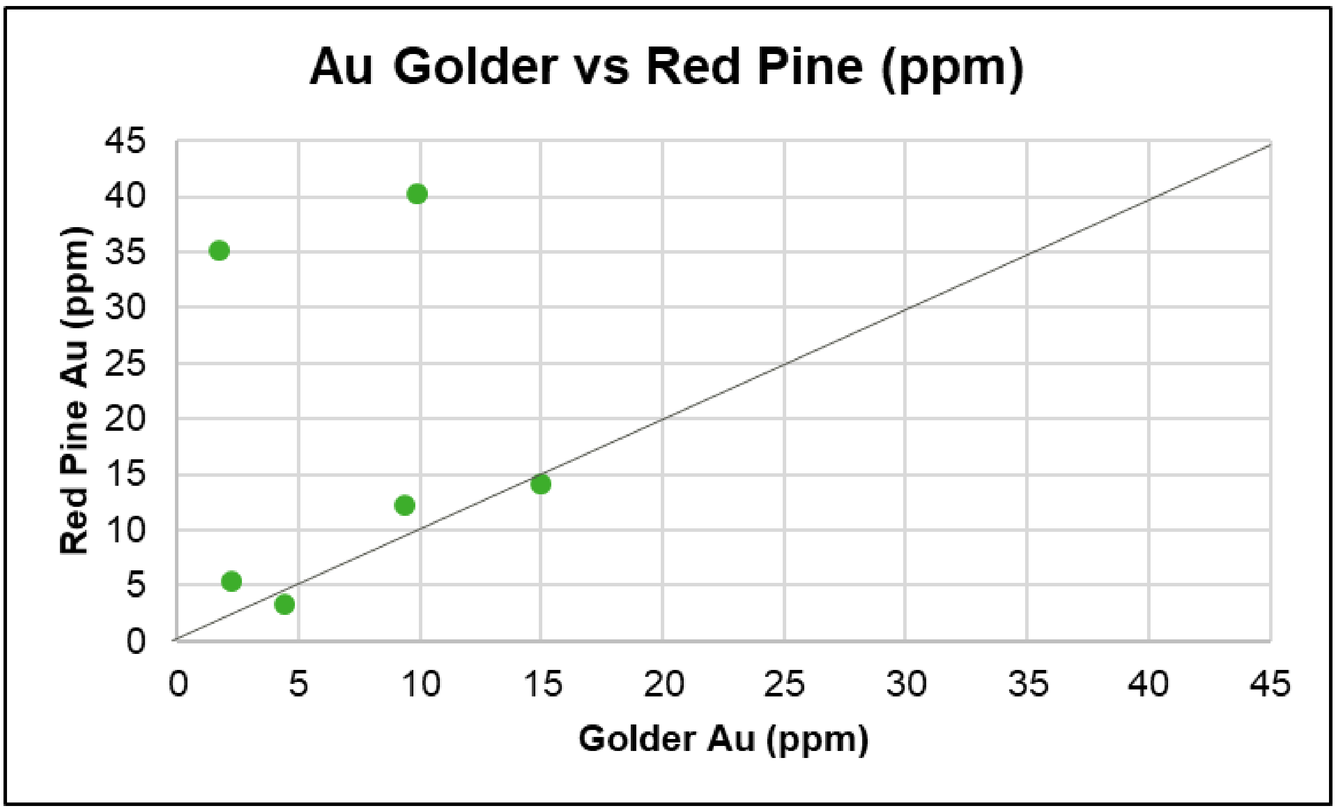


Figure 12-13: XY Scatterplot Comparison of Verification Samples

12.2.4 Assay Database Verification

The QP completed a verification check of 161 Au assays as compared to original laboratory certificates. The verification check focused on representative areas within the modelled mineral zones, focusing on all samples having a grade greater than 1.0 g/t. No material issues were identified during this verification check and all assays were found to match the laboratory certificates available. Assay certificates were not available for 15 historical samples so these samples could not be verified. A summary of the assay verification is listed in Table 12-6.

Table 12-6: Summary of Assay Comparisons to Original Certificates

No. Samples	No. Samples Matching	No. Samples Not Matching	No. Samples Missing Certificate
161	146	0	15

Since some of the historical assays could not be verified, it is recommended that two of the historical drill holes, containing high-grade assays greater than 10 g/t (drill holes 07-385, S183), be twinned with new drill holes, as a verification of historical data.

12.2.5 QA/QC Review

Red Pine has a QA/QC process in place to monitor the primary assay laboratories for potential analytical issues, as previously described in Item 11.0. Red Pine actively monitored the assay results throughout the 2017 to 2018 drill program and summarized the QA/QC results in graphs that were provided to the QP for review. Several failures from the CRMs were documented resulting in the re-assay of select samples. Most CRMs performed as expected within tolerances of three standard deviations (SD) of the mean grade. The QP is satisfied that the QA/QC process is performing as designed and that Red Pine is taking appropriate actions to ensure the quality of the data. The QP completed a check analysis of the QA/QC data as a verification of Red Pine results and is satisfied that the process is being actively monitored and is performing as designed. No analytical bias was evident from the review.

It is recommended that Red Pine submits samples to a secondary laboratory for Au and SG check analysis to ensure that there is not any laboratory bias for gold analysis and to confirm the accuracy of their internal SG measurements.

12.3 Conclusions and Recommendations

On completion of the data verification process for Surluga and Minto Mine South, it is the QP’s opinion that the geological data collection, analytical methods, and QA/QC procedures used by Red Pine are consistent with CIM best practice guidelines.

The historical drill hole assay database could not be directly verified by the QP as Red Pine does not have the assay certificates, and the core was not accessible at the time of the site visit. It should be expected, however, that there will be variability between current and historical assay data due to differences in core size, sampling procedures, analytical techniques, drilling orientations and the highly strained nature of the deposit that results in variable gold distribution over short distances.

The confirmation drill program completed at Surluga provided spot checks of the historical data distributed throughout the deposit that corroborated the presence of mineralization, including the approximate distribution and tenor of mineralization as well as the absence of mining voids.

It is the QP’s opinion that Red Pine has done a reasonable job trying to validate and improve the confidence of the historical data, and that the geological database is of suitable quality to support the 2019 Mineral Resource estimate, as reported in Item 14.0.

The QP recommends a historical core sample program to further assess the quality of the legacy data. This program would include a statistically significant number of samples (approximately 1,000) selected from the remaining split AQ-sized core drilled during the 1980’s. Core drilled from earlier periods is no longer available.

The QP also recommends updating the assay database, using all of the available metallic screened assays as the final assay result, as these results are deemed to be the highest quality.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

During the summer of 2019, Red Pine commissioned McClelland Laboratories Inc., located in Sparks, Nevada, to determine the amenability of 11 samples from the Surluga and Minto Mine South deposits to cyanidation and flotation treatment. Of the 11 samples, 3 were from the Minto Mine South Deposit and 8 were from different zones of the Surluga Deposit. Results from the study were received by Red Pine on August 22, 2019.

13.1 Selection of Metallurgical Samples

13.1.1 Mineralization styles in the Surluga and Minto Mine South Deposits

In the Surluga deposit, gold mineralization principally occurs as arrays of quartz veins of different thickness associated with pyrite as the main sulfide (pyrite-dominant mineralization). Accessory to absent pyrrhotite and arsenopyrite, and minor to absent chalcopyrite, occasional native gold, sphalerite and galena complete the main mineral assemblage. Pyrite-dominant mineralization is absent from the Minto Mine South deposit. Petrographic and laser-ablation ICP-MS work conducted on that mineralization assemblage indicates that gold is principally occurring as free native gold coating the iron sulfides with a possible minor fraction of gold hosted either as inclusions or solid solution in some pyrite (Wehrle, 2020).

In the Minto Mine South deposit, and in certain zones of the Surluga deposit, gold mineralization is associated with quartz-tourmaline veins with variable pyrite, accessory pyrrhotite, minor to trace chalcopyrite, common native gold and minor to absent gold-bismuth alloys (e.g., maldonite – Au_2Bi), native bismuth and bismuthinite (Wehrle, 2020; Minto mineralization). In the Surluga Deposit, Minto mineralization is typically blended with Py-dominant and Apy-dominant mineralization and is observed to postdate both mineralization types.

A third style of gold mineralization has arsenopyrite as the main sulfide (arsenopyrite-dominant). It occurs as variably preserved relicts in the resource of the Surluga deposit and is absent from the Minto Mine South deposit. Where observed in the Surluga deposit, it occurring as extremely deformed arsenopyrite-bearing schists with or without strong quartz veining. Within the Surluga deposit, primary arsenopyrite-dominant mineralization tends to be spatially restricted to discrete zones and is more commonly blended as an accessory to minor component in larger zones formed principally by pyrite-dominant with accessory to absent Minto mineralization. Petrographic work indicate that both the Py-dominant and Minto mineralization types are overprinting Apy-dominant mineralization.

Petrographic and laser-ablation ICP-MS work conducted on the arsenopyrite-dominant mineralization type was done in 2019 and 2020 at the University of Windsor (Ontario) as part of a Master's thesis on the Wawa Gold Project (see Wehrle, 2020). For the arsenopyrite-dominant mineralization, this work suggests that the deportment of gold is variable and is controlled by the intensity of fluid-rock interactions following the precipitation of an early gold-rich arsenopyrite (see Wehrle, 2020). In samples taken in zones of arsenopyrite-dominant mineralization without extensive fluid-rocks interactions post-deposition of the gold-rich arsenopyrite, gold is mainly deported in solid solution or as very fine inclusions in arsenopyrite, and very rarely as native gold. In samples in which low to moderate levels of fluid-rock interactions occurred post-deposition of the gold-bearing arsenopyrite, the early gold-bearing arsenopyrite is variably recrystallized by cycles of coupled-dissolution-precipitation that have liberated some of the gold from the arsenopyrite. Gold in these samples is deported as occasional native gold and in solid solution or micro-inclusions in arsenopyrite. In samples affected by strong to intense fluid-rock interactions post precipitation of the gold-bearing arsenopyrite, the cycles of dissolution-precipitation affecting the gold-bearing arsenopyrite have completely leached gold out of the arsenopyrite, which is devoid of gold, and precipitated gold present is as native gold.

The petrographic observations conducted on the arsenopyrite forming the arsenopyrite-dominant mineralization of the Surluga deposit indicate that the sole presence of arsenopyrite may not be an accurate proxy for the metallurgical behavior of that material. Targeted petrographic work or the possible use of geochemical pathfinders will be necessary to appropriately prognosticate the metallurgical response of arsenopyrite-dominant mineralization in the Surluga Deposit and other mineralized structures of the Wawa Gold Project.

13.1.2 Selected Metallurgical Samples in the Surluga and Minto Mine South Deposits

The samples sent for metallurgical testing were composites made from three (3) to 22 individual core samples prepared by quartering half HQ-sized core. The composite samples sent for metallurgical testing were selected to provide a compositional approximation of the higher-grade cores of the mineralized structures and of the compositional variability of gold mineralization between different zones of the deposit.

Three (3) samples from the Minto Mine South deposit were selected to characterize Minto mineralization. The metallurgical attributes of the Minto mineralization in the Surluga Deposit were considered to be represented by the samples used for the Minto Mine South Deposit due to their compositional similarities, in terms of sulphide assemblage, gangue mineral composition, and bulk chemistry. Five (5) samples were selected in the Surluga Deposit to represent a blend of pyrite-dominant with accessory to absent arsenopyrite-dominant mineralization to characterize the most likely metallurgical behavior of gold mineralization during production from the higher-grade zones of the deposit. Three (3) samples were also specifically selected to characterize the metallurgical behavior of primary arsenopyrite mineralization that is locally preserved in discrete zones of the Surluga Deposit.

13.2 Sample Preparation and Head Analysis

Note that content for this Item is from the McClelland Laboratories, Inc., August 22, 2019, report, titled “Report on Q2 2019 Metallurgical Studies – Surluga/Minto Composite Samples,” by Jared R. Olson.

On April 16, 2019, eleven samples of quarter sawn drill core were received from the Surluga project for analysis and testing. The samples were labelled as RPX-1 through RPX-11 and weighed 2 kg to 37 kg.

Each sample was crushed to nominal 10 mm. The 10-mm material was then blended and split using a riffle or rotary type splitter to obtain approximately 5 kg for crushing to 100%-1.7 mm. In the case of the two samples that weighed less than 5 kg (RPX-1 and RPX-8), the samples were crushed entirely to -1.7 mm. The -1.7-mm material was blended and split using a rotary type splitter to obtain four replicate samples (typically 1.25 kg each).

One of the replicate splits of the -1.7-mm material was used to determine a batch ball mill grind time for grinding to an 80%-75µm feed size. This split was ground in a laboratory steel ball mill. Grinding was periodically stopped and the material was screened to determine approximate percent passing 75µm. Plus and minus 75µm was de-watered and returned to the mill for additional grinding. The process was repeated until an 80%-75µm size was reached and the required grind time was determined.

One of the replicate splits from each sample was further split to obtain duplicate 100-g splits for head analysis. Each of these splits was analyzed for gold and silver content by conventional fire assay fusion procedures. One of the duplicate splits from each sample was also used for an ICP metals scan and for sulphide sulphur analysis.

Gold and silver head assay results and head grade comparisons are presented in Table 13-2 and Table 13-3. Sulphide sulphur analysis results are given in Table 13-4.

Table 13-1: Gold Head Assay Results and Head Grade Comparisons, Surluga/Minto Composite Samples

Au (g/t)							
Sample	Direct Assay		Calculated Head		Average	Standard Deviation	Relative Standard Dev. %
	Initial	Duplicate	CN	Flot.			
RPX-1	10.4	7.25	7.31	6.36	7.83	1.77	22.6
RPX-2	3.44	7.68	4.51	4.85	5.12	1.81	35.4
RPX-3	5.65	8.78	2.82	9.46	6.68	3.06	45.8
RPX-4	3.61	4.2	7.82	4.44	5.02	1.9	37.8
RPX-5	4.31	3.78	4	4.99	4.27	0.53	12.4
RPX-6	4.49	5.4	4.72	5.11	4.93	0.4	8.1
RPX-7	2.82	2.39	2.86	3.12	2.8	0.3	10.7
RPX-8	5.69	5.51	6.19	6.77	6.04	0.56	9.3
RPX-9	13.6	10.9	9.92	13.3	11.9	1.8	15.1
RPX-10	4.14	4.49	4.68	6.03	4.83	0.83	17.2
RPX-11	2.79	2.48	2.54	3.05	2.72	0.26	9.6

Table 13-2: Silver Head Assay Results and Head Grade Comparisons, Surluga/Minto Composite Samples

Ag (g/t)					
Sample	Direct Assay		Calculated Head		Average
	Initial	Duplicate	CN	Flot.	
RPX-1	0.5	0.3	<0.6	<0.5	0.5
RPX-2	0.4	0.8	0.6	<0.9	0.7
RPX-3	0.3	0.4	<0.3	<0.9	0.5
RPX-4	0.4	0.4	<0.6	0.4	0.5
RPX-5	0.5	0.5	0.4	0.5	0.5
RPX-6	0.4	0.7	0.4	<0.5	0.5
RPX-7	0.4	0.3	<0.2	<0.4	0.3
RPX-8	0.1	0.1	0.4	<0.3	0.2
RPX-9	5.1	2.8	6.9	<5.8	5.1
RPX-10	0.6	0.5	0.6	0.8	0.6
RPX-11	0.3	0.4	0.4	0.4	0.4

Average gold head grades ranged from 2.72 to 11.9 g/t Au . Head grade agreement was good for samples RPX-6, 8, and 11. Gold head grade relative standard deviation in these was less than 10%. Otherwise, head grade agreement generally was poor. Head grade agreement was notably poor for sample RPX-3. Relative standard deviation for this sample was 45.8%. During flotation test of this sample, 41% of the contained gold was collected in the metallic fraction suggesting that this sample contained a substantial amount of coarse particulate gold. It is expected that the poor head grade agreement observed for this sample, and potentially for other Surluga/Minto composite samples, is due to a “nugget effect” caused by the presence of coarse particulate gold.

Average silver head grades generally ranged from 0.2 to 0.7 g/t Ag . Average grade was somewhat higher for sample RPX-9 (5.1 g/t Ag).

Table 13-3: Sulphide Sulphur Analysis Results, Surluga/Minto Composite Samples

Sample	% Sulfide S
RPX-1	0.63
RPX-2	2.78
RPX-3	0.6
RPX-4	0.56
RPX-5	0.77
RPX-6	1.39
RPX-7	1.14
RPX-8	0.67
RPX-9	0.6
RPX-10	0.56
RPX-11	0.67

Sulphide sulphur grades were very similar for 8 of the 11 samples and ranged from 0.56% to 0.77%. Grades were somewhat higher for samples RPX-2, 6, and 7, and ranged from 1.14% to 2.78%.

A detailed correlation analysis was conducted to compare head analysis results to cyanidation recoveries, cyanidation reagent requirements, flotation recoveries, flotation mass pull, and gold and silver grades. It was noted that cyanidation gold recoveries were inversely correlated to arsenic concentration. It was also noted that cyanide consumption increased with increasing iron concentration and flotation mass pull increased with increasing sulphide sulphur content.

13.2.1 Agitated Cyanidation Testing Procedures and Results

Agitated CIL cyanidation bottle roll tests were conducted on each of the 11 Surluga/Minto composite samples to determine gold and silver recoveries and reagent requirements. Following the leach cycle, slurries were screened to recover the metallic fraction which was assayed separately from the remaining tails. This was done to capture any residual gravity recoverable gold. Tests were conducted at an 80%-75 µm feed size with a 32-hour leach cycle.

Splits from each sample (typically 1.25 kg) were batch ground in a mild steel ball mill using the grind times previously determined, to produce an 80%-75 µm feed for leaching. In addition to normal quality control procedures to prevent sample cross-contamination, composites were ground in order of increasing estimated gold grade. Following each composite, the ball mill was cleaned by grinding barren silica sand. The sand was dried, weighed, and assayed to determine gold losses to the ball mill. Assay results showed that 0.1% to 1.5% (0.5% average) of the gold contained in a given sample was lost to the ball mill.

Slurries were settled in grinding water and decanted, as needed, to reach 40% solids. Natural slurry pH was measured, and lime was added to adjust the slurry pH to 10.0. Sodium cyanide, equivalent to 2.0 g NaCN/L of solution, was then added to each alkaline slurry. Pretreated activated carbon, equivalent to 20 g carbon/L slurry, was added immediately before the initial cyanide addition. The activated carbon was pretreated by attritting and soaking in a barren cyanide solution for 6 hours before use.

Leaching was conducted by rolling the slurries in bottles on laboratory rolls for 32 hours. Rolling was suspended briefly after 2, 6, and 16 hours so samples of pregnant solution could be taken for gold and silver analysis by ICP methods. Slurry D.O. levels were measured. Pregnant solution volumes were measured and sampled. Cyanide concentration and pH were determined for each solution. Make-up water, equivalent to that withdrawn was added to the slurries. Cyanide concentration in CIL tests were allowed to decrease naturally with cyanide addition only to make-up for cyanide removed in the analytical samples. Lime was added when necessary to maintain the leaching pH at between 9.8 and 10.2.

After 32 hours, CIL bottle roll tests were interrupted. Final pregnant solution volumes were measured and sampled for gold and sliver analysis. Final pH and cyanide concentrations were determined.

Slurries were screened to recover loaded carbon. After carbon removal, the slurries were additionally screened at 150 µm to recover any coarse particulate gold (metallics fraction). Loaded carbon, metallic fraction, and remaining leached residue were washed, dried, weighed, and assayed to determine precious metal content. The leached residues were assayed in triplicate. The metallics fractions were assayed to extinction.

Overall metallurgical results from the agitated leach tests are presented in Table 13-5 and Table 13-6.

Table 13-4: Overall Metallurgical Results, Agitated Cyanidation Tests, Surluga/Minto Composite Samples, 80%-75µm Feed Size

Composite: Metallurgical Results	RPX-1 CY-9	RPX-2 CY-10	RPX-3 CY-8	RPX-4 CY-6	RPX-5 CY-4	RPX-6 CY-1
Recovery: % of total Au						
Loaded Carbon	94.7	97.6	93.6	93.7	84.8	48.5
Metallics Fraction	0	0	0.4	0.8	0.5	0.4
Total	94.7	97.6	94	94.5	85.3	48.9
Extracted (Carbon), g/t Au	6.92	4.4	2.64	7.33	3.39	2.29
Extracted (Metallics), g/t Au	0	0	0.01	0.06	0.02	0.02
Total Extracted, g/t Au	6.92	4.4	2.65	7.39	3.41	2.31
Tail assay, g/t Au1)	0.39	0.11	0.17	0.43	0.59	2.41
Calculated Head, g/t Au	7.31	4.51	2.82	7.82	4	4.72
Average Head, g/t Au2)	7.83	5.12	6.68	5.02	4.27	4.93
Recovery: % of total Ag						
Loaded Carbon	>50.0	50	>66.7	>66.7	75	75
Metallics Fraction	>33.3	16.7	0	>16.7	0	0
Total	>83.3	66.7	>66.7	>83.3	75	75
Extracted (Carbon), g/t Ag	0.3	0.3	0.2	0.4	0.3	0.3
Extracted (Metallics), g/t Ag	0.2	0.1	0	0.1	0	0
Total Extracted, g/t Ag	0.5	0.4	0.2	0.5	0.3	0.3
Tail assay, g/t Ag1)	<0.1	0.2	<0.1	<0.1	0.1	0.1
Calculated Head, g/t Ag	<0.6	0.6	<0.3	<0.6	0.4	0.4
Average Head, g/t Ag2)	0.5	0.7	0.5	0.5	0.5	0.5
NaCN Consumed, kg/mt	0.63	1.68	0.73	1.27	1.05	0.88
Lime Added, kg/mt	0.6	0.4	0.4	0.4	0.4	0.4

Notes:
1) Average of triplicate tail assays.
2) Average of all head grade determinations.

Table 13-5: Overall Metallurgical Results, Agitated Cyanidation Test, Surluga/Minto Composite Samples, 80%-75µm Feed Size

Composite: Metallurgical Results	RPX-1 CY-9	RPX-2 CY-10	RPX-3 CY-8	RPX-4 CY-6	RPX-5 CY-4	RPX-6 CY-1
Recovery: % of total Au						
Loaded Carbon	94.7	97.6	93.6	93.7	84.8	48.5
Metallics Fraction	0	0	0.4	0.8	0.5	0.4
Total	94.7	97.6	94	94.5	85.3	48.9
Extracted (Carbon), g/t Au	6.92	4.4	2.64	7.33	3.39	2.29
Extracted (Metallics), g/t Au	0	0	0.01	0.06	0.02	0.02
Total Extracted, g/t Au	6.92	4.4	2.65	7.39	3.41	2.31
Tail assay, g/t Au[1)]	0.39	0.11	0.17	0.43	0.59	2.41
Calculated Head, g/t Au	7.31	4.51	2.82	7.82	4	4.72
Average Head, g/t Au[2)]	7.83	5.12	6.68	5.02	4.27	4.93
Recovery: % of total Ag						
Loaded Carbon	>50.0	50	>66.7	>66.7	75	75
Metallics Fraction	>33.3	16.7	0	>16.7	0	0
Total	>83.3	66.7	>66.7	>83.3	75	75
Extracted (Carbon), g/t Ag	0.3	0.3	0.2	0.4	0.3	0.3
Extracted (Metallics), g/t Ag	0.2	0.1	0	0.1	0	0
Total Extracted, g/t Ag	0.5	0.4	0.2	0.5	0.3	0.3
Tail assay, g/t Ag[1)]	<0.1	0.2	<0.1	<0.1	0.1	0.1
Calculated Head, g/t Ag	<0.6	0.6	<0.3	<0.6	0.4	0.4
Average Head, g/t Ag[2)]	0.5	0.7	0.5	0.5	0.5	0.5
NaCN Consumed, kg/mt	0.63	1.68	0.73	1.27	1.05	0.88
Lime Added, kg/mt	0.6	0.4	0.4	0.4	0.4	0.4

Notes:
1) Average of triplicate tail assays.
2) Average of all head grade determinations.

The Surluga/Minto Composite samples generally were readily amenable to CIL cyanidation treatment at the 80%-75 µm feed size. For 9 of the 11 samples, cyanidation gold recovery ranged from 77.7% to 97.6% (average of 90.3%) in 32 hours of leaching. Gold recoveries were notably lower for samples RPX-6 (48.5%) and RPX-8 (55.9%).

Leached residues were screened at 150 µm to capture any metallic gold particles that were not extracted within the 32-hour leach cycle. Results indicate that this “metallics” fraction contained 0.8% or less (0.3% average) of the total gold contained in the composite samples.

Total silver extractions ranged from 0.1 to 1.9 g/t Ag (average of 0.5 g/t Ag). These extractions are equivalent to 27.5% to >83.3% (average of 69.2%).

Cyanide consumption was moderate to high and ranged from 0.63 to 1.68 kg NaCN/mt (1.06 kg NaCN/mt average). It is likely that cyanide consumption would be somewhat lower during commercial processing of this material. Results from batch CIL cyanidation testing that are conducted with new carbon, tend to typically overestimate commercial cyanide consumption.

Lime requirements for pH control were uniformly low and ranged from 0.4 to 0.6 kg/mt.

13.2.2 Bulk Sulphide Flotation Testing Procedures and Results

A rougher bulk sulphide flotation test was conducted on each of the 11 Surluga/Minto composite samples at an 80%-75μm feed size to determine response to flotation treatment. Each ground ore charge was screened prior to flotation to recover a metallics fraction which was assayed separately from the flotation products. This was done to remove any coarse metallic gold particles which would likely be recoverable by gravity concentration.

Splits from each sample (typically 1.25 kg) were batch ground in a steel ball mill, using the grind times previously determined, to produce an 80%-75μm feed for leaching. In addition to normal quality control procedures to prevent sample cross-contamination, composites were ground in order of increasing estimated gold grade. Following each composite, the ball mill was cleaned by grinding barren silica sand. The sand weas dried, weighed, and assayed to determine gold losses to the ball mill. Assay results showed that. 0.2% to 4.6% of the gold contained in a given sample was lost to the ball mill.

Each of the ground slurries was screened at 150 μm to remove gravity recoverable gold, prior to flotation.

Flotation was conducted using a Denver laboratory scale flotation unit at 1,200 rpm. Slurry solids density of the ground ore was adjusted to 33 weight percent solids. Flotation was conducted in 4 stages with 0.015 kg/mt of PAX (potassium amyl xanthate) added at each of stages 1 and 2 and 0.010 kg/mt of AERO 3477 promoter (dithiophosphate) added at each of stages 2 through 4. Total addition of reagents was 0.030 kg/mt PAX and 0.030 kg/mt AERO 3477. MIBC was used as a frother. The slurry was floated at natural pH. The 4 stages of concentrate were combined into a rougher concentrate. The rougher concentrate and rougher tails were each dried, weighed, and assayed to determine residual gold, silver, and sulphide sulphur content. The rougher tails gold and silver assays were conducted in triplicate. The metallic fractions were also assayed for gold and silver content. These fractions were assayed to extinction.

Flotation test results are present in Table 13-7 through Table 13-17.

Table 13-6: Bulk Sulphide Flotation Concentration Test F-9 Results, Surluga/Minto Composite Sample RPX-1, 80%-75μm Feed Size

Product	Weight, %	Cum. Wt., %	Assay			Distribution					
						Au		Ag		% S=	
			g/t Au	g/t Ag	% S=	%	Cum. %	%	Cum. %	%	Cum. %
Metallics Fraction	0.3	0.3	334.0	47.0	N/A	15.8	15.8	28.2	28.2	N/A	N/A
Ro. Conc.	3.4	3.7	142.0	7.7	12.3	75.9	91.7	52.5	80.7	71.9	71.9
Ro. Tail	96.3	100	0.55	<0.1	0.17	8.3	100	<19.3	100	28.1	100
Composite	**100**		**6.36**	**<0.5**	**0.58**	**100**		**100**		**100**	

Table 13-7: Bulk Sulphide Flotation Concentration Test F-10 Results, Surluga/Minto Composite Sample RPX-2, 80%-75µm Feed Size

Product	Weight, %	Cum. Wt., %	Assay			Distribution					
						Au		Ag		% S=	
			g/t Au	g/t Ag	% S=	%	Cum. %	%	Cum. %	%	Cum. %
Metallics Fraction	0.6	0.6	101.0	75.0	N/A	12.5	12.5	48.6	48.6	N/A	N/A
Ro. Conc.	9.4	10.0	43.6	4.1	22.9	84.5	97.0	41.7	90.3	84.2	84.2
Ro. Tail	90.0	100	0.16	<0.1	0.45	3.0	100	<9.7	100	15.8	100
Composite	**100**		**4.85**	**<0.9**	**2.56**	**100**		**100**		**100**	

Table 13-8: Bulk Sulphide Flotation Concentration Test F-8 Results, Surluga/Minto Composite Sample RPX-3, 80%-75µm Feed Size

Product	Weight, %	Cum. Wt., %	Assay			Distribution					
						Au		Ag		% S=	
			g/t Au	g/t Ag	% S=	%	Cum. %	%	Cum. %	%	Cum. %
Metallics Fraction	0.9	0.9	434.0	54.0	N/A	41.3	41.3	54.7	54.7	N/A	N/A
Ro. Conc.	3.9	4.8	138.0	7.9	16.4	56.9	98.2	34.6	89.3	93.1	93.1
Ro. Tail	95.2	100	0.18	<0.1	0.05	1.8	100	<10.7	100	6.9	100
Composite	**100**		**9.46**	**<0.9**	**0.69**	**100**		**100**		**100**	

Table 13-9: Bulk Sulphide Flotation Concentration Test F-6 Results, Surluga/Minto Composite Sample RPX-4, 80%-75µm Feed Size

Product	Weight, %	Cum. Wt., %	Assay			Distribution					
						Au		Ag		% S=	
			g/t Au	g/t Ag	% S=	%	Cum. %	%	Cum. %	%	Cum. %
Metallics Fraction	1.1	1.1	11.5	<3.0	N/A	2.8	2.8	8.0	8.0	N/A	N/A
Ro. Conc.	4.5	5.6	73.2	6.3	14.1	74.2	77.0	69.0	77.0	95.7	95.7
Ro. Tail	94.4	100	1.08	0.1	0.03	23	100	23	100	4.3	100
Composite	**100**		**4.44**	**0.4**	**0.66**	**100**		**100**		**100**	

Table 13-10: Bulk Sulphide Flotation Concentration Test F-4 Results, Surluga/Minto Composite Sample RPX-5, 80%-75µm Feed Size

Product	Weight, %	Cum. Wt., %	Assay			Distribution					
						Au		Ag		% S=	
			g/t Au	g/t Ag	% S=	%	Cum. %	%	Cum. %	%	Cum. %
Metallics Fraction	0.8	0.8	8.72	<3	N/A	1.4	1.4	4.8	4.8	N/A	N/A
Ro. Conc.	3.1	3.9	139	12.2	26.0	86.3	87.7	75.9	80.7	94.4	94.4
Ro. Tail	96.1	100	0.64	0.1	0.05	12.3	100	19.3	100	5.6	100
Composite	**100**		**4.99**	**0.5**	**0.85**	**100**		**100**		**100**	

Table 13-11: Bulk Sulphide Flotation Concentration Test F-1 Results, Surluga/Minto Composite Sample RPX-6, 80%-75µm Feed Size

Product	Weight, %	Cum. Wt., %	Assay			Distribution					
						Au		Ag		% S=	
			g/t Au	g/t Ag	% S=	%	Cum. %	%	Cum. %	%	Cum. %
Metallics Fraction	0.5	0.5	4.66	4.0	N/A	0.5	0.5	3.9	3.9	N/A	N/A
Ro. Conc.	8.0	8.5	59.5	5.0	15.9	93.1	93.6	78.2	82.1	95.9	95.9
Ro. Tail	91.5	100	0.36	<0.1	0.06	6.4	100	<17.9	100	4.1	100
Composite	**100**		**5.11**	**<0.5**	**1.33**	**100**		**100**		**100**	

Table 13-12: Bulk Sulphide Flotation Concentration Test F-3 Results, Surluga/Minto Composite Sample RPX-7, 80%-75μm Feed Size

Product	Weight, %	Cum. Wt., %	Assay			Distribution					
						Au		Ag		% S=	
			g/t Au	g/t Ag	% S=	%	Cum. %	%	Cum. %	%	Cum. %
Metallics Fraction	0.8	0.8	10.3	<3	N/A	2.6	2.6	6.6	6.6	N/A	N/A
Ro. Conc.	6.5	7.3	43.1	3.8	18.0	89.9	92.5	67.9	74.5	93.3	93.3
Ro. Tail	92.7	100	0.25	<0.1	0.09	7.5	100	<25.5	100	6.7	100
Composite	**100**		**3.12**	**<0.4**	**1.25**	**100**		**100**		**100**	

Table 13-13: Bulk Sulphide Flotation Concentration Test F-7 Results, Surluga/Minto Composite Sample RPX-8, 80%-75μm Feed Size

Product	Weight, %	Cum. Wt., %	Assay			Distribution					
						Au		Ag		% S=	
			g/t Au	g/t Ag	% S=	%	Cum. %	%	Cum. %	%	Cum. %
Metallics Fraction	1.1	1.1	6.12	<3.0	N/A	1.0	1.0	11.8	11.8	N/A	N/A
Ro. Conc.	4.6	5.7	136	3.3	14.7	92.4	93.4	54.4	66.2	96.0	96.0
Ro. Tail	94.3	100	0.47	<0.1	0.03	6.6	100	<33.8	100	4.0	100
Composite	**100**		**6.77**	**<0.3**	**0.7**	**100**		**100**		**100**	

Table 13-14: Bulk Sulphide Flotation Concentration Test F-11 Results, Surluga/Minto Composite Sample RPX-9, 80%-75μm Feed Size

Product	Weight, %	Cum. Wt., %	Assay			Distribution					
						Au		Ag		% S=	
			g/t Au	g/t Ag	% S=	%	Cum. %	%	Cum. %	%	Cum. %
Metallics Fraction	0.4	0.4	88.6	70	N/A	2.7	2.7	4.9	4.9	N/A	N/A
Ro. Conc.	5.1	5.5	236	106	18.1	90.2	92.9	93.5	98.4	95.1	95.1
Ro. Tail	94.5	100	1.0	<0.1	0.05	7.1	100	<1.6	100	4.9	100
Composite	**100**		**13.3**	**<5.8**	**0.97**	**100**		**100**		**100**	

Table 13-15: Bulk Sulphide Flotation Concentration Test F-2 Results, Surluga/Minto Composite Sample RPX-10, 80%-75μm Feed Size

Product	Weight, %	Cum. Wt., %	Assay			Distribution					
						Au		Ag		% S=	
			g/t Au	g/t Ag	% S=	%	Cum. %	%	Cum. %	%	Cum. %
Metallics Fraction	1.0	1.0	26.6	11	N/A	4.4	4.4	13.9	13.9	N/A	N/A
Ro. Conc.	3.9	4.9	135	15	14.7	87.4	91.8	74	87.9	95.3	95.3
Ro. Tail	95.1	100	0.52	0.1	0.03	8.2	100	12.1	100	4.7	100
Composite	**100**		**6.03**	**0.8**	**0.6**	**100**		**100**		**100**	

Table 13-16: Bulk Sulphide Flotation Concentration Test F-5 Results, Surluga/Minto Composite Sample RPX-11, 80%-75µm Feed Size

Product	Weight, %	Cum. Wt., %	Assay			Distribution					
						Au		Ag		% S=	
			g/t Au	g/t Ag	% S=	%	Cum. %	%	Cum. %	%	Cum. %
Metallics Fraction	0.6	0.6	12.6	<3.0	N/A	2.5	2.5	4.3	4.3	N/A	N/A
Ro. Conc.	4.5	5.1	55.2	6.7	15.1	81.3	83.8	72.8	77.1	96.0	96.0
Ro. Tail	94.9	100	0.52	0.1	0.03	16.2	100	22.9	100	4.0	100
Composite	**100**		**3.05**	**0.4**	**0.71**	**100**		**100**		**100**	

Results show that significant portions of the gold contained in composites RPX-1, 2, and 3 were captured in the metallics fraction removed by screening flotation feed. The metallics fraction from these three composites represented 15.8%, 12.5%, and 41.3%, respectively, of the gold contained in these samples. For the eight remaining composites, gold recoveries to the metallics fraction ranged from 0.5% to 4.4% (average 2.2%). The metallics fraction weights ranged from 0.3% to 1.1% of the total feed weight.

The Surluga/Minto composites generally responded very favorably to bulk sulphide flotation treatment. Combined gold recoveries to the rougher flotation concentrate and the metallics fraction ranged from 77.0% to 98.2% and averaged 90.9%. Rougher concentrate gold grades ranged from 43.1 to 236 g/t Au.

Rougher flotation concentrate weights were low for 8 of the 11 composites and were equivalent to between 3.1% and 5.1% of the feed weigh (average of 4.1%). Rougher concentrate weights were somewhat higher for composites RPX-2, 6, and 7. In these cases, the rougher concentrate weights were equivalent to 9.4%, 8.0%, and 6.5%, respectively, of the feed weight. These three composites all had elevated sulphide sulphur content. As described previously, flotation concentration mass pull increased with increasing sulphide sulphur content.

Sulphide sulphur recoveries to the flotation rougher concentrate generally ranged from 93.1% to 96.0%. Sulphide sulphur recovery was somewhat lower for composite RPX-1 (71.9%) and RPX-2 (84.2%). Both of these composites gave reasonably high gold recovery.

Flotation was also effective for recovering silver. Rougher tailings silver grades were all 0.1 g/t Ag or less.

13.2.3 Conclusions

- The Surluga/Minto composites generally were readily amenable to whole ore CIL cyanidation treatment at an 80%-75µm feed size. For 9 of the 11 composites, cyanidation gold recoveries averaged 90.3%, in 32 hours of leaching.
- Composites RPX-6 and RPX-8 were not amenable to CIL cyanidation at the 75µm size. Recoveries from these composites were 48.5% and 55.9%, respectively.
- The low recoveries from samples RPX-6 and RPX-8 are thought to be related to the elevated arsenic content of those composites and the refractory nature of sulphides with disseminated or solid solution gold.
- Cyanide consumption during CIL cyanidation was moderate to high.
- Lime requirements for pH control during cyanidation were uniformly low.

- The Surluga/Minto composites responded favorably to bulk sulphide flotation concentration treatment with removal of gravity recoverable gold (metallics fraction) before flotation. Gold recoveries to the combined metallics and flotation concentrates ranged from 77.0% to 98.2% (average 90.9%).
- Rougher flotation mass pulls generally were low and averaged 5.2% of the feed weight.
- Results indicated that significant portions of the gold contained in composites RPX-1, 2, and 3 were captured by classifying flotation feed at 150μm to simulate gravity concentration. It can be inferred by comparing these results to the metallic fractions captured following cyanidation that the majority of the gold in the +150-μm fractions would be expected as recoverable by cyanidation.

13.3 Interpretations, Conclusions and Recommendations

13.3.1 CIL cyanidation

Samples representative of the main zones of mineralization in the Surluga and Minto Mine South deposits generally were readily amenable to CIL cyanidation treatment at the 80%-75 µm feed size. For the three (3) samples representative of Minto mineralization, CIL cyanidation and gravity recoverable gold average of 95.4%. For the five (5) samples representative of the blends of pyrite-dominant with accessory to absent arsenopyrite-dominant mineralization types in the Surluga Deposit, CIL cyanidation and gravity recoverable gold average 90.3 %.

The three (3) samples selected to specifically characterize arsenopyrite-dominant mineralization in the Surluga Deposit yielded a range of CIL cyanidation and gravity recoveries between 48.9% to 78.2% (average of 61.2%). The range in gold recovery by CIL cyanidation for the arsenopyrite-dominant mineralization type corresponds to the petrographic observations on the deportment of gold for that mineralization style. For the metallurgical study, the sample selection was completed prior to the petrographic work, which precluded the sampling of the full range of mineralogical textures of arsenopyrite indicative of different intensity of fluid-rock interactions. The sample selection, based uniquely on the presence or absence of arsenopyrite, may not be completely representative of the variability of the of fluid-rock interactions that affected this type of mineralization in the Surluga deposit.

13.3.2 Flotation

Samples representative of the main zones of mineralization in the Surluga and Minto Mine South deposits were amenable to gravity recovery and bulk sulphide flotation at the 80%-75 µm feed size. For the three (3) samples representative of Minto mineralization, bulk sulphide flotation and gravity recoverable gold averaged 95.6%. For the five (5) samples representative of the blends of pyrite-dominant with accessory to absent arsenopyrite-dominant mineralization in the Surluga Deposit, bulk sulphide flotation and gravity recoverable gold averaged 86.6 %. For the three (3) samples selected to specifically characterize arsenopyrite-dominant mineralization in the Surluga Deposit, bulk sulphide flotation and gravity recoverable gold average of 93.3%.

13.3.3 Conclusions

The results indicate that:

- CIL cyanidation and gravity recoverable gold average of 90.3% for representative blends of pyrite-dominant with accessory to absent arsenopyrite-dominant mineralization forming the bulk of the resource of the Surluga Deposit.
- CIL cyanidation and gravity recoverable gold average of 95.4% for Minto mineralization forming the Minto Mine South deposit and locally present in the Surluga Deposit.

- Cyanide consumption during CIL cyanidation was moderate to high.
- Lime requirements for pH control during cyanidation were uniformly low.
- Flotation and gravity recoverable gold averaged 93.3% for the localized domains of arsenopyrite-dominant mineralization in the Surluga Deposit.
- Rougher flotation mass pulls generally were low and averaged 5.2% of the feed weight.

The positive response of Surluga and Minto Mine South mineralization to conventional, industrially proven processes provides flexibility for project definition, design, and potential treatment of respective material types.

13.3.4 Recommendations

Additional work is required to characterise the spatial distribution of the pyrite-dominant, Minto and arsenopyrite-dominant mineralization types in the Surluga Deposit and to define metallurgical domains and approximation of the blends of mineralization styles. This can be achieved with the digitization of the sulfide assemblages recorded in the historic drill logs, and diamond drilling for targeted verification of historic data and for areas of the deposit where the sulfides assemblages were not historically recorded. Diamond drilling will also be required for petrographic studies and metallurgical characterization of arsenopyrite-dominant mineralization identified in the historic drill logs in zones that were not drilled by Red Pine, and for which drill core is not available.

Once this work is completed, additional metallurgical samples representative of the ranges of blends of mineralization types in the Surluga deposit will be tested to refine the characterization of the metallurgical behavior of the higher-grade zones of the deposit. Additional metallurgical samples of the arsenopyrite-dominant mineralization will be pursued based on the textural attributes of arsenopyrite following the observations made with the petrographic work and laser-ablation ICP-MS work. This sampling will allow a better representation of the full range of metallurgical behavior of arsenopyrite-bearing mineralization based on the variable deportment of gold documented for that mineralization type to support process flowsheet definition.

14.0 MINERAL RESOURCE ESTIMATES

The Mineral Resource estimates and other information in this Item are forward-looking information. The factors that could cause actual results to differ materially from the forward-looking information include any significant differences from one or more of the following material factors or assumptions that were applied in drawing the conclusions or making the estimates, forecasts or projections set forth in this Item, including: **the accuracy of historical assay database, the assumptions used by the QP to prepare the data for resource estimation, the highly structurally deformed nature of the deposit resulting in high grade variability, the presence of narrow Lamprophyre dykes that are typically barren but difficult to interpret, the interpretation of the controlling structural environment and mineral domain models, the selection of grade interpolation method, sample search and estimation parameters used for grade interpolation, treatment of high-grade outlier sample data, continuity of mineralization and reasonable prospects for economic extraction.**

14.1 Introduction

This report represents an update to the June 2015 Technical Report, titled “Independent Technical Report; Wawa Gold Project, Ontario” and provides a combined Mineral Resource estimate consisting of the Surluga and Minto Mine South deposits for the Project. The Minto Mine South Mineral Resource estimate was previously disclosed on November 15, 2018, in the news release, titled “Red Pine Announces Initial Mineral Resource Estimate for its Minto Mine South Project” and is supported by the NI 43-101 Technical Report, titled “National Instrument 43-101 Initial Technical Report for the Minto Mine South Property; Report Effective Date: December 31, 2018.” No changes have been made to the Minto Mine South Mineral Resource estimate since this time.

The Mineral Resource estimate for the Surluga deposit, has been prepared in accordance with NI 43-101 and following the requirements of Form 43-101F1. The Mineral Resource estimate follows the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Estimation of Mineral Resource and Mineral Reserves Best Practices Guidelines (November 2003) and was classified following CIM Definition Standards for Mineral Resources & Mineral Reserves (May 2014).

The QP for this Mineral Resource estimate is Mr. Brian Thomas, P.Geo., an independent QP, as defined under NI 43-101 and an employee of Golder based in Sudbury, Ontario, Canada. The effective date of this Mineral Resource estimate is May 31, 2019.

The Mineral Resource estimates outlined in the following sections were derived from geological models and drill hole data provided by Red Pine, using a 3D block modelling approach in Datamine Studio RM (Datamine) software.

14.2 Surluga

14.2.1 Drill Hole Data

The Mineral Resource estimate is based upon data provided from recent surface diamond drilling, completed by Red Pine, along with historical surface and underground drill hole data from previous owner/operators. The drill hole database consisting of 2,293 drill holes, totalling approximately 190,985 m of core and 86,017 gold assays was made available for modelling on March 20, 2019. The database volume covers the entire Project area including the Surluga and Minto Mine South deposits.

For the purposes of modelling, a subset of the full data was selected from within the Jubilee Shear Zone mineral domain. Within this volume the database consists of 1,812 drill holes totalling 68,141 m of core and 37,271 gold assays.

The database was analyzed for interval errors and out of range values and was reviewed in 3D space to validate the hole locations and de-surveyed hole traces. A minor number of interval issues were identified and resolved.

The recent Red Pine drill hole data is supported by a QA/QC process as described previously in Item 11.0. The QP has also completed independent sample verification and check logging as summarized in Item 12.0 and has not identified any material flaws in the drill hole data or data collection procedures. Red Pine's data collection procedures were found to be consistent with standard industry practice. Approximately 84% of the samples were considered to be historical (legacy) data.

14.2.2 Geological Domaining

Red Pine modelled three mineralized shear zone solids, consisting of the Upper Jubilee, Main Jubilee, and Lower Jubilee shears, as outlined in Figure 14-1. These domain solids were modelled based on high shear intensity levels as described in the current and historical drill logs. Mineralization in the Surluga deposit is bound to these shear zones where quartz veins and sulphide mineralization have been highly strained and deformed producing shallowly south plunging rod-like structures, as discussed in Item 7. The QP reviewed the shear zone models and trimmed the boundaries to within approximately 80 m of any diamond drill hole. It is the QP's opinion that the shear zone models are reasonably representative of the controls on mineralization observed at the Surluga deposit.

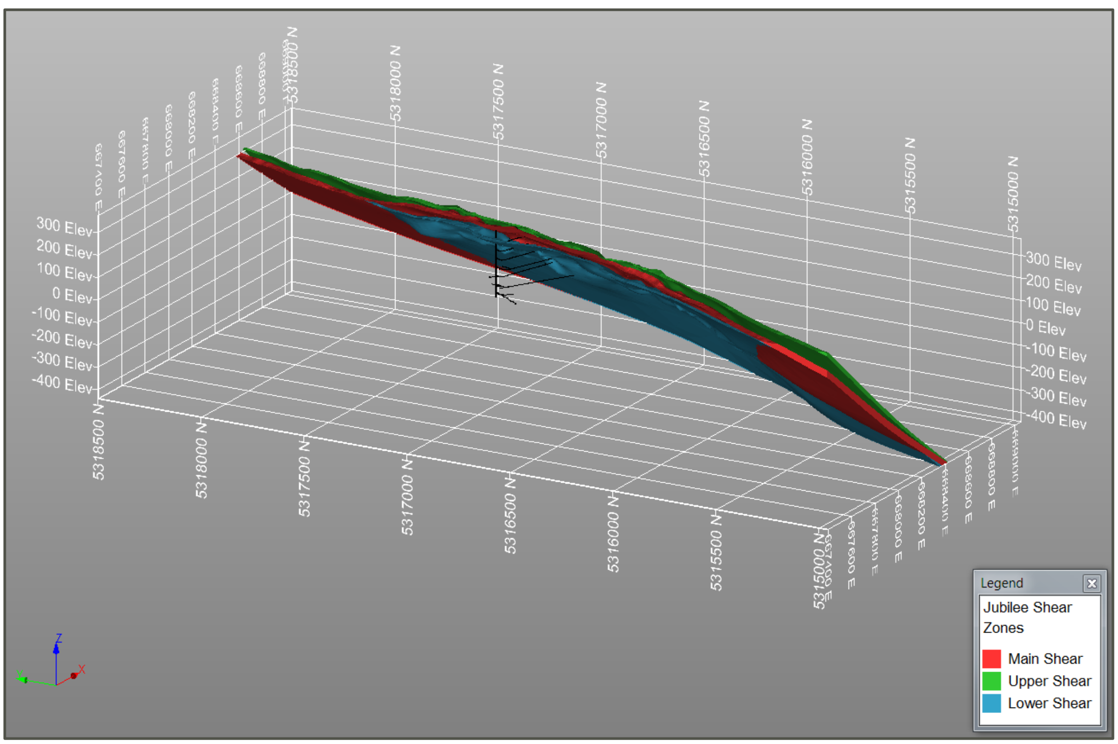


Figure 14-1: Surluga Shear Zones (Oblique View Facing Northeast)

A late Diabase dyke was also modelled and is located in the south end of the deposit and is orientated in a northwest direction. The dyke is not mineralized and was used to outline a waste domain. Many other smaller scale Lamprophyre dykes are also prevalent throughout the deposit. These dykes are generally less than 1m wide and are much more widely dispersed; and therefore, could not be reliably modelled. It would not be possible to selectively mine around these dykes and any potential mining would likely need to include the dyke material, which is generally barren, but locally mineralized. Many of the dyke intervals were sampled and those that were not sampled were assigned a grade of 0.02 g/t within the main shear zone and 0.01 g/t in the Upper and Lower Shear zones.

14.2.3 Historical Database Analysis

The Surluga drill hole database consists predominantly of historical data (84%) that was collected using processes that were undocumented and may not meet today's standards. The database has issues that make resource estimation challenging and call into question the quality of the data. These issues include the use of selective sampling, resulting in a significant amount of unsampled intervals within the mineralized domains, lack of QA/QC controls, smaller core size and no supporting laboratory certificates. As a result of these issues, the previous 2015 Mineral Resource estimate was based on a sample data set where all unsampled intervals were set to a default grade of zero, and the resulting resource classification was limited to the Inferred category.

In order to support the quality and confidence of the historical data, Red Pine conducted a large scale resample program starting in 2016 and completed a confirmation drill hole program in 2018 as previously summarized in Items 9, 10, and 12 of this Report.

The following sections outline the data analysis that the QP completed to better understand the historical data and utilize the new information from Red Pine in order to support the assumptions and methodologies used to complete the Mineral Resource estimate and should not be considered as verification of the historical sample database.

14.2.3.1 Historical Core Sampling Program

Red Pine sampled approximately 21,416 m of previously unsampled historical core from 525 drill holes that were historically assumed to be uneconomic (barren waste). This data, referred to as Resampled in the following paragraph, provided evidence that not all of the unsampled intervals were barren, as was assumed in the 2015 Mineral Resource estimate.

A total of 51,007 samples were selected within the 2019 geological shear envelopes and flagged as being either Primary (41,298), Resampled (3,467) or Absent samples (6,242). A cumulative log probability plot was used to compare the differences in the grade distributions between these populations, as shown in Figure 14-2.

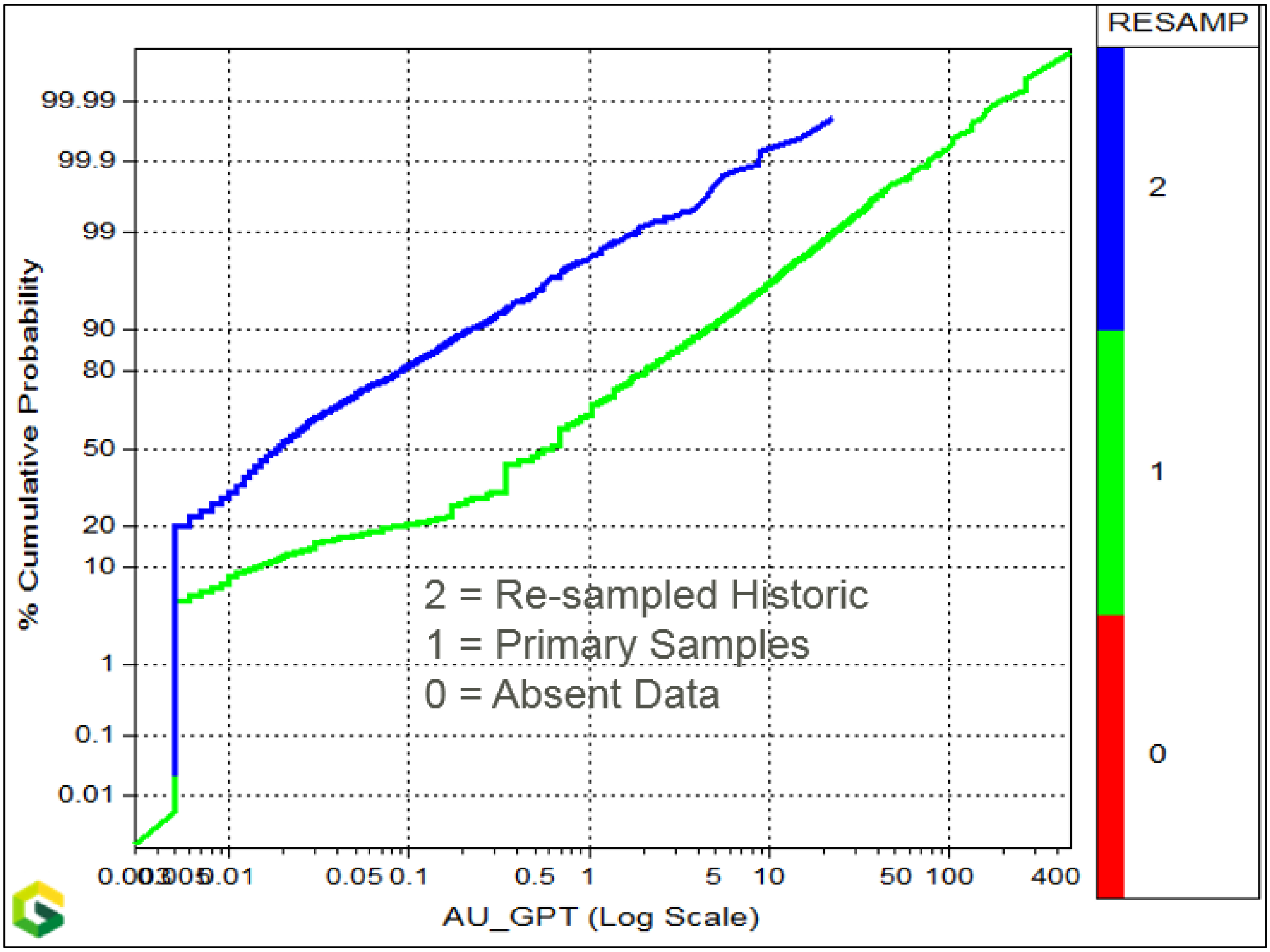


Figure 14-2: Comparison of Au grade Populations Between Primary Samples (green) and Re-sampled Historical Samples

The probability plot indicates that the selective sample choices, made by the logging geologists at the time, were generally correct when assuming that these intervals were barren and approximately 80% of the resampled population was determined to have a grade of less than 0.1 g/t. However, there was still a portion of the resampled population that was mineralized, and further analysis was required. The resampled data was then combined into stratigraphic groupings based on lithological descriptions, and another cumulative probability plot was generated in order to compare the Au distributions for each stratigraphic rock unit (Figure 14-3).

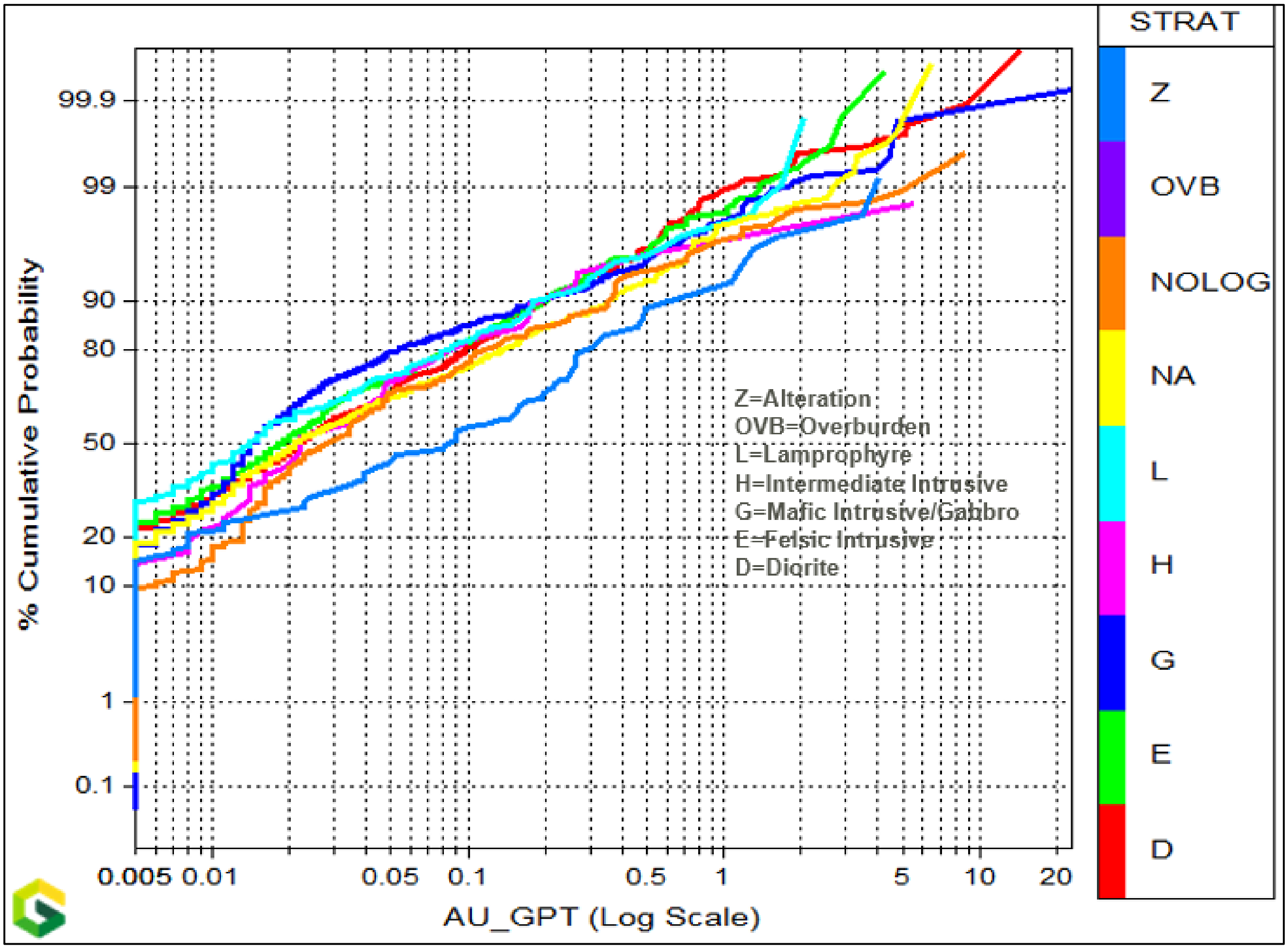


Figure 14-3: Comparison of Au grade Populations Between Stratigraphic Rock Units in Re-sampled Historical Samples

From this probability plot, it was determined that the Alteration group (blue line), was more mineralized relative to the other stratigraphic units, with approximately 50% of the population having a grade of less than 0.1 g/t as compared to the remaining units having approximately 80% less than 0.1 g/t. Based on this analysis, the QP made the decision to leave the remaining unsampled intervals, that were logged as alteration, as absent data (623 samples). All other unsampled stratigraphic units (5,619 samples) were assigned default values equal to the geometric mean of each unit. The geometric mean was used as a proxy for the median value and is therefore, not influenced by high-grade outliers as would be the case if the mean value was used. Theses default values were assigned by individual shear zone, where 1,529 absent data records in the Upper and Lower Jubilee Shears were assigned values ranging from detection limits of 0.005 g/t to 0.02 g/t and 4,090 absent data records in the Main Shear were assigned values ranging from 0.005 g/t to 0.08 with 99.5% of those being 0.04 g/t or less.

14.2.3.2 Analysis of Drill hole Data by Date

The QP analyzed the drill hole database to determine if there was any potential bias between the recent and the historical drill hole data. Based on a histogram of drilling dates, the holes were grouped into 3 generations of drilling consisting of: 1) pre 1980; 2) 1980 to 2000 and 3) 2000 to present. A cumulative log probability plot was generated to compare the Au grade distributions of each generation, as shown in Figure 14-4. Unsampled intervals were removed for the purpose of this comparison.

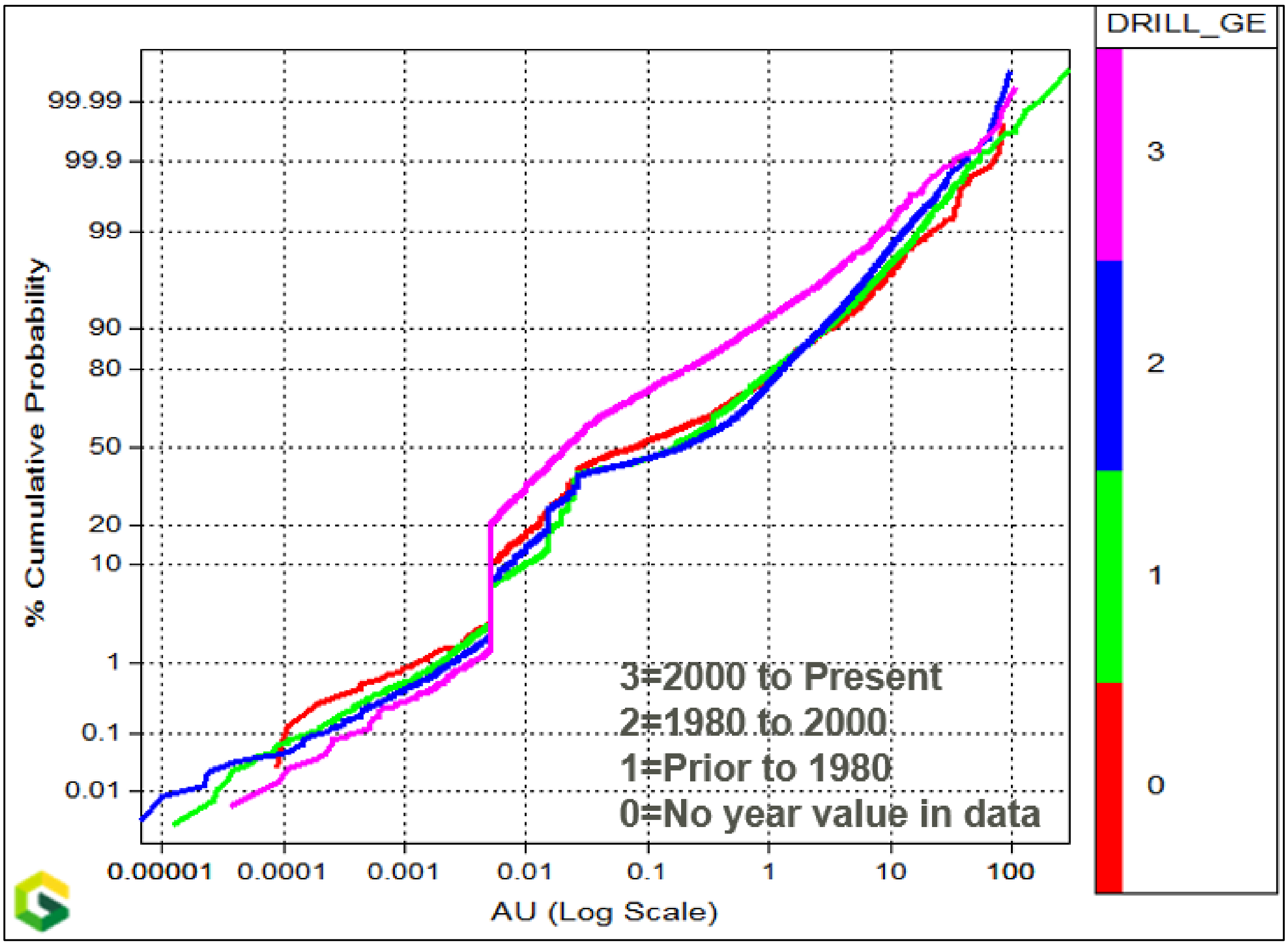


Figure 14-4: Comparison of Au grade Populations Between Drill Generations

The probability plot indicates that the recent generation of drilling (2000 to present) has a lower Au grade population than the historical drill holes (pre-2000), with approximately 90% of the population having a grade of < 1 g/t in the recent population versus 80% of the historical population having grades < 1 g/t in the historical populations. On further inspection of the actual locations of the holes, it was noted that the historical holes are heavily clustered in the higher-grade areas of the deposit, whereas the current holes are widely distributed, as shown in Figure 14-5.

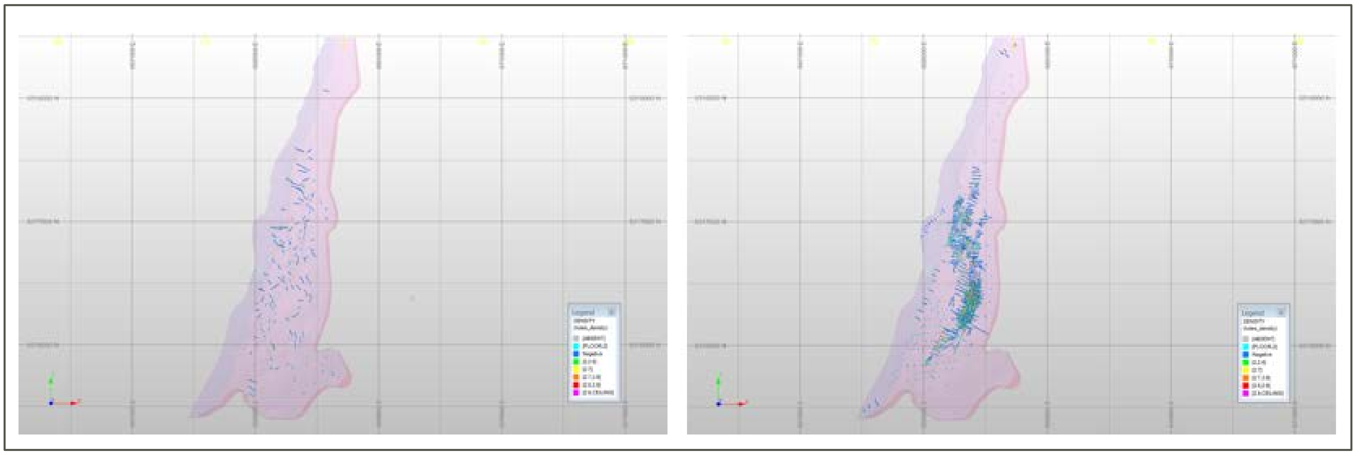


Figure 14-5: Comparison of Current vs Historical Drill Hole Distributions (Recent Holes Left, Historical Holes Right)

It is the QP's opinion that the closely spaced clustering of historical holes, within the higher-grade areas of the deposit, likely accounts for the majority of differences seen in the grade distributions between the current and historical populations.

In the rest of this Section, the term "raw" data refers to original information as provided by Red Pine. Data which has been processed to treat unsampled intervals is referred to as "processed."

14.2.4 Exploratory Data Analysis

14.2.4.1 Outlier Analysis

An XY scatterplot of Au grade vs sample length (Figure 14-6) was generated as well as a cumulative probability plot of Au grade. Based on the scatterplot, a top-cut value of 80 g/t was chosen to restrict outlier sample values for the main shear zone and a top-cut of 40 g/t was used for the Upper and Lower Shear zones. No significant breaks were identified from the probability plot. A total of 36 sample values were top-cut in the database.

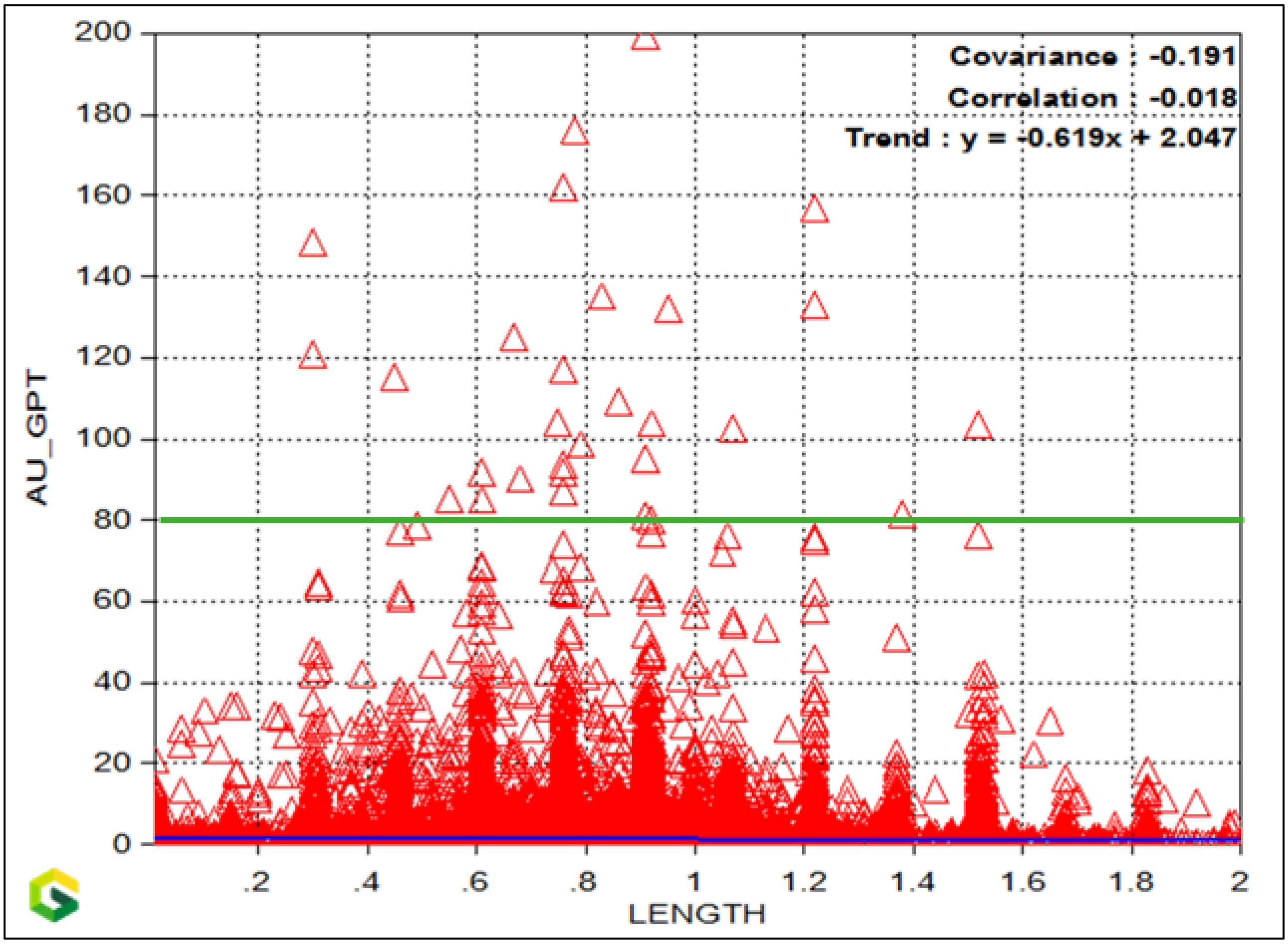


Figure 14-6: XY Scatterplot of Au Grades (g/t) vs Sample Length (m)

The process of grade capping lowered the mean, length-weighted Au grade of the processed samples from 1.03 g/t to 1 g/t and reduced the coefficient of variation (C.V) from 4.52 to 3.77.

14.2.4.2 Compositing

Based on sample length analysis, a composite length of 1 m was chosen. All raw sample intervals were composited to a mean length of 1 m with a minimum sample length of 0.5 m. The global mean Au grades and total sample lengths were compared to ensure that no significant number of samples were lost during the compositing process.

14.2.4.3 Descriptive Statistics

The Surluga grade population within the mineralized domain was analyzed using a combination of histogram, XY scatterplot and descriptive statistics**.** The Surluga grade population is highly skewed, as observed in Figure 14-7.

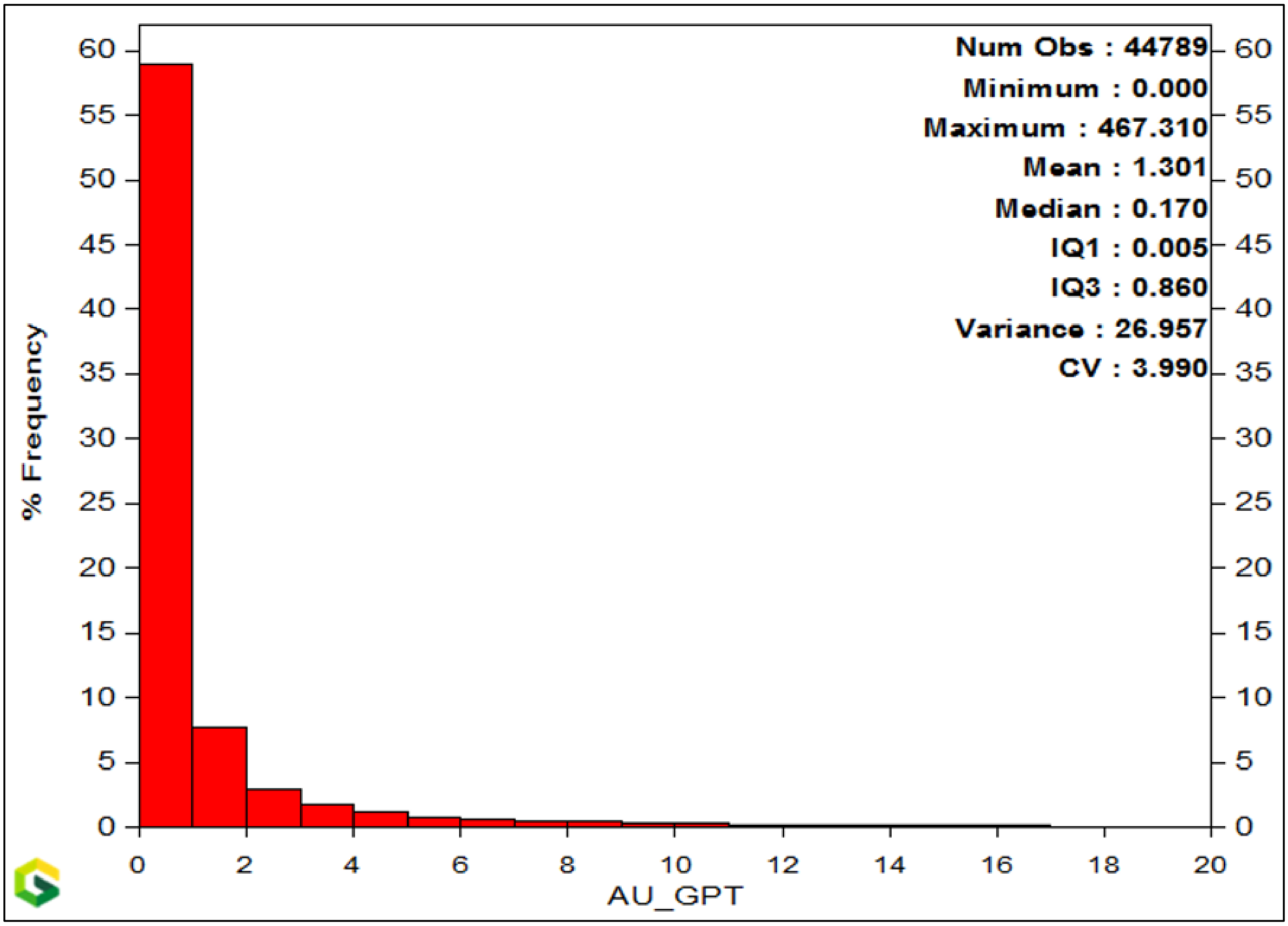


Figure 14-7: Histogram of Au Grades (g/t)

Table 14-1 summarizes the descriptive statistics for the populations of raw, processed, capped, and composited sample data that is located within the mineralized shear zone volume, as previously described in Item 14.2.2.

Table 14-1: Comparison of Sample Statistics

Sample Type	Min.	Max.	Mean	Median	Variance	Std Devn	C.V
Raw	0	467.31	1.30	0.13	26.96	5.19	3.99
Processed	0	467.31	1.02	0.03	21.32	4.62	4.52
Capped	0	80.00	1.00	0.03	14.12	3.76	3.77
Composite	0	80.00	1.00	0.03	10.30	3.21	3.21

14.2.4.4 Bulk Density

A total of 934 density measurements were used to determine a mean density value of 2.75 t/m3 for the Surluga deposit. The QP analyzed the density population by rock type and regionally in various locations but did not identify any material differences. Therefore, the mean density value was assigned to all blocks in the model and was used as the basis for calculating Mineral Resource tonnage. The distribution of samples used for density calculation relative to the Shear Zone mineral envelope was reviewed by the QP and determined to be representative of the deposit.

Density measurements were taken from 10 cm samples from NQ and HQ sized core using the weight in air versus the weight in water method (Archimedes) based on the following formula:

$$SG = \frac{Sample\ Weight\ in\ Air}{Sample\ Weight\ in\ Air - Sample\ Weight\ in\ Water}$$

A full description of the density measurement process is outlined in Item 11.0.

14.2.5 Block Model and Resource Estimation

14.2.5.1 Assessment of Spatial Grade Continuity

A high-level variogram analysis was completed to assess the spatial continuity of grade in the Surluga deposit using a combination of variogram maps and directional variograms. This analysis provided input on the directions of grade continuity and the maximum distances of grade correlation. The variogram analysis was found to be consistent with geological orientations observed in the deposit and those modelled by Red Pine in the Jubilee Shear Zone domains, and also confirmed that there is high nugget variability and limited spatial continuity of grade in the deposit. This analysis was used as the basis for the search ellipse distances defined in the estimation search strategy as summarized in Item 14.2.5.4 but was not used for the purpose of assigning Kriging weights to the samples for grade estimation.

14.2.5.2 Block Model Definition

The volume definition for the Surluga block model is summarized in Table 14-2. Block shape and size is typically a function of the geometry of the deposit, density of sample data, and expected smallest mining unit (SMU). On this basis, a parent block size of 2 m (E-W) by 2 m (N-S) by 2 m (Elevation) was chosen.

Table 14-2: Block Model Volume Definition

Direction	Minimum	Maximum	Block Size	No. Blocks
Easting	667,330	668,962	2	816
Northing	5,315,250	5,318,610	2	1680
Elevation	-480	420	2	450

The shear domain envelopes were filled with blocks using the parameters described in Table 14-2. Block volumes were then compared to the mineral zone volumes to confirm there were no errors during the process. Block volumes for all zones were found to be within reasonable tolerance limits of the mineralization envelope volumes.

14.2.5.3 Interpolation Methods

Inverse Distance cubed (ID^3) was the grade interpolation method chosen as the basis of the 2019 Surluga Mineral Resource estimate. This method assigns estimation weights to the samples within the search volume relative to the distance of the sample data from the centre of the block. The closer the sample, the higher the weights as described in the following formula where p is defined to the power of 3.

$$\hat{v_1} = \frac{\sum_{i=1}^{n} \frac{1}{d_i^p} v_i}{\sum_{i=1}^{n} \frac{1}{d_i^p}}$$

ID^3 was chosen by the QP over Inverse Distance Squared (ID^2) and Ordinary Kriging (OK) to better control the smoothing of grades, putting more weight on the samples closest to the block, due to the variable nature of the mineralization. Nearest Neighbour (NN), and ID^2 were estimated for global comparison and validation purposes, but not used for final resource reporting. Ordinary Kriging was not assessed during the estimation process.

14.2.5.4 Search Strategy

A 3 pass, elliptical search strategy was utilized based on search distances (radius) of 4 m (across-strike) x 20 m (down-dip) x 40 m (along-strike). Successive search distances were factored (2x & 3x) in the down-dip and down-plunge directions while the across strike direction was restricted to a maximum search distance of 6 m. Block estimates were based on a minimum of 5 samples and a maximum of 12 samples with a maximum of 4 samples used per drill hole resulting in a minimum of 2 holes required for each block estimate. A plunge rotation of 25° was used along with Dynamic Anisotropy to account for the grade plunge and minor variations in deposit orientation. Dynamic Anisotropy is a Datamine process used to adjust search orientations based on the shape of a controlling surface, which in this case was the Jubilee Shear Zone mineral domain. General search orientations, defined by dip and dip direction, were estimated into the blocks based on the trends implicit to the mineral domain envelopes.

The search estimation parameters used for grade estimation are summarized in Table 14-3.

Table 14-3: Search Volume Controls Used for Au Grade Estimation

Pass	Along Strike Search Radius	Down Dip Search Radius	Across Strike (thickness) Search Radius	Min. No. of Samples	Max. No. of Samples	Max. No. Samples From Each Hole	Min No. Holes
Pass 1	40	20	4	5	12	4	2
Pass 2	80	40	6	5	12	4	2
Pass 3	120	60	6	5	12	4	2

14.2.5.5 Model Validation

The block model validation process included visual comparisons between block estimates and composite grades in plan, section, and long section along with a global comparison of mean grades and swath plots. Block estimates were visually compared to the drill hole composite data to check agreement.

Figure 14-8 and Figure 14-9 provide comparisons of the composite samples and block model Au estimates in cross-section and long-section views. No material grade bias issues were identified, and the block grades compared well to the composite data.

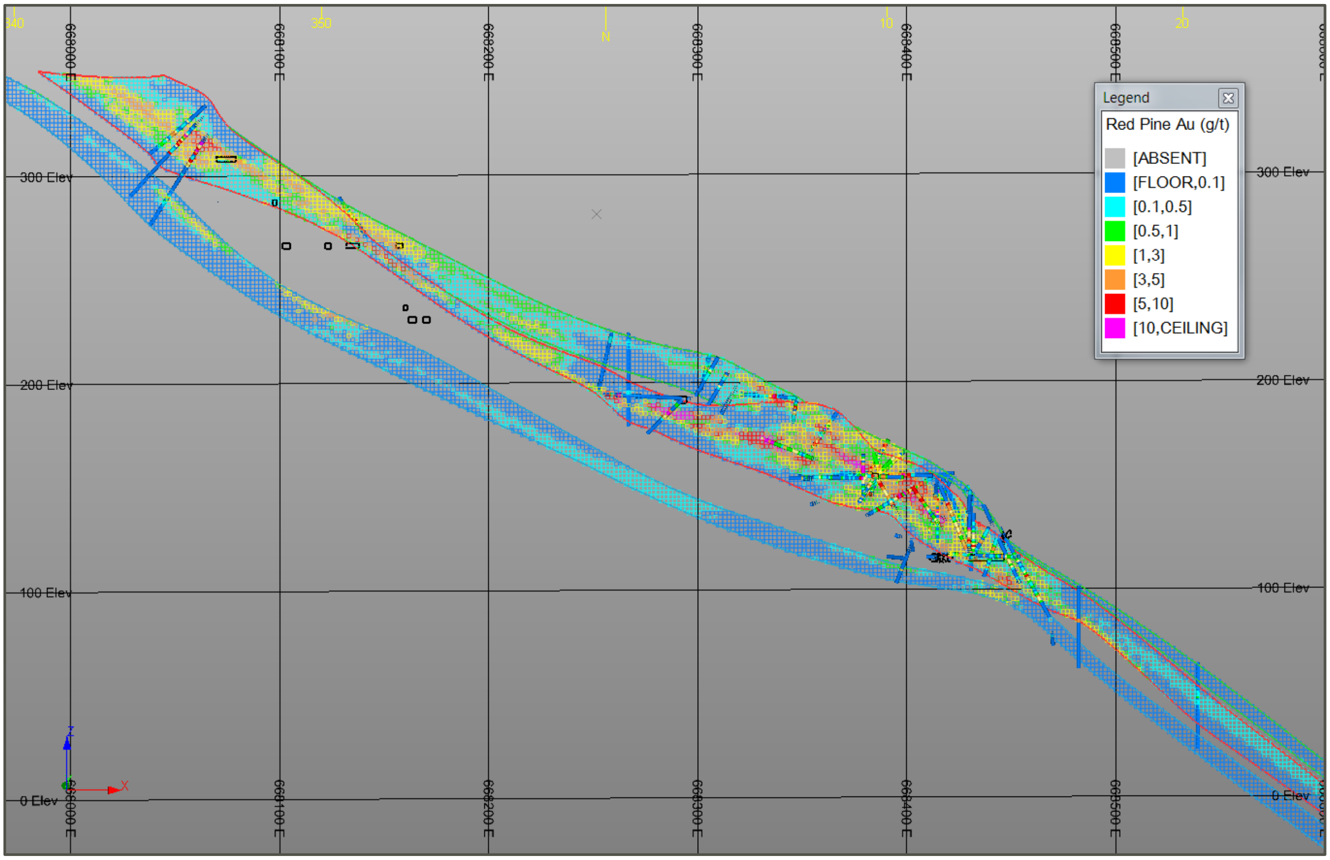


Figure 14-8: East-West Cross-Section (5,316,450N) Facing North

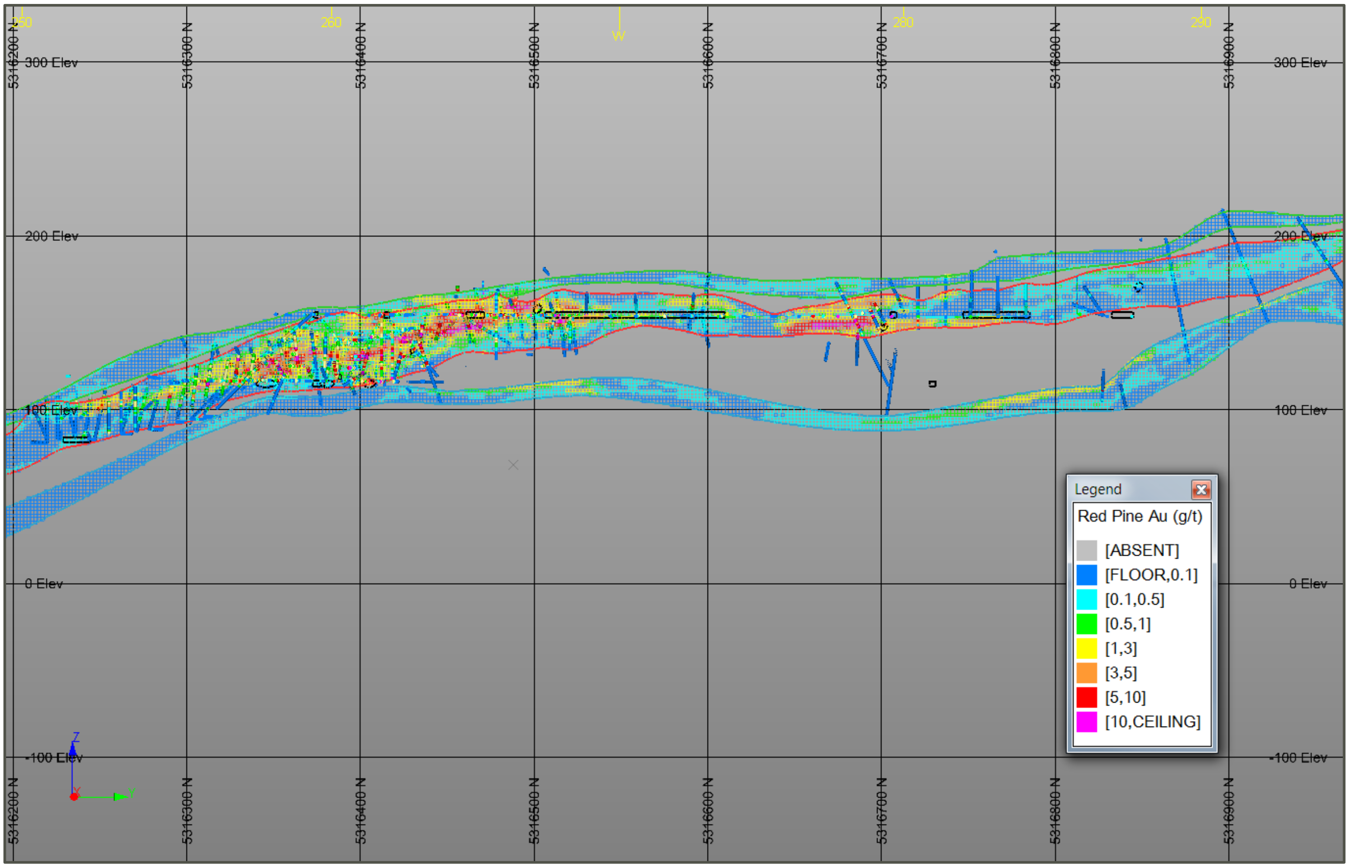


Figure 14-9: North-South Long-Section (668,400E) Facing West

Global statistical comparisons between the composite samples, NN estimates, ID^2 estimates and the final estimates (ID^3) for the Surluga deposit were compared to assess global bias, where the NN model estimates represent de-clustered composite data. Clustering of the drill hole data can result in differences between the global means of the composites and NN estimates. Similar global means of the NN and ID^3 estimates indicate that there is no global grade bias in the model. The results summarized in Table 14-4 indicate that no material global bias was found in the block model.

Table 14-4: Statistical Comparison of Global Mean Au Grades

Deposit	Composite Mean (g/t)	NN Mean (g/t)	ID^2 Mean (g/t)	ID^3 Mean (g/t)	Relative Difference (%)
Surluga	1.00	0.31	0.33	0.32	3.3

- The comparison is for all blocks in the model irrespective of classification.
- Relative difference calculated between ID^3 mean and NN mean Au grades.

Swath plots of Au grades were generated from slices throughout each zone to evaluate for local grade bias issues. Figure 14-10 provides a longitudinal (N-S) example of the swath plots covering the Surluga block model. The swath plots compare the ID^3 model grades to the NN model grades (de-clustered composite grades) and the drill hole composite grades to identify potential local grade bias in the model. Review of all the swath plots did not identify any significant bias in the model that is material to the Resource Estimate as there was general agreement between the de-clustered composites (NN model) and the final model grades. Differences observed between the final model grades and the composite samples are attributed to the heavy clustering of samples in the higher-grade portions of the deposit and previously shown in Figure 14-5.

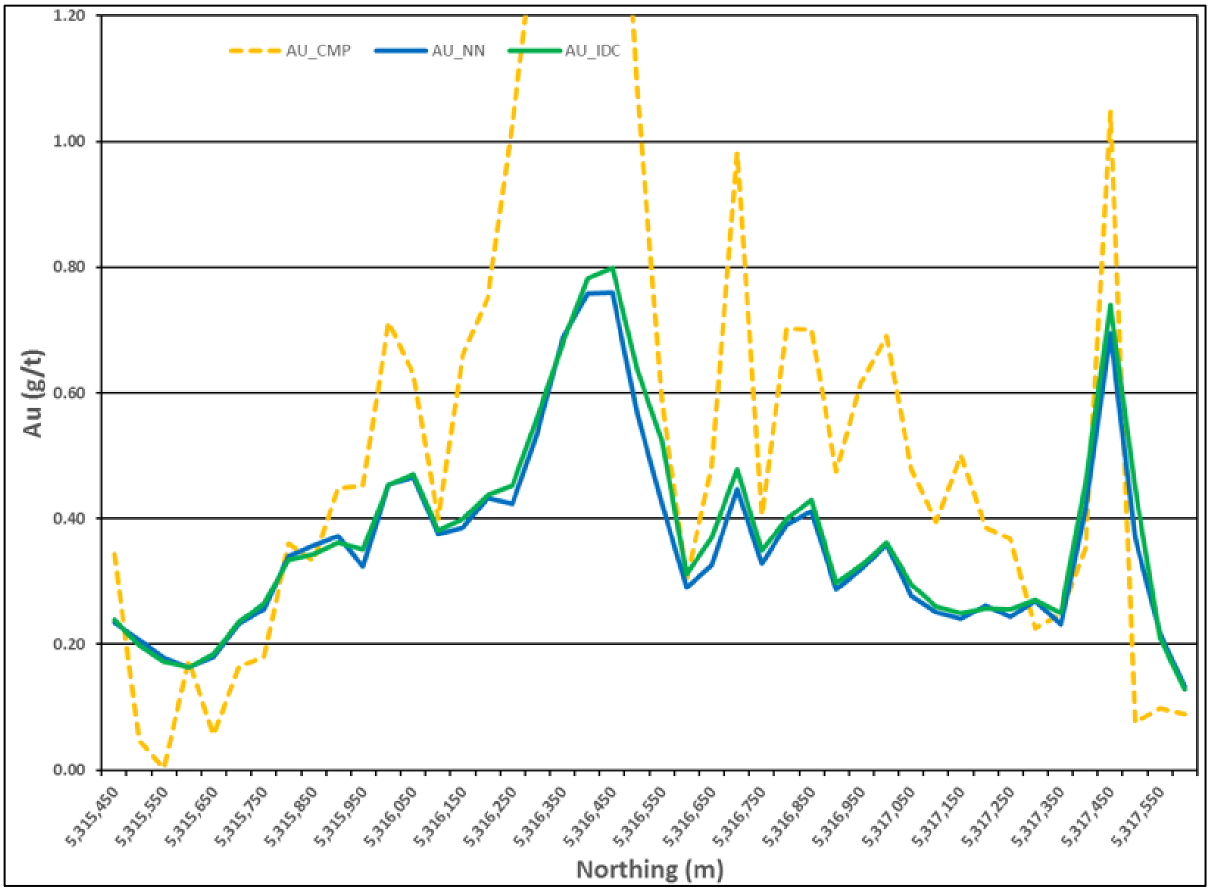


Figure 14-10: Longitudinal (North-South) Swath Plot of the Surluga Block Model

14.2.5.6 Historical Mining

Areas of historical mining from the Jubilee and Surluga Mines as well as blocks inside the diabase dyke were depleted from the block model and excluded from this Mineral Resource estimate. The volume surrounding the stoping areas of the historical Jubilee Mine was entirely excluded from this Resource Estimate due to uncertainty regarding the exact location and extent of Jubilee historical mining (black), as shown in Figure 14-11.

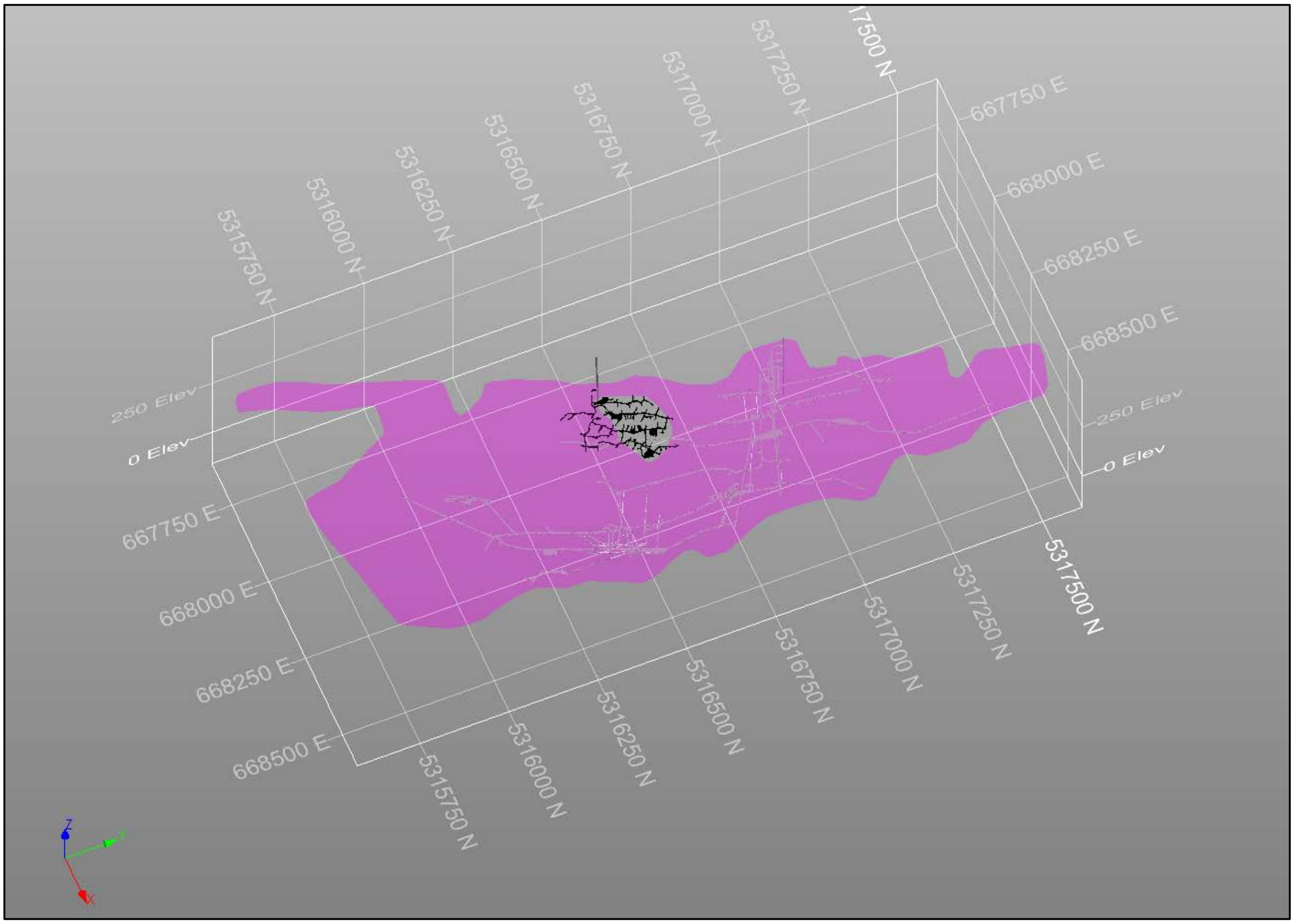


Figure 14-11: Block Model Volume Excluded from Mineral Resource to Account for Historical Mining

14.2.5.7 Resource Classification

The Mineral Resource Estimate was classified following the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Definition Standards for Mineral Resources and Mineral Reserves (May 2014). Resource classifications were assigned to broad regions of the block model based on QP confidence and judgement related to drill hole spacing, geological understanding, continuity of mineralization in conjunction with data quality, density and block model representativeness. Indicated Mineral Resources were defined at a nominal 30-m drill spacing, or less, and Inferred was defined between 30-m and 80-m drill spacing. Measured Mineral Resources were not defined, due to the historical nature of a significant proportion of the available drill hole data but may have been supported in some areas if evaluated on drill hole spacing alone. Figure 14-12 outlines the locations of Indicated and Inferred Mineral resources in the Surluga deposit.

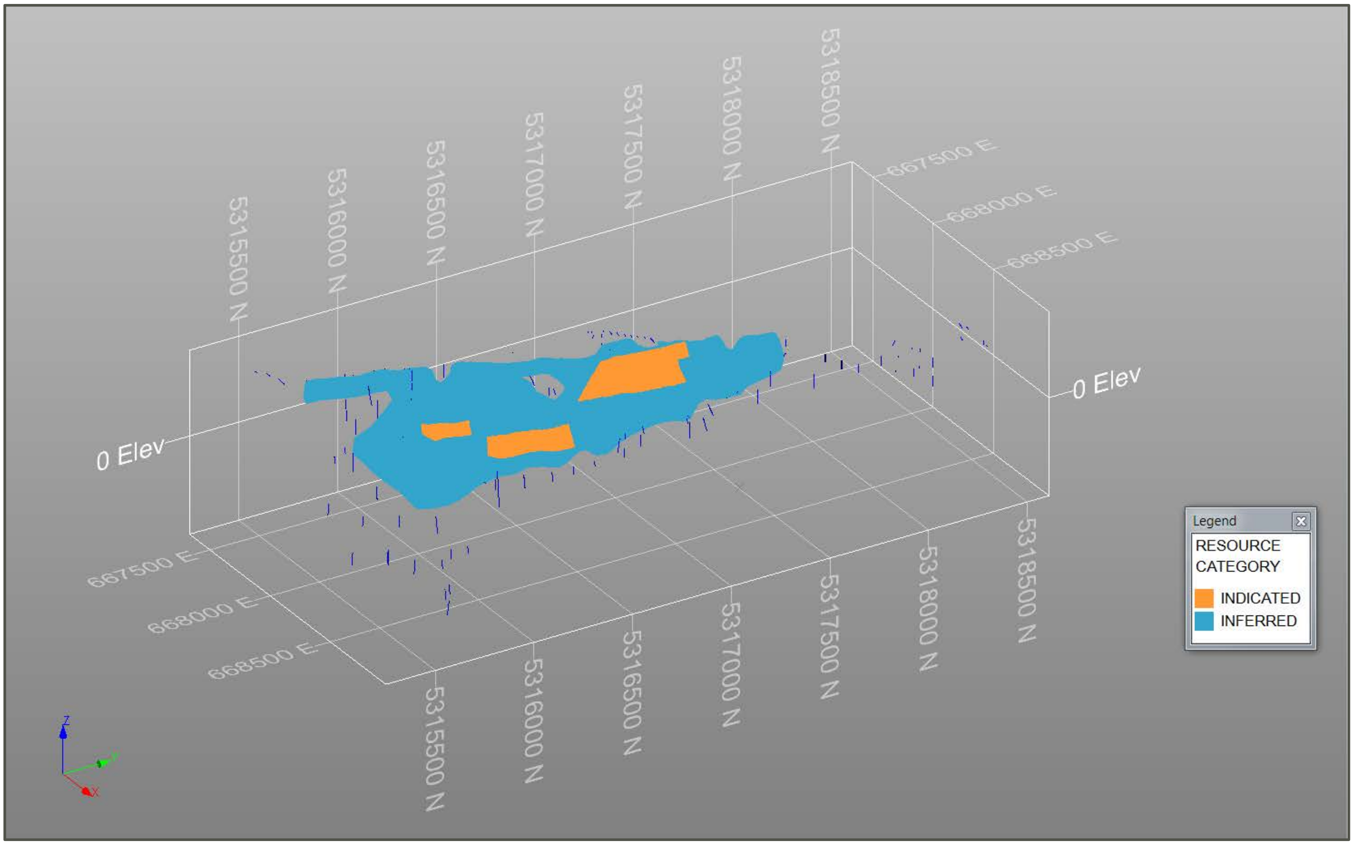


Figure 14-12: Surluga Mineral Resource Classification (Oblique View facing Northwest)

14.2.5.8 Cut-Off Grade

Mineral Resources are reported at a 2.7 g/t, break-even cut-off grade, and are supported by the following economic assumptions for potential underground longhole mining:

- Gold Price: US$1,200
- Exchange Rate: $1.33 CAD: $1 USD
- Gold Recovery: 90%
- Operating Expense (OPEX): CA$125 / tonne ($85 mining, $25 milling, $15 general and administration (G&A)

14.2.5.9 Mineral Resource Statement

Mineral Resources are not Mineral Reserves, and do not demonstrate economic viability. There is no certainty that all, or any part, of this Mineral Resource will be converted into Mineral Reserve. Inferred Mineral Resources are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as Mineral Reserves.

Table 14-5 summarizes the Indicated and Inferred Mineral Resources for the Surluga Project, and Table 14-6 demonstrates the tonnage and grade sensitivity relative to other potential mining cut-offs. Mineral Resources were evaluated for mining continuity by reporting within a 2 g/t reporting envelope. Estimates reported below the 2.7 g/t cut-off in Table 14-6 are shown for sensitivity purposes and do not have reasonable prospects for economic extraction.

Table 14-5: Surluga Mineral Resource Estimate (Effective Date May 31, 2019)

Resource Category	Tonnes	Au Grade (g/t)	Contained Au (Oz)
Indicated	1,202,000	5.31	205,000
Total Indicated	**1,202,000**	**5.31**	**205,000**
Inferred	2,362,000	5.22	396,000
Total Inferred	**2,362,000**	**5.22**	**396,000**

Notes:
1) All Mineral Resources reported at a 2.7 g/t Au cut-off from within a 2-g/t envelope.
2) A 2.7 g/t cut-off is supported for potential underground longhole mining by the following economic assumptions: Gold Price: US$1,200, Gold Recovery: 90%, Operating Expense (OPEX): CA$125/tonne ($85 mining, $25 milling, $15 G&A).
3) Tonnage estimates are rounded to the nearest 1,000 tonnes.
4) g/t – grams per tonne.
5) Ozs – troy ounces.

Table 14-6: Surluga Cut-off Sensitivity Comparison

Au Cut-off Grade (g/t)	Indicated Category			Inferred Category		
	Tonnes	Au Grade (g/t)	Contained Gold (Oz)	Tonnes	Au Grade (g/t)	Contained Gold (Oz)
2.0	1,654,000	4.50	239,000	3,533,000	4.26	484,000
2.5	1,323,000	5.06	215,000	2,666,000	4.92	422,000
2.7	**1,202,000**	**5.31**	**205,000**	**2,362,000**	**5.22**	**396,000**
3.0	1,043,000	5.68	191,000	1,981,000	5.67	361,000
3.5	829,000	6.31	168,000	1,507,000	6.44	312,000
4.0	669,000	6.93	149,000	1,175,000	7.21	272,000

Notes:
1) Official Mineral Resource estimate reported at 2.7 g/t (highlighted in green).
2) All Au cut-offs reported from within a 2-g/t envelope
3) Estimates listed below 2.7 g/t are shown for sensitivity purposes and do not have reasonable prospects for economic extraction
4) Tonnage estimates are rounded to the nearest 1,000 tonnes.
5) g/t – grams per tonne.
6) Ozs – troy ounces.

14.3 Minto Mine South Deposit

The following summary of the Minto Mine South Mineral Resource estimate has been extracted in its entirety from the 2018 Technical Report, titled "National Instrument 43-101 Initial Technical Report for the Minto Mine South Property; Report Effective Date: December 31, 2018." The QP confirms there has been no material changes related to the Minto Mine South Mineral Resource estimate since the time of initial disclosure.

14.3.1 Drill hole Data

Red Pine provided (in Microsoft Excel™ files) diamond drill hole data consisting of geological descriptions, gold assays and density measurements. These files were imported into Datamine and verified as described below.

14.3.1.1 Diamond Drill Holes

The drill hole database consisting of 2,253 drill holes totalling 181,792 m of core and 74,572 gold assays was made available for modelling on October 2, 2018. This database covers a volume that includes the Jubilee deposit as well as the Minto South deposit.

For the purposes of modelling, a subset of the full data was selected between 667,420 m and 670,145 m Easting, 5,314,800 m and 5,315,900 m Northing, and -475 m and 380-m Elevation. Within this volume, the database, includes 276 drill holes totalling 49,627 m of core and 18,560 gold assays. Historical (legacy) data consisted of approximately 11% of the database.

The database was analyzed for interval errors and out of range values and was reviewed in 3D space to validate the hole locations and de-surveyed hole traces. A minor number of interval issues were identified and resolved, several down-hole surveys were updated, and one collar location was corrected. The final date for the drill hole database was November 2, 2018.

The drill hole data is supported by a QA/QC process as described previously in Item 11.0 as well as independent sample verification and check logging as summarized in Item 12.0. The QP has not identified any material flaws in the drill hole data or data collection procedures. Data collection procedures were found to be consistent with CIM best practice guidelines. The drill hole database has been determined by the QP to be of suitable quality to support the 2018 resource estimate.

14.3.1.2 Density Measurements

A total of 292 density measurements (from 82 drill holes) were provided from onsite drill core measurements in the Minto South volume of interest. Of these only samples from 2 drill holes pre-date 2017. The distribution of samples used for density measurement relative to the Shear Zone mineralization envelope was reviewed by the QP and found to be reasonably representative of the full deposit.

Measurements were taken from 10-cm samples from NQ and HQ sized core using the weight in air versus the weight in water method (Archimedes) based on the following formula:

$$SG = \frac{Sample\ Weight\ in\ Air}{Sample\ Weight\ in\ Air - Sample\ Weight\ in\ Water}$$

A full description of the density measurement process is provided in Item 11.0.

The (length-weighted) histogram of density (SG) measurements is shown in Figure 14-13. A mean density value of 2.77 t/m^3 was used for tonnage calculations.

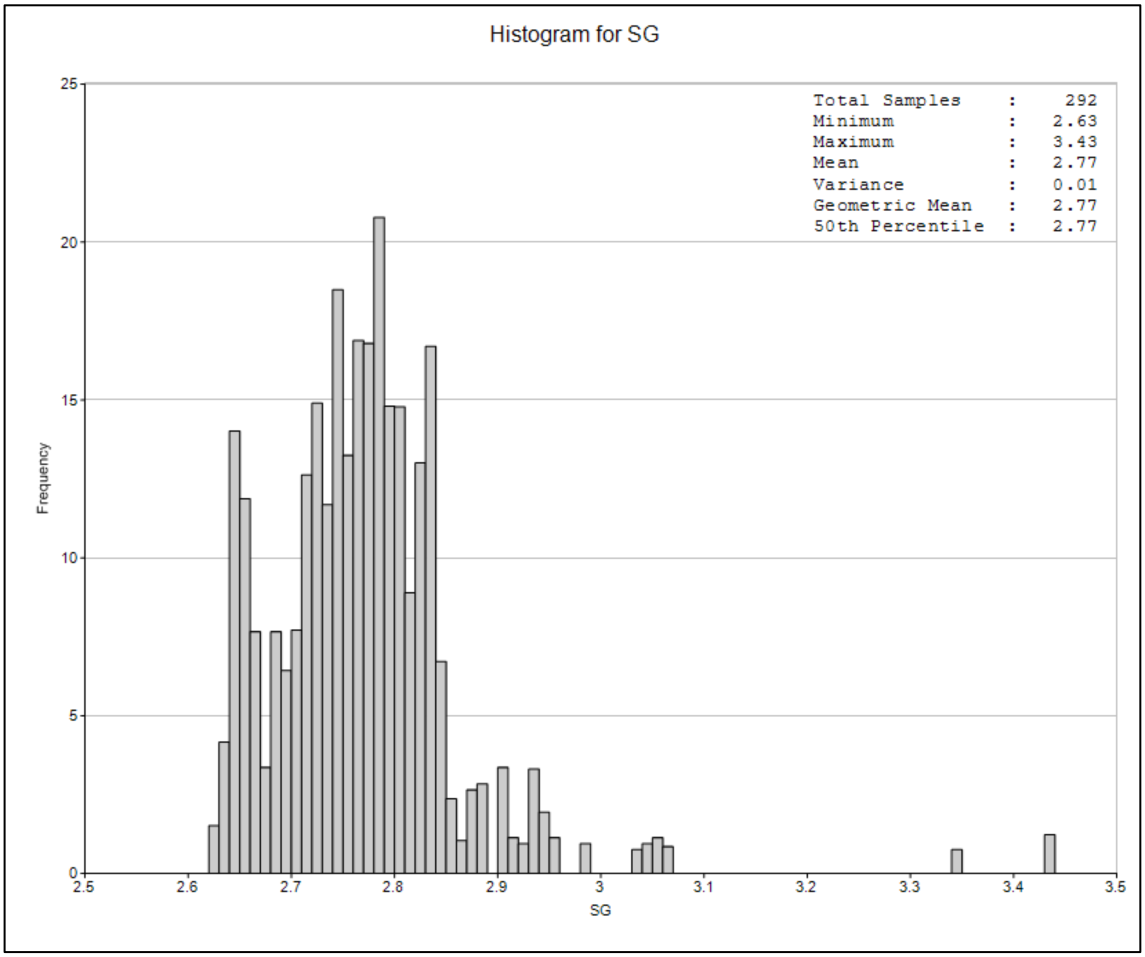


Figure 14-13: Histogram of Density Measurements

14.3.2 Mineralization/Geology Domaining

Red Pine provided (in DXF files) two mineralization envelopes consisting of a broad Shear Zone and a Vein Zone and an envelope of a Diabase Dyke cross-cutting the mineralization. The Shear Zone and a Vein Zone envelopes were created by Leapfrog software (Leapfrog). The Shear Zone domain was created using the geological boundaries of the Wawa Gold Shear Zone defined as a geological domain with a continuous penetrative tectonic foliation. The Vein Domain was created by constraining within the Minto Mine Shear zone a geological domain where quartz veining prevails and where most of the grade of the intersection is contained. The vein domain typically consisted of one coherent shear vein although in some drill holes the vein splayed in parallel shear veins separated by narrow domains of host rocks. A minimum width of 2 m was employed for the vein domain to partially reflect the potential minimum mining unit (MMU). The diabase dyke envelope was created by Leapfrog using lithology Diabase Minto as a control. The three envelopes were imported into Datamine and verified as solids (i.e. they can be used to select drill hole data and create blocks). The QP reviewed these domain boundaries and confirmed that they were representative of the Minto mineralization.

The mineralization envelopes were then trimmed to create a boundary perimeter that was generally 40 m from the nearest drill holes, apart from areas closer to the topographic surface where it is reduced to 20 m (see Figure 14-14).

The Shear Zone and Vein Zone envelopes were created independently but based on the controls used the Shear Zone should fully enclose the Vein Zone. Some instances were noted where the Vein Zone extended slightly outside the Shear Zone, but the volumes involved were very small and not material. Most of the vertices on the envelope meshes were “snapped” to drill hole sample endpoints but in some cases where they were not, and no material volume discrepancies were identified.

For the purposes of modelling, the Vein Zone supersedes the Shear Zone, and the Diabase Dyke supersedes both mineralization zones.

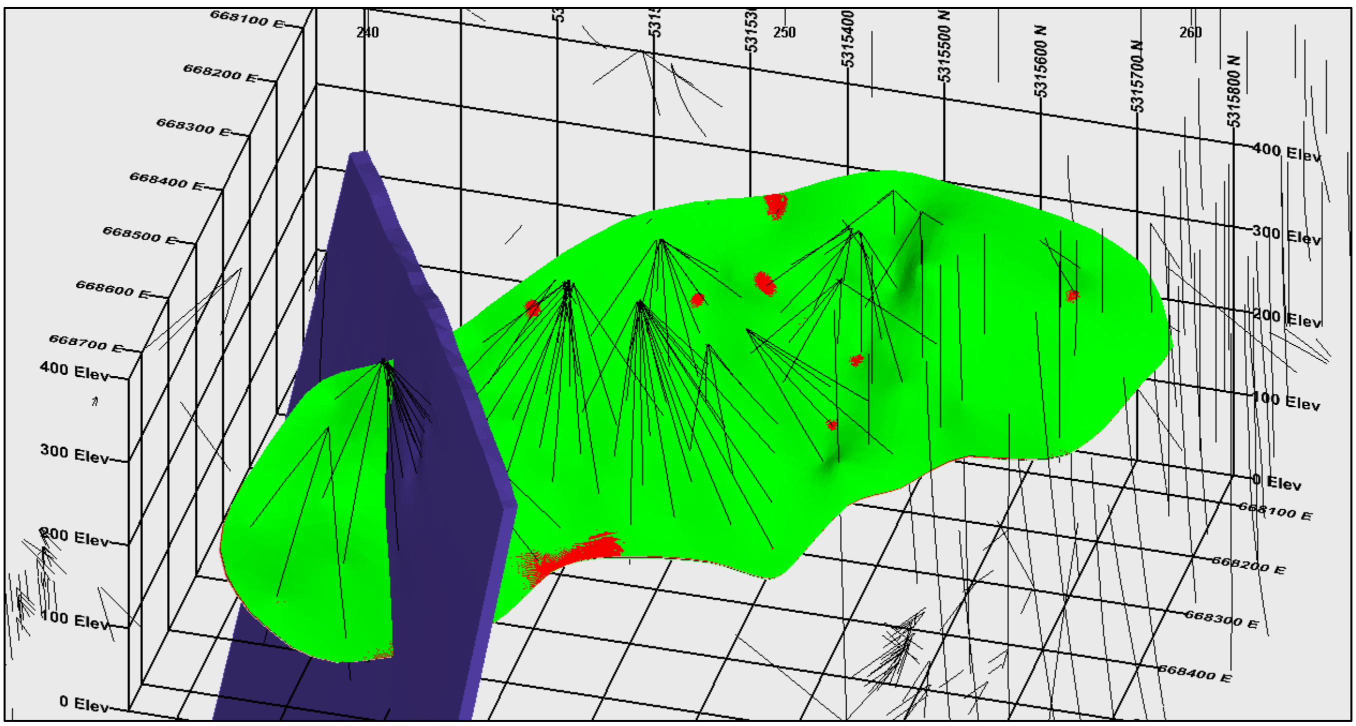


Figure 14-14: Shear Zone (green), Vein Zone (red), and Diabase Dyke (blue) Envelopes

14.3.3 Exploratory Data Analysis (EDA)

Analysis was conducted on the drill hole data selected within each mineralization envelope to determine the nature of the Au grade distribution and the identification of high-grade outlier samples. A combination of descriptive statistics, histograms, probability plots and XY scatter plots were used to analyze the grade population data. The findings of the EDA analysis were used to help define modelling procedures and parameters used in the resource estimate as further described in this section.

Table 14-7 provides a summary of the Au statistics for the raw sample populations captured from within each mineralization envelope (domain).

Table 14-7: Au Statistics of Raw Data Captured within the Mineralization Envelopes

Domain	No. of Holes	No. of Intervals	Total Length of Samples (m)	No. Un-assayed Intervals	No. of Samples	Minimum (g/t)	Maximum (g/t)	Mean (g/t)	Std Deviation (g/t)	Coefficient of Variation (g/t)
Shear (Zone 1)	108	721	840	35	686	0.00	13.40	0.13	0.54	4.32
Vein (Zone 2)	110	494	444	19	475	0.00	51.00	2.46	6.30	2.56

Notes: The total sample length includes un-assayed sample intervals.
Sample statistics weighted by length.

The un-assayed sample intervals were examined, and all were concluded to be barren material and the Au grade was set to zero, except for intervals in two drill holes (SD-17-80 and SD-17-83), which are known to have passed through cavities from previous underground mining. Table 14-8 provides a summary of the Au statistics for the verified sample populations captured from within each mineralization envelope (domain).

Table 14-8: Au Statistics of Verified Data Captured within the Mineralization Envelopes

Domain	No. of Holes	No. of Intervals	Total Length of Samples (m)	No. Un-assayed Intervals	No. of Samples	Minimum (g/t)	Maximum (g/t)	Mean (g/t)	Std Deviation (g/t)	Coefficient of Variation (g/t)
Shear (Zone 1)	108	721	840	0	721	0.00	13.40	0.10	0.49	4.82
Vein (Zone 2)	110	494	444	2	492	0.00	51.00	2.33	6.15	2.64

Note: Sample statistics weighted by length.

Figure 14-15 and Figure 14-16 show the Au histograms for verified sample data captured within the Shear (Zone 1) and Vein (Zone 2) mineralization, respectively.

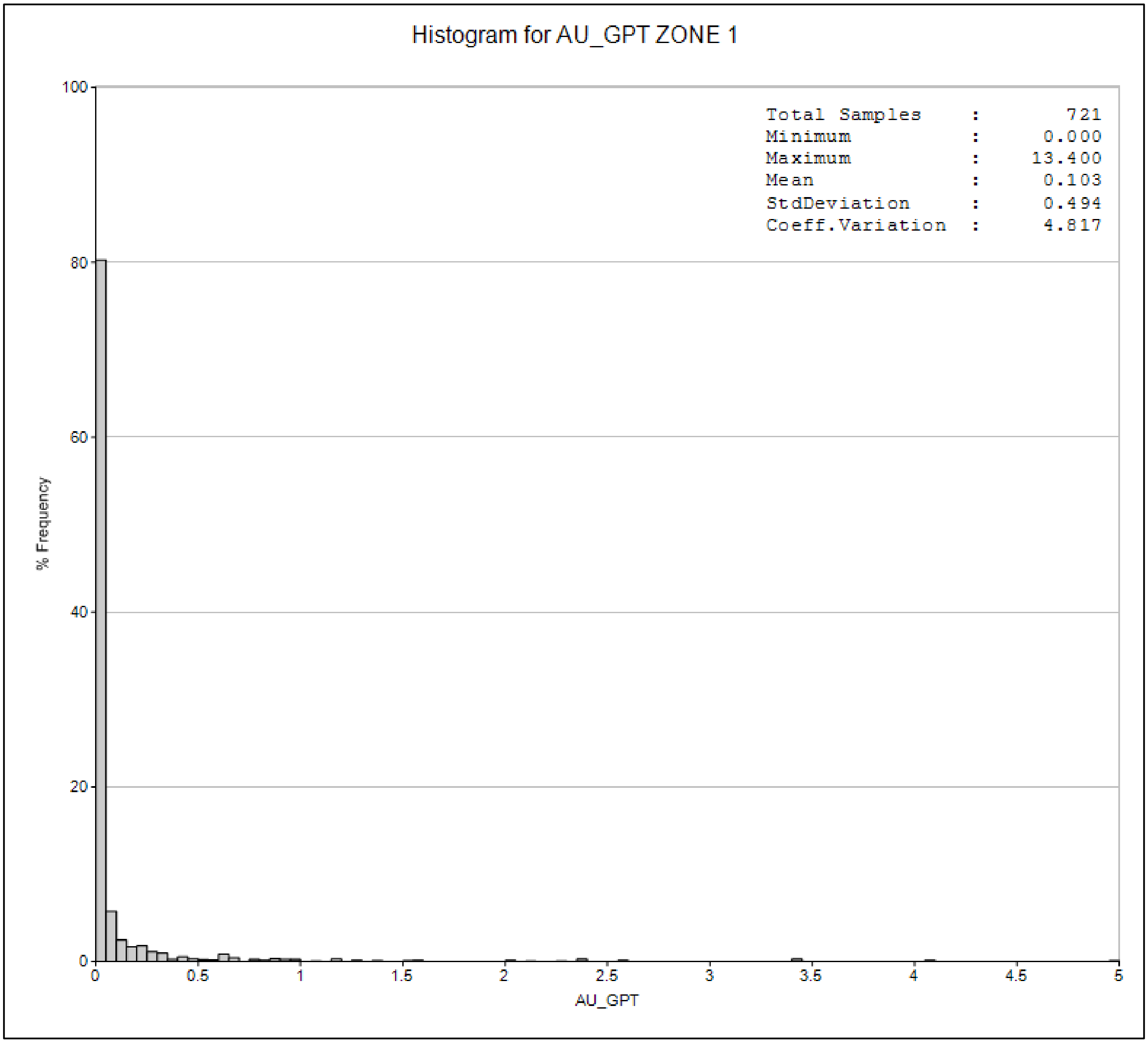


Figure 14-15: Au Histogram of Verified Sample Data within the Shear (Zone 1)

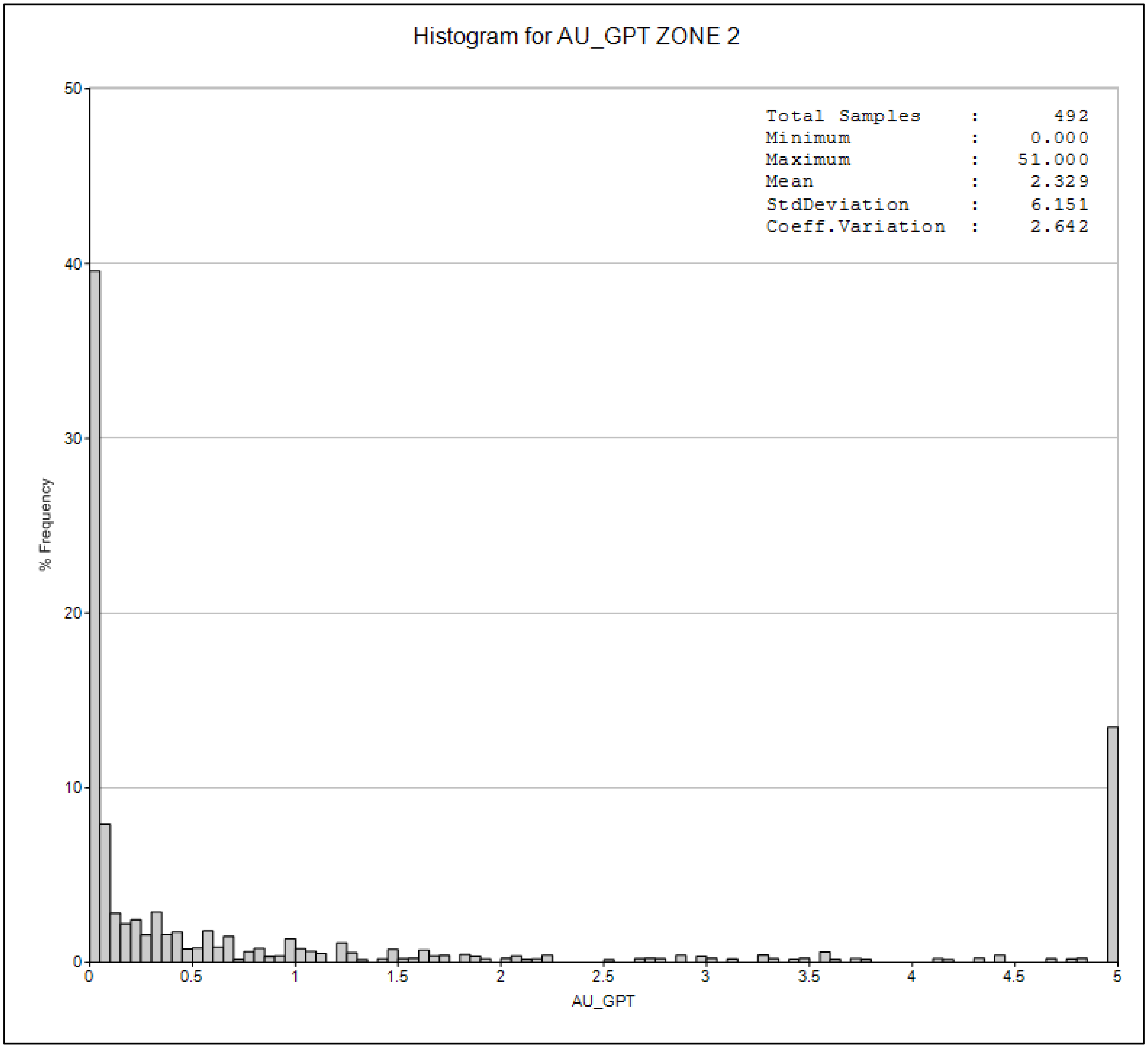


Figure 14-16: Au Histogram of Verified Sample Data within the Vein (Zone 2)

Figure 14-17 shows the cumulative probability distribution for the Vein (Zone 2) mineralization. Figure 14-18 shows the scatterplot of length versus Au grade for the Vein (Zone 2) mineralization. The red line represents the capping level chosen to top-cut Au grades.

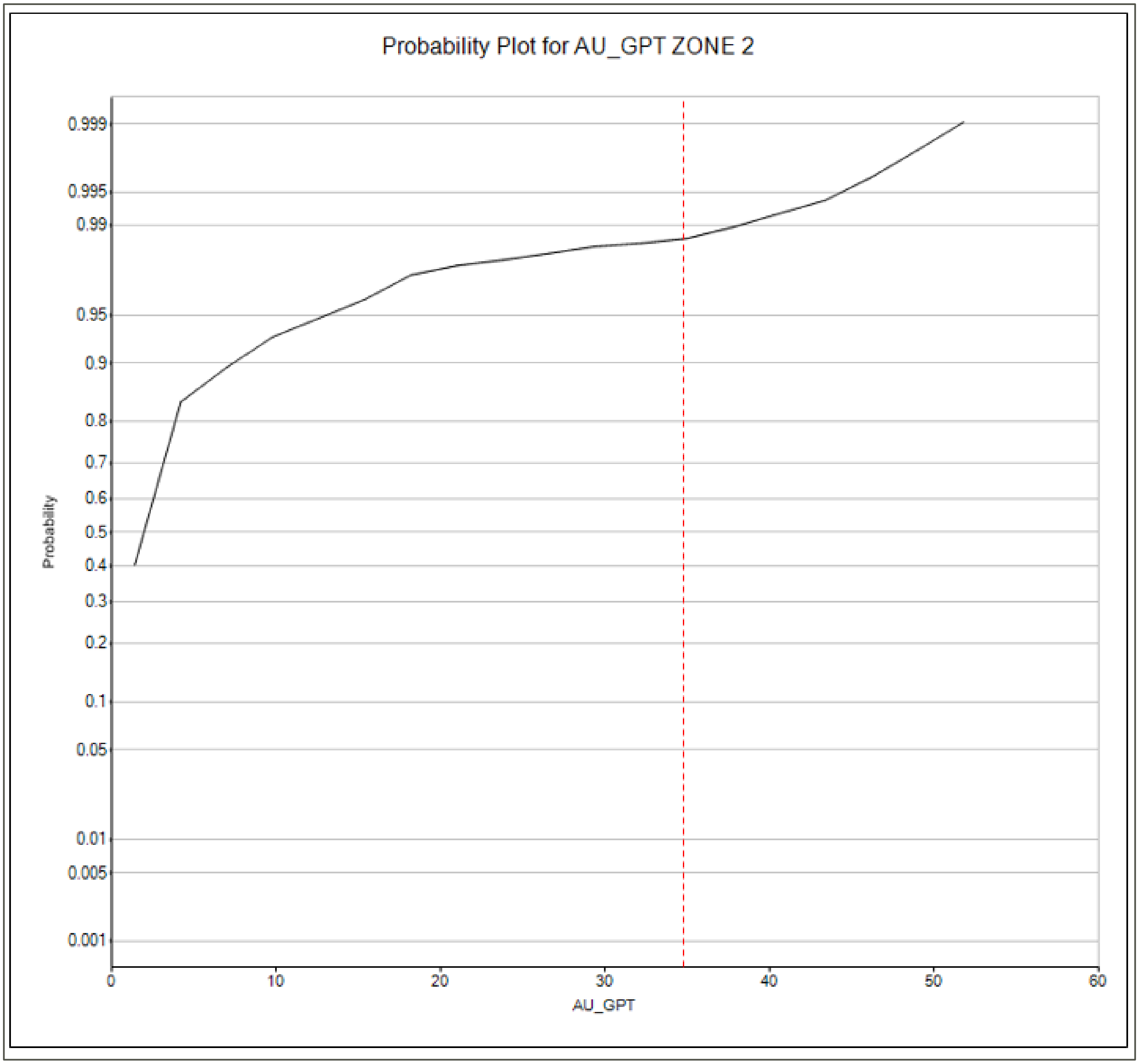


Figure 14-17: Au Cumulative Probability Distribution of the Vein (Zone 2)

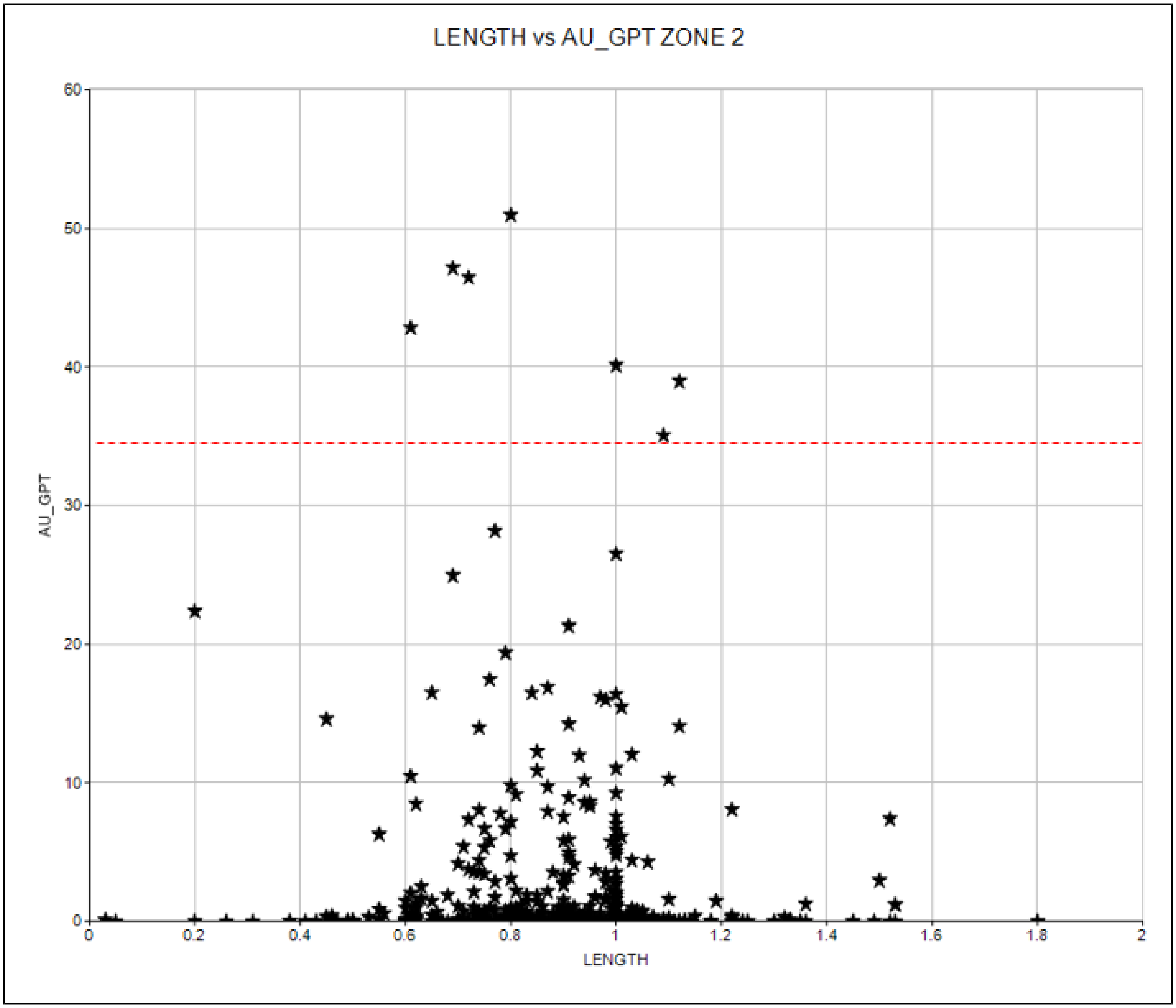


Figure 14-18: Scatterplot of Length versus Au Grade for the Vein (Zone 2)

The Au population in the Shear (Zone 1) has a mean value of 0.13 g/t and standard deviation of 0.54. The high standard deviation is attributed to a single sample at 13.4 g/t. Approximately 76% of samples were below 0.05 g/t, with only one sample above 5.0 g/t. It was recognized that the single high-grade sample was probably part of a secondary vein running parallel to the primary vein and potentially connected to it at some point, but there were insufficient drill holes in the area to domain it separately. Its inclusion in the Shear (Zone 1) was not considered material to the overall resource estimation.

The Au population in the Vein (Zone 2) has a mean value of 2.46 g/t and standard deviation of 6.30. Approximately 36% of samples were below 0.05 g/t and 14% above 5.0 g/t. The large percentage of sub 0.05 g/t material was recognized as a natural consequence of producing a smooth continuous mineralization envelope.

The cumulative probability distribution for the Vein (Zone 2) mineralization showed an inflection point around 35 g/t. Only 7 samples exceed 35 g/t, ranging from 35.1 to 51 g/t with sample lengths ranging from 0.61 to 1.12 m.

14.3.4 Compositing and Capping

Compositing of samples is a technique used to give each sample a relatively equal length to reduce the potential for estimation bias due to uneven sample lengths. The sample data was found to have a wide range of sample lengths due to variable widths of the Vein. A histogram of sample length was generated to determine the most common sample length used (mode), as illustrated in Figure 14-19.

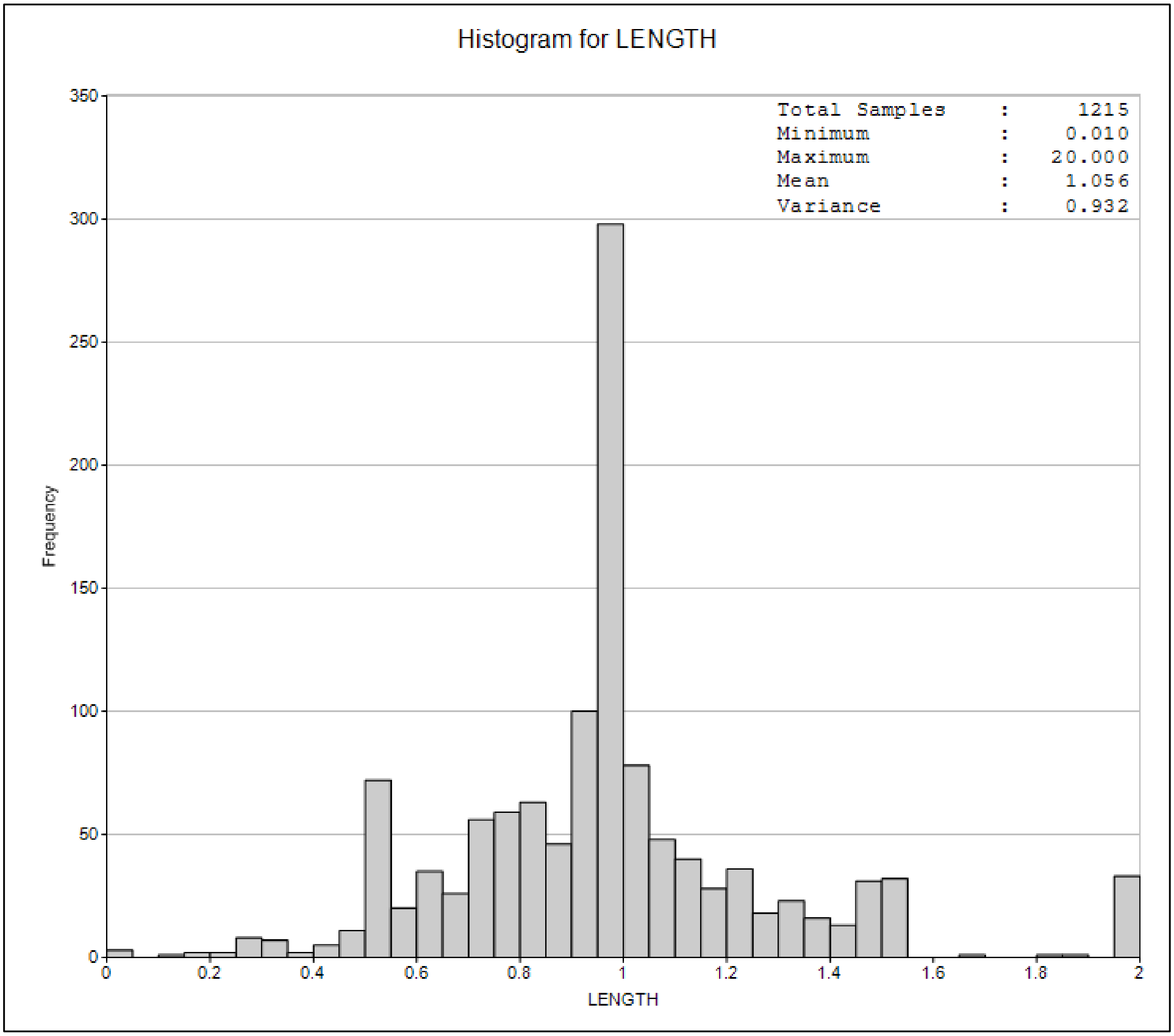


Figure 14-19: Histogram of Raw Sample Length (m) in the Combined Shear and Vein Zones

Samples captured within the mineralization envelopes were composited to a mean length of 1.0 m based on the observed modal distribution of sample lengths. An option to use a variable composite length was chosen to prevent the potential loss of sample data and reduce the potential for grade bias due the possible creation of short, and potentially high-grade composites that are generally formed along the contacts when using a fixed length. Composites were created independently for each mineralization envelope with no overlaps along boundaries. A histogram of composite length was used to confirm that the compositing was completed as expected. It displays a normal distribution around the 1.0 m composite length, as shown in Figure 14-20.

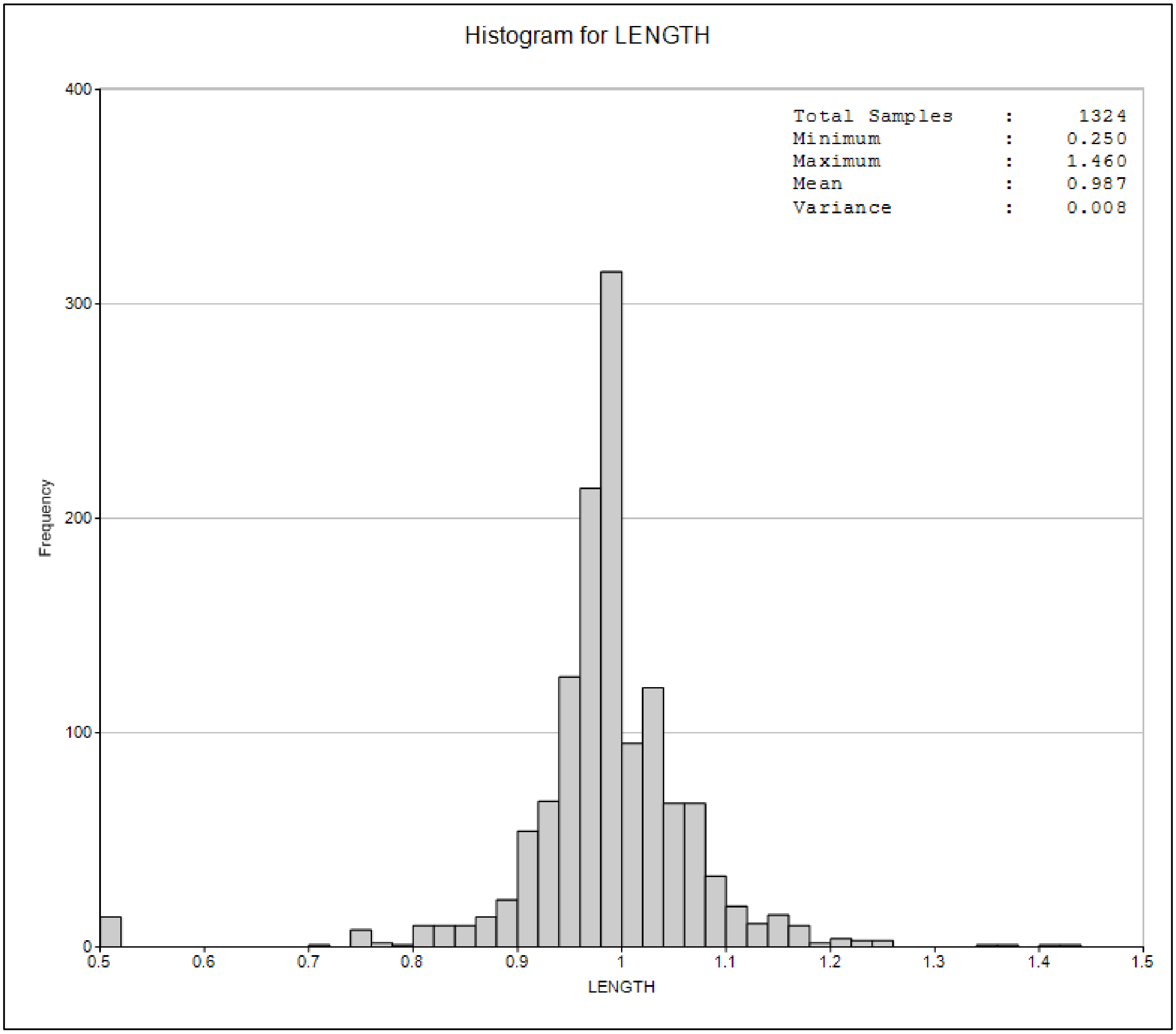


Figure 14-20: Histogram of Composite Length (m) in the Combined Shear and Vein Zones

The composite samples were validated statistically to ensure there was no loss of data or material change to the mean grade of each sample population. Figure 14-21 and Figure 14-22 show the Au histograms for composites within the Shear (Zone 1) and Vein (Zone 2) mineralization, respectively.

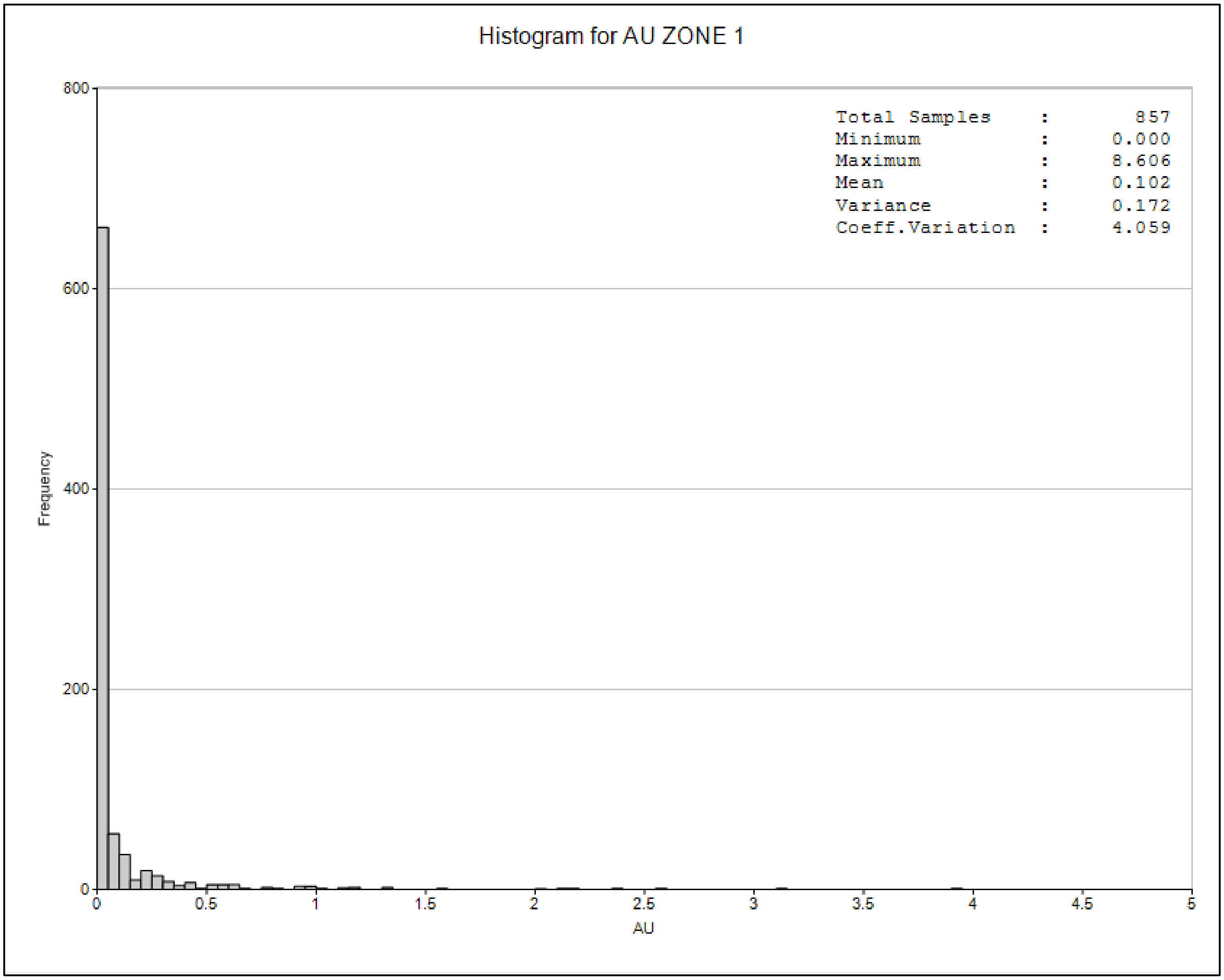


Figure 14-21: Au Histogram of Composites within the Shear (Zone 1)

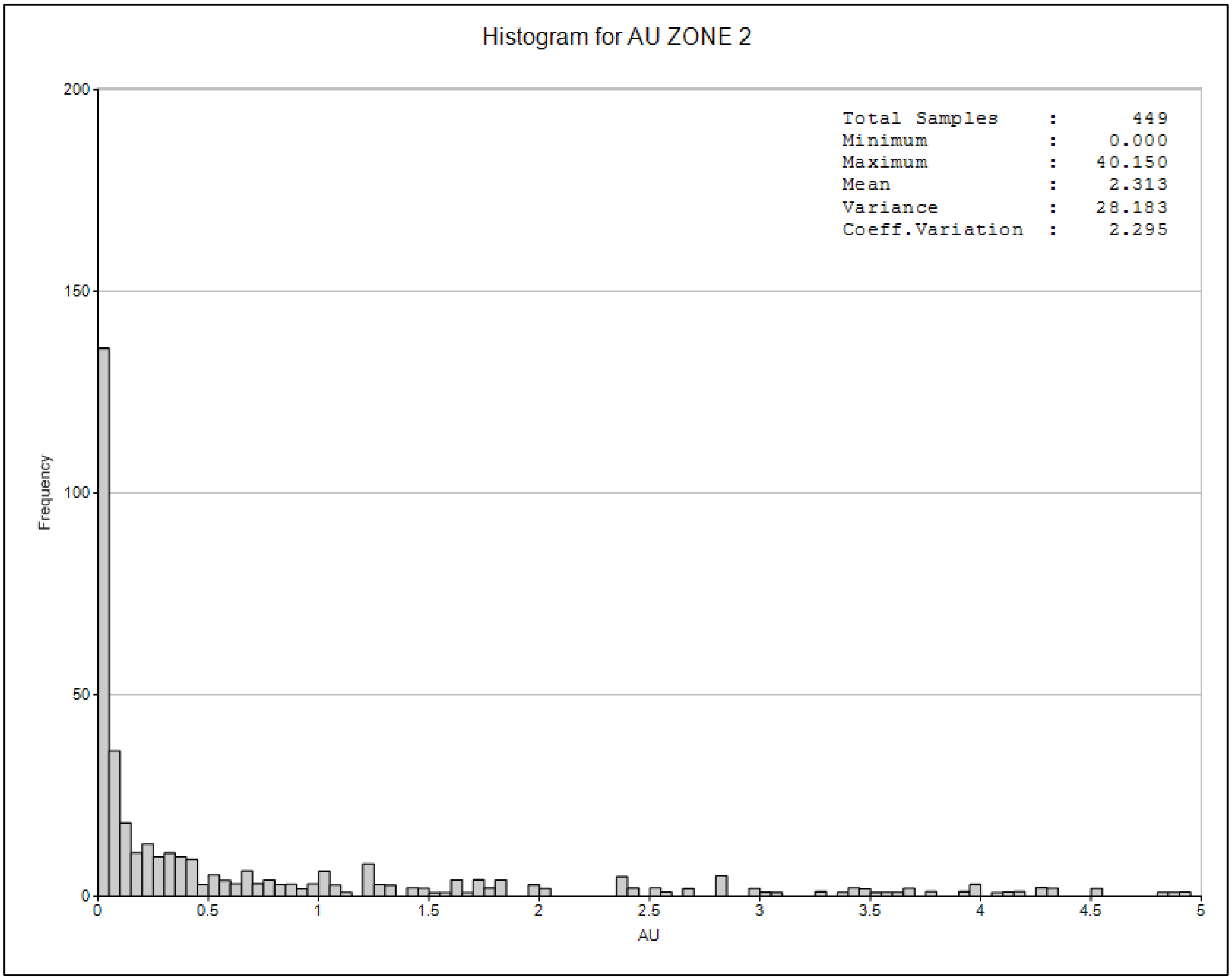


Figure 14-22: Au Histogram of Composites within the Vein (Zone 2)

Based on the inflection point around 35 g/t noted in the cumulative probability distribution of verified captured data within the Vein (Zone 2) mineralization, the composites were examined and only 4 exceed 35 g/t, ranging from 35.1 to 41.5 g/t. Based on the spatial locations of these composites and the lack of continuity of higher-grade material, they were capped to 35 g/t.

The impact of the EDA on the data to be used for resource estimation is summarized in Table 14-9.

Table 14-9: Summary of Au Statistics during the EDA Process

Domain	Raw Captured Samples			Verified Captured Samples			Composites			Composites Capped at 35 g/t		
	Mean (g/t)	Std. Dev. (g/t)	Coef. Var. (g/t)	Mean (g/t)	Std. Dev. (g/t)	Coef. Var. (g/t)	Mean (g/t)	Std. Dev. (g/t)	Coef. Var. (g/t)	Mean (g/t)	Std. Dev. (g/t)	Coef. Var. (g/t)
Shear (Zone 1)	0.13	0.54	4.33	0.10	0.49	4.82	0.10	0.42	4.06	0.10	0.42	4.06
Vein (Zone 2)	2.46	6.28	2.56	2.33	6.15	2.64	2.31	5.31	2.30	2.29	5.17	2.26

14.3.5 Block Model and Resource Estimation

14.3.5.1 Assessment of Spatial Grade Continuity

Experimental grade variograms were generated from the composite sample data in order to determine approximate search ellipse dimensions and orientations. Since ID^3 was chosen for the final interpolation, the variogram models only influence the search ellipse volume (sample neighbourhood) and anisotropy (differences in search distances along each axis) and were not used to assign estimation weights to the samples.

A set of two structure spherical variogram models were fitted to the experimental variogram data in the interpreted, down-plunge direction which represents the direction of greatest grade continuity based on the available grade and structural information. An example of the Au variogram model for the major axis of the down-plunge direction is provided in Figure 14-23. Models for the semi-major and minor axes were inconclusive and not considered to determine sample search distances.

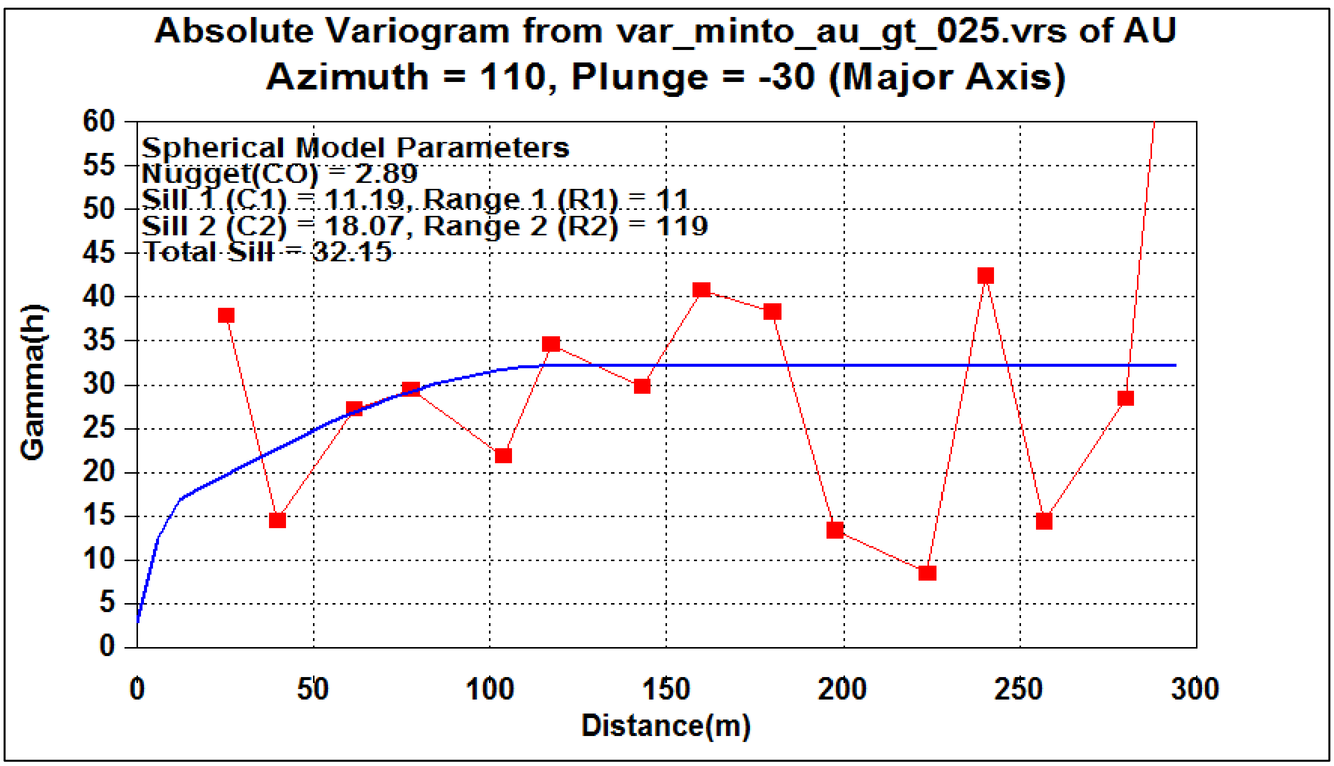


Figure 14-23: Directional Variogram Model in the Down-plunge Direction

The down-plunge/strike and down-dip directions of the mineralization were interpreted to be the directions of greatest grade continuity. Half the second structure range of the down-plunge axis was used as the basis to define the search ellipse dimension along this axis. The search dimensions selected for the other axis' were defined by the QP based on general anisotropies observed from the data as a reasonable variogram model could not be determined. Search distances are summarized in Table 14-11.

14.3.5.2 Block Model Definition

The volume definition for the Minto South block model is summarized in Table 14-10. Block shape and size is typically a function of the geometry of the deposit, density of sample data, and expected smallest mining unit (SMU). On this basis, a parent block size of 2 m (E-W) by 2 m (N-S) by 2 m (Elevation) was chosen.

Table 14-10: Block Model Volume Definition

Direction	Minimum	Maximum	Block Size	No. Blocks
Easting	668,050	668,750	2	350
Northing	5,314,850	5,315,800	2	475
Elevation	0	400	2	200

The mineralization envelopes were filled with blocks using the parameters described in Table 14-10 Block volumes were then compared to the mineral zone volumes to confirm there were no errors during the process. Block volumes for all zones were found to be within reasonable tolerance limits of the mineralization envelope volumes.

14.3.5.3 Interpolation Methods

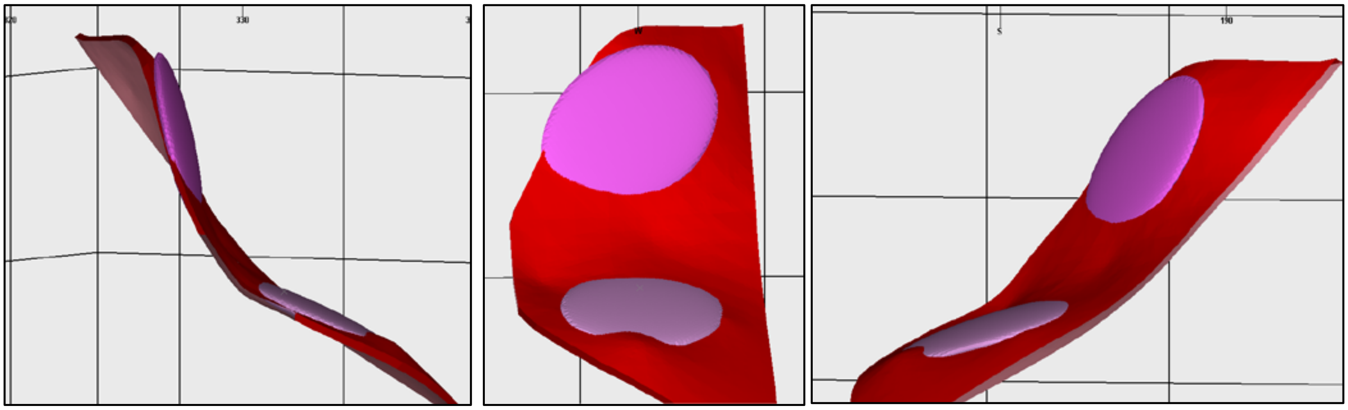
Inverse Distance cubed (ID^3) was the grade interpolation method chosen as the basis of the 2018 resource estimate. This method assigns estimation weights to the samples within the search volume relative to the distance of the sample data from the centre of the block. The closer the sample, the higher the weights as described in the following formula where p is defined to the power of 3.

$$\hat{v_1} = \frac{\sum_{i=1}^{n} \frac{1}{d_i^p} v_i}{\sum_{i=1}^{n} \frac{1}{d_i^p}}$$

ID^3 was chosen by the QP over Inverse Distance Squared (ID^2) and Ordinary Kriging (OK) to better control the smoothing of grades, putting more weight on the samples closer to the block, due to the variable and nuggety nature of the mineralization. Nearest Neighbour (NN), ID^2 and OK were all estimated for global comparison and validation purposes, but not used for final resource reporting.

14.3.5.4 Search Strategy

A dynamic search orientation was used in the grade estimation process to account for variable orientations of mineralization. General search orientations, defined by dip and dip direction, were estimated into the blocks based on the trends implicit to the mineralization envelopes. A 30° rake to the South was applied based on geological understanding of structural and mineralization trends, supported by the assessment of spatial grade continuity described in Item 14.3.6.1. Figure 14-24 shows an example of dynamic anisotropic search volume control at the South end of the Vein Zone mineralization.



The Vein Zone is red and search ellipses are magenta.

Figure 14-24: Example of Dynamic Anisotropic Search Volume Control

A total of 3 nested, anisotropic searches were used for both the Shear (Zone 1) and Vein (Zone 2). The search radii and sample controls used are summarized in Table 14-11.

Search strategies for each domain used an elliptical search with a minimum of 6 samples and a maximum of 12 samples from a minimum of 2 drill holes in the first, a second search pass with a minimum of 5 and maximum of 8 samples from a minimum of 2 drill holes and a third search with a minimum of 2 and maximum of 8 samples from a minimum of 1 drill hole.

Table 14-11: Search Volume Controls used for Au Grade Estimation

Pass	Along Strike Search Radius	Down Dip Search Radius	Across Strike (thickness) Search Radius	Min. No. of Samples	Max. No. of Samples	Max. No. Samples From Each Hole	Min No. Holes
Pass 1	60	40	6	6	12	4	2
Pass 2	120	80	12	5	8	4	2
Pass 3	180	120	18	2	8	4	1

14.3.5.5 Outlier Controls

Composites that were capped at 35 g/t (see Item 14.3.5) were restricted to influencing grade estimation within the first search volume pass only, as an additional means of mitigating the spread of high-grade values and producing a level of continuity in higher-grade material that is unsupported.

14.3.5.6 Cross-Cutting Diabase Dyke

Blocks lying inside the cross-cutting Diabase Dyke were removed from the model as the dyke was emplaced post mineralization and assumed to be barren.

14.3.5.7 Model Validation

The block model validation process included visual comparisons between block estimates and composite grades in plan, section, and 3D along with a global comparison of mean grades and swath plots. Block estimates were visually compared to the drill hole composite data in both the Shear and Vein to check agreement. No material grade bias issues were identified, and the block grades compared well to the composite data as demonstrated in Figure 14-25, Figure 14-26, and Figure 14-27.

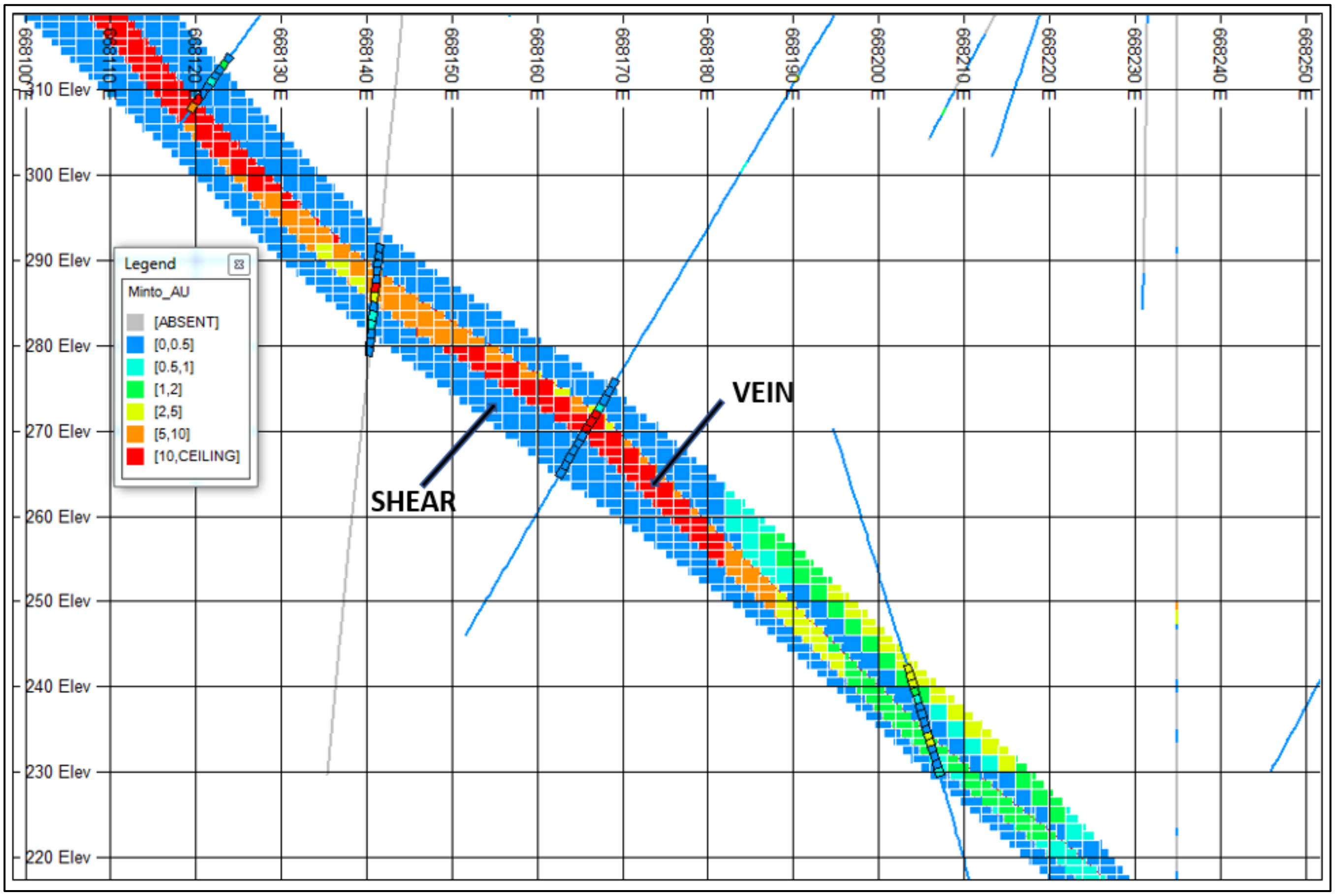


Figure 14-25: Example Cross-Section of Au Grade Distribution in the Block Model Relative to the Drill Hole Composites in Both the Vein and Shear Zones, East-West Section Facing North (5,315,460 N)

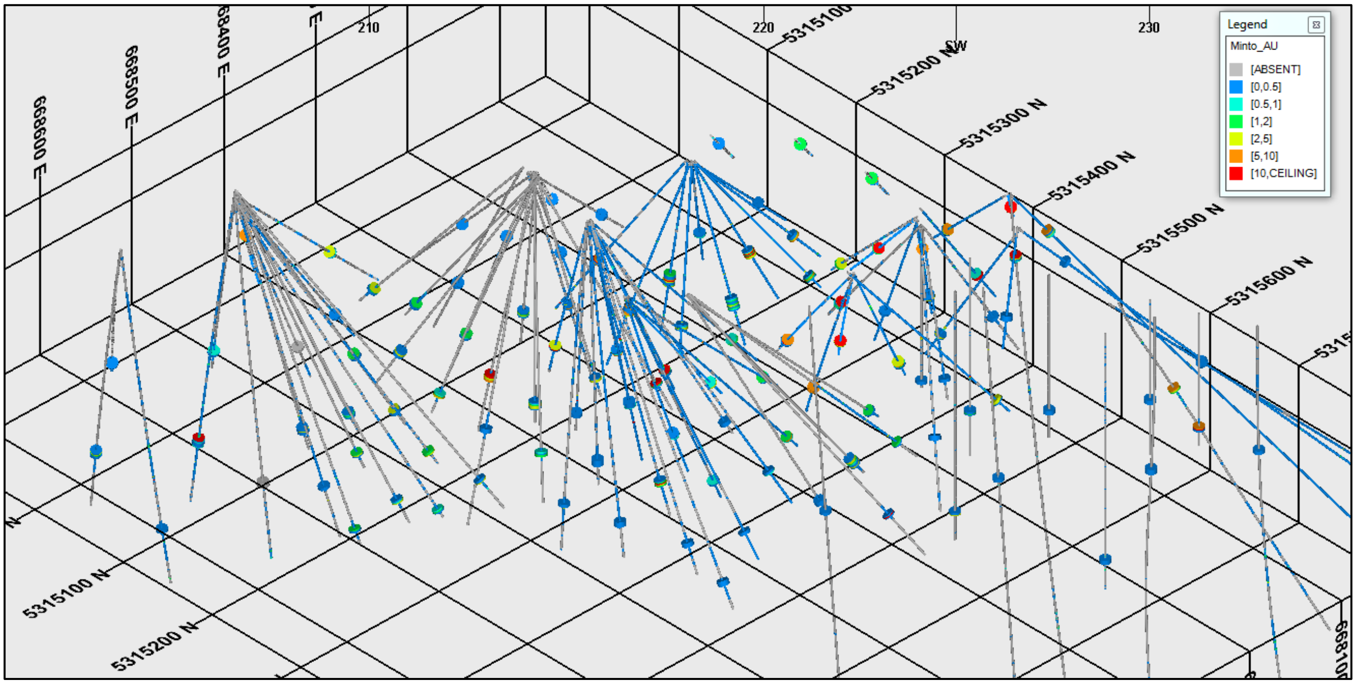


Figure 14-26: Au Grade Distribution of Composite Samples in the Vein Zone

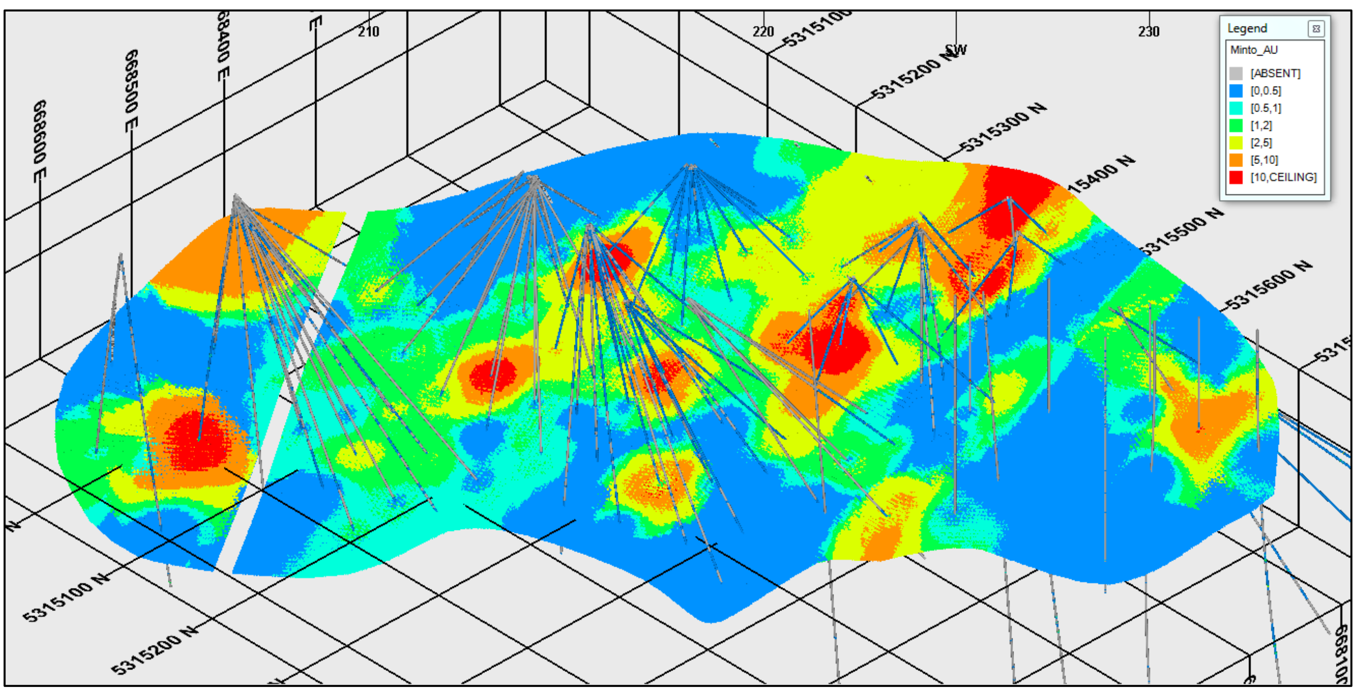


Figure 14-27: Au Grade Distribution in the Block Model of the Vein Zone

Global statistical comparisons between the composite samples, NN estimates, ID^2 estimates and the final estimates (ID^3) for the Shear (Zone 1) and Vein (Zone 2) were compared to assess global bias, where the NN model estimates represent de-clustered composite data. Clustering of the drill hole data can result in differences between the global means of the composites and NN estimates. Similar global means of the NN and ID^3 estimates indicate that there is no global grade bias in the model. The results summarized in Table 14-12 indicate that no material global bias was found in the Vein component of block model. The Shear does show some global bias due to the impact of a single high-grade sample. The bias identified in the broad shear zone is not material to the Mineral Resource estimate due to the low-grade nature of the zone.

Table 14-12: Statistical Comparison of Global Mean Grades

Strat Unit	Composite Mean (g/t)	NN Mean (g/t)	ID^2 Mean (g/t)	ID^3 Mean (g/t)	Relative Difference (%)
Shear (Zone 1)	0.102	0.131	0.099	0.102	-22.0
Vein (Zone 2)	2.313	1.953	2.08	2.073	6.1

Note: The comparison is for all blocks in the model irrespective of classification.

Swath plots of Au grades were generated from slices throughout each zone to evaluate for local grade bias issues. Figure 14-28 provides a cross-sectional (E-W) example of the swath plots of the Vein (Zone 2). The swath plots compare the model grades to the de-clustered composite grades and the composited drill hole grades to identify potential local grade bias in the model. Review of all the swath plots did not identify any bias in the model that is material to the Resource Estimate as there was general agreement between the de-clustered composites (NN model) and the final model grades.

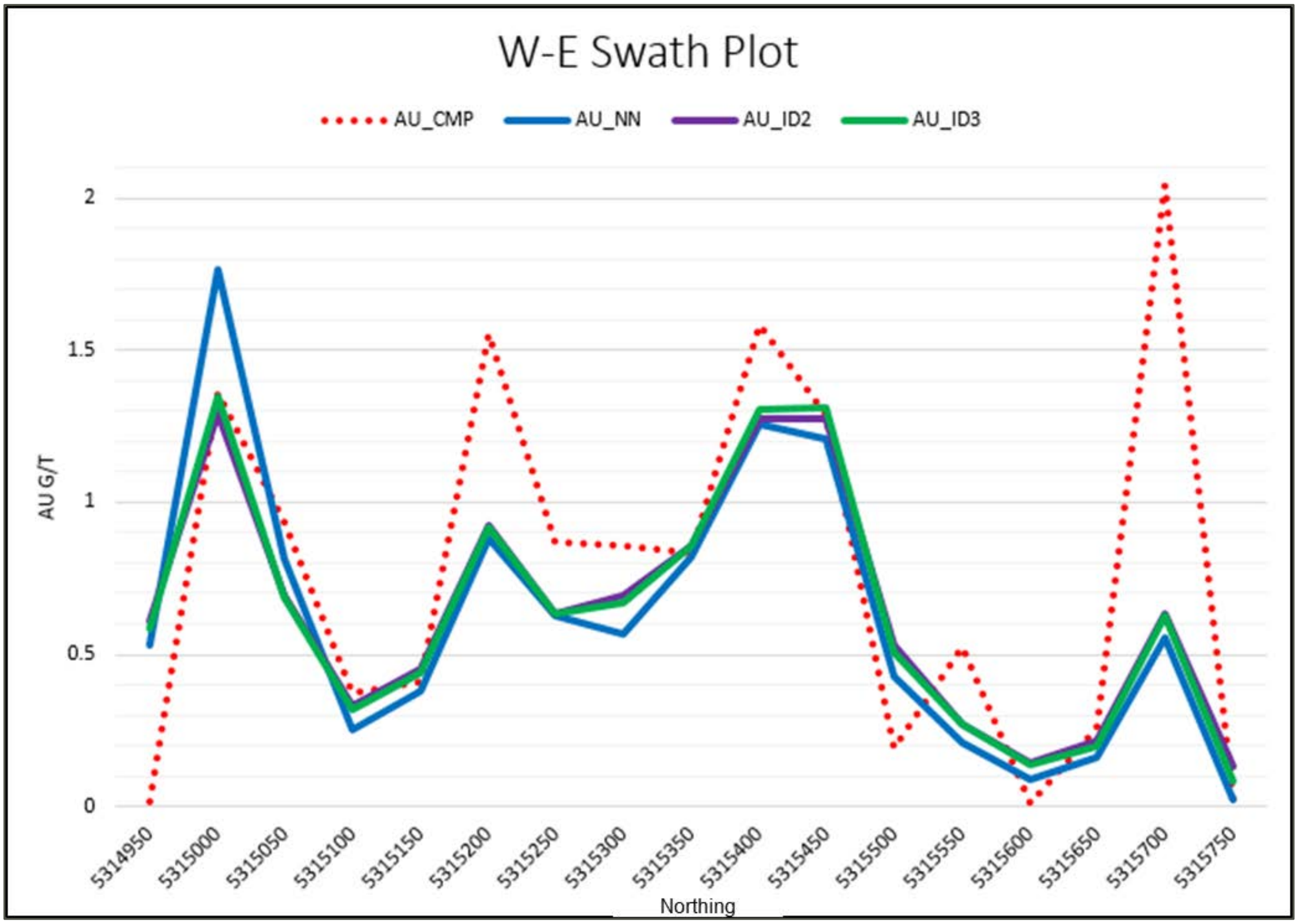


Figure 14-28: West-East Swath Plot of the Vein (Zone 1)

14.3.5.8 Previous Mining

Previous mining was known to have occurred in the northern part of the Minto South deposit. Lateral and vertical development had been digitized and placed in the correct spatial location, but no reliable information was available for the stopes. A “blanket” envelope was created to represent the best estimate of what may have been previously mined (Figure 14-29) and material inside this envelope was not included in the Mineral Resource estimate.

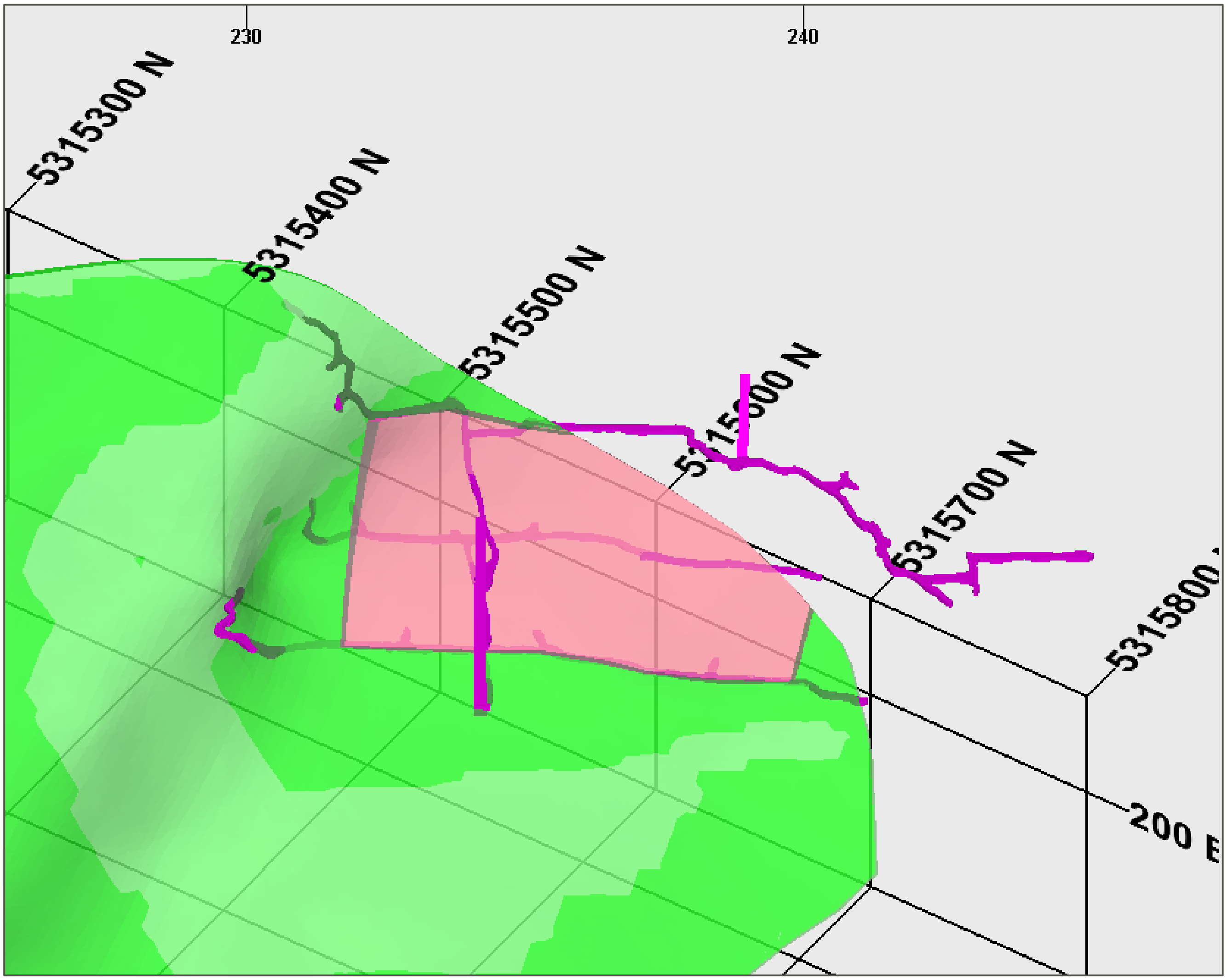


Figure 14-29: Volume Extracted to Account for Previous Mining (pink, against the Shear Zone [green]) in the Northern Part of Minto South (development is magenta)

14.3.5.9 Resource Classification

The Resource Estimate was classified by following the Canadian Institute of Mining, Metallurgy and Petroleum (“CIM”) Definition Standards for Mineral Resources and Mineral Reserves (May 2014). Resource classifications were assigned to broad regions of the block model based on QP confidence and judgement related to geological understanding, continuity of mineralization in conjunction with data quality, density, and block model representativeness.

One of the contributing considerations in the classification was the distribution of the mean distance to the closest three drill holes (Figure 14-30).

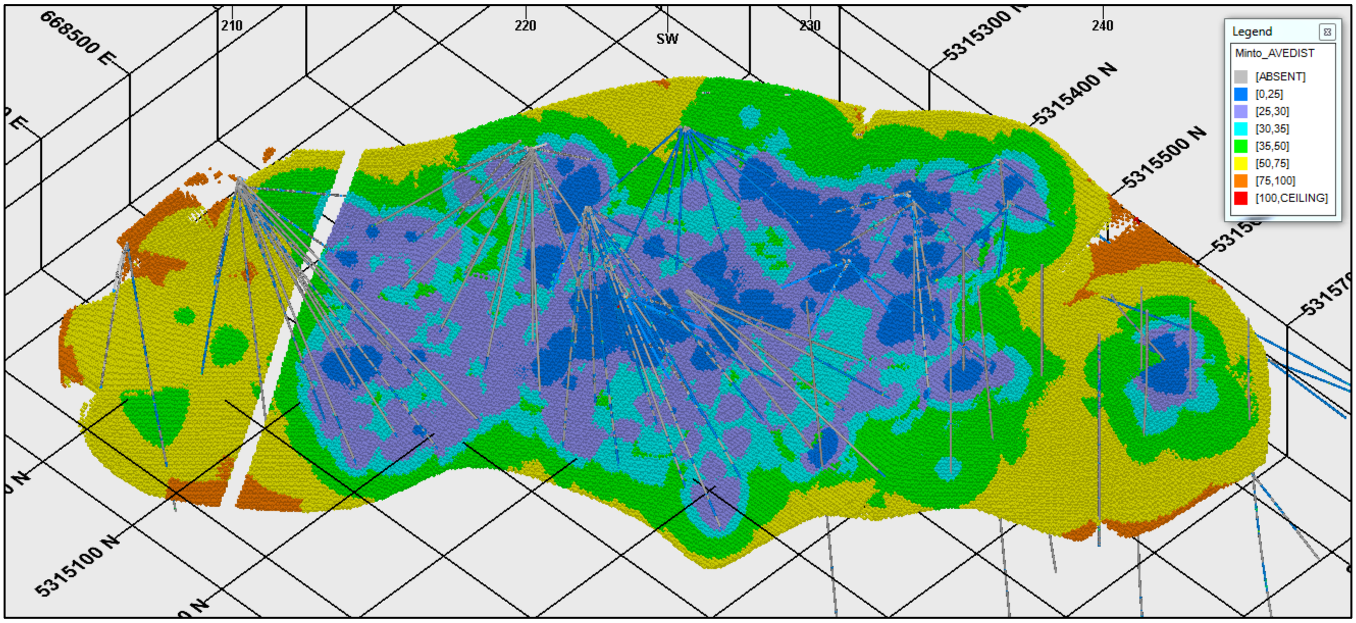


Figure 14-30: Distribution of Mean Distance to Closest Three Drill Holes

For the volume of Mineral Resources in the Indicated category, the mean drill hole spacing to the closest three drill holes was approximately 25 m to 30 m or less, where geology and grade continuity were reasonably understood and represented in the model (Figure 14-31). All other volumes were in the Inferred category.

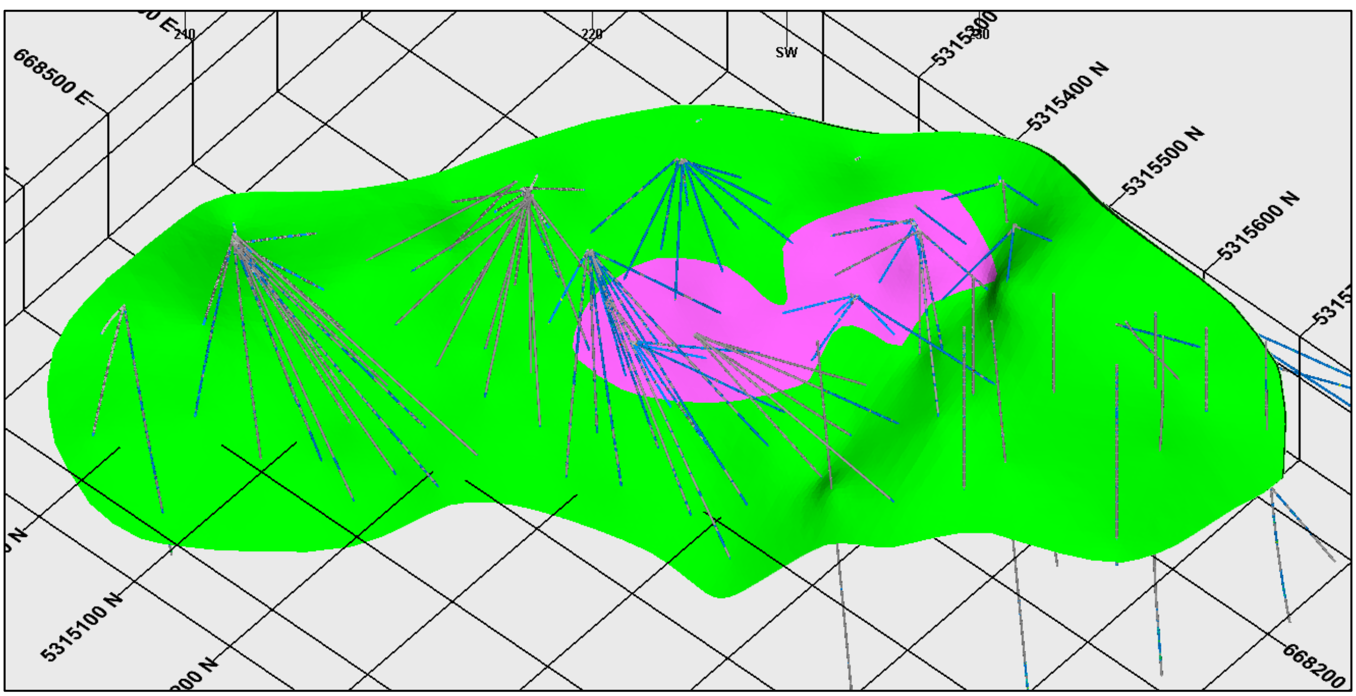


Figure 14-31: Resource Classification (Indicated is magenta, Inferred is green)

14.3.5.10 Cut-Off Grade

The QP has selected a 3.5 g/t break-even cut-off grade for the reporting of Mineral Resource estimates, based on the following economic assumptions, for potential underground cut-and-fill mining:

- Gold Price: US$1,200
- Exchange Rate: 0.75 US$/CA$
- Mill Recovery: 90%
- Operating Expense (OPEX): CA$160/tonne ($120 Mining, $25 Milling, $15 G&A)

14.3.5.11 Mineral Resource Statement

The Mineral Resource estimate for the Minto South Project is disclosed in accordance with NI 43-101 and has been estimated following the CIM Estimation of Mineral Resource and Mineral Reserves Best Practices guidelines.

Mineral resources are not mineral reserves and do not necessarily demonstrate economic viability. There is no certainty that all or any part of this mineral resource will be converted into mineral reserve.

Inferred Mineral Resources are too speculative geologically to have economic considerations applied to them to enable them to be categorized as mineral reserves.

The base case Mineral Resource estimate is reported at a cut-off of 3.5 g/t Au (Table 14-13) while other cut-offs are provided to demonstrate tonnage and grade sensitivities (Table 14-14). The Resource estimate excludes mineralization within previously mining areas.

Table 14-13: Minto South Mineral Resource Estimate (Effective Date November 7, 2018)

Resource Category	Tonnes	Au Grade (g/t)	Contained Au (Oz)
Indicated	105,000	7.5	25,000
Total Indicated	**105,000**	**7.5**	**25,000**
Inferred	354,000	6.6	75,000
Total Inferred	**354,000**	**6.6**	**75,000**

Notes:
1) All Mineral Resources reported at a 3.5 g/t Au cut-off.
2) A 3.5 g/t cut-off is supported by the following economic assumptions for potential underground cut-and-fill mining: Gold Price: US$1,200, Gold Recovery: 90%, Operating Expense (OPEX): CA$160 / tonne ($120 mining, $25 milling, $15 G&A).
3) Tonnage estimates are rounded to the nearest 1,000 tonnes.
4) g/t – grams per tonne.
5) Ozs – troy ounces.

Table 14-14: Minto South Mineral Resource Cut-off Sensitivity

Au Cut-off Grade (g/t)	Indicated Category			Inferred Category		
	Tonnes	Au Grade (g/t)	Contained Gold (Oz)	Tonnes	Au Grade (g/t)	Contained Gold (Oz)
2.5	142,000	6.30	29,000	496,000	5.60	89,000
3.0	123,000	6.90	27,000	426,000	6.00	83,000
3.5	**105,000**	**7.50**	**25,000**	**354,000**	**6.60**	**75,000**
4.0	92,000	8.00	24,000	303,000	7.10	69,000
4.5	81,000	8.50	22,000	260,000	7.50	63,000
5.0	71,000	9.10	21,000	225,000	8.00	58,000

Note: *Base Case Scenario: Mineral Resource estimate uses a break-even economic cut-off grade of 3.5 g/t Au.

It is the QP's opinion that the Mineral Resource has reasonable prospects for economic extraction based on reasonable grade continuity at the selected economic reporting cut-off. The QP is unaware of any known environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant factors that could materially affect the Mineral Resource estimate.

14.4 Combined Mineral Resource Estimate for the Wawa Gold Project

The combined Mineral Resource estimate for the Project, comprising the Surluga and Minto Mine South deposits, is summarized in Table 14-15.

Table 14-15: Wawa Project Combined Mineral Resource Estimate

Deposit	Resource Category	Tonnes	Au Grade (g/t)	Contained Au (Oz)
Surluga	Indicated	1,202,000	5.31	205,000
Minto Mine South	Indicated	105,000	7.50	25,000
Total	**Indicated**	**1,307,000**	**5.47**	**230,000**
Surluga	Inferred	2,362,000	5.22	396,000
Minto Mine South	Inferred	354,000	6.60	75,000
Total	**Inferred**	**2,716,000**	**5.39**	**471,000**

Notes:
1) Surluga Mineral Resources reported at a 2.7 g/t cut-off from within a 2-g/t envelope. The 2.7 g/t cut-off is supported by the following economic assumptions for potential underground longhole mining: Gold Price: US$1,200, Gold Recovery: 90%, Operating Expense (OPEX): CA$125 / tonne ($85 mining, $25 milling, $15 G&A).
2) Minto Mineral Resources reported at a 3.5 g/t cut-off which is supported by the following economic assumptions for potential underground cut-and-fill mining: Gold Price: US$1,200, Gold Recovery: 90%, Operating Expense (OPEX): CA$160 / tonne ($120 mining, $25 milling, $15 G&A).
3) Tonnage estimates are rounded to the nearest 1,000 tonnes.
4) g/t – grams per tonne.
5) Ozs – troy ounces.

A comparison was completed to evaluate changes between the 2015 and 2019 Mineral Resource estimates, as summarized in Table 14-16.

Table 14-16: Wawa Gold Project Mineral Resource Summary of Changes

	2015 Resource Estimate			2019 Resource Estimate			Changes to the Resource Estimate		
Category	Tonnes (000)	Au Grade (g/t)	Contained Gold (000 Ozs)	Tonnes (000)	Au Grade (g/t)	Contained Gold (000 Ozs)	Tonnes (000)	Au Grade (g/t)	Contained Gold (000 Ozs)
Indicated	0	0	0	1,307	5.47	230	1,307	5.47	230
Inferred	19,824	1.71	1,088	2,716	5.39	471	-17,108	3.68	-617

There were significant changes to the estimation methodology between the 2015 and 2019 estimates that resulted in material differences to the stated Mineral Resource estimates, as summarized in the following list:

1) The deposit was evaluated as an underground project instead of an open-pit project in 2015, which resulted in the use of a 2.7 g/t cut-off rather than the 0.4 g/t cut-off used for an open-pit scenario. This resulted in a material change in the estimated tonnage and grade.
2) The Jubilee shear zone was re-interpreted as three individual shears rather than as a single shear, which resulted in a change in volume and grade distribution.
3) The footprint of the 2019 Inferred Mineral Resource was significantly reduced from 2015 to reflect the uncertainty of mineral continuity at depth between widely spaced holes.
4) The estimation parameters were changed to reflect the differences in mining scenarios. The block size was reduced to 2 x 2 x 2 m from 4 x 4 x 4 m and the interpolation method was changed from Ordinary Kriging (OK) to Inverse Distance Cubed (ID^3). These changes have reduced the amount of grade smoothing in the model and are more representative of the scale of mineralization in the deposit.
5) Indicated Mineral Resources for Surluga were classified in the 2019 model based on recent confirmation drilling, the large historical sample program completed by Red Pine and other verification checks completed by the QP described in Item 12.
6) The Minto Mine South deposit was discovered, and the Mineral Resource was added in 2018.

15.0 MINERAL RESERVE ESTIMATES

There are no Mineral Reserve estimates for the 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

There are many historical mines adjacent to the Project as previously described in Item 6. Regionally in the Michipicoten Greenstone belt, the Island Gold mine and the historical Edward mine have mineralization styles that show some similarities with the mineralized zones of the Project. In this technical report, only the historical mines with production records located in the immediate vicinity of the Project are described. There are no active gold mines or development projects in the immediate vicinity of the Project.

RT Minerals Corp. is a gold exploration company that has interest in the Golden Reed Mine Property and the Norwalk Property, both within and in close proximity to the Project. The Golden Reed Mine Property consists of a single 4-unit mining claim staked within the eastern section of the Project. The Norwalk Property is comprised of three unpatented mineral claims consisting of 29 units with a total area of 445 Ha situated on the southwestern edge of the Project.

23.1 Historical Gold Mines

Mines with historical production records near the Project include the Mariposa, Grace-Darwin, Parkhill, Van Sickle, Cooper, Jubilee, Minto and Surluga mines. The Maripose mine was a small and short-term operation in the early 1900s, producing 8 tonnes at 72.99 g/t gold (Sage, 1993; Rupert, 1997). The Grace-Darwin mine was operated discontinuously between 1900 and 1940 and produced 41,302 tonnes at 13.27 g/t gold (Sage, 1993; Rupert, 1997). The Parkhill mine was the largest operating and highest grade mine on record, producing 114,096 tonnes at 14.81 g/t gold from 1929 to 1938 (Sage, 1993; Rupert, 1997). The Van Sickle mine was another small, short-term operation (1933 – 1936) producing 8,372 tonnes at 6.34 g/t gold (Sage, 1993; Rupert, 1997). The Cooper, Jubilee and Minto mines were all operated in the 1930s. The Cooper mine was a small operation, produced 4,435 tonnes at 11.42 g/t gold (Sage, 1993; Rupert, 1997). The Jubilee mine was the second largest mine producing 107,930 tonnes at 4.29 g/t gold and the Minto mine produced 57,335 tonnes at 12.56 g/t gold (Sage, 1993; Rupert, 1997). The Surluga mine was the last mine in operation (1964 – 1969) near the Project and produced 86,082 tonnes at 3.12 g/t gold (Sage, 1993; Rupert, 1997).

The QP has not verified the information presented in this Item and this information is not necessarily indicative of the mineralization on the property that is the subject of this Technical Report.

24.0 OTHER RELEVANT DATA AND INFORMATION

The QP is unaware of any other data or information that is material to the Project.

25.0 INTERPRETATION AND CONCLUSIONS

25.1 Interpretations

The Wawa Gold deposit is a shear hosted Archean lode gold deposit, located near the town of Wawa, Ontario, Canada, in the Michipicoten greenstone belt. Mineralization is primarily located within the Jubilee Shear Zone and consists of native gold and gold-bearing sulphide mineralization associated with quartz veins, and a potassic hydrothermal alteration assemblage hosted in mainly diorite. Mineralization plunges approximately 25o to the south/southwest and dips approximately 30o to the southeast. Since the previous 2019 Technical Report, Red Pine has completed surface exploration and exploration drilling. The 2019 and 2020 drill programs confirmed that the Surluga deposit remains open along-strike and down-dip, along with other gold-bearing structures in the area as disclosed in the June 21, 2019, news release, titled “Red Pine Provides Comparison of 2015-2019 Block Models and Outlines Exploration Activity for the Remainder of 2019 at its Wawa Gold Project.”

The 2019 Mineral Resource estimate was evaluated using a geostatistical block modelling approach using Datamine RM software. The block model is constrained to within the Jubilee Shear Zone limits interpreted by Red Pine. Block model grades were estimated using the ID3 interpolation method from the current drill hole database. ID3 estimates were observed to control grade smoothing and achieved an appropriate grade-tonnage profile relative to the characteristics of the deposit. Density was assigned to the model based on mean SG values for the deposit.

25.2 Conclusions

It is the Mineral Resource QP’s opinion that the information presented in this Technical Report is representative of the Project, and based on the verification completed, concludes that the sample database is of suitable quality to provide the basis of the conclusions and recommendations reached in this Technical Report.

The QP has taken reasonable steps to make the block model and Mineral Resource estimate representative of the Red Pine data, but notes that there are risks related to the accuracy of the estimates related to the following:

- The accuracy and quality of the historical data.
- The assumptions used by the QP to prepare the data for resource estimation.
- The accuracy of the Red Pine shear zone interpretation.
- The variable and structurally complex nature of the deposit geology.
- The presence of Lamprophyre dykes that are difficult to model and are generally barren.
- The impact of outlier grade data.
- Estimation parameters used by the QP.

For these and other reasons, actual results may differ materially from these estimates.

25.2.1 Metallurgical Conclusions

It is the Metallurgy QP's opinion that the samples used for metallurgical testing were representative of the styles of mineralization found in the Surluga and Minto Mine South deposits.

For the three (3) samples representative of Minto mineralization, CIL cyanidation and gravity recoverable gold average of 95.4%. For the five (5) samples representative of the blends of pyrite-dominant with accessory to absent arsenopyrite-dominant mineralization types in the Surluga Deposit, CIL cyanidation and gravity recoverable gold average of 90.3 %. The three (3) samples selected to specifically characterize arsenopyrite-dominant mineralization in the Surluga Deposit yielded a range of CIL cyanidation and gravity recoveries between 48.9% to 78.2% (average of 61.2%).

Samples representative of the main zones of mineralization in the Surluga and Minto Mine South deposits were amenable to gravity recovery and bulk sulphide flotation at the 80%-75 µm feed size. For the three (3) samples representative of Minto mineralization, bulk sulphide flotation and gravity recoverable gold averaged 95.6%. For the five (5) samples representative of the blends of pyrite-dominant with accessory to absent arsenopyrite-dominant mineralization in the Surluga Deposit, bulk sulphide flotation and gravity recoverable gold averaged 86.6 %. For the three (3) samples selected to specifically characterize arsenopyrite-dominant mineralization in the Surluga Deposit, bulk sulphide flotation and gravity recoverable gold averaged 93.3%.

Potential processing alternatives applicable to the Wawa Gold Project are suggested as including:

i) Gravity concentration followed by sulphide flotation which would be applicable to all material types with products potentially shipped to a third party for smelting.

ii) Whole ore cyanidation applying CIL which would be applicable to materials lower than a threshold sulphide and arsenopyrite concentration which exhibited lower gold recoveries in test work.

iii) A hybrid circuit involving gravity concentration, sulphide flotation and CIL on flotation tailings, which would be expected as yielding highest possible Au recovery and be applicable to all material types.

26.0 RECOMMENDATIONS

The QP recommends a 25,000 m drill program to potentially expand the extents of the Surluga and Minto South deposits by drilling along strike and down-dip in the Jubilee and Minto Mine South shear zones. The QP recommends that approximately 16,250 m to 20,000 m of the drill program to be focused on testing the extensions of the known deposits and increase the level of confidence in the existing mineral resources.

The remaining 5,000 m to 8,750 m of the drill program is recommended for exploration purposes to be completed in the mineralized structures on the property that have the potential to host significant zones of gold mineralization, including the Hornblende Shear Zone, the Minto B Shear Zone, the Grace Shear Zone, the Nyman Shear Zone, the Parkhill #4 Shear Zone, and the extension of the Jubilee Shear Zone south of the Parkhill Fault.

Targeted surface exploration consisting of mapping and sampling is also recommended for high priority exploration targets in zones of known mineralization.

A historical core sampling program is also recommended to further assess the quality of the legacy data. This program would include a statistically significant number of samples selected from the remaining split AQ-sized core drilled during the 1980's.

The cost of the proposed exploration program is estimated to be approximately $6,275,000, as outlined in Table 26-1.

Table 26-1: Summary of Recommended Work Program

Recommended Work	Estimated Cost CA$
Diamond drilling	$5,000,000
Targeted field mapping and sampling	$50,000
Historic core sampling	$50,000
Overhead and corporate G&A	$875,000
Contingency 5%	$300,000
Total Costs	**$6,275,000**

26.1 QA/QC and Database

The QP recommends the use of duplicate samples (field, pulp, and umpire) in order to help quantify deposit variability and identify any potential laboratory bias. It is also recommended that the assay database be updated using all of the available metallic screened assays as the final assay result, as these results are deemed to be the highest quality. In order to improve data security and reduce the risk of introducing errors, it is recommended to store drill hole and assay data in a relational database system rather than relying on Excel™ spreadsheets.

26.2 Metallurgical Recommendations

Additional work is required to fully characterise the distribution of the pyrite-dominant, Minto and arsenopyrite-dominant mineralization types to define metallurgical domains and approximate composition of the blend of mineralization styles in the Surluga Deposit. This can be achieved with the digitization of the sulfide assemblages recorded in the historic drill logs, and diamond drilling for targeted verification of historic data and for areas of the deposit where the sulfides assemblages were not historically recorded. Modern diamond drilling will also be required for the petrographic studies of arsenopyrite-dominant mineralization identified in historic logs located in zones without modern drilling.

Once this work is completed, additional metallurgical samples representative of the ranges of blends of mineralization types in the Surluga deposit will be tested to further define and characterize the overall metallurgical behavior of higher-grade zones of the deposit. Additional metallurgical samples of the arsenopyrite-dominant mineralization will be pursued based on the textural attributes of arsenopyrite following petrographic work. This sampling will provide a better representation of the full range of metallurgical behavior of arsenopyrite-bearing mineralization based on the variable deportment of gold to support process flowsheet definition.

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