INDEPENDENT TECHNICAL REPORT

Miller Gold Project, Kirkland Lake, Ontario

Prepared for

Northstar Gold Corp.

NORTHSTAR GOLD CORP

Prepared By

Trevor Boyd, PhD, P.Geo.
Elisabeth Ronacher, PhD, P.Geo.
Ronacher McKenzie Geoscience Inc.

RONACHER MCKENZIE GEOSCIENCE

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Credit: George Pollock, June 2018

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1.0 SUMMARY

Ronacher McKenzie Geoscience ("Ronacher McKenzie") of Sudbury, Ontario, Canada was contracted by Northstar Gold Corp. ("Northstar") to review the Miller Gold Property (the "Property") located in the Catharine, Pacaud, Boston and McElroy Townships in northeastern Ontario and prepare an Independent Technical Report (the "Report"). The Report was prepared in accordance with the National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101").

The Property is located in the Larder Lake Mining Division of Northeastern Ontario, 18 km south of Kirkland Lake and 5 km east of the village of Boston Creek within the Catharine, Pacaud, Boston and McElroy Townships. The Property consists of 84 contiguous, unpatented claim cells covering approximately 1,100 ha in the Larder Lake Mining Division. All claims are 100% owned by Northstar. In addition, Northstar also holds two Freehold Patents L17916 and L17917 with both mining and surface rights in the northwest corner of Catharine Township, which are contiguous with the rest of the Property. Each patent has an area of 15.83 ha for a total of 31.67 ha. Surface rights for the mining claims are owned by the Crown, except for 11 SRO patents which are held by third parties.

The Miller Gold Property is located within the Archean volcano sedimentary assemblage of rocks of the Western Abitibi Subprovince in the Superior Province. Metavolcanic rocks in the Property area of known age fall in the range of 2750 - 2700 Ma and are cut by an Algoman age granitic intrusion. Most of the metavolcanics are of the Catharine Assemblage, which consists of mafic to intermediate volcanic rocks, subordinate pyroxene komatiite and minor felsic metavolcanic rocks. Ultramafic and mafic to intermediate intrusive rocks occur as stocks and sills emplaced into the metavolcanic rocks. Relatively undeformed, younger alkaline to calc-alkaline felsic intrusive rocks were emplaced into the metavolcanic rocks as irregular stocks and dykes, which include the Allied, West Allied, Planet, and Meilleur syenite intrusions. These named 'Syenite' intrusions were U/Pb on zircon dated at 2662+- 18 Ma and are highly altered from the leaching of quartz and addition of Na. These intrusions are an important spatial component of the Miller Gold Property geology and the location of the gold mineralization. Lamprophyre dykes cut all other units.

Numerous faults transect the predominately pillow, tholeiitic, mafic metavolcanic and supracrustal rocks. The most important faults are the north-west striking Pacaud Fault, Catharine Fault and east-northeast striking secondary faults, all of which displace the Assemblage units.

The Miller Gold Property hosts a large scale hydrothermal system with indications of multi-stage and long-lived magmatic gold deposition associated with large scale intense metasomatism and pervasive alteration. Geochronological Re/Os and U/Pb age dating has found the mineralization is associated with

the Temiskaming magmatic event (2680 to 2660 Ma) contemporaneously with the age of gold deposits along the Kirkland Lake Main Break. This is consistent with the Au-Ag-Bi-Cu-Mo-Te signature of the gold mineralization on the Property similar to that of some gold deposits in Kirkland Lake Camp. Evidence indicates that the Miller gold deposits and the Kirkland Lake gold deposits were formed contemporaneously and derived from a common gold enriched magmatic hydrothermal reservoir at depth. The Catharine Fault Zone which crosscuts the Miller Gold Property is interpreted as a broad composite "first order structure" capable of channelling deep seated exsolved magmatic hydrothermal fluids into favourable sites of gold deposition, namely intrusive contacts and cross cutting second order structures. The gold on the Property is known to be situated within both shallowly dipping and northeast striking, sub-vertical quartz veins along with northwest trending porphyritic dikes and syenite stocks hosted within the mafic volcanic rocks. Gold mineralization in the area commonly has a nuggety character and coarse texture occurring in native form or as tellurides and may or may not be associated with disseminated pyrite. There is potential for the discovery and outline of a large gold resource on the Property beyond the scope of the high grade, but narrow, shallowly dipping quartz vein mineralization historically exploited to-date.

The mining history of the Miller Gold Property dates to the early 1900s with the discovery of gold and development of the Miller – Independence Mine. Official reported production is 58.5 ounces Au and 70 ounces Ag from a 31 ton bulk sample of recovery grade of 1.89 oz/ton Au; however, based upon the mine workings and amount of what appears to be waste rock identified throughout the Property the true production may have been considerably higher. A shaft was built near the original discovery. A flat, faulted vein estimated to contain 1,800 tons of mineralized material was discovered during that period. Besides the original development work, the only other significant exploration completed was during 1987-88 in which Nortek Exploration completed 37 diamond drill holes and estimated a grade and tonnage for the Miller-Independence deposit.

During the summer of 2014 Northstar Gold completed a diamond drill program to follow-up on positive historic drilling and previous ground Induced Polarization (IP) survey results completed on the Property in early 2014. The drilling, completed from June 4 - 27, 2014, comprised of 15 NQ holes totaling 1,778.5 metres. In addition, 773 surface samples were obtained and analyzed during the summers of 2012-2016. The most encouraging results from this drill program came from drill testing the Allied Syenite intrusion, in holes MG14-03, MG14-07, and MG14-09 to MG14-12 located in the northern central part of the Property in northeastern Pacaud Township. The 2014 summer drill program established that the Allied Syenite is part of a large-scale gold-enriched intrusive system that hosts widespread stringers and historically mined veins both within the intrusive and the surrounding basaltic rocks on the Miller Gold Property.

Exploration during 2015, conducted by Northstar's joint venture partner Oban Mining Corporation ("Oban"), was focused on determining the potential economics for gold mineralization in the Allied, Planet, and Meilleur syenites which have geological characteristics and an observed style of mineralization commonly found within syenite-associated disseminated gold deposits – an atypical form of the greenstone-hosted orogenic lode gold style of mineralization. The gold mineralization in the area of the historic Miller Independence Mine, south of the Allied Syenite, has many of the characteristics of greenstone-hosted quartz-carbonate vein deposits type, but was not drill-tested in 2015. In 2015, Oban performed surface mapping, bedrock sampling, and drilled 12 diamond drill holes totaling 4,067 m. This work tested the gold mineralization in the area of these 3 intrusions and in the adjacent metavolcanic rocks with the results suggesting that mineralization both within and adjacent to the intrusions is controlled by the related structures.

The 2014 and 2015 drill programs established that the Allied, Planet and Meilleur syenites are central to a large-scale gold-enriched intrusive system that hosts widespread stringers and historically mined veins. Determining a final size and gold grade for the mineralized alkaline intrusive hosted system will require a major drilling program.

Northstar collected a 932 tonne bulk sample from the high-grade gold quartz No. 1 Vein in 2016. The bulk sampling program was undertaken to follow-up positive diamond drilling and surface sampling results obtained in 2014 and 2015. The objectives of the 2016 bulk sampling program were two-fold; first to obtain a sizable bulk sample to assess the gold grade, dilution and mineability of the stripped surface exposures; and second to explore the cleaned blasted areas by conducting channel sampling to assess continuity of the gold mineralization along strike and down-dip, to aid in planning follow-up bulk sampling and drill testing exploration. In general, bulk sample mineralized material was obtained from surface quartz vein exposures (or very near surface extensions) including approximately 0.5 m widths of bounding altered basalt wall rock carrying lower gold values.

The 932 tonne bulk sample was collected using an excavator during the period October 28 to November 18, 2016 and was processed at the Camflo Mill operated by Richmond Mines Inc. near Malartic, Quebec. The bulk sampling program entailed the stripping of areas of 4 trenches, subsequent blasting and excavating of Trenches 1 to 3 and mining. Approximately 850 tonnes of the 932 tonne bulk sample were mined from Trench 1 plus 82 tonnes from Trench 3. During the bulk sampling program 241 trench evaluation and bulk in-situ field samples were gathered and assayed for gold content for comparison purposes. These samples included mineralized material from cut channels in bedrock and blasted rock pieces predominantly from the 4 trenches. The bulk sampling program was generally successful in its objectives, more specifically in demonstrating the presence of high-grade, continuous, mineralized gold zones over albeit narrow widths for the main No. 1 Vein and other veins on the Property. The bulk sample program allowed Northstar to project the probable trend and down-dip attitude of the No.1 Vein zone for follow-up exploration and additional bulk sampling.

Trevor Boyd, P.Geo., visited the Property in November and December of 2016, designed and monitored Northstar's bulk sampling Quality Assurance / Quality Control (QA/QC) program, choose samples for geochemical analysis and reviewed Northstar's ground and drilling exploration work conducted since it acquired the Property in 2012. QA/QC support was also provided in the delivery and mill head sampling of the bulk sample for contract gold milling at the Camflo Gold Mill in northeastern Quebec. Elisabeth Ronacher, P.Geo., visited the Property on June 7, 2018. Ms. Ronacher reviewed the 2015 drill core and collected drill core and grab check samples.

The authors of this Report conclude that based upon new exploration results and concepts, past exploration, development and gold production, the encouraging positive results from the bulk and surface sampling program and recent drilling by Northstar and Oban; a systematic exploration program is warranted to qualify and expand historic mineral resources known to occur on the Property and define new mineralized zones, with the goal of defining a NI 43-101 mineral resource on the Property. This systematic program would involve an initial phase of drill hole and sampling data verification, digitizing of results, and 3D geological and geophysical modeling to establish diamond drill targets. A critical review of past sample preparation, analytical procedures and QA/QC should be conducted prior to any additional drilling on the Property. This would entail the selective resampling of drill core, sample pulps and rejects from previous drilling with the purpose of confirming that the amount of gold in the samples is not being under-reported and accurately being measured.

A follow-up program of extended IP/resistivity surveying, shallow closely-spaced oriented-core diamond drilling, additional stripping, trenching, and bulk sampling is recommended for the Property. This should be followed by detailed modelling of the results in preparation for a resource estimation following the standards of the NI 43-101 to be completed for both the near surface No. 1 Vein, D vein, Allied and Planet syentites mineralized areas. It is also recommended that Northstar make a concerted effort to further consolidate and expand the Miller Gold Property through the acquisition of adjacent and proximal mineral claims with historic gold workings and mineralized prospects.

2.0 INTRODUCTION

Ronacher McKenzie Geoscience Inc. ("Ronacher McKenzie") of Sudbury, Ontario, Canada was contracted by Northstar Gold Corp. ("Northstar") of New Liskeard, Ontario, Canada to complete an Independent 43-101 Technical Report ("Report") on the Miller Gold Property (the “Property”) during the spring of 2018. The report was prepared in accordance with the National Instrument 43-101 – Standards of Disclosure for Mineral Projects (“NI 43-101”).

The purpose of the Report is to support Northstar in a Qualifying Transaction (QT) to go public. Another purpose is to summarize the exploration completed on the Property to date and to provide recommendations to advance the Property so that Northstar and potential investors can make informed decisions. The focus of the Report is on the diamond drilling and bulk sampling undertaken on the Property since the summer of 2014.

The sources of information for this Report include exploration and tenure data provided by Northstar, Northstar’s joint-venture partner in 2015, Oban Mining Corporation (“Oban”; now Osisko Mining Inc.), publicly available data, information collected during the site visits and references cited in section 19.0. In particular, this Report draws upon 3 Technical Reports completed since 2015: Boyd and Selway (2015; "Independent Technical Report Miller Gold Property Kirkland Lake Ontario" on behalf of Oban Mining Corporation and Northstar), Hart (2015; "Technical Report on the Miller Property, Boston, Pacaud, McElroy and Catherine townships Ontario" for Oban Mining Corporation) and Boyd (2017; "Technical Report Miller Gold Property Kirkland Lake Ontario" prepared for Northstar).

The first named report was filed and is available on SEDAR for Oban Mining Corporation dated April 17, 2015. A site visit was conducted by Trevor Boyd, P.Geo., an Independent Qualified Person in accordance with the NI 43-101, on March 27, 2015 with the purpose of checking locations of claim posts using GPS, focusing on the newly staked claims in January 2015 and choosing independent site-visit drill core samples to be analyzed at a third laboratory.

Another site visit was completed to the Miller Gold Property by Trevor Boyd from October 28 to November 18, 2016, to referee, monitor and aid in guiding the surface and bulk sampling program on the Property. Trevor Boyd, the author of this Report, visited the Camflo Mill to monitor and sample the delivered bulk sample during December 1 to 3. The process and results of the bulk sampling program were reviewed in a Technical Report (Boyd 2017).

Another site visit was completed by Elisabeth Ronacher, P.Geo., an Independent Qualified Person in accordance with the NI 43-101, on June 7, 2018. Ms. Ronacher reviewed several drill holes from the 2015 drilling program, collected check samples from the 2015 drill core, visited the areas of the Planet and Allied Syenites and the trenches completed in 2016 and collected grab samples from the trenches. The assay results of the drill core samples generally correspond with the original values considering the nuggety nature of the mineralization. The grab sample results indicate that gold occurs in the area of the Planet Syenite and in the area of the trenches.

2.1 Terminology

Activation Laboratories Inc. ("Actlabs"): Analytical laboratory firm with multiple locations including Thunder Bay and Ancaster, Ontario

AGAT Laboratories Inc. ("AGAT"): Analytical laboratory firm with multiple locations including Mississauga, Ontario.

Fire Assay: Fire assay is the method of choice for gold analysis. The procedure involves mixing an aliquot of the sample (e.g., 30 g or 50 g) with a flux agent (e.g., sodium borate, PbO) and a "collector" such as silver. The mixture is heated to ~1150 °C. The lead and silver settle to the bottom of the melt and the silver scavenges gold as it sinks. The lead and silver button are cupelled at 950 °C. The silver bead (which also contains gold) is dissolved and analyzed by atomic absorption or other techniques (http://actlabs.com).

Inquartation: Process whereupon the bead of silver or gold obtained by cupellation is squeezed between pliers, or flattened by a hammer on a clean anvil, to loosen the bone ash adhering to its lower surface, and is then cleaned by a brush of wires or stiff bristles

ICP-MS: Inductively Coupled Plasma - Mass Spectrometer: An instrument capable of determining the concentrations of 70+ elements simultaneously by measuring the mass of ions generated by an argon gas plasma heated to 10,000°K and passing through a magnetic quadrupole to the detector. Capable of ultra-low detection limits (ppb to ppt) with very wide linear ranges (up to 7 orders of magnitude) (Acme Analytical Laboratories Ltd: www.acmelab.com).

LIDAR: Airborne to Satellite based surveying method that measures distance to a target by illuminating the target with pulsed laser light and measuring the reflected pulses with a sensor. Differences in laser return times and wavelengths can then be used to make digital 3-D representations of the target.

Merrill-Crowe Gold Mill ("Merrill-Crowe"): The Merrill–Crowe Process is a gold milling technique for removing gold from a cyanide solution. The solution is separated from the ore by methods such as filtration (clarification) and decantation. Oxygen is then removed by passing the solution through a vacuum de-aeration column. Zinc dust is added to the clarified, de-aerated solution which precipitates the gold; zinc having a higher affinity or the cyanide ion than gold. The gold precipitate (mixed with zinc dust) is then filtered out of the solution, and the zinc dust and gold are mixed with sulfuric acid to dissolve the zinc. The solution is filtered, and the remaining solids are smelted to a gold doré bar. The basic process was discovered and patented by Charles Washington Merrill around 1900, and later refined by Thomas B. Crowe, working for the Merrill Company.

Metallic Screen Analysis: A representative split of the sample (i.e. 250 to 2,000 g) is sieved at 100 mesh (149 am) with fire assays performed on the entire +100 mesh and 2 splits on the -100 mesh fraction. The total amount of sample and the +100 mesh and -100 mesh fraction is weighed for assay reconciliation.

MNDM: Ontario Ministry of Northern Development and Mines

NSR: Net smelter return.

QA/QC: Quality Assurance/ Quality Control

2.2 Units

The Metric System is the primary system of measure and length used in this Report and is generally expressed in kilometres (km), metres (m) and centimetres (cm); volume is expressed as cubic metres (m3), mass expressed as metric tonnes (t), area as hectares (ha), and gold and silver concentrations as grams per tonne (g/t). Conversions from the Metric System to the Imperial System are provided below and quoted where practical. Many of the geologic publications and more recent documents now use the Metric System but older documents almost exclusively refer to the Imperial System.

Conversion factors utilized in this report include:

- 1 troy ounce/ton = 34.285714 grams/tonne
- 1 gram/tonne = 0.029167 troy ounces/ton
- 1 troy ounce = 31.103477 grams

- 1 gram = 0.032151 troy ounces

The term gram/tonne or g/t is expressed as "gram per tonne" where 1 gram/tonne = 1 ppm (part per million) = 1000 ppb (part per billion). The mineral industry accepted terms Au g/t and g/t Au are substituted for "grams gold per metric tonne" or "g Au/t". Other abbreviations include ppb = parts per billion; ppm = parts per million; oz/t = troy ounce per short ton; Moz = million ounces; Mt = million tonne; t = tonne (1000 kilograms); SG = specific gravity; lb/t = pound/ton; and, st = short ton (2000 pounds).

Dollars are expressed in Canadian currency (CAD$) unless otherwise noted. Gold (Au) and silver (Ag) are stated in US$ per troy ounce (US$/oz). Where quoted, Universal Transverse Mercator (UTM) coordinates are provided in the datum of Canada, NAD83, Zone 17U North.

2.3 Ronacher McKenzie Geoscience Qualifications

Ronacher McKenzie is a geosciences consulting company based in Sudbury and Toronto, Ontario, Canada providing a wide range of geological and geophysical services to the mineral industry. Ronacher McKenzie's professionals have international experience in a variety of disciplines with services that include:

- Exploration Project Generation, Design and Management
- Data Compilation and Exploration Target Generation
- Property Evaluation and Due Diligence Studies
- Independent Technical Reports (43-101) / Competent Person Reports
- Mineral Resource / Reserve Modelling, Estimation, Audit; Conditional Simulation
- 3D Geological Modelling, Visualization and Database Management

In addition, Ronacher McKenzie has access to the most current software for data management, interpretation and viewing, manipulation and target generation.

The primary Qualified Person and author for this Report is Trevor Boyd, Ph.D., P.Geo., affiliate for Ronacher McKenzie and a geologist in good standing with the Association of Professional Geoscientists of Ontario (APGO #1023) and Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (#3312). Trevor Boyd has over 30 years of experience working as an economic geologist. Certificate of Qualifications is provided in Appendix 1.

Another author of this Report is Elisabeth Ronacher Ph.D., P.Geo. Elisabeth Ronacher is the co-founder of and Principal Geologist to Ronacher McKenzie Geoscience and a geologist in good standing of the Association of Professional Geoscientists of Ontario (APGO #1476). Dr. Ronacher has worked as a geologist since 1997 with academia and industry on a variety of exploration properties such as Au, Cu, bas-metal, Cu-Ni PGE and U. Dr. Ronacher has written numerous Independent Technical Reports (NI 43-101) on a variety of deposit types. Dr. Ronacher has visited the Property.

3.0 RELIANCE ON OTHER EXPERTS

Ronacher McKenzie relied on information provided by Northstar regarding ownership of the property. Ronacher McKenzie reviewed the status of mineral claims on the website of the Government of Ontario, Ministry of Northern Development and Mines on June 22, 2018.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 Location

The Property is located in the Larder Lake Mining Division of Northeastern Ontario 18 km south of Kirkland Lake and 5 km east of the village of Boston Creek at approximately 582800E and 5317700N, UTM Zone 17N NAD83 (Figure 4-1). The Property is located within the Catharine, Pacaud, Boston and McElroy Townships.

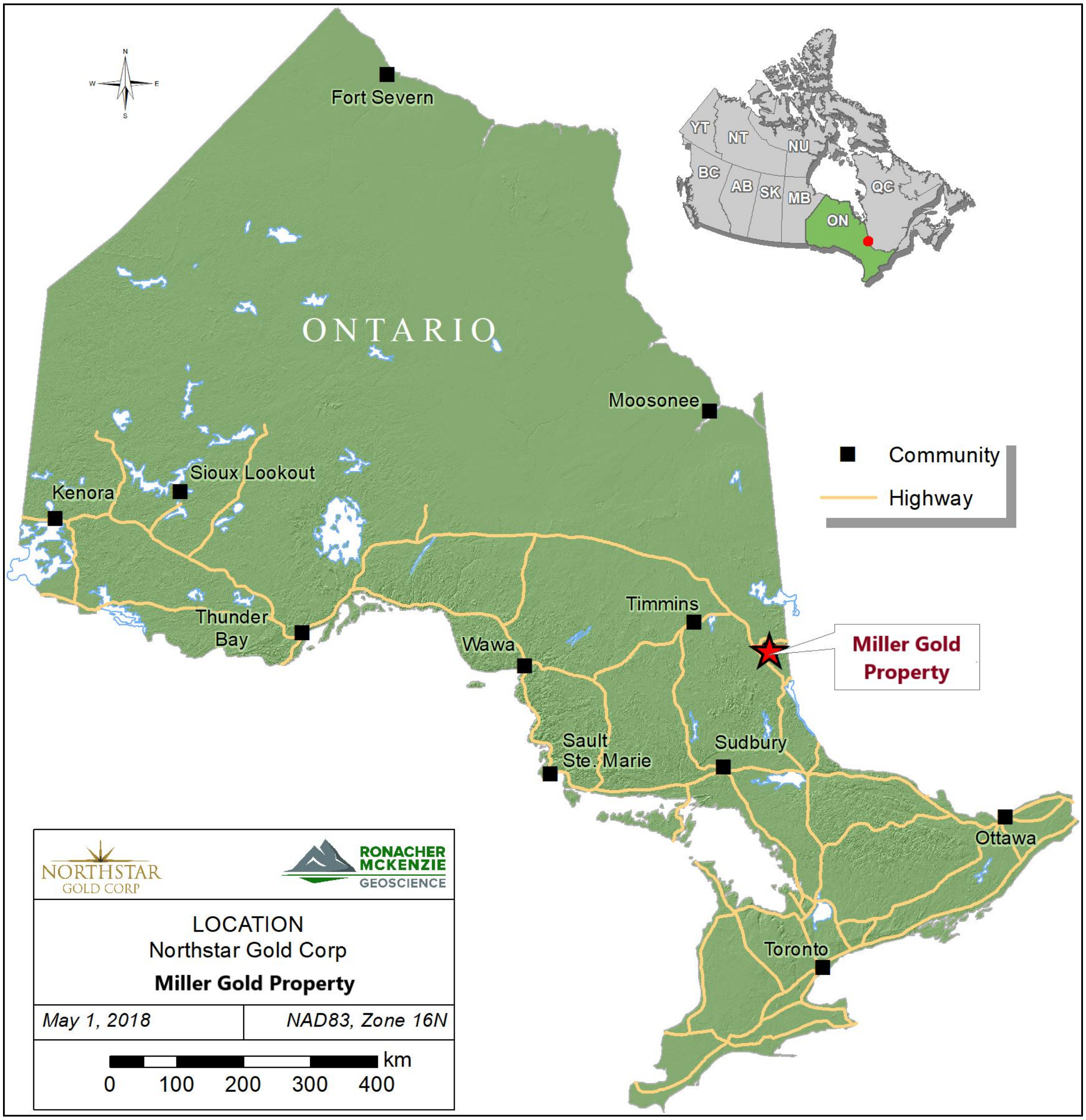


Figure 4-1 Location of the Miller Gold Property in northeastern Ontario.

4.2 Description and Ownership

The Property consists of 84 contiguous, unpatented cell claims in the Larder Lake Mining Division within the Catharine, Pacaud, Boston and McElroy Townships as shown on Figure 4-2 and listed in Table 4-1. Thirty five of the 84 cells are boundary cells and 49 are standard cells. The approximate area of the claims is 1,100 ha. All claims cells are 100% owned by Northstar of 17 Wellington Street, New Liskeard, Ontario.

In addition, the Company also holds two Freehold Patents L17916 (PIN 61250-0076, Parcel 323SST) and L17917 (PIN 61250-0075, Parcel 322SST) with both mining and surface rights in the northwest corner of Catharine Township. These patents are contiguous with the rest of the Property (Figure 4-2, Table 4-2). Each patent has an area of 15.83 ha for a total of 31.67 ha.

Surface rights for the mining claims are owned by the Crown, except for 14 SRO patents of which 12 are owned by third parties (Table 4-2). Northstar has legal access to the Miller Gold Property, but it is professional courtesy to notify surface rights owners before commencing an exploration program.

Table 4-1 Miller Gold Property mineral claims.

Claim#	Type	Status	Anniversary Date	Owner	Area /# of Cells
104073	Claim	Active	2023-07-02	NORTHSTAR GOLD CORP.	1
104178	Claim	Active	2023-06-05	NORTHSTAR GOLD CORP	1
104774	Claim	Active	2023-03-24	NORTHSTAR GOLD CORP	1
105244	Claim	Active	2023-07-23	NORTHSTAR GOLD CORP	1
112751	Claim	Active	2023-01-19	NORTHSTAR GOLD CORP	1
118704	Claim	Active	2023-11-09	NORTHSTAR GOLD CORP	1
119853	Claim	Active	2023-03-24	NORTHSTAR GOLD CORP	1
121833	Claim	Active	2023-12-27	NORTHSTAR GOLD CORP	1
122108	Claim	Active	2023-12-24	NORTHSTAR GOLD CORP	1
122109	Claim	Active	2023-01-21	NORTHSTAR GOLD CORP	1
122619	Claim	Active	2023-12-27	NORTHSTAR GOLD CORP	1
127907	Claim	Active	2023-03-19	NORTHSTAR GOLD CORP	1
133734	Claim	Active	2023-06-28	NORTHSTAR GOLD CORP	1
134113	Claim	Active	2023-03-05	NORTHSTAR GOLD CORP	1
134971	Claim	Active	2023-06-28	NORTHSTAR GOLD CORP	1
138975	Claim	Active	2023-06-26	NORTHSTAR GOLD CORP	1
139375	Claim	Active	2023-03-19	NORTHSTAR GOLD CORP	1
139376	Claim	Active	2023-03-19	NORTHSTAR GOLD CORP	1

Claim#	Type	Status	Anniversary Date	Owner	Area /# of Cells
143104	Claim	Active	2023-06-28	NORTHSTAR GOLD CORP	1
150066	Claim	Active	2023-01-21	NORTHSTAR GOLD CORP	1
155915	Claim	Active	2023-03-19	NORTHSTAR GOLD CORP	1
156551	Claim	Active	2023-12-24	NORTHSTAR GOLD CORP	1
157230	Claim	Active	2023-06-28	NORTHSTAR GOLD CORP	1
158346	Claim	Active	2023-01-19	NORTHSTAR GOLD CORP	1
160446	Claim	Active	2023-11-09	NORTHSTAR GOLD CORP	1
167008	Claim	Active	2023-11-09	NORTHSTAR GOLD CORP	1
172394	Claim	Active	2023-03-19	NORTHSTAR GOLD CORP	1
172395	Claim	Active	2023-03-19	NORTHSTAR GOLD CORP	1
173038	Claim	Active	2023-06-26	NORTHSTAR GOLD CORP	1
179205	Claim	Active	2023-07-02	NORTHSTAR GOLD CORP	1
179206	Claim	Active	2023-07-02	NORTHSTAR GOLD CORP	1
179920	Claim	Active	2023-10-16	NORTHSTAR GOLD CORP	1
180581	Claim	Active	2023-12-27	NORTHSTAR GOLD CORP	1
182616	Claim	Active	2023-11-09	NORTHSTAR GOLD CORP	1
182905	Claim	Active	2023-11-09	NORTHSTAR GOLD CORP	1
185339	Claim	Active	2023-06-26	NORTHSTAR GOLD CORP	1
186887	Claim	Active	2023-01-10	NORTHSTAR GOLD CORP	1
187605	Claim	Active	2023-06-28	NORTHSTAR GOLD CORP	1
189691	Claim	Active	2023-06-28	NORTHSTAR GOLD CORP	1
190247	Claim	Active	2023-06-26	NORTHSTAR GOLD CORP	1
190313	Claim	Active	2023-03-11	NORTHSTAR GOLD CORP	1
191084	Claim	Active	2023-06-26	NORTHSTAR GOLD CORP	1
199810	Claim	Active	2023-06-28	NORTHSTAR GOLD CORP	1
203783	Claim	Active	2023-06-26	NORTHSTAR GOLD CORP	1
215912	Claim	Active	2023-12-27	NORTHSTAR GOLD CORP	1
217965	Claim	Active	2023-07-23	NORTHSTAR GOLD CORP	1

Claim#	Type	Status	Anniversary Date	Owner	Area /# of Cells
225926	Claim	Active	2023-12-24	NORTHSTAR GOLD CORP	1
228645	Claim	Active	2023-03-24	NORTHSTAR GOLD CORP	1
237731	Claim	Active	2023-06-05	NORTHSTAR GOLD CORP	1
238342	Claim	Active	2023-06-28	NORTHSTAR GOLD CORP	1
245624	Claim	Active	2023-01-10	NORTHSTAR GOLD CORP	1
245625	Claim	Active	2023-01-10	NORTHSTAR GOLD CORP	1
247074	Claim	Active	2023-11-09	NORTHSTAR GOLD CORP	1
253709	Claim	Active	2023-01-10	NORTHSTAR GOLD CORP	1
257030	Claim	Active	2023-06-28	NORTHSTAR GOLD CORP	1
269762	Claim	Active	2023-12-27	NORTHSTAR GOLD CORP	1
281132	Claim	Active	2023-06-05	NORTHSTAR GOLD CORP	1
282868	Claim	Active	2023-01-10	NORTHSTAR GOLD CORP	1
282869	Claim	Active	2023-01-10	NORTHSTAR GOLD CORP	1
284435	Claim	Active	2023-07-23	NORTHSTAR GOLD CORP	1
284436	Claim	Active	2023-07-23	NORTHSTAR GOLD CORP	1
287210	Claim	Active	2023-03-19	NORTHSTAR GOLD CORP	1
292540	Claim	Active	2023-12-24	NORTHSTAR GOLD CORP	1
293542	Claim	Active	2023-06-28	NORTHSTAR GOLD CORP	1
302165	Claim	Active	2023-01-21	NORTHSTAR GOLD CORP	1
302988	Claim	Active	2023-06-28	NORTHSTAR GOLD CORP	1
306254	Claim	Active	2023-03-24	NORTHSTAR GOLD CORP	1
307952	Claim	Active	2023-03-19	NORTHSTAR GOLD CORP	1
310330	Claim	Active	2023-06-28	NORTHSTAR GOLD CORP	1
311795	Claim	Active	2023-06-26	NORTHSTAR GOLD CORP	1
313789	Claim	Active	2023-06-26	NORTHSTAR GOLD CORP	1
321173	Claim	Active	2023-11-09	NORTHSTAR GOLD CORP	1
325119	Claim	Active	2023-03-20	NORTHSTAR GOLD CORP	1
326479	Claim	Active	2023-06-26	NORTHSTAR GOLD	1

Claim#	Type	Status	Anniversary Date	Owner	Area /# of Cells
				CORP	
326480	Claim	Active	2023-06-26	NORTHSTAR GOLD CORP	1
326481	Claim	Active	2023-06-26	NORTHSTAR GOLD CORP	1
330375	Claim	Active	2023-03-20	NORTHSTAR GOLD CORP	1
335177	Claim	Active	2023-06-26	NORTHSTAR GOLD CORP	1
341053	Claim	Active	2023-01-10	NORTHSTAR GOLD CORP	1
341054	Claim	Active	2023-01-10	NORTHSTAR GOLD CORP	1
342088	Claim	Active	2023-12-27	NORTHSTAR GOLD CORP	1
344094	Claim	Active	2023-11-09	NORTHSTAR GOLD CORP	1
516903	Claim	Active	2020-04-16	NORTHSTAR GOLD CORP	1
516904	Claim	Active	2020-04-16	NORTHSTAR GOLD CORP	1

Table 4-2 Miller Gold Property patents. Only patents L17916 and L17917 are owned by Northstar.

Township	Patent	Rights	PIN	Relationship to MRO	Status of PIN
Catharine	L17917	SRO, MRO	61250-0075		active
Catharine	L17916	SRO, MRO	61250-0076		active
McElroy	L5097	SRO	61245-0027	overlaps with mining claims 306254, 112751, 190247,326480	active
McElroy	L5098	SRO	61245-0026	overlaps with mining claims 104774, 172395, 306254, 112751	closed
McElroy	L5128	SRO	61245-0111	overlaps with mining claim 155915, 307952, 325119, 228645	active
Boston	L4906	SRO	61244-0121	overlaps with mining claims 118581, 342088, 122619, 215912	active
Boston	L4737	SRO	61244-0118	overlaps with mining claims 122619, 215912, 269762, 121833	active
Boston	L5025	SRO	61244-0116	overlaps with mining claims 215912, 330375, 121833, 281132	active
Pacaud	L17987	SRO	61251-0047	overlaps with mining claims 104073, 269762, 179206, 179205	active
Pacaud	L17988	SRO	61251-0048	overlaps with mining claims 170206, 179205, 122108, 156551	active
Pacaud	L52238	SRO	61251-0053	overlaps with mining claims 167008, 182616, 160446, 344094	active
Pacaud	L52237	SRO	61251-0055	overlaps with mining claims 160446, 344094, 182905, 321173	active

Township	Patent	Rights	PIN	Relationship to MRO	Status of PIN
Pacaud	L52235	SRO	61251-0054	overlaps with mining claims 118704, 160446, 247074, 182905	active
Catharine	L11175	SRO	61250-0079	overlaps with mining claims 302988, 190313	active

MRO = mineral rights only, SRO = surface rights only
Northstar owns MRO and SRO for Patents L17917 and L17916

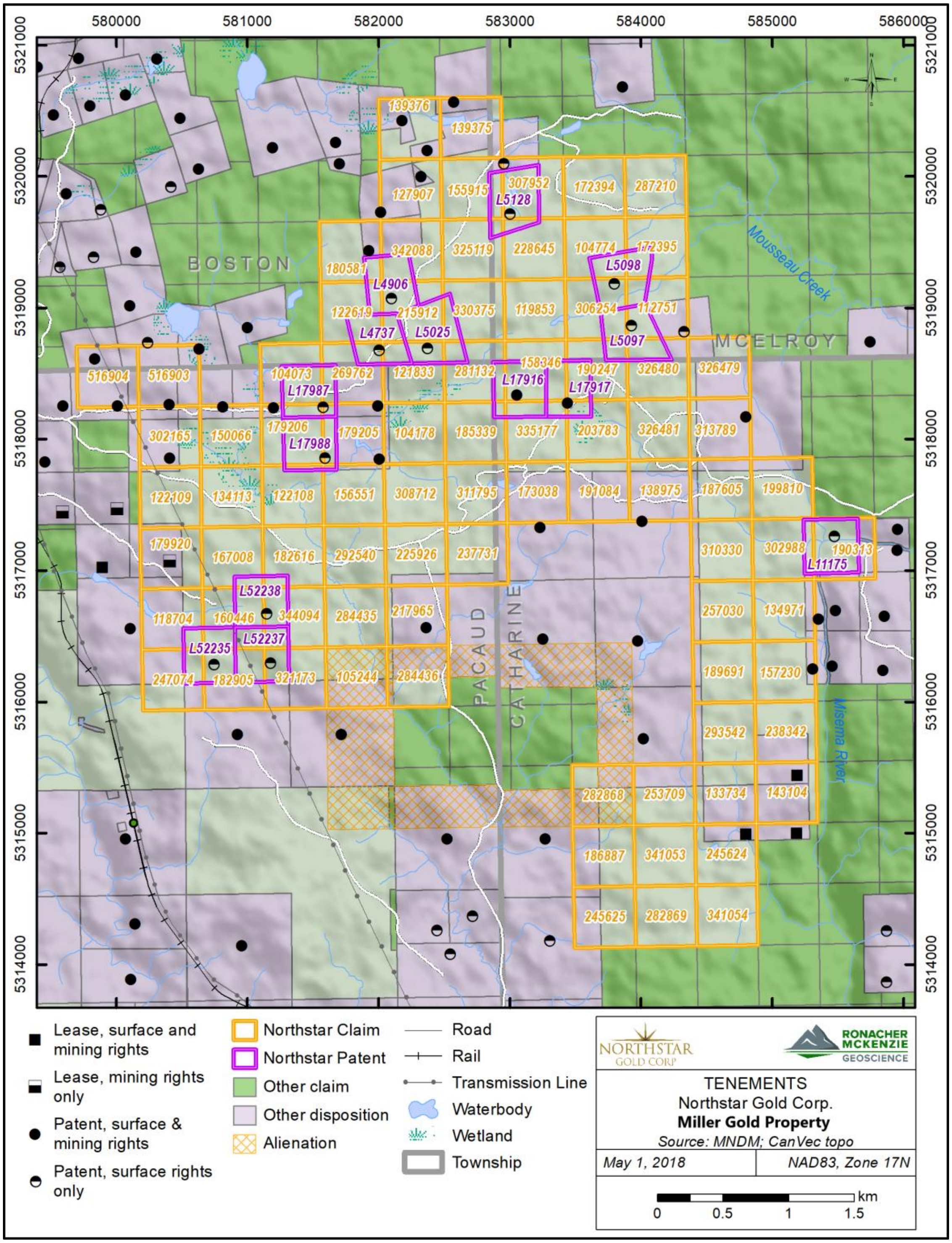


Figure 4-2 Claim map of Miller Gold Property, Ontario.

4.3 Oban-Northstar Option

On February 22, 2015, a joint venture agreement (Agreement) was signed between Oban and Northstar which allowed Oban to acquire up to 70% interest on the Property from Northstar. Under the terms of the Agreement, the Company could earn up to a 51% interest in the Property by subscribing for $300,000 in common shares of Northstar at $0.10 per share and making payments and incurring expenditures of $3 million over three years. Oban could earn a further 9% interest by making payments and incurring expenditures equal to $2 million by the fifth anniversary, and a further 10% by the sixth anniversary for payments and expenditures equal to a further $3.3 million or, at the option of Oban, $2 million and a commitment to fund the Property through to completion of a pre-feasibility study. The Joint venture agreement was terminated in December 2015 and Oban earned no interest in the Property.

4.4 Obligations

As part of Ontario's work to modernize the Mining Act, a transition has been completed to a 24/7 Mining Lands Administration System (MLAS) and to online mining claim registration and recording which requires the adjustment of administrative fees related to registering new cell claims as well as other associated mining lands transactions. New and adjusted fees were introduced on April 10th, 2018 concurrent with the launch of MLAS. Key among these is the establishment of a new fee required to register cell claims in MLAS. In the new system, registering a mining claim will be completed by on-line payment of a single registration fee of $50 per cell claim unit.

In Ontario to retain a mining claim, companies must still submit an assessment work file to the Ontario Ministry of Energy, Northern Development and Mines (MNDM) Geoscience Assessment Office. For MLAS annual assessment work requirements will remain largely unchanged, despite new cell sizes being 11 to 50 per cent larger than the size of current claim units. Assessment work requirements are $400 per cell claim and $200 per boundary claim or any claim that is encumbered. Unlike some other jurisdictions, there will be no other fee requirement such as an annual claim renewal fee, or a graduated system for rising fees and assessment work.

Property tax is required to be paid to the Ontario Ministry of Finance on each patent. In 2018, the property tax for Northstar's L17917 (Parcel 322 SST) was $63.33. The property tax for L17916 (Parcel 323 SST) was also $63.33. The property taxes were paid and are in good standing.

The Miller Gold Property is subject to 3 royalties:

1. Ashley Gold Mines Royalty: There is a 0.25% Net Smelter Return (NSR) with an option to buy out for $250,000 owed to Ashley Gold Mines on the Com Copper mine which represents 16 hectares covering the original legacy claim (4246848) in Pacaud Township. The remaining original claims representing 240 hectares (legacy claims 4201240, 4224525, 4201239, 4217728) in Catherine township also carry a 2% NSR owed to Ashley Gold Mines with a 1% buy back for $1,000,000 and a right of first refusal on the remaining 1% NSR.

2. Franco-Nevada Corporation Royalty: There is a 3% NSR belonging to Franco-Nevada Corporation carried over in the deal on the 32 hectare Campbell Property in the northeast corner of Catherine township (patents L17916 and L17917).

3. Lake Shore Gold Royalty: There is a 2% NSR owed to Lake Shore Gold on the Shoebox Property (legacy claim 4215970 with 6 units) representing 96 hectares with a 1% buy back for $1,000,000 and a right of first refusal on the remaining 1% NSR. Other than the above royalties, there are no other agreements on the Miller Gold Property.

In order to undertake certain exploration activities on mining claims, leases or licenses of occupation, it is required to submit to the MNDM an Exploration Plan and Permit application. These exploration activities include ground geophysical surveys, mechanized drilling, surface stripping, line cutting and pitting and trenching. Northstar currently holds an exploration permit for stripping and trenching (PR-16-10887) valid until July 19, 2019. The Company presently does not hold an Exploration Permit for diamond drilling.

Surface rights owners must be notified when applying for an exploration permit. Aboriginal communities potentially affected by the exploration permit activities will be consulted and have an opportunity to provide comments and feedback before a decision is made on the permit approval.

There are no environmental liabilities on the mineral claims as the environmental liability of mineral claims is the responsibility of the crown. In the future, if the mineral claims are converted to leases all historic shafts on the Property should be capped. Currently, 2 historic shafts near the main road have been capped. Even though the Property is a brownfields site, there are no visible tailings on the surface. The Qualified Person is not aware of any royalties, back-in rights, payments, or other agreements and encumbrances to which the property is subject other than the ones listed above. To the best of Author's knowledge, there are no significant factors and risks that may affect access, title, or the right or ability to perform work on the property.

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

5.1 Access

The most convenient access to the Miller Gold Property is from Kirkland Lake via Highway 66, then south on Highway 112, then turning east on local road 564 to Boston Creek, then further east along a logging road for about 4 km to the property. Depending upon the weather the logging road may be at times be only 4-wheel drivable and have load restrictions on heavy vehicles. During the winter the road is ploughed only to Boston Creek.

5.2 Climate and Vegetation

The climate normal for 1971-2000 from Environment Canada for Kirkland Lake (closest weather station to the Property) indicate that the daily average temperature ranges from -18ºC in January to 17ºC in July. The average monthly accumulation of rain is around 95 mm from June to September. The average monthly accumulation of snow is 65 cm from December to January.

Drilling can be conducted year round except for spring thaw from mid-March to May. Geological mapping and outcrop sampling can be conducted from May to November when there is no snow on the ground.

Vegetation varies from black spruce and alders to jack pine, black spruce, birch, and poplar in well drained areas. Wildlife on the property may consist of moose, black bear, beaver, rabbit and spruce grouse.

5.3 Physiography

The topography of the Property consists of moderate to low relief with elevations ranging from 300 to 330 metres above sea level. Most of the Property is wooded with a number of creeks and swampy areas throughout.

5.4 Infrastructure and Local Resources

The population of the nearest town, Kirkland Lake, is 8,483 people (Statistics Canada, www.statcan.gc.ca). Kirkland Lake is an economically vibrant mining town and a good source for labour, exploration supplies and general services. The area is well serviced by highways, a railway line and hydro-electric power lines which extend to within 4 kilometres of the Property at Boston Creek. Figure 5-1 shows the location of the Miller Gold Property with respect to local infrastructure.

The Miller Gold Property is in the exploration stage and does not yet hold a resource/reserve estimate or a prefeasibility study; therefore, discussion on the sufficiency of surface rights for mining operations, potential tailings storage areas, potential waste disposal areas, heap pad leach pad areas and potential processing tailings storage area for mining operations is not relevant.

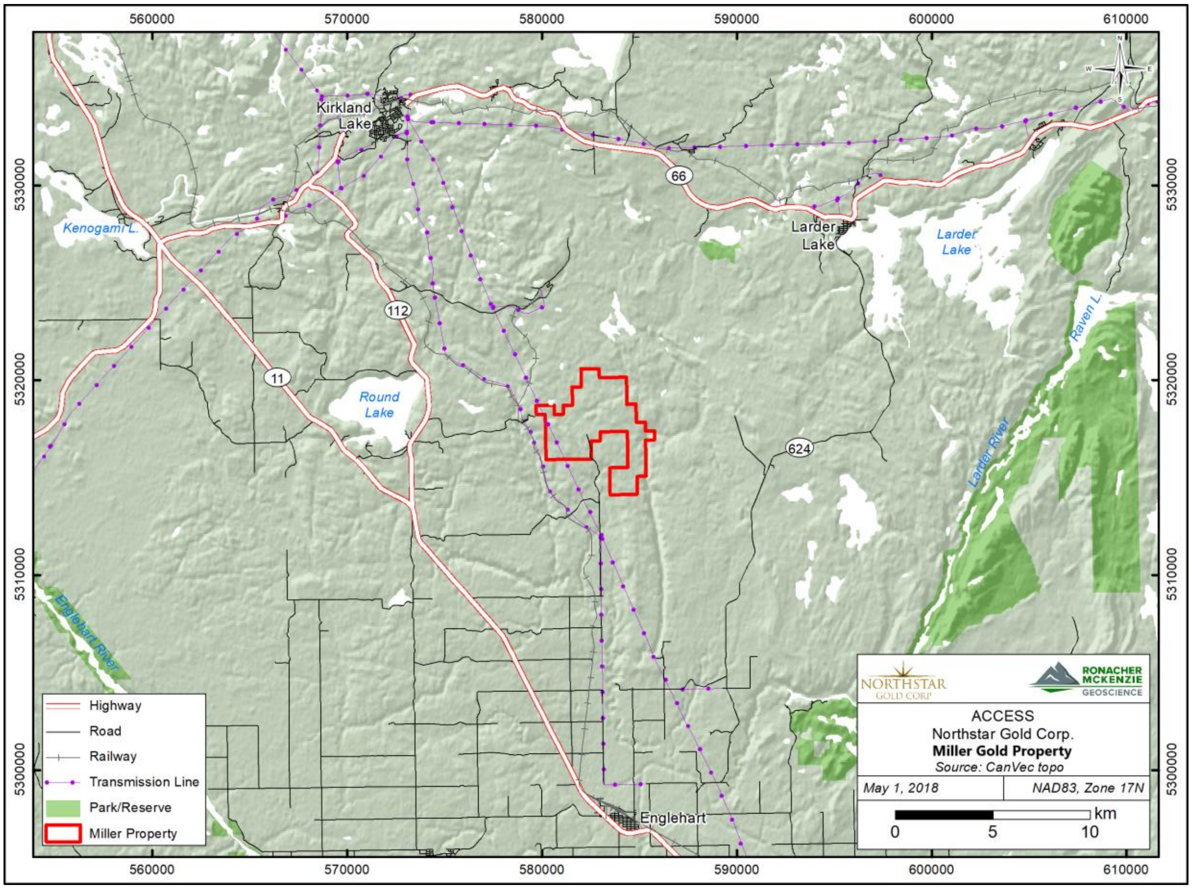


Figure 5-1 Access to and local infrastructure around the Miller Gold Property.

6.0 HISTORY

The mining history of the Miller Gold Property dates to the early 1900s with the discovery of gold and development of the Miller – Independence Mine (French 1988). Official reported production is 58.5 ounces Au and 70 ounces Ag from a 31 ton bulk sample of recovery grade of 1.89 oz/ton Au; however, based upon the mine workings and amount of what appears to be waste rock identified throughout the Property the true production may have been considerably higher.

Besides the original development work, the only other significant exploration completed was during 1987-88 in which Nortek Exploration completed 37 diamond drill holes and estimated a grade and tonnage for the Miller-Independence deposit at 808,000 tons at 0.335 oz/ton Au. **This number is a historical estimate, not compliant to 43-101 guidelines, provided for information only and is not to be relied upon.** The relevance of this historical estimate is as a rough guideline of possible resource on the Property. The key assumptions, parameters and methods to prepare this historical estimate are not known. The historical estimate does not use categories set out in sections 1.2 and 1.3 NI 43-101. A full assessment report is filed with MNDM by G.B. French (1988) in which this number is reported. This historical estimate can be updated to a current mineral resource by additional drilling. The Qualified Person has not done sufficient work to classify the historical estimate as current mineral resource and the issuer is not treating this historical estimate as a current mineral resource.

The recorded exploration and development history based upon publication and assessment report review is listed in Table 6-1.

Table 6-1 Summary of historical work originally compiled in Hart 2015, revised and updated for this report.

Year	Company	Location	Description
1915	Miller-Independence Mining Ltd	Miller Independence	First discovery of gold in vein (No.1 Vein), which cut across the property in a northwest-southeast direction for at least half of a mile. Gold and tellurides occur all along the entire length.
1916	Miller-Independence Mining Ltd	Miller Independence	Quartz vein with free gold and sulfides discovered near the first discovery. A shaft was built near the original discovery. A flat, faulted vein estimated to contain 1,800 tons of mineralized material was discovered. The gold is associated with galena and copper telluride.
1917	Miller-Independence Mining Ltd	Miller Independence	Another shaft was sunk on a second vein, which was thought to be related to the first vein discovered in 1916. A feldspar porphyry dyke cuts through the shaft.
1917	Miller-Independence Mining Ltd	Miller Independence	Another vein was discovered - it was 6 inches wide at surface and widens up to 10 inches at depth. The vein was alongside a porphyry dyke, both of which carried visible gold and tellurides.
1918-1920	Miller-Independence Mining Ltd	Miller Independence	A total of 6 shafts were sunk on the property. Shaft A was 515 feet and did not cut any vein. Shaft B cut a vein at 21 feet (vertical depth). A 174 foot drift was developed south of the vein. The Incline Shaft was 141 feet with east and west drifts constructed. Shaft C was a total of 110 feet. It crosscut a vein and a 30 inch wide mud seam at 44 and 62 feet, respectively. Shaft D had a total depth of 500 feet and crosscut Vein D. North of Vein D are 4 parallel fractures carrying gold grades. At the 500-foot level, several iron and copper sulphides rich stringers were cut. The Jumbo Shaft was a 14 foot deep pit, which followed a 30 inch wide vein. The Jumbo Vein is 400 feet south of Vein D. Both Vein D and Jumbo Vein dip south and strike about 30 degrees north of east. In 1918, 58.0 oz Au and 70.0 oz Ag from a 31 ton bulk sample of 1.89 oz/ton Au recovery grade was produced.

Year	Company	Location	Description
1920s	Local Prospector – Gauthier	Planet Syenite	Gold was discovered at the Planet Syenite.
1934	Miller-Independence Mining Ltd	Miller Independence	The mine re-opened and further development was conducted at Shaft C - 185 feet of cross cuts, 1,049 ft of drifting and deepening to 150 feet. 1,000 ft of diamond drilling was also completed.
1937-1938	Planet Gold Mines Ltd	Planet Syenite	Quartz veins and stringers with the presence of visible gold were observed to crosscut the syenite porphyry. Exploration work included extensive trenching, test pitting and diamond drilling (Tod 1937).
1938	Howey Gold Mines	Planet Syenite	Howey Gold Mines optioned the Planet property from Planet Gold Mines Ltd. Extensive trenching was performed on the Planet syenite and a 16 ton bulk sample was taken, the results are unknown. A 3,668 lb sample was also taken and it graded 0.075 oz/ton. Recovery was estimated to be 87%.
1939	Howey Gold Mines	Planet Syenite	A 3,044 lb bulk sample was taken (probably from the small prospect shaft). The table test indicted a total gold content of 0.096 oz/ton. (Crosscombe 1941)
1946	Lebon Gold Mines	Planet Syenite	Diamond drill program and surface trenching was performed, results are not available.
1960	Turzone Exploration Ltd	2 km ESE Allied	Geological survey and exploration report.
1960	Turzone Exploration Ltd	2 km ESE Allied	Drilling program consisting of 14 holes, totaling 437.38 m
1961	Fedora	Allied	Diamond drill program consisting of 2 holes, totaling 97.2 m
1961	Fidelity MNG Investments Ltd	2 km SW Allied	Ground MAG, EM and IP survey covered 0.1 km^2
1961	Mirado Nickel Mines Ltd	1.5 km E Meilleur	An EM survey was carried out, covering 19.6 mile picket lines and a 2.3 mile base line.
1961-1963	Tagliamonte		3 diamond drill holes were drilled to test the presence of quartz veins. No assays were reported.
1962	A. Bargnesi	1.5 km W	Diamond drill program consisting of 2 holes, totaling 123.5 m
1962	R. Rinaldi	1.5 km SW	Drilling program consisting of 3 holes, totaling 98.7 m
1962	Fidelity MNG Investments Ltd	2 km SW Allied	Geological mapping, prospecting, trenching, EM, IP and MAG surveys, covering 0.1 km^2
1963	Ontario Geological Survey	Catharine and Marter Township	A. Grant from the Ontario Geological Survey mapped Catharine and Marter townships at a scale of 1 inch to ¼ mile. M2043.
1969	A. Bargnesi	1.5 km W	Diamond drill program consisting of 1 hole (#1)
1970	Moncrieff Uranium	E Allied	Airborne EM survey and MAG survey, (Logee 1970), covering 87 km^2
1974	Diversified Mines Ltd	Planet	3 maps were prepared, 4 trenches totaling 690 ft were blasted, and 216 samples collected and assayed. The assays yielded low gold values and it was recommended that no additional funds should be committed to this property. (Watts, Griffins and McOuat Limited 1974)
1982	Alexander H. Perron	Allied	Ground MAG and VLF-EM survey (Greer 1982), covered 1 km^2

Year	Company	Location	Description
1982	J. Paiement	Allied	A MAG survey was carried out; 13.3 miles of line were cut and surveyed (Chartre 1982).
1982	398737 Ontario Ltd	Planet	Drilled 3 rows of 3.5" diameter rotary drill holes at 10-foot centres across the intrusive body in an east-west direction and a similar drill section at right angles to crosscut the body in a north-south orientation for a total of 291 holes. The cuttings were collected, assayed for gold and milled for total gold recovery. The overall grade of gold in the deposit was 0.14 g/t Au. A 10 kg composite of diamond drill core from the Planet Syenite was submitted for testing by flotation, gravity and cyanidation in 1982 at Lakefield Research by 398737 Ontario Limited (Seeber, 1982). Results of the gravity separate on a -28 mesh assayed 1 g/t Au at 58% recovery for a calculated head grade of 0.13 g/t Au. The flotation tests on a 64% -200 mesh and 78% -200 mesh were 0.10 g/t Au and 0.19 g/t Au respectively. Results of the cyanidation tests on 64% -200 mesh and 78% -200 mesh size fractions were both 0.13 g/t Au (Seeber 1982).
1983-1986	Shenandoah Resources Ltd	Allied	Surface stripping and bulk sampling of No.1 Vein proved the vein system was thick enough to be economically mined. The average grade of sampling was in excess of 0.35 oz/ton. 12 drill holes were drilled, 4 of which were drilled in line on strike, down dip of the ore body outcrop. This confirmed the extension of the mineralized zone for over 700 linear feet.
1984	Alexander H. Perron	Between Meilleur and Allied	Ground MAG and VLF-EM survey (Greer 1984), covered 1.76 km^2
1985	Alexander H. Perron	1.5 km W Allied	Ground MAG and VLF-EM survey (Greer 1985), covered 0.6 km^2
1986	Gary Kosy-Robert Kosy	1.5 km SE Allied	Diamond drill program consisting of 1 hole, 67.05 m (Kosy 1986)
1986	Teck Explorations Ltd	2.5 km SSE Allied	Geological mapping and prospecting, 30 anomalous gold samples were taken with the highest assaying 560 ppb Au (Page 1986)
1986	Alexander H. Perron	1.5 km W Allied	Geological survey was performed, describing topography and any visible outcrops (Greer 1987)
1987	Edward J. Searles	2.5 km E Allied	Diamond drill program consisting of 1 hole (S87-1) 106.68 m (Searles 1987)
1986	Teck Explorations Ltd	2 km E Allied	Ground MAG and VLF-EM survey (Thorsen 1986) covered 0.88 km^2
1987	Alexander H. Perron	1.5 km W Allied	Diamond drill program consisting of 3 holes, totaling 188.1 m (Greer 1987)
1987	Nortek Minerals Ltd,	Allied	Diamond drilling program consisting of 36 holes, totaling 2,223.21 m. Detailed petrographic, mineralogical and textural studies were conducted. Other work conducted included: mineral processing using core bulk samples, drill hole surveying, regional and local mapping of geological units. (French 1988, Lawrence 1988).
1987	Golden Shield Resources Ltd	Allied	A total of 1,459 km of surveying was flown with the DIGHEM3 system (Smith 1987)
1987	Morgain Minerals Ltd	1.5 km W Allied	EM and MAG surveys were conducted, (Greer 1987), covering 0.6 km^2
1987	Sudbury Contact Mines Ltd	Meilleur	Airborne MAG and VLF-EM surveys were conducted, covering 113 km^2

Year	Company	Location	Description
1988	R. J. Wright	3 km SSE	Diamond drill program consisting of 8 holes, totaling 701.04 m
1988	R. J. Wright	2 km ESE	Diamond drill program consisting of 4 holes, totaling 423.67 m
1988	Teck Explorations Ltd	2 km E Allied	Geological mapping and reporting (Thorsen 1988).
1988	G. B. French	Allied	3 samples assayed with the maximum value of 0.002 oz/ton.
1989	Gold Fields Canadian Mining	3 km SE Allied	15 rock samples from trenches were taken. One sample (7649) reported to contain 0.406 oz/ton and the rest of the samples had less than 1 ppm Au.
1990	Gold Fields Canadian Mining	1.5 km ESE Allied	Trenching and surface stripping was conducted. A total of 16 samples were assayed. Au varied between 0.03 to 0.3 oz/ton, 1 sample also reported to contain 1.53% Cu.
1991	Mark Shore	2 km W Allied	Line cutting, geological mapping, prospecting, MAX-MIN VLF and MAG surveys which covered a 0.15 km^2 area were conducted. A total of 26 samples with the highest grade at 0.01 oz/ton were taken.
1991	Alexander H. Perron	2 km SE Allied	Geological survey and report (Greer 1991)
1993	Alexander H. Perron	Meilleur	Lithological, structural mapping and topographic surveying were performed.
1994	Queenston Mining Inc.	Meilleur	A MAG survey with 2.3 miles of gridding with line spacing at 200 ft was conducted. Geological mapping and 6 samples were taken with values ranging from 168 ppb to 3.449 ppb Au. (Carmichael 1997).
1994	Ontario Geological Survey	Catharine & Pacaud Townships	S.L. Jackson from the Ontario Geological Survey mapped Pacaud and Catharine townships at 1:20 000, OFR5884. (Jackson 1994).
1995	Alexander H. Perron	Allied	Ground MAG and VLF-EM surveys were conducted, (Weller 1995), covering 0.9 km^2
1996	Alexander H. Perron	1.5 km WSW Allied	MAG and EM surveys were performed, (Weller 1996), covering 0.3 km^2
1996	Queenston Mining Inc.	Meilleur	Stripping and washing, detailed geological surveying and mapping were conducted. 10 samples were taken ranging from 38 ppb to 1,834 ppb Au. Diamond drill program consisting of 3 holes, totaling 305.95 m (Carmichael 1997).
1997	Alexander H. Perron	Allied	Line cutting, and detailed geological surveying were conducted. (Weller 1997)
2002	Alexander H. Perron	1.5 km W Allied	MAG and EM surveys were performed, (Weller 2002), covering 0.3 km2
2003	Kirkland Lake Minerals Inc	1 km SW Allied	Power stripping, trenching and sampling were conducted. 20 grab samples were taken, the best results were 0.03 and 0.02 ppm Au (Harrington 2003).
2007	Walter Metherall	1.5 km S Allied	Line cutting, outcrop mapping, surface sampling (8 grab samples with values ranging from not detected to 1.1 ppm Au) and geophysical surveys (MAG and VLF-EM, totaling 19.65 km) were conducted.
2008	Abitibi Mining Corp	1.5 km SW Allied	MAG, VLF-EM and MAX-MIN HLEM surveys were conducted. The north grid consists of 18.525 km, the lines are spaced at 100 m increments with stations picketed at 25 m intervals. The baseline has a total length of 1,125 m. (Ploeger 2006).
2008	Boston Creek Mines Ltd	2.km W Allied	Manually stripped an area approximately 30 ft by 30 ft.; samples were taken but no assays were returned by the time of the report.
2008	Abitibi Mining Corp	2 km SE Allied	Prospecting and trench mapping, channel sampling of three stripping outcrop were conducted. (Ploeger 2008)

Year	Company	Location	Description
2009	Ashley Gold Mines Ltd	1.5 km NW Allied	MAG survey, totaling of 3.825 line km, was conducted
2009	Lake Shore Gold Corp	Allied	Geological data and 18 samples were collected. The highest reported value was 1.51 ppm Au. (MacLachlan 2011).
2009	Abitibi Mining Corp	Meilleur	TFM, VLF-EM and HLEM surveys were conducted. The north grid consists of 11.275 km, with lines spaced at 100 meter increments and stations picketed at 25 m intervals. The baseline with the total length of 1125 m. (Ploeger 2009).
2009	Ashley Gold Mines Ltd	1.5 km E Meilleur	MAG survey, totaling of 2.85 line km, was conducted.
2010	Mhakari Gold Corp	Planet	Prospecting and survey were conducted to locate areas where historic work was completed. 5 rock samples were taken, with values ranging from 0 to 0.52 ppm Au. (Ploeger 2010)
2010	David Benjamin Zabudsky, Walter Metherall	2.5 km E Allied	Diamond drilling program consisting of 9 holes, totaling 1,393 m. Gold values were fairly low. Higher grade intersections from the drilling were related to late, thin quartz-carbonate veining with abundant pyrite.
2011	Lake Shore Gold Corp	Allied	40 grab samples were collected - 38 were collected for analysis and 2 for representative purposes. 5 samples returned grades >0.1 ppm Au, of which two were 32.0 and 58.8 ppm Au (MacLachlan 2011).
2012	Northstar Gold Corp	Miller Gold Property	Northstar acquired the Miller Gold Property. Prospecting and sampling were performed on the Property, a total of 137 samples were taken as outlined in sections 9.0 and 10.0.
2013	Northstar Gold Corp	Miller Gold Property	N-S grid was cut over the Allied Syenite and 11 km of ground magnetics was performed, at 50 metre spacing, was performed on the grid. Prospecting and sampling were performed on the Property, a total of 328 samples were taken as outlined in sections 9.0 and 10.0.
2014	Northstar Gold Corp	Miller Gold Property	Prospecting and sampling were performed on the Property, a total of 169 samples were taken. Diamond drill program consisting of 15 holes, totaling 1,778.5 m. Abitibi Geophysics completed 11.3km of ground time domain 3D IP on the N-S grid as discussed in sections 9.0 and 10.0. (Boyd 2014, Loader 2014).
2015	Oban Mining Corp.	Miller Gold Property	Oban entered into an option agreement with Northstar, and completes geophysical surveys, mapping and surface sampling and diamond drilling exploration programs as outlined in sections 9.0 and 10.0 (Hart 2015).
2015-2018	Arteaga, L.	Miller Gold Property	MSc and Ph.D. thesis research of gold mineralization and Allied Syenite (Arteaga 2016, 2018).
2016-2017	Northstar Gold Corp.	Miller Gold Property	Northstar completes bulk sampling, milling and metallurgical programs as outlined in Boyd (2017).

7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

The Miller Gold Property is located within the Archean volcano-sedimentary assemblage of rocks of the Western Abitibi Subprovince in the Superior Province. Description of the Abitibi greenstone belt is from Ayer et al. (2005) and geological description of the Property area and information on geological figures is mostly from Jackson (1994) and French (1988).

The Abitibi greenstone belt is composed of east-trending synclines of mainly volcanic rocks and intervening domes cored by syn-volcanic and/or syn-tectonic plutonic rocks (gabbro-diorite, tonalite, and granite) alternating with east-trending bands of turbiditic wackes. Most volcanic and sedimentary rocks dip vertically and are generally separated by east-trending faults with variable dips.

Metavolcanic rocks in the Kirkland Lake area are the 2723-2720 Ma Stoughton-Roquemaure Assemblage, characterized by broad regions of tholeiitic basalts, komatiitic basalts, and komatiites with several relatively minor felsic volcanic centers. The volcanic assemblage is located on the northeast flank of the Round Lake Batholith located in the southwest part of Pacaud Township. The upper part of the Assemblage in this area, formerly referred to as the Catherine Group, is cut by Algoman Age granitic intrusions and is overlain by felsic volcanic rocks of the Skead Group, which is part of the Upper Blake River Assemblage (Figure 7-1). Intermittent small pyritic sulphide zones occur in the metavolcanic rocks. Early Proterozoic diabase dykes crosscut the Archean rocks. The regional metamorphic grade is greenschist facies.

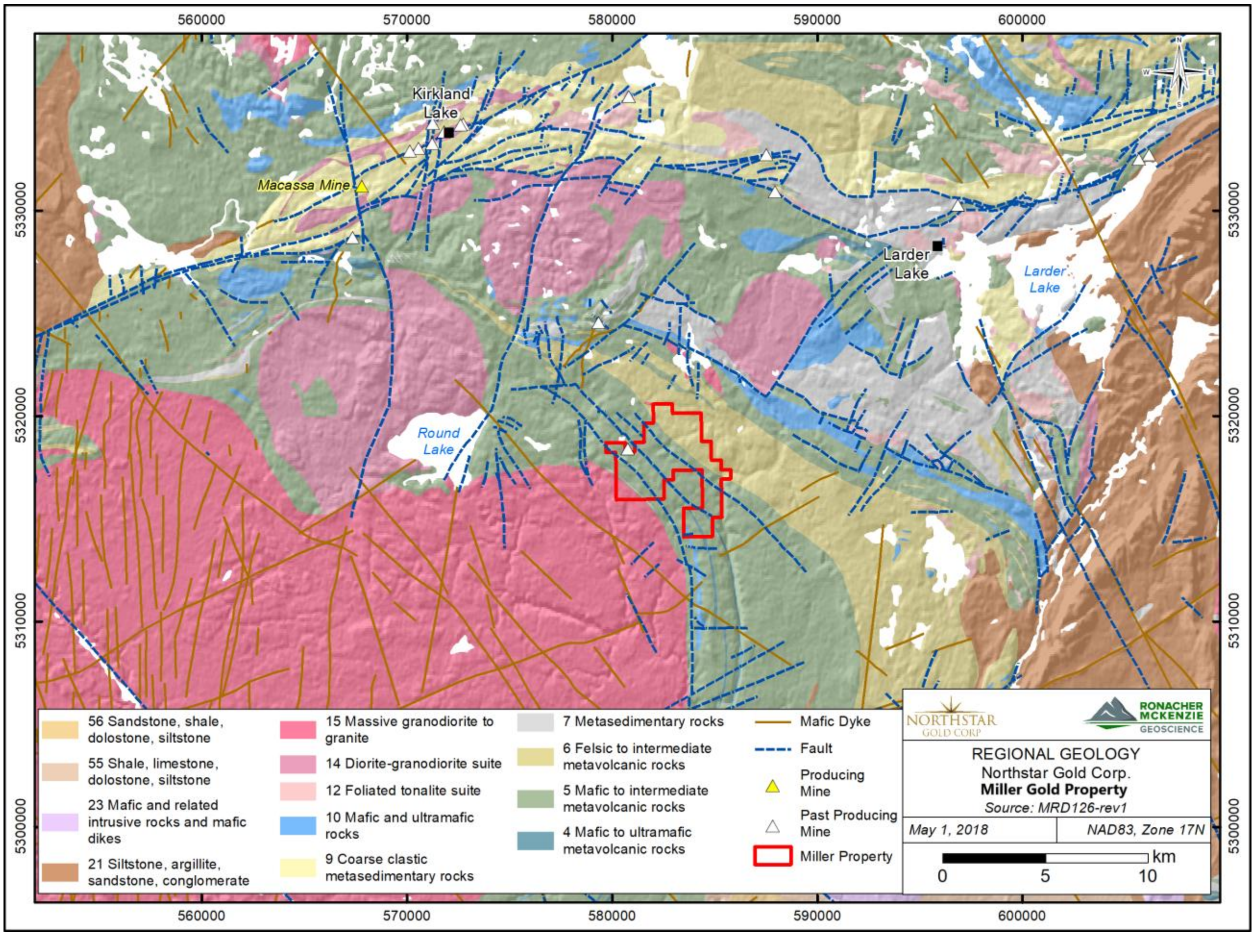


Figure 7-1: Miller Gold Property Regional Geology.

7.2 Local and Property Geology

The Miller Gold Property is underlain by northwest-trending ultramafic and mafic to intermediate metavolcanic rocks of the Pacaud Assemblage and the Catharine Group with the Stoughton-Roquemaure Assemblage, to the southwest and intermediate to felsic metavolcanic rocks of the Skead Group, Blake River Assemblage to the northeast. Occasional ultramafic and mafic to intermediate intrusive rocks occur as stocks and sills emplaced into the metavolcanic rocks. Relatively undeformed, alkaline to calc-alkaline felsic intrusive rocks were emplaced into the metavolcanic rocks as irregular stocks and dykes, which include the Allied, West Allied, Planet, and Meilleur syenite intrusions. Lamprophyre dykes cut all other units. Felsic intrusive rocks of the Round Lake Batholith bound the metavolcanic rocks to the west. Occasional north- to northwest-trending diabase dykes of the Matachewan dyke swarm cut all older units. The most prominent structures are a series of northwest-trending faults and include the Pacaud and Catharine faults. The Catharine Fault was interpreted to be a first-order structure by Arteaga (2018). There is also a series of lesser northeast-trending faults and shears. Gold mineralization is associated with quartz+/-carbonate veining best developed in, or adjacent to, the Allied, Planet and Meilleur syenites.

Most of the Property is underlain by mafic to intermediate rocks with lesser ultramafic metavolcanic rocks. The mafic metavolcanic rocks are comprised of massive flows, pillowed flows, and lesser volcaniclastic rocks. Metamorphic grade and deformation increase towards the Round Lake Batholith to the southwest and most of the massive flows on the Property contain medium- to coarse-grained amphibole. The presence of coarse-grained amphibole means that it can be difficult to distinguish between coarse-grained flows and gabbro sills. The intermediate metavolcanic rocks are subordinate units occurring as occasional flows and volcaniclastic rock interbedded with the mafic metavolcanic rocks. Ultramafic metavolcanic rocks rarely outcrop and are generally intensely altered but are thought to be spinifex textured flows.

The northeast portion of the Property, north of the Catharine Fault, is underlain by predominantly intermediate to felsic metavolcanic rocks that are dominantly volcaniclastic with lesser flows. Occasional mafic volcaniclastic units are inter-bedded with the intermediate volcaniclastic rocks closer to the Catharine Fault.

Intrusive rocks range from syn-volcanic to syn-tectonic in age with the syn-volcanic rocks being dominated by mafic to intermediate compositions and syn-tectonic rocks that are generally intermediate to felsic in composition. Syn-volcanic intrusions are generally medium- to coarse-grained gabbro to diorite that may form sills or composite sills tens of metres in thickness. Felsic to intermediate intrusive rocks of the Round Lake Batholith represent an early syn-tectonic igneous event. Late, syn-tectonic intrusions are dominantly medium- to coarse-grained, massive, syenite with lesser granodiorite and feldspar+/-quartz porphyritic dykes and sills. These intrusions may form large irregular stocks of predominantly syenite composition that appear to be a composite of multiple intrusive phases of dyke and sill emplacement. Lamprophyre dykes are rarely exposed but are intersected by drilling and are interpreted to be a late phase of the syn-tectonic alkaline intrusive event as they cut all older units.

Numerous faults transect the predominately pillow, tholeiitic, mafic metavolcanic, supracrustal rocks (Figure 7-2). The most important are the north-west striking Pacaud Fault and Catharine Fault which trend sub-parallel to the strike of the lithologies. A series of less prominent northeast-trending fault and shears are oriented 050-070°, dipping 50-60° southeast or northwest. The largest intrusive body in the area is the tonalite dominated Round Lake Batholith located in the southwest part of Pacaud Township. In general, cleavage and shear zones tend to parallel the batholith margin and in the Property area strike northwest, steeply dipping, and facing northeast.

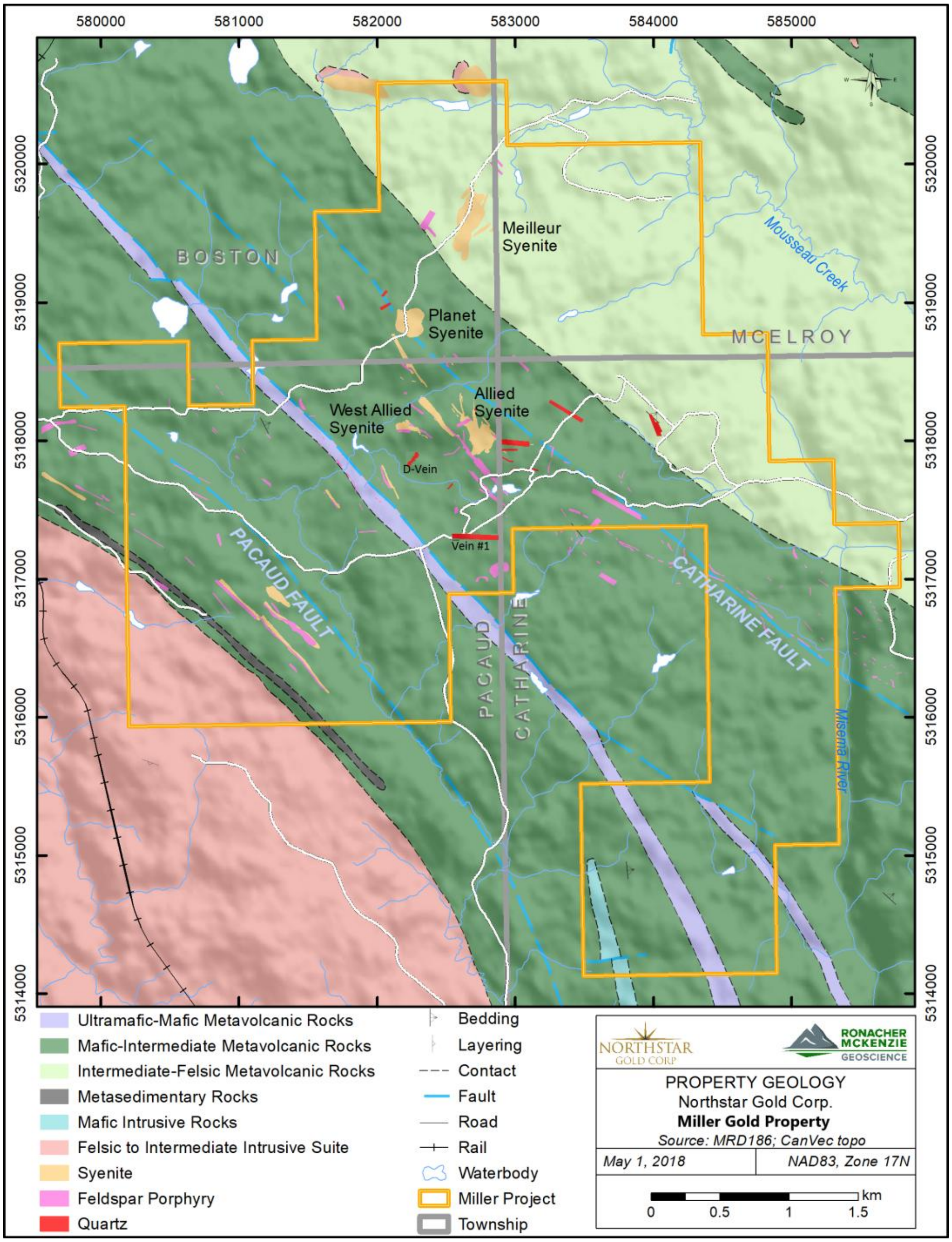


Figure 7-2 Miller Gold Property geology and mineralization.

7.3 Mineralization and Alteration

There are 3 categories of veins identified on the Property, laminated fault-fill, extensional veins and vein arrays, and stockwork / fault breccia. Laminated fault-fill veins are northwest-trending, steeply dipping, low angle to parallel to foliation and form in shear zones or faults.

Extensional veins and vein arrays are northeast- to east-trending, shallow dipping, at high angles to the foliation, and form both within and outside of the shear zones. The extensional veins include the planar shallowly dipping veins formed at a moderate angle to shear zones in both intrusive stocks and volcanic country rocks, as well as arrays of planar to sigmoidal veins at high angle to the foliation that are generally found within the shear zones. Mineralized, northeast-trending, northwest-dipping extensional veins are present in all 3 intrusions. Mineralized quartz-carbonate extensional veining is observed in the western portion of the Property associated with faulting which has a 25° dip to the north. The third set of veins is the brittle stockwork and fault breccia veins observed at both the Planet and Allied syenite intrusions. A high intensity of stockwork quartz veining is observed in the Planet Syenite associated with oblique to orthogonal vein sets.

Gold mineralization on the Property is known to be situated within both shallowly dipping and sub-vertical quartz veins and syenite stocks hosted within the mafic volcanic rocks. Gold mineralization in the area commonly has a nuggety character and coarse texture occurring in native form or as tellurides and may or may not be associated with disseminated pyrite. Presently, the most economically interesting veins are in the northeastern Pacaud Township, within in the centre of the Property on cells 185339 and 311795.

Historically the main target of exploration has been the shallowly north-dipping, white quartz No. 1 Vein that hosts free gold, tellurides, minor pyrite, chalcopyrite, tourmaline and galena. This vein is located approximately 400 m south of the Allied Syenite. Traced for about 600 feet along a west-trend, the vein averages about a foot in width (where identified on surface but may expand down dip) and has a shallow, 20° or less, north dip. Mineralization is often concentrated along the country rock contacts and consists of native gold, frequently with telluride, in a net-like arrangement in the quartz along the contact. Accessory mineral phases consist of chalcopyrite, pyrite, specular hematite and galena. Telluride phases include multiple varieties of gold tellurides but mainly calaverite ($AuTe_2$), a bismuth telluride, and petzite (Ag_3AuTe_2). The country rock is primarily mafic metavolcanic cut by north-trending feldspar porphyritic dykes.

Located about 300 m southwest of the Allied Syenite and 300 m northwest of the No. 1 Vein, the Independence, or “D”, vein strikes 245° and dips 45° southeast with the best mineralization between 30 ft and 160 ft in depth along the inclined “D” shaft.

Au-Bi-Te mineralization was identified in drill hole MG-14-12, sample 14624 at 54.6 m (Figure 7-3). This sample was logged as a quartz vein with visible gold, tellurides and chalcopyrite. The quartz vein intrudes the Allied Syenite. Assay results show that this sample has 12.2 g/t Au by metallic screen analysis, 1,260 ppm Bi, 359 ppm Cu, 296 ppm Pb and 79.4 ppm Te.

Alkaline intrusives named the Allied Syenite in Pacaud Township and Planet Syenite and Meilleur Syenite in Boston Township plus a number of northwest trending sinuous feldspar porphyry bodies are noted north of the No. 1 Vein and may have a genetic relationship to the gold mineralization (Figure 7-2). The syenite in places exhibits a more granitic appearance and composition but this is believed to be a function of introduced quartz in the form of veins and silicification in the matrix. Research by Arteaga (2016, 2018) U/Pb on zircon dated the intrusions at 2662 +- 18 Ma and has identified that these "syenites" have undergone specialized alteration named episyenitization in the form of de-silicification and K depletion accompanied by Na metasomaltism resulting in the replacement in the intrusives of the potassium by albite feldspars. The Allied Syenite is part of an arc of alkaline magmatism that extends for 3,000 metres to the north and may be connected to the Planet Syenite.

Arteaga (2018) dated the mineralization by analyzing molybdenite from drill holes from the Property using the Re-Os technique. The average age of molybdenite is 2680 ± 8 Ma.

Figure 7-3 Au-Bi-Te stringers in quartz vein from 54.6 m, MG-14-12.

8.0 DEPOSIT TYPES

The Property lies in the Kirkland Lake Mining District of northeast Ontario in which historically gold has been mined as typical mesothermal, replacement type, high-grade, quartz veins found along or close to a major east-west trending Archean deformation/structural feature named the Kirkland Lake Main Break within the Larder Lake - Cadillac Deformation Zone. Gold production since 1915 from 7 gold mines amounts to more than 24 million ounces of gold. (Clark 2013).

More recently identified gold deposits in the camp such as the Upper Beaver deposit held by Agnico Eagle Mines Limited consists of disseminated to quartz filled fractures, stockworks, breccias, and pyritic zones associated with igneous intrusives commonly of syenite composition (Agnico Eagle Mines website: http://www.agnicoeagle.com/). At the Macassa Mine presently operated by Kirkland Lake Gold Inc., higher grade shoots containing tellurides and native gold constitute about 30% of the overall gold mineralized structures cutting the syenites. The following description of the Larder Lake Break gold mineralization is taken from Ispolatov et al. (2005).

> *Gold mineralization at the Anoki and McBean properties is similar to the above- described gold deposits of McVittie and McGarry townships. In particular, the replacement-style, pyrite-rich Anoki Main zone shares strong analogies with the Kerr Addison-Chesterville flow ore, and replacement ores of Cheminis and Omega mines. Gold-bearing quartz stockworks in carbonate-fuchsite schists explored at depth at the McBean deposit and within the Anoki Deep zone are similar to the "green carbonate" ore at Kerr Addison-Chesterville. Mineralized aphyric dikes of the McBean ore zone strongly resemble the albitite ore of the Kerr Addison Mine described by Smith et al. (1993). Mineralization of the Anoki South zone that is hosted by a graphitic exhalite horizon may correlate to the graphite ore of the Kerr Addison-Chesterville Mine. Similarities in mineralization styles as well as analogous structural setting within the Larder Lake–Cadillac deformation zone suggest that gold-bearing zones of the Anoki and McBean properties are likely related to mineralization of Kerr Addison-Chesterville, Cheminis, and Omega mines. All these occurrences of gold mineralization are parts of a single regional hydrothermal system. The most characteristic features of this system are summarized below:*

1. *Gold mineralization is localized within a first-order structure, that is, the Larder Lake–Cadillac deformation zone (Smith et al. 1993), and (as far as we are aware) there is no tendency for preferential occurrence of larger deposits in second- and third-order structures;*

2. *Mineralization is commonly associated with gentle S-shaped bends along the Larder Lake Cadillac deformation zone (Anoki, McBean, Omega, and Cheminis);*

3. *On the scale of the host deformation zone, mineralization tends to form linear shoots (strike length<dip length) that plunge roughly parallel to the regional stretching lineation (L2): e.g., 40-50° east at McBean (this study); approximately 70º east Kerr Addison-Chesterville (Smith et al. 1993, p. 30); near vertical at Cheminis (longitudinal section in Clark and Bonnar 1987; structural data in Wilkinson 1993, p.142).*

4. *At least some mineralized zones are centered on relatively competent lava flow units (e.g., Omega, Cheminis, possibly Kerr Addison) that are flanked by rheological weak and*

probably impermeable ultramafic talc-chlorite schists (e.g., Thomson 1941; Smith et al. 1993).

5. *There are 2 principal types of gold mineralization: a) the economically most important style is the pyritic replacement ore where gold is present largely as submicroscopic particles in pyrite (accounts for about 65% of gold at Kerr Addison- Chesterville, most gold at Cheminis and Omega, and Anoki Main zone), and b) the second in importance are quartz stockworks and veins in carbonate-fuchsite-altered ultramafic rocks, where coarser gold is present principally in quartz. The two mineralization types coexist within individual deposits and are probably related to the same hydrothermal episode (e.g., Smith et al. 1993). Localization and shape of individual replacement ore bodies is typically defined by primary or structurally modified geometry of geochemically and rheological favourable units (Smith et al. 1993; present study of the Anoki Main zone). Volcanic rocks of the Larder Lake Group constitute the most common protolith for replacement ores. Volcanic protoliths of the Anoki Main zone and Kerr Addison-Chesterville flow ore (Warwick 1981; Kishida and Kerrich 1987) are Fe-tholeiites. Carbonate is the major component in both mineralization types, which indicates that ore was generated by carbonic, CO2 – rich fluids (e.g., Kishida and Kerrich 1987). Sulphidation of the Fe-rich, high Fe/Mg tholeiitic rocks must have constituted the main gold deposition mechanism for pyritic replacement mineralization (Böhlke 1988; Phillips et al. 1984; Smith et al. 1993), whereas relatively coarse gold in quartz veins enclosed in carbonate-fuchsite alteration was most likely deposited through phase separations (e.g., Smith et al. 1993). The latter mechanism agrees well with the rather irregular distribution of gold in "green carbonate ore" (Smith et al. 1993) and occurrence of gold-barren quartz stockworks in carbonate-fuchsite schists. Both types of mineralization most probably belong to the syn-deformation greenstone-hosted quartz-carbonate vein (mesothermal-orogenic) deposit class.*

6. *Syn-mineralization hydrothermal alteration likely increased competency of host rocks; ultramafic talc-chlorite schists were modified into carbonate-fuchsite rocks with abundant quartz veining, the largely chloritic flow unit of the Anoki zone was replaced by albite-rich aggregate. In both cases, hydrothermal products are more rigid than the protolith, and are likely to respond more brittle-like to continuing deformation and maintain or even enhance permeability.*

Occurrence of mesothermal gold mineralization in the first order deformation zone is unusual. Within the most economically significant gold camps, the largest gold deposits are *typically found in subsidiary second- and third-order structures (e.g., Eisenlohr et al. 1989; Robert 1990; McCuaig and Kerrich 1998). This atypical localization pattern may be due to the nature of the Larder Lake–Cadillac deformation zone in the Larder Lake area. Lithological assemblage of the Larder Lake–Cadillac deformation zone includes competent mafic volcanic units intermingled with or enveloped by incompetent and impermeable ultramafic talc- chlorite schists (Thomson 1941). This combination probably constituted favourable ground for maintaining isolated discrete permeable fluid conduits within the deformation zone. Competent tholeiitic volcanic units responded more brittle, thus enhancing their overall permeability. Rheological weak talc-chlorite schists enveloped these permeable zones, preventing fluid dispersal and maintaining high fluid/rock ratios within fluid pathways. Some of these competent units were also geochemically favourable for sulphidation (e.g., Fe-tholeiitic, high Fe/Mg rocks), and gold deposition occurred.*

The location of gold deposits in the Larder Lake–Cadillac deformation zone may (at least in part) reflect biases in exploration strategies, that is, the "Larder Lake Break" has for almost 100 years attracted the most attention from geologists and prospectors alike, and potentially gold-bearing subsidiary structures may have been overlooked. There is no geological factor precluding the occurrence of gold mineralization along subsidiary faults or shear zones that were hydraulically connected to the Larder Lake–Cadillac deformation zone during a regional hydrothermal mineralizing event. The presence of Fe-tholeiites in the Kinojevis assemblage and Larder Lake Group (north and south of the Larder Lake–Cadillac deformation zone) supports the possibility for formation of replacement-style gold mineralization along subsidiary splays of the Larder Lake–Cadillac deformation zone."

Ispolatov (2005) also mentioned:

"Kirkland Lake gold mineralization has a distinct metal signature (Te>Au, Mo, Pb, Ag, high Au/Ag, low As) and is probably unrelated to mineralization along the Larder Lake–Cadillac deformation zone and its splays. The gold-bearing veins of the Kirkland Lake deposit could have formed during D4, synchronously with reverse-dextral movement along the Main Break, as hydrothermal fluids associated with deep alkaline magmatism migrated to shallow crustal levels."

A more detailed and alternative discussion of the mineral deposit types in the Kirkland Lake Camp and on the Property can also be found in the Technical Report by Hart (2015).

9.0 EXPLORATION

9.1 Mapping and Surface Sampling

9.1.12012 - 2016 Northstar Prospecting, Sampling and Locating Drill holes

From the acquisition of the Property in 2012 through to 2014 and in 2016, a series of a prospecting and sampling programs were undertaken by Northstar in order to confirm and define the extent of gold mineralization in trenches, exposed adit openings and scattered outcrop exposures. A total of 137 grab, composite grab, and single chip samples were obtained by George Pollock and geological technician Marc Cardinal, both of Northstar, during the summer of 2012, 327 grab, composite grab and single chip samples during the summer of 2013, 169 grab and chip samples during the summer of 2014 and 139 grab samples in 2016. Analytical results were highly variable and biased by the high grade grab samples as summarized in Table 9-1. Most of the samples were collected from cells 185339 and 311795 covering the area of the majority of historic workings in Northeast Pacaud Township on the Property.

Table 9-1 Miller Gold Property prospecting surface samples

Year	No. Of Samples	Au (g/t) Mean	Au (g/t) Median	Au (g/t) Mode	Au (g/t) Range	Comments
2012	137	4.3	0.274	<0.03	<0.03 – 70.2	39% of the samples below detection
2013	328	6.25	0.04	<0.03	<0.01 – 247	37% of the samples below detection
2014	169	1.57	0.07	<0.01	<0.01-55.5	25% of the samples below detection
2016	139	14.9	0.19	004	<0.01-841	8% of the samples below the detection

It is noted these results are from prospecting surface samples collected over a non-systematic, highly variable spacing throughout the property and thus should not be treated in a “material” representative fashion with respect to the overall grade of the mineralized zone on the surface. They are presented and discussed here in a limited fashion for information only for that reason.

In general, higher grade surface samples were reported to commonly contain significant visible gold and telluride mineralization associated with quartz veins cutting meta-volcanic and intrusive rocks.

In the area where No. 1 Vein is projected to trend to the surface south of hole MG14-15 and in the vicinity of the Miller-Independence Mine historic workings, sampling of exposed quartz veins has returned high grade Au assays. The quartz veins were found to contain less sulphides and tellurides in comparison to those observed in the drill core but host multiple occurrences of visible coarse gold associated with black tourmaline. The highest grade surface samples are clustered around the No. 1 Vein, D vein exposures and the contact zone around the Allied Syenite near the eastern syenite contact.

The locations of historical diamond drill holes from previous work were found to be distributed throughout the Property on cells 185339, 311795 and 335177 and on the adjacent patented land Lot 12 Con 6 in Catharine Township south of 335177 and 203783. Those identified in the field were surveyed by handheld GPS while the remainder are estimated from historical property maps and reports of work, predominantly French (1988), and their locations have not been verified in the field. The details of this program are described in Boyd and Selway 2015.

9.1.2 Oban Mining 2015 Mapping and Sampling

During May and June 2015, Northstar's joint venture partner at that time, Oban Mining Corp., performed geological mapping and sampling to identify controls on mineralization and map out the distribution of syenite intrusions on the Miller Gold Property. All the Northstar and Oban surface sampling between 2012 -2016 is plotted on Figure 9-1.

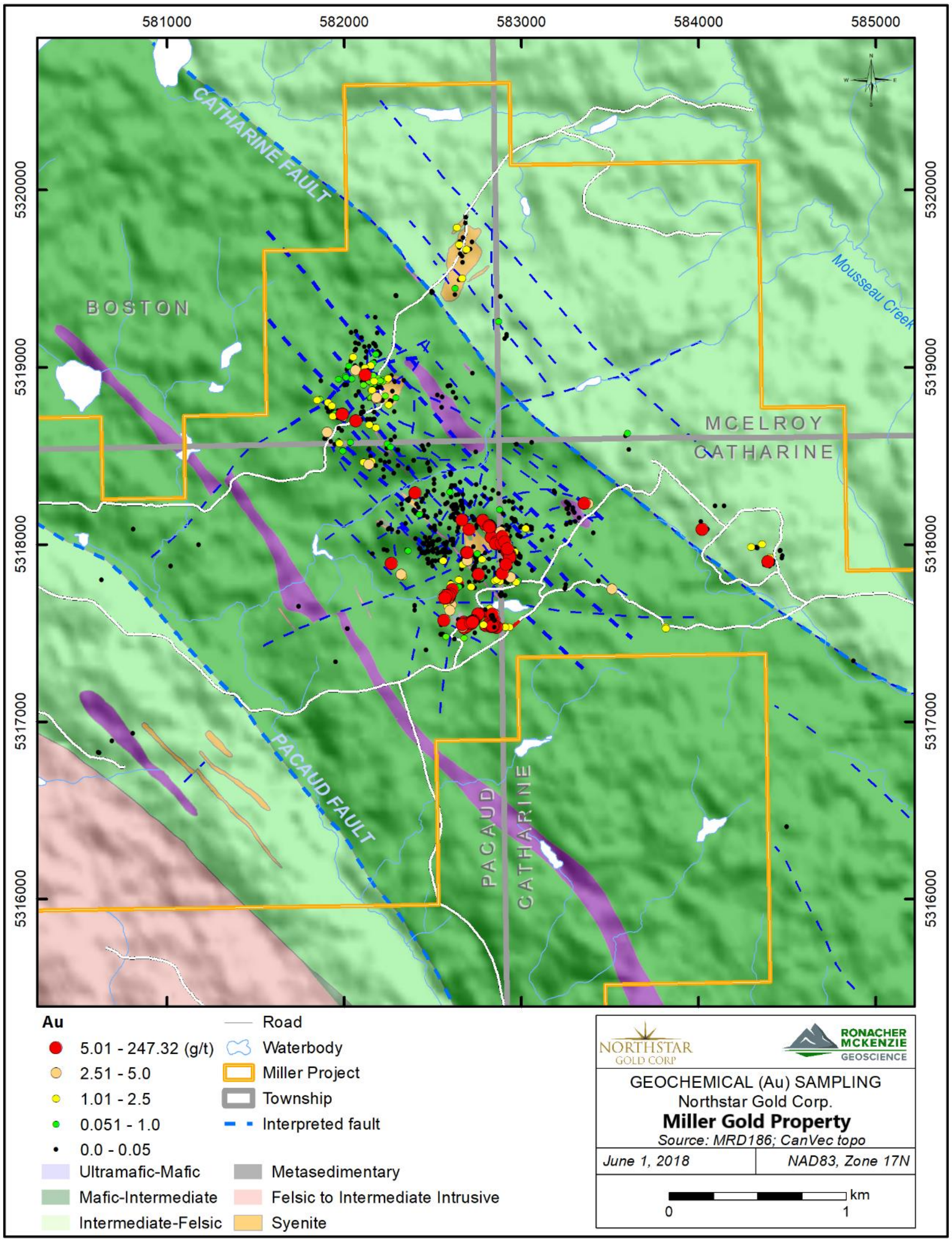


Figure 9-1 Miller Gold Property 2012 and 2016 grab and trench gold sampling results (source: MRD186 and Northstar mapping data).

The focus of the field mapping was the Allied, Planet and Meilleur syenites which were mapped at 1:500. The areas between these intrusions were mapped at 1:1,000. Based on the 2015 mapping and sampling and results of previous drill programs, drill targets were chosen for the 2015 drill program. The reported descriptions and results below are taken from Hart (2015).

Allied Syenite

The Allied Syenite is an approximately 280 m by 80 m, northwest-trending, vertical intrusive body that is hosted in massive to pillowed mafic volcanic rocks. Within the Allied Syenite there are 2 sets of quartz veins, flat extensional cm-scale quartz veins and younger shear veins. These veins were rarely observed in outcrop and have been characterised by the 2015 drill program. The Allied Syenite is bounded by northwest-trending faults which were interpreted from drilling, geophysics, LIDAR, and mapping data.

Mapping the Allied Syenite described in Hart (2015) was difficult due to limited outcrop exposure with the majority of the intrusion located in a topographic low filled with sand and swamps. Outcrops of syenite were visible at the outer contacts and the interpreted extent of the syenite was determined using outcrops, drill hole data and geophysics, as the Allied Syenite forms a magnetic low. Exposure of mineralization in outcrop is rare, and less than 50 samples were collected from the Allied Syenite, with many of the samples being rubble from historical pits and trenches.

Only 7 samples returned gold values >1.0 g/t Au, with the best being 11.85 g/t Au in sample 29661 taken in the northwest portion of the Allied Syenite and comprised of an equigranular syenite with chlorite and quartz veins. Two samples from the west side of the intrusion returned 2.30 g/t Au and 2.77 g/t Au respectively. These samples were mainly rubble material and returned values of up to 212.0 g/t Au and 16.1 g/t Au. Along the eastern contact of the Syenite there are 3 historic pits and this area has been heavily sampled from 2012 to 2014; therefore, few samples were taken from this area during the 2015 program. Most of the samples are associated with a breccia zone related to the northwest-trending fault and the best sample returned 212 g/t Au, which was hosted in a boulder of quartz with abundant visible gold and tellurides (Table 9-2).

East and southeast of the Allied Syenite is a series of north- and east-trending trenches in sheared, variably silicified, and carbonate altered mafic volcanic which appear to be related to structures that host the No. 1 Vein. The best sample from this area returned 52.5 g/t Au hosted in a shallow dipping, 10 cm wide quartz vein with disseminated pyrite in a carbonatized mafic metavolcanic. Other high gold values in this area were taken from rubble at the edge of the historic pits with the best sample returning 23.3 g/t Au.

Table 9-2 2015 Assays from Allied Syenite Area over 1 g/t Au (from Hart, 2015). Grab samples unless stated otherwise.

Sample Number	Description	Easting	Northing	Area	Au (g/t)
R333706	Boulder: 15cm quartz vein with abundant visible gold and tellurides	582898	5318043	East of Allied	212
R333701	Shallow dipping 10cm quartz vein with disseminated pyrite	582915	5317884	South of Allied	52.5
29676	Quartz vein with specks of visible gold	582936	5317926	South of Allied	23.3
R333711	Boulder: 5cm quartz stringers with heavy pyrite in altered mafic volcanic	582907	5318013	East of Allied	16.1
29675	Quartz vein with hematite staining	582935	5317933	South of Allied	15.65
29661	Syenite with chlorite and quartz veins	582667	5318137	North of Allied	11.85
R333104	2-3 cm white quartz vein in carbonatized mafic volcanic with up to 10% disseminated pyrite	582895	5317835	South of Allied	11.1
29695	Quartz vein hosted in weathered mafic volcanic with disseminated pyrite	582937	5317940	South of Allied	7.25
R333715	Boulder: 10cm quartz vein with hematite staining in pervasively carbonatized mafic volcanic	582924	5317973	South of Allied	6.11
R333709	Boulder: stockwork veining with pyrite in pervasively altered mafic volcanic	582890	5318045	East of Allied	4.99
R333102	5mm quartz vein in intensely carbonatized mafic volcanic with 5-10% pyrite halo around vein	582930	5317963	South of Allied	3.29
14881	Mafic volcanic with disseminated pyrite	582883	5318070	East of Allied	3.27
R333287	15 cm quartz vein with disseminated pyrite	582321	5317829	West of Allied	3.27
14855	Altered mafic volcanic with quartz vein and pyrite	582942	5317939	South of Allied	2.58
R333714	Boulder: 8cm quartz vein with pyrite in pervasively carbonatized mafic volcanic	582929	5317970	South of Allied	2.51
R333053	2cm shallow dipping quartz vein with up trace euhedral pyrite and trace mafic volcanic	582173	5318933	Allied	1.94
R333213	Boulder: 50 cm quartz vein in syenite with minor pyrite and molybdenite	582253	5318787	Allied	1.83
14856	Mafic volcanic with trace pyrite and quartz stringers	582945	5317940	South of Allied	1.64
29681	Sugary quartz vein with hematite staining hosted in mafic volcanic	582925	5317957	South of Allied	1.555
R333288	Boulder: Mafic schist with pervasive silicification and disseminated pyrite	582333	5317818	West of Allied	1.515
14890	Quartz vein with disseminated pyrite	582914	5318018	East of Allied	1.415
R333702	10cm shallow dipping quartz vein with disseminated pyrite	582911	5317854	South of Allied	1.185
14884	Rusty quartz vein with trace mafic volcanic	582906	5318051	Allied	1.045
14885	Mafic volcanic with disseminated pyrite and quartz veins	582914	5318052	East of Allied	1.005

West Allied Syenite

Hart (2015) identified 2 felsic dykes during the 2015 mapping program in the area to the west-northwest of the Allied Syenite. One of the dykes of interest in this area is 250 m long by 15 m wide, is northwest-trending, and is located approximately 185 m west-northwest of the Allied Syenite. The other dyke of interest is 130 m long by 5-20 m wide west-northwest-trending dyke located approximately 400 m west of the Allied Syenite. The dykes are composed of massive, medium- to coarse-grained equigranular syenite cut by infrequent aplite dykes, hosting occasional quartz veins. The veins may be bounded by a reddish potassic alteration and host up to 2% disseminated pyrite. Although there was no indication that these dykes formed part of the Allied Syenite, the area was referred to as the West Allied. There were no anomalous gold values returned for the field samples collected on these dykes.

Planet Syenite

The Planet Syenite is an irregularly shaped body with surface dimensions of approximately 150 m west by 200 m north, located about 925 m north of the Allied Syenite. This intrusion is predominately equigranular syenite (Sy1) with sporadic aplite dykes. The Planet Syenite contains visible quartz grains therefore it is more likely a quartz syenite (Hart, 2015).

As described in Hart (2015), the historic trench in the Planet Syenite was hand stripped at the beginning of the program to better understand the geology and mineralization. The stripped area was mapped at 1:100 and Oban also completed a channel sampling program to test the mineralization potential of the various vein sets observed during the mapping of the stripped area.

The following observations were based on the 1:100 mapping of the Planet Syenite trench. A high intensity of stockwork quartz veining is observed in the Planet Syenite stripped outcrop with 3 oblique to orthogonal vein sets, the widths of which range from less than 1 cm to over 15 cm. The primary vein set is composed of northwest-trending, steeply dipping veins. However, there are also north-northwest trending veins that are vertical to steeply dipping. This vein set is concentrated at the western portion of the Plant Syenite trench forming strong quartz stockwork. A set of west-southwest-trending veins dipping between 25° and 40° to the northwest seem to be the youngest vein set, but there are conflicting crosscutting relationships as these veins are sometimes cut by northwest-trending veins (Hart, 2015).

Most of the sampling on the Planet Syenite was with a part of the channel sampling program; 20 samples were collected from the remainder of the intrusion. A total of 84 channel samples were taken, with 2 samples returning over 1 g/t Au (Table 9-3). One sample returned 1.645 g/t Au from a 0.75 m long channel comprised of massive syenite with 2-1 mm vertical quartz veins and 1 shallow 3 mm quartz vein hosting trace to 1% fine-grained pyrite. Another returned 1.19 g/t Au from a 0.65 m long channel consisting of massive syenite with trace to 1% disseminated pyrite and 2-1 cm shallow quartz veins. The common feature observed between the 2 samples was a pink alteration halo along the shallowly north-dipping veins that contain up to 1% pyrite. There are similar shallowly north-dipping veins with alteration haloes in other samples that did not return anomalous gold values, however based on the more detailed work completed in the Allied Syenite it is interpreted that all of the shallowly dipping veins are of the same generation and the difference in assay results is due to a nugget effect as observed elsewhere on the Property. Three samples of the other 21 samples returned >1.0 g/t Au, with values between 1.045 and 1.94 g/t Au; 1 of these samples is located 100 m south of the channel samples returned 1.83 g/t Au from rubble associated with a historical trench.

Immediately north of the Planet Syenite, there is a narrow, linear, moderate to strong northeast-trending shear zone striking between 050° and 070° and dipping between 50° and 60° to the southeast. This zone is approximately 400 m long and locally up to 30 m wide and exhibits associated iron-carbonate alteration and disseminated pyrite. Approximately 58 samples were collected in the northern Planet area with 4 samples collected from the shear returning >1.0 g/t Au and the best sample returning 4.29 g/t Au.

A northwest-trending structure located west of the Planet Syenite has been tentatively correlated with the structure bounding the east side of the Allied Syenite. A total of 76 samples were collected in this area, with many of the samples taken from rubble associated with historical pits and trenches. This material consisted of variably carbonate-altered and sheared mafic metavolcanics with quartz veins and veinlets that contain disseminated pyrite and minor chalcopyrite. Twelve samples returned greater than 1.0 g/t Au, with the best sample returning 43.7 g/t Au.

Table 9-3 2015 Assays from Planet Syenite Area over 1 g/t Au (from Hart, 2015). Grab samples unless stated otherwise.

Sample Number	Description	Easting	Northing	Sampler	Au (g/t)
14899	Boulder: Quartz with hematite staining	581993	5318732	West of Planet	43.7
14895	Mafic volcanic with pyrite and quartz veining	582068	5318696	West of Planet	34.9
R333226	40 cm quartz vein with 3-5% disseminated pyrite hosted in mafic volcanic, sample from blast pile near pit	582064	5318981	NE of Planet	4.29
R333255	40 cm quartz vein in pervasively altered volcanics with 3-5% disseminated pyrite	582141	5318450	West of Planet	3.16

Sample Number	Description	Easting	Northing	Sampler	Au (g/t)
14919	Quartz vein with hematite and pyrite	581931	5318781	West of Planet	2.22
14926	Basalt with cm-scale quartz veins with pyrite	582180	5318658	West of Planet	2.16
R333053	2cm shallow dipping quartz vein with up to 1mm euhedral pyrite, trace syenite with up to 1% pyrite	582173	5318933	Planet	1.94
R333213	50 cm quartz vein in syenite with trace pyrite and molybdenite taken from blast pile near trench	582253	5318787	Planet	1.83
14894	Syenite with hematite staining and trace quartz and pyrite	582068	5318696	West of Planet	1.64
R333243	20 cm quartz vein with tourmaline; chlorite; carbonate and diss. pyrite	581975	5318570	West of Planet	1.435
R333217	Carbonate schist with quartz stringers and 305% diss. pyrite	582119	5318995	NE of Planet	1.415
R333236	20 cm quartz vein with diss. pyrite	582143	5318673	West of Planet	1.385
R333264	1.0 m wide quartz vein with diss. pyrite	582051	5319057	NE of Planet	1.355
R333257	20 cm quartz vein with heavy disseminated pyrite	582155	5318469	West of Planet	1.24
14904	Mafic volcanic with pyrite and quartz veining	581936	5318723	West of Planet	1.2
14917	Altered mafic volcanic with pyrite and quartz	581911	5318799	West of Planet	1.155
R333258	20 cm quartz vein in pervasively altered volcanics with diss. pyrite	582111	5318462	West of Planet	1.15
R333455	Syenite with quartz veins containing molybdenite	582637	5319787	NE of Planet	1.135
R333056	5-6cm shallow dipping quartz vein with trace euhedral pyrite	582244	5318927	Planet	1.045

Meilleur Syenite

The Meilleur Syenite is an irregularly shaped, dyke-like body with surface dimensions of approximately 110 m west by 650 m north, located about 1,500 m north of the Allied and 800 m northeast of the Planet Syenite. Located north of the Catharine Fault, the Meilleur I is hosted by intermediate metavolcanic rocks of the Skead Group in contrast to the mafic metavolcanic rocks of the Catharine Group which host the other 2 intrusions. The intrusion is composed of a massive, red to pink equigranular syenite cut by white quartz veins up to 10 cm wide, with a variety of orientations. The Meilleur Syenite is bounded by 2 north-northwest-trending shear zones interpreted based on LIDAR and geophysics. There are 2 vein sets in the intrusion, a northeast-trending shallowly dipping set and a northeast-trending vertical set. The primary vein set is the northeast-trending, 25° northwest dipping set. Both vein sets host 0.5% to 1% molybdenite, pyrite and occasional tourmaline (Hart, 2015).

As was reported in Hart (2015), mapping in the area of the Meilleur Syenite suggests that the intrusion is approximately 60 m wider than outlined by previous mapping. This interpretation is supported by 3 holes completed in 1996 which intersected syenite in an area of limited outcrop. Mapping indicated that the intrusion extended further north than previously shown by about 85 m but overall the current interpretation is a similar dyke-like body.

A total of 28 samples were collected in and around the Meilleur Syenite, and most of the samples returned less than 1 g/t Au. Three of the 4 samples that returned >1.0 g/t Au were located in the northern portion of the intrusion (Table 9-4). Another sample returned 1.135 g/t Au and is in a 140 m by 30 m northeast-trending syenite dyke parallel to the Meilleur Syenite which had not been previously mapped.

Table 9-4 2015 Assays from Meilleur Syenite Area over 1 g/t Au (from Hart, 2015). Grab samples unless stated otherwise.

Sample Number	Description	Easting	Northing	Au (g/t)
14933	Quartz vein with disseminated pyrite	582692	5319664	1.78
14932	Syenite with cm-scale quartz vein	582668	5319501	1.625
R33345 5	Syenite with quartz vein containing molybdenite and possible tourmaline	582637	5319787	1.135
R33341 3	Syenite with pyrite and cm-scale quartz vein, along the vein contact is trace molybdenite	582650	5319689	1.22

Other Areas

Oban collected approximately 100 samples in the area peripheral to the syenite intrusions and identified 2 areas hosting gold mineralization that appear to be unrelated to the intrusions or the historical Miller Independence Mine. The first area is located approximately 1.2 km east of the Allied Syenite, and the second is located about 420 m west of the Allied area and south of the West Allied area. The eastern area is hosted by variable altered mafic metavolcanic rock cut by quartz veins and hosting minor disseminated pyrite. Of the 10 samples in this area, 2 samples from separate locations returned 2.210 g/t and 1.445 g/t Au. The western area is also hosted in altered mafic metavolcanics with up to 12 cm quartz veins, containing up to 3% disseminated pyrite. A total of 8 samples were collected in this area and 4 samples returned >0.9 g/t Au with the best sample returning 3.27 g/t Au.

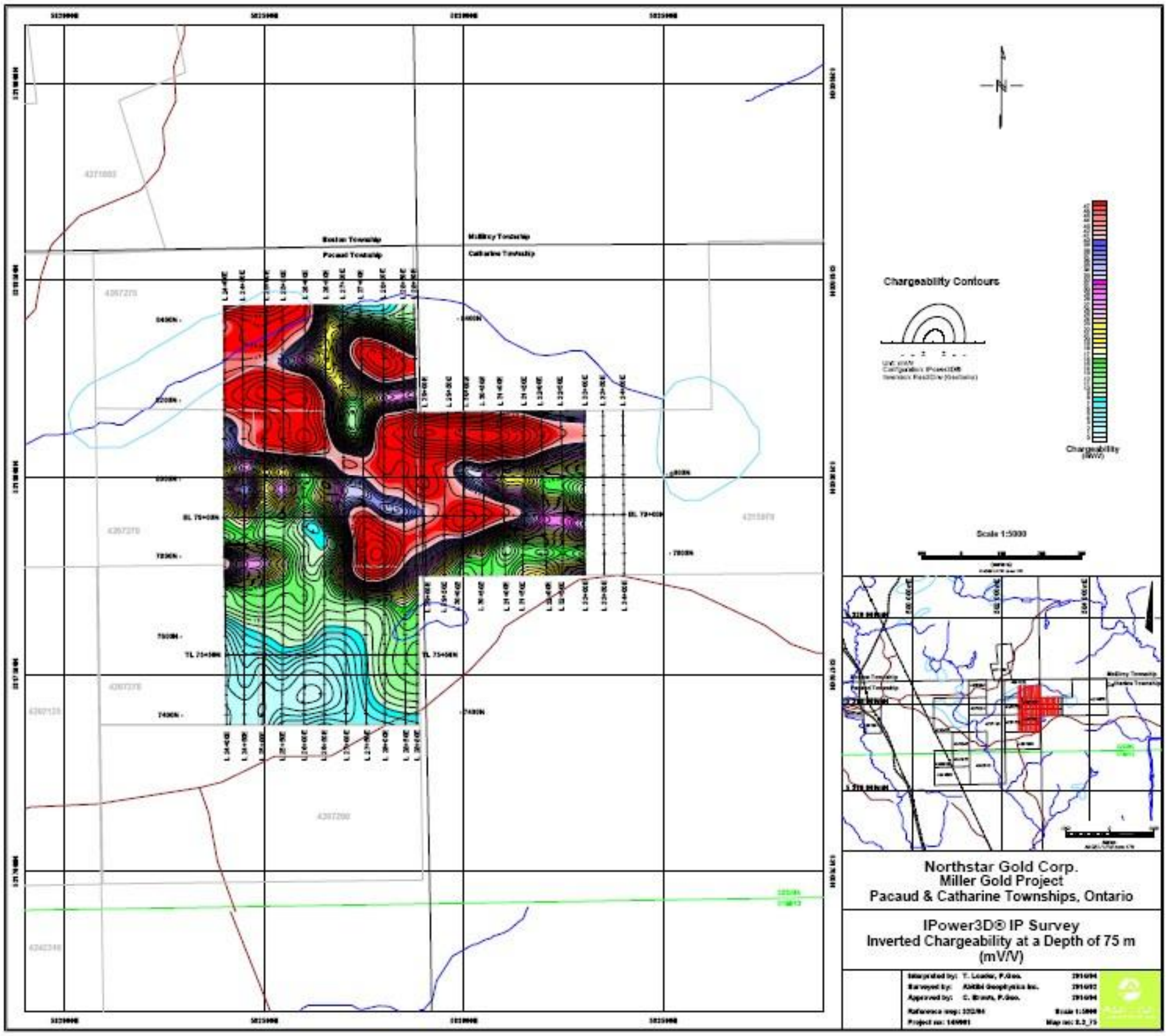
9.2 Geophysics

9.2.1 2013 Ground Magnetic Survey

During 2013, an approximately 11 km ground magnetic survey was completed on a 50 metres spaced north-south cut grid covering the central portion of the Miller Gold Property in northeastern Pacaud Township and northwestern Catharine Township. The dominant feature identified from the magnetic survey is the main northwest trending lineament defining the Catharine Fault trending through northwestern Catharine Township as well as the general northwestern trend of the geological terrain. The Allied Syenite appears as a magnetic low.

9.2.22014 Ground Resistivity and IP Survey

During the winter of 2014, Abitibi Geophysics completed an 11.3 km ground time domain 3D IP (IPower 3D on five simultaneous lines) chargeability and resistivity survey on the same grid. The data values were inverted using computer software calculating 3 dimensional patterns of resistivity and chargeability of the subsurface that best explain the values recorded at surface. The depth and quality of the survey results are variable and limited by the character of the bedrock, however, plans at 50, 75, and 100 metres depths were provided by the geophysical contractor as shown in *Figure 9-2*. Abitibi Geophysics identified 9 geophysical anomalies that were interpreted to be sub horizontal.



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igure 9-2 IPower 3D Survey Plan of the Miller Gold Property.

The survey interpretation presented in the Abitibi Geophysics report (Loader 2014) outlined a resistive layer, dipping slightly to the north, immediately overlying a highly conductive layer which correlated well with the mineralized, shallowly north dipping quartz No. 1 Vein located south of the Allied Syenite. The vein is underlain by a zone of clays, fault gouge and broken rock which is likely responsible for the conductive zone that underlies the resistive zone. The Catharine fault zone is clearly visible in the IP inversion results. The resistivity inversion sections in the eastern portion of the grid indicate a conductive zone dipping at about -45 degrees to the south. The porphyry dykes of the Allied Syenite do not show a strong IP response. The Abitibi Geophysics report recommended diamond drilling for the distinctive chargeability anomalies, 7 of which are associated with the No. 1 Vein Zone. The drill targets chosen in the 2014 program were consistent with these recommendations.

9.2.32015 Airborne Magnetic-VLF Survey

As discussed in Hart (2015), K8aranda Geophysics Ltd. was commissioned by Oban to fly a helicopter-borne gradient magnetic and very flow frequency (VLF) EM survey over the entire Miller Gold Property during March-April 2015 (Figure 9-3). A total of 960.8 line km was flown with a flight line spacing of 50 m.

The magnetic survey highlighted the regional northwest-trending mafic to intermediate metavolcanic rocks and gabbro sill located to the southwest of the Catharine fault zone, in the area of the Allied and Planet syenites. The intermediate metavolcanic rocks to the northeast of the Fault have a lower magnetic response, including the area around the Meilleur Syenite. The Allied and Planet syenites have low magnetic responses compared to the surrounding mafic to intermediate metavolcanics while the Meilleur is a relatively high compared to the surrounding intermediate metavolcanics. The Allied and Planet syenites are identified magnetic low features on the calculated first vertical derivative of the total magnetic field. The VLF results over the intrusions did not result in a distinctive response.

9.2.1LIDAR Survey

In May 2015, Oban contracted KBM Resources Group to conduct a LIDAR and ortho-image survey over the entire Miller Gold Property as reported in Hart (2015). The LIDAR survey was useful in the identification of geological features, including lineaments and faults, and for historical workings, including pits, trenches, and trails. Identification of these features aided in the planning of the 2015 field work and was also helpful in the field as a reference while mapping. This data was also useful during the interpretation of the geology for the Property.

9.3 Bulk Sampling

9.3.12013 Mini-Bulk Sample

During late 2013, to confirm historic and initial high grade prospecting results from the area, Northstar Gold collected an approximately 15 tonne hand-cobbed mini-bulk sample from 2 main exposures where No.1 Vein comes to the surface in the areas of Trench 1 and 3 discussed in Section 9.4. The mini-bulk sample material was described as containing >90% quartz suggesting minimal basalt wall rock dilution. The material was stored at the Northstar secured warehouse facility to be processed at a local mill pending permission from the Ontario Ministry of Northern Development and Mines once the Property is taken to mining lease.

During April 2016, 59 samples were collected from 27 approximately half tonne bags from this mini-bulk sample and sent to Actlabs Sudbury in order to obtain an estimate of their grade for analysis. The results of these analyses averaged 26.8 g/t Au, however, check samples completed and submitted for analyses at a different laboratory during the Author's site visit in November 2016 indicated that the true average grade was around half this value. These results and their verification process are discussed in detail in Section 12.4

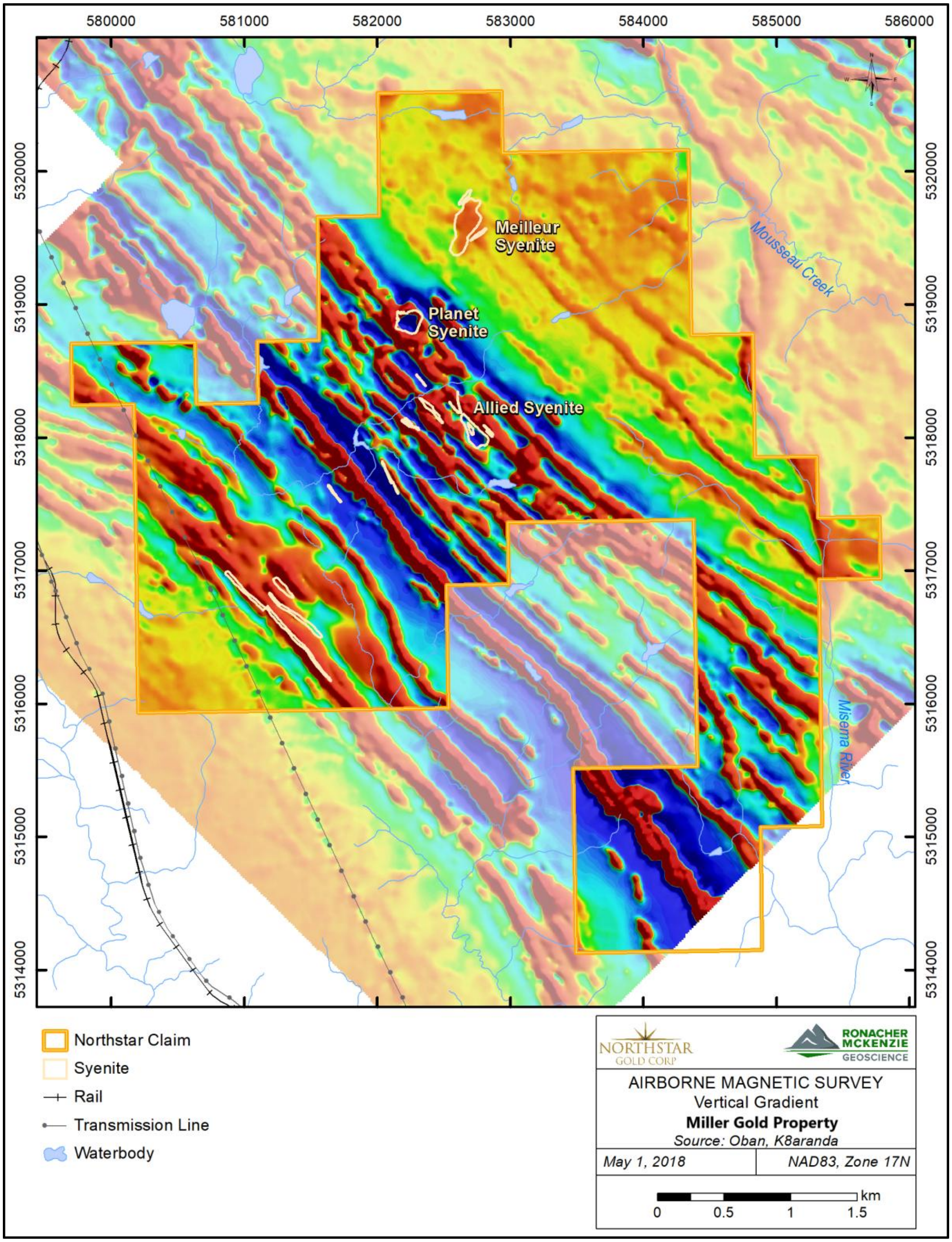

Figure 9-3 Miller Gold Property airborne magnetic survey, vertical gradient (from Hart, 2015).

9.3.22016 Bulk Sample

The objectives for the 2016 bulk sampling program completed by Northstar Gold were two-fold; first to obtain a sizable bulk sample to assess the gold grade, dilution and mineability of the stripped surface exposures; and second to explore the cleaned blasted areas by conducting channel sampling so as to assess the continuity of the gold mineralization along strike and down-dip to aid in planning follow-up larger tonnage bulk sampling and drill testing exploration. In general, collected bulk sample mineralized material was taken from surface exposures (or very near surface extensions) of the high gold grade quartz No. 1 Vein including approximately 0.5 m widths of bounding altered basalt wall rock carrying lower values, as described in earlier check sampling discussed in the 2015 43-101 Technical Report on the property (Boyd and Selway 2015). The 2016 bulk sampling program and results are detailed in a Technical Report prepared by Boyd (2017).

The bulk sampling, totaling approximately 932 tonnes, was completed from October 28 to November 13, 2016. The program entailed the stripping of areas of 4 trenches, the subsequent blasting and excavating of Trenches 1 to 3, and the mining of the bulk sample in which approximately 850 tonnes was mined from Trench 1 and the remainder from Trench 3. Between November 14 and 18th, the bulk sample was trucked to the Richmont Mines Inc. Camflo Mill located in Malartic, Quebec, situated about 20 km west of Val d'Or. The Camflo Mill has a capacity of 1,200 short tons per day and uses a Merrill-Crowe conventional type process with gold cyanidation and precipitation using zinc powder. It operates circuits for jaw crushing and ball mill grinding passing material 75% at 200 mesh (75 µm). Currently, Mill Superintendent is Billy Lamothe on behalf of Richmont Mines; the mill processes ore from Richmont's Beaufor Mine but also custom mills on a contract basis. The Camflo Mill documents were provided from Richmont Mines to Northstar which included a tabulated sample list, daily reports, inventory documents, assay results and certificates. Richmont sold the Beaufor Mine and Camflo Mill to Monarques Gold in 2017.

During the bulk sampling program 241 trench evaluation and bulk in-situ field samples were gathered which included mineralized material from cut channels in bedrock and blasted rock pieces predominantly from the four trenches. The program was generally successful in its objectives, more specifically in demonstrating, for the main No. 1 Vein and other veins on the Property, the presence of high-grade, continuous, mineralized gold zones over albeit narrow widths. It was found that 80 of the collected field samples reported greater than 5 g/t Au. The program allowed Northstar to project the probable trend and down-dip attitude of these zones for follow-up exploration and bulk sampling.

The bulk sample was processed at the Camflo Mill operated by Richmond Mines Inc. near Malartic, Quebec. Based upon Northstar sampling of the Camflo mill feed of the delivered bulk sample, the weighted average head grade of 5.06 g/t for the delivered bulk sample is significantly lower than the estimated weighted average grades of 10.9 and 3.1 g/t Au obtained from Trenches 1 and 3, respectively, from the analysis of 90 in-situ broken rock samples gathered over the bulk sampling areas. This indicates that the delivered bulk sample included significant wall rock dilution, however, the in-situ field analytical results are largely consistent with the results of previous exploration and sampling over 2 trenched areas during 2013 - 2015.

The work completed on the Miller Gold Property by Northstar Gold during 2016 follows up on extensive prospecting and surface sampling, ground geophysical surveys, and diamond drilling undertaken since its staking by the company in 2012. This work is described in detail in 2 reports Boyd and Selway (2015) and Hart (2015).

This trenching and bulk sampling work program entailed the stripping of overburden at the 4 areas on claim 4267277 where gold mineralized quartz veins were exposed by an excavator followed by a series of surface blasts using drilled 4 to 10 foot vertical holes to create deeper trenches at 3 of the 4 areas. The blasted rock was visually assessed as either mineralized bulk sample material or waste at the trench sites with the former loaded onto a 15 tonne articulated dump truck to be carried and stockpiled by the entrance road to the property. The stockpiled mineralized material was then loaded onto 35 tonne highway trucks to be shipped for custom processing at the Camflo gold mill in Malartic, Quebec, operated by Richmont Mines Inc. The waste rock was piled by the side of trench sites to be used as fill as part of their remediation upon completion of the work.

In order to monitor the trenching and bulk sampling process and results, a total of 241 surface monitoring field samples were gathered from the 4 trenches, including 72 cut channel samples, 113 blasted rock samples obtained from the trenches, and 19 metallurgical test samples. 116 of these samples covered areas of blasted rock and channel cut areas over the areas of the bulk samples taken from Trenches 1 and 3; and 99 were evaluation (mostly cut channel) type samples from Trenches 1, 2, 3, and 4 with the decision to recommend additional follow-up bulk sampling and continued exploration dependent upon their analytical results.

During this program, approximately 202 kg and 122 kg of gold mineralized predominately quartz samples were obtained for metallurgical testing from each of Trenches 3 and 4 with weighted average grades of 3.7 and 36.1 g/t Au, respectively. No work yet has commenced for these samples.

The locations of the trenches and samples are shown on Figure 9-4. Those collected samples reporting greater than 2 g/t gold were check assayed by metallic screen technique as described in detail in Section 11.4. The geology, sampling, and exploration work for each of the 4 stripped areas or trenches is described as follows in greater detail as follows.

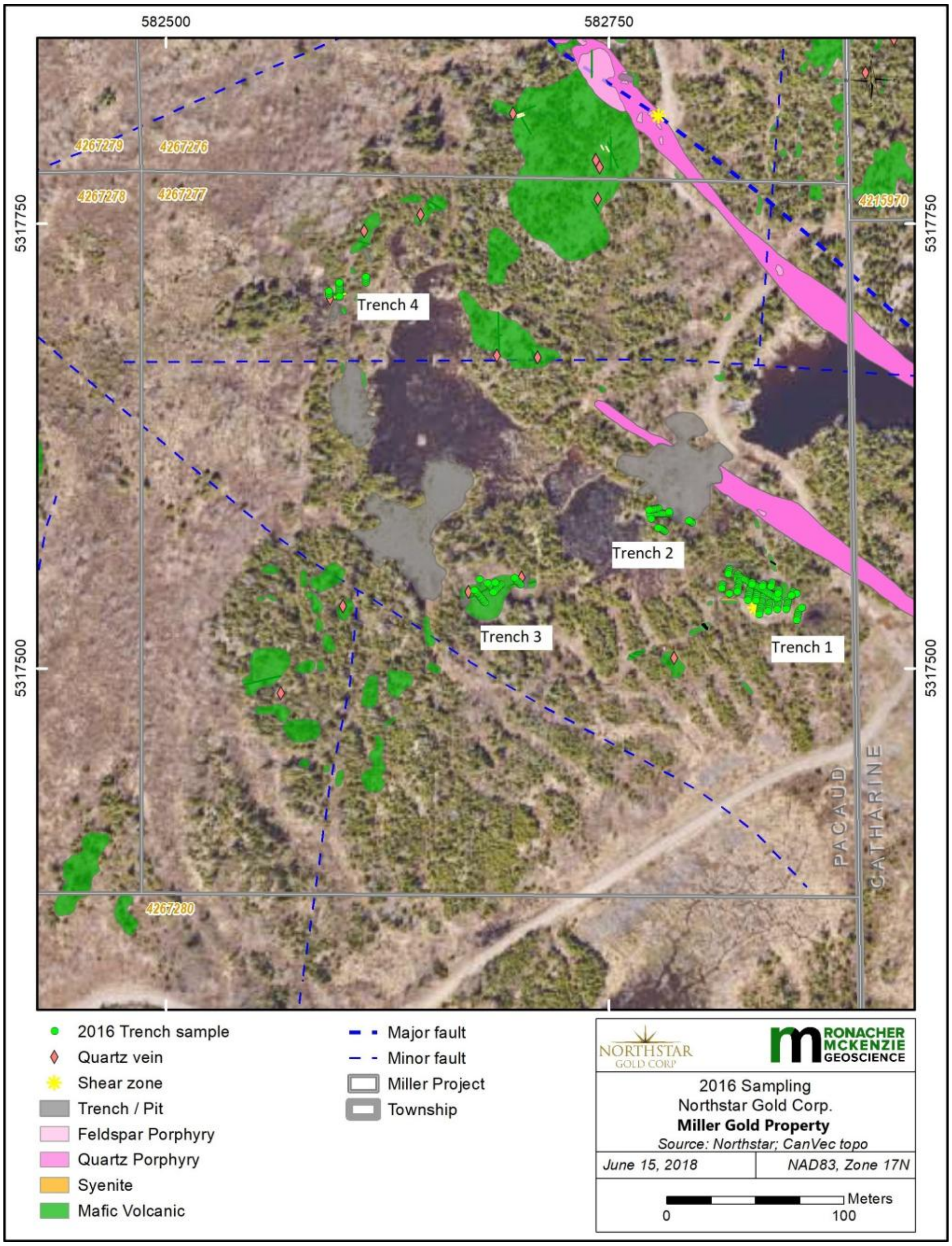

Figure 9-4 Miller Gold Property Location of 2016 Trenches and surface samples

Trench 1

Trench 1 is located near the southeast corner of cell 311795 (legacy claim 4267277) and covers an area where the main No. 1 Vein was historically identified and re-discovered by Northstar to reach the surface, striking east-west in a shallow northerly dip over an exposed area of approximately 25 square metres. In 2014, a series of chip samples and a 13 tonne mini-bulk sample had been collected by Northstar on the surface over this area (also named Trench 1 at the time) based upon the discovery of numerous occurrences of free gold, and gold and bismuth telluride minerals from prospecting the previous year (Boyd and Selway, 2015; Steyn, 2013). Samples gathered from the mini-bulk sample were analyzed in April 2016 and in the fall of 2016; the QA/QC results are discussed in Section 12. Repeated high-grade gold values in outcrop were identified over the area justifying this extensive stripping, blasting and the scaled up follow-up bulk sampling program along this extended strike length where the vein was identified to reach the surface.

For this program, an enlarged east southeast to west northwest trending area named Trench 1 was stripped and partially blasted exposing the vein over a strike length of approximately 60 metres and length down-dip of 5 to 12 metres. The No. 1 Vein at this exposure is a quartz-dominant, roughly tabular body striking west northwest and dipping approximately 10° to the north northeast. The cross-cut mafic volcanic host rocks are northwest striking, chloritized, pillow basalts steeply dipping to the northeast. Foliations in the basalt range from 280-300° with some small joints or shears trending 320-330°. Upon closer examination, the vein has an undulating to ragged appearance, pinching and swelling, in thickness from 15 to 35 cm, and appears to be dipping towards a more north northwest fashion at the north northwest extension of the exposure. In places, there are 10-50 cm sized satellite quartz clots and narrow stringers projecting at high angles from the main vein. The quartz contains <2% sulfides made up of scattered pyrite and rare chalcopyrite in association with the persistent identification of multiple occurrences of free gold and gold-bismuth telluride minerals. The host basalt wall rock possesses a local and variable up to 1 metre wide alteration halo from the contact with the quartz in the form of moderate to pervasively intense silicification, quartz stringers, lesser sericitization, and 2-10% disseminated pyrite. The altered basalt reports low gold values which appear to roughly correlate in grade both with the degree of its pyritization, quartz stringers, and proximity to the vein contact. Gold analyses of samples from the Trench 1 area are reported from previous reports such as in Boyd (2014) and Boyd and Selway (2015) prior to its enlargement.

Approximately 850 tonnes of the total bulk sample material was excavated from Trench 1 and obtained from about a 45 × 10 metre blasted portion of the stripped outcrop where the vein dips from the surface to about 2.5 metres vertical depth. The sampling focused on gathering high-grade gold mineralization from the quartz vein material with minimal dilution from the adjacent rock such that a layer of the overlying basalt cap was removed as waste to be returned to the trench as fill during remediation. The ratio of quartz to basalt material is estimated to be variable depending upon where in the trench it was removed, ranging from 20 to 50% so the ultimate grade of the bulk sample was found to be dependent upon the grade of the quartz vein material, grade of the adjacent basalt wall rock, and the proportion of each rock type.

In order to assess an estimated grade of the Trench 1 bulk sample material, 72 approximately 10 kilogram samples of the in-situ broken blast material were gathered over 8 traverses across the pile which were located by NAD 83 UTM coordinates as listed with the analytical results in Table 9-6. Sampling of partially diluted blasted and broken No. 1 Vein Zone material from 7 parallel 5 metre spaced traverses across Trench 1 plus 1 traverse along the length of Trench 1 produced a weighted average grade of 14.7 g/t Au. When excluding the highest grade sample of 284 g/t Au in sample 15294 from the calculations, the weighted average grade is reduced to 10.9 g/t Au. In addition, where access was possible, 9 sets of 1 metre cut channel samples totaling 29 samples were cut across the exposed vein and basalt wall rock listed in Table 9-5 and Figure 9-5. Seven of the channel cuts at 2 bench depths from the Trench 1 on the No 1 Vein Zone averaging 20.1 g/t Au over 2.14 m (estimated average true width of 0.37 m including the high grade quartz vein and immediate mineralized wall rock).

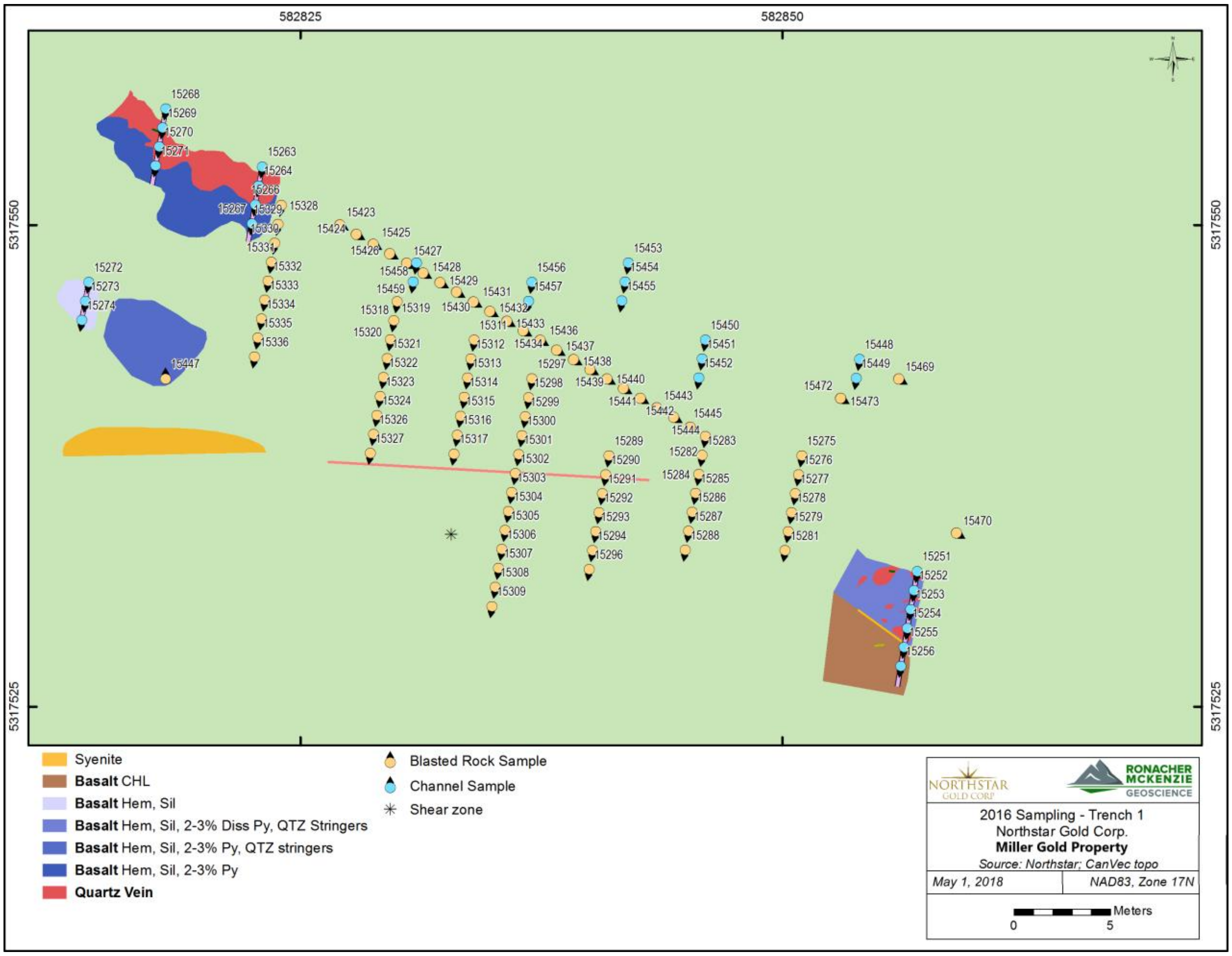

Figure 9-5 Trench 1, 2016 channel and blasted sample locations.

Best results for the channel cuts are 47.4 g/t Au over 3m, including 140 g/t Au over 1m, 19.4 g/t Au over 3m, including 52.4 g/t Au over 1m and 45 g/t Au over 2m, including 73.7 g/t over 1m.

Table 9-5 Trench 1 cut channel samples.

Sample ID	Traverse ID	Traverse Azimuth (°)	Length (m)	Gold (ppb)	Gold (g/t)
S15251	Tr1	190	0-1	843	
S15252	Tr1	190	1-2	> 5000	6.49
S15253	Tr1	190	2-3	> 5000	2.59
S15254	Tr1	190	3-4	144	
S15255	Tr1	190	4-5	7	
S15256	Tr1	190	5-6	8	
S15263	Tr3	190	0-1	230	
S15264	Tr3	190	1-2	> 5000	140

Sample ID	Traverse ID	Traverse Azimuth (°)	Length (m)	Gold (ppb)	Gold (g/t)
S15266	Tr3	190	2-3	849	
S15267	Tr3	190	3-4	185	
S15268	Tr4	190	0-1	6	
S15269	Tr4	190	1-2	> 5000	1.46
S15270	Tr4	190	2-3	> 5000	52.1
S15271	Tr4	190	3-4	> 5000	4.74
S15272	Tr5	190	0-1	72	
S15273	Tr5	190	1-2	20	
S15274	Tr5	190	2-3	33	
S15448	Tr13	190	0-1	15	
S15449	Tr13	190	1-2	> 5000	9.45
S15450	Tr14	190	0-1	13	
S15451	Tr14	190	1-2	> 5000	25.3
S15452	Tr14	190	2-3	> 5000	73.7
S15453	Tr15	190	0-1	211	
S15454	Tr15	190	1-2	> 5000	9.33
S15455	Tr15	190	2-3	529	
S15456	Tr16	190	0-1	546	
S15457	Tr16	190	1-2	1390	
S15458	Tr17	190	0-1	12	
S15459	Tr17	190	1-2	3000	2.78

Table 9-6 Trench 1 blasted rock samples.

Sample ID	Traverse #	Traverse Azimuth (°)	Length (m)	Gold (ppb)	Gold (g/t)
S15275	Br1	190	0-1	1580	
S15276	Br1	190	1-2	> 5000	2.23
S15277	Br1	190	2-3	867	
S15278	Br1	190	3-4	1860	
S15279	Br1	190	4-5	> 5000	5.12
S15281	Br1	190	5-6	1320	
S15282	Br2	190	0-1	> 5000	4.6
S15283	Br2	190	1-2	602	
S15284	Br2	190	2-3	320	
S15285	Br2	190	3-4	116	
S15286	Br2	190	4-5	1070	
S15287	Br2	190	5-6	1380	
S15288	Br2	190	6-7	> 5000	6.01
S15289	Br3	190	0-1	123	
S15290	Br3	190	1-2	> 5000	4.25
S15291	Br3	190	2-3	330	
S15292	Br3	190	3-4	> 5000	57.4

Sample ID	Traverse #	Traverse Azimuth (°)	Length (m)	Gold (ppb)	Gold (g/t)
S15293	Br3	190	4-5	980	
S15294	Br3	190	5-6	> 5000	284
S15296	Br3	190	6-7	> 5000	19.7
S15297	Br4	190	0-1	95	
S15298	Br4	190	1-2	17	
S15299	Br4	190	2-3	28	
S15300	Br4	190	3-4	5	
S15301	Br4	190	4-5	63	
S15302	Br4	190	5-6	> 5000	3.03
S15303	Br4	190	6-7	> 5000	21.4
S15304	Br4	190	7-8	> 5000	1.13
S15405	Br4	190	8-9	1270	
S15406	Br4	190	9-10	> 5000	61
S15407	Br4	190	10-11	> 5000	60.9
S15408	Br4	190	11-12	> 5000	7.96
S15309	Br4	190	12-13	> 5000	22.4
S15311	Br5	190	0-1	> 5000	5.19
S15312	Br5	190	1-2	> 5000	9.24
S15313	Br5	190	2-3	> 5000	6.38
S15314	Br5	190	3-4	> 5000	3.88
S15315	Br5	190	4-5	> 5000	9.56
S15316	Br5	190	5-6	4090	8.01
S15317	Br5	190	6-7	4340	6.68
S15318	Br6	190	0-1	> 5000	39.1
S15319	Br6	190	1-2	> 5000	41
S15320	Br6	190	2-3	> 5000	22.2
S15321	Br6	190	3-4	4960	
S15322	Br6	190	4-5	> 5000	85.3
S15323	Br6	190	5-6	> 5000	15.4
S15324	Br6	190	6-7	> 5000	18.5
S15326	Br6	190	7-8	> 5000	4.73
S15327	Br6	190	8-9	3790	9.63
S15328	Br7	190	0-1	68	
S15329	Br7	190	1-2	75	
S15330	Br7	190	2-3	> 5000	19.3
S15331	Br7	190	3-4	> 5000	20.6
S15332	Br7	190	4-5	> 5000	40.2
S15333	Br7	190	5-6	> 5000	18.4
S15334	Br7	190	6-7	> 5000	29.4
S15335	Br7	190	7-8	> 5000	19
S15336	Br7	190	8-9	1200	
S15423	Br12	120	0-1	> 5000	9.82
S15424	Br12	120	1-2	> 5000	6.09
S15425	Br12	120	2-3	1750	
S15426	Br12	120	3-4	1680	

Sample ID	Traverse #	Traverse Azimuth (°)	Length (m)	Gold (ppb)	Gold (g/t)
S15427	Br12	120	4-5	1290	
S15428	Br12	120	5-6	650	
S15429	Br12	120	6-7	3740	8.97
S15430	Br12	120	7-8	1870	
S15431	Br12	120	8-9	2050	3.44
S15432	Br12	120	9-10	961	
S15433	Br12	120	10-11	1050	
S15434	Br12	120	11-12	3130	6.94
S15436	Br12	120	12-13	> 5000	19.4
S15437	Br12	120	13-14	> 5000	3.32
S15438	Br12	120	14-15	> 5000	11.5
S15439	Br12	120	15-16	3880	4.22
S15440	Br12	120	16-17	2530	4.32
S15441	Br12	120	17-18	> 5000	23.8
S15442	Br12	120	18-19	525	
S15443	Br12	120	19-20	2790	3.43
S15444	Br12	120	20-21	3280	5.59
S15445	Br12	120	21-22	> 5000	4.87
S15469	Br12	120	24-25	2180	
S15470	Br12	120	29-30	701	
S15447			grab	> 5000	10.5

Trench 2

In this program, Trench 2 is located on cell 311795 (legacy claim 4267277), 60 metres north of Trench 1 in the vicinity of where the No. 1 Vein is intersected by diamond drill hole MG-14-14 drilled in 2014 (Boyd, 2014) at a depth of 2 metres. The drill site is covered mostly by piled broken waste rock from historic work completed during the 1920s. A 20 × 15 metre area was stripped of overburden in an attempt to reach bedrock, which was only partially achieved. The main No. 1 Vein quartz rock was not definitively identified among the uncovered outcrop, however, a 2-3 cm thick flat pyrite-telluride bearing quartz vein hosted in rusty silicified, pyritized, sub-vertical basalt was identified associated with localized sub-vertical shears and multiple quartz stringers trending 320 – 330°. A set of 6-1 metre channel samples returned values of 5.9 g/t Au over 5.0m in a channel cut, including 17.4 g/t Au over 1m from this exposure as listed in Table 9-7 and Figure 9-6.

Subsequent blasting of this and adjacent outcrops was unsuccessful in defining No. 1 Vein at this locality because of flooding of the created pits by an adjacent beaver pond, however, excavation of the broken rock into piles revealed the accumulation of voluminous amounts of similarly altered, pyritized rock including additional pieces of narrow flat quartz stringers on the faces of the basalt. A total of 23 10-kilogram broken rock samples in 3 traverses, similar to that in Trench 1, as listed in Table 9-8 and shown in Figure 9-6, were gathered for gold analysis returning values as high as 14.6 g/t Au, but none of this material was chosen for the bulk sample at this stage due to the erratic nature of the gold content and paucity of visual information to make an estimate of its gold grade.

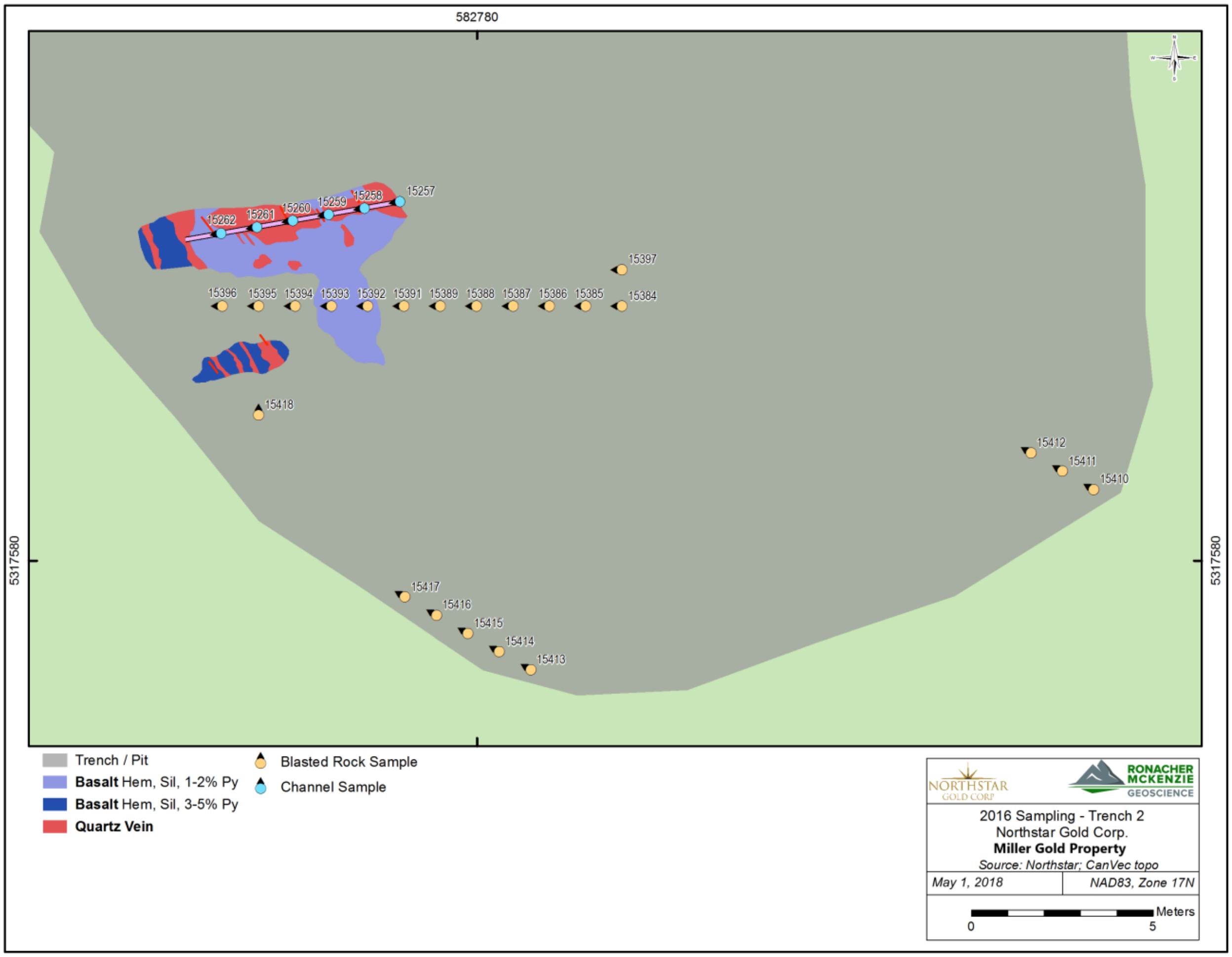

Figure 9-6 Trench 2, 2016 channel and blasted sample locations.

Table 9-7 Trench 2 cut channel samples.

Sample ID	Traverse #	Traverse Azimuth (°)	Length (m)	Gold (ppb)	Gold (g/t)
S15257	Tr2	80	0-1	1870	2.72
S15258	Tr2	80	1-2	1620	1.76
S15259	Tr2	80	2-3	1660	2.32
S15261	Tr2	80	3-4	> 5000	17.4
S15262	Tr2	80	4-5	> 5000	5.49

Sample ID	Traverse #	Traverse Azimuth (°)	Length (m)	Gold (ppb)	Gold (g/t)
S15263	Tr2	80	5-6	654	

Table 9-8 Trench 2 blasted rock samples.

Sample ID	Traverse #	Traverse Azimuth (°)	Length (m)	Gold (ppb)	Gold (g/t)
S15384	Br9	270	0-1	131	
S15385	Br9	270	1-2	884	
S15386	Br9	270	2-3	504	
S15387	Br9	270	3-4	794	
S15388	Br9	270	4-5	663	
S15389	Br9	270	5-6	1220	
S15391	Br9	270	6-7	409	
S15392	Br9	270	7-8	618	
S15393	Br9	270	8-9	1500	
S15394	Br9	270	9-10	604	
S15395	Br9	270	10-11	3960	4.41
S15396	Br9	270	11-12	> 5000	14.6
S15397	Br9	270	12-13	1530	
S15410	Br10	300	0-1	442	
S15411	Br10	300	1-2	746	
S15412	Br10	300	2-3	232	
S15413	Br11	300	0-2	231	
S15414	Br11	300	2-4	397	
S15415	Br11	300	4-6	722	
S15416	Br11	300	6-8	433	
S15417	Br11	300	8-10	104	
S15418	Br11	Grab		849	

Trench 3

Trench 3, located on cell 311795 (legacy claim 4267277), covers an area 100 metres west of Trench 1 where there is a flooded historic ramp which was historically used to explore and test mine No. 1 Vein. In 2014, a series of chip samples had been gathered by Northstar on the surface over an area (named Trench 2 at the time) to the west of the ramp entrance where No.1 Vein appears to reach the surface (Boyd and Selway 2015). In April 2016, check samples were gathered from the bags of the 2013 mini-bulk sample, which partially originated from the Trench 3 area for which the QC results are discussed in

Section 12. In general, moderately high gold values were found over the area from previous work justifying the stripping, blasting and additional bulk sampling program.

For this program, a small 10 × 10 metre area, 20 metres west of the ramp was stripped and blasted to facilitate the removal of the basalt cap to better access the quartz vein material. No. 1 Vein at this exposure appears to be thinner (10-20 cm wide) and possesses a lower grade in comparison to that in Trench 1 based upon the previous sampling by Northstar. The surface exposure of the Vein here allows one to appreciate its undulating to sinuous nature and associated measured shearing trending 220 - 230° on outcrop. The Vein's overall east-west strike remains like that found at Trench 1 although it appears to steepen in its northerly dip to approximately 20°. Gold analyses of samples from the area are reported from previous reports as Trench 2 such as in Boyd (2014) and Boyd and Selway (2015) prior to its enlargement when it was named Trench 3 in this Technical Report.

Approximately 82 tonnes of the total bulk sample were taken from Trench 3. Some of this sample was supplemented by the gathering of historic piled quartz boulders adjacent to the trench. The sampling again focused on gathering high-grade gold mineralization from the quartz vein material with minimal dilution from the basalt. The percentage of quartz (to basalt) in the sample here is higher than at Trench 1 ranging from 50 to 70%. In order to assess an estimated grade of the Trench 3 bulk sample, 7- 10 kilogram samples of the in-situ broken blast material were gathered in 1 traverse across the pile as shown in

Table 9-10 which were located by NAD 83 UTM coordinates. In addition, where access was possible, 3 sets of 1 metre channel samples totaling 23 samples were cut across the exposed vein and basalt wall rock listed in Table 9-9 and shown Figure 9-7. One of these sample sets was across the quartz vein exposure which was subsequently blasted to create the trench. For each sample an estimate was made of its basalt and quartz composition. Best results of 3 channel cuts were 5.02 g/t Au over 2.0m, including 7.96 g/t Au over 1m. An additional 200 kg sample of the quartz vein material was obtained from the site to be used for metallurgical testing. Sampling of 287 kg of blasted and broken material overall reported a weighted average grade of 3.1 g/t Au.

The results in these tables can be compared to both the original gold values in Boyd and Selway (2015), the mini-bulk sampling results, and the reconciled grade of mill head feed samples for the bulk sample reported from the Camflo Mill.

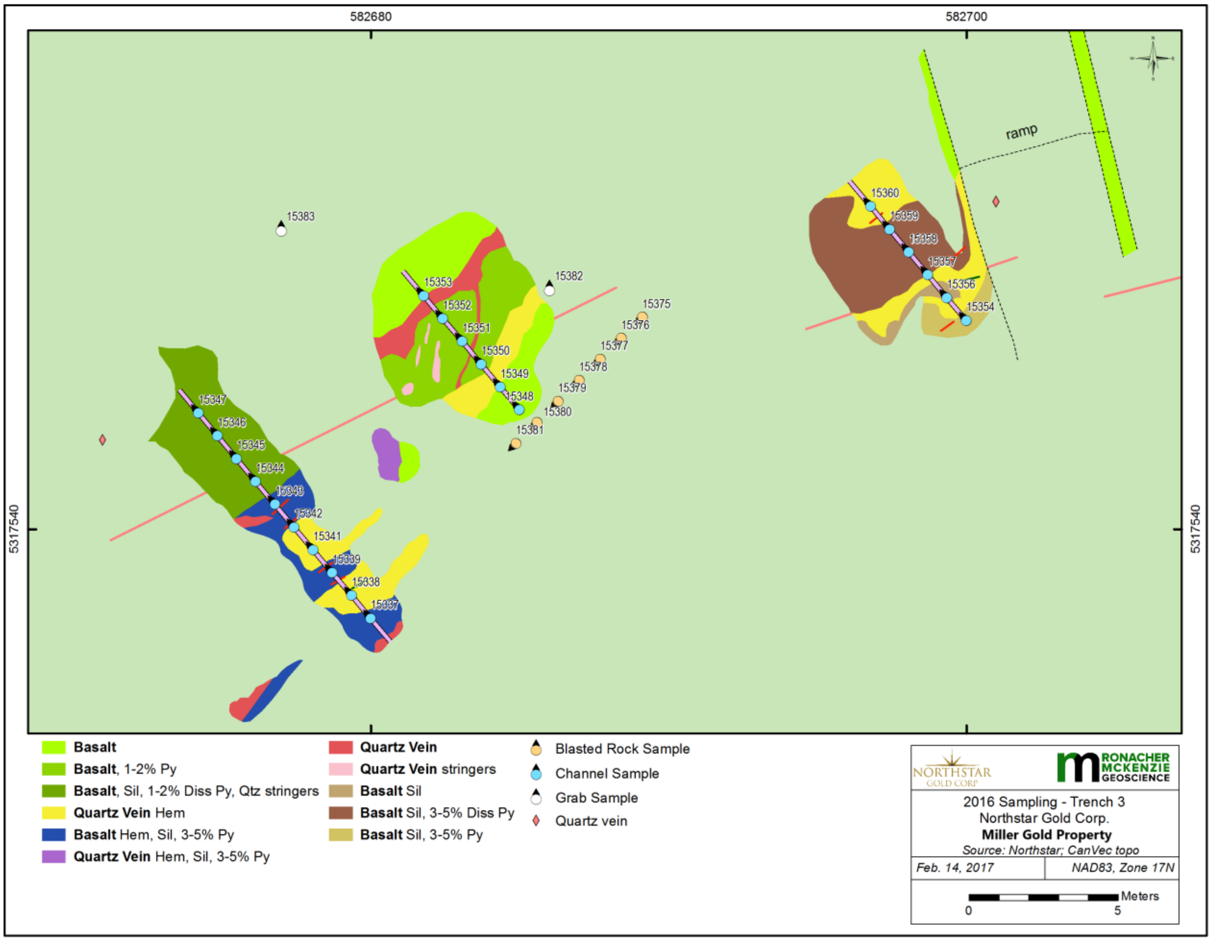

Figure 9-7 Trench 3, 2016 channel and blasted sample locations.

Table 9-9 Trench 3 cut channel samples.

Sample ID	Traverse #	Traverse Azimuth (°)	Length (m)	Gold (ppb)	Gold (g/t)
S15337	Tr6	320	0-1	1180	
S15338	Tr6	320	1-2	2040	2.26
S15339	Tr6	320	2-3	146	
S15341	Tr6	320	3-4	29	
S15342	Tr6	320	4-5	14	
S15343	Tr6	320	5-6	5	
S15344	Tr6	320	6-7	7	
S15345	Tr6	320	7-8	8	
S15346	Tr6	320	8-9	< 5	
S15347	Tr6	320	9-10	< 5	
S15348	Tr7	320	0-1	< 5	

Sample ID	Traverse #	Traverse Azimuth (°)	Length (m)	Gold (ppb)	Gold (g/t)
S15349	Tr7	320	1-2	29	
S15350	Tr7	320	2-3	1360	
S15351	Tr7	320	3-4	319	
S15352	Tr7	320	4-5	94	
S15353	Tr7	320	5-6	95	
S15354	Tr8	320	0-1	62	
S15356	Tr8	320	1-2	289	
S15357	Tr8	320	2-3	1010	
S15358	Tr8	320	3-4	391	
S15359	Tr8	320	4-5	3890	7.96
S15360	Tr8	320	5-6	2090	1.67

Table 9-10 Trench 3 blasted rock samples.

Sample ID	Traverse #	Traverse Azimuth (°)	Length (m)	Gold (ppb)	Gold (g/t)
S15375	Br8	225	0-1	> 5000	5.00
S15376	Br8	225	1-2	66	
S15377	Br8	225	2-3	192	
S15378	Br8	225	3-4	2200	2.00
S15379	Br8	225	4-5	1630	
S15380	Br8	225	5-6	3140	1.43
S15381	Br8	225	6-7	829	
S15282	Br8	grab		570	
S15383	Br8	grab		21	

Trench 4

Trench 4 is located towards the northwest part of cell 311795 (legacy claim 4267277) and covers an area 300 metres northwest of Trench 1 where there is a known historic gold showing named the D-Vein associated with a buried shallow shaft and trench. Previous grab samples obtained in 2013 and 2014 returned multiple high-grade gold values justifying a stripping and more systematic sampling program at the showing (Boyd 2014). For this program, a 5 by 20 metre area covered mostly by thick bush was stripped to expose the northeast trending structure.

The D-Vein at this exposure appears to be highly variable in width from 5 to 30 cm with a strike and dip ranging 245 - 255° azimuth dipping 40 - 45°SE, which can be followed for 10 metres after which it may change strike or shrink into a 2 cm thick stringer within a steeply dipping shear zone trending 265°. It is uncertain whether this observed change is a geological feature, perhaps trending obliquely to the shearing in an easterly fashion under overburden, or whether parts of the structure were mined out. The D-Vein is comprised of iron oxide stained quartz with 3-5% disseminated pyrite, trace chalcopyrite and multiple occurrences of visible gold, and exhibits a 0.3 to 1 metre alteration halo into the basaltic wall rock in the form hematization, silicification, 2-5% pyritization, and intermittent quartz stringers.

In this program, no blasting or bulk sampling was completed but in order to assess an estimated grade of the vein and basaltic wall rock at this site, 14 1 metre cut channel samples were taken across its strike as shown in Table 9-11 and Figure 9-8. The best results of the 4 channel cuts were 27.8 g/t Au over 1 metre and 34.8 g/t Au over 1 metre with an approximate 0.5m true width of the D-Vein system. An additional 122 kg sample of the vein material was obtained at the site for metallurgical testing and reported a weighted average grade of 36.1 g/t Au.

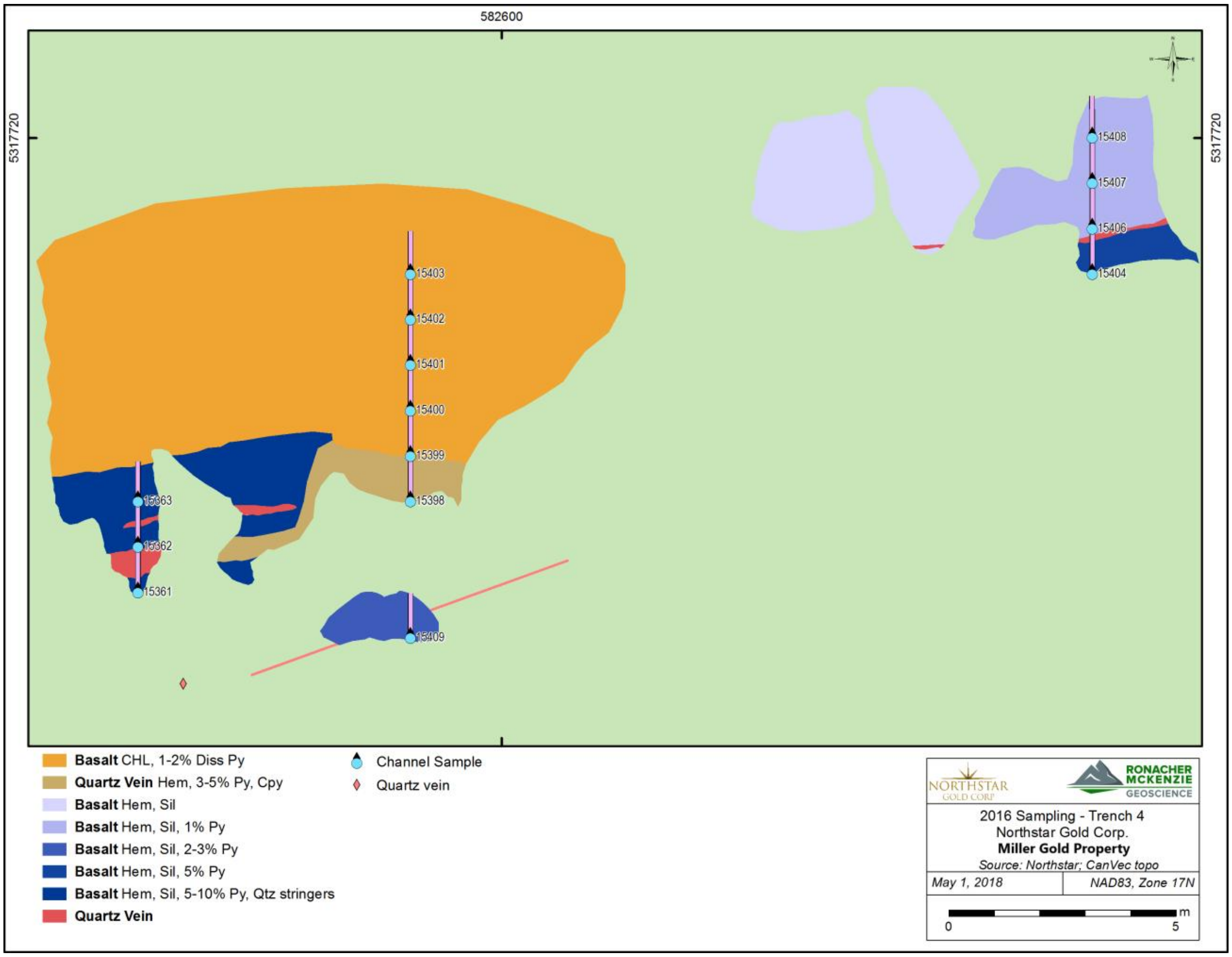

Figure 9-8 Trench 4, 2016 channel sample locations.

Table 9-11 Trench 4 D-Vein cut channel samples.

Sample ID	Traverse #	Traverse Azimuth (°)	Length (m)	Gold (ppb)	Gold (g/t)
S15361	Tr9	360	0-1	> 5000	30.0
S15362	Tr9	360	1-2	> 5000	9.46
S15363	Tr9	360	2-3	54	
S15398	Tr10	360	0-1	> 5000	34.8
S15399	Tr10	360	1-2	222	0.34
S15401	Tr10	360	2-3	47	
S15402	Tr10	360	3-4	9	
S15403	Tr10	360	4-5	18	
S15404	Tr11	360	0-1	<5	
S15406	Tr11	360	1-2	5	
S15407	Tr11	360	2-3	< 5	
S15408	Tr11	360	3-4	< 5	
S15409	Tr12	360	0-1	10	

10.0 DRILLING

10.1 Northstar Gold 2014 Drilling

Northstar conducted its 2014 diamond drilling program in order to:

- Validate the results of the historical drilling focusing on following up predominately on the results of the 1986-87 Nortek work program on the Property and;

- Test drill targets within chargeability and resistivity anomalies generated from the ground IP/resistivity survey conducted by the company early in 2014 in advance of the drilling program.

The 2014 diamond drill holes are located on cells 311795, 185339, 335177 and 173038 (legacy claims 4267277, 4267276, and 4215970) listed in Table 10-1. The drilling program consisted of 15 (MG14-01 to 15) NQ holes totaling 1,778.5 m. All the holes were drilled vertically with the exception of holes MG14-04, 06 and 12.

Forage Asinii of Notre-Dame du Nord was the diamond drilling contractor and the program was supervised in the field by George Pollock while geologists Trevor Boyd and Elisabeth Ronacher logged the core and monitored QA/QC for the program. A Reflex down-hole survey was performed at approximately 50 m intervals. The drill casing was kept in the holes. GPS coordinates of all collar locations were recorded and at the end of the drill program all the holes were surveyed using Trimble DGPS. The overburden depths were between 2 - 5 m. The samples were gathered as NQ core with recoveries of over 95 per cent. The core was photographed and logged for RQD, lithology, mineralization and alteration prior to sampling and stored at Northstar's secure warehouse at Earlton, Ontario.

Table 10-1 Miller Gold Property 2014 drill hole collars (NAD83, Zone 17U).

Hole ID	Elevation asl. (m)	Cell #	Legacy Claim #	Easting	Northing	Dip (°)	Azimuth (°)	Length (m)
MG14-01	337	311795	4267276	582781	5317806	-90	NA	138
MG14-02	322	311795	4267277	582875	5317751	-90	NA	75.5
MG14-03	331	185335	4267276	582813	5317977	-90	NA	162
MG14-04	336	185339	4215970	582895	5317990	-75	12	102
MG14-05	339	335177	4215970	583021	5318104	-90	NA	81
MG14-06	340	335177	4215970	582995	5317867	-55	0	222
MG14-07	323	185339	4267277	582818	5318026	-90	NA	137
MG14-08	327	185339	4267277	582809	5318076	-90	NA	87
MG14-09	329	185339	4267277	582775	5317979	-90	NA	147
MG14-10	327	185339	4267277	582780	5318009	-90	NA	177
MG14-11	327	185339	4267277	582753	5318036	-90	NA	186
MG14-12	332	185339	4267277	582832	5317969	-60	0	159
MG14-13	324	311795	4267276	582804	5317678	-90	NA	45
MG14-14	321	311795	4267276	582785	5317601	-90	NA	30
MG14-15	327	311795	4267276	582848	5317592	-90	NA	30
								1,778.5

As well as collars listed

Table 10-1, detailed geological plans are presented in Figure 10-1 and Figure 10-2 with the 2014, 2015 and historical drill holes in the area of predominant economic interest on the Property. Specifically, during the 2014 program the drilling was clustered in 2 areas on the map based upon; the area of main No. 1

Vein Zone(s) on cells 185339 and 311795 (legacy claims 4267276 and 4267277) in northeastern Pacaud Township which has been the historical focus for exploration and development on the Property and; the area of the Allied Syenite immediately to the north on cell 185339 (legacy claim 4367276). In addition, 3 exploration holes were drilled to the east of the Allied Syenite on cells 185339 and 335177 (legacy claim 4515970) in northwestern Catharine Township which originally was part of the historically named "Perron" claims.

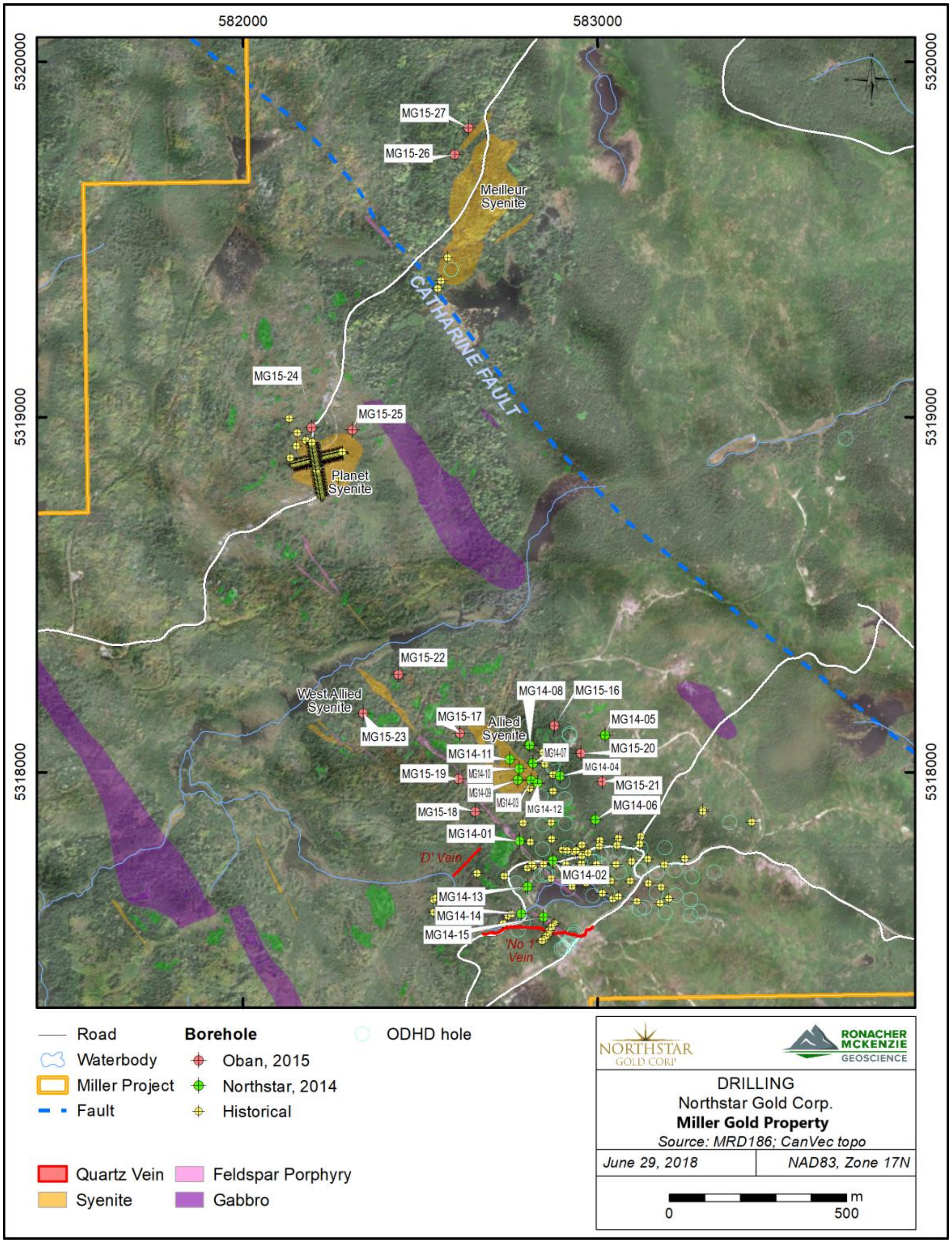

Figure 10-1 Miller Gold Property historic, 2014 and 2015 diamond drill holes plan map.

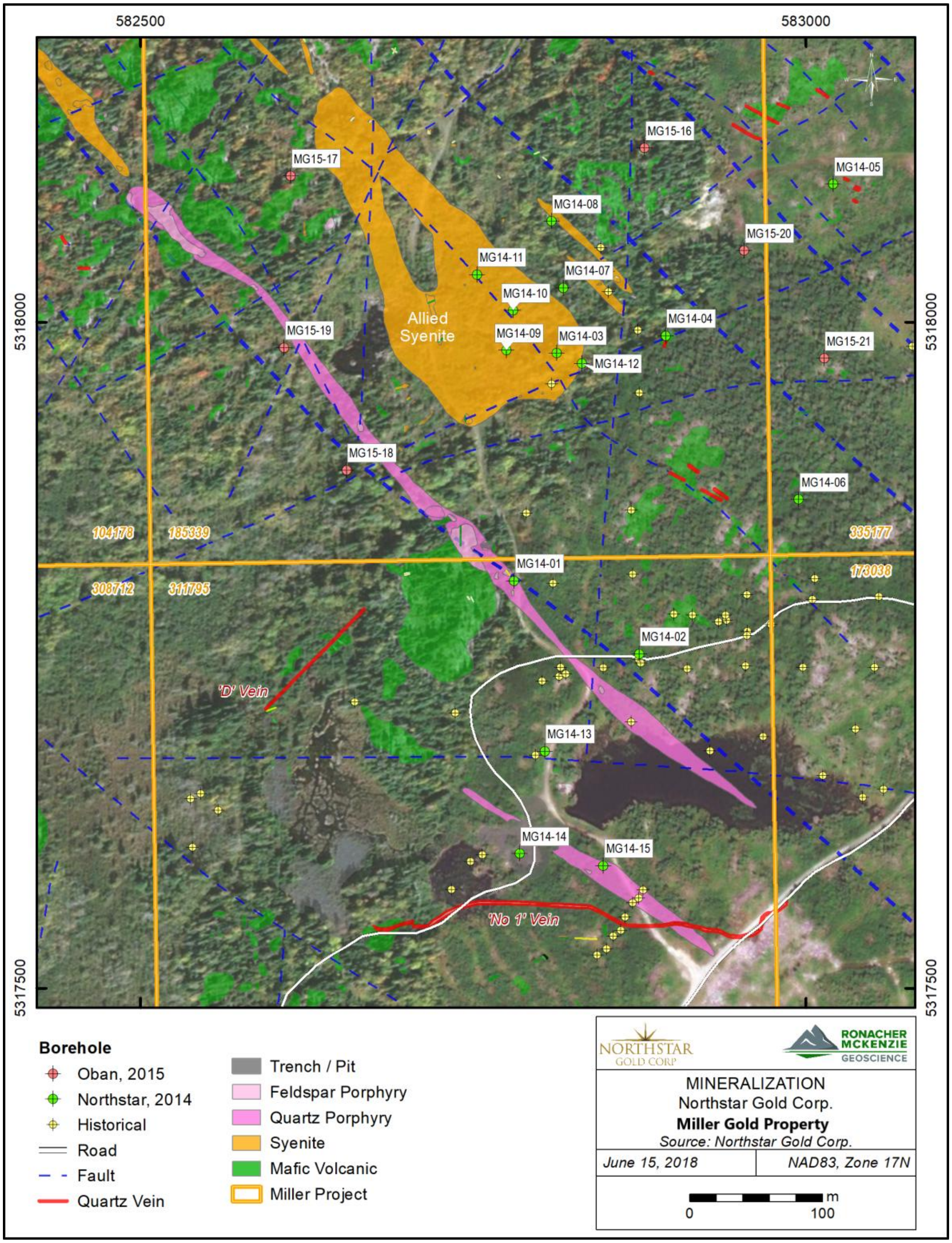

Figure 10-2 Miller Gold Property detail of central mineralized area with diamond drill holes plan map.

During the drill program, a total of 1,111 core samples were obtained from the drilling most of which were 1 metre in length but ranging from 0.25 to 2.0 metres. All the samples were analyzed for gold and 51 were also analyzed for multi-elements. The analyzed samples covered approximately 61% of the core obtained from drilling. All the assays highlights are listed in Table 10-2. Mineralized intervals reported are core lengths and their true widths at this stage are unknown. There are no drilling, sampling or recovery issues known by the author that could materially impact the accuracy and reliability of the results.

10.1.1 Discussion of 2014 Results

The program was successful in confirming the trend of the shallowly dipping No. 1 Vein Zone in holes MG14-02, 3, 7, 9, 12 and 13. In addition, a bulk tonnage, near surface gold target was discovered within the Allied Syenite with 6 drill holes (MG14-03, 7, 9, 10, 11, 12) intersecting gold zone(s) between 20m and 120m vertical depth within the intrusive body. Drill hole spacing in the vicinity of the Allied Syenite was between 30 and 50m for the 6 holes. Best results of the drilling came from holes MG14-02, 07, 09 and 12. Specific drilling highlights are detailed in Table 10-2.

Table 10-2 Miller Gold Property 2014 assay highlights table.

Hole ID	From (m)	To(m)	Interval (m)	Au (g/t)	Comments
MG14-01	3	3.3	0.3	3.3	Within 20m of historic hole 87-6
and	58.15	58.65	0.5	1.56	
MG14-02	49.7	57.65	7.95	5.26	Vein #1 Zone C shaft within 2m of historic hole 204
including	49.7	50.15	0.45	86.6	
MG14-03	41.7	111.3	69.6	0.58	20m north of Historic hole 87-15 Allied Syenite
including	41.7	62	20.3	1.27	
including	41.7	42	0.3	36.2	
Including	110	111.3	1.3	1.21	
MG14-06	171.6	177.7	6.1	0.94	ENE Shear zone
MG14-07	22	119.5	97.5	1.04	
including	105.47	119.5	14.03	3.55	Vein #1 zone Allied Syenite
including	112.43	114.25	1.82	11.3	
MG14-08	10	11	1	1.11	
MG14-09	44	107	63	0.88	
including	75	107	32	1.27	
including	88.95	107	18.05	1.99	Vein #1 zone Allied Syenite
MG14-10	41	109	68	0.6	
Including	46	52	6	2.43	Allied Syenite
including	76.5	87	10.5	1.18	
MG14-11	20	21	1	8.2	
and	43.5	95	51.5	0.7	Allied Syenite
Including	43.5	49.5	6	2.29	
Including	79	81	2	3.6	
Including	92	95	3	1.47	

Hole ID	From (m)	To(m)	Interval (m)	Au (g/t)	Comments
and	110	111	1	7.42	
MG14-12	54	156	102	0.99	
Including	54	56	2	4.47	
Including	78	82	4	2.59	
including	113	156	43	1.7	
including	138.05	142	3.95	11.6	Vein #1 zone Allied Syenite
MG14-13	21.9	24	2.1	1.9	
MG14-14	3	4	1	8.34	Vein #1 zone-C shaft
MG14-15	5.5	6	0.5	0.47	

In summary, gold mineralization in the No. 1 Vein Zone is characterized by widely distributed coarse native gold and gold tellurides hosted by quartz veins, disseminated pyrite, intense chlorite alteration and rare chalcopyrite stringers. Fine gold is associated with heavy disseminated pyrite mineralization.

Diamond drilling confirmed the presence of No. 1 Vein hosting gold mineralization in the area of the Miller–Independence historic mine workings at shallow depths. The program also showed No. 1 Vein dips shallowly to the north towards the Allied Syenite where the vein system may widen and become incorporated into the Allied Syenite as multiple sub-horizontal narrow veins in a fingering manner suggestive of a genetic relationship in the gold mineralization.

Gold is very widely distributed throughout Allied Syenite from 20 to 120 metres vertical depth with the majority of samples showing anomalous results. Gold mineralization in the intrusive is commonly associated with intense silicification, hematization, pyritization, black chlorite, and quartz and jasper veining of the syenite but is also found in spatially associated mafic volcanic and feldspar porphyry rocks, and within parts of the syenite exhibiting apparent lesser alteration such as within hole MG14-09. Within these less altered host rocks the gold mineralization, however, still appears to be associated with distinctive speckled grains of black chlorite of likely iron rich composition and secondary origin.

At this early stage of exploration, the orientation of the mineralized zone is not well defined and sample lengths do not reflect the true lengths or widths of the mineralized zone although based upon drill core logging in vertical holes many veins intersected in the Allied Syenite were observed to be at a normal angle to the core axis.

10.2 2015 Oban Mining Drilling

In July and August 2015, Oban Mining Corp. contracted Forthright Drilling, based out of Timiskaming Shores, ON to complete 12 NQ diamond drill holes on the Allied, West Allied, Meilleur and Planet syenites totaling 4,067 m (Table 10-3, Figure 10-1). The rig and equipment sloop were moved between drill sites by a skidder. The drill sites are accessible by truck along a network of bush roads.

The diamond drill program was designed to test the extent of the Allied Syenite due to limited exposure. The drill holes in the Allied Syenite were spaced on 100 m sections and were drilled with an azimuth of either 065° or 245° to intersect the structures interpreted to control the auriferous veins at an optimal angle. This drilling pattern produced four sections through the Allied Syenite.

For the West Allied, Planet and Meilleur syenites, the drill program was planned to test the character and distribution of the gold mineralization at depth and to determine the size of these intrusions. The West Allied Syenite has no recorded historical drilling while the Meilleur and Planet syenites have been sparsely drill-tested with 3 holes and 6 holes respectively. The drill holes were planned to intersect the mineralized quartz veins and structures at an optimal angle based on the results of the 2015 field mapping program.

The azimuth and inclination of all drill holes were measured using a Reflex multi-shot downhole survey instrument. Measurements were made 15 m below casing, at 50 m downhole, and at subsequent 50 m intervals. The Reflex survey data is summarized in the header section on each of the drill hole logs. The location of each drill hole was recorded by an averaged GPS reading. Based on this control, accuracy of hole positioning is estimated to be less than 5 m.

The drill core was logged and photographed, 4 boxes at a time. The logs recorded the different lithologies, alteration types, mineralization, position and orientations of veins, fractures, RQD and other structures. The rock quality designation (RQD), and level of core recovery for the 2015 drill holes was recorded prior to the lithologic logging. Core recovery was generally > 95% with the exception of a few highly fractured zones. The photos of the un-split core agree well with the stated core recovery of > 95%.

Table 10-3 Summary of Oban 2015 Drill Program.

Drill hole	Project Area	Easting	Northing	Elevation (m)	Azimuth (°)	Dip (°)	Final Depth (m)
MG15-16	Allied	582879	5318131	327.78	245	-45	351
MG15-17	Allied	582613	5318110	325.35	65	-45	204
MG15-18	Allied	582655	5317889	307.51	60.1	-53	399
MG15-19	Allied	582608	5317981	315.28	62.8	-51	394.4
MG15-20	Allied	582954	5318054	326.46	245	-46	423
MG15-21	Allied	583014	5317973	326.77	245	-47	440.7
MG15-22	West Allied	582438	5318276	311.35	225	-45	225

MG15-23	West Allied	582340	5318166	318.41	221.5	-46	224.7
MG15-24	Planet	582194	5318971	327.56	197.8	-51	369
MG15-25	Planet	582309	5318964	310.77	201.9	-45	314
MG15-26	Meilleur	582597	5319740	313.89	129.4	-48	356
MG15-27	Meilleur	582637	5319815	318.65	135.5	-46	366
							4,066.8

Of the 4,066 m drilled, 183.7 m of core was not sampled. The unsampled intervals were in MG15-21 and MG15-24. MG15-21 failed to intersect the Allied Syenite therefore the majority of the hole was hosted in slightly altered to unaltered mafic volcanic. Unaltered mafic volcanic rocks with no mineralization or veining were not sampled. MG15-24 was planned to be drilled to a depth of 370 m to intersect a mineralized quartz vein observed on surface. This vein was not intersected in the drill hole, and over the 140 m of mafic volcanic rocks intersected in the hole only intervals with alteration, mineralization or quartz veining, were sampled.

10.2.1 Discussion of Oban 2015 Results

Of the 12 holes drilled, all holes except for MG15-22 and MG15-23 returned assays above 1 g/t. Table 10-4 lists highlights of the drilling program. The drill program was successful in demonstrating the presence of gold mineralization in the Allied, Planet, and Meilleur syenites and indicates that there is little chance of gold mineralization being found within the West Allied Syenite.

Table 10-4: Summary of highlights and calculated weighted averages from the 2015 drilling.

Hole ID	From (m)	To (m)	Core Length (m)	Au (g/t)	Comments
MG15-16	192.85	196.25	3.40	3.1	Vein #1 zone in volcanic rocks north of Allied Syenite
MG15-18	102.50	103.55	1.05	7.1	Vein #1 zone in volcanic rocks west of Allied Syenite
	255.70	256.00	0.30	19.2	New zone in Allied Syenite @ 210m depth
	374.75	377.75	3.00	4.2	New zone in Allied Syenite @ 300m depth
including	374.75	376.25	1.50	6.12	
MG15-20	311.85	314.85	3.05	14.1	New zone in Allied Syenite @ 220m depth
including	311.85	312.85	1.00	40.5	Abundant visible gold
MG15-24	48.45	195.64	147.19	0.57	Pervasive alteration zone in Planet
including	48.45	60.00	11.55	3.32	Intercept with tellurides and visible gold in stockwork @ 37m depth; confirms historic drilling in Planet Syenite
including	52.30	57.00	4.70	7.34	Visible gold with tellurides
including	53.70	54.00	0.30	74.9	Abundant visible gold with tellurides

including	97.05	97.95	0.90	9.11	Visible gold
including	193.00	195.64	2.64	5.98	Sulfide-rich zone in Planet @ 148m depth
including	193.00	194.10	1.10	12.5	
MG15-26	86.55	87.50	0.95	20.8	Abundant tellurides in FZ near Meilleur
	141.00	141.50	1.50	4.27	
	293.80	306.85	13.05	2.13	Abundant tellurides in FZ in Meilleur
including	293.80	295.20	1.40	14.3	

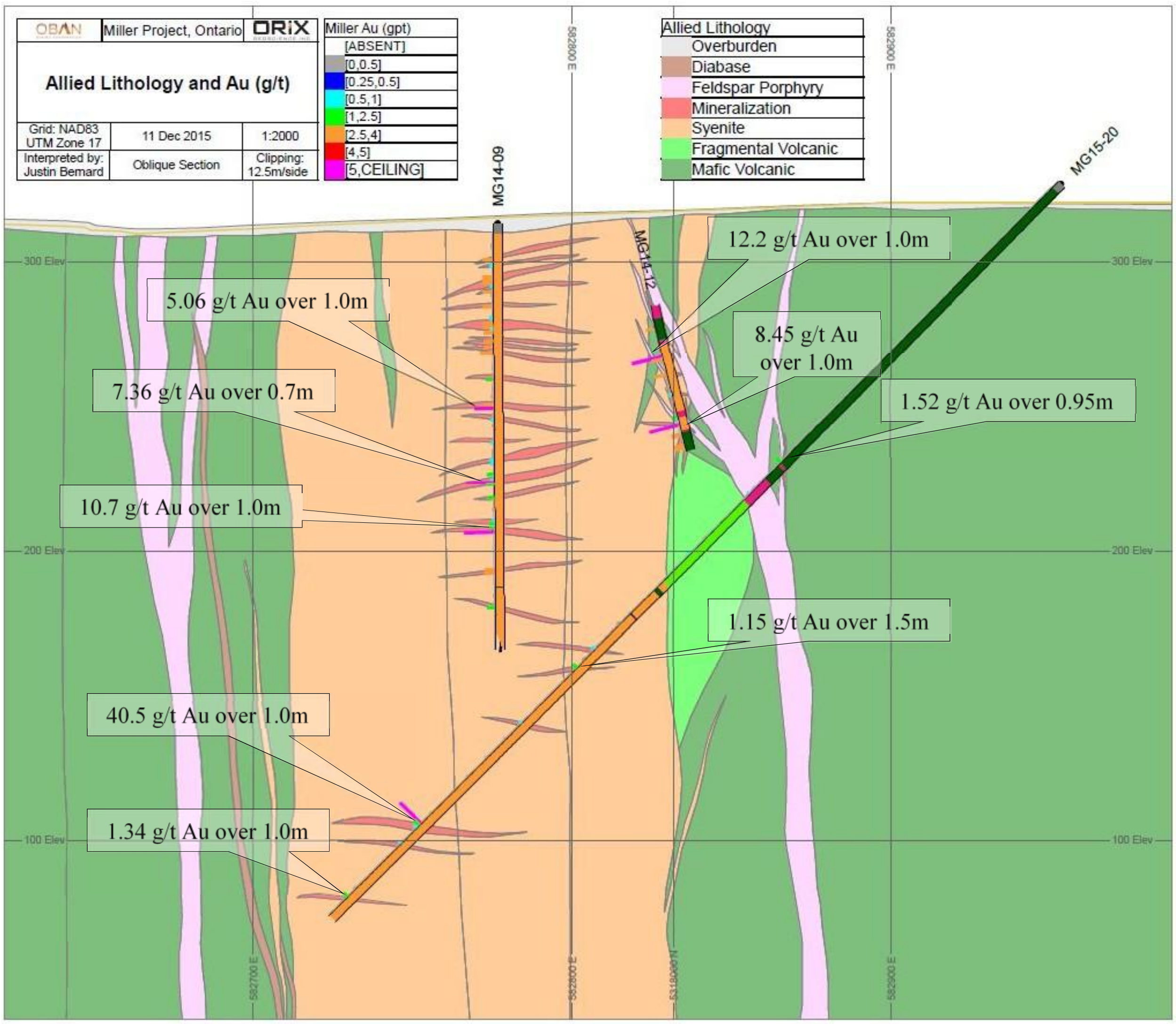

Figure 10-3 Geological cross section through the Allied Syenite (from Hart, 2015).

The 5 holes in the Allied Syenite intersected a series of quartz veins. Gold mineralization is sporadic, with the majority of the high grade intervals hosted in the shallowly dipping first generation quartz veins with associated tellurides and rare visible gold. Within the 5 holes that intersected the main body of the intrusion there were 23 intervals that returned >1.0 g/t Au. The best interval was intersected in MG15-20 which returned 40.5 g/t Au over 1.0 m from 311.85 to 312.85 m, included in a graded interval of 14.1 g/t Au over 3.05 m from 311.85 to 314.9 m (see Table 10-4 and Figure 10-3). Drilling from the southwest side of the intrusion towards MG15-20, M15-18 intersected 4.2 g/t Au over 3.0 m from 374.75 to 376.25m including 5.96 g/t Au over 0.75 m and 6.27 g/t Au over 0.75 m.

Two holes were drilled into the Planet Syenite with MG15-24 collared near the northeast contact and MG15-25 collared approximately 110 m east of MG15-24 and was drilled to be parallel to MG15-24. MG15-24 intersected a series of 5 syenite dykes between 45.45 and 229.47 m which range from 2.5 to 57.2 m in width which are separated by fine-grained mafic metavolcanic rocks. The syenite and metavolcanic rocks host numerous centimetre-scale quartz veins containing pyrite with lesser chalcopyrite, molybdenite, tellurides and rare visible gold.

Two holes were collared to intersect the north end of the Meilleur Syenite (MG15-26 and MG15-27). Hole MG15-26 intersected a red, medium-grained syenite between 89.64 m and 316.06 m with a satellite dyke between 332.06 m and 335.73 m. The syenite hosts centimetre- to a few tens of centimetre-scale quartz veins containing pyrite, 0.5% to 1% molybdenite and rare tellurides. The best assay returned 20.8 g/t Au from 86.55 m to 87.5 m in a faulted, bleached mafic metavolcanic unit.

The sample lengths do not represent the true thickness of the mineralization. The orientation of the mineralization is unknown at this stage. The Qualified Person is not aware of any drilling, sampling, or recovery factors that could materially impact the accuracy and reliability of the results.

11.0 Sample Preparation, Analyses and Security

11.1 2014 Northstar Gold Drill and Field program

The drill core was placed in wooden core trays at the drill site, labelled with the hole ID and box number and transported to the core logging facility in Earlton, Ontario. At the core logging facility, the core boxes were labelled with aluminum tag indicating the hole number and the core interval stored in each box. The core is stored in core racks inside the core logging facility or staked in its yard. The core storage facility is locked, and the property is fenced with a locked gate.

During this program, Northstar Gold implemented an industry standard QA/QC program that included insertion of blanks, blind commercial standards and duplicate quarter core samples in order to ensure best practice in sampling and analysis. During the logging the NQ drill core was laid out on racks at Northstar's Earlton warehouse facility with a Northstar technician measuring recoveries and RQD and taking photographs while the geologist described the core. The geologist then assessed the intervals of mineralization for sampling and placed sample tags accordingly. The core was then ready for cutting.

The selected drill core samples ranged from 0.25 to 2.0 metres in length, but mostly were 1 metre. The samples were prepared from core cut in half using a diamond saw, sealed in secure packages with a sample tag, and shipped by either company personnel or bonded carrier to either the Swastika Laboratories facility in Kirkland Lake, Ontario or the Activation Laboratories accredited facility (ISO/IEC 17025:2005) in Ancaster, Ontario for preparation and analysis. Swastika Laboratories was not accredited at the time of the analyses. One tag was left remaining in the core box stapled at the beginning of each sample interval for future reference.

Field outcrop grab samples collected in 2014 for analyses have a sample description and the site location, obtained from a handheld GPS, noted on a pre-numbered sampling booklet. Samples were submitted for analyses similar as with the core samples, however no standards or blanks were included with the submitted batches. No QA/QC monitoring of sample collection or analyses was done for grab samples except where specifically mentioned in Boyd and Selway (2015).

Once the samples arrived in the laboratory, as a routine practice with rock and core at both facilities, the entire sample was crushed up to 90% passing 2 mm, mechanically split (250 g) and then pulverized to 95% passing 150 mesh (105 μm).The prepared sample pulps were analyzed by fire assay for gold on a 30 gram split with either AAS or ICP Finish, and in some cases by either 45 multi-element analysis with Aqua Regia Digest and ICP-OAS and ICP-MS method finishes or by 35 elements using Instrumental Neutron Activation Analysis (INAA) at Activation Laboratories. Samples at both laboratories reporting greater than 3 g/t gold were check assayed by fire assay with a gravimetric finish.

Selected drill core samples were analyzed using the metallic screen technique by Activation Laboratories. The metallic screen procedure is described in detail in Section 11.2 and involves the collection of a 500g or 1000g split, which is taken and sieved at 100 mesh (0.149 mm); the entire +100 mesh fraction is fired and two 30g samples collected from the -100 mesh are fired in duplicate. Both Swastika Laboratories and Activation Laboratories fulfill standard quality assurance/quality control protocols except where specifically noted.

In greater detail, the following is a discussion of how the sample preparation and analytical procedures changed during the program. Initially, during the program 355 drill core samples were sent to Swastika Laboratories for gold analysis by fire assay. Based upon the discovery of telluride minerals in the core it was believed that the assays were significantly under-reporting the amount of gold in the core. Selected sample rejects and pulps were sent to Activation Laboratories for check analyses by fire assay with ICP finish, INAA, and fire assay metallic screen analysis. It was discovered during the sample preparation at the Activation Laboratories facility that the Swastika preparation of its samples was inadequate, allowing only approximately 50% of sample through 2 mm, much lower than the minimum acceptable level of 80%. The result was the reporting of significantly less representative and more erratic gold from the Swastika facility, which was supported by the results from selected samples being analyzed using metallic screen methodology at the Activations Laboratories facility, although this was not a consistent pattern. INAA successfully detected all the gold in sample aliquot but the reporting of meaningful results was hampered by a failed internal standard and its small sample aliquot size (<25 g) per analysis in samples commonly weighing 3-4 kg in size and possessing a heterogeneous distribution of gold and telluride grains.

Based upon these findings, the remaining 756 core samples were analyzed by fire assay with ICP finish at Activation Laboratories. In summary, 84 and 24 samples also underwent metallic screen and INAA analyses, respectively. Generally, the metallic screen analytical results were considered more credible than standard fire assay methods because it analyzed more sample material, and in cases of samples undergoing multiple analyses, they were chosen as the accepted value despite, in many cases, the results being lower than those obtained from the standard fire assay techniques.

In the author's opinion, the sample preparation, security and analytical procedures follow industry standards and are suitable for the purpose of identifying mineralization in drill core. There is no relationship between Northstar and Actlabs or Swastika other than that Northstar engaged these laboratories to assay drill core.

11.2 2015 Oban Mining Field Sampling Program

Field samples collected for analyses have a sample description and the site location, obtained from a handheld GPS, noted on a pre-numbered sampling booklet. Sample descriptions include lithology, structural measurements, mineralization and alteration. The sample descriptions and locations were also entered a Microsoft Excel spreadsheet for plotting maps using ArcView GIS software. The samples were placed into a numbered bag with the sample tag. The sampling site was flagged and marked with the sample number and tagged with an aluminum tag inscribed with the sample number for future identification.

All rock and core samples from the 2015 field and diamond drilling program were submitted to ALS Minerals for analysis. Samples were prepared using the PREP-33D method and analyzed using the AU-ICP22 and ME-MS41 methods. If a sample assayed >10 g/t Au, the pulp was re-assayed using the gravimetric finish method, AU-GRA22, as well as Screen Metallics Gold Method, AU-SCR-21. The screen metallic analyses were then considered to be the final gold value. The following descriptions were supplied by ALS-Chemex.

Sample preparation was performed at the ALS Sudbury facility. Samples were dried as required and crushed to 90% less than 2 mm or better using a jaw and/or roller crusher. The crushed sample was split using a riffle splitter and an approximately 1,000 g split was pulverized to 95% less than 106 microns or better using a ring and puck grinding mill. The pulverized splits of the samples were transported by ALS-Chemex to their facility in North Vancouver for analyses. Analysis for gold used a fire assay – inductively coupled plasma – atomic emission spectrometry (ICP- AES) method, Au-ICP22. The upper and lower limits for gold by this method are 10.0 and 0.001 ppm respectively.

Any samples that exceeded the upper limits of the AU-IC22 method for the gold analyses were re-analysed using a gravimetric finish, Au-GRA22 method and screen metallics gold method, AU-SCR-21. The upper and lower limits for gold detection by this method are 1,000 and .05 ppm respectively. The sample preparation, security and analytical procedure were adequate for the purpose of this report.

11.3 2015 Oban Mining Drill Program

The sampling protocol was based on representative sample widths of the mineralogy, lithology, vein, structure, or alteration zone within the limits of a maximum sample length of 1.5 m and a minimum sample length of 0.3 m. Samples did not cross lithological contacts, changes in structural style, veins/vein sets, or strong alteration zones unless the lithology, structure, vein or alteration was less than 0.3 m in width, and then only to meet the 0.3 m minimum.

A removable portion of the sample tag was stapled into the core box at the beginning of the sample interval. The core cutter removed half the tag and placed it into a sample bag inscribed with that number. The beginning and end of each sample interval was marked on the core with a china marker. The core was sawn in half with a core saw using a diamond blade; subsequently, half of the core was placed into a numbered bag with the sample tag, and the remaining half of the core was placed in the core box. Sample numbers and corresponding intervals were recorded in the drill log. The drill core is currently stored at Northstar's secure core shack in Earlton, Ontario.

Core samples were placed in polypropylene rice bags and were securely closed with zip lock ties. The bags were individually labeled for shipping and stored at the core cutting facility until shipped. The samples were transported from Earlton to the ALS-Chemex laboratory in Sudbury, Ontario for sample preparation by Northstar representatives. The samples were prepared as described previously in Section 11.2 and then transported by ALS-Chemex to their facility in North Vancouver for analyses.

A total of 3,359 samples were analyzed for gold by fire assay with an atomic absorption spectroscopy finish completed by ALS-Chemex. Analyses for gold used the fire assay method, Au-ICP23 and analyses for trace elements used the multi-element ME-MS41 method. Any samples that returned greater than the upper limit for gold were re-analyzed using the methods described in section 11.2. All samples were also analyzed by a multi-element ICP-aqua regia digestion package which included Te, Ag, Cu, Ni, Pb and Zn. Information concerning the lithology, structure, alteration and mineralization was logged and entered into an excel spreadsheet. All intervals of core were digitally photographed. The sample preparation, security and analytical procedure were adequate for the purpose of this report.

11.4 Northstar Gold Bulk 2016 Sampling Program

Northstar Gold implemented an industry standard QA/QC program under the supervision of the author that includes insertion of 7 blanks and 7 blind commercial standards with the 241 field samples in order to ensure best practice in sampling and analysis. During the field sampling program on the Miller Gold Property cut channel outcrop or blasted rock samples were taken at systematic intervals on the surface by the author or by Northstar technician Marc Cardinal with UTM NAD 83 GPS coordinates recorded in the field at the ends of each traverse line.

The collected surface samples ranged in weight from 5 to 20 kg, predominantly approximately 10 kg. Larger than usual samples were gathered to ensure their being representative, bearing in mind the nuggety nature of the gold distribution within the mineralized areas on the property as discussed in Boyd and Selway (2015). The samples were zip-lock sealed in secure packages with a sample tag and shipped by either company personnel or bonded carrier to the Activation Laboratories accredited facilities (ISO/IEC 17025:2005) in Sudbury, Ancaster, and Thunder Bay, Ontario for preparation and analysis. One tag was left remaining in the sample book for future reference. A blank and high-grade gold standard OREAS-62E (certified values 9.13 ppm Au, 9.86 ppm Ag) were inserted by Northstar for approximately every 30 samples with the batch shipment.

Once the field samples arrived in the laboratory, the entire sample was crushed with 90% passing 2 mm; a 1,000 gram sample pulp was pulverized to 95% passing 149 μm screen (100 Mesh size) and prepared to be analyzed by fire assay for gold on a 50 g split with an ICP finish, and in most cases an additional 45 multi-element analysis with ICP-MS method finish was completed. Samples reporting greater than 2 g/t gold were check assayed by metallic screen technique (Actlabs Code 1A4). The metallic screen procedure involves the preparation of the 1,000 gram pulp, which is sieved at 100 mesh; the entire +100 mesh fraction is fired, and two 30 g samples collected from the -100 Mesh fraction were fired in duplicate. Activation Laboratories fulfill standard quality assurance/quality control protocols.

The Camflo Mill head feed sample splits provided for Northstar Gold were sealed in zip-lock secure packages by a mill technician and then double packaged by the author at the mill site with sample tags added to the outer bags without breaking the secure lock of the inner packages. These samples and the Northstar mill solution sample splits were then driven and submitted to the Activation Laboratories facility in Sudbury directly under the custody of the author. The Camflo mill head feed samples and a composite mill head sample were also analyzed by metallic screen except that 2,000 gram sample pulps were prepared to 90-95% passing 149 µm (100 mesh). This is similar to the analytical procedure implemented for the aforementioned mini bulk sample collected in 2013 from the area of Trenches 1 and 3 and discussed in Section 9.

In general, sample size, preparation and analytical procedures have changed on the Miller Gold Property since its acquisition by Northstar Gold. This is outlined in previous technical reports for the Property (Boyd and Selway 2015, Hart 2015). Based upon the discovery of telluride minerals and highly nuggety coarse native gold in mineralized samples, it was believed that the assays were initially significantly under-reporting the amount of gold when using standard sample preparation techniques and 30 gram fire assay with Atomic Absorption methodologies. The result was the implementation of an improved sample preparation procedure of crushing the entire sample, increasing the level of sample material passing through 2 mm screen from 80 to 90%, and the increase in the size the sample pulps to at least 1,000 g from the standard 250 g.

The analytical procedure was further refined during this work program with the preparation of at least 1,000 g pulps for the metallic screen analysis to make them more representative of the sample. Specific instructions were provided to the laboratory with respect to minimizing gold losses in the coarse fraction and avoidance of over grinding to reduce breakdown and smearing of tellurides so that greater than 90% but less than 95% of the material passes through the 100 mesh screen.

Concern was raised with respect to the variance of results discovered between the metallic screen gold analyses at the Sudbury Activation Laboratories facility and the company's other 2 facilities in Ancaster and Thunder Bay. Specifically, 10 reject duplicates and a composite of the Camflo mill feed samples reviewed and analyzed at the other 2 facilities reported significant and consistent lower gold values in comparison to those results reported from the Sudbury facility. It was unclear if these differences were due to minor variations in sample preparations among the facilities or more serious issues at the Sudbury facility. Based upon this information and sample material availability, reject duplicates from mill feed and field sample batches and from the original 2016 mini-bulk sample batch were sent to AGAT Laboratories in Mississauga for independent third party laboratory check analyses using similar preparation and methodologies as applied at the Actlabs facilities.

The results of these check analyses and comparisons with the Actlabs results are presented and discussed in Section 12.4. The sample preparation, security and analytical procedure were adequate for the purpose of this report.

11.5 Northstar 2016 Sampling

Grab samples collected in 2016 were stored in plastic samples bags with pre-numbered sample tags. The samples were transported to Swastika Laboratories, Swastika, ON, by Northstar personnel. The samples were crushed up to 80% passing 1.7 mm using low-chrome steel jaw plates, mechanically split (250 g) using a rotary splitter and then pulverized to 90% passing 150 mesh (105 µm) using a low-chrome steel bowl set. The prepared sample pulps were analyzed by fire assay for gold on a 50 gram split with either AAS finish.

At the time of the analysis of the 2016 grab samples, Swastika was accredited for fire assay analysis (ISO/IEC 17025:2005). There is no relationship between Swastika and Northstar other than that Northstar commissioned Swastika to analyze samples.

Northstar added 10 blanks and 9 standards to the samples. The sample preparation, security and analytical procedure were adequate for the purpose of this report.

12.0 DATA VERIFICATION

12.1 Northstar Grab samples

No standards or blanks were used during the Northstar 2012-2014 grab sampling.

A total of 10 blanks were inserted into the sample stream during the 2016 grab sampling. Three blanks failed; 2 of the failed blanks were analyzed immediately after samples with high gold grades, which indicates that the laboratory may not have cleaned the crusher properly.

A total of 9 standards were included into the sample stream: 6 OREAS 62e standards with certified values of 2.47 g/t Au and 3 OREAS 60c standards with certified values of 9.13 g/t Au. All standards passed.

In the context that these were field grab samples obtained for prospecting purposes, the sample data are adequate for identifying the presence of gold mineralization and for the purpose of this report.

12.2 Northstar Gold 2014 Drilling Quality Control

During the 2014 drill program Northstar submitted with the core samples a total of 130 blind gold standard samples and coarse granite or marble blanks at an average rate of one standard and one blank for every 17 samples which was originally reviewed and reported by Boyd and Selway (2105). A summary of the blanks and standards is given in Table 12-1.

Table 12-1 2014 Drill program blanks and standards

QC Sample	Element	Units	Certified Value	One Standard Deviation	Drill Holes	Lab
Crushed granite blank	Au	g/t	<0.01	N/A	MG-14-01, 02, 03, 06	Swastika
Crushed granite blank	Au	ppb	<5	N/A	MG-14-07, 08	Actlabs
Crushed marble blank	Au	ppb	<5	N/A	MG-14-09, 10, 11, 12, 13	Actlabs
Oreas 204	Au	ppm	1.043	0.039	MG-14-01, 02, 03, 05, 06	Swastika
Oreas 204	Au	ppm	1.043	0.039	MG-14-07, 09, 10, 11	Actlabs
Oreas 19a	Au	ppm	5.49	0.1	MG-14-01, 03, 06	Swastika
Oreas 19a	Au	ppm	5.49	0.1	MG-14-07, 08, 09, 10, 11	Actlabs
CDN-ME-16	Au	g/t	1.48	0.14	MG-14-11, 12	Actlabs
	Ag	g/t	30.8	2.2		
	Cu	%	0.671	0.036		
	Pb	%	0.879	0.04		
	Zn	%	0.807	0.04		
CDN-GS-2K	Au	g/t	1.97	0.18	MG-14-11, 12	Actlabs
CDN-GS-	Au	g/t	9.5	0.56	MG-14-03, 12, 15	Actlabs

QC Sample	Elemen t	Units	Certified Value	One Standard Deviation	Drill Holes	Lab
10D						

A total of 27 crushed granite blank samples were inserted into the sample stream with the 2014 drill program (Figure 12-1). A total of 17 crushed granite blank samples were sent to Swastika with drill core from MG-14-01 to 06. Swastika analyzed the samples for Au using fire assay with an ICP finish. All the granite blanks submitted to Swastika passed. All the granite blank assays were less than 3 times the detection limit of 10 ppb (0.01 ppm). A total of 10 crushed granite blank samples were sent to Actlabs with drill core from MG-14-07 and 08. Actlabs analyzed the samples for Au using fire assay with an AA finish. All the granite blanks submitted to Actlabs passed. All the granite blank assays were less than 3 times the detection limit of 5 ppb (0.005 ppm).

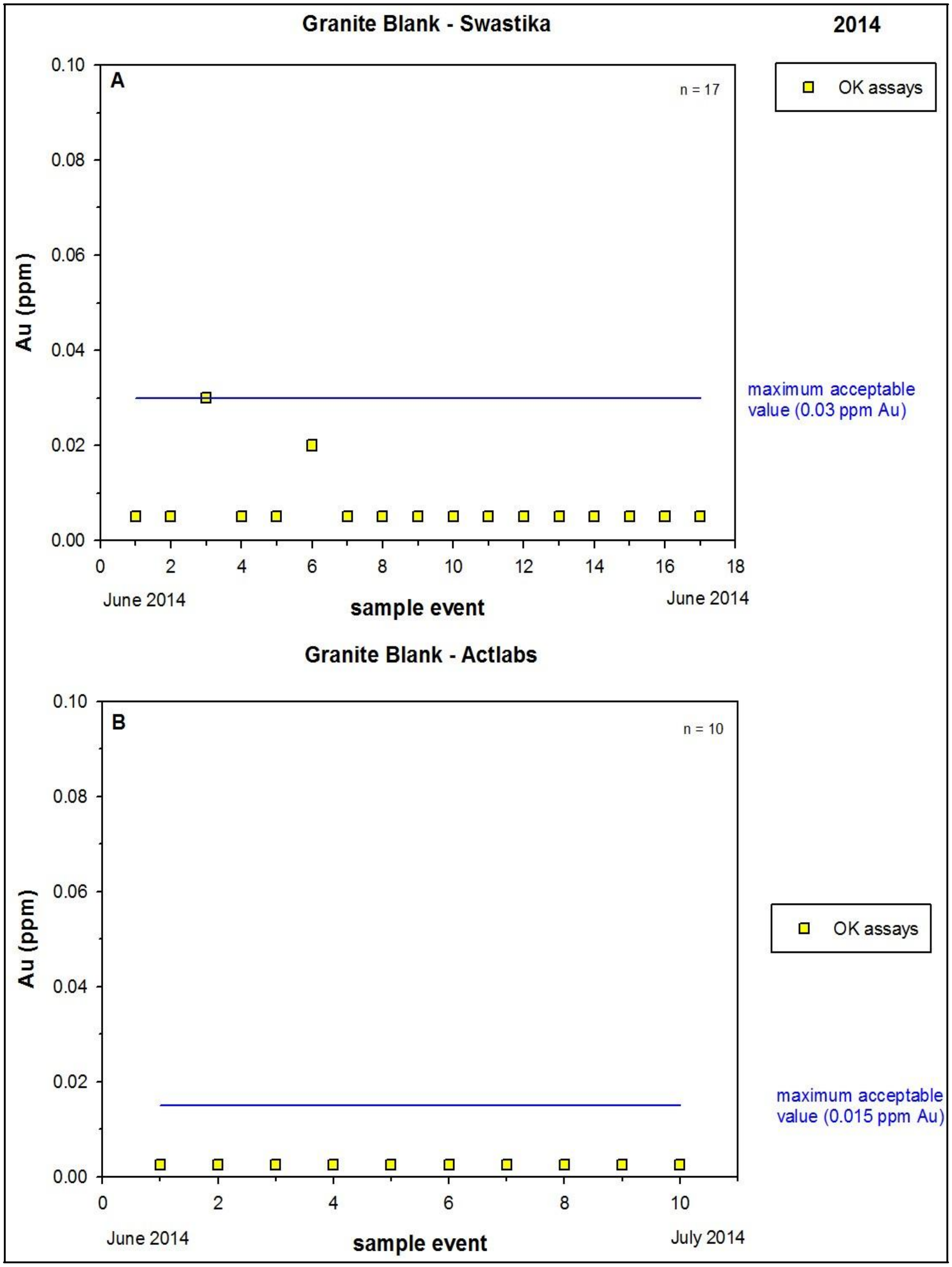

Figure 12-1 Control chart for Au analyses of granite blank by A) Swastika and B) Actlabs.

A total of 38 crushed marble blank were sent to Actlabs with drill core from MG-14-09 to 13. Actlabs analyzed the samples for Au using fire assay with an AA finish. Only 1 analyses of the marble blank failed (sample 14430, MG-14-11) for a failure rate of 2.6% as shown in Figure 12-2.

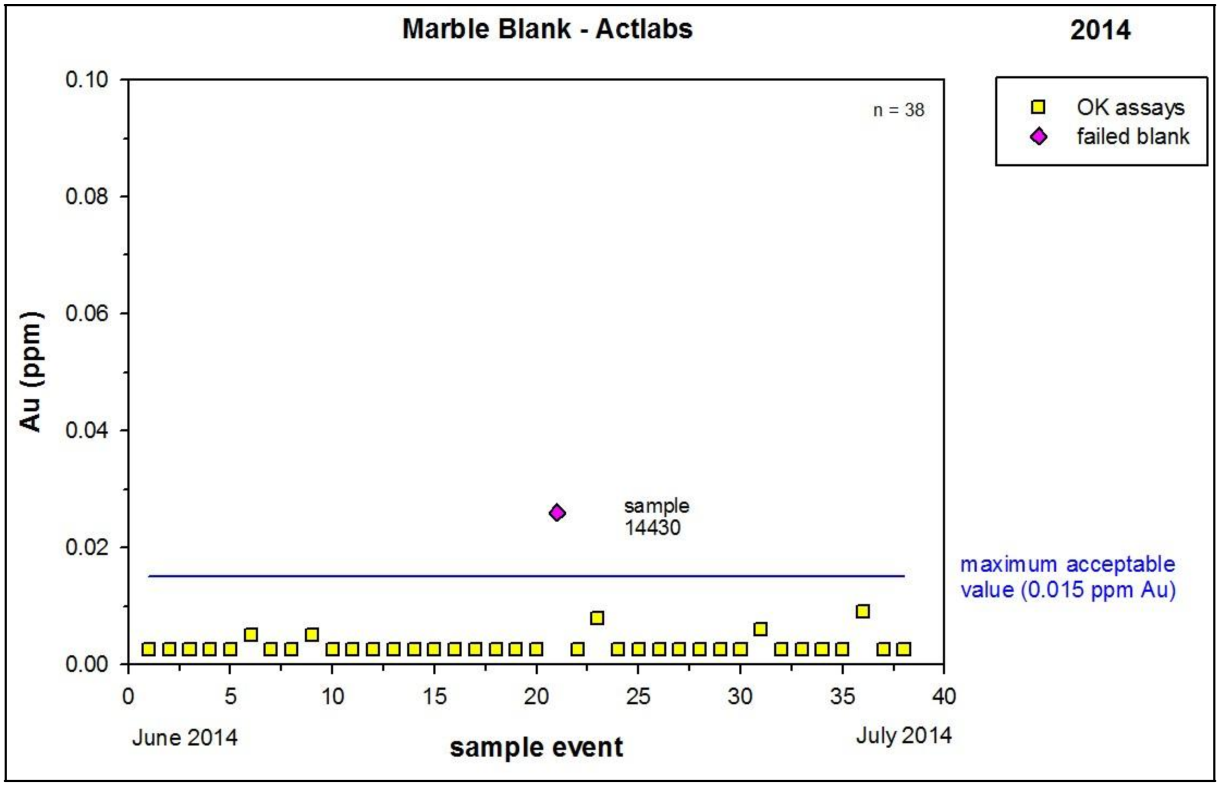

Figure 12-2 Control chart for Au analyses of marble blank by Actlabs.

A total of 5 different gold standards were used during the drill program. The certified values of all these standards are summarized in Table 12-1. A total of 8 analyses of low grade standard Oreas 204 with a certified value of 1.043 g/t Au were inserted into the sample stream with drill holes MG-14-01, 02, 03, 05 and 06 and submitted to Swastika. All the standards passed as shown in Figure 12-3.

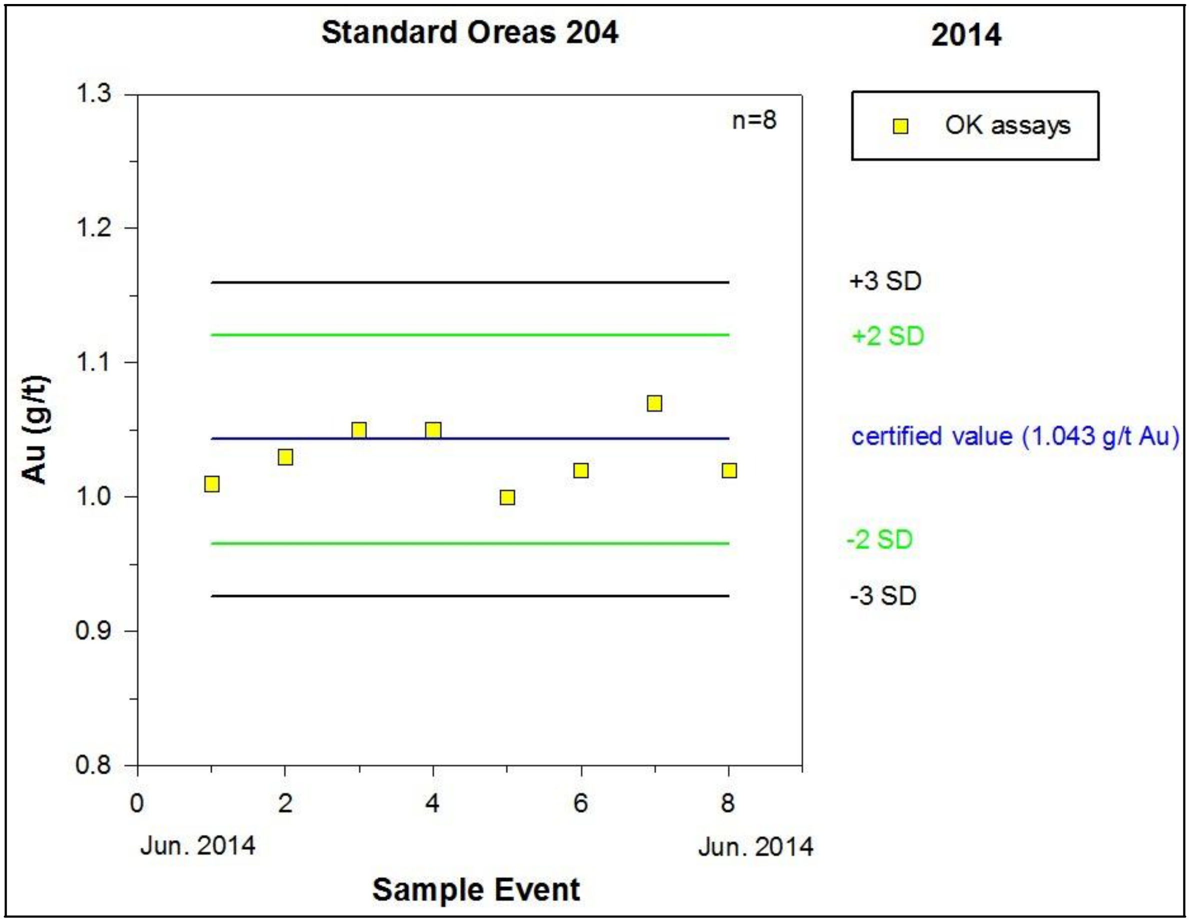

Figure 12-3 Control chart for Au standard Oreas 204 analyzed by Swastika.

A total of 15 analyses of low grade standard Oreas 204 with a certified value of 1.043 g/t Au were inserted into the sample stream with drill holes MG-14-07, 09, 10 and 11 and submitted to Actlabs (Figure 12-4). All the standards passed, but there was a minor bias low as the majority of the analyses are below the certified value.

Sample 14280 from drill hole MG-14-10 was originally labeled as Oreas 204 with < 5 ppb Au but it is actually drill core. Sample 14281 was originally labeled as drill core with 1.01 g/t Au, but it is actually Oreas 204. The sample numbers were likely switched in the lab, as the standards were bagged, and the sample tags were removed from the sample tag book in the core shack before any drill core was cut.

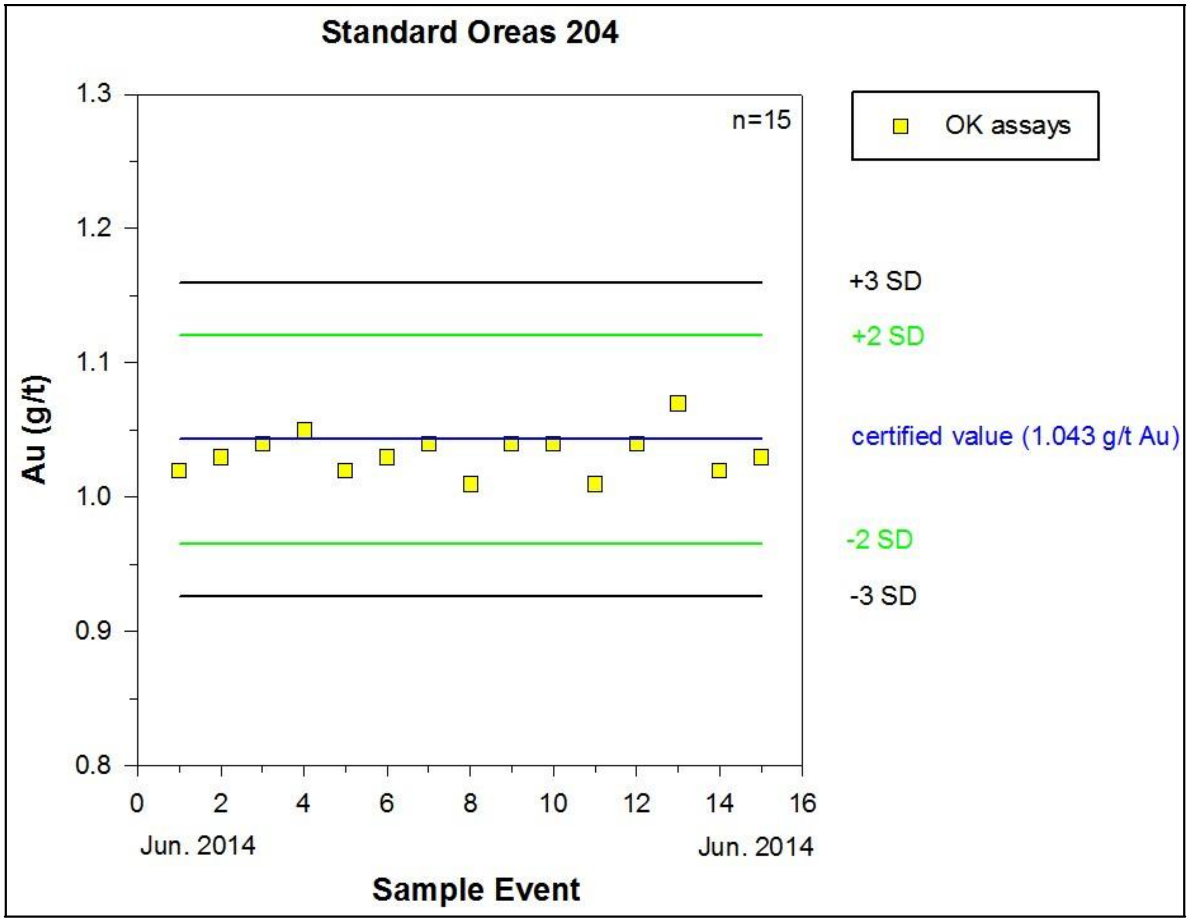

Figure 12-4 Control chart for Au standard Oreas 204 analyzed by Actlabs.

A total of 7 analyses of high grade Oreas 19a with a certified value of 5.49 g/t Au were inserted into the sample stream with drill holes MG-14-01, 03 and 06 and submitted to Swastika (Figure 12-5). All the standards passed, but they are slightly bias high as all of the analyses are above the certified value.

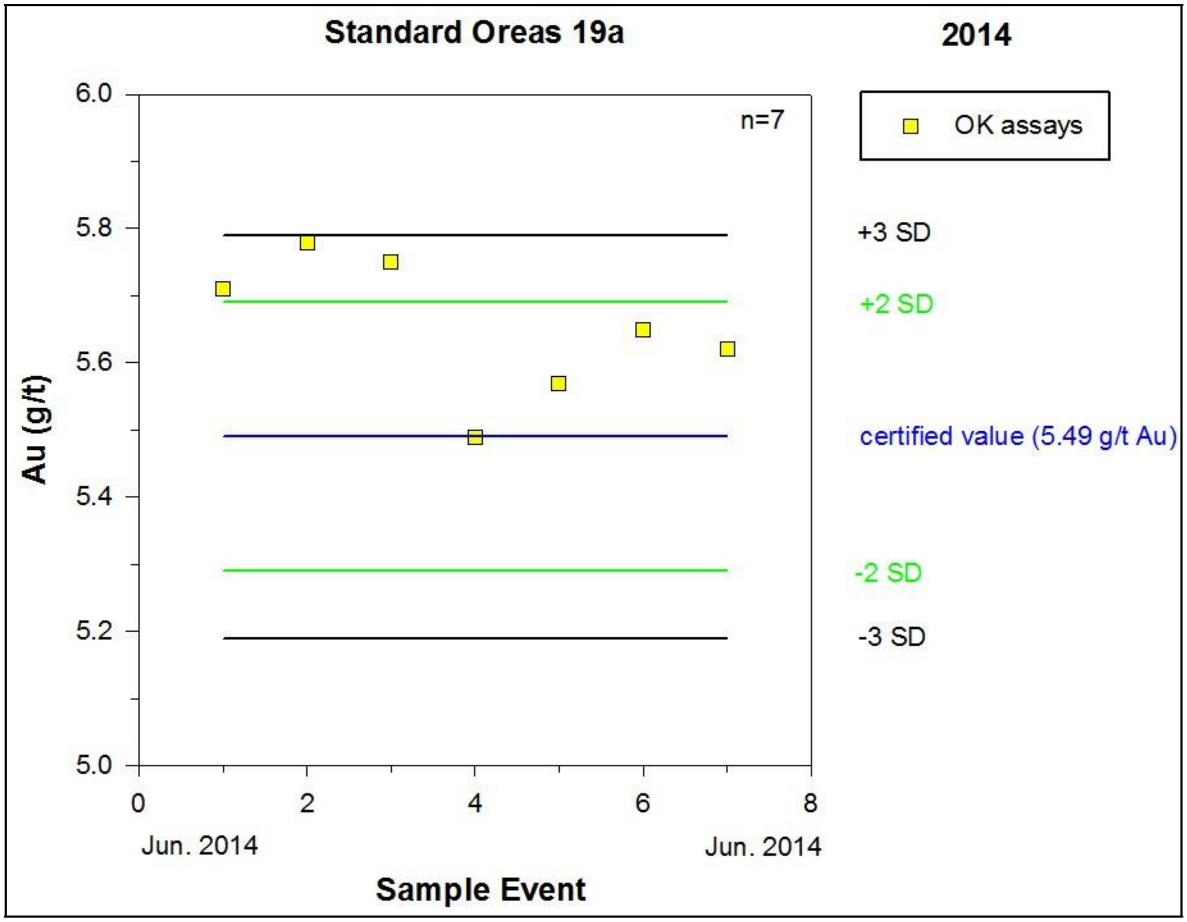

Figure 12-5 Control chart for Au standard Oreas 19a analyzed by Swastika.

A total of 16 analyses of high grade Oreas 19a with a certified value of 5.49 g/t Au were inserted into the sample stream with drill holes MG-14-07, 09, 10 and 11 and submitted to Actlabs (Figure 12-6). All the standards passed, but they are slightly bias high as several of the analyses are above the certified value.

Sample 14420 from drill hole MG-14-11 originally was labelled as Oreas 19a, but it had 13 ppb Au and is actually drill core. Sample 14419 was originally labelled as drill core, but it Oreas 19a with 5.7 g/t Au. The sample numbers were likely switched in the lab, as the standards were bagged, and the sample tags were removed from the sample tag book in the core shack before any drill core was cut.

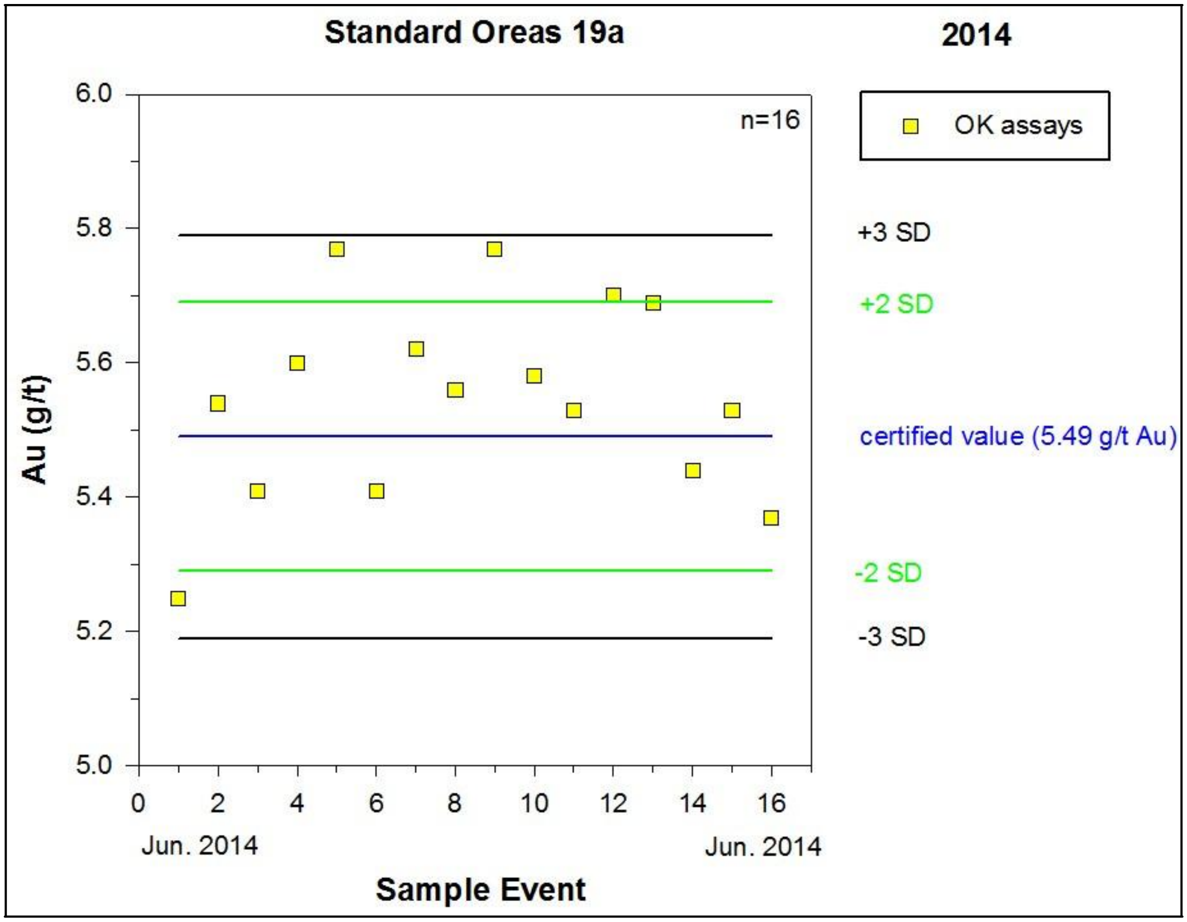

Figure 12-6 Control chart for Au standard Oreas 19a analyzed by Actlabs.

A total of 6 analyses of low grade standard CDN-ME-16 with a certified value of 1.48 g/t Au were inserted into the sample stream with drill holes MG-14-11 and 12 and submitted to Actlabs (Figure 12-7). All the standards passed.

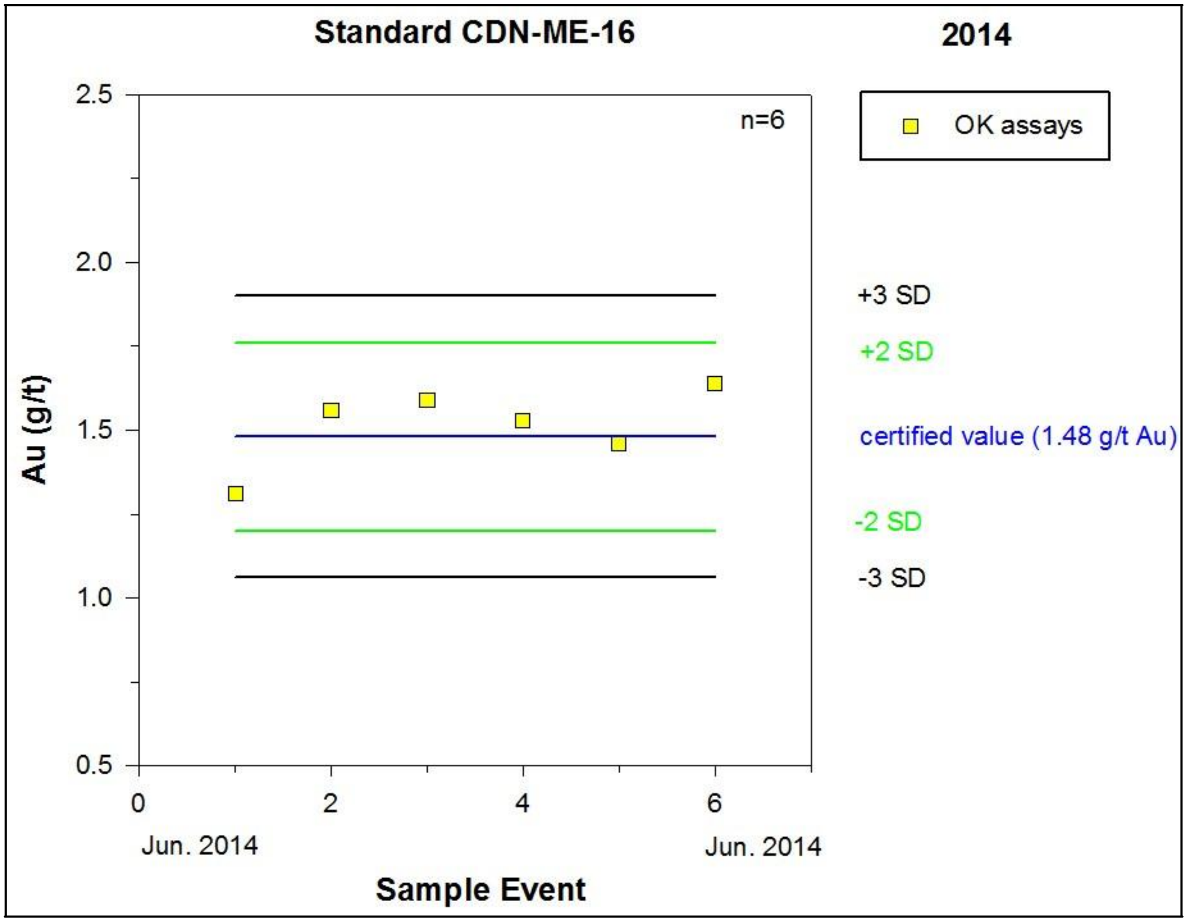

Figure 12-7 Control chart for Au standard CDN-ME-16 analyzed by Actlabs.

A total of 2 analyses of medium grade standard CDN-GS-2K with a certified value of 1.97 g/t Au were inserted into the sample stream with drill holes MG-14-11 and 12 and submitted to Actlabs (Figure 12-8). Both standards passed.

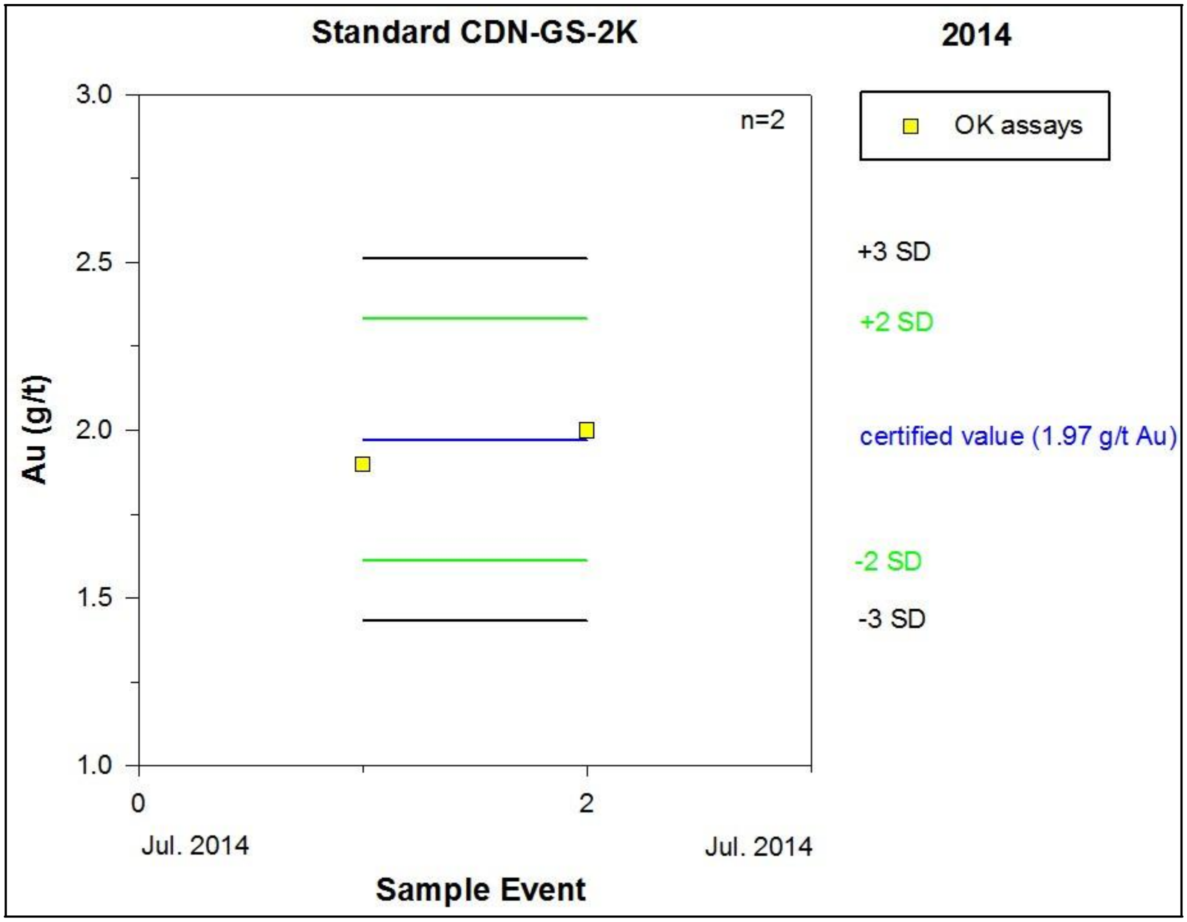

Figure 12-8 Control chart for Au standard CDN-GS-2K analyzed by Actlabs.

A total of 7 CDN-GS-10D high grade standard samples with a certified value of 9.50 g/t Au were inserted into the sample stream with drill holes MG-14-03, 12 and 15 and submitted to Actlabs (Figure 12-9). All the standards passed.

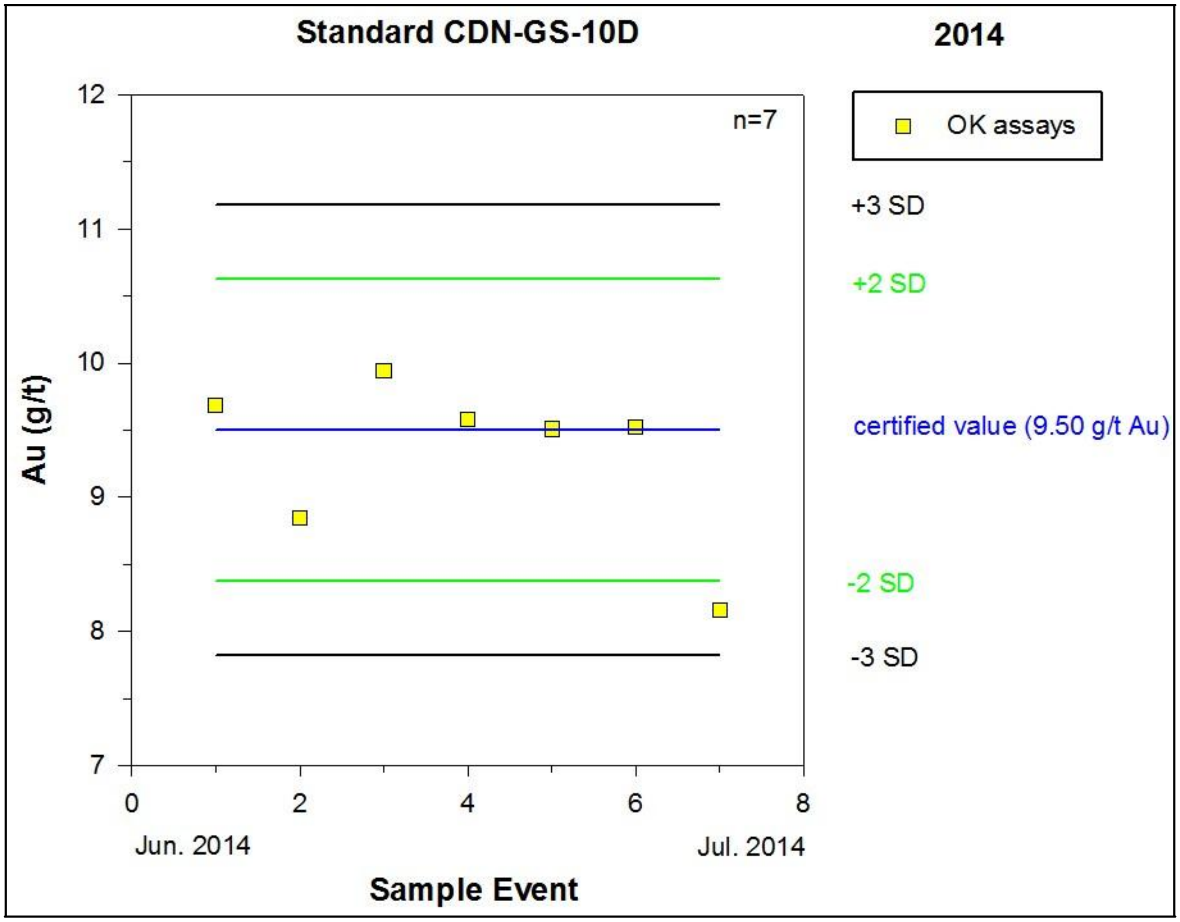

Figure 12-9 Control char for Au standard CDN-GS-10D analyzed by Actlabs.

A total of 20 core duplicates from drill holes MG-14-01 to MG-14-06 were analyzed by fire assay by Swastika. All the core duplicates passed, as the majority of them were low grade samples <0.20 g/t Au (Figure 12-10). One high grade core duplicate pair (samples 13693 and 13694, MG-14-03) had 4.3 g/t Au and 4.02 g/t Au which are similar.

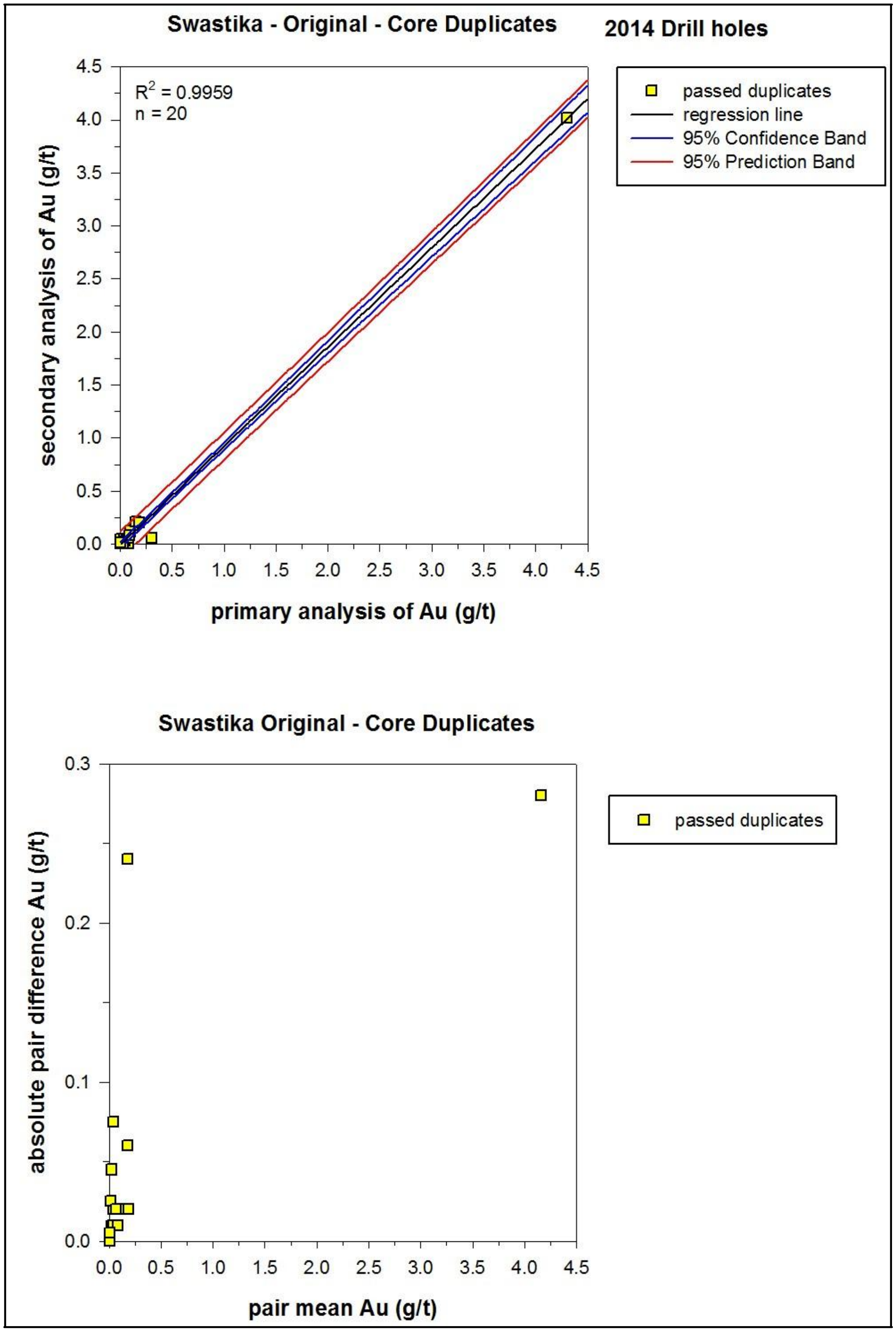

Figure 12-10 Control chart for core duplicates for Au by Swastika by fire assay.

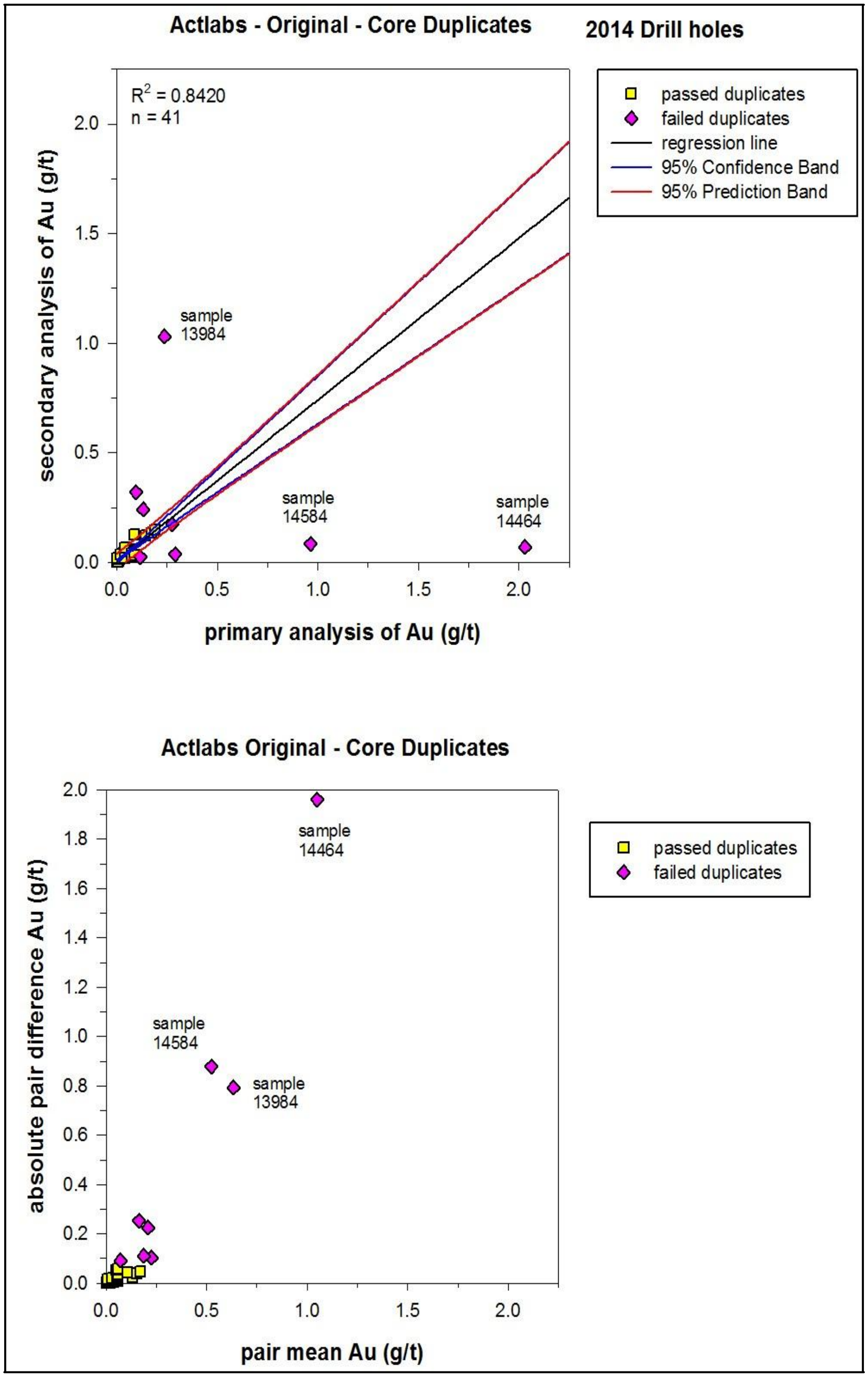

Figure 12-11 Control char for core duplicates analyzed for Au by Actlabs by fire assay.

A total of 41 core duplicates from drill holes MG-14-07 to 15 were analyzed by fire assay by Actlabs. A total of 8 of the 41 core duplicates failed for a failure rate of 19.5% (Figure 12-11). This is a high failure rate, but note the failed duplicates had 1 sample with > 0.2 g/t Au. The core duplicates that passed had 1 or both samples with < 0.2 g/t Au. It appears that the high failure rate for core duplicates is more likely due to the nugget effect at higher grades than an issue with the analytical method

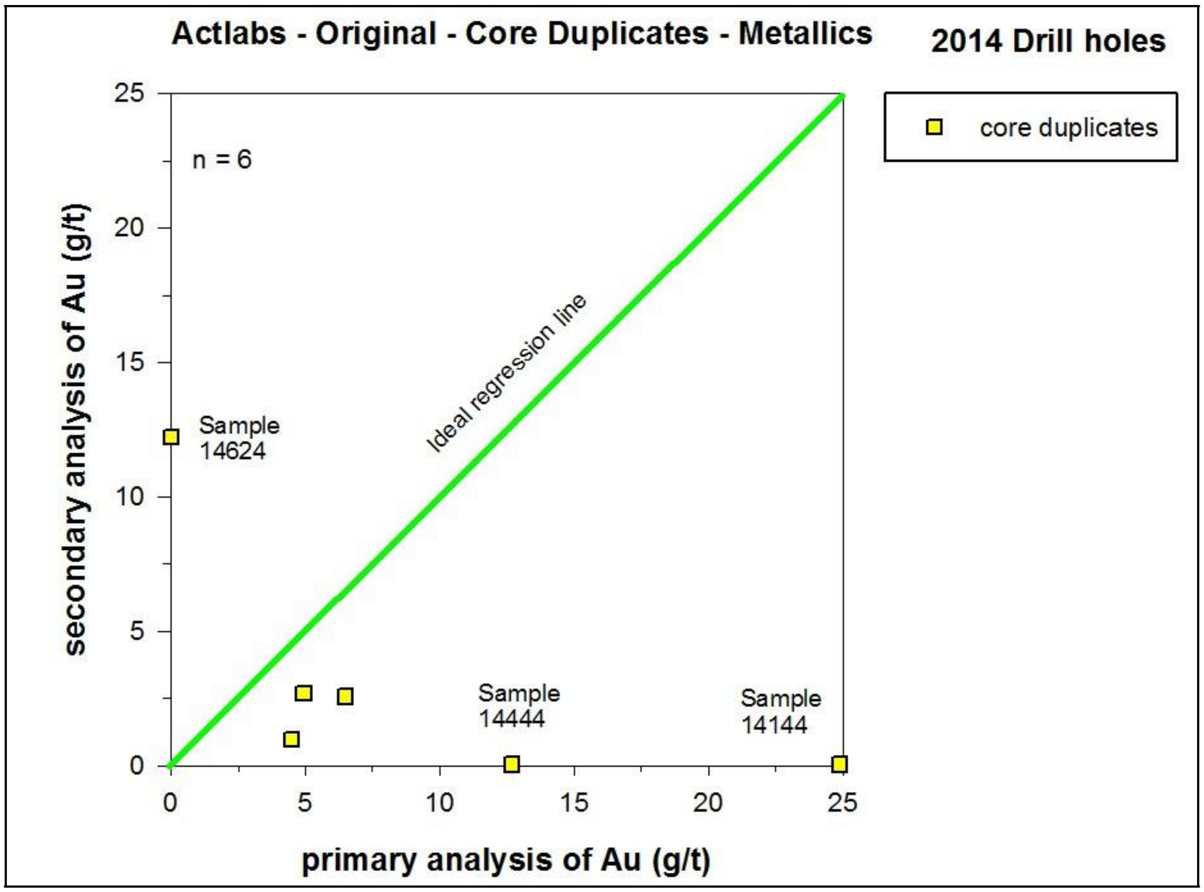

Figure 12-12 Control chart for core duplicates analyzed for Au by Actlabs by metallic screen.

Six core duplicate pairs from drill holes MG-14-03, 09, 11 and 12 were analyzed for Au by Actlabs by metallic screen. The total Au value was plotted for the primary vs. secondary samples and most of the samples do not plot along the ideal 1:1 regression line as shown in Figure 12-12. For 3 samples, the difference between the primary and secondary samples is significant due to the heterogeneous distribution of Au in the drill core.

A plot of the fine fraction vs. the coarse fraction of the same core duplicate samples analyzed by Actlabs by metallic screen in *Figure 12-13* shows that for the low grade samples the fine and coarse fraction give a similar result, but for high grade samples > 3 g/t Au the coarse fraction is significantly higher grade than the fine fraction. This is further evidence of the gold nugget effect in the drill core. For example, sample 14624 from MG-14-12 from 54.0 to 55.0 m has an average of 7.135 g/t Au in the fine fraction and 231 g/t Au in the coarse fraction for a total gold value of 12.2 g/t. Sample 14143 from MG-14-09 from 101.0 to 102.0 m has an average of 14.35 g/t Au in the fine fraction and 214 g/t Au in the coarse fraction for a total gold value of 24.9 g/t Au. Sample 14443 from MG-14-11 from 43.5 to 44.50 m has an average of 10.155 g/t Au in the fine fraction and 74.3 g/t Au in the coarse fraction for a total gold value of 12.7 g/t Au. The relationship between sample length and true thickness of the mineralization is not yet known.

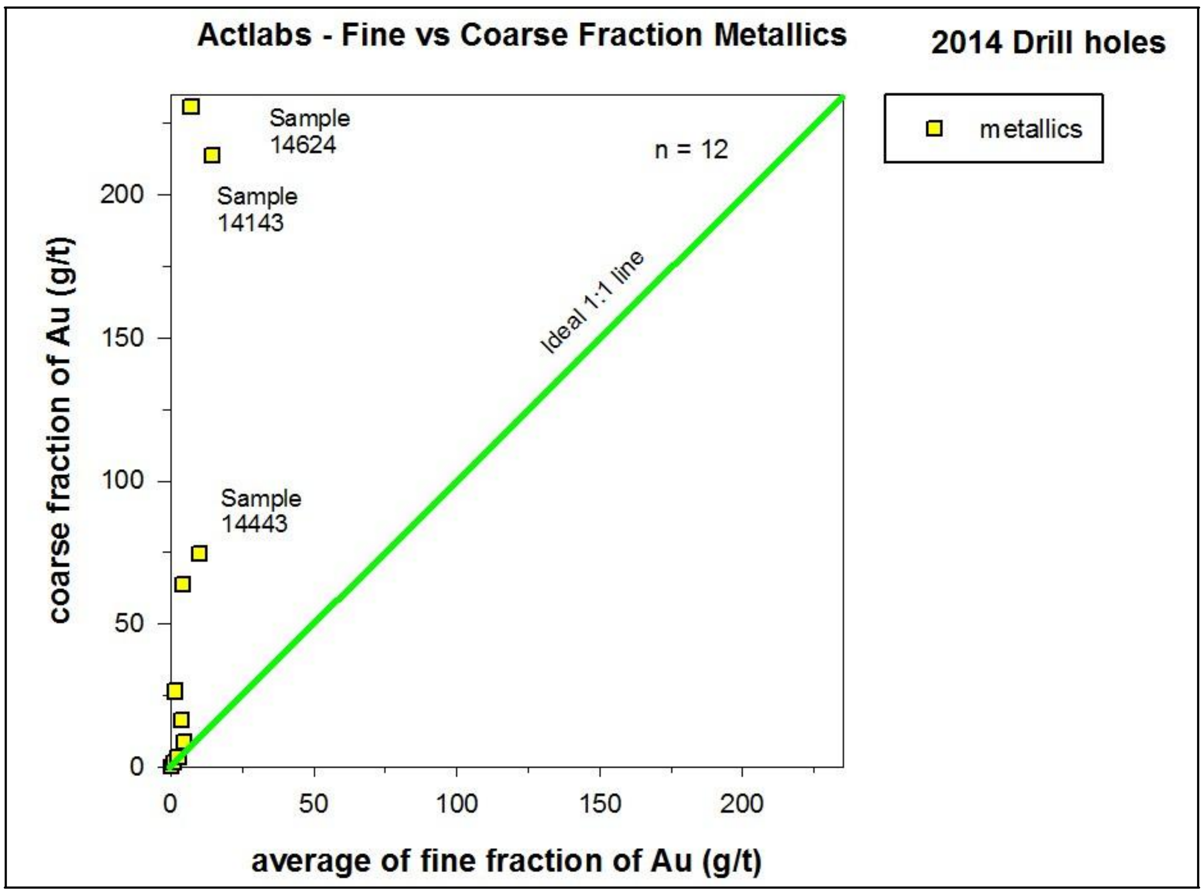

Figure 12-13 Plot of the average fine fraction vs. the coarse fraction for the metallic screen samples.

The author's opinion is that the quality control review of the results the analyses of the standards, blanks and core duplicates that the results from the 2014 drill program are of good quality and adequate for the purpose of identifying mineralization at depth in drill core. Core duplicates indicate that the coarse-grain size of the gold in both its native and telluride forms results a strong nugget effect for the assays.

12.3 Oban Mining 2015 Drilling Quality Control

In order to test for contamination, accuracy and precision during the analytical process, quality assurance and quality control (QAQC) samples were added to the sample stream every 10 samples for QAQC purposes. During the mapping program 18 blanks, 21 standards and 11 duplicates were submitted. During the drill program 120 blanks, 109 standards and 111 duplicates were submitted. All the assays were imported into a password protected Microsoft Excel database and a QAQC report was generated. The review, tables and figures for this drill program were originally reported in Hart (2015).

A fine silica blank certified by Analytical Solutions Ltd (ASL) was chosen to check for cross-sample contamination at the laboratory. This blank had a certified Au value of 0.02 ppm. Blanks were inserted every 30th sample, or immediately after a sample that contained visible gold. A value for gold of less than 0.02 ppm was passed and analysis above that limit was considered a failure. Any result that fell below the detection limits of <0.001 were divided by two in order to create a value that can be graphed.

For the field program, the first 4 blanks were taken from a local limestone aggregate source containing little to no Au until the certified fine silica blank arrived on-site. All 18 blanks fell below the accepted value indicating that there were no cross-sample contamination problems.

In the drill program, blanks were inserted every 30th sample in a series of 100 which meant samples ending in _10, _40 and _70 were always a blank. In addition, blanks were inserted immediately after samples containing visible gold as a way to check for contamination. All 120 blanks fell below the maximum certified value of 0.02 ppm. Additionally, 11 blanks were sent in for inclusion in two analytical batches that required re-analysis due to failures of the standards. These 11 blanks also fell below the maximum certified value.

Five certified standards were used in the Miller field and drilling programs. Three certified standards from CDN Resources Laboratories Ltd., CDN-GS-2K (low grade), CDN-GS-10D (high grade), and CDN-CM-38 were used briefly at the beginning of the Miller field program. CDN-CM-38 was also used in the 2015 drill program as a standard for Ag, Cu and Mo. For general use, these standards were replaced with certified OREAS standards OREAS 60C (lower grade) and OREAS 62E (higher grade) for both the field and drilling programs. These standards, from Ore Research and Exploration P/L, came in a 60 g foil packet and had specific values and ranges for Au and Ag (Table 12-2). A standard was inserted every 30th sample. The label was scratched off the packet so that the laboratory would not know which standard was being analyzed. A failure limit of +/- 2 absolute standard deviations from the certified value was set as the failure limit. If a standard fell outside of this range, the laboratory was requested to re-run the batch.

For the field program, there were no batch failures that required re-analysis although one standard (R333450, OREAS 62E) from batch SD15085705 failed for Ag. Considering that the objective of this program was the gold analyses, and that R333450 failed for Ag, the failure was documented but no re-analysis was requested. There were several QAQC failures regarding standards during the drilling program, see Figure 12-14, Figure 12-15 and Figure 12-16. Out of the 109 standards, 9 failed for gold, representing 8% of the total analyses and 7 failed for silver, representing 6%. The majority of these failures occurred in two batches (SD15122210 and SD15126103) which affected 298 samples in drill holes MG15-17 and MG15-18. These entire two batches were re-analyzed. Due to the small sample weight of the standard and blanks, new standard and blank packets were sent to the laboratory to be inserted in place of the originals. The laboratory determined that flux had not been properly adjusted to accommodate the silica rich nature of the standards. This lack of adjustment was of concern to Oban as the targeted mineralization is silica-rich. However, the other 100 standards returned gold values within the expected limits suggesting if there was a flux problem it must have been only with these two batches. As well, there does not appear to be much difference between the gold concentrations comparing original analytical results to the results of the re-analyses. To provide an additional check on these batches, 11 samples were selected from the two failed batches, along with 5 standards for submission as “check assays” at Bureau Veritas Laboratories located in the Vancouver area. The results of the check assays were comparable to the results from ALS.

Table 12-2 Specifications for 2015 Standards used for Oban drill program from Hart (2015).

		CDN-GS-2K		
Element	**Certified Value**	**Low (2σ)**	**High (2σ)**	**Type of Analysis**
Gold	1.97 g/t	1.79 g/t	2.15 g/t	Fire Assay, 30 g
		CDN-GS-10D		
Element	**Certified Value**	**Low (2σ)**	**High (2σ)**	**Type of Analysis**
Gold	9.50 g/t	8.94 g/t	10.06 g/t	Fire Assay
		OREAS-60C		
Element	**Certified Value**	**Low (2σ)**	**High (2σ)**	**Type of Analysis**
Gold	2.47 ppm	2.30 ppm	2.63 ppm	Fire Assay, 30 g
Silver	4.81 ppm	4.21 ppm	5.40 ppm	Aqua Regia Digestion, 25 g
		OREAS-62E		
Element	**Certified Value**	**Low (2σ)**	**High (2σ)**	**Type of Analysis**

Gold	9.13 ppm	8.31 ppm	9.95 ppm	Fire Assay, 30 g
Silver	9.86 ppm	9.13 ppm	10.59 ppm	Aqua Regia, 25 g

CDN-CM-38

Element	**Certified Value**	**Low (2σ)**	**High (2σ)**	**Type of Analysis**
Gold	0.942 g/t	0.87 g/t	1.014 g/t	Fire Assay, 30 g
Silver	6.0 g/t	5.60 g/t	6.40 g/t	Aqua Regia
Copper	0.68%	0.65%	0.71%	Aqua Regia
Molybdenum	0.02%	0.0158	0.02%	Aqua Regia

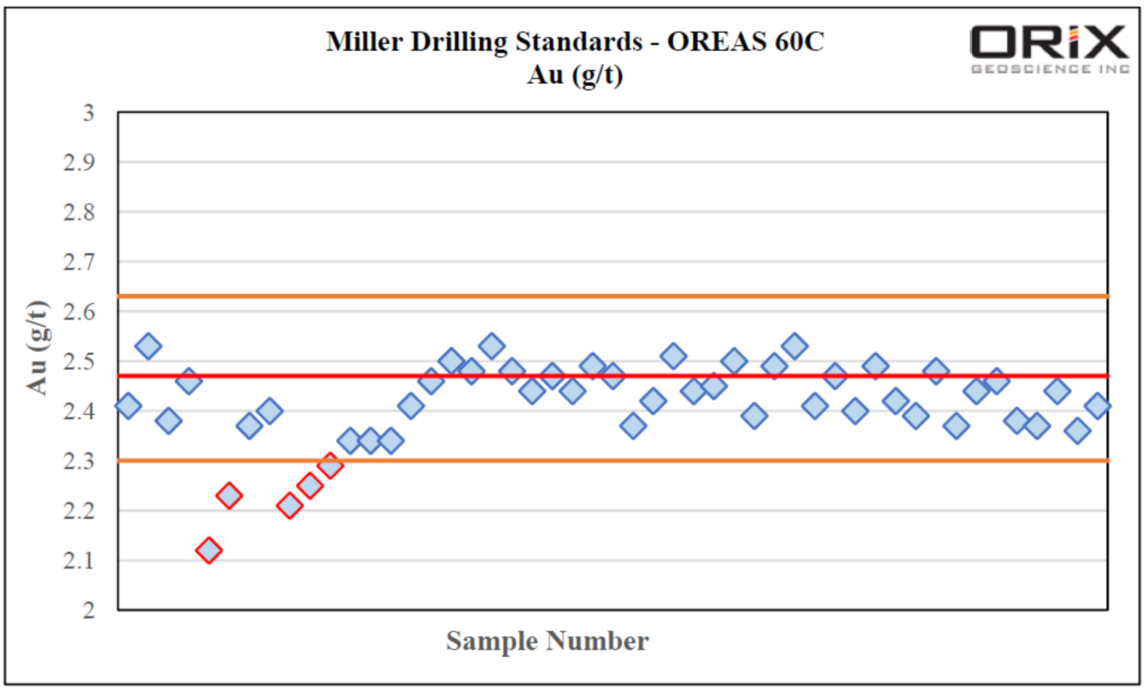

Figure 12-14 Oreas 60C Standard Results from 2015 Miller Gold Property Drilling Program, red line represents the certified Au value and the orange lines represent 2 standard deviations from Hart (2015).

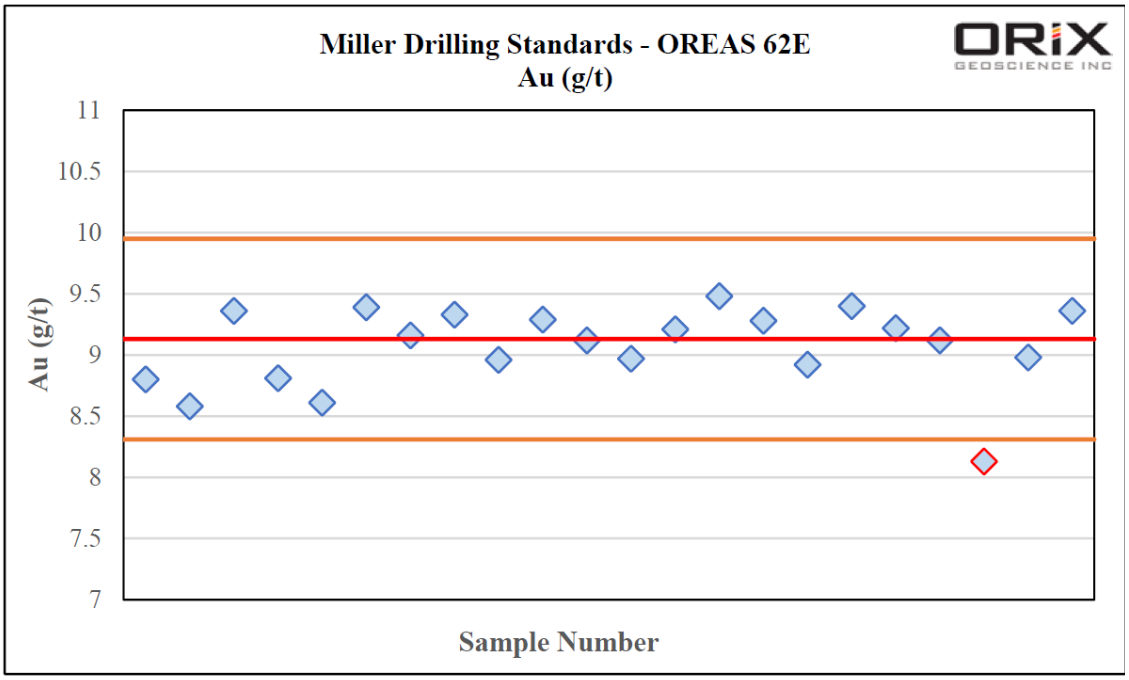

Figure 12-15 Oreas 62E Standard Results from 2015 Miller Gold Property Drilling Program, red line represents the certified Au value and the orange lines represent 2 standard deviations from Hart (2015).

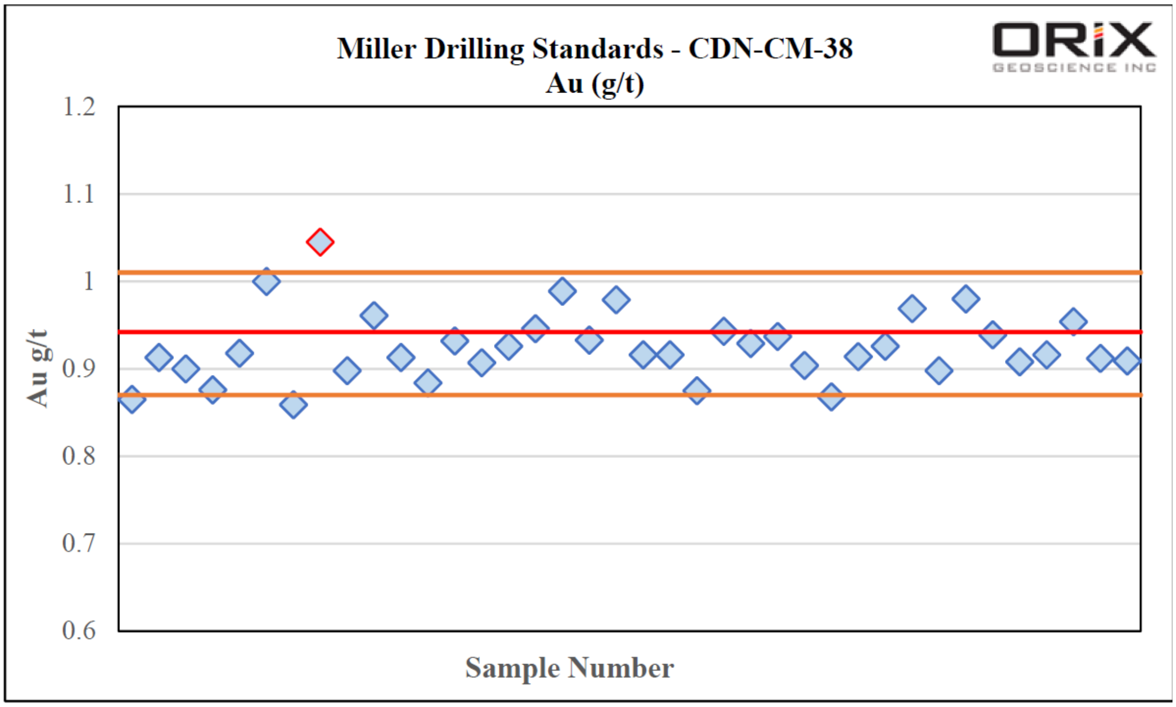

Figure 12-16 CDN-CM-3860C Standard Results from 2015 Miller Gold Property Drilling Program, red line represents the certified Au value and the orange lines represent 2 standard deviations from Hart (2015).

One final QA/QC issue was with regard to the use of multi-element standard CDN-CM-38 with certified values for Au, Ag, Cu and Mo. The results for Mo consistently fell below the 2 standard deviation limit. The Mo value for this standard is certified but there is a note on the certificate that 3 laboratories failed to provide Mo analyses by an aqua regia method during the round robin. It should also be noted that ALS states for the ME-MS41 method that some refractory minerals and elements such as molybdenum are not brought into solution in aqua regia. In these cases, it was suggested that fire assay may be used in combination with ME- MS41, or a 4 acid digestion may be preferable. Although noted in past exploration program, it was determined that Mo is not an element of potential economic importance on this property and these analytical problems were not considered to be an issue.

A pulp duplicate was inserted every 30th sample to test for precision. The laboratory was instructed to separate the pulp of the selected sample into 2 parts and analyze these parts separately. The results of the sample and its duplicate were then compared by calculating its mean, absolute difference and percent relative difference. A sample was flagged for failure if the relative percent difference of the sample and duplicate exceeded 100%. The calculation for relative percent difference is (A - B) / ((A + B)/2) X 100 where “A” is the original Au value in ppm and “B” is the duplicate Au value in ppm. Any result which fell below detection limits (<0.001) was divided by 2 to create a value for graphing and calculations.

Due to the nuggety nature of the Au mineralization encountered in this project, duplicate repeatability was expected to be difficult to measure. However, the results for the duplicate analyses compared better than expected. In total, 111 duplicate samples were taken during the drill program. Only 6 samples failed with a greater than 100% relative difference. Although these failures were flagged in the database, no action was required by the laboratory. A total of 55 duplicates failed with >25% relative difference, 47 of these samples had assay results <0.1 g/t Au. There are 57 samples with <25% relative difference that have assay results<0.1 g/t Au so these differences are probably not related to an analytical problem on samples with low gold values. It may be that these differences are the result of an accessory mineral phase, and there are very fine-grained gold telluride minerals identified in the veins on the property.

As part of the QAQC program, 11 rejects from MG15-17 and MG15-18 and 4 standards were sent to Bureau Veritas Mineral Laboratories (ACME) for check assay. The check assay samples were chosen so there were low, medium and high grade samples.

All the standards returned analyses within the accepted limits for this program. As the samples selected as duplicates were shipped directly from ALS to ACME, it was not known in advance that sample R330459 did not have enough material remaining to analyze. The percentage difference between the ALS and ACME samples varied from 3% to 197% (Table 12-3). This variation is comparable to the percentage difference from the duplicates. Due to the coarse-grained, nuggety nature of the Au mineralization encountered in this project, duplicate repeatability was expected to be difficult to measure.

Table 12-3: Check assays from Bureau Veritas Mineral Laboratories (from Hart (2015).

BHID	Sample #	Sample Type	ALS FA Au (ppm)	ACME FA Au (ppm)	ACME Grav. Au
MG15-17	R330338	Reject	0.03	<0.0005	
MG15-17	R330357	Reject	0.124	0.128	
MG15-17	R330373	Reject	0.886	0.516	
MG15-17	R330416	Reject	1.445	0.437	
MG15-17	R330438	Reject	0.09	0.01	
MG15-17	R330459	Reject	0.255	na	
	OB-01	OREAS-60c		2.441	
	OB-02	CDN-CM-38		0.963	
	OB-03	OREAS-60c		2.466	
	OB-04	CDN-CM-38		0.941	
MG15-18	R330819	Reject	0.074	0.183	

BHID	Sample #	Sample Type	ALS FA Au (ppm)	ACME FA Au (ppm)	ACME Grav. Au
MG15-18	R330853	Reject	1.12	0.379	
MG15-18	R330902	Reject	0.685	0.884	
MG15-18	R330913	Reject	7.16	>10	9.6
MG15-18	R330928	Reject	0.02	0.025	

Based upon the results of this review, the data generated from this program are adequate for the purpose of this report.

12.4 2016 - 17 Bulk Sampling and Milling Quality Control Analysis

As a consequence of the initially returned discrepancies between the results of the Camflo Mill and the initial Northstar Activation Laboratories Sudbury facility mill feed splits, which reported weighted averages of 5.13 g/t vs.11.2 g/t Au, respectively, ten reject duplicates of the Northstar splits were sent for check analyses at the Activation Laboratories Ancaster and Thunder Bay facilities. The results indicated a major decrease in the amount of gold reported in comparison to the Actlabs Sudbury results even though similar metallic screen methodologies as described in Section 11.4 were utilized.

Earlier in 2016, the 59 samples that had been collected from the mini-bulk sample discussed in Section 9.3 had also been analyzed at Actlabs Sudbury in April 2016 for Northstar and were now in question. During the visit for the November 2016 bulk sampling program, the author obtained and submitted for analysis referee samples (15419, 15421 and 15422) from 3 of the mini-bulk sample bags. These samples returned much lower gold contents from the Actlabs Ancaster facility in comparison to the initial April 2016 analyses. Based upon the discovered Au analytical differences between the Actlabs Sudbury and Thunder Bay / Ancaster facilities for the Camflo Mill splits and mini-bulk samples, it was concluded that an expanded program of Quality Control Analysis required the sending of multiple additional reject duplicates from all of Northstar's 2016 batches submitted for analysis for metallic screen gold analysis to a third party independent accredited analytical facility for check analyses to assess the extent of analytical failure.

In summary, 18 remaining reject samples from the Camflo Mill feed batch, 6 reject samples from the April 2016 mini-bulk batch, and 16 reject samples from this program's on-site exploration and bulk sampling batch all were sent to the AGAT Laboratories analytical facility in Mississauga, Ontario for metallic screen gold analysis using similar methodologies as applied at the Actlabs facilities and described in Section 11.4. The results of these duplicates analyses are presented inTable 12-4.

Table 12-4 Comparison among Actlabs, Sudbury, Ancaster and Thunder Bay facilities analyses with AGAT duplicates and Northstar Referee Samples

April 2016 Mini Bulk Sample #s.	**Actlabs, Initial Analyses, April 2016 Sudbury, Ontario (g/t Au)**	**AGAT, Reject Duplicates Analyses, March 2017, Mississauga, Ontario (g/t Au)**	**Northstar Referee Sample Analyses, January 2017; Actlabs, Ancaster, Ontario (g/t Au)**
15002	18.2	6.3	-
15008	40.5	24.3	-
15027	31.1	18.5	-
15033	39.3	15.9	-
15047	78	42.1	-
15058	101	52.9	-
Avg. 15016/15017	57.6	-	43.9
Avg. 15041/15042	54.6	-	31
Avg. 15052/15053	52.1	-	6.42
December 2016 Camflo Mill, Northstar splits sample #s	***Actlabs, Initial Analyses, December 2016, Sudbury, Ontario (g/t Au)***	***AGAT, Reject Duplicates, March 2017 (g/t Au)***	***Actlabs, Reject Duplicates, January 2017, Actlabs Ancaster / Thunder Bay, Ontario (g/t Au)***
15751	26.6	10.1	8.51
15753	8.52	4.92	5.54
15754	3.75	4.6	-
15755	15.7	4.28	7.5
15756	5.74	2.84	-
15757	5.53	1.84	1.95
15758	7.4	6.97	-
15759	13.9	4.63	3.49
15760	4.66	2.96	-
15761	10	4.18	-
15764	12.6	4.17	-
15765	16.7	3.68	5.95
15766	3.03	-	3.87
15767	8.16	3.24	4.07
15769	14.9	5.82	
15770	8.67	5.88	4.36
15771	6.95	3.96	-
15772	3.36	3.4	-
15773	28.5	11.6	11.9
Northstar On-site Exploration and Bulk sample #s, January, 2017	**Actlabs, Initial Analysis, January 2017, Actlabs, Ancaster, Ontario (g/t Au)**	**AGAT, Reject Duplicates, March 2017, Mississauga, Ontario (g/t Au)**	**-**
15266	0.85	2.08	-
15276	2.23	2.15	-
15290	4.25	4.64	-

15294	284	320	-
15296	19.7	15.8	-
15304	1.13	0.64	-
15308	7.96	11.8	-
15322	85.3	76	-
15323	15.4	20.6	-
15326	4.73	6.29	-
15362	9.46	0.42	-
15374	19.1	27.6	-
15462	58.6	37	-
15466	92.1	59.3	-

The reject duplicate analyses for the in-situ field samples between the AGAT Laboratories, Mississauga and Activation Laboratories, Ancaster facilities showed great variation due to the erratic and nuggety nature of the gold mineralization but overall there was reasonably good agreement between them, within 5% when comparing their average values. The reject duplicate and referee sample analyses for the mini-bulk samples, however, showed that the Mississauga and Ancaster combined average value is 49% lower in comparison to the initial reported April 2016 Actlabs Sudbury facility average Au value. In addition, the reject duplicate analyses for the mill feed samples show the Mississauga and combined Ancaster / Thunder Bay average values are respectively 54% and 47% lower than the initial Sudbury Au results. There was no significant difference found in the Au analytical results between the Ancaster and Thunder Bay laboratories.

Based upon these results it can be concluded that there is a systematic gold by metallic screen analytical difference at the Sudbury facility even though the reported analyses passed Actlabs' internal QA/QC checks. The reason for this discrepancy remains unknown. The Actlabs Sudbury lab was closed permanently in January 2017. Northstar is planning to re-analyse where possible the remaining 52 mini-bulk sample rejects from the April 2016 analyses as a result of these findings.

For the samples sent to Activation Laboratories, a total of 7 each of silica sand blanks and high-grade Oreas 62e gold standards with certified value of 9.13 ppm Au for fire assay were inserted with the 241 field samples sent for analysis including those covering the bulk sample. Three each of the blanks and Oreas 62e standards were inserted with the 58 samples collected from the previous mini-bulk sample. Confidence limits at 95% were 8.97 - 9.30 ppm. For the reject duplicates sent to AGAT Laboratories a total of 5 Oreas 206 Au standards with certified value of 2.197 ppm Au and 95% confidence limits of

2.165- 2.229 ppm, plus four silica sand blanks were inserted with the batches. The analytical results and analytical certificates are respectively listed in Table 12-5.

Table 12-5 Analytical results of blanks and standards.

Standard	1	2	3	4	5	6	7
Oreas 62e Au Std. (In-situ samples for Actlabs Ancaster field samples, December 2016) Cert. value 9.13 ppm Au (95% confidence limits 8.97 - 9.30 ppm)	9.20 ppm #15280	9.33 ppm #15310	9.22 ppm #15340	9.17 ppm #15390	8.62 ppm #15420	9.31 ppm #15446	9.35 ppm #15471
Silica sand blank (In-situ samples for Actlabs Ancaster field samples, December 2016)	**414** ppb #15265	**311** ppb #15295	**512** ppb #15325	11 ppb #15355	12 ppb #15405	22 ppb #15435	16 ppb #15460
Oreas 62e Au Std. (Samples of Actlabs Sudbury mini-bulk sample, initial analyses, April 2016)	9.10 ppm #15020	8.80 ppm #15040	9.40 ppm #15060	-	-	-	-
Silica sand blank (Samples of Actlabs, Sudbury, mini-bulk sample, initial analyses, April 2016)	<5 ppb #15010	<5 ppb #15030	<5 ppb #15050	-	-	-	-
Oreas 206 Au Std. (Reject duplicates for AGAT, March 2017) Cert. value 2.197 ppm Au (95% confidence limits 2.165- 2.229 ppm)	2.20 ppm #15310	2.15 ppm #15480	2.21 ppm #15750	2.21 ppm #15000	2.31 ppm #15060	-	-
Silica Sand Blank (Reject duplicates for AGAT, March 2017)	0.002 ppm #15265	0.006 ppm #15295	0.002 ppm #15325	<0.001 ppm #15774	-	-	-

For the in-situ field samples in Table 12-7, 4 of the gold standards were found to be outside the 95% confidence limits of which one reported a significantly low value at 8.62 ppm. Three of the blanks were found to have clear analytical failures reporting 414, 311 and 512 ppb (highlighted) suggestive of gold contamination among the sample batch and possible losses during preparation for the field samples analyzed at the Ancaster facility. As a result of the blanks failures and variance in gold values from duplicates to-date, re-preparation and check analysis were completed at the AGAT facility for 18 reject duplicates of the field samples. For the samples of the mini-bulk sample, 2 of the 3 gold standards were found to be outside the 95% confidence limits of which 1 reported a significantly low value at 8.80 ppm. All but 1 of the gold standards for the AGAT analyses were within the 95% confidence limits, and the remaining silica blanks reported no significant gold.

Based upon the results of this review, the data are adequate for the purpose of this report except the April 2016 analyses of the mini-bulk samples and December 2016 analyses of the Camflo Mill check samples both submitted by Northstar to the Actlabs Sudbury facility for metallic screen analyses as presented in Table 12-6. These analyses were rejected by the Northstar in agreement with the reviewer. They are presented there for referee purposes only.

12.5 Miller Gold Project Site Visits

12.5.1 2014-15 Site Visits

Multiple site visits have been completed by the authors and Qualified Persons. The first visit was conducted by Trevor Boyd and Elisabeth Ronacher, both "independent qualified persons" in accordance with National Instrument 43-101, from June 2 – 27, 2014 to log and sample the drill core, inspect the drill, conduct independent surface sampling at the Property and monitor the QA/QC during the drill program. The second visit was conducted by Trevor Boyd on March 27, 2015 with the purpose of checking locations of claim posts using GPS focusing on the newly staked claims in January 2015 and choosing independent drill core samples to be analyzed at a third laboratory. These site visits were in context of the completion of the 2015 Miller Gold Property 43-101 Technical Report (Boyd and Selway 2015).

During the period of the first site visit, Trevor Boyd, collected a series of check samples from 2 main re-discovered surface exposures of visible gold mineralization overlying areas of where No. 1 Vein is projected to trend towards the surface in the vicinity of drill holes MG14-14 and 15. The first outcrop Area 1 was approximately over the exposure to be covered by Trench 1 in the 2016 program. Six composite grab samples consisting of mixed quartz vein and wall rock material were obtained over an exposed mineralized zone approximately 2 metres wide and 25 metres long cut-off along strike by swamp and overburden. The 6 samples totaling 51.5 kg returned a weight averaged grade of 10.7 g/t Au. The second area (Area 2) of mixed quartz veins and wall rock was over the exposure to be covered by Trench 3 in the 2016 program. Five composite grab samples totaling 40 kg obtained over an approximate 20 by 2 metre mineralized exposure adjacent to a historic adit portal and returned a weight averaged grade of 4.2 g/t Au. The results are tabulated in Table 12-6.

Table 12-6 Miller Gold Property 2014 site visit assay highlights table (NAD83, Zone 17U).

Sample #	Outcrop	Easting	Northing	Assays g/t Au	Rock Description
29558	yes	582821	5317545	6.27	Area 1. TB-M-01
29559	yes	582823	5317541	1.23	Area 1 TB-M-02
29560	yes	582828	5317541	4.32	Area 1 TB-M-03
29561	yes	582834	5317540	5.44	Area 1 TB-M-04
29562	yes	582837	5317536	44.5	Area 1 TB-M-05
29563	yes	582852	5317531	1.26	Area 1 TB-M-06
Weight Avg.				10.7	
29564	yes	582667	5317534	0.29	Area 2 TB-M-07
29565	yes	582672	5317543	1.03	Area 2. TB-M-08
29566	yes	582675	5317543	17.52	Area 2. TB-M-09
29567	yes	582685	5317546	0.54	Area 2. TB-M-10
29568	yes	582699	5317545	4.16	Area 2. TB-M-11
Weight Avg.				4.2	

Sample #29561 in Area 1 weighing 9 kilograms and assaying 44.5 g/t Au is from the same approximate location which is reported to be previously sampled by Northstar in 2013 in which a 30 kg sample was submitted for metallurgical testing and assayed 51.1 g/t Au (Section 13.0).

During the second site visit, access to the Property was made by 4-wheel truck and snow-tracked ATV whereupon property claim posts were located by GPS cords and photographed as shown in Figure 12-17. An attempt was made to reach bedrock but due to the thickness of the snow cover at this time of the year this was not successful.

Figure 12-17 Claim Post #1 (NE corner) of claim 4275152 (0582537E, 5319103N, NAD83, Zone 17U).

In addition, during the second trip Northstar's secured core storage facility in Earlton was visited (Figure 12-18) in which 8 quarter core samples from the 2014 drill program plus a gold standard and blank were chosen, bagged, and submitted to the AGAT Laboratories preparation facility in Sudbury.

The submitted samples were prepared by crush to 90% passing 2mm, split to 250 g and pulverize to 85% passing 75um. The laboratory was notified of the possible presence of tellurides and nuggety nature of the gold distribution within the samples. The samples were analyzed for gold at the AGAT Laboratories facility at Mississauga by method code 202-552, Au by fire assay, ICP-OES Finish, 50g with a range 0.001 – 10 ppm with the results presented in Table 12-7.

Figure 12-18 Drill core racks for logging and sampling inside storage warehouse.

Table 12-7 Miller Gold Property 2015 site visit core samples.

Sample	Original	Hole ID	From	To(m)	Te	Au	Original accepted assays (g/t)
1058051	13548	MG14-01	58.15	58.65	3.65	0.89	1.56
1058052	13649	MG14-03	32	33	1.51	0.23	2.95
1058053	13987	MG14-07	118.6	119.5	2.07	0.75	10.1
1058054	14135	MG14-09	94	95	22.2	4.59	1.65
1058055	14326	MG14-10	106.5	107.5	1.85	0.28	1.14
1058056	14474	MG14-11	68	69	0.97	0.2	2.92
1058057	14686	MG14-12	122	123	1.01	0.71	0.882
1058058	14728	MG14-13	23.5	24	6.98	4.72	1.95
1058059	na	na	na	na	0.28	2.05	CDN-GS-2K gold standard 1.97 +-0.18 (2 standard deviations)
1058060	na	na	na	na	0.14	0.012	Blank Limestone gravel

Despite the high variability of the analytical results in comparison to the original sample assays, they are generally positive in context of the nuggety character of the gold mineralization.

12.5.2 2016-2018 Site Visits

From November 2 to 11, 2016, Trevor Boyd, P.Geo. of Ronacher McKenzie visited the Miller Gold Property to referee and aid the mining and stockpile of the bulk sample by Northstar Gold. as well as the gathering of the trench evaluation and bulk sample monitor samples. During the program the author monitored the stripping of the areas of all the 4 trenches, the blasting and excavating of Trenches 1 to 3, and the mining of the bulk sample from Trenches 1 and 3. During the site visit, the author supervised the gathering of the cut channel and blasted rock samples in the areas of the 4 trenches and the insertion of blanks and gold standards prior to shipping them to Activation Laboratories facility in Sudbury for analyses.

Since the author was involved in monitoring the sampling program directly, no separate check samples were taken concurrently by the author during this program on the Miller Gold Property or at the Camflo Mill except for three referee sample gathered from the bags containing the mini-bulk sample which had been collected and analyzed earlier in 2016. The 3 referee samples were collected before the mini-bulk sample material was added to the main bulk sample batch in this program since the author had neither been contracted to referee nor reviewed the original gathering and analysis of the mini-bulk material in April 2016.

On December 1 and 2nd, the author visited the Camflo Mill on behalf of Northstar to observe with George Pollock, Northstar's President, the contract processing of the bulk sample, which recorded at the mill site a measured total of 1,005 humid or 932 dry metric tonnes. Procedures by the mill for monitoring the gold inventory before, during and after the processing of the samples are outlined in detail in the Camflo Mill Gold Inventory document (Richmont Mines Inc. 2015) and include the measurement of ore levels in primary and secondary bins and the sampling of gold concentrations in leaching solution tanks, agitator slurry tanks, and gold solution tanks. During processing, crushed head feed samples for gold analysis were gathered every 15 minutes, composited and split every hour with 1 split each provided to Camflo and Northstar. Monitoring and sampling of the gold inventory and processing containers was completed with Vickie Cyr, Mill Metallurgist in the presence of the author or George Pollock with check samples gathered from the 3 leaching solution tanks, 6 agitator slurry tanks, and gold riche, gold pauvre and storage solution containers on December 1 and 4th immediately before and after the processing of Northstar's material. The samples were split into 3 parts, 1 each for the Camflo Mill, Northstar, and a third referee sample stored at the mill site. The details of the monitoring process and results are outlined in Boyd (2017).

The milling process used for the Beaufor Mine ore was somewhat adjusted for the Northstar bulk sample due to its range of characteristics within its mineralized material, consisting largely of gold tellurides, coarse free gold plus lesser gold associated with the 3-5% disseminated pyrite based upon findings from field and metallurgical work to-date on the Miller Gold Property (Boyd 2014, Boyd and Selway 2015, Steyn, 2016). The coarser gold tellurides are slower to dissolve in comparison to the fine gold in the Beaufor ore requiring higher levels of cyanide and lead nitrite to be added to the leach tanks as well as additional lime added to the agitator tanks to raise the pH to 12. The leaching process was also extended to 71 hours from the standard 48 hours to promote gold dissolution until December 4 after which the process was terminated due to the reduction of flow through the filter press. Some soil contamination in the bulk sample caused frothing in the agitator tanks which may have hampered gold precipitation and caused the flow reduction.

According to the Camflo Mill Daily Report, the average measured head grade of the fire assay with atomic absorption finish analyses of the Camflo Mill splits of the 23 head feed samples was 5.13 g/t gold; the recovered gold grade was calculated to be approximately 4.0 g/t with a stated mill recovery for the Northstar bulk sample from December 1st and 4th of 95.75%. This is comparable to the average weighted grade of 19 mill feed samples for the Northstar splits of 5.06 g/t Au. Initially, however, the first set of analyses of the Northstar splits completed at the Actlabs Sudbury laboratory returned a reported weighted average of 11.2 g/t Au suggesting a major discrepancy with the Camflo Mill splits average head grade which was discussed in detail in Section 12.3.

The Camflo Gold Inventory document reported 187.643 troy ounces of raw bullion, including 172.52 troy ounces in a gold bar shipped to the Royal Canadian Mint and 15.123 ounces of scrap gold in the furnace were recovered of which 71.935 ounces belong to Camflo Mill based upon the differences in measured gold amounts in the leach, agitator and solution tanks on December 1st and 4th for a total adjusted net recovery of bullion doré of 115.695 ounces from 932 tonnes of feed. The overall estimated mill return is 65.75% based on the net return of 100.542 ounces to Northstar on a measured head grade of 5.1 g/t Au representing 152.9 ounces of gold at the mill head, considering total gold losses in the grinding circuit, tailings, furnace room and refinery. The Camflo Mill credited 100.542 ounces to Northstar with no clear explanation based upon the Camflo inventory. The difference between the Camflo Mill measured head grade and calculated recovered grade for the bulk sample may be attributed to gold losses in mill grinding but this is difficult to verify.

The Camflo Mill reported measured and calculated head grade was initially thought to be significantly more different from the reported Northstar head grade based upon the reported analyses of the 23 Northstar splits of the original mill feed samples completed at the Activation Laboratories Sudbury facility, described in Section 11.4. However, analyses of 10 duplicates of these samples sent to Actlabs' Thunder Bay and Ancaster facilities reported considerably lower grades, which were similar to the Camflo Mill measured results. As a result of the discrepancies in reported results between the different Actlabs facilities, 18 reject duplicates of the remaining mill feed sample material were sent to AGAT Laboratories for independent third party check analyses with the results presented and discussed in Quality Control Analysis Section 12.3.

Another site visit was completed by Elisabeth Ronacher, P.Geo., on June 7, 2018. Dr. Ronacher visited Northstar's secure drill core facility (Figure 12-19) reviewed selected drill holes from the 2015 drilling program and collected check samples from holes MG-15-18 and MG-15-24. The intervals reviewed in drill hole MG-15-24 were pink intrusive rock with ~5-10% quartz veins. Visible gold and tellurides were observed at 53.85 m (sample E5518314). The interval reviewed in hole MG-15-18 consisted also of a pink intrusive with quartz veins. Tellurides were in a quartz observed between 255. 00 and 255.8 m (sample E5518319). Visible gold was observed in sample E558320. Table 12-8.

Figure 12-19 Northstar's secure drill core logging and storage facility.

Table 12-8 Check samples collected from 2015 drill core.

Hole #	From (m)	To (m)	Sample #	Au (ppm)	Original Au (ppm)	Comment
MG-15-24	50.00	51.00	E5518310	0.045	0.417	original interval: 50.25-51.00 m
MG-15-24	51.00	51.50	E5518311	0.097	1.29	original interval: 51.00-51.30 m
MG-15-24	51.50	52.50	E5518312	0.071	0.085	original interval: 51.30-52.30 m
MG-15-24	52.50	53.00	E5518313	0.118	8.44	original interval: 52.30-53.00 m
MG-15-24	53.00	54.00	E5518314	>10	0.024	original interval: 53.00-53.70 m
MG-15-24	96.00	97.00	E5518315	0.026	1.62	original interval: 96.25-97.05 m
MG-15-24	97.00	98.00	E5518316	0.093	N/A	original interval: 97.05-97.95 m
Standard	OREAS 62e		E5518317	10.2	9.14 ± 0.41	
MG-15-18	183.00	183.50	E5518318	1.48	1.66	original interval: 183.00-183.30 m
MG-15-18	254.00	255.00	E5518319	0.028	0.052	original interval: 254.05-254.90 m
MG-15-18	255.00	256.00	E5518320	>10	13.95	original interval: 254.90-255.70 m and 255.70-256.00 m
MG-15-18	256.00	257.00	E5518321	0.188	0.019	original interval: 256.0-256.90 m
MG-15-18	257.00	258.00	E5518322	0.118	0.027	original interval: 256.90-257.80 m
Blank			E5518323	0.006		

The results of check samples generally correspond with the original samples if the nuggety nature of the mineralization is considered. The results indicated that gold is present in the 2015 drill core.

Dr. Ronacher also collected grab samples on the property during the personal inspection. The first area inspected was the area of the Planet Syenite; the locations of 2015 channel sampling were visited (Figure 12-20). One grab sample of a quartz vein with molybdenite was collected in the Planet Syenite area (Table 12-9). The collar location of drill hole MG-15-24 was also visited (Figure 12-21). In addition, several historic pits were observed in this area.

The area of Trenches 1 to 4 was also visited (Figure 12-22) and two samples were collected from Trench 1 and 1 sample from Trench 4 (Table 12-9). At Trench 4, visible gold was observed in the volcanic host rock. The assay results show that gold is present in the samples from the area of the Planet Syenite and from the trenches.

The area of the Allied Syenite was also visited; historic pits from which grab samples collected by Northstar were observed. Quartz veins with tellurides were noticed at the historic pits

Table 12-9 Grab samples collected on the property during the site visit.

Sample #	UTM E	UTM N	Elevation (m)	Au (ppm)	Comment
RR333727	582124	5318947	320	4.92	Planet syenite outcrop, quartz with molybdenite
RR333728	582837	5317539	304	0.852	Trench 1, quartz with tellurides
RR333729	582838	5317541	304	11.8	Trench 1, quartz with tellurides
RR333730	582595	5317712	299	9.79	Trench 4, breccia vein
RR333731				8.96	Standard: Oreas 63e: 9.14±0.41
RR333732				0.134	Blank

Figure 12-20 Channel sampling completed in 2015 in the Planet Syenite area.

Figure 12-21 Collar location of drill hole MG-15-24.

Figure 12-22 Photo of Trench 1.

Figure 12-23 Visible gold in volcanic host rock at Trench 4.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 2013 - 14 Gold Metallurgical Test Programs

A 30 kg sub-sample obtained from the 2013 13 tonne bulk sample discussed in Section 9.3 consisting of quartz veined material hosting visible gold was submitted by Northstar for gravity recoverable gold (GRG) bench testing in September 2013 at the Activation Laboratories Ltd. Metallurgy Department using a Knelson Concentrator in a gold recovery circuit (Steyn 2013). The sample was crushed to 100% -850 µm for the 1st pass through the Knelson Concentrator, with the tailings from the 1st pass milled 42% -75 µm for the 2nd pass, and 83% -75 µm for the 3rd pass through the concentrator. The sample head grade was 51.1 g/t Au with a 94.2% gold recovery using gravity concentration and the final tails from the test had 2.93 g/t of gold remaining.

Four pails of material were sent to SMC (Canada) Ltd. for testing with results being described by Smirle (2013). Two of the pails contained white to rusty quartz plus small amounts of metallic luster while the second 2 pails contained quartz and small amounts of metallic oxidation therefore pails containing similar material were processed together. Each batch of material was mixed then split, fed through a Bico pulveriser, passed through a 60 mesh screen and then sent to the gravity separator except for a small portion separated for assay. A gravity concentrate was recovered with the remainder, except for a small portion removed for assay, and was passed through a rolling mill and then screened at 200 mesh with another assay sample removed. The remainder was fed to a Denver float cell with a Dow frother plus xanthate producing a concentrate. Overall the reported recoveries were 92.3% and 96.2% for the two sets of material. It was noted that no visible gold was observed in the sample material and that this may be due to the gold presenting itself as a telluride.

13.2 2016 - 17 Gold Metallurgical Test Programs

In early 2016, 2 hand cobbed samples, one each of high and low gold grade, originally obtained in 2014 from the area of Trench 1 where Vein #1 reaches the surface in the same location as the aforementioned mini-bulk sample, were submitted to Actlabs in Thunder Bay for a series of bench metallurgical tests. The purpose of the testing was to determine the gold recovery using a combination of gravity concentration, flotation, and cyanidation. The flotation and gravity products were analyzed to determine ARD characteristics and deleterious element compositions. The results of the flotation tests were variable but showed the amenability of the use of a gravity circuit for this mineralized material for the successful recovery of gold and for the planning of the milling flow chart. Details of the tests completed, and their results are reported in Steyn (2016). It is noted in the report that a mineralogical study of the gravity concentrate indicated that the gold occurs as gold bismuth tellurides, native gold, electrum, and gold and silver tellurides (Steyn 2013). The gold or gold containing mineral grain size in the concentrate was on average 20 - 60 µm whereas the grains in the tailings were <3 µm.

During the 2016 - 17 bulk sampling program, discussed in Section 9.3, a composite sample taken from the rejects of the 23 Northstar splits samples from the Camflo Mill feed material was prepared for metallurgical testing at Actlabs in Thunder Bay. A test metallurgical program for this sample that mimics the grinding and cyanidation processes at the Camflo Mill was undertaken. In addition, the composite sample underwent a series of gravity concentration plus grinding and preparation tests at different mesh sizes in order to further assess the most beneficial means minimizing the loss of gold during preparation for analysis and recovery.

Initial results from 2 cyanide leach tests using 2,000 g composite mill head samples under the same conditions as were present in the Camflo mill reported 96.1% and 97.7% overall gold dissolution in 72 hours. Gold dissolution at 45 hours was 95.5% and 97.3%. These results represent a marked improvement over previous leach tests and demonstrate that high gold recoveries are possible when using a higher solution pH of 11.9 to 12.1 and maintaining moderate cyanide concentrations in the range of 650 to 700 ppm NaCN to assist in the dissolution of gold tellurides (Steyn 2017).

For the gravity recoverable gold tests using the composite mill head samples, 70% to 75% of the total gold was recovered in a single pass at a coarse 1 mm feed size. Overall gravity recoveries using a Knelson concentrator and Wilfley table were 87.8% and 80.3% respectively. While the reported recovery is encouraging from a metallurgical standpoint it nevertheless makes avoiding gold losses in communition of sample material from the property more challenging as the majority of the gold is being liberated at coarse +1 mm crush sizes. During the preparation of Northstar's exploration samples some gold losses were experienced in crushing and grinding due to coarse nuggety gold getting trapped within and soft gold bismuth tellurides smearing out on the steel equipment.

The results of 7 x 1000 g flotation tests of 30 minutes duration on both composite head samples and the Wilfley table tailings were reasonable with a range of gold recoveries between 39.2% and 95.2%. The best recovery of 95.2% on the composite mill head sample was achieved using a combination of Cytec's AEROPHINE 3418A and AERO 6697 collectors along with a standard MIBC frother. Recoveries on the gravity tailings were lower with the Cytec's AERO 407 promoter achieving the best result of 67%, although the combination of AEROPHINE 3418A and AERO 6697 produced the highest grade concentrate (Steyn 2017).

The bulk sample mill head mineralized material utilized for the 2016-17 metallurgical programs is considered to be representative of the mineralized body on the Property because the sample was extracted from the narrow high grade quartz vein considerably diluted by low grade mafic wall rock. This contrasts with the material utilized for the 2013-14 metallurgical programs which were completed on the quartz vein material only.

The results indicate that high recoveries are possible from the mineralized material using a combination of gravity, cyanide leach and flotation metallurgical methods but considerable additional testing is required the define a flow chart for economic appraisal due to the variety of settings and textures of the gold mineralization in native, telluride and sulphide-hosted forms.

13.3 Mineralogical Testing

Two drill core samples from MG-14-09 were submitted to Actlabs for modal mineralogy late in 2014:

- Sample 14143 from 101.0 to 102.0 m with 24.9 g/t Au determined by metallic screen
- Sample 14149 from 106.0 to 107.0 m with 10.7 g/t Au determined by metallic screen

Both samples were logged as being syenite with intense chlorite alteration with disseminated pyrite.

One polished section from each sample was prepared for analysis with carbon coating (Bindi, 2014). The polished sections were analyzed for modal mineralogy on a Quanta 600F scanning electron microscope (SEM). By a combination of image analysis employing atomic number contrast imaging (from back-scattered electron – or BSE- signal intensity) and Energy Dispersive Spectrometry (EDS) using Bruker 5010 SDD detectors, minerals and other attributes are directly measured on the SEM Mineral Liberation Analyzer (“MLA”). BSE signal intensity is proportional to the mean atomic number of minerals. The Field Emission Gun was used at an accelerating voltage of 20 kV and a spot size of 5 and a working distance of 12.5 mm.

The modal mineralogy of the entire samples confirmed the logged lithology of syenite (high albite, low quartz and K-feldspar content) and the presence of strong chlorite alteration and disseminated pyrite (Table 13-1).

Four gold grains were identified in sample 14149 which were both liberated and locked, ranging in size from 5-75 μm and associated with tsumoite (BiTe). The gold grains were Au-Ag alloys of variable composition.

Table 13-1 Table of modal mineralogy for samples from MG-14-09

	Client ID Mineral (wt.%)	14143	14149
Gold	Gold	0	
Telluride	Tsumoite	<0.01	0
Sulphide	Pyrite	1.04	0.62
Mica and Clay	Biotite	0.53	0.61
	Chlorite	7.93	
Other Silicates	Quartz	0.5	0.13
	K-feldspar	0.12	0.13
	Albite	87.07	
	Plagioclase	1.39	1.27
	Epidote	0.05	0.19
	Amphibole	0.28	0.27
	Zircon	0.03	0.11
	Titanite	0.54	1.18
Oxides and	Rutile	0.03	0.01
	Fe Oxy/hydroxide	<0.01	0.05
Carbonates	Calcite	0.11	0.26
Phosphates	Apatite	0.07	0.05
	Others	0.3	0.26
	Total	**100**	**100**

These results were useful for mineralogically characterizing typical gold bearing mineralized material hosted in the Allied Syenite.

Two gravity concentrates and tailings from a sub-sample of the 2013 bulk sample (section 9.3 and 13.1) were also analyzed by MLA. The concentrates consisted dominantly of pyrite (67.88 wt.%) and quartz (21.78 wt.%); a third tailings sample consisted dominantly of quartz. Gold and silver occurred in the form of native gold, electrum and as gold and silver tellurides and sulfides. Gold and silver-bearing minerals comprise 1.36 wt. % of the concentrate. Bismuth and lead tellurides and their oxidation products are also found in trace amounts (1.21 wt. % in the concentrate). In the concentrate, most of the native gold and electrum occur as free grains (80 % and 72 %, respectively). Some of the gold is locked in pyrite. Gold can also be found as small disseminated grains in iron oxides and Bi telluride.

14.0 MINERAL RESOURCE ESTIMATES

No mineral resources have been estimated on the Miller Gold Property.

15.0 ADJACENT PROPERTIES

The Property is surrounded by mineral claims belonging to Orefinders Resources Inc. bounding on its north and east side in Boston and McElroy townships, Barry-Hollinger Gold Mines Ltd. to the immediate northwest in Boston Township, and Les Entreprises Ogima Inc. bounding on the south side in Pacaud and Catherine townships. In general, patent land holdings are scattered throughout the area, the most significant being the 160 acre Searles Patented holding in Lot 12, Con 6 of Catherine Township bounding to the immediate southeast of the main Property workings. This holding is included in the discussion of the 1987 Miller-Independence exploration work report (French 1988).

There are 4 deposits with gold mineralization in the area that have either had past production or report resources. These deposits are, in order of increasing distance from the Property; the Barry-Hollinger, Terry Zone (Teck), Gold Hill, and Cathroy-Larder (Mirado). The Barry- Hollinger, Gold Hill, and Cathroy-Larder are past producers and much of the production was completed more than 60 years ago.

1. The Barry Hollinger deposit is approximately 2 km northwest of the Allied and 1.5 km west of the Planet syenites. The deposit consists of 12 veins although only the No.7 vein had any development. The No.7 vein is 8 ft. wide, 057° dipping 70° to the south, and consists of parallel veinlets or irregular lenses of quartz hosted by green schist. Gold is associated with quartz and chalcopyrite. Development consisted of a 2 compartment shaft to 1,000 ft with a winze from 1,000 to 2,250 ft, and a 150 ton mill. A total of 69,891 oz Au from 267,741 tons for a 0.26 oz/t recover grade was reported by Gordon et al. (1979).

2. The Terry Zone is located about 2 km southwest of the Allied Syenite across the trend of the regional strike. Gold mineralization is hosted by quartz containing 5-10% pyrite hosted by metavolcanic rocks and to a lesser extent quartz-feldspar porphyry dykes (Théberge, 2009). Most of the mineralization is contained in a 180 m by 300 m area with a thickness of several centimetres to 4.5 m.

3. The Gold Hill mine is located about 3.3 km to the southeast of the Allied Syenite along the trend of the regional strike. Mineralization consists of lenses and veins of interbanded quartz and sulphide, with the sulphide consisting of pyrite with minor chalcopyrite, molybdenite and galena. The mineralization can be traced for 1,100 feet on surface and underground channel sampling returned up to 5.6 oz Au over 1.7 ft. A 1,200 foot shaft and 6,000 ft of lateral development were completed in the late 1920s. A total of 660 oz Au were produced from 4,616 tons for a recovery grade of 0.14 oz/t Au (Gordon et al. 1979).

4. The most advanced and presently active gold project is The Cathroy-Larder, or Mirado, mine located approximately 4.5 km east of the Allied and 5.0 km east of the Planet syenites in the southeast portion of McElroy Township. An open pit was in operation in 1987, producing 7,200 oz Au from 67,500 tons at a grade of 0.107 oz/t Au and leaving 3 stockpiles of material (Reddick and Lavigne, 2012). A report by SRK Canada Inc. (Weiershäuser et al, 2013) reported a total inferred mineral resource of 442,000 ounces grading 1.29 g/t Au with the distribution of the resource shown in Table 15-1; the cut-off grades assumed a gold price of US$1,400 per ounce and metallurgical recovery was assumed to be 95%.

Table 15-1 Mirado Deposit (Weiershäuser et al, 2013).

Classification	Cut-off grade (g/t Au)	Quantity (000 tonnes)	Grade (g/t Au)	Contained Au (000 oz)
Inferred				
Open pit	0.45	9,927	1.18	376.6
Underground	2	669	2.9	62.4
Northern pile	2	12	4.71	1.8
Central pile	2	4	5.38	0.7
Southern pile	2	5	2.74	0.4
Total inferred		10,618	1.29	442

In January 2018, Orefinders Resources Inc. announced the results of its Preliminary Economic Assessment for the South Zone Open Pit part of the Mirado Gold Mine. The PEA considered only production from a specific area which encompasses approximately 5% of Orefinders' Mirado Project. The Mineral Resource estimated within the PEA for mining is within the South Zone's open pit, and is near surface mineralization, which can be economically mined within a relatively short time frame and without the use of an on-site processing or tailings facility

The Qualified Person has been unable to verify this information and the information on adjacent properties is not necessarily indicative of the mineralization on the property that is subject of this Technical Report. This Technical Report distinguishes between the information from the adjacent properties and the information from the Miller Gold Property.

16.0 Other Relevant Data and Information

No additional information or explanation is necessary to make this technical report more understandable.

17.0 Interpretation and Conclusions

Historical exploration on the Miller Gold Property has been sporadic and not always well-focused as the Property was often subdivided into a series of smaller separately owned claims or properties. Consolidation of the smaller properties by Northstar has allowed for a more systematic examination of the potential of the Miller Gold Property to host economic gold mineralization.

17.1 Diamond Drilling

Encouraging diamond drilling results from the initial 2014 program, primarily testing the historically known No. 1 Vein Zone in holes MG14-02, MG14-03, MG14-07, MG14-09 and MG14-12, suggest this mineralized zone extends to the north, incorporates into the Allied Syenite, and remains open continuing further along down dip to the north as reported in Boyd and Selway (2015). Further to the south this vein system trends up dip to shallow depths and in places becomes exposed on the surface about 30 and 60 metres south of hole MG14-15, but the outcropping of auriferous veining is scattered and difficult to delineate. This may be because of the tree cover and paucity of detailed surface exploration and sampling on the Property for the past 80 years.

North of hole MG14-01, the demonstration of the relationship of the gold mineralization between No. 1 Vein and the Allied Syenite and the knowledge that the intrusive is part of a continuous arc of alkaline magmatism that extends for 3,000 metres to the north suggests that the gold potential for the property is more extensive than historically believed.

The target of the 2015 Oban diamond drilling program was a syenite-associated disseminated gold deposit style of mineralization in the Allied, Planet and Meilleur syenites. The work completed in 2015, as reported in Hart (2015), provided a better understanding of the gold mineralization in the Allied Syenite and was also successful in identifying additional gold mineralization in the Planet and Meilleur syenites.

The results of the drill program were better than the surface sampling for the Allied, Planet and Meilleur syenites suggesting and the full potential of these intrusions to host economic gold mineralization has not been fully tested. A better understanding of the controls on the quartz veining is needed to assess if there is a potential for additional mineralization at depth. It is noted by Hart (2015) that historical work has concentrated on the southern portion of the Meilleur Syenite where the gold mineralization appears to be lower grade. The 2015 exploration program suggests that the north portion of the intrusion is larger than exposed on surface and hosts better gold mineralization in core than on surface.

17.2 Bulk Sampling and Surface Sampling

Northstar's dual purpose for 2016-17 bulk sampling program was to obtain a sizable bulk sample to assess the gold grade, dilution and mine-ability of the stripped surface exposures; and to explore the stripped areas to assess the continuing continuity of the gold mineralization along strike and down-dip. The program was successful in demonstrating, for No. 1 Vein and other veins on the Property, the presence and continuity of high grade, mineralized gold mineralization, over albeit narrow and variable widths, hosted by the veins and immediate wall rock. The results allow Northstar to project the probable trend and attitude of these zones for follow-up exploration.

The reported average Camflo Mill head grade of 5.13 g/t for the dry 932 tonne bulk sample is reasonably comparable to the combined weighted average grade of 8.77 g/t Au obtained from the analysis the 90 in-situ comparable channel and broken rock samples gathered over the bulk sampling areas of Trenches 1 and 3, bearing in mind the effect of increased dilution of up to 70% basalt in the delivered bulk sample. It is noted that this average grade is reported based upon the removal of the reported highest grade blasted rock sample (284 g/t Au); when this sample is included the average grade increases to 11.2 g/t Au.

These in-situ field sample results provide only a general grade guideline in supporting the mill head grades because the Au contents of both the basalt wall-rock (approximately 100 ppb to 2 g/t Au) and quartz vein (approximately 4–284 g/t Au) are highly variable, more variable than the estimated wall rock dilution or the weights of the individual samples. These reported average grades, however, are supported by the results of previous exploration and sampling in the 2 trenches areas. As previously reported, the author had earlier collected a series of composite grab surface samples from trenches 1 and 3 reporting weighted average grades of 10.7 and 4.2 g/t Au, respectively, as reported in Boyd and Selway (2015).

A working analytical methodology to produce accurate and repeatable gold analyses of the mineralized material on the Property is continuing to be developed by Northstar during this program as outlined in Section 11. Analytical challenges exist for the mineralized samples because much of the gold appears to occur as gold-bismuth tellurides, which are difficult to analyze. The gold analysis is further complicated by the coarse texture and soft character of the gold-bismuth tellurides in comparison to other gold telluride mines in the Kirkland Lake Camp. Gold losses during sample preparation can occur when samples undergo over-grinding resulting in smearing of gold telluride onto grinding equipment. In addition, some coarse gold appears to be lost in grinding when sample material is over-pulverized. The results of this program suggest that a minor change in the analytical procedure for gold mineralized samples may result in a wide variation in reported results.

In terms of the evaluative sampling purpose of the Project, all 4 of the stripped and/or blasted areas were identified as indicating open continuity in their gold zones. After the bulk sample was gathered, additional chip sampling in Trench 1 exposures at 2 to 3 metres depth demonstrated that the narrow but high-grade No. 1 Vein remains open both down dip (Traverses 13 to 17) to the north and along strike to the east (Traverse 1) and west (Traverses 3 & 4) as shown in Table 9-5.

Within the Trench 2 exposures, No. 1 Vein was not successfully exposed by blasting, however, in the area of the channel sampling (Traverse 2, Table 9-7), stringer veining and high grade samples in the hanging wall rocks suggested the mineralized system remains open and continues at shallow depths to the northwest beyond the stripped area.

Within Trench 3, gold grades from sampling report more erratic and lower grade values in comparison to Trenches 1 and 2, however, the channel sampling in Traverse 8 listed in Table 9-9 indicates that good gold grades in veining continues down-dip to the northeast in the vicinity of the main ramp and is worthy of continued investigation.

Sampling results from Trench 4 (D-Vein) found that the auriferous vein system is different from No. 1 Vein, dipping at approximately 40-45° to the south southeast, and possibly cut-off along strike to the east northeast; but reported high-grade gold values in Traverses 9 and 10 in Table 9-11 show it remains open down-dip and along strike to the west southwest where the vein system becomes covered by overburden and swamp.

The open vein systems within the 4 trenches represent excellent exploration targets for defining additional near surface gold mineralized material to be tested by additional trenching and drilling as outlined and recommended in Section 18.

It should be noted that in drill hole MG14-14 collared 15 m north of Trench 2, the Vein #1 zone was logged between 2.57 m and 3.80 m vertical depth and reported an intersection of 8.3 g/t Au over 1.0 m between 3.0 m and 4.0 m. This shallow intercept along with intercepts reported in drill hole MG14-02 of 5.26 g/t Au over 7.95 m between 49.70 m and 57.65 m is strongly suggestive that the Vein #1 zone thickens down dip to the north where it is laterally extensive and remains open in all directions. This is consistent with the positive results from the sampling of the hanging wall mineralization in Trench 2.

It is also noted that from the 2015 mapping program and sampling of pits and trenches, it is suggested that there is a similar potential for the discovery of additional shallow quartz-carbonate vein mineralization to the north and west of the Planet Syenite which are associated with northwest and northeast-trending structures in that area. A series of historical pits and trenches along a northeast-trending shear/fault on the north side of the Planet Syenite were sampled and most samples returned >0.1 g/t Au with a high of 4.29 g/t Au. This shear/fault structures appear to be part of the same structural event that produced the east- and northeast-trending structures that host the gold mineralized veins south of the Allied Syenite. There are also a series of historical trenches and pits along the northwest-trending structure located west of the Planet Syenite, and about half of the samples from this structure returned >0.1 g/t Au with the best sample returning 43.7 g/t Au. There is no indication that either of these structures have been tested by diamond drilling.

17.3 Conclusions

The suggestion in this and previous reports (Boyd and Selway 2015, Hart 2015, Boyd 2017) that the Miller Gold Property hosts a large scale hydrothermal gold system is supported from research findings presented in the MSc Thesis of Luis Arteaga (Arteaga 2018) which outlines indications of multi-stage and long-lived magmatic gold deposition associated with large scale intense metasomatism, pervasive alteration and episyenitization of the named syenite intrusions. Geochronological Re/Os and U/Pb age dating has found the mineralization is associated with the Temiskaming magmatic event (2680 to 2660 Ma) contemporaneously with the age of gold deposits along the Kirkland Lake Main Break. This is consistent with the Au-Ag-Bi-Cu-Mo-Te signature of the gold mineralization on the Property similar to that of some gold deposits in Kirkland Lake Camp. Evidence indicates that the Miller gold deposits and the Kirkland Lake gold deposits were formed contemporaneously and derived from a common gold enriched magmatic hydrothermal reservoir at depth. The Catharine Fault Zone which crosscuts the Miller Gold Property is interpreted as a broad composite "first order structure" capable of channelling deep seated exsolved magmatic hydrothermal fluids into favourable sites of gold deposition, namely intrusive contacts and cross cutting second order structures. In conclusion, there is potential for the discovery and outline of a large gold resource on the Property beyond the scope of the high grade, but narrow quartz vein mineralization historically exploited to-date.

In general, the exploration of the Miller Gold Property has been conducted in accordance with best practices with NI 43-101 with no material errors in procedures on the part of Northstar Gold or Oban Mining or significant deficiencies in the integrity of the results. The results from the 2014 and 2015 drill programs are of good quality and adequate for the purpose of their utilization in any subsequent resource estimations. It is cautioned that the gold distribution in the mineralized zones is highly erratic due to its nuggety character, coarse texture, and variable mineralogy occurring commonly as native gold and tellurides. This has resulted to-date in analytical problems that are described in this Report. It is the opinion of the authors of this Technical Report that the work completed to-date by Northstar has returned sufficient positive results to justify an enlarged follow-up exploration program consisting mostly of diamond drilling with the purpose of defining a mineral resource. The Qualified Person is not aware of significant risks and uncertainties that could reasonably be expected to affect the reliability or confidence in the exploration information other than the one stated above. These risks can be managed and may not have an impact on the project's potential economic viability.

18.0 RECOMMENDATIONS

Based upon exploration results to-date, follow-up exploration of the Property is strongly recommended. The encouragingly positive results from the bulk and surface sampling program support a follow-up program of core and reject re-sampling and analysis, drill hole modelling, extension of the 2014 IP / resistivity survey and closely-spaced shallow diamond drilling. Additional stripping, trenching, detailed surface mapping and bulk sampling is also recommended for the Miller Gold Property.

Phase 1

- In the short term, the purpose of the recommended program is to aid in identifying additional promising areas where quartz veining shallows or flares up "blow outs" to the near or at surface similar to Trench 1. Three-dimensional exploration geology modeling of the central mineralized area including the Allied Syenite and southward to the Trench 1 area should be completed. Follow-up exploration priority should be directed in the vicinity of the Trenches 1 to 4 extending northwards towards the Allied Syenite focusing on the delineation of open volumes of near surface vein-hosted, high-grade, gold mineralization preferably accessible by open pit mining techniques.

- As an immediate priority, it is important that drill logs and core from the drilling programs of 2014 and 2015 be re-examined, and selected core samples be re-sampled and re-analyzed using a similar methodology as outlined in Section 11 prior to choosing targets for follow-up diamond drilling, trenching and surface sampling, and modelling work. Attention should be paid to those samples from previous drill core sections that were logged as appearing to be situated within interpreted mineralized zones, where values of <10 g/t Au where reported, and that did not undergo metallic screen analysis from at least a 1,000 g prepared pulp sample. Based upon the results in this program, it is believed the erratic reported gold results from previous exploration of the property and difficulties in consistently following mineralized zones may be at least partially due to the failure of previous analyses to consistently account for the all the coarse gold in the samples.

- A program of shallow exploratory diamond drilling, trenching and channel sampling should be completed on the Allied, Planet and Meilleur syenites to better expose the intrusive bodies and auriferous quartz veins. This program should include locations within the intrusions and across the regional structures that host gold mineralization, including the northwest-trending zone along the east side of the Allied Syenite and the northeast-trending zone along the north side of the Planet Syenite, to better assess the relationship between the intrusions and the structures which appear to control the auriferous quartz veins. This drilling, trenching and channel sampling program should also examine the mineralized quartz veins located to the south of the Allied Syenite hosted by a similar set of structures associated with those in the intrusion.

- Integrative with the drill core re-evaluation, the author recommends the re-evaluation and possible re-processing of the 2014 IP survey data combined with additional deposit modelling based upon the improved geological understanding gained from the 2014 and 2015 drilling programs and exploration with the purpose of identifying additional near-surface high resistivity and chargeability targets and more specifically to better define the trend and depth of the No. 1 Vein north of Trench 1. It is also recommended to expand the 3D IP coverage to the west of the D Zone and to the north half of the Miller Gold Property. The geophysical data should be interpreted in a geological context such that drill targets can be generated. The gold bearing structures identified in surface mapping need to be included in the geological / geophysical model.

- Attention should be paid to the structural geology of selected locations over the Allied, Planet and Meilleur syenites in follow-up to both historic and 2014 and 2015 drilling with a focus on assessing northeast and west northwest trending shear structures along the north contact and centre of the Planet Syenite. It is recommended that attention also be paid to the east side of the Allied and west side of the Planet syenites at the projected intersection of these shear structures, and at depth where possible intersections, bends, fault jogs or intrusive contacts of No. 1 Vein and D-Vein may result in thickening of the high grade Au zones.

Phase 2

- It is recommended that Northstar, based upon the findings from the aforementioned recommendations and contingent on positive results from Phase 1 exploration, follow with a tightly spaced definition drilling program on the No. 1 Vein, Allied Syenite and D zones. The focus of the program will be on target areas generated from the interpretation of the aforementioned IP work and drill core and surface re-evaluation including where the No. 1 Vein Zone attains a minimum width of 1.0 m as observed in drill holes MG14-02 and MG14-14 and MG14-07 (3.25 g/t Au over 14.03 m from 105.47 to 119.5 m) and MG14-12 (11.62 g/t Au over 3.95 m from 138.05 to 142.0 m) in the vicinity of the Allied Syenite. Follow up drilling is also recommended on the new discovery in drill holes MG15-18 (19.25 g/t Au over 0.3 m from 255.7 m to 256.0 m) and MG15-20 (14.1 g/t Au over 3.05 m from 311.85 to 314.9 m) which may represent a parallel gold bearing structure 100 m below the Vein 1 zone. It is recommended that during the next drill program Specific Gravity measurements be completed on every 10^{th} sample chosen for analysis.

- This fieldwork should be followed by detailed deposit modelling of the results in preparation for a resource estimation that follows the standards of the National Instrument 43-101.

The results of the drilling and re-evaluation work programs should also aid Northstar Gold to choose prospective surface locations for additional enlarged bulk sampling. A proposed budget for exploration and development is outlined in Table 18-1.

Table 18-1 Recommended exploration program and cost estimate.

Item	Unit	No of Units	Cost/Unit	Total Cost
Phase 1				
Review of drill logs and resampling of drill core and rejects	day	10	$1,000	$10,000
Preparation and metallic screen gold analysis of selected core and reject samples including re-analysis of rejects from bulk samples.	samples	150	$100	$15,000
Development of geological and geophysical exploration models to define near-surface drill and trenching targets with focus on Allied Syenite and vicinity.				$20,000
Exploratory shallow diamond drilling in vicinity of Trenches 1-4 and Allied Syenite using portable drill. (all costs)	metres	3,000	$175	$525,000
Follow-up stripping, blasting and sampling of selected areas using heavy machinery / workers	hours	500	$650	$325,000
Gold analysis of samples from drilling and trenching programs	samples	2,000	$50	$100,000
Extension of IP survey to the north and west of present survey area. Consider deep IP survey option for parts of the survey area.	kilometre	40	$2,500	$100,000
Sub-TOTAL				**$1,095,000**
Phase 2				

Item	Unit	No of Units	Cost/Unit	Total Cost
Follow-up close-spaced shallow definition diamond drilling using portable drill (all costs)	metres	4,000	$175	$700,000
Gold analysis of samples from drilling and bulk sampling programs.	samples	2,000	$50	$100,000
Deposit modelling and 43-101 resource estimation, and technical report preparation including site visit and validation sampling	hours	500	$200	$100,000
Environmental impact assessment study including 12 month monitoring program in preparation for preparation of closure plan and enlarged bulk sampling program				$200,000
Sub-TOTAL				**$1,100,000**
TOTAL				**$2,195,000**

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20.0 STATEMENT OF AUTHORSHIP

This report, titled "Miller Gold Project, Kirkland Lake, Ontario", dated December 10, 2018 and prepared for Northstar Gold Corp., was completed and signed by the following author:

____
Trevor Boyd, PhD, P.Geo.
December 10, 2018
Toronto, ON

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Elisabeth Ronacher, PhD, P.Geo.
December 10, 2018
Sudbury, ON

Appendix 1 – Certificates of Authors

Appendix 2

Analytical Certificate

Ronacher McKenzie 2018 Site Visit