# **Pursuit Gold Corp.**

# National Instrument 43-101 Report on the Brunswick Property

**Porcupine Mining Division, Ontario** 

Brunswick Township Province of Ontario

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Pursuit Gold Corp. Suite 409, 221 West Esplanade North Vancouver, B.C. V7M 3J3

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# Item 1: Summary

The Brunswick property is an option from Michael Tremblay by Rainy Mountain Royalty Corp. who began work on the eastern part of the property in November, 2016. A grant has been made by Rainy Mountain Royalty Corp. to Pursuit Gold Corp. (#Suite 409, 221 West Esplanade North Vancouver, B.C. V7M 3J3) of an option to purchase a 90% undivided right, title and interest in and to the property. The Brunswick property is located in NTS 41 P11/12 within UTM zone 17 and consists of 173 claim cells covering the full width of Brunswick Twp. (6 miles or 9.6 km). It also covers a major regional Fault structure called the Ridout Fault which is the extension of the Larder Lake Fault extending from Kirkland Lake-Larder Lake, Ontario. The main attraction of the property was a gold showing on the north side of the Ridout Fault that is associated with carbonate alteration with one grab sample assaying 32 g/t Au.

The Brunswick property is located in the eastern extension of the Swayze greenstone belt or the western extension of the Matachewan belt and the Shiningtree portion of the Abitibi greenstone belt. A major shear zone crosses the southern side of the property called the Ridout fault which appears to be the western extension of the Larder Lake Break. This fault continues west along the south side of the Swayze greenstone belt to the Kapuskasing structure and aligns with the conglomerates found in Borden Twp.

Exploration on the property includes early geophysics by Narex Ore Search Consultants Inc. in 1984; prospecting by P. Wallgren in 2009; gradient array IP, magnetics and soil survey by Benton Resources in 2009 and sampling of the property by M. Tremblay in 2014. Rainy Mountain Royalty Corp. acquired the property in 2016 and performed an IP survey, geological mapping in 2016; trenching, drilling and IP survey in 2017; and more IP and drilling in 2018.

Mineralization on the Brunswick property is dominated by quartz veining in carbonatesericite shear zone with a number of grab samples yielding high gold values (up to 32.9 g/t Au). Drilling has yielded a mineralized intercept in hole BE17-07 located 50m west of the original gold showing which returned 1.14 g/t Au over 5.9 m including 3.29 g/t over 1.0m. This hole suggests the gold zone plunges west around 45 degrees. Four short 50 m holes were drilled on this zone and additional holes were drilled on the westward down plunge. The true thickness of the mineralization is not known.

To better delineate the gold trends on the property, infill drilling is recommended around hole BE17-04 on line 5000E, 98+00N both east to hole BE18-09 on 50500E and beyond to line 51100E, and west to line 49800E. An additional 2 km of strike length on the west of line 46700E at 100-200 m spacings is to be cut and read with Magnetics and IP followed by drilling. An additional 5 holes are required on lines 48800E to 48100E on existing IP anomalies. Expansion of the grid westward and IP surveys are recommended to follow the favourable structures to determine those places with the highest sulphide content. Hence additional line cutting and geophysics are required and 5-7 more drill holes (\$200,000) are recommended.

# **Item 2: Introduction**

This NI 43-101 technical report is addressed to Pursuit Gold Corp. Its purpose is to recommend exploration on the west grid of the property to follow the extension of structures SW on the east grid on the Brunswick property, in order to find a shear-hosted Au deposit. The report shows that this is a property of merit of which financing is necessary. Sources of information for the technical portion of the report are Laarman (2018), Middleton (2017), Middleton and Tremblay (2017) and Tremblay and Middleton (2016). R. Middleton P.Eng. worked on the property in 2016-2018. J. Laarman P.Geo. visited and was involved with the exploration on the property in 2018.

# Item 3: Reliance on Other Experts

The author of this report did not rely on a report, opinion or statement of another expert who is not a qualified person, or on information provided by the issuer concerning legal, political, environmental or tax matters.

# **Item 4: Property Description and Location**

The Brunswick property is situated approximately 110 km south of Timmins, Ontario (Fig. 1). It is located in NTS 41 P11/12 within UTM zone 17 at Lat 47°38'N and Long 81°29'W. A grant has been made by Rainy Mountain Royalty Corp. (RMRC) to Pursuit Gold Corp. Suite 409, 221 West Esplanade North Vancouver, B.C. V7M 3J3) of an option to purchase a 90% undivided right, title and interest in and to the Property through cash payments, exploration expenditures and the granting of an NSR. Previously, Rainy Mountain Royalty Corp. entered into an option agreement to acquire an undivided 100% interest in a 13 claim unit property located in Brunswick Twp., Ontario (the "Brunswick Property"). The Brunswick Property is currently owned by Michael Tremblay of Wawa,

Ontario (as to 50% interest) and Fiorella Santamaria of Sault Ste. Marie, Ontario (as to 50% interest) (the "Optionors").

The terms of the current Letter Agreement are as follows:

1) RMRC represents and warrants to Pursuit that Rainy Mountain is the legal and beneficial owner of a 100% interest in and to the Brunswick Property consisting of 13 claim units located in the Porcupine Mining Division, Ontario and more particularly described in Schedule A (the "Property").

2) RMRC hereby grants to Pursuit the sole and exclusive right and option to purchase up to a 90% undivided right, title and interest in and to the Property by completing the following cash and exploration expenditures:

(a) In order to maintain the option in good standing the following shares payments shall be made to RMRC's shareholders or their designees:

Upon CSE approval: \$20,000

on or before Sept 30, 2021 \$25,000

on or before Sept 30, 2022 \$25,000 Total \$70,000

(b) Exploration expenditures (the "Expenditures") to be made by Pursuit in order to exercise the Option are as follows:

on or before Sept 30, 2021 \$ 200,000

on or before Sept 30, 2022 \$ 350,000 Total\$ 550,000

(c) If Pursuit completes the payments in 2(a) and makes all the exploration expenditures in 2(b) then it will have earned a 51% undivided interest in the Property (Option 1)

(d) In order to maintain the option in good standing and increase Pursuit's interest to 80% the following payments shall be made to RMRC's shareholders or their designees:

on or before Sept 30, 2023 \$50,000

on or before Sept 30, 2024 \$50,000 Total\$100,000

(e) Exploration expenditures (the "Expenditures") to be made by Pursuit in order to increase its interest to •% are as follows:

on or before Sept 30, 2023 \$ 400,000

on or before Sept 30, 2024 \$ 500,000 Total\$ 1,450,000

(f) If Pursuit completes the payments in 2(d) and makes all the exploration expenditures in 2(e) then it will have earned an 80% undivided interest in the Property (Option 2)

(g) Net Smelter Return Royalty ("NSR") – Upon Pursuit earning an 80% undivided interest in the Property, Pursuit will grant RMRC a 1.5% NSR. RMRC will grant to Pursuit the right to reduce the NSR to 0.5% for a one time cash payment of C1,000,000. All Expenditures are in C Expenditures incurred in any period in excess of the amount to be incurred in that period can be carried over to the next year.

3) Upon Pursuit paying and incurring all of the Cash payments and Expenditures specified in Section 2(a) and (b), Pursuit will be deemed to have exercised Option (1)and

will be the owner of a 51% undivided interest in the Property subject to the NSR. At such time, Pursuit and RMRC will prepare such documentation as is required regarding the Property in order to register the ownership of the 51% undivided interest in the Property in the name of Pursuit or its designee.

4) Upon Pursuit having Option 1, Pursuit shall have 90 days in which to notify the RMRC in writing, that it intends to proceed to exercise Option 2 (the "80% Exercise Notice") failing which Pursuit and RMRC hereto will proceed to form a joint venture. Upon exercise of the Option 1 and in the event Pursuit elects not to earn the increased interest under Option 2, Pursuit and RMRC agree to associate on a joint venture basis for the further exploration and development of the Properties and the properties within the Area of Interest, and to enter into a joint venture agreement in substantially the form published by the Rocky Mountain Minerals Law Foundation, or any updated form of agreement adopted by such organization prior to the date the joint venture commences, with such form being modified as appropriate. In the event that Pursuit fails to exercise Option 2 Pursuit advises RMRC in writing that it does not intend to proceed with the exercise of Option 2, the parties shall forthwith proceed to form a joint venture.



# Figure 1: Location map

The property claims are located in Brunswick Township. At present the property consists of 173 claim cells (Table 1; Fig. 2) and covers the full width of Brunswick Twp. (6 miles or 9.6 km).

PORCUPINE Mining Division									
Claim#	Гуре	Status	Issue Date	Anniversary Date	Owner Client#	Area /# of Cells			
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# Table 1: Claim status

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299410	Claim	Active	2018-04-10	2025-04-09	(203056) MICHAEL TREMBLAY	1
299528	Claim	Active	2018-04-10	2022-04-09	(203056) MICHAEL TREMBLAY	1
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300337	Claim	Active	2018-04-10	2022-04-09	(203056) MICHAEL TREMBLAY	1
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300740	Claim	Active	2018-04-10	2022-04-09	(203056) MICHAEL TREMBLAY	1
300741	Claim	Active	2018-04-10	2022-04-09	(203056) MICHAEL TREMBLAY	1
300742	Claim	Active	2018-04-10	2022-04-09	(203056) MICHAEL TREMBLAY	1
300974	Claim	Active	2018-04-10	2025-04-09	(203056) MICHAEL TREMBLAY	1
302370	Claim	Active	2018-04-10	2025-04-09	(203056) MICHAEL TREMBLAY	1
305579	Claim	Active	2018-04-10	2025-04-09	(203056) MICHAEL TREMBLAY	1
308442	Claim	Active	2018-04-10	2022-04-09	(203056) MICHAEL TREMBLAY	1
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310051	Claim	Active	2018-04-10	2025-04-09	(203056) MICHAEL TREMBLAY	1
314469	Claim	Active	2018-04-10	2025-04-09	(203056) MICHAEL TREMBLAY	1
314470	Claim	Active	2018-04-10	2025-04-09	(203056) MICHAEL TREMBLAY	1

315135	Claim	Active	2018-04-10	2025-04-09	(203056) MICHAEL TREMBLAY	1
315136	Claim	Active	2018-04-10	2025-04-09	(203056) MICHAEL TREMBLAY	1
316100	Claim	Active	2018-04-10	2025-04-09	(203056) MICHAEL TREMBLAY	1
317382	Claim	Active	2018-04-10	2022-04-09	(203056) MICHAEL TREMBLAY	1
318327	Claim	Active	2018-04-10	2022-04-09	(203056) MICHAEL TREMBLAY	1
322062	Claim	Active	2018-04-10	2022-04-09	(203056) MICHAEL TREMBLAY	1
325615	Claim	Active	2018-04-10	2022-04-09	(203056) MICHAEL TREMBLAY	1
327148	Claim	Active	2018-04-10	2025-04-09	(203056) MICHAEL TREMBLAY	1
327855	Claim	Active	2018-04-10	2025-04-09	(203056) MICHAEL TREMBLAY	1
329618	Claim	Active	2018-04-10	2025-04-09	(203056) MICHAEL TREMBLAY	1
331049	Claim	Active	2018-04-10	2025-04-09	(203056) MICHAEL TREMBLAY	1
333467	Claim	Active	2018-04-10	2022-04-09	(203056) MICHAEL TREMBLAY	1
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337468	Claim	Active	2018-04-10	2025-04-09	(203056) MICHAEL TREMBLAY	1
337641	Claim	Active	2018-04-10	2025-04-09	(203056) MICHAEL TREMBLAY	1
339511	Claim	Active	2018-04-10	2025-04-09	(203056) MICHAEL TREMBLAY	1
339512	Claim	Active	2018-04-10	2025-04-09	(203056) MICHAEL TREMBLAY	1
339706	Claim	Active	2018-04-10	2022-04-09	(203056) MICHAEL TREMBLAY	1
339707	Claim	Active	2018-04-10	2022-04-09	(203056) MICHAEL TREMBLAY	1
341489	Claim	Active	2018-04-10	2025-04-09	(203056) MICHAEL TREMBLAY	1

There are no known environmental liabilities associated with the property. The author does not know of any significant factors or risks that may affect access, title or the right or ability to perform work on the property.

# Item 5: Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Brunswick property is located in Brunswick Twp. approximately 110 km south of Timmins, Ontario. Access is via Hwy 144 on Hwy 560 going east to a gravel road

Date / Time of Issue: Thu Apr 12, 13:51:02 EST 2018



Ontario Ministry of Northern Development and Mines Mining Lands Claim Map

# Administrative Districts

**MNRF** District Office Township BRUNSWICK Mining Division Land Registry SUDBURY Porcupine Timmins



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following a major powerline 35 km east of Hwy 144 or 19 km west of the village of Shiningtree and then traveling north 22 km to the east grid. Another road called Londonderry 27 km east of Hwy 144 gives access to the west grid 18 km north.

The local terrain is typical of the Precambrian Shield, with low rolling hills and marshy areas. Vegetation on higher ground consists of a variety of hardwoods such as poplar and birch, with coniferous trees that include spruce and balsam, and minor amount of pine. In the lower ground, typically more wet in character, black spruce, tamarack, alder swales, and cedar predominate. Water for exploration purposes is available from beaver ponds, marshes, and small streams and lakes that are located on the property.

Snowfall generally begins in November and extends into late March, early April. Lakes are usually passable with adequate ice thickness from late December through to late March. Between 50 and 100 mm of monthly rainfall is normal from April to October. The mean temperature is  $-13^{\circ}$ C in January and  $19^{\circ}$ C in July.

A full range of services and supplies are provided in the city of Timmins located 110 km to the north. Accommodations can be found in the town of Shining Tree ranging from rental houses through to lodges. Limited supplies such as fuel and groceries exist in the town of Gowganda, Ontario.

Item 6: History (taken from Kleinbreck (2010) and Tremblay and Middleton (2016))

In 1981, Canadian Nickel Company Ltd. held three blocks in Brunswick Township totalling 81 claims (1296 Ha). No work was submitted for assessment credits. The next year, the Ontario Geological Survey completed geological mapping in Brunswick Township (Map 2606: Siragusa, 1983).

In 1984, Narex Ore Search Consultants Inc. commissioned Aerodat Ltd. to complete an airborne geophysical survey over parts of the current property.

In 1990, the Ontario Geological Survey commissioned Geoterrex Ltd. to complete a GeoTEM airborne geophysical survey covering the eastern part of the current property (Map 81419).

In 2009, P. Wallgren staked two claims totalling 30 units. Prospecting returned gold assays up to 17.3 g/t from a silicified and carbonatized (ankerite) mafic volcanic rocks.

In 2009, Benton Resources cut a grid of 36.8 km at 100m line spacing (24 lines at 1.2 km each)+ BL-TL on what is now the east grid and around a gold showing located at approximately UTM 42600E, 5276400N. Short 600m long lines were read over the zone with gradient array IP (see report by Johnson, 2010). Magnetometer readings were taken on the whole grid which consisted of 24 lines 1.2 km long, Johnson, M. (2010b). Trenching was carried out on the showing which exposed the carbonate shear hosting the values. Soil sampling was done on selected lines locating anomalous values along a trend on strike to the showing.

Apparently this work was never filed for assessment since Benton abandoned the project and subsequently Michael Tremblay staked the claims in 2014. The past work is listed in the References.

The property was subsequently sampled by M. Tremblay. The staking joined other claims held by Tremblay on the west side of the Township giving him the whole extent of the township. The gold showing had been exposed by previous trenching and had grab samples of 32.9. 3.77, 2.82, and 3.13 g/t Au.

Regional Mapping by the Ontario Geological Survey was published in Berger (2012) south of Gogama at a scale of 1:50,000 covering the belt from Brunswick to Chester Twp. (Map 3762). The Ridout Shear Zone was illustrated by this mapping.

**Item 7: Geological Setting and Mineralization** (taken from Tremblay and Middleton (2016)):

# **Regional Geology**

Brunswick Twp. has been mapped recently by Ben Berger of the OGS and is illustrated on Map 3762. Berger, B. (2012). Brunswick covers the eastern extension of the Swayze greenstone belt or the western extension of the Matachewan belt and the Shining tree portion of the Abitibi greenstone Belt. A major Shear Zone crosses the southern side of the property called the Ridout Fault which appears to be the western extension of the Larder Lake Break. This Fault continues west along the south side of the Swayze greenstone Belt (Fig. 3) to the Kapuskasing Structure and aligns with the conglomerates found in Borden Twp. (Fig. 4).

The south margin of the claims contains Timiskaming sediment (greywackes, argillites and conglomerates) and are typical of the sediment found along the major Breaks in the Abitibi Belt. Pillow lavas are well exposed and show structural deformation plunging west at 35-45 degrees. Major Shears up to 100 m wide cross the property parallel to the Ridout Fault (Shear).

Iron rich basalts are the main rock unit possibly with interflow sediment. Some spherulitic lavas have been observed on the north side of the grid. A younger quartz eye porphyry occurs around line 50100E -50300E at 100+00N - 101+00N. Narrow dikes of porphyry are seen in the trenches next to the gold showing.

Mineralization consists of a iron carbonate (ankerite) altered shear with sericite alteration and quartz and pyrite veining with occasional specs of Chalcopyrite.

# **Property geology**

The property is underlain by pillow basalt volcanic in the northern part of the property and north of 95+00N on the grid with carbonate altered shear zones (Figs. 5 and 6). The

Figure 3 Regional Structure Map



# Figure 4

Local Twp. Geology Map



Geology Map on Grid 1:2500



![](_page_17_Figure_0.jpeg)

Timiskaming sediment are exposed on the road through the property and occur at 94+20N between lines 50000E and 50100E and in the ditch going south from that point. These sediments are very siliceous and highly resistive. The Ridout Fault south margin is at 94+20N and is over 125 m wide going west to line 49000E and is exposed in the ditch of a road going west to that point near 49200E. This is a major structural zone crossing the region and the parallel shears are the subject of the 2016 gold exploration program.

The IP anomalies detected by the 2016 survey are reflections of the parallel shears and are composed of sericite schist altered basalt with iron carbonate, and disseminated pyrite causing the chargeability anomalies. The resistivity lows are the wide shears with sericite and green mica alteration (hydromuscovite). These are excellent hosts for gold mineralization.

The Ridout Fault has been mapped by B. Berger (2012) and this Fault is thought to be the extension of the Larder Lake Break and goes west along the south side of the Swayze Greenstone belt to the Kapuskasing High where the Borden Gold deposit was discovered east of Chapleau and appears to be adjacent to Timiskaming conglomerates which are usually found adjacent to the large major Faults like the Larder Lake Break and Destor Porcupine Break.

Crenulations are seen in outcrops in the vicinity of 100+00N - 102+00N and plunges can be measured in folds to the west at 35-45 degrees and dips are to the north at 60-70 degrees. It is speculated that a special fold structure occurs between 98+00N and 102+00N around lines 49700-50000E since the plunges and dips are different from the near vertical shears on the north and south end of the property. The siliceous sediment at 94+20N to 92+00N are dipping close to vertical and the pillow lavas at 106+00 -107+00N are plunging to the west at 45-55 degrees but shearing is close to vertical. Hence some local drag folding in the mid part of the grid appears to occur, and this may explain the large shears seen in the resistivity 99+00 - 98+00N.

# Geophysics

The deep array of "a" = 25m, N = 1 - 20 had made it possible for the exploration to a depth of 250m, allowing for the detection of disseminated sulphides or conductive zones that do not occur near surface. This survey was focused on a gold showing hosted in carbonated mafic volcanic around line 49800-49700E, 102+50N. However the strongest chargeability occurs at 101+00N, 106+00N, 99+00N, 98+00N and the 99+00 and 98+00 ones are associated with a low resistivity zone crossing the grid. Mapping has located carbonate altered volcanic around 9900N next to the road (line 49700E) and near 50300E as well and the resistivity low is interpreted to be a sericite-iron carbonate altered shear zone in the basalt volcanic. A conductor appears to be present on 50300E and 49700E at 98+50N at a depth of 125m. It is speculated that the deep chargeability anomaly is either a graphitic shear or a concentration of sulphides and drilling will be recommended to test this anomaly at 50300E, 98+50N from a point 100+25N on line 50300E. The Ridout shear can be seen in the resistivity data in the 95+00-96+00N area on lines 49000-49100E Another major shear occurs at the south end of 49000. Any chargeability

anomaly along the north contact of the Ridout shear is of great importance. In addition several IP anomalies occur on the north contact of the wide resistivity low paralleling the Base Line 1000+00N.

# **Prospecting and Sampling**

A total of 18 days were spent prospecting during 2016 by M. Tremblay, primarily on the eastern portion of the property. At least 4 separate shear zones were indicated, running parallel to the Ridout Shear Zone. Alteration associated with the shearing is primarily Fecarbonate alteration, along with variable amounts of pyrite and chlorite, sericite and albite alteration. Quartz veining, +/- pyrite, +/- tourmaline is common within alteration zones. Quartz veining, both shear parallel and crosscutting, vary from mm scale up to 2m wide.

Several of the more interesting areas occur outside the 2016 grid area and require further systematic examination.

Porphyritic rocks were noted in the vicinity of the main gold showing, as well as, in the southwest corner of the 2016 grid.

# Geochemistry

All 72 samples collected were analysed with ME MS 41 and Au21 methods using ICP at ALS Labs in North Vancouver and preparations were done in Thunder Bay. Multi Element – Mass Spectrometer gives all the pathfinder elements used to map the mineralized halo effects around gold deposits. This program has discovered a As (arsenic) Sb (antimony) halo on the west side of the property and occasional anomalous values around the grid area. Anomalous vanadium values also occur which may reflect a vanadium mica in the shears.

# Structural geology

The dominant feature crossing the property is the Ridout Fault (Shear) along the contact of the basalt volcanic and the Timiskaming sediment to the south. At least four other deformation zones have been identified by mapping and with the resistivity data from the IP survey.

Multi stage folding is observed on the Ridout Shear and chevron folds as well as crenulations are seen along the trend from the gold showing at 102+50N. A 100m wide shear parallel to the base line 100+00N occurs between 100+00N and 99+00N and others occur at 98+00N and 97+00N, and 94+00N.

# Mineralization

# **Original Gold Zone Follow-up**

Hole BE17-07 located 50m west of the original gold showing gave the following results. The gold showing had been exposed by previous trenching and had grab samples of 32.9. 3.77, 2.82, and 3.13 g/t Au. This hole suggests the gold zone plunges west around 45 degrees. Four short 50 m holes were drilled on this zone and additional holes were drilled on the westward down plunge. The true thickness of the mineralization is not known.

Drill Hole	From (m)	To (m)	Length (m)	Gold (Au) g/t
BE17-07				
	32	33	1.0	1.380
	33	34	1.0	3.290
	34	35	1.0	0.750
	35	36	1.0	0.375
	36	37	1.0	0.690
	37	37.9	0.9	0.213

As a general statement, the original gold showing has a Mo-W pathfinder association, and the major shears have very high As-Sb values in nine of the ten holes from the 2017 drilling, and the new discovery described has a Cu-Te association in pyrite.

The east side of the west grid in another area prospective for a mineralized intercept. This is in the area of lines 48500-48800E, where samples were gathered which returned assays of 6.6 g/t Au, 4.05 g/t Au, and 2.57 g/t in quartz vein material containing chalcopyrite, in sheared volcanic tuffs .

# Item 8: Deposit Types

The Brunswick property gold occurrences are shear hosted gold deposits with quartz veins (Fig. 7). Deposit type is known as a greenstone-hosted quartz-carbonate vein deposit. General description below (in arial font) is from an abstract from Dubé and Gosselin (2007):

Greenstone-hosted quartz-carbonate vein deposits typically occur in deformed greenstone belts of all ages, especially those with variolitic tholeiitic basalts and ultramafic komatiitic flows intruded by intermediate to felsic porphyry intrusions, and sometimes with swarms of albitite or lamprophyre dyke. They are distributed along major compressional to transtensional crustal-scale fault zones in deformed greenstone terranes commonly marking the convergent margins between major lithological boundaries, such as volcano-plutonic and sedimentary domains (Fig. 16). The large greenstonehosted quartz-carbonate vein deposits are commonly spatially associated with fluvio-alluvial conglomerate (e.g. Timiskaming conglomerate) distributed along major crustal fault zones (e.g. Destor Porcupine Fault). This association suggests an empirical time and space relationship between large-scale deposits and regional unconformities. These types of deposits are most abundant and significant, in terms of total gold content, in Archean terranes. However, a significant number of world-class deposits are also found in Proterozoic and Paleozoic terranes.

In Canada, they represent the main source of gold and are mainly located in the Archean greenstone belts of the Superior and Slave provinces. They also occur in the Paleozoic greenstone terranes of the Appalachian orogen and in the oceanic terranes of the Cordillera. The greenstone-hosted quartz-carbonate vein deposits correspond to structurally controlled complex epigenetic deposits characterized by simple to complex networks of gold-bearing, laminated quartz-carbonate fault-fill veins. These veins are hosted by moderately to steeply dipping, compressional brittle-ductile shear zones and faults with locally associated shallow-dipping extensional veins and hydrothermal breccias. The deposits are hosted by greenschist to locally amphibolite-facies metamorphic rocks of dominantly mafic composition and formed at intermediate depth (5- 10 km). The mineralization is syn- to late-deformation and typically postpeak greenschist -facies or syn-peak amphibolite-facies metamorphism. They are typically associated with iron-carbonate alteration. Gold is largely confined to the quartz-carbonate vein network but may also be present in significant amounts within iron-rich sulphidized wall-rock selvages or within silicified and arsenopyrite-rich replacement zones.

There is a general consensus that the greenstone-hosted quartz-carbonate vein deposits are related to metamorphic fluids from accretionary processes and generated by prograde metamorphism and thermal re-equilibration of subducted volcano-sedimentary terranes. The deep-seated, Au-transporting metamorphic fluid has been channelled to higher crustal levels through major crustal faults or deformation zones. Along its pathway, the fluid has dissolved various components - notably gold - from the volcano-sedimentary packages, including a potential gold-rich precursor. The fluid then precipitated as vein material or wall-rock replacement in second and third order structures at higher crustal levels through fluid-pressure cycling processes and temperature, pH and other physico-chemical variations.

![](_page_21_Figure_2.jpeg)

Figure 7: Schematic diagram of a greenstone-hosted quartz-carbonate gold deposit from Poulsen (2000) *in* Dubé and Gosselin (2007).

# Item 9: Exploration (taken from Tremblay and Middleton, 2018)

An Induced Polarization (IP) survey was carried out by Rainy Mountain Royalty Corp. in November, 2016 and early 2017 on the east and west side of the property. Select lines of the 2010 grid were recut and tagged using the old lines for reference since metal tags could be identified. These lines were mapped in a geological survey and read with a deep IP array using "a" = 25m but N = 1-20 so approximately 250m depths were tested by this survey. The IP survey has identified numerous chargeability trends associated with shear zones that parallel the Ridout Fault Zone (Coles and Middleton (2016) and Grant (2017)). These shears occur within mafic volcanic and traverse contacts with interflow sediment in one case, and consist of sericite and iron carbonate alteration (ankerite), and are typical of the host rock setting of gold deposits in the Timmins (Porcupine) camp.

Geological mapping was performed by Rainy Mountain from November 18 to December 8, 2016. Earlier visits were made in September 15-16 and in October 2016. A 29.9 km grid was re established on the western portion of a larger grid put in by Benton Resources in 2009-2010 on what is now the eastern half of the Tremblay Property in Brunswick Township. This gave 13 lines which were 2 km long to be traversed. A total of 72 samples were collected for gold and ICP analysis to determine the presence of pathfinder elements to help locate the gold zones.

The east side of the west grid was prospected by Mike Tremblay for Rainy Mountain in June 2017 where 13 samples were collected and analysed. This is in the area of lines 48500-48800E, and the area was revisited in September 2017 where more samples were gathered. Assays of 6.6 g/t Au, 4.05 g/t Au, and 2.57 g/t were found in quartz vein material containing chalcopyrite, in sheared volcanic tuffs.

Follow up trenching was done by Rainy Mountain in August 2017 on IP anomalies extending west of the gold showing, and along 97+00N on lines 49900 and 49800 west of hole BE17-04 where anomalous gold values were found. Trenching done east and west of hole 04 exposed quartz veins with chalcopyrite with anomalous gold (0.322 g/t Au). Trenching also exposed a deformation zone around 101+50N on lines 49000E to 49100E and this projects east toward the original gold showing on 498E, Middleton, R. (2017). One sample at 102+00N on line 49000E returned 0.310 g/t Au. Five distinctive shears which are thought to be splays of the Ridout Fault (Shear Zone) have been identified.

Item 10: Drilling (taken from Middleton and Tremblay (2017) and Laarman (2018))

Drilling was performed by Rainy Mountain Royalty Corp. in May-June 2017 and one hole in July as the very first diamond drill holes drilled in Brunswick Township. Drilling on the Brunswick property in general was done from 2017-2018. Significant gold results are in Table 2. Drill plan maps are in Figs. 8 to 14.

For the 2017 drilling, a total of 2265m was drilled in 15 holes NQ, 6 on the west grid (BW series) followed by 9 on the east grid (BE series; Table 3). The plan was to test each shear zone as outlined by IP anomalies on the chargeability trends from the 2016 and 2017 geophysics. The purpose was to determine if these were favourable gold bearing shear zone settings, and in all cases, they were found to be iron carbonate altered sericitized sheared mafic volcanic. All core is stored at the Watershed 144 car and truck stop on the corner of Hwy 144 & 560, just south of Gogama, Ontario.

Drill Hole		From (m)	To (m)	Width (m)	Au g/t		
BE17-01	Intercept	92.5	93.5	1.00	0.109		
BE17-03	Intercept	82.7	83.7	1.00	0.130		
BE17-04	Intercept	120.2	121.2	1.00	0.113		
BE17-04	Intercept	122.2	123.2	1.00	0.298		
BE17-04	Intercept	186.9	187.6	0.70	0.207		
BE17-04	Intercept	190.3	191.0	0.70	0.364		
BE17-06	Intercept	49.2	50.0	0.80	0.153		
BE17-07	Zone	32	37.9	5.9	1.140		
BE17-07	including	33	34	1.00	3.290		
BE17-08	Intercept	41.3	41.8	0.50	1.850		
BE18-02	Intercept	83.7	84.8	1.10	0.440		
BE18-02	Intercept	132.4	133.0	0.60	0.120		
BE18-04	Intercept	23.4	23.9	0.50	0.650		
BE18-04	Intercept	45	46	1.00	0.100		
BE18-06	Intercept	9.5	10.5	1.00	0.132		
BE18-07	Intercept	19	20	1.00	0.100		
BE18-07	Intercept	43	44	1.00	0.242		
BE18-08	Intercept	47	48	1.00	1.590		

Table 2: Brunswick property significant drill intercepts

Table 3. - Drill collar locations from the 2017 Brunswick drilling.

Hole ID	Grid	Line	Station	Az. (°)	Dip (°)	Length (m)
BW17-01	West	47100E	7900N	180	-45	134
BW17-02	West	47300E	7725N	180	-45	110
BW17-03	West	46810E	8170N	180	-45	453
BW17-04	West	46700E	8100N	180	-45	80
BW17-05	West	47100E	8070N	180	-45	161
BW17-06	West	48300E	7525N	180	-45	101
BE17-01	East	50700E	10075N	180	-45	302
BE17-02	East	50300E	10040N	180	-45	137
BE17-03	East	51100E	9475N	180	-45	143
BE17-04	East	50000E	9800N	180	-45	260
BE17-05	East	49800E	10150N	180	-45	80
BE17-06	East	49700E	10300N	180	-45	50
BE17-07	East	49750E	10300N	180	-45	50
BE17-08	East	49800E	10300N	180	-45	50
BE17-09	East	49850E	10300N	180	-45	59

On the west grid, in 2017, holes BW17-01 to -06 were drilled in an attempt to put one hole in each IP anomaly. Drilling was successful in confirming that each IP trend corresponds to a shear zone and all holes hit intense iron carbonate-sericite alteration with quartz veining, fuchsite (green chrome mica), pyrite and anomalous arsenic and antimony. Anomalous arsenic is up to 1687 ppm, however, only two of the shears had elevated antimony close to laminated quartz with hydromuscovite. Localized zinc and copper occurred in hole BW17-03. All of the holes obtained very low anomalous gold values that, along with anomalous arsenic and antimony detected, leaves the possibility that these holes are in the arsenic halo part of a gold system as observed at other gold

![](_page_24_Picture_0.jpeg)

Figure 8. Core photo of silica-albite-ankerite-sericite gold zone in BE17-07 that returned 1.14 g/t Au over 5.9m from 32 to 37.9m.

![](_page_24_Picture_2.jpeg)

Figure 9. Core photo of the carbonate-sericite zone in BE17-04 with an intercept of 0.298 g/t Au from 122.2 to 123.2m.

![](_page_25_Figure_0.jpeg)

![](_page_26_Figure_0.jpeg)

![](_page_27_Figure_0.jpeg)

Figure 12

![](_page_28_Figure_0.jpeg)

![](_page_29_Figure_0.jpeg)

![](_page_30_Figure_0.jpeg)

![](_page_31_Figure_0.jpeg)

deposits in the Canadian Shield such as Hemlo and the Bell Creek Mine in Timmins. Further drilling may be required along strike or at depth. Also, a fifth IP trend to the north of the four shears has been recently identified and remains untested. Ultramafic rocks and variolitic and spherulitic volcanic were intersected along with leucoxene basalts all presenting typical host rocks found in the Timmins-Porcupine Camp.

On the east grid, four different shears were drilled by holes BE17-01, 02, 04, 05, and the gold zone was tested by four 50 m holes (BE17-06 to -09). Anomalous gold is found in the eastern holes BE17-04, 07, 08 and 03 as well as anomalous arsenic in hole BE17-04. Hole BE17-04, which is located 500m south of the original gold showing, contained highly anomalous gold (0.322 g/t) and the highest arsenic values found to date on the property (8380 ppm). Other anomalous gold values were 0.298 g/t, 0.113 g/t, 0.207 g/t and 0.364 g/t, all to the side of the high As value. This hole was testing one IP trend which is over 2.1 km long, and located 400m north of the Ridout Fault. Hole BE17-03 was subsequently drilled in July and hit a new shear zone with a 8 m wide quartz zone adjacent to a sericite schist zone. Holes BE17-06 to -09 were drilled on 50m spacings over the original gold discovery. Hole BE17-07 hit the down plunge of the original showing on line 49800, 102+50N.

Drilling in January, 2018, was performed for a total of 1419m drilled in 15 holes NQ on the east grid (BE series; Table 4). The purpose of the drilling was to follow up on the deformation zone with folded quartz veins extending along the IP trend exposed by trenching in the area of line 49000E from 101+75N to 102+50N. Also, drill holes targeted the carbonate-sericite zone to the south which is associated with the IP anomalies. It is interpreted that this deformation zone is the western extension of the Au showing at drill hole BE17-07. Another purpose was to follow up on an IP anomaly trend to the north of this trend which may be the source of Au-bearing soil samples taken at the collar area of BE18-02 and Au-bearing soil samples near 50100E 103+25N. Drilling along the Au zone trend was also recommended at a weak IP anomaly to the east on line 50700E on the north side of a small pond. In 2017, drill hole BE17-04 contained very anomalous gold (0.322 g/t) along with the highest arsenic value found on the property. Trenching in August 2017 also confirmed the anomalous gold continued westward on the IP trend. This area required drilling to the west to line 49800E at 97+25N, as well as the east extension of this trend up to line 51900E. New IP data in 2018 also warranted drilling along an IP trend to the NE of drill hole BE18-04 which returned anomalous Au in mineralized albitite dikes. Drilling was targeted on IP anomalies from lines 51500E to 51900E at 108+60 to 109+25N. Finally, a hole targeted the carbonate-sericite zone of drill hole BE17-03 at 51300E 94+75N.

The following is a detailed description of the 2018 drill program:

Table 4. - Drill collar locations from the 2018 Brunswick drilling.

Hole ID	Grid	Line	Station	UTM Easting	UTM Northing	UTM Elevation	Az. (°)	Dip (°)	Length (m)
BE18-01	East	49000E	10250N	461330	5276254	382	180	-50	176
BE18-02	East	49200E	10250N	461527	5276258	365	180	-50	155
BE18-03	East	49000E	10515N	461334	5276516	371	180	-50	101

BE18-04	East	50700E	10425N	463047	5276423	390	180	-50	50
BE18-05	East	49900E	10680N	462237	5276670	400	180	-50	47
BE18-06	East	49505E	10245N	461835	5276245	390	180	-50	80
BE18-07	East	49798E	9740N	462121	5275741	384	180	-50	101
BE18-08	East	49900E	9725N	462234	5275724	378	180	-50	80
BE18-09	East	50500E	9625N	462844	5275839	378	180	-50	161
BE18-10	East	51700E	10910N	464025	5276908	404	180	-50	74
BE18-11	East	51700E	10885N	464023	5276887	405	180	-50	65
BE18-12	East	51900E	10925N	464233	5276921	397	180	-50	65
BE18-13	East	51500E	10860N	463848	5276852	410	180	-50	86
BE18-14	East	51900E	9680N	464240	5275684	373	180	-50	77
BE18-15	East	51300E	9475N	463637	5275508	375	180	-50	101

#### Rock Types

#### Table 5. Lithologies observed in the Brunswick 2018 drilling:

#### Mafic Volcanic

Very fine grained to aphanitic, massive chloritized mafic volcanic. Where there are fine grained tuff feldspars, the unit is called mafic crystal tuff such as in drill holes BE18-01 and BE18-05. These mafic crystal tuffs are host to pyrite-pyrrhotite bands that are not anomalous in Au such as in BE18-05. In some drill holes such as BE18-01 and -02 and BE18-15, there are fine grained abundant leucoxenes within the chloritized mafic volcanic. There are pillowed mafic flows that contain common beige pillow interiors and vesicles in chloritized mafic volcanic in drill holes BE18-11 and BE18-12. In areas of deformation, the unit contains wavy bands of chlorite and calcite-quartz veinlets such as the deformation zones in BE18-01 and BE18-02 that are host to Au mineralization. In the top of drill hole BE18-06, the deformation zone consists of light yellow-green sericite-carbonate with quartz-calcite veinlets and pyrite that host Au mineralization.

#### Carbonate-sericite zone

The carbonate-sericite zone is an alteration of mafic volcanic and contains deformed, wavy greasy brown carbonate-sericite bands that are host to commonly mottled quartz veins and calcite veinlets such as in BE18-07 and BE18-14. Where fine grained pyrite and bands are present associated with quartz veins, there is Au mineralization such as in BE18-15 and BE18-07.

#### Intermediate crystal tuff to tuff

Grey, very fine grained sheared intermediate volcanic with common fine to medium grained white tuff feldspars and chlorites in the groundmass. In units without tuff feldspars, the unit is just intermediate tuff. Unit contains sections of mauve albite or potassic altered tuff with disseminated fine grained pyrite and/or pyrite-magnetite bands in drill holes BE18-10, -11, -12 and -13. In drill holes BE18-04 and BE18-13, there are sections of abundant fine grained quartz eyes along the shear planes in the intermediate tuff that host disseminated fine grained pyrite.

#### Felsic dike/albitite dike

Felsic, albitite dikes, which occur in BE18-04, are white, coarse grained, thin dikes with common fine grained disseminated pyrite at 5% that host Au mineralization. The albitites X-cut and are hosted in a quartz eye-abundant intermediate tuff.

#### **Iron Formation**

Black to dark grey, carbonaceous and magnetite-bearing iron formation in drill hole BE18-13 contains common calcite-quartz veinlets to veins that host semi-massive coarse grained pyrrhotite-pyrite clots to net-textured to disseminated sulphides.

#### Graphite

Small, thin units or layers of graphite with common thin calcite veinlets and host to pyrite and lesser chalcopyrite sulphides. These units are found within various drill holes commonly at the contacts of carbonate-sericite altered mafic volcanic with regular greenschist mafic volcanic.

#### Quartz feldspar porphyry

Commonly these are thin fine grained porphyritic feldspar and quartz-bearing dikes that X-cut the mafic tuff in BE18-01, -02 and -03. These units commonly contains fine grained pyrite associated with them, but, were below anomalous in Au. There's a larger intrusion hosted in the mafic volcanic in BE18-06 that contains trace pyrite.

#### Gabbro

Green and white, coarse grained massive to very fine grained mylonitized atypical greenschist gabbro in BE18-10 which could be a coarse grained mafic volcanic.

#### Diabase

This is a late Proterozoic unit that X-cuts all other lithologies. Diabase is a grey, fine grained and massive, ophitic textured dike with fine grained cumulus magnetite in parts of the units that are magnetic, commonly in the centres of the dikes. The dikes contain chill margins near the contacts.

BE18-01 was collared at 49000E 102+50N. The hole targeted a deformation zone and an IP anomaly in the underlying carbonate alteration zone. The hole collared in intermediate crystal tuff to a depth of 11.8m before intersecting a section of mafic tuff and quartz feldspar porphyry dikes with quartz eyes and fine grained pyrite to 19.6m. From 19.6 to 26.9m, there is a deformation zone of folded thin bands of chlorite and felsic QFP. Then there is a section of mafic tuff to 94.4m with a few X-cutting QFP dikes. From 94.4 to 110.5m is a sericite-albite banded intermediate volcanic. This is followed by mafic volcanic to 115.4m. From 115.4 to 116.6m, there is a graphite layer with 2 to 6% pyrite and minor chalcopyrite. Then there is mafic volcanic to 150.7m that contains greasy brown sericite-carbonate alteration. From 150.7 to 151.8m, there is a graphite breccia followed by mafic volcanic to 164.4m. There is fault gouge from 164.4 to 167.3m. Then there is mafic volcanic to the end of the hole at 176m. From 95 to 143.7m, there is anomalous As that ranges from 50.5 to 689 ppm in sericite-albite-carbonate altered intermediate to mafic volcanic.

BE18-02 was collared at 49200E 102+50N. The hole targeted a deformation zone and underlying carbonate alteration zone. The hole collared in diabase to 36.8m followed by intermediate crystal tuff to 86.2m. From 74.35 to 84.9m, there are 1 to 5% fine grained pyrite bands with an intercept of anomalous Au at 0.440 g/t over 1.1m from 83.7 to 84.8m. From 86.2 to 109.4m, there is mafic tuff followed with X-cutting quartz feldspar porphyry dikes. Then from 109.4 to 135.2, there is a deformation zone in volcanic with common quartz-carbonate veins and quartz feldspar porphyry dikes. Within this sequence from 132.5 to 132.6m is 2% very fine grained arsenopyrite that returned 0.120 g/t Au and 1720 ppm As over 0.6m from 132.4 to 133m. From 135.2 to 143.7m, there is intermediate volcanic followed by a section of graphite and volcanic bands from 143.7 to 145.1m. Then there is intermediate volcanic to the end of the hole at 155m.

BE18-03 was collared at 49000E 105+15N. The hole targeted a more northerly IP anomaly trend that was investigated to be a possible source to some Au-bearing soil samples at the location of BE18-02. The hole collared in intermediate tuff to 82.3m that contains common sheared feldspar porphyry dikes. From 71.15 to 80m, there are

intercepts of 21.4 to 79.3 ppm As in albite-green mica-tournaline veinlets. This is followed by mafic crystal tuff to 92.5m that contains pyrite bands and quartz-calcite veinlets. There was no anomalous Au in the pyrite bands. From 92.5 to 97.2m, there is intermediate crystal tuff followed by mafic crystal tuff to the end of the hole at 101m.

BE18-04 was collared at 50700E 104+25N. The hole targeted an IP anomaly trend on the north side of a small pond. The hole collared in an intermediate tuff with abundant fine grained quartz eyes throughout the unit to the end of the hole at 50m. Within this unit there are albitite dikes from 23.4 to 24.8m with 4% fine grained pyrite that returned 0.650 g/t Au over 0.5m, from 31.9 to 32m with 4% fine grained pyrite and from 47.2 to 48.5m with 2% fine grained pyrite. 0.100 g/t Au was returned over 1m from 45 to 46m in 2% very fine grained pyrite in the surrounding quartz eye intermediate tuff.

BE18-05 was collared at 49900E 106+80N. The hole targeted a more northerly IP anomaly trend that was investigated to be a possible source to some Au-bearing soil samples to the south. The hole collared in intermediate crystal tuff to 8.8m followed by intermediate tuff to 21.6m. From 21.6 to 35m, there is mafic crystal tuff that contains pyrite-pyrrhotite bands and quartz-calcite veins from 21.8 to 26.25m and from 32.65 to 32.8m. The sulphide bands and veins returned no anomalous Au. One sample that contains 2% sphalerite at 26m depth returned 1630 ppm Zn from 25.45 to 26.25m. From 35 to 45.9m, there is mafic volcanic followed by a quartz eye-bearing intermediate tuff to the end of the hole at 47m.

BE18-06 was collared at 49505E 102+45N. The hole targeted the Au zone on trend to the original Au showing intercepted in BE17-07. The hole was backed up on a 32 g/t Au showing in a trench. The hole collared in a light yellow-green sericitized and albitized mineralized zone to 15.1m that has the same alteration of the zone in BE17-07. An intercept of 0.132 g/t Au was returned over 1m from 9.5 to 10.5m in a section of deformed quartz and ankerite veinlets and 1% very fine grained pyrite. From 15.1 to 31.5m, there is mafic tuff followed by quartz feldspar porphyry to 41.8m. Then from 41.8 to 64.7m, there is mafic tuff followed by deformed mafic tuff to the end of the hole at 80m. The deformed mafic tuff contained up to 1% fine grained pyrite but returned no anomalous Au.

BE18-07 was collared at 49798E 97+40N. The hole was backed up at a carbonatesericite alteration zone at a trench that is associated with an IP anomaly trend. The goal was to intercept the Au-bearing quartz veins with pyrite and the anomalous 0.322 g/t Au intercepted in the carbonate-sericite zone of BE17-04. The hole collared in mafic volcanic to 7.4m followed by graphite bands to 11.6m. This was followed by the carbonate-sericite zone from 11.6 to 44.5m. There was an intercept of 0.100 g/t Au over 1m from 19 to 20m in quartz-carbonate veinlets with 0.5% pyrite. From 43 to 44m, there is an intercept of 0.242 g/t Au over 1m in the carbonate-sericite zone at the lower contact with mafic volcanic. There is elevated As throughout the carbonate-sericite zone to up to 216 ppm. From 44.5 to 46.1m, there is chloritized mafic volcanic with calcite veinlets followed by graphite to 48.8m that is thinly banded with quartz and calcite. Then there is mafic volcanic to 93m. From 93 to 98.6m, there is a diabase dike. This is followed by mafic volcanic to the end of the hole at 101m.

BE18-08 was collared at 49900E 97+25N. The hole targeted the same carbonate-sericite zone as BE18-07. The hole collared in the carbonate-sericite zone to 25.8m. The zone returned no anomalous Au however contains elevated As throughout to up to 124.5ppm. The zone was followed by graphite bands to 28.5m and mafic volcanic to the end of the hole at 80m. Within the mafic volcanic, from 40.8 to 49.3m, there is a section of light brown sericite-carbonate alteration that returned 1.59 g/t Au from 47 to 48m depth in a small 2 g sample with acid digestion, but was not validated by a 30 g fire assay. No anomalous Au elsewhere in the hole.

BE18-09 was collared at 50500E 96+25N. The hole targeted a large IP anomaly that trends along the same carbonate-sericite zone as BE17-04. The hole collared in mafic volcanic to 50.6m followed by a deformed, wavy banded grey, weakly carbonated mafic volcanic to 112.8m. Within this sequence, there's a pyrite-graphite-chert layer from 55.6 to 56.3m with 10% pyrite that returned 0.96 g/t Ag and 503 ppm As, but no Au. One sample from 93.8 to 94.8m returned 0.74 g/t Ag and 213 ppm As in up to 7cm wide quartz veins at 42% that host very fine grained pyrite and chalcopyrite at 1% each from 94 to 94.1m within that sample. From 95.7 to 98.2m, there is elevated As to 180.5 ppm. From 98.2 to 100.2m, there's a zone of coarse, up to 28cm wide mottled white quartz veins at 28% with up to 15% pyrite. This zone returned up to 0.27 g/t Ag, 414 ppm Cu and 0.75 ppm Hg, but no anomalous Au. However, from 99.2 to 99.7m, there is 1180 ppm Zn. From 109 to 109.6m, there are up to 3.5cm wide quartz veinlets at 25% with 3% very fine to medium grained cubic pyrite that returned 407 ppm As and 16.05 ppm Mo. The next sample from 109.6 to 110.6m returned 710 ppm As and 22.1 ppm Mo in the carbonate altered mafic volcanic groundmass that hosts 1% fine grained pyrite. From 112.8 to 113.7m, there's a graphite layer followed by more deformed, grey mafic volcanic to 130.7m. From 122.5 to 122.9m, there are up to 3cm wide light grey quartz-carbonate veinlets at 33% with X-cutting 0.4cm wide hematite veinlets at 5% that returned 476 ppm As. Following this sample from 122.9 to 127.3m, there are thin quartz-carbonate veinlets at 5% that host 3% hematite and returned 325 to 390 ppm As and 23.9 to 46.9 ppm Sb in four samples. Then from 130.7 to 142.1m, there's a sericite-altered felsic intrusion. After this, there is deformed, grey mafic volcanic to 144.7m followed by another graphite layer to 145.3m. Then there is deformed, grey mafic volcanic to 157.8m. Within this sequence, there's a fault gouge from 152 to 152.8m. From 157.8 to 158.3m, there is a graphite breccia followed by the grey mafic volcanic to the end of the hole at 161m. Assays returned elevated As and Sb throughout the hole. One sample returned 7250 ppm As near the bottom of the hole from 157 to 157.8m in a section of up to 3cm wide dark smokey grey quartz veins at 9% that host 3% fine grained pyrite.

BE18-10 was collared at 51700E 109+10N. The hole targeted an IP anomaly trend to the NE that was investigated to be possibly the same IP trend as the Au zone at BE17-07. The hole collared in a greenschist gabbro to 52m that contained mylonitized sections within it. From 52.25 to 53.7m, there are brecciated quartz and quartz-chlorite-calcite veins with 5 to 10% pyrite. The pyrite returned no anomalous Au but had 21.7 ppm Mo.

From 52 to the end of the hole at 73.6m, the unit is an intermediate crystal tuff. There is fine grained pyrite at 1 to 5% in the tuff from 60.7 to 61.6m, from 67.6 to 69.1m and from 71.2 to 71.8m, all of which returned no anomalous Au. 18.5 ppm Mo was returned from 71.2 to 71.8m.

BE18-11 was collared at 51700E 108+85N. The hole targeted an IP anomaly further to the south along line 51700E. The hole collared in pillowed mafic volcanic to 29.5m followed by intermediate crystal tuff to 55.3m. There are pyrite-magnetite bands in the unit from 48.2 to 50.7m. The hole was sampled in select areas from 48.2 to 60.2m of fine grained pyrite bands and all the samples returned elevated Zn, generally between 80 and 516 ppm Zn and one sample at 1820 ppm Zn. From 55.3 to the end of the hole at 65m, there is an intermediate tuff with abundant fine grained quartz eyes. From 56.3 to 58.1m, two samples returned 1.37 g/t and 1.03 g/t Ag with 39 ppm and 11 ppm As, 796 ppm and 446 ppm Pb and 1820 ppm Zn.

BE18-12 was collared at 51900E 109+25N and targeted the IP anomaly trend of BE18-10. The hole collared in pillowed mafic volcanic to 55.3m. From 40.6 to 41.1m, a 6cm wide quartz-calcite vein with fine grained 2% pyrite and 1% pyrrhotite returned 0.93 g/t Ag, 230 ppm Mo, 549 ppm Pb, 22.5 ppm Rb, 0.244 ppm Re and 623 ppm Zn. From 42.4 to 48.3m, there is a section of 5% pyrite and up to semi-massive 30% pyrrhotite bands and clots. Four samples returned between 1.23 and 2.13 g/t Ag. A series of samples returned up to 1535 ppm Pb and 1340 ppm Zn. From 55.3 to the end of the hole at 65m, there is intermediate crystal tuff with fine grained pyrite at up to 2% from 59.2 to 62.2m and minor sphalerite at 62m depth. The samples returned no anomalous Au.

BE18-13 was collared at 51500E 108+60N and targeted a strong IP anomaly. The hole collared in intermediate crystal tuff to 43.2m. From 35.9 to 36.4m, there are 1 to 3cm wide quartz-carbonate veinlets with pyrite that returned 0.89 g/t Ag, 426 ppm Cu and 1990 ppm Zn. From 43.2 to 59.7m, there is black magnetite-carbonaceous banded iron formation with common interstitial net-textured to clots to bands of pyrrhotite and lesser pyrite in the iron formation layers and quartz-calcite veinlets. From 53.8 to 54.8m and from 55.8 to 56.5m, there is interstitial pyrrhotite and fine grained chalcopyrite that returned 0.92 g/t Ag, 378 ppm Cu and 2310 ppm Zn and 1.08 g/t Ag, 544 ppm Cu and 3630 ppm Zn respectively. After this, from 59.7 to the end of the hole at 86m, there is intermediate crystal tuff with up to 20cm wide quartz veins with pyrrhotite-pyrite at 5% from 60.3 to 60.5m, from 61.1 to 61.8m, from 64.9 to 66.6m and from 67.1 to 67.4m. From 70.2 to 71m, there is 3% fine to medium grained disseminated pyrite in the intermediate tuff. No anomalous Au was returned.

BE18-14 was collared at 51900E 96+80N. The hole targeted the IP anomaly trend of BE18-09. The hole collared in a greasy brown carbonate-sericite zone in mafic volcanic to the end of the hole at 77m. There are common quartz veins and calcite veinlets throughout the zone up to 35.6m depth. From 49 to 59.9m, there is a section of deformed calcite veinlet bands along a shear. From 71.9 to 77m, the mafic volcanic is green chloritized outside of the carbonate-sericite zone. Assays returned common anomalous As to 136.5 ppm and Sb to 5.11 ppm. Anomalous Au was retuned at 60 ppb Au over 1m

from 7.2 to 8.2m on the side of mottled up to 3.5cm wide quartz veinlets and 80 ppb Au over 1m from 21.7 to 22.7m in a section with a 7cm wide mottled quartz vein.

BE18-15 was collared at 51300E 94+75N. The hole targeted the carbonate-sericite zone of BE17-03. The hole collared in diabase to 20.2m followed by weakly carbonate-altered mafic volcanic to 38.8m. Then from 38.8 to 58.9m, there is chloritized mafic volcanic with abundant fine grained leucoxenes. From 58.9 to 67.5m, there is carbonate-sericite altered mafic volcanic again with beige sericite-carbonate from 62.2 to 71m. There are up to 18cm wide smokey grey quartz veins in the section. Then from 67.5 to the end of the hole at 101m, there is a carbonate-sericite zone in deformed mafic volcanic with common thin wavy graphite bands along foliation. In this section, there's a quartz vein zone from 76 to 80.3m with up to 12cm wide mottled quartz veins and a few areas with 0.5cm wide folded pyrite bands. There's a diabase dike in the section from 93.3 to 94.7m, after which, the unit is grey carbonate-sericite altered with lack of veins and pyrite. Assays returned anomalous As to 116.5 ppm, but no anomalous Au.

Drilling on the east grid was successful in confirming that the deformation zone that is parallel the IP anomaly trend to the west of the Au zone is anomalous in Au and so is probably the extension of the Au Zone at BE17-07. The carbonate-sericite zone to the south that is associated with the IP anomalies returned anomalous As but no anomalous Au. Anomalous Au and As, however, was returned in BE18-02 and in the Au zone at the The sericite-carbonate altered mafic volcanic associated with the top of BE18-06. anomalous Au in BE18-06 had the same yellow-green sericite-carbonate colouration/alteration as the rocks associated with the Au zone in BE17-07 and could be interpreted to be the same Au zone. Drilling on the IP anomaly trend to the north revealed that the pyrite-pyrrhotite bands observed in mafic tuffs were not host to Au mineralization and so were not the source of the Au-bearing soil samples to the south of this trend. Drilling at the north side of the pond on line 50700E was successful in determining that the weak IP anomaly is associated with pyrite-mineralized albitite dikes that host anomalous Au mineralization. Drilling to the west of the Au-bearing quartz veins of BE17-04 revealed the same carbonate-sericite zone that was drilled in BE17-04. Anomalous Au was returned from this zone in BE18-07, however, there was not the amount of Au-bearing pyrite in BE18-07 and -08 as that discovered in BE17-04. Further drilling targeted on IP anomalies from lines 51500E to 51900E at 108+60 to 109+25N returned common anomalous As in the carbonate-sericite alteration, but no anomalous Au. The high As in many of the samples indicate there is good possibility of there being a Au-bearing horizon in this system. The hole targeting the carbonate-sericite zone of drill hole BE17-03 at 51300E 94+75N did not return anomalous Au. Drilling on the new IP anomaly trend to the NE of BE18-04 revealed that the sulphides intersected in those holes were primarily base metal sulphides that did not host Au mineralization and were not the Au-bearing disseminated pyrite-bearing albitites of BE18-04.

# Item 11: Sample Preparation, Analyses and Security

The mineralized sections of the drill holes were split at approximately 1 metre intervals, with one half sent to ALS Canada Inc.'s Timmins, Ontario lab for initial preparation. In

2018, samples were sent to ALS Canada Inc.'s Thunder Bay, Ontario lab for initial preparation. The remaining core was returned to the core box and stored in a secure core shack located at the Watershed, Ontario (located half way between Timmins and Sudbury on Highway 144, 35 km from the Property).

Diabase blanks were used and were from an outcrop near the Terry Fox Monument in Thunder Bay, Ontario on Hwy 11/17, submitted at a rate of one blank per 50 samples. Standards were submitted at a rate of one standard per 50 samples. Standards were from CDN Resource Laboratories Ltd and the standard CDN-GS-P4F was used.

Table 6. The standard CDN-GS-P4F and its expected gold value.

Standard Name	Au grade (ppm Au)	Error (ppm Au)
CDN-GS-P4F	0.498	0.056

All samples were sent to an ALS prep lab in Thunder Bay, ON. These were crushed to 70% passing a 2mm sieve, and pulverized to a further 85% passing 75µm sieve. The pulps were sent to ALS Minerals in North Vancouver, BC for gold and multi-element analysis. The gold assaying was completed using a fire assay extraction from a 30 g sample with ICP finish. The pathfinder elements were read using a 1 g representative sample with aqua regia digestion and an ICP finish.

ALS Minerals are accredited by the Standards Council of Canada (SCC) for specific tests listed in their Scope of Accreditation No. 579 (http://palcan.scc.ca/specs/pdf/677\_e.pdf). This accreditation is based on ISO 17025:2005 international standards and involves extensive site audits and performance evaluations.

All samples underwent multi-element analysis by aqua regia digestion and ICP-MS finish (ALS code ME-MS41). Those samples that returned gold values greater than 0.1g/t and select samples in certain drill holes were subject to fire assay with ICP-AES finish (ALS code Au-ICP21).

# Item 12: Data Verification

The data presented in this report has come primarily from reports received from Benton Resources and Rainy Mountain Royalty Corp. The author has reviewed the historical data, and can verify that the information has been presented accurately as it exists in those files and reports to the best of his ability. Those reports contain the assay certificates and other supporting documentation for the data presented for the exploration work on the property. Any additional references are compiled in section 27 of this report.

There were no limitations placed on the author in conducting the verification of the data. The majority of the data relied upon was modern data completed by qualified persons. The author is of the opinion that these data sets were adequate for the completion of the technical report.

# Item 13: Mineral Processing and Metallurgical Testing

Not applicable.

# Item 14: Mineral Resource Estimates

Not applicable.

# Item 15: Mineral Reserve Estimates

Not applicable.

# **Item 16: Mining Methods**

Not applicable.

# **Item 17: Recovery Methods**

Not applicable.

# Item 18: Project Infrastructure

Not applicable.

# Item 19: Market Studies and Contracts

Not applicable.

# Item 20: Environmental studies, Permitting, and Social or Community Impact

No environmental studies have been performed as this is not an advanced project.

# Item 21: Capital and Operating Costs

Not applicable.

# Item 22: Economic Analysis

Not applicable.

# **Item 23: Adjacent Properties**

An adjacent property to the Brunswick property is the Groves project, held by Northern Sun Mining Corp. The Groves nickel copper platinum group metals ("PGM") property is located approximately 15 km south east of Gogama, Ontario. The 28 contiguous mining claims consist of 400 units or 6,400 hectares which cover a magnetic anomaly interpreted

as a large gabbroic intrusion. The magnetic anomaly is approximately 12 km long and varies in width from 1 km to 2 km. The Groves project contains an historically reported resource of 500,000 tons (Canadian Mines Handbook, 1957) of 1.5% combined copper ("Cu") plus nickel ("Ni") above the 45.7m level in two separate zones. (www.northernsunmining.ca).

The qualified person has not been unable to verify this information and the information is not necessarily indicative of the mineralization on the Brunswick property.

# Item 24: Other Relevant Data and Information.

# Table 7. Summary of Costs Spent

Kany Wountain 2010 program	
Assays	\$4076.33
Geophysics and lines	\$59551.00
Geologist and tech time log	\$21160.45
Rentals, trucks, supplies, travel	\$13658.89
Total	\$90,991.85
Rainy Mountain 2017 program	
Drilling	\$181014.00
Assays	\$7205.33
Thin sections	\$1849.05
Core cutting	\$3000.00
Core shack rental	\$3390.00
Trench excavators	\$8955.29
Geology accom., meals, gas, truck expenses	\$22337.04
Geology tech expenses	\$531.42
Geophysics and lines	\$24132.33
Geologist and tech time log	\$83819.44
Pump and hose rental	\$1779.75
Total	\$338,013.65
Rainy Mountain 2018 program	
Drilling	\$139741.75
Assays	\$13449.03
Accom., meals, truck expenses	\$10026.00
Fuel for vehicles hauling core	\$9453.00
Snow plowing access for drill	\$5602.00
Geophysics and lines	\$83660.00
Geologist and tech time log	\$56218.50
Rentals, trucks, supplies, core cutters	\$9620.00
Total	\$319,353.37

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# Rainy Mountain 2016 program

Total spent on Brunswick property:

\$748,358.87

Subsequent costs incurred for exploration in 2018 include \$7450.00 for the geology reports. All the costs spent on Brunswick given above do not include HST.

# Item 25: Interpretations and Conclusions

The IP anomalies detected by this survey are reflections of the parallel shears and are composed of sericite schist altered basalt with iron carbonate, and disseminated pyrite causing the chargeability anomalies. The resistivity lows are the wide shears with sericite and green mic alteration (hydromuscovite). These are excellent hosts for gold mineralization.

The dominant features crossing the property is the Ridout Fault (Shear) along the contact of the basalt volcanic and the Timiskaming sediment to the south. At least 4 other deformation zones have been identified by mapping and with the resistivity data from the IP survey.

Multi stage folding is observed on the Ridout Shear and chevron folds as well as crenulations are seen along the trend from the gold showing at 102+50N. A 100m wide shear parallel to the base line 100+00N occurs between 100+00N and 99+00N and others occur at 98+00N and 97+00N, and 94+00N.

Several shear zones were outlined parallel to the Ridout Fault and are natural hosts for gold deposits. The occurrence of anomalous gold values over 0.3 g/t Au and anomalous arsenic values over 1000 ppm hosted in iron carbonate-sericite altered shear zones with quartz and pyrite suggests an ideal setting for gold deposits on the Brunswick property. Drill hole spacings along these shears is 100-200-500m apart leaving large gaps of knowledge about these structures. For surface grab samples, one gold showing had been exposed by previous trenching on line 49800E, 102+50N and had grab samples of 32.9. 3.77, 2.82, and 3.13 g/t Au. Other prospecting assays yielded results of 6.6, 4.05, and 2.57 g/t found in quartz vein material containing chalcopyrite, in sheared volcanic tuffs (Middleton, 2017).

The drill program in 2017 started in May with 6 holes (BW17-01 to 06) being completed on the west grid initially; then holes BE17-01, 02, 04, 05, 06, 07, 08, 09 in June, 2017 followed by hole BE17-03 in July, 2017. A total of 15 holes (2574m) were drilled. The plan was to test each shear zone as outlined by the previous IP survey to determine if these were favourable gold bearing shear zone settings, and in all cased they were iron carbonate altered sericitized sheared mafic volcanic. Anomalous arsenic and antimony was found in the western holes (BW17-01 to 06) and anomalous gold was found in the eastern holes BE17-04, 07, 08 and 03 as well as anomalous arsenic in hole 04. Follow up trenching done in August, 2017 east and west of hole 04 exposed quartz veins with chalcopyrite with anomalous gold (0.322 g/t Au). Trenching also exposed a deformation zone around 101+50N on lines 49000E to 49100E and this projects east toward the original gold showing on 49800E (Middleton, 2017). Drilling on the east grid in 2018 was successful in confirming that the deformation zone that is parallel the IP anomaly trend to the west of the Au zone is anomalous in Au and so is probably the extension of the Au Zone at BE17-07. The carbonate-sericite zone to the south that is associated with the IP anomalies returned anomalous As but no anomalous Au. Anomalous Au and As, however, was returned in BE18-02 and in the Au zone at the top of BE18-06. Drilling at the north side of the pond on line 50700E was successful in determining that the weak IP anomaly is associated with pyrite-mineralized albitite dikes that host anomalous Au mineralization. Drilling to the west of the Au-bearing quartz veins of BE17-04 revealed the same carbonate-sericite zone that was drilled in BE17-04. Anomalous Au was returned from this zone in BE18-07, however, there was not the amount of Au-bearing pyrite in BE18-07 and -08 as that discovered in BE17-04.

There are no significant risks and uncertainties to affect the reliability or confidence in the exploration information or the project's potential economic viability. The author was involved in the work performed in 2018 and the work follows good professional practice with regard to sampling QA/QC procedure and drill targeting/operation.

# **Item 26: Recommendations**

Advancing the Brunswick project to a subsequent phase is contingent on the gold and pathfinder contents in the drill, trenching and prospecting results intercepted on the property from 2016-2018. Infill drilling is recommended around hole BE17-04 on line 50000E, 98+00N both east to hole BE18-09 on 50500E and beyond to line 51100E, and west to line 49800E. Surface samples taken in 2017 on line 48800E on the west grid were very anomalous in gold (Middleton, 2017) and IP anomalies extending west form these samples remain to be tested. Additional IP needs to be done west of line 47600E for a strike length of 2 km.

An additional 2 km of strike length on the west of line 46700E at 100-200 m spacings is to be cut and read with Magnetics and IP followed by drilling. Previous IP surveys on the east side have assisted in locating possible extensions of the old original gold showing which require drilling.

An additional 5 holes are required on lines 48800E to 48100E on existing IP anomalies. It is recommended that an IP anomaly north of the trend tested on claim 4274708 be drilled which lines up with anomalous gold values found by Mike Tremblay during the Prospecting program in 2017. Expansion of the grid westward and IP surveys are recommended to follow the favourable structures to determine those places with the highest sulphide content. Hence additional line cutting and geophysics are required and 5-7 more drill holes (\$200,000) are recommended.

Recommended Proposed holes are (over):

WEST	GRID					
	Line	Station	Depth m	Az	Dip	Target
	48400E,	82+40N	150	180	-50	-
	48600E,	81+80N	100	180	-50	IP
	48500E,	87+60N	100	180	-50	IP and shear end of pond
	48800E,	86+80N	75	180	-50	New IP target or if BW-01 is good
anothe	r					
	48700E,	82+20N	75	180	-50	
	Total		500			
	48700E, Total	82+20N	75 500	180	-50	

Additional holes will be drilled based on results including undercut holes.

	Cost Estimate	Totals
EXPLORATION	(Cdn\$)	(Cdn\$)
Phase 1: Geophysics		
20km of lines		
+ 6km tie line (2km extension)		
= 26km cut lines @ \$850/km =	\$22,100	
20km of IP @ \$2500/km	\$50,000	
26km of Mag @ \$200/km	\$5,200	
Mob and Accom	\$17,000	
Total	\$94,300	94,300
Phase 2: Diamond Drilling		
Drilling and assays (845.6 metres @ \$125/m)	\$105,700	
7 holes of 100m +1 hole of 145.6m		
Total	\$105,700	105,700
GRAND TOTAL FOR BUDGET PURPOSES	ΤΟΤΑΙ	200.000

 Table 8: Estimated budget for proposed work

# Item 27: References

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# **Date and Signature Page**

# **Statement of Qualifications**

I, Jordan Laarman, of 4-312 Red River Road, Thunder Bay, Canada, certify that:

- 1. I am a graduate of the University of Western Ontario, 2014, and hold a Ph.D. Geology degree.
- 2. I am a graduate of Lakehead University, 2007, and hold a M.Sc. Geology degree.
- 3. I am a graduate of the University of Western Ontario, 2004, and hold an Hon.BSc. Geology degree.
- 4. I am a member of the Canadian Institute of Mining, Metallurgy and Petroleum.
- 5. I am a member of the Prospectors and Developers Association of Canada.
- 6. I am a member of the Society of Economic Geologists.
- 7. I am a member of the Ontario Prospectors Association.
- 8. I have been employed as a geological assistant by Nunavut Tunngavik Incorporated in 2003.
- 9. I have been employed on contract as a field and project geologist by Rainy Mountain Royalty Corp., Mega Uranium Ltd., Cascadia International Resources Inc., and Trillium North Minerals Ltd. from 2004 to 2009.
- 10. I have been employed as a project geologist by Cliffs Natural Resource Corporation from 2010 to 2012.
- 11. I have been employed on contract as a project geologist by KWG Resources Inc. from 2013 to 2014.
- 12. I have been employed on contract as a geologist by Harte Gold Corp. in 2014-2015.
- 13. I have been employed as a geologist by Wesdome Gold Mines Ltd. in 2016-2017.
- 14. I am and have been a practicing member of APGO (Association of Professional Geoscientists of Ontario) since September, 2012.
- 15. I have co-supervised a drill program and logged core on the Brunswick Property in January, 2018.
- 16. I am responsible for the preparation of all sections of the Report titled "National Instrument 43-101 report on the Brunswick Property", dated June 11, 2021 and prepared for Pursuit Gold Corp.
- 17. I have read the NI 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
- 18. I am a qualified person for the purpose of this instrument.
- 19. I have prior involvement with the property.
- 20. I am independent of the company for which this report is written.
- 21. I have made a personal inspection of the Brunswick property in January, 2018.
- 22. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.

Jordan Laarman . Date: June 11, 2021 . Jordan Laarman, Ph.D., P.Geo. Membership #2181

# **Consent of Qualified Person**

To: British Columbia Securities Commission and the Alberta Securities Commission

I, Jordan Laarman, do hereby consent to the public filing of technical report entitled National Instrument 43-101 Report on the Brunswick Property Porcupine Mining Division, Ontario, Brunswick Township, Province of Ontario and dated June 11, 2021 (the "Technical Report") by Pursuit Gold Corp. (the "Issuer"), with the TSX Venture Exchange under its applicable policies and forms in connection with the option agreement and I acknowledge that the Technical Report will become part of the Issuer's public record.

Jordan Laarman June 11, 2021 Signed Dated