



**REPORT**

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

*Report Effective Date: September 30, 2024*

*Resource Effective Date: August 28, 2024*

Submitted to:

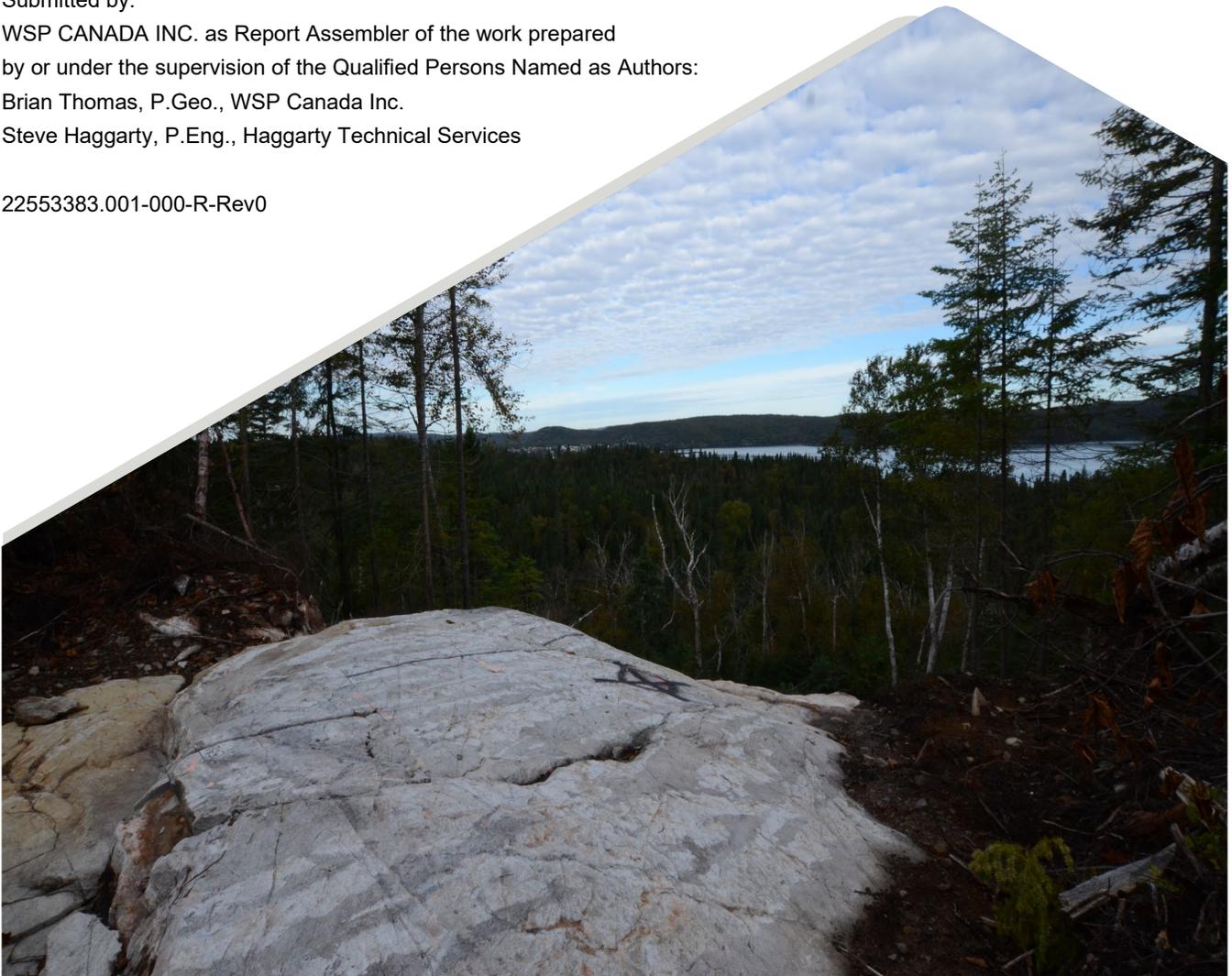
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22553383.001-000-R-Rev0



## 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.Geol. (the Author), of WSP Canada Inc. (WSP) 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 was prepared in accordance with a contract between WSP and Red Pine, which 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 September 30, 2024.

Qualified Person	Responsible for Parts
<p><i>Signed by Brian Thomas</i></p> <p>Brian Thomas, P.Ge. (WSP Canada Inc.) Date Signed: September 30, 2024</p>	<p>Responsible for Items: 1.1 – 1.4, 1.6.1, 1.7, 1.8.1.1, 1.8.1.2, 1.8.2.1, 2-11, 12.1-12.4, 14, 15-24, 25.1, 25.2.1, 25.2.2, 26.1, 27</p>

Qualified Person	Responsible for Parts
<p><i>Signed by Steve Haggarty</i></p> <p>Steve Haggarty, P.Eng. (Haggarty Technical Services) Date Signed: September 30, 2024</p>	<p>Responsible for Items: 1.5, 1.6.2, 1.8.1.3, 1.8.2.2, 12.5, 13, 25.2.3, 26.2</p>

**CERTIFICATE OF QUALIFIED PERSON BRIAN THOMAS**

I, Brian Thomas, state that:

- (a) I am a Principal Geologist at:  
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33 Mackenzie Street, Suite 100 Sudbury,  
Ontario, P3C 4Y1
- (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: September 30, 2024 (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 Laurentian University with a B.Sc. in Geology from 1994, I am a member in good standing of the Association of Professional Geoscientists of Ontario (#1366). My relevant experience after graduation, for the purpose of the Technical Report, includes over 30 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 each property described in the Technical Report occurred between May 21 – 23, 2024 and was for a duration of 3 days.
- (e) I am responsible for Item(s) 1.1 – 1.4, 1.6.1, 1.7, 1.8.1.1, 1.8.1.2, 1.8.2.1, 2 – 11, 12.1-12.4, 12.6, 14, 15 – 24, 25.1, 25.2.1, 25.2.2, 26.1, 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 2023 Technical Report titled National Instrument 43-101 Technical Report for the Wawa Gold Project, with an effective date of June 21, 2023, 2021 Technical Report titled National Instrument 43-101 Technical Report for the Wawa Gold Project, with an effective date of August 18, 2021; 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 parts of the Technical Report for which I am responsible have 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 the Technical Report for which I am responsible, contain(s) all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated at Sudbury, Ontario this 30<sup>th</sup> of September 2024.

Signed by Brian Thomas

Brian Thomas; P.Geo.

**CERTIFICATE OF QUALIFIED PERSON STEVEN HAGGARTY**

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

- (a) I am an independent Metallurgist at:
- Haggarty Technical Services Corp.  
2083 Country Club Drive  
Burlington, Ontario L7M 3V3
- (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: September 30, 2024 (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.
- (d) I had the opportunity to visit the Red Pine Exploration, Wawa Gold Project on May 25, 2023, with a tour of the property and the core shack for the project described in the Technical Report. I was directly involved in the previous definition and completion of associated metallurgical testwork at McClelland Laboratories in Sparks, Nevada. During the May 2023 site visit I was able to examine remnant sections of drill core, from the same zones and mineralized intercepts that were the subject of previous metallurgical testwork, involving fine grained sulfides in fine quartz veining.
- (e) I am responsible for items 1.5, 1.6.2, 1.8.1.3, 1.8.2.2, 12.2, 13, 25.2.3, 26.2 of the Technical Report.
- (f) I am independent of the issuer as described in section 1.5 of NI 43-101.
- (g) With the exception of managing and interpreting data from a 2019 metallurgical test program completed at SGS Lakefield, and supporting the completion of a previous August 2021 and June 2023 Wawa Gold Project NI-43101 Technical Reports, I have not had prior involvement with the property that is the subject of this most recent updated 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 September 30, 2024.

Signed by Steven Haggarty

Steven Haggarty, P. Eng.

Haggarty Technical Services, Corp.

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## 1.0 SUMMARY

This Technical Report was prepared for Red Pine Exploration Inc. (Red Pine) and presents updated exploration data and an updated Mineral Resource estimate for the Wawa Gold Project located near Wawa, Ontario, Canada (previous report effective date: June 21, 2023). The new exploration data includes additional drilling and surface mapping results for many of the mineralized structures of the Property. Red Pine owns a 100% interest in the Project.

The Mineral Resource estimates and Technical Report were prepared by WSP Canada Inc. (WSP) in conjunction with Haggarty Technical Services Corp. (Haggarty) for the metallurgy-related elements of the study. 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.

The Mineral Resource estimate was updated due to material changes in exploration drill hole data obtained since 2019 for many gold zones within the Wawa Gold Project and following the identification in May 2024 of selective manipulations of gold assay data in the Red Pine assay database. Manipulated assay data was also found to have informed the 2019 resource estimation for the Surluga Deposit and the 2018 estimation for the Minto Mine deposit (see June 21, 2023, Technical Report, titled "National Instrument 43-101 Technical Report for the Wawa Gold Project"). The updated mineral resource estimate is based on Red Pine's rebuilt and externally verified gold assay database. 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 2019) and were classified according to the CIM Definition Standards for Mineral Resources & Mineral Reserves (May 2014).

Except for Section 13.0 Mineral Processing and Metallurgical Testing, the Qualified Person (QP) for this Technical Report is Mr. Brian Thomas, P.Geo., an independent QP as defined under NI 43-101 and an employee of WSP. 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 September 30, 2024.

A QP personal site inspection of the Project was last conducted by Mr. Brian Thomas between May 21, 2024, and May 23, 2024, 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 an expanded verification sampling program of Red Pine's core as well as historical drill core. Mr. Steve Haggarty, the QP for the metallurgy, personally inspected the site on May 25, 2023, and visually inspected the remnant drill core characteristics of the deposit used to support the metallurgical testing.

### 1.1 Property Description and Ownership

#### 1.1.1 Project Description, Ownership and Location

The Project is located 2 kilometres (km) east of the Town of Wawa, Ontario, and approximately 650 km northwest of Toronto (Figure 4-1). The Project is located within the McMurray Township (NTS 41/n14) and is centered on Universal Trans Mercator (UTM) North American 1983 Datum (NAD83) (Zone 16N) 669,800 metres (m) east and 5,315,000 m north.

The Project consists of 302 unpatented and 122 patented or leased mining claims, totaling 7,041 Ha (Figure 4-2, Figure 4-3, and in Item 24.0).

Red Pine holds a 100% interest in the Project after the March 2021 acquisition of the 36.69 % interest in the Wawa Gold Project formerly held by Citabar Limited Partnership (“Citabar”).

On August 29, 2023, Red Pine announced a NSR royalty agreement (the “Royalty Agreement”) with Franco-Nevada Corporation for the purchase of a 1.5% NSR on the Project.

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

All-year road access is available by driving 2 km east on Highway 101 from the town of Wawa (Ontario) and then turning south (S) on the Surluga Road, a private gravel road owned and maintained by Red Pine.

Wawa has a population of 2,705 people (2021) (<https://www12.statcan.gc.ca/census-recensement/2021>). A 230-kV power line crosses the southern part of the property, and a second power line crosses the western part. Wawa Municipal Airport is located 3.1 km south-southwest of Wawa along Highway 101, although no commercial airlines operate from the airport. The Canadian National (CN) operates a rail station at Hawk Junction, located 24 km east of Red Pine’s main camp.

The closest operating mills to the Wawa Gold Project are the Kremzar and Magino mills owned and operated by Alamos Gold Inc. (“Alamos Gold”). Alamos Gold is currently upgrading the Magino Mill to a throughput of 11,200 tpd, expected in 2025, and plans to shut down the 1,200 tpd Kremzar mill once the the Magino Mill upgrade is completed (<https://www.alamosgold.com/>). The driving distance from the Wawa Gold Project to the Island Gold District is 89.9 km using Highway 17 and passing through Dubreuilville. The 1,200 tpd Eagle River Mill operated by Wesdome is located at a driving distance of 119 km from the Wawa Gold Project.

The proximity to Lake Superior has a significant impact on the climate of the property. 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.

The property is hilly, with elevations ranging from 300 m to 400 m above sea level (asl). Steep ridges exist locally. The property is forested with spruce, pine, poplar, and birch being the dominant species. Water is available on the property in the form of small lakes and streams.

### **1.1.3 History**

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

The Surluga Mine was discovered in the early 1960s (Sage, 1991) and began production shortly thereafter (Kuryliw, 1970 & 1972). The Surluga Mine continued production until the mid-1970s. In the early 1980s, various properties from previous owners were consolidated into one land package. In the mid-1980s, the Surluga Mine was dewatered and the mine shaft was refurbished as part of restarting mining operations. 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. During this time, the Sunrise-Mickelson vein systems and the Van Sickle mine were added to the land package (Bradshaw, 1991; Bowdidge, 1996; Rupert, 1997). The late 2000s saw the rejuvenation of exploration on the Project, with extensive drilling beginning near the end of the decade and extensive exploration taking place at the Surluga mine and surrounding areas (Gow, 2011).

### 1.1.4 Environmental Considerations

Red Pine is in the process of completing a closure plan for the current and historical site activities. As part of the Closure Plan, Red Pine has capped mine shafts that were exposed to the environment, while the now completed filling of two historical Mackey Point pits remains to be certified by a Professional and Qualified Engineer. A Certificate of Approval (COA) regarding Minto Lake Tailings Dam and Pond has been issued, and the required conditions are being monitored. Tests have indicated that all rock samples found at the site have moderate to high buffering capacity regarding acid-generating potential. All patented mining claims for which mining rights are held are part of the closure plan, except for PAT-775, 776, and 777, which were purchased in 2022.

## 1.2 Geology and Mineralization

The property is located in the Michipicoten greenstone belt of the Wawa Sub-province (Superior Province), formed by three cycles of mafic and felsic metavolcanic rocks, with associated subvolcanic intrusions and metasedimentary rocks (Sage, 1994). On the property, a high-level, polyphase, and predominantly dioritic to tonalitic intrusive complex named the Jubilee Stock hosts most of the known zones of gold mineralization (Frey, 1987; Sage, 1993). The core of the Jubilee Stock, characterized by the prevalence of phaneritic medium- to coarse-grained intrusions with accessory porphyritic intrusions, is curved-shaped into a sigmoid form. Its long axis is oriented at 20°, and it has a surface expression of 6 km x 1.3 km. The periphery of the Jubilee Stock is comprised of multiple sub-volcanic porphyritic intrusions with localized domains of phaneritic intrusions. The boundaries between the sub-volcanic intrusions and the extrusive volcanic rocks remain undefined. A set of tholeiitic gabbro dykes is also part of the Jubilee Stock. The intrusive units forming the Jubilee Stock intruded their host volcanic sequence around  $2,745 \pm 3$  million years ago (Ma; Sullivan et al. 1985).

Gold mineralization is conspicuous throughout the Project and is best defined within the Wawa Gold Corridor, centered on the Jubilee Shear System. The Wawa Gold Corridor features four distinct phases of mineralization:

- Intrusion-related gold (IRG) mineralization coetaneous with the emplacement of the Jubilee Stock.
- Three episodes of gold mineralization during the evolution of an orogenic cycle:
  - The first episode (D1 - Grace) corresponds to NW-SE shortening recorded in the Grace and Minto C shears.
  - The second episode (D2 - Jubilee) marks peak orogenic deformation involving top-to-NNE strike-slip to oblique faulting, dominant in the Jubilee and Hornblende Shear systems.
  - The third episode (D3 – Minto) is characterized by top-to-NE extension, forming extensional shear zones like the Minto Mine and Parkhill #4 Shears, and networks of extensional veins.

The largest and strongest zone of IRG mineralization identified so far on the property is located between the Jubilee and the Hornblende shear zones within the Wawa Gold Corridor. This zone is centered on a tonalite intrusive, with gold mineralization preferentially hosted within or adjacent to that tonalite. IRG mineralization occurs as networks of biotite-rich stringers, replacement veins, and replacement fronts. Early sulfides include pyrite and pyrrhotite, transitioning to euhedral to subhedral and fine- to coarse-grained arsenopyrite. Molybdenite, chalcopyrite and scheelite can also precipitate in certain biotite-rich veins.

The zones of orogenic gold mineralization of the Wawa Gold Corridor are formed after the felsic to mafic intrusions forming the Jubilee Stock. In the shear zones formed during compressive deformation, gold concentration typically relates to finely disseminated sulphides (pyrite or arsenopyrite) associated with arrays of variably deformed quartz and quartz-carbonate veins. In the mineralized zones formed during the extensional event, gold mineralization is typically associated with quartz-tourmaline veins formed in the extensional shear zones or forming networks of veins.

The Jubilee Shear System, a network of anastomosing shears progressively developed and re-activated throughout the cycle of orogenic deformation, is the largest mineralized structure defined so far on the Wawa Gold project and represents the primary source of gold for the Jubilee Deposit which includes the Surluga Deposit, as referred to in previous technical reports. The Jubilee Shear System is centered on a high-strain zone named the Main Deformation Domain. The Main Deformation Domain hosts most of the current mineral resources of the Wawa Gold Project. The deformation domains of the Jubilee Shear System were primarily formed during the peak compression event, but secondary deformation occurred from the early compression stage to the final extensional stage.

## 1.3 Exploration

### 1.3.1 Diamond Drilling

Between 2014 and 2024, Red Pine completed 11 drilling programs totaling 163,164 m of drill core distributed in 547 drill holes. Each drill program targeted different geological structures of the Wawa Gold Project, which are listed in Table 1-1. Most of the drill programs targeted mineralized structures located within the Wawa Gold Corridor and associated with historical mining.

The most targeted mineralized structure was the Main Deformation Domain of the Jubilee Shear System, within and beyond the volume covered by the 2019 mineral resource of the Surluga deposit. The objectives of the drill programs were to confirm the presence of historically reported gold mineralization, test for the presence of gold mineralization and extend the zones of gold mineralization. Each program successfully extended or confirmed gold mineralization in the tested structures.

**Table 1-1: Summary of Exploration, Resource Definition and Confirmation Drilling in the Mineralized Structures of the Wawa Gold Project**

Area/Target	Number of Holes	Years Tested	Metres Drilled
Cooper	11	2019	1,064.00
Core Shack & Jubilee Vein Networks	2	2023	735.00
Darwin - Grace	37	2017, 2022	6,358.80
EM Target	1	2022	153.00
Hornblende & IRGS	22	2015 - 2019, 2021 - 2023	8,134.00
Hornblende & IRGS / Jubilee	13		4,861.00
IRGS South Parkhill Fault	3	2017	396.00
Jubilee	185	2014 - 2024	67,876.85
Jubilee / HW	43	2023-2024	13,537.00
Jubilee South of Parkhill Fault	23	2022	7,190.57
Mickelson - Sunrise	9	2015, 2018	753.80

Area/Target	Number of Holes	Years Tested	Metres Drilled
Minto B	3	2022	567.00
Minto B / Jubilee	53	2018, 2022 - 2023	21,365.48
Minto Mine	112	2017 - 2018, 2022 - 2023	24,560.77
Minto Mine / Jubilee	3	2017	1,273.00
Nyman	9	2017, 2021-2022	1,004.57
Parkhill # 4	3	2018	891.00
Parkhill Mine	6	2017 - 2018	1,325.00
Root	3	2018	466.18
Sadowski	5	2023	651.00
<b>Total</b>	<b>547</b>		<b>163,164</b>

### 1.3.2 Surface Exploration

During the field seasons from 2014 to 2023, surface exploration programs focused on the gold showings and 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, 1,223 rock samples were collected, with gold grades ranging from below detection to 93.0 g/t Au. The reader is cautioned that grab samples are selective by nature and may not represent the actual grade of a mineralized target.

### 1.3.3 Geophysical Surveys

Multiple geophysical surveys were completed between 2015 and 2024 and included ground and airborne magnetic surveys, local ground EM surveys and local gravity surveys.

### 1.3.4 Channel Sampling

During the summers of 2015 to 2021, Red Pine personnel carried out mechanized stripping and channel sampling of exposed outcrops to define the continuity and distribution of gold mineralization in the exposed geological structures. No channel samples were taken between 2022 and 2024.

A total of 1,570 channel samples totaling 1,543.75 m were collected over 519 channels. The main objective of the trenching program was to test for the presence of gold mineralization and to characterize the distribution and continuity of mineralization in some of the geological structures. Mechanized stripping also provided high-quality exposures to describe the host rocks of the mineralized structures. The mineralization structures tested with channel sampling included the Root Vein, Grace Shear, Cooper and Ganley shears, Jubilee Shear and its extension south of the Parkhill Fault, Hornblende Shear, Algoma Shear, Parkhill #4 Shear, Minto B Shear, Sunrise-Mickelson Vein Networks, Parkhill Shear, Mariposa Vein, Villeneuve Vein and prospective structures identified from traverses, mapping and geophysical surveys.

### 1.3.5 Historical Drill Core Sampling

To mitigate the impacts of the selective sampling patterns in historical drilling programs, Red Pine sampled intervals of historical drill core that were left unsampled by the previous operators from 40,481 m of recovered historical core in two separate phases completed in 2016 and 2018. Throughout the sampling programs, Red Pine took 10,627 assays from 21,416 m of previously un-sampled drill core distributed in 525 drill holes. The samples were processed using the same methodology and QA/QC controls as used for Red Pine drill core samples at the time.

In total, 14 historical core samples had gold grade greater than or equal to 5.00 g/t gold, 34 had gold grades between 2.00 and 5.00 g/t gold, 72 had gold grades between 1.00 and 2.00 g/t gold, 178 had gold grades between 0.40 and 1.00 g/t gold and 623 had gold grades between 0.10 and 0.40 g/t gold. The best gold grade found in previously unsampled drill core was 109.00 g/t gold over 0.86 m.

## 1.4 Sample Preparation, QAQC and Security

### 1.4.1 Data Management

Since February 2024, the assay chain of custody procedures have been updated so that each assay certificate is now sent via email in password-protected zip files to at least two members of the Red Pine senior management team. The PDF files of each assay certificate are password-protected against modifications, and each assay certificate is directly accessible to the senior management using Actlab's WebLIMS portal.

### 1.4.2 Summary of the Quality Assurance and Quality Control Programs

Two independent certified laboratories were used for the gold analyses of the Project. A total of 64,287 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.

As part of Red Pine's internal QA/QC protocols, standards and blanks are regularly inserted into the core sampling sequence. A standard is inserted every 20 samples, and a blank is inserted every 25 samples. Blanks are also routinely inserted after core samples where native gold is observed. The selected standards have a mineralogical matrix representative of orogenic gold deposits and cover a range of gold grades comparable to those expected in the mineralized zones. Additional QA/QC measures include pulp repeats (second analysis of the same original prepared pulp) and pulp duplicates (second analysis of new pulp from obtained from the coarse rejects) at the primary assay laboratory (2014-present), re-analysis of fire assays results  $\geq 2.00$  g/t gold (2015 - 2023) or  $\geq 2.25$  g/t gold (2023 to present) using the coarse rejects by metallic screen, quarter core field duplicates for Minto-style veins and for the other types of mineralization (2023 to present), monitoring the pulverization of the samples by ascertaining that the percentage passing of the pulps at 106  $\mu\text{m}$  is at or exceeds 95.00 % (from 2024), and duplicate analysis of metallic screen analyses at the primary laboratory from the coarse rejects (from 2024).

Red Pine will integrate umpire check assaying of pulps at a second laboratory for its subsequent drill programs.

It is the QP's opinion that the geological data collection, analytical methods, and QA/QC procedures used by Red Pine are consistent with industry standards and that the geological database and the assay data is of suitable quality to support the 2024 Mineral Resource estimate, as reported in Item 14.0.

## 1.5 Mineral Processing and Metallurgical Testing

During the summer of 2019, Red Pine Exploration commissioned McClelland Laboratories Inc (MLI), (located in Sparks, Nevada), to determine the amenability of eleven (11) samples from the Surluga and Minto Mine South deposits to cyanidation and flotation treatment. Of the eleven (11) samples, three (3) were from the Minto Mine Shear and eight (8) were from different zones of the Main Deformation Domain of the Jubilee Shear. The study was outlined by Haggarty Technical Services (located in Burlington, Ontario) with results received by Red Pine on August 22, 2019.

The main observations from the metallurgical testing include:

- The Jubilee/Minto composites were amenable to whole ore CIL cyanidation at 80%-75 µm feed size subject to the influence of increasing arsenopyrite content. For nine (9) of the eleven (11) composites, cyanidation gold recoveries averaged 90.3% after 32 hours of leaching.
- The Surluga/Minto composites responded favorably to bulk sulphide flotation with the 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%).
- Composites RPX-6 and RPX-8 exhibited lower 48.5% to 55.9% Au recovery from CIL cyanidation at the 75µm grind size which is thought to be related to the elevated arsenic content of those composite samples at 3,020 to 4,960 ppm As.

Results indicated that significant portions of the gold contained in composites RPX-1, 2, and 3 were captured by classifying flotation feed at 150 mesh (106 µm) to simulate gravity concentration. By comparing these results to the metallic fractions in CIL residues after cyanidation, it was established that the majority of gravity recoverable gold is amenable to, and recoverable by cyanidation.

## 1.6 Data Verification

### 1.6.1 Resource Data Verification

The mineral resource QP completed a 3-day site visit that included verification logging, sampling and verification of hole collar coordinates for selected holes. All drill logs and hole collar data were found to be consistent with the Red Pine database and no material differences were identified.

Verification sampling consisted of 50 quarter-sawn samples selected from 21 Red Pine holes drilled between 2014 and 2024, and 15 composite samples from historical core, covering the main segment of the Jubilee Shear distributed in 11 underground holes and 1 surface drill hole.

The QP observed that the Red Pine original and quarter core assay results were in reasonable agreement with some larger variations seen in higher grade intervals. Reasonable agreement was also seen between the historical verification samples and the original assays with a minor (approximately 6%) decrease in total mean grade noted in the verification sample population.

The Red Pine assay database, representing drill core samples obtained between 2014-2024 drill programs and from the 2016 and 2018 historical core sample program was independently compiled under the supervision of the QP using assay certificates obtained directly from Actlabs and SGS. The Independently created DB was found to match the updated 2024 Red Pine DB with no material differences in assay grades.

Spot checks of the historical database were conducted based on 200 randomly selected holes representing 6,095 sample intervals. Some minor errors were noted that were determined to be not material to the resource estimate.

On completion of the data verification process for the Wawa Gold Project, it is the QP's opinion that the geological data collection, analytical methods, and QA/QC procedures used by Red Pine are consistent with standard industry practices. It is the QP's opinion that the geological database and the assay data is of suitable quality to support the 2024 Mineral Resource estimate.

### 1.6.2 Metallurgical Data Verification

During a May 2023 site visit, the metallurgical QP, Steve Haggarty, was able to inspect and witness the in-situ mineralization associated with RPX-2, 3, 4, 7, 8, 9, and 11. The mineralization and style of deportment as described for the project was confirmed by the site visit and supports the direction and methodology for metallurgical processing concepts and testing previously pursued.

The selection of metallurgical composite samples for testing was pursued with guidance by Jean-Francois Montreuil, P.Geo., of Red Pine Exploration, and provided a reasonable cross-section of respective zones, at variable Au head grade, sulphide, and arsenopyrite content. The recalculated head grades from 2019 metallurgical testwork was found to be reasonably close to, and in agreement with expected head grades based on drill core data.

## 1.7 Mineral Resource Estimates

The Mineral Resource estimate for the Wawa Gold Project has been prepared in accordance with NI 43-101 following the requirements of Form 43-101F1. The Mineral Resource estimate follows the CIM Estimation of Mineral Resource and Mineral Reserves Best Practices Guidelines (November 2019) 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 WSP Canada Inc. The effective date of this Mineral Resource estimate is August 28, 2024.

The Mineral Resource estimates outlined in this report 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 and reported from constraining volumes for open-pit (OP) and underground (UG) mining.

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 factors used to determine reasonable prospects for economic extraction (RPEE).**

Table 1-2 summarizes the Indicated and Inferred Mineral Resources for the Wawa Gold Project. Mineral Resources were evaluated for RPEE by reporting OP resources withing a constrained pit shell at a gold cut-off grade of 0.4 g/t and UG resources for Jubilee and Minto at cut-off grades of 2.0 g/t and 2.4 g/t within constraining grade envelopes of 1.6 g/t and 2.0 g/t, respectively.

**Table 1-2: Mineral Resource Estimate for the Wawa Gold Project (Effective Date August 28, 2024)**

Category	Resource	Tonnes	Au (g/t)	Au Ounces
Indicated	Open Pit	14,354,000	1.72	794,000
Indicated	Underground	299,000	4.99	48,000
<b>Total Indicated</b>	-	<b>14,653,000</b>	<b>1.79</b>	<b>842,000</b>
Inferred	Open Pit	14,718,000	1.40	665,000
Inferred	Underground	1,465,000	3.80	179,000
<b>Total Inferred</b>	-	<b>16,183,000</b>	<b>1.62</b>	<b>843,000</b>

Notes:

- 1) The updated MRE has been prepared in accordance with the CIM Standards (2014) and follows Best Practices outlined by the CIM (2019).
- 2) Mineral resources that are not mineral reserves do not have demonstrated economic viability. There are no Mineral Reserves for the Wawa Gold Project.
- 3) The QP (for purposes of National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101")) for the updated MRE is Brian Thomas, P.Geo., an employee of WSP and is "independent" of the Company within the meaning of Item 1.5 of NI 43-101.
- 4) The effective date of the updated MRE is August 28, 2024.
- 5) A minimum thickness of 3 metres was used when interpreting the mineralized domains.
- 6) The updated MRE is based on sub-blocked models with a main block size of 3 metres x 3 metres x 3 metres.
- 7) The pit-constrained mineral resources are reported at a 0.40 g/t Au cut-off grade considering an Operating Expense ("OPEX") of CDN \$28.95 / tonne (\$2.70/t mining, \$19.00/t processing, \$3.10/t G&A, \$3.80/t transport to mill, \$0.35/t rehabilitation)
- 8) The Jubilee underground constrained mineral resources are reported at a 2.00 g/t Au cut-off and a minimum of 2,000 tonnes of contiguous material contained within a 1.60 g/t envelope. The 2.0 g/t cut-off assumes underground long hole mining with an OPEX of CDN \$146.65 / tonne (\$90.00 mining, \$37.50 milling, \$15.00 G&A, \$3.80/t transport to mill, \$0.35/t rehabilitation).
- 9) The Minto underground constrained mineral resources are reported at a 2.40 g/t Au cut-off and a minimum of 2,000 tonnes of contiguous material contained within a 2.00 g/t envelope. The 2.40 g/t Au cut-off grade assumes underground long hole mining with an OPEX of CDN \$176.65 / tonne (\$120.00 mining, \$37.50 milling, \$15.00 G&A, \$3.80/t transport to mill, \$0.35/t rehabilitation).
- 10) A bulk density factor of 2.77 tonnes per cubic m (t/m<sup>3</sup>) was applied for the MRE.
- 11) A gold price of \$CDN2,632 (US\$1,950) per ounce as used, and a USD/CDN exchange rate of 1.35.
- 12) Mill recovery of 90.3% was assumed.
- 13) Royalty of 2.5% (reduced from 3.5% assuming expected re-purchasing of 1.5% of NSR from previous joint venture partner for \$CDN1.75 million and option to purchase an additional royalty of 0.5% by Franco-Nevada upon completion of feasibility study).
- 14) Rounding may result in apparent summation differences between tonnes, grade, and metal content.

## 1.8 QP Conclusions and Recommendations

### 1.8.1 Conclusions

#### 1.8.1.1 QA/QC and Database

The QP completed several data verification checks for the 2024 Wawa Gold MRE. The verification process included a 3-day personal inspection of the Project site to review geological procedures, chain of custody of drill core samples and assay certificates, drill collar inspections and the collection of 65 independent samples for metal verification consisting of 50 samples from Red Pine drilling and 15 samples from historic core intervals in the Jubilee Shear Zone (including Surluga).

Data verification also included a full independent build of the Red Pine assay database using original assay lab certificates sent directly to the QP from the laboratories, a review of QA/QC performance for drilling completed between 2014-2024 and a review of assays from 200 hundred historical holes.

On completion of the data verification process for the Wawa Gold Project, it is the QP's opinion that the geological data collection, analytical methods, and QA/QC procedures used by Red Pine are consistent with industry standards. It is the QP's opinion that the geological database and the assay data is of suitable quality to support the 2024 Mineral Resource estimate, as reported in Item 14.0.

### **1.8.1.2 Resource 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 geological interpretations
- 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
- Parameters used to support reasonable prospects for potential economic extraction

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

### **1.8.1.3 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 Main Deformation Domain of the Jubilee Shear and the Minto Mine Shear.

The results indicate the following:

- CIL cyanidation and gravity gold recovery averaged 90.3% for representative blends of pyrite-dominant with accessory to absent arsenopyrite-dominant mineralization forming the bulk of the resource in the Main Deformation Domain of the Jubilee Shear System.
- CIL cyanidation and gravity gold recovery averaged 95.4% for Minto mineralization forming the Minto Mine Shear.
- Elevated arsenic content is recognized as influencing whole ore cyanidation, however the presence of arsenopyrite did not impede flotation performance.
- Cyanide consumption during CIL cyanidation was moderate to high.
- Lime requirements for pH control during cyanidation were uniformly low.

- Flotation and gravity gold recovery averaged 93.3% for the localized domains of arsenopyrite-dominant mineralization in the Main Deformation Domain of the Jubilee Shear System.
- Rougher flotation mass pull for the limited number of scoping tests was generally low and averaged 5.2% of the feed weight. Mass pull and gold recovery to rougher concentrate would be expected as increasing with additional testing and the introduction of alternative sulfide and free gold promoter-collectors.

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

- i) Whole ore cyanidation applying CIL, which would be applicable to materials lower than a threshold sulphide and arsenopyrite concentration.
- ii) Gravity concentration followed by sulphide flotation to a third cleaner concentrate, which would be applicable to all material types with products shipped to a third party for hydrometallurgical processing, or smelting.
- iii) A hybrid circuit involving gravity concentration, sulphide flotation to a third cleaner concentrate for shipment to a third party for hydrometallurgical processing or smelting, with CIL cyanidation of the gravity concentrate and flotation tailings.
- iv) A circuit involving gravity concentration, followed by sulphide flotation with higher mass pull to a rougher concentrate, and regrinding of the rougher concentrate to approximately 10 microns, followed by intense cyanidation of the reground concentrate and gravity concentrate. This alternative would be expected as applicable to all material types, yielding reasonably consistent and high Au recovery, and would require a smaller flotation circuit, and smaller cyanidation circuit.

## **1.8.2 Recommendations**

### **1.8.2.1 Exploration**

The QP recommends a 25,000 m drilling program that prioritizes the testing of the mineralized structures of the Wawa Gold Project outside the mineral resources with 70% to 85% of the drilling meterage allocated into extending gold mineralization in the mineralized domains of the Wawa Gold Corridor that are informing the updated MRE in the Jubilee and Minto shear systems. Priority targets for the exploration program should be the testing at depth of the exploration potential of the Jubilee Shear System in the projected extensions of the underground resources, further testing of the IRG/Hornblende corridor and its satellite shear, the testing of the hanging wall of the Main Deformation Domain of the Jubilee Shear in areas without modern drilling and the testing of the Jubilee Shear System north of the boundary of the mineral resource.

The QP also recommends the allocation of 15% to 30% of the drilling meterage to the testing of the mineral potential of geological structures beyond the mineral resource. This includes the geological structures associated with historical mines or significant geological structures like the Jubilee Shear System south of the Parkhill Fault, the Parkhill Mine and Parkhill #4 shears, the Root Vein and its associated vein network, the Jasper Vein Network, the southern extension of the Grace Shear, as well as other favorable structures identified during exploration.

The QP recommends that the exploration drilling program should be preceded by a field and sampling program to identify new areas on the property with potential to host significant gold mineralization to refine the targeting matrix for the property (approximately \$100,000).

Table 1-3 summarizes the recommended Phase 1 work program.

**Table 1-3: Summary of Recommended Work Program**

Recommended Work	Estimated Cost \$CAD
<b>Phase 1</b>	
Diamond drilling (25,000m @ 250\$/m including assaying, personnel, core logging facility and logistics)	\$6,250,000
Field mapping and sampling program	\$100,000
Sampling of historical core	\$50,000
Metallurgical Testing	\$100,000
Overhead and corporate G&A	\$875,000
Contingency 7%	\$509,250
<b>Phase 1 Costs</b>	<b>\$7,884,250</b>

### 1.8.2.2 Metallurgical Recommendations

Additional metallurgical testwork should be completed on the most challenging suite of mineralization, as well as material at nominal grade ranges that would be expected from mining. The most applicable process flowsheet would balance the trade-off between CapEx, OpEx, metal recovery, with an overriding factor requiring a demonstrated and viable reclamation and closure plan for permitting.

- i) A processing strategy not previously tested could involve gravity concentration, followed by sulphide flotation with higher mass pull to a rougher concentrate, and regrinding of the rougher concentrate to approximately 10 microns, followed by intense cyanidation of the reground rougher concentrate and gravity concentrate. This alternative would be expected as applicable to all material types, yielding reasonably high and consistent Au recovery, and would require a smaller flotation circuit, as well as a smaller cyanidation circuit. Following cyanide removal from the sulphide concentrate residue, this process strategy lends itself towards sub-aqueous co-disposal of the sulphidic content in the feed, under a cap of benign low sulphide flotation tailings, to mitigate long term concerns with respect to environmental / chemical stability.

Additional metallurgical samples representative of the grade ranges and blends of mineralization types on the Wawa Gold Project 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 and the evaluation of process alternatives.

As a component of additional metallurgical testwork, mineralogical studies including TESCAN TIMA automated SEM analysis will support the confirmation of Au association and deportment within mineralization present in flotation tailings and cyanidation residues to establish contributing factors to recovery losses, and to strengthen the GeoMet model. A summary of recommendations is included as Table 1-3.

## 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 represents material changes to the MRE based on corrected assay data between 2014 and 2024, and additional drill hole data for the Jubilee (previously referred to as Surluga) and Minto Mine deposits.

The Mineral Resource estimates and Technical Report were prepared by WSP in conjunction with Haggarty Technical Services Corp. (Haggarty) for the metallurgical content. 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 2019) and were classified by following the CIM Definition Standards for Mineral Resources & Mineral Reserves (May 2014).

The report effective date of this Technical Report is September 30, 2024.

### 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 provided directly from 3<sup>rd</sup> party laboratories
- Geological interpretations provided by Red Pine
- Metallurgical study on the Surluga (which is included in the Jubilee deposit) and Minto Mine 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 Mineral Resource and geology QP for this Technical Report is Mr. Brian Thomas, P.Geo., an independent QP, as defined under NI 43-101 and employee of WSP. The QP for metallurgy is Mr. Steve Haggarty, P.Eng., an independent QP, as defined under NI 43-101 and an employee of 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 Mr. Brian Thomas between May 21 and 23, 2024, to observe site conditions, review geological data collection and QA/QC procedures and results, confirm drill collar locations, and complete verification logging and sampling of drill core.

Mr. Steve Haggarty, the QP for the metallurgy, personally inspected the site on May 25, 2023, and visually inspected remnant and current drill core characteristic of the deposit.

### **2.2.1 Acknowledgements**

The authors 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 WSP for his contributions to the block modelling and grade estimation procedures, Jerry DeWolfe, P.Geo., of WSP for peer review, and William Kyle, of WSP, for his contributions to editing, formatting, and compilation.

## 2.3 Units of Measure and Abbreviations

Capital expenditure	CAPEX
Centimetre	cm
Copper	Cu
Cubic centimetre	cm <sup>3</sup>
Cubic metre	m <sup>3</sup>
Degree	°
Degrees Celsius	°C
Gamma (1 x 10 <sup>-9</sup> Tesla = 1 nanoTesla)	γ
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 <sup>2</sup> )	ha
Internal rate of return	IRR
Kilogram	kg
Kilograms per cubic metre	kg/m <sup>3</sup>
Kilograms per square metre	kg/m <sup>2</sup>
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 <sup>2</sup>
Square metre	m <sup>2</sup>
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 McMurray Township (NTS 41/N15). The property is centered 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 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. As a result of the completion of the Citabar Acquisition, Red Pine now holds a 100% interest in the Project. The Purchase Agreement also includes the grant to the Vendors of a 2% net smelter return royalty (“NSR”) on production from the Wawa Gold Project, of which 1.5% of the 2% NSR is subject to a buyback for a total cost of \$1.75 million.

On August 29, 2023, Red Pine announced a NSR royalty agreement (the “Royalty Agreement”) with Franco-Nevada Corporation for the purchase of a 1.5% NSR on its Wawa Gold Project. Pursuant to the Royalty Agreement, Franco-Nevada has been granted a one-time option, exercisable within 30 business days of Red Pine providing notice to Franco-Nevada confirming both (i) a board-approved construction decision at Wawa, and (ii) completion of a feasibility study at Wawa, to purchase an additional 0.5% net smelter return royalty (the “Additional Royalty”) at a cost of 1.0x the net present value of the Additional Royalty, which is to be calculated based on the value of the mineral reserves within the Wawa feasibility study, after applying a 5% discount rate, and utilizing the then-prevailing analyst consensus commodity price forecasts.

The royalties applicable on the Wawa Gold Project are listed in Item 24.0.

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](http://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.

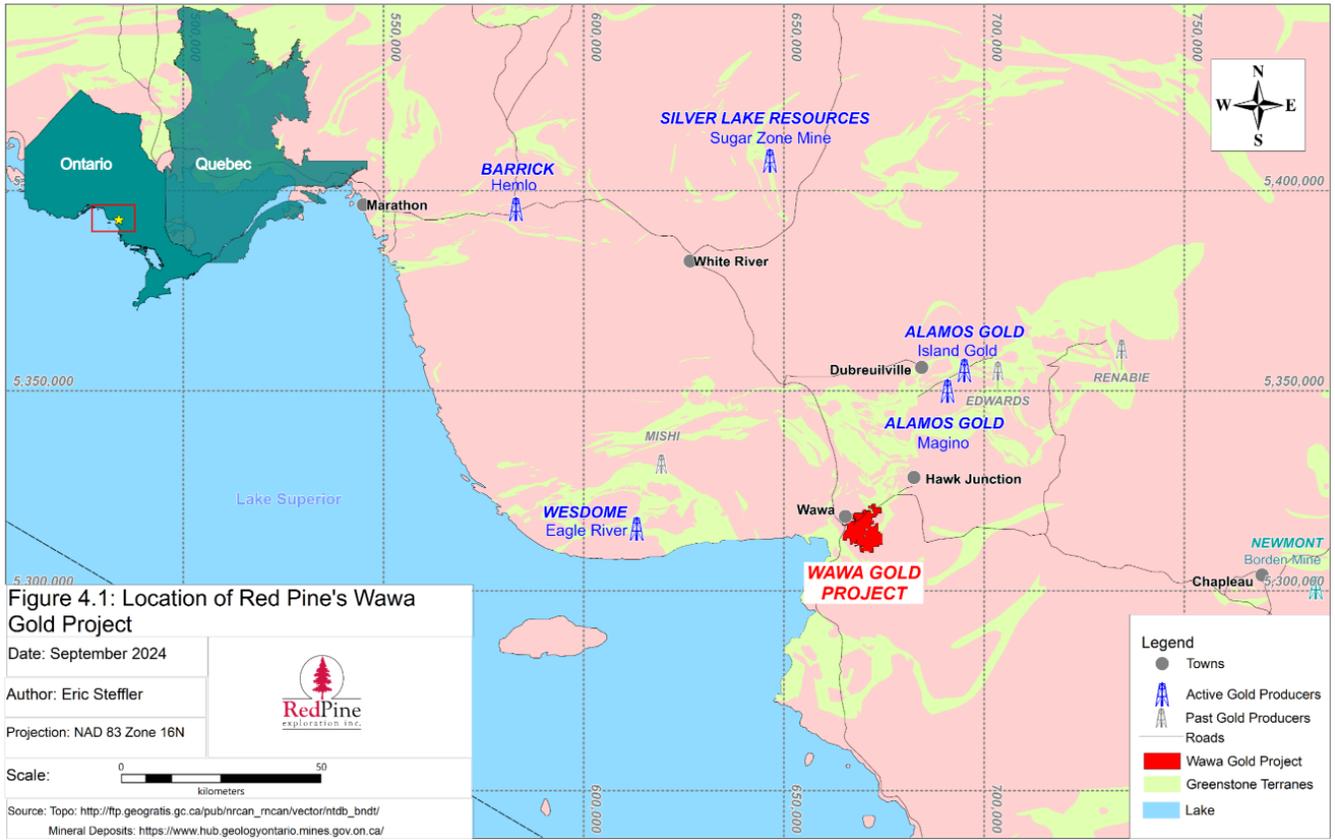
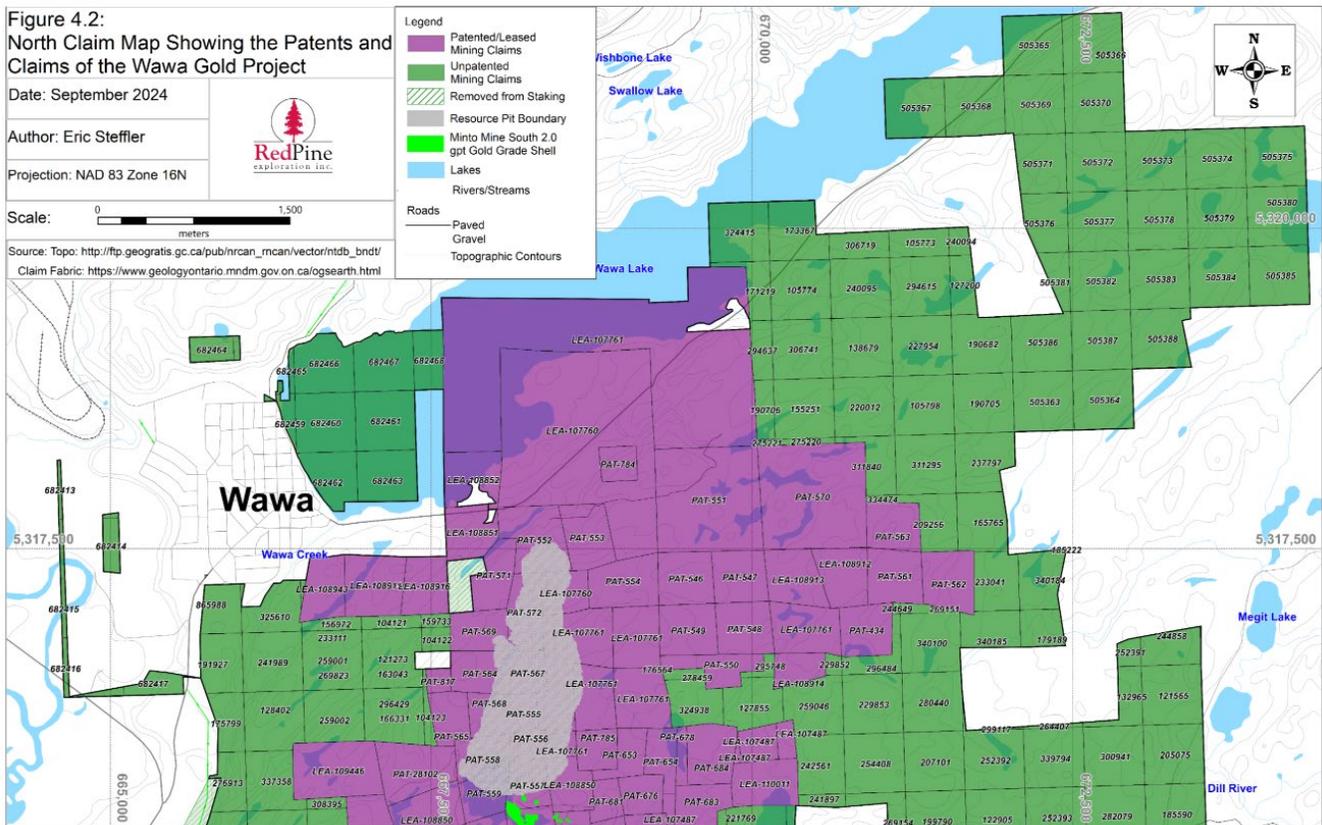


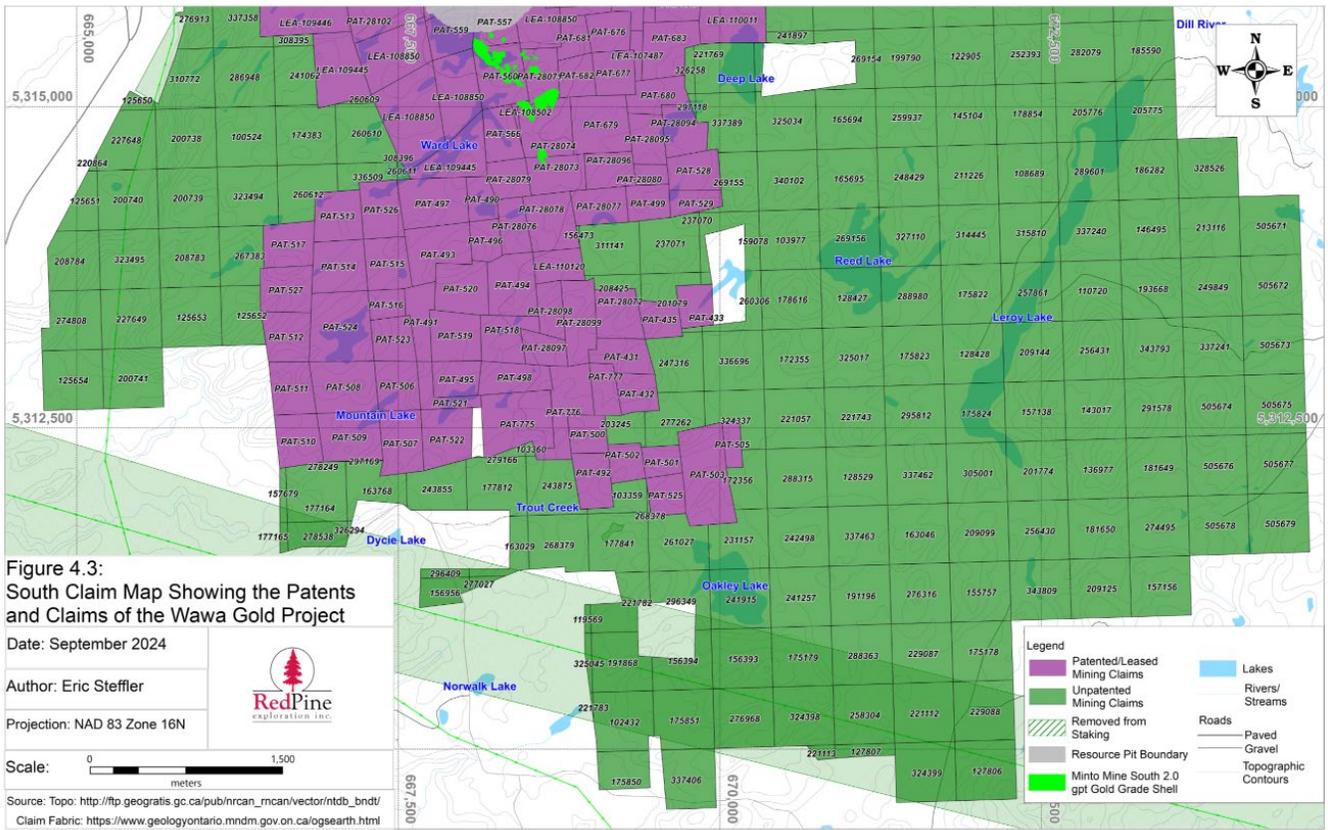
Figure 4-1: Location of Red Pine's Wawa Gold Project

## 4.2 Property Land Tenure

The Project consists of 302 unpatented and 122 patented or leased mining claims, totaling 7,041 Ha. Red Pine owns the surface rights for 5 of the 17 leases and 7 unpatented mining claims just west of the Surluga Deposit. Red Pine does not hold the surface rights for any other 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, with further details in Item 24.0). The unpatented and patented or 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 (MNR), which Red Pine continues to do, as mandated in the claim's terms and conditions.

The obligations to maintain the property for 2024 amount to, Mining Land Tax: \$5,672.25, Municipal Tax: \$92,864.67, MNR Tenant Tax: \$22,351.53 and Lease Rents: \$2,369.26. The regulator work obligations for unpatented (Cell) claims amount to \$88,400.





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

### 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 square metres (m<sup>2</sup>), or pitting and trenching of a volume of 1 to 3 cubic metres (m<sup>3</sup>). 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, which covers all the Red Pine patents and leases except for 3 patents purchased in 2022. All surface rights holders must be notified of the application in advance of the submission. Thus, for the 2014-2024 drilling seasons, no permits were required.

There are two active exploration permits on the Wawa Gold Property, PR-22-000099 and PR-23-000112.

PR-22-000099 was issued on June 2, 2022, and is valid until June 1, 2025. The mining claim numbers covered by this permit are 103359, 103360, 105774, 127855, 155251, 156473, 157679, 159078, 163768, 165765, 171219, 172356, 173367, 177164, 177812, 177841, 190706, 201079, 203245, 208425, 209256, 221769, 229852, 229853, 231157, 233041, 237071, 241897, 242561, 243855, 243875, 244649, 247316, 259046, 260306, 261027, 268378, 268379, 269151, 269155, 275220, 275221, 277262, 278249, 278459, 279166, 294637, 295748, 296484, 297118, 297169, 306741, 311141, 311295, 311840, 324337, 324415, 324938, 326258, 334474, 336696, 337389, 340100, 340185.

A new permit covering the 11 claims listed below was issued on May 17, 2023, expiring May 16, 2026, under the Permit number PR-23-000112. The claims covered by this permit are 104121, 104122, 104123, 156972, 159733, 163043, 166331, 233111, 259001, 259002, 296429

#### 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 except for PAT-775, 776, and 777 which were recently purchased in 2022.

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, EXP indicated that the environmental items presented in the following sub-sections 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 implies completing the filling of the two historical pits. During the winter of 2021 an access trail was created for an excavator from Highway 101 to the Mackey Point pits. Material was moved from the south side of highway 101 on the Wawa Gold Property to fill in the pits. Mounds of material were created over the pits and let to settle. It was determined in the late fall of 2022 that more material would need to be moved to the pits to fill them completely. Additional material was added in 2023 to complete the filling of the pit. Final review and sign off of the remediation remain pending.

#### **4.4.1.2 Item 2: Revegetation**

Although revegetation is observed to be naturally occurring at the former Darwin-Grace, Minto, Parkhill and Van Sickle mine sites, due to the ongoing exploration by Red Pine Exploration, Item 2 – Revegetation has been delayed. It was noted in the inspection report completed on July 6, 2023 (“Citadel Gold Mine Property Inspection Report”, File S16) that the inspector noted:

“The waste rock was observed to contain a noticeable volume of fines and/or mixing with native soils. The rock fines and mixed soil seems to have allowed for the natural succession of vegetation from the surrounding Boreal forest ecosystem. The density and diversity of the vegetation observed indicated that site revegetation was well established and overtime could allow the proponent and their consultants to confirm which areas were successfully revegetated in future.”

#### **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: Road Spillway Construction**

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).

#### **4.4.1.7 Item 7: Crown pillar desktop study**

In response to recommendations towards formalizing the subsurface mine workings assessment required under subclause 23. (2) 5. of Ontario Regulation 240/00 that was provided in a July 23<sup>rd</sup>, 2023, Ontario Ministry of Mines – Mineral Development Branch memo to Red Pine regarding an inspection of the Wawa Gold Project completed on June 6, 2023 (“Citadel Gold Mine Property Inspection Report”, File S16), Red Pine started a Desktop Crown Pillar Stability Assessment of the Wawa Gold Project.

Terracon Geotechnique Ltd. (“TLG”) completed a comprehensive desktop-level review and geotechnical assessment of crown pillar conditions within the RPX’s Wawa Gold Project, to provide corroborative support to previously documented preliminary findings of low to negligible risks posed to the public due to the presence of historic underground mine workings and crown pillars.

Although the report is not finalized and still in the draft stage, through a desktop analysis rock mass qualities of the crown pillars are considered stable for the long term, following a site assessment by TLG.

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 2,705 people (2021) (<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 101, 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.

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 and would be sufficient to support a 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 m asl. The area of the property (Figure 5-1) is hilly with a range of elevations from 300 m asl to 400 m asl. Steep ridges exist locally. The property is forested with spruce, pine, poplar, and birch being the dominant species.

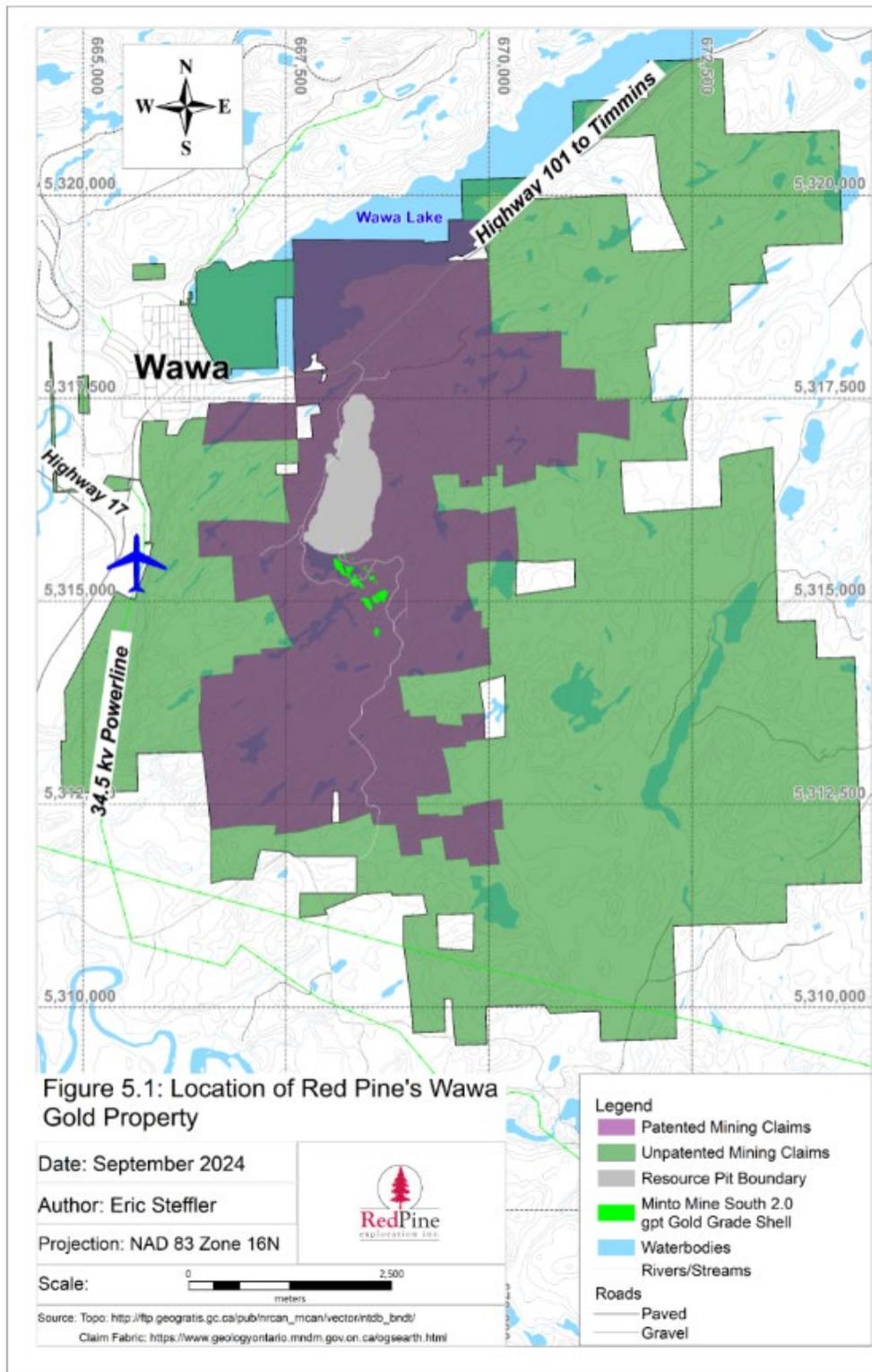


Figure 5-1: Location of Red Pine's Wawa Gold Property

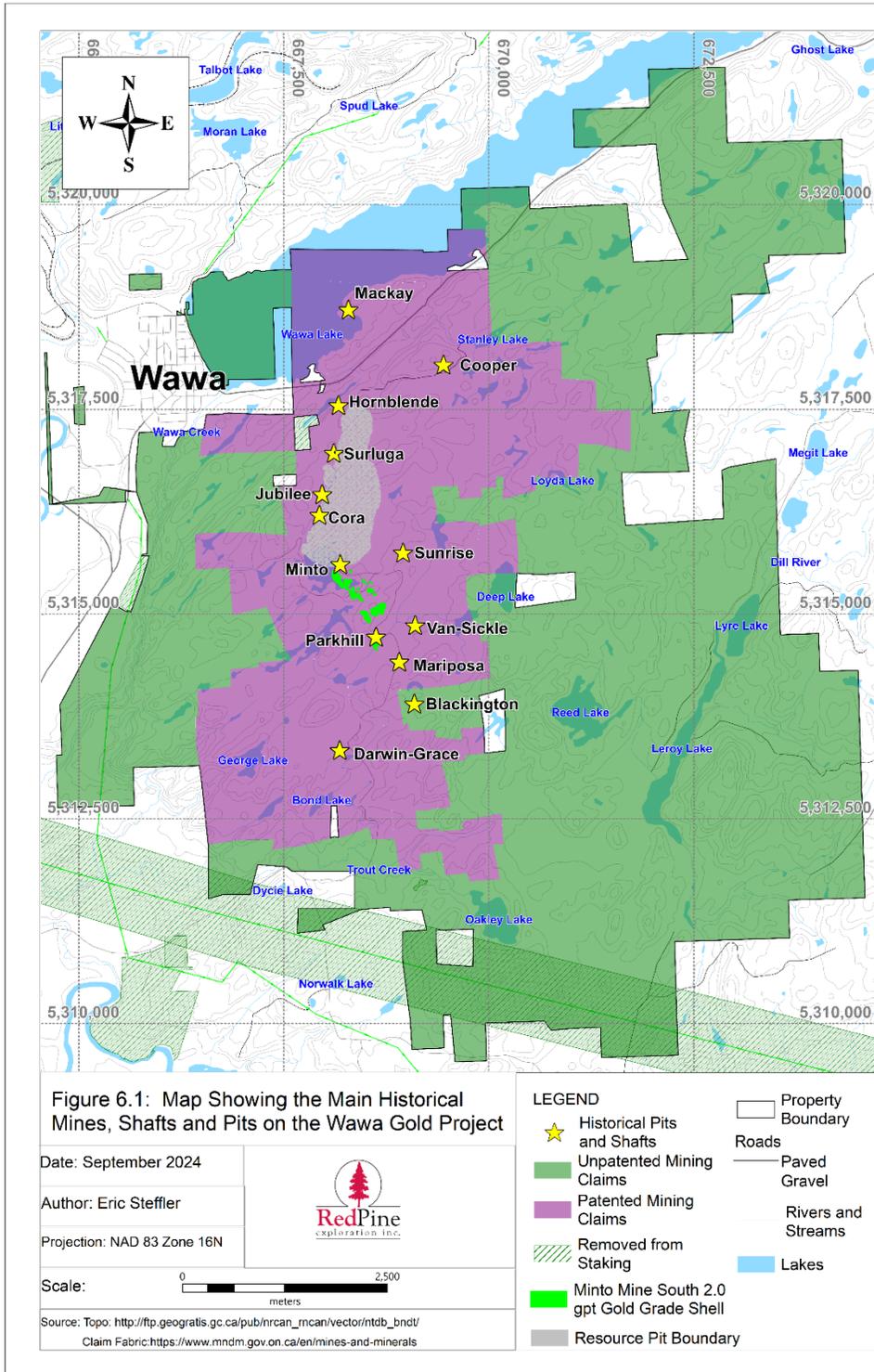
## 6.0 HISTORY

This Item presents the history of exploration and mining activity that occurred on the Wawa Gold Project and the stages of the amalgamation of the different land packages that now form the current property. The Project has a lengthy exploration and development history dating back to the late 1800s, with intermittent periods of exploration and exploitation. Over this extended period, eight gold mines were brought into operation. Preserved records of production have been summarized by Sage (1993) and Rupert (1997) who also provided a detailed overview of the historical exploration on the property (Table 6-1; Figure 6-1).

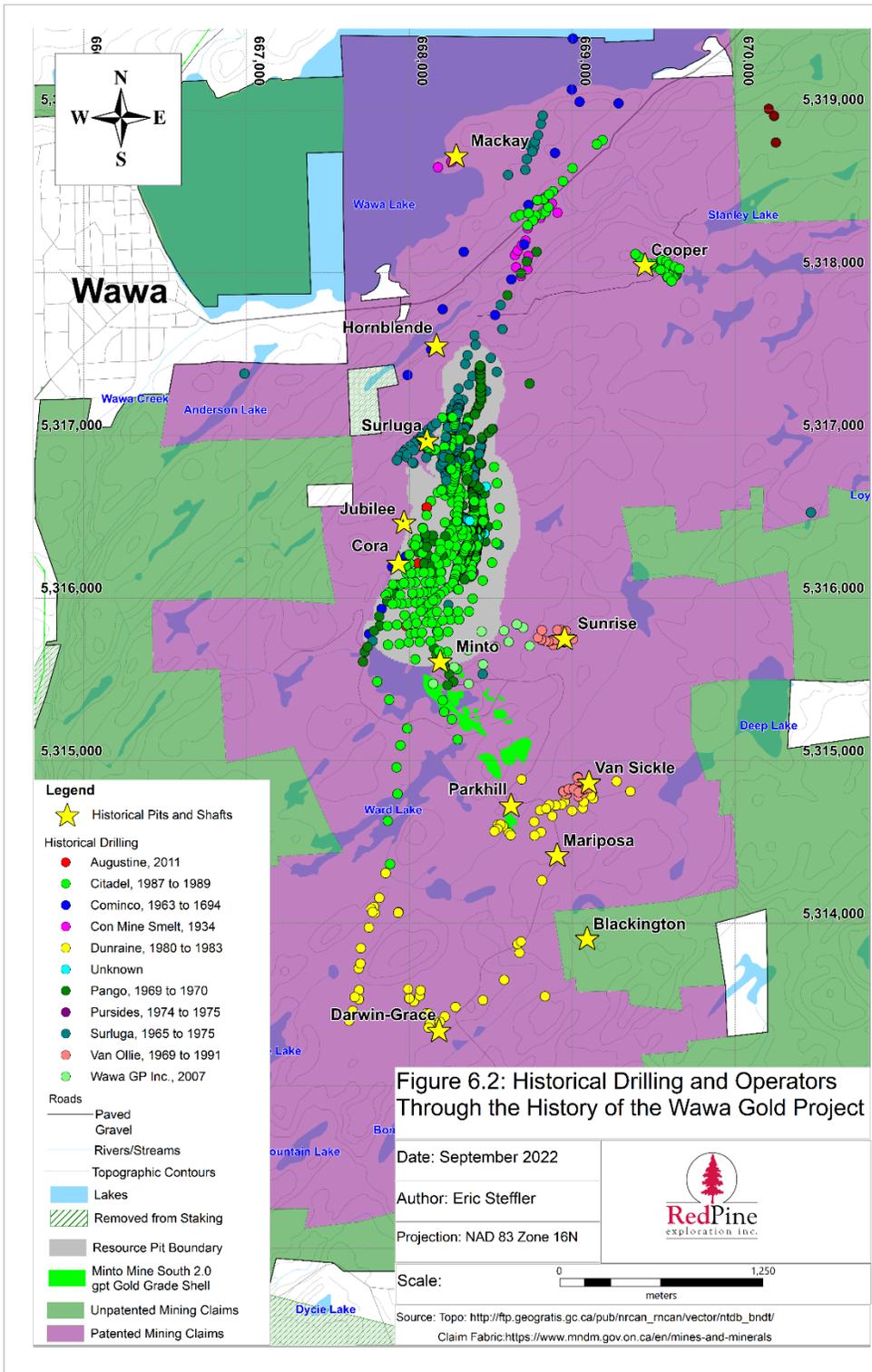
A total of 127,489 m of historical drilling, comprising 580 surface and 1,444 underground diamond drill holes have been documented and compiled within Red Pine's drilling database (Figure 6-2). Several activities such as trench stripping, shaft sinking, and sample collection have also been completed on the property.

**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
<b>Total</b>	<b>419,560</b>	<b>9.04</b>	<b>120,093</b>



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



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

## 6.1 Discovery Period – 1897 to 1910

Gold exploration in the Wawa area dates to the 1860s (Rupert, 1997), with significant developments occurring in 1887 when William Teddy discovered gold at Mackey Point (Frey, 1987; Table 6-2). This discovery prompted a staking rush and benefited from the change in claim staking adopted by the Ontario Government to encourage staking in 1895 (MacMillan and Rupert, 1990).

Subsequent efforts focused on extracting gold from bedrock, leading to the sinking of multiple shafts and the digging of numerous test pits across the property. Notable discoveries during this period include the Minto Mine (1897), discovered by S. Berailldt and the Blackington vein (1898), found by Mr. W.H. Lewis. These discoveries played pivotal roles in the advancement of the region's gold industry.

**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 Mackey 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-foot shaft	Gold grades in a shear zone were described as negligible; Abandoned operation	Sage, 1993
S. Berailldt 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-foot-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-foot 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-foot inclined shaft and a 20-foot 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-foot Mariposa shaft	Limited gold production of 18 ounces of gold from two levels at 100 and 200 feet	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's discovery of gold in the Hornblende Shear Zone led to the sinking of two inclined shafts and the construction of a test mill by the Hornblende Mining Company in 1900. Concurrently, the Mariposa Gold Company initiated the sinking of the Mariposa shaft between 1902 and 1903 (Sage, 1993).

The Algoma Commercial Company's exploitation of the Grace vein in 1900 marked the beginning of significant gold extraction producing 6,097 tons of ore (Sage, 1993). Although commercial gold production ceased in 1903, operations resumed between 1907 and 1910 under the Lepage Gold Mining Company, yielding 4,260 tons of ore.

## 6.2 Peak of Mining Activity – 1925 to 1938

Between 1910 and 1925, the Project experienced an exploration and production hiatus characterized by intermittent activity and numerous land transactions (Sage, 1993). From the mid-late 1920s to the late 1930s, the mining activity peaked with several operational mines, including, Cooper, Minto, Jubilee, Parkhill, Grace-Darwin, Mariposa, and Van Sickle (Figure 6-1, Table 6-1, Table 6-3; MacMillan and Rupert, 1990; Sage, 1993). Notably, the Cora vein in the Jubilee Shear Zone was briefly mined in 1927, representing the initial mining effort in the Jubilee Shear Zone. The Jubilee Mine emerged as a significant producer from the Jubilee Shear, yielding 107,930 t at 4.29 g/t gold. The Parkhill Mine, was the most prolific mine, producing 54,298 oz of gold from 114,096 t at 14.81 g/t gold (Table 6-1).

**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	1926–1929	26 surface DDH and underground development at Jubilee Mine	No results reported	Rupert, 1997
Cooper Gold Mine Limited	1926-1930	Drilling and exploration of Minto, Jubilee, Cooper and Trout Creek (Parkhill) mines gold production from the Minto Mine	Exploration results lost	Sage, 1993
Power and Mines syndicate	1926-1930	Resumption of mining in the Grace Mine; Discovery of Nyman vein; Sinking of the Grace 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	1,627 oz of gold in Cooper Mine and 36,178 oz of gold in Jubilee and Minto Mines (combined)	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 with 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	1933-1934	Metallurgical testing, 15 drill holes	Up to 17 g/t Au over 0.3 m in core	Mackay Point Syndicate, 1933 (42C02SE0021)
Darwin Gold Mines Limited	1934-1937	Gold production from the Darwin Mine Deepening of Grace 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 two compartment shaft with two levels	
Mackay Point Gold Mines Limited	1936-?	Trenching, pitting and 4,285 ft of drilling at Mackay Point and on Root vein	Records lost	Sage, 1993
Wawa Gold Fields Limited	Pre-1934	Trenching and stripping of Figgus vein	Assays between \$0.70 across 24 inches to \$262.85 across 18 inches reported (gold between \$20.5 and \$35/oz in 1934)	Rupert, 1979

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

The 1940s and 1950s were marked by minimal exploration efforts and salvage operations at the Grace-Darwin and Deep Lake Mines. In the 1950s, Tom Surluga emerged as a key figure, arranging numerous land transactions leading to the consolidation of land parcels covering the northern extension of the Jubilee Shear in what became the Surluga Deposit (Sage, 1993).

Exploration and development activity resumed in 1960 when W.D. Sutherland, under the guidance of Tom Surluga (Table 6-4), intensified efforts, drilling 25 holes in the northern extension of the Jubilee Shear (Table 6-4). Surluga Gold Mines Limited was established in 1962, following the successes of initial drill programs. Consolidated Mining and Smelting Limited optioned the property in 1964, conducting extensive surface diamond drilling before turning down the option. Between 1964 and 1968, Surluga Gold Mines Limited developed the Surluga Mine, sinking a 950-ft shaft with seven levels, alongside the construction of a 750-ton-per-day mill in 1969-1971. Collaboration with Pango Gold Mines Limited in 1969-1971 led to significant discoveries, the “6 to 5 ramp” high-grade zone, underlining the evolving prospectivity of the Jubilee Shear. In 1973, Surluga Gold Mines rebranded as Pursides Gold Mines Limited, focusing on underground exploration in the Surluga Deposit and development of levels 6 and 7. Operation ceased in 1975, leading to receivership in 1976. Table 6-4 summarizes the exploration activities for that time period, Table 6-5 and Table 6-6, respectively, indicate the drilling meterage completed from surface and from underground during the development of the Surluga Mine and Table 6-7 presents drilling highlights from surface drilling in the Surluga Deposit.

**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 1961 contained 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 were established with promising drill hole grades. A ground magnetic survey conducted in 1969 revealed an inclined gabbro plug east of Jubilee Lake, exhibiting highly magnetic pyrrhotite-pentlandite mineralization. The surrounding gabbroic rock displayed low magnetic signatures compared to the biotitic syenite it intruded.	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 (100-ft intervals) 1 drill hole north shore of Reed Lake into mag anomaly	Ground mag survey: 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)
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)
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: 8 anomalies detected, 1 recommended for follow-up	Crone, 1975 (41N15NE0082)

**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 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 within the Southern Part of the Wawa Gold Project – 1980 to 1986**

The reorganization of Pursides Gold Mines as Citadel Gold Mines Inc. in 1980 marked a period of reduced development and exploration activities in the Surluga Deposit. Citadel, between 1982 and 1986, consolidated various properties into one land package and conducted limited surface exploration, including till sampling and ground magnetic and VLF-EM surveys (Table 6-8).

Exploration efforts primarily focused on historical gold mines like Parkhill, Van Sickle, and Grace-Darwin, mainly led by Dunraine Mines Ltd. Dunraine's activities involved drilling around Parkhill and Van Sickle Mines, and identifying the extension of the Jubilee Shear Zone south of the Parkhill Fault that was named the Darwin Shear Zone (Table 6-8 and Table 6-9; Harper 1981a, b). From 1982 to 1984, Dunraine conducted drilling, trenching and surface mapping, with a particular emphasis on the Jubilee southern extension of the Shear Zone and the Grace-Darwin Mine. They also dewatered, sampled and mapped the upper levels of the Parkhill Mines (Gignac, 1983; Studemeister, 1983, 1984). In 1986, Goldun Age Resources Inc. entered an option agreement with Dunraine and continued the dewatering operations at the Parkhill property. Tilsley's analysis in 1986 suggested that remaining gold was mainly concentrated in pillars, floors, and backs of stopes and concluded that the mined lenses would not extend up-dip to the property boundary and that no undiscovered lenses were present in the surveyed areas.

**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	Best intersection D80-18: 46.22g/t Au over 0.88 m; average grade of Parkhill tailings 0.86 g/t	Harper, 1981a (41N15NE0054)
Pango Gold Mines Ltd.	1980	35 channel samples of Surface expression of Deep Lake Mine Ground magnetic survey and 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 magnetic survey	No significant anomalies; 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 gabbro-diorite.	Kuryliw, 1980 (41N15NE0077) Piazza, 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 were identified, two recommended for drilling VLF-EM survey 2: 10 conductive anomalies identified, thought to be caused by bedrock sources; IP recommended as a follow-up tool for prioritization	Kuryliw, 1982 (41N15NE0057) Piazza, 1984 (41N15NW0026)
Northern Horizon Resources Ltd.	1981	Ground magnetic survey: 300-ft line spacing.	One horseshoeshaped magnetic anomaly was identified, and interpreted as a possible folded structure	Kuryliw, 1981 (41N15NE0524)
Canbec Explorations Ltd.	1983	Ground magnetic survey: 5.9-line mi were run at 200-ft and 400-ft line spacing, with station spacing of 50 ft over 3 claims VLF-EM survey: 5.9 line-mi at 200-ft and 400-ft line spacing and 100-ft station spacing.	Mag Survey: A weak overall magnetic signature, with anomalies identified as diabase dykes and felsic volcanic flow units. VLF-EM survey: 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)
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: 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: 298 line-km and 300 m line spacing, 30 m EM sensor height, 45 m sensor height.	20 anomalies identified as a moderate-high priority	Smith and Dvorak, 1983 (42C02SE0505)
Pango Gold Mines Ltd.	1984	Till sampling: 47 overburden holes	Anomalous zones near faults and shears were identified but no economic significance attributed to anomalies	Gillis, 1984 (41N15NW0027)
Monte Christo Resources	1984	Ground magnetic and VLF-EM survey: Completed on 11 claims  Geologic mapping  EM-17 HLEM: 6 line-mi collected at 300-ft coil separation.  3 drill holes targeting conductors (W-1, -2, -2A, -3)	One large conductive anomaly was found to be a high priority and recommended for drill testing. Shear zones identified during mapping. EM-17 HLEM: Weak HLEM conductors were noted in the same trend, interpreted as a possible shear zone, and were recommended for drilling. Drilling: one drill hole 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

Between 1986 and 1990, significant efforts were directed toward revitalizing operations at the Surluga Mine. A comprehensive drilling campaign, both surface and underground, was undertaken alongside mapping activities through the Surluga deposit (Table 6-10, Table 6-11, and Table 6-12). Drilling highlights from surface drilling in the Surluga Deposit are presented in Table 6-13. Ore recovery studies commissioned by Citadel revealed that Cyanidation recovered ~90% of the gold while sulphide flotation ~86% (Lakefield Research, 1988). However, gravity concentration using the Knelson Concentrator proved unsuccessful. Mining operations ceased in 1989 due to mill inefficiency, challenges in mine design optimization, mechanization difficulties, and problems with dilution control stemming from the cryptic boundaries of the high-grade zone (E. Hoffman, pers. Comm.). A structural study commissioned by Citadel just prior to the cessation of the underground operations in the Surluga Mine concluded that a strong stretching lineation controls the geometry of the main high-grade zones of the Jubilee Shear, plunging shallowly to the S-SE (Helmstaedt, 1988).

Exploration efforts yielded success with the discovery of the Old Tom zone, in the southernmost part of the Surluga Deposit. Parallel to the operation, Citadel conducted extensive exploration across its property, focusing on the Root and Cooper-Ganley vein systems through diamond drilling, stripping, trenching, sampling and mapping. Additionally, the company continued consolidating its holdings, acquiring the Henderson property and purchasing the Parkhill and Grace-Darwin mine properties from Dunraine (Rupert, 1997).

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

Company	Year(s)	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 were 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 VLFEM survey: 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: 19.25 line-km of ground mag and VLF-EM collected / 25m spacing. Ground mag VLFEM survey 2: 50.85 line km of ground mag and VLF-EM were conducted on 31 claims at 120 m line spacing. Ground mag VLF-EM survey 3	Mapping, rock sampling: six rock types observed and described; various quartz veins observed (no assay results available) Magnetic results highlight diabase dykes and geologic contacts. VLF-EM results identified 2 high-priority conductors Ground mag,	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 <u>Surluga mine closed in 1989</u> 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 and IP survey 1: Results found the shear zone was not distinguishable from the background Ground mag survey 2: Several magnetic anomalies were identified on Block C. Ground mag survey 3: The anomaly was interpreted as iron formation. Geophysics deemed “marginal utility” but soil sampling effective. Stripping, 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 with 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
Allied Northern Resources Ltd.	1989	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: 41.1 line-km of magnetic data and 38.1 line-km of VLF-EM data collected.	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: 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 were 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”) explored the Mickelson-Sunrise vein system and the Van Sickle mine. The exploration program included diamond drilling, stripping, channel sampling and surface mapping. Several veins were stripped, including the Van Sickle Vein, Captain Vein, and Road Vein. The Van Sickle vein system was traced for 200 m and Sears (1990a) concluded it was the extension of the Parkhill vein system. A total of 71 diamond drill holes were completed, targeting Van Sickle, Mickelson, Captain Veins, and the Sunrise No. 1 Vein (Table 6-14, Table 6-15).

**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) surveys (Sears and Gasparetto, 1988), identifying several quartz veins without available assay data. In 1990, exploration programs included prospecting, stripping, rock and soil sampling, and mapping in the southern part of McMurray Township. Three quartz-carbonate veins and several weak soil anomalies were delineated, with one vein showing low gold values. Additionally, six diamond drill holes totalling 320.95 m intersected the Villeneuve vein system (Sears, 1990e).

## 6.6 Optioning of the Surluga Deposit – 1990 to 1996

During the optioning period, the evaluation and exploration model for the Surluga Deposit shifted towards assessing the feasibility of a large tonnage and lower-grade resources for potential open-pit (Table 6-16 and Table 6-17).

### 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. Pan Orvana conducted a thorough review of historical data, including drilling and implemented a soil sampling survey to delineate an Au anomaly over the main shear zone. Underground panel sampling in the underground workings of the Jubilee Mine revealed significant gold grades, indicating favourable conditions for open-pit mining. Bradshaw (1991) also observed that 10% of the unsampled core in the Jubilee Shear Zone

contains over 0.684 g/t gold. However, further work was deemed necessary to define viable resources, leading Pan Orvana to drop the option in 1992.

### 6.6.2 Goldbrook Exploration Limited – 1996 to 1997

Goldbrook Exploration Limited (“Goldbrook”) entered into an option agreement, focusing on evaluating the Surluga Deposit. Reviewing available data, the evaluation work of Goldbrook indicated the presence of a substantial low-grade gold resource within the Jubilee Shear Zone (Table 6-18) (Bowdidge, 1996). However, due to financial constraints, Goldbrook was unable to meet its commitments, prompting Citadel to terminate the option in 1997 (Rupert, 1997). Notably, historical estimates provided by Goldbrook were not classified as current Mineral Resources or Reserves and should not be relied upon due to the lack of disclosure standards adherence and the absence of key assumptions, parameters, or methods used in their preparation.

**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; Sampling 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 14.0 of this Report.

### 6.7 Recent Period – Redevelopment of the Surluga Deposit 1997 to 2016

The period between the end of extensive exploration activity in 1991 and the resumption of the drill programs focused on gold exploration 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 rejuvenated 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 (25 m station spacing) Ground mag survey Prospecting (12.5 m station spacing) Rock/soil sampling (1995) in Leroy Lake area	No significant Au results in 1994; weak B-horizon soil anomaly (57 ppb). Geophysics surveys: 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 (Line spacing 100 m, station spacing 25 m) Ground mag survey (Line spacing 60 m, station spacing 30 m)	VLF-EM: One conductive anomaly was identified. Ground mag survey: 2 anomalies identified as high priority for follow-up	Archibald, 1996b (42C02SE0026)
Elliot Feder	1996-1998	VLF-EM survey (12.2 line-km collected, 100 m line spacing, 25 m station spacing) Ground mag survey (12.2 line-km) Till sampling	VLF-EM: 3 anomalies identified as possible shear zones, recommended for follow-up. Ground mag survey: Anomalies identified related to Firesand Carbonatite Complex. Till sampling: 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	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	2003-2004	Ground mag survey (62.2 line-km. 25 m and 50 m line spacing, 15 m station spacing) VLF-EM survey (24.5 line-km, 50 m line spacing, 15 m station spacing)	Ground mag survey: results have been used to further delineate airborne anomalies and outcrops. VLF-EM survey: 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 conducted an 8,401-m NQ-size diamond drill campaign on behalf of Citabar that successfully intersected the down-dip extension of the Jubilee shear zone (Table 6-19 and Table 6-20; Gow, 2011). Additionally, drill hole 07-385 revealed the extension of the Minto vein leading in 2017 to the discovery of the Minto Mine Deposit. However, due to insufficient storage space, Citabar disposed of most un-mineralized drill core based on logging assessments during the program, a decision criticized by RPA in 2011 who noted issues with logging and sampling procedures (Gow, 2011).

**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	452.00	453.90	1.90	6.00
including	452.60	453.40	0.80	11.20
07-384	555.06	562.20	7.17	1.18
including	555.60	555.80	0.20	13.39
	564.40	576.40	12.00	1.15
	569.70	570.15	0.45	5.49
07-385	61.10	62.40	1.30	10.38
07-386B	586.00	590.00	4.00	2.06
including	586.00	587.20	1.20	6.22
07-387	476.10	485.50	9.40	1.78
including	480.70	481.70	1.00	3.37
including	483.50	484.50	1.00	4.61
07-388	48.25	49.18	0.93	4.28
	507.35	508.20	0.85	1.35
7-392	844.10	844.60	0.50	5.12
7-393	680.50	680.90	0.40	4.50
including	691.10	692.80	1.70	10.67
	734.20	735.70	1.50	5.73
07-393B	686.25	688.80	2.55	6.21
including	686.25	686.40	0.15	93.7
including	716.80	717.60	0.80	10.95
07-394	558.10	559.20	1.10	7.92
	51.10	52.10	1.00	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 through an option agreement dated April 16, 2009, and an assignment agreement dated September 15, 2010, entered into between Citabar, Citadel Gold Mines Inc. (“Citadel”), Delta Uranium Inc. (“Delta”) and Delta Precious Metals (Ontario) Inc. (“DPMI”). Delta and DPMI assigned their rights under the Option Agreement to Augustine, granting the later an exclusive right to earn a 60% interest in the Surluga Project (Augustine Ventures MDA, July 24, 2015).

Augustine Ventures Inc. (Augustine) assumed the obligations of Delta PM and Delta Uranium Inc. in September 2010. In January 2011, a helicopter-borne Versatile Time Domain Electromagnetic data survey was conducted, identifying magnetic-conductive features, notably around the Parkhill fault, with six conductive anomalies as potential targets (Duke, 2012).

Afterwards, Augustine drilled 2,944 m in 18 NQ diamond drill holes in 2011 to confirm historical drilling results as recommended by RPA (Gow, 2011) and to delineate mineralization around the Jubilee Mine (Table 6-21 and Table 6-22). However, twinned historical holes did not reproduce the expected results, challenging the reliability of the historical database, as suggested by Duke (2012).

**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.

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 million tonnes (Mt) grading 1.14 g/t Au (cut-off: 0.2 g/t Au) classified as an inferred resource. The historical estimate followed 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 considering the historical estimate as current, due to insufficient work by the QP.

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 an 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 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 the 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 was estimated 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 Historical 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
<b>Total</b>	<b>0.50</b>	<b>19,824</b>	<b>1.71</b>	<b>1,088</b>

Notes:

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

\*\* Historical 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 of 95%.

### 6.7.4 2018 Mineral Resource Estimate – Minto South Property

Red Pine commissioned Golder Associates Ltd. (Golder) to complete an NI 43-101 Mineral Resource Estimate and Technical Report, titled “National Instrument 43-101 Initial Technical Report for the Minto South Property,” which has an effective date of December 31, 2018.

The QP has not completed sufficient work to consider the 2018 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 2018 Technical Report was completed in accordance with NI 43-101 and following the requirements of Form 43-101F1. The Mineral Resource estimates followed the 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 estimate was based upon data provided by Red Pine from surface diamond drill programs completed up to October 2018. Gold mineralization in the Minto South deposit was modelled in two zones, consisting of a shear zone and a narrow Vein zone. A three-dimensional block model was constructed for estimating gold grades based on Inverse Distance Cubed (ID<sup>3</sup>) interpolation.

The Mineral Resource estimate stated Inferred Mineral Resource estimates for potential underground cut and fill mining scenario at a 3.5 g/t break-even cut-off grade, as summarized in Table 6-25.

**Table 6-25: 2018 Historical Minto Mine South Mineral Resource Estimate\***

Resource Category	Quantity (tonnes)	Grade (g/t Gold)	Contained Gold (Troy ounces)
Indicated	105,000	7.5	25,000
<b>Total Indicated</b>	<b>105,000</b>	<b>7.5</b>	<b>25,000</b>
Inferred	354,000	6.6	75,000
<b>Total Inferred</b>	<b>354,000</b>	<b>6.6</b>	<b>75,000</b>

\*Notes:

- High-grade assays capped to 35 g/t gold;
- Tonnage estimates are rounded to the nearest 1,000 tonnes;
- A 3.5 g/t gold cut-off is supported by the following economic assumptions: Gold Price: \$1,200 \$USD, Gold Recovery: 90%, Operating Expense (OPEX): \$CAD \$160 / tonne (\$120 mining \$25 milling, \$15 G&A).
- Areas of historical mining from the Minto Mine were excluded from the block model.

### 6.7.5 2019 Mineral Resource Estimate – Surluga Deposit

Red Pine commissioned Golder Associates Ltd. (Golder) to complete an NI 43-101 Mineral Resource Estimate and Technical Report, titled “National Instrument 43-101 Technical Report for the Wawa Gold Project,” has an effective date of May 31, 2019. The report represents an update to the June 2015 Technical Report and provides a combined Mineral Resource estimate consisting of the Surluga and Minto Mine South Deposits. There were no changes were made to the Minto Mine South Mineral Resources estimates from the previously disclosed on the 2018 Technical Report.

The QP has not completed sufficient work to consider the 2019 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 Mineral Resource estimates followed the 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 estimate was based upon data provided by Red Pine from surface diamond drill programs completed up to March 20, 2019. Gold mineralization in the Surluga Deposit was modelling in a single mineral domain which contains the three shear domains of the Jubilee Shear; the gold mineralization in the Minto South deposit was modelled in two zones, consisting of a shear zone and a narrow Vein zone. Three-dimensional block models were constructed for estimating gold grades based on Inverse Distance Cubed (ID3) interpolation.

The Mineral Resource estimate stated Inferred Mineral Resource estimates for potential underground long-hole scenario 2.7 g/t for the Surluga Deposit and cut and fill mining scenario at a 3.5 g/t break-even cut-off grade for the Minto South deposit, as summarized in Table 6-26.

**Table 6-26: 2019 Historical Mineral Resource Estimate\***

Deposit	Resource Category	Tonnes (000s)	Au Grade (g/t)	Contained Gold (000 Ozs)
Surluga	Indicated	1,202	5.31	205
Minto Mine South	Indicated	105	7.5	25
<b>Total</b>	<b>Indicated</b>	<b>1,307</b>	<b>5.47</b>	<b>230</b>
Surluga	Inferred	2,362	5.22	396
Minto Mine South	Inferred	354	6.6	75
<b>Total</b>	<b>Inferred</b>	<b>2,716</b>	<b>5.39</b>	<b>471</b>

\*Notes: Surluga Deposit:

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

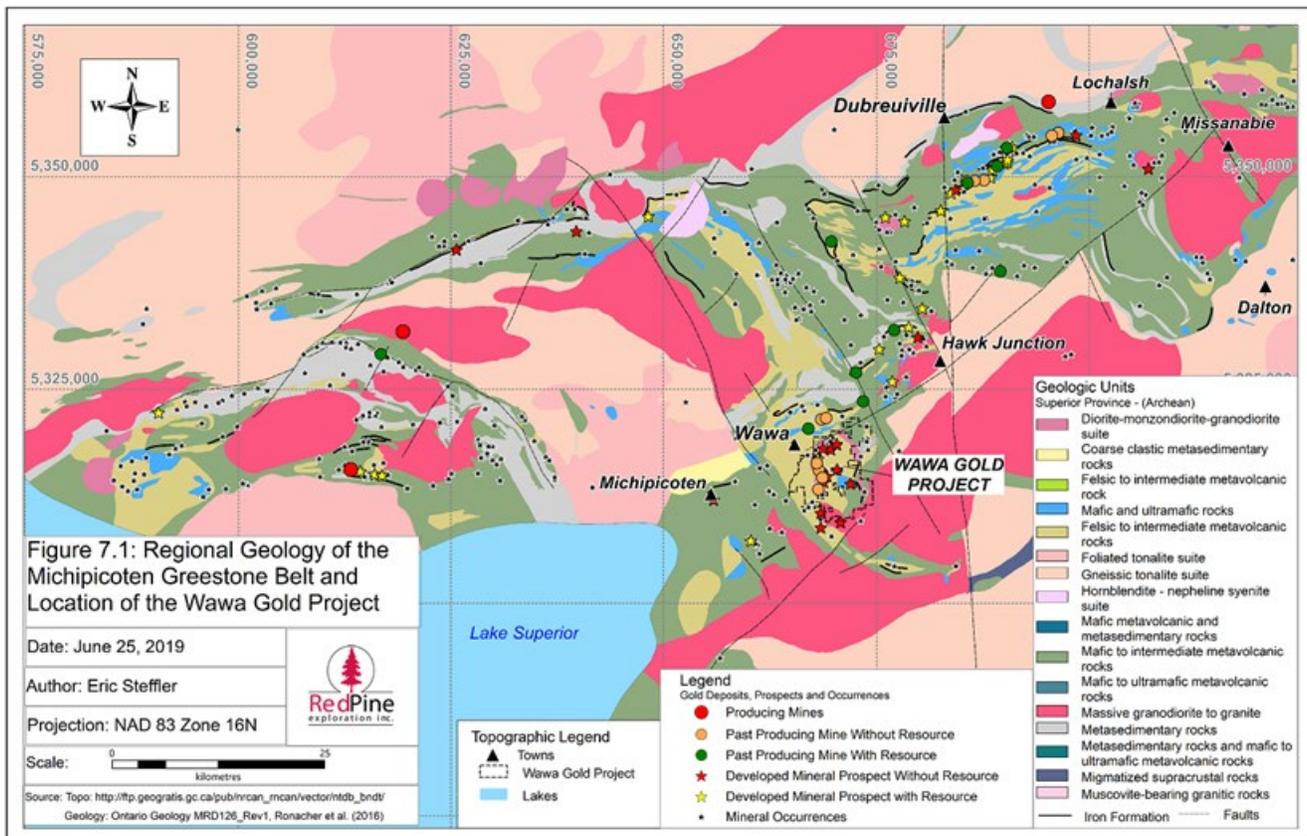
Minto Mine South Deposit:

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

## 7.0 GEOLOGICAL SETTING AND MINERALIZATION

### 7.1 Regional Geology

The Wawa Gold Project is located 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 multiple sub-provinces, characterized by varied geological origins and compositions (plutonic, volcanic-plutonic, gneissic, sedimentary) that range in age from 3.0 billion years before present (Ga) to 2.65 Ga (Polat and Kerrich, 2000).

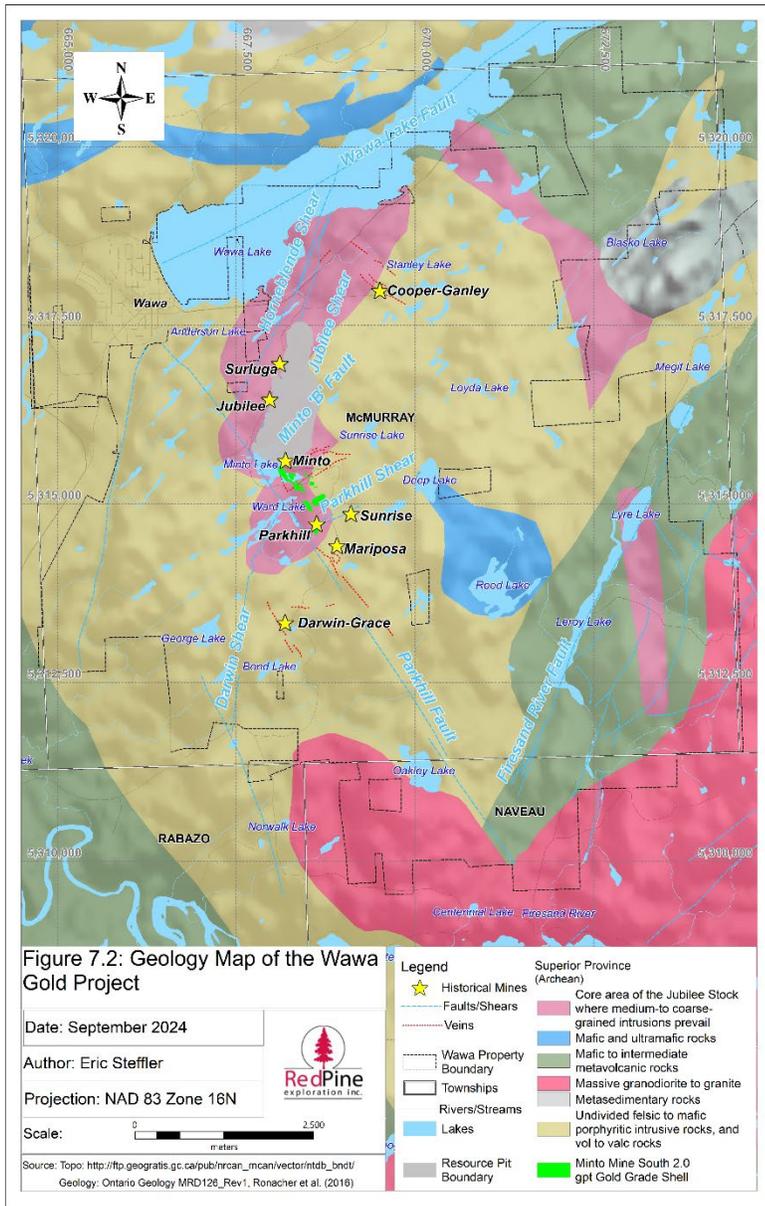


**Figure 7-1: Regional Geological Map of the Michipicoten Greenstone Belt and Location of the Wawa Gold Project**

### 7.2 Local Geology

The Michipicoten greenstone belt comprises three cycles of mafic to felsic volcanism, and associated subvolcanic intrusions, exhibiting Zircon U-Pb ages of 2.9 Ga, 2.75 Ga, and 2.7 Ga for volcanic cycles 1, 2, and 3 respectively. The mafic portion of the Michipicoten greenstone belt ranges from basaltic to komatiitic composition. The main subvolcanic intrusions emplaced during cycles 1 and 2 are the Hawk Granitic Complex and the Jubilee Stock, respectively. These intrusions have been interpreted to mark the central points of calderas and to be the intrusive equivalent of the surrounding felsic to intermediate volcanic rocks (Sage, 1984). A hiatus between volcanic Cycles 2 and 3 was marked by the extensive formation of Algoma-type banded iron formations.

Post-Archean magmatism includes diabase dykes and the Firesand River Carbonatite intrusion along the Wawa-Hawk Lake-Manitowik Lake Fault System (Figure 7-2) at the intersection with the Firesand River fault, which suggests that the fault is deep-seated; whereas the location of the Jubilee Stock and Hawk Granite Complex along the Wawa-Hawk Lake-Manitowik Lake Fault System indicates that it may follow an older structure active during the formation of the Michipicoten greenstone belt.



**Figure 7-2: Simplified Geological Map of the Wawa Gold Project Showing the Core Zones of the Jubilee Stock**

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). The Wawa gold project lies within this geological context.

## 7.3 Property Geology

The core of the known gold corridor of the Project is hosted within the intrusive units of the Jubilee Stock, a polyphase intrusive complex composed of porphyritic to phaneritic intrusive facies ranging from mafic to felsic composition surrounded by felsic to intermediate volcanic rocks of the Wawa assemblage (Sullivan et al. 1985, Sage 1994). Almost every historical mine on the property is located within or at the margins of the Jubilee Stock.

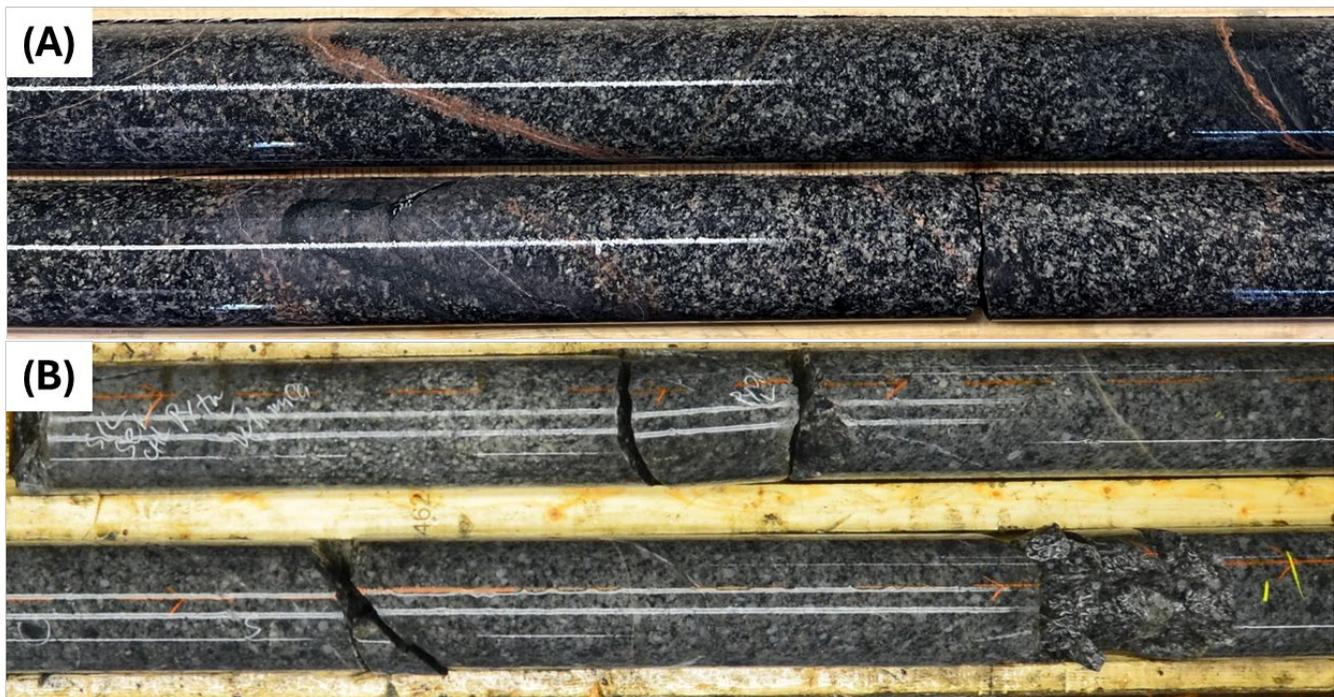
### 7.3.1 Jubilee Stock

The Jubilee Stock is a calc-alkaline intrusive complex composed of several mafic to felsic intrusions (Frey, 1987; Sage, 1993; Figure 7-2). The core of the Jubilee Stock is comprised of over 75% of phaneritic and medium- to coarse-grained dioritic-to-tonalitic intrusions, with accessory and localized phaneritic mafic-intermediate to mafic intrusions. The core of the stock forms a 6 x 1.3 km curved sigmoid-shaped structure at the surface with its long axis oriented at 20°. The remaining 25% of the core zone of the Jubilee Stock is composed of undivided mafic to felsic porphyritic intrusions. The Jubilee Stock has been dated at  $2,745 \pm 3$  million years before present (Ma) and aligns with the surrounding volcanic rocks, dated  $2,746 \pm 11$  Ma (Turek et al., 1992). Sage (1993) suggested that the Jubilee Stock formed beneath a caldera complex. 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 *Phaneritic Medium- to Coarse-Grained Intrusions of the Jubilee Stocks*

The core of the Jubilee Stock comprises multiple intrusions ranging from mafic to felsic composition (Figure 7-3 A and B). Petrographic analysis by Sage (1993) and the chemical analyses of Red Pine indicates quartz dioritic to tonalitic compositions with igneous mineral assemblages comprised in variable proportions of quartz, plagioclase, and biotite. Mafic intrusions of the Jubilee Stock exhibit magma mixing textures with the felsic to intermediate intrusions of the stock (Walker, 2011). Some of the mafic intrusions host Ni-Cu mineralization, characterized by disseminated pyrrhotite-chalcopyrite clusters, in which pyrrhotite is likely intermingled with pentlandite. Intrusive contacts in the core zone of the Jubilee Stock are typically striking SE to E-W and dip moderately to shallowly to the SW and S.

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. Red Pine has now updated that terminology to improve the accuracy of the descriptions of the medium- to coarse-grained intrusions of the Jubilee Stock as there is an intricate relation between certain tonalitic intrusions of the Jubilee Stock and intrusion-related gold mineralization.



**Figure 7-3: Phaneritic Intrusions of the Jubilee Stock – A) Diorite; B) Tonalite**

### **7.3.1.2 Porphyritic Intrusions**

Numerous porphyritic intrusions occur in the periphery of the core of Jubilee Stock and were hypothesized by Sage (1993) to occupy the ring fracture of a large caldera centered on the Jubilee Stock (Figure 7-4 A to D). Primary phenocryst assemblages in these units include biotite-feldspar, biotite, feldspar, quartz-feldspar, and quartz. Multielement analyses and portable x-ray fluorescence (XRF) instrument measurements identify four classes of biotite-feldspar porphyritic intrusions within the stock, ranging from mafic to felsic composition. A compositional continuum and visual gradation between medium- to coarse-grained diorite or tonalite with intermediate-felsic and felsic biotite-feldspar porphyritic intrusions suggest a comagmatic origin between some porphyries and the phaneritic intrusions of the Jubilee Stock. Observations in drill core suggest that biotite porphyritic intrusions may correspond to the altered forms of intermediate-felsic and mafic-intermediate biotite-feldspar porphyries, where alteration preferentially replaced and dissolved the feldspar phenocrysts. Currently during the logging process, these porphyritic intrusions are broken into four (4) main units using visual characteristics, along with XRF measurements. These four units range from mafic to felsic composition as follows: (A) BTFP\_MAF; (B) BTFP\_MAF\_INT; (C) BTFP\_INT\_FELS; and (D) BTFP\_FELS (Figure 7-5). Upon reception of multi-element analysis assays, these porphyritic units are re-evaluated based on trace element ratios.

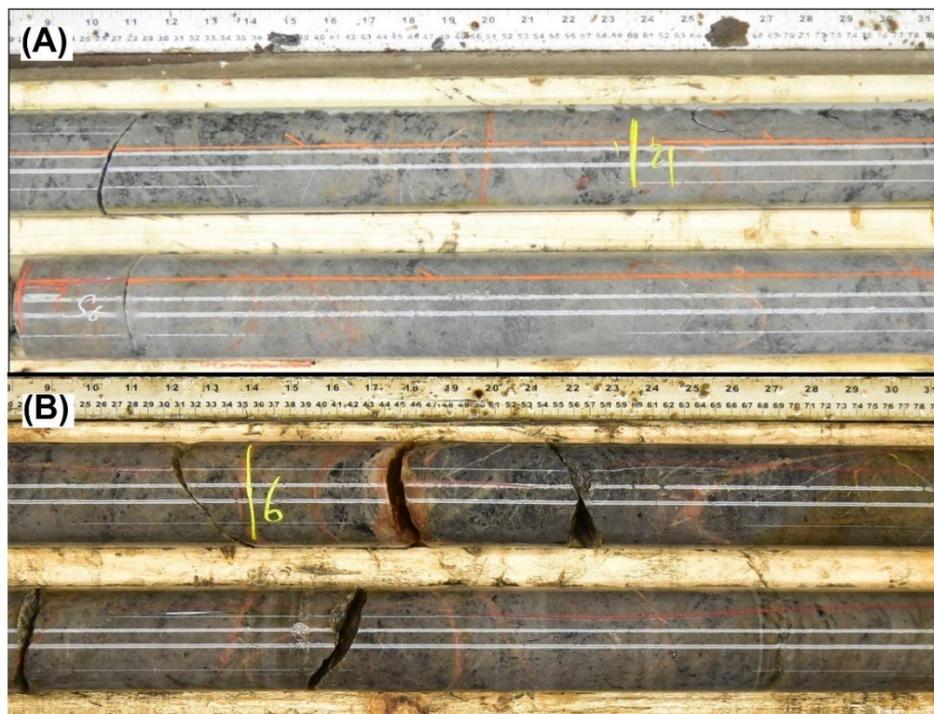
### **7.3.1.3 Silica-Sodic altered units (SILUNIT)**

This unit corresponds to zones of strong silica-sodic alteration formed after phaneritic intrusions, volcanic units and porphyritic intrusions and prevails in certain zones of the Wawa Gold Corridor (Figure 7-5). The unit may correspond to the hornfelsed units identified by Sage (1993) along contacts between the Jubilee Stock and volcanic rocks. The presence of hydrothermal veins containing molybdenite, associated with the Jubilee Stock's formation, crosscutting zones of intense silica-sodic alteration, suggests a coetaneous timing between silica-sodic alteration and the emplacement of the Jubilee Stock. Intense silica-sodic alteration typically destroys the primary

textures of the replaced unit and complicates protolith identification, while in the transitional zones, it gradually replaces host units. The predominant precursor units are tonalites and felsic to intermediate-felsic porphyritic intrusions of the Jubilee Stock.



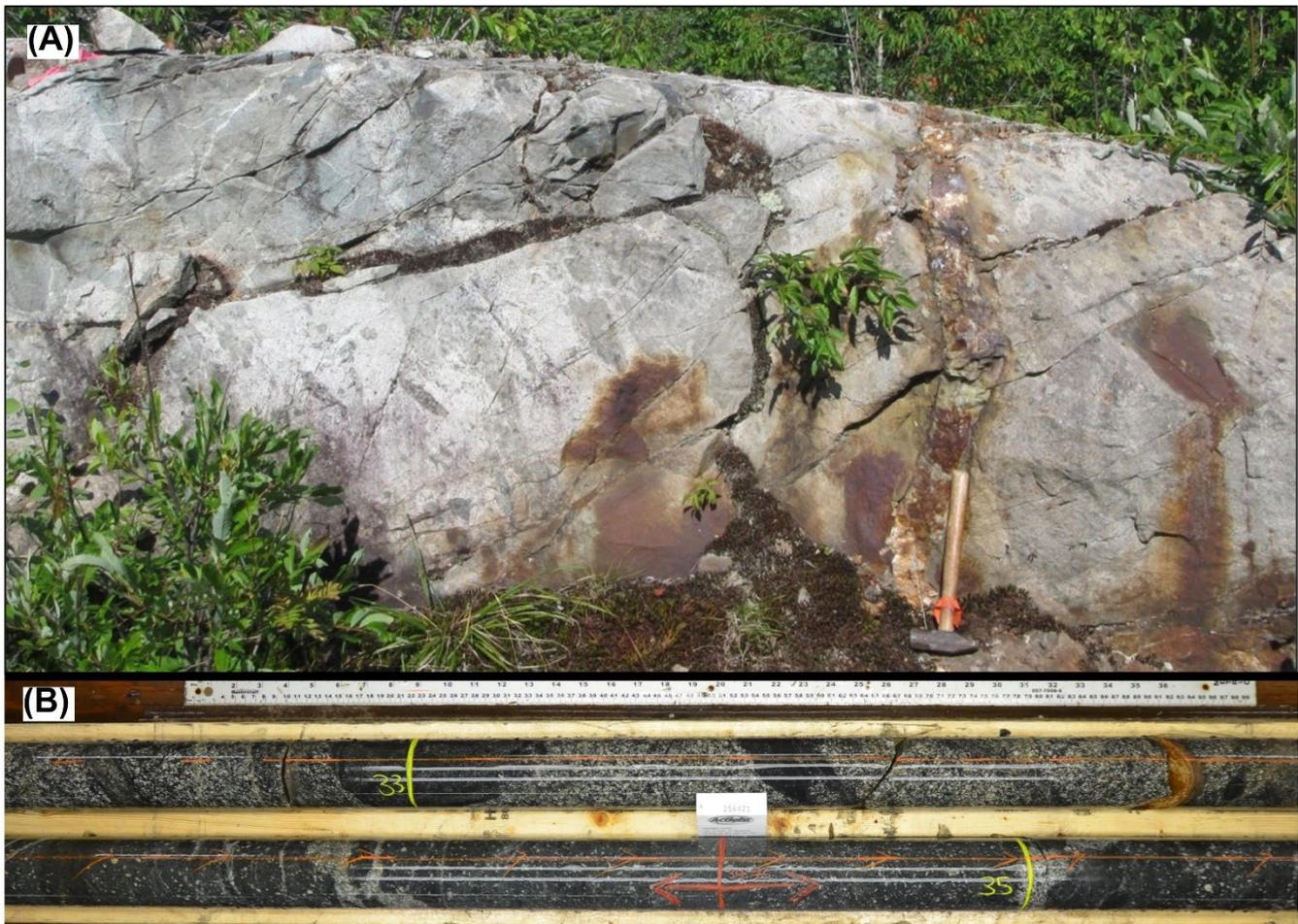
**Figure 7-4: Porphyritic Intrusions of the Jubilee Stock A) Felsic, B) Felsic-Intermediate, C) Intermediate-Mafic and D) Mafic BTFP-pyritic Porphyritic Intrusions**



**Figure 7-5: Silica-sodic Alteration in the Jubilee Stock A) and B) Silica-sodic Altered Intrusions in the Jubilee Stock**

### 7.3.1.4 Intrusive Breccias

Intrusive breccias are prevalent at contacts between the different intrusive facies in the Jubilee Stock (Figure 7-6). Those zones can be quite large and be observed in drill core over length exceeding 200 m. The matrix-to-clasts ratios vary, with more matrix proportions towards the centre of the intrusion injecting into the older unit. Dioritic, tonalitic, and felsic to intermediate-felsic biotite-felspar porphyritic injections form the typical matrix of intrusive breccias injected into older and more mafic to mafic-intermediate porphyries that are forming the fragments of the intrusive breccias (Figure 7-6). In chaotic intrusive breccia zones, more than 3 distinct intrusive facies could occur as fragments in the breccias. Fragments sizes range from millimetres to tens of meters, some are partially assimilated by the injecting felsic to intermediate intrusions. In areas where the contacts between different intrusions occur primarily as intrusive breccias, mapping the irregular contacts between each intrusion is challenging due to the gradational nature and the irregular geometry of the contact. In the Jubilee Shear Zone, the intrusive units forming the breccias are completely transposed in the tectonic fabrics and the pre-existing intrusive contacts can become preferential zones for gold mineralization.



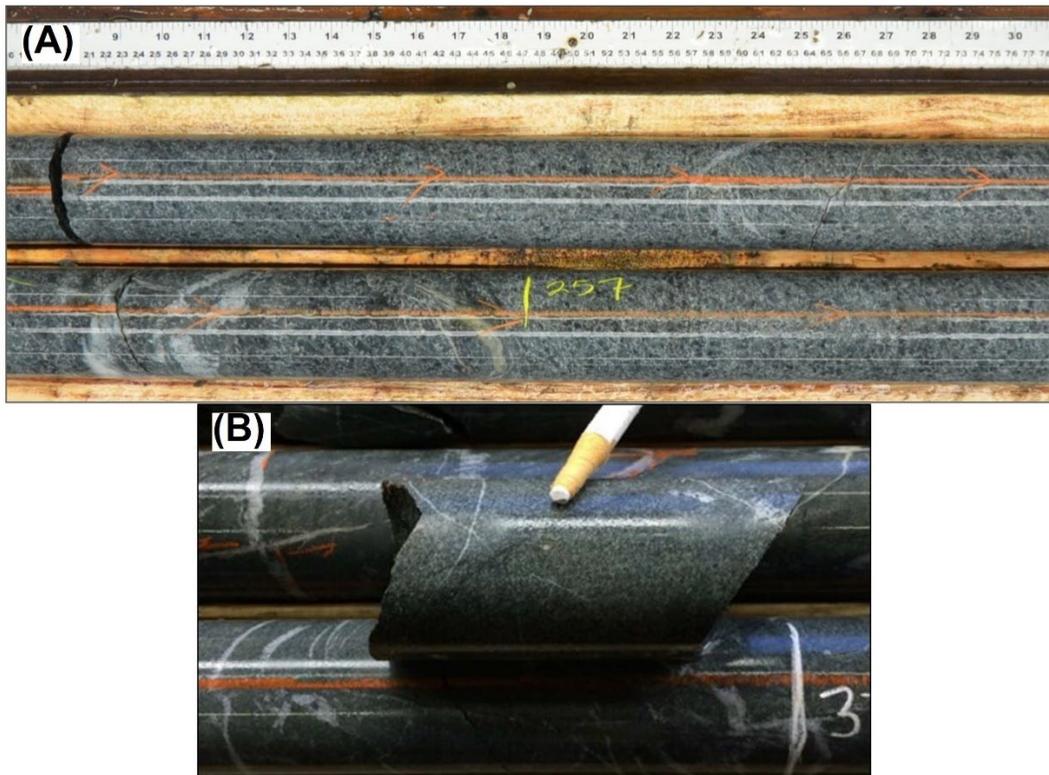
**Figure 7-6: Intrusive Breccias Typical of the Contact Zones between the Different Intrusions Forming the Jubilee Stock A) Surface Exposure B) Drill Core Exposure of Intrusive Breccias**

### 7.3.2 Tholeiitic Intrusions

The Wawa Gold project exhibits a distinct generation of mafic to ultramafic intrusions. These mafic intrusions show a transitional to tholeiitic composition and are coarse-grained in the centre of the larger intrusions (Figure 7-7A) to fine-grained at the margins of the larger intrusions or for the smaller intrusions. (Figure 7-7B).

The main intrusive complex related to the tholeiitic suite on the Wawa Gold project is 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. The presence of tholeiitic mafic dyke fragments in intrusive breccias however suggests that they are contemporaneous with the formation of the Jubilee Stock.

The tholeiitic dykes are principally striking SE and are shallow to moderately dipping to the SW, parallel to some of the intrusive contacts observed in the Jubilee Stock. These intrusions are important controls on the distribution of gold mineralization in the Jubilee Stock. Where the tholeiitic mafic intrusions intersected major shear zones, they create zones of rheological contrast with the felsic-intermediate intrusions of the Jubilee Stock that contribute to the widening of the shear zone and increase the intensity of deformation. In certain areas this correlates to stronger alteration, veining and gold mineralization. These mafic dykes also act as nucleating zones for deformation to propagate in the Jubilee Shear Zone HW and this contributes to the formation of localized shear zones associated with the development of extensional vein networks.



**Figure 7-7: Tholeiitic Mafic Intrusions of the Jubilee Stock. A) Coarse-grained facies typical of the Center of Large Intrusions and B) Fine-grained Facies Typical of the Margins of Large Intrusions or of the Small Intrusions**

### 7.3.3 Volcanic Units

No systematic framework to classify and map the volcanic units of the property has so far been developed as exploration remained focused on the intrusive facies of the Jubilee Stock. In historical logs, many volcanic units are described as fragmental volcanoclastic units, but a re-examination of some of those intervals indicates 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.

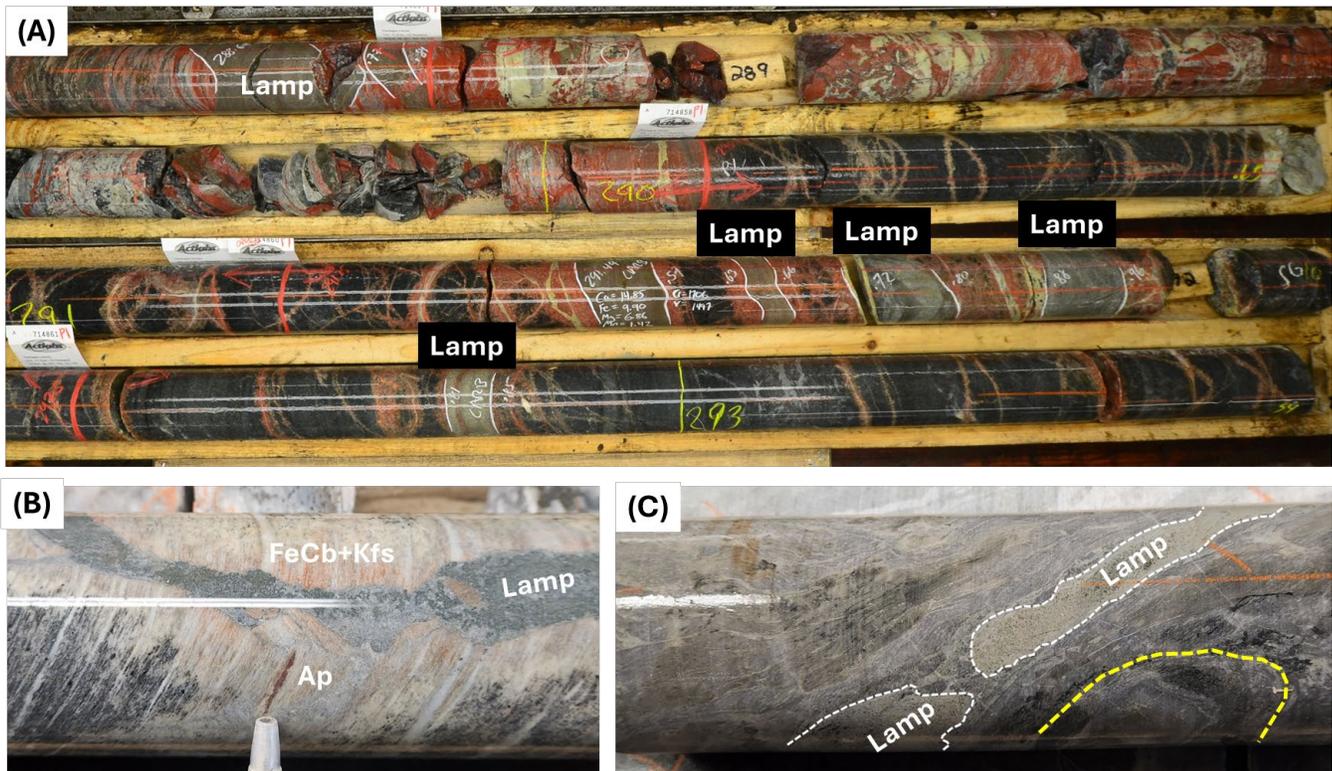
### 7.3.4 Diabase and Lamprophyre Dykes

In the Wawa Gold project, Swarms of lamprophyre, diabase, and carbonatite dykes are observed typically emplaced along pre-existing zones of weakness in large fracture or fault systems. Two main sets of diabase dykes are observed on the Wawa Gold Project. Both have chilled margins and variable magnetic properties. One set of diabase dykes trends NW, is subvertical and its emplacement is contemporaneous with the faulting movement along the Parkhill Fault. Some of the dykes are observed to be composite amalgamation of a few individual diabase dykes that are coalescing and diverging along a parallel structural trend. The second set trends ENE and is truncated by the Parkhill Fault. Both sets are crosscutting all the zones of gold mineralization of the property, indicating that their emplacement post-date the development of the gold system.

Two generations of lamprophyre dykes are pervasive throughout the Project. One generation is Archean and was emplaced in the late stage of the extensional deformation event, and the other generation is Proterozoic and is contemporaneous to the emplacement of the Firesand Carbonatite. The Archean lamprophyres are referred to as K-Lamps the data collection system of Red Pine. The terminology K-lamps comes from a potassium feldspar alteration halo that routinely accompanies the lamprophyres (Figure 7-8A). The development of extensive networks of Fe-carbonate veins with variable quartz and apatite, and with K-feldspar haloes, of replacement zones comprised of Fe-carbonate and K-feldspar accompanied the emplacement of the K-Lamps (Figure 7-8A and B). They are typically emplaced as swarms of centimetres- to decimetres-wide dykes during the waning stages of the extensional deformation event (Figure 7-8A to C). Zones of rare earth elements mineralization are associated with some of the K-Lamp, with total La + Ce content exceeding 0.1% TREO in certain areas.

In the Jubilee and the Minto B shears, which remained active during extensional deformation, many K-Lamps are emplaced somewhat concordantly to the preexisting foliations whereas other K-Lamps are emplaced discordantly and crosscut the tectonic foliations and stretching lineations (Figure 7-8A to C). Some K-Lamps are weakly sheared along the foliation indicating their syn-deformation timing of emplacement (Figure 7-8C). The period of emplacement of the K-Lamps is concurrent with a period of locally strong brecciation in the Jubilee Shear that formed zones of breccias historically named Jubilee Breccias. The mineral assemblages observed in the hydrothermal cement of the Jubilee Breccias correspond to the mineral assemblages observed in the veins that can be directly related to the Archean lamprophyres (Figure 7-8A).

The second generation of lamprophyre dyke is Proterozoic, and their emplacement timing was interpreted to correspond to the emplacement of the Firesand Carbonatite. The Proterozoic lamprophyres are labelled Na-Lamps in the logging system of Red Pine because of the riebeckite and carbonate alteration haloes and veins that are routinely associated with those lamprophyres. The dykes are typically magnetically strong and crosscut all the gold mineralized zones. They tend to form larger and more coherent individual dykes than the K-Lamps, with some dykes being metre-wide. A few carbonatite dykes, likely related to the Firesand Carbonatite located near the property's northeastern corner, have also been observed in drill holes in the Jubilee Shear System.



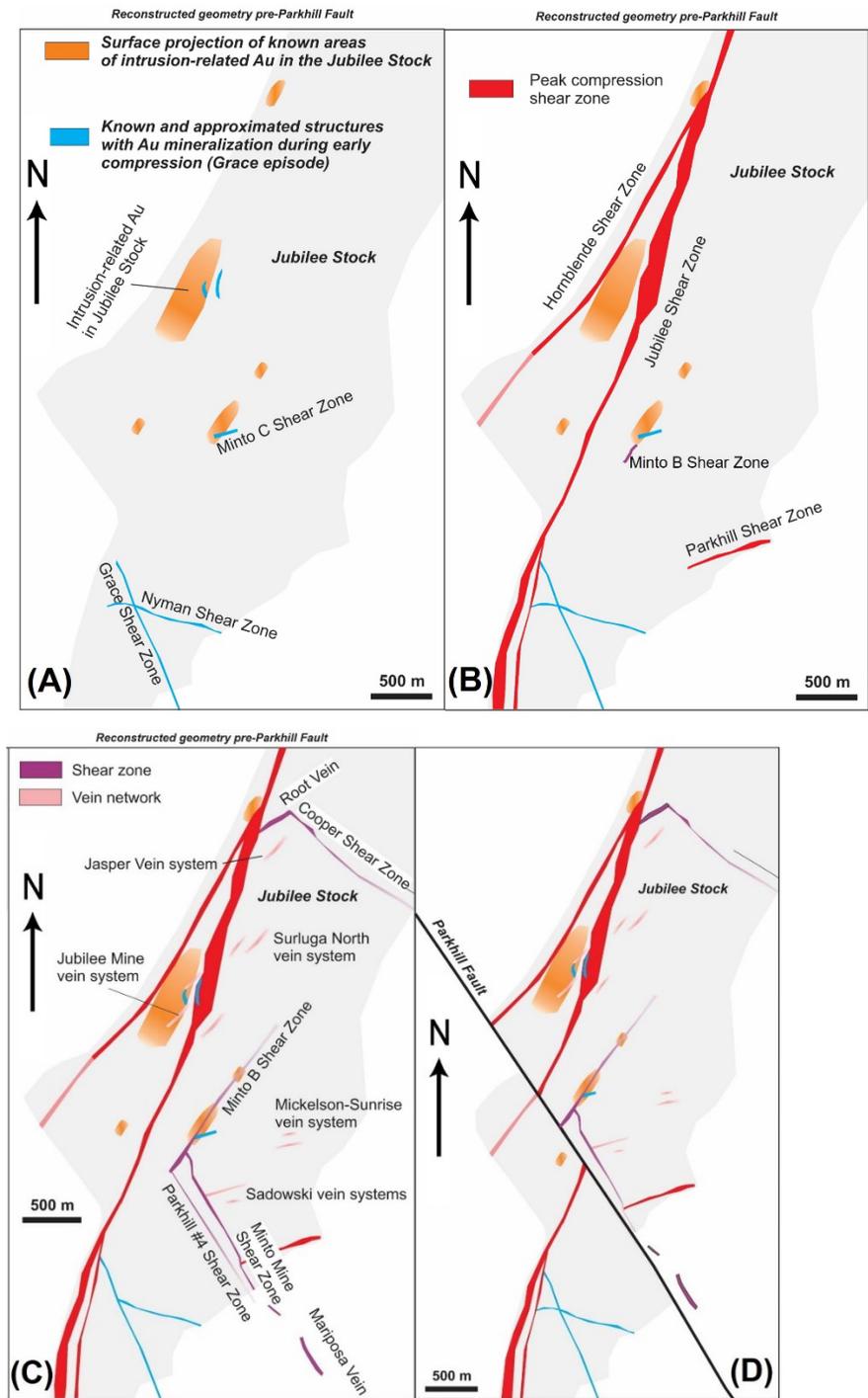
Note: A) Array of K-Lamps emplaced generally concordantly with the foliation in the Main Deformation Domain of the Jubilee Shear. The K-Lamps are associated with pervasive K-feldspar replacement fronts and networks of Fe-carbonate veins locally filling small breccia zones B) K-Lamp with a Fe-Carbonate + K-feldspar alteration haloes with accessory apatite crosscutting the main foliation in the Jubilee Shear C) K-Lamp dyke deformed in the late tectonic fabrics of the Minto B Shear. An earlier tectonic foliation in the Minto B Shear is folded and the foliation associated with the K-Lamp is axial planar to the fold.

**Figure 7-8: K-Lamps of the Wawa Gold Project**

## 7.4 Structure and Gold Mineralization

The Wawa Gold Corridor features four distinct phases of mineralization: intrusion-related gold mineralization coetaneous with the Jubilee Stock emplacement, and three episodes of gold mineralization during the evolution of an orogenic cycle (Figure 7-9). Following the descriptions of Ma et al. (2024), the first episode corresponds to NW-SE shortening recorded in the Grace and Minto B fault zone (D1); the second episode, which marks peak orogenic deformation, involves top-to-NNE strike-slip to oblique faulting dominant in the Jubilee and Hornblende Shear systems (D2); and the third episode is characterized by top to NE extension as observed in the Parkhill #4 and Cooper structures (D3).

The Jubilee Shear System, a network of anastomosing shear zones progressively developed and re-activated throughout the cycle of orogenic deformation, is the largest mineralized structure defined so far on the Wawa Gold project and represents the primary anchor of the Jubilee Deposit (including the Surluga Deposit). The strain domains of the Jubilee Shear System were primarily formed during the peak compression event, but secondary deformation occurred from the early compression stage to the final extensional stage.



Note: A) Formation of IRG and early-compression mineralized structures B) Peak-compression mineralized structures C) Mineralized structures related to extensional deformation D) Current geometry of the mineralized structures post-movement along the Parkhill Fault

**Figure 7-9: Schematic Representation of the Evolution of Gold Mineralization on the Wawa Gold Project and Locations of the Main Zones of Mineralization**

### 7.4.1 Intrusion-Related Gold Mineralization

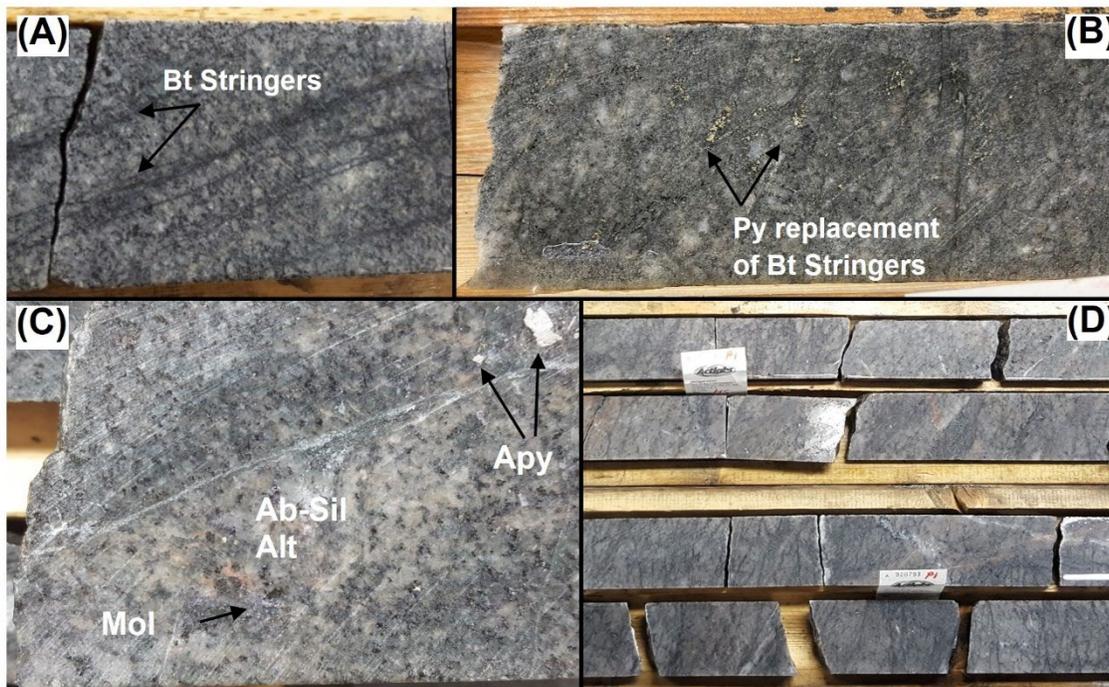
Intrusion-Related Gold (IRG) mineralization on the Wawa Gold Project is defined as gold mineralization contemporaneous with the emplacement of the Jubilee Stock and that predates orogenic deformation. The largest and strongest zone of IRG mineralization identified so far on the property is located between the Jubilee and the Hornblende shear zones, within the Wawa Gold Corridor (Figure 7-9). This zone of IRG mineralization centres on a tonalite intrusive, with mineralization preferentially hosted within or adjacent to that tonalite.

Additional zones of IRG gold mineralization are now documented throughout the property, including near and within the Minto B Shear Zone and in the hanging wall of the Jubilee Shear west of the Minto B Shear (Figure 7-9). For both the Hornblende and the Minto B shears, the spatial overlap between pre-existing zones of IRG mineralization and these structures indicates that the presence of older IRG mineralization zones and alteration zones is one of the controls on the development of younger shear zones. Localized indications of IRG mineralization and alteration, without significant gold mineralization, were also observed in the Darwin-Grace Mine area.

Alteration and mineralization associated with IRG mineralization follow a relatively constant mineralogical trend (Figure 7-10). Early alteration consists of silica-sodic alteration forming replacement fronts and veins, that is preferentially affecting the intermediate to felsic units of the Jubilee Stock. Strong to intense silica-sodic alteration erases the primary textures of the altered units. Networks of biotite stringers, replacement veins, and replacement fronts follow silica-sodic replacement. Sulfide precipitation begins with the emplacement of biotite alteration. Early sulfides include pyrite and pyrrhotite, transitioning to euhedral to subhedral and fine to coarse grained arsenopyrite. Molybdenite and chalcopyrite can precipitate in certain biotite veins as well. Weak to moderate chlorite overprints can be present in certain mineralized biotite veins. In the most mature zones of IRG mineralization, biotite veining evolves to quartz veining or silicification fronts, often with variable biotite veining associated with pervasive white mica replacement. Pyrite, along with variable pyrrhotite and arsenopyrite, remains dominant in these mineralized zones. Locally, scheelite precipitates in some of the quartz veins. The white micas in the alteration zones associated with IRG mineralization exhibit a muscovite composition trending towards phengitic.

### 7.4.2 Grace Deformation Period (D1)

The early compressive Grace Deformation Period, also referred to as the D1 event, marks the first stage of orogenic gold mineralization and is interpreted as a significant event of primary gold mineralization on the Wawa Gold Project (Wehrle et al., 2023). Mineralized structures associated with D1 are observed across the project, with the most notable ones being: the Grace and the Minto C shears, and a network of variably preserved shear zones located between the Jubilee and the Hornblende shears, which are variably transposed in D2 structures. Significant zones of mineralization related to D1 also occur as variably preserved relicts in certain zones like the Jubilee Shear System and the Hornblende Shear; the shears composing syn-D2 deformation zones. Significant showings associated with D1 mineralization include the War Eagle showing, the Villeneuve vein the Moody Pit, and in the Nyman Shear.



Note: A) Early biotite stringers with weak silica-sodic replacement B) Pervasive biotite veining and replacement with disseminated pyrite overprinting earlier silica-sodic replacement C) Chloritized biotite stringers with euhedral Apy and Mol crosscutting earlier silica-sodic replacement D) Zone of pervasive and intense silica-sodic replacement crosscut by many biotite and biotite-quartz stringers, some with molybdenite.

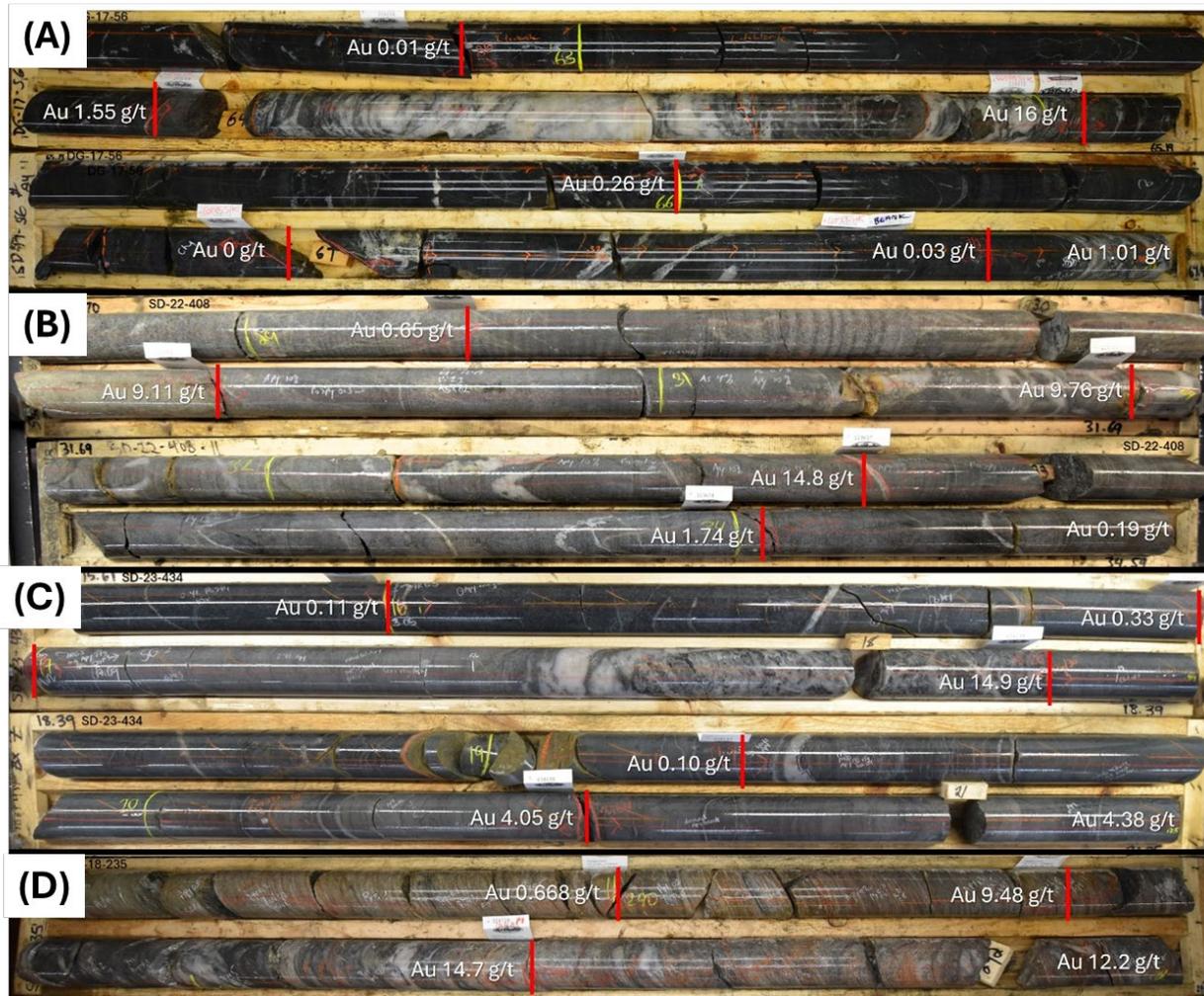
### Figure 7-10: Stage of Development of IRG Mineralization

The shear zones formed during D1 are in general relatively narrow, averaging 1 m to 5 m in thickness. The Grace Shear Zone, the most significant and the best-preserved shear zone of this deformation event, has a confirmed strike extension exceeding 2 km. Many of the other shears and mineralization zones associated with D1 event are disrupted by overprinting of the D2 deformation (e.g. Minto C and shears between the Hornblende and Jubilee Shear, and relicts of D1 mineralization in the Jubilee Shear) or remain underexplored (e.g. Moody Pit, Villeneuve), making their original strike length difficult to quantify.

The geometrical attributes of the D1 shear zones vary depending on the local geological context where the shear zones were originally formed. Compressive deformation of the D1 event primarily forms domains of  $L \gg S$  to  $L = S$  tectonites in the shear zones (Ma et al., 2024). The main controls on the geometry of D1 shear zones are the orientation of the primary contacts in the Jubilee Stock and the intensity of the overprint of D2 tectonic fabrics. At the Darwin-Grace mine, logging indicates that the Grace Shear Zone follows the approximate trace of an intrusive contact between an intermediate and a mafic-intermediate porphyritic intrusion. In average, the Grace Shear Zone strikes  $327^\circ$  and dips approximately between  $50^\circ$  and  $75^\circ$ . The stretching lineation in the Grace Shear Zone is plunging between  $25^\circ$  to  $45^\circ$  to the SE. In contrast, the Minto C Shear, which also preferentially follows a contact between a tonalite intrusions and the host porphyries in the Jubilee Stock, strike and dips approximately  $240^\circ$  and  $20^\circ$ .

In the shears of the D2 event like the Jubilee Shear System, the zones of D1 deformation and mineralization are respectively transposed and altered by the superimposed tectonic fabrics and overprinting alteration.

Alteration and mineralization in the D1 shear zones show a progression from immature to mature zones of mineralization (Figure 7-11). A defining characteristic of gold mineralization associated with D1 structures is the intricate relation between the presence of very fine-grained to fine-grained, acicular arsenopyrite, and gold mineralization. In immature zones of mineralization, arsenopyrite, with varying proportions of pyrite and pyrrhotite is associated with biotite with accessory chlorite alteration. As the maturity of arsenopyrite mineralization increases, sericite with iron carbonate alteration (in felsic to intermediate hosts) or sericite-chlorite with iron carbonate alteration (in mafic-intermediate to mafic hosts) intensifies. In mature zones of mineralization, fine and pervasive disseminations to bands of arsenopyrite with accessory pyrite and pyrrhotite define the mineralization zones. Quartz veining can vary from weak to strong, but no clear association between the intensity of quartz veining and the gold content has been identified.



Note: A) Mineralized quartz vein from the early compression period in the Grace Shear B) Pervasive white-mica and iron carbonate replacement associated with finely disseminated arsenopyrite, pyrite and pyrrhotite with weak quartz veining in the Minto C Shear C) Zone of early-compression mineralization transposed in one of the lower deformation domains of the Jubilee Shear System. Mineralization is comprised of pervasive white-mica and iron carbonate replacement associated with finely disseminated arsenopyrite, pyrite and pyrrhotite and moderate quartz veining D) Early compression mineralization comprised of moderate-strong quartz veining with arsenopyrite variably overprinted by pyrite deformed in the Main Deformation Domain of the Jubilee Shear System.

**Figure 7-11: Mineralization Zones Typical of the Early Compression Period**

As many of the D1 mineralization zones were altered and deformed during the D2 deformation period, there is no systematic and direct correlation between the abundance of arsenopyrite and gold grade, as a significant proportion of the gold originally deposited in D1 structures was remobilized and concentrated in different areas of the gold system during D2 deformation (Werhle et al., 2023). The intensity of deformation and remobilization in mineralization zones of the D1 event typically increases with the intensity of D2 overprints.

### 7.4.3 Jubilee Deformation Period (D2)

The Jubilee Deformation Period (D2) marks the peak compressive event and the third gold mineralizing event of the Wawa Gold Project. The D2 event formed the most prevalent structural features on the property. The largest D2 deformation zones include the Jubilee Shear System and the Hornblende Shear Zone that are defining the Wawa Gold Corridor (Figure 7-12 and Figure 7-13). A series of ENE-oriented and gold-mineralized shear zones are also possibly associated with the Jubilee Deformation Event. This includes the Parkhill Shear Zone, hosting the Parkhill and Van Sickle mines. Structures and mineralization characteristics of the D2 event are also seen in the Minto B Shear Zone.



**Figure 7-12: Surface Exposure of the Main Deformation Domain of the Jubilee Shear System**



**Figure 7-13: Surface Exposure of a Deformation Domain from the Hornblende Shear**

The individual shear systems of the D2 deformation event are formed by anastomosing networks of high to low strain L to L=S tectonites that are coalescing together from kilometers to multi-kilometer long shear segments. In the Jubilee and Hornblende shears, foliation is NNE-NE striking and moderately dips to the SE, whereas the penetrative stretching lineation shallowly plunges SE to SW. As the stretching lineation is typically stronger than the foliation in the D2 strain domains, the stretching lineation is the major control of the geometry of the mineralization zones formed pre- to syn-D2 deformation (Figure 7-14 and Figure 7-15; Werhle et al., 2023).

In the major D2 structures like the Jubilee Shear System, as deformation in those structures spans all the stages of the orogenic cycle, the styles of gold mineralization are quite diversified and include components of the 4 mineralization stages documented on the Wawa Gold project. All the mineralization zones formed pre- to syn-D2 are moderately to completely transposed into the D2 stretching lineation and foliation and are weakly to strongly overprinted by syn-D2 alteration (Figure 7-15). The mineralization in syn-D2 shears typically occurs as arrays of moderately to strongly stretched D1 to D2 quartz to quartz-carbonate shear veins associated with white micas replacement and silicification of the host rocks (Figure 7-15). In the areas of significant gold mineralization, typically developed in D2 structures along preexisting contacts between intrusions of the Jubilee Stock, the stretched arrays of veins constitute most of the mineralized rock (Werhle et al., 2023).

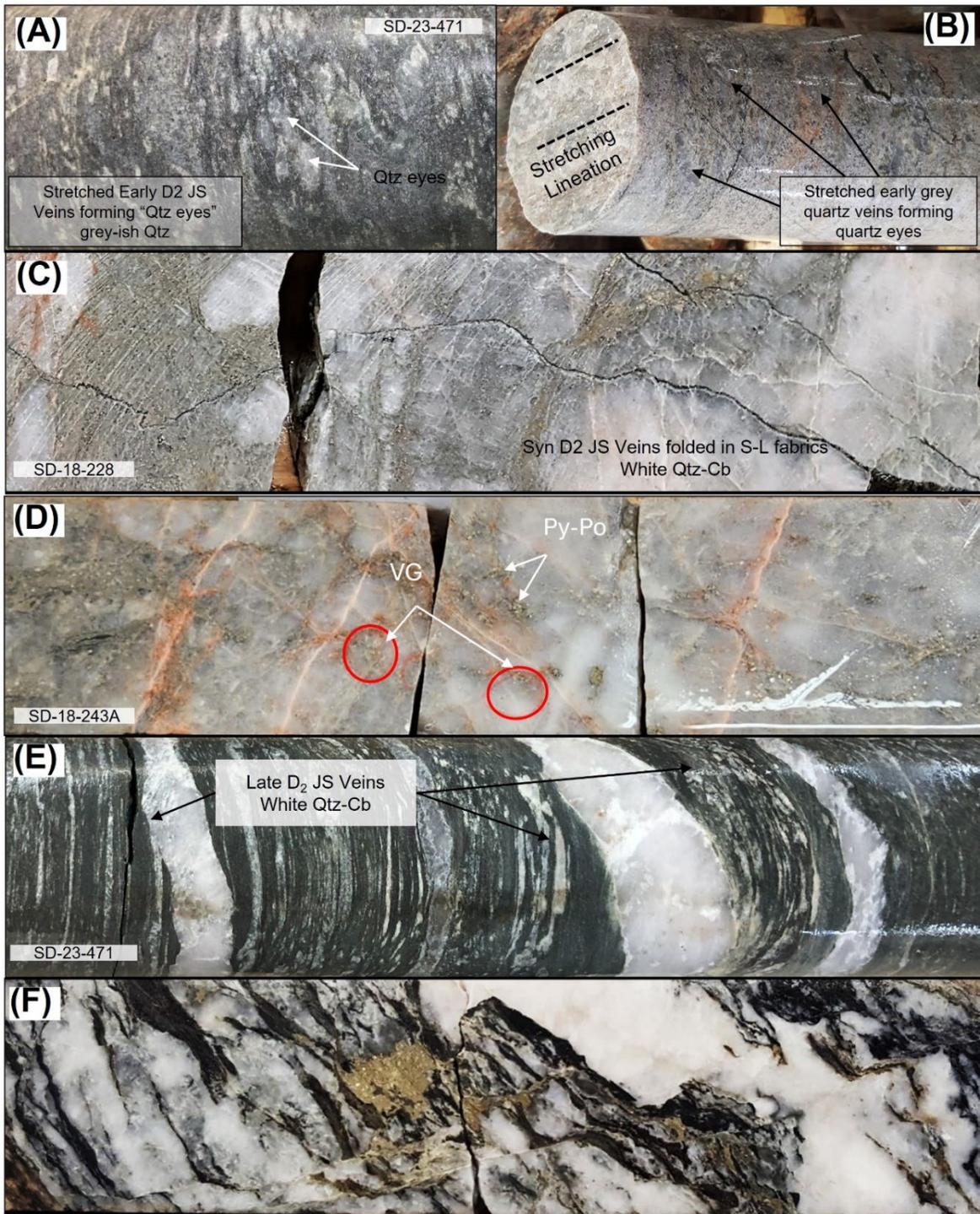
Euhedral to subhedral, fine-grained to medium-grained and curpiferous to arseniferous pyrite disseminated throughout the host and veins, and locally forming discrete lenses stretched in the lineation, is the typical sulfide associated with syn-D2 gold mineralization. Accessory to abundant pyrrhotite, and occasional chalcopyrite, galena and sphalerite are precipitated during D2. D1 arsenopyrite, where observed in D2 structures, is weakly to

completely dissolved and recrystallized by cycles of coupled dissolution-precipitation and is also replaced by syn-D2 pyrite (Werhle et al., 2023). In certain areas of D2 structures, late-D2 quartz shear veins or D3 extensional quartz-tourmaline shear veins are associated with gold mineralization and prevail over pre- to syn-D2 veins (Figure 7-15).



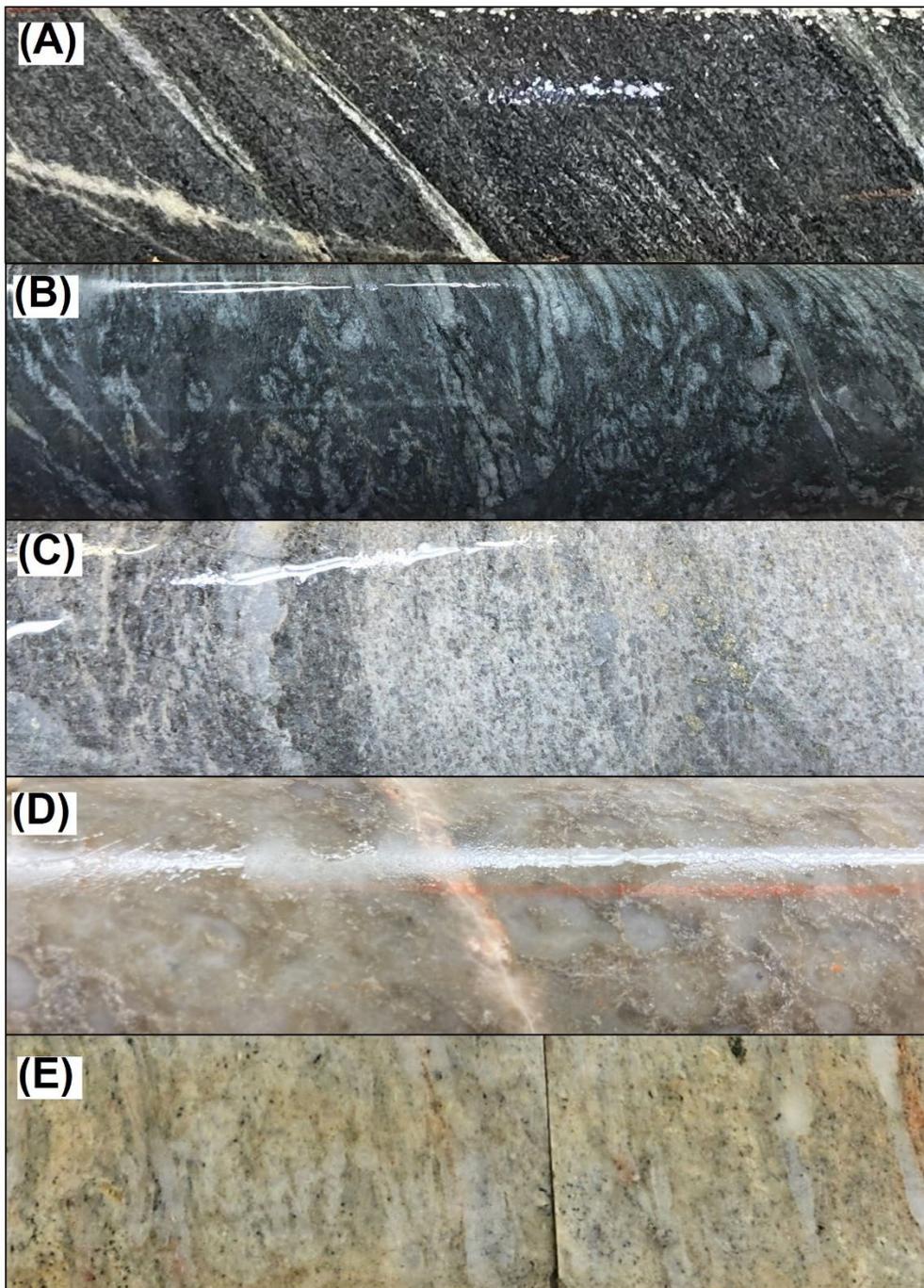
**Figure 7-14: Stretching Lineation Characteristic of the Peak Compression Event Developed in a Mafic Intrusion**

Alteration assemblages vary throughout the peak compression structures, forming a well-defined zonation around the zones of mineralization in the structures (Figure 7-16). Chlorite with calcite alteration with variable biotite and magnetite is typical in the shoulders of the zones of strong mineralization and extends into the weakly to undeformed host rocks. In the core of the mineralization zones, white micas alteration with variable chlorite and iron carbonate, and silicification are the typical alteration types. The white micas formed peak D2 deformation that are associated with gold mineralization have a muscovite to paragonitic composition.



Notes: A) and B) Early-D2 array of quartz veins completely stretched in the D2 stretching lineation C) and D) Syn-D2 quartz veins with pyrite as the main sulfide. Native gold in D2 quartz vein is typically occurring in the plane perpendicular to the stretching lineation E) and F) Late and post-D2 quartz and quartz-tourmaline veins typical of the extensional period

**Figure 7-15: Vein Generation Observed in the Structures of the Main Compression Event Using the Main Deformation Domain of the Jubilee Shear System as an Example**



Notes: A) Early biotite to biotite-chlorite replacement B) Chlorite alteration typically associated with networks of stretched carbonate-quartz and carbonate veins. Magnetite is locally formed in the zones of chlorite replacement C) Pervasive white mica with iron carbonate and silica replacement in the mineralization zones of the D2 structures D) Strong silicification associated with stretched quartz veins in D2 structures E) Chlorite-iron carbonate replacement with localized fuchsite or mariposite developed in the mafic units in the core zones of D2 structures

**Figure 7-16: Typical Alteration Types Observed in the Main Deformation Domain of the Jubilee Shear and in Other D2 Structures**

#### 7.4.4 Minto Deformation Period (D3)

The Minto Deformation Period (D3) marks the fourth mineralization event at the Wawa Gold Project. This period of orogenic relaxation led to the formation of numerous extensional shear zones and networks of quartz veins (Werhle et al., 2023). Tectonic deformation related to the Minto Deformation Period was largely confined within the extensional shear zones and in domains of D1 and D2 shear zones reactivated during D3.

In the D3 shear zones, mature quartz shear veining occurs in high-strain zones, preferentially developed along meter-wide tholeiitic gabbro dykes or within areas of strong alteration and mineralization in reactivated D1-D2 shears. Away from preexisting zones of rheological weakness, extensional shears exhibit weakly penetrative foliations forming immature strain domains with little to no quartz veining. S fabrics prevail in extensional shears, and the stretching lineation, raking close to the dip direction of the foliation, is weakly to moderately developed. The mineralized quartz lenses correspond to domains of stronger shear veining, plunge perpendicular to the stretching lineation.

The most significant extensional shears identified so far include the Minto Mine, Parkhill #4, and Cooper shears. The Minto Mine and Parkhill # 4 shears are related to the historical Parkhill and Minto Mines (Figure 7-17). The Cooper Shear is related to the historical Cooper Mine. Other significant and gold mineralized extensional shears includes the Root and Ganley shears. The strike extension of individual extensional shear zones, using as examples the Minto Mine and Parkhill # 4 shears, exceed 2 km whereas their thickness range from 0.5 m in immature domains to up 10 m, with an average of 2 m to 5 m.

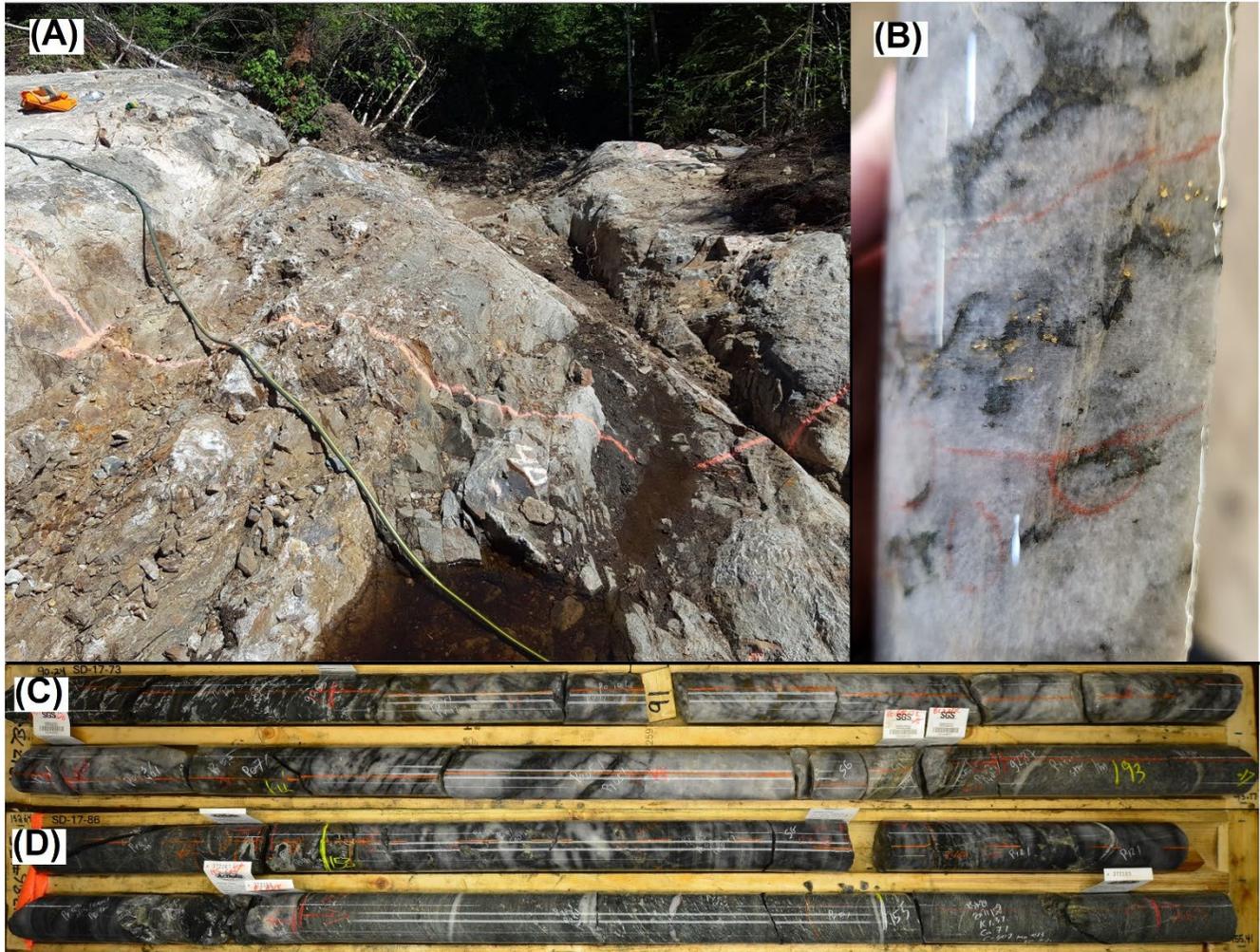
The extensional vein networks are typically formed in the haloes of the larger extensional shear zones like the Minto Mine Shear, consisting of decimeter- to meter-wide shear zones or in the haloes of major D1 and D2 structures in areas where the structures were reactivated during D3. The extensional veins extend into the host units around the shear zones (Figure 7-18). Recent drilling program indicates that the intermediate to felsic intrusions of the Jubilee Stock are the most favorable hosts for the extensional vein networks.

The small shears associated with the development of networks of extensional veins, like those in larger extensional shear zones, are typically following the trace of small tholeiitic gabbro dykes emplaced in the Jubilee Stock. The vein density, the thickness of extensional veins and the overall thickness of each vein network vary considerably. Some parts of vein networks are only 1-3 m-wide and consist of one or two veins ranging from a few centimeters to a few decimeters in thickness, whereas other parts of the same network can be up to 10 m to 30 m wide and contain dozens of centimeter-wide to decimeter-wide extensional veins (Figure 7-18). The geometry of the individual veins within each extensional vein network varies depending on the geometry of the host intrusive unit and the shear zone associated with its development.

Most of the extensional vein networks follow two general trends: shallowly dipping to the south or the north. North dipping extensional vein networks include the Sadowski, the Mickelson-Sunrise, the Core Shack and the Root vein networks (Figure 7-18). South dipping vein networks include the vein networks located above the Old Tom zones of the Jubilee Shear, the Surluga North vein networks, and most of the vein networks developed around the Minto Mine Shear (Figure 7-18).

Quartz-tourmaline or white quartz veins, both with variable carbonate and white mica alteration haloes, are the typical veins of the extensional deformation event in both the extensional shears and the vein networks. The tourmaline in the quartz veins of the extensional event has a characteristic shortwave infrared wavelength of absorption for its Fe-OH bond averaging 2244 nm. The main assemblage of sulfides variably formed in mineralized D3 veins predates the main period of gold introduction. Anhydral pyrrhotite is the most common

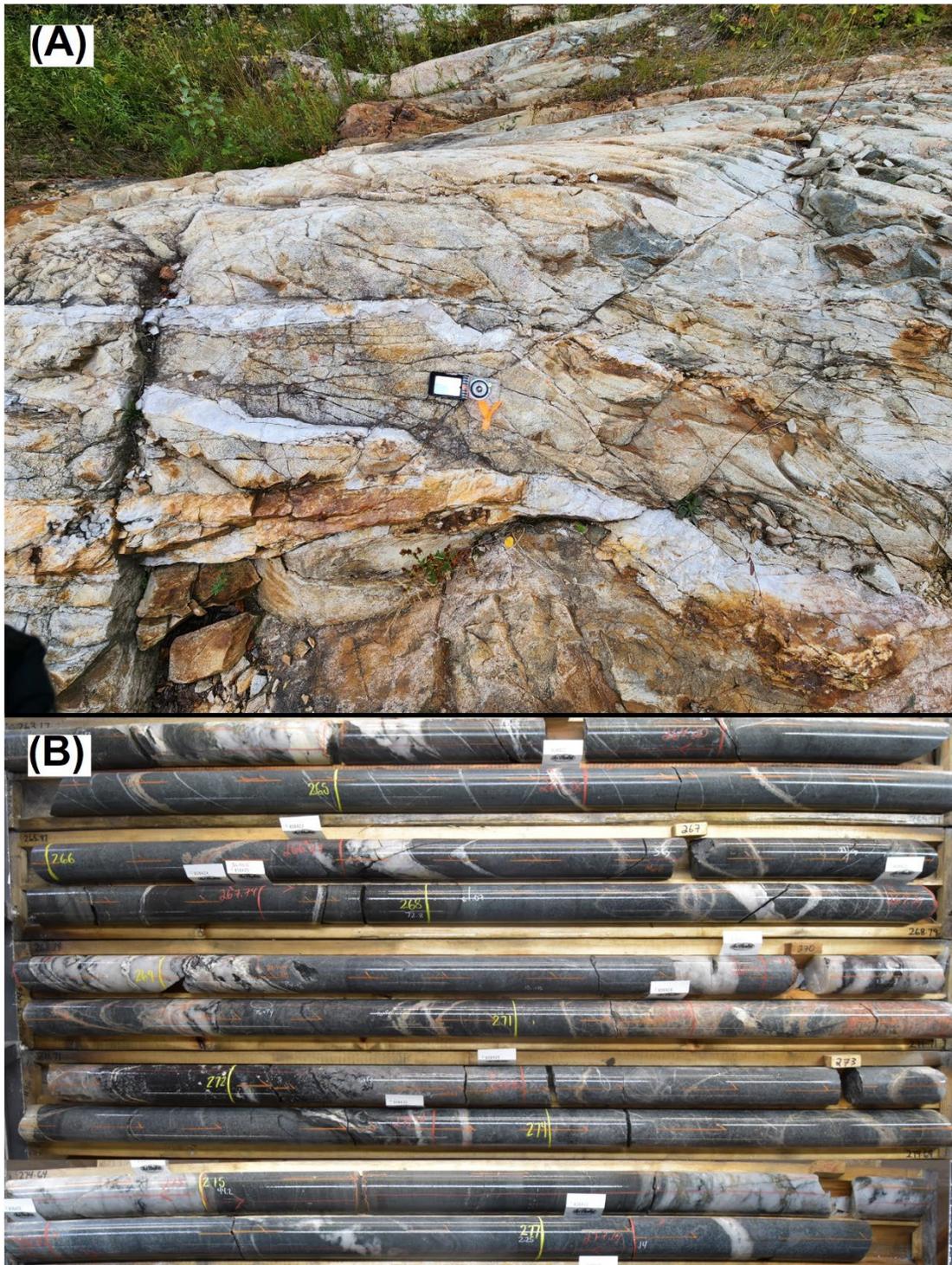
sulphide, in some instances rimming earlier, fine-grained and euhedral pyrite. The early pyrite and pyrrhotite are overprinted by a subsequent generation of fine-grained and anhedral pyrite.



Notes: A) Surface exposure of the high-strain zone of the Cooper Shear centered on a sheared tholeiitic mafic dyke B) Abundant native gold in the Minto Vein hosted in the Minto Mine Shear C) and D) Minto Vein in the Minto Mine Shear that is typically developed along small and sheared mafic tholeiitic mafic dykes. Deformation is weakly penetrative in the surrounding tonalite.

### Figure 7-17: Mineralization of the Extensional Period

Gold mineralization occurs at the latest stage of the extensional deformation event within brittle fractures cross-cutting the quartz veins. Little mineralization occurs in the host rocks during the extensional period and gold is almost entirely deposited in the preexisting quartz veins. Mineralization minerals include native gold with variable pyrite, iron carbonate, chalcopyrite, and locally bismuthinite and gold-bismuth alloys (e.g., maldonite –  $\text{Au}_2\text{Bi}$ ; Werhle et al., 2023). A moderate to high nugget effect, due to the higher abundance of coarse gold compared to mineralization associated with IRG, D1 and D2, affects all the veins formed during the extensional period.



Notes: A) Surface exposure of the Mickelson Vein Network showing an array of shallowly and northerly dipping quartz veins B) Mature zone of quartz veining in the Surluga North Vein Network centered on a network of small shear zones with some hosting sheared quartz-tourmaline vein.

**Figure 7-18: Extensional Vein Network of the Wawa Gold Project**

Gold mineralization is interpreted to be coeval with the emplacement of the Archean K-Lamp throughout the Wawa Gold Project. The fluids associated with these lamprophyres are hypothesized to have remobilized gold precipitated during the earlier mineralization events. These fluids then redeposited and concentrated that gold in some of the quartz veins of the extensional deformation event, as these were the structures that remained active during that deformation period. Alterations associated with the potassic lamprophyres include strong K-feldspar replacement and iron carbonate, with variable quartz veining with k-feldspar haloes. In some extensional veins, native gold occurs in association with K-feldspar and iron carbonate stringers.

## **7.4.5 Description of the major mineralized structures of the Wawa Gold Project**

### **7.4.5.1 Jubilee Shear System**

The Jubilee Shear System (Jubilee Shear) is the largest mineralized structure identified so far in the Wawa Gold Corridor. Including the segment south of the Parkhill Fault, the shear system extends over a strike length of at least 6 km. It is primarily associated with the Jubilee Deformation Period, with remnants in some areas of the early-compressive tectonic fabrics and with local superimposition of tectonic fabrics of the extensional deformation periods.

In its segment north of the Parkhill Fault, the Jubilee Shear System is comprised of six domains of stronger deformation with satellite and narrower domains of deformation. The entire Jubilee Shear System is anchored by the Main Deformation Domain, which hosts most of its gold endowment. The domains of deformation above and below the Main Deformation Domain are less consistently mineralized and the intensity of shearing is more variable. The main domain of the Jubilee Shear strikes 0-40° and progressively rotates clockwise from north to south and dips 25–55°. The average dip of the shear zones steepens east of the Minto B Shear (Figure 7-15). The D2 stretching lineation is the predominant tectonic fabric in the Main Deformation Domain of the Jubilee Shear, forming L>S to L>>S tectonites. The stretching lineation rakes between 150° to 180° within the foliation plane, its trend and plunge varying with the progressive rotation of the shear. In the deformation domains above and below the Jubilee Shear, more variability is observed in the development of the stretching lineation.

This Jubilee Shear System varies in width from 20 m to 150 m, with each individual deformation domain ranging in thickness from 2 m to 50 m. Each deformation domain can merge with one another and are overprinting and transposing earlier IRG and D1 mineralization. The intensity of deformation in the strain domains of the Jubilee Shear correlates strongly with the presence of compositional heterogeneity in the intrusive units of the Jubilee Stock deformed in the shear zone. Where the deformation domains of the shear system intersect heterogeneous compositional domains of the Jubilee Stock, widening of the strain domains with intensifying deformation, alteration and veining are typically observed. Conversely, in more homogeneous domains of the Jubilee Stock where intrusive contacts are widely spaced, the zones of strong deformation are narrower, and tectonic activity decreases in intensity. Mineralization is commonly partitioned in areas of deformed intrusive contacts particularly where tholeiitic gabbro dykes were present. These intrusive contacts are an important control on the high-grade zones of the Jubilee Shear Zone.

Mineralization and veining of the deformation domains of the Jubilee Shear System can be broken into three (3) distinct vein types: pre- to syn-D2, syn- to late-D2 and post-D2. The pre- to syn-D2 quartz veining includes the quartz veins and mineralization assemblages typical of the D1 and D2 deformation event and probable relicts of IRG mineralization. The continuity of those zones of mineralization, which are carrying most of the gold content of the Jubilee Shear System, is primarily controlled by the penetrative stretching lineation. Syn- to late-D2 quartz veins crosscut the pre- to syn-D2 stretched veins and are weakly to non-stretched in the Jubilee stretching lineation. These represent a minor contributor to the gold content of the shear system. Post-D2 veining are the

quartz-tourmaline veins of the Minto Deformation Period (Figure 7-17), locally abundant and containing a significant fraction of the gold content of certain zones of the shear system. The D3 veins are cross-cutting and folding the tectonites formed during the peak Jubilee Deformation, are generally concordant with the D2 foliation and form a cross-plunge in the shear zone perpendicular to the stretching lineation.

Within the Jubilee Shear, there are various alteration replacement assemblages, ranging from white mica (sericite), chlorite, potassium, silica, iron-carbonate, albite, and biotite (Figure 7-18). From logs and assay results, typically the highest gold grades are found within areas with the highest degree of silica and sericite alterations. The intensity of white mica (sericite) alteration is reliably quantified using short-wave infrared (SWIR) readings. Chlorite mixing with sericite is typical of the more mafic units in the Jubilee Shear. Relicts of an earlier biotite alteration, variably overprinted by chlorite, remain in less mineralized domains. Biotite alteration associated with mineralization also becomes more prevalent at depth in the Jubilee Shear System east of the Minto B Shear.

The southern segment of the Jubilee Shear System experienced an apparent displacement toward the SE along the NW-oriented and sub-vertical Parkhill Fault. Ma et al. (2024) observed that the actual displacement vector along the Parkhill Fault is principally vertical, with the north side moving upwards and the south side moving downwards. Sage (1993) correlates the Parkhill Fault with the southeastern extension of the northwest-striking Black Trout Lake Fault.

#### **7.4.5.2 Minto B Shear and Mineralization**

The Minto B Shear is located in the hanging wall of the Jubilee Shear and merges with the Main Deformation Domain of the Jubilee Shear at depth. It is characterized by a well-developed tectonic foliation averaging a strike of 035° and steeply dipping at 80° to the ESE. The shear has been traced over at least 1 km in strike and is the largest mineralized structure identified so far in the hanging wall of the Jubilee Shear. In certain areas of the structure, a reversal of the dip direction of the foliation to a WNW orientation can occur. The main stretching lineation in the Minto B Shear plunges 60-70° and trends 150-160°. In areas of lithological heterogeneity with many intrusive contacts, the high-strain zones of the Minto B Shear can be up to 20 m wide and are surrounded by weakly deformed zones, forming a shear package up to 40 m wide.

The formation of the Minto B Shear occurred throughout the orogenic cycle with the youngest observed deformation occurring late D3, resulting in the development of a foliation along which some of the potassic lamprophyre dykes are deformed. All four styles of mineralization characteristic of the Wawa Gold Corridor are present in the Minto B Shear (Figure 7-19). Alongside the Hornblende Shear located west of the Jubilee, the Minto B Shear is the structure of the highest abundance of IRG mineralization. These zones of preexisting IRG mineralization were a probable nucleation site for the shear zone. Zones of mineralization typical of the D1, D2 and D3 periods are also present in the Minto B Shear. All the zones of IRG, D1 and D2 mineralization stretched in the stretching lineation characteristic of the shear zone, whereas the zones of D3 mineralization are not affected by the stretching lineation.

Depending on the mineralization period during which they were formed, different alteration and mineralization assemblages are associated with the mineralization zones of the Minto B Shear. Silicification, quartz veining, iron carbonate alteration, and white mica alteration in intermediate/felsic intrusive facies, or chlorite in the mafic intrusive facies, are typically present in the zones of mineralization associated with D1 or D2 orogenic mineralization. Strong biotite alteration as veins and replacement fronts in a silica-sodic altered host are typical of the zones of IRG mineralization in the Minto B Shear.



Notes: A) Overlap between early-compression gold mineralization and extensional quartz-tourmaline veining in a high-grade zone of the Minto B Shear B) Syn-compression mineralization in the Minto B Shear comparable to mineralization observed in the Jubilee Shear System.

**Figure 7-19: Gold Mineralization Types of the Minto B Shear**

### 7.4.5.3 Minto Mine Shear Zone and Mineralization

The Minto Mine Shear Zone ranges from 0.5 m to 15 m in thickness and hosts a domain of higher-grade mineralization centered on a quartz-tourmaline vein. The Minto Mine Shear has been traced with sufficient confidence with diamond drilling and geological modelling over a strike length of 1.5 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. This offset is visible by the progressive bending of the underground Minto Mine workings as it approaches the Minto B Shear Zone. A shear interpreted as the western extension of the Minto Mine Shear is located west of the Minto B Shear Zone. To the South, the Minto Mine Shear Zone has been traced by diamond drilling to slightly beyond the footprints of the historical Parkhill Mine and remains open for further extension.

The tectonic foliation and lineation of the Minto Mine Shear Zone are not penetrative outside of the main sheared envelope. However, inside the main sheared envelope, these structures are well-developed, with a characteristic foliation striking NNW and dipping ~45° to the NE. The zones of higher-grade mineralization are characterized by a single shear-hosted quartz vein or stacks of closely spaced shear-hosted quartz veins with gold mineralization almost entirely partitioned into the quartz veins. The plunge of the domain of quartz veining in the shear zone

rakes approximately 60° to the right of an observer looking down dip of the shear envelope, perpendicular to the stretching lineation observed in the extensional shear zones. Where a mature quartz domain is developed in the Minto Mine shear, a strongly sheared mafic unit is present either in the hanging wall or the footwall of the high-grade vein.

## 8.0 DEPOSIT TYPES

Two distinct periods of gold mineralization have been identified in the Wawa Gold Project. The first period, interpreted to be contemporaneous with the emplacement of the Jubilee Stock based on crosscutting relationship and mineralogical indicators, can be classified as Intrusion-related gold (IRG) mineralization. The second period, contemporary with an orogenic cycle, can be classified as orogenic gold mineralization.

Most of the known zones of gold mineralization currently outlined on the Wawa Gold Project are related to orogenic processes. However, a significant component of IRG mineralization has also been documented in some of the mineralized structures of the Wawa Gold Project, such as the Hornblende and the Minto B shears. Additional exploration remains necessary to clearly establish the metallogenic significance of IRG mineralization on the total gold endowment of the Wawa Gold Project.

### 8.1 Intrusion-related gold deposits

In this report for the Wawa Gold Project, IRG mineralization is defined as magmatic-hydrothermal gold mineralization resulting from the exsolution of hydrothermal fluids from the intrusions forming the polyphase Jubilee Stock, which was emplaced at ca. 2,745 Ma.

The Côté Gold Deposit in the Swayze greenstone belt is the best-documented example of IRG mineralization in the Archean greenstone belts of the Canadian Shield (Katz, 2017), and it is used in this Item to define the attributes of IRG mineralization. This is primarily based on the work of Katz (2017) and is supplemented by Katz et al. (2020) and Oshust et al (2018).

IRG mineralization at the Côté Gold Deposit is related to the syn-volcanic emplacement of multiphase low-Al tonalite-trondhjemite-diorite (TTD) Chester intrusive complex. Goldfarb and Pitcairn (2023) indicate that IRG mineralization is predominantly associated with an intrusive complex emplaced at crustal depths, within 3 km and up to 5 km from the surface. This emplacement setting aligns with the interpretation of Sage (1993) that the Jubilee Stock is a shallowly emplaced intrusive complex intruding its own volcanic products deposited into a large caldera system.

Gold mineralization at the Côté Gold deposit occurs as breccias, disseminations and veins (sheeted and arrays) with four main alteration types associated with gold mineralization: amphibole-rich, biotite-rich, muscovite-rich, and albite-rich assemblages. A fifth type, epidote-rich alteration, is also documented in a specific area of the deposit.

Peak gold mineralization is associated with biotite-rich alteration, contemporaneous with the emplacement of the intrusive complex. Subsidiary gold mineralization is associated with amphibole-rich alteration and muscovite-rich alteration, which typically forms replacement haloes around the zones of gold-mineralized sheeted veins and stockworks related to the biotite-rich alteration type. Gold mineralization is consistently found in hydrothermal biotite breccias formed after diorite-cemented intrusive breccias and is coincident with Cu and less consistently with Mo mineralization.

The biotite-rich alteration type, associated with gold mineralization, includes diverse mineral assemblages. According to Katz (2017), biotite can be associated in variable proportions with quartz ± magnetite ± epidote ± allanite ± calcite ± ankerite ± pyrite ± chalcopyrite ± pyrrhotite ± apatite ± titanite ± bastnaesite ± fluorite ± sphalerite ± galena. In gold-mineralized zones, the primary accessory to significant gangue minerals associated with biotite are quartz and carbonates (Katz et al., 2020). The main sulfides are pyrite, pyrrhotite, chalcopyrite, molybdenite and occasionally arsenopyrite.

## 8.2 Greenstone-hosted quartz-carbonate vein deposits

Greenstone-hosted quartz-carbonate vein deposits, part of Precambrian Lode Gold deposits, are typically related to mesothermal mineralizing systems formed around the brittle-ductile transition in continental crust near 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 transport gold 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 between 23,000 and 25,000 tonnes of gold (Goldfarb et al., 2005).

Mineralization in these deposits is typically hosted in 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 synchronous with or late in the deformation period. Common features include stockworks, breccias, crack-seal veins, sigmoidal veins, and disseminations in deeper parts.

Typical hydrothermal alteration facies associated with this family of deposits, 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

These deposits typically contain 2% to 5% sulphides, 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. The typical alteration minerals are carbonates, muscovite, chlorite, K-feldspar, biotite, tourmaline, and albite. Intermittent pressure changes in the shear zones, and the resulting fluid un-mixing, 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 2 km to 10 km long, around 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 2023 Rock Sampling

Red Pine completed surface sampling field programs from 2014 to 2024 and collected a total of 1,223 grab samples. In 2024, Red Pine corrected its internal database assay result for 1 grab sample after probable manipulation of the original assay result for that grab sample was identified. The probable manipulation and the corrected result have no material impact on the Wawa Gold Project as the grab samples were not used in the MRE.

Brad Leonard, P.Geo., a consultant to Red Pine, completed the first rock sampling program during the fall of 2014; successive 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 is typically related to shear zones, the immediate vicinity of the shear zones and zones of weak deformation and moderate-strong hydrothermal alteration. Gold grades over 5.00 g/t are related to mineralization zones rich in quartz veins (shear and extensional vein networks), 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 93 g/t gold in an extensional vein of the Mickelson Vein Network. 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 and assay results for the grab samples.

**Table 9-1: Summary of Grab Samples Collected 2014 – 2023**

Parameters	Year	Total
Rock samples collected	2014	82
Rock samples collected	2015	283
Rock samples collected	2016	117
Rock samples collected	2017	13
Rock samples collected	2018	22
Rock samples collected	2019	157
Rock samples collected	2020	350
Rock samples collected	2021	64
Rock samples collected	2022	117
Rock samples collected	2023	18
<b>Total number of samples</b>		<b>1223</b>

**Table 9-2: Grab Sample Results  $\geq 5.00$  g/t Gold Between 2014-2023**

Sample	Area	Year	Easting	Northing	Au (g/t)
22201	Mariposa	2014	668795	5314282	11.00
22205	Darwin Grace	2014	668029	5313446	13.50
22313	Mackay Point	2014	668763	5318441	5.63
22314	Mackay Point	2014	668792	5318471	14.70
22327	Minto Mine area	2014	668191	5315789	17.00
22328	Minto Mine area	2014	668191	5315789	5.51
22334	Mickelson-Sunrise	2014	668943	5315761	9.25
22336	Mickelson-Sunrise	2014	668942	5315754	31.90
22338	Mickelson-Sunrise	2014	668932	5315689	27.00
22340	Mickelson-Sunrise	2014	668724	5315745	15.00
11465	Mickelson-Sunrise	2015	668966	5315680	24.90
11532	Mackay Point	2015	668756	5318442	16.60
11597	Minto Mine area	2015	668463	5315777	10.50
11619	Parkhill	2015	668764	5314700	54.10
11626	Parkhill	2015	668746	5314695	12.90
11663	Hornblende Shear	2015	668077	5317498	24.40
11701	Mickelson-Sunrise	2015	668944	5315749	36.30
11703	Mickelson-Sunrise	2015	668790	5315707	6.86
11725	Mickelson-Sunrise	2015	668723	5315749	6.90
11728	Mickelson-Sunrise	2015	668884	5315692	93.00
11743	Darwin Grace	2015	668025	5313447	18.40
1473023	Jubilee Shear	2015	667930	5316243	50.80
1473051	Cooper	2015	669518	5317996	34.10
1473059	Cooper	2015	669653	5317918	25.40
18482	Nyman Vein	2016	668469	5313565	37.90
1473351	Jubilee Shear	2016	668044	5316687	20.90
1473953	Jubilee Shear	2016	668050	5316691	12.40
1473955	Jubilee Shear	2016	668016	5316711	5.33
1473963	Jubilee Shear	2016	668289	5316731	43.10
1473977	Jubilee Shear	2016	668235	5316818	64.90
500409	Mackay Point	2019	668286	5318635	14.00
769288	Mickelson-Sunrise	2020	668204	5315791	5.23
774863	Vein Network	2020	668187	5313614	67.90
774913	South of Darwin-Grace	2020	668673	5314023	6.12
774914	South of Darwin-Grace	2020	668673	5314023	11.50
774968	South of Darwin-Grace	2020	668183	5313085	8.92

Sample	Area	Year	Easting	Northing	Au (g/t)
774996	South of Darwin-Grace	2020	668257	5312463	6.75
774997	South of Darwin-Grace	2020	668257	5312463	13.70
799518	South of Darwin-Grace	2020	668271	5312393	10.70
799519	South of Darwin-Grace	2020	668271	5312393	8.72
799522	South of Darwin-Grace	2020	668294	5312415	18.10
799523	South of Darwin-Grace	2020	668294	5312415	18.40
802566	War Eagle	2021	668188	5313614	19.80
802575	War Eagle	2021	668259	5312472	9.24
802576	War Eagle	2021	668255	5312478	9.40

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

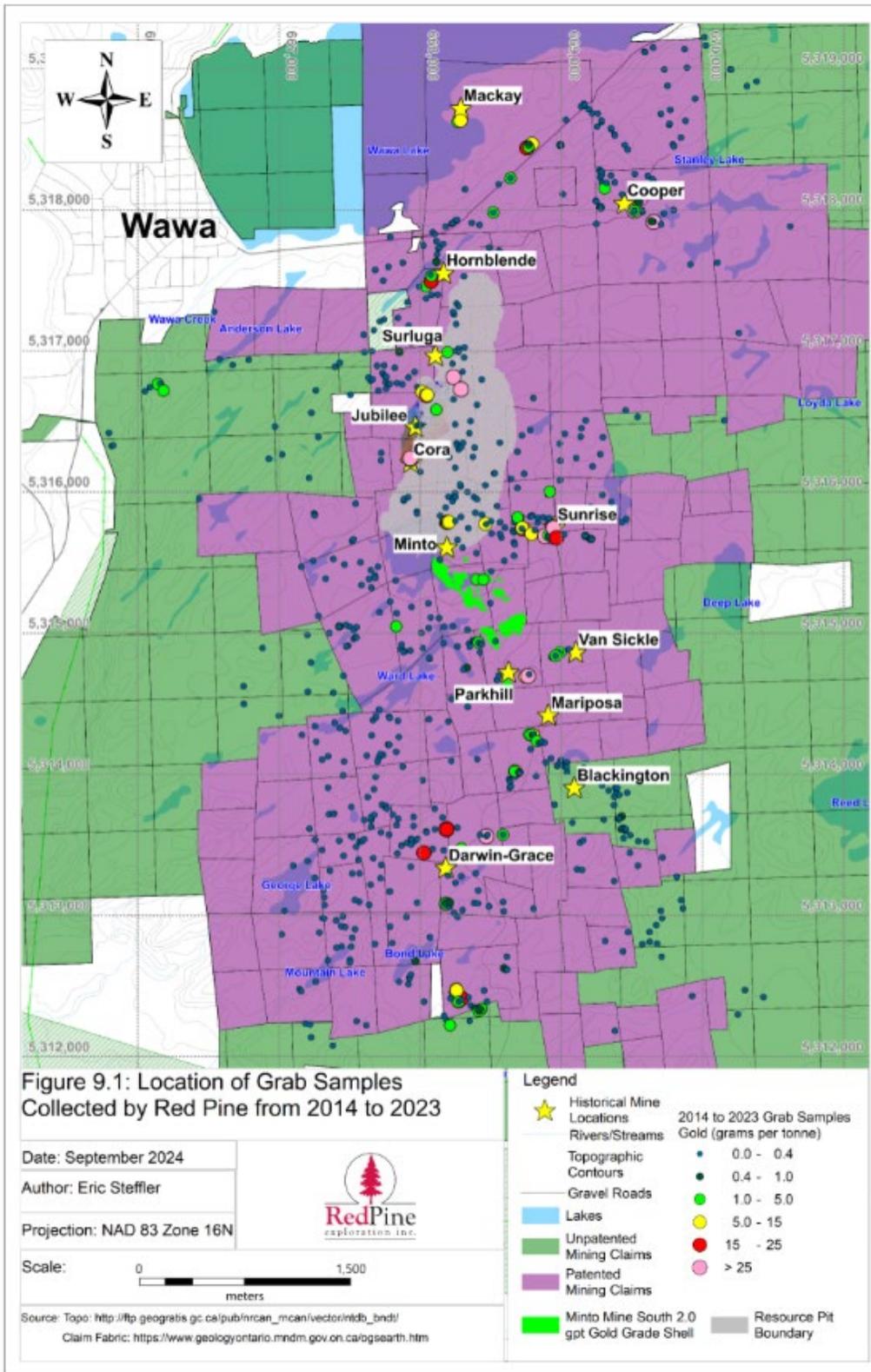


Figure 9-1: Location and Gold Grade of Grab Samples Collected by Red Pine from 2014 to 2023

## 9.2 Geophysics

This Item was modified and summarized from MacDonald et al. (2023). Additional details for each of the geophysical surveys completed on the Wawa Gold Project can be found in MacDonald et al. (2023).

### 9.2.1 Ground Magnetic, Spectral Induced Polarization and Resistivity Surveys Surveying (December 2014 to January 2015)

In December 2014 and January 2015, Red Pine's personnel conducted a ground magnetic survey of over the Jubilee Shear and the surrounding areas. In parallel, Red Pine contracted Clearview Geophysics Inc. (Clearview) to conduct a Spectral Induced Polarization and Resistivity ("Spectral IP/Res") survey. The primary objective of both surveys was to find a relation between the physical rock properties and the presence of gold mineralization that could be used to guide exploration.

The ground magnetic data was collected using a GEM Systems GSMP-35 Magnetometer at 1 Hz with a reported accuracy of  $\pm 0.05$  nT (GEM Systems Inc., 2013). A total of 69.7 line-kms was collected in GPS mode. This represents a total area surveyed of 2.23 km<sup>2</sup>. Most survey lines were collected in an east-west orientation at a spacing of 50 m. An additional four lines were surveyed over the cut line path of the IP lines. Additional lines oblique to the main east-west orientation were collected and included in the final database.

The Spectral IP/Res 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 (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, and Line 4 was surveyed parallel to the strike of the Jubilee Shear, approximately 430 m southeast of the top surface. Line 4 is considered the Base Line. The data was collected using a Scintrex IPR-12 Multi-channel IP-Receiver.

No direct relationships were identified between the tested geophysical properties of the rocks and the presence of gold mineralization, although ground magnetism was successful in mapping the trace of the Main Deformation Domain of the Jubilee Shear.

### 9.2.2 Ground Magnetic Surveying and Ground Horizontal Loop Electromagnetic Surveying (October 2015)

Red Pine contracted Clearview in October 2015 to complete a ground magnetic survey and a ground horizontal loop electromagnetic ("HLEM") survey in the Mickelson-Sunrise area of the Wawa Gold Project (Figure 9-2). The objective of the survey was to identify the geological structures associated with the Mickelson and Sunrise vein networks (Mihelcic, 2015). The parameters for each survey are listed in Table 9-3 and Table 9-4.

**Table 9-3: Parameters of the October 2015 Ground Magnetic Survey**

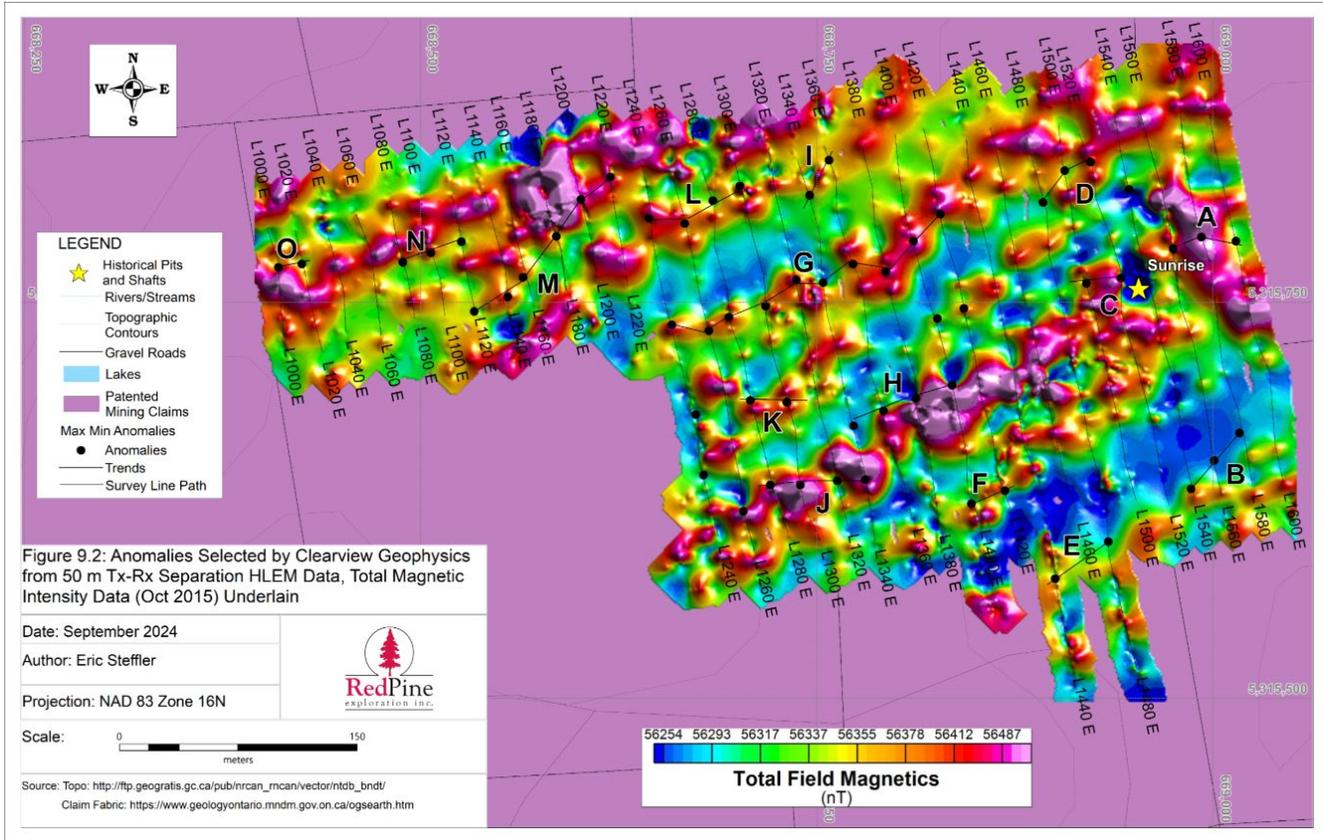
Survey Parameter	Details
Survey dates	October 18-19, 2015
Line-km	12.3 km
Line direction	170°
Line spacing	20m
Terrain clearance	2m
Magnetic sensor	Scintrex ENVI Cesium magnetometer
Magnetic sensor resolution	0.01 nT
Magnetic sensor sampling rate	10 Hz
Magnetic base station sensor	GSM-19 v7.0 Overhauser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

**Table 9-4: Parameters of the October 2015 Ground HLEM Survey**

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 km <sup>2</sup> , 100 m: 0.052 km <sup>2</sup>
Line direction	170°
Line spacing	20m
Station spacing - 50m cable separation	5m
Station spacing - 100m cable separation	12.5m
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) - 100m 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

The ground magnetic survey delineated several subtle ENE trending magnetic linear features. The highest quadrature response profiles detected by the electromagnetic survey 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).



**Figure 9-2: Anomalies Selected by Clearview Geophysics from 50 m Tx-Rx Separation HLEM Data (Total Magnetic Intensity Data [Oct 2015] Underlain**

### 9.2.3 Helicopter-borne Gradient Magnetic Survey

In February 2015, Red Pine contracted Scott Hogg & associates Ltd. (“Scott Hogg”) to conduct a helicopter-towed gradient magnetic survey on the Project (Munro, 2015). The survey parameters are presented in Table 9-5.

**Table 9-5: Helicopter-Borne Gradient Magnetic Survey Parameters**

Survey dates	February 12 - 17, 2015
Line-km	928 line-km
Area	37 km <sup>2</sup>
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

For detail parameters of the survey please refer to MacDonald et al. (2023).

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 9-3. 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).

### 9.2.4 mT Survey

Red Pine engaged Empulse Geophysics Ltd. to conduct a transient magnetotelluric (mT) survey of the Project using a SFERIC Transient AMT system. Data was collected at 137 stations at approximately 300 m spacing on 19 parallel lines enclosing an area of approximately 2.5 km E-W by 5.5 km N-S. 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. Further, between 1,500 m and 2,000 m, there is evidence of several deep “roots” or resistivity lows that exist 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).

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).

### **9.2.5 Inversion of 2011 VTEM Data**

In 2017, Red Pine contracted AARHUS GEO to invert the VTEM survey data flown by Augustine Ventures in 2011 to recover improved electrical resistivities by means of Cole-Cole modelling. SCI inversion was effective in delineating the chargeable areas, which resulted in strong IP effects in VTEM data (Figure 9-4).

AARHUSGEO concluded that there is no correlation between electrical conductivity and gold content. The Jubilee Shear has a strong conductive signature but for other targets like the Hornblende Shear, there is no conductive response (Kaminski et al, 2017).

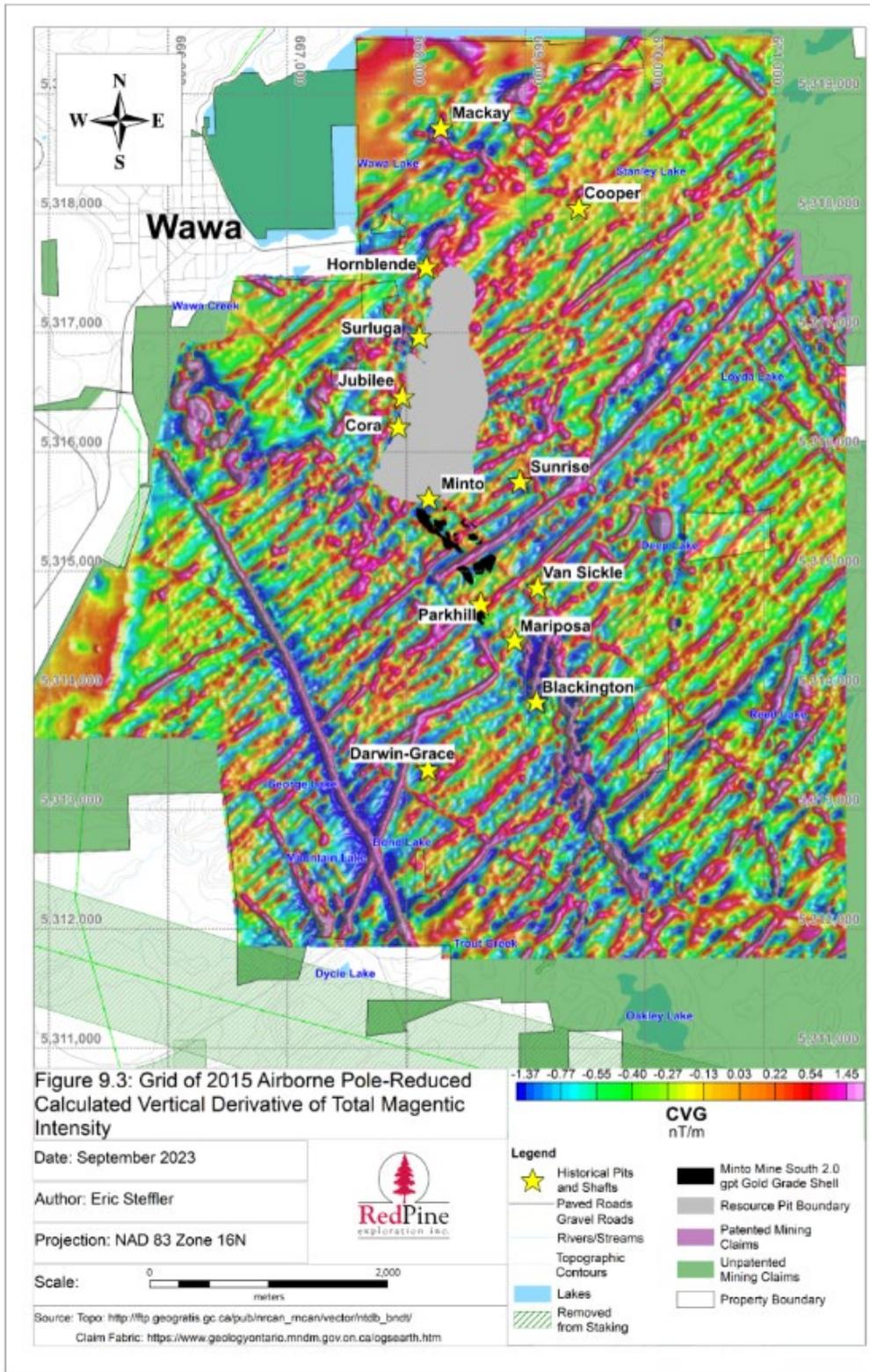


Figure 9-3: Grid of Pole-Reduced Calculated Vertical Derivative of Total Magnetic Intensity

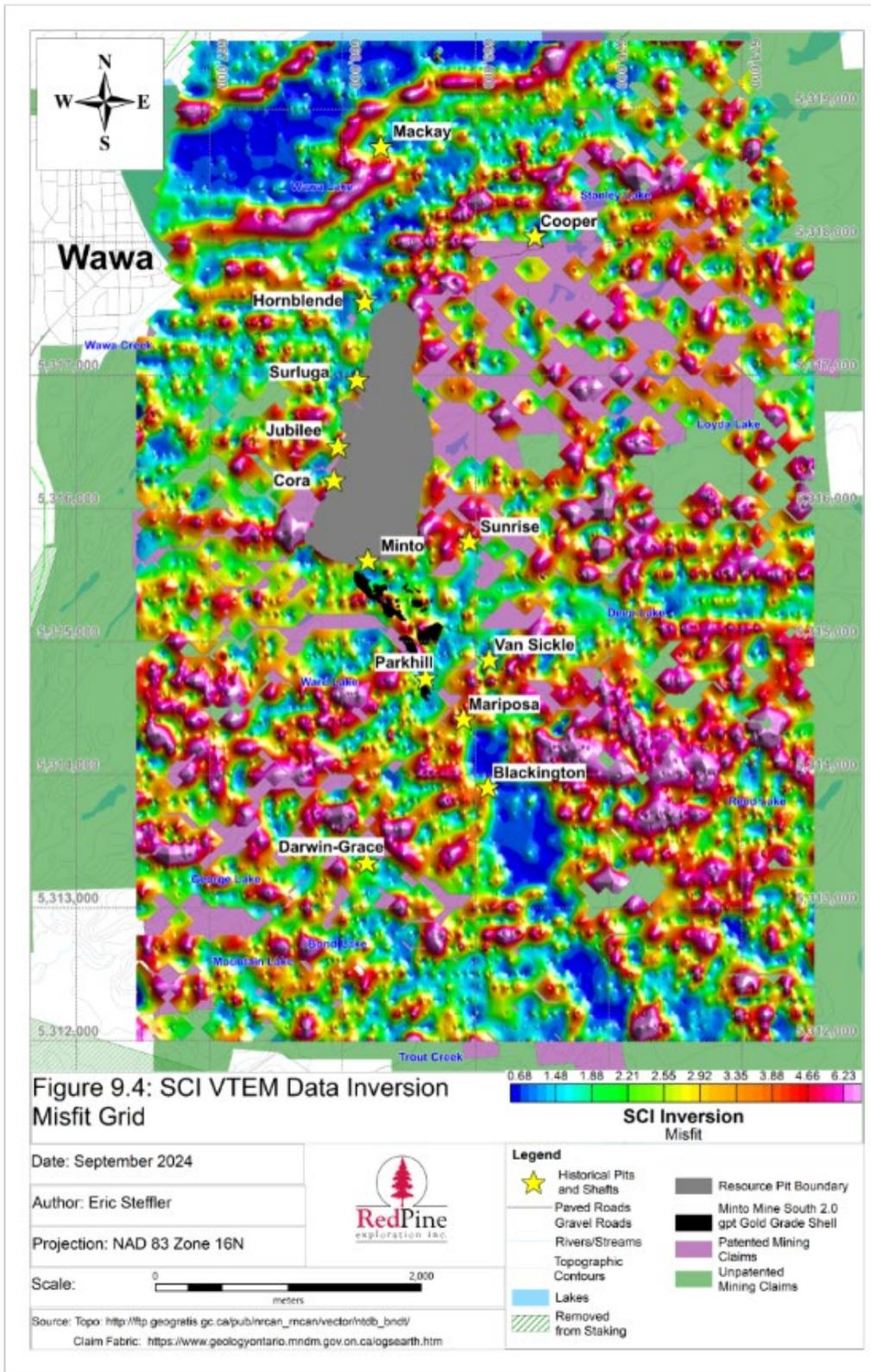


Figure 9-4: SCI VTEM Data Inversion Misfit Grid

### 9.2.6 Gravity Survey (2019)

Red Pine Exploration contracted Abitibi Geophysics to conduct a high-resolution ground gravity survey between March 19, and March 29, 2019. A Scintrex CG-6 and a CG-5u AutoGrav gravity meter were used. 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 along 5 lines 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. 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, bouguer and terrain corrections) using a bouguer density of  $2.75 \text{ g/cm}^3$  to reflect the diorite to tonalitic rocks that constitute the Jubilee Stock. The gravity method mapped the Jubilee Stock by negative residual responses and confirmed the SW extension of the core zone Jubilee Stock in the Darwin-Grace Mine area.

For the map showing survey results refer to MacDonald et al. (2023).

### 9.2.7 Cross-hole IP/Resistivity Survey (2020)

During the spring of 2020, Red Pine contracted Clearview to carry out a cross-hole IP/Resistivity survey over the Jubilee Shear to map trends and zones in 3D to potentially assist with planning follow-up exploration drilling. Table 9-6 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. 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.

**Table 9-6: Parameters of the Cross-hole IP/Resistivity Survey**

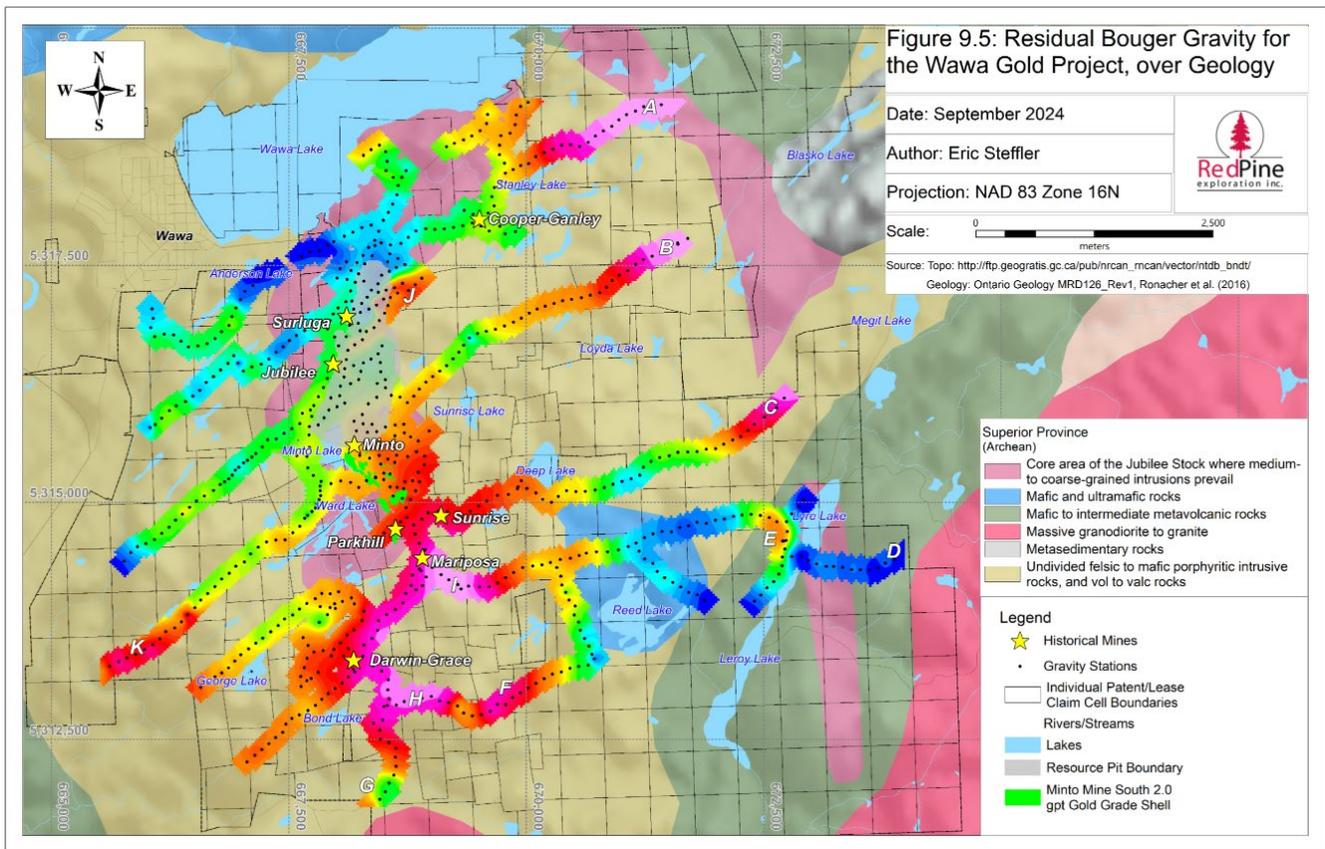
Survey Parameter	Details
Survey dates	May 18-26, 2020
System	Scintrex IPR12 Rx,
	Walcer 10 kW Tx
Reading Location - P1	Fixed several metres from anchor hole collar
Reading Location - P2	Down anchor hole
Reading Location - P3	Down paired-hole
Reading Time	Cyclical DC pulses of 2 seconds on positive followed 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)

For the map showing survey results, refer to MacDonald et al. (2023).

### 9.3 Gravity Survey (2023-2024)

Between November 2023 and January 2024, ClearView was retained by Red Pine to complete a Gravity Survey at the Wawa Gold Project. The gravity survey was carried out with the Scintrex CG-6 gravimeter (s/n 554) at 672 unique stations covering approximately 60 line-km coverage. The instrument was leveled on a short or long tripod as close to the planned station as possible in the most open and firm ground area for best GPS satellite coverage and gravimeter stability. At least two consecutive gravimeter readings were automatically acquired at each station. Each reading was stacked over 60 seconds. The RTK-GPS receiver was used to measure the height of the gravimeter above ground surface. The lower part of the RTK-GPS receiver staff was marked with a metric measuring tape for height -of-instrument measurements. These elevation data were used for the Free Air and Bouguer corrections. Earth Tide corrections were done internally with the gravimeter GPS synchronized time.

A total of 11 features of interest were identified by the gravity survey on the property (Figure 9-5). The survey successfully outlined the trace of the Jubilee Shear in the area considered for the resource estimation and identified additional structural breaks between gravity highs and lows that could be related to gold mineralization. The outline of the residual Bouguer Gravity is also providing insight into the surface area covered by the Jubilee Stock and the iron formations located at the center of the Wawa Gold Project. Infill of the gravity lines will be required to complete the picture indicated by this first-pass property-scale gravity survey.



**Figure 9-5: Residual Bouguer Gravity for the Wawa Gold Project**

## 9.4 Channel Sampling 2015 to 2021

During the summers of 2015 to 2021, Red Pine personnel carried out mechanized stripping and channel sampling of exposed outcrops to define the continuity and distribution of gold mineralization in the exposed geological structures. No channel samples were taken between 2022 and 2024.

In 2024, Red Pine corrected in its internal database the assay results for 18 individual channel samples after probable manipulations of the original assay results for those channel samples were identified. The probable manipulations and the corrected results have no material impact on the Wawa Gold Project.

A total of 1,570 channel samples totaling 1,543.75 m were collected over 519 channels (Figure 9-6). In addition, between 2016 and 2021, a total of 40 standards consisting of OREAS certified reference material (standards) and 32 Blanks were sent for analysis with the channel samples. The surveyed location, length, azimuth and dip of each channel can be found in MacDonald et al. (2023). The main objective of the trenching program was to test for the presence of gold mineralization and to characterize the distribution and continuity of mineralization in some of the geological structures of the Wawa Gold Project. Mechanized stripping also provided high-quality exposures to describe the host rocks of the mineralized structures. The mineralization structures tested with channel sampling include: The Root Vein, Grace Shear, Cooper and Ganley shears, Jubilee Shear and its extension south of the Parkhill Fault, Hornblende Shear, Algoma Shear, Parkhill #4 Shear, Minto B Shear, Sunrise-Mickelson Vein Networks, Parkhill Shear, Mariposa Vein, Villeneuve Vein and prospective structures identified from traverses, mapping and geophysical surveys.

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. The 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 samples with grades above 2.00 Au g/t are listed in Table 9-7. Figure 9-6 shows the locations and gold grade distribution in all areas where stripping and channel sampling was completed.

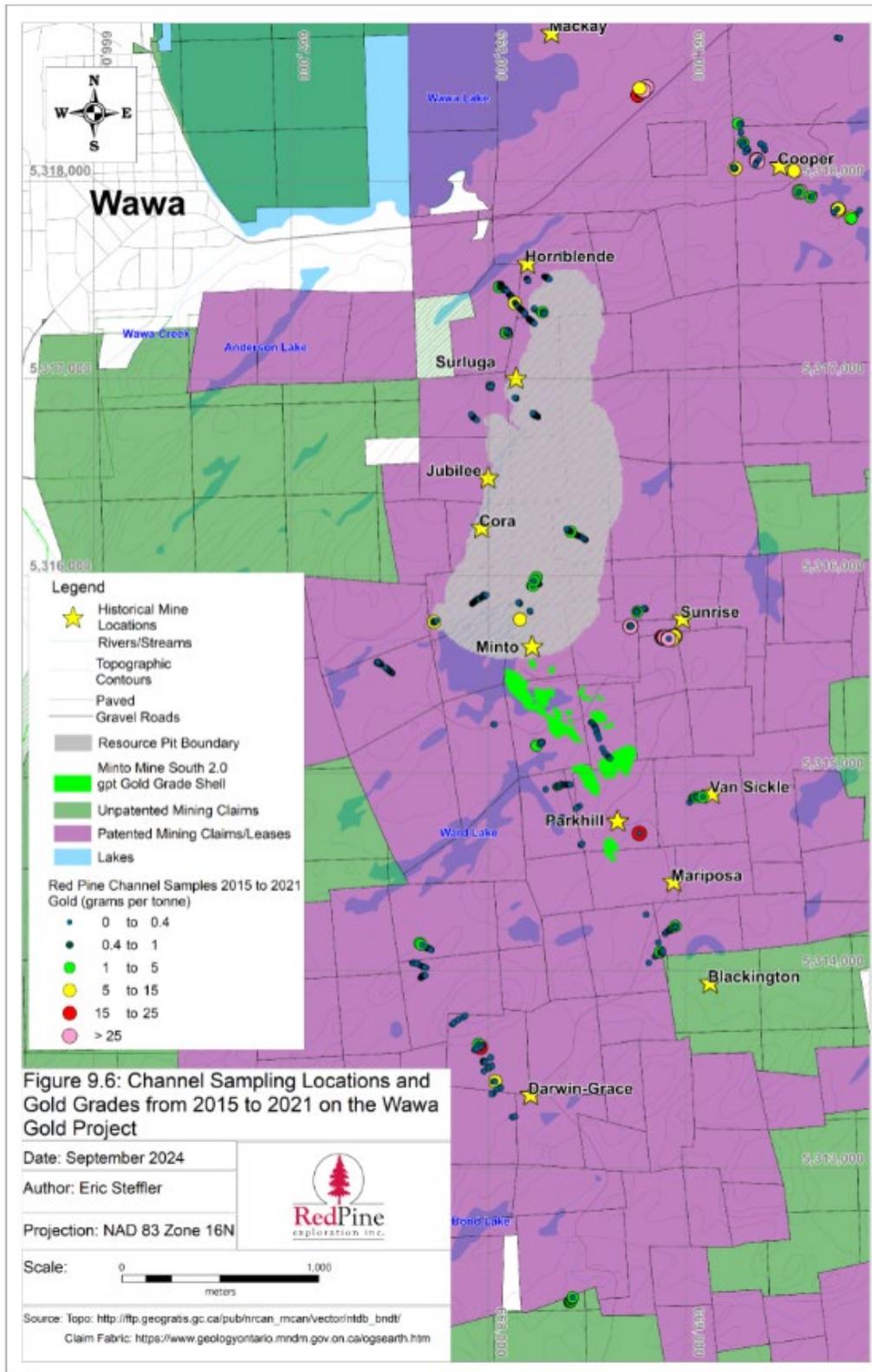


Figure 9-6: Channel Sampling Locations and Gold Grades from 2015 to 2021 on the Wawa Gold Project

**Table 9-7: Assay Results  $\geq 2.00$  g/t gold from Channel Samples Collected during the 2014 to 2021 Programs**

Trench ID	Year	From (m)	To (m)	Length (m)*	Au (g/t)	Easting	Northing	Elevation
15WG-AC-001	2015	0	1	1	2.25	668803	5318479	297
15WG-AC-001	2015	1	2	1	6.06	668804	5318478	297
15WG-AC-001A	2015	1.5	2.5	1	7.10	668801	5318478	297
15WG-AC-001A	2015	2.5	2.88	0.38	53.70	668801	5318478	297
15WG-AC-004	2015	0	0.75	0.75	2.40	668766	5318449	300
15WG-AC-008	2015	4	5	1	3.17	668161	5315781	348
15WG-AC-008	2015	5	6	1	5.16	668160	5315782	348
15WG-AC-012	2015	10	11	1	3.04	668243	5315995	352
15WG-AC-025	2015	2	2.5	0.5	18.40	668765	5314698	339
15WG-AC-026	2015	1	1.1	0.1	88.10	668943	5315697	352
15WG-AC-026	2015	1.1	1.5	0.4	8.77	668943	5315697	352
15WG-AC-031	2015	1.95	2.25	0.3	4.02	668904	5315689	353
15WG-AC-035	2015	0	0.7	0.7	69.50	668913	5315683	352
15WG-AC-035	2015	0.7	1.5	0.8	20.60	668913	5315684	352
15WG-AC-035	2015	1.5	2.2	0.7	17.10	668913	5315684	352
15WG-AC-123	2015	3	4	1	2.10	668754	5315820	367
15WG-AC-125A	2015	0.5	1.5	1	4.37	668721	5315746	371
15WG-AC-125A	2015	1.5	2.25	0.75	54.20	668720	5315747	371
15WG-JFM-017	2015	0.17	0.51	0.34	23.70	668758	5318439	301
Mickelson1	2015	2.1	3.45	1.35	8.85	668931	5315677	350
Mickelson3	2015	0	0.85	0.85	8.18	668885	5315690	354
Mickelson5	2015	0	0.5	0.5	5.57	668883	5315690	354
Mickelson5	2015	0.9	1.6	0.7	38.20	668883	5315689	354
Mickelson6	2015	0.55	1	0.45	42.80	668882	5315690	355
TR-16-1M	2016	0	1	1	2.77	668134	5317386	341
TR-16-1N	2016	0	1	1	6.92	668134	5317384	342
TR-16-2A	2016	5	6	1	2.83	668054	5317465	334
TR-16-3B	2016	0	1	1	6.74	667724	5315768	307
RV-1	2017	0	1	1	4.37	668775	5318461	302
RV-1	2017	2	3	1	2.38	668773	5318462	302
RV-1	2017	4	5.6	1.6	2.76	668772	5318464	302
RV-2	2017	1	2	1	2.38	668776	5318462	302
RV-2	2017	3	4	1	5.97	668775	5318464	302

Trench ID	Year	From (m)	To (m)	Length (m)*	Au (g/t)	Easting	Northing	Elevation
RV-2	2017	4	5	1	2.22	668774	5318465	302
RV-2	2017	5	6	1	4.48	668773	5318465	302
RV-2	2017	6	7	1	6.82	668772	5318466	302
RV-3	2017	5	6	1	4.35	668776	5318469	302
RV-3	2017	6	7	1	9.75	668775	5318469	302
RV-3	2017	9	10	1	2.14	668773	5318472	302
RV-4	2017	0	1	1	7.90	668781	5318467	303
RV-4	2017	4	5	1	3.79	668779	5318470	303
RV-5	2017	0	1	1	2.03	668781	5318458	299
RV-5	2017	1	2	1	20.30	668780	5318458	299
RV-6	2017	3	4	1	12.80	668782	5318462	300
RV-6	2017	4	5	1	8.75	668782	5318462	300
RV-7	2017	0	1	1	88.50	668785	5318461	300
RV-7	2017	2	3	1	3.48	668784	5318462	300
RV-7	2017	3	4	1	10.20	668783	5318463	300
RV-8	2017	0	1	1	79.70	668785	5318462	300
RV-9	2017	1	2	1	3.36	668770	5318469	305
RV-9	2017	6	7	1	5.66	668766	5318473	305
CG-2	2018	1.6	2.02	0.42	9.58	669578	5317949	362
CG-3	2018	0	0.31	0.31	27.00	669578	5317949	362
CG-5	2018	0.78	1.23	0.45	3.19	669575	5317949	362
CG-5	2018	1.23	2.23	1	3.67	669575	5317948	362
CG-1-1	2019	1.5	2	0.5	26.90	669359	5318111	379
CG-1-2	2019	1.4	1.9	0.5	42.80	669364	5318105	379
CG-1-2	2019	1.9	2.8	0.9	28.50	669364	5318104	379
Cooper-10-2	2019	1.49	2.99	1.5	3.57	669266	5318294	362
Cooper-11-2	2019	1.5	1.9	0.4	12.80	669251	5318067	366
Cooper-2-4	2019	3.93	4.54	0.61	2.51	669634	5317922	362
Cooper-3-1	2019	1.8	2.85	1.05	2.58	669771	5317857	359
Cooper-3-1	2019	2.85	3.9	1.05	34.10	669772	5317858	359
Cooper-3-1	2019	5.7	7.2	1.5	8.01	669774	5317861	359
Cooper-5b-2	2019	0	1.4	1.4	14.10	669838	5317817	357
Cooper-5b-3	2019	0	1.4	1.4	3.23	669841	5317814	358
Ganley-1-2	2019	1.8	2.9	1.1	6.29	669549	5318054	370
JSZ_South3B-5	2019	1	1.85	0.85	2.56	667650	5314141	344
Trench-2-1	2019	1.5	2.55	1.05	7.56	668035	5313441	345

Trench ID	Year	From (m)	To (m)	Length (m)*	Au (g/t)	Easting	Northing	Elevation
Trench-5A-4	2019	2.1	3.1	1	3.75	667948	5313629	353
Trench-5A-5	2019	0	0.9	0.9	2.01	667949	5313629	352
Trench-5B-1	2019	0	0.6	0.6	6.86	667959	5313614	347
Mickelson-1C	2020	0	1.05	1.05	10.20	668887	5315695	353
Mickelson-1D	2020	0	0.8	0.8	6.84	668885	5315693	353
Mickelson-1E	2020	0	0.75	0.75	10.20	668896	5315690	353
Mickelson-1G	2020	0	0.45	0.45	2.97	668902	5315689	352
Mickelson-1J	2020	0	1.1	1.1	7.58	668910	5315683	351
Mickelson-1K	2020	0	1.15	1.15	19.30	668912	5315684	351
Mickelson-1L	2020	0	0.8	0.8	7.95	668914	5315683	351
Minto-04M	2020	0	1.4	1.4	4.04	668947	5314226	360
WE-21-001-1	2021	2	3	1	2.46	668426	5312345	292
WE-21-001-2	2021	1	2	1	3.17	668425	5312342	289
WE-21-001-6	2021	2	3	1	4.74	668418	5312327	294
WE-21-001-6	2021	3	4	1	2.13	668419	5312327	294
WE-21-001-7	2021	2	3	1	2.35	668414	5312323	292
WE-21-001-7	2021	4	4.7	0.7	2.18	668415	5312322	292
WE-21-001-8	2021	4	5	1	4.64	668411	5312322	289
WE-21-001-8	2021	5	5.7	0.7	3.44	668411	5312321	289

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

## 9.5 Historical Holes Sampling Program (2016, 2018)

An examination of the historical sampling pattern indicated that, in the mineralized structures of the project, many intervals of potentially mineralized rocks were left un-sampled by the previous operators. These unsampled intervals are assigned gold grades close to 0 g/t in the resource estimation. A cursory analysis suggested that they have a non-negligible impact on resource estimation in the Main Deformation Domain of the Jubilee Shear System.

To mitigate the impacts of the selective sampling patterns, in two separate phases completed in 2016 and 2018, Red Pine sampled intervals of historical drill core that were left unsampled by the previous operators on the project from 40,481 m of recovered historical core. Throughout the sampling programs, Red Pine took 10,627 assays from 21,416 m of previously un-sampled drill core distributed in 525 drill holes (Table 9-8). Each sample consisted of the entirety (full core) of the un-sampled interval. In total, 130 surface (holes starting with "S") and 395 underground drill holes (holes starting with "U") were processed (Figure 9-7). The location, azimuth and dip of the historical drill holes that were sampled can be found in MacDonald et al. (2023).

The average length of historical core samples is 2.03 m, the median length is 2.11 m and the minimum and maximum length are respectively 0.06 m and 4.88 m. The best gold grade found in previously unsampled drill core is 109.00 g/t gold over 0.86 m (Table 9-9). In total, 14 historical core samples had gold grade greater to or equal to 5.00 g/t gold, 34 had gold grades between 2.00 and 5.00 g/t gold, 72 had gold grades between 1.00 and

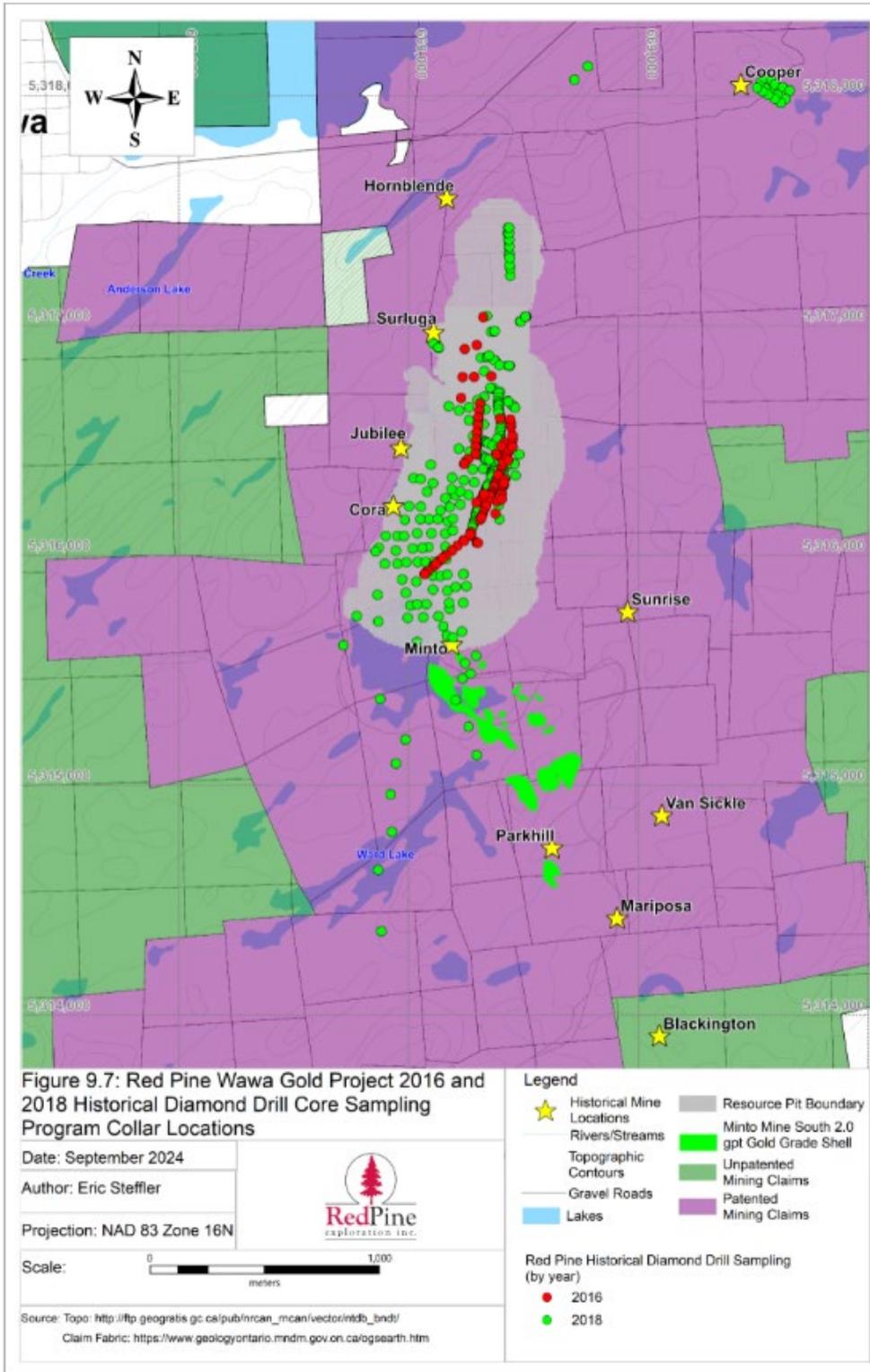
2.00 g/t gold, 178 had gold grades between 0.40 and 1.00 g/t gold and 623 had gold grades between 0.10 and 0.40 g/t gold.

**Table 9-8: 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 standards	705
Total Number of Blanks	466

Table 9-9 highlights unsampled drill core intersections that contain gold grade greater than or equal to 2.00 g/t Au. These results show that gold mineralization is present in some of the intervals left unsampled by the previous operators. Figure 9-8 shows the location of the intersections and gold grade. Included with the assaying, 705 standards and 466 Blanks were inserted with the historical core samples to ensure quality control.

During the sampling program, the core was visually inspected and logged. The information was collected into a Microsoft Excel™ spreadsheet. Alteration and rock type identification were supported with magnetic susceptibility (“MagSus”) measurements using a KT-10 magnetometer, portable X-ray Fluorescence (XRF) readings and Short Wave Infrared Reflectance data collection. Elements like colour, texture, structure, grain size, pervasive alteration, and contact locations were recorded and used to create a lithological description of the core from intervals of the drill hole that could be recovered. SWIR and MagSus measurements were however not collected during the 2018 historical holes sampling program.



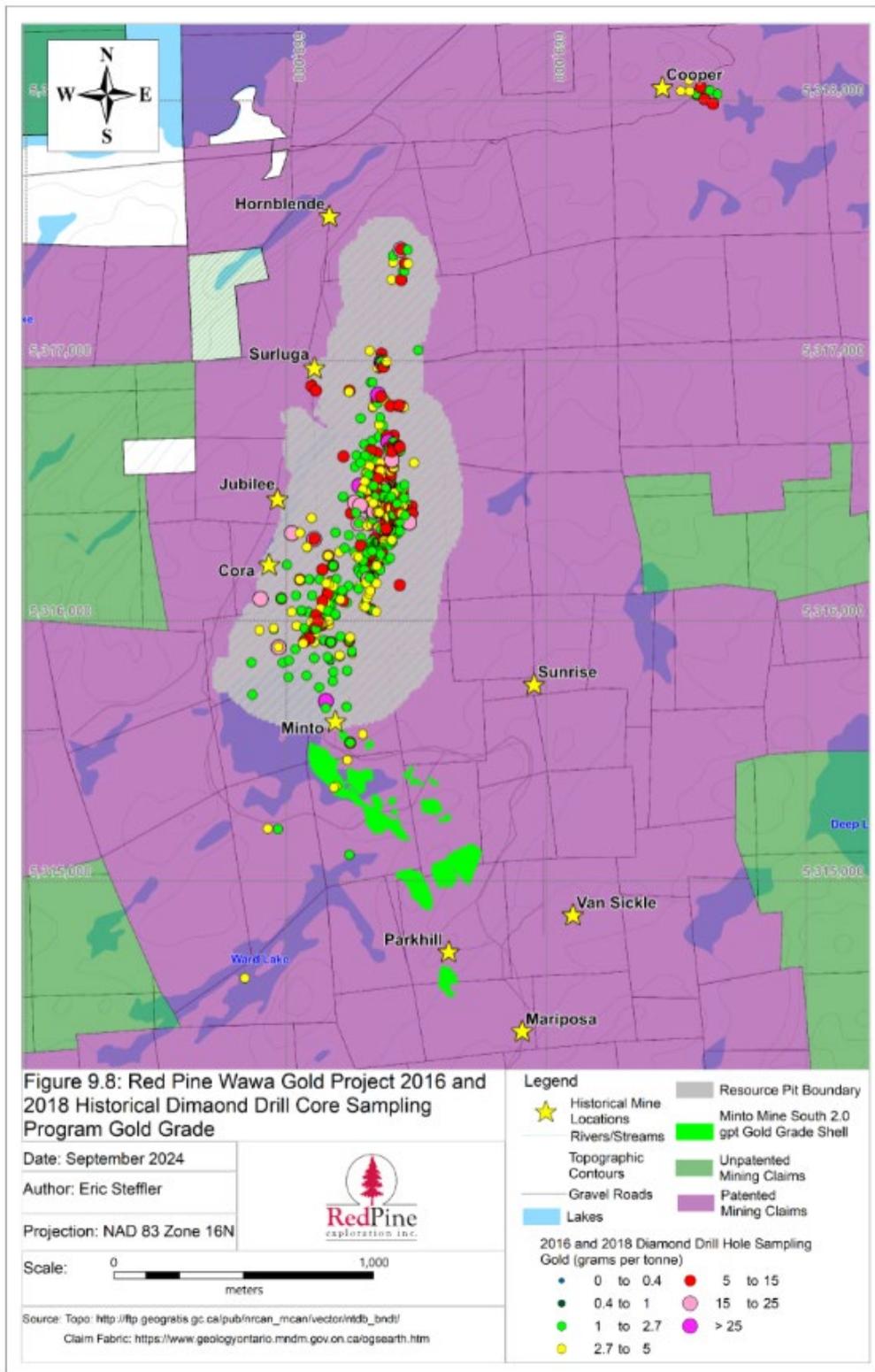
**Figure 9-7: Red Pine Wawa Gold Project 2016 and 2018 Historical Diamond Drill Core Sampling Program Collar Locations**

**Table 9-9: Assay Results  $\geq 2.00$  g/t gold from Intervals Left Un-sampled in Historical Drill Holes by Previous Operators**

Hole	From (m)	To (m)	Sample (#)	Length (m)*	Gold (g/t)
S174W2	174.65	175.56	705211	0.91	9.36
S176	294.13	295.66	919797	1.53	5.19
S212	67.67	69.86	712451	2.19	7.95
S233	9.14	11.28	707602	2.14	3.41
S244	145.88	147.22	15343	1.34	2.60
S247	88.7	90.22	14854	1.52	13.10
S247	90.22	91.74	14855	1.52	3.23
S247	91.74	93.27	14856	1.53	3.11
S247	128.32	129.08	14874	0.76	4.49
S247	129.08	129.69	14876	0.61	2.42
S280	182.58	183.18	706388	0.6	14.50
S280	260.76	261.52	706393	0.76	3.51
S287	132.59	134.84	712713	2.25	22.80
S302	39.44	40.54	708124	1.1	3.40
S307	249.54	252.68	919410	3.14	3.09
S309	74.07	74.86	14972	0.79	6.19
S311	267.31	270.36	708204	3.05	5.52
U0011AL6	22.56	23.17	705861	0.61	6.47
U0443L3	33.83	36.27	706423	2.44	2.34
U0447L3	30.18	31.24	705843	1.06	3.76
U0454L5	11.58	12.19	705799	0.61	5.24
U0492L5	12.19	12.8	705463	0.61	2.07
U0495L5	17.22	18.59	705767	1.37	3.70
U0511L5	7.92	8.53	705491	0.61	4.79
U0532L5	16.76	19.2	705426	2.44	2.87
U0552L3	30.78	31.85	706547	1.07	5.09
U0553L3	30.33	30.78	706447	0.45	2.31
U0588L3	22.56	25.42	706609	2.86	4.53
U0589L3	17.53	19.81	14526	2.28	8.72
U0590L3	24.87	25.73	14536	0.86	109.00
U0645L5	14.94	17.53	705947	2.59	2.13
U0678L5	31.7	32.31	13758	0.61	3.45
U0683L5	11.58	14.63	705987	3.05	2.61
U0715L5	35.97	37.49	13256	1.52	4.96
U0728L5	23.77	26.52	706871	2.75	8.78
U0984L6	3.54	4.63	705858	1.09	4.24
U0995L6	13.78	14.94	705864	1.16	4.10

Hole	From (m)	To (m)	Sample (#)	Length (m)*	Gold (g/t)
U1403L7	11.58	13.11	13212	1.53	4.05
U1434L7	0	0.61	13203	0.61	3.69
U1508L5	49.83	51.51	13548	1.68	2.22
U1650L5	39.62	40.39	13373	0.77	2.08
U1659L5	38.07	38.71	705612	0.64	3.98
U1660L5	27.89	30.18	705084	2.29	3.31
U1673L5	8.87	10.09	18774	1.22	4.37
U1686L4	35.81	37.19	19197	1.38	4.81
U1692L4	8.53	10.91	18719	2.38	2.63
U1694L4	1.83	3.69	19267	1.86	2.14
U1694L4	5.36	7.32	19269	1.96	4.94

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



**Figure 9-8: Red Pine Wawa Gold Project 2016 and 2018 Historical Diamond Drill Core Sampling Program Gold Grade**

## 10.0 DRILLING

### 10.1 Summary

Between 2014 and 2024, Red Pine drilled a total of 547 diamond drill holes for 163,163.82 m of drill core (Figure 10-1). Table 10-1 indicates all the mineralized structures that were drill tested during that period. In each of the drill tested mineralized structures, the objectives of the drilling programs were to confirm the presence of historically reported gold mineralization, test for the presence of gold mineralization and extend the zones of gold mineralization.

**Table 10-1: Summary of Exploration, Resource Definition and Confirmation Drilling in the Mineralized Structures of the Wawa Gold Project**

Area/Target	Number of Holes	Metres Drilled
Cooper	11	1,064.00
Core Shack & Jubilee Vein Networks	2	735.00
Darwin - Grace	37	6358.80
EM Target	1	153.00
Hornblende & IRGS	22	8,134.00
Hornblende & IRGS / Jubilee	13	4,861.00
IRGS South Parkhill Fault	3	396.00
Jubilee	185	67,876.85
Jubilee / HW	43	13,537.00
Jubilee South of Parkhill Fault	23	7,190.57
Mickelson - Sunrise	9	753.80
Minto B	3	567.00
Minto B / Jubilee	53	21,365.48
Minto Mine	112	24,560.77
Minto Mine / Jubilee	4	1,273.00
Nyman	9	1,004.57
Parkhill # 4	3	891.00
Parkhill Mine	6	1,325.00
Root	3	466.18
Sadowski	5	651.00
<b>Total</b>	<b>547</b>	<b>163,164</b>

### 10.2 Drilling programs and drilling assay database

The Items below summarize the objectives and results for each of the drilling programs conducted on the Wawa Gold Project. Table 10-2 summarizes the mineralized structures tested each year and indicates the drilling contractors that were active on the Wawa Gold Project during each program. A cross-section representative of the Jubilee Shear System is available at Figure 10-2 and a cross-section representative of the Minto Shear System at Figure 10-3.

The details of the data verification completed by the QP are presented in Item 12.0. The assay results and the interpretations presented in this Item are based on the gold assay database independently verified by the QP, and constructed by Red Pine from the original gold assay certificates from 2014-2024 obtained directly Actlabs and SGS in May and June 2024.

**Table 10-2: Summary of the Targeted Areas Dring the 2014 to 2024 Wawa Gold Project Drilling Programs**

Year	Primary / Secondary Target	Number of Holes	Metres Drilled	Drilling Company (Core size)
2014	Jubilee	6	1,573.00	Norex Drilling (NQ)
2015	Jubilee	20	4,021.00	Rouillier Drilling (NQ)
	Hornblende & IRG	4	1,387.00	Rouillier Drilling (HQ)
	Hornblende & IRG / Jubilee	1	310.00	
	Mickelson - Sunrise	8	554.80	
2016	Hornblende & IRG / Jubilee	4	1,166.00	Rouillier Drilling (HQ)
	Jubilee	2	556.00	
2017	Darwin-Grace	15	1,641.00	Rouillier Drilling (HQ)
	Hornblende & IRG / Jubilee	6	2,559.00	
	IRG south of Parkhill Fault	3	396.00	
	Jubilee	38	10,430.50	
	Minto Mine	66	12,542.77	
	Minto Mine / Jubilee	4	1,273.00	
	Parkhill Mine	5	823.00	
	Mickelson - Sunrise	1	199.00	
2018	Hornblende & IRG	2	592.00	
	Hornblende & IRG / Jubilee	1	472.00	
	Jubilee	37	10,823.00	
	Minto Mine	43	11,068.00	
	Parkhill Mine	1	502.00	
	Parkhill # 4	3	891.00	
	Root Vein Network	3	466.18	
2019	Cooper	11	1,064.00	Rouillier Drilling (HQ)
	Hornblende & IRG	2	779.00	
	Jubilee	7	2,506.00	
2020	Jubilee	10	5,322.18	Rouillier Drilling (HQ)
2021	Hornblende & IRG	3	1,063.00	All Star Mining & Rouillier Drilling (HQ)
	Jubilee	7	2,588.00	
	Jubilee / Minto Mine	15	7,267.18	All Star Mining (HQ)
	Nyman	2	173.87	Forage Gyllis (HQ)

Year	Primary / Secondary Target	Number of Holes	Metres Drilled	Drilling Company (Core size)
2022	Hornblende & IRG	1	398.00	Forage Fusion (HQ)
	Minto Mine	1	260.00	
	Jubilee	22	9,430.55	
	Jubilee / Minto Mine	15	9,468.34	Forage Fusion & Rouillier Drilling (HQ)
	Darwin-Grace	22	4717.80	Forage Gyllis (HQ)
	EM Target	1	153.00	
	Jubilee South of Parkhill Fault	23	7,190.57	
	Minto B	3	567.00	
	Minto B / Jubilee	14	5,225.47	
	Nyman	7	830.70	
2023	Core Shack & Jubilee Vein Networks	2	735.00	Forage Gyllis (HQ)
	Hornblende & IRG	10	3,915.00	
	Jubilee	7	4,245	
	Jubilee / HW	5	1,821	
	Minto B / Jubilee	38	15,747.01	
	Minto Mine	2	690.00	
	Sadowski	5	651.00	
2024	Jubilee / HW	38	11,715.80	Forage Gyllis (HQ)
	Minto B / Jubilee	1	393.00	
<b>Total</b>		<b>547</b>	<b>163,164</b>	

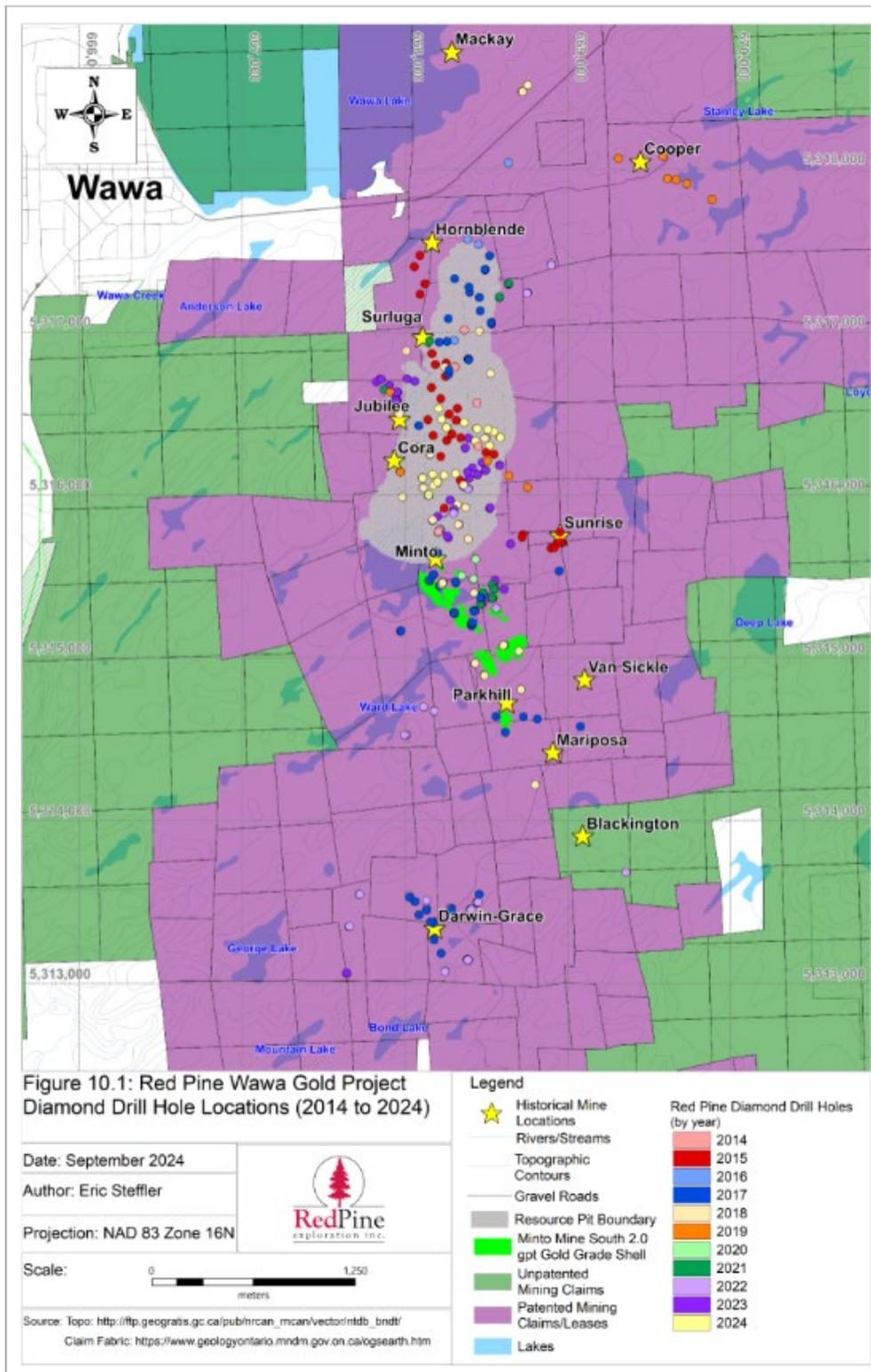


Figure 10-1: Diamond Drill Hole Collar Location 2014 to 2024

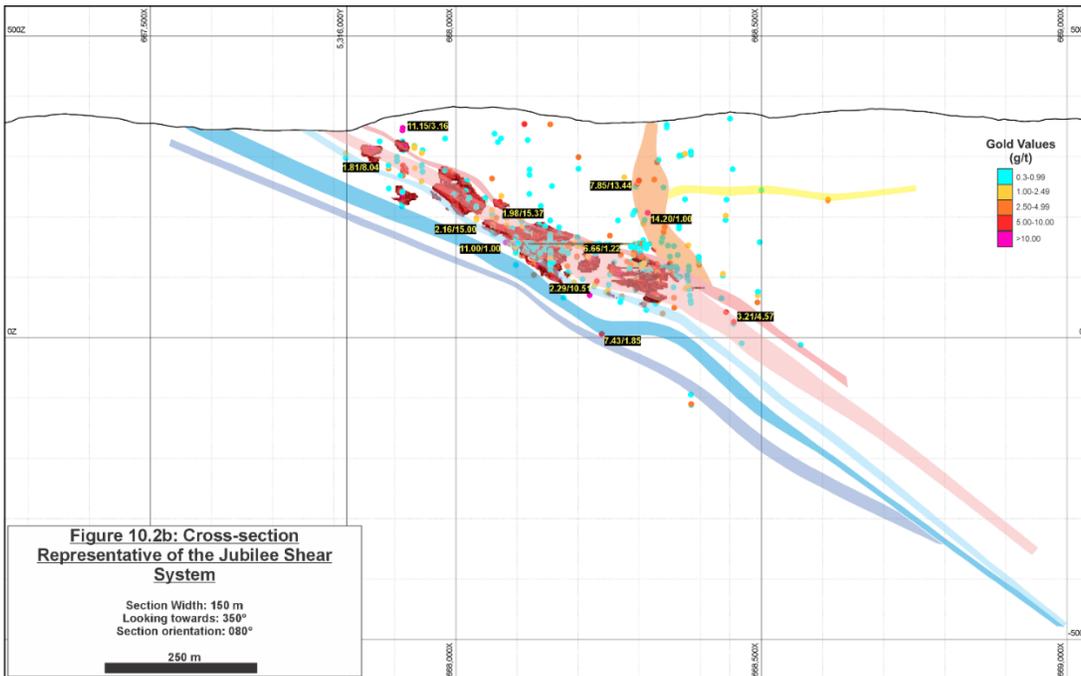
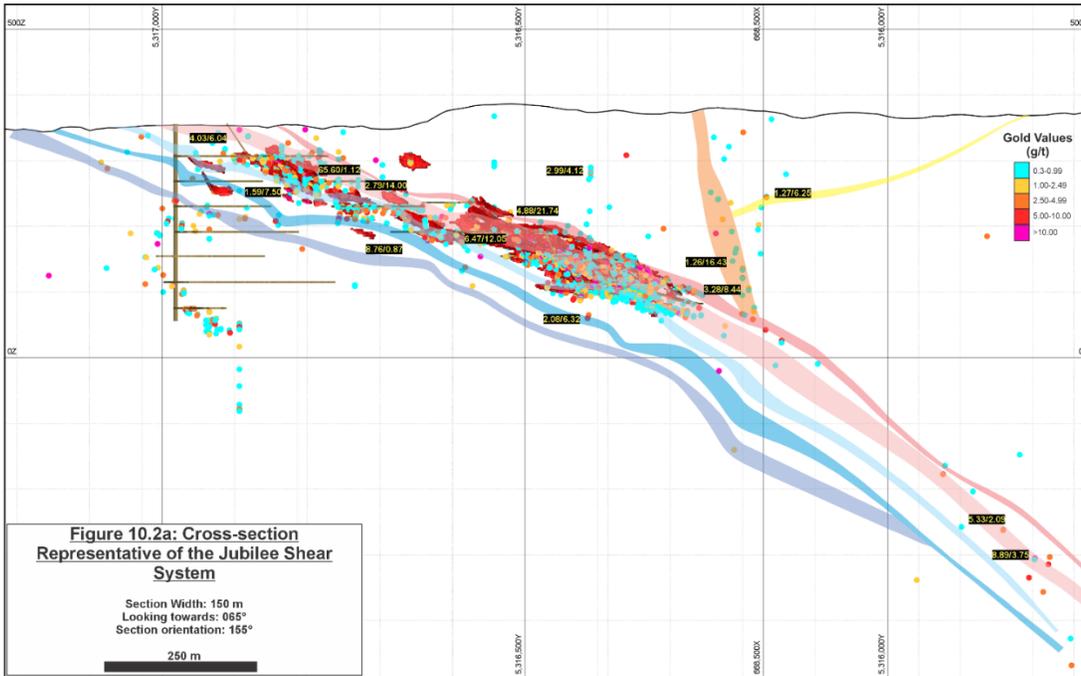
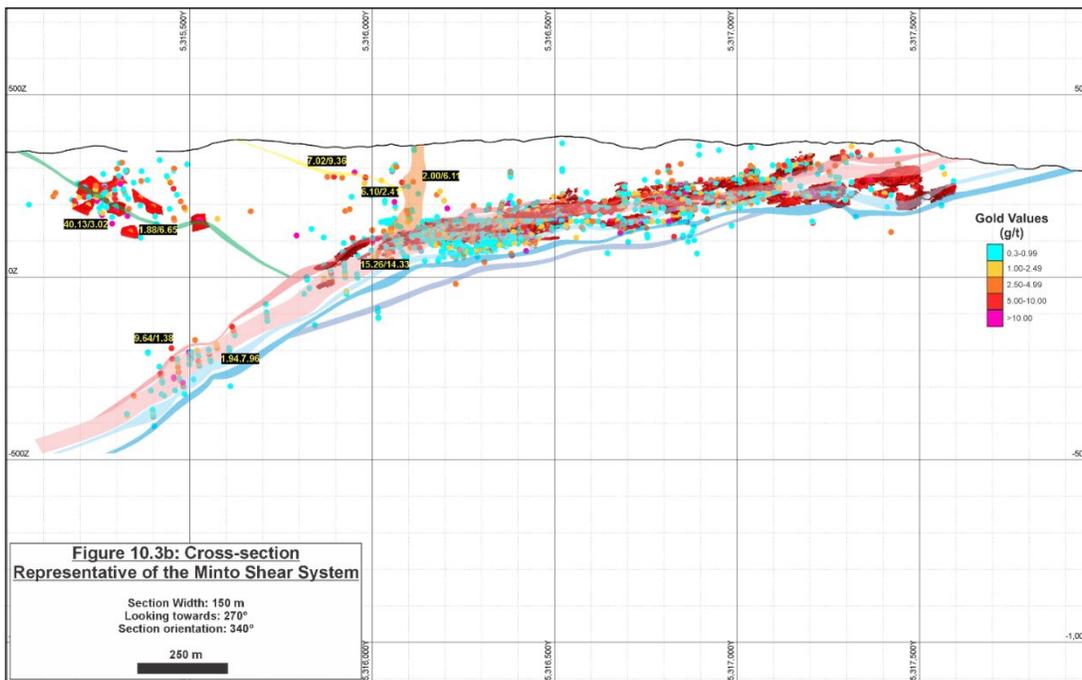
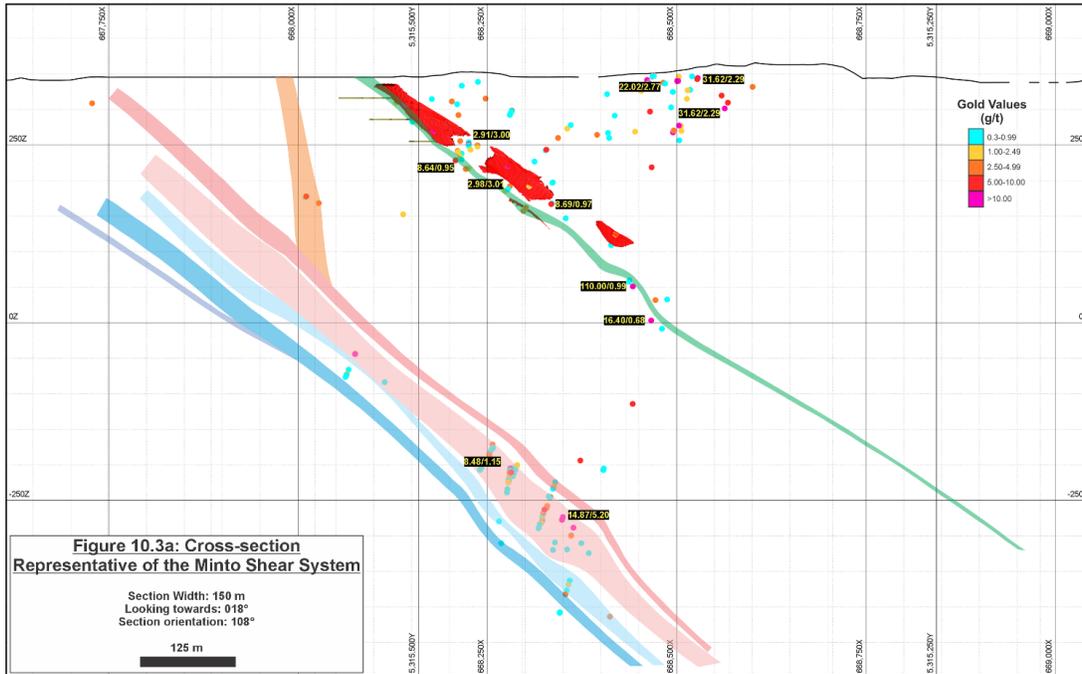


Figure 10-2: Cross-section Representative of the Jubilee Shear System



**Figure 10-3: Cross-section Representative of the Minto Shear System (shown in green)**

### 10.2.1 December 2014 to April 2015 Drilling Program

In 2014, to confirm the presence of significant gold mineralization in the Main Deformation Domain of the Jubilee Shear that was reported by historical underground drilling, Red Pine completed 6 diamond drill holes for a total of 1,573 m to test the different zones of the Surluga Deposit: the 65, Old Tom, Pango and Surluga Zone. In the

Winter and Spring of 2015, Red Pine continued the testing of the 65 and Old Tom zones to validate the historical drilling results, and tested drilling gaps left in the Jubilee Shear by the historical operators. A total of 20 diamond drill holes were completed during that program.

The program successfully confirmed the presence of significant gold mineralization as indicated by the historical underground drill holes in the Main Deformation Domain of the Jubilee Shear and that gold mineralization could be extended in some of the drilling gaps left in the mineralized structure. Gold mineralization was also identified in satellite shears and in networks of veins above and below the Main Deformation Domain of the Jubilee Shear.

Table 10-3 presents the highlights of that drilling program.

**Table 10-3: Highlights from the December 2014 to Spring 2015 Drilling Program**

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
SD-14-01	75.50	82.05	6.55	1.29	Algoma Shear
including	77.00	78.10	1.10	4.72	
	107.07	109.60	2.53	3.15	
SD-14-02	78.50	82.50	4.00	2.00	Algoma Shear
including	80.50	82.50	2.00	3.85	
	119.50	128.38	8.88	3.56	
	119.50	122.42	2.92	6.23	Jubilee Shear
and	125.50	126.50	1.00	11.30	
SD-14-03	253.00	275.08	22.08	3.97	Jubilee Shear
including	257.00	258.00	1.00	8.17	
and	265.10	270.70	5.60	11.68	
SD-14-04	253.18	282.50	29.32	7.18	Jubilee Shear
including	263.00	268.90	5.90	7.76	
and	270.00	271.12	1.12	13.10	
and	273.64	276.60	2.96	10.16	
and	276.60	277.35	0.75	104.00	
and	281.50	282.50	1.00	11.40	
SD-14-05	148.25	162.25	14.00	7.25	Jubilee Shear
including	155.00	161.00	6.00	15.33	
SD-14-06	10.61	12.45	1.84	6.05	Minto C Shear
	292.33	311.50	19.17	1.74	Jubilee Shear
including	302.20	303.30	1.10	11.90	
	320.46	322.50	2.04	22.36	
including	320.46	321.50	1.04	42.30	
SD-15-07	59.00	72.00	13.00	2.45	Minto B Shear
including	66.00	68.00	2.00	13.65	
	233.00	254.00	21.00	1.67	Jubilee Shear
including	247.00	248.00	1.00	9.25	
SD-15-08	328.35	329.35	1.00	11.50	Jubilee Shear
SD-15-10	228.39	229.40	1.01	16.20	Jubilee Shear

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
SD-15-11	195.50	196.50	1.00	53.20	Ext. Vein
	216.00	217.00	1.00	51.70	Lower Jubilee Shear/Ext. Vein
SD-15-12	151.10	152.10	1.00	4.43	Jubilee Shear
SD-15-13	169.00	178.15	9.15	1.34	Jubilee Shear
including	172.35	173.70	1.35	2.81	
SD-15-14	254.11	255.00	0.89	8.49	Jubilee Shear
	266.00	273.18	7.18	2.58	
including	268.80	269.80	1.00	9.99	
	282.00	285.48	3.48	4.02	
including	282.00	283.00	1.00	11.20	
SD-15-17	141.90	143.48	1.58	2.73	Jubilee Shear
SD-15-19	74.48	76.50	2.02	4.01	Jubilee Shear
	84.60	85.60	1.00	5.11	
SD-15-22	56.04	57.00	0.96	5.67	Jubilee Shear
SD-15-23	30.60	31.60	1.00	3.86	Jubilee Shear
SD-15-25	196.70	206.75	10.05	2.19	Jubilee Shear
including	198.75	199.75	1.00	3.84	
and	201.75	202.75	1.00	3.24	
and	204.75	205.75	1.00	3.65	
SD-15-26	282.00	306.00	24.00	1.16	Jubilee Shear
including	285.11	286.10	0.99	4.01	
	287.10	288.10	1.00	8.25	
	298.13	299.13	1.00	4.68	

\*Note: Intercepts are calculated using a maximum of 6 m of internal dilution with no capping applied and are reported over core lengths. True widths are estimated to vary between 25 % to 95 % of the reported core length depending on the geological structure.

## 10.2.2 Fall 2015 Drilling Program

Five (5) drill holes for a total of 1,697 m tested the presence of gold mineralization in the Hornblende Shear near and down-plunge of the historical Hornblende Mine Shaft where the 2015 surface exploration results indicated the presence gold mineralization, and close to level 7 of the Surluga Mine shaft. Nine (9) diamond drill holes for a total of 554.80 m tested the Mickelson – Sunrise Vein Network to follow on promising channel samples results obtained in veins of the network and on the drilling programs of Van Ollie that identified significant mineralization at depth.

The assay results indicate that near-surface gold mineralization exists in the Hornblende Shear in the vicinities of the historical Hornblende Shaft and confirmed the presence of gold mineralization reported by historical drilling near level 7 of the Surluga Mine.

In the Mickelson – Sunrise target, drilling successfully intersected significant mineralization in two veins, but was generally unsuccessful in finding the down-dip extensions of the high-grade veins channel sampled at surface. Remapping of the trenches in 2020 unraveled the structural complexity of the mineralization zones. It indicated

that the vein networks are preferentially dipping to the north and that southerly dipping shearing visible on the Mickelson showing and spatially associated with the vein with the highest gold grades is not the structural control on mineralization. This indicated that the northerly azimuth selected for many drill holes to test the shearing was not the optimal one to test the Mickelson and Sunrise vein networks. Table 10-4 presents the highlights of that drilling program.

**Table 10-4: Highlights from the Fall 2015 Drilling Program**

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
HS-15-28	25.95	38.50	12.55	0.79	Hornblende Shear
including	27.00	27.82	0.82	2.87	
and	30.50	31.50	1.00	2.23	
HS-15-31	61.00	79.00	18.00	2.43	Jubilee Shear
including	72.00	73.00	1.00	24.30	
and	75.00	76.00	1.00	5.59	
and	77.00	78.00	1.00	5.49	
	349.50	353.40	3.90	2.40	
including	350.50	351.50	1.00	4.22	Hornblende Shear
SM-15-32	21.40	22.00	0.60	6.65	Mickelson Vn
SM-15-35	41.00	41.75	0.75	5.24	Mickelson Vn

\*Note: Intercepts are calculated using a maximum of 6 m of internal dilution with no capping applied and are reported over core lengths. True widths are estimated to vary between 25 % to 95 % of the reported core length depending on the geological structure.

### 10.2.3 November 2016 to February 2017 Drilling Program

This drilling program consisted of 13 diamond drill holes totaling 3,742 m. Drilling tested the Main Deformation Domain of the Jubilee Shear and the gold mineralized structures west of the Main Deformation Domain that were identified in the 2016 surface mapping and channel sampling program. Drilling also tested, based on drilling results from the 1930s, the Jasper Vein and the Jubilee Shear System near the Wawa Goldfield mine, and the Jubilee Shear System close to the northern end of the 2015 resource estimation.

The program successfully demonstrated the presence of many mineralized structures west of the Main Deformation Domain of the Jubilee Shear. It confirmed the presence of gold mineralization in the Jubilee Shear System and the Jasper Vein Network (probable northern extension of the Surluga North Vein Network) near the historical Wawa Goldfield mine located 600 m north and uncovered high-grade mineralization in the Jubilee Shear close to the northern end of the 2015 resource estimation. Table 10-5 presents the highlights of that drilling program.

**Table 10-5: Highlights from the Fall 2016 to February 2017 Drilling Program**

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
SD-16-40	93.00	94.00	1.00	3.39	Jubilee Shear
	141.10	142.10	1.00	4.05	
SD-16-41	161.33	162.09	0.76	6.79	Jubilee Shear
SD-16-43	48.65	51.03	2.38	1.89	Jasper Vn
including	50.10	51.03	0.93	3.01	
SD-16-44	37.80	38.80	1.00	2.65	Surluga North Vn
	41.43	42.25	0.82	10.70	
	49.82	50.82	1.00	3.13	
SD-16-45	147.27	148.27	1.00	6.27	Jubilee Shear
	155.36	156.14	0.78	176.00	
SD-17-46	64.22	75.00	10.78	1.09	Jubilee Shear
including	73.00	74.00	1.00	3.55	
	164.50	168.38	3.88	2.94	
including	164.50	165.37	0.87	10.70	
SD-17-47	88.81	89.93	1.12	3.45	Jubilee Shear
SD-17-49	167.17	170.58	3.41	2.06	Jubilee Shear
including	169.37	170.58	1.21	4.21	
SD-17-50	94.87	104.57	9.70	1.96	Jubilee Shear
including	96.60	97.60	1.00	11.80	
and	101.75	102.52	0.77	4.23	
	113.40	124.60	11.20	0.75	
including	123.72	124.60	0.88	5.15	
	213.38	222.24	8.86	1.28	Below Jubilee Shear
including	213.38	214.38	1.00	7.46	
SD-17-51	61.10	62.10	1.00	3.63	Jubilee Shear
	328.00	328.80	0.80	12.70	Hornblende Shear
SD-17-52	8.00	8.74	0.74	9.81	
	17.34	25.00	7.66	1.36	
including	24.00	25.00	1.00	7.49	
	210.24	210.97	0.73	11.00	Hornblende Shear

\*Note: Intercepts are calculated using a maximum of 6 m of internal dilution with no capping applied and are reported over core lengths. True widths are estimated to vary between 25 % to 95 % of the reported core length depending on the geological structure.

### 10.2.4 February to May 2017 Drilling Program

This drilling program tested the structures related to the historical Darwin-Grace, Minto and Parkhill mines, and a geophysical target in the Mickelson-Sunrise area.

At the Darwin-Grace Mine and its surroundings, 14 drill holes totaling 1,559 m tested the Grace Shear and one drill hole totaling 82 m tested the Nyman Shear. Drilling in the Grace Shear targeted areas where underground channel sampling from the 1930s suggested the presence of very high-grade gold mineralization, and the

northern and southern extensions of the Grace Shear where surface work indicated possible extensions of gold mineralization. Drilling at the Nyman Shear tested the down-dip continuity of a quartz vein hosting strong gold mineralization identified at surface during the 2016 field mapping program.

At the Parkhill Mine, five (5) drill holes totaling 823 m tested the E-W-oriented Parkhill Shear and the NW-oriented Parkhill # 4 Shear. At the Minto Mine, eleven (11) drill holes totaling 1,943 m tested the interpreted extension of gold mineralization in the Minto Mine Shear beyond the underground workings of the historical Minto Mine.

The most significant outcome of that drilling program is the discovery of the extension of the Minto Vein that became the Minto Mine Deposit with 5 of the eleven 11 original drill holes intersected significant mineralization in the Minto Shear. At the Parkhill Mine, drilling successfully identified the Parkhill Shear and promising mineralization in the Parkhill # 4 Shear. The drilling program in the Grace Shear successfully intersected the structure and demonstrated that potentially significant gold mineralization extends beyond the historical mine. Table 10-6 presents the highlights of that drilling program.

**Table 10-6: Highlights from the February to May 2017 Drilling Program**

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
DG-17-54	48.00	49.49	1.49	6.02	Grace Shear
DG-17-55	51.75	54.19	2.44	6.54	Grace Shear
including	53.15	53.69	0.54	17.80	
DG-17-56	62.86	65.06	2.20	8.84	Grace Shear
including	63.95	65.06	1.11	16.00	
DG-17-63	73.74	77.77	4.03	3.10	Grace Shear
including	73.74	74.71	0.97	8.26	
and	76.77	77.77	1.00	4.29	
DG-17-66	15.18	16.00	0.82	10.10	Nyman Shear
PH-17-70	38.49	40.00	1.51	6.23	Parkhill Shear
PH-17-71	52.68	53.59	0.91	4.25	Parkhill / Minto Mine shears
	63.32	64.00	0.68	3.95	Parkhill / Minto Mine shears
	156.00	157.00	1.00	8.00	Parkhill # 4 Shear
SD-17-73	43.28	44.28	1.00	3.39	Vein Network
	90.63	92.87	2.24	26.55	Minto Mine Shear
including	90.63	91.75	1.12	39.00	
SD-17-74	107.61	109.34	1.73	7.89	Minto Mine Shear
including	107.61	108.54	0.93	12.00	
SD-17-75	103.13	104.13	1.00	4.80	Minto Mine Shear
SD-17-77A	45.96	49.90	3.94	2.53	Minto Mine Shear
including	45.96	46.77	0.81	9.17	
	229.24	230.30	1.06	4.36	Minto B Shear
SD-17-78	55.30	56.10	0.80	51.00	Minto Mine Shear
SD-17-79	78.41	79.88	1.47	8.85	Minto Mine Shear
including	78.41	79.15	0.74	14.00	
SD-17-80	240.89	244.61	3.72	1.99	Minto B Shear

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
including	240.89	241.55	0.66	6.06	
SD-17-82	119.50	122.50	3.00	2.91	Minto Mine Shear
	128.50	130.00	1.50	2.97	
	149.25	150.00	0.75	4.15	Vein Network
SD-17-83	292.35	293.57	1.22	4.09	Minto B Shear

\*Note: Intercepts are calculated using a maximum of 6 m of internal dilution with no capping applied and are reported over core lengths. True widths are estimated to vary between 25 % to 95 % of the reported core length depending on the geological structure.

### 10.2.5 May to December 2017 Drilling Program

The drilling program focused on definition drilling in the Minto Mine Shear following the discovery of the Minto Vein (12,287.77 m in 60 drill holes) and on exploration drilling in the northern extension of the Jubilee Shear System at the edges of the 2015 resource (8,420.5 m in 29 drill holes). Drilling also tested for gold mineralization in the Jubilee Shear System near and within the historical Jubilee Mine, in the geological structures located west of the Jubilee Shear System (2,549 m in 8 drill holes) and in mineralized structures south of the Parkhill Fault indicated by surface mapping and historical drilling (396 m in 3 drill holes).

In the Minto Mine Shear, drilling successfully followed at depth the Minto Vein and progressively defined the Minto Mine Deposit and identified networks of mineralized quartz veins around the shear. In the northern extension of the Jubilee Shear System, drilling successfully extended mineralization in the Main Deformation Domain and identified zones of high-grade mineralization in the shear segments below the Main Deformation Domain. In the Jubilee Mine area, drilling intersected significant mineralization near and within the footprints of the historical mine. West of the Jubilee Shear System, drilling continued to indicate the presence of many mineralized structures, whereas south of the Parkhill Fault, drilling confirmed the presence of broad zones of low-grade gold mineralization in the Jubilee Stock. Table 10-7 presents the highlights of that drilling program.

**Table 10-7: Highlights from the May to December 2017 Drilling Program**

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
SD-17-84	36.00	36.63	0.63	3.22	Jubilee Shear
	67.75	69.00	1.25	5.20	
	210.00	211.08	1.08	2.81	
SD-17-85	54.80	63.23	8.43	1.32	Vein Network/Shear
including	54.80	55.82	1.02	3.75	
	150.10	152.30	2.20	2.91	Minto Mine Shear
including	151.75	152.30	0.55	6.30	
SD-17-86	152.93	154.31	1.38	20.00	Minto Mine Shear
SD-17-87	324.51	325.87	1.36	3.20	Hornblende Shear
SD-17-88	110.00	110.87	0.87	16.90	Minto Mine Shear
SD-17-89	166.86	170.33	3.47	2.49	Minto Mine Shear
including	167.86	168.73	0.87	4.86	
SD-17-90	166.97	169.00	2.03	10.14	Minto Mine Shear
including	168.00	169.00	1.00	17.00	

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
SD-17-91	144.25	147.00	2.75	2.07	Jubilee Shear
including	144.25	145.00	0.75	6.30	
SD-17-92	165.35	166.30	0.95	8.64	Minto Mine Shear
SD-17-94	12.50	13.70	1.20	23.40	Vein Network/Shear
	121.00	122.00	1.00	3.62	Vein Network/Shear
SD-17-95	135.40	136.26	0.86	3.53	Jubilee Shear
	179.68	182.48	2.80	1.74	
including	179.68	180.67	0.99	3.12	
	186.16	187.33	1.17	28.80	
SD-17-96	4.60	5.60	1.00	6.58	Vein Network/Shear
SD-17-97	213.05	218.19	5.14	4.07	Jubilee Shear
including	215.10	216.12	1.02	10.40	
SD-17-98	115.14	115.90	0.76	13.60	Algoma Shear
SD-17-99	3.63	4.40	0.77	7.29	Vein Network/Shear
	17.35	19.98	2.63	13.08	
including	18.14	19.16	1.02	31.20	
	211.50	212.26	0.76	5.85	Minto Mine Shear
SD-17-101	206.40	207.40	1.00	34.60	Vein Network
SD-17-102	124.02	126.08	2.06	2.60	Algoma Shear
including	124.02	125.10	1.08	4.31	
	240.00	241.75	1.75	5.44	Jubilee Shear
including	240.83	241.75	0.92	8.63	
SD-17-103A	233.66	236.67	3.01	2.98	Minto Mine Shear
including	234.62	235.62	1.00	6.60	
SD-17-104	172.45	188.89	16.44	1.10	Jubilee Shear
including	172.45	173.45	1.00	3.10	
and	181.54	183.88	2.34	4.13	
	255.40	261.10	5.70	2.69	
including	260.12	261.10	0.98	10.10	
SD-17-105	63.82	64.69	0.87	3.11	Vein Network/Shear
	92.00	97.00	5.00	4.44	Minto Mine Shear
including	92.00	92.97	0.97	11.50	
and	94.00	95.00	1.00	6.33	
SD-17-106	136.62	144.48	7.86	4.27	Minto Mine Shear
including	136.62	138.35	1.73	8.10	
and	141.76	143.60	1.84	8.91	
SD-17-107	165.71	171.00	5.29	1.38	Jubilee Shear
including	169.35	170.08	0.73	3.16	
	197.00	198.00	1.00	49.20	

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
SD-17-108	133.77	135.00	1.23	9.49	Minto Mine Shear
SD-17-109	181.78	185.44	3.66	4.09	Jubilee Shear
including	184.08	185.44	1.36	8.99	
SD-17-110A	96.36	97.12	0.76	3.74	Vein Network/Shear
	117.32	125.65	8.33	1.06	Minto Mine Shear
including	122.08	123.00	0.92	4.11	
SD-17-111	54.88	55.81	0.93	5.53	Vein Network/Shear
SD-17-113	121.19	123.53	2.34	6.77	Algoma Shear/Vein Network
including	121.98	122.67	0.69	15.00	
	224.14	225.90	1.76	2.00	Jubilee Shear
including	224.14	225.00	0.86	3.38	
SD-17-114	137.80	139.80	2.00	3.57	Minto Mine Shear
including	138.80	139.80	1.00	5.06	
SD-17-115	104.56	115.88	11.32	2.58	Minto Mine Shear
including	108.93	110.96	2.03	10.98	
SD-17-117	126.00	130.00	4.00	11.08	Minto Mine Shear
including	126.00	127.00	1.00	9.19	
and	127.00	128.00	1.00	33.50	
	182.00	183.00	1.00	20.40	Vein Network/Shear
SD-17-118	198.08	200.34	2.26	1.05	Jubilee Shear
including	198.08	198.69	0.61	2.80	
SD-17-121	119.93	121.96	2.03	2.16	Vein Network/Shear
including	120.96	121.96	1.00	3.70	
	179.13	180.85	1.72	6.49	Minto Mine Shear
including	180.00	180.85	0.85	10.90	
SD-17-123	138.50	139.50	1.00	3.92	Vein Network/Shear
	177.50	179.10	1.60	4.30	Minto Mine Shear
including	178.36	179.10	0.74	8.06	
SD-17-124	216.37	221.00	4.63	1.11	Jubilee Shear
including	218.26	219.12	0.86	2.97	
SD-17-125	219.37	220.66	1.29	11.40	Vein Network/Shear
SD-17-126	142.49	143.25	0.76	8.41	Vein Network/Shear
	160.00	161.00	1.00	6.80	Vein Network/Shear
	186.65	188.25	1.60	14.34	Minto Mine Shear
including	186.65	187.42	0.77	28.20	
SD-17-129	82.25	83.00	0.75	3.03	Vein Network/Shear
SD-17-130	217.80	224.80	7.00	1.02	Jubilee Shear
including	217.80	218.80	1.00	2.98	
SD-17-131	108.30	109.32	1.02	44.30	Vein Network/Shear

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
SD-17-131	244.21	245.30	1.09	3.83	Minto Mine Shear
SD-17-135	78.46	82.57	4.11	2.11	Vein Network/Shear
including	81.65	82.57	0.92	6.98	
SD-17-139	230.08	230.70	0.62	5.69	Vein Network/Shear
SD-17-140	78.00	79.00	1.00	5.50	Vein Network/Shear
SD-17-140	136.00	137.93	1.93	1.85	Vein Network/Shear
including	136.00	136.94	0.94	4.71	
SD-17-142	189.70	190.50	0.80	3.41	Jubilee Shear
SD-17-145	193.50	194.50	1.00	14.70	Vein Network/Shear
SD-17-146	211.00	211.90	0.90	3.04	Jubilee Shear
SD-17-150	240.44	241.44	1.00	3.93	Jubilee Shear
	252.13	261.89	9.76	1.23	
including	252.13	253.20	1.07	2.99	
and	255.20	256.20	1.00	4.41	
SD-17-151	147.06	148.00	0.94	8.59	
SD-17-153	352.80	358.20	5.40	2.54	Jubilee Shear
including	353.80	354.82	1.02	7.76	
and	357.38	358.20	0.82	5.73	
SD-17-157	220.68	222.53	1.85	2.62	Jubilee Shear
including	221.60	222.53	0.93	4.13	
	238.60	245.73	7.13	2.23	
including	240.70	241.70	1.00	5.36	
and	244.75	245.73	0.98	3.39	
SD-17-158	155.20	155.92	0.72	7.36	Minto Mine Shear
SD-17-159	157.00	158.50	1.50	3.15	Vein Network/Shear
	168.86	169.70	0.84	3.02	Vein Network/Shear
SD-17-160	182.93	183.80	0.87	4.31	Jubilee Shear
SD-17-162	177.55	179.05	1.50	3.12	Vein Network/Shear
	203.80	205.25	1.45	3.79	Minto Mine Shear
	211.35	212.33	0.98	4.05	
SD-17-163	56.80	57.80	1.00	12.80	Vein Network/Shear
	117.28	121.00	3.72	4.31	Jubilee Shear
including	117.28	118.00	0.72	5.95	
and	119.30	120.15	0.85	10.30	
	150.16	151.14	0.98	4.54	
	177.00	178.00	1.00	2.76	
SD-17-164	220.51	224.12	3.61	2.49	Minto Mine Shear
including	222.50	223.50	1.00	6.12	
	236.77	238.30	1.53	2.26	Vein Network/Shear

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
including	237.60	238.30	0.70	3.70	
SD-17-167	82.00	82.84	0.84	7.64	Jubilee Shear
	455.17	455.96	0.79	3.00	Hornblende Shear
SD-17-169	121.60	122.57	0.97	2.95	Vein Network/Shear
	143.00	144.00	1.00	2.73	Vein Network/Shear
	186.67	189.16	2.49	2.77	Minto Mine Shear
including	187.40	188.40	1.00	5.39	
SD-17-170	85.00	99.00	14.00	2.79	Jubilee Shear
including	89.20	90.25	1.05	3.24	
and	92.00	93.00	1.00	3.89	
and	96.00	97.00	1.00	11.40	
	110.27	115.77	5.50	4.67	
including	111.90	113.56	1.66	12.85	Jubilee Shear
and	114.75	115.77	1.02	3.24	
	244.95	246.25	1.30	7.77	Below Jubilee Shear
SD-17-171	200.38	202.30	1.92	7.34	Minto Mine Shear
including	200.38	201.39	1.01	11.30	
SD-17-172	72.60	91.59	18.99	4.42	Jubilee Shear
including	72.60	73.60	1.00	10.70	
and	75.60	76.60	1.00	4.30	
and	77.60	80.60	3.00	7.30	
and	90.57	91.59	1.02	40.20	
	118.83	119.91	1.08	13.60	
	148.53	150.47	1.94	11.38	
including	148.53	149.50	0.97	21.10	
SD-17-173	44.50	59.29	14.79	2.94	Jubilee Shear
including	44.50	45.53	1.03	23.60	
and	49.25	50.10	0.85	6.45	
and	58.40	59.29	0.89	2.85	
	78.08	79.09	1.01	4.74	
SD-17-174	112.95	113.95	1.00	5.68	Vein Network/Shear
	193.60	199.82	6.22	3.40	Minto Mine Shear
including	194.36	195.27	0.91	11.70	
SD-17-175	218.70	219.70	1.00	7.03	Minto Mine Shear
SD-17-176	71.00	86.00	15.00	1.94	Jubilee Shear
including	73.40	74.53	1.13	4.84	
and	78.80	79.60	0.80	13.40	
and	84.20	85.12	0.92	4.61	

\*Note: Intercepts are calculated using a maximum of 6 m of internal dilution with no capping applied and are reported over core lengths. True widths are estimated to vary between 25 % to 95 % of the reported core length depending on the geological structure.

## 10.2.6 2018 Drilling Program

The 2018 drilling program focused on definition drilling in the Minto Mine Shear (11,068 m in 43 drill holes), and on confirming historical results (4,002 m in 12 drill holes) and testing of gaps in the historical drilling coverage in the Jubilee Shear System (6,821 m in 25 drill holes). Limited exploration drilling tested the Parkhill # 4 Shear close to the Parkhill Mine (891 m in 3 drill holes), the mineralized structures west of the Jubilee Shear System (1,064 m in 3 drill holes), the Root Vein Network and the northern extension of the Wawa Gold Corridor (466.18 m in 3 drill holes) and the Parkhill Shear down-dip of level 14 of the historical Parkhill Mine (502 m in 1 drill hole).

In the Minto Mine Shear, drilling successfully extended the Minto Vein over 800 m down-plunge from its discovery near the historical Minto Mine and left the structure open for future exploration. In the Jubilee Shear System, drilling successfully confirmed in different zones of the Main Deformation Domain the grades reported in historical drill holes, and was able to extend the high-grade core of the Surluga Deposit. In the Parkhill #4 Shear, drilling indicated that gold mineralization in the structure could be comparable in grade to mineralization in the Minto Mine Shear. Drilling successfully intersected the Parkhill Shear below the historical Parkhill Mine and indicated that the shear is a large geological structure but did not intersect significant mineralization. Table 10-8 presents the highlights of that drilling program.

**Table 10-8: Highlights from the 2018 Drilling Program**

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
SD-18-178	131.09	132.10	1.01	7.05	Below Jubilee Shear
	224.92	226.00	1.08	13.00	Hornblende/IRGS
SD-18-181A	201.88	205.82	3.94	3.12	Minto Mine Shear
including	204.83	205.82	0.99	5.77	
RV-18-182	232.96	233.75	0.79	25.60	Hornblende Shear
SD-18-188	230.25	236.90	6.65	1.88	Minto Mine Shear
including	230.25	232.00	1.75	4.03	
and	235.94	236.90	0.96	3.71	
SD-18-189	107.00	107.98	0.98	2.79	Vein Network/Shear
	125.58	126.58	1.00	3.52	
	149.30	151.47	2.17	3.66	
including	149.30	150.05	0.75	8.93	
	199.18	200.00	0.82	3.28	
	223.00	223.90	0.90	4.31	
PH-18-190	204.00	205.00	1.00	6.06	Parkhill # 4 Shear
SD-18-192	248.65	249.44	0.79	13.20	Minto Mine Shear
SD-18-193	256.89	257.63	0.74	4.42	Minto Mine Shear
SD-18-194	272.74	273.53	0.79	6.70	Minto Mine Shear
SD-18-195	46.60	47.60	1.00	3.19	Vein Network/Shear
	134.14	139.33	5.19	1.54	Minto Mine Shear
including	134.98	135.83	0.85	5.48	
SD-18-196	83.00	84.00	1.00	3.90	Vein Network/Shear
	100.48	103.25	2.77	4.42	Minto Mine Shear

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
including	102.15	103.25	1.10	10.30	
SD-18-197	154.00	155.07	1.07	4.94	Vein Network/Shear
SD-18-201	122.68	125.20	2.52	2.01	Minto Mine Shear
including	122.68	123.40	0.72	3.78	
SD-18-203	191.77	192.70	0.93	4.90	Minto Mine Shear
SD-18-206	302.52	303.60	1.08	4.00	Minto Mine Shear
SD-18-207	288.32	290.42	2.10	2.69	Minto Mine Shear
including	289.71	290.42	0.71	5.42	
SD-18-212	262.00	263.00	1.00	5.28	Parkhill # 4 Shear
SD-18-212	276.20	276.75	0.55	13.60	
SD-18-213	90.25	91.00	0.75	4.69	Vein Network/Shear
	184.45	185.50	1.05	6.76	Minto Mine Shear
	257.75	259.84	2.09	5.68	
including	258.30	258.88	0.58	16.30	Parkhill # 4 Shear
SD-18-217	308.20	309.00	0.80	4.75	Minto Mine Shear
SD-18-218	321.00	321.90	0.90	3.29	Minto Mine Shear
SD-18-219	91.45	92.52	1.07	19.80	Vein Network/Shear
	239.44	240.47	1.03	4.54	Vein Network/Shear
	253.70	254.60	0.90	3.72	Minto Mine Shear
SD-18-220	206.75	207.36	0.61	3.92	Vein Network/Shear
SD-18-221	225.84	227.94	2.10	2.08	Minto Mine Shear
SD-18-222	246.00	247.90	1.90	4.09	Vein Network/Shear
	252.50	253.20	0.70	3.31	
	256.00	258.60	2.60	13.57	Minto Mine Shear
including	257.88	258.60	0.72	46.50	
	283.00	284.00	1.00	4.50	Vein Network/Shear
SD-18-223	156.90	158.02	1.12	13.40	Minto Mine Shear
	167.12	171.84	4.72	7.13	
including	167.12	169.98	2.86	10.07	Vein Network/Shear
SD-18-225	198.26	201.24	2.98	1.97	
including	200.31	201.24	0.93	3.62	Vein Network/Shear
	232.41	233.40	0.99	19.60	
SD-18-226	250.92	251.92	1.00	3.56	Minto Mine Shear
SD-18-228	257.00	288.00	31.00	3.73	Jubilee Shear
including	262.00	263.00	1.00	19.70	
and	268.50	269.00	0.50	33.70	
and	272.00	274.00	2.00	8.15	
and	279.00	280.00	1.00	24.20	
SD-18-229	258.83	283.95	25.12	3.54	Jubilee Shear

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
including	262.64	267.53	4.89	4.15	
and	269.60	271.63	2.03	12.04	
and	272.66	273.62	0.96	6.81	
and	274.30	276.39	2.09	5.34	
and	281.56	282.75	1.19	9.52	
SD-18-230	270.20	276.17	5.97	2.37	
including	272.95	274.58	1.63	6.07	Jubilee Shear
	288.42	290.28	1.86	3.78	
SD-18-231	285.45	295.18	9.73	2.47	
including	289.10	291.11	2.01	6.80	Jubilee Shear
	294.26	295.18	0.92	5.67	
SD-18-232	303.38	314.00	10.62	1.07	
including	312.85	314.00	1.15	3.33	Jubilee Shear
SD-18-233	83.30	84.25	0.95	8.01	Shear Zone
	311.50	314.91	3.41	7.33	Jubilee Shear
SD-18-234	272.77	277.90	5.13	16.46	
including	272.77	273.70	0.93	19.80	Jubilee Shear
and	273.70	274.70	1.00	60.20	
SD-18-235	279.51	300.20	20.69	3.04	
including	290.00	292.38	2.38	12.45	Jubilee Shear
and	298.79	299.40	0.61	12.10	
	309.41	310.37	0.96	8.22	
SD-18-236	315.75	324.55	8.80	3.11	
including	320.54	322.54	2.00	6.99	Jubilee Shear
SD-18-237	278.80	279.80	1.00	15.40	Jubilee Shear
SD-18-238	177.30	182.35	5.05	8.19	
including	179.30	182.35	3.05	10.26	Jubilee Shear
	207.75	208.70	0.95	10.80	
SD-18-239	174.64	177.60	2.96	2.15	
	194.00	195.00	1.00	3.25	Jubilee Shear
	224.38	225.40	1.02	3.67	
SD-18-240	143.70	150.70	7.00	2.80	
including	143.70	145.70	2.00	3.88	Jubilee Shear
and	146.70	147.70	1.00	4.19	
and	149.70	150.70	1.00	5.14	
	202.37	203.30	0.93	5.88	Below Jubilee Shear
SD-18-241	148.57	167.45	18.88	4.37	
including	149.47	152.50	3.03	13.37	Jubilee Shear
and	153.11	154.00	0.89	5.72	

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
and	155.00	156.05	1.05	5.24	
and	157.60	158.38	0.78	6.35	
and	162.00	162.61	0.61	8.36	
SD-18-243A	197.22	221.41	24.19	6.81	
including	205.96	208.77	2.81	43.48	
and	211.33	214.25	2.92	6.10	Jubilee Shear
and	219.38	221.41	2.03	6.57	Jubilee Shear
	229.73	231.67	1.94	6.44	Jubilee Shear
including	230.71	231.67	0.96	11.20	Jubilee Shear
SD-18-244	172.50	199.90	27.40	1.72	
including	174.34	177.14	2.80	8.07	
and	179.17	180.22	1.05	5.91	Jubilee Shear
and	191.05	192.00	0.95	3.38	Jubilee Shear
SD-18-245	103.46	104.49	1.03	4.30	
SD-18-247	78.20	94.00	15.80	1.03	
including	91.85	92.98	1.13	8.75	
	111.95	129.52	17.57	2.31	Minto B Shear
including	115.87	116.77	0.90	4.40	Minto B Shear
and	120.50	122.50	2.00	5.09	Minto B Shear
and	127.50	129.52	2.02	9.74	Minto B Shear
SD-18-248	103.83	127.84	24.01	2.09	
including	103.83	106.28	2.45	9.53	
and	115.10	116.14	1.04	5.48	Jubilee Shear
and	121.18	122.17	0.99	5.39	Jubilee Shear
and	124.83	125.67	0.84	5.57	Jubilee Shear
SD-18-249	195.46	199.57	4.11	1.36	Jubilee Shear
including	198.54	199.57	1.03	3.39	Jubilee Shear
SD-18-250	359.82	361.53	1.71	2.79	Jubilee Shear
SD-18-251	173.28	176.18	2.90	4.12	
including	173.28	174.16	0.88	7.99	Jubilee Shear
and	175.06	176.18	1.12	3.46	Jubilee Shear
SD-18-252	171.28	172.07	0.79	3.31	Jubilee Shear
SD-18-253	301.00	303.07	2.07	6.50	Jubilee/Minto B Shear
including	302.18	303.07	0.89	12.80	Jubilee/Minto B Shear
	359.85	362.35	2.50	2.83	Jubilee Shear
SD-18-254	167.00	175.17	8.17	1.81	
including	168.93	169.97	1.04	6.02	Jubilee Shear
and	174.15	175.17	1.02	3.24	Jubilee Shear
SD-18-255	182.48	194.75	12.27	6.96	Jubilee Shear

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
including	189.79	190.41	0.62	11.30	
and	190.41	191.20	0.79	76.40	
and	191.20	191.94	0.74	6.81	
SD-18-256	105.00	107.16	2.16	9.19	Minto C Shear
	246.22	254.80	8.58	2.17	
including	248.33	249.43	1.10	5.51	Minto B Shear
and	250.62	251.67	1.05	3.11	
SD-18-258	238.87	269.79	30.92	1.66	
including	240.90	241.96	1.06	5.93	
and	246.84	248.21	1.37	3.92	
and	257.88	259.00	1.12	4.50	Jubilee Shear
and	263.13	264.83	1.70	4.19	
and	265.88	266.91	1.03	8.25	
and	268.79	269.79	1.00	3.84	
SD-18-259	75.13	76.05	0.92	14.60	Minto C Shear
	316.26	317.30	1.04	3.38	
	334.40	335.04	0.64	4.20	Jubilee Shear
SD-18-260	274.78	275.89	1.11	12.90	Jubilee Shear
SD-18-261	288.70	289.70	1.00	3.17	Jubilee Shear
SD-18-264	50.95	53.00	2.05	2.47	Jubilee Shear
	178.50	179.67	1.17	5.66	Below Jubilee Shear

\*Note: Intercepts are calculated using a maximum of 6 m of internal dilution with no capping applied and are reported over core lengths. True widths are estimated to vary between 25 % to 95 % of the reported core length depending on the geological structure.

### 10.2.7 2019 Drilling Program

The 2019 drilling program tested the Cooper Shear (1,064 m in 11 drill holes) and the mineralized system located west of the Main Deformation Domain of the Jubilee Shear (779 m in 2 drill holes). In the Jubilee Shear System, drilling tested the probable down-plunge extension of the zones of strong veining exposed at the Cora Shaft (561 m in 3 drill holes) and the potential extensions of the mineralized system at depth (1,945 m in 4 drill holes).

In the Cooper Shear, drilling successfully intersected the Cooper Vein but was not able to find areas of significant mineralization in the vein and gold grades comparable to those obtained in the channel sampling program. West of the Jubilee Shear System, drilling confirmed the presence of a large mineralized system and provided conclusive indications of the presence of intrusion-related (IRG) gold mineralization. At depth in the Jubilee Shear, drilling confirmed that the structure extended down-dip from the boundaries of the resource estimated in 2019 and that it remains mineralized. Drilling also intersected many zones of mineralization in the Minto B Shear above the Jubilee Shear. Table 10-9 presents the highlights of that drilling program.

**Table 10-9: Highlights from the 2019 Drilling Program**

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
SD-19-276	257.93	263.21	5.28	1.06	Hornblende/IRGS
including	262.45	263.21	0.76	2.79	
	288	293.5	5.50	1.59	
including	290	290.88	0.88	3.15	
SD-19-277	80.48	81.5	1.02	3.63	Below Jubilee Shear
	87.55	90.32	2.77	4.72	
including	87.55	88.55	1.00	6.74	
and	89.39	90.32	0.93	5.75	
	124.35	125.23	0.88	4.7	Hornblende/IRGS
	218.2	222.72	4.52	2.24	
including	218.2	220	1.80	5.13	
SD-19-280	55.3	63.34	8.04	1.18	Jubilee Shear
including	56.52	57.37	0.85	3.82	
and	61.94	62.65	0.71	2.79	
SD-19-282	33.32	34.32	1.00	4.7	Shear Zone
	243.2	246.16	2.96	2.19	Minto B Shear
	257.68	259.7	2.02	3.06	
including	257.68	258.4	0.72	6.89	
	313	314	1.00	5.21	Jubilee Shear
SD-19-283	152.46	155.61	3.15	2.56	Minto C Shear
including	152.46	153.51	1.05	4.13	

\*Note: Intercepts are calculated using a maximum of 6 m of internal dilution with no capping applied and are reported over core lengths. True widths are estimated to vary between 25 % to 95 % of the reported core length depending on the geological structure.

### 10.2.8 2020 Drilling Program

The 2020 drilling program tested Jubilee Shear System at depth in the projected down-plunge extension of the 2019 resource in an area where 2 drill holes from the deep drilling program of 2007 indicated the presence of potentially significant gold mineralization. Ten (10) drill holes totaling 5,322.18 m were completed during that program.

The observations of promising gold grades associated with favorable mineralogical indicators and of strong quartz veining in some of the zones of mineralization indicated the potential at depth of the Jubilee Shear System.

Table 10-10 presents the highlights of that drilling program.

**Table 10-10: Highlights from the 2020 Drilling Program**

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
SD-20-285A	443.33	444.66	1.33	3.45	Jubilee Shear
including	444.00	444.66	0.66	5.69	
SD-20-286	541.00	541.95	0.95	5.22	Jubilee Shear
	556.07	567.35	11.28	1.13	
including	556.07	557.21	1.14	5.54	
and	566.35	567.35	1.00	3.42	
SD-20-287	205.38	206.42	1.04	3.46	Shear Zone
	457.46	458.44	0.98	2.72	Jubilee Shear
SD-20-289	565.00	572.01	7.01	2.20	Jubilee Shear
including	571.14	572.01	0.87	12.50	
SD-20-291	546.45	560.12	13.67	1.44	Jubilee Shear
including	547.63	548.60	0.97	5.36	
and	554.77	555.93	1.16	3.48	
SD-20-292	507.78	508.79	1.01	7.32	Jubilee Shear
	520.57	534.61	14.04	0.93	
including	520.57	521.54	0.97	4.70	
SD-20-293	553.44	560.90	7.46	1.94	Jubilee Shear
	554.44	555.53	1.09	4.03	
	565.00	568.91	3.91	3.61	
including	565.00	566.91	1.91	5.34	

\*Note: Intercepts are calculated using a maximum of 6 m of internal dilution with no capping applied and are reported over core lengths. True widths are estimated to vary between 25 % to 95 % of the reported core length depending on the geological structure.

### 10.2.9 2021 Drilling Program

The 2021 drilling program targeted two areas of the Jubilee Shear System. Seven drill holes totaling 2,588 m targeted the northern end of the shear system down-dip of the 2019 resource with the objective of finding a new zone of high-grade mineralization, and 15 drill holes totaling 7,267.18 m targeted southern end of the shear system to follow on the results of the 2020 drilling program. Drilling at the southern end of the shear system also tested the Minto Mine Shear located above the targeted area. In addition, 3 drill holes totaling 1,063 m tested the mineralized system west of the Jubilee Shear and 2 drill holes totaling 173.87 m tested the Nyman Shear.

At the northern end of the Jubilee Shear System, drilling intersected the down-dip extension of the shear system. The assay results combined with the observations of areas of strong quartz veining and favorable mineralization mineral assemblages indicated that significant gold mineralization was present in this area.

At the southern end of the Jubilee Shear System, the assay data and the observations of favorable mineralogical indicators and of zones of strong quartz veining indicated that significant mineralization exists 440 m down-plunge of the boundary of the 2019 resource in the Jubilee Shear System. Drilling in that area extended the Minto Vein in the Minto Shear and identified the Sadowski Vein Network. Table 10-11 presents the highlights of that drilling program.

**Table 10-11: Highlights from the 2021 Drilling Program**

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
SD-21-294	18.60	19.60	1.00	3.95	Jubilee Shear
	194.78	195.78	1.00	14.70	Below Jubilee Shear
SD-21-296A	94.90	98.90	4.00	3.99	Sadowski Vn
including	94.90	95.90	1.00	3.11	
and	97.90	98.90	1.00	12.80	
	623.66	630.58	6.92	1.28	Jubilee Shear
including	626.61	627.58	0.97	3.19	
	641.03	642.00	0.97	3.85	
SD-21-297A	85.90	87.10	1.20	2.70	Sadowski Vn
	671.48	672.22	0.74	11.00	Jubilee Shear
	682.75	684.87	2.12	3.32	
SD-21-298A	86.35	87.50	1.15	24.80	Sadowski Vn
	322.36	323.35	0.99	110.00	Minto Mine Shear
	578.26	579.54	1.28	7.54	Shear Zone
	609.00	610.38	1.38	9.64	Jubilee Shear
	661.65	666.85	5.20	14.87	
including	661.65	662.65	1.00	27.40	
and	664.75	666.85	2.10	23.60	
SD-21-299	92.00	93.28	1.28	6.09	Surluga North Vn
	227.40	230.00	2.60	3.20	Jubilee Shear
including	227.40	228.29	0.89	6.05	
SD-21-301	228.59	237.38	8.79	0.69	Surluga North Vn
including	228.59	229.46	0.87	3.91	
	253.00	256.20	3.20	3.38	Jubilee Shear
including	253.00	254.00	1.00	5.52	
	255.20	256.20	1.00	4.82	
SD-21-302	636.13	638.60	2.47	3.34	Jubilee Shear
including	636.95	637.76	0.81	9.58	
	649.60	653.70	4.10	2.36	
including	649.60	650.59	0.99	4.64	
and	652.75	653.70	0.95	5.09	
	670.08	676.00	5.92	1.77	
including	672.00	673.02	1.02	3.98	
SD-21-303	171.54	173.81	2.27	2.70	Surluga North Vn
including	171.54	172.64	1.10	4.82	
SD-21-304	257.80	258.79	0.99	2.96	Jubilee Shear
SD-21-305A	56.12	57.14	1.02	8.23	Vein Network/Shear
SD-21-308	88.50	89.92	1.42	3.81	Surluga North Vn

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
	257.45	258.52	1.07	11.80	Jubilee Shear
SD-21-309	334.34	334.83	0.49	4.27	Vein Network/Shear
	363.59	364.27	0.68	16.40	Minto Mine Shear
	484.37	484.87	0.50	7.10	Shear Zone
SD-21-310	115.35	119.30	3.95	3.60	Below Jubilee Shear
including	115.35	117.26	1.91	5.11	
and	118.24	119.30	1.06	4.00	
	158.14	159.74	1.60	2.56	
	313.44	315.49	2.05	9.06	Shear Zone
including	314.54	315.49	0.95	17.30	
SD-21-312A	640.69	652.07	11.38	1.78	Jubilee Shear
including	640.69	641.56	0.87	6.67	
and	645.61	646.62	1.01	4.27	
SD-21-313	786.31	787.30	0.99	3.81	Jubilee Shear

\*Note: Intercepts are calculated using a maximum of 6 m of internal dilution with no capping applied and are reported over core lengths. True widths are estimated to vary between 25 % to 95 % of the reported core length depending on the geological structure.

### 10.2.10 2022 Drilling Program

The 2022 drilling program targeted multiple geological structures and areas of the Wawa Gold Project. In the first half of the 2022 drilling program, the objectives were to test at depth the northern and southern extensions of the Jubilee Shear System, and to test the geological structures associated with the Darwin-Grace Mine and the extension of the Jubilee Shear south of the Parkhill Fault. In the second half of the program, the primary objective was to define mineralization in the hanging wall of the Jubilee Shear System above the 2019 resource.

Twenty-two (22) drill holes totaling 9,430.55 m tested the northern end of the Jubilee Shear System down-dip of the 2019 resource with the objective of extending the zones of mineralization identified in 2021. Fifteen (15) drill holes totaling 9,468.44 m targeted the southern end of the shear system down-plunge of the 2019 resource to follow on the results of the 2021 drilling program and to continue the testing of the Minto Mine Shear and of the Sadowski Vein Network. The Grace Shear and the down-dip extension of the geological structures hosting the Darwin-Grace mine were tested by 22 drill holes totaling 4,717.80 m in conjunction with the testing of the Nyman Shear with 7 drill holes totaling 830.70 m. The Jubilee Shear System south of the Parkhill Fault was tested by 23 drill holes totaling 7,190.57 m. The Minto B Shear and its satellite shears like Minto C, in conjunction with the Jubilee Shear System, was tested by 17 drill holes totaling 5,792.47 m. Drilling also tested the structures west of the Jubilee Shear (1 drill hole for 398 m), the Minto Mine Shear (1 drill hole for 260 m) and an electromagnetic anomaly (1 drill hole for 153 m).

At the northern end of the Jubilee Shear System, drilling intersected significant gold mineralization up to approximately 400 m down-dip of the boundaries of the 2019 resource and identified the Surluga North Vein Network located above the Jubilee Shear. In the southern extension of the Jubilee Shear System, drilling proved that gold mineralization remains present at 800 m vertical depth in the Jubilee Shear and intersected significant mineralization in the Minto Mine Shear and in the Sadowski Vein System.

In the Jubilee Shear System south of the Parkhill Fault, drilling confirmed the presence of gold mineralization over a strike length of 1 km and up to 200 m down-dip from the surface projection of the structure. Drilling also indicated that moderate to strong deformation in the Jubilee Shear System south of the Parkhill Fault is up to 250-350 m thick. The structural characteristics of that very large deformation corridor remain to be completely established. In the Grace Shear, the intersection of gold mineralization 250 m south of the Darwin-Grace mine indicates that the mineralized system remains open to the south. Drilling also successfully intersected at depth the quartz vein associated with the E-W-oriented underground developments that defined the lower part of the Darwin-Grace mine and suggested that the Nyman Shear could be one of the E-W structures associated with that mineralized trend. Many zones of mineralization were also intersected above the Grace Shear, indicating a previously unknown multi-dimensionality for that mineralized system.

In the second half of 2022, as the program transitioned into testing the hanging wall of the Jubilee Shear, drilling demonstrated the presence of significant mineralization in the Minto B Shear and in the Minto C Shear. Drilling also extended gold mineralization in the Jubilee Shear System in areas that were not tested by the previous drilling programs and in deformation zones located below the Main Deformation Domain of the Jubilee Shear. West of the Jubilee Shear, drilling continued to demonstrate the presence of multiple zones of gold mineralization. Table 10-12 presents the highlights of that drilling program.

**Table 10-12: Highlights from the 2022 Drilling Program**

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
DG-22-317	77.62	78.57	0.95	3.37	Nyman Shear
SD-22-321	225.03	226.21	1.18	11.02	Surluga North Vn
including	225.69	226.21	0.52	21.40	
SD-22-326	245.27	245.68	0.41	69.30	Surluga North Vn
	330.97	331.94	0.97	3.94	Jubilee Shear
DG-22-327	95.10	96.19	1.09	10.00	Grace Shear
DG-22-329	52.68	53.68	1.00	5.15	Shear Zone
SD-22-330	246.52	247.57	1.05	4.14	Surluga North Vn
SD-22-331B	767.00	768.00	1.00	3.21	Jubilee Shear
SD-22-337	334.79	340.50	5.71	5.63	Jubilee Shear
including	334.79	335.60	0.81	16.70	
and	337.75	338.58	0.83	5.57	
and	339.53	340.50	0.97	13.80	
DG-22-338	189.86	191.00	1.14	2.75	Shear Zone
SD-22-340	343.45	344.25	0.80	10.40	Jubilee Shear
DG-22-341	197.13	199.10	1.97	2.37	Shear Zone
SD-22-345	61.47	62.60	1.13	7.97	Surluga North Vn
	298.41	299.92	1.51	4.76	
	343.22	343.95	0.73	6.71	Jubilee Shear
	375.86	376.77	0.91	4.88	
DG-22-349	24.41	26.09	1.68	4.53	Grace Shear
SD-22-350	16.51	18.80	2.29	31.62	Sadowski Vn

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
including	16.51	16.88	0.37	22.50	
and	17.66	18.37	0.71	86.38	
SD-22-352	57.67	59.00	1.33	4.20	Surluga North Vn
	227.44	228.36	0.92	13.10	
JS-22-359	233.32	234.45	1.13	3.14	Jubilee Shear - South of Parkhill Fault
SD-22-360	16.18	16.82	0.64	5.95	Vein Network/Shear
SD-22-361	277.63	278.80	1.17	5.14	Surluga North Vn
SD-22-363	404.56	408.54	3.98	4.73	Jubilee Shear
including	405.56	406.56	1.00	4.42	
and	407.56	408.54	0.98	11.00	
SD-22-364	136.00	137.50	1.50	8.18	Vein Network/Shear
	690.85	692.00	1.15	3.42	Jubilee Shear
SD-22-371	618.27	619.42	1.15	8.48	Jubilee Shear
SD-22-373	147.49	148.50	1.01	3.37	Vein Network/Shear
	161.15	164.17	3.02	40.13	Minto Mine Shear
including	161.15	162.10	0.95	21.70	
and	162.10	163.16	1.06	93.20	
SD-22-376	115.18	122.42	7.24	2.77	Below Jubilee Shear
including	115.18	117.67	2.49	6.05	
and	120.45	121.42	0.97	3.17	
	204.38	205.65	1.27	4.41	Hornblende/IRGS
SD-22-377	172.92	173.89	0.97	8.69	Minto Mine Shear
SD-22-379A	71.00	71.69	0.69	18.50	Vein Network/Shear
SD-22-382	98.00	99.44	1.44	4.22	Surluga North Vn
SD-22-385	325.70	328.48	2.78	1.76	Jubilee Shear
including	325.70	326.68	0.98	3.21	
SD-22-394	154.88	155.57	0.69	6.34	Surluga North Vn
SD-22-395A	157.00	158.00	1.00	12.40	Surluga North Vn
SD-22-396	229.37	230.37	1.00	4.07	Surluga North Vn
	238.60	256.29	17.69	2.28	
including	238.60	239.60	1.00	8.84	
and	243.59	245.00	1.41	3.10	
and	246.00	247.00	1.00	6.47	
and	249.50	251.00	1.50	6.40	
and	253.82	254.82	1.00	7.64	
JS-22-398	194.11	195.60	1.49	5.81	Jubilee Shear - South of Parkhill Fault
SD-22-399	353.83	356.49	2.66	3.72	Jubilee Shear
including	353.83	355.16	1.33	6.67	
SD-22-403	97.35	98.30	0.95	6.35	Surluga North Vn

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
	209.47	210.95	1.48	4.30	
SD-22-404	41.78	48.70	6.92	2.01	Minto C Shear
including	47.65	48.70	1.05	10.90	
	225.79	236.44	10.65	2.09	Minto B Shear
including	230.57	231.57	1.00	3.25	
	233.50	236.44	2.94	4.19	
	273.43	278.49	5.06	2.15	Jubilee Shear
including	275.46	276.46	1.00	5.46	
SD-22-406	46.33	53.43	7.10	1.37	Minto C Shear
including	46.33	47.32	0.99	5.02	
	102.48	105.15	2.67	4.41	Minto B Shear
SD-22-407	42.70	43.62	0.92	3.57	Minto C Shear
	49.00	49.82	0.82	5.72	
	79.68	81.18	1.50	2.83	
	291.00	293.65	2.65	3.57	Jubilee Shear
including	292.32	293.65	1.33	5.45	
SD-22-408	29.29	38.65	9.36	7.02	Minto C Shear
including	29.29	32.80	3.51	11.22	
and	36.31	38.65	2.34	10.19	
SD-22-409	99.05	102.00	2.95	2.96	Minto C Shear
including	99.05	100.50	1.45	4.41	
SD-22-410	289.78	296.70	6.92	1.90	Jubilee Shear
including	290.98	292.18	1.20	5.49	
and	293.38	294.47	1.09	3.20	
SD-22-411	133.03	136.88	3.85	1.07	Minto B Shear
including	133.03	134.03	1.00	2.99	
SD-22-412	146.20	147.47	1.27	3.79	Minto B Shear
	280.94	286.79	5.85	2.27	Jubilee Shear
including	283.28	284.55	1.27	4.87	
SD-22-413	174.35	175.33	0.98	3.09	Jubilee Shear
	249.51	259.59	10.08	2.01	Minto B Shear
including	250.76	253.26	2.50	6.87	
SD-22-414	311.33	321.84	10.51	2.29	Jubilee Shear
	311.33	312.33	1.00	6.50	
	320.73	321.84	1.11	6.96	
	337.54	338.68	1.14	12.50	
SD-22-415	174.86	175.86	1.00	55.00	Minto B Shear
	187.00	199.00	12.00	1.09	
including	193.00	194.00	1.00	2.80	

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
SD-22-416	88.53	94.64	6.11	2.00	HW IRGS
including	92.08	93.36	1.28	6.41	
SD-22-417	196.57	197.42	0.85	3.74	Minto B Shear
	205.36	206.54	1.18	3.47	
	263.20	264.20	1.00	4.03	
including	270.56	279.00	8.44	3.28	Jubilee Shear
and	270.56	271.75	1.19	3.75	
and	275.00	276.00	1.00	2.80	
and	277.00	279.00	2.00	6.45	
	306.35	317.80	11.45	2.06	
	307.55	309.00	1.45	4.68	
	316.80	317.80	1.00	13.00	Jubilee Shear
SD-22-418	374.53	376.38	1.85	7.43	
including	375.55	376.38	0.83	13.30	

\*Note: Intercepts are calculated using a maximum of 6 m of internal dilution with no capping applied and are reported over core lengths. True widths are estimated to vary between 25 % to 95 % of the reported core length depending on the geological structure.

### 10.2.11 2023-2024 Drilling Program

The 2023-2024 drilling program was primarily focussed on defining mineralization in the hanging wall of the Jubilee Shear System above the 2019 resource. Following the recommendation of the previous Technical Report, the program also included confirmation drilling of historical results in the Jubilee Shear System and tested mineralization gaps in the outline of the 2019 resource in the Jubilee Shear. As the Minto B Shear is the largest mineralized structure identified in the hanging wall of the Jubilee Shear, 37 drill holes totalling 16,140.01 m tested the Minto B and the Jubilee shear. This was followed by 43 drill holes totalling 13,536.80 m that targeted the hanging wall of the Jubilee Shear and the Jubilee Shear System west of the Minto B Shear. In addition, 7 drill holes (4,245.00 m) tested the deeper extension of the Jubilee Shear, 10 drill holes (3,915.00 m) tested the mineralized system west of the Jubilee Shear, 5 drill holes (651.00 m) tested the Sadowski Vein Network, 2 drill holes (735.00 m) targeted the Core Shack Vein Network and 2 drill holes (690.00 m) tested the Minto Mine Shear and the Sadowski Vein Network.

Drilling successfully defined gold mineralization in the Minto B Shear over a strike length of 750 m between surface and its intersection with the Main Deformation Domain of the Jubilee Shear. In the Jubilee Shear System, drilling intersected significant mineralization in drilling gaps left by the historical operators, at the intersection of the Minto B Shear with the Main Deformation Domain of the Jubilee Shear and confirmed in certain areas the historical drilling results. Drilling also uncovered zones of significant mineralization in deformation domains located below the Main Deformation Domain of the Jubilee Shear. In the deeper extension of the Jubilee Shear, drilling confirmed that the area discovered in 2007 is part of the Jubilee Shear System.

West of the Jubilee Shear, drilling confirmed the continuity of gold mineralization in the zone of IRG mineralization. In parallel, drilling indicated that networks of extensional veins and mineralized shears overlap or are adjacent to the zones of IRG mineralization. Table 10-13 presents the highlights of that drilling program.

**Table 10-13: Highlights from the 2023-2024 Drilling Program**

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
SD-23-419	62.46	70.32	7.86	0.97	HW IRGS
including	68.23	69.29	1.06	3.49	
	253.36	269.79	16.43	1.26	
including	259.47	260.34	0.87	2.70	Minto B Shear
and	263.33	264.12	0.79	3.30	
and	267.84	268.82	0.98	4.08	
SD-23-420	79.58	82.88	3.30	1.78	Minto C Shear
including	81.94	82.88	0.94	2.72	
SD-23-424	57.49	58.49	1.00	6.86	Vein Network/Shear
	71.36	72.36	1.00	6.03	
SD-23-426	83.45	84.18	0.73	3.15	Below Jubilee Shear
SD-23-427	191.38	193.39	2.01	1.81	Hornblende/IRGS
including	191.38	192.36	0.98	2.77	
SD-23-428	60.39	65.06	4.67	2.19	Hornblende/IRGS
including	61.64	62.78	1.14	2.80	
and	63.92	65.06	1.14	3.99	
SD-23-430	14.16	20.20	6.04	4.03	Jubilee Shear
including	14.16	15.48	1.32	3.72	
and	16.68	20.20	3.52	5.50	
	37.00	40.75	3.75	2.13	
including	39.50	40.75	1.25	4.71	
	65.46	71.35	5.89	1.41	
including	70.23	71.35	1.12	2.93	
	188.83	189.99	1.16	4.33	Below Jubilee Shear
SD-23-432	63.00	64.00	1.00	3.30	Vein Network/Shear
	377.57	378.67	1.10	3.22	Jubilee Shear
SD-23-433	17.00	24.81	7.81	4.87	Jubilee Shear
including	17.00	18.07	1.07	11.00	
and	20.33	23.69	3.36	6.97	
SD-23-433	200.06	204.89	4.83	1.42	Hornblende/IRGS
including	201.27	202.46	1.19	4.05	
SD-23-434	17.00	26.67	9.67	3.69	Jubilee Shear

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
including	17.00	18.20	1.20	14.90	
and	19.31	21.73	2.42	4.21	
and	25.59	26.67	1.08	4.28	
SD-23-436	16.70	17.20	0.50	27.50	Sadowski Vn
SD-23-437	16.74	19.51	2.77	22.02	Sadowski Vn
including	16.74	18.49	1.75	34.54	
SD-23-438	40.64	41.64	1.00	4.95	Vein Network/Shear
SD-23-441	296.52	297.67	1.15	3.49	Jubilee/Minto B Shear
SD-23-442	239.69	241.05	1.36	4.62	Minto B Shear
	293.15	297.53	4.38	15.64	
including	294.53	295.53	1.00	60.90	Jubilee/Minto B Shear
and	296.53	297.53	1.00	4.99	
	308.36	314.40	6.04	2.04	Jubilee Shear
including	308.36	310.91	2.55	3.46	
SD-23-443	239.82	242.26	2.44	2.46	Minto B Shear
including	240.63	241.43	0.80	5.81	
SD-23-444	214.10	216.27	2.17	6.44	Minto B Shear
	299.26	300.20	0.94	4.40	
	327.58	337.45	9.87	1.75	Jubilee Shear
including	331.77	333.87	2.10	2.85	
SD-23-445	264.85	265.88	1.03	3.22	Minto B Shear
SD-23-446	102.71	110.09	7.38	1.05	
including	102.71	103.94	1.23	3.16	
	120.00	127.50	7.50	1.59	
including	121.24	122.47	1.23	5.99	Jubilee Shear
	169.71	171.06	1.35	6.00	
	177.87	181.61	3.74	1.36	
including	179.05	180.24	1.19	2.96	
	353.05	353.92	0.87	8.76	
SD-23-447	413.38	424.00	10.62	1.01	Jubilee Shear
including	413.38	414.67	1.29	3.68	
SD-23-448	649.49	651.58	2.09	5.33	Jubilee Shear
SD-23-449	354.73	372.68	17.95	1.22	Jubilee Shear

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
including	354.73	355.81	1.08	6.67	Jubilee/Minto B Shear
and	363.21	364.29	1.08	3.36	
SD-23-451	297.48	306.25	8.77	5.06	
including	298.36	299.18	0.82	5.74	
and	299.18	300.00	0.82	26.00	
and	303.00	306.25	3.25	4.12	
	316.10	330.43	14.33	15.26	Jubilee Shear
including	323.48	324.67	1.19	171.00	
and	329.33	330.43	1.10	4.02	
	355.38	358.86	3.48	10.76	
including	355.38	356.54	1.16	23.50	
and	356.54	357.70	1.16	5.01	Minto C Shear
SD-23-452	101.50	103.91	2.41	6.10	
including	102.70	103.91	1.21	9.13	
	212.38	213.57	1.19	4.41	Minto B Shear
	439.67	441.00	1.33	6.34	Below Jubilee Shear
SD-23-454	114.83	115.85	1.02	7.17	Minto C Shear
SD-23-455	681.15	684.90	3.75	8.89	Jubilee Shear
including	683.76	684.90	1.14	21.60	
SD-23-456	49.53	50.77	1.24	6.03	Minto B Shear
	242.70	261.84	19.14	3.04	Jubilee Shear
including	245.00	246.07	1.07	4.81	
and	249.12	250.03	0.91	5.21	
and	251.85	252.80	0.95	5.58	
and	252.80	253.56	0.76	23.00	
and	256.29	260.75	4.46	3.57	
	278.60	279.64	1.04	46.90	Jubilee Shear
SD-23-457	235.15	246.10	10.95	2.40	
including	235.15	236.47	1.32	3.39	
and	239.82	240.82	1.00	11.70	Minto B Shear
SD-23-458	157.00	161.20	4.20	1.23	
including	160.15	161.20	1.05	3.00	Jubilee Shear
SD-23-460	234.48	239.30	4.82	2.02	
	238.25	239.30	1.05	4.22	

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
SD-23-461	297.04	303.99	6.95	1.49	Jubilee Shear
including	302.09	303.99	1.90	3.40	
SD-23-462	407.50	408.51	1.01	4.14	Below Jubilee Shear
SD-23-464	203.00	204.50	1.50	14.20	Minto B Shear
SD-23-465	242.85	243.86	1.01	3.56	Vein Network/Shear
SD-23-466	192.83	198.15	5.32	1.32	Minto B Shear
including	192.83	194.16	1.33	4.52	
	300.17	302.31	2.14	3.52	Jubilee Shear
including	300.17	301.24	1.07	5.93	
	338.30	350.45	12.15	1.46	
including	338.30	339.31	1.01	3.08	
and	347.30	348.35	1.05	3.14	
SD-23-467	128.71	134.96	6.25	1.27	Minto C Shear
including	129.96	131.21	1.25	3.39	
	316.73	317.83	1.10	4.49	Jubilee Shear
	517.61	518.73	1.12	2.82	Below Jubilee Shear
SD-23-470	120.84	134.28	13.44	7.85	Minto B Shear
including	120.84	122.80	1.96	13.29	
and	124.81	125.84	1.03	59.10	
and	127.00	128.18	1.18	9.89	
SD-23-470	228.91	230.22	1.31	4.63	Vein Network/Shear
SD-23-472	296.60	302.54	5.94	3.87	Jubilee Shear
including	301.53	302.54	1.01	20.10	
SD-23-473	366.82	367.95	1.13	2.96	Jubilee Shear
SD-23-477	256.42	262.12	5.70	0.95	Jubilee Shear
including	261.18	262.12	0.94	3.15	
	294.41	306.46	12.05	6.47	
including	294.41	296.31	1.90	3.95	
and	297.90	298.52	0.62	5.05	
and	299.16	300.11	0.95	17.10	
and	305.94	306.46	0.52	93.20	
SD-23-478	237.31	238.53	1.22	13.30	Vein Network/Shear

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
SD-23-479	259.13	269.24	10.11	3.42	Jubilee Shear
including	262.00	265.21	3.21	7.37	
and	268.25	269.24	0.99	3.87	
SD-23-480	291.30	308.42	17.12	2.19	Jubilee Shear
including	291.30	292.31	1.01	4.65	
and	293.47	294.70	1.23	3.93	
and	305.12	307.22	2.10	7.86	
SD-23-481	321.08	327.40	6.32	2.08	Jubilee Shear
including	321.08	322.20	1.12	3.04	
and	326.32	327.40	1.08	8.16	
SD-23-482	303.60	304.70	1.10	8.55	Jubilee Shear
SD-23-483	122.67	125.52	2.85	1.53	Minto B Shear
including	123.62	124.57	0.95	3.42	
	281.10	283.40	2.30	4.11	Jubilee Shear
including	282.18	283.40	1.22	6.66	
	290.45	292.90	2.45	2.88	
including	291.67	292.90	1.23	4.55	
SD-23-485	294.98	295.98	1.00	11.00	Jubilee Shear
SD-23-486	206.84	209.12	2.28	2.57	Jubilee Shear
including	206.84	208.00	1.16	4.00	
	229.20	236.47	7.27	3.40	
including	232.40	234.44	2.04	9.70	
SD-23-487	224.09	242.16	18.07	2.44	Jubilee Shear
including	224.09	226.39	2.30	4.59	
and	233.06	235.62	2.56	6.48	
and	240.97	242.16	1.19	7.62	
SD-24-489	246.00	247.23	1.23	5.28	Jubilee Shear
	256.76	258.00	1.24	4.24	
SD-24-490	141.15	146.12	4.97	2.25	Vein Network/Shear
including	142.12	143.11	0.99	5.61	
	200.03	221.23	21.20	3.56	Jubilee Shear
including	200.03	201.00	0.97	16.50	
and	202.26	205.73	3.47	4.49	
and	211.29	213.42	2.13	13.62	

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
SD-24-492	340.91	341.91	1.00	17.90	Jubilee Shear
SD-24-493	253.25	289.12	35.87	1.97	
including	253.25	254.38	1.13	3.43	
and	256.64	260.03	3.39	6.54	
and	273.42	274.62	1.20	6.72	
and	279.20	280.28	1.08	2.87	
and	281.36	285.14	3.78	4.26	
SD-24-494	186.81	204.12	17.31	1.16	Jubilee Shear
including	195.52	196.66	1.14	2.98	
SD-24-495	199.75	211.28	11.53	4.53	Jubilee Shear
including	199.75	202.68	2.93	5.41	
and	203.77	204.88	1.11	5.13	
and	206.14	208.18	2.04	4.99	
and	210.14	211.28	1.14	15.00	
SD-24-499A	181.73	197.10	15.37	1.98	Jubilee Shear
including	182.89	183.77	0.88	7.59	
and	189.89	190.91	1.02	4.04	
and	191.93	192.95	1.02	2.78	
SD-24-500	189.50	205.00	15.50	2.16	Jubilee Shear
including	197.44	198.42	0.98	6.02	
and	199.51	200.60	1.09	2.75	
and	201.60	202.60	1.00	9.55	
SD-24-501A	313.75	318.48	4.73	1.41	Jubilee Shear
including	317.59	318.48	0.89	4.47	
	408.73	412.17	3.44	1.90	Below Jubilee Shear
including	409.90	411.29	1.39	2.80	
SD-24-502	239.70	279.00	39.30	1.69	Jubilee Shear
including	248.57	249.84	1.27	3.31	
and	252.29	253.53	1.24	6.32	
and	257.25	259.67	2.42	5.13	
and	272.78	273.95	1.17	4.82	
and	277.52	279.00	1.48	7.64	
SD-24-504	176.14	186.82	10.68	1.03	Jubilee Shear
including	180.89	181.81	0.92	5.00	

Hole (#)	From (m)	To (m)	Length (m)*	Gold (g/t)	Zone (name)
SD-24-505	195.00	209.00	14.00	1.40	Jubilee Shear
including	195.00	196.00	1.00	8.77	
SD-24-506	259.30	269.12	9.82	4.15	Jubilee Shear
including	260.43	261.69	1.26	6.15	
and	264.12	266.87	2.75	9.70	
SD-24-508	230.96	244.78	13.82	1.45	Jubilee Shear
including	230.96	233.36	2.40	4.66	
	330.88	331.90	1.02	5.89	Below Jubilee Shear
SD-24-509A	23.39	24.64	1.25	7.86	Vein Network/Shear
	78.00	81.88	3.88	1.94	
including	79.25	80.63	1.38	3.66	
SD-24-509A	156.27	162.45	6.18	0.85	Jubilee Shear
including	161.16	162.45	1.29	2.73	
SD-24-511	200.71	212.60	11.89	1.48	Jubilee Shear
including	200.71	201.68	0.97	3.01	
and	205.69	206.69	1.00	3.43	
and	210.62	211.64	1.02	5.69	
SD-24-515	185.70	207.44	21.74	4.88	Jubilee Shear
including	185.70	186.76	1.06	2.97	
and	189.00	190.11	1.11	6.18	
and	191.12	192.00	0.88	72.20	
and	193.05	196.22	3.17	3.08	
and	199.24	200.45	1.21	5.20	
and	206.30	207.44	1.14	4.12	
	249.00	250.23	1.23	2.84	
	358.77	359.77	1.00	3.45	Below Jubilee Shear
SD-24-520	126.43	143.15	16.72	3.08	Jubilee Shear
including	142.15	143.15	1.00	40.20	
SD-24-521	79.70	80.80	1.10	7.47	Jubilee Shear
	112.45	113.57	1.12	65.60	
	212.86	214.05	1.19	8.18	Below Jubilee Shear

\*Note: Intercepts are calculated using a maximum of 6 m of internal dilution with no capping applied and are reported over core lengths. True widths are estimated to vary between 25 % to 95 % of the reported core length depending on the geological structure.

### 10.2.12 Collar Survey

For the 2015 to 2024 drill programs, drill alignment was done using a Reflex TN-14 gyrocompass. The drill holes from 2014 were aligned using a compass and front sights. Prior to drilling, the drill collars were spotted using either a handheld Garmin Oregon GPS, a TopCon RTK GPS or a Trimble Geo 7X GPS. Upon completion of all drill holes, the collar location was surveyed by Red Pine personnel using a TopCon RTK (Sub-cm accuracy) or Trimble Geo 7X GPS (Decimeter accuracy) to provide high precision collar location and elevation. All the drill collars of the borehole completed by Red Pine between 2014 and 2024 are shown on Figure 10-1. The casing for all drill holes was left in place and capped with bolt-on metal caps and attached 0.9-m flag (Table 10-13).



Figure 10-4: Drill Collar Location for SD-18-216 through SD-18-221

### 10.2.13 Down-Hole Surveys

Down-hole surveying of in-hole azimuth and dip was completed on all holes during the 2014 to 2024 drill programs using a Reflex EZ-shot. Under typical operating conditions, the first down-hole survey was completed approximately 10 to 20 m below the bottom of the drill casing and then every 30 m following the initial measurement. As the Reflex EZ-shot uses magnetism for its measurements, in areas where ferromagnetism is prevalent in the rocks, measurements can be unreliable for azimuth readings. All down-hole surveys were

completed by the drilling contractors at the drill and repeats, when feasible, were asked for missed or bad surveys.

#### **10.2.14 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.

#### **10.2.15 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 2024 drilling programs were completed at the drill by the personnel of the drilling contractors. The core shack is located on the Wawa Gold Property, near the town of Wawa, no more than 6 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. The core is checked for block errors and for mistakes in core placement. A quick log of the core is also completed to evaluate if the geological targets were intersected. After these steps, a more thorough examination of the drill core is done during core logging in the core shack that is described in Item 10.3 and intervals of core are selected for sampling.

### **10.3 Geotechnical Core Processing**

Prior to the beginning of the geological logging, core pieces were properly fitted, and when available, the core orientation line was drawn. Metre marks were then written on the drill core using as reference the blocks identified by the drillers every run (3 m). The 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.

#### **10.3.1 Structure**

The Reflex ACTIII was used in conjunction with drilling to orient 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). A core rocket launcher is used for the collection of lineation measurements. 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.

### 10.3.2 Short Wave Infrared Reflectance

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 drifting and changing light conditions, a standard measurement (white spectralon reference with a reflectance value of 99%) 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 were then processed using The Spectral Geologist (TSG™) software to get the spectral mineralogy of each spot measurement. Different spectral scalars, specific to white micas, chlorite, carbonate, biotite, and tourmaline, which were the minerals found to be directly related to the alteration processes related to gold mineralization, were then calculated for each hole.



**Figure 10-5: 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/>), based on the minerals identified by TSG™, the spectral data and the calculated scalars for each

metre were average to one point for each mineral. For the historical core sample, the spectral scalars for each data point were averaged for one entire row of core. 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. The collected spectral data also provide quantitative measurements of the intensity of spectrally detectable alteration minerals for each mineralization zones of the Wawa Gold Project.

### 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 Bulk Density Measurements

Bulk density 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 and recorded in an Excel™ spreadsheet for each drill hole. Bulk density was determined by weighing a piece of core in air and in water and calculating using the following formula:

$$\text{Bulk Density} = \frac{\text{Sample Weight in Air}}{\text{Sample Weight in Air} - \text{Sample Weight in Water}}$$

## 10.4 Core Logging Protocols

### 10.4.1 Core Logging

From 2014 to the spring of 2017, drill core logs were recorded in Gemslogger software, an extension of Microsoft access. In the spring of 2017, Red Pine switched logging software and started using MX Deposit (Seequent/Bentley). All the core logging is done under the supervision of a qualified geologist.

In MX Deposit, the geological data collection system is subdivided in different tables describing the major and minor geological units, the effects of hydrothermal alteration that formed either veins or replaced the host rocks, the type of mineralized structure and for shear zone information on the intensity and anisotropy of deformation, and a detailed description of the mineralization minerals observed in the drill core. Structural logs, when orientation lines of acceptable quality are available, are also completed for each diamond drill hole. Structural logs are completed in MX Deposit in a dedicated table.

A variety of methods are used to accurately describe lithological units, the effect of hydrothermal alteration and the mineralization minerals. These included testing for magnetism with a magnet, reactivity with 10% HCL, scratch testing with a nail or tungsten scribe to estimate hardness, colour, texture, structure and grain size.

SWIR analyses and by spot measurements using a portable XRF are systematically used to help with the identification of rock types and of mineralization minerals and to define the mineralogy and the intensity of hydrothermal replacements in the haloes and within zones of gold mineralization. The portable XRF units used by the company are programmed with predefined element ratios that characterize favorability for gold (white mica intensity ratio derived from internal work) and the nature of the host rocks (Zr/TiO<sub>2</sub>).

#### **10.4.2 Core Sampling**

The selection of core sampling intervals is based on the observations of mineralogical and structural features that are known to be associated with gold mineralization. These include favorable sulfide mineralization, quartz veining, shearing and deformation, intrusive contacts with indications of fluid circulation and alteration types potentially associated with gold mineralization like white mica replacements or biotite replacements and veins. SWIR and portable XRF measurements are used to support the identification and the quantification of the mineralogical indicators for gold mineralization. Each core sample is generally kept between 0.5 m to 1.5 m in length and the samples are taken to avoid crossing the boundaries between major geological units as much as possible. The samples were originally captured in an Excel™ spreadsheet and are now captured directly into MX Deposit.

#### **10.4.3 Core Photography**

Dry and wet digital photographs were taken of all drill core drilled of the 2014 to 2024 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 or in groups depending on the photography system used. Each picture is then verified 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 and easy to read on the core pictures, the photos are deemed to be in focus and of acceptable quality.

## 11.0 SAMPLING PREPARATION, ANALYSES, AND SECURITY

### 11.1 Historical Drilling Programs

For the drill programs prior to 2007, no information is available about the historical drill core's sample preparation, analyses and security. 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 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, and the other half was put in a sample bag and sent to Accurassay Laboratories (Accurassay) in Thunder Bay, Ontario. Due to limited storage, Wawa GP disposed of some of the drill core from the 2007 drilling program that was considered non-mineralized. 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 (AAS) finish. Accurassay operated independently of Wawa GP (Duke 2012). Wawa GP inserted 12 blanks and three Certified Reference Material samples ("standards") into the sample stream. In addition, Accurassay repeated one pulp analysis for every 10 samples and an excellent correlation was described between the original analysis and the repeat pulp assay (Duke, 2012). Sample security was described by Dow (2011): core was moved from the drill rig to the logging area by the drillers, and the samples were transported to Accurassay by a bonded carrier. Assay certificates were initially sent electronically to Wawa GP, with a paper copy of the assay certificates sent by Canada Post afterward.

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, and the other half was placed 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 in Thunder Bay (Ontario) by Greyhound. Accurassay is accredited for gold under the ISO/IEC 17025 guideline and is independent of Augustine. Accurassay dried and crushed the sample to -8 mesh (2.38 mm). A subsample of unspecified size was pulverized, and 30 g of the pulverized material was analyzed by fire assay with an AAS finish.

As part of its QA/QC protocols, Augustine used a system of sample blanks, standards, and laboratory pulp repeats to monitor the quality of its gold assay data. The blank material was created from a diorite of the Jubilee Stock considered to be barren. Gold values were detected in all the analyzed blanks except for two samples. Duke (2012) indicated uncertainty regarding whether the detected gold values were related to possible cross-contamination, or to the natural gold content of the diorite used as a blank (Duke, 2012). Augustine used two standards supplied by Accurassay. HGS3 with a gold content of 4009 ppb  $\pm$  250 ppb (1SD) was used 16 times and SMG with a gold content of 247 ppb  $\pm$  27 ppb (1SD) was used 18 times. Duke (2012) observed an excellent correlation between the original analyses and the laboratory pulp repeats.

Duke (2012) concluded that the sample collection, preparation, and security for the 2011 drilling program were adequate.

## 11.2 Red Pine 2014 to 2024 Core Sampling

### 11.2.1 Core Handling, Sampling and Security

The core collected by Red Pine during the 2014 to 2024 drilling programs was sampled at two lengths; approximately 1.5 m for intervals without strong visual indicators of gold mineralization, and at approximately 1.0 m for intervals with visual indicators of gold mineralization. With a few exceptions, the minimal sample length is 0.5 m and the maximum sample length is 1.6 m.

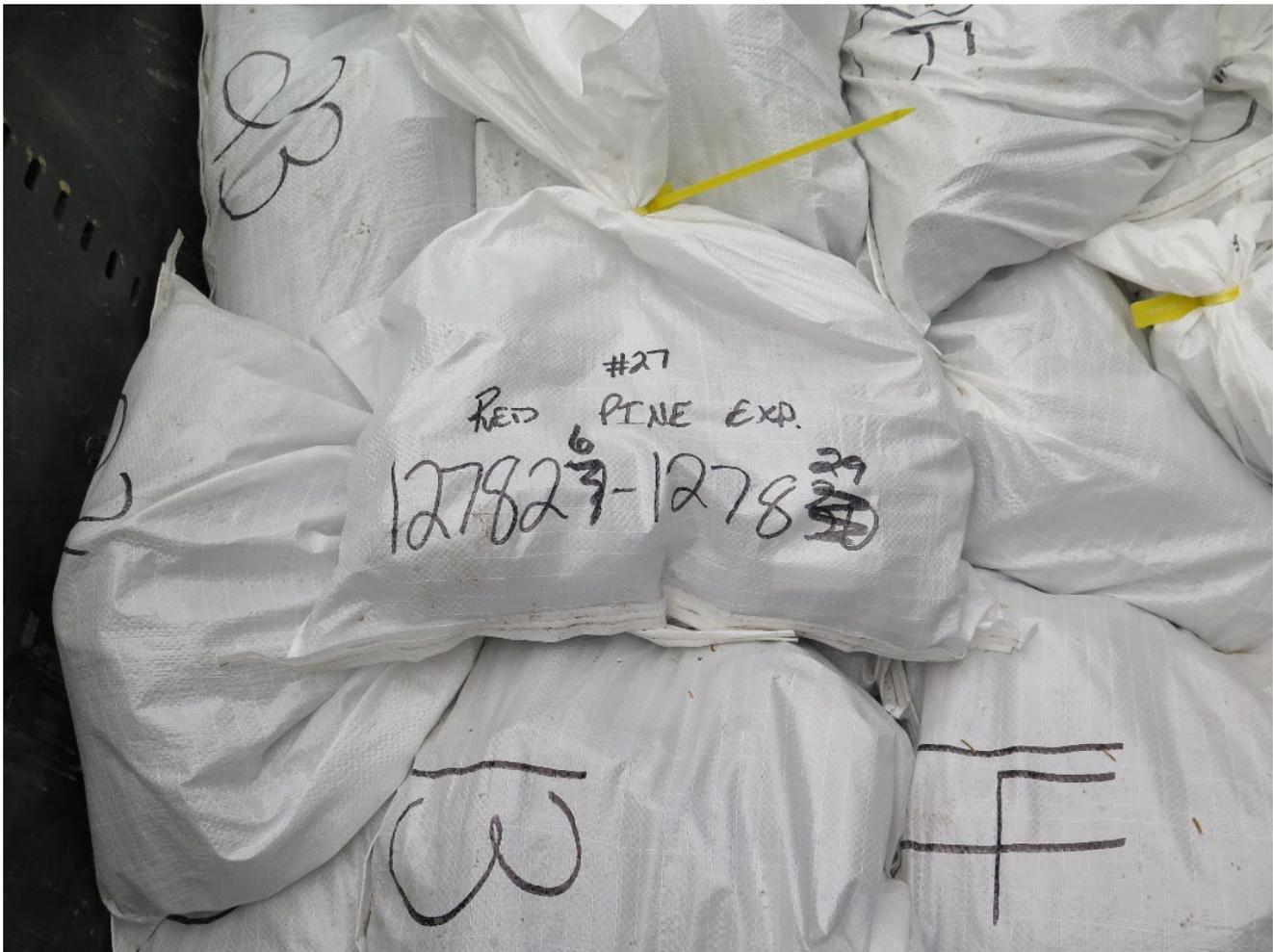
Upon completion of the geological logging, the geologist marks the location of the samples by placing a pair unique identification (“ID”) tags at the end of the selected sample. One of the two sample tags is then stapled into the core boxes at the end of each sample. Red marks are also drawn on the core to define the beginning and the end of each sample, and a cut line is generally drawn on the core to indicate where to cut the core samples. The cut line is defined to split in half the geological or structural features that are the most likely to control the distribution of gold in the selected core sample. QA/QC samples, including standards and blanks, are routinely inserted in the sequence of core samples and added to the sample batches sent to the laboratory. From 2023, quarter core field duplicates of Minto-style vein are routinely inserted in the sampling sequence.

The core is cut in half, with one half of the core placed in a plastic sample bag with a sample tag matching that of the other half, which remains in the core storage located on the property for future reference. The half-core sample selected to stay in the core box, when applicable, is the sample containing the orientation line. For future reference, the core boxes are securely stored in core racks on-site (Figure 11-1).



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

After cutting, individual samples are placed in batches of 3-6 samples in rice bags in preparation for their transport to the assay laboratory. Between 2014 and 2016, when enough samples were ready for shipment, the samples were brought directly by Red Pine personnel to Actlabs facilities in Timmins, Ontario. From 2016 to 2024, the samples were sent to Actlabs in Ancaster (Ontario), or to SGS in Cochrane or Lakefield (Ontario), using the Manitoulin Transport depot located in the town of Wawa (Ontario). For the samples sent with Manitoulin Transport, each rice bag is sealed using sequentially numbered security tags to maintain secure shipping and an appropriate chain of custody (Figure 11-2). Each security tag was recorded by Red Pine personnel, and the information was transmitted to the receiving 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.



**Figure 11-2: Security Sealed Rice Bags Containing Four Individual Sample Bags Each**

### **11.2.2 Analytical Procedures**

Two independent certified laboratories were used for the gold analyses of the Project. A total of 64,287 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 AAS or and ICP-AES finish (Actlabs method 1A2-50, SGS method GO FAI515).
- 2) Metallic Screen on 1,000 g of samples (Actlabs method 1A4-1000, SGS method GO FAS51K)

For the fire assay procedure, the entire sample is crushed to -10 mesh (1.7 mm), mechanically split and a split of 250 g is pulverized to at least 95% -150 mesh (105 µm). Fifty (50) grams of the pulverized sample is used for the fire assay procedure. Gold analysis was completed by atomic absorption spectrometry 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 50 g splits of the -100 mesh fraction. The final assay is calculated using the weight and gold analysis of each fraction.

Between 2015 and 2023, with a few exceptions, all the samples with a gold grade over 2.00 g/t from the fire assay were systematically re-analyzed by metallic screen to validate the detected gold grade. From 2023 to present, the metallic screen trigger has been increased to 2.25 g/t gold. With a few exceptions, all the samples reaching the upper limit detection of 5.00 g/t gold for fire assays were analyzed by metallic screen. Metallic screen assay is also routinely selected as the primary assaying method for samples containing quartz veins of the extensional event in which coarse gold is relatively abundant or suspected to be present, and for samples with compressional quartz veins containing visible gold.

In addition to gold analyses, systematic multi-element analyses using ICP-MS and ICP-AES following a four-acid near-complete digestion were completed on the drill core samples from the 2014 and 2017 to 2024 drilling programs. Red Pine used the multi-element packages ME-MS61 (2014-2018) and UT-6M (after 2018) of Actlabs and the package GE ICM40B from SGS.

### **11.2.3 Red Pine Data Management**

All existing exploration data for the Wawa Gold Project, including historical data as well as data collected during the 2014 to 2020 exploration programs, was amalgamated into three central Excel™-based databases maintained internally by Red Pine. One database was for the drill hole data, one for the trenching data and one for the prospecting sample data. From 2014 to 2020, the results from each assay certificate were manually added to the results sheet of the respective Excel databases. These excel spreadsheets are now kept as a backup of all the current data and the prospecting sample data excel sheet is still utilized when importing into various types of modelling software.

Starting in 2021, following the recommendations outlined in the technical report entitled “National Instrument 43-101 Technical Report for the Wawa Gold Project” dated August 6, 2021, to import assay data into a relational database instead of relying on Excel™ spreadsheets, all the drilling data of Red Pine, and subsequently all the data from trenching and surface samples, including assay data, was imported into MX Deposit. The MX Deposit relational database is now serving as the centralized drilling, trenching and surface sample database for Red Pine. As they are received from the laboratory, the csv files of assay certificates are imported in MX Deposit. Following their importation, the gold assay values imported from the csv are visually verified using the pdf file of the certificate, the data is verified for importation errors, the analytical results for standards and blanks are monitored for analytical failures, the pulp repeats and duplicates completed at the laboratory are verified and the passing rate of the pulverized samples is validated to ensure that the samples are not under-pulverized.

All the geological modelling and interpretations made for the Project are based on the data collected and validated in the MX Deposit database.

Between 2014 and 2017, the assay certificates from Actlabs were sent unencrypted to one person in Red Pine and consisted of two separate files, an Excel™ document and a Portable Document Format (pdf) document. From 2017 to 2020, a comma-separated value (csv) file was also sent. During the period when SGS was the primary laboratory in 2017, the files from each certificate were sent unencrypted to one person in Red Pine as a password-protected pdf document to protect against modifications and as a comma-separated value (csv) file. Starting in June 2020 and continuing to January 2024, to increase the protection of the assay certificates, the pdf, Excel and csv files from each assay certificate were sent from Actlabs to one person in Red Pine in password-protected zip files. A separate email containing the password for the zip files was also sent to the same person.

From February 2024 onwards, the pdf, Excel and csv files from each assay certificate are sent in password-protected zip files to at least two members of the senior management team of Red Pine. The pdf files are also password-protected against modifications. The assay certificates are also directly accessible to the senior management of the company using Actlab's WebLIMS portal.

### **11.2.4 Summary of the Quality Assurance and Quality Control Programs**

Quality control (QC) measures are typically established to ensure the precision, accuracy and overall reliability 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. Proper documentation of QC measures and regular analysis of QC data are crucial safeguards for Project data and form the basis for the QA program implemented during exploration.

As part of Red Pine's internal QA/QC protocols, standards and blanks are regularly inserted into the core sampling sequence. A standard is inserted every 20 samples, and a blank is inserted every 25 samples. Blanks are also routinely inserted after core samples where native gold is observed. The selected standards have a mineralogical matrix representative of orogenic gold deposits and cover a range of gold grades comparable to those expected in the mineralization zones of the project. Additional QA/QC measures include pulp repeats (second analysis of the same original prepared pulp) and pulp duplicates (second analysis of new pulp from obtained from the coarse rejects) at the primary assay laboratory (2014-present), re-analysis of fire assays results  $\geq 2.00$  g/t gold (2015 - 2023) or  $\geq 2.25$  g/t gold (2023 to present) using the coarse rejects by metallic screen, quarter core field duplicates for Minto-style veins and for the other types of mineralization (2023 to present), monitoring the pulverization of the samples by ascertaining that the percentage passing of the pulps at  $106 \mu\text{m}$  is at or exceeds 95.00 % (from 2024), and duplicate analysis of metallic screen analyses at the primary laboratory from the coarse rejects (from 2024).

In early 2017, Actlab's turnaround time for sample analysis exceeded industry standards, prompting Red Pine 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 analyzing over 10 g/t Au, due to a communication error between SGS and Red Pine. Communications errors, along with lengthy delays in QA/QC results and re-assays with SGS prompted Red Pine to return to Actlabs from mid-2017 to present.

### **11.2.5 Standards**

In the 2014 to 2024 drilling programs, 4 standards are typically used: one grading 0.40-0.70 g/t gold, one grading 1.00-2.50 g/t gold, one grading 5.00-7.00 g/t gold and one grading  $> 10.00$  g/t gold. The standards grading between 0.40 and 7.00 g/t gold form the primary group of standards were inserted with core samples, whereas the standards grading  $\geq 10.00$  g/t gold are inserted in batches containing samples with mineralogical and veining

indicators of strong gold mineralization. All the 5,778 standards used on the project are manufactured by Ore Research & Exploration Pty Ltd (OREAS).

From 2014 to 2024, a total of 5,513 standards have been analyzed at Actlabs with a passing rate of 96.9 % considering that 172 samples have gold values outside 3 standard deviations (SD) of the mean grade. In 2017, a total of 265 standards were analyzed at SGS with a passing rate of 98.9% considering that 3 samples have gold values outside 3 SD. In addition, the gold overlimit results for 10 standards were not determined at SGS. Table 11-1 presents the list of standards used on the Wawa Gold Project and Table 11-2 presents a statistical summary for each of the analyzed standards at Actlabs and SGS. Figure 11-3, Figure 11-4, and Figure 11-5 present the results for the routinely inserted standards between 2021 and 2024.

The threshold for a standard failure is when the gold analysis is outside 3 SD of its certified value. In those situations, Red Pine first identified the suite of samples in which the standard failure occurred to define if the failure of the standard can be related to a sample misidentification or an analytical failure. To help with this process, all the standard are individually photographed prior to their insertion in the sample shipment. If the standard failure cannot be associated with a sample misidentification and occurred around a suite of samples with gold content below the lower detection limit and up to approximately 50 ppb, Red Pine notifies the laboratory of the failure and no additional analyses are typically requested. If the identified standard failure occurred in a suite of samples within a known gold zones with the samples surrounding the standard containing gold values more than 50 ppb, Red Pine requests the laboratory to re-analyze the standard and in general five core samples above and below the CRM standard that failed. In the few cases where multiple standard failures were observed in one assay certificate or when a sequence of standards were outside the 2 SD range of the certified value in the same certificate, Red Pine notifies the laboratory of the samples within the warning or failing range and requests batches of samples from the certificate to be re-tested. If no significant changes were observed in the re-tested samples and the reanalyzed standard passes, the certificate and the results are considered to be of acceptable quality. If significant differences were found, the certificate was failed and the samples reanalyzed.

On Figure 11-5, a period of increased failure rate can be observed for the standard OREAS 279 in late 2022 and early 2023, while no other standards exhibited such a high failure rate. After an investigation done between Red Pine and Actlabs, it was noted that Actlabs was supplied with additional standard materials, with the OREAS information removed and letter identifiers chosen by Red Pine. These additional standards were used for standard re-runs in case of over-limits if the entirety of the original standard packet was used in the initial fire assay. The review completed by the Actlabs and Red Pine suggested that Actlabs may have been using incorrect lettered materials for the re-runs, leading to the standard failures. Red Pine requested the removal of all standard materials with letter identifiers and provided new materials. After replacing the material, Figure 11-5 shows that the results of the standard OREAS 279 returned to their normal pass rate.

**Table 11-1: Standards and Blank Material Used by Red Pine during the 2014 to 2024 Drilling Programs**

Standard	Certified Au (g/t)	1SD	2SD (Low)	2SD (High)	3SD (Low)	3SD (High)	Method Name*	Mineralization Style/Matrix
OREAS 12a	11.79	0.240	11.31	12.27	11.07	12.51	FA	Orogenic Lode Au; A blend of gold bearing Magdala ore from the Stawell Gold Mine, west-central Victoria, Australia and barren tholeiitic basalt from Epping, Victoria, Australia.
OREAS 19a	5.49	0.100	5.29	5.69	5.19	5.79	FA	
OREAS 202	0.752	0.026	0.701	0.804	0.675	0.830	FA	
OREAS 205	1.244	0.053	1.138	1.35	1.085	1.402	FA	
OREAS 206	2.197	0.081	2.165	2.229	2.188	2.207	FA	
OREAS 209	1.58	0.044	1.49	1.66	1.44	1.71	FA	
OREAS 210	5.49	0.150	5.18	5.79	5.03	5.94	FA	Orogenic Lode Au; Alkali olivine basalt and sulphide-bearing (pyrite, arsenopyrite) Au ore in quart-sericite-carbonate schist assemblage
OREAS 216	6.66	0.155	6.34	6.97	6.19	7.12	FA	Orogenic Lode Au; 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
OREAS 218	0.531	0.017	0.497	0.565	0.48	0.582	FA	
OREAS 226	5.45	0.126	5.2	5.7	5.07	5.83	FA	
OREAS 229	12.11	0.206	11.7	12.53	11.49	12.73	FA	
OREAS 229B	11.95	0.288	11.37	12.53	11.09	12.81	FA	
OREAS 231	0.542	0.015	0.512	0.573	0.497	0.588	FA	Orogenic Lode Au; Blend of gold-bearing ore and barren greenstone from the Frogs Leg Gold Mine located 19km west of Kalgoorlie in Western Australia.
OREAS 235	1.59	0.038	1.51	1.66	1.47	1.7	FA	Orogenic Lode Au; Blend of high grade gold-bearing ore and barren metasediments. Primary gold mineralization occurs as disseminated arsenopyrite and pyrite in a quartz-carbonate veinlet stockwork. The ore was sourced from the Fosterville Mine, Bendigo Australia.
OREAS 240b	5.65	0.142	5.36	5.93	5.22	6.08	FA	Orogenic Lode Au; Blend of gold-bearing ore and barren greenstone from the Frogs Leg Gold Mine located 19km west of Kalgoorlie in Western Australia.
OREAS 279	6.55	0.218	6.11	6.99	5.90	7.2	FA	Orogenic Lode Au; Blend of high-grade gold-bearing ore and barren sediments (shale, quartz and limestone). The ore was sourced from the Leeville Mine northwest of Carlin, Nevada
OREAS 292	11.06	0.353	10.36	11.77	10.00	12.12	FA	Orogenic Lode Au; Sample of high-grade gold-antimony ore sourced from the Costerfield Operation located approximately 10km northeast of the town of Heathcote in Victoria, Australia.
OREAS 904	0.045	0.004	0.036	0.054	0.032	0.058	FA	Fault controlled silicification - copper oxide; Suite of four transitional to oxide copper standards prepared from CST's Lady Annie Mine, located 120 kms northwest of Mount Isa, Queensland, Australia. Mineralisation at Lady Annie is hosted in dolomitic, carbonaceous and argillaceous sandstones and siltstones

Standard	Certified Au (g/t)	1SD	2SD (Low)	2SD (High)	3SD (Low)	3SD (High)	Method Name*	Mineralization Style/Matrix
Blank							N/A	Coarse silica sand provided by Actlabs or B&M White Lightning 2040 - expected grade of <0.005 g/t Au
Blank 2							N/A	Coarse 2040 Blank industrial metallic sand

Table 11-2: QA/QC Sample Count and Statistics

Actlabs										
Standard	Years	Counts	Expected value (g/t Au)	Average (g/t Au)	HRD (%)	HARD (%)	Outliers	Gross Outliers	Percent Passing QC	Overlimits not analyzed
OREAS 12A	2015 - 2016	123	11.79	11.82	0.3	2.3	4	0	96.7%	0
OREAS 19A	2015	49	5.49	5.48	-0.1	2.7	6	0	87.8%	0
OREAS 202	2015	8	0.752	0.741	-1.5	1.6	0	0	100.0%	0
OREAS 205	2014 - 2016	146	1.244	1.236	-0.7	2.7	2	0	98.6%	0
OREAS 206	2014 - 2015	13	2.197	2.142	-2.5	2.9	1	0	92.3%	0
OREAS 209	2017 - 2019	655	1.580	1.554	-1.7	3.0	14	0	97.9%	0
OREAS 210	2017 - 2020	714	5.49	5.50	0.2	2.4	10	0	98.6%	0
OREAS 216	2016	35	6.66	6.70	0.6	2.2	0	0	100.0%	0
OREAS 218	2017 - 2021	640	0.531	0.534	0.5	2.9	7	1	98.8%	0
OREAS 226	2019 - 2021	114	5.45	5.45	-0.1	1.8	0	0	100.0%	0
OREAS 229	2017 - 2022	211	12.11	11.97	-1.2	2.1	11	0	94.8%	0
OREAS 229B	2020 - 2024	114	12.10	11.95	1.3	2.1	1	0	99.1%	0
OREAS 231	2021 - 2024	885	0.542	0.543	0.2	2.7	20	2	97.5%	0
OREAS 235	2020 - 2024	909	1.590	1.579	-0.7	2.8	63	0	93.1%	0
OREAS 240B	2024	44	5.65	5.68	0.6	1.7	0	0	100.0%	0
OREAS 279	2021 - 2024	827	6.55	6.47	-1.3	3.2	28	0	96.6%	0
OREAS 292	2023 - 2024	16	11.06	10.83	-2.1	2.9	0	0	100.0%	0
OREAS 904	2014	10	0.045	0.050	10.7	11.1	2	0	80.0%	0
<b>Total</b>		<b>5513</b>					<b>169</b>	<b>3</b>	<b>96.9%</b>	<b>0</b>

Actlabs										
Standard	Years	Counts	Expected value (g/t Au)	Average (g/t Au)	HRD (%)	HARD (%)	Outliers	Gross Outliers	Percent Passing QC	Overlimits not analyzed
<b>SGS</b>										
Certified Reference Material	Years	Counts	Expected value (g/t Au)	Average (g/t Au)	HRD (%)	HARD (%)	Outliers	Gross Outliers	Percent Passing QC	Overlimits not analyzed
OREAS 12A	2017	63	11.79	11.91	1.1	2.3	0	0	100.0%	9
OREAS 205	2017	57	1.244	1.257	1	2.9	1	0	98.2%	0
OREAS 209	2017	17	1.580	1.522	-3.6	4.7	0	1	94.1%	0
OREAS 210	2017	74	5.49	5.48	-0.2	2.8	1	0	98.6%	0
OREAS 216	2017	11	6.66	6.65	-0.2	1.9	0	0	100.0%	0
OREAS 218	2017	41	0.531	0.534	0.6	2.9	0	0	100.0%	0
OREAS 229	2017	2	12.11	N/A	N/A	N/A	0	0	100.0%	1
<b>Total</b>		<b>265</b>					<b>2</b>	<b>1</b>	<b>98.9%</b>	<b>10</b>

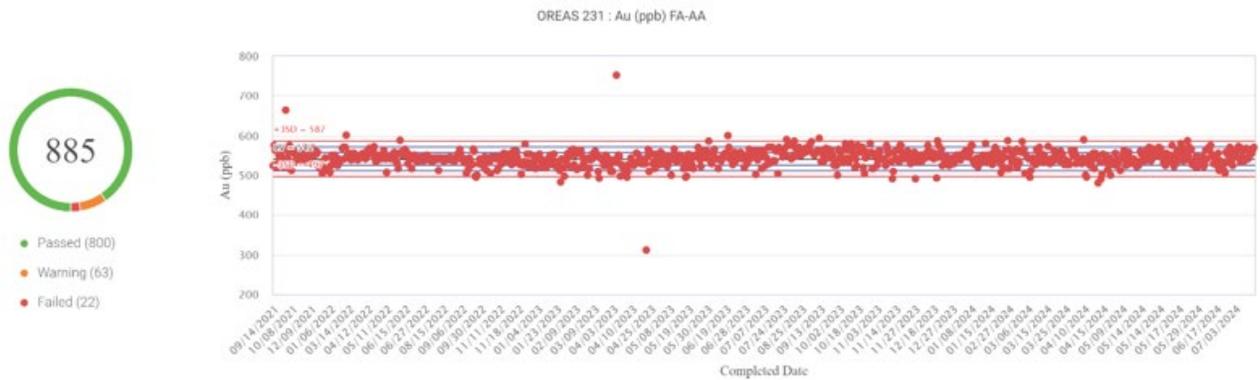


Figure 11-3: Control Chart for Standard OREAS 231 between 2014 and 2024 (Actlabs)

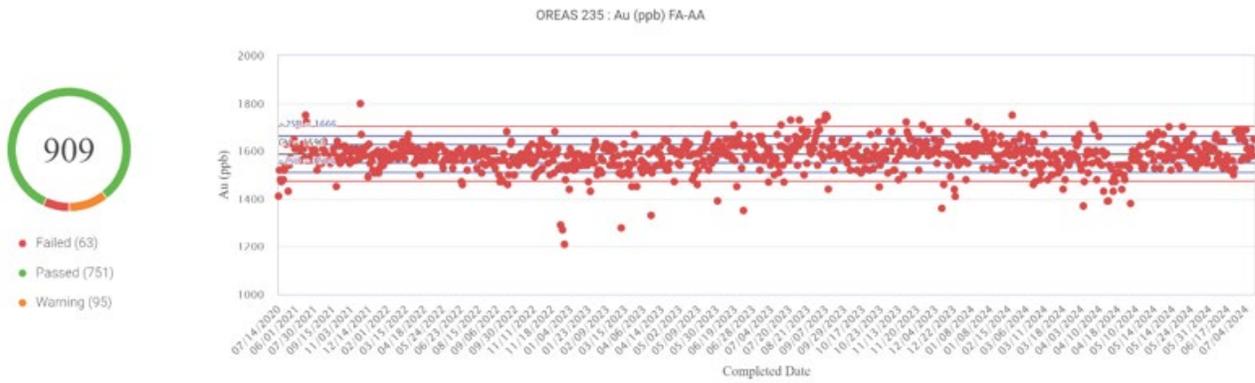


Figure 11-4: Control Chart for Standard OREAS 235 between 2014 and 2024 (Actlabs)

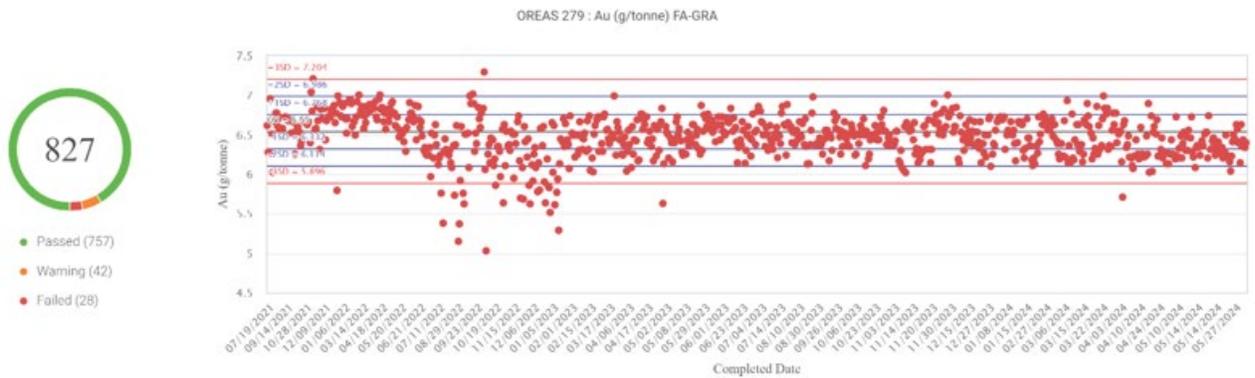
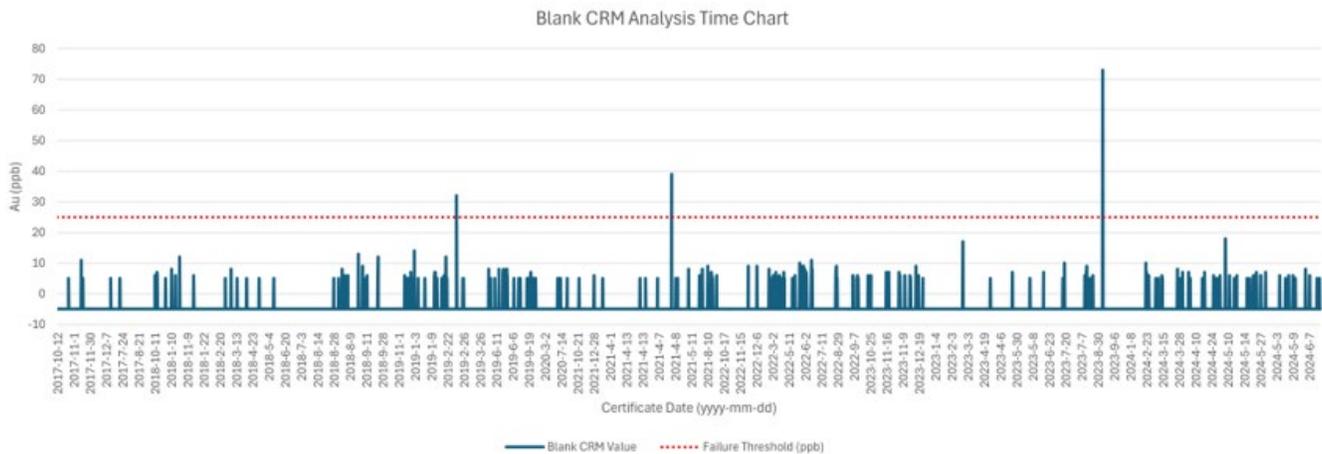


Figure 11-5: Control Chart for Standard OREAS 279 between 2014 and 2024 (Actlabs)

### 11.2.6 Blanks

The primary blank used during all the drilling program of Red Pine to monitor for possible sample contamination is a silica sand corresponding to the Bell & Mackenzie White Lightning® 2040 silica sand (Table 11-1). A total of 4,585 blank samples were sent to Actlabs between 2014 and 2024. From that total, 3 blank samples (0.07 %) contained gold values higher than 5 times (25 ppb) the detection limit (DL) (Figure 11-6). In 2017, a total of 209 blank samples were sent to SGS with no samples containing values higher than 5 times DL.



**Figure 11-6: Control Chart for Blank 1 between 2014 and 2024 (Actlabs)**

A secondary blank (Table 11-1), inserted 38 times in sample shipments sent in 2023 and 2024, consisted of an industrial sand that was purchased by mistake in 2023. The mistake was quickly captured and corrected. This industrial sand was identified as 2040 Black, which is a granulated Copper Slag produced by K 7 E Sand Gravel out of Wyoming, Ontario (2040 Black, 2024). The composition of this sand was mainly Iron Oxide (53 to 60%), with Fused Silica (31 to 37%) and traces of Aluminum Oxide, Calcium Oxide, and Magnesium Oxide (2040 Black, 2024). This sand has a main use as blasting material for removing deep rust during the process of sand blasting. The industrial sand contained gold values between below detection (less than 5 ppb) and 32 ppb gold. Setting the gold values below detection at half the DL (2.5 ppb), an average of 12 ppb Au and a standard deviation of 9 ppb Au can be calculated for the industrial sand. No samples have gold values outside the average value + 3 SD (39 ppb), indicating the absence of significant outliers in the suite of analyses and of potential gold contamination. Considering the average of 12 ppb, a Horizontal Relative Difference (HRD) value of -3.2 % is indicating no considerable bias for the analyses of the industrial sand and a Horizontal Absolute Relative Difference (HARD) of 62.8 % is indicating very poor replicability of Au results for the industrial sand.

### 11.2.7 Field duplicates

A total of 139 quarter core duplicates were inserted into samples shipments between 2014 and 2024. Seventy-eight (78) quarter core duplicates were inserted from 2023 onwards when Red Pine, following the recommendations of the resource QP, started the routine insertion of quarter core duplicate to quantify the variations in gold grade for the veins of the extensional (Minto) event. Red Pine has since expanded the quarter core duplicate collection to cover all the styles of mineralization present in the gold zones of the Wawa Gold Project.

Prior to 2023, 58 core quarter core duplicates covering a Jubilee Shear intersection were taken in 2020 from one drill hole of the 2020 drilling program, and 3 quarter core duplicates were taken from the Cooper Vein from the 2019 drilling program. Except for the 3 quarter core duplicates of the Cooper Vein that were analyzed at Bureau Veritas in 2019, all the other 136 quarter core duplicates were analyzed at Actlabs using the analytical protocol and assay methods used for the primary half core samples.

The dataset of 139 pairs has been divided into two sets of data as each mineralization type have different attributes. Figure 11-7 shows the pairs associated with gold mineralization related to the compressional period (75 pairs, including 58 pairs from 1 drill hole) and Figure 11-8 shows the pairs of samples associated with gold

mineralization related to the extensional period (63 pairs). The graphs and the following statistical analyses exclude the one outlier sample grading 171.00 g/t gold and its quarter core duplicate grading 136.00 g/t gold, which represents a quartz vein of the compressional period.

The pairs of samples with gold mineralization from the compressional period show a moderate distribution of points around the 1:1 line on Figure 11-7, with a few samples plotting beyond the +/- 20% range of variation. A subset of 54 pairs of mineralized samples from the compressional period, considering quarter core duplicate assays grading over 0.05 g/t gold indicates moderate repeatability (39.5 % HARD) between the two sets of samples. This indicates a moderate nugget effect for the gold mineralization zones typical of the compressional period in the Jubilee Shear System.

The pairs of samples with gold mineralization from the extensional period shows a wide distribution of points around the 1:1 line on Figure 11-8, with many samples plotting beyond the +/- 20% range of variation. A subset of 36 pairs of samples from extensional veins, considering quarter core duplicate assay grading over 0.05 g/t gold, indicates a very poor repeatability between the two datasets (103.4 % HARD). The poor repeatability of assay results from mineralization associated with the extensional veins supports the petrographic observations that gold primarily occurs as coarse gold, which is very heterogeneously distributed in the core samples and can be explained by the nugget effect. This also supports the observation and conclusions of MacDonald et al. (2023) that a high nugget effect affects the mineralized quartz veins of the extensional period (Minto veins) and supports the continuation of taking field duplicates to monitor and quantify that variability.

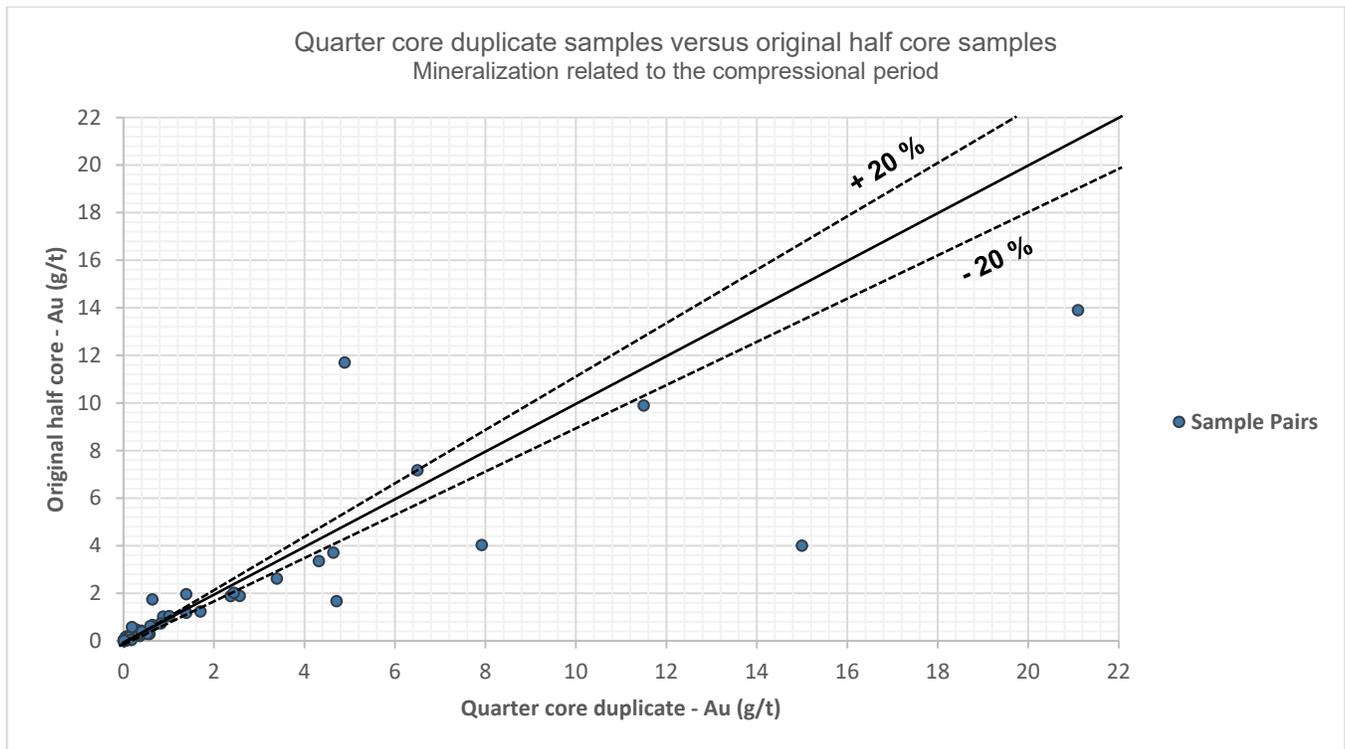
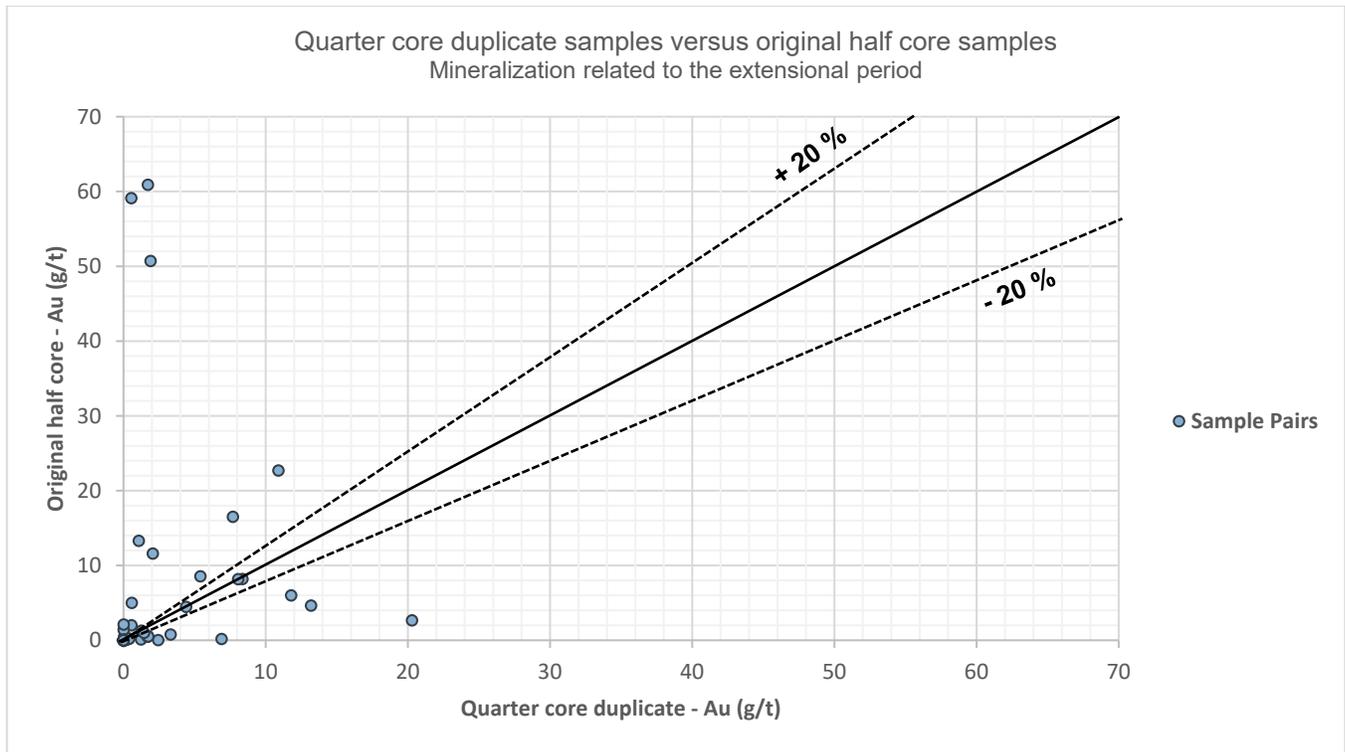


Figure 11-7: XY Scatterplot of Field Duplicates from Mineralization of the Compressional Period



**Figure 11-8: XY Scatterplot of Field Duplicates from Mineralization of the Extensional Period**

### 11.2.8 Pulp repeats and pulp duplicates

Between 2014 and 2024, a total of 8,220 pairs of pulp repeats and a total of 1,986 pairs of pulp duplicates have been analyzed at Actlabs. The range of gold grades varies between lower detection at 5 ppb and the upper detection limit of 5,000 ppb of the fire assay with AAS finish analytical method (Figure 11-9 and Figure 11-10). From the pulp repeat dataset, a subset of 900 samples grading between 50 and 4,990 ppb gold indicated no obvious bias (-1.5 % HRD) and acceptable precision (7.04 % HARD) between the two determinations. From the pulp repeat dataset, a subset of 242 samples grading between 50 and 4,990 ppb gold indicated no obvious bias (2.09 % HRD) and acceptable precision (8.80 % HARD) between the two determinations (Figure 11-10). The observable decrease of analytical precision for both the pulp repeats and the pulp duplicates around gold grades greater than 2,000 ppb (2.00 g/t) support the reanalysis of samples with gold grades greater or equal to 2.25 g/t gold with metallic screen analyses.

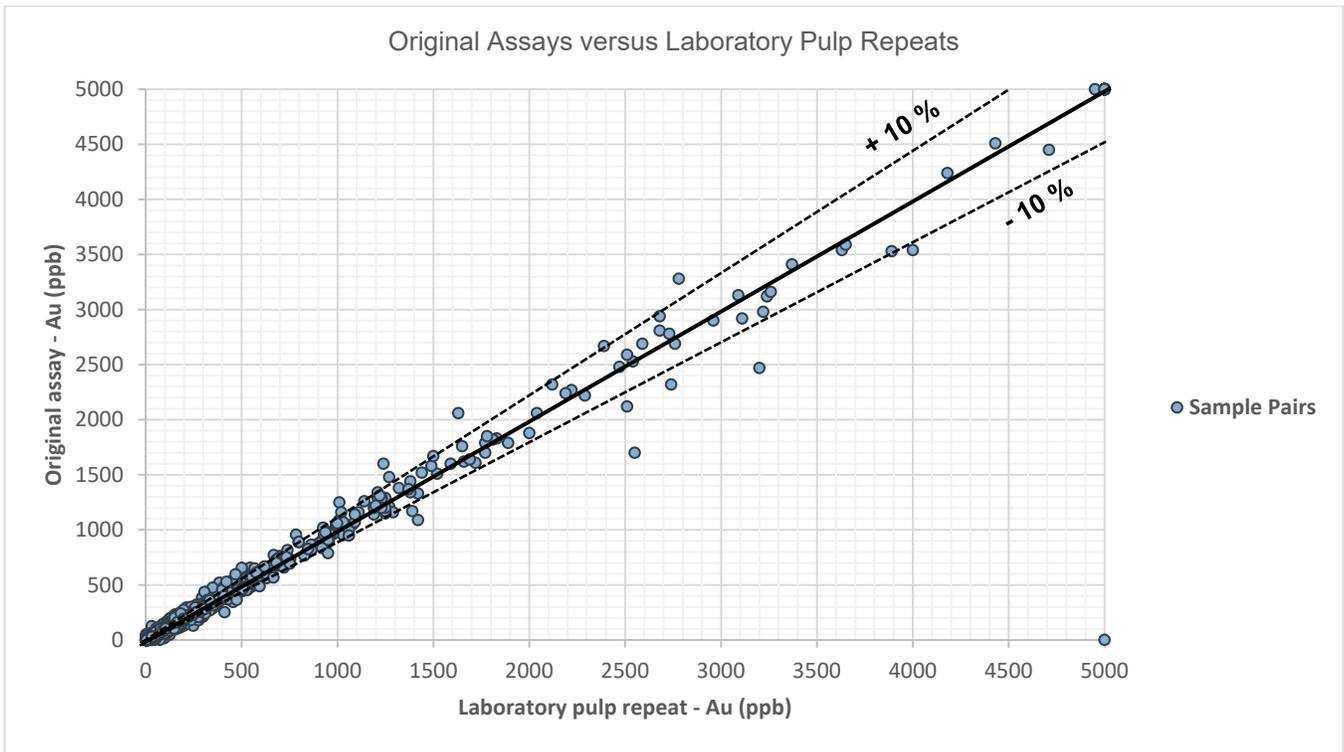
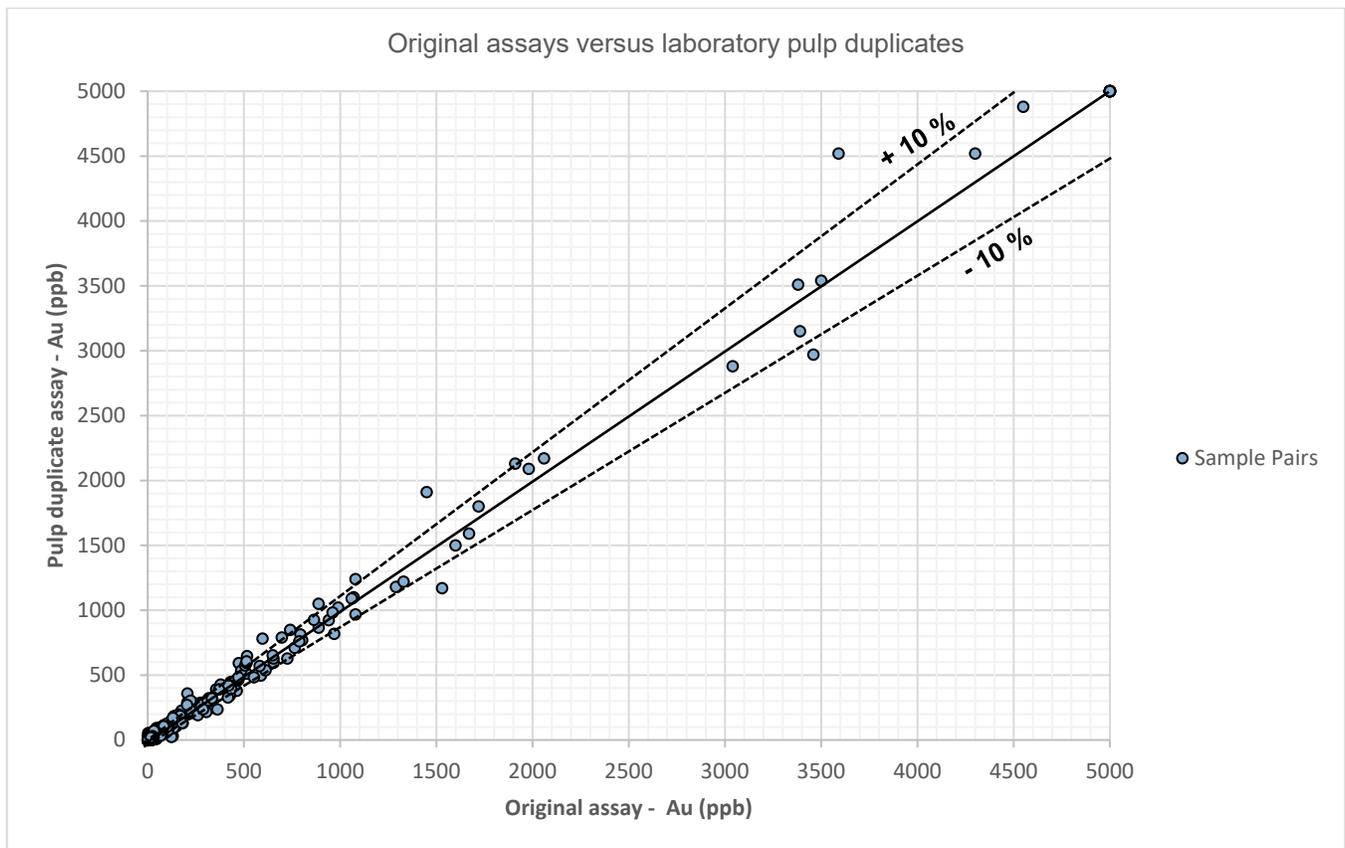


Figure 11-9: XY Scatterplot of Laboratory Pulp Repeats Versus Original Assays

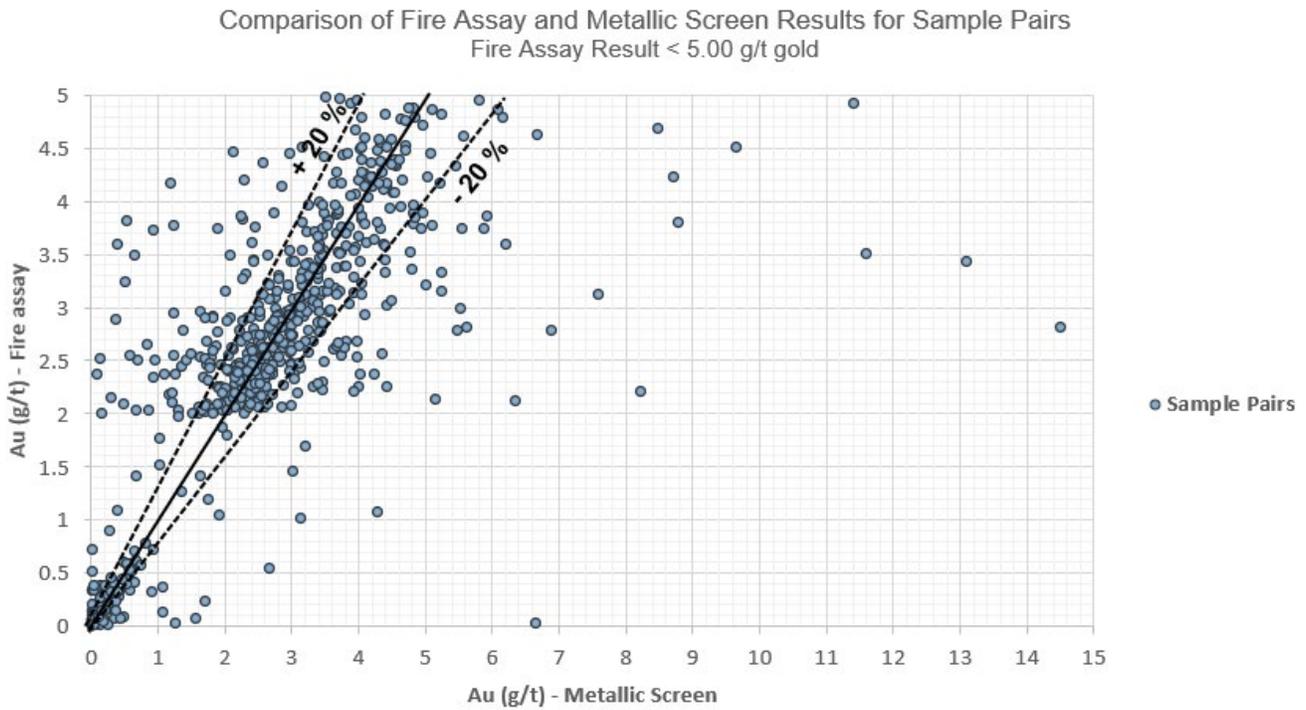


**Figure 11-10: XY Scatterplot of Laboratory Pulp Duplicates Versus Original Assays**

### 11.2.9 Fire assay samples reanalyzed by metallic screen

Between 2015 and 2024, a total of 926 core samples with fire assay results between 0.005 and 5.00 g/t gold were reanalyzed using the coarse rejects with metallic screen analyses at Actlabs. The pairs of samples are plotted in Figure 11-11. Since this dataset includes samples that were assayed using two methodologies due to off threshold triggering (Red Pine samples >2.00 ppm Au in Fire Assay until 2023 and 2.25 g/t Au from 2023 automatically trigger a Metallic Screen Analysis to test for coarse gold), the pairs of samples are not technically duplicates. There is a potential bias resulting from the different methodologies applied, the different subsample weights used, and the lack of random selection.

However, this dataset can be used to evaluate bias and precision. A subset of 572 sample pairs considering gold grades over 0.10 g/t gold for metallic screen analysis indicated no obvious bias (1.7% HRD) and moderate repeatability (27.6 % HARD) between the two methods. The results support the continued application of metallic screen methodology in determining the potential coarse gold content.



**Figure 11-11: XY Scatterplot of Fire Assay Versus Metallic Screen Results**

**11.2.10 Sieve analyses**

Since April 2024, Red Pine, as part of its updated QA/QC protocols, has been monitoring the passing percentage of the pulps to assess the quality of sample pulverization and mitigate the potential effects of incomplete pulverization. A total of 110 sieve analyses were received and indicate an average % passing 106 µm of 99.5 %. No samples were found to fall below 95 % passing 106 µm, the threshold indicating under pulverization. The graph of the sieve analyses is presented at Figure 11-12.



## 12.0 DATA VERIFICATION

The QP completed several data verification checks for the 2024 Wawa Gold MRE. The verification process included a 3-day personal inspection of the Project site to review geological procedures, chain of custody of drill core samples and assay certificates, drill collar inspections and the collection of 65 independent samples for metal verification consisting of 50 samples from Red Pine drilling and 15 samples from historic core intervals in the Surluga (Jubilee Shear Zone).

Data verification also included a full independent build of the Red Pine assay database using original assay lab certificates sent directly to the QP from the laboratories for drilling completed between 2014-2024.

Ronacher-McKenzie/SRK, Golder Associates, prior to WSP's incorporating the company, and WSP completed six previous site visits (2015, 2016, 2017, 2018, 2019 and 2022) at the Wawa Gold project in which verification logging and sampling, collar co-ordinates, and assay database verification were conducted. The QPs for those reports found that the data collection, methods, and QA/QC procedures used were consistent with industry standards.

### 12.1 Site Visit

A site visit to the Project site was carried out by Brian Thomas, P.Geo., an independent QP as defined by National Instrument 43-101, from May 21, 2024, to May 23, 2024. The site visit included the following activities:

- Inspection of the exploration site and confirmation of drill hole collar locations.
- Independent verification logging and sampling of 50 Red Pine drill core samples from holes drilled from 2014 to 2024.
- Independent verification sampling of 15 composited historical samples (pre-2014).
- Review of data collection procedures including drilling, logging, sampling, assaying, density measurements.
- Review of geology, mineralization and structural controls on mineralization.
- Review of current interpreted geological models.

An additional site visit as was carried out by the metallurgical QP, Steve Haggarty, P. Eng on May 25, 2023. The site visit included the following activities:

- To observe firsthand the remnant drill core from mineralized intercepts that were previously selected for metallurgical testing.
- To visually inspect the drill core containing finely disseminated pyrite and pyrrhotite, associated with relatively fine quartz veining, that is characteristic of the deposit, with variable gold, arsenopyrite, chalcopyrite, and sphalerite content.

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

#### 12.1.1 Drill Collar Inspection

Twelve drill collar locations were inspected 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 (approximately 3 m) as

summarized in Table 12-1. Figure 12-1 represents the collar location for hole SD23-469. No drills were active at the time of the site inspection.

**Table 12-1: Comparison of Drill Hole Collar Coordinates (UTM NAD 83)**

Hole	Red Pine		WSP		Variance from Red Pine	
	Easting	Northing	Easting	Northing	Easting	Northing
SD-22-417	668387.948	5316039.217	668,386.3	5,316,040.0	-1.7	0.7
SD-23-460	668276.906	5315969.245	668,278.2	5,315,971.2	1.3	1.9
SD-23-469	668494.571	5316151.904	668,493.7	5,316,152.9	-0.9	1.0
SD-23-470	668357.288	5316056.023	668,356.3	5,316,054.8	-1.0	-1.3
SD-23-472	668384.625	5316142.473	668,385.9	5,316,142.0	1.3	-0.5
SD-24-488	668310.026	5316131.391	668,311.7	5,316,131.7	1.7	0.3
SD-24-498E	668545.892	5316390.289	668,544.8	5,316,392.0	-1.1	1.7
SD-24-501	668510.029	5316403.003	668,509.8	5,316,403.7	-0.2	0.7
SD-24-506	668437.782	5316411.078	668,441.0	5,316,414.0	3.2	2.9
SD-24-511	668364.009	5316445.151	668,367.1	5,316,446.6	3.1	1.5
SD-24-513	668254.11	5316414.376	668,252.9	5,316,414.1	-1.2	-0.2
SD-24-490	668239.028	5316122.364	668,238.4	5,316,123.1	-0.6	0.7



**Figure 12-1: Example Drill Hole Collar Location**

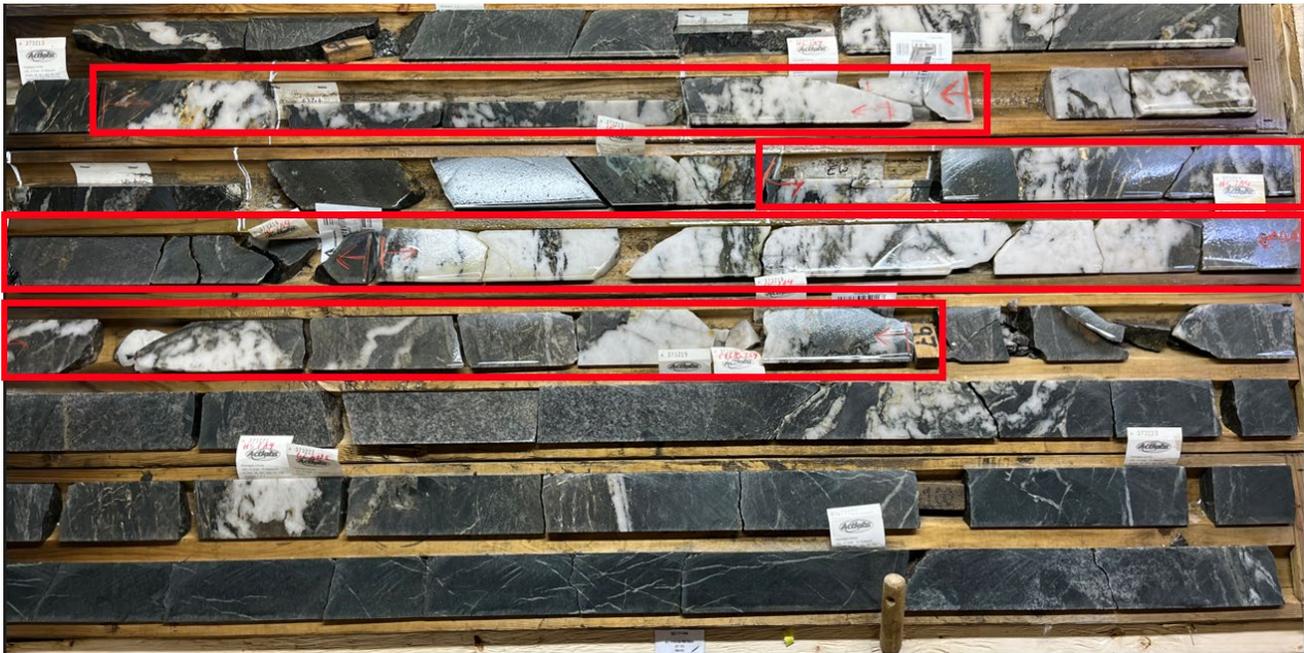
## 12.2 Independent Verification Logging and Sampling

### 12.2.1 Red Pine Data

The sample verification program consisted of 50 quarter-sawn samples selected from 21 Red Pine holes drilled between 2014 and 2024. Intervals of similar geology and grade were composited over multiple sample intervals in order to obtain a larger sample size. Thirty-three verification samples covered the main zone of the Jubilee Shear, 1 sample covered the lower segments of the Jubilee Shear, 4 covered the Minto B Shear Zone and 12 covered the Minto Mine Shear. Figure 12-2 and Figure 12-3 provide examples of verification intervals from drill holes SD-23-456 and SD-17-105, showing examples of quartz veining hosted in hydrothermally altered and highly sheared intrusive rocks. The Red Pine drill logs were found to match the observed core reasonably well and no material issues were identified in the logging.



Figure 12-2: SD-23-456 Example Verification Sample Interval (Jubilee Shear Zone)



**Figure 12-3: SD-17-105 Example Verification Sample Interval (Minto Shear Zone)**

The verification samples consisted of quartered NQ-sized drill core for the drill holes completed between December 2014 and April 2015, and quartered HQ-sized drill core for the holes completed after May 2015. Table 12-2 summarizes the results of the Red Pine sample verification program.

Verification analysis was completed using a combination of fire assay using a 50 pulp with a gravimetric finish as well as metallic screen for selected higher-grade intervals.

Figure 12-4 provides a graphical comparison of the 2024 verification assays versus original assays. It should be noted that the volume of sampled material was not the same since Red Pine samples were based on half-sawn NQ core (47.6-millimetre core diameter) and HQ core (63.5-millimetre core diameter), and the verification samples were based on quarter-sawn NQ and HQ core.

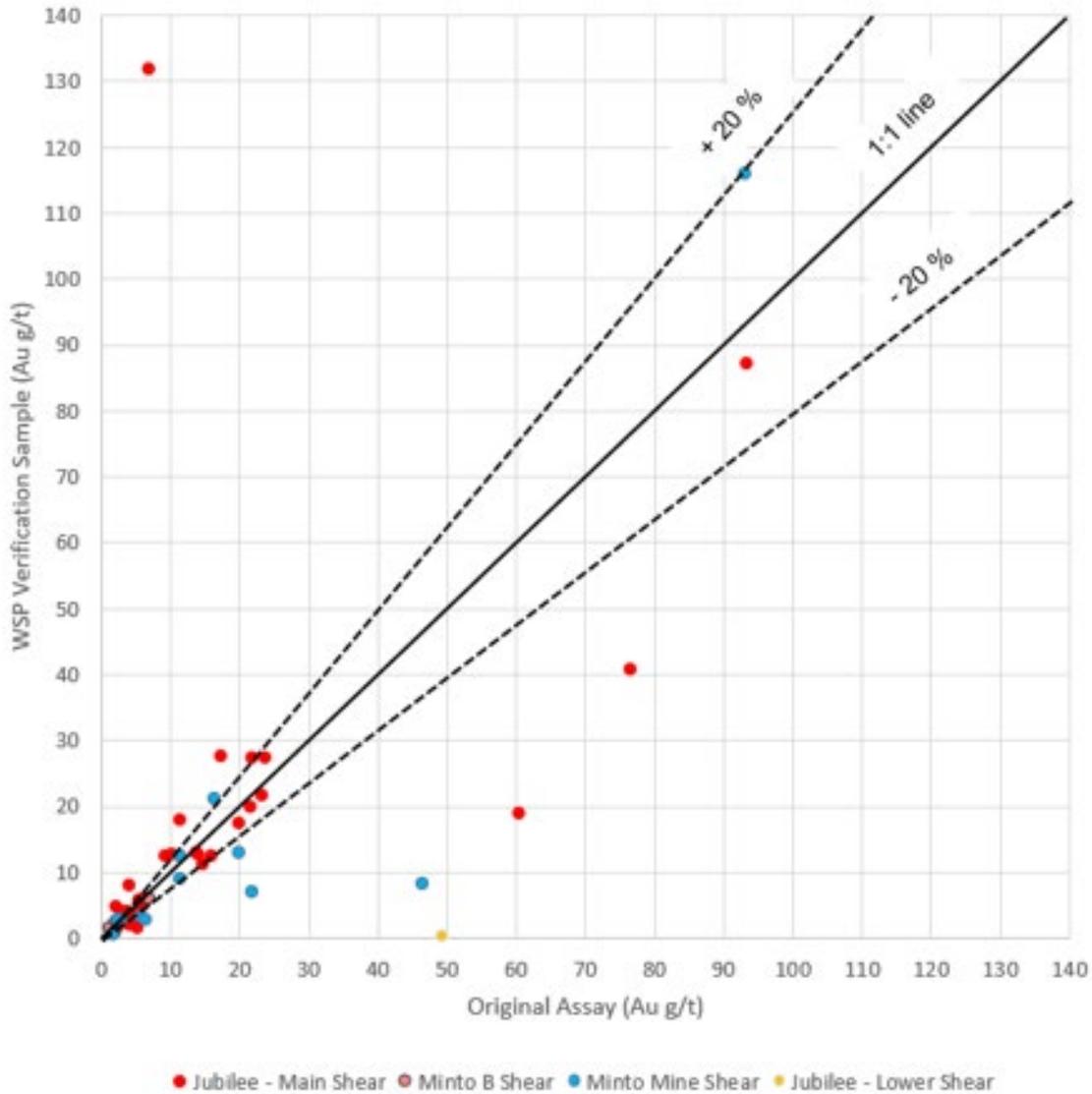
The QP observed that the original and quarter core assay results were in reasonable agreement although some larger variations were seen in some of the higher-grade intervals.

**Table 12-2: Independent Sample Verification Intervals from Red Pine intersections between 2014 and 2024**

Hole ID	Zone	From (m)	To (m)	Sample Length (m)	Composite Length (m)	RPX Sample Number	RPX Au Sample (g/t)	RPX Au Composite (g/t)	WSP Sample Number	WSP Au (g/t)
SD-14-03	Jubilee - Main Shear	268.50	269.65	1.15	1.15	1471546	13.90	13.90	P449201	12.70
		269.65	270.70	1.05	1.05	1471547	14.60	14.60	P449202	11.25
SD-14-04	Jubilee - Main Shear	267.00	267.77	0.77	3.00	1471573	11.60	6.02	P449210	6.02
		267.77	268.90	1.13		1471575	6.42			
		268.90	270.00	1.10		1471576	1.69			
		270.00	271.12	1.12	3.64	1471578	13.10	6.05	P449211	5.38
		271.12	272.37	1.25		1471579	3.72			
		272.37	273.64	1.27		1471580	2.12			
		273.64	274.60	0.96	2.96	1471581	8.87	10.16	P449212	12.80
		274.60	275.60	1.00		1471582	9.77			
		275.60	276.60	1.00		1471583	11.80			
SD-14-05	Jubilee - Main Shear	155.00	156.00	1.00	3.00	1471652	5.79	9.23	P449213	12.65
		156.00	157.00	1.00		1471653	10.30			
		157.00	158.00	1.00		1471654	11.60			
		158.00	159.00	1.00	3.00	1471655	22.60	21.43	P449214	20.10
		159.00	160.00	1.00		1471656	18.30			
		160.00	161.00	1.00		1471658	23.40			
SD-18-234	Jubilee - Main Shear	272.77	273.70	0.93	0.93	708865	19.80	19.80	P449206	17.40
		273.70	274.70	1.00	1.00	708866	60.20	60.20	P449207	19.00
		274.70	275.68	0.98	0.98	708867	3.83	3.83	P449208	2.03
SD-18-255	Jubilee - Main Shear	189.79	190.41	0.62	0.62	923203	11.30	11.30	P449203	17.95
		190.41	191.20	0.79	0.79	923204	76.40	76.40	P449204	40.90
		191.20	191.94	0.74	0.74	923206	6.81	6.81	P449205	132.00
SD-20-291	Jubilee - Main Shear	546.45	547.63	1.18	2.15	771726	2.62	3.86	P449219	8.12
		547.63	548.60	0.97		771727	5.36			
		554.77	555.93	1.16	2.25	771735	3.48	2.11	P449220	1.44
		555.93	557.02	1.09		771736	0.66			
SD-22-414	Jubilee - Main Shear	318.57	319.65	1.08	2.16	122815	2.30	2.05	P449229	4.92
		319.65	320.73	1.08		122816	1.81			
		320.73	321.84	1.11	1.11	122817	6.96	6.96	P449230	2.42
SD-23-451	Jubilee - Main Shear	298.36	299.18	0.82	1.64	808722	5.74	15.87	P449215	12.65
		299.18	300.00	0.82		808723	26.00			
		303.00	304.00	1.00	3.25	808728	6.76	4.12	P449216	3.84
		304.00	305.14	1.14		808729	2.76			
		305.14	306.25	1.11		808730	3.14			
		355.38	356.54	1.16	1.16	808779	23.50	23.50	P449217	27.50

Hole ID	Zone	From (m)	To (m)	Sample Length (m)	Composite Length (m)	RPX Sample Number	RPX Au Sample (g/t)	RPX Au Composite (g/t)	WSP Sample Number	WSP Au (g/t)																																																																																																																																																																																																																																																										
		356.54	357.70	1.16	2.32	808781	5.01	4.39	P449218	2.03																																																																																																																																																																																																																																																										
		357.70	358.86	1.16		808782	3.77				SD-23-455	Jubilee - Main Shear	682.41	683.76	1.35	1.35	992145	3.64	3.64	P449227	4.02	683.76	684.90	1.14	1.14	992146	21.60	21.60	P449228	27.40	SD-23-456	Jubilee - Main Shear	251.85	252.80	0.95	0.95	990362	5.58	5.58	P449224	4.70	252.80	253.56	0.76	0.76	990364	23.00	23.00	P449225	21.70	257.45	258.52	1.07	3.30	990368	3.75	3.30	P449226	4.19	258.52	259.63	1.11	990369	3.00	259.63	260.75	1.12	990371	3.17	SD-23-477	Jubilee - Main Shear	297.90	298.52	0.62	0.62	997619	5.05	5.05	P449221	1.58	299.16	300.11	0.95	0.95	997623	17.10	17.10	P449222	27.70	305.94	306.46	0.52	0.52	997630	93.20	93.20	P449223	87.20	SD-24-490	Jubilee - Main Shear	201.00	202.26	1.26	2.51	999843	2.18	2.48	P449246	2.59	202.26	203.51	1.25	999844	2.78	203.51	204.62	1.11	2.22	999845	7.46	5.46	P449247	5.82	204.62	205.73	1.11	999846	3.45	205.73	206.73	1.00	2.17	999847	1.12	2.15	P449248	1.89	206.73	207.90	1.17	999848	3.03	211.29	212.42	1.13	2.13	999853	14.70	13.62	P449249	13.05	212.42	213.42	1.00	999854	12.40	SD-17-107	Jubilee - Lower Shear	197.00	198.00	1.00	1.00	498071	49.20	49.20	P449209	0.25	SD-22-413	Minto B Shear	250.76	252.00	1.24	2.50	125696	6.31	6.87	P449250	5.87	252.00	253.26	1.26	125697	7.42	SD-23-419	Minto B Shear	253.36	254.52	1.16	3.82	654177	1.65	1.22	P449243	1.46	254.52	255.73	1.21	654178	0.78	255.73	257.18	1.45	654179	1.25	258.58	259.47	0.89	1.76	654182	1.63	2.16	P449244	2.40	259.47	260.34	0.87	654183	2.70	266.86	267.84	0.98	2.93	654191	0.68	1.95	P449245	0.72	267.84	268.82	0.98	654192	4.00	268.82	269.79	0.97	654193	1.17	SD-22-373	Minto Mine Shear	161.15	162.10	0.95	0.95	804249	21.70	21.70	P449239	6.99	162.10	163.16	1.06	1.06	804155	93.20	93.20	P449240	116.00	163.16	164.17	1.01
SD-23-455	Jubilee - Main Shear	682.41	683.76	1.35	1.35	992145	3.64	3.64	P449227	4.02																																																																																																																																																																																																																																																										
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SD-24-490	Jubilee - Main Shear	201.00	202.26	1.26	2.51	999843	2.18	2.48	P449246	2.59																																																																																																																																																																																																																																																										
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212.42	213.42	1.00	999854	12.40																																																																																																																																																																																																																																																																
SD-17-107	Jubilee - Lower Shear	197.00	198.00	1.00	1.00	498071	49.20	49.20	P449209	0.25																																																																																																																																																																																																																																																										
SD-22-413	Minto B Shear	250.76	252.00	1.24	2.50	125696	6.31	6.87	P449250	5.87																																																																																																																																																																																																																																																										
		252.00	253.26	1.26		125697	7.42																																																																																																																																																																																																																																																													
SD-23-419	Minto B Shear	253.36	254.52	1.16	3.82	654177	1.65	1.22	P449243	1.46																																																																																																																																																																																																																																																										
		254.52	255.73	1.21		654178	0.78																																																																																																																																																																																																																																																													
		255.73	257.18	1.45		654179	1.25																																																																																																																																																																																																																																																													
		258.58	259.47	0.89	1.76	654182	1.63	2.16	P449244	2.40																																																																																																																																																																																																																																																										
		259.47	260.34	0.87		654183	2.70																																																																																																																																																																																																																																																													
		266.86	267.84	0.98	2.93	654191	0.68	1.95	P449245	0.72																																																																																																																																																																																																																																																										
		267.84	268.82	0.98		654192	4.00																																																																																																																																																																																																																																																													
		268.82	269.79	0.97		654193	1.17																																																																																																																																																																																																																																																													
SD-22-373	Minto Mine Shear	161.15	162.10	0.95	0.95	804249	21.70	21.70	P449239	6.99																																																																																																																																																																																																																																																										
		162.10	163.16	1.06	1.06	804155	93.20	93.20	P449240	116.00																																																																																																																																																																																																																																																										
		163.16	164.17	1.01	1.01	804157	1.76	1.76	P449241	0.52																																																																																																																																																																																																																																																										

Hole ID	Zone	From (m)	To (m)	Sample Length (m)	Composite Length (m)	RPX Sample Number	RPX Au Sample (g/t)	RPX Au Composite (g/t)	WSP Sample Number	WSP Au (g/t)
SD-18-222	Minto Mine Shear	257.88	258.60	0.72	0.72	713784	46.50	46.50	P449242	8.18
SD-17-171	Minto Mine Shear	200.38	201.39	1.01	1.01	524057	11.30	11.30	P449232	12.55
		201.39	202.30	0.91	0.91	524058	2.94	2.94	P449233	2.82
SD-17-115	Minto Mine Shear	108.93	109.96	1.03	1.03	498141	5.71	5.71	P449234	3.26
		109.96	110.96	1.00	1.00	498142	16.40	16.40	P449235	21.00
SD-17-105	Minto Mine Shear	92.00	92.97	0.97	0.97	373214	11.50	11.50	P449236	8.92
		94.00	95.00	1.00	1.00	373216	6.33	6.33	P449237	2.67
		95.00	96.00	1.00	2.00	373217	2.72	2.38	P449238	2.63
		96.00	97.00	1.00		373218	2.04			
SD-17-86	Minto Mine Shear	152.93	153.62	0.69	1.38	372166	19.80	20.00	P449231	12.85
		153.62	154.31	0.69		372167	20.20			



**Figure 12-4: XY Scatterplot Comparison of the Verification Sample Results**

**12.2.2 Historical**

The verification sampling of historical core (drilled prior to 2014 by previous operators) considered 15 composite samples all covering the main segment of the Jubilee Shear and distributed in 11 underground historical drill holes and 1 historical surface drill hole. Figure 12-5 and Figure 12-6 provide examples of historical drill holes U0662L5 and U1089L6, showing quartz veining hosted in hydrothermally altered and highly sheared intrusive rocks.



**Figure 12-5: Historical Hole U0662L5 (Jubilee Shear Zone)**



**Figure 12-6: Historical Hole U01089L6 (Jubilee Shear Zone)**

Each sample of historical drill core, due to accuracy issues with faded footage blocks and the possible shifting of the drill core in the boxes during transport of the boxes that occurred in the past, consisted of a composite sample taken from the entire box of mechanically split A-sized to B-sized drill core. All the remaining half core that was present in each box was included in the samples. The drill holes and the intersections for the historical samples were selected based on the ability to establish precise boundaries for the previously sampled intervals, the composite grade of the intersections contained in the boxes and their location.

Table 12-3 summarizes the results of the historical assay verification program and Figure 12-7 provides a graphical comparison of the 2024 verification assays versus original.

The QP observed a reasonable agreement between the verification samples and the original historical assays, noting a slight negative bias in the verification samples of approximately 6% in the total mean grade of the sample populations.

**Table 12-3: Independent Sample Verification Intervals from Historical Intersections prior to 2014**

Hole ID	From (m)	To (m)	Sample Length (m)	Composite Length (m)	Sample Weight (kg)	RPX Sample Number	RPX Au Samples (g/t)	RPX Au Composites (g/t)	WSP Sample Number	WSP Au (g/t)
S235	174.80	175.56	0.76	3.51	3.38	38747	0.00	1.43	P449162	0.87
	175.56	176.48	0.92			38748	2.19			
	176.48	177.39	0.91			38749	2.47			
	177.39	178.31	0.92			38750	0.82			
U0644L5	0.76	1.52	0.76	6.86	5.90	27523	0.34	0.30	P449160	1.22
	1.52	2.29	0.77			27524	0.00			
	2.29	3.05	0.76			27525	0.00			
	3.05	3.81	0.76			27526	1.03			
	3.81	4.57	0.76			27527	0.69			
	4.57	5.33	0.76			27528	0.34			
	5.33	6.10	0.77			27529	0.34			
	6.10	6.86	0.76			27530	0.00			
	6.86	7.62	0.76			27531	0.00			
U0644L5	7.62	8.38	0.76	7.62	6.17	27532	0.00	1.27	P449159	1.17
	8.38	9.14	0.76			27533	0.00			
	9.14	9.91	0.77			27534	0.00			
	9.91	10.67	0.76			27535	0.00			
	10.67	11.43	0.76			27536	0.34			
	11.43	12.19	0.76			27537	0.34			
	12.19	12.95	0.76			27538	0.00			
	12.95	13.72	0.77			27539	1.37			
	13.72	14.48	0.76			27540	7.20			
	14.48	15.24	0.76			27541	3.43			
U0658L5	0.00	0.76	0.76	5.33	4.41	28104	0.00	0.10	P449157	0.31
	0.76	1.52	0.76			28105	0.00			
	1.52	2.29	0.77			28106	0.69			
	2.29	3.05	0.76			28107	0.00			
	3.05	3.81	0.76			28108	0.00			
	3.81	4.57	0.76			28109	0.00			
	4.57	5.33	0.76			28110	0.00			
U0662L5	0.76	1.52	0.76	6.86	5.60	27972	0.00	0.15	P449158	0.19

Hole ID	From (m)	To (m)	Sample Length (m)	Composite Length (m)	Sample Weight (kg)	RPX Sample Number	RPX Au Samples (g/t)	RPX Au Composites (g/t)	WSP Sample Number	WSP Au (g/t)
	1.52	2.29	0.77			27973	0.00			
	2.29	3.05	0.76			27974	0.00			
	3.05	3.81	0.76			27975	0.34			
	3.81	4.57	0.76			27976	0.00			
	4.57	5.33	0.76			27977	1.03			
	5.33	6.10	0.77			27978	0.00			
	6.10	6.86	0.76			27979	0.00			
	6.86	7.62	0.76			27980	0.00			
U0663L5	0.61	1.22	0.61	7.62	6.80	28118	2.06	3.13	P449165	2.54
	1.22	1.83	0.61			28119	1.37			
	1.83	2.59	0.76			28120	1.37			
	2.59	3.35	0.76			28121	1.03			
	3.35	4.11	0.76			28122	8.91			
	4.11	4.88	0.77			28123	15.77			
	4.88	5.64	0.76			28124	1.37			
	5.64	6.40	0.76			28125	0.00			
	6.40	7.16	0.76			28126	0.00			
	7.16	8.23	1.07			28127	0.00			
U0727L5	8.53	9.60	1.07	7.32	5.02	0	1.03	22.20	P449154	22.70
	9.60	10.06	0.46			0	7.20			
	10.06	10.82	0.76			0	0.69			
	10.82	11.58	0.76			0	0.69			
	11.58	12.34	0.76			0	0.34			
	12.34	13.11	0.77			0	17.49			
	13.11	13.87	0.76			0	93.60			
	13.87	14.63	0.76			0	37.03			
	14.63	15.39	0.76			0	37.37			
	15.39	15.85	0.46			0	33.94			
U0729L5	0.00	0.61	0.61	6.40	4.61	29075	0.34	2.28	P449152	1.35
	1.83	3.05	1.22			29076	1.03			
	3.05	3.66	0.61			29077	8.23			
	3.66	4.57	0.91			29078	5.83			
	4.57	5.49	0.92			29079	0.34			
	5.49	6.10	0.61			29080	2.40			
	6.10	6.86	0.76			29081	1.03			
	6.86	7.62	0.76			29082	0.34			
U0763L6	1.52	2.44	0.92	4.58	3.69	30189	7.20	11.15	P449151	4.66
	2.44	3.35	0.91			30190	2.40			

Hole ID	From (m)	To (m)	Sample Length (m)	Composite Length (m)	Sample Weight (kg)	RPX Sample Number	RPX Au Samples (g/t)	RPX Au Composites (g/t)	WSP Sample Number	WSP Au (g/t)
	3.35	4.11	0.76			30191	27.43			
	4.11	4.72	0.61			30192	15.43			
	4.72	5.49	0.77			30193	10.97			
	5.49	6.10	0.61			30194	5.83			
U0784L6	7.32	7.77	0.45	7.31	6.92	0	7.89	10.01	P449156	9.65
	7.77	8.23	0.46			706696	0.04			
	8.23	8.84	0.61			0	31.54			
	8.84	9.54	0.70			30680	11.31			
	9.54	10.06	0.52			30681	25.71			
	10.06	10.67	0.61			30682	7.20			
	10.67	11.28	0.61			30683	9.94			
	11.28	11.89	0.61			30684	10.63			
	11.89	12.50	0.61			30685	11.66			
	12.50	12.95	0.45			30686	10.63			
	12.95	13.72	0.77			30687	0.34			
	13.72	14.63	0.91			30688	0.00			
U0798L6	8.53	9.45	0.92	4.27	4.74	31254	0.00	1.32	P449155	1.76
	9.45	10.36	0.91			31255	0.00			
	10.36	11.28	0.92			31256	0.00			
	11.28	11.89	0.61			31257	9.26			
	11.89	12.80	0.91			31258	0.00			
U0798L6	12.80	13.11	0.31	2.44	1.84	706694	0.01	2.77	P449153	3.56
	13.11	14.02	0.91			31259	5.14			
	14.02	15.24	1.22			31260	1.71			
U0927L6	0.00	0.79	0.79	7.83	6.74	32529	1.89	4.75	P449161	7.25
	0.79	1.52	0.73			32530	11.31			
	1.52	2.10	0.58			32531	9.43			
	2.10	2.87	0.77			32532	1.03			
	2.87	3.41	0.54			32533	2.57			
	3.41	4.02	0.61			32534	0.34			
	4.02	4.91	0.89			32535	1.03			
	4.91	5.21	0.30			32536	2.91			
	5.21	5.70	0.49			32537	25.37			
	5.70	6.16	0.46			32538	6.00			
	6.16	6.61	0.45			32539	2.57			
	6.61	7.04	0.43			32540	2.06			
7.04	7.83	0.79	32541	0.69						
U1089L6	5.49	6.40	0.91	5.33	4.66	0	0.48	5.93	P449163	3.20

Hole ID	From (m)	To (m)	Sample Length (m)	Composite Length (m)	Sample Weight (kg)	RPX Sample Number	RPX Au Samples (g/t)	RPX Au Composites (g/t)	WSP Sample Number	WSP Au (g/t)
	6.40	7.92	1.52			0	11.66			
	7.92	8.53	0.61			0	12.34			
	8.53	9.24	0.71			0	1.30			
	9.24	10.82	1.58			0	3.15			
U1089L6	10.82	12.28	1.46	5.94	4.49	0	1.71	3.48	P449164	2.77
	12.28	13.66	1.38			0	1.71			
	13.66	14.17	0.51			0	19.20			
	14.17	15.24	1.07			0	4.18			
	15.24	16.76	1.52			0	1.03			

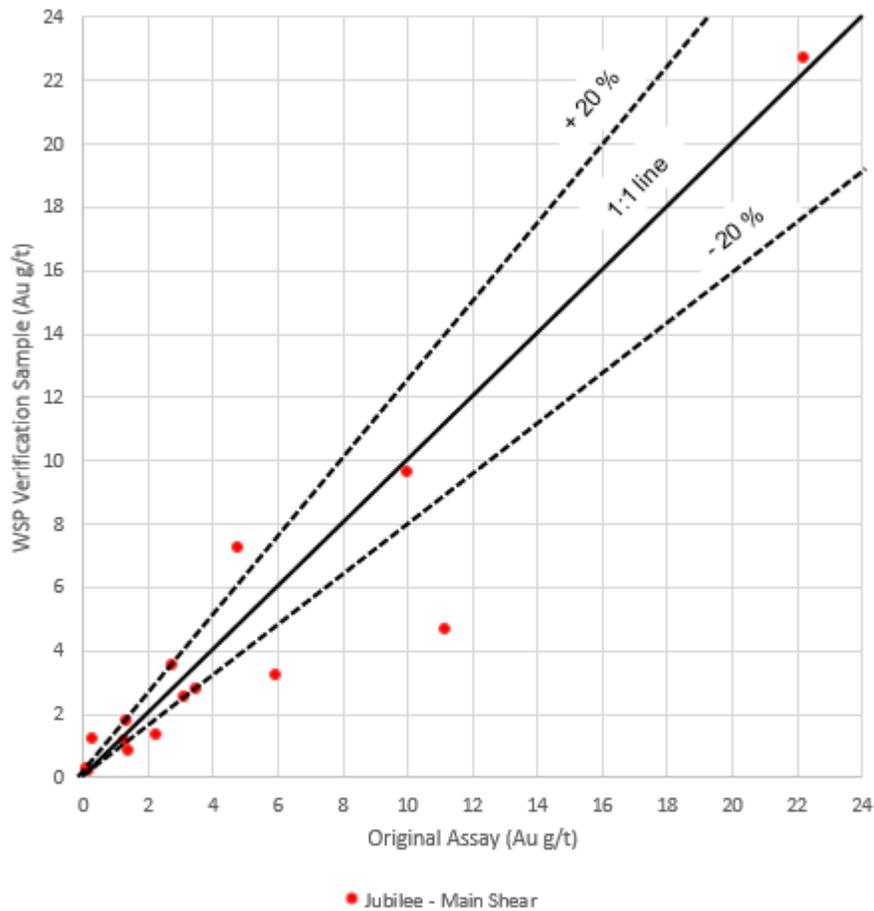


Figure 12-7: XY Scatterplot Comparison of the Verification Sample Results from Historical Intersections

### **12.2.3 Verification samples transport and analysis**

The verification samples were transported in sealed rice bags by the QP from the Wawa Gold Project to ALS Canada Ltd. in Sudbury. Sample preparation was done at ALS Sudbury and gold analyses were done at ALS Vancouver. Quartered HQ and NQ drill core samples were crushed, and 250 g fractions were pulverized to 85% passing 75 microns. Historical drill core, because of the larger sample volume, were crushed and then a 1000 grams fraction was pulverized to 85% passing 75 microns. Gold was analyzed for most of the verification samples by 50-gram fire assaying with a gravimetric finish, with some larger, higher-grade samples analyzed by 1-kilogram screen metallic assay methods. Metallic screening considered 1 kg pulp screened to 100 microns, duplicate 50 g fire assay on screen undersize and complete assaying of the oversize fraction. Blanks and certified reference materials were included in the analyses of the verification samples.

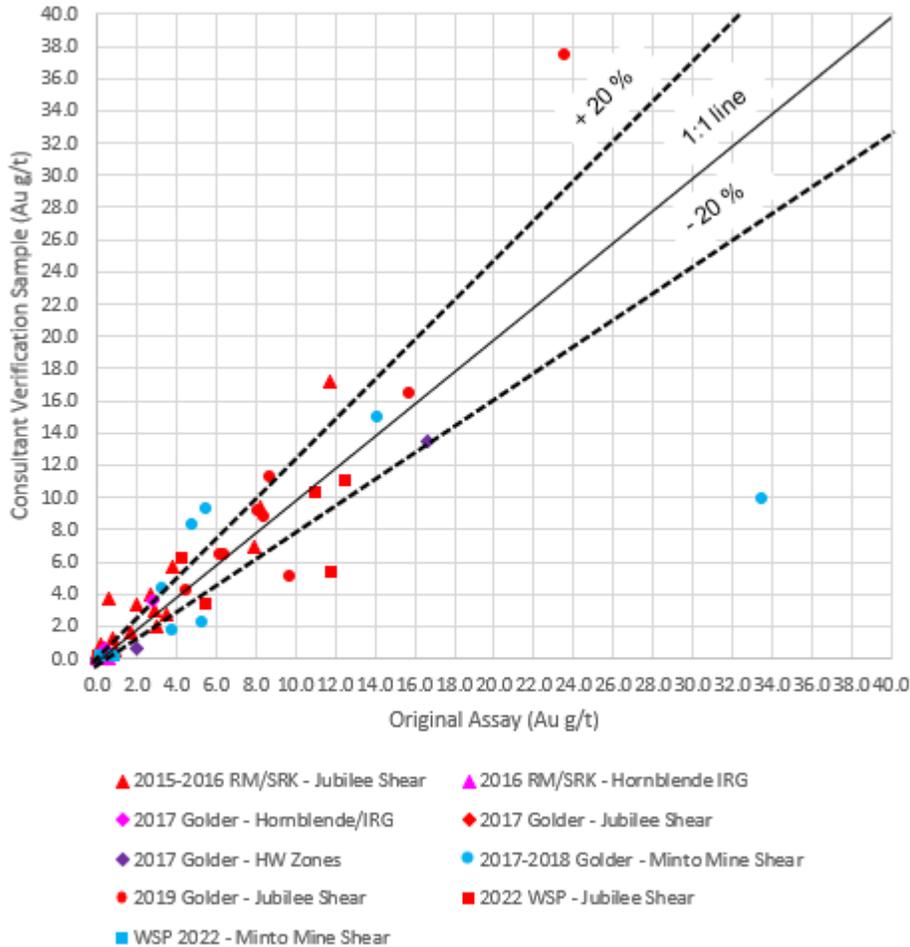
### **12.3 Previous NI 43-101 Independent Assay Verification Programs**

Six independent assay verification programs were completed prior to 2024 since Red Pine began drilling in 2014. The verification sample programs consisted of the following: 1) and 2) 2015/2016 Ronacher McKenzie Geoscience (RM)/SRK-Wawa Gold Project, 3) and 4) 2017/2018 Golder-Regional Exploration Targets/Minto Mine Shear, 5) 2019/2021 Golder-Wawa Gold Project and 6) 2023 WSP-Wawa Gold Project. The six independent programs obtained a total of 69 quarter core verification samples from the current drilling during the period in question and from the 2011 Augustine Venture drilling. The 2015 RM/SRK and the 2023 WSP reports also took 41 verification samples from the historical drill holes completed prior to 2011. Five pulp duplicates were analyzed by Golder in 2019 representing the 2016 and 2018 historical core sample programs.

The mineral resource QP has reviewed the methodology and results for those verification sample programs from the previous reports and is satisfied with the reasonable agreement between the corrected original samples and the verification samples.

#### **12.3.1 Previous NI 43-101 Assay Verification Programs for Red Pine and Augustine Venture Drilling**

The amalgamation of all the previous verification sample results compared to the corrected 2024 database values are presented in Figure 12-8, representing 2014-2022 Red Pine drilling differentiated by NI 43-101 report year and geological structures. The details of the analytical methods used for each verification sample program can be found in their respective technical report. The verification samples were found to have reasonable agreement with the original assay results.

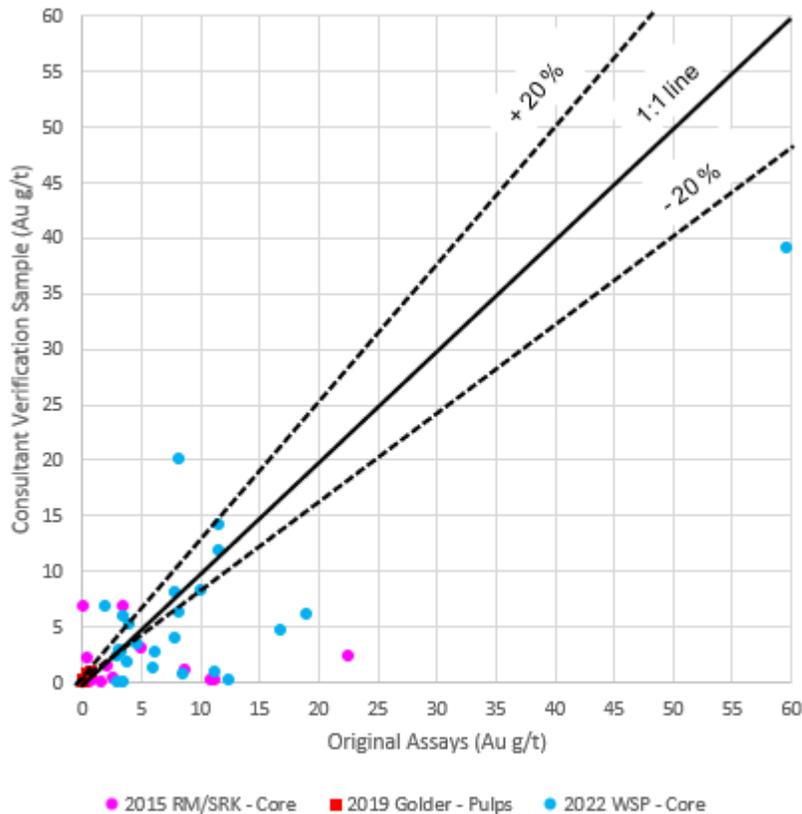


**Figure 12-8: Summary of Verification Samples from 2014-2022 Red Pine Drilling**

### 12.3.2 Verification Sampling of Historical Core and Pulp Duplicates

WSP in 2023 and RM/SRK in 2015 conducted verification sample programs from the known available historical (pre-2011) core whose Au values were used to support the MRE (Figure 12-9). The samples were taken to represent the approximate boundaries of individual samples reported in the Red Pine assay DB. RM/SRK collected 16 verification samples in 2015 and WSP collected 25 verification samples in 2022. For both verification programs, the entire remaining half core (AQ or BQ size, mechanically split) was photographed and submitted for sampling. In 2019, Golder also proceeded to reanalyze 5 pulp samples from the 2016-2018 historical core sample program (Figure 12-9).

The QP observed poor to marginal precision in the results when compared on an individual interval basis (possibly due to the reasons previously stated with the historical core) which led to the decision to conduct the 2024 verification program on a larger scale, compositing the samples over longer intervals that would be more representative of open pit or underground bulk tonnage mining.



**Figure 12-9: Historical Core (pre-2011) Verification Re-assay versus Original Assay**

## 12.4 Assay Database Verification

### 12.4.1 Verification of the Red Pine Assay Database

WSP, under the supervision of the QP, independently compiled the Red Pine assay database, representing Red Pine drill core samples obtained from the 2014-2024 drill programs and from the 2016 and 2018 historical core sample program, using assay certificates obtained directly from Actlabs and SGS. The Independently created DB was found to match the updated 2024 Red Pine DB with no material differences in assay grades.

It is the QP's opinion that the corrected 2024 Red Pine assay DB accurately represents the gold assay results reported in the laboratory assay certificates.

### 12.4.2 Verification of the Historical Assay Database

The QP randomly selected 200 drill holes that in total contained 6,095 samples to compare to the gold assay results reported in scanned copies of the historical drill logs. From the total of the 6,095 samples, gold assays results were matched for 5,651 samples. 416 samples from the 2011 drilling program of Augustine Venture and 24 samples from historical drilling could not be verified as the assay results were not reported in the drill logs or the drill logs were missing, and 7 samples could not be verified because of faded writing. Only six samples were found to have gold assay values that were different in the original logs from those entered in the Red Pine DB. The minor differences can be related to data entry errors or legibility issues when entering the assay data from the scanned logs (Table 12-4).

**Table 12-4: Summary of Historical Data Entry Errors**

Hole ID	Sample ID	From (m)	To (m)	Value in the scanned log (Au oz/ton)	Value in the drilling database (Au oz/ton)	Diff (Au Oz/ton)
U0025L6	37155	11.58	12.50	0.060	0.020	0.040
U0047L2	4870	9.14	10.67	0.000	0.010	-0.010
U0947L6	33010	34.41	35.14	0.040	0.047	-0.007
U0947L6	33018	41.15	42.06	0.040	0.030	0.010
U1455L1	7355	8.69	10.21	0.030	0.016	0.014
U1675L5	4574	21.95	23.32	0.018	0.008	0.010

In addition, minor errors were found in the length of certain historical core samples. As these differences were not material to the MRE, they were reported to Red Pine for correction in the DB but were not adjusted prior to resource estimation.

The QP recommends that Red Pine completes the review process of the historical assay database and corrects the errors that were identified as part of the verification process.

Three historical drill holes, S094, U1110L3 and U1116L3 were left out of the MRE because of irreconcilable collar locations.

## 12.5 Definition of 2019 Metallurgical Composite Samples

Metallurgical testing in 2019 considered eleven (11) separate composite samples identified as RPX-1 to RPX-11. The spatial orientation and zonation details for respective samples is summarized in Table 12-5.

**Table 12-5: 2019 Metallurgical Testing Composite Sample Details**

Geological Zone	Metallurgical Sample ID	Hole ID	From	To	Samples in composite	Au	S	Cu	As	Area
			(m)	(m)		(g/t)	(wt.%)	(ppm)	(ppm)	
Minto Mine Shear	RPX-1	SD-17-74	107.61	109.34	2	7.89	1.69	455	3.73	Mine Zone north
	RPX-2	SD-17-90	166.97	170.15	3	6.61	2.73	1669	9.47	Minto Zone Center
	RPX-3	SD-17-106	136.62	144.48	5	7.53	1.33	603	20.5	Minto Zone Center
Jubilee Shear - Main Deformation Domain	RPX-4	SD-17-172	72.60	80.60	8	4.90	0.61	36.6	7.00	Jubilee Zone
	RPX-5	SD-18-229	262.64	283.95	21	4.03	0.96	141	352	65 Zone
	RPX-6	SD-18-235	285.20	296.73	13	4.15	1.34	69.0	>3321	65 Zone
	RPX-7	SD-18-236	315.75	324.55	9	3.11	1.42	230	54.0	65 Zone
	RPX-8	SD-18-237	278.80	281.40	3	6.26	0.81	48.0	3051	Pango Zone
	RPX-9	SD-18-238	177.30	182.35	5	8.19	0.98	42.3	3276	Surluga Zone
	RPX-10	SD-18-241	148.57	167.45	22	4.38	0.68	71.3	312	Jubilee Zone
	RPX-11	SD-18-258	263.13	269.79	7	4.41	0.75	105	31.1	Old Tom Zone

Note: For testwork completed at McClelland Labs in Sparks, NV.

The selection of metallurgical composite samples for testing was pursued with guidance by Jean-Francois Montreuil, P.Geol., of Red Pine Exploration, and provided a reasonable cross-section of respective zones, at variable Au head grade, sulphide, and arsenopyrite content. The recalculated head grades from 2019 metallurgical testwork was found to be reasonably close to, and in agreement with expected head grades based on drill core data.

During a May 2023 site visit, the metallurgical QP, Steve Haggarty, was able to inspect and witness the in-situ mineralization associated with RPX-2, 3, 4, 7, 8, 9, and 11. The mineralization and style of deportment as described for the project was confirmed by the site visit and supports the direction and methodology for metallurgical processing concepts and testing previously pursued.

## 12.6 Conclusions and Recommendations

On completion of the data verification process for the Wawa Gold Project, it is the QP's opinion that the geological data collection, analytical methods, and QA/QC procedures used by Red Pine are consistent with industry standards and that the geological database and the assay data is of suitable quality to support the 2024 Mineral Resource estimate, as reported in Item 14.0.

Red Pine adjusted the chain of custody of the assay certificates to ensure that a minimum of two members of the senior management team receives the results. In addition, Red Pine has registered to Actlab's WebLIMS remote portal providing management with remote access to certificates.

The expanded verification sample program completed in 2024, combined with the 6 previous verification sample programs of Red Pine drill core, indicate a reasonable agreement between the original gold assay values reported in the assay database and the results of the quartered core samples. The Red Pine assay database has also been independently verified and reconciled using a reconstructed assay database compiled under the supervision of the QP.

Verification of the historical drill hole assay data was conducted based on 15 composite samples and spot check comparisons of assay values to scanned core logs for 200 randomly selected holes covering 6,095 sample intervals.

The QP recommends continuing to catalogue the rescued historical core and to continue the verification sampling of the historical core using composited samples that consist of entire individual boxes for holes within the resource envelope. 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, and the natural variability of the mineralization.

Confirmation drill holes completed in the Jubilee Shear between 2014 and 2024 also 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.

The QP has the following recommendations for Red Pine:

- Implement a regular program of umpire duplicate samples at a second laboratory.
- Increase the number of sample split preparation duplicates in the QA/QC in the QA/QC protocols followed by Actlabs.
- Continue verification of the historical database by sampling the remaining core left on site.

## 13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

During the summer of 2019, Red Pine Exploration commissioned McClelland Laboratories Inc (MLI), (., located in Sparks, Nevada), to determine the amenability of eleven (11) samples from the Surluga and Minto Mine South deposits to cyanidation and flotation treatment. Of the eleven (11) samples, three (3) were from the Minto Mine Shear and eight (8) were from different zones of the Main Deformation Domain of the Jubilee Shear. The study was outlined by Haggarty Technical Services (located in Burlington, Ontario) with results received by Red Pine on August 22, 2019. 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 Jubilee Shear System and the Minto Mine Shear

Metallurgical composite samples were selected from the Main Deformation Domain of the Jubilee Shear System, where gold mineralization principally occurs as arrays of quartz veins of different thickness associated with pyrite as the main sulphide (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. 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 sulphides with a possible minor fraction of gold hosted either as inclusions, or solid solution, in some pyrite (Wehrle, 2020).

In the Minto Mine Shear, and in certain zones of the Main Deformation Domain of the Jubilee Shear System, 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 –  $\text{Au}_2\text{Bi}$ ), native bismuth, and bismuthinite (Wehrle, 2020; Minto mineralization). In the Main Deformation Domain, 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 sulphide (arsenopyrite-dominant). It occurs as variably preserved relicts in the resource of the Main Deformation Domain of the Jubilee Shear System and is absent from the Minto Mine Shear. Where observed in the Jubilee Shear, it occurs as extremely deformed arsenopyrite-bearing schists with, or without, strong quartz veining. Within the Main Deformation Domain of the Jubilee Shear, 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 indicates that both the Py-dominant and Minto mineralization types are overprinting Apy-dominant mineralization (Wehrle, 2020).

Petrographic and laser-ablation ICP-MS work conducted on the arsenopyrite-dominant mineralization type was performed 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.

### **13.1.2 Mineralization styles in the Jubilee Shear System and the Minto Mine Shear**

The samples sent for metallurgical testing were composites made from 22 individual core samples prepared by quartering half HQ-sized core. The composite samples sent for metallurgical testing were selected to provide an approximation of the higher-grade core 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 Shear were selected to characterize Minto mineralization. The metallurgical attributes of the Minto mineralization in the Jubilee Shear System were considered to be represented by the samples used for the Minto Mine South Deposit due to their similarities in terms of sulphide assemblage, gangue minerals, and bulk chemistry. Five (5) samples were selected in the Main Deformation Domain of the Jubilee Shear to represent a blend of pyrite-dominant with accessory to absent arsenopyrite-dominant mineralization to characterize the most likely metallurgical behavior of gold mineralization from the higher-grade zones of the deposit. Three (3) samples were selected to characterize the metallurgical behavior of primary arsenopyrite mineralization that is locally preserved in discrete zones of the Main Deformation Domain of the Jubilee Shear.

## **13.2 Sample Preparation, Head Analysis and Results**

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.”

On April 16, 2019, eleven (11) samples of quarter sawn drill core were delivered to MLI 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 a 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 splitter to obtain four replicate samples (typically 1.25 kg each).

One of the replicate splits of -1.7-mm sample was used to determine batch ball mill grind time for grinding to an 80%-75 µm 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 75 µm. Plus and minus 75 µm sized material was de-watered and returned to the mill for additional grinding. The process was repeated until an 80%-75 µm product grind size was reached, and the required grind time was determined.

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

Gold and silver head assay results and head grade comparisons are presented in Table 13-1 and Table 13-2, respectively. ICP analysis including sulphide sulphur results are provided in Table 13-3.

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

Sample	Au (g/t)							
	Direct Assay Head Grade			Relative % Std Dev	Recalculated Metallurgical Head Grade			Relative % Std Dev
	Initial	Duplicate	Average		CN	Flotation	Average	
RPX-1	10.40	7.25	8.83	17.8%	7.31	6.36	6.84	6.9%
RPX-2	3.44	7.68	5.56	38.1%	4.51	4.85	4.68	3.6%
RPX-3	5.65	8.78	7.22	21.7%	2.82	9.46	6.14	54.1%
RPX-4	3.61	4.20	3.91	7.6%	7.82	4.44	6.13	27.6%
RPX-5	4.31	3.78	4.05	6.6%	4.00	4.99	4.50	11.0%
RPX-6	4.49	5.40	4.95	9.2%	4.72	5.11	4.92	4.0%
RPX-7	2.82	2.39	2.61	8.3%	2.86	3.12	2.99	4.3%
RPX-8	5.69	5.51	5.60	1.6%	6.19	6.77	6.48	4.5%
RPX-9	13.60	10.90	12.25	11.0%	9.92	13.30	11.61	14.6%
RPX-10	4.14	4.49	4.32	4.1%	4.68	6.03	5.36	12.6%
RPX-11	2.79	2.48	2.64	5.9%	2.54	3.05	2.80	9.1%

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

Sample	Ag (g/t)				Average
	Direct Assay		Calculated Head		
	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 recalculated Au head grades from testing listed in Table 13-1 ranged from 2.8 to 11.6 g/t Au. Duplicate direct head grade assays exhibited a relative standard deviation of 1.6% to 38.1%, with higher variability an indication of the presence of fine free metallic values causing the “nugget effect”. Variability in Au head grade analysis is noted as not always proportional to gold content. Recalculated head grade from metallurgical testing yielded an acceptable relative standard deviation of 3.6% to 14.6% with the exception of two samples RPX-3 and RPX-4 at 28% to 55% with head grades in the order of 6 g/t Au.

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

Average gold head grades ranged from 2.72 to 11.9 g/t Au. Head grade agreement was good for samples RPX-6,

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

CP Element Analysis	Unit	SAMPLE										
		RPX-1	RPX-2	RPX-3	RPX-4	RPX-5	RPX-6	RPX-7	RPX-8	RPX-9	RPX-10	RPX-11
Ag	ppm	0.28	0.45	0.20	0.32	0.57	0.52	0.21	0.16	4.05	0.58	0.37
Al	%	1.96	2.89	1.42	6.71	4.85	4.87	4.13	6.03	5.55	5.94	5.57
As	ppm	4.0	10.7	15.1	14.7	418	4,960	50.4	3,020	2,610	340	39.1
Ba	ppm	170	220	150	450	460	310	350	520	340	490	430
Be	ppm	0.43	1.68	1.08	6.51	3.59	3.86	5.63	9.76	3.53	4.09	2.74
Bi	ppm	8.29	2.54	8.96	0.35	0.53	0.19	0.68	0.66	0.25	0.35	0.28
Ca	%	0.78	3.69	1.29	4.52	3.36	2.60	1.95	3.73	5.27	3.34	4.12
Cd	ppm	0.06	0.12	0.07	0.10	0.22	0.29	0.24	0.13	0.12	0.22	0.13
Ce	ppm	12.05	41.5	18.85	80.5	128.0	28.3	22.5	37.4	28.9	46.3	42.2
Co	ppm	11.1	48.7	26.7	28.0	21.5	13.2	12.5	27.9	29.3	15.1	20.1
Cr	ppm	179	219	169	96	128	160	139	168	241	121	162
Cs	ppm	0.18	0.55	0.13	0.45	0.45	0.27	0.30	0.21	0.29	0.42	1.37
Cu	ppm	243	1,350	215	37.3	139.0	72.2	206	51.3	47.3	81.4	102.0
Fe	%	1.86	8.08	1.98	4.61	3.98	3.28	3.21	4.24	4.71	3.68	3.78
K	%	0.85	1.06	0.87	2.87	2.69	2.31	1.81	2.23	2.32	2.87	2.05
La	ppm	5.9	20.1	8.3	38.4	68.6	14.4	10.1	19.9	14.9	24.7	22.1
Li	ppm	2.5	9.3	2.3	7.0	5.4	2.0	3.3	6.4	9.3	7.8	9.8
Mg	%	0.33	2.72	0.53	1.96	1.41	0.94	0.76	1.80	2.66	1.50	1.73
Mn	ppm	190	837	277	904	720	412	355	703	857	637	624
Mo	ppm	4.65	4.68	14.85	2.97	5.48	2.42	4.30	5.49	1.51	2.79	3.24
Na	%	0.26	0.58	0.08	2.50	1.13	1.26	0.78	2.41	1.96	1.54	0.80
Nb	ppm	2.4	13.5	16.6	32.8	32.9	8.4	7.3	31.1	9.8	21.5	4.4
Ni	ppm	28.6	176.5	49.1	62.6	59.7	62.3	56.3	104.5	171.0	60.5	60.9
P	ppm	150	760	200	1,080	640	370	260	490	490	620	460
Pb	ppm	2.6	18.9	10.1	5.1	12.4	22.2	6.7	9.0	5.6	11.7	8.1
Rb	ppm	18.6	29.6	17.4	67.6	69.2	71.7	53.7	58.1	56.3	74.3	73.1
S	%	0.60	2.80	0.74	0.72	1.05	1.51	1.44	0.78	1.01	0.66	0.73
Sb	ppm	0.74	1.57	1.72	0.45	0.69	2.92	0.38	2.48	5.63	0.65	0.48
Sc	ppm	2.9	9.1	2.1	16.0	13.9	9.4	8.6	10.7	13.9	11.2	13.8
Sr	ppm	42.0	172.5	77.3	224	183.0	72.0	69.5	171.5	173.5	171.5	138.5
Ta	ppm	0.10	0.46	0.25	0.46	0.67	0.18	0.14	0.47	0.13	0.47	0.19
Te	ppm	0.49	0.51	0.45	<0.05	0.14	0.31	0.23	0.15	0.06	0.17	0.09
V	ppm	14	76	26	114	101	45	52	75	95	73	79
W	ppm	3.2	3.1	2.9	11.4	12.9	16.1	8.8	7.5	6.4	8.8	11.1
Zn	ppm	9	58	24	47	99	138	84	57	38	81	44
Zr	ppm	44.5	70.0	29.8	128.0	91.7	118.0	101.5	144.5	115.0	140.5	104.5

Listed in Table 13-3, sulphide sulphur content ranged from 0.6% to 1.1% S<sup>2-</sup> for the majority of samples, with higher values of 1.4% to 2.8% S<sup>2-</sup> for samples RPX-2, 6, and 7. Arsenic content associated with arsenopyrite was noted as significantly higher at 2,610 to 4,960 ppm As for samples RPX-6, RPX-8 and RPX-9 relative to a range for the remainder of the samples from 4 to 340 ppm As, with an average 110 ppm As.

A correlation analysis was conducted to compare head grade 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 proportional 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

CIL cyanidation bottle roll tests were completed on each of the eleven (11) Jubilee/Minto composite samples to determine gold and silver recoveries and reagent requirements. Following the leaching tests, slurries were first screened to remove loaded carbon, and then rescreened at 106  $\mu\text{m}$  to recover the metallic fraction which was assayed separately from the remaining tails. The metallic fire screen was included to capture any residual insoluble gravity recoverable gold values. Tests were conducted at an 80%-75  $\mu\text{m}$  grind 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  $\mu\text{m}$  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 from grinding were settled and decanted, as required to achieve 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 prior to initial cyanide addition. The activated carbon was pretreated by attriting 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 to obtain samples of the leach solution for gold and silver dissolution rate kinetic analysis. Slurry D.O. levels, leach solution sample aliquot volume, residual cyanide concentration, and slurry pH were checked and adjusted as required at each sampling period. Make-up water, equivalent to that withdrawn was added to the slurries. Cyanide concentration in CIL tests was allowed to decrease naturally with additional cyanide make-up only to account for cyanide removed in the analytical rate kinetic samples. Lime was added when necessary to maintain slurry pH at between 9.8 and 10.2.

After 32 hours, CIL bottle roll tests were interrupted. Final leach solution volumes were measured and sampled for gold and silver analysis, along with final pH and residual cyanide concentrations.

Slurries were screened to recover loaded carbon. After carbon removal, the slurries were additionally screened at 150 mesh (106  $\mu\text{m}$ ) 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 13-4 and Table 13-5.

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

<b>Composite: Metallurgical Results</b>	<b>RPX-1 CY-9</b>	<b>RPX-2 CY-10</b>	<b>RPX-3 CY-8</b>	<b>RPX-4 CY-6</b>	<b>RPX-5 CY-4</b>	<b>RPX-6 CY-1</b>
<b>Recovery: % of total Au</b>						
Loaded Carbon	94.7	97.6	93.6	93.7	84.8	48.5
Metallics Fraction	0.0	0.0	0.4	0.8	0.5	0.4
Total	94.7	97.6	94.0	94.5	85.3	48.9
Extracted (Carbon), g/t Au	6.92	4.40	2.64	7.33	3.39	2.29
Extracted (Metallics), g/t Au	0.00	0.00	0.01	0.06	0.02	0.02
Total Extracted, g/t Au	6.92	4.40	2.65	7.39	3.41	2.31
Tail assay, g/t Au <sup>1</sup>	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	4.00	4.72
Average Head, g/t Au <sup>2</sup>	7.83	5.12	6.68	5.02	4.27	4.93
<b>Recovery: % of total Ag</b>						
Loaded Carbon	>50.0	50.0	>66.7	>66.7	75.0	75.0
Metallics Fraction	>33.3	16.7	0.0	>16.7	0.0	0.0
Total	>83.3	66.7	>66.7	>83.3	75.0	75.0
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	0.0
Total Extracted, g/t Ag	0.5	0.4	0.2	0.5	0.3	0.3
Tail assay, g/t Ag <sup>1</sup>	<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 <sup>2</sup>	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%-75 µm Feed Size**

Composite: Metallurgical Results	RPX-7	RPX-8	RPX-9	RPX-10	RPX-11
	CY-3	CY-7	CY-11	CY-2	CY-5
<b>Recovery: % of total Au</b>					
Loaded Carbon	93.0	55.9	77.7	91.0	87.0
Metallics Fraction	0.0	0.6	0.5	0.2	0.4
Total	93.0	56.5	78.2	91.2	87.4
Extracted (Carbon), g/t Au	2.66	3.46	7.71	4.26	2.21
Extracted (Metallics), g/t Au	0.00	0.04	0.05	0.01	0.01
Total Extracted, g/t Au	2.66	3.50	7.76	4.27	2.22
Tail assay, g/t Au1	0.20	2.69	2.16	0.41	0.32
Calculated Head, g/t Au	2.86	6.19	9.92	4.68	2.54
Average Head, g/t Au2	2.80	6.04	11.9	4.83	2.72
<b>Recovery: % of total Ag</b>					
Loaded Carbon	>50.0	75.0	26.1	83.3	75.0
Metallics Fraction	0	0.0	1.4	0.0	0.0
Total	>50.0	75.0	27.5	83.3	75.0
Extracted (Carbon), g/t Ag	0.1	0.3	1.8	0.5	0.3
Extracted (Metallics), g/t Ag	0.0	0.0	0.1	0.0	0.0
Total Extracted, g/t Ag	0.1	0.3	1.9	0.5	0.3
Tail assay, g/t Ag1	<0.1	0.1	5.0	0.1	0.1
Calculated Head, g/t Ag	<0.2	0.4	6.9	0.6	0.4
Average Head, g/t Ag2	0.3	0.2	5.1	0.6	0.4
NaCN Consumed Kg/mt	1.26	1.02	1.00	1.18	1.00
Lime Added Kg/mt	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 Jubilee/Minto Composite samples were amenable to CIL cyanidation at the 80%-75 µm feed size. For nine (9) of the eleven (11) samples, cyanidation gold recovery ranged from 77.7% to 97.6% (average of 90.3%) after 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 mesh (106 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. Relatively low Au metallics content after leaching is a positive indicator that gravity recoverable gold content is amenable to cyanidation with gravity concentration still considered necessary to avoid the inventory or entrainment of gravity recoverable gold within a full-scale circuit prior to cyanidation.

Total silver extraction ranged from 0.1 to 1.9 g/t Ag (average of 0.5 g/t Ag) which is equivalent to 27.5% to >83.3% (average of 69.2%).

Cyanide consumption was moderate to high and ranged from 0.6 to 1.7 kg NaCN/mt (1.1 kg NaCN/mt average). It is likely that cyanide consumption would be somewhat lower at full-scale relative to laboratory testing.

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 eleven (11) Jubilee/Minto composite samples at an 80%-75 µm feed size to determine response to sulfide and fine free gold flotation.

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%-75 µm feed for flotation. 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 with barren silica sand. The sand was 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 mesh (106 µm) to remove gravity recoverable gold, prior to flotation with the metallics fraction assayed separately from flotation products.

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 four (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 (isobutyl-dithiophosphate) was added to each of stages 2 and 4. Total addition of reagents was 0.030 kg/mt PAX and 0.030 kg/mt AERO 3477. MIBC was applied as the frother with flotation conducted at natural pH. The four (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 fire assayed to extinction for gold and silver content.

Flotation test results are presented in Table 13-6 through Table 13-16.

**Table 13-6: Bulk Sulphide Flotation Concentration Test F-9 Results, Surluga/Minto Composite Sample RPX-1, 80%-75 µm 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
<b>Composite</b>	<b>100</b>		<b>6.36</b>	<b>&lt;0.5</b>	<b>0.58</b>	<b>100</b>		<b>100</b>		<b>100</b>	

**Table 13-7: Bulk Sulphide Flotation Concentration Test F-10 Results, Surluga/Minto Composite Sample RPX-2, 80%-75 µm 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
<b>Composite</b>	<b>100</b>		<b>4.85</b>	<b>&lt;0.9</b>	<b>2.56</b>	<b>100</b>		<b>100</b>		<b>100</b>	

**Table 13-8: Bulk Sulphide Flotation Concentration Test F-8 Results, Surluga/Minto Composite Sample RPX-3, 80%-75 µm 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
<b>Composite</b>	<b>100</b>		<b>9.46</b>	<b>&lt;0.9</b>	<b>0.69</b>	<b>100</b>		<b>100</b>		<b>100</b>	

**Table 13-9: Bulk Sulphide Flotation Concentration Test F-6 Results, Surluga/Minto Composite Sample RPX-4, 80%-75 µm 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
<b>Composite</b>	<b>100</b>		<b>4.44</b>	<b>0.4</b>	<b>0.66</b>	<b>100</b>		<b>100</b>		<b>100</b>	

**Table 13-10: Bulk Sulphide Flotation Concentration Test F-4 Results, Surluga/Minto Composite Sample RPX-5, 80%-75 µm 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
<b>Composite</b>	<b>100</b>		<b>4.99</b>	<b>0.5</b>	<b>0.85</b>	<b>100</b>		<b>100</b>		<b>100</b>	

**Table 13-11: Bulk Sulphide Flotation Concentration Test F-1 Results, Surluga/Minto Composite Sample RPX-6, 80%-75 µm 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
<b>Composite</b>	<b>100</b>		<b>5.11</b>	<b>&lt;0.5</b>	<b>1.33</b>	<b>100</b>		<b>100</b>		<b>100</b>	

**Table 13-12: Bulk Sulphide Flotation Concentration Test F-3 Results, Surluga/Minto Composite Sample RPX-7, 80%-75 µm 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
<b>Composite</b>	<b>100</b>		<b>3.12</b>	<b>&lt;0.4</b>	<b>1.25</b>	<b>100</b>		<b>100</b>		<b>100</b>	

**Table 13-13: Bulk Sulphide Flotation Concentration Test F-7 Results, Surluga/Minto Composite Sample RPX-8, 80%-75 µm 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
<b>Composite</b>	<b>100</b>		<b>6.77</b>	<b>&lt;0.3</b>	<b>0.7</b>	<b>100</b>		<b>100</b>		<b>100</b>	

**Table 13-14: Bulk Sulphide Flotation Concentration Test F-11 Results, Surluga/Minto Composite Sample RPX-9, 80%-75 µm 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
<b>Composite</b>	<b>100</b>		<b>13.3</b>	<b>&lt;5.8</b>	<b>0.97</b>	<b>100</b>		<b>100</b>		<b>100</b>	

**Table 13-15: Bulk Sulphide Flotation Concentration Test F-2 Results, Surluga/Minto Composite Sample RPX-10, 80%-75 µm 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
<b>Composite</b>	<b>100</b>		<b>6.03</b>	<b>0.8</b>	<b>0.6</b>	<b>100</b>		<b>100</b>		<b>100</b>	

**Table 13-16: Bulk Sulphide Flotation Concentration Test F-5 Results, Surluga/Minto Composite Sample RPX-11, 80%-75 µm 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
<b>Composite</b>	<b>100</b>		<b>3.05</b>	<b>0.4</b>	<b>0.71</b>	<b>100</b>		<b>100</b>		<b>100</b>	

Results indicate 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 (8) 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 responded favorably to bulk sulphide flotation. 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.

Benchscale rougher flotation concentrate weights were low for eight (8) of the eleven (11) composites and varied between 3.1% and 5.1% of the feed weight (average of 4.1%). Rougher mass pull and concentrate weight were somewhat higher for composites RPX-2, 6, and 7 at 9.4%, 8.0%, and 6.5% respectively, with these composites all containing elevated 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 yielded reasonably high gold recovery.

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

## 13.3 Interpretations, Conclusions and Recommendations

### 13.3.1 Summary of observations

The results indicate the following:

- The Jubilee/Minto composites were amenable to whole ore CIL cyanidation at 80%-75  $\mu\text{m}$  feed size subject to the influence of increasing arsenopyrite content. For nine (9) of the eleven (11) composites, cyanidation gold recoveries averaged 90.3% after 32 hours of leaching.
- Composites RPX-6 and RPX-8 exhibited lower 48.5% to 55.9% Au recovery from CIL cyanidation at the 75 $\mu\text{m}$  grind size which is thought to be related to the elevated arsenic content of those composite samples at 3,020 to 4,960 ppm As.
- Cyanide consumption during CIL cyanidation was moderate to high at 0.6 to 1.7 kg NaCN/mt.
- Lime requirements for pH control during cyanidation were uniformly low at 0.4 to 0.6 kg Ca(OH)<sub>2</sub>/mt.
- The Surluga/Minto composites responded favorably to bulk sulphide flotation with the 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 pull was generally 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 150 mesh (106  $\mu\text{m}$ ) to simulate gravity concentration. By comparing these results to the metallic fractions in CIL residues after cyanidation, it was established that the majority of gravity recoverable gold is amenable to, and recoverable by cyanidation.

### 13.3.2 CIL cyanidation

Samples representative of the main zones of mineralization in the Main Deformation Domain of the Jubilee Shear and Minto Mine Shear were readily amenable to CIL cyanidation treatment at the 80%-75  $\mu\text{m}$  feed size. For the three (3) samples representative of Minto mineralization, CIL cyanidation and gravity gold recovery averaged 95.4%. For the five (5) samples representative of the blends of pyrite-dominant with accessory to absent arsenopyrite-dominant mineralization types in the Main Deformation Domain of the Jubilee Shear, CIL cyanidation and gravity gold recovery averaged 90.3%.

The three (3) samples selected to characterize arsenopyrite-dominant mineralization in the Main Deformation Domain of the Jubilee Shear 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 fluid-rock interactions that affected this type of mineralization in the Jubilee Shear System and the other mineralized structures of the Wawa Gold Project in which early compressive mineralization is present.

### 13.3.3 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 recovery averaged 93.3%. For the 3 samples selected to specifically characterize arsenopyrite-dominant mineralization in the Surluga Deposit, bulk sulphide flotation and gravity recoverable gold average of 93.3%.

### 13.3.4 Conclusions

The results indicate the following:

- CIL cyanidation and gravity gold recovery averaged 90.3% for representative blends of pyrite-dominant with accessory to absent arsenopyrite-dominant mineralization forming the bulk of the resource in the Main Deformation Domain of the Jubilee Shear System.
- CIL cyanidation and gravity gold recovery averaged 95.4% for Minto mineralization forming the Minto Mine Shear.
- Elevated arsenic content is recognized as influencing whole ore cyanidation, however the presence of arsenopyrite did not impede flotation performance.
- Cyanide consumption during CIL cyanidation was moderate to high.
- Lime requirements for pH control during cyanidation were uniformly low.
- Flotation and gravity gold recovery averaged 93.3% for the localized domains of arsenopyrite-dominant mineralization in the Main Deformation Domain of the Jubilee Shear System.
- Rougher flotation mass pull for the limited number of scoping tests was generally low and averaged 5.2% of the feed weight. Mass pull and gold recovery to rougher concentrate would be expected as increasing with additional testing and the introduction of alternative sulfide and free gold promoter-collectors.

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

- i) Whole ore cyanidation applying CIL, which would be applicable to materials lower than a threshold sulphide and arsenopyrite concentration.

- ii) Gravity concentration followed by sulphide flotation to a third cleaner concentrate, which would be applicable to all material types with products shipped to a third party for hydrometallurgical processing, or smelting.
- iii) A hybrid circuit involving gravity concentration, sulphide flotation to a third cleaner concentrate for shipment to a third party for hydrometallurgical processing or smelting, with CIL cyanidation of the gravity concentrate and flotation tailings.
- iv) A circuit involving gravity concentration, followed by sulphide flotation with higher mass pull to a rougher concentrate, and regrinding of the rougher concentrate to approximately 10 microns, followed by intense cyanidation of the reground concentrate and gravity concentrate. This alternative would be expected as applicable to all material types, yielding reasonably consistent and high Au recovery, and would require a smaller flotation circuit, and smaller cyanidation circuit.

The positive response of the mineralization types present in the Minto Mine Shear and the Jubilee Shear System to conventional, industrially proven processes provides flexibility for project definition, design, and potential treatment of respective material types. Process flowsheet definition and development requires a continued focus on arsenopyrite and sulfide content as influencing factors on cyanidation.

### 13.3.5 Recommendations

Additional metallurgical testwork should be completed on the most challenging suite of mineralization, as well as material at nominal grade ranges that would be expected from underground mining. Additional metallurgical testwork should be completed on the most challenging suite of mineralization, as well as material at naturally blended grade ranges that would be expected from underground mining. The most applicable process flowsheet would balance the trade-off between CapEx, OpEx, metal recovery, with an overriding factor requiring a demonstrated and viable reclamation and closure plan for permitting.

- ii) A processing strategy not previously tested could involve gravity concentration, followed by sulphide flotation with higher mass pull to a rougher concentrate, and regrinding of the rougher concentrate to approximately 10 microns, followed by intense cyanidation of the reground rougher concentrate and gravity concentrate. This alternative would be expected as applicable to all material types, yielding reasonably high and consistent Au recovery, and would require a smaller flotation circuit, as well as a smaller cyanidation circuit. Following cyanide removal from the sulphide concentrate residue, this process strategy lends itself towards sub-aqueous co-disposal of the sulphidic content in the feed, under a cap of benign low sulphide flotation tailings, to mitigate long term concerns with respect to ARD generation.

Additional metallurgical samples representative of the grade ranges and blends of mineralization types on the Wawa Gold Project 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 and the evaluation of process alternatives.

As a component of additional metallurgical testwork, mineralogical studies including TESCAN TIMA automated SEM analysis will support the confirmation of Au association and deportment within mineralization present in flotation tailings and cyanidation residues to establish contributing factors to recovery losses, and to strengthen the GeoMet model.

## 14.0 MINERAL RESOURCE ESTIMATES

The Mineral Resource estimates in this Item have been updated to reflect material corrections to the Red Pine assay database for the period between 2014 and 2024 and the inclusion of recent exploration results conducted since the 2019 MRE.

### 14.1 Introduction

This Report represents an update to the June 2023 Technical Report, titled “National Instrument 43-101 Technical Report for the Wawa Gold Project” consisting of the Surluga and Minto Mine South deposits. The updated 2024 Mineral Resource estimate is reported under a base case scenario of a potential combined open pit and underground project as discussed in Item 14.5.8.

The Mineral Resource estimate for the Wawa Gold Project has been prepared in accordance with NI 43-101 and following the requirements of Form 43-101F1. The Mineral Resource estimate follows the CIM Estimation of Mineral Resource and Mineral Reserves Best Practices Guidelines (November 2019) 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.Geol., an independent QP, as defined under NI 43-101 and an employee of WSP Canada Inc. The effective date of this Mineral Resource estimate is August 28, 2024.

The Mineral Resource estimates outlined in this Item 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 and reported from constraining volumes for open-pit (OP) and underground (UG) mining.

### 14.2 Drill Hole Data

The Red Pine drill hole DB consists of data obtained from recent surface diamond drilling, completed by Red Pine between 2014 to 2024, along with historical surface and underground drill hole data from previous owner/operators since 1960. The drill hole DB supporting this MRE consisted of 2,557 drill holes, totaling approximately 289,867 m of core and 145,849 gold assays and was closed for modelling on June 24, 2024. On closing of the DB, Red Pine was still processing drill core on site which consisted of 22 holes totaling approximately 5,000 m drilled primarily for testing the hanging wall of the Jubilee Shear System and 26 holes totaling 5,430 m for testing the gold potential of geological structures outside of the area covered by the updated resource.

The database volume covers the entire Project area including the Jubilee Shear and Minto Mine South areas.

The QP has overseen the independent reproduction (by WSP) of the Red Pine assay database (2014-2024) from original lab certificates obtained directly from Actlabs and SGS. This database was compared to the 2024 corrected assay data provided by Red Pine and was found to match well with some minor corrections made to the Red Pine DB prior to closing. The QP also completed independent sample verification and check logging as summarized in Item 12.0 and has not identified any material flaws in the assay data or data collection procedures. Red Pine’s data collection procedures were found to be consistent with standard industry practice.

The database was also 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 prior to grade estimation.

## 14.2.1 Historical Database

The Jubilee shear system contains a considerable amount historical assay data (1960 to 2010) that was collected using processes that were not documented and would likely not meet industry standards today. The historical data has issues that bring into question the quality of the data and the confidence of the resulting estimates including, the use of selective sampling procedures resulting in a significant amount of unsampled intervals within the mineralized domains, unknown QA/QC controls, smaller core size and no supporting laboratory certificates or documentation of analytical procedures.

Both Red Pine and the QP have conducted significant reviews of the historical assay data by comparing the database assays to those recorded in scanned logs produced by previous operators. Minor changes were made to the grade of a handful of sample intervals which would have no material impact to the MRE. The QP conducted independent sampling of available historical core as described in Item 12.0. The comparison of the assay results was favourable but the total mean grade did show a negative bias in Au grade of approximately 6% based on a limited number of samples.

Red Pine conducted a large-scale historical sample program from core left on site starting in 2016 and has drilled 177 holes totaling 78,490 m within the Jubilee resource area since the 2019 MRE. The additional drill holes will help to reduce any residual risk resulting from the historical data.

Approximately 58% of the Jubilee samples used in the MRE were considered to be historical (legacy) data compared to 9% for Minto.

## 14.2.2 QP Opinion

It is the QP's opinion that the Red Pine sample DB is suitable for use for the purpose of this MRE and Technical Report, however it should be noted that the historical data and variability seen in the Minto data, based on verification sampling conducted, may present some risk to the MRE and for this reason no Measured resources have been declared.

## 14.3 Geological Domaining

### 14.3.1 Jubilee Shear System

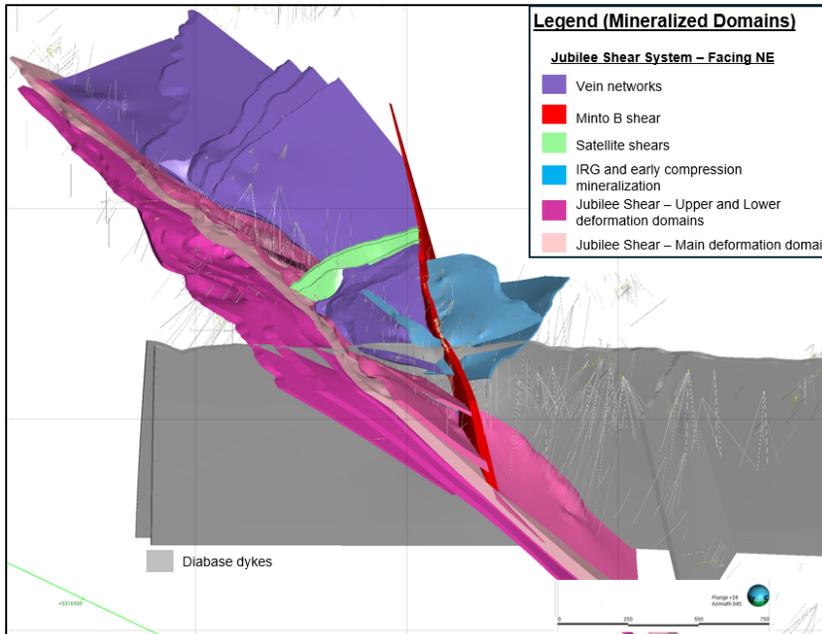
Red Pine interpreted mineral domain models representing the main mineralized shear system as well as mineralized hangingwall and footwall structures as outlined in Figure 14-1. These domain models were interpreted based on shear intensity levels, measured structural orientations, mineralization characteristics, quartz veining and gold grades. Mineralization in the Surluga deposit is bound to 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 7.0.

A subset of 2,011 drill holes totaling approximately 217,333 m and comprising 82,032 gold assays covering 91,253 m of core length was used as the basis of the Jubilee MRE. Historical drilling prior to Red Pine contributed 47,796 gold assays covering 49,348 m. The more recent 2011 drill program by Augustine Ventures, the 2014 to 2024 drill programs by Red Pine and the sampling of previously un-sampled historical core contributed 34,236 gold assays covering approximately 41,905 m.

The QP reviewed the Red Pine domain models and believes that the main shear models are representative of the controls on mineralization observed at the Jubilee deposit. Some of the hangingwall domains, or portions thereof, are based on limited information and are likely to evolve (i.e., change) as new exploration data becomes

available. Hangingwall domain interpretations may be considered conceptual in nature and mineral resources from these areas were limited to the Inferred category.

The mineral domains for Jubilee are summarized in Table 14-1 with the most significant being the Main Deformation zone (ms\_main\_deform), the Upper Deformation West Minto B zone (ms\_upper\_deform\_wmb) and the Lower Deformation 1 zone (ms\_lower\_deform\_1).



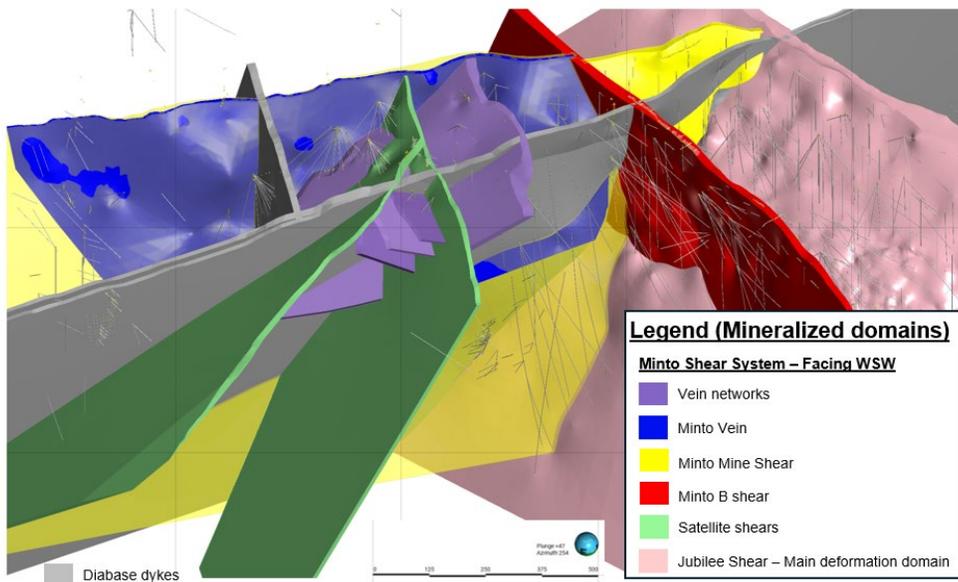
**Figure 14-1: Surluga Mineral Domain Models (Oblique View Facing Northeast)**

### 14.3.2 Minto Shear System

The interpreted Minto mineral domain models represent the main shear system, the main vein (within the main shear), as well as mineralized hangingwall structures as outlined in Figure 14-2. These domain models were interpreted based on shear intensity levels, measured structural orientations, mineralization characteristics, quartz veining and gold grades. Mineralization in Minto is hosted in quartz veins with sulphide mineralization having a shallow plunge to the south-east.

A subset of 216 drill holes totaling approximately 66,622 m and comprising 4,904 gold assays covering 5,812 m was used as the basis of the Minto MRE. Historical drilling prior to Red Pine contributed 448 gold assays covering approximately 606 m whereas the 2011 drill program by Augustine Ventures and the 2014 to 2024 drill programs by Red Pine contributed 4,456 gold assays covering approximately 5,206 m.

Mineral domains for Minto are summarized in Table 14-1 with the most significant being the Main Vein (mv) and the Main Shear East (ms\_east).



**Figure 14-2: Minto Mineral Domains**

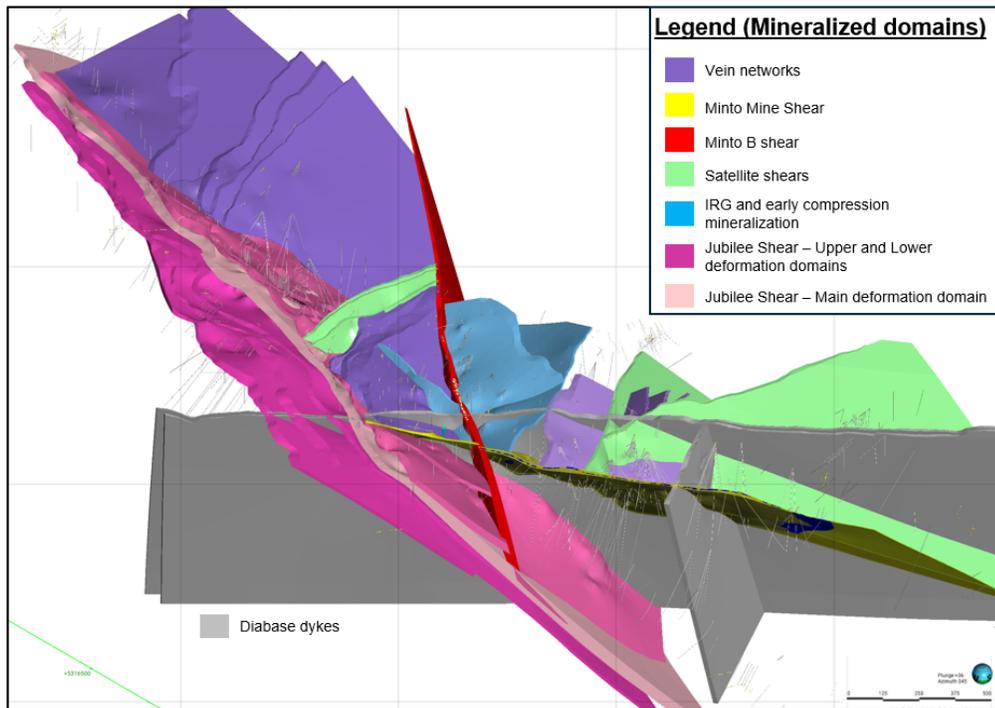
The QP reviewed the domain models and believes that the Main Shear and Main Vein models are representative of the controls on mineralization observed at Minto. As with Jubilee, some of the hangingwall domains, or portions thereof, are based on limited information and are likely to evolve (i.e. change) as new exploration data becomes available. Hangingwall domain interpretations may be considered conceptual in nature and mineral resources from these areas were limited to the Inferred category.

### 14.3.3 Diabase and Lamprophyre Dykes

A late diabase dyke was also modelled and is located in the south end of the deposit, with the main branch oriented in a northwest direction Figure 14-3. The dyke is unmineralized and was used to outline a waste domain where all blocks were assigned a zero grade.

Narrow lamprophyre dykes (lamp) are also prevalent throughout the Minto and Jubilee areas. These dykes are generally less than 1m wide and are much more widely dispersed; and therefore, could not be reliably modelled.

For Jubilee, selective mining around the lamp dykes is unlikely as they are mostly concordant with mineralization and any potential mining would likely need to include the dyke material, which is mainly barren. Many of the dyke intervals were sampled but those that weren't were assigned a grade of 0 g/t prior to estimation.



**Figure 14-3: Combined Minto and Jubilee Domain Models with Diabase Dykes**

In Minto, the lamp dykes cross-cut mineralization, therefore an attempt was made to estimate the dyke locations with a block modeling approach in order to account for their impact on tonnage and grade. Lamp dyke sample intervals were therefore removed from the mineralized sample population as their impact was accounted for spatially in the block model.

## 14.4 Exploratory Data Analysis (EDA)

For the purposes of grade estimation, two subsets of data were selected using mineral domain models representing the Jubilee and Minto areas. The EDA consisted of basic descriptive statistics, histograms, box plots, cumulative probability plots and XY scatterplots. The sample populations were analyzed in order to: identify missing data, out of range values, grade distribution, assess sample lengths, identify potential outlier thresholds and determine the mean sample grades for each mineral domain.

The QP has assigned all un-sampled intervals with a default value 0.001 g/t with the exception of un-sampled intervals that were logged as alteration which were left as absent grade. Data analysis from the 2016 historic sample program indicated that previously unsampled intervals logged as alteration were more likely to be mineralized than the remaining sample population. See June 21, 2023, Technical Report, titled “National Instrument 43-101 Technical Report for the Wawa Gold Project”.

Table 14-1 lists the raw sample statistics for each domain prior to assigning the default values or top cuts with the Main Deformation Zone for Jubilee and the Main Vein for Minto highlighted in bold.

Table 14-1: Summary of Raw Sample Statistics by Domain

Area	DOMAIN	NSAMPLES	MAXIMUM Au (g/t)	MEAN Au (g/t)	VARIANCE	STANDDEV	SKEWNESS	CV
Jubilee	irgs_east_minto_b	410	6.41	0.12	0.24	0.49	8.42	3.94
Jubilee	irgs_old_tom_area	128	3.41	0.16	0.20	0.45	5.50	2.81
Jubilee	ms_lower_deform_1	4,745	49.20	0.21	1.92	1.39	21.16	6.64
Jubilee	ms_lower_deform_2	2,646	51.70	0.18	1.51	1.23	26.53	7.00
Jubilee	ms_lower_deform_3	1,098	18.86	0.15	0.41	0.64	11.55	4.41
<b>Jubilee</b>	<b>ms_main_deform</b>	<b>45,265</b>	<b>467.31</b>	<b>1.33</b>	<b>27.96</b>	<b>5.29</b>	<b>24.23</b>	<b>3.99</b>
Jubilee	ms_upper_deform_wmb	3,821	46.29	0.18	0.99	1.00	26.49	5.62
Jubilee	ms_upper_deform_1	691	30.17	0.21	2.79	1.67	15.00	7.92
Jubilee	ms_upper_deform_2	595	12.90	0.15	0.52	0.72	11.47	4.90
Jubilee	ss_algoma	588	15.00	0.28	1.37	1.17	8.58	4.22
Jubilee	ss_central_algoma	132	12.80	0.16	1.05	1.02	11.10	6.20
Jubilee	ss_east_minto_b	676	14.80	0.36	2.20	1.48	6.56	4.13
Jubilee	ss_lower_algoma	129	1.37	0.07	0.04	0.19	3.57	2.54
Jubilee	ss_minto_b	3,927	59.10	0.27	2.42	1.56	23.96	5.76
Jubilee	ss_old_tom_area_11	123	1.85	0.09	0.06	0.25	4.64	2.73
Jubilee	ss_splay10_a	161	7.97	0.10	0.49	0.70	9.73	6.80
Jubilee	ss_splay10_b	184	4.22	0.06	0.12	0.35	10.95	6.11
Jubilee	ss_65_area_13	250	1.91	0.07	0.04	0.21	5.35	3.11
Jubilee	ss_65_area_14	228	0.37	0.03	0.00	0.06	3.86	2.19
Jubilee	ss_65_area_15	465	13.30	0.16	0.92	0.96	9.71	6.08
Jubilee	vn_old_tom_area_2	369	10.49	0.09	0.37	0.61	15.60	6.78
Jubilee	vn_old_tom_area_4	874	85.71	0.13	4.85	2.20	37.90	17.32
Jubilee	vn_old_tom_area_7	688	5.61	0.05	0.07	0.26	13.34	5.18
Jubilee	vn_old_tom_area_8	326	15.50	0.15	1.21	1.10	12.17	7.46
Jubilee	vn_surluga_north	642	69.30	0.25	3.66	1.91	26.33	7.76
Jubilee	vn_surluga_north_2	197	4.82	0.07	0.13	0.36	10.86	5.49
Jubilee	vn_surluga_north_3	387	12.40	0.12	0.60	0.77	11.31	6.29
Jubilee	vn_surluga_north_5	150	10.70	0.16	0.67	0.82	10.52	5.10
Minto	ms_east	1,141	13.40	0.12	0.37	0.61	13.70	4.95
Minto	ms_west	133	5.55	0.18	0.29	0.54	6.19	2.98
<b>Minto</b>	<b>mv</b>	<b>734</b>	<b>110.00</b>	<b>1.76</b>	<b>54.83</b>	<b>7.40</b>	<b>9.78</b>	<b>4.20</b>
Minto	ss_ew_sz_1	375	5.68	0.07	0.18	0.43	10.24	6.13
Minto	ss_ew_sz_2	294	5.95	0.08	0.20	0.44	10.88	5.55
Minto	ss_437	414	31.20	0.31	4.31	2.08	11.63	6.72
Minto	ss_439	375	24.80	0.24	2.60	1.61	11.59	6.68
Minto	vn_sadowski_east	182	107.00	0.76	40.14	6.34	12.19	8.32
Minto	vn_sadowski_east_lower	70	6.03	0.12	0.45	0.67	8.26	5.80
Minto	vn_sadowski_east_upper	40	4.95	0.24	0.58	0.76	4.96	3.12
Minto	vn_stockwork_433	365	12.80	0.12	0.50	0.70	14.01	5.75
Minto	vn_stockwork_434	70	19.60	0.40	4.84	2.20	8.10	5.53
Minto	vn_stockwork_435	136	3.70	0.09	0.15	0.39	7.38	4.37
Minto	vn_stockwork_533	43	44.30	0.89	37.13	6.09	6.98	6.81

### 14.4.1 Compositing

A composite length of 1.5 m was chosen based on sample length analysis, scale of geological features and a 3 m block size representing bulk UG and OP mining. All raw sample intervals were composited to a mean length of 1.5 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 sample length was lost during the compositing process.

### 14.4.2 Outlier Analysis

Cumulative probability plots and XY scatterplots of Au grade versus sample length (Figure 14-6) were generated for each domain based on 1.5 m sample composite data to identify probable outliers and determine appropriate capping levels. Domains with similar trends, geological characteristics, and grade ranges were grouped and evaluated together. Figure 14-4 to Figure 14-7 provide example plots of the main mineralized domains that are material to the MRE, where the red line indicates the chosen grade cap. Table 14-2 summarizes the capping details for each of the main domains.

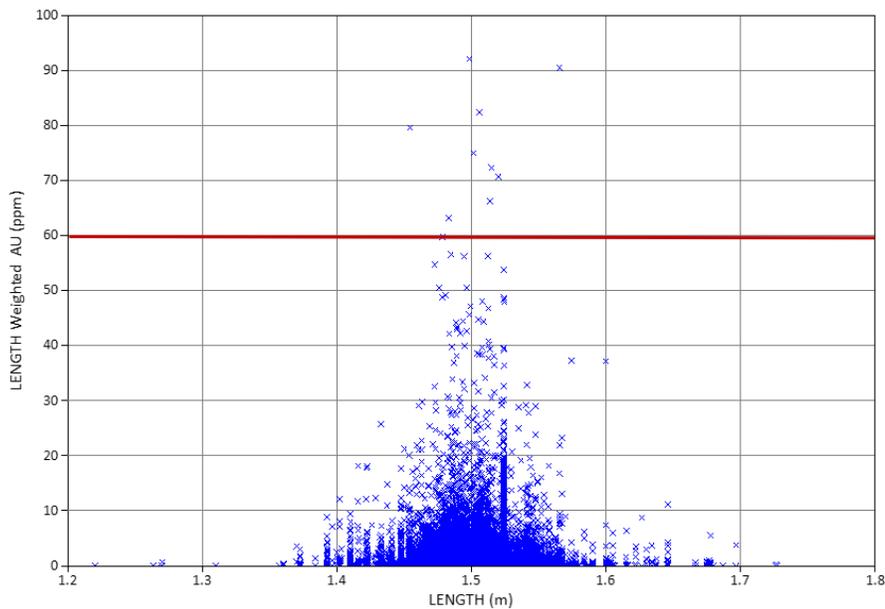


Figure 14-4: XY Scatterplot of Au Grades (g/t) vs Sample Length (m) for Jubilee Main Deformation Zone

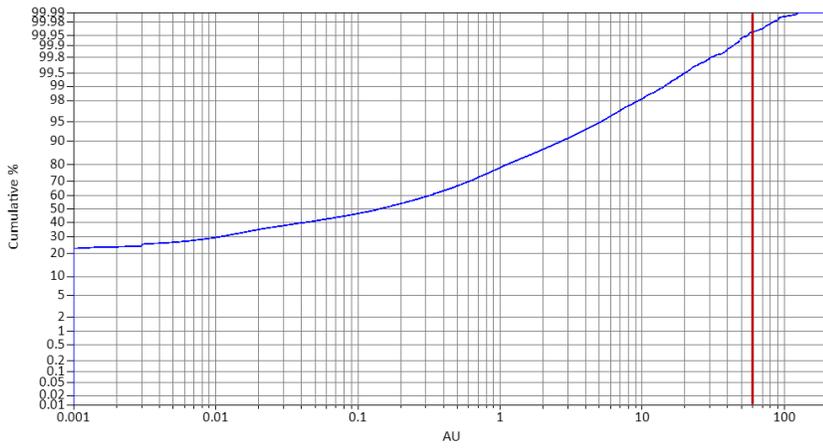


Figure 14-5: Cumulative Probability Plot of Au Grades (g/t) for Jubilee Main Shear

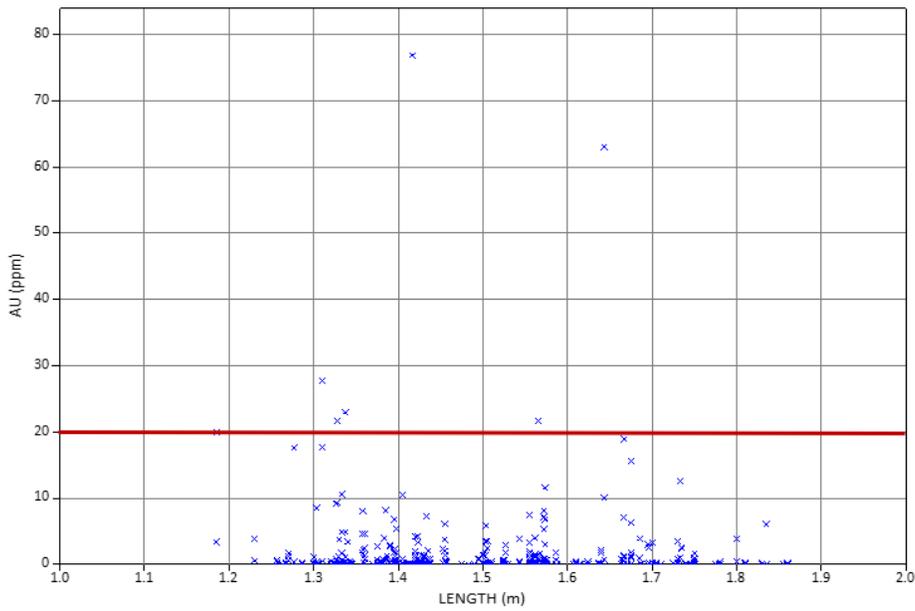
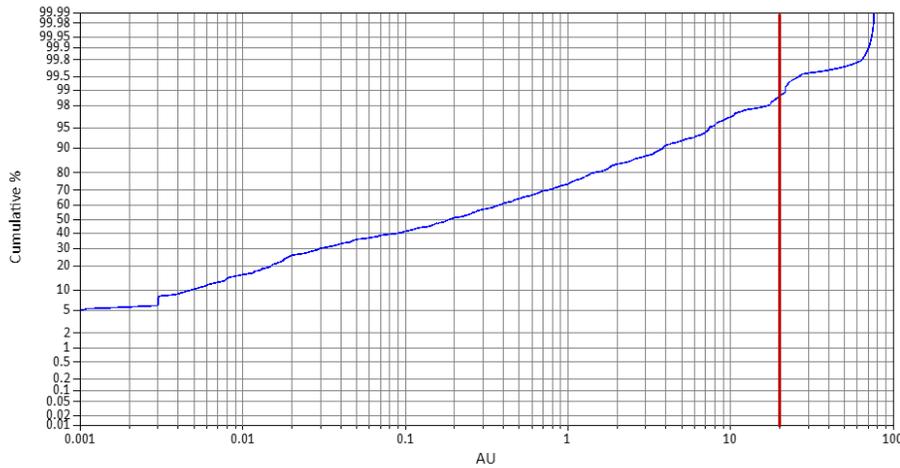


Figure 14-6: XY Scatterplot of Au Grades (g/t) vs Sample Length (m) for Minto Main Vein



**Figure 14-7: Cumulative Probability Plot of Au Grades (g/t) for Minto Main Vein**

The process of grade capping lowered the mean composite Au grades and reduced the coefficient of variation (CV - standard deviation divided by mean) resulting in an approximate reduction of sample metal of 2% for Surluga and 9% for Minto on a global basis.

**Table 14-2: Summary of Grade Caps by Domain**

Deposit Area	DOMAIN	TOP-CUT Value (g/t)	# SAMPLES CUT
Jubilee	ms_lower_deform_1	17.5	2
<b>Jubilee</b>	<b>ms_main_deform</b>	<b>60</b>	<b>14</b>
Jubilee	ms_upper_deform_wmb	17.5	1
Minto	ms_east	5	2
<b>Minto</b>	<b>mv</b>	<b>20</b>	<b>6</b>

Table 14-3 summarizes the changes in mean Au grades and CVs for the most material domains throughout the compositing and capping process.

**Table 14-3: Comparison of Sample Statistics for Main Mineralized Domains**

Area	DOMAIN	MEAN RAW SAMPLE Au (g/t)	MEAN CAPPED COMP. Au (g/t)	CV RAW SAMPLES	CV CAPPED COMPOSITES
<b>Jubilee</b>	<b>ms_main_deform</b>	<b>1.33</b>	<b>1.08</b>	<b>3.99</b>	<b>2.95</b>
Jubilee	ms_lower_deform_1	0.21	0.16	6.64	5.09
Jubilee	ms_upper_deform_wmb	0.18	0.13	5.62	4.37
<b>Minto</b>	<b>mv</b>	<b>1.76</b>	<b>1.28</b>	<b>4.2</b>	<b>2.54</b>
Minto	ms_east	0.12	0.1	4.95	3.8

### 14.4.3 Bulk Density

A total of 21,035 density measurements were used to determine a mean density value of 2.77 t/m<sup>3</sup> for the Jubilee deposit and Minto deposits. 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 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.

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

## 14.5 Block Model and Resource Estimation

### 14.5.1 Assessment of Spatial Continuity of Grade

Variogram modeling was completed to assess the spatial continuity of grade in both deposits using a combination of variogram maps and directional variograms. This analysis provided input on the directions and distances of grade correlation. The variogram analysis was found to be consistent with grade trend orientations observed in the deposit and those modelled by Red Pine. This analysis was used as the basis for determining the search ellipse distances and anisotropy defined in the estimation search strategy as summarized in Item 14.2.5.4.

### 14.5.2 Block Model Definition

The volume definition for the block model is summarized in Table 14-4. Block shape and size is typically a function of the geometry of the deposit, the scale of mineralized structures, density of sample data, and expected smallest mining unit (SMU). On this basis, a parent block size of 3 m (E-W) by 3 m (N-S) by 3 m (Elevation) was chosen to best represent the scale of geological zonation observed in the mineralization.

**Table 14-4: Block Model Volume Definition**

Direction	Minimum	Maximum	Block Size	No. Blocks
Easting	667,330	669,010	3	560
Northing	5,315,250	5,319,360	3	1,370
Elevation	-480	420	3	300

The domain envelopes were filled with blocks using the parameters described in Table 14-4. Block volumes were then compared to the mineral domain 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 mineral domain solids.

### 14.5.3 Interpolation Methods

Inverse Distance cubed (ID<sup>3</sup>) was the grade interpolation method chosen as the basis of the 2024 MRE. 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<sup>3</sup> was chosen by the QP over Inverse Distance Squared (ID<sup>2</sup>) 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), ID<sup>2</sup> and OK were estimated for global comparison and validation purposes, but not used for final resource reporting. Ordinary Kriging was found to be over-smoothed and did not appear to best represent the distribution of grade in the model.

#### 14.5.4 Search Strategy

A 3 pass, elliptical search strategy was utilized for both Jubilee and Minto as outlined in Table 14-5 and Table 14-6. Plunge rotations were used along with Dynamic Anisotropy to account for the grade plunge and 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 based on the main Shear Zone mineral domains. General search orientations, defined by dip and dip direction, were estimated into the blocks based on the trends implicit to the mineral domain envelopes. Additional controls were placed on the capped outlier samples as they were only used for grade estimation in the first 2 passes and were removed for the third pass.

**Table 14-5: Search Volume Controls Used for Jubilee Au Grade Estimation**

Pass	Along Strike Search Radius (m)	Down Dip Search Radius (m)	Across Strike Search Radius (m)	Min. No. of Samples	Max. No. of Samples	Max No. Samples from Each Hole	Min No. of Holes
Pass 1	40	20	4	5	8	2	3
Pass 2	80	40	6	5	8	3	2
Pass 3	120	80	6	5	8	3	2

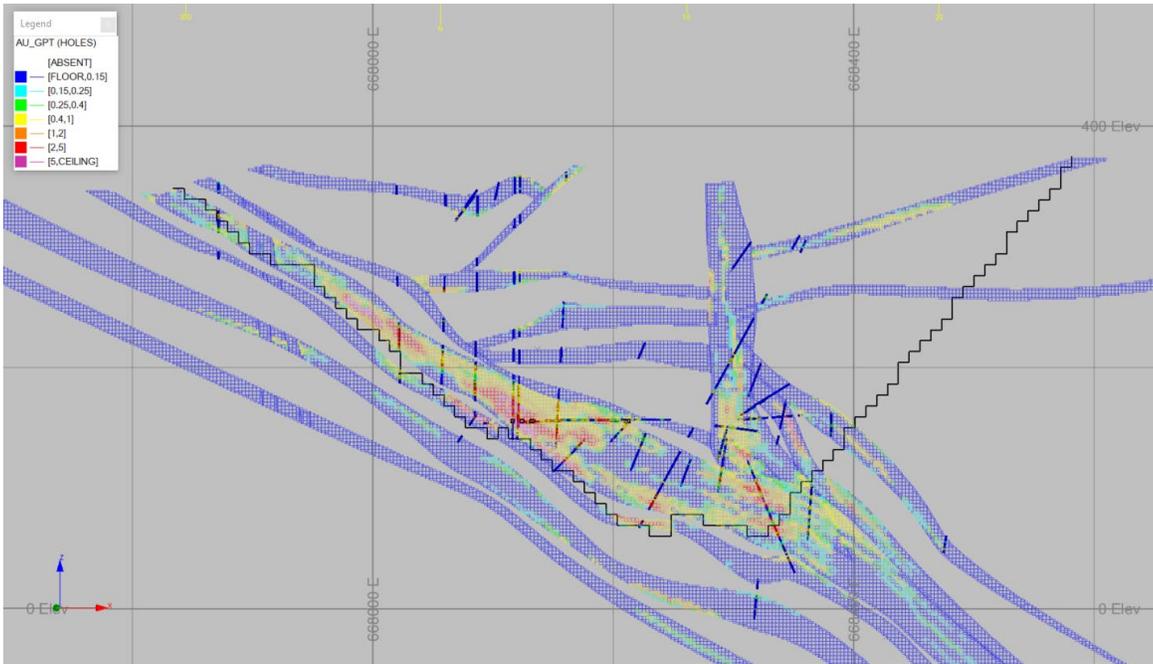
**Table 14-6: Search Volume Controls Used for Minto Au Grade Estimation**

Pass	Along Strike Search Radius (m)	Down Dip Search Radius (m)	Across Strike Search Radius (m)	Min. No. of Samples	Max. No. of Samples	Max No. Samples from Each Hole	Min No. of Holes
Pass 1	40	35	3	6	12	3	2
Pass 2	80	70	6	5	8	3	2
Pass 3	120	100	9	3	8	3	1

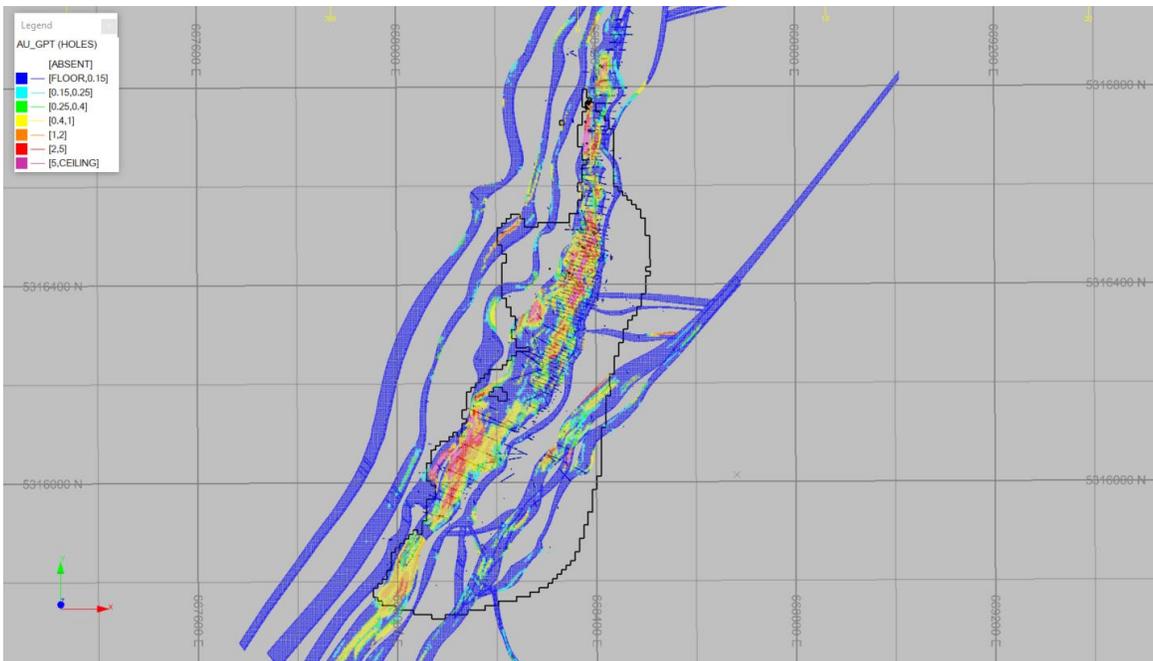
#### 14.5.5 Model Validation

The block model validation process included visual comparisons between block estimates and composite grades in plan, and cross-section, along with a global comparison of mean grades. Block estimates were visually compared to the drill hole composite data to confirm agreement.

Figure 14-8 and Figure 14-9 provide example comparisons of the composite samples and block model Au estimates in cross-section and plan views. No material grade bias issues were identified, and the block grades compared well to the composite data. The resource pit shell is shown in black.



**Figure 14-8: East-West Cross-Section (5,316,450N) Facing North**



**Figure 14-9: Plan View (160 m Elevation)**

Global statistical comparisons between the composite samples, NN estimates, ID<sup>2</sup> estimates, OK estimates, and the final estimates (ID<sup>3</sup>) were compared to assess for 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 sample composites and NN estimates. The results summarized in Table 14-7 indicate that no significant global bias was found in the block models.

**Table 14-7: Statistical Comparison of Global Mean Au Grades**

Deposit	Domain	Composite Mean (g/t)	NN Mean (g/t)	ID <sup>2</sup> Mean (g/t)	OK Mean (g/t)	ID <sup>3</sup> Mean (g/t)	Relative Difference (%)
Jubilee	ms_main_deform	1.08	0.47	0.48	0.49	0.48	2.6
Minto	mv	1.40	1.27	1.33	1.31	1.32	3.8

Notes: The comparison is for all blocks in the model irrespective of classification.  
Relative difference calculated between ID<sup>3</sup> mean and NN mean Au grades.

### 14.5.6 Historical Mining

Areas of historical mining from the Jubilee, Surluga and Minto mines as well as blocks inside the diabase dyke were flagged in the block model and excluded from this Mineral Resource estimate.

### 14.5.7 Resource Classification

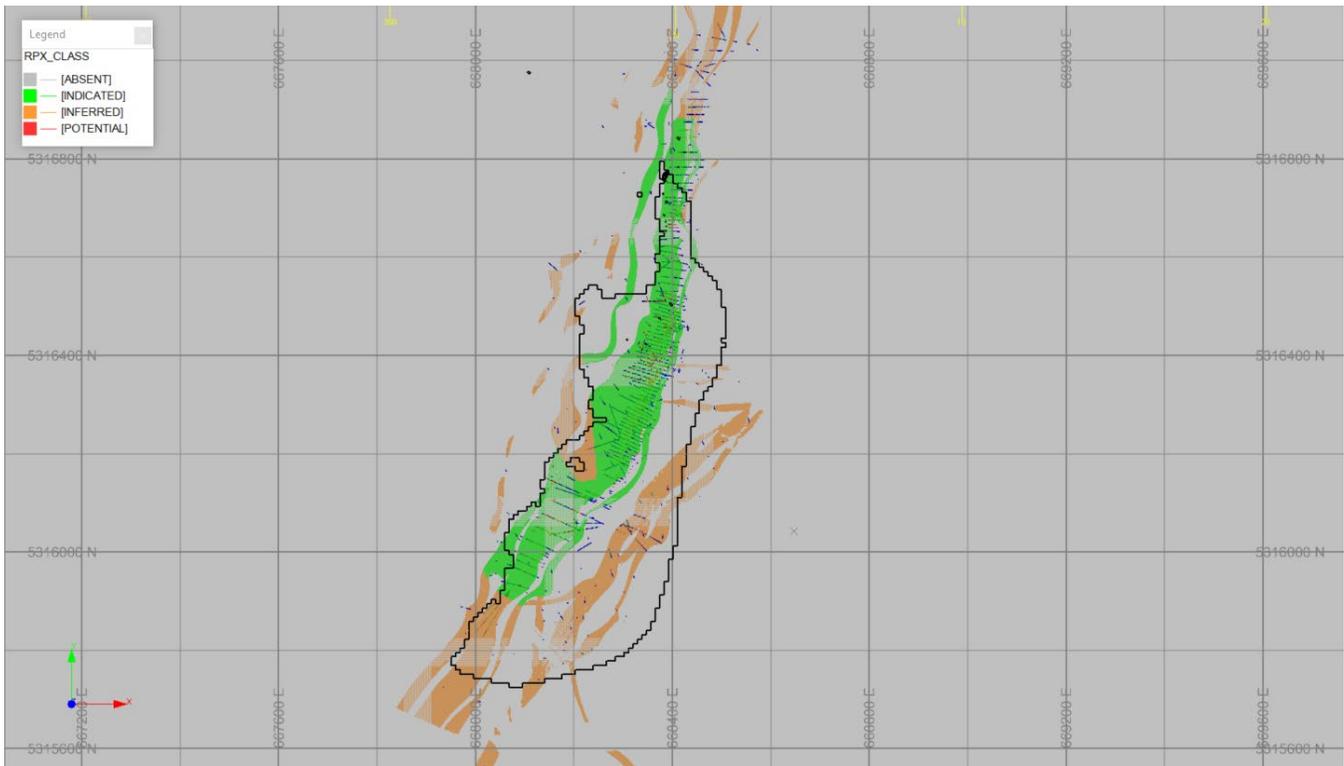
The Mineral Resource Estimate was classified following the CIM Definition Standards for Mineral Resources and Mineral Reserves (May 2014). Resource classifications were assigned to broad regions of the block model based on QP confidence and judgement related to drill hole spacing, geological understanding, continuity of mineralization in conjunction with data quality and block model representativeness.

Indicated resources were defined at an approximate drill spacing of 40 m or less where grades were estimated from either pass 1 or 2, and Inferred resources were defined at an approximate drill spacing between 40 m and 80 m with grades estimated predominantly from either pass 2 or 3.

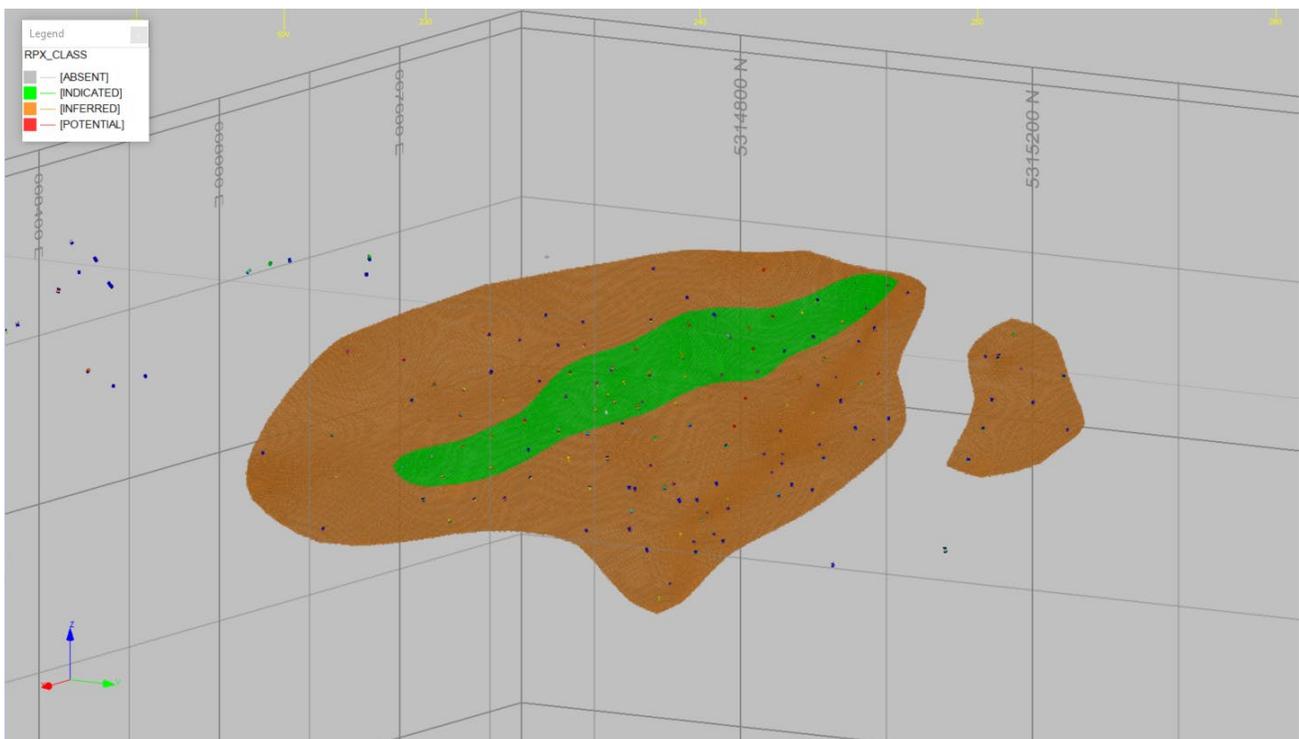
Measured Mineral Resources were not defined due to the historical nature of a significant proportion of the available drill hole data but may have been supported in some areas if evaluated on drill hole spacing alone.

Figure 14-10 outlines the locations of Indicated and Inferred Mineral resources in the Jubilee area. All mineral resources are confined to within the mineralized domain models. Any mineralization outside of these domains is considered as exploration potential.

Figure 14-11 outlines the locations of Indicated and Inferred Mineral resources in the Minto area. All mineral resources are confined to within the mineralized domain models and Indicated resources were confined to the Main Vein and Main Shear domains, all other domains were classified as Inferred. Any mineralization outside of these domains is considered as exploration potential. Drill spacing in the lower area of Minto would likely meet the Indicated criteria in some areas but was left as Inferred as the nature of mineralization is not as well understood outside of the main trend.



**Figure 14-10: Jubilee Mineral Resource Classification (Plan View 160 m Elevation, Resource Pit Shell in Black)**



**Figure 14-11: Minto Mineral Resource Classification for the Main Vein (Oblique View Facing South-West)**

## 14.5.8 Reasonable Prospects for Economic Extraction

### Mining Assumptions

The cut-off grades for this MRE are based on the following parameters and assumptions used to support reasonable prospects for economic extraction for OP and UG mining. Mining cost assumptions are summarized in Table 14-8.

- Gold Price: US\$1,950/Oz (C\$2,632.50/Oz), based on the approximate 3 year rolling average price
- Exchange Rate: \$1.35 CAD: \$1 USD
- Gold Recovery: 90.3%
- Maximum Pit Wall Slope: 50 degrees
- Royalties: 2.5% (reduced from 3.5% assuming expected re-purchasing of 1.5% of NSR from previous joint venture partner for \$CDN1.75 million and option to purchase an additional royalty of 0.5% by Franco-Nevada upon completion of feasibility study)

**Table 14-8: Summary of OP & UG Operating Cost Assumptions (\$CDN)**

Economic Assumption	Jubilee OP	Jubilee UG	Minto UG
Mining (C\$/t)	\$ 2.70	\$ 90.00	\$ 120.00
Processing (C\$/t)	\$ 19.00	\$ 37.50	\$ 37.50
G&A (C\$/t)	\$ 3.10	\$ 15.00	\$ 15.00
Transport to mill (C\$/t)	\$ 3.80	\$ 3.80	\$ 3.80
Rehabilitation & Closure (C\$/t)	\$ 0.35	\$ 0.35	\$ 0.35
<b>Total Operating Costs (C\$/t)</b>	<b>\$ 28.95</b>	<b>\$ 146.65</b>	<b>\$ 176.65</b>
<b>Cut-Off Grade Au (g/t)</b>	<b>0.4</b>	<b>2.0</b>	<b>2.4</b>

### Open Pit

Open pit resource estimates were reported above a 0.4 g/t break-even cut-off grade and constrained within a Whittle resource pit shell based on a revenue factor of 1.0. Pit slope angles were assumed to have a maximum slope of 50 degrees.

Figure 14-12 and Figure 14-13 outline mineral resource blocks greater than 0.4 g/t within the pit shell (black). Mining dilution and recovery factors were not applied to the resource pit shell or to the MRE.

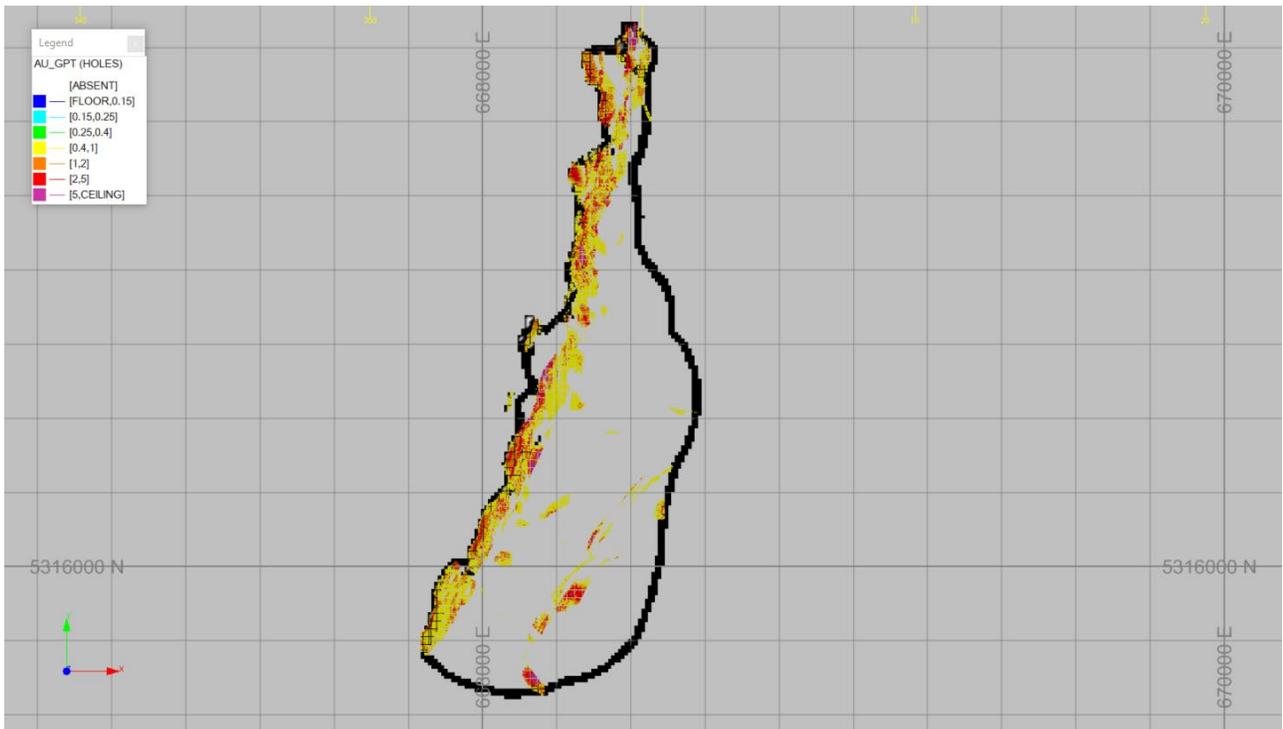


Figure 14-12: Plan View of Jubilee Resource Pit Shell (250 m Elevation)

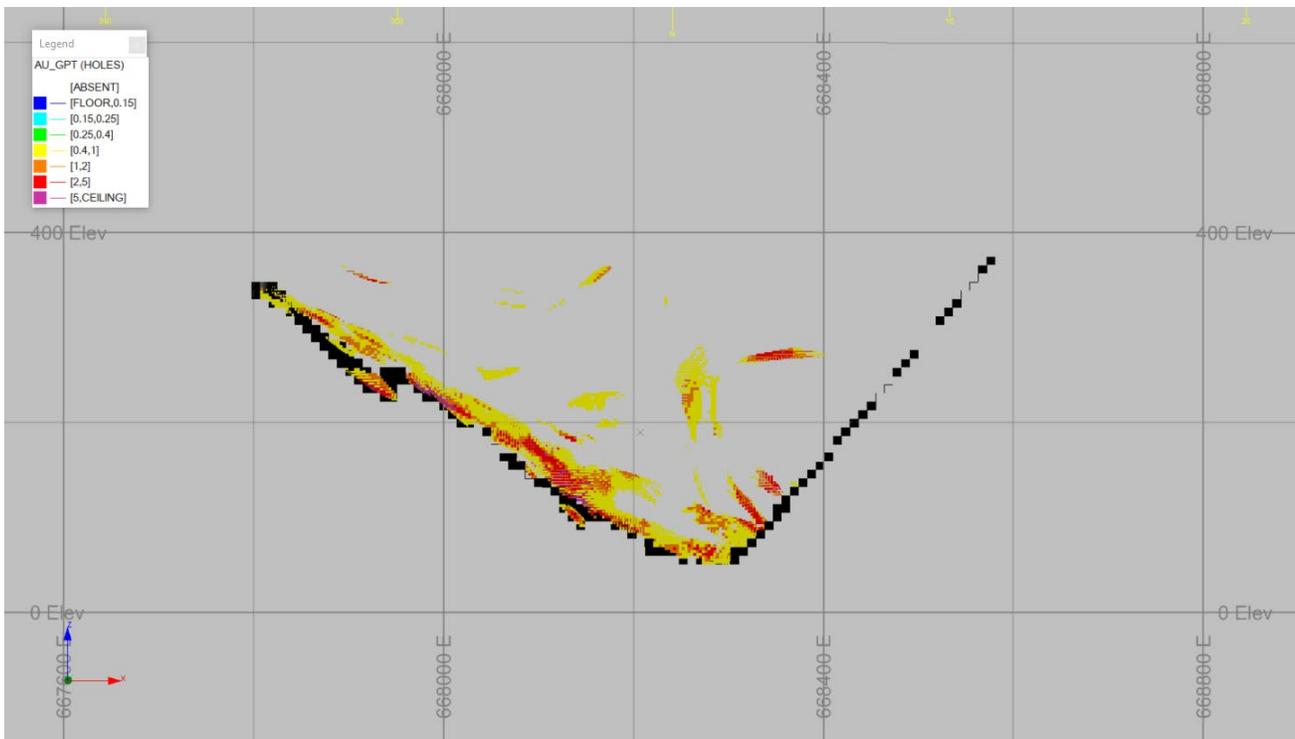


Figure 14-13: East-West Section View of Resource Blocks within the Jubilee Pit Shell (5,316,000N, Facing North)

## Underground

The UG resource estimates for Jubilee were reported outside and below the pit shell at a 2.0 g/t break-even cut-off grade representing Longhole mining. Resource blocks were evaluated for reasonable mining continuity by generating grade envelopes around blocks having a grade of 1.6 g/t or higher and excluding envelopes smaller than 2,000 tons.

The Minto UG underground resource estimate was reported using a slightly higher cut-off grade of 2.4 g/t as it is anticipated that potential mining widths could be narrower and possibly resulting in lower productivity. Resource blocks were evaluated for reasonable mining continuity by generating grade envelopes around blocks having a grade of 2.0 g/t or higher and excluding envelopes smaller than 2,000 tons.

Figure 14-14 outlines the combined UG mineral resource blocks for Jubilee and Minto.

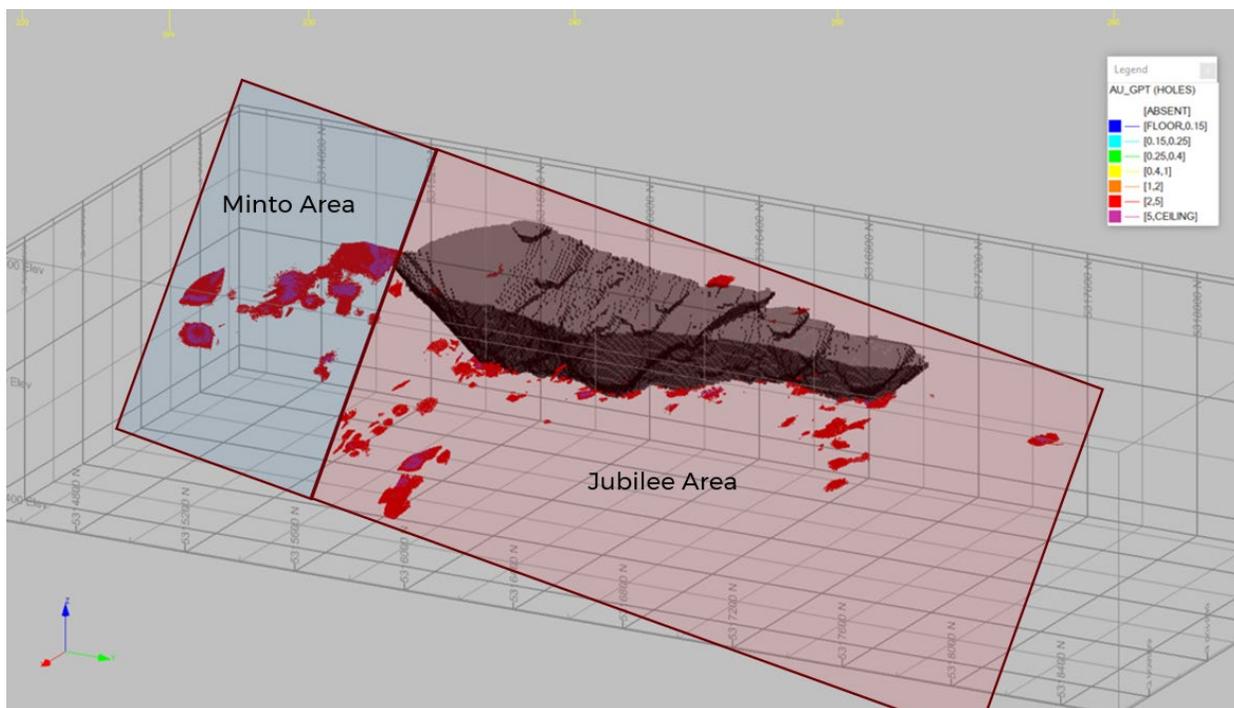


Figure 14-14: Oblique View of Minto and Jubilee UG Resource Blocks (facing South-West)

## 14.6 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.

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 factors used to determine reasonable prospects for economic extraction.**

Table 14-9 summarizes the Indicated and Inferred Mineral Resources for the Wawa Gold Project. Mineral Resources were evaluated for RPEE by reporting OP resources within a constrained pit shell at a gold break even cut-off grade of 0.4 g/t and UG resources for Jubilee and Minto at cut-off grades of 2.0 g/t and 2.4 g/t within constraining grade envelopes of 1.6 g/t and 2.0 g/t, respectively.

**Table 14-9: Mineral Resource Estimate for the Wawa Gold Project (Effective Date August 28, 2024)**

Category	Resource	Tonnes	Au (g/t)	Au Ounces
Indicated	Open Pit	14,354,000	1.72	794,000
Indicated	Underground	299,000	4.99	48,000
<b>Total Indicated</b>	-	<b>14,653,000</b>	<b>1.79</b>	<b>842,000</b>
Inferred	Open Pit	14,718,000	1.40	665,000
Inferred	Underground	1,465,000	3.80	179,000
<b>Total Inferred</b>	-	<b>16,183,000</b>	<b>1.62</b>	<b>843,000</b>

## Notes:

- 1) The updated MRE has been prepared in accordance with the CIM Standards (2014) and follows Best Practices outlined by the CIM (2019).
- 2) Mineral resources that are not mineral reserves do not have demonstrated economic viability. There are no Mineral Reserves for the Wawa Gold Project.
- 3) The QP (for purposes of National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101")) for the updated MRE is Brian Thomas, P.Geol., an employee of WSP and is "independent" of the Company within the meaning of Item 1.5 of NI 43-101.
- 4) The effective date of the updated MRE is August 28, 2024.
- 5) A minimum thickness of 3 metres was used when interpreting the mineralized bodies.
- 6) The updated MRE is based on sub-blocked models with a main block size of 3 metres x 3 metres x 3 metres.
- 7) The pit-constrained mineral resources are reported at a 0.40 g/t Au cut-off grade considering an Operating Expense ("OPEX") of CDN \$28.95 / tonne (\$2.70/t mining, \$19.00/t processing, \$3.10/t G&A, \$3.80/t transport to mill, \$0.35/t rehabilitation)
- 8) The Jubilee underground constrained mineral resources are reported at a 2.00 g/t Au cut-off and a minimum of 2,000 tonnes of contiguous material contained within a 1.60 g/t envelope. The 2.0 g/t cut-off assumes underground long hole mining with an OPEX of CDN \$146.65 / tonne (\$90.00 mining, \$37.50 milling, \$15.00 G&A, \$3.80/t transport to mill, \$0.35/t rehabilitation).
- 9) The Minto underground constrained mineral resources are reported at a 2.40 g/t Au cut-off and a minimum of 2,000 tonnes of contiguous material contained within a 2.00 g/t envelope. The 2.40 g/t Au cut-off grade assumes underground long hole mining with an OPEX of CDN \$176.65 / tonne (\$120.00 mining, \$37.50 milling, \$15.00 G&A, \$3.80/t transport to mill, \$0.35/t rehabilitation).
- 10) A bulk density factor of 2.77 tonnes per cubic m (t/m<sup>3</sup>) was applied for the MRE.
- 11) A gold price of \$CDN2,632 (US\$1,950) per ounce as used, and a USD/CDN exchange rate of 1.35.
- 12) Mill recovery of 90.3% was assumed.
- 13) Royalty of 2.5% (reduced from 3.5% assuming expected re-purchasing of 1.5% of NSR from previous joint venture partner for \$CDN1.75 million and option to purchase an additional royalty of 0.5% by Franco-Nevada upon completion of feasibility study).
- 14) Rounding may result in apparent summation differences between tonnes, grade, and metal content.

A comparison was completed to evaluate changes between the 2024 and 2019 Mineral Resource estimates, as summarized in Table 14-10.

**Table 14-10: Wawa Gold Project Mineral Resource Summary of Changes**

Category	2019 Resource Estimate			2024 Resource Estimate			Changes To Resource		
	Tonnes (000)	Au (g/t)	Ounces Au (000)	Tonnes (000)	Au (g/t)	Ounces Au (000)	Tonnes (000)	Au (g/t)	Ounces Au (000)
Indicated	1,307	5.47	230	14,653	1.79	842	13,346	-3.68	612
Inferred	2,716	5.39	471	16,183	1.62	843	13,467	-3.77	372

There were significant changes between 2024 and 2019 that resulted in material differences to the MRE, as summarized in the following list:

- 1) The Jubilee deposit was evaluated as a combined open-pit and underground project instead of a strictly underground project in 2019, which resulted in the use of a 0.4 g/t cut-off within the resource pit shell rather than the 2.7 g/t cut-off used for an UG only scenario. This resulted in a material change in the estimated tonnage, grade and metal content.
- 2) The gold price assumptions have increased from US\$1,200/oz to US\$1,950/oz resulting in lower underground mining break-even cut-off grades of 2.0 g/t (Jubilee) and 2.4 g/t (Minto) as compared to 2.7 g/t (Jubilee) and 3.5 g/t (Minto).
- 3) There was a significant addition of infill and exploration drill holes that increased the amount of Indicated resources and expanded the resource footprint.
- 4) The estimation parameters were changed to reflect the differences in mining scenarios. The block size was increased to 3 x 3 x 3 m from 2 x 2 x 2 m as well as other minor changes to the grade capping and estimation methodology.

### 14.6.1 Risks and Opportunities

The QP has summarized the following risks and opportunities related to this MRE:

- Mineral domain and lithological models were interpreted from drill hole data and may not accurately represent the actual deposit geology or account for the full scale of geological variability due to the complex structurally deformed nature of the deposit. Geological models generally change and evolve over time as new information becomes available.
- The sample database contains high-grade outlier values which can have a material impact on the MRE. The QP has taken steps to reduce the impact of this data but there remains some uncertainty regarding the impact on the overall quantity of metal in the deposit.
- Orientations of some of the drill holes may not represent a true cross-section and are possibly oriented sub-parallel to the down dip direction locally which may result in some local grade bias in the block model.
- Many different grade estimation methodologies can be used to support a MRE and variations in the approach and estimation parameters used can have a material impact on the resource estimate. Different approaches may affect the degree of grade smoothing which can have a material impact when reporting mineral resources above a grade cut-off. The QP has made efforts to achieve the expected level of smoothing, but the process is not an exact science and is dependent on the quality of the variogram model and mineral domain models.
- The Indicated resource category, in some areas of the model is based on drill spacing at, or near 40 m which is at the higher end of risk spectrum for the Indicated category. The QP has limited the Indicated category to areas within the main trend of mineralization where confidence in grade continuity is higher.
- A mean density value has been applied to the entire block model and may not represent local variations in density.
- Changes in metal prices and mining costs can vary significantly over short periods of time which has the potential to materially impact the MRE.

- The metallurgical recovery assumed for the MRE is based on test work completed to date and may not reflect actual recoveries achieved during future mining.
- The exclusion of some mineralization in the Jubilee and Minto footwall areas presents an opportunity to increase resources through continued exploration and infill drilling.
- Further infill drilling could provide an opportunity to increase resource confidence and may support the conversion of Inferred resources to the Indicated category.
- Further geotechnical work may be able to support a steeper pit slope which could reduce the amount of hanging wall dilution and lower the stripping ratio.
- The Minto area is currently considered as mainly an UG resource but could potentially be considered for OP mining.
- With additional investigation, density estimation could be added to the block model to better account for local variations and possibly improve the quality of tonnage estimates.
- Processing costs may be lower than stated for UG resources if considering an on-site mill scenario which could lead to a lower UG resource cut-off value.

The QP is unaware of any known environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or any other potential factors that could materially impact the Wawa Gold MRE provided in this Technical Report.

## **15.0 MINERAL RESERVE ESTIMATES**

This Item 15 is not required because the [subject] Property is not an advanced property.

## **16.0 MINING METHODS**

This Item 16 is not required because the [subject] Property is not an advanced property.

## **17.0 RECOVERY METHODS**

This Item 17 is not required because the [subject] Property is not an advanced property.

## **18.0 PROJECT INFRASTRUCTURE**

This Item 18 is not required because the [subject] Property is not an advanced property.

## **19.0 MARKET STUDIES AND CONTRACTS**

This Item 19 is not required because the [subject] Property is not an advanced property.

## **20.0 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT**

This Item 20 is not required because the [subject] Property is not an advanced property.

## **21.0 CAPITAL AND OPERATING COSTS**

This Item 21 is not required because the [subject] Property is not an advanced property.

## **22.0 ECONOMIC ANALYSIS**

This Item 22 is not required because the [subject] Property is not an advanced property.

## 23.0 ADJACENT PROPERTIES

There are many historical mines adjacent to the Project as previously described in Item 6.0. 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.

BTU Metal Corp. is a gold exploration company that has interest in the Hudcap Property that is situated on the southwestern edge of the Wawa Gold Project.

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**

Table 24-1: Patents and Leases

Project	Tenure Number	Mining Right Type	Surface Rights	Mining Rights	Account Status	Expiry	Area (ha)	PIN	Parcel Number	Holder	NSR
Wawa Gold JV	LEA-107487	Lease	Yes	Yes	Active	1/31/2025	15.103	31169-0202(LT) 31169-0201(LT)	1743LA	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	LEA-107760	Lease	Yes	Yes	Active	5/31/2026	162.202	31169-0204(LT) 31169-0203(LT)	1768AL	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	LEA-107761	Lease	No	Yes	Active	5/31/2026	319.176	31169-0206(LT) 31169-0205(LT) 31169-0207(LT)	1769AL	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	LEA-108502	Lease	No	Yes	Active	1/31/2031	1.206	31169-0210(LT)	1804AL	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	LEA-108850	Lease	No	Yes	Active	8/31/2032	79.776	31169-0214(LT) 31169-0213(LT)	1818AL	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	LEA-108851	Lease	Yes	Yes	Active	7/31/2032	14.609	31169-0212(LT)	1815AL	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	LEA-108852	Lease	No	Yes	Active	7/31/2032	15.338	31169-0211(LT)	1814AL	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	LEA-108912	Lease	No	Yes	Active	11/30/2032	16.058	31169-0197(LT)	1113AL	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	LEA-108913	Lease	No	Yes	Active	11/30/2032	19.696	31169-0196(LT)	1112AL	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	LEA-108914	Lease	No	Yes	Active	11/30/2032	7.758	31169-0195(LT)	1111AL	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	LEA-108915	Lease	No	Yes	Active	11/30/2032	20.372	31169-0193(LT)	1110AL	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	LEA-108916	Lease	No	Yes	Active	11/30/2032	17.062	31169-0194(LT)	1109AL	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	LEA-108943	Lease	No	Yes	Active	1/31/2033	16.058	31169-0198(LT)	1125AL	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	LEA-109445	Lease	Yes	Yes	Active	5/31/2033	37.231	31169-0216(LT) 31169-0215(LT)	1873AL	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	LEA-109446	Lease	No	Yes	Active	5/31/2033	21.413	31169-0217(LT)	1874AL	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	LEA-110011	Lease	Yes	Yes	Active	4/30/2042	17.369	31169-0199(LT)	1660LA	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	LEA-110120	Lease	No	Yes	Active	7/31/2044	9.324	31169-0200(LT)	1699AL	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%

Project	Tenure Number	Min ing Right Type	Surf ace Rights	Min ing Rights	Account Stat us	Expiry	Area (ha)	PIN	Parcel Number	Holder	NSR
Wawa Gold JV	PAT-28072	Pat ent	Yes	Yes	Active		11.857	31169-0272(LT)	963AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-28073	Pat ent	Yes	Yes	Active		13.395	31169-0286(LT)	1685AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-28074	Pat ent	Yes	Yes	Active		18.494	31169-0284(LT)	1678AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-28075	Pat ent	Yes	Yes	Active		9.672	31169-0284(LT)	1678AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-28076	Pat ent	Yes	Yes	Active		9.308	31169-0295(LT)	1805AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-28077	Pat ent	No	Yes	Active		11.21	31169-0295(LT)	1805AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-28078	Pat ent	Yes	Yes	Active		17.321	31169-0295(LT)	1805AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-28079	Pat ent	Yes	Yes	Active		8.863	31169-0285(LT)	1678AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-28080	Pat ent	No	Yes	Active		3.865	31169-0338(LT)	2049AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-28094	Pat ent	No	Yes	Active		7.689	31169-0260(LT)	347AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-28095	Pat ent	No	Yes	Active		7.284	31169-0260(LT)	347AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-28096	Pat ent	No	Yes	Active		10.297	31169-0260(LT)	347AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-28097	Pat ent	Yes	Yes	Active		7.689	31169-0280(LT)	1551AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-28098	Pat ent	Yes	Yes	Active		7.932	31169-0280(LT)	1551AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-28099	Pat ent	Yes	Yes	Active		16.187	31169-0280(LT)	1551AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-28102	Pat ent	Yes	Yes	Active		21.853	31169-0318(LT)	1930AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-431	Pat ent	Yes	Yes	Active		9.712	31169-0317(LT)	1927AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-432	Pat ent	Yes	Yes	Active		9.308	31169-0317(LT)	1927AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-433	Pat ent	Yes	Yes	Active		8.498	31169-0549(LT)	3415AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-434	Pat ent	Yes	Yes	Active		15.135	31169-0304(LT)	1867AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%

Project	Tenure Number	Min ing Right Type	Surf ace Rights	Min ing Rights	Account Stat us	Expiry	Area (ha)	PIN	Parcel Number	Holder	NSR
Wawa Gold JV	PAT-435	Pat ent	Yes	Yes	Active		8.498	31169-0316(LT)	1927AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-490	Pat ent	No	Yes	Active		8.094	31169-0277(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-491	Pat ent	No	Yes	Active		7.284	31169-0277(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-492	Pat ent	No	Yes	Active		15.783	31169-0278(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-493	Pat ent	No	Yes	Active		14.569	31169-0277(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-494	Pat ent	No	Yes	Active		16.592	31169-0277(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-495	Pat ent	No	Yes	Active		10.927	31169-0277(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-496	Pat ent	No	Yes	Active		5.666	31169-0277(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-497	Pat ent	No	Yes	Active		19.425	31169-0277(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-498	Pat ent	No	Yes	Active		12.545	31169-0277(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-499	Pat ent	No	Yes	Active		9.712	31169-0279(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-500	Pat ent	No	Yes	Active		8.498	31169-0278(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-501	Pat ent	No	Yes	Active		6.475	31169-0278(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-502	Pat ent	No	Yes	Active		7.284	31169-0278(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-503	Pat ent	No	Yes	Active		14.973	31169-0278(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-504	Pat ent	No	Yes	Active		10.522	31169-0278(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-505	Pat ent	No	Yes	Active		4.856	31169-0278(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-506	Pat ent	No	Yes	Active		12.545	31169-0277(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-507	Pat ent	No	Yes	Active		16.592	31169-0277(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-508	Pat ent	No	Yes	Active		18.211	31169-0277(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%

Project	Tenure Number	Min ing Right Type	Surf ace Rights	Min ing Rights	Account Stat us	Expiry	Area (ha)	PIN	Parcel Number	Holder	NSR
Wawa Gold JV	PAT-509	Pat ent	No	Yes	Activ e		14.973	31169-0277(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-510	Pat ent	No	Yes	Activ e		12.95	31169-0277(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-511	Pat ent	No	Yes	Activ e		13.759	31169-0277(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-512	Pat ent	No	Yes	Activ e		13.355	31169-0277(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-513	Pat ent	No	Yes	Activ e		14.569	31169-0277(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-514	Pat ent	No	Yes	Activ e		16.592	31169-0277(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-515	Pat ent	No	Yes	Activ e		14.569	31169-0277(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-516	Pat ent	No	Yes	Activ e		4.856	31169-0277(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-517	Pat ent	No	Yes	Activ e		13.759	31169-0277(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-518	Pat ent	Yes	Yes	Activ e		18.616	31169-0255(LT)	199AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-519	Pat ent	Yes	Yes	Activ e		16.592	31169-0255(LT)	199AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-520	Pat ent	No	Yes	Activ e		15.783	31169-0221(LT)	3AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-521	Pat ent	No	Yes	Activ e		4.452	31169-0277(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-522	Pat ent	No	Yes	Activ e		16.187	31169-0277(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-523	Pat ent	No	Yes	Activ e		12.545	31169-0277(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-524	Pat ent	No	Yes	Activ e		21.448	31169-0277(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-525	Pat ent	No	Yes	Activ e		7.689	31169-0278(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-526	Pat ent	No	Yes	Activ e		14.569	31169-0277(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-527	Pat ent	No	Yes	Activ e		14.164	31169-0277(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-528	Pat ent	No	Yes	Activ e		13.759	31169-0279(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%

Project	Tenure Number	Min ing Right Type	Surf ace Rights	Min ing Rights	Account Stat us	Expiry	Area (ha)	PIN	Parcel Number	Holder	NSR
Wawa Gold JV	PAT-529	Pat ent	No	Yes	Activ e		6.07	31169-0279(LT)	1504AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-546	Pat ent	Yes	Yes	Activ e		16.673	31169-0648(LT)	5136AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-547	Pat ent	Yes	Yes	Activ e		16.309	31169-0648(LT)	5136AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-548	Pat ent	Yes	Yes	Activ e		18.737	31169-0648(LT)	5136AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-549	Pat ent	Yes	Yes	Activ e		18.009	31169-0648(LT)	5136AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-550	Pat ent	Yes	Yes	Activ e		13.638	31169-0648(LT)	5136AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-551	Pat ent	Yes	Yes	Activ e		64.75	31169-0648(LT)	5136AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-552	Pat ent	Yes	Yes	Activ e		21.853	31169-0648(LT)	5136AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-553	Pat ent	Yes	Yes	Activ e		17.806	31169-0648(LT)	5136AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-554	Pat ent	Yes	Yes	Activ e		18.777	31169-0648(LT)	5136AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-555	Pat ent	Yes	Yes	Activ e		5.666	31169-0649(LT)	5136AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-556	Pat ent	Yes	Yes	Activ e		6.556	31169-0649(LT)	5136AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-557	Pat ent	Yes	Yes	Activ e		11.493	31169-0649(LT)	5136AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-558	Pat ent	Yes	Yes	Activ e		11.817	31169-0649(LT)	5136AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-559	Pat ent	Yes	Yes	Activ e		13.193	31169-0649(LT)	5136AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-560	Pat ent	Yes	Yes	Activ e		16.997	31169-0649(LT)	5136AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-561	Pat ent	Yes	Yes	Activ e		17.685	31169-0648(LT)	5136AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-562	Pat ent	Yes	Yes	Activ e		18.737	31169-0648(LT)	5136SW S	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-563	Pat ent	Yes	Yes	Activ e		14.973	31169-0648(LT)	5136AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-564	Pat ent	Yes	Yes	Activ e		15.054	31169-0649(LT)	5136AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%

Project	Tenure Number	Min ing Right Type	Surf ace Rights	Min ing Rights	Account Stat us	Expiry	Area (ha)	PIN	Parcel Number	Holder	NSR
Wawa Gold JV	PAT-565	Pat ent	Yes	Yes	Active		12.464	31169-0649(LT)	5136AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-566	Pat ent	Yes	Yes	Active		11.817	31169-0649(LT)	5136AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-567	Pat ent	Yes	Yes	Active		9.955	31169-0649(LT)	5136AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-568	Pat ent	Yes	Yes	Active		9.996	31169-0649(LT)	5136AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-569	Pat ent	Yes	Yes	Active		12.95	31169-0649(LT)	5136AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-570	Pat ent	Yes	Yes	Active		64.75	31169-0648(LT)	5136AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-571	Pat ent	Yes	Yes	Active		15.265	31169-1809(LT)	1115MI CH	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-572	Pat ent	Yes	Yes	Active		16.467	31169-1824(LT)	1148MI CH	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-653	Pat ent	Yes	Yes	Active		8.782	31169-0281(LT)	1647AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-654	Pat ent	Yes	Yes	Active		8.498	31169-0283(LT)	1676AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-676	Pat ent	Yes	Yes	Active		9.441	31169-0268(LT)	432AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-677	Pat ent	Yes	Yes	Active		8.903	31169-0309(LT)	1902AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-678	Pat ent	Yes	Yes	Active		3.735	31169-0341(LT)	2108AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-679	Pat ent	Yes	Yes	Active		20.76	31169-0274(LT)	1401AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-680	Pat ent	Yes	Yes	Active		10.117	31169-0297(LT)	1806 1/2AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-681	Pat ent	Yes	Yes	Active		6.475	31169-0306(LT)	1885AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-682	Pat ent	Yes	Yes	Active		6.475	31169-0305(LT)	1884AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-683	Pat ent	Yes	Yes	Active		18.616	31169-0297(LT)	1806 1/2 AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-684	Pat ent	Yes	Yes	Active		16.997	31169-0273(LT)	1385AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-775	Pat ent	Yes	Yes	Active		23.638	31169-0293(LT)	1785AWS	RED PINE EXPLORATION INC. (196462) - 100%	Franco-Nevada 1.5%, Citabar* 2.0%

Project	Tenure Number	Mining Right Type	Surface Rights	Mining Rights	Account Status	Expiry	Area (ha)	PIN	Parcel Number	Holder	NSR
Wawa Gold JV	PAT-776	Patent	Yes	Yes	Active		17.673	31169-0302(LT)	1833AWS	RED PINE EXPLORATION INC. (196462) - 100%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-777	Patent	Yes	Yes	Active		7.831	31169-0302(LT)	1833AWS	RED PINE EXPLORATION INC. (196462) - 100%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-784	Patent	Yes	Yes	Active		8.778	31169-0270(LT)	496AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-785	Patent	Yes	Yes	Active		9.834	31169-0276(LT)	1456AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
Wawa Gold JV	PAT-817	Patent	Yes	Yes	Active		3.237	31169-0315(LT)	1925AWS	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%	Franco-Nevada 1.5%, Citabar* 2.0%
<b>* 1.5% subject to buyback of \$1.75M</b>											

**Table 24-2: SRO Patents**

Project	Mining Right Type	Rights	Account Status	PIN	Holder
Wawa Gold JV	Patent	SRO	Not Applicable	31169-0289(LT)	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%
Wawa Gold JV	Patent	SRO	Not Applicable	31169-0307(LT)	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%
Wawa Gold JV	Patent	SRO	Not Applicable	31169-0308(LT)	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%
Wawa Gold JV	Patent	SRO	Not Applicable	31169-0642(LT)	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%
Wawa Gold JV	Patent	SRO	Not Applicable	31169-0643(LT)	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%
Wawa Gold JV	Patent	SRO	Not Applicable	31169-0695(LT)	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%
Wawa Gold JV	Patent	SRO	Not Applicable	31169-0696(LT)	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%
Wawa Gold JV	Patent	SRO	Not Applicable	31169-0872(LT)	RED PINE EXPLORATION INC. (196462) - 60%, WAWA GP INC. (409536) - 40%
Wawa Gold JV	Patent	SRO	Not Applicable	31169-0311(LT)	RED PINE EXPLORATION INC. (196462) - 100%
Wawa Gold JV	Patent	SRO	Not Applicable	31169-0312(LT)	RED PINE EXPLORATION INC. (196462) - 100%
Wawa Gold JV	Patent	SRO	Not Applicable	31169-0313(LT)	RED PINE EXPLORATION INC. (196462) - 100%
Wawa Gold JV	Patent	SRO	Not Applicable	31169-0328(LT)	RED PINE EXPLORATION INC. (196462) - 100%

Table 24-3: Wawa Claims

Tenure ID	Cell ID(s)	Tenure Type	Tenure Status	Anniversary Date	Holder	Area (ha)	Township/Area	NSR
865988	41N15K076	SCMC	Active	11/5/2025	(100) RED PINE EXPLORATION INC.	13.78	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
103977	41N15J206	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
145104	41N15J169	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
156473	41N15J202	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	0.17	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
159078	41N15J205	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	12.01	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
165694	41N15J167	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
165695	41N15J187	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
176564	41N15J083	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	0.00	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
178616	41N15J226	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
199790	41N15J148	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
201079	41N15J224	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	8.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
203245	41N15J263	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	7.15	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
207101	41N15J128	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
208425	41N15J223	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	4.57	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
211226	41N15J189	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
237070	41N15J184	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	0.03	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
237071	41N15J204	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	20.39	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
241897	41N15J146	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	5.98	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
247316	41N15J244	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	17.58	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
248429	41N15J188	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
254408	41N15J127	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
259937	41N15J168	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
260306	41N15J225	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	8.49	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
269154	41N15J147	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	10.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
269155	41N15J185	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	13.98	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
269156	41N15J207	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
277262	41N15J264	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	15.25	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
278459	41N15J084	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	2.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
311141	41N15J203	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	18.34	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
314445	41N15J209	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
325034	41N15J166	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	20.90	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
327110	41N15J208	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
340102	41N15J186	SCMC	Active	1/20/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
105773	42C02B348	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	9.90	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
105774	42C02B366	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	21.61	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
105798	41N15J008	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	21.61	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
127200	42C02B369	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	8.81	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
138679	42C02B387	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	21.61	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
155251	41N15J006	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	21.61	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
165765	41N15J049	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	17.58	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
171219	42C02B365	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	9.39	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
173367	42C02B346	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	18.87	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%

Tenure ID	Cell ID(s)	Tenure Type	Tenure Status	Anniversary Date	Holder	Area (ha)	Township/Area	NSR
179189	41N15J090	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	9.54	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
185222	41N15J050	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	0.00	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
190682	42C02B389	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	20.96	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
190705	41N15J009	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	21.61	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
190706	41N15J005	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	6.73	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
209256	41N15J048	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	14.25	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
220012	41N15J007	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	21.61	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
227954	42C02B388	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	21.61	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
233041	41N15J069	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	16.04	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
237797	41N15J029	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	19.49	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
240094	42C02B349	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	3.59	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
240095	42C02B367	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	21.61	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
275220	41N15J026	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	2.21	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
275221	41N15J025	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	0.70	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
294615	42C02B368	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	21.61	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
294637	42C02B385	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	7.61	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
306719	42C02B347	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	9.46	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
306741	42C02B386	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	21.61	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
311295	41N15J028	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	21.61	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
311840	41N15J027	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	11.92	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
324415	42C02B345	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	21.60	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
334474	41N15J047	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	1.16	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
340184	41N15J070	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	14.82	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
340185	41N15J089	SCMC	Active	2/9/2027	(100) RED PINE EXPLORATION INC.	13.11	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
121565	41N15J112	SCMC	Active	2/13/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
122905	41N15J149	SCMC	Active	2/13/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
132965	41N15J111	SCMC	Active	2/13/2027	(100) RED PINE EXPLORATION INC.	9.79	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
178854	41N15J170	SCMC	Active	2/13/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
185590	41N15J152	SCMC	Active	2/13/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
205075	41N15J132	SCMC	Active	2/13/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
205775	41N15J172	SCMC	Active	2/13/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
205776	41N15J171	SCMC	Active	2/13/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
244858	41N15J092	SCMC	Active	2/13/2027	(100) RED PINE EXPLORATION INC.	12.19	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
252391	41N15J091	SCMC	Active	2/13/2027	(100) RED PINE EXPLORATION INC.	3.81	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
252392	41N15J129	SCMC	Active	2/13/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
252393	41N15J150	SCMC	Active	2/13/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
264407	41N15J110	SCMC	Active	2/13/2027	(100) RED PINE EXPLORATION INC.	1.28	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
282079	41N15J151	SCMC	Active	2/13/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
300941	41N15J131	SCMC	Active	2/13/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
339794	41N15J130	SCMC	Active	2/13/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
125650	41N15K155	SCMC	Active	3/7/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
125651	41N15K194	SCMC	Active	3/7/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY, LENDRUM	Franco-Nevada 1.5%, Citabar* 2.0%
125652	41N15K237	SCMC	Active	3/7/2027	(100) RED PINE EXPLORATION INC.	14.69	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
125653	41N15K236	SCMC	Active	3/7/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%

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125654	41N15K254	SCMC	Active	3/7/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY, LENDRUM	Franco-Nevada 1.5%, Citabar* 2.0%
200738	41N15K176	SCMC	Active	3/7/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
200739	41N15K196	SCMC	Active	3/7/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
200740	41N15K195	SCMC	Active	3/7/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
200741	41N15K255	SCMC	Active	3/7/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
208783	41N15K216	SCMC	Active	3/7/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
208784	41N15K214	SCMC	Active	3/7/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY, LENDRUM	Franco-Nevada 1.5%, Citabar* 2.0%
220864	41N15K174	SCMC	Active	3/7/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY, LENDRUM	Franco-Nevada 1.5%, Citabar* 2.0%
227648	41N15K175	SCMC	Active	3/7/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
227649	41N15K235	SCMC	Active	3/7/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
274808	41N15K234	SCMC	Active	3/7/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY, LENDRUM	Franco-Nevada 1.5%, Citabar* 2.0%
276913	41N15K136	SCMC	Active	3/7/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
310772	41N15K156	SCMC	Active	3/7/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
323495	41N15K215	SCMC	Active	3/7/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
209144	41N15J250	SCMC	Active	3/15/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
305001	41N15J289	SCMC	Active	3/15/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
102432	41N15J363	SCMC	Active	3/28/2027	(100) RED PINE EXPLORATION INC.	21.64	NAVEAU	Franco-Nevada 1.5%, Citabar* 2.0%
119569	41N15J322	BCMC	Active	3/28/2027	(100) RED PINE EXPLORATION INC.	1.02	NAVEAU	Franco-Nevada 1.5%, Citabar* 2.0%
156393	41N15J345	SCMC	Active	3/28/2027	(100) RED PINE EXPLORATION INC.	21.64	NAVEAU	Franco-Nevada 1.5%, Citabar* 2.0%
156394	41N15J344	SCMC	Active	3/28/2027	(100) RED PINE EXPLORATION INC.	14.29	NAVEAU	Franco-Nevada 1.5%, Citabar* 2.0%
175850	41N15J383	SCMC	Active	3/28/2027	(100) RED PINE EXPLORATION INC.	21.64	NAVEAU	Franco-Nevada 1.5%, Citabar* 2.0%
175851	41N15J364	SCMC	Active	3/28/2027	(100) RED PINE EXPLORATION INC.	21.64	NAVEAU	Franco-Nevada 1.5%, Citabar* 2.0%
191868	41N15J343	SCMC	Active	3/28/2027	(100) RED PINE EXPLORATION INC.	19.62	NAVEAU	Franco-Nevada 1.5%, Citabar* 2.0%
221783	41N15J362	BCMC	Active	3/28/2027	(100) RED PINE EXPLORATION INC.	0.23	NAVEAU	Franco-Nevada 1.5%, Citabar* 2.0%
276968	41N15J365	SCMC	Active	3/28/2027	(100) RED PINE EXPLORATION INC.	21.64	NAVEAU	Franco-Nevada 1.5%, Citabar* 2.0%
325045	41N15J342	BCMC	Active	3/28/2027	(100) RED PINE EXPLORATION INC.	1.92	NAVEAU	Franco-Nevada 1.5%, Citabar* 2.0%
337406	41N15J384	SCMC	Active	3/28/2027	(100) RED PINE EXPLORATION INC.	21.64	NAVEAU	Franco-Nevada 1.5%, Citabar* 2.0%
100524	41N15K177	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
103359	41N15J283	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	7.43	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
103360	41N15J262	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	0.72	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
108689	41N15J190	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
110720	41N15J231	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
127806	41N15J389	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.64	NAVEAU	Franco-Nevada 1.5%, Citabar* 2.0%
127807	41N15J387	BCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	4.50	NAVEAU	Franco-Nevada 1.5%, Citabar* 2.0%
136977	41N15J291	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
143017	41N15J271	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
146495	41N15J212	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
155757	41N15J329	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.64	NAVEAU, MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
156956	41N15K340	BCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	7.54	RABAZO	Franco-Nevada 1.5%, Citabar* 2.0%
157138	41N15J270	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
157156	41N15J332	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.64	NAVEAU, MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
163029	41N15J301	BCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	8.03	RABAZO, NAVEAU, MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
174383	41N15K178	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.43	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
175178	41N15J349	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.64	NAVEAU	Franco-Nevada 1.5%, Citabar* 2.0%

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175179	41N15J346	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.64	NAVEAU	Franco-Nevada 1.5%, Citabar* 2.0%
177812	41N15J281	BCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	19.94	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
177841	41N15J303	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.64	NAVEAU, MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
181649	41N15J292	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
181650	41N15J311	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.64	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
186282	41N15J192	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
191196	41N15J327	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.64	NAVEAU	Franco-Nevada 1.5%, Citabar* 2.0%
193668	41N15J232	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
201774	41N15J290	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
209099	41N15J309	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.64	NAVEAU, MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
209125	41N15J331	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.64	NAVEAU, MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
213116	41N15J213	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
221112	41N15J368	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.64	NAVEAU	Franco-Nevada 1.5%, Citabar* 2.0%
221113	41N15J386	BCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	1.93	NAVEAU	Franco-Nevada 1.5%, Citabar* 2.0%
221782	41N15J323	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	19.35	NAVEAU	Franco-Nevada 1.5%, Citabar* 2.0%
229087	41N15J348	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.64	NAVEAU	Franco-Nevada 1.5%, Citabar* 2.0%
229088	41N15J369	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.64	NAVEAU	Franco-Nevada 1.5%, Citabar* 2.0%
229852	41N15J086	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	15.42	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
231157	41N15J305	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	19.30	NAVEAU, MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
241062	41N15K158	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	14.82	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
241257	41N15J326	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.64	NAVEAU	Franco-Nevada 1.5%, Citabar* 2.0%
241915	41N15J325	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.64	NAVEAU	Franco-Nevada 1.5%, Citabar* 2.0%
242561	41N15J126	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	17.18	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
243855	41N15K300	BCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	15.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
243875	41N15J282	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	17.14	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
249849	41N15J233	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
256430	41N15J310	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.64	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
256431	41N15J251	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
257861	41N15J230	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
258304	41N15J367	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.64	NAVEAU	Franco-Nevada 1.5%, Citabar* 2.0%
259046	41N15J106	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	19.15	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
260609	41N15K159	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	11.78	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
260610	41N15K179	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
260611	41N15K200	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	1.64	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
260612	41N15K198	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	16.74	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
261027	41N15J304	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	19.11	NAVEAU, MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
267383	41N15K217	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	15.50	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
268378	41N15J284	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	0.24	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
268379	41N15J302	BCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	19.92	NAVEAU, MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
274495	41N15J312	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.64	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
276316	41N15J328	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.64	NAVEAU	Franco-Nevada 1.5%, Citabar* 2.0%
277027	41N15J321	BCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	1.48	RABAZO, NAVEAU	Franco-Nevada 1.5%, Citabar* 2.0%
279166	41N15J261	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	1.42	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
286948	41N15K157	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%

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288363	41N15J347	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.64	NAVEAU	Franco-Nevada 1.5%, Citabar* 2.0%
289601	41N15J191	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
291578	41N15J272	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
296349	41N15J324	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	13.88	NAVEAU	Franco-Nevada 1.5%, Citabar* 2.0%
296409	41N15K320	BCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	2.55	RABAZO, MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
308395	41N15K138	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	2.64	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
308396	41N15K180	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	19.25	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
315810	41N15J210	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
323494	41N15K197	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.59	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
324398	41N15J366	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.64	NAVEAU	Franco-Nevada 1.5%, Citabar* 2.0%
324399	41N15J388	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.64	NAVEAU	Franco-Nevada 1.5%, Citabar* 2.0%
328526	41N15J193	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
336509	41N15K199	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	7.83	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
337240	41N15J211	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
337241	41N15J253	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
337358	41N15K137	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	17.83	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
343793	41N15J252	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
343809	41N15J330	SCMC	Active	3/29/2027	(100) RED PINE EXPLORATION INC.	21.64	NAVEAU, MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
505363	41N15J010	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	21.61	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
505364	41N15J011	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	21.61	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
505365	42C02B290	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	21.60	CHABANEL	Franco-Nevada 1.5%, Citabar* 2.0%
505366	42C02B291	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	21.60	CHABANEL	Franco-Nevada 1.5%, Citabar* 2.0%
505367	42C02B308	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	21.60	MCMURRAY, CHABANEL	Franco-Nevada 1.5%, Citabar* 2.0%
505368	42C02B309	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	21.45	MCMURRAY, CHABANEL	Franco-Nevada 1.5%, Citabar* 2.0%
505369	42C02B310	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	21.52	MCMURRAY, CHABANEL	Franco-Nevada 1.5%, Citabar* 2.0%
505370	42C02B311	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	21.60	MCMURRAY, CHABANEL	Franco-Nevada 1.5%, Citabar* 2.0%
505371	42C02B330	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	17.73	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
505372	42C02B331	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	21.60	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
505373	42C02B332	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	21.60	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
505374	42C02B333	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	21.60	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
505375	42C02B334	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	21.60	MCMURRAY, LASTHEELS	Franco-Nevada 1.5%, Citabar* 2.0%
505376	42C02B350	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	15.00	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
505377	42C02B351	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	21.60	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
505378	42C02B352	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	21.60	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
505379	42C02B353	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	21.60	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
505380	42C02B354	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	21.60	MCMURRAY, LASTHEELS	Franco-Nevada 1.5%, Citabar* 2.0%
505381	42C02B370	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	7.24	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
505382	42C02B371	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	21.61	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
505383	42C02B372	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	21.61	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
505384	42C02B373	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	21.61	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
505385	42C02B374	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	21.61	MCMURRAY, LASTHEELS	Franco-Nevada 1.5%, Citabar* 2.0%
505386	42C02B390	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	20.83	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
505387	42C02B391	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	21.61	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
505388	42C02B392	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	20.24	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%

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505671	41N15J214	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY, LASTHEELS	Franco-Nevada 1.5%, Citabar* 2.0%
505672	41N15J234	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY, LASTHEELS	Franco-Nevada 1.5%, Citabar* 2.0%
505673	41N15J254	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY, LASTHEELS	Franco-Nevada 1.5%, Citabar* 2.0%
505674	41N15J273	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
505675	41N15J274	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY, LASTHEELS	Franco-Nevada 1.5%, Citabar* 2.0%
505676	41N15J293	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
505677	41N15J294	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY, LASTHEELS	Franco-Nevada 1.5%, Citabar* 2.0%
505678	41N15J313	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	21.64	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
505679	41N15J314	SCMC	Active	4/10/2027	(100) RED PINE EXPLORATION INC.	21.64	MCMURRAY, LASTHEELS	Franco-Nevada 1.5%, Citabar* 2.0%
128402	41N15K117	SCMC	Active	6/29/2027	(100) RED PINE EXPLORATION INC.	21.10	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
156972	41N15K078	BCMC	Active	6/29/2027	(100) RED PINE EXPLORATION INC.	2.78	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
163043	41N15K099	BCMC	Active	6/29/2027	(100) RED PINE EXPLORATION INC.	0.00	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
175799	41N15K116	SCMC	Active	6/29/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
191927	41N15K096	SCMC	Active	6/29/2027	(100) RED PINE EXPLORATION INC.	17.06	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
241989	41N15K097	SCMC	Active	6/29/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
259001	41N15K098	BCMC	Active	6/29/2027	(100) RED PINE EXPLORATION INC.	18.86	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
259002	41N15K118	SCMC	Active	6/29/2027	(100) RED PINE EXPLORATION INC.	18.99	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
295748	41N15J085	SCMC	Active	6/29/2027	(100) RED PINE EXPLORATION INC.	4.13	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
296429	41N15K119	BCMC	Active	6/29/2027	(100) RED PINE EXPLORATION INC.	1.68	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
325610	41N15K077	SCMC	Active	6/29/2027	(100) RED PINE EXPLORATION INC.	20.87	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
104121	41N15K079	SCMC	Active	7/28/2027	(100) RED PINE EXPLORATION INC.	4.70	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
104122	41N15K100	SCMC	Active	7/28/2027	(100) RED PINE EXPLORATION INC.	4.58	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
104123	41N15K120	SCMC	Active	7/28/2027	(100) RED PINE EXPLORATION INC.	2.76	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
121273	41N15K099	BCMC	Active	7/28/2027	(100) RED PINE EXPLORATION INC.	20.85	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
159733	41N15K080	SCMC	Active	7/28/2027	(100) RED PINE EXPLORATION INC.	9.28	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
166331	41N15K119	BCMC	Active	7/28/2027	(100) RED PINE EXPLORATION INC.	18.28	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
233111	41N15K078	BCMC	Active	7/28/2027	(100) RED PINE EXPLORATION INC.	1.57	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
269823	41N15K098	BCMC	Active	7/28/2027	(100) RED PINE EXPLORATION INC.	2.76	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
172355	41N15J246	SCMC	Active	8/25/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
172356	41N15J285	SCMC	Active	8/25/2027	(100) RED PINE EXPLORATION INC.	11.83	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
324337	41N15J265	SCMC	Active	8/25/2027	(100) RED PINE EXPLORATION INC.	15.69	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
336696	41N15J245	SCMC	Active	8/25/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
127855	41N15J105	SCMC	Active	9/10/2027	(100) RED PINE EXPLORATION INC.	18.41	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
221769	41N15J145	SCMC	Active	9/10/2027	(100) RED PINE EXPLORATION INC.	18.03	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
297118	41N15J164	SCMC	Active	9/10/2027	(100) RED PINE EXPLORATION INC.	0.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
324938	41N15J104	SCMC	Active	9/10/2027	(100) RED PINE EXPLORATION INC.	14.05	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
326258	41N15J144	SCMC	Active	9/10/2027	(100) RED PINE EXPLORATION INC.	2.70	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
337389	41N15J165	SCMC	Active	9/10/2027	(100) RED PINE EXPLORATION INC.	19.37	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
229853	41N15J107	SCMC	Active	9/15/2027	(100) RED PINE EXPLORATION INC.	21.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
244649	41N15J067	SCMC	Active	9/15/2027	(100) RED PINE EXPLORATION INC.	0.50	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
269151	41N15J068	SCMC	Active	9/15/2027	(100) RED PINE EXPLORATION INC.	2.44	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
280440	41N15J108	SCMC	Active	9/15/2027	(100) RED PINE EXPLORATION INC.	21.57	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
296484	41N15J087	SCMC	Active	9/15/2027	(100) RED PINE EXPLORATION INC.	8.78	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
299117	41N15J109	SCMC	Active	9/15/2027	(100) RED PINE EXPLORATION INC.	0.70	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%

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340100	41N15J088	SCMC	Active	9/15/2027	(100) RED PINE EXPLORATION INC.	21.50	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
128427	41N15J227	SCMC	Active	10/2/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
128428	41N15J249	SCMC	Active	10/2/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
128529	41N15J287	SCMC	Active	10/2/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
157679	41N15K297	BCMC	Active	10/2/2027	(100) RED PINE EXPLORATION INC.	2.23	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
163046	41N15J308	SCMC	Active	10/2/2027	(100) RED PINE EXPLORATION INC.	21.64	NAVEAU, MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
163768	41N15K299	BCMC	Active	10/2/2027	(100) RED PINE EXPLORATION INC.	13.74	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
175822	41N15J229	SCMC	Active	10/2/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
175823	41N15J248	SCMC	Active	10/2/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
175824	41N15J269	SCMC	Active	10/2/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
177164	41N15K298	SCMC	Active	10/2/2027	(100) RED PINE EXPLORATION INC.	21.13	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
177165	41N15K317	BCMC	Active	10/2/2027	(100) RED PINE EXPLORATION INC.	1.40	RABAZO, MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
221057	41N15J266	SCMC	Active	10/2/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
221743	41N15J267	SCMC	Active	10/2/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
242498	41N15J306	SCMC	Active	10/2/2027	(100) RED PINE EXPLORATION INC.	21.64	NAVEAU, MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
278249	41N15K278	SCMC	Active	10/2/2027	(100) RED PINE EXPLORATION INC.	0.01	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
278538	41N15K318	BCMC	Active	10/2/2027	(100) RED PINE EXPLORATION INC.	9.17	RABAZO, MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
288315	41N15J286	SCMC	Active	10/2/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
288980	41N15J228	SCMC	Active	10/2/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
295812	41N15J268	SCMC	Active	10/2/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
297169	41N15K279	SCMC	Active	10/2/2027	(100) RED PINE EXPLORATION INC.	0.00	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
325017	41N15J247	SCMC	Active	10/2/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
326294	41N15K319	BCMC	Active	10/2/2027	(100) RED PINE EXPLORATION INC.	0.25	RABAZO, MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
337462	41N15J288	SCMC	Active	10/2/2027	(100) RED PINE EXPLORATION INC.	21.63	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
337463	41N15J307	SCMC	Active	10/2/2027	(100) RED PINE EXPLORATION INC.	21.64	NAVEAU, MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
682413	41N15K017	SCMC	Active	10/25/2027	(100) RED PINE EXPLORATION INC.	1.71	MCMURRAY, LENDRUM	Franco-Nevada 1.5%, Citabar* 2.0%
682414	41N15K018	SCMC	Active	10/25/2027	(100) RED PINE EXPLORATION INC.	6.94	MCMURRAY, LENDRUM	Franco-Nevada 1.5%, Citabar* 2.0%
682415	41N15K019	SCMC	Active	10/25/2027	(100) RED PINE EXPLORATION INC.	1.67	MCMURRAY, LENDRUM	Franco-Nevada 1.5%, Citabar* 2.0%
682416	41N15K038	SCMC	Active	10/25/2027	(100) RED PINE EXPLORATION INC.	3.48	MCMURRAY, LENDRUM	Franco-Nevada 1.5%, Citabar* 2.0%
682417	41N15K039	SCMC	Active	10/25/2027	(100) RED PINE EXPLORATION INC.	6.47	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
682459	41N15K017	SCMC	Active	10/25/2027	(100) RED PINE EXPLORATION INC.	19.77	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
682460	41N15K018	SCMC	Active	10/25/2027	(100) RED PINE EXPLORATION INC.	21.61	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
682461	41N15K019	SCMC	Active	10/25/2027	(100) RED PINE EXPLORATION INC.	21.61	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
682462	41N15K038	SCMC	Active	10/25/2027	(100) RED PINE EXPLORATION INC.	20.81	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
682463	41N15K039	SCMC	Active	10/25/2027	(100) RED PINE EXPLORATION INC.	18.55	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
682464	42C02C396	SCMC	Active	10/25/2027	(100) RED PINE EXPLORATION INC.	6.62	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
682465	42C02C397	SCMC	Active	10/25/2027	(100) RED PINE EXPLORATION INC.	2.83	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
682466	42C02C398	SCMC	Active	10/25/2027	(100) RED PINE EXPLORATION INC.	19.36	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
682467	42C02C399	SCMC	Active	10/25/2027	(100) RED PINE EXPLORATION INC.	20.50	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%
682468	42C02C400	SCMC	Active	10/25/2027	(100) RED PINE EXPLORATION INC.	10.77	MCMURRAY	Franco-Nevada 1.5%, Citabar* 2.0%

\* 1.5% subject to buyback of \$1.75M

## 25.0 INTERPRETATION AND CONCLUSIONS

### 25.1 Interpretations

The Wawa Gold Project hosts a polyphase and multi-dimensional Archean gold system in the Michipicoten Greenstone Belt in Ontario. Gold mineralization first occurred during the emplacement of the Jubilee Stock, a composite intrusive complex, and continued throughout an orogenic cycle during which many gold-mineralized shear zones were developed. The largest gold mineralized structure defined so far on the property is the Main Deformation Domain of the Jubilee Shear System that is the primary source of mineralization for the Jubilee resource estimate. Many mineralized structures surrounding the Main Deformation Domain, including the Minto Shear System, also contribute to the mineral resource estimation. In the Main Deformation Domain of the Jubilee Shear, mineralization primarily consists of native gold and gold-bearing sulphide mineralization associated with strongly deformed and elongated quartz veins. Mineralization plunges approximately 25° to the south/southwest and dips approximately 25-50° to the southeast. Since the previous 2023 Technical Report, Red Pine has completed surface exploration and exploration drilling that confirmed that the mineralized systems of the property remain open along-strike and down-dip.

The current MRE was evaluated using a geostatistical block modelling approach using Datamine RM software. Block model grades were estimated using the ID<sup>3</sup> interpolation method from the current drill hole database. ID<sup>3</sup> 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 bulk density values for the mineralized structures.

### 25.2 Conclusions

#### 25.2.1 QA/QC and Database

The QP completed several data verification checks for the 2024 Wawa Gold MRE. The verification process included a 3-day personal inspection of the Project site to review geological procedures, chain of custody of drill core samples and assay certificates, drill collar inspections and the collection of 65 independent samples for metal verification consisting of 50 samples from Red Pine drilling and 15 samples from historic core intervals in the Surluga (Jubilee Shear Zone).

Data verification also included a full independent build of the Red Pine assay database using original assay lab certificates sent directly to the QP from the laboratories, a review of QA/QC performance for drilling completed between 2014-2024 and a review of assays from 200 hundred historical holes.

On completion of the data verification process for the Wawa Gold Project, it is the QP's opinion that the geological data collection, analytical methods, and QA/QC procedures used by Red Pine are consistent with industry standards. It is the QP's opinion that the geological database and the assay data is of suitable quality to support the 2024 Mineral Resource estimate, as reported in Item 14.0.

#### 25.2.2 Mineral Resource 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 geological interpretations
- 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
- Parameters used to support reasonable prospects for potential economic extraction

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

### **25.2.3 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 Main Deformation Domain of the Jubilee Shear and the Minto Mine Shear.

The results indicate the following:

- CIL cyanidation and gravity gold recovery averaged 90.3% for representative blends of pyrite-dominant with accessory to absent arsenopyrite-dominant mineralization forming the bulk of the resource in the Main Deformation Domain of the Jubilee Shear System.
- CIL cyanidation and gravity gold recovery averaged 95.4% for Minto mineralization forming the Minto Mine Shear.
- Elevated arsenic content is recognized as influencing whole ore cyanidation, however the presence of arsenopyrite did not impede flotation performance.
- Cyanide consumption during CIL cyanidation was moderate to high.
- Lime requirements for pH control during cyanidation were uniformly low.
- Flotation and gravity gold recovery averaged 93.3% for the localized domains of arsenopyrite-dominant mineralization in the Main Deformation Domain of the Jubilee Shear System.
- Rougher flotation mass pull for the limited number of scoping tests was generally low and averaged 5.2% of the feed weight. Mass pull and gold recovery to rougher concentrate would be expected as increasing with additional testing and the introduction of alternative sulfide and free gold promoter-collectors.

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

- v) Whole ore cyanidation applying CIL, which would be applicable to materials lower than a threshold sulphide and arsenopyrite concentration.

- vi) Gravity concentration followed by sulphide flotation to a third cleaner concentrate, which would be applicable to all material types with products shipped to a third party for hydrometallurgical processing, or smelting.
- vii) A hybrid circuit involving gravity concentration, sulphide flotation to a third cleaner concentrate for shipment to a third party for hydrometallurgical processing or smelting, with CIL cyanidation of the gravity concentrate and flotation tailings.
- viii) A circuit involving gravity concentration, followed by sulphide flotation with higher mass pull to a rougher concentrate, and regrinding of the rougher concentrate to approximately 10 microns, followed by intense cyanidation of the reground concentrate and gravity concentrate. This alternative would be expected as applicable to all material types, yielding reasonably consistent and high Au recovery, and would require a smaller flotation circuit, and smaller cyanidation circuit.

The positive response of the mineralization types present in the Minto Mine Shear and the Jubilee Shear System to conventional, industrially proven processes provides flexibility for project definition, design, and potential treatment of respective material types. Process flowsheet definition and development requires a continued focus on arsenopyrite and sulfide content as influencing factors on cyanidation.

## 26.0 RECOMMENDATIONS

### 26.1 Exploration

The QP recommends a 25,000 m drilling program that prioritize the testing of the mineralized structures of the Wawa Gold Project outside the mineral resources with 70 % to 85 % of the drilling meterage allocated into potentially extending gold mineralization in the mineralized domains of the Wawa Gold Corridor that are forming the updated mineral resources in the Jubilee and Minto shear systems. Priority targets for the exploration program should be the testing at depth of the exploration potential of the Jubilee Shear System in the projected extensions of the underground resources, continue the testing of the IRG/Hornblende corridor and its satellite shears, the testing of the hanging wall of the Main Deformation Domain of the Jubilee Shear in areas without not drill tested by Red Pine and the testing of the Jubilee Shear System north of the boundary of the mineral resource.

The QP also recommends the allocation of 15% to 30% of the drilling meterage to the testing of the mineral potential of geological structures beyond the mineral resource. This includes the geological structures associated with historical mines like the Jubilee Shear System south of the Parkhill Fault, Parkhill Mine and Parkhill #4 shear, the Root Vein and its associated vein network, the Jasper Vein Network, the southern extension of the Grace Shear, as well as other favorable structures identified during exploration.

The QP recommends that the exploration drilling program should be preceded by a field and sampling program to identify new areas on the property with potential to host significant gold mineralization to refine the targeting matrix for the property (approximately \$100,000).

**Table 26-1: Summary of Recommended Work Program**

Recommended Work	Estimated Cost \$CAD
<b>Phase 1</b>	
Diamond drilling (25,000m @ 250\$/m including assaying, personnel, core logging facility and logistics)	\$6,250,000
Field mapping and sampling program	\$100,000
Sampling of historical core	\$50,000
Overhead and corporate G&A	\$875,000
Contingency 7%	\$509,250
<b>Program Costs</b>	<b>\$7,784,250</b>

### 26.2 Metallurgical Recommendations

Additional metallurgical testwork should be completed on the most challenging suite of mineralization, as well as material at nominal grade ranges that would be expected from underground mining. The most applicable process flowsheet would balance the trade-off between CapEx, OpEx, metal recovery, with an overriding factor requiring a demonstrated and viable reclamation and closure plan for permitting.

- A processing strategy not previously tested could involve gravity concentration, followed by sulphide flotation with higher mass pull to a rougher concentrate, and regrinding of the rougher concentrate to approximately 10 microns, followed by intense cyanidation of the reground rougher concentrate and

gravity concentrate. This alternative would be expected as applicable to all material types, yielding reasonably high and consistent Au recovery, and would require a smaller flotation circuit, as well as a smaller cyanidation circuit. Following cyanide removal from the sulphide concentrate residue, this process strategy lends itself towards sub-aqueous co-disposal of the sulphidic content in the feed, under a cap of benign low sulphide flotation tailings, to mitigate long term concerns with respect to ARD generation.

Additional metallurgical samples representative of the grade ranges and blends of mineralization types on the Wawa Gold Project 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 and the evaluation of process alternatives.

As a component of additional metallurgical testwork, mineralogical studies including TESCAN TIMA automated SEM analysis will support the confirmation of Au association and deportment within mineralization present in flotation tailings and cyanidation residues to establish contributing factors to recovery losses, and to strengthen the GeoMet model. A summary of recommendations is included as Table 26-3.

**Table 26-2: Summary of Recommended Metallurgical Testing Program**

Recommended Work	Estimated Cost \$CAD
Additional rougher flotation test work on three (3) separate composite samples representing low, medium and high As bearing material at expected nominal Au grades.	\$15,000
Additional cyanidation testwork on the three (3) separate composites evaluating a rougher concentrate at 15% mass pull, reground to 80% passing 10 microns, including pre-aeration and lead nitrate addition.	\$25,000
Completion of comparative process flowsheets and testwork on the three separate composites including whole ore cyanidation, flotation to a 3 <sup>rd</sup> Cleaner concentrate, and the hybrid flotation-CIL alternative to support project financial evaluations and process flowsheet selection.	\$25,000
Completion of targeted TESCA TIMA (SEM) analysis to confirm the disposition and deportment of residual Au values in process residues from six (6) separate samples from testwork and the various process options.	\$20,000
Contingency 15%	\$15,000
<b>Total Cost</b>	<b>\$100,000</b>

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