micon INTERNATIONAL LIMITED | mineral industry consultants

moneta porcupine

MONETA PORCUPINE MINES INC.

A MINERAL RESOURCE ESTIMATE FOR THE GOLDEN HIGHWAY PROJECT, MICHAUD AND GARRISON TOWNSHIPS, BLACK RIVER - MATHESON AREA, NORTHEASTERN ONTARIO

Report Date: February 28, 2019
Resource Database Effective Date: November 19, 2018
Resource Effective Date: January 15, 2019

Report By:

B. Terrence Hennessey, P.Geo.
Richard M. Gowans, P.Eng.

900 - 390 BAY STREET, TORONTO ONTARIO, CANADA M5H 2Y2
Telephone +1 416 362 5135 Fax +1 416 362 5763

Page

Table of Contents

Page

Page

Page

List of Tables

Page

List of Figures

Page

Page

1.0 SUMMARY

1.1 INTRODUCTION

At the request of Mr. Gary O'Connor, CEO and Chief Geologist of Moneta Porcupine Mines Inc. (Moneta), Micon International Limited (Micon) has undertaken an independent technical review of the mineral exploration completed on the Golden Highway Project and prepared a mineral resource estimate for several of the deposits located on the property.

Since the completion of a 2012 mineral resource estimate and Preliminary Economic Assessment, which examined the possibility of open pit mining at the project (Puritch et al., 2012), approximately 109,000 m of additional drilling on several targets has been performed by Moneta. This drilling and its results will be described in this report and incorporated into a new geological interpretation and a mineral resource estimate which anticipates underground mining.

1.2 LOCATION

The Golden Highway Project is located within the Larder Lake Mining Division, northeastern Ontario, Canada. It is centred about 571456 East and 5368622 North, in Zone 17N of the NAD83 UTM coordinate system or 48°, 28" North Latitude and 80°, 02" West Longitude. The property is located approximately 540 km north of Toronto, 92 km east of Timmins, and 40 km north of Kirkland Lake.

The project is easily accessible via Highway 101 east from Timmins through Matheson.

1.3 PROPERTY DESCRIPTION

The Golden Highway Project is a large package of mining claims totaling 10,800 ha. The claims and leases under joint venture with Kirkland Lake Gold Mines located east of Matheson in a number of claim blocks, some adjacent to the project, are not included in the scope of this report as they are not considered to be part of the same project. The property is comprised of 22 patented mineral claims, four leased mineral claims, and 311 unpatented mineral claims located in Guibord, Michaud, Barnet, Garrison and McCool Townships. These contiguous claims total 6,673 ha and are owned 100% by Moneta, excluding the Dyment 3 claim block (eight unpatented claims totaling 52.2 ha) that is held 75% by Moneta and 25% by Kirkland Lake Gold Inc.

1.4 REGIONAL GEOLOGY

The project is located within the southern part of the Archean (ca. 2.7 Ga) Abitibi greenstone belt of the Superior Province of the Canadian Shield in northeastern Ontario. The Abitibi greenstone belt consists of Neoarchean supracrustal rocks divided into tectonic-stratigraphic assemblages that include metavolcanic rocks, synvolcanic intrusions, metasedimentary rocks, calc-alkaline and alkaline intrusive rocks, and late Proterozoic dykes. The dominant regional

structures of interest are the Destor Porcupine Fault Zone (DPFZ) and Pipestone Fault Zone with their associated gold deposits and mineralization.

The project is located on the DPFZ, a major gold mineralized regional fault structure. Figure 1.1 shows the location of the DPFZ in red and several prominent gold deposits including the Black Fox Mine, Ross Mine, Holloway Mine and Holt-McDermott Mine that are located within an approximately 25 km radius of the Golden Highway Project.

1.5 PROPERTY GEOLOGY

Holocene organic deposits of peat and black muck cover much of the property. Underlying the organic deposits are extensive Quaternary glacio-lacustrine, deep water varved silts and clays of the Barlow-Ojibway Formation and/or sands associated with the Munro Esker complex. They are up to several metres thick, overlying the Matheson Till at the bed rock interface.

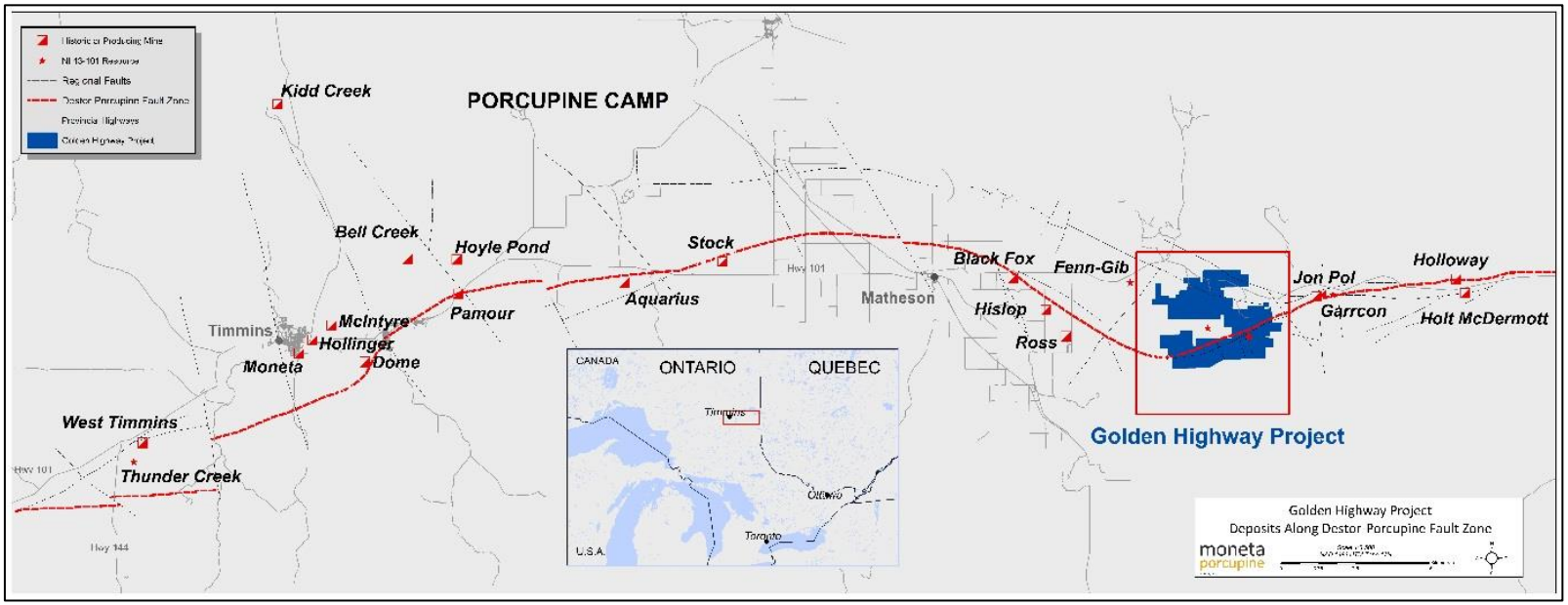
These recent unconsolidated sediments mean that there is no exposure of mineralized rock over any of the known zones. The bedrock geology of the property is mainly determined from drill core observations, geophysical interpretations and local rock outcrop areas outside of the mineralized lithologies. The area is largely covered with overburden consisting mainly of sands associated with the Munro Esker complex. A few outcrops are located in the centre of the property south of Emens Lake and more extensively south of the Pike River valley to the south of the DPFZ.

The central portion of the property is the main area of exploration work and can be divided into a North corridor and South corridor that together define the DPFZ, as it crosses Michaud and western Garrison Townships. These distinct geological corridors contain the bulk of the known gold mineralization discovered to date. The North corridor contains the historical DPFZ (north branch) trace in a sequence of Tisdale mafic and ultramafic metavolcanics. The Timiskaming metasedimentary rocks, iron formation and associated rocks are contained in the South corridor.

1.6 MINERALIZATION AND DEPOSIT TYPE

The five deposits on the property which have had mineral resources estimated for them, (South West, Windjammer South, Discovery, Windjammer North, and 55) have been classified as structurally controlled orogenic gold deposits in an Archean greenstone belt setting. This deposit type is a significant source of gold mined in the Superior and Slave provinces of the Canadian Shield. These deposits are typically quartz-carbonate vein hosted and are distributed along crustal-scale fault zones that mark convergent margins between major lithological boundaries such as those between volcano-plutonic and sedimentary domains. The Golden Highway Project is located on the DPFZ, a major regional structure.

Figure 1.1
Gold Deposits in the Matheson Area Along the Destor-Porcupine Fault Zone



Source: Moneta, 2019.

The DPFZ in northeastern Ontario, hosts the largest Archean orogenic gold camp in the world and has produced over 75 Moz of gold from the Timmins Camp alone. When combined with the adjacent Larder Lake-Cadillac Fault Zone and associated splays, this region has hosted over 200 Moz of gold (Dubé, B et al. 2017).

The greenstone-hosted quartz-carbonate vein deposits are structurally controlled, epigenetic deposits characterized by simple to complex networks of gold-bearing, laminated quartz-carbonate structure-fill veins. These veins are hosted by moderately to steeply dipping, compressional, brittle-ductile shear zones and faults with locally associated extensional veins and hydrothermal breccias. The later structures are the main host for mineralization on the Golden Highway Project.

1.7 EXPLORATION

The area between Matheson and the Quebec border has a long history of prospecting, mineral exploration, and gold mining dating back to the beginning of the 20th Century. Production from mines in the area began in 1911.

Staking of the Golden Highway Property commenced in 1939 and known exploration work commenced in 1945. Details of the work conducted are somewhat restricted and generally limited to data in the province's assessment files (see Section 6). It is known that several companies worked the claims and that geophysical surveys (magnetics, VLF, induced polarization and horizontal loop EM) and drilling programs were conducted.

Moneta gained control of the core claims in 1986 and commenced its own exploration.

Since acquisition Moneta, or its joint venture partners at the time, have completed some additional geophysical work (airborne and ground magnetics and VLF). The majority of the work completed was drilling, mostly diamond core drilling with a small amount of reverse circulation (RC) drilling. A significant amount of drilling has been completed by Moneta.

Moneta has possession of all of the drill core from 1986 on at its secure logging facility on Hwy. 655 in Timmins. This core library is frequently used for reference when conducting geological modelling. Only assays from the 1986 and newer drilling were used for the mineral resource estimate in this report.

1.8 MINERAL RESOURCES

Micon received from Moneta a large drill hole database with gold grades, lithologies and bulk density data. Moneta personnel, in collaboration with Micon, also interpreted 64 wireframes of narrow veins suitable for an underground mining scenario. The database contained the results from 1,312 drill holes, with a total of 374,857 m of drilling and containing 156,196 samples. Of these 389 drill holes containing 12,859 m of core intersected the 64 wireframes. Most drill holes intersected multiple zones.

The assay data were composited to 1-m length and the univariate statistics were estimated and the need for grade capping was analyzed. A small number of composites were capped.

Good variograms were modelled and grade was therefore interpolated into the model using ordinary kriging. Long ranges varying from 60 to 100 m on the major axis were achieved. Most variograms ranges exceeded 70 m.

The mineral resources have been classified into the Indicated and Inferred Resource categories. For Indicated Resources the closest informing composite needed to be less than 50 m away and the block had to be informed by 3 or more drill holes. (Forty metres was used for one vein where the range of the variogram was shorter.) All other blocks were classified as Inferred.

The mineral resource estimates for the five reportable deposits (South West, Windjammer South, Windjammer North, 55 and Discovery) are set out in Table 19.1. The mineral resources have been reported at a 3.0 g/t Au cut-off.

Table 1.1
Golden Highway Project Mineral Resource Estimate by Deposit

Deposit Name	Indicated			Inferred		
	Tonnes (t)	Grade (g/t)	Ounces (oz)	Tonnes (t)	Grade (g/t)	Ounces (oz)
South West	2,007,000	4.63	298,900	5,583,000	4.21	755,800
Windjammer South	364,000	4.19	49,100	173,000	4.59	25,500
55	216,000	5.11	35,400	327,000	4.31	45,300
Discovery	-	-	-	108,000	4.12	14,300
Windjammer North	-	-	-	265,000	3.80	32,400
Total	**2,587,000**	**4.61**	**383,400**	**6,456,000**	**4.21**	**873,300**

Notes:

1. Mineral Resource Estimates are reported at a cut-off grade of 3.00 g/t Au for an underground mining scenario. The cut-off grade was calculated at a gold price of US$1,250 per ounce, an exchange rate of USD$/CDN$ of 0.75 and operational assumptions outlined in Section 14 of this report.
2. The resource estimate is supported by statistical analysis with different high grade capping applied to each of the deposits ranging from 13.0 g/t Au to 37.0 g/t Au on 1-m composites.
3. The mineral resources presented here were estimated with a block size of 5 m x 5 m x 10 m utilizing sub-blocks as required and constrained within geological wire frames with a minimum width of 1.50 m. The cells are estimated by Ordinary Kriging using the appropriate variogram model of each structure with individual search ellipsoids.
4. The mineral resources presented here were estimated by Micon International Limited using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definitions and Standards on Mineral Resources and Reserves.
5. Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, market or other relevant issues.
6. The quantity and grade of reported Inferred Resources are uncertain in nature and there has not been sufficient work to define these Inferred Resources as Indicated or Measured Resources.
7. There are no historical underground voids from mining including shafts, ramps drifts or stopes in any of the deposit areas.

8. Tonnage estimates are based on bulk densities individually measured and calculated for each of the deposit areas, averaging 2.78 tonnes per cubic metre for the total resource. Resources are presented as undiluted and in situ.
9. This mineral resource estimate is dated January 15, 2019. The effective date for the drill hole database used to produce this updated mineral resource estimate is November 19, 2018. Tonnages and ounces in the tables are rounded to the nearest thousand and hundred respectively. Numbers may not total due to rounding.
10. There were no West Block mineral resources reported due to low grades and a lack of data and thus continuity.
11. At the present time, Micon does not believe that the mineral resource estimate is materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.

1.9 INTERPRETATION AND CONCLUSIONS

Since the early 1980s exploration on the Golden Highway Property has resulted in the discovery of a number of gold deposits and gold-mineralized zones. These can be classified as structurally-controlled orogenic gold deposits in an Archean greenstone belt setting.

Six of these (South West, Windjammer South, Windjammer Central, Windjammer North, 55 and Discovery) have been sufficiently drilled to have mineral resource estimates prepared for them. For all but Windjammer Central narrow, higher grade vein structures have been modelled. Central is a wider, lower grade bulk tonnage target potentially suitable for open pit mining. However, the deep overburden in the area has resulted in only a small tonnage of mineralization lying with a pit shell floated on it. For this reason no resources have been reported for Central.

Other zones (Western, Dyment 3, LC, Westaway, Twin Creeks, Halfway and Landing) and isolated drill intersections have also been found which deserve follow-up exploration.

1.10 RECOMMENDATIONS

Moneta staff have produced a recommended program of continued exploration which has been reviewed by the QP. It is recommended that the following activities and programs be conducted to continue to advance the development of the project:

- Exploration drilling program to test mineralized targets already identified.
- Exploration drilling to expand the mineral resources.
- Exploration drilling to test new drill targets.
- Infill drilling within the current resource where gaps occur or to upgrade confidence categories.
- Further geological interpretation and modelling.
- Mineralogical and petrological studies to determine the deportment of gold.
- Metallurgical test work of the different styles and geological settings of mineralization to test recoveries near cut-off grade, the new higher average grade, as well higher-grade areas of the resources.
- Metallurgical test work to include acid base accounting and trace element background data collection.

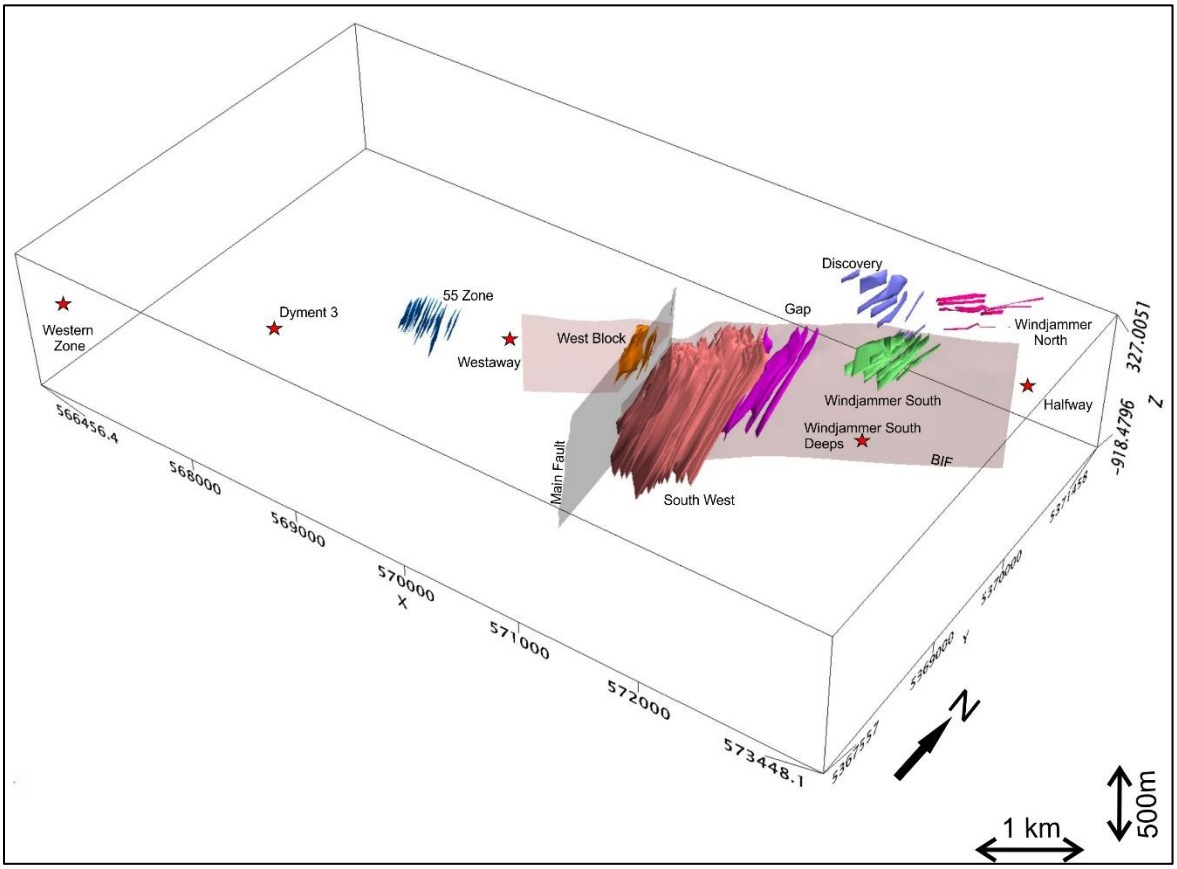
- Geotechnical data collection and test work to establish geotechnical aspects of mining the project.
- Environmental study programs including aquatic, terrestrial, hydrology, and groundwater to provide data for planning and permitting.
- First Nation and other stakeholder consultation.
- Scoping study: An updated resource and preliminary economic assessment (PEA) of the project is required to determine the focus, direction and plans for further resource development

An infill drilling program of 40,000 m is recommended to infill portions of the resource where drill spacing is not sufficient within the interpreted wireframes to fully interpolate grade between more widely spaced drill holes and to connect shallower structures with extensions at depth.

A 60,000 m exploration drilling program is recommended to expand the currently modelled resources. Drilling should be allocated to the following target areas: down dip and strike extensions of the 55, South West-West Block, South West east extension (former Gap area) and Windjammer South deposits as well as the Discovery and Windjammer North deposits and associated zones along the northern splay of the DPFZ.

A number of new targets not included in the current resource have been identified and found to host gold mineralization, notably along the southern contact of the regional banded iron formation (BIF). A program of 35,000 m is recommended to test the Halfway, Westaway, Dyment and Western Zones. (See Figure 1.2.)

Figure 1.2
Golden Highway Project, 3D Isometric View, Main Target Zones



Source: Moneta, 2019.

A number of zones including LC, Landing Zone and Twin Creeks occur along the northern splay of the DPFZ within the Tisdale and Kidd-Munro Formations which warrant additional drill testing. A large portion of this structure east of Windjammer North has not been tested. Approximately 2 km of strike length of untested BIF between the South West and 55 deposits requires drill testing as does the BIF to the east of Halfway. It is recommended to conduct 65,000 m of exploration drilling.

Upon completion of the proposed additional drilling an updated mineral resource and, subsequently, a preliminary economic assessment (PEA) should be completed to first determine the overall size of the project and then determine the potential economics and outline the best program to advance the project.

It is recommended that Moneta characterize the acid generation/acid consuming and metal leaching potential of the different mineralized zones and rock types potentially to be mined/exposed.

Commencing geotechnical data collection is recommended in line with the current status of the project in order to establish suitable base line data as required for further development.

A program of environmental and social base line data collection and studies is recommended to reflect the current status of the project and situate the project favourably for further advancement. The commencement of suitable hydrology, ground water and weather data are also recommended.

1.10.1 Recommended Program Budget

Moneta has also prepared a program budget which is based in part on Micon's recommendations (Table 1.2).

Table 1.2
Recommended Work Program Budget

Program	Units (m)	Unit Cost ($/m)	Budget
Mine Property General			
Infill Drilling Program	40,000	$135	$5,400,000
Resource Expansion Drilling	60,000	$135	$8,100,000
Exploration Drilling	65,000	$135	$8,775,000
Drill Test Known Targets	35,000	$135	$4,725,000
Metallurgical Recovery Test Work			$250,000
Petrographic & Mineralogical Studies			$50,000
Geological Interpretation and Modelling			$250,000
Environmental Base-Line Study Work: Aquatic, Terrestrial, Ground Water, Water Quality			$350,000
First Nation Consultation and Archaeological Studies			$650,000
Geotechnical and Hydrology programs and studies			$250,000
Scoping Study: Resource update and PEA			$850,000
Total			**$29,650,000**

The QP has reviewed the proposed program of work and budget and finds them to be reasonable and justified in light of the observations made in this report. The QP recommends that Moneta conduct the planned activities subject to availability of funding and any other matters which may cause the objectives to be altered in the normal course of business activities.

2.0 INTRODUCTION

2.1 TERMS OF REFERENCE

At the request of Mr. Gary O'Connor, CEO and Chief Geologist of Moneta Porcupine Mines Inc. (Moneta), Micon International Limited (Micon) has undertaken an independent technical review of the mineral exploration completed on the Golden Highway Project and prepared a mineral resource estimate for several of the deposits located on the property.

Since the completion of the 2012 mineral resource estimate and Preliminary Economic Assessment (Puritch et al., 2012), approximately 109,000 m of additional drilling on several targets has been performed by Moneta. This drilling and its results will be described in this report and incorporated into a new geological interpretation and resource estimate.

Some of the boiler plate text for this report has been contributed by Moneta and edited by Micon.

Micon and the consultants who prepared this report do not have any material interest in Moneta or any related entities. The relationship between Micon and Moneta is solely a professional association between client and independent consultant. This report is prepared in return for fees based upon agreed commercial rates and the payment of these fees was in no way contingent on the results of this report.

The requirements of electronic document filing on SEDAR necessitate the submission of this report as an unlocked, editable PDF (portable document format) file. Micon accepts no responsibility for any changes made to the file after it leaves its control.

2.2 INFORMATION SOURCES

Micon was given access to electronic data and previous reports compiled by Moneta and its consultants. Some of the illustrations in this report are reproduced from those data and documents.

2.3 QUALIFIED PERSONS, SITE VISITS AND AREAS OF RESPONSIBILITY

The primary authors of this report and Qualified Persons are:

- B. Terrence Hennessey, P.Geo., Vice President and Senior Geologist.
- Richard Gowans, P.Eng., President and Principal Metallurgist

Micon's site visit to the Golden Highway Project was conducted between September 11 and 14, 2018 by Terrence Hennessey. The project site east of Matheson was accessed by four wheel drive truck on September 12, 2018. The QP visited the locations of the Windjammer Zones, 55 Zone and South West Zone target areas. As the local topography is generally flat and low, with frequent swampy areas, no exposures of mineralization or local host rocks were

available to be seen. Drill set-up locations were also viewed and surveyed locations of a few were checked by GPS. This was followed by visits to Moneta's core storage yard and logging facility in Timmins to inspect core and review procedures with the logging geologists. The core from several typical diamond drill holes was reviewed to assess the quality of drilling, core recovery and sampling and to view the lithologic, alteration and structural controls of the mineralization. Moneta's office in downtown Timmins was also visited to review geological and mineralization models.

2.4 UNITS AND ABBREVIATIONS

All currency amounts are stated in Canadian (CAD) or US dollars (USD) as indicated. Quantities are generally stated in metric units, the standard Canadian and international practice, including metric tons (tonnes, t) and kilograms (kg) for weight, kilometres (km) or metres (m) for distance, hectares (ha) for area. Wherever applicable, Imperial units have been converted to Système International d'Unités (SI) units for reporting consistency. Precious metal grades may be expressed in grams (g) or grams per tonne (g/t), parts per million (ppm) or parts per billion (ppb) and their quantities may also be reported in troy ounces (ounces, oz), a common practice in the mining industry. A list of abbreviations is provided in the Table of Contents section.

The abbreviations used are summarized in Table 2.1.

Table 2.1
Abbreviations

Abbreviation	Meaning	Abbreviation	Meaning
µ	micron	km^2	square kilometre
°C	degree Celsius	kPa	kilopascal
°F	degree Fahrenheit	kVA	kilovolt-amperes
°	azimuth/dip in degrees	kW	kilowatt
µg	microgram	kWh	kilowatt-hour
A	ampere	L	litre
A	annum	L/s	litres per second
Au	gold	m	metre
Bbl	barrels	M	mega (million)
Btu	British thermal units	m^2	square metre
C$	Canadian dollars	m^3	cubic metre
Cal	calorie	min	minute
Cfm	cubic feet per minute	MASL	metres above sea level
Cm	centimetre	mm	millimetre
cm^2	square centimetre	mph	miles per hour
D	day	MVA	megavolt-amperes
dia.	diameter	MW	megawatt
Dmt	dry metric tonne	MWh	megawatt-hour
Dwt	dead-weight ton	m^3/h	cubic metres per hour
Ft	foot	opt, oz/st	ounce per short ton
ft/s	foot per second	oz	Troy ounce (31.1035g)
ft^2	square foot	ppm	part per million
ft^3	cubic foot	psia	pound per square inch absolute

Abbreviation	Meaning	Abbreviation	Meaning
G	gram	psig	pound per square inch gauge
G	giga (billion)	RL	relative elevation
Gal	Imperial gallon	s	second
g/L	gram per litre	st	short ton
g/t	gram per tonne	stpa	short ton per year
Gpm	Imperial gallons per minute	stpd	short ton per day
Hr	hour	t	metric tonne
Ha	hectare	tpa	metric tonne per year
Hp	horsepower	tpd	metric tonne per day
In	inch	US$	United States dollar
in^2	square inch	USg	United States gallon
J	joule	USgpm	US gallon per minute
K	kilo (thousand)	V	volt
Kcal	kilocalorie	W	watt
Kg	kilogram	wmt	wet metric tonne
Km	kilometre	yd^3	cubic yard
km/h	kilometre per hour	yr	year

2.5 ACKNOWLEDGMENT

Micon is pleased to acknowledge the helpful cooperation of Moneta personnel, all of whom made any and all data requested available and responded openly to all questions, queries and requests for material.

3.0 RELIANCE ON OTHER EXPERTS

A description of the properties, and ownership thereof, is provided in Section 4 of this report for general information purposes only, as required by NI 43-101.

The QPs have not reviewed any of the documents or agreements under which Moneta holds title to the claims of the Golden Highway Project and offers no opinion as to the validity of the mineral titles claimed.

Moneta has supplied Micon with written descriptions of the property outlining the current claim status and any underlying royalties (Moneta, 2019).

The QP has relied on the property descriptions and claim status for completion of Section 4 of this report. The QPs have also relied on information regarding royalties provided by Moneta.

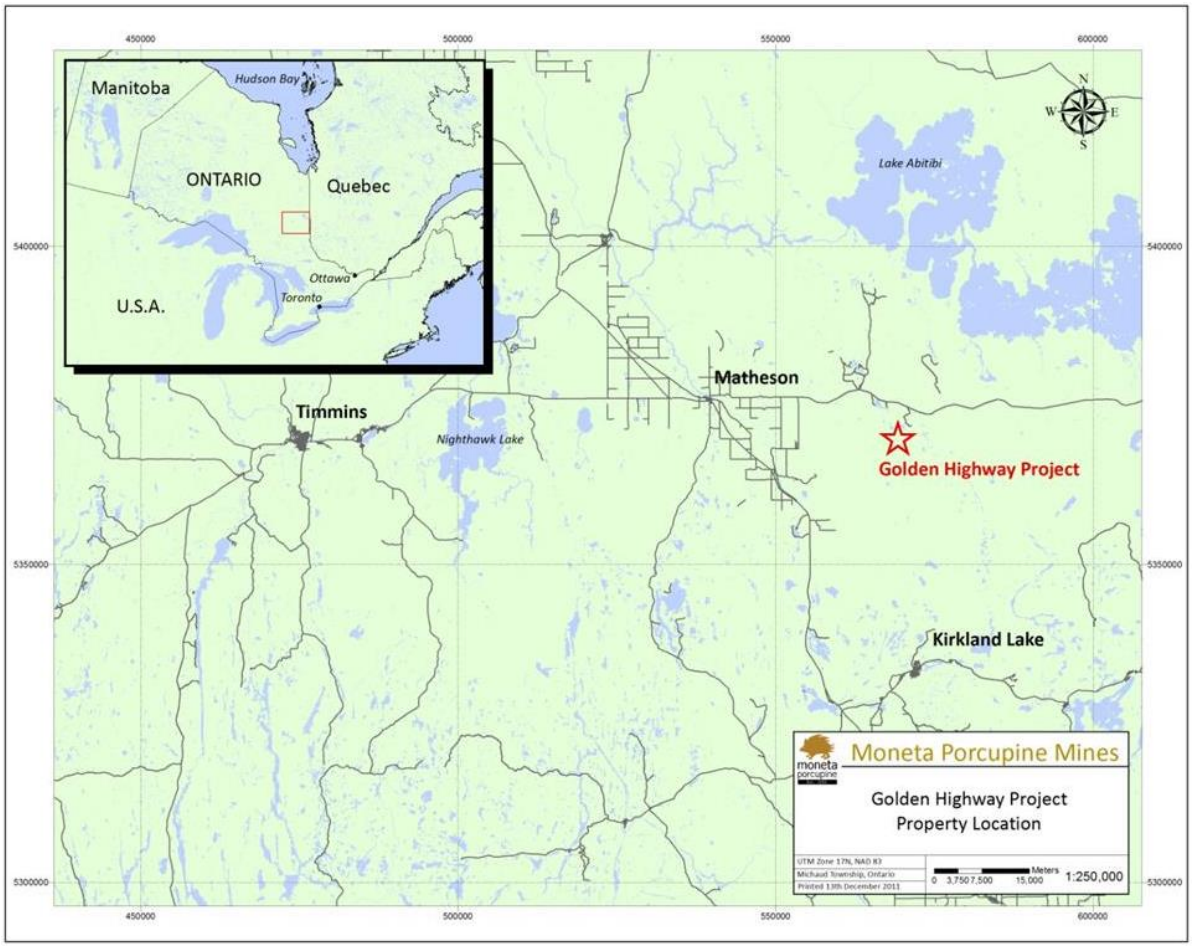
4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 PROPERTY LOCATION

The Golden Highway Project is located within the Larder Lake Mining Division, northeastern Ontario, Canada. It is centred about 571456 East and 5368622 North, in Zone 17N of the NAD83 UTM coordinate system or 48° 28" North Latitude and 80° 02" West Longitude. The property is located approximately 540 km north of Toronto, 92 km east of Timmins, and 40 km north of Kirkland Lake (Figure 4.1).

The property co-ordinates used in this report are located using the NAD83 UTM coordinate system.

Figure 4.1
Property Location Map



Source: Moneta, 2019.

4.2 PROPERTY DESCRIPTION AND LAND TENURE

The Golden Highway Project is a large package of mining claims totaling 10,800 ha. For the purposes of this report only the main contiguous portion of the project is detailed and is referred to as the Golden Highway Property. The claims and leases under joint venture (JV) with Kirkland Lake Gold Mines located east of Matheson in a number of claim blocks, some adjacent to the Golden Highway Project, are not included in the scope of this report as they are not considered to be part of the same project. The property is comprised of 22 patented mineral claims, four leased mineral claims, and 311 unpatented mineral claims located in Guibord, Michaud, Barnet, Garrison and McCool Townships (Figure 4.2). These contiguous claims total 6,673 ha and are owned 100% by Moneta, excluding the Dyment 3 claim block (eight unpatented claims totaling 52.2 ha) that is held 75% by Moneta and 25% by Kirkland Lake Gold Inc. Details of the property claims are set out in Appendix 1.

On April 10, 2018 Ontario launched a new electronic Mining Lands Administration System (MLAS) replacing the province's century-old traditional ground staking methods. It marked the completion of the modernization of the Mining Act. For purposes of this report the new MLAS system of claims and leases references and numbering system is used. However, for completeness, the historical legacy numbering and references are included in the table located in the appendices. The mineral resource estimate is located entirely on the patented claims and leased mineral claims.

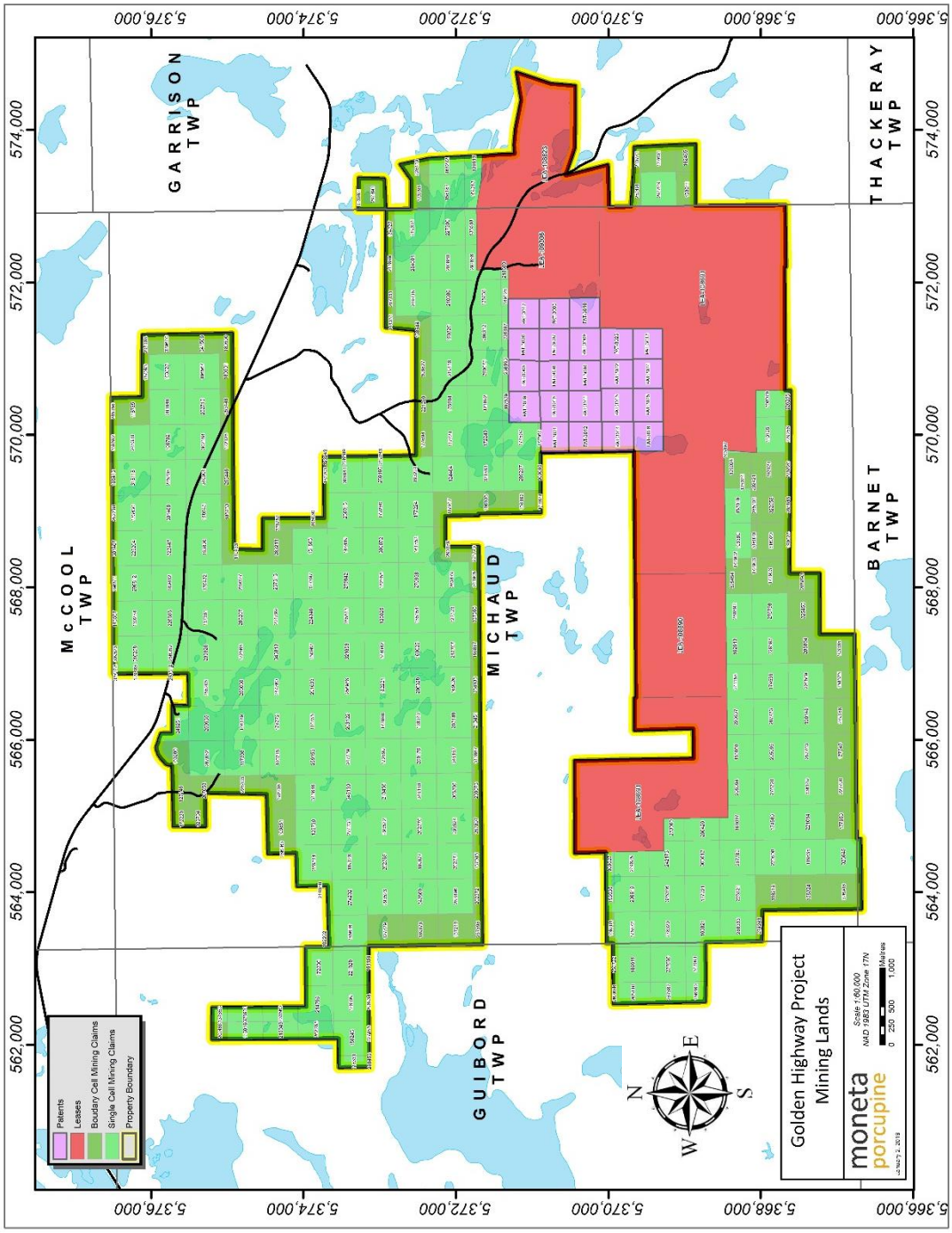
The patented mineral claims are a contiguous block of 22 (355.97 ha) with both mining (MR) and surface rights (SR). Each patent covers approximately 16 ha, as listed Appendix 1, and shown on Figure 4.2. They are subject to annual mining taxes and are owned 100% by Moneta with no underlying royalty agreements.

The four leased mineral claims on the property consist of three in Michaud (LEA-109306, 108690, and 108691) and one in Garrison Townships (LEA-108823) covering a total of 1,653.2 ha. Mining leases LEA-108690 and 108691 include surface rights and all are subject to mining taxes. These leases are listed in Appendix 1 and shown on Figure 4.2. All leases are 100% Moneta owned and have no underlying royalty agreements.

The remaining 311 unpatented mineral claims making up the Golden Highway Project are located in Guibord, Michaud, Barnet, Garrison and McCool Townships (Figure 4.2). For these, underlying royalty agreements are in place for two blocks located in areas to the north and away from the mineral resource estimate (Section 4.3).

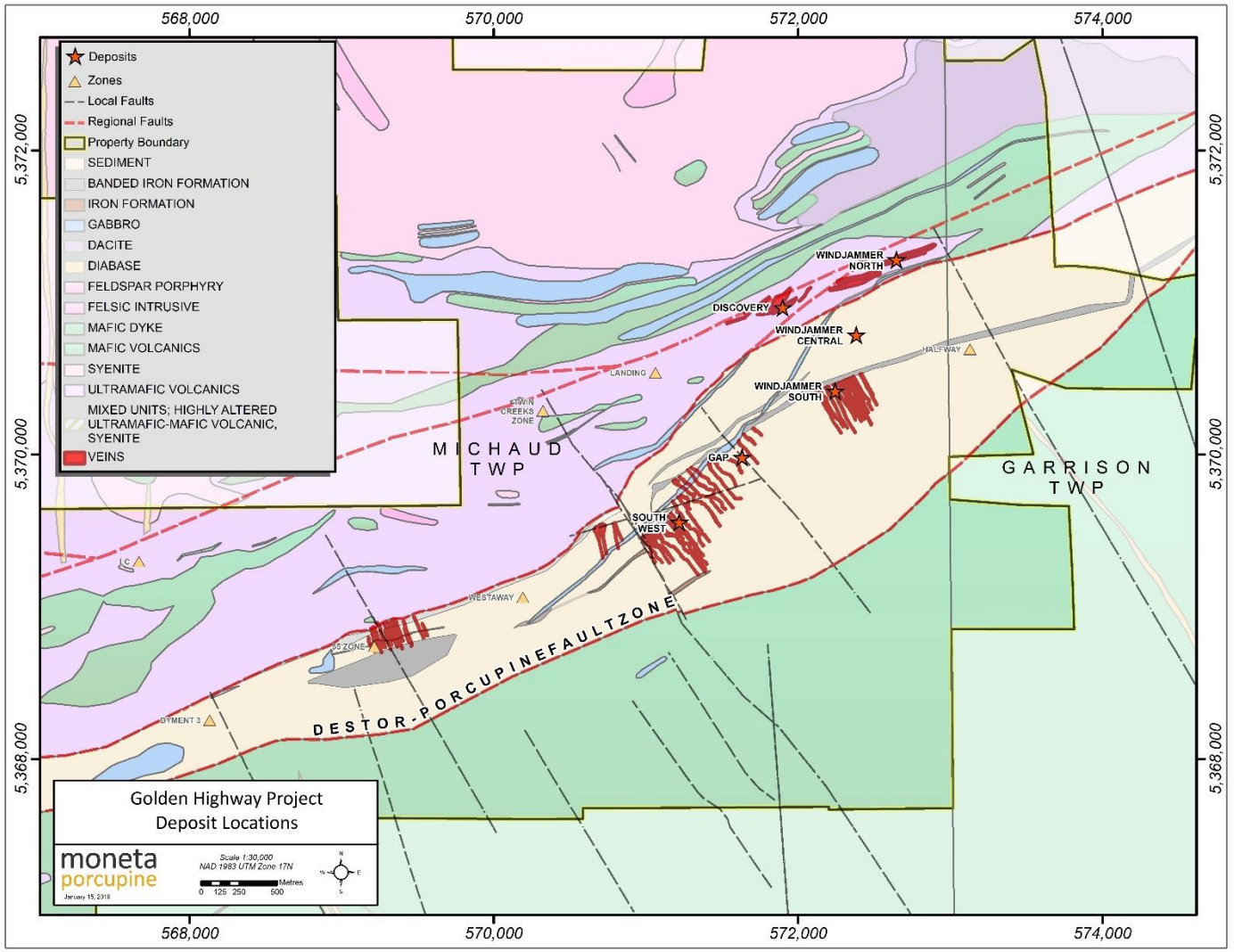
The location of the principal mineralized zones within the mineral leases is shown below on Figure 4.3.

Figure 4.2
Property Claim Map



Source: Moneta, 2019

Figure 4.3
Location of Mineral Zones Relative to Mining Lease Boundaries



Source: Moneta, 2019.

4.3 UNDERLYING AGREEMENTS

None of the patented mineral claims or leased mineral claims containing the mineral resource estimate are subject to any underlying royalty agreements and are owned 100% by Moneta. Within the 311 unpatented mineral claims making up the Golden Highway Project a total of 10 legacy claim units referred to as the Moses block are subject to a $5,000 per annum advance royalty.

The Moses block is located to the north and east of the mineral resource estimate within Michaud and Garrison Townships. In addition, a total of 12 legacy mineral claim units referred to as the Hennesy block are subject to a 10% NPI (Net Profits Income). The block is located to the north and west of the mineral resource estimate within Michaud Township. The location of the unpatented claims subject to underlying royalty agreements are shown in Figure 4.4.

4.4 ENVIRONMENTAL AND PERMITTING

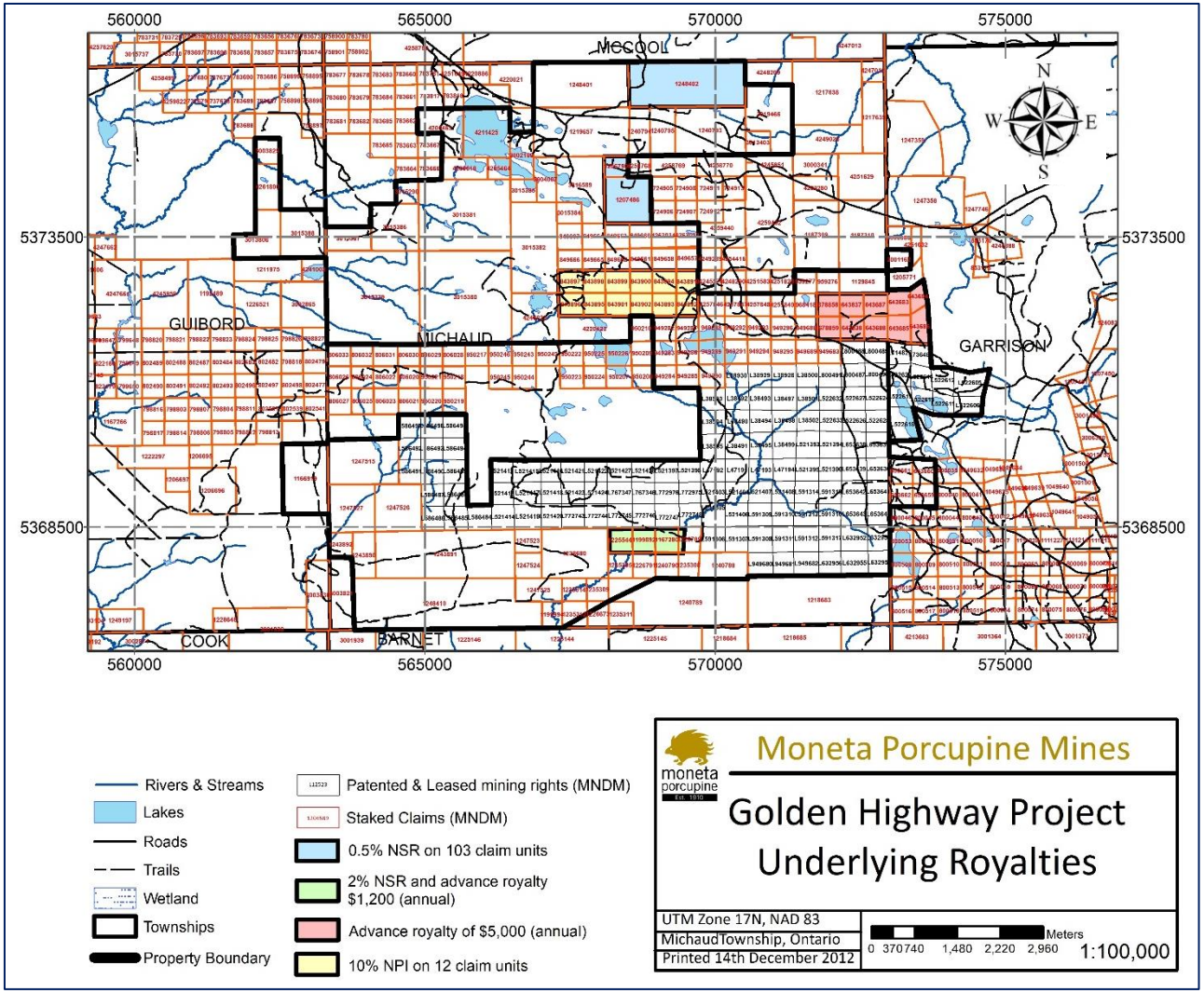
No industrial activities such as mining or mineral processing are known to have been conducted on the property.

Moneta has advised the QP that they are not aware of any environmental liabilities within the Golden Highway Project area or of any restrictions beyond those covered by existing legislation and regulation with respect to potential mine sites and tailings and disposal sites should future development take place. During the site visit the QP did no notice any significant environmental liabilities on the property.

Some of the property has been logged.

The Ontario Mining Act requires companies to apply for a three-year exploration permit prior to undertaking any exploration activities involving heavy equipment. The process includes First Nations consultation. Moneta submitted and obtained exploration permits for the Golden Highway Project for their 2013 to 2018 drilling programs. Moneta's current exploration permit PR16-10985A2 is valid until November 18, 2019.

Figure 4.4
Claims Subject To Underlying Royalty Agreements



Source: Moneta, 2019

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 ACCESSIBILITY

The Golden Highway Project is accessed by logging and drilling roads that extend south from Highway 101, east of Matheson, Ontario. The intersection for the main logging access road (Tower Road) is 32 km east of Matheson at 570730E and 5374755N UTM NAD 83. The mineral deposits are located approximately 4 km south of Highway 101 and accessed locally by a network of forestry logging and drilling roads of varying quality (see Figure 4.1).

5.2 CLIMATE

The climate is typical of northern boreal forest areas with the project area experiencing four distinct seasons. There are extended periods of sub-zero temperatures during the winter months of November through March. The daily average winter temperature in January is -16.2° C with daily average maximum and minimums of -10° C and -22.8° C respectively and an extreme daily minimum of -45° C. The daily average summer temperature in July is +18.3° C with daily average maximum and minimums of +24.8° C and +11.8° C respectively and an extreme daily maximum of +38.3° C. The region has average annual precipitation of approximately 78.6 cm including approximately 57 cm of rain, largely during the months of April to October and up to 22 cm of winter snow accumulation, occurring largely between the months of November and April (Environment Canada website, 1981 to 2010 data).

Mineral exploration can be conducted year-round. However, because of the swampy ground conditions on much of the project area, exploration activities such as geophysical surveys and diamond drilling are more easily conducted in the winter due to better accessibility after freeze-up. Drilling at other times is possible on portions of the property.

5.3 LOCAL RESOURCES AND INFRASTRUCTURE

There are excellent local resources and infrastructure to support exploration and mining activities in the region which has a long history of both activities. Mining equipment and personnel are readily available from the towns of Matheson, Kirkland Lake and Timmins. Timmins and Kirkland Lake are major supply and service centres for the mining industry. They are serviced by modern telecommunications, commercial airlines or rail service and truck transportation.

Communications and power are available along Highway 101 and Highway 672. Water resources are locally available. Cell phone coverage extends to the property. Electrical power is supplied to various mining and mineral exploration projects along Hwy 101 from west of Matheson to the Quebec border.

Moneta maintains a secure and well equipped, core logging and storage facility in north Timmins at 2679 Highway 655 and an office in downtown Timmins at 65 Third Avenue.

Moneta holds sufficient surface rights necessary for potential future mining operations including tailings storage areas, waste disposal areas and a processing plant.

5.4 PHYSIOGRAPHY

Regional-scale, poorly drained swamp dominates much of the project area. The property topography is relatively flat with an elevation of approximately 330 m above sea level. Relief is generally only a few metres with drier sandy esker ridges and dunes, rising up to 25 m above open and forested swampy areas in the northern and eastern parts. The property has very limited outcrop. There are areas of swamp in the southern part of the property.

All streams and rivers in the area are part of the Arctic watershed. The Pike River meanders through the centre of the property. It is a potential source of water for mining operations but provides little drainage for the low-lying terrain. Drainage patterns are poorly developed due to the low topographic relief and the extensive clay cover immediately below the vegetation layer. Several small lakes occur on the property. Perry Lake, the largest, is situated in the northwest corner of the property. Some of the diamond drill holes form natural wells.

Overburden depths on the property are variable and generally deep, with depths up to 80 m. There are isolated areas of bedrock exposure located in the centre of the Michaud Parcel and to the southeast marking the southern limit of the Pike River valley.

Vegetation consists of low stands of black spruce and alder in the wetter areas, with stands of birch, poplar and jack pine in the higher drier sandy areas.

6.0 HISTORY

6.1 EARLY REGIONAL HISTORY

The area between Matheson and the Quebec border has a long history of prospecting, mineral exploration, and gold mining dating back to the beginning of the 20th Century. Production from mines in the area began in 1911.

6.2 PROPERTY HISTORY

Claim staking in the area increased in 1944 as a consequence of an Ontario Department of Mines report which suggested that the Destor Porcupine Fault Zone (DPFZ) passed through the original Moneta patented claims in Michaud Township. These patents had been staked as claims in 1939 and optioned to Moneta Porcupine Mines Ltd. (a predecessor company) in 1945. Since that time various portions of the property have been held and explored by a succession of companies. Moneta's current land position was primarily acquired through staking and by a series of joint venture agreements dating from the late 1980's onward.

In 1986, Moneta activated exploration on its patents in Michaud Township and optioned the immediately adjacent Nahanni Mines claim group. This claim group was taken to lease and later became known as the Nufort leases (LEA-108690 and LEA-108691). In 1988 to 1989, Unocal Canada Ltd. optioned the property and completed the Nahanni (Nufort) 50% earn-in on behalf of Moneta for total expenditures of $1 million and payments of $100,000. Unocal dropped its option in 1989 due to a corporate decision to terminate exploration in Canada and the property was returned to Moneta.

Independence Mining Company Inc. optioned the property in 1991 and completed its minimum expenditure commitment of $400,000 before returning it. The agreement called for exploration expenditures of $4 million and payments of $290,000 for a 50% property interest.

Lac North America Ltd. (acquired by Barrick Gold Inc. in August 1944) optioned the property from Moneta in 1994 including Moneta's interest in the Nufort Leases. The agreement called for total expenditures of $3.5 million including payments of $225,000 for a 60% interest on the 100% Moneta ground. Lac also optioned the Nufort lease interests in 1995 under a separate agreement that required total expenditures of $3.0 million and payments of $200,000 for an overall 70% interest. The combined property was returned to Moneta in 1998 following the downsizing of Barrick's exploration activities.

In 1998, Moneta acquired the remaining 50% interest in the Nufort leases for a 100% interest, extinguishing all underlying encumbrances.

In 2001, an option agreement was entered into with Acrex Ventures Ltd. covering a significant portion of the southern staked claims and larger Nufort lease, as well as several patents. Acrex vested in a portion of the option in 2004 by meeting earn-in requirements and both companies

formed the Michaud Joint Venture. In 2009 Moneta acquired the 50% Acrex ownership interest in the Michaud Joint Venture ground for $1 million terminating the joint venture.

St Andrew Goldfields Ltd., optioned the southern portion of the property in Barnet and southeastern Michaud Township in 2001 with a 50% earn-in expenditure level of $200,000 and staged option payments, satisfied in 2009 as part of a property exchange agreement. In this property exchange Moneta was granted a 100% interest in 29 claim units in Cody Township, a 100% interest in three claim units in Guibord Township, and a $50,000 cash payment from St Andrew Goldfields Ltd. In return, and, in order to address expenditure commitments, the Agreement granted St Andrew Goldfields Ltd., a 75% vested interest in the Guibord property and 50% vested interest and operatorship in the Barnet Joint Venture.

In 2004, the Perry Lake property was staked (68 claim units) and the Turner Lake (ten claim units) and Dyment 3 (three claim units) properties were optioned. In 2006, an additional ten claim units were staked adjoining the Perry Lake block to the north.

In November 2007, Moneta entered into an agreement with a subsidiary of Newmont Mining Corporation to acquire Newmont's 50% interest and operatorship in a joint venture known as the Windjammer property comprised of two mining leases (22 claim units) in Garrison and Michaud Townships. Moneta issued 4,380,000 common shares to Newmont as consideration for the acquisition. A subsequent February, 2009 vesting order from the Mining Commissioner increased Moneta's interest to 100% in the Windjammer property.

Moneta also staked three claim units in 2008. A total of eight claim units were acquired in Michaud Township by purchase (four claims) and staking (four claims) in 2010. In 2011 Moneta staked an additional two claim units in Michaud Township and successfully renewed three mining leases within the Golden Highway project for a further 21 years. A fourth mining lease was renewed in 2012, also for 21 years.

6.3 HISTORIC EXPLORATION PRIOR TO MONETA

This section of the report and Table 6.1 summarize the known exploration history of the project prior to Moneta's exploration in the area. Table 6.1 is a general listing of exploration records available for the current Golden Highway Project, primarily sourced from government assessment files and reports (Puritch et al., 2012).

Table 6.1
Golden Highway - Summary of Historical Exploration and Development Activities

Year	Company	Exploration	Township
1945	Koulomzine	Mag survey, hole 6, 8, 9, 12	Michaud
1946	Clodan	Mag survey	Michaud
1946	Moneta	Holes 1 to 18, geological report	Michaud
1966	Dalhousie Oil and Gas	DM66-1 and 2	Michaud
1967	Amax	MR/H/W-1 to 40, overburden drilling	Michaud
1968	Amax	KX25-67 and KX26-68	Michaud
1970	Renzy Mines	Holes 1 to 12	Michaud
1972	Hollinger Mines	Mag survey	Guibord, Michaud
1979	Amax	Geological survey	Michaud
1980	Redstone	Mag survey, horizontal loop	Michaud
1980	Windjammer Power	Summary report, Holes 1 & 2	Michaud, Garrison
1981	Lacana	Geophysical surveys	Michaud
1981	Nahanni	Mag and VLF survey	Michaud
1981	Redstone	Mag survey	Michaud
1981	Tesluk	Drill hole 81-1	Michaud
1982	Gold Fields	Mag and VLF survey	Michaud, Guibord
1982	Nahanni	Drill holes M-82-1 to 4 & Geological mapping	Michaud
1982	Selco	Geophysical surveys (IP and Mag)	Michaud
1983	Moses	Drill holes JM-3 and 4	Michaud, Garrison
1983	Nahanni	Mag and VLF survey	Michaud
1983	Nahanni	Drill holes M-83-5 to 7, Mag and VLF survey, Geological mapping, R83-1 series, Overburden drilling, exploration report	Michaud
1983	OGS - Abitibi Project	Airborne Mag Survey	Michaud, Barnet
1984	Asarco	Geological mapping, Drill hole DPL-1	Michaud
1985	Falconbridge	Drill holes 659-04 to 6 , IP survey	Michaud
1985	Meunier	Geological report	Michaud
1985	Noranda	Mag and VLF survey, drill holes WJ-85-1 and 2	Barnet, Michaud
1985	St Joe	Drill holes PR85-05 to 11	Guibord, Michaud
1986	Hennessey	Mag survey	Michaud
1986	Kidd Creek	Mag and VLF survey	Michaud
1987	Goldfields/Lacana	MPH Ground Mag Survey, IP	Michaud
1986	Lacana	Drill holes MD-1-86 and 2	Michaud
1986	Nahanni	Drill holes NM-86-8 to 13	Michaud
1986	Noranda	Geological mapping, drill holes GR-86-01 and 2	Michaud

Source: Puritch et al., 2012

6.4 DEPOSIT RELEVANT HISTORIC EXPLORATION

This section summarizes the historic exploration in the immediate area of the 55, South West, Windjammer and Discovery deposits, for which the resource estimation has been undertaken.

In 1947 to 1948, Wright-Hargreaves Mines Ltd. drilled four holes totalling 1,346 m on the Windjammer property (WH series). This program completed a section across the main iron formation east of the current Windjammer South deposit with a best value of 6.9 g/t Au over 0.32 m reported.

In 1966, also on Windjammer, Dalhousie Oil and Gas completed two drill holes in the northern part of the property with no assays reported.

In 1980 Windjammer Power and Gas completed two diamond drill holes in iron formation on the Windjammer property (WJMPH series), with a best result of 36.6 g/t Au over 0.32 m.

From 1983 to 1989, after optioning the Windjammer portion of the property, Noranda Exploration Co. Ltd. carried out considerable work. One diamond drill hole was completed in 1983 in the southeast section, with a best assay of 1.38 g/t Au over 1.23 m. In 1985 two holes were drilled through the DPFZ intersecting green carbonate, felsic tuff and basalt with a best result of 4.3 g/t Au over 0.60 m. The 1987 program included a 41 km grid with magnetometer and IP surveys, followed by a Phase One 30-drill-hole program totalling 9,626.70 m. Phase Two was completed in 1988 with five holes (2,404.50 m) in the South Zone and 11 holes (4,287.30 m) in the North Zone. Later that year two additional holes were drilled in South Zone (823.20 m) and one hole in the North Zone (395.67 m). This program was continued into 1989 with two holes each in the South Zone (958.90 m) and North Zone (1,019 m). These drill holes comprise the WJ series in the database.

6.5 HISTORIC RESOURCE ESTIMATES

In 1996, Barrick Gold Inc. (Barrick) prepared a preliminary internal historical resource estimate for the South West Zone. This resource predates NI 43-101. The estimate was based on information from approximately 65 drill holes from Moneta's 1987 drilling and Barrick's drilling in 1995 and 1996 (Carre and Lei, 1997).

Initial metallurgical tests indicated that gold recoveries to 95% were possible and that the free gold and minor low-sulphide ore could be readily processed at Barrick's former (now Kirkland Lake Gold's) Holt-McDermott Mill nearby.

In late 1997, Barrick updated the South West internal resource calculation based on a reinterpretation of the South West Zone and incorporating relevant data from the last phase of drilling completed in 1997. This was performed using the similar methodology and modified parameters reflecting the alternative interpretation (Carre and Lei, 1997).

The mineral resources completed by Barrick are historic in nature and therefore not NI 43-101 compliant and should not be relied upon.

In 2008 and updated in 2009 a near-surface NI 43-101-compliant resource estimate was completed on the Windjammer South Zone by D. George Cargill, Ph.D., P.Eng., of Cargill

Consulting Geologists Limited. This resource included an estimate of Indicated and Inferred Resources. This resource was based on 26 drill holes (8,875 m) completed by Noranda (1983 to 1989) and 21 drill holes (7,097 m) drilled by Moneta from 2007 to 2008.

An NI 43-101 mineral resource estimate was prepared by P&E Mining Consultants Inc. for the Golden Highway Project in 2011 (Dated December 01, 2011) and was comprised of both underground and surface resources totalling 33,533,000 tonnes @ 0.99 g/t Au in indicated resources for some 1,071,000 contained ounces and 47,837,000 tonnes @ 1.35 g/t Au in inferred resources for some 2,069,000 contained ounces.

An updated NI 43-101 Mineral Resource Estimate and Preliminary Economic Assessment (PEA) was conducted by P&E Mining Consultants Inc. (P&E) on the Golden Highway Project in late 2012. The updated mineral resource was reported by way of a press release on October 25, 2012. It was based on 349 surface diamond drill holes completed on the Windjammer (South/Central/North), Gap, South West, and 55 Zones. P&E's updated NI 43-101 compliant mineral resource estimate included Indicated and Inferred Resources with an open pit cut-off grade of 0.37 g/t Au, and an underground cut-off grade of 2.00 g/t gold.

The PEA considered the development of the Windjammer (South/Central/North), Gap, South West, and 55 Zone pits, and the underground resources on the South West Zone. The PEA results released on November 01, 2012 estimate potentially economic portions of the mineral resources, before dilution and mine extraction, that include combined open-pit and underground Indicated Resources at cut-off grades of 0.40 g/t Au and 2.0 g/t Au for open-pit and underground resources respectively. The 2012 mineral resources are superseded by this report.

The P&E estimates have been superseded by the estimate in this report.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 REGIONAL GEOLOGY

Moneta's Golden Highway Project (Figure 7.1) is located within the southern part of the Archean (ca. 2.7 Ga) Abitibi greenstone belt of the Superior Province of the Canadian Shield in northeastern Ontario. The Abitibi greenstone belt consists of Neoarchean supracrustal rocks divided into tectonic-stratigraphic assemblages that include metavolcanic rocks, synvolcanic intrusions, metasedimentary rocks, calc-alkaline and alkaline intrusive rocks, and late Proterozoic dykes. The dominant regional structures of interest are the DPFZ and Pipestone Fault Zones with their associated gold deposits and mineralization. More thorough discussions of the Superior Province Archean geology are provided by Jackson and Fyon (1991), as well as Ayer et al. (2001/2005).

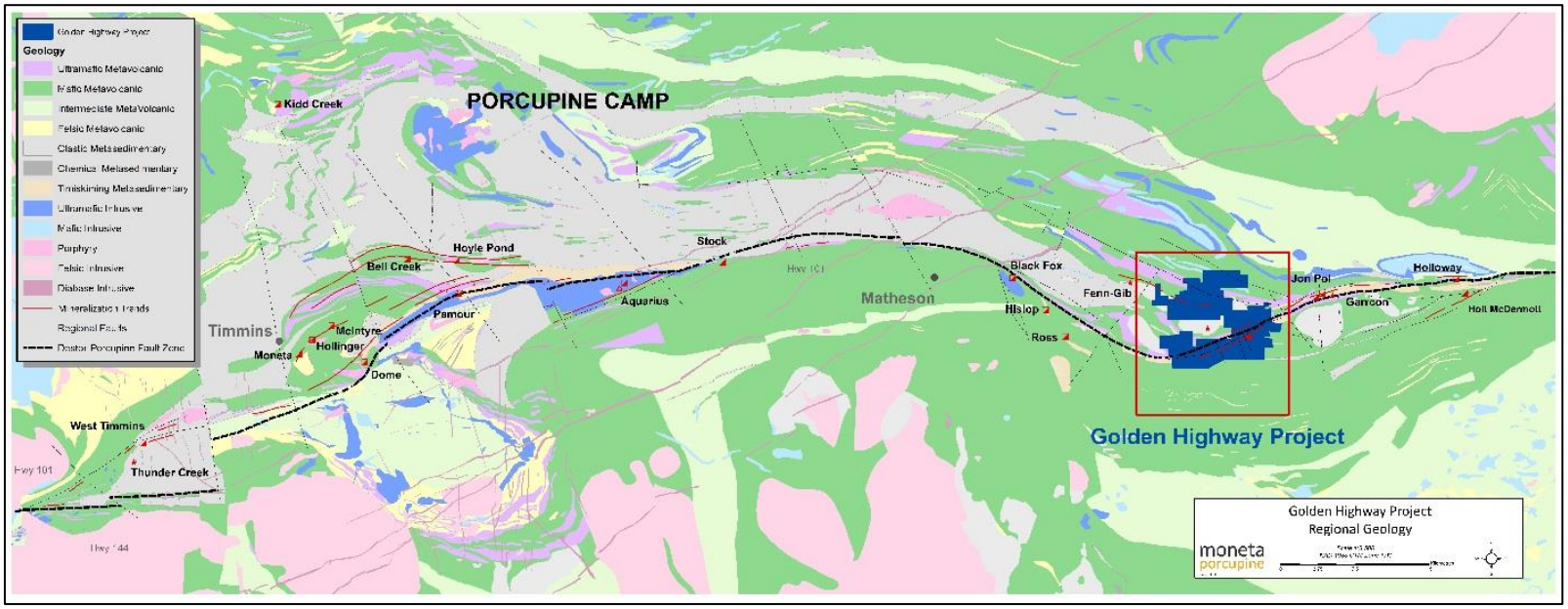
The Golden Highway Project is located on the DPFZ, a major gold mineralized regional fault structure. Figure 7.2 shows the location of the DPFZ and several prominent gold deposits including the Black Fox Mine, Ross Mine, Holloway Mine and Holt-McDermott Mine that are located within an approximately 25 km radius of the Golden Highway Project.

More specific to the local geology of the Golden Highway Project is Berger's (2002) geological synthesis of the Highway 101 corridor from Matheson east to the Province of Quebec provincial boundary. He subdivides the geology into five litho-tectonic assemblages (Ayers and Trowell, 2001) as follows: Kidd-Munro (2,719 to 2,711 Ma), Tisdale (2,710 to 2,703 Ma), Blake River (2,697 to 2,701 Ma), Porcupine (2,696 to 2,690 Ma), and Timiskaming (2,687 to 2,675 Ma). The distribution of gold deposits in relation to major faults and the Timiskaming assemblage is shown in Figure 7.3.

Berger's (2002) description of the geology of the Golden Highway Project area is as follows:

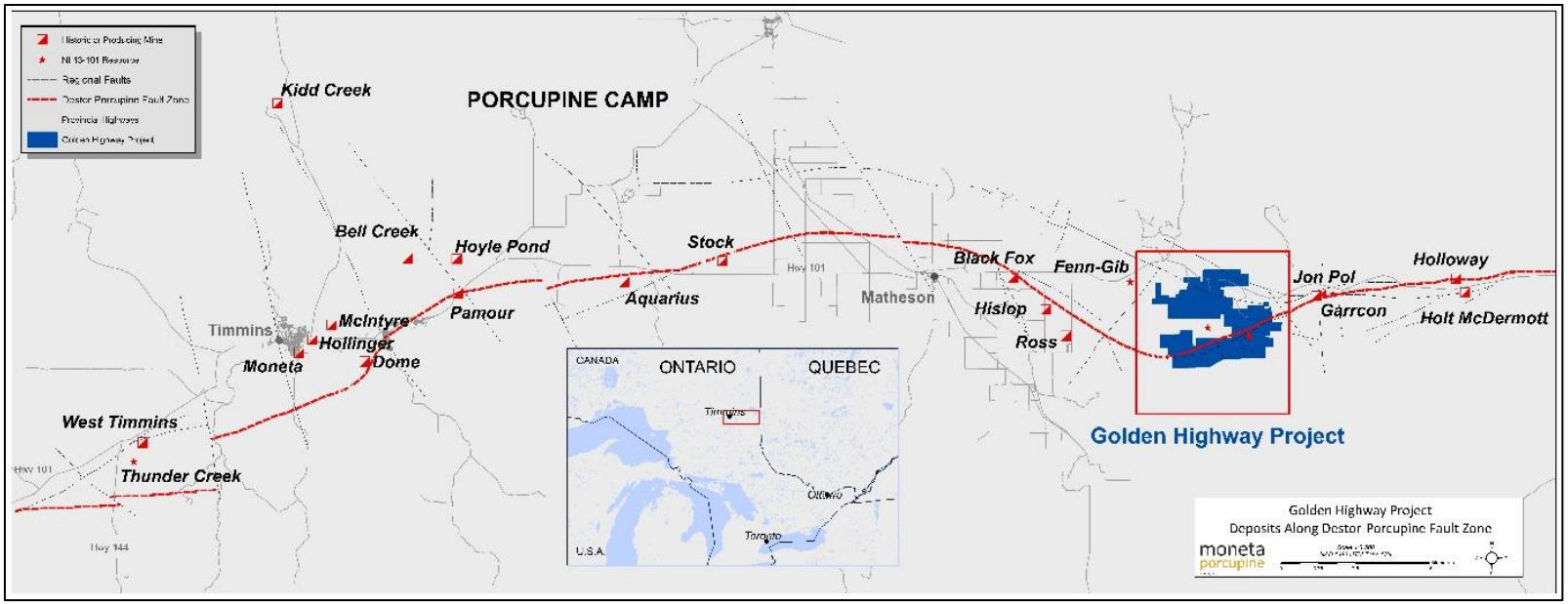
> "The Kidd-Munro assemblage underlies the north part of the study area and is composed of a tholeiitic metavolcanic member and a calc-alkalic metavolcanic member. Ultramafic to mafic layered sills intrude the metavolcanic rocks. The Tisdale assemblage is composed of tholeiitic metavolcanic rocks and subordinate amounts of calc-alkalic metavolcanic rocks. The distribution of the assemblage is poorly constrained because of the Porcupine-Destor deformation zone and related splay faults transect the assemblage in several places. The Blake River assemblage underlies the south part of the study area and is composed of predominantly mafic tholeiitic metavolcanic rocks that are intercalated with thin units of tholeiitic rhyolite and calc-alkalic metavolcanic rocks. The Porcupine assemblage underlies the northwest part of the study area and is composed of greywacke, argillite, and rare conglomerate that are intruded by small alkalic intrusions. The Timiskaming assemblage is composed of clastic and chemical metasedimentary rocks and rare alkalic metavolcanic rocks that are distributed within and near to the Porcupine-Destor deformation zone. Ultramafic to felsic alkalic intrusive rocks are also correlated with the Timiskaming assemblage and occur as dikes, small single-phase intrusions and large multi-phase intrusions throughout the area. Paleoproterozoic quartz-diabase dikes, Keweenawan-age olivine diabase dikes and Jurassic kimberlite dikes and diatremes intrude the Neoarchean rocks."

Figure 7.1
Regional Geology, Golden Highway Project



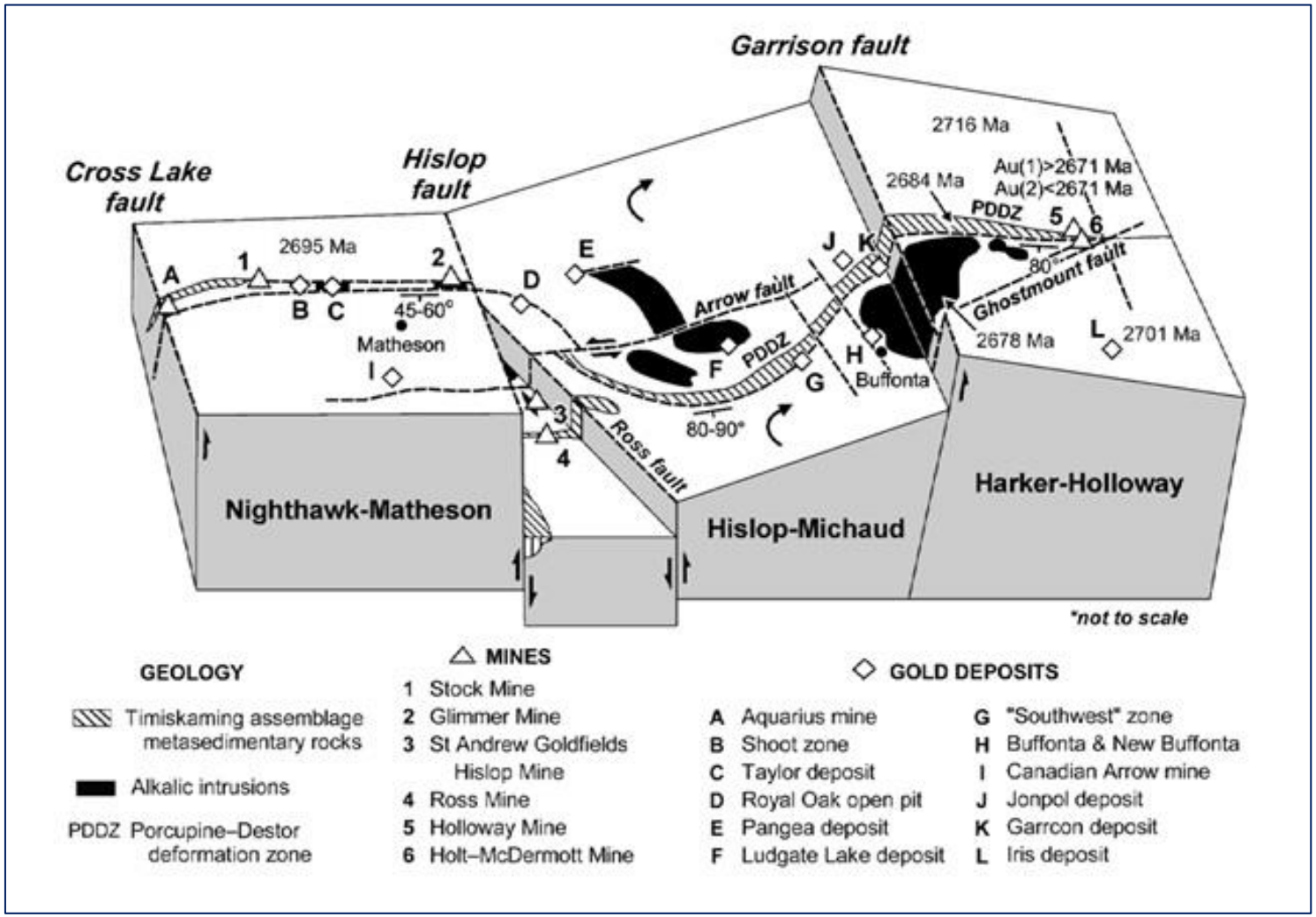
Source: Moneta, 2019.

Figure 7.2
Gold Deposits in the Matheson Area along the Destor-Porcupine Fault Zone



Source: Moneta, 2019.

Figure 7.3
Regional Schematic Model Showing Distribution of Gold Deposits in Relation to Major Structures and the Distribution of Timiskaming Assemblage Rocks



Source: Moneta, 2019.

> "The Porcupine-Destor deformation zone is a crustal-scale structure that transects the study area and is characterized by south-side-up vertical movement. The fault zone and related northeast striking splay faults such as the Ghostmount fault and McKenna fault, are the loci for gold mineralization. Northeast-striking faults with dominant vertical displacement transect the Porcupine-Destor deformation zone. Two of these faults, the Hislop fault and Garrison fault, are major structural features that act as the boundaries to different metallogenic segments. Gold mineralization occurs in different structural settings, different styles, and different types of alteration patterns in each segment."

The DPFZ remains the most prolific gold-bearing structure with several gold deposits discovered along its strike length and within splays and extensive alteration zones. In the general area of the property gold production is underway from Kirkland Lake Gold Ltd.'s Holt-McDermott mine (Holloway Township), McEwen Mining Inc.'s Black Fox mine (Hislop Township, the former Glimmer mine), and Kirkland Lake Gold Ltd.'s Taylor Mine approximately 25 km east, 15 km west and 25 km west of the property, respectively. Additional gold prospects, former producers, and more significant gold occurrences in various stages of exploration are also present (Figure 7.2 and 7.3) including, from west to east, the Ross Mine, and Fenn-Gib, Ludgate, 55/South West/Windjammer, Jonpol, 903 and Garrcon deposits.

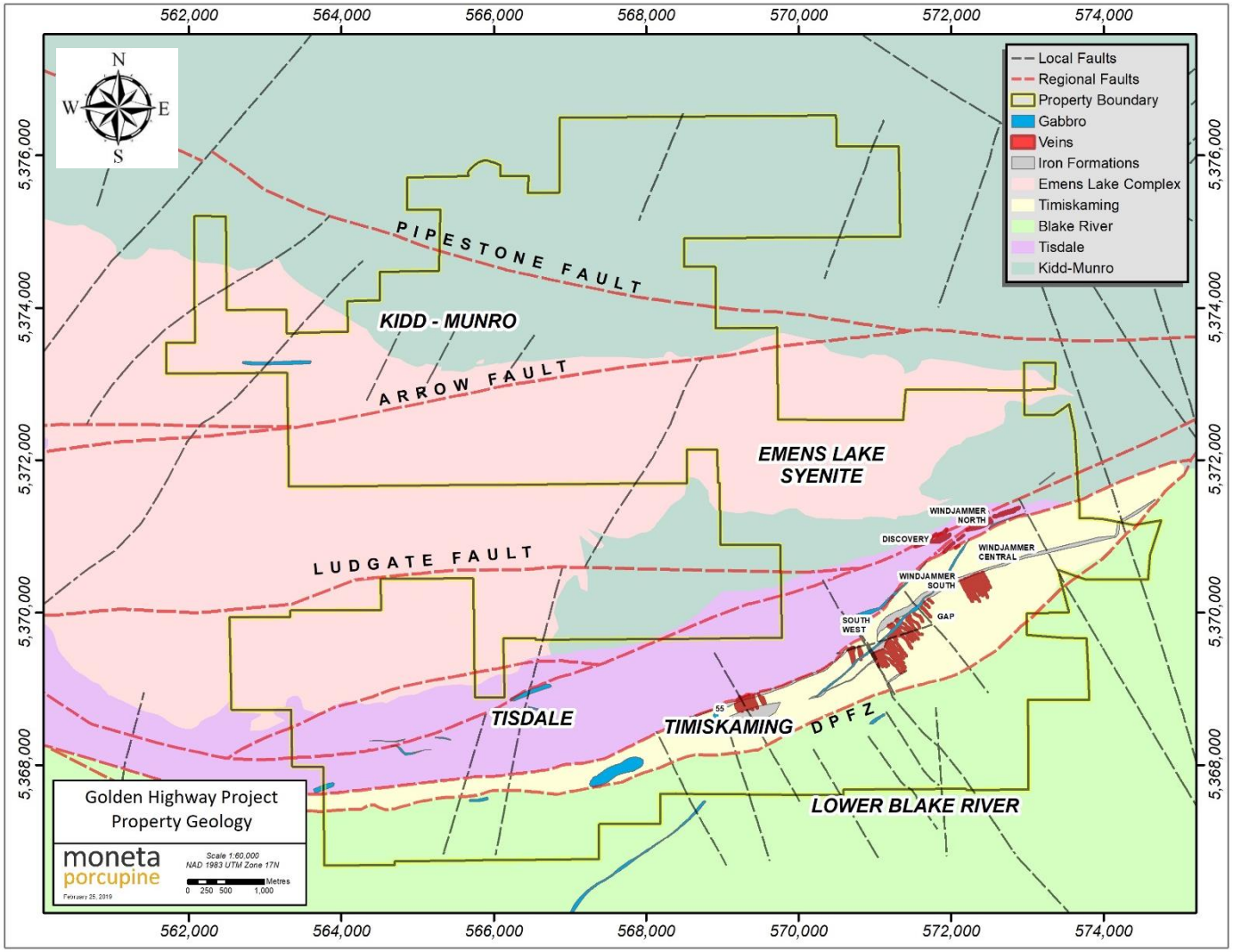
7.2 PROPERTY GEOLOGY

Holocene organic deposits of peat and black muck cover much of the map area. Underlying the organic deposits are extensive Quaternary glacio-lacustrine deep water varved silts and clays of the Barlow-Ojibway Formation and/or sands associated with the Munro Esker complex. They are up to several metres thick, overlying the Matheson Till.

The bedrock geology of the property is mainly determined from drill core observations, geophysical interpretations and local rock outcrop areas. The geology was mapped by Satterly (1949) with a more recent refinement by Berger (2002). The area is largely covered with overburden consisting mainly of sands associated with the Munro Esker complex. A few outcrops are located in the centre of the property south of Emens Lake and more extensively south of the Pike River valley.

The central portion of the property is the main area of exploration work and can be divided into a North corridor and South corridor that together define the DPFZ, as it crosses Michaud and western Garrison Townships. These distinct geological corridors contain the bulk of the known gold mineralization discovered to date. The North corridor contains the historical DPFZ (north branch) trace in a sequence of Tisdale mafic and ultramafic metavolcanics. The Timiskaming metasedimentary rocks, iron formation and associated rocks are contained in the South corridor (Figure 7.4).

Figure 7.4
Golden Highway Property Geology



Source: Moneta, 2019.

The Northern corridor on the eastern portion of the property consists of a 4.5-km long, variably altered and deformed/sheared sequence of Tisdale intercalated komatiitic ultramafic rocks and tholeiitic basalts, generally bounded by talc-chlorite schists. The basalts are traceable along most of the north branch of the DPFZ across the property, and, generally, when altered and quartz carbonate veined, host numerous gold zones such as Twin Creek, Landing, and the Discovery and Windjammer North deposits as well as scattered higher-grade gold intercepts. These Northern corridor volcanics continue in the western portion of the property, widening substantially and include gold zones associated with pyritic syenites such as the LC Zone and the LC extension.

In the northern portion of the property, the Kidd-Munro metavolcanic rocks are associated with the Arrow, Pipestone and Munro Faults. Limited drilling has established a sequence of tholeiitic mafic volcanics in contact to the south by phases of the Emens Lake (Central Michaud) syenite complex. The Arrow and a portion of the Pipestone Faults, a regional east-west structure, follow this contact. Only minor and scattered gold mineralization has been discovered to date.

The Southern corridor is well defined by the belt of Timiskaming sediments that parallels the DPFZ and includes the main gold deposits/zones discovered to date on the property. This corridor has a strike length of approximately 12 km crossing Michaud Township and continuing northeasterly into Garrison Township. This corridor hosts the Western Zone, Dyment 3 Zone, 55 deposit, Westaway Zone, South West deposit (including the former Gap Zone), Windjammer Central deposit and Windjammer South deposits

The Timiskaming metasediments consist of a series of alternating fine to coarse greywacke units with subordinate argillite, and conglomerate and possible rare sandstone. Greywacke is generally fine to medium grained with minor sections of very fine and coarser grained conglomeratic material. The greywacke is typically green-grey, massive to well-bedded, chloritized and can be locally pyritic.

Conglomerate typically consists of a grey to pink-grey and medium to coarse grained sandstone matrix containing pebble to cobble sized angular to sub-rounded clasts ranging in size from several millimetres to rarely greater than 10 cm. Clasts include greenish black to grey mafic volcanics, less common iron formation and rare massive sulphide fragments. Conglomerate is typically found along the south contact of iron formation where it may represent a disconformity.

The oxide facies iron formation (bedded jasper, magnetite, or hematite) ranges in thickness from 10 to 100 m, generally strikes 070º with a steep 80º southeast dip. It is much more magnetite rich and massive to the east while to the west it thins quickly and is dominated by hematite. The iron formation is well bedded, shows locally changing dips and soft sediment deformation and displacement features. Fracturing and deformation are usually parallel to the bedding. Pyrite is present from trace to 0.5 % both along bedding and in fractures. Fractures contain calcite and locally traces of specular hematite. Local variations in thickness are

attributed to overall thickening and thinning, facies changes, and poorly defined isoclinal folding.

The metasediments are bounded to the north by the dominantly ultramafic volcanic sequence of the Tisdale assemblage (Northern corridor) and to the south by the Blake River metavolcanics. The sedimentary sequence is from 500 to 900 m thick. It is crosscut by a major vertical gabbro dyke Golden Highway Gabbro trending 050º. The dyke is 10 to 40 m wide and has been traced for 2.3 km from west of the South West deposit to the Windjammer North deposit.

In addition to the importance of the DPFZ and its associated splays and similar orientated structures, interpretive work has identified northwest to north trending cross structures believed to play a significant role in localizing gold mineralizing systems. Many of the recently drilled significant quartz and quartz carbonate veins and vein zones reflect similar orientations to these higher angle cross structures/faults.

7.3 DEPOSIT GEOLOGY AND MINERALIZATION

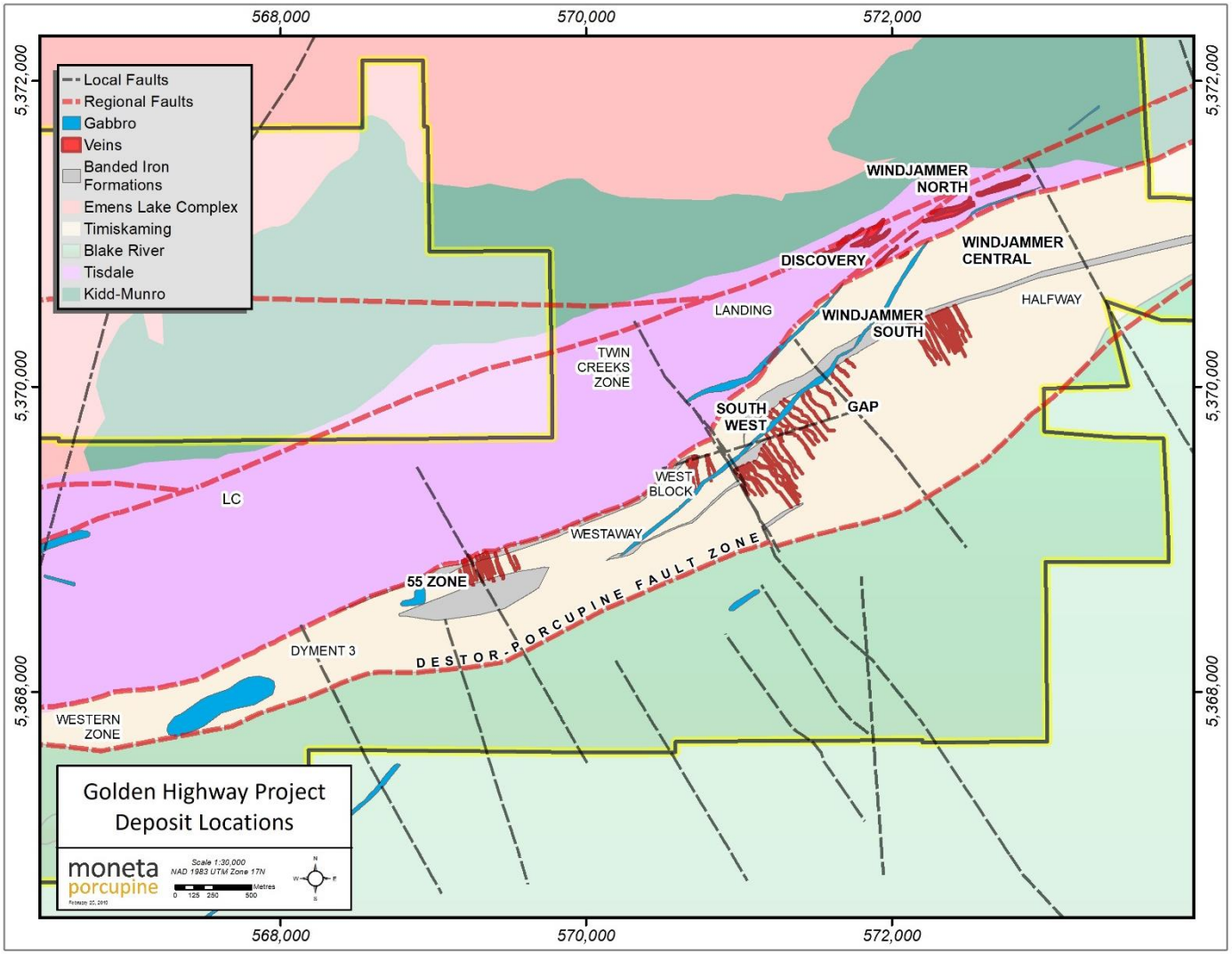
7.3.1 General

The Golden Highway property to date is known to host six gold deposits, six gold mineralized zones and numerous unassigned gold drill intersections along a 12-km long mineralized corridor. This corridor contains two highly prospective geological settings: a northern corridor with sheared mafic and ultramafic volcanic units and syenitic intrusive complexes, and a southern corridor defined by Timiskaming sediments containing banded iron formation (BIF). This section describes the geology and gold mineralization of the following gold deposits: South West/Gap, 55, Windjammer South, Windjammer Central, Windjammer North, and Discovery (Figure 7.5), which were examined in the current mineral resource estimation. The following gold zones: Western, Dyment 3, LC, Westaway, Halfway, Twin Creeks, and Landing on the property are also briefly discussed although no resources were estimated for them.

7.3.2 South West Deposit

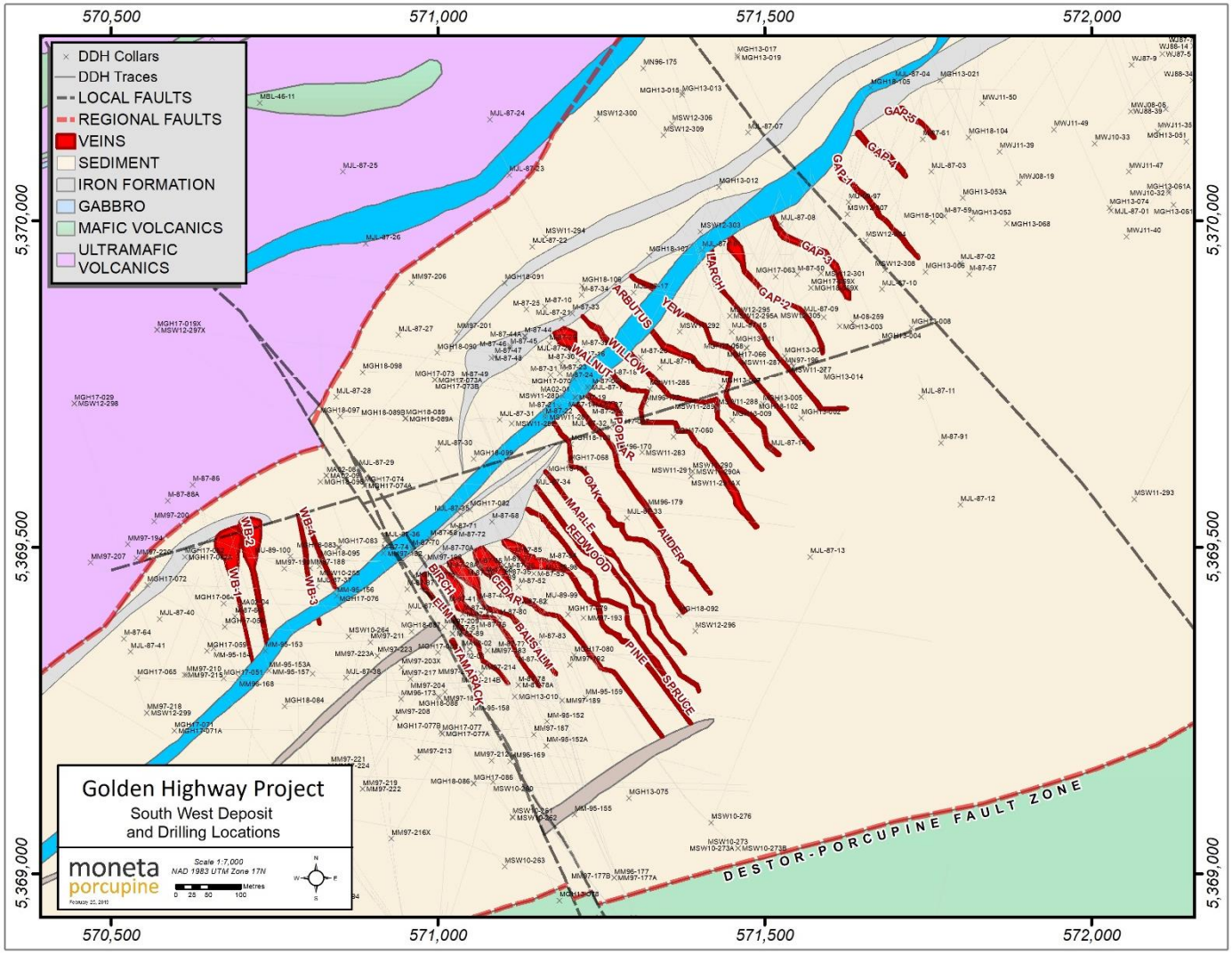
The South West deposit (including the former Gap area) comprises a series of mineralized extensional veins and stockwork. The vein arrays and associated stockwork veining occur as stacked, en échelon vein structures within Timiskaming sediments, south of the southern contact of a regional BIF. (See Figure 7.6).

Figure 7.5
Gold Deposits and Zones of the Golden Highway Property



Source: Moneta, 2019.

Figure 7.6
South West Deposit Geology and Drill Location Map



Source: Moneta, 2019.

The regional iron formation at the South West deposit is a banded jasperoid-hematite-magnetite formation (BIF) varying in thickness from 1 m up to 25 m. It has been traced for approximately 5 km, from the 55 deposit to the eastern boundary of the property (Figure 7.4). The Timiskaming sediments consist of a polymictic conglomerate unit, coarse lithic greywackes with occasional sericitic argillite fragments, weakly bedded medium to fine greywackes, bedded greywackes and argillites (from the south contact of the BIF towards the Blake River mafic volcanics to the south). The sedimentary bedding generally strikes northeast or southwest and dips steeply to the northwest or southeast. The Timiskaming sediments are pervasively chloritized and in the vicinity of the BIF. Hematization overprints the chloritization. Local sericitization occurs within the coarse greywackes as bands and the argillite units are often strongly sericitized.

The South West deposit stratigraphy is cut by a major fault (the West Fault) which displaces the BIF and the north Timiskaming sediment-Tisdale ultramafic volcanics contact. The West Fault trends 335° and dips 60° to the southwest.

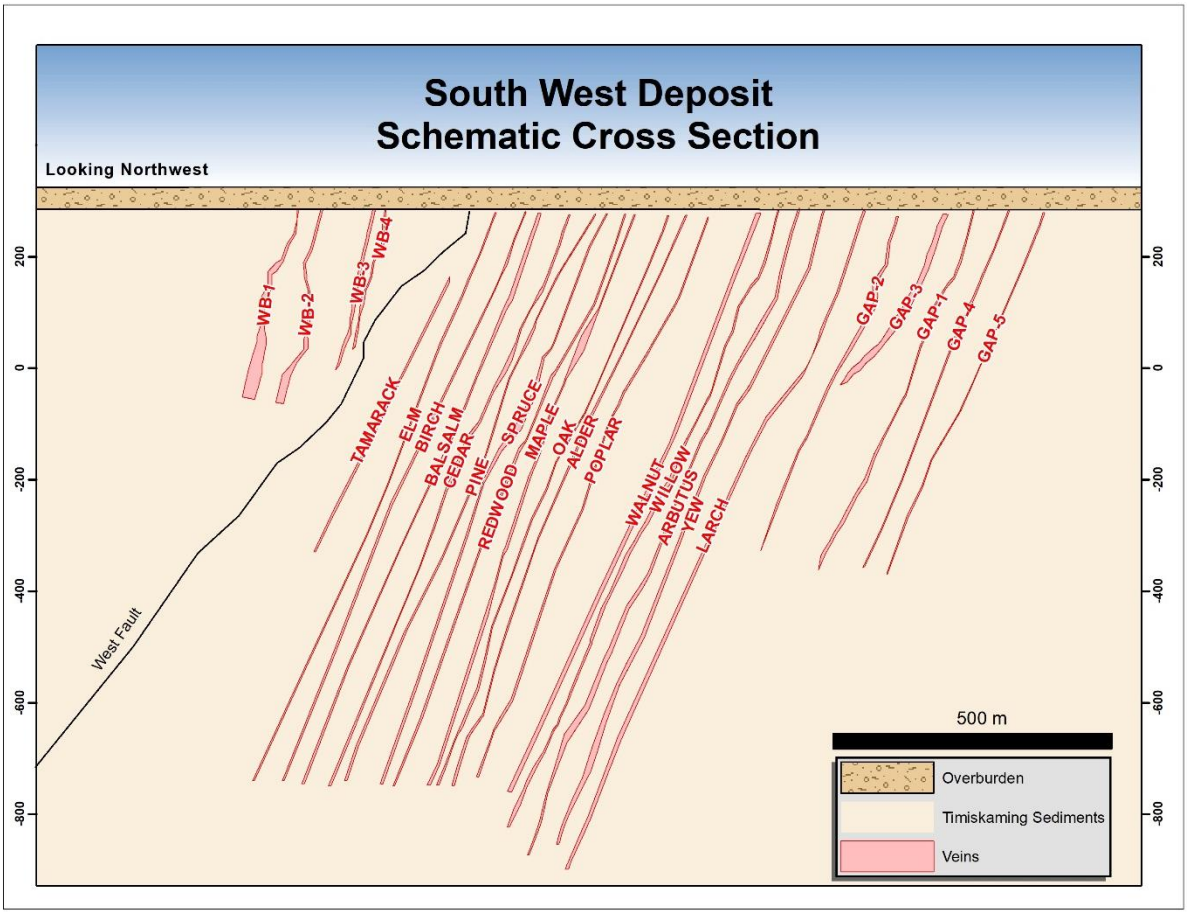
Drilling to date has outlined twenty five northwest-trending extensional veins and associated stockwork, four of which occur west of the West Fault (see Figure 7.7) in the West Block area for which no resource estimate was produced. The twenty five tension vein arrays are now continuous from the Gap area to west of the West Fault. The South West mineralized system of vein arrays is currently known to extend for 1.5 km along a northeast strike.

The vein arrays and stockwork dip steeply to the southwest at 70°, with seventeen tree-named veins (see Figure 7.6 and Figure 7.7) occurring in the central area. The veins and associated stockwork zones generally have an average width of approximately 2.8 m and up to 25 m in proximity to the regional BIF. These mineralized structures generally occur 25 m to 30 m apart. The vein arrays and stockwork zones can be traced for 300 to 400 m southeast from the southern regional BIF contact.

The vein structures have been intersected at depths up to 1,200 m below surface and remain open down dip. The vein arrays are extensional quartz-carbonate-pyrite veins and/or quartz-carbonate stock-work style veining with distinct narrow (mm to cm) ankerite-silica alteration halos. Gold mineralization occurs associated with 1 to 3% pyrite in the veins and vein alteration halos, as well as visible gold. In some cases, a zone of quartz-pyrite veinlets occurs adjacent to the veins and hosts mineralization. The veins can be brecciated and occur as quartz matrix-supported breccia zones. Selected significant gold intersections are listed in Table 7.1.

In proximity to the southern contact of the BIF, the vein arrays expand into stockwork zones in the porous coarse greywackes. The stockworks plunge ~70° to the southwest along the contact and are up to 25 m wide, The stockwork of quartz-carbonate-pyrite veins (3 to 20% veining) occur within a distinct ankerite-silica alteration halo occasionally with sericite. Gold mineralization occurs associated with pyrite in the veins and vein alteration halos as well as visible gold.

Figure 7.7
South West Deposit Schematic Cross Section



Source: Moneta, 2019.

Table 7.1
South West Deposit Selected Gold Results

Hole #	From (m)	To (m)	Length (m)	Au (g/t)	Vein Array Name
MGH13-080	769.50	774.00	4.50	5.62	Alder
MSW10-267G	1011.30	1025.00	13.69	3.58	Alder
MGH17-070	267.00	270.00	3.00	4.41	Arbutus
MGH17-073	500.00	505.00	5.00	4.12	Arbutus
MSW10-162G	1280.82	1304.57	23.75	3.67	Arbutus
MGH17-056	441.50	445.51	4.01	34.17	Balsam
MM-95-158	266.27	274.76	8.50	4.31	Balsam
MGH17-081	177.00	180.00	3.00	5.38	Birch
M-87-72	64.13	68.77	4.64	4.62	Cedar
MGH17-051	565.00	568.00	3.00	7.13	Cedar
MGH17-081	266.97	269.13	2.16	30.47	Cedar
MM97-208	330.94	335.34	4.40	7.16	Cedar
MSW10-162D	1312.70	1320.87	8.17	4.66	Larch
MGH17-079	414.75	416.05	1.30	16.21	Larch

Hole #	From (m)	To (m)	Length (m)	Au (g/t)	Vein Array Name
MM97-190	890.40	895.50	5.10	4.18	Maple
MM96-177	696.01	700.80	4.79	7.20	Oak
MGH13-010	313.00	329.00	16.00	3.75	Pine
MGH17-051	636.00	639.00	3.00	7.01	Pine
MGH17-064	472.80	477.00	4.20	41.08	Pine
MM97-188	559.50	562.80	3.30	5.58	Pine
MGH17-075	271.92	275.00	3.08	3.99	Palm
MGH17-076	429.00	432.30	3.30	7.60	Redwood
MSW11-279	850.00	854.50	4.50	3.14	Redwood
MGH13-075	392.97	395.23	2.26	11.3	Spruce
MGH17-077	527.30	531.00	3.70	5.17	Spruce
MM97-177A	552.11	559.21	7.10	5.89	Spruce
MGH17-083	697.35	700.50	3.15	5.73	Walnut
MM96-170	190.70	201.6	10.9	4.04	Walnut
MGH17-073	460.00	461.00	1.00	15.10	Willow
MGH17-062	270.12	271.75	1.63	1,078.43	West Vein
MGH17-070	360.00	362.80	2.80	3.75	Yew
MGH17-073	551.59	553.92	2.33	10.21	Yew
MGH18-103	387.02	394.15	7.13	5.06	Yew
MGH17-056	441.50	445.51	4.01	38.33	SW-1
MGH17-076	220.50	230.00	9.50	2.48	SW-1
MGH13-010	281.04	332.75	51.71	1.70	SW-2
MGH17-064	457.70	495.6	30.60	5.01	SW-2
MSW10-267F	1237.21	1287.25	50.04	1.70	SW-3A
MSW10-273	994.22	1079.4	85.18	1.21	SW-3A
MSW11-279	1117.83	1185.53	51.57	1.31	SW-3A
MN96-162	1166.32	1248.00	80.18	1.90	SW-3B
MSW10-162B	1180.20	1214.86	34.66	2.17	SW-3B
M-87-09	85.97	167.39	58.86	1.17	SW-3C
M-87-32	137.19	160.08	10.49	1.56	SW-3C
MGH18-098	418.00	443.00	25.00	2.48	SW-3D
includes	418.00	422.50	4.50	5.00	SW-3D
MGH18-102	425.00	437.00	12.00	2.74	SW-4
MGH18-102	568.00	573.30	5.30	7.63	New Vein
MGH17-069	561.00	574.00	13.00	2.24	SW-5
MGH18-091	377.49	442.88	64.88	1.63	SW-6
MM97-216X	1189.59	1221.25	31.66	1.23	SW-7
MGH18-106	301.00	305.00	4.00	3.59	SW-7

7.3.3 55 Deposit

The 55 deposit is located two kilometres along strike, west-southwest of the South West deposit. It hosts gold mineralization in a similar geological setting and style to South West, within Timiskaming clastic sediments between two iron formation horizons with the northern one along the ultramafic to mafic volcanic contact. Gold mineralization is associated with quartz-pyrite veining within structural corridors associated with ankerite-sericite-silica-pyrite alteration. Sulphides are dominantly finely disseminated pyrite and scattered coarser-grained subhedral aggregates in veins. Visible gold and rare accessory molybdenite and chalcopyrite

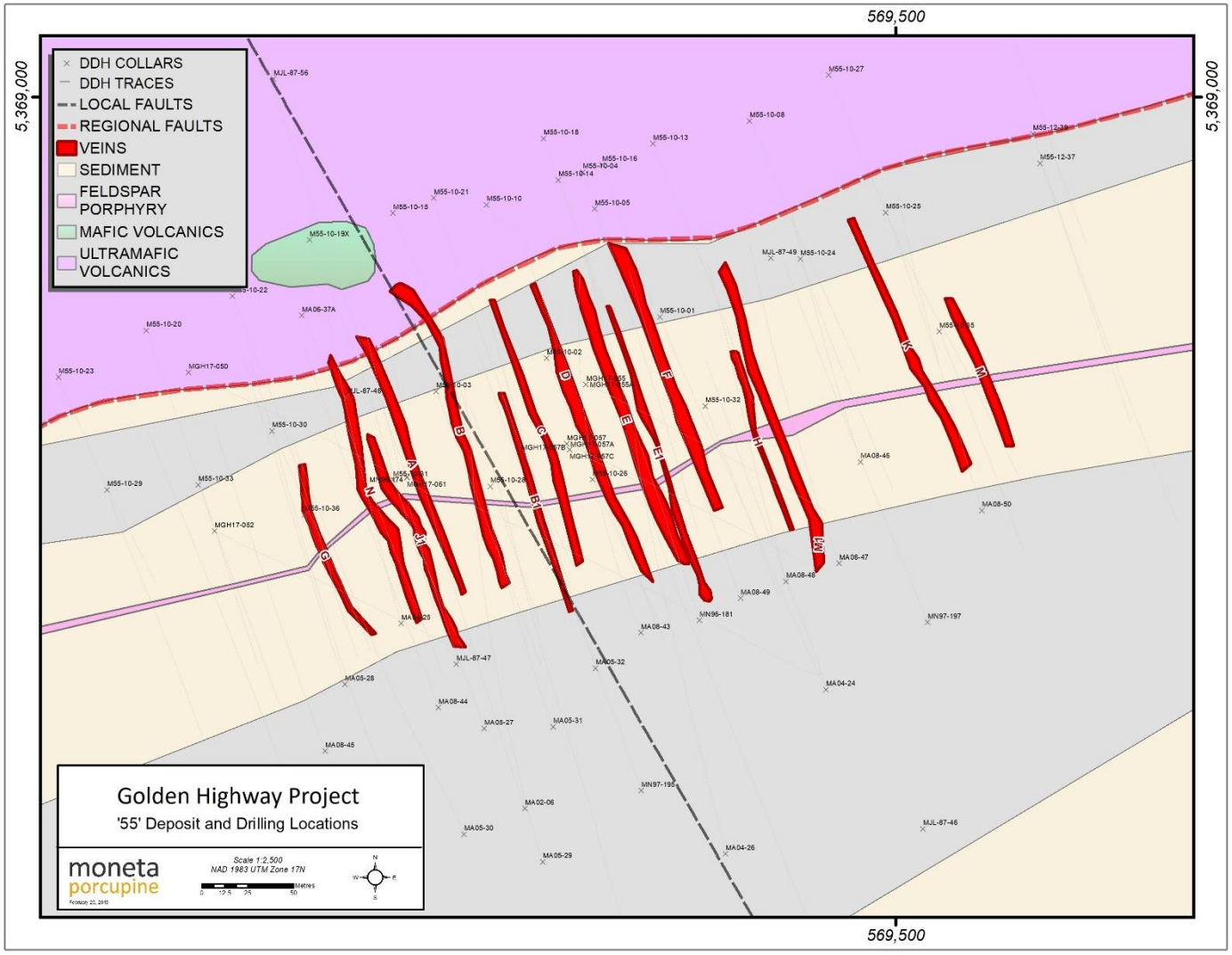
have been observed. Additional high-grade gold mineralization occurs when these veins intersect the northern iron formation and cause extensive sulphidization.

A total of thirteen north-northwest trending vein structures (A to K) have been interpreted to date (Figure 7.8). The veins have been traced up to 200 m in strike length and drilled to depths of up to 300 m. The main veins have an average width of approximately 2.50 m and are spaced 20 m to 35 m apart and dip steeply 70° to the west (Figure 7.9). The 55 mineralized system is currently known to extend for 400 m along the northeast strike, with significant untested potential along strike and to depth. Selected significant gold intersections are listed in Table 7.2. Highlights from drilling include 7.96 g/t Au over 36.00 m and 42.29 g/t Au over 2.90 m.

Table 7.2
55 Deposit Selected Gold Results

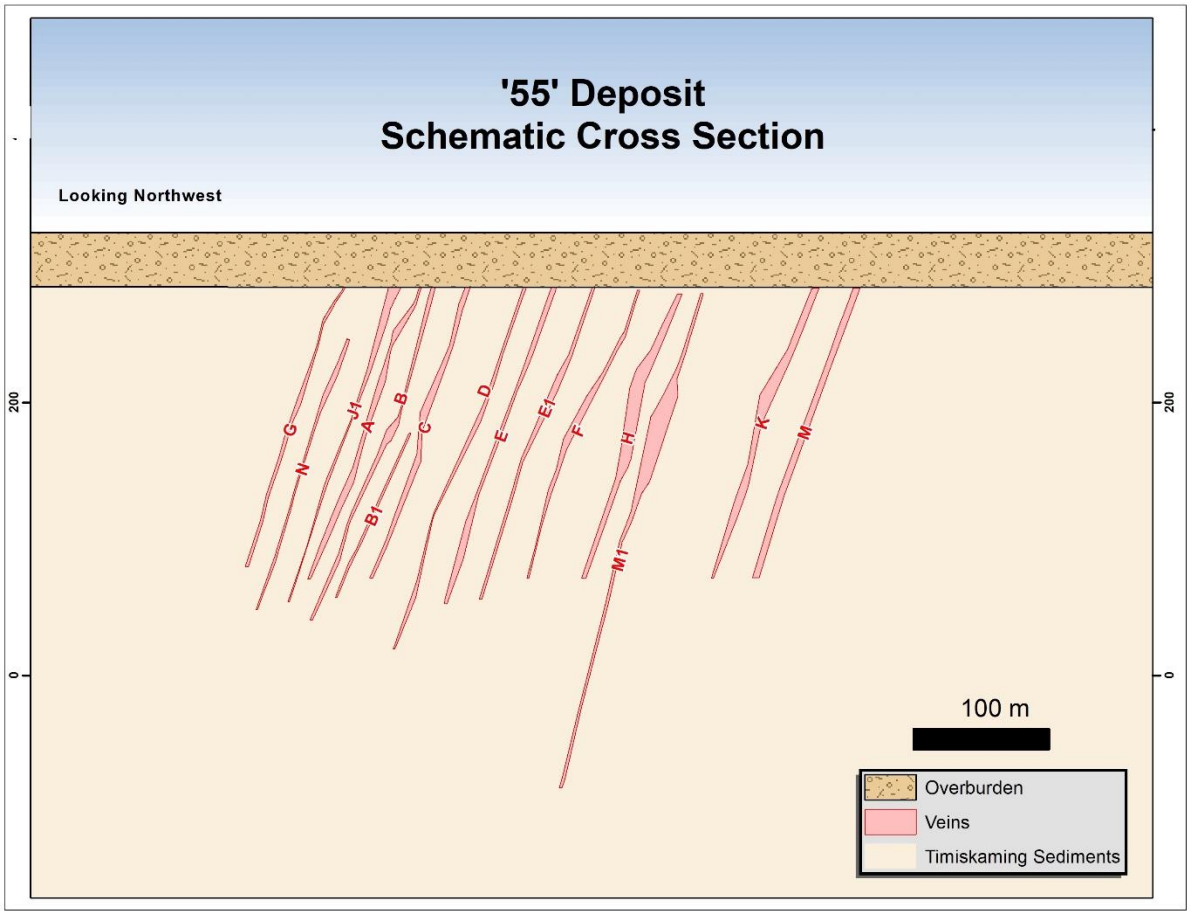
Hole #	From (m)	To (m)	Length (m)	Au g/t
M55-10-04	76.60	81.80	5.20	9.09
M55-10-04	76.60	81.80	5.20	9.85
M55-10-14	92.66	95.30	2.64	15.03
MA-02-06	211.00	217.50	6.50	7.74
MA-04-25	55.00	62.00	7.00	8.68
MA-05-32	238.50	239.80	1.30	37.08
MA-08-43	80.90	83.80	2.90	42.29
MA-08-49	127.00	163.00	36.00	7.96
MN-97-195	261.80	265.30	3.50	13.04
MGH17-052	75.85	77.60	1.75	7.04
includes	75.85	76.70	0.85	12.15

Figure 7.8
55 Deposit Geology and Drill Location Map



Source Moneta, 2019.

Figure 7.9
55 Deposit Schematic Cross Section

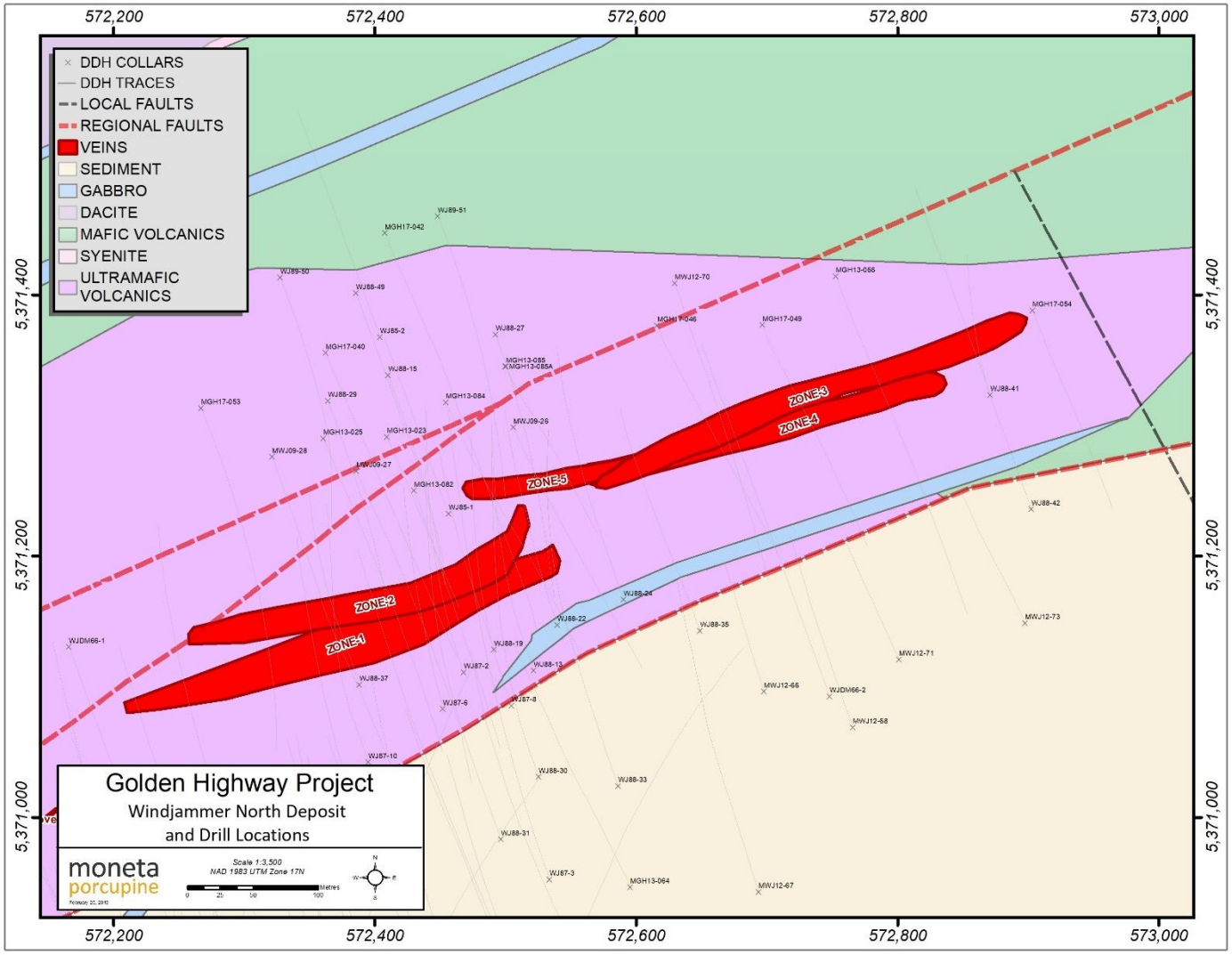


Source: Moneta, 2019.

7.3.4 Windjammer North Deposit

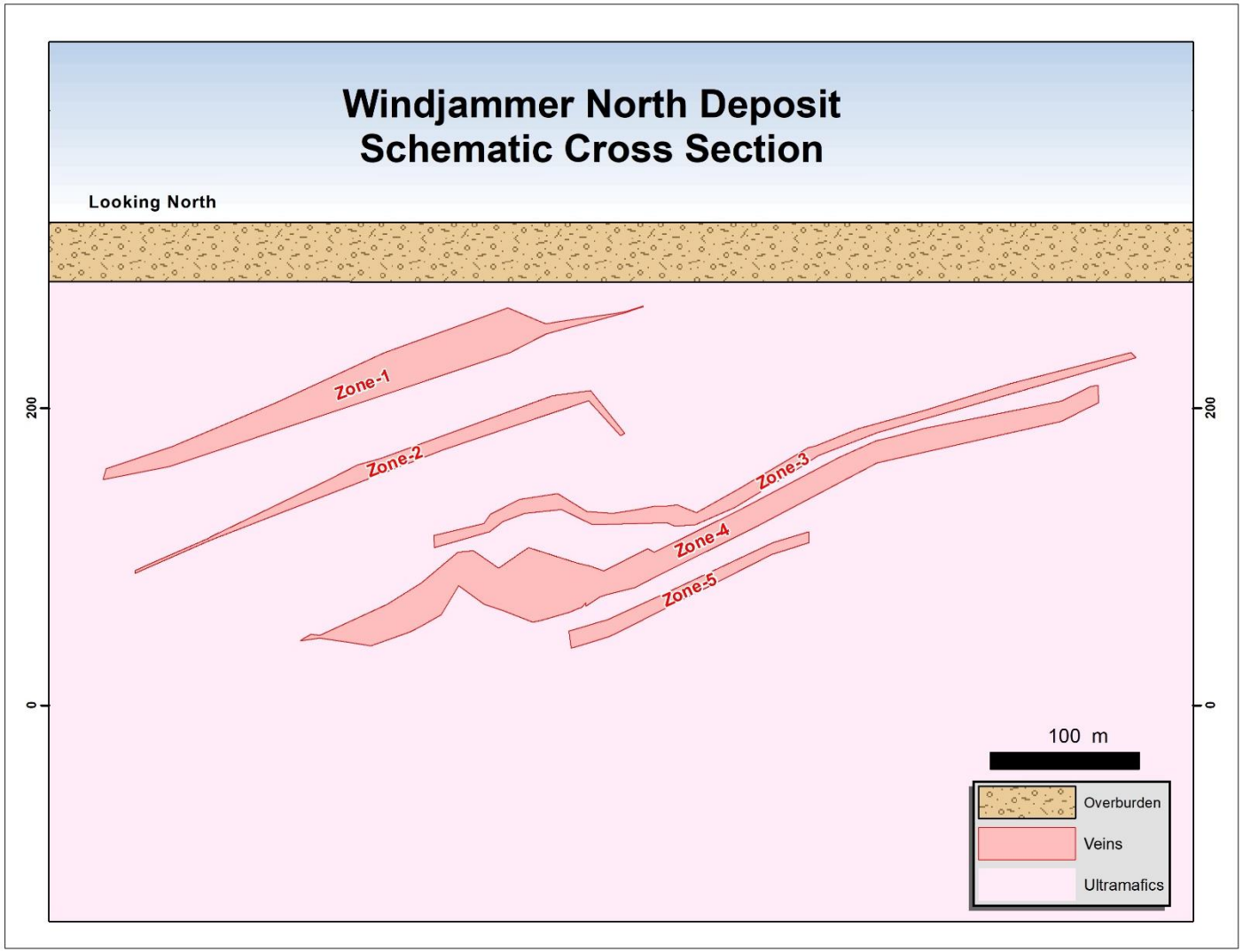
The Windjammer North deposit is located within the North corridor volcanics of the northern branch of the DPFZ. The deposit consists of six subparallel stacked zones trending 070° and plunging 25° to the west (Figure 7.10). The zones vary in width from 10 to 15 m and are up to 15 m thick (Figure 7.11). They have be traced down plunge for over 600 m and tested to depths up to 400 m below surface. Gold mineralization is hosted by massive to brecciated ultramafic metavolcanics that have been altered to a green fuchsite-carbonate assemblage in the western and central portion of the zone with more mafic metavolcanics to the east displaying albite bleaching and sericite alteration. Fracture filling chlorite and specular hematite are common. The mineralization is associated with pyrite-rich white to light grey quartz veining and veinlets. The structural corridor has been intruded by variably altered felsic intrusive dykes. Selected significant gold intersections are listed in Table 7.3.

Figure 7.10
Windjammer North Deposit Geology and Drill Location Map



Source: Moneta, 2019.

Figure 7.11
Windjammer North Deposit Schematic Cross Section



Source: Moneta, 2019

Table 7.3
Windjammer North Deposit Selected Gold Results

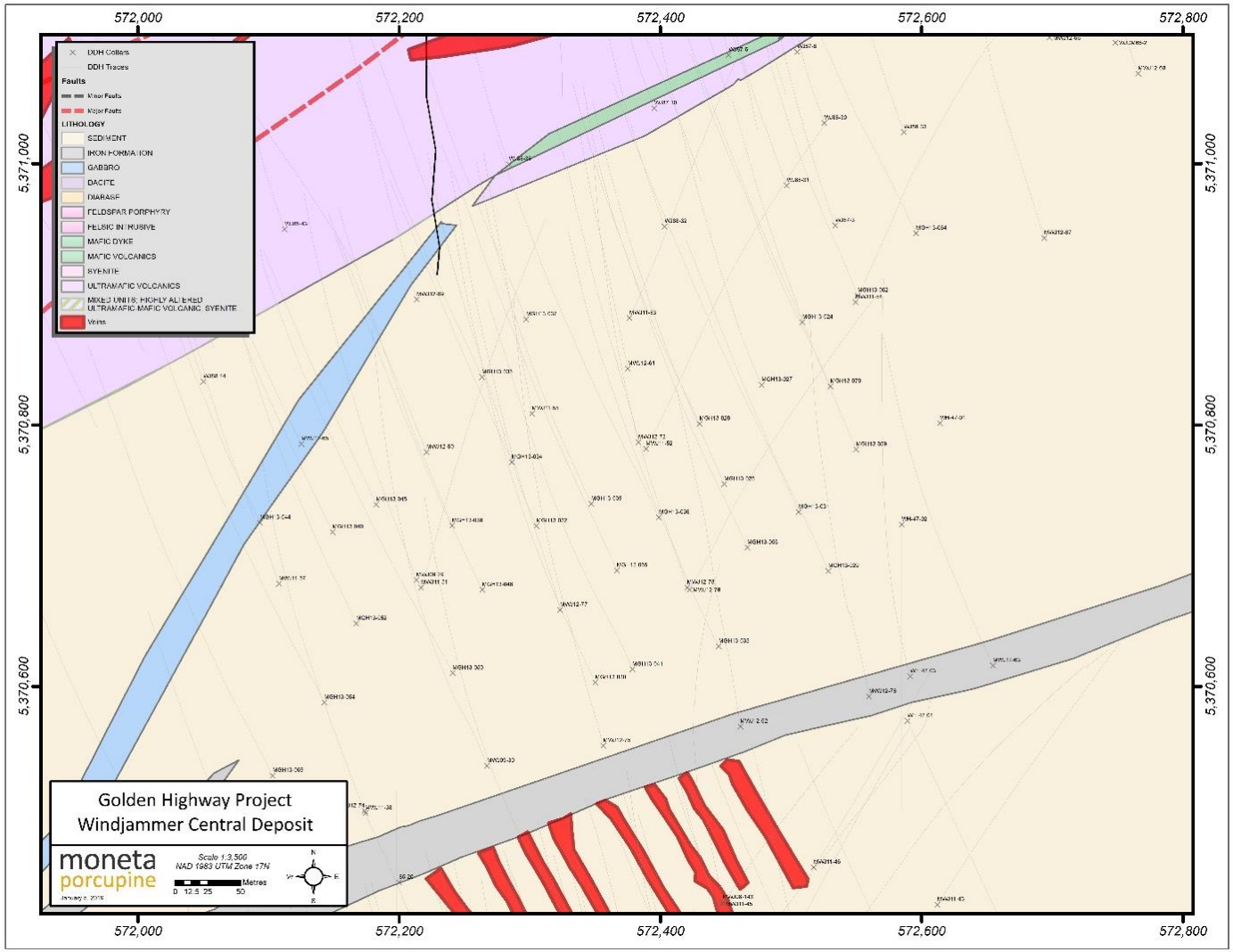
Hole #	From (m)	To (m)	Length (m)	Au (g/t)	Zone Name
WJ-87-06	292.20	300.70	7.80	7.86	Zone 1
WJ-87-08	291.70	313.10	21.40	5.06	Zone 1
includes	292.20	300.30	8.10	10.69	Zone 1
WJ-88-29	272.40	275.25	3.35	6.49	Zone 1
WJ-88-15	267.70	284.50	16.80	4.39	Zone 1
includes	274.00	279.80	5.80	6.36	Zone 1
MGH13-024	534.00	537.00	3.00	6.91	Zone 2
WJ-88-49	308.50	314.50	6.00	4.73	Zone 1
WJ-88-51	372.00	376.80	4.50	4.41	Zone 2A
WJ-88-27	265.80	272.20	6.40	4.73	Zone 1
MGH17-046	444.50	445.50	1.00	5.78	Zone 3
MGH17-049	143.50	146.50	3.00	3.60	Zone 1
includes	145.50	146.50	1.00	7.56	Zone 1
MGH17-053	462.30	471.80	9.50	7.52	Zone 3
includes	462.30	463.27	0.97	10.90	Zone 3
and	467.30	470.12	2.82	19.46	Zone 3

7.3.5 Windjammer Central Deposit

The Windjammer Central deposit is hosted in a 500-m wide section of the Timiskaming sedimentary sequence north of the Windjammer South deposit. It is bounded by the regional iron formation to the south and to the north by the Kidd-Munro volcanics hosting the Windjammer North deposit. Drilling on Windjammer Central has identified gold mineralization over wide intervals in the sediments both along the volcanic contact and well south into the sediments. The mineralization has been traced along the volcanic/sedimentary contact for a 750 m strike length, a width of up to 350 m southerly into the hanging wall, and to a depth of only 350 m. Drilling to date has been on a 50-m drill hole spacing both in plan and vertically to systematically test the mineralized extent of the gold system. This represents potential for near surface bulk mineable gold mineralization. The gold mineralization is dominantly of the stockwork style associated with pyrite in and around fine quartz stringers and variable scale quartz and quartz-carbonate veining. See Figure 7.12 for drill hole locations relative to the Windjammer South Deposit (veining at bottom of Figure).

Previously reported drill highlights included 73.00 m @ 1.02 g/t Au, 54.00 m @ 0.94 g/t Au, including 26.00 m @ 1.42 g/t Au, and 22.00 m @ 1.06 g/t Au.

Figure 7.12
Windjammer Central Deposit Geology and Drill Location Map



Source: Moneta, 2019.

Due to the relatively low grades and significant widths of the Windjammer Central deposit, a single block model within a grade shell was estimated rather than attempting to interpret individual vein zones. However, the local overburden thickness is significant and very little resource fell within a pit shell. No resource has been determined for Windjammer Central.

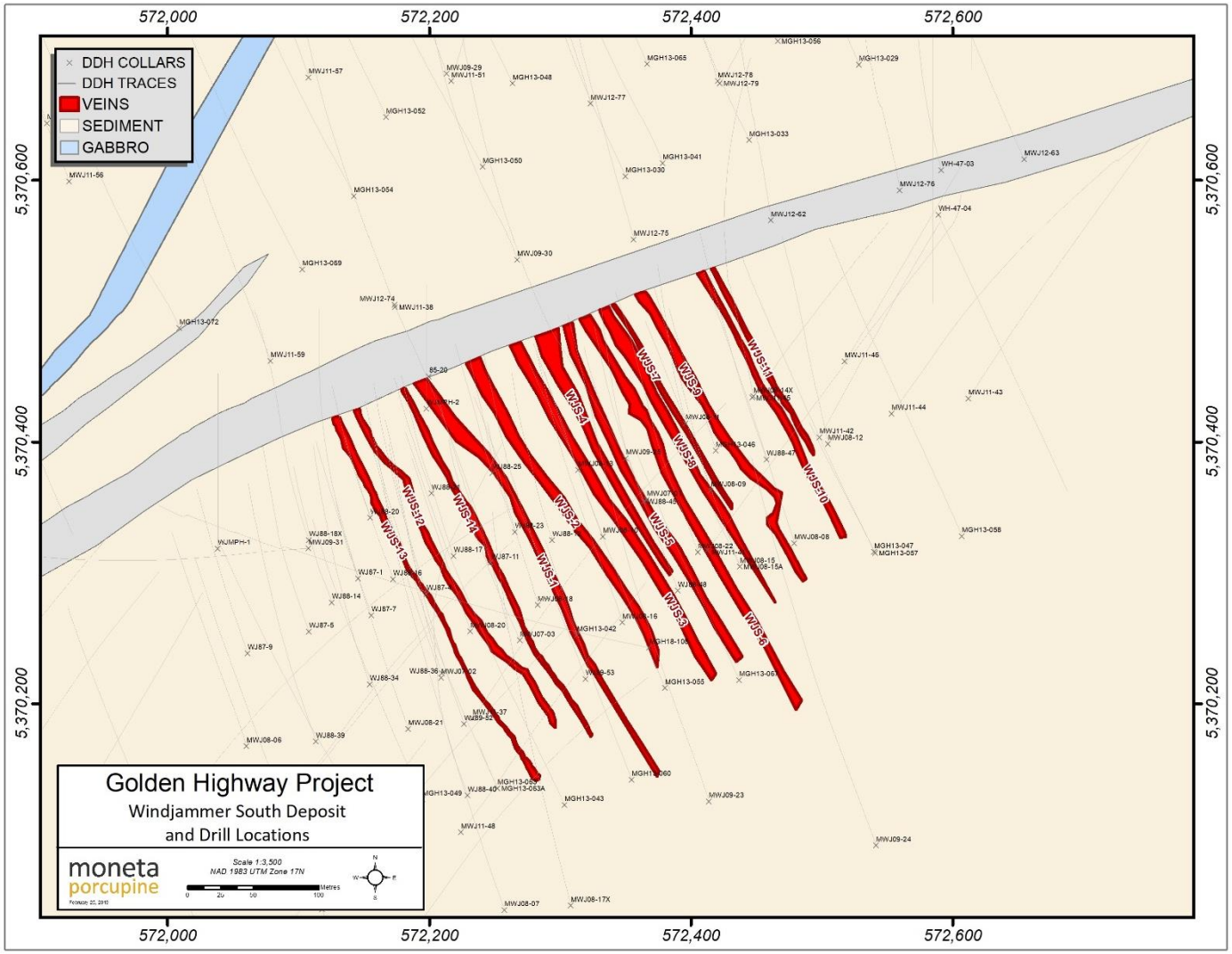
7.3.6 Windjammer South Deposit

The Windjammer South deposit is located within Timiskaming sediments south of the regional iron formation (BIF). The mineralized stockwork zones and vein structures at Windjammer South occur in the same geological setting as the South West deposit located 2.0 km to the west. Sediments are predominantly altered Timiskaming greywacke, sandstone, and conglomerate. Windjammer South is comprised of eleven vein structures (Figure 7.13). Vein structures trend northwest and dip moderately, to steeply, to the southwest at approximately 50°. The veins are spaced 25 m to 30 m apart and have widths of 2 m to 10 m, thinning to the south (Figures 7.13 and 7.14). The vein structures at Windjammer South can be traced for up to 300 m in strike length and have been historically drilled to vertical depths of up to 400 m. The vein structure gold mineralization is dominantly of the stockwork style associated with pyrite in and around fine quartz stringers and variable scale quartz and quartz-carbonate veining. Sulphidization of the iron formation is primarily associated with local brecciation of the iron formation at the sedimentary contact. The mineralized system is currently known to extend for 500 m along strike (Figure 7.13). Selected significant gold intersections are listed in Table 7.4.

Table 7.4
Windjammer South Deposit Selected Gold Results

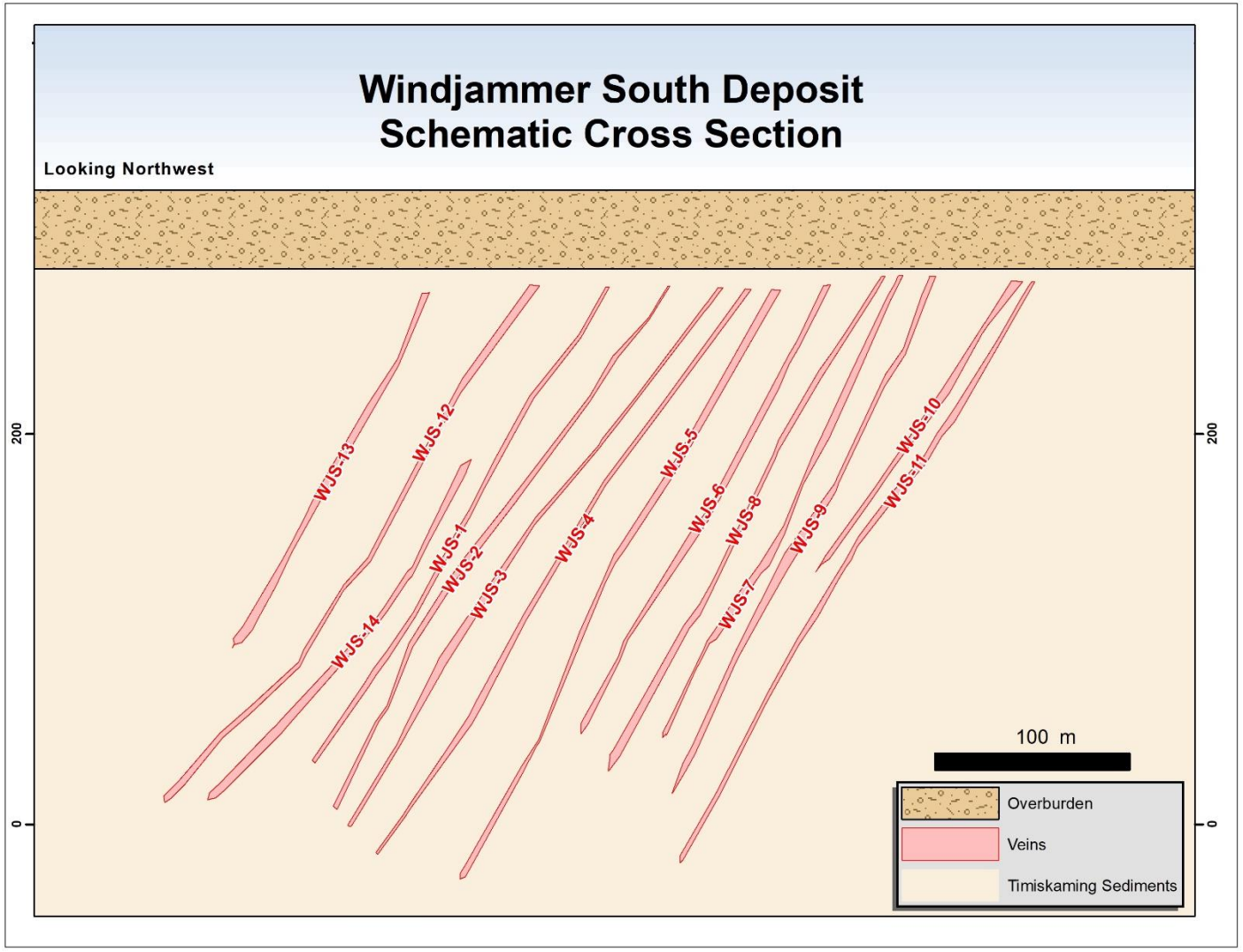
Hole #	From (m)	To (m)	Length (m)	Au (g/t)
WJ88-40	239.70	243.90	4.20	3.91
includes	239.70	240.30	0.60	10.56
MWJ07-03	257.20	354.40	97.2	1.44
MWJ08-11	67.10	152.55	85.45	3.38
MWJ08-18	116.00	284.25	168.25	1.26
MWJ11-43	410.75	414.00	3.25	8.87
MGH13-042	207.00	406.00	199.00	1.02
MGH13-046	67.00	74.00	7.00	3.75
MGH13-057	203.00	213.00	10.00	7.72
MGH13-063A	112.00	117.00	5.00	7.91
MGH18-108	113.20	113.75	0.55	12.65
MGH18-108	213.00	220.90	7.90	8.09
MGH18-108	268.00	272.70	4.70	4.39
MGH18-108	429.00	434.80	4.25	5.70
MGH18-108	462.70	507.00	44.30	1.55

Figure 7.13
Windjammer South Deposit Geology and Drill Location Map



Source: Moneta, 2019.

Figure 7.14
Windjammer South Deposit Schematic Cross Section



Source: Moneta, 2019.

7.3.7 Discovery Deposit

The Discovery deposit (see Figure 7.15) includes a mineralized Upper Zone and Contact Zone. It is located on a southern splay of the DPFZ and hosted within altered komatiitic ultramafic rocks of the Kidd-Munro assemblage to the north and the sheared fault contact with conglomerate and greywacke units of the Timiskaming sedimentary rocks to the south.

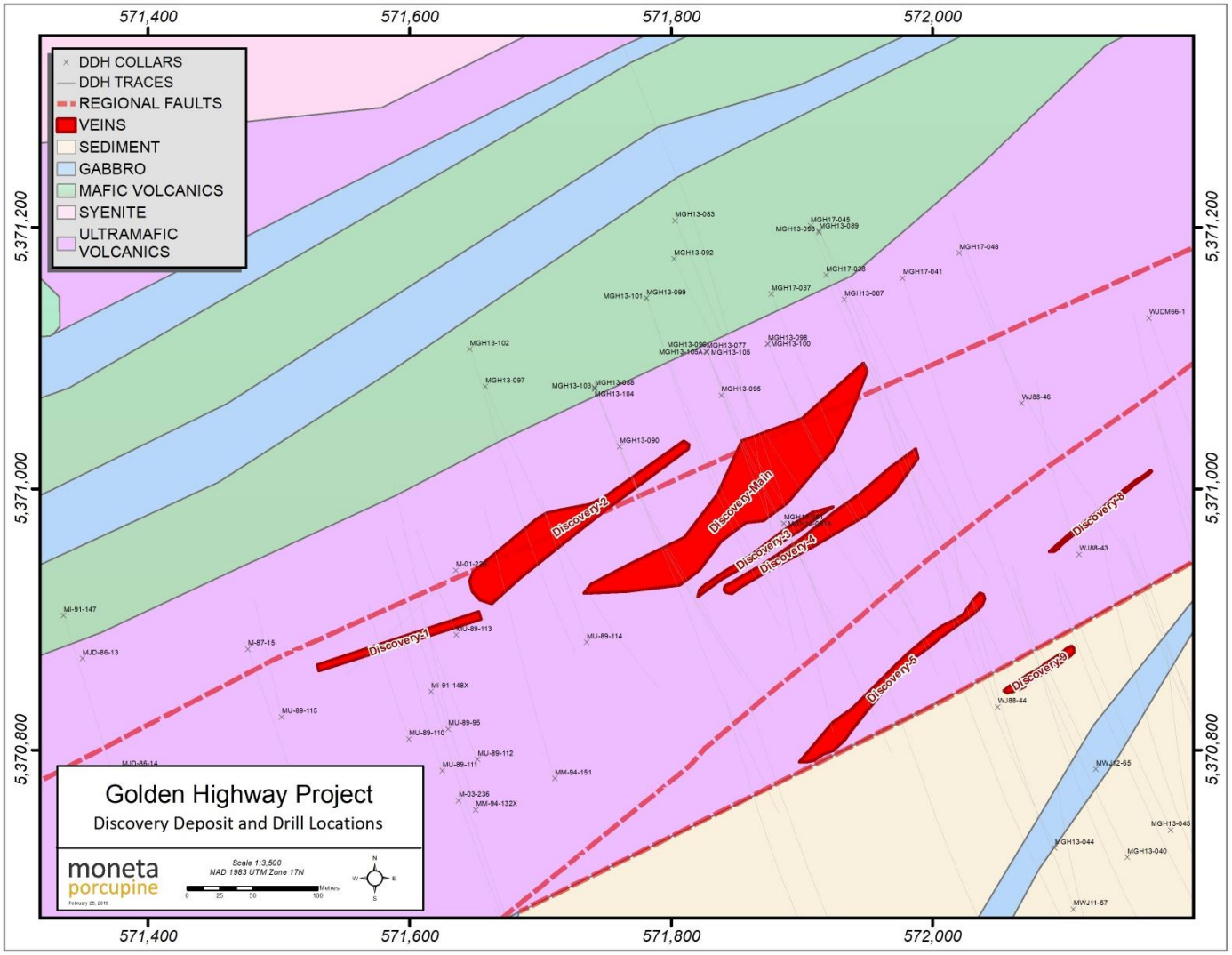
The Upper Zone ultramafic host rocks have been intruded by a series of roughly east-northeast-trending (070°) steeply-south dipping quartz feldspar-syenite porphyry (QFP) to lamprophyre porphyry dykes spatially associated with quartz vein hosted gold mineralization. The Upper Zone is comprised of five parallel stacked mineralized lenses that have been traced for over 500 m in strike length and to a vertical depth of 400 m. The south dipping lenses of mineralization occur over an aggregate width of 175 m. Each lens is 5 to 15 m wide. The individual mineral lenses trend 070° and dip very steeply (80° to 85°) to the south, similar to the orientation of the DPFZ. They are noted by chlorite-pyrite alteration. An interpretative section (see Figure 7.16) shows the structural setting of the Upper Zone. Significant drill results are included in Table 7.5.

The deeper Contact Zone to the south, dips steeply to the north (approximately 80°). It occurs associated with, and parallel to, the sediment-ultramafic contact trending ~070° (east-northeast), north of the Golden Highway gabbro. The Contact Zone is comprised of three mineralized lenses. The gold mineralized in the two lenses is characterized by quartz veining, stockwork and breccias often with altered QFP clasts. The mineralization is associated with pyrite-chlorite and ankerite alteration within the sediments. These lenses are narrower (5 m to 10 m) and potentially higher grade. The deeper lenses have been intersected for 200 m along strike and remain open to depth and on strike.

Table 7.5
Discovery Deposit Selected Gold Results

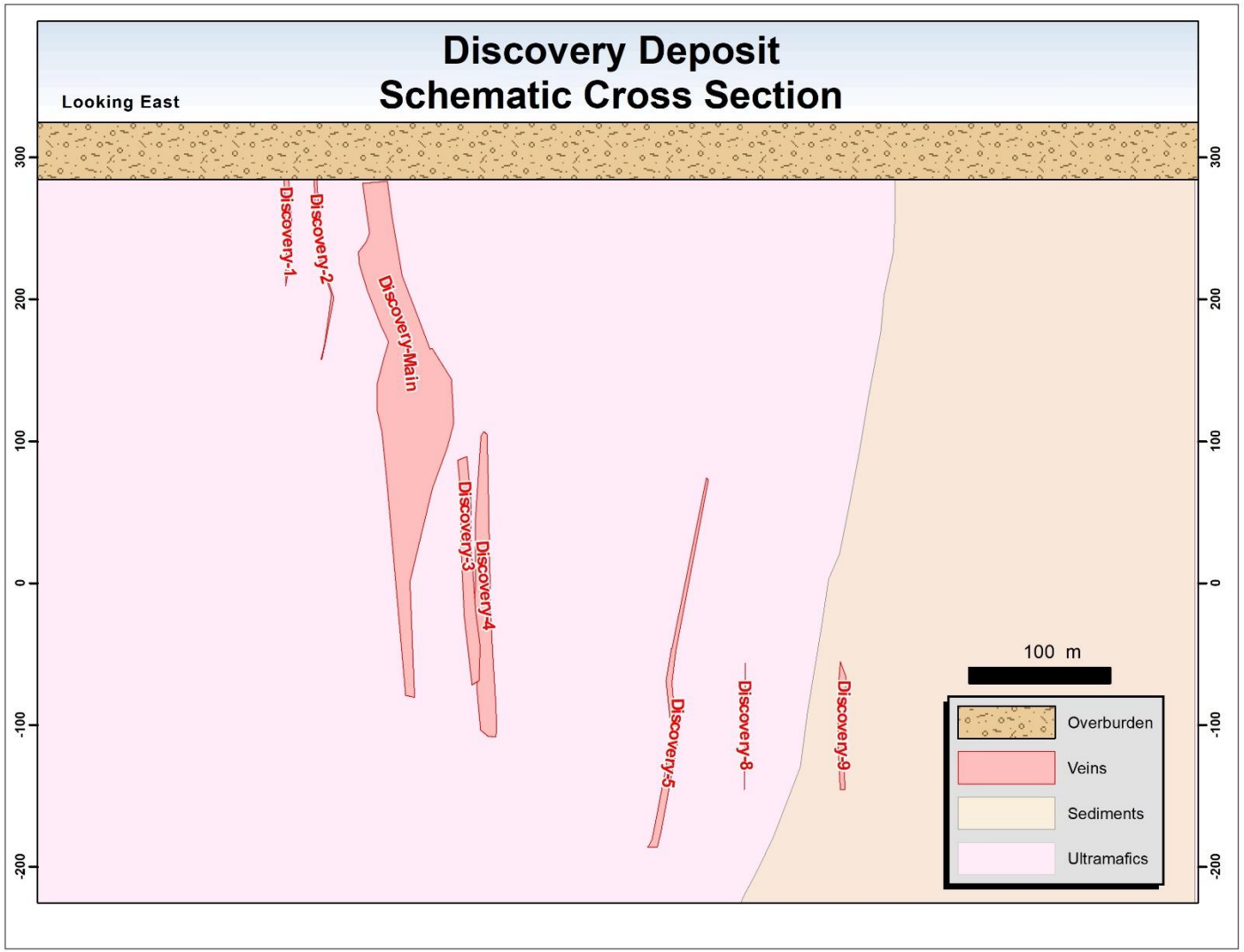
Hole #	From (m)	To (m)	Length (m)	Au (g/t)	Zone Name
MGH13-077	153.00	162.00	9.00	5.48	Upper
MGH13-088	308.00	315.3	7.30	5.18	Upper
MGH13-089	543.00	554.20	11.20	5.44	Upper
MGH17-037	338.13	371.00	32.87	2.71	Upper
includes	349.00	353.88	4.88	4.80	Upper
MGH17-038	273.40	275.00	1.60	6.04	Upper
MGH17-038	558.00	563.00	5.00	3.73	Contact
Includes	558.00	563.00	3.00	5.24	Contact
MGH17-045	593.10	600.00	6.90	2.30	Contact
Includes	595.00	596.00	1.00	10.30	Contact
MGH17-048	486.00	487.00	1.00	3.16	Contact

Figure 7.15
Discovery Deposit Geology and Drill Location Map



Source: Moneta, 2019.

Figure 7.16
Discovery Deposit Zones Schematic Cross Section



Source: Moneta, 2019.

7.3.8 Other Gold Zones

In addition to the above six gold deposits, the Golden Highway property currently hosts seven distinct gold-bearing zones (namely Halfway, Landing, Twin Creeks, Westaway, LC, Dyment 3, and Western from east to west). At the present time, there is insufficient drilling in the zone areas to complete an interpretation and resource estimate on them. The location of the zones is shown on Figure 7.5.

The easternmost zone to date, Halfway, is located 500 m east of the Windjammer South deposit. Gold mineralization occurs at the contact of Temiskaming sediments and regional BIF. It is associated with ankerite-pyrite-silica altered, coarse grained greywacke units on the contact with sulphidized BIF. Drill hole MWJ11-43 intersected 8.87 g/t Au over 3.25 m, including 11.74 g/t Au over 2.30 m at 410.75 m down hole depth. There are no other drill holes close to this intercept.

The Landing Zone and Twin Creeks Zone host gold mineralization in quartz and quartz-carbonate veins, breccia zones and stockworks often with 2 to 5% fine disseminated pyrite and occasional visible gold. Mineralization is often associated with deformed syenite dykes within a wide deformation zone of highly altered ultramafic and mafic volcanics. Mafic volcanics show pervasive carbonate (ankerite) and sericite alteration with varying silicification. Drilling on the Landing Zone has intersected 12.20 g/t Au over 5.04 m and 3.12 g/t Au over 4.60 m. The Twin Creeks Zone has returned gold intercepts of 6.00 g/t Au over 2.70 m, 5.50 g/t Au over 4.70 m, 3.64 g/t Au over 5.56 m, 2.89 g/t Au over 6.55 m, and a longer 2.63 g/t Au over 27.81 m.

The Westaway Zone is located between the South West deposit and the 55 deposit south of the south branch of the DPFZ. Gold mineralization is associated with quartz veining and breccias within Timiskaming sediments. Drilling in 1996 and 1997 at the Westaway Zone returned the following significant gold intercepts: 5.80 g/t Au over 6.30 m including 10.4 g/t Au over 1.50 m, 6.22 g/t Au over 3.30 m, 6.14 g/t Au over 3.20 m, and 5.64 g/t Au over 2.90 m.

The LC Zone is approximately 2.5 km west of the Landing Zone along the DPFZ. This gold mineralization occurs within the lower of two southwest dipping porphyritic syenitic intrusions in the immediate hanging wall of the DPFZ. The syenitic intrusives cover approximately 1,000 m along strike and up to 200 m in width with limited drill testing to a vertical depth of 500 m. Gold occurs in quartz and quartz-carbonate-chlorite stringers within highly fractured silicified and hematitic alteration zones containing pyrite. The gold mineralization is associated with the upper intrusive contact and volcanics of the DPFZ as well as the centre of the lower syenitic porphyry. Drilling on the LC Zone has returned high grade gold intercepts of 11.30 g/t Au over 3.70 m, 20.60 g/t Au over 1.20 m, 13.00 g/t Au over 3.10 m, 7.18 g/t Au over 4.26 m, 6.22 g/t Au over 7.50 m, 5.54 g/t over 5.76 m and lower grade, possible bulk tonnage intercepts of 1.54 g/t Au over 22.50 m, 1.39 g/t Au over 27.00 m, and 1.30 g/t Au over 22.00 m.

The Dyment 3 Zone is located one kilometre southwest of the 55 deposit in a similar sedimentary geological setting. Mineralization is hosted in discrete quartz and quartz-carbonate veins and stringers of varying widths and orientations, accompanied by sericite/ankerite alteration. Several syenitic and quartz feldspar porphyry dykes have been intersected. Pervasively hematized, moderately sericitized and blocky intervals (fault zones) were also intersected close to the Tisdale ultramafic volcanic/Timiskaming sediment contact. Drill hole intercepts from ten historical holes (2,568 m) include 3.07 g/t Au over 1.50 m and 5.49 g/t Au over 0.40 m.

The Western Zone was discovered 1.5 km west-southwest of the Dyment 3 Zone along the volcanic-sedimentary contact and has only been tested with 14 drill holes (4,780 m). Significant drill intercepts include 23.52 g/t Au over 0.40 m, 10.05 g/t Au over 1.00 m, 7.34 g/t Au over 1.00 m and 5.67 g/t Au over 4.00 m in quartz and quartz-carbonate veining with associated ankerite and sericite alteration. The drilling on the Western Zone has indicated gold mineralization that currently extends over 650 m of strike along the volcanic contact and to a depth of less than 200 m. Untested potential remains both east towards the Dyment 3 Zone and west for 3 km to the western limits of the Golden Highway Project.

8.0 DEPOSIT TYPES

The South West, Windjammer South, Windjammer Central, Discovery, Windjammer North, and 55 deposits of the Golden Highway Project can be classified as structurally-controlled orogenic gold deposits in an Archean greenstone belt setting. The Abitibi greenstone belt of Ontario and Quebec is located in the southeastern portion of the Superior Province (Nassif et. al 2018) of the Canadian Shield. This deposit type is a significant source of gold mined in the Superior and Slave provinces. Dubè and Gosselin (2007) published an overview of greenstone-hosted gold deposits in Canada. These deposits are typically quartz-carbonate vein hosted and are distributed along crustal-scale fault zones that mark convergent margins between major lithological boundaries such as those between volcano-plutonic and sedimentary domains. The Golden Highway Project is located on the DPFZ, a major regional structure.

The DPFZ in northeastern Ontario, hosts the largest Archean orogenic gold camp in the world and has produced over 75 Moz of gold from the Timmins Camp alone. When combined with the adjacent Larder Lake-Cadillac Fault Zone and associated splays, this region has hosted over 200 Moz of gold (Dubé, B et al. 2017).

The greenstone-hosted quartz-carbonate vein deposits are structurally controlled, epigenetic deposits characterized by simple to complex networks of gold-bearing, laminated quartz-carbonate structure-fill veins. These veins are hosted by moderately to steeply dipping, compressional, brittle-ductile shear zones and faults with locally associated extensional veins and hydrothermal breccias. The later structures are the main host for mineralization on the Golden Highway Project.

Along the DPFZ the main host rocks are greenschist facies metamorphic rocks of dominantly mafic to ultramafic metavolcanic rocks intruded by intermediate to felsic porphyry. In the Timmins area, larger deposits are spatially associated with fluvio-alluvial conglomerate (Timiskaming conglomerate) distributed along major and deep-seated crustal fault zones DPFZ. On the Golden Highway Project, a banded iron formation transects the Timiskaming sedimentary basin and is spatially associated with gold mineralization.

The deposits are typically associated with iron-carbonate (ankerite) alteration with gold usually occurring in the quartz-carbonate-pyrite vein network. Significant gold can also occur associated with the iron-rich, sulphidized, wall rock selvages or within silicified and arsenopyrite-rich replacement zones.

In the Superior Province, orogenic gold deposits are spatially associated with large scale regional deformation zones such as the DPFZ. These large-scale structures and the associated Timiskaming-type sediments are interpreted as zones of transgressive terrain accretion (Kerrich and Wyman 1990), (Nassif et al. 2018). Colvine et al.'s (1988) study of gold deposits in Ontario concluded that Archean lode gold deposits are formed at deeper crustal levels (2 to 10 km) than younger epithermal deposits.

There is a general consensus that greenstone-hosted quartz-carbonate vein deposits are related to metamorphic fluids and generated by prograde metamorphism with fluid channelling along major crustal deformation zones and thermal re-equilibration of subducted volcano-sedimentary terranes.

Auriferous quartz veins cut many different rock types in the Timmins-Kirkland Lake area, including late intrusive rocks and late deformation zones such as the DPFZ. As a consequence, it is likely that gold mineralization formed late in the Archean geological history of the Timmins area (Fyon and Green, 1991). In the Timmins area, Corfu et al. (1989) have documented auriferous quartz veins cutting 2,691 to 2,688 Ma quartz-feldspar porphyry intrusions and a 2,673 +6/-2 Ma albitite dikes. At the adjacent Garrison project, Nassif et. al (2018) have concluded that north-northwest-trending extensional gold bearing quartz veins post-dated earlier sinistral trans tensional northeast-trending shear zones hosting hydrothermal mineralization dated 2,657 +/- 15Ma.

9.0 EXPLORATION

This section of the report and Table 9.1 summarize the exploration history of the project after Moneta activated exploration in 1986.

Table 9.1
Golden Highway - Summary of Moneta Exploration and Development Activities

Year	Company	Exploration	Township
1986	Moneta	MPH Ground Mag Survey, IP Various interpretations over time, drill hole M-86-01	Michaud
1986	St Joe	Mag survey	Guibord, Michaud
1987	Asarco	Drill holes PL87-01 to PL87-11	Michaud
1987	Falconbridge	Mag and VLF survey	Michaud
1987	Moneta	Mag and VLF survey, drill holes M-87-02 to 8,15, M-87-17 to 26, M-87-50 and MJB87-01 to 27, Overburden drilling	Michaud
1987	Nahanni	IP survey	Michaud
1987	Noranda	NBR87-01 to 29, drill holes BT-87-01 and 2	Barnet, Michaud
1988	Asarco	Drill holes PL87-12 to PL88-16	Michaud
1988	Falconbridge	Drill hole MI54-01	Michaud
1988	Golden Range	Drill holes GRM-88-1 to 4B	Michaud
1988	Lacana	Drill holes MD-88-3 to 7	Michaud
1988	Mid-North	Drill holes PT88-1 to 3	Michaud
1988	Noranda	Drill hole WJ-88-44	Michaud, Garrison
1988	Stellar	Mag and VLF survey	Michaud
1989	Corona	Mag survey	Michaud
1989	Falconbridge	Drill holes MI55-01 and 2	Michaud
1989	Golden Range	Mag survey	Michaud
1989	Moneta/Unocal	MU89 drill holes series	Michaud
1989	Moneta	Drill hole MPM-89-01	Michaud
1990	Corona	Drill hole PL-90-1B	Michaud
1990	Lacana	Drill holes MD-90-08 to 11	Michaud
1990	Moneta	Mag survey, geological mapping	Michaud
1991	Independence	Ground Mag Survey, IP, drill holes MI-91-139 to 150	Michaud, Guibord
1993	Moses	Drill hole JM-5	Michaud
1994	Hawley	Mag and VLF survey	Michaud
1994	Lac Minerals	IP survey	Michaud, Barnet, Guibord
1994	Noranda	Geophysical survey	Guibord
1994	Tandem	TM series, Overburden drilling	Michaud, Guibord
1995	Battle Mountain	Ground Mag / IP Survey,	Michaud, Guibord
1995	Lac Minerals	Drill holes PR-95-01 to 04	Michaud, Barnet
1995	St Andrew Goldfields Ltd.	Airborne Mag Survey	Michaud, McCool
1996	Barrick	MN96 series drill holes, Geophysical interp, Mag survey	Michaud

Year	Company	Exploration	Township
1996	Battle Mountain	Geophysical surveys (IP and Mag), geological report, prelim, drill holes PL96-1 and 2	Michaud
1996	Lac Exploration	Drill hole MM94 and MM95 series	Michaud
1996	Moneta	IP survey	Michaud
1996	Tandem	Drill holes 96-01 to 96-04	Michaud
1997	Battle Mountain	Drill holes PL96-1-2, PL97-3 to 5	Michaud
1997	Beagan	Mag and VLF survey	Michaud
1997	Lac Exploration	Drilling report, MN97 series	Michaud
1997-1998	Moneta	IP surveys	Michaud
1998	Totem	Exploration summary	Michaud, Garrison
1999	Hagen	IP survey	Michaud
1999	Kidston	Mag survey	Michaud
2000	Moneta	IP survey	Michaud
2000	Moses	OPAP, Soil geochemistry survey	Michaud
2002	Moneta	Ground mag (26.3 line km) and IP survey (6.1 line km)	Michaud
2001	Moneta	Drill holes M-01-225 and 226	Michaud
2002	Moneta/Acrex	Drill holes MA02-01 to 09	Michaud
2003	Moneta/Acrex	Drill holes MA03-10X to 14	Michaud
2003	Moneta	Drill holes M-03-236 to 239	Michaud
2004	Moneta/Acrex	Drill holes MA04-15 to 26	Michaud
2004	Moneta	Drill holes M-04-257 and 258	Michaud
2005	Moneta/Acrex	Drill holes MA05-27 to 32	Michaud
2006	Moneta/Acrex	Drill holes MA06-33 to 37A	Michaud
2007	Moneta/Acrex	Drill holes MA07-38 to 42	Michaud
2007	Moneta	Drill holes MWJ07-01 to 03	Garrison
2008	Moneta	Drill holes MWJ08-05 to 22	Michaud
2008	Moneta/Acrex	Drill holes MA08-43 to 50	Michaud
2008	Moneta	Drill holes M-08-259	Michaud
2009	Moneta	Tuned gradient IP survey	Michaud
2009	Moneta	Drill holes MWJ09-23 to 31	Michaud
2010	Moneta	Borehole 3D Resistivity/IP and Infinity TEM	Michaud
2010	Moneta	Drill holes MSW10-162 A, B, D, G, MM97-203X and MSW10-260 to 276	Michaud
2010	Moneta	Drill holes M55-10-01 to 36 and MWJ10-32 to 33	Michaud
2011	Moneta	Drill holes MPL11-01 to 09, MWJ11-34 to 59 and MSW11-277 to 294	Michaud
2012	Moneta	Drill holes MSW295, 296, 299 to 309, M55-12-37 to 39, MWJ12-60 to 79	Michaud

The diamond drilling listed above is discussed in Section 10.

In 1986 to 1987, Moneta carried out magnetometer, induced polarization and VLF-EM surveys which were followed by diamond drilling and reverse circulation drilling, discussed in

Section 10. As a result of this work, Moneta discovered the South West deposit gold mineralization. MPH Consulting Ltd. compiled and interpreted the geophysical data in a report written in March, 1988.

In 1991 a geophysical data compilation and interpretation was undertaken for Independence Mining Company Inc. utilising existing ground magnetics and IP geophysical data.

In 1994 to 1995 additional work by Lac Minerals, during its option period, included detailed ground magnetics on local grids (1996), GPS surveying, internal resource estimates, and preliminary metallurgical testing.

Since the end of 2012, exploration work has primarily been diamond drilling that focused on the expansion and better definition of known gold mineralization areas. This work was completed by or for Moneta and is documented in Section 10.

Magnetic data originally collected by Saint Andrews Goldfields covering the Golden Highway project area were provided to Fathom Geophysics by Moneta for geophysical processing in 2012. These data were processed by a suite of standard filters and Fathom Geophysics' structure detection filter, radial symmetry filter and complexity analysis were applied to the data. A series of digital images and maps were produced from the data (Daniel Core, 2012).

In 2016, and to supplement internal magnetic interpretations, Moneta outsourced a comprehensive interpretation of the high-resolution airborne magnetics available for the Golden Highway to independent consultants. Several high priority target areas were identified, and correlated with the extensive property drill database, increasing the level of confidence of these areas for potential gold mineralization. A test of an advanced AMT (audio magneto-telluric) geophysical survey was conducted in 2016.

Due to the complete coverage of the mineralization by overburden of moderate depth, Moneta did not complete any trenching or grab or channel sampling on the property.

While it may have been used to guide early drill hole spotting, none of the geophysical data were reviewed by the QP or used for, or having bearing on, the mineral resource estimate presented in this report.

10.0 DRILLING

Historic drilling on the Golden Highway Property is covered in Section 6.

10.1 PRE-2013 MONETA DRILLING

After the 1986 initiation of exploration by Moneta, and the completion of the magnetometer, induced polarization and VLF-EM surveys, diamond drilling and reverse circulation drilling commenced. By 1988, 93 diamond drill holes (M-87 series) and 132 RC holes had been completed.

In 1989, UNOCAL Canada Ltd. optioned the property and completed two phases of drilling comprising 9,246 m in 44 holes primarily along the DPFZ (MU series). A total of five drill holes (1,178.20 m) were completed on the South West Zone as part of this drill program. UNOCAL dropped its option in the same year.

From December, 1994 to April, 1995, Lac North America Ltd. (a subsidiary of Barrick Gold Inc.) drilled 4,583 m in 11 holes (MM series). Three were drilled on mineralized zones (North Zone) associated with the DPFZ, and eight on the South West Zone. In 1995 to 1996 additional drilling took place for a total of 11,534 m in 23 drill holes. Ten holes were drilled on the South West Zone, nine holes on the Last Chance Zone, and four holes were exploration holes on what is now the Far West Block (former the 04 Extension Zone). In 1997, Lac drilled an additional 44 holes (22,270 m) on the greater South West Zone (MN series). The property was returned to Moneta in 1998.

In 2002 the Moneta/Acrex drill program consisted of 9 drill holes for a total of 3,038.5 m. Holes were drilled into several zones; four in the three blocks of the South West Zone, one into the Far West block area, two into the 55 Zone, and two north of the South West Zone Central Block.

In late 2003 and continuing into 2004, three new drill holes were completed by Moneta/Acrex in the 55 Zone and one was deepened. An additional 13 holes were drilled approximately 2 km to the west. In total, 4,940 m were drilled of which 793 m were drilled in the 55 Zone, with the remaining 4,147 m on the newly discovered Western Zone.

From 2005 to 2006 the Moneta/Acrex JV completed 6 infill drill holes totalling 2,142 m on the 55 Zone including an 800-m westerly step out.

In 2007, Moneta acquired Newmont's operating interest the Windjammer property and completed three drill holes totalling 988 m on Windjammer South.

In 2008, a drill program totalling 6,914 m in 21 holes, was completed by Moneta on the Windjammer South Zone.

Also in 2008, the Moneta/Acrex Joint Venture completed an 8-hole, 2,449 m drill program, on the 55 Zone increasing drill data density for potential resource modelling.

In 2009 Moneta completed a 9-hole drill program totalling 4,753 m and 2 drill hole extensions (281 m) in the Windjammer South, Central, and North zone area.

2010 saw a significant increase in the drilling program, with drilling taking place in all three known zones. In the 55 Zone drill holes M55-01 to 36 were completed. In Windjammer South holes MWJ10-25 and 29 to 32 were completed for a total footage of 1,475 m. Drill holes MWJ10-29 and 30, as well as the extension of MWJ10-25, profiled the area that is now part of Windjammer Central. Holes MWJ10-26 to 28 were drilled in the Windjammer North area. South West Zone drilling included holes MSW10-260 to 273 for a total of 7,375 m and included numerous wedges from several deeper mother holes.

2011 drilling focused on Windjammer South and the eastern and deeper portions of the South West Zone. Windjammer South drilling consisted of holes MWJ11-35 to 50 for 6,400 m. South West Zone drilling completed the deeper phase of drilling with holes MSW11-278 to 282, 284 and 285 for a total of 4,375 m (Puritch et al., 2012).

Figure 10.1 shows the known drilling completed on the property prior to 2012.

10.2 DIAMOND DRILLING 2013 TO 2018

Since the end of 2012, exploration activities at the Golden Highway Project gold deposits have consisted of several diamond drilling programs. The 2013 drilling program included advancing the 2012 NI 43-101 mineral resource areas to higher confidence categories, drilling Windjammer Central to the west and establishing a better linkage to Windjammer South, advancing the Gap area and better defining its linkage to both the South West and Windjammer South (Puritch et al., 2012). The 2014 exploration activities were successful in identifying and expanding the Discovery Zone immediately adjacent to the modelled Windjammer North 2012 NI 43-101 open pit.

The 2017 to 2018 winter drill program was conducted from September, 2017 through to the end of April, 2018. It focused on the South West deposit, where 45 drill holes for 29,803.90 m were completed. The remainder of the program tested the Discovery, Gap, 55, Windjammer North and LC areas. The drill program was designed to verify and extend newly interpreted zones of higher grade gold mineralization which had been identified after a technical review of all property drill targets was completed over the summer of 2017.

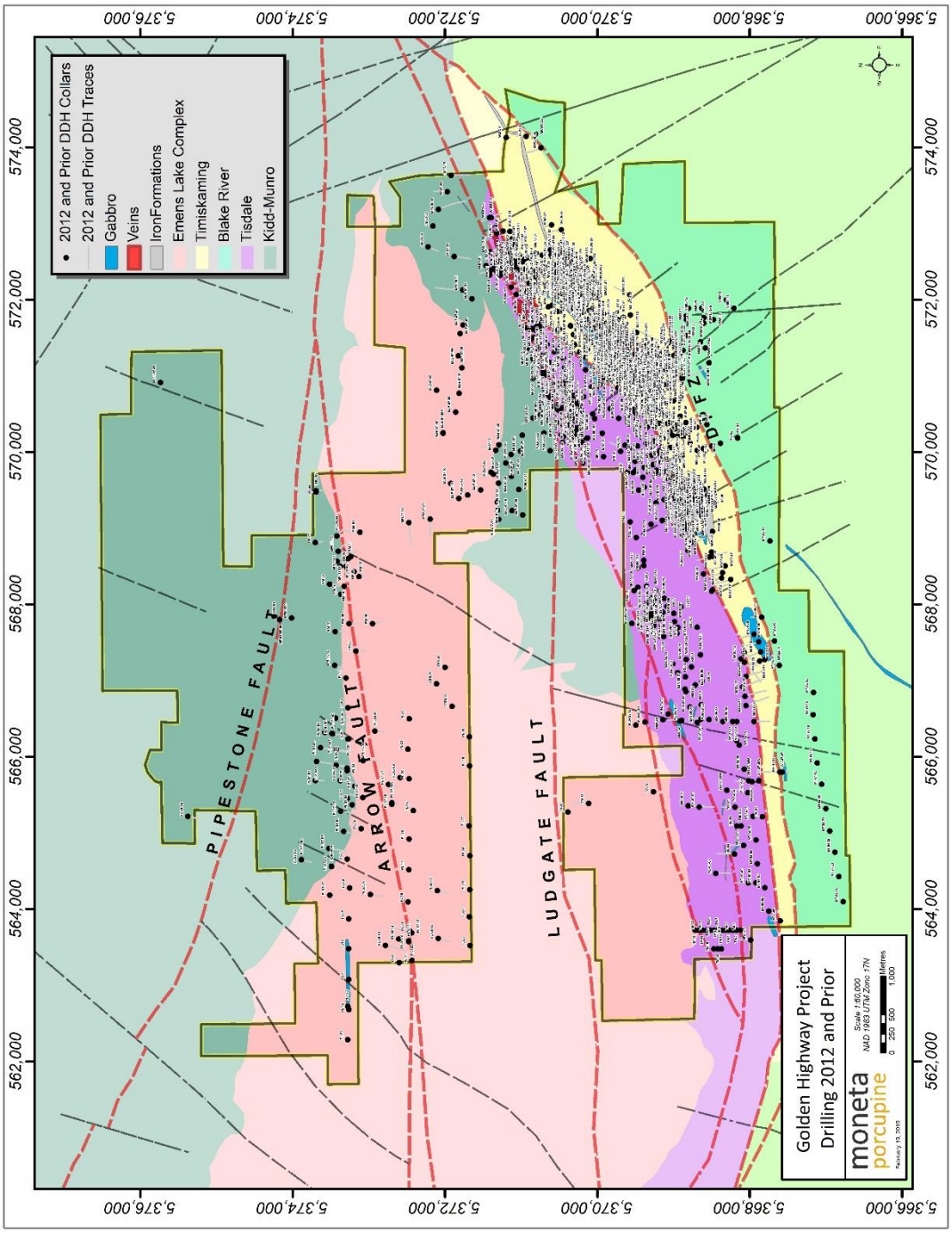


Figure 10.1
Pre-2012 Drill Hole Collar Locations

An additional eight drill holes for 3,551 m were drilled on the South West and Windjammer South deposits areas during the summer of 2018. This included seven holes for 2,903 m at South West and one hole of 648 m at Windjammer South. The drilling was conducted as infill drilling on newly discovered vein and stockwork zones to enable the zones to be included in the new resource estimate. Holes MGH18-101 to MGH18-108 were drilled by NPHL, from July 31, 2018 to September 4, 2018.

There has been a significant amount of diamond drilling since 2013 which is summarized in Table 10.1. All drill holes were completed with NQ size core.

Table 10.1
Moneta Diamond Drilling 2013 to 2018 Golden Highway Property

Program	Drill Hole Series	Total No. Drill Holes*	Total Metres
2013-2014	MGH13-001 to 105A	112	49,719
2016	MGH16-001 to 011	11	6,052
2017-2018	MGH17-012 to 100	102	49,817
2018	MGH18-101 to 108	8	3,551
		Total	**109,139**

*Includes abandoned and extended drill holes.

The 2013-2014 exploration was focused on drill programs to expand and better define the in- and out-of-pit October, 2012, NI 43-101 resource estimate. Moneta completed 112 holes over the course of two years, equivalent to 49,719 m of drilling. The 2013 to 2014 drilling was carried out by Norex Drilling limited (Norex) of Porcupine, Ontario.

In 2015, there was no drilling on the Golden Highway project.

Moneta completed 11 drill holes in 2016 totaling 6,052 m. This drilling was carried out by Norex. A western North corridor volcanics target (Destor West), delineated by an advanced AMT (audio magneto-telluric) geophysical survey, was tested in 2016, by drill holes MGH16-004 and 006 (1,667 m). The remaining holes of the drill program (2,937 m), stepped out 700 to 1,400 m southwesterly along strike of the DPFZ from the LC Zone.

In 2017, exploration was comprised of two drill programs. In early 2017 the first drill campaign consisted of 25 drill holes and 3 drill hole extensions, drilled for 11,781.22 m (MGH17-012 to 035). Drilling was targeted at areas outside of the 2012 resource estimate and notably along the north branch of the DPFZ in the LC and Twin Creeks areas where, historically, gold mineralization had been intersected.

During late 2017 to early 2018, Moneta conducted drill testing of mineralized targets generated in the technical review. The program involved up to six contract drill rigs being mobilized to the Discovery, South West, Gap, 55, Windjammer North and LC target areas as well as earlier on the Twin Creeks target. Holes MGH17-012 to MGH17-055 were drilled by Norex of Porcupine, Ontario. Holes MGH17-056 to 070 were drilled by Roullier Drilling of Amos,

Quebec and/or NPLH Drilling (NPHL) of Timmins, Ontario. Holes MGH17-071 to MGH18-100 were drilled by NPHL. A total of 38,715.1 m was drilled in 78 holes (MGH17-037 to MGH18-100), from September 11, 2017 to April 26, 2018.

A table of all drill holes included in the database provided to Micon are set out in Appendix 2. Not all of the holes in the database were used in the resource estimate. As discussed above, only the post 1987 drilling, for which Moneta has the remaining core, were used in grade estimation for the mineral resource reported herein.

The post 2012 drilling was largely targeted at the zones considered for the mineral resource estimate presented in this report. The drill hole collar locations are shown in Figures 10.2 to Figure 10.4.

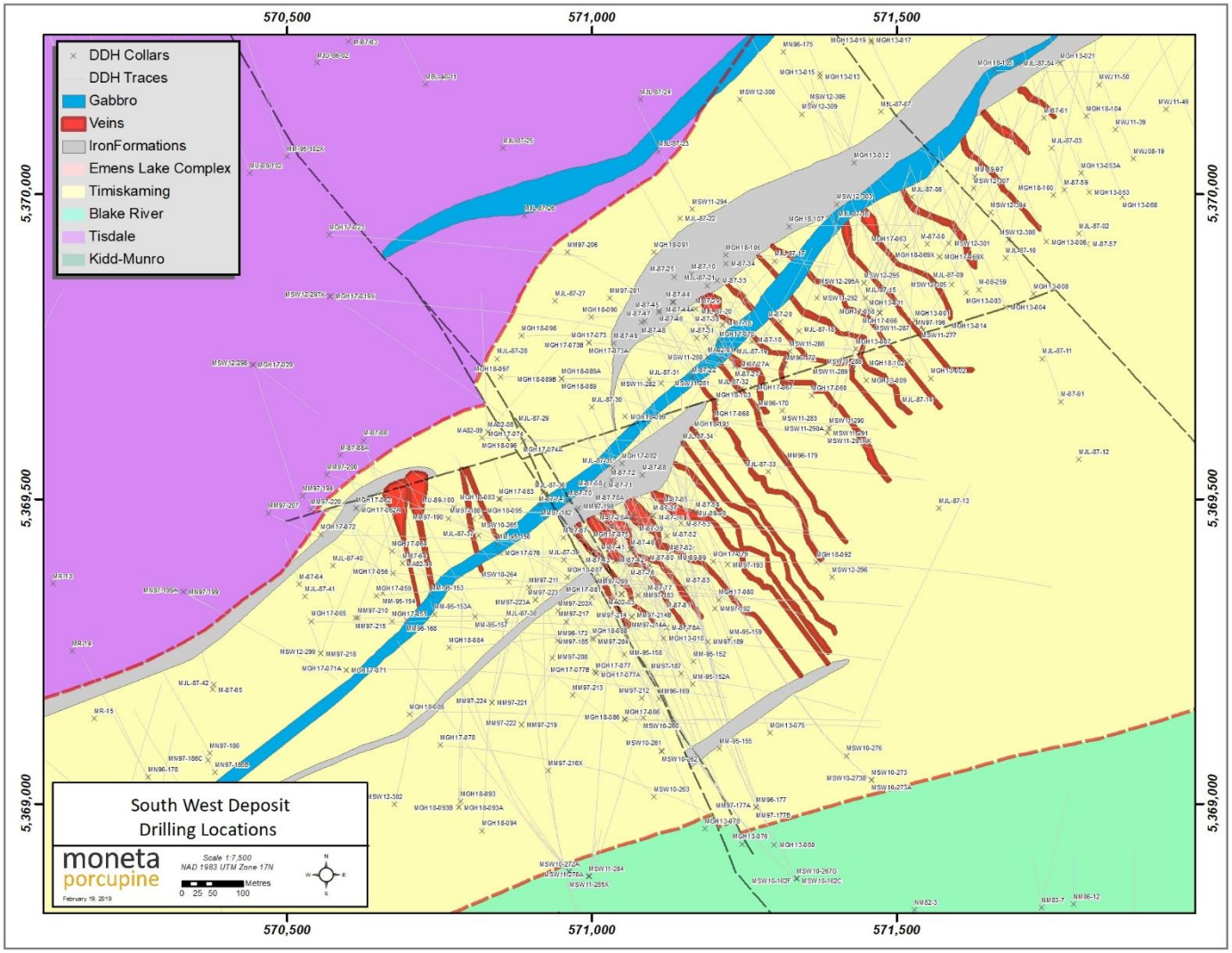
10.3 DRILLING PROCEDURES

Knowledge of the drilling procedures used in the pre-Moneta drilling (1986) is limited. Only the 1987 onwards drill hole assay results were used for the mineral resource estimate. Moneta has all of the core from 1987 on.

Drill hole collars were positioned by Moneta personnel with a hand-held GPS unit. All diamond drill holes were aligned by drilling crews employing an Azimuth Pointing System (APS) rented from Reflex instruments of Timmins Ontario. The Azimuth Pointing System (APS) is a GPS-based compass that provides a True North Azimuth measurement and position. Since the APS is not using the earth's magnetic field to determine the azimuth, it is not affected by ferrous anomalies (metal) from the ground or surrounding structures.

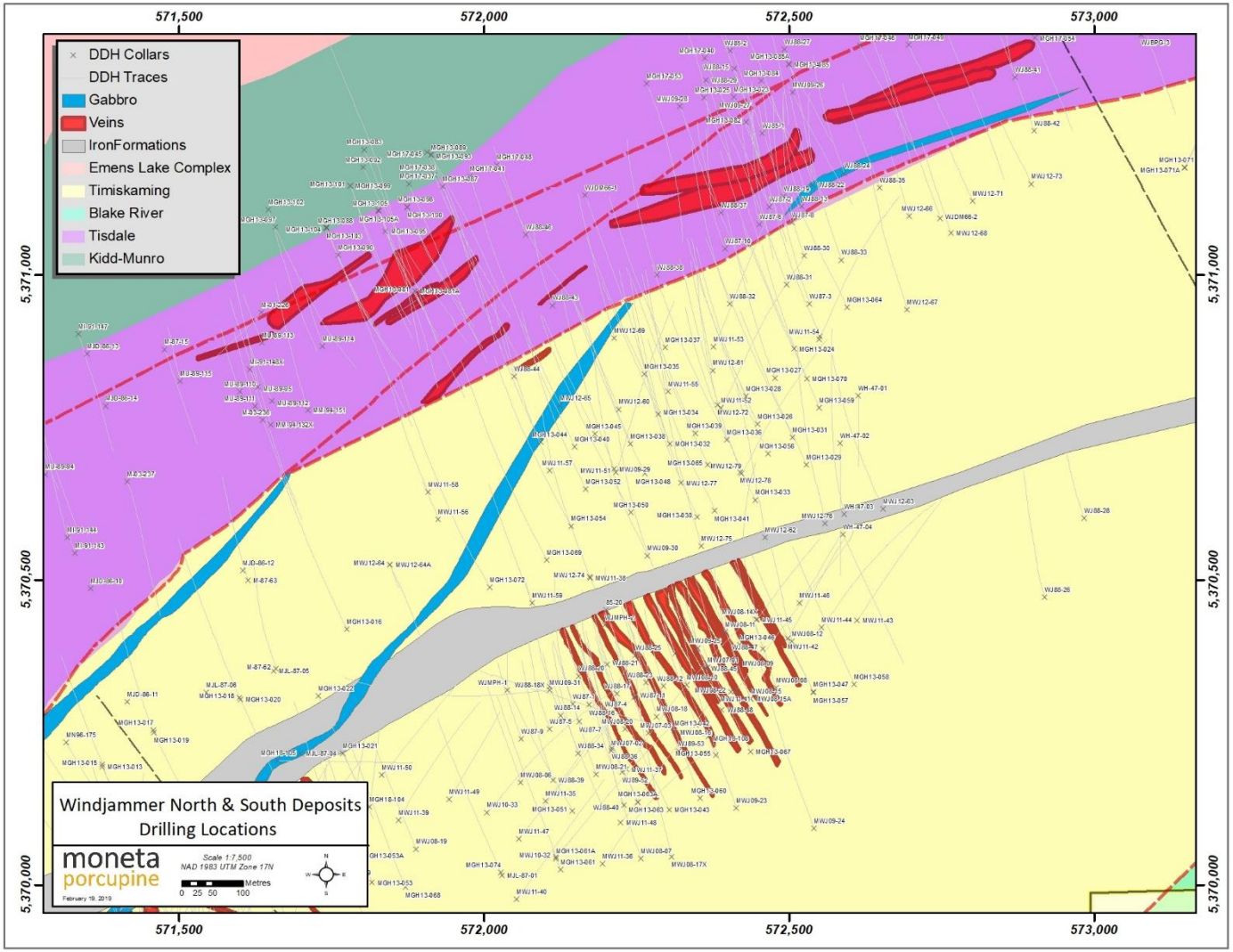
The APS uses two antennas to calculate an azimuth solution. The APS surveys the drill hole collar coordinates and elevation in UTM coordinates (NAD83) utilizing total station GPS instrumentation. These data were recorded and subsequently entered by Moneta personnel into a computer database. As a verification of the initial GPS collar co-ordinates, after demobilization of the drill rig off the hole, Talbot Surveys Inc. of Timmins Ontario surveyed the top of the drill hole casing with a Topcon Hiper II Real time GPS system. The Topcon Total Station survey instrument was utilized by Talbot Surveys to measure the drill hole casing azimuth and inclination.

Figure 10.2
South West Deposit Current Drill Hole Locations



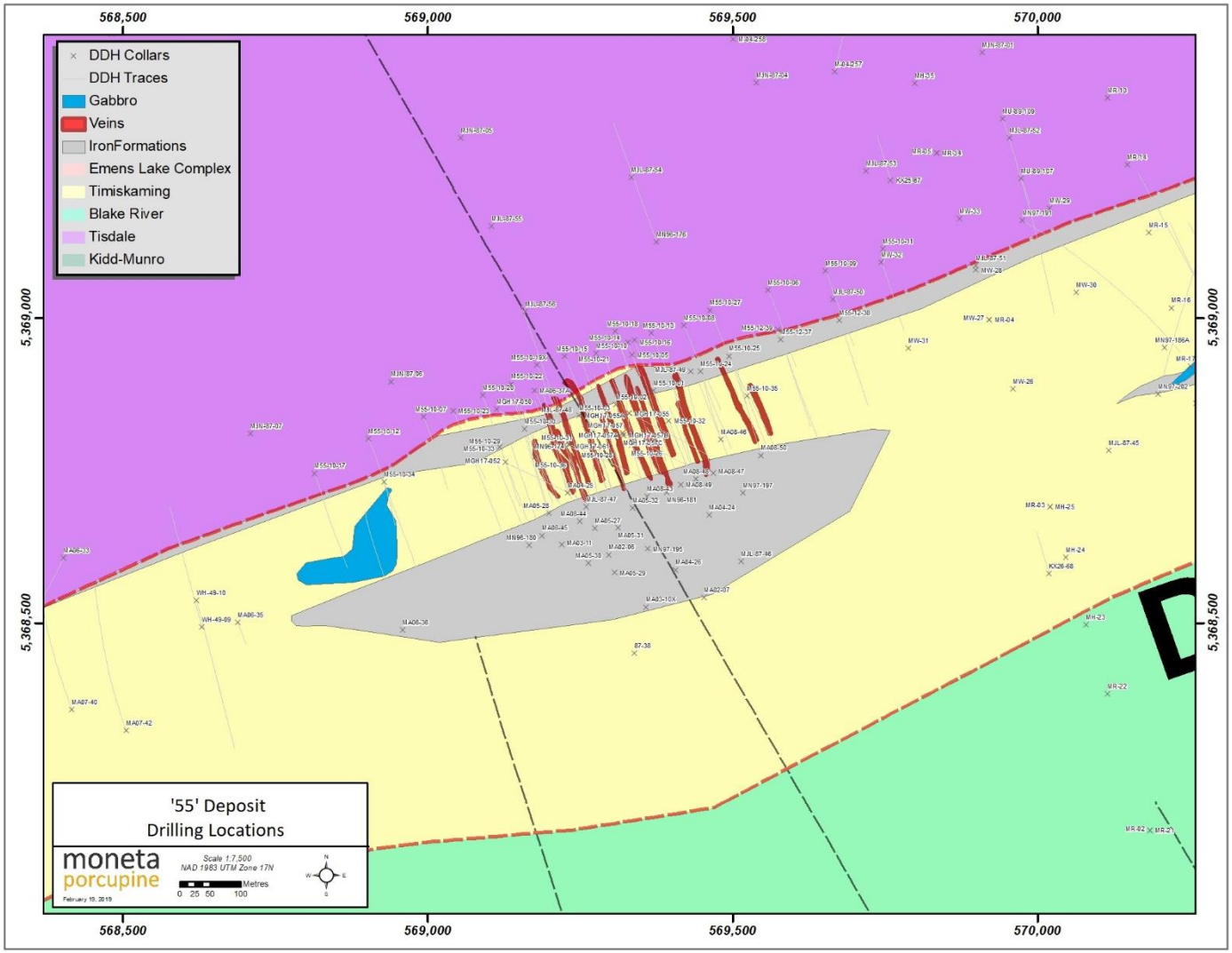
Source: Moneta, 2019

Figure 10.3
Windjammer North, Central and South Deposits Current Drill Hole Locations



Source: Moneta, 2019

Figure 10.4
55 Zone Current Drill Hole Locations



Source: Moneta, 2019.

During drilling, the contractor conducted down hole surveying utilizing a Reflex EZ-Shot®, an electronic single shot instrument. It accurately measures six parameters in one single shot, azimuth, inclination, magnetic tool face angle, gravity roll angle, magnetic field strength and temperature. Single shot tests were taken 15 m or so below the casing and every 60 m down the drill hole. Upon completion of a drill hole, a gyroscopic survey of the hole was completed by the drill crew. The gyroscopic survey utilized a Reflex IQ Logger structural EZ-Gyro instrument and azimuth/inclination readings were taken every 10 m downhole. The gyroscopic survey results superseded the Reflex single shot results for drill hole orientation and the Talbot surveyed collar azimuth/inclination in the computer database.

Casing was left in each of the holes and the stand pipes were capped.

Industry standard core sampling protocols were used by Moneta on all drill holes. These protocols are documented in a hard copy Moneta sampling procedures manual, which are described in this section.

At the drill site, the drilling contractor places drill core into wooden tray boxes along with marker blocks to indicate measured distances down the drill hole from the collar. Drill core was also oriented by the drilling contractor personnel for most holes from MGH16-001 to MGH18-108. The orientation involved using the Reflex Act III instrument, with the orientation mark indicated at the end of a core run (3 or 6 m interval), on the bottom of the core.

During drilling programs, drill core was collected by Moneta technicians at the drill sites or the drill access trail every drilling day and transported to Moneta's core logging and storage facility. The secure facility is located at 2679 Highway 655, Timmins, Ontario.

At the logging facility, the length of drill core recovered was compared to the position of depth markers in the core boxes by a technician or geologist in order to check for misplaced markers and to measure core boxes for tagging. After core measuring, a Moneta technician or geologist cleans the core if necessary, completes a geotechnical log of core recovery and Rock Quality Designation (RQD, percentage of the core run with individual pieces longer than 10 cm) measurements, on the core.

Prior to logging, the core bottom orientation line is drawn on the core. This is accomplished by locating the core bottom mark scribed by the drillers at the end of a core run, then rotating and aligning the core so that core bottom mark is placed at the edge of the core box or edge of a 1.5-m long angle iron. A solid line was then marked with a wax marker along the edge producing the core orientation line. If the drill core was not oriented, the core was rotated so the foliation is perpendicular to the edge of the core box/angle iron and a dashed line is marked on the core.

The core is then logged and sampled by qualified geologists. Geological descriptions of the core and sampling intervals with corresponding identifier numbers were entered onto a

diamond drill log record captured on a laptop computer. In addition, orientation measurements (α and β angles) are recorded of structures and veins utilizing a kenometer.

Bulk density measurements were taken every 20 m down the hole using the water immersion technique. Tighter spaced measurements at approximately 6 m through mineralized and altered halo zones of target zones were taken. This was to ensure that the bulk density (g/cm^3) of the various mineralization host units could be utilized for the resource estimation (see Section 11.5.3).

Sampling of the core was based on visual observations of rock type, alteration intensity, quartz and quartz-carbonate vein intensity, and/or sulphide mineralization. The samples were collected within lithologically homogeneous intervals with due regard for varying mineralogy and textures. Generally, the sample length within mineralized zones was on the order of 0.3 to 1.0 m, with non-mineralized samples up to 1.5 m. Sample intervals did not cross lithological boundaries in the 2017 to 2018 drilling programs. Core with visible gold (VG) was noted on the sample tag with VG to enable the laboratory to clean the sample preparation equipment after this sample to avoid contamination. All logging is recorded directly to laptop computers and completed drill logs and sample tables are stored offsite on a company server which is routinely backed up.

After lithological logging and sampling, a Moneta geologist took digital photographs of the core (dry and wet). Moneta has a vast collection of core photographs dating back to 2004 and hole M-04-257. The NQ core selected for sampling was cut in half along the core orientation line using an electric diamond core saw with continuous fresh water flushing, and half-bagged with the first part of a three-part assay tag bearing a unique identifier number. The other half of the core was stored at the logging facility with the second part of the three-part assay tag number placed in the core box at the beginning of the sample interval. Records of the sampled intervals and sample numbers are recorded in the computerized drill logs, and the third part of the assay tag is filed.

The sawn and unsampled whole drill core from the 2013 to 2018 drill programs is securely stored on core racks at the Moneta core logging/storage facility, 2679 Highway 655 in Timmins.

10.4 CONCLUSIONS

The QP has examined the logging procedures used and described above. In the opinion of the QP, Moneta personnel have used industry standard best practices in the collection, handling and management of drill core and assay samples.

The QP is not aware of any drilling, sampling, or recovery factors that could materially impact the accuracy and reliability of the results presented in this report.

11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

11.1 GENERAL

The master assay database has been compiled by Moneta incorporating all available records and then used for the purposes of the resource estimate presented in this report. The data used for resource estimation does not include any assays from pre-1986 work. Moneta has the entire core, pulp rejects, and coarse rejects dating from 1986 catalogued and stored in the company's secure core logging-sampling facility located in Timmins. Data entries have been verified and scans of paper drill logs and assay certificates are available.

11.2 HISTORICAL SAMPLES

Historical drilling and geological data were sourced from government assessment and company files and considered indicative of geology and mineralization. Older (pre-1980) assay results may not be reliable and core sizes ranged from AQ to NQ. The pre-1986 assay data were not used for resource estimation but the logging may be used for drill hole planning.

More recent drill programs since 1986 have primarily used BQ and NQ sized core with some HQ, as determined by drilling situations and program design at the time. Results from these programs are believed to be reliable with the inclusion of extensive duplicates and metallic analyses when warranted. Moneta drill results from 1986 to 1987 have been tested and confirmed by Lac Minerals (Barrick 1994 to 1995) resampling. Noranda drill results to 1989 have also been verified by resampling and twinning of two drill holes as detailed by Cargill (2008). Significant drilling within the historical drill patterns in the zones has generated similar results. Recent sampling conducted in 2017 and 2018 of 1980's core has continued to validate the original data.

A variety of analytical laboratories have been used over the course of the various drill programs. Moneta drill programs from 1986 to 1987 used Bell-White Analytical Laboratories Ltd. (Haileybury) and, later in the programs, Swastika Laboratories Ltd. (Swastika) in Kirkland Lake and Bondar Clegg (Ottawa), now ALS-Chemex. Lac Minerals (Barrick) also used Swastika Laboratories in Kirkland Lake. The Swastika Laboratory is still in operation. Moneta used Laboratoire Expert (Rouyn-Noranda, Quebec) and Activation Laboratories (Timmins) over the period 2011 to 2012. Both laboratories are still operating.

Past programs, in particular the Lac Minerals (Barrick) and Unocal drill programs, used offsite facilities to log and process core. In the case of Barrick it was the Holt-McDermott mine site approximately 20 km to the east along Highway 101, while Unocal used the Perry Lake Lodge also on Highway 101 and adjacent to the current property. Moneta's drill core samples have routinely been collected at the company's core logging and storage facility, a gated area in Timmins where all core, pulps and rejects from post 1986 drilling are stored. (See Figures 11.1 and 12.2.) A permanent insulated building, suitable for winter operations, is available for core logging and sampling including diamond saws, office area and core logging and display areas. Drill core samples were typically picked up by laboratory personnel or delivered directly

to the laboratory for preparation and analysis, or to a secure lockup to be shipped by bus, as required.

Figure 11.1
Moneta Core Logging and Storage Facility

Source: Moneta, 2019)

In 1996 Barrick samples were first fire assayed and then analyzed by atomic absorption with a 5 ppb detection limit. Samples with values greater than 500 ppb were reanalyzed using a standard gravimetric fire assay technique including check assays.

From 2002 to 2004 Moneta core samples were assayed at Swastika Laboratories using a 30 g aliquot for NQ core and 2 x 30 g aliquots for HQ core giving a representative 1 assay ton sample portion. Samples were analyzed by fire assay with an atomic absorption finish with a 2 ppb detection limit. Gold values greater than 1.0 g/t Au, were reassayed by standard gravimetric fire assay with a detection limit of 0.03 g/t Au from the same prepared pulp.

Screen metallics assays were completed on any samples with visible gold observed in core. A random 41 samples were sent to Bondar Clegg as third party checks using the same primary pulp. Also, in 2004 additional duplicate assays from coarse reject material were completed on all assays over 5 g/t Au at the primary laboratory. Later screen metallic fire assays were

performed on samples defining zones from both geological and gold content considerations. Adjacent flanking or low gold grade samples were also included. Internal pulp repeat analysis on the same original pulp was completed by Swastika on a regular basis and up to 15% of the pulps representing a range of results were submitted to ALS Chemex as checks for third party quality control.

11.2.1 Quality Assurance/Quality Control

A Quality Assurance/Quality Control (QA/QC) program was established. Standards and blanks were routinely submitted in the sample stream, assayed and reported by the laboratory for at least every 30 samples. The analytical methods for the standards and blanks were as per the original sample. Samples containing visible gold may have been subjected to a metallic sieve assay and a check assay, should repeated check samples show significant variability.

11.3 2007 TO 2013 SAMPLING METHOD AND APPROACH

The methods described in this section were utilised by Moneta from 2007 until 2013.

In the course of the drill program regular core pick-up runs were made to the drill site by pickup truck on an as needed basis but generally daily or after two productive drill shifts.

All mineralized sections of drill core considered significant were marked and tagged to be split using a diamond saw with continuous fresh water flushing. One core half was retained as a reference sample while the other was bagged and shipped for assay as directed by the project geologist and Qualified Person. Sample intervals and corresponding sample numbers were entered into the standardized core log sheets by computer. Sample lengths were determined by the geologist logging the core with samples ranging from 0.20 m to 1.50 m in length. Typical sample lengths were 0.50 to 1.00 m. The samples selected for assay were batched with standards and blanks included, to be shipped to appropriate laboratories by bonded commercial carrier from secure lockups.

Results were first reported electronically for direct database entry, followed by certified assay certificates.

11.4 2007 TO 2013 SAMPLE PREPARATION AND ANALYSIS

Swastika Laboratories Ltd., Laboratoire Expert, and Activation Laboratories were used for analysis. They participated regularly in the Proficiency Testing Program for Mineral Analysis Laboratories (PTP-MAL) administered by the Standards Council of Canada and maintain Certificates of Successful Participation in Proficiency Testing for gold, and other elements.

At Swastika the samples were dried and crushed to approximately six mesh. A Jones riffle splitter was used to take a 400 g sub sample for pulverizing with the reject portion bagged and stored. After reducing the 400 g sub sample to 80% passing -100 mesh, the sample was thoroughly blended and a 29.166 g portion (one assay ton) used for fire assaying. Assayed

samples were finished by Atomic Absorption. Those which returned value of greater than 2 g/t Au were reassayed and finished gravimetrically. Repeat or check assays were run by the laboratory on at least one in every 10 samples on the original pulp or on a second pulp prepared from the reject. Additional checks were provided in a number of instances when an assay was greater than 2 g/t.

Laboratoire Expert Inc. (Rouyn-Noranda, Quebec) undertook the primary analytical work since 2009 with third party check analyses conducted by Activation Laboratories (Timmins/Ancaster). Prior to 2009, Swastika Laboratories Ltd. undertook the primary analytical work with third party check analyses conducted by Laboratoire Expert Inc. Blank material utilized was commercial landscaping marble.

One standard and blank were included within every batch of 24 samples sent to Laboratoire Expert, the primary laboratory.

Typically core samples were dried, crushed by jaw crusher and further reduced to approximately 6 to 10 mesh using a rolls crusher. The jaws and rolls were cleaned with a wire brush and air jet and the processing of barren material. A Jones riffle is used to take a 300 to 400 g sub-sample for pulverizing. The remaining reject portion was bagged and stored. After reducing to a nominal -100 or -200 mesh with a pulverizer, the sample was thoroughly blended and sent to the fire assay department. A 1-assay ton portion (29.166 g) was used for fire assaying. This process results in a particle of gold that, in the normal assay method, is weighed (gravimetric).

For screen metallics gold assays, the total sample is dried if necessary, crushed and pulverized, then screened using a 100 mesh screen. The -100 mesh portion is mixed and assayed in duplicate by fire assay with a gravimetric finish as well as a complete digestion of the +100 mesh portion. All individual assays are reported as well as the final calculated value. For geochemical analysis or where lower detection limits are required, the gold is dissolved and determined by Atomic Absorption Spectrophotometry. This was done after collecting the precious metals with a fire assay fusion.

Third party checks and pulp repeat analyses were conducted regularly on the same original pulp and duplicate sampling was occasionally conducted on a second pulp prepared from the stored coarse reject. Analytical standards (also known as certified reference materials, CRM) and blanks were also used for control samples. Selected samples, determined based on showing significant variability, defining zones, or having noted visible gold during logging, are reprocessed using screen metallics assay methodologies. Up to 15% of all pulps collected using a range of values are reassayed by the second third party check laboratory (Activation Laboratories or Swastika) using internal standards. Results were monitored and repeat analysis completed when required. Coarse rejects and all prepared pulps were stored for any additional analytical work.

Results >1.0 g/t Au were automatically repeated using gravimetric FA methods, >10 g/t Au were reassayed as second cuts from the reject, and >20 g/t Au were subject to metallic gold

assays. Assay results were then reported over the drilled widths using the either the first primary analysis or what was considered to be the most complete and accurate method (the gravimetric fire assay or the screen metallic assay if conducted).

11.5 2016 TO 2018 SAMPLE PREPARATION AND ANALYSIS

11.5.1 2016 To August 2017 Sample Preparation And Analysis

For the 2016 to August 2017 program, using the same core logging, data entry and sampling procedures, three standards and two blanks were included within every batch of 74 samples sent to the primary laboratory of SGS Laboratories in Cochrane and collected from the secured Moneta core logging and storage facility located in Timmins. The batches were collected by SGS personnel from the core facility and driven directly to the laboratory.

Typically core samples are dried, crushed by jaw crusher and further reduced to approximately 75% passing 10 mesh (2 mm) using a roll crusher. The jaw crusher and roll crusher were cleaned with a wire brush and air jet as well as barren material flush. A Jones riffle was used to collect a 250 g sub-sample for pulverizing. The remaining reject portion was bagged and stored. After reducing a nominal 85% passing -200 mesh (-75 µm) with a disc pulverizer, the sample is thoroughly blended and sent to the fire assay department.

A 1-assay ton portion (~30g) was used for fire assaying with an ICP-AOS finish. The detection limit of this was 0.001g/t Au and the upper limit was 10g/t Au. Samples above 3g/t Au were analyzed by fire assay with a gravimetric finish. This final assay is determined by weighing the final prill (gravimetric).

Samples above 20g/t Au from gravimetric assaying were subjected to a metallic screen fire assay of the total sample. The total sample is dried crushed and pulverized, then screened using a 100 mesh screen. The -100 mesh portion is mixed and assayed in duplicate using two 30g fire assay charges with a gravimetric finish. The entire +100 mesh portion is analyzed by fire assay with a gravimetric finish. All individual assays are reported as well as the final calculated (weight averaged) value. Independent certified standards were sourced from OREAS through Analytical Solutions Ltd.

Assay results were then reported using drilled widths and gold values, the reported value is the first ICP-AOS result, replaced by the first Gravimetric result if that was run, replaced by the metallic screen result if that was undertaken.

11.5.1.1 Repeat Third Party Assay Checks

Repeat or check assays were conducted regularly (every 90 days when pulps were returned from the laboratory) on the same original pulps, at a third party check (umpire) laboratory, Activation Laboratory in Timmins. Standards and blanks are also inserted in the third party repeat batches as control samples.

A list of samples was prepared taking 3/24 or 9 samples per batch of 74 (~12%) based on 3 value points ~100 ppb, ~1 g/t and ~3 g/t or 3 ppb, 100 ppb and 500 ppb for low result batches. For a batch of 35 samples sent for third party checks, 4 samples consist of standards/blanks, one from each original certificate. The list was printed and provided to the technician with certificate and sample numbers. The pulps were retrieved from each box to make new batches. The batches were delivered directly to the Activation laboratory in Timmins by Moneta personnel in sealed bags, including a digital chain of custody and sample list.

Assaying at Activation Laboratories was performed by 30g fire assay with an AAS finish for samples less than 3 g/t and a 30 g charge with a gravimetric finish for samples above 3 g/t Au.

All coarse rejects and pulps are stored at the Timmins core logging and sampling facility of Moneta for any additional analytical work.

11.5.2 2017 September to Present Sampling Procedures

For the September 2017 to current drilling programs, the same core processing and sampling protocols were followed with a minimum sampling interval of 0.30 m and a maximum interval of 1.50 m, collected from the same right-hand side of the oriented and marked up core. In most cases, a 1.00 m sample was used unless geological contacts meant a shorter sample length was required. The primary laboratory was changed to ALS-Chemex located in Timmins and the secondary umpire laboratory used was Activation Laboratories also based in Timmins. The following QA/QC sampling procedures were followed:

11.5.2.1 Assaying and Sample Preparation Procedures

Delivery: Samples were collected directly from the secured Moneta core facility in Timmins by ALS-Chemex staff upon notification that a batch was ready for pick-up and were delivered directly in sealed rice sacks to the sample preparation facility. Activation Laboratory staff collected the third party check assay samples directly from the Moneta core facility also upon notification.

Preparation: Drill core and rock samples were dried and crushed to 85% passing ~2mm (~10#), a 1kg split using a Jones Riffle splitter was then pulverized to 85% passing 75µm (~200#) at the ALS-Chemex sample preparation facility in Timmins. A 250g split of this pulp was sent directly to the ALS-Chemex assay facility in Vancouver, Canada by ALS-Chemex staff.

Fire Assay Method: The sample was homogenized and a 50g charge assayed by Fire Assay with an Atomic Absorption Spectrometry (AAS) finish analytical procedure. The detection limit of this procedure is 0.001g/t Au and the upper limit is 10g/t Au.

Standards (Certified Reference Material): Standards (CRM's) within drill sample batches were inserted at a frequency of ~1 in 20 (5%) by the logging geologists (3 standards per batch of 70 samples). The standards used covered 3 grade ranges, near cut-off (~0.3g/t Au), average grade

of mineralization in the area (~1.0 g/t Au) and higher grade (3 to 6 g/t Au). Independent certified CRM's were sourced from OREAS through Analytical Solutions Ltd.

Blanks: Blanks within drill sample batches were inserted at a frequency of 2 per batch of 70. Where possible blanks were inserted immediately after high grade samples. Blank material is sourced from clean commercially available landscaping marble.

Pulp repeat sample (Pulp duplicate): The laboratory was requested to produce a second sample repeat from the same prepared pulp twice (2) per batch of 70 samples. This pulp was submitted using a unique sample number and assayed using the same method as the primary sample.

Third party check assays: Repeat samples were selected from 5% of prepared sample pulps and sent to an independent third party laboratory upon receipt of the returned pulps from the primary laboratory and sent to Activation Laboratory in Timmins. Samples were randomly selected to cover the grade range of interest. These sample batches contained new standards at a frequency of ~1 in 20 and blanks at a frequency of ~1 in 20 (5%).

Gravimetric Fire Assay: A fire assay with a gravimetric finish (50g charge) was conducted for all samples over 10g/t Au at the ALS-Chemex Laboratory in Vancouver.

Metallic screen fire assays: These were performed on samples which had been identified by the logging geologist as containing coarse gold or considered to be potentially high grade. The geologist requested this on submission. The metallic screen fire assays were performed on the same initial 1kg prepared pulp with total analysis of the +100mesh fraction and duplicate (2x) 50g fire assays with an AAS finish on the -100mesh fraction. All fire assays were completed with an AAS finish.

Clean Pulverizers: Samples with identified coarse visible gold or high grade were flagged for the laboratory with VG written on the sample tag and a clean quartz flush was requested of the crushing and grinding equipment after preparation of this sample, so as not to contaminate the following sample. Blanks were submitted after potentially high grade samples, as a test for contamination.

Field Duplicate samples (Coarse Duplicates): Upon return of the coarse rejects from the primary laboratory, field duplicates samples were collected from the samples which returned a range of assays (low, medium and high) within all drill sample batches at a frequency of ~1 in 20 (5%) of samples. The field duplicate sample was submitted to the same primary laboratory (ALS-Chemex Laboratories, Timmins) that had performed the initial assay and a second pulp was prepared and assayed by fire assay in the same manner as the primary sample.

Multi-Element ICP Analysis: Multi-element ICP analysis was conducted across mineralized zones and alteration haloes and into wall rock on a regular basis. This involved an ICP-AES analysis of the same prepared pulp at the primary laboratory using a 4-acid digestion and analyzed for 61 elements. The results were monitored to determine if pathfinder or deleterious elements exist.

11.5.2.2 QA/QC Procedures

Laboratory Inspections: Routine visits were made by Moneta personnel to the sample preparation facility to check that samples are being crushed and pulverized to the required size in the correct percentages. Checks were made that the general cleanliness of the facility and the handing of samples were to best industry standards.

Standards: The assay results for certified standards were plotted upon receipt of the initial assays. Anything more than two standard deviations above or below the mean certified result was considered a fail. If more than 4 consecutive assays of the standard fall above or below the mean but within two standard deviations, this was also considered a fail.

Blanks: Any reported assay >0.001g/t Au was considered a fail.

Some judgement was used for the request of reanalysis of entire batches if failures did occur. Should batches contain no detectable assays, then a batch may not be reassayed and if adjacent standards were within acceptable levels then only partial batches may have been reanalysed.

Regular monthly or as required reporting of QA/QC results was maintained, to include a high-level summary of the information contained in the monthly assay tracking sheet. Included was how many samples were submitted, how many standards/blank failures occurred, any sample preparation failures, how many reassays were requested, and laboratory turnaround times, as well as steps to remedy failures. Monthly performance charts displaying all standards and blanks for the month were plotted and identification of any positive/negative bias highlighted for all standards over time. Analysis of the pulp repeat samples was also charted, as well as comparison of third party check assays and coarse field duplicate samples against the primary assay. Internal laboratory QA\QC sampling and analysis, including pulp repeat and assaying of internal laboratory standards, was also assessed.

11.5.3 Bulk Density

Bulk density measurements were collected on roughly one sample in every 6 m of core from cut full core samples. The bulk density measurement method used was the instantaneous water immersion method which records the dry weight immediately followed by the weight in water which is used to calculate the bulk density. The results were entered into the database to correspond with the drill hole number, depth, grade and rock and alteration types.

$GB = \frac{W}{W-Sw}$ Where GB = Bulk Density of the Sample in g/cm^3, W = Dry Weight of the Sample in g, Sw = Suspended Weight of the sample in water, g

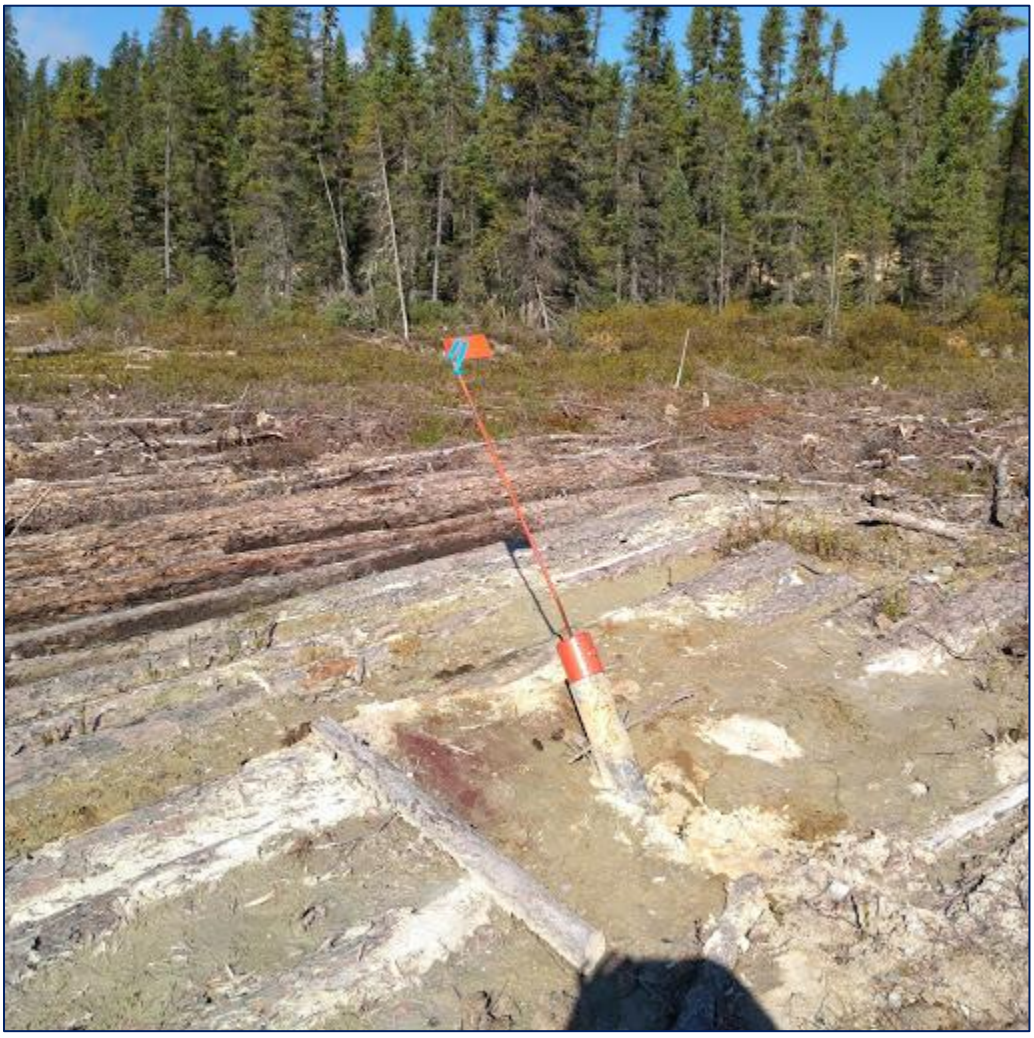
11.6 CONCLUSIONS

The QP is satisfied with the adequacy of the sample preparation, security, and analytical procedures employed and concludes that they have resulted in data suitable for use in a mineral resource estimate.

12.0 DATA VERIFICATION

During the September, 2018 site visit, the QP travelled to the Golden Highway Project field site east of Matheson, Ontario, as required by NI 43-101. While no rock outcrops are available near the mineralized bodies allowing for examination of mineralization in place, there was extensive evidence of previous drilling activity including well-marked drill casings (see Figure 12.1).

Figure 12.1
Drill Hole Casing and Marker Flag



Source: Micon, 2019.

The collar co-ordinates of several of the drill holes were checked against their reported surveyed locations with a hand-held Garmin GPS. Discrepancies noted were typically less than 1 or 2 m.

Moneta maintains a secure core storage yard and logging facility behind a locked gate on Highway 655 in north Timmins (see Figure 12.2). An extensive and well organized core rack system contains much of the drill core from the Golden Highway Project. The core storage yard contains all drill core from the 1980s onward, which is available for review.

Figure 12.2
Moneta Core Stroage and Logging Facility

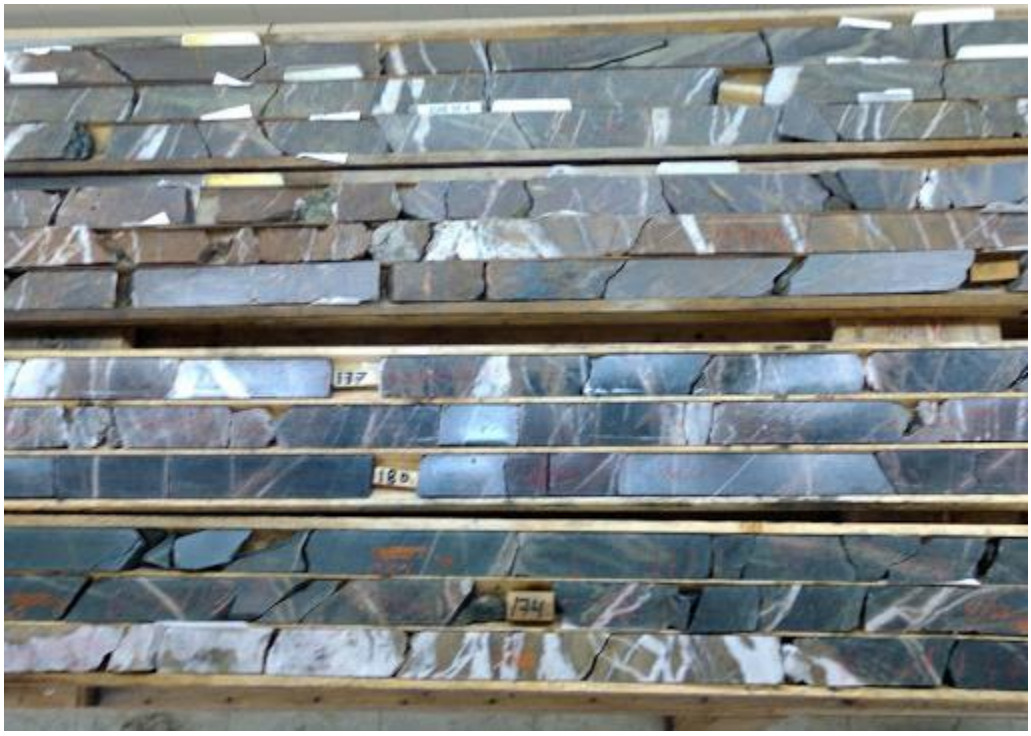
Source: Micon, 2019.

Moneta staff geologists and technicians selected typical mineralized intersections from the Golden Highway Project drill core in the yard and presented them to the QP with explanations of the group's interpretations. Examples of core from 1987 to 2018 were examined. Obvious sign of mineralization and alteration were noted in the core (see Figure 12.3). Occasional examples of visible gold were also noted.

While at the core logging facility, the QP reviewed the core logging, sampling, sample shipment, sample security procedures and QA/QC protocols employed by Moneta staff. The QP also reviewed the equipment and procedures used for bulk density measurement of the drill core.

On the final day of the site visit, the QA/QC program results, data verification, geological modelling procedures used by Moneta personnel and the resulting geological model were reviewed on-screen at Moneta's office on Third Avenue in Timmins.

Figure 12.3
Golden Highway Project Drill Core



Source: Micon, 2019.

While reviewing type examples of mineralization in drill core, four quarter-sawn duplicate samples were collected and submitted to ALS Minerals sample preparation facility in Sudbury, Ontario. The samples were prepared using the Prep 31D method (crush to 90% less than 2 mm, riffle split off 1 kg, pulverize split to better than 85% passing 75 microns) and analyzed by fire assay using the Au-AA26 method (50 g fire assay with atomic absorption finish).

The results obtained are compared to the original Moneta assay results in Table 12.1.

Table 12.1
Micon Check Assays

Hole	From (m)	To (m)	Zone	Original Assay (Au g/t)	Reassay (Au g/t)
MGH-13-10	174.00	175.00	South West	5.38	8.28
MGH-13-10	175.00	176.00	"	4.42	3.18
MGH-13-77	154.50	156.00	Discovery	6.49	6.44
MGH-17-53	462.30	463.27	Windjammer North	10.90	9.78

The assay results received by Micon are considered by the QP to be reasonable confirmation of the presence of gold at approximately the same concentrations as measured by Moneta.

After receipt of the project database from Moneta, the entry of assay results was checked against original assay certificates. The database contained 154,412 records of which 4,176 or 2.7% were checked. No significant data entry errors were discovered.

Moneta tracks the results of its QA/QC samples (standards, blanks and pulp and reject duplicates) using standard control charts. The QP reviewed the QA/QC results and control chart plots prepared by Moneta. These were found to be acceptable.

12.1 CONCLUSIONS

The QP is satisfied that the exploration, sampling, security and QA/QC procedures employed by Moneta, and their results, are sufficient to produce data adequate for the purposes used in this technical report.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

A number of metallurgical test work studies have been completed using samples taken from the property. This includes preliminary leach tests undertaken by Barrick in 1996 and Newmont in 2001.

More recently, a scoping level metallurgical test work program, comprising standard bench scale cyanide leach bottle roll tests and a Bond Ball Mill Work Index test, was completed by SGS Minerals Services (SGS) in Vancouver in 2012. The samples used for the test work program included six composites representing different mineralized zones identified at the Golden Highway Project.

13.1 METALLURGICAL SAMPLES

13.1.1 Historical Testwork (Barrick and Newmont)

Barrick's preliminary program in 1996 used mineralized samples representing the South West deposit. The average gold grade of the mineralized drill core used for the leach tests was 8.00 g/t.

Newmont's 2001 program used four of six samples received from the Windjammer North and South deposits. Of the two rejected Newmont samples, one was determined to be refractory (Windjammer North deposit), based on a poor extraction from a cyanide based analytical procedure, and the second reject sample was considered to be waste.

The average calculated gold head grades from the four fine grind leach tests are shown in Table 13.2.

Table 13.1
Metallurgical Samples (2001) Gold Head Grades

Sample[1]	8 WJN	41 WJN	4 WJS	A WJS
Calculated Head Grade (Au g/t)	4.94	1.15	1.65	0.92

[1] WJN = Windjammer North Zone, WJS = Windjammer South Zone.

13.1.2 SGS - 2012

Six boxes containing approximately 165 kg of split drill core were received by SGS in August, 2012. These samples were selected by Moneta and represented the main mineralized zones at the project. The head grade of these composite samples is shown below in Table 13.2.

Table 13.2
Metallurgical Samples (2012) Gold Head Grades

Composite[1]	WJN	GAP	WJC	WJS	WJS (dup.)	SWZ	55 Zone
Head Grade (Au g/t)	0.84	1.04	1.21	0.83	0.99	0.99	1.2
Master Composite[2]	5%	10%	15%	28%	0%	33%	10%

[1] WJN = Windjammer North Zone, GAP = Gap Zone, WJC = Windjammer Central Zone, WJS = Windjammer South Zone, SWZ = South West Zone.
[2] Master composite was used for the Bond Work Index test.

The gold head grades were determined by using a standard screened metallics fire assay procedure.

The metallurgical samples are typical of the mineralization occurring at the property. However, they were originally selected to represent open pit material and therefore do not represent the potentially underground minable mineralization spatially or in terms of gold head grade. Whilst the gold content of these samples is around 1 g/t, the average grade of the underground mineral resources is above 4 g/t.

The occurrence of potentially deleterious elements in the composite samples, such as arsenic, has not been assessed. Also, there are no measurements of potential by-products such as silver.

13.2 METALLURGICAL TESTWORK

13.2.1 Historical Test Work (Barrick and Newmont)

The Barrick 1996 test work included standard preliminary cyanide leach tests at various grind sizes. A summary of these test results is presented in Table 13.3.

Table 13.3
Barrick Preliminary Leach Test Results

Leach Time (h)	Grind (%-200 mesh)	Au Extraction (%)	Consumption (kg/t)	
			NaCN	Lime
94	74	87.1	0.47	7.3
94	84	90.3	0.49	8.0
94	88	91.7	0.48	9.3
72	99	94.0	0.35	7.4

The leach test results suggest a positive grind-gold recovery relationship, moderate cyanide consumption and relatively high lime consumption. Gold extraction was about 90% at a grind size of 80% passing 200 mesh (74 microns).

The 2001 Newmont test program included two sets of tests using the four samples, one comprised 96 hour leaching of a coarse crushed aliquot (<10 mesh or 2 mm) and the other a

standard 24 hour leaching test using samples ground to 80% passing 200 mesh (74 microns). The test results are summarized in Table 13.4.

Table 13.4
Newmont Preliminary Leach Test Results

Sample	Au Head Grade (Calc. - g/t)	Grind Size	Au Extraction (%)
8 WJN	5.14	Coarse	49.2
8 WJN	4.94	Fine	90.5
44 WJN	1.25	Coarse	53.0
44 WJN	1.15	Fine	91.5
4 WJS	1.42	Coarse	58.4
4 WJS	1.65	Fine	93.8
A WJS	1.06	Coarse	31.5
A WJS	0.92	Fine	80.1

The coarse leach tests using <10 mesh material suggested that heap leaching would probably not be a viable processing option. The fine leach tests using 80% passing 200 mesh material showed gold extractions of around 91% for the WJN sample, 93.8% for one WJS sample but only 80% for the other WJS sample.

13.2.2 Comminution Testing

A Bond ball mill grindability test was undertaken using the master composite ground to a size of 200 mesh (75 μm). The Bond Work Index was 17.4 kWh/t which suggests that the material was relatively hard.

13.2.3 Cyanide Leach Tests

Initial cyanide bottle roll leach tests were undertaken by SGS following fine grinding of the samples. A summary of these fine grind leach tests is provided in Table 13.5.

Table 13.5
Fine Grind Leach Test Results

Sample	Grind - P_{80} (µm)	Au Extraction (%)		Consumption (kg/t)	
		24 h	48 h	NaCN	Lime
WJN	23	84.5	86.8	0.54	1.27
WJN	18	86.0	88.0	0.22	1.11
GAP	42	89.6	95.7	0.03	-
GAP	25	95.2	95.3	0.05	1.30
WJC	28	95.0	95.0	0.21	-
WJC	22	93.6	94.1	0.07	1.65
WJS	36	94.8	93.2	0.07	-
WJS	24	94.6	95.3	0.30	1.31
WJS (dup)	36	94.9	95.0	0.06	-
WJS (dup)	26	91.8	94.3	0.31	1.57
SWZ	37	74.7	95.4	0.11	-
SWZ	24	92.2	96.4	0.18	1.42
55 Zone	32	73.7	96.2	0.05	-
55 Zone	25	96.0	95.2	0.12	1.85
Mean-all	28	89.8	94.0	0.17	1.44
Mean-fine	33	86.7	93.9	0.15	1.27
Mean v. fine	23	92.8	94.1	0.18	1.46

Following the fine grind leach tests, additional cyanidation work was undertaken using target 80% passing grind sizes (P_{80}) of 55, 65 and 80 µm. Due to lower gold extractions using the WJN sample, CIL tests were conducted using 10 g/L of carbon.

A summary of the results for these coarser grind tests is presented in Table 13.6.

Table 13.6
Moderate Grind Leach Test Results

Sample	Grind - P_{80} (µm)	Au Extraction (%)		Consumption (kg/t)	
		24 h	48 h	NaCN	Lime
WJN-CIL	47	-	81.1	0.23	1.27
WJN-CIL	61	-	78.3	0.23	1.60
WJN-CIL	82	-	78.9	0.29	1.15
GAP	60	93.8	92.7	1.33	0.83
GAP	75	91.2	91.9	1.20	1.42
GAP	123	87.5	91.1	0.98	0.93
WJC	47	95.6	92.6	0.13	0.82
WJC	64	92.1	92.7	0.19	0.80
WJC	85	87.6	91.7	0.17	0.97
WJS	58	84.8	92.0	0.14	1.18
WJS	70	92.9	94.3	0.18	0.75
WJS	99	84.4	91.7	0.15	0.92
SWZ	56	92.6	95.0	0.14	0.64
SWZ	79	94.4	94.4	0.18	0.72
SWZ	79	92.4	92.6	0.25	1.47
55 Zone	55	90.8	92.9	0.14	0.97
55 Zone	68	90.9	91.5	0.14	0.72
55 Zone	85	90.2	89.1	0.19	1.05
Ave-all[1]	74	90.7	92.4	0.37	0.95
Ave-fine[1]	55	91.5	93.0	0.38	0.89
Ave-medium[1]	71	92.3	93.0	0.38	0.88
Ave-coarse[1]	94	88.4	91.2	0.35	1.07

[1] Excludes results for WJN

The average leach test results for the different zones are presented in Table 13.7.

Table 13.7
Average Leach Test Results for Each Zone

Zone	Grind - P_{80}(µm)	Au Extraction (%)		Consumption (kg/t)	
		24 h	48 h	NaCN	Lime
WJN	46	85.3	82.6	0.30	1.28
GAP	65	91.5	93.3	0.72	1.12
WJC	49	92.8	93.2	0.15	1.06
WJS	50	91.2	93.7	0.17	1.15
SWZ	55	89.3	94.8	0.17	1.06
55 Zone	53	88.3	93.0	0.13	1.15
Average	**53**	**90.3**	**91.9**	**0.27**	**1.14**

13.3 CONCLUSIONS AND RECOMMENDATIONS

The single Bond ball mill index test suggests that the mineralization is relatively hard.

Apart from the Windjammer North (WJN) Zone, cyanide leach gold extractions were typically above 90% after 24 hours of leaching. Cyanide consumptions were typically low and lime additions to control pH were moderate.

Additional gold recovery with fine final grinding is relatively small and good leach performance would be expected using a P_{80} grind size of around 75 microns.

A program of optimization leach tests is recommended using samples that represent both open pit and underground mining mineral resources.

The potential recovery of gold using gravity separation should be investigated.

Mineralogy of the different mineralized zones should be examined. This would include gold and silver deportment studies and the identification and typical proportion of the main sulphide minerals. Gangue mineralization should also be quantified.

Geochemical tests and characterization test work is recommended in order to assess the following:

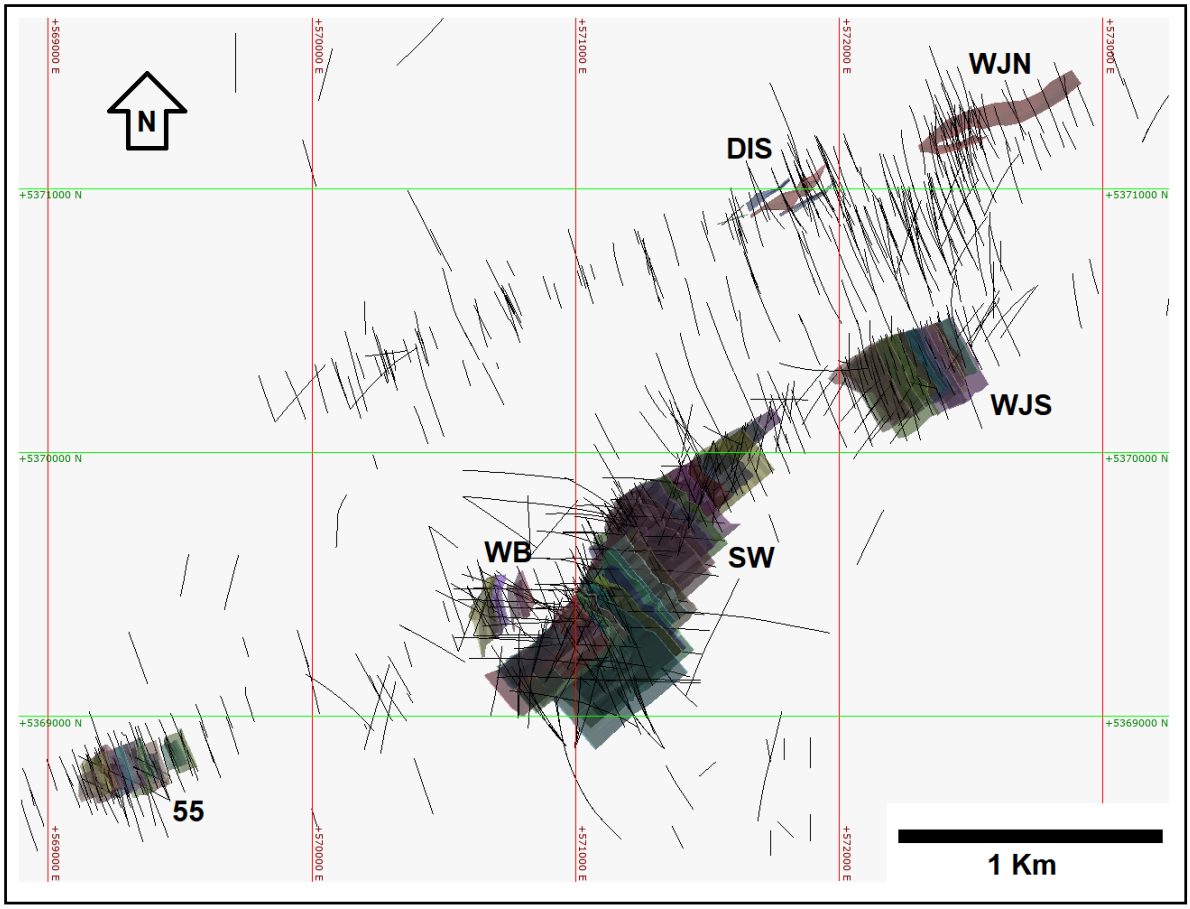
- Potential of deleterious elements such as arsenic, mercury and other heavy metals.
- ARD potential of mineralized, waste and tailings stockpiles.
- Potential of silver as a valuable by-product.

14.0 MINERAL RESOURCE ESTIMATES

14.1 GENERAL DESCRIPTION

The Golden Highway Project mineral resources have been estimated using multiple series of narrow vein interpretations grouped in six mineralization areas, Windjammer North Zone (WJN), Windjammer South Zone (WJS), Discovery (DIS), South West Zone (SW), West Block (WB) and 55 Zone (55). Due to its proximity, and similar orientation, West Block was included in the same block model as South West. The six zones contain parallel, contiguous vein-type structures disposed in groups with variable bearings and dips, by group. Figure 14.1 shows the location of the 64 interpreted vein interpretations constructed by Moneta. The mineral resources for the Golden Highway deposits have been estimated assuming an underground mining scenario.

Figure 14.1
Location of the Moneta Golden Highway Mineralized Zones and Drill Holes



Source: Micon, 2019

14.2 MINERAL RESOURCE ESTIMATE DEFINITIONS

The current mineral resource estimate for the Golden Highway Project has been prepared following the 2014 CIM Definition Standards - For Mineral Resources and Mineral Reserves, as required under NI 43-101. The CIM standards and definitions are as follows:

> "Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories. An Inferred Mineral Resource has a lower level of confidence than that applied to an Indicated Mineral Resource. An Indicated Mineral Resource has a higher level of confidence than an Inferred Mineral Resource but has a lower level of confidence than a Measured Mineral Resource."
>
> "A Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction."
>
> "The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling."
>
> "Material of economic interest refers to diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals."
>
> *Inferred Mineral Resource*
>
> "An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity.
>
> An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration."
>
> "An Inferred Mineral Resource is based on limited information and sampling gathered through appropriate sampling techniques from locations such as outcrops, trenches, pits, workings and drill holes. Inferred Mineral Resources must not be included in the economic analysis, production schedules, or estimated mine life in publicly disclosed Pre-Feasibility or Feasibility Studies, or in the Life of Mine plans and cash flow models of developed mines. Inferred Mineral Resources can only be used in economic studies as provided under NI 43-101."
>
> *Indicated Mineral Resource*
>
> "An Indicated Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit."

"Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation."

"An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve."

Measured Mineral Resource

"A Measured Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit."

"Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation."

"A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proven Mineral Reserve or to a Probable Mineral Reserve."

"Mineralization or other natural material of economic interest may be classified as a Measured Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such that the tonnage and grade or quality of the mineralization can be estimated to within close limits and that variation from the estimate would not significantly affect potential economic viability of the deposit. This category requires a high level of confidence in, and understanding of, the geology and controls of the mineral deposit."

14.3 SUPPORTING DATA

The Golden Highway Project database provided to Micon is comprised of 1,312 drill holes, with a total of 374,857 m of drilling and containing 156,196 samples. This database was the starting point from which the 64 veins were modelled.

During the site visit the QP reviewed the relogging and interpretation procedures used to construct the wireframes. After hand off of the data, the final interpretations were reviewed for consistency and conformity to the informing data.

For the purpose of mineral resource estimation, Micon used only the data contained within the wireframes. The effective number of drill holes and samples used were 389 holes and 12,859 m of core. Most drill holes intersected multiple vein wireframes.

No trench samples or any other type of sampling were used in the resource estimate.

14.3.1 Topography

The project topography was provided by Moneta Porcupine Mines Inc. as a digital terrain model (DTM) in DXF format. The DTM was of sufficient quality for, however, given the underground extraction assumption, it was not used for the mineral resource estimate other than to limit the extent of the vein wireframes. It was used for the examination of possible open pittable resources for the Windjammer Central deposit.

14.3.2 Rock Density

A total of 4,144 density measurements were delivered to Micon, from which average densities were calculated for each deposit at the Golden Highway Project. The overall average density value for the entire project is 2.78 g/cm^3 (or t/m^3). Table 14.1 summarizes the density averages.

Table 14.1
Average Density by Deposit

Deposit Name	Count	Length (m)	Density Value (t/m^3)
South West	2,460	283.20	2.79
Windjammer North	775	121.20	2.83
Windjammer South	243	150.20	2.75
55 Zone	292	195.30	2.74

14.3.3 General Statistics

Basic statistics were calculated for the entire Golden Highway Project database and for the selected intervals inside of the mineralized vein envelopes. The results are summarized in Tables 14.2 and 14.3.

Table 14.2
Global Statistics, Gold

Description	Au (g/t)
Number of samples	155,988
Minimum value	0.000
Maximum value	3,510
Mean	0.327
Median	0.033
Variance	42.816
Standard Deviation	6.543
Coefficient of variation	20.024

Table 14.3
Basic Statistics Within the Wireframes

Description	Deposit						
Selection	Entire Database	Discovery	South West	West Block	WJN	WJS	55 Zone
Count	155,988	657	6,893	1,106	607	2,256	1,417
Length	53,677.49	748.86	6,743.15	1,083.36	482.98	2,009.89	1,067.79
Mean	0.33	1.53	1.48	2.30	2.13	1.72	1.91
Standard deviation	6.54	2.56	3.91	75.43	4.40	7.37	5.85
Coefficient of variation	20.02	1.68	2.64	32.74	2.07	4.29	3.06
Variance	42.82	6.57	15.27	5,690.43	19.32	54.24	34.21
Minimum	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lower quartile	0.01	0.06	0.03	0.03	0.22	0.25	0.05
Median	0.03	0.84	0.49	0.21	1.05	0.87	0.44
Upper quartile	0.19	2.31	1.72	0.77	2.40	1.71	1.80
Maximum	3,510.00	42.10	148.80	3,510.00	65.00	391.84	187.99

WJN = Windjammer North, WJS = Windjammer South

14.4 THREE-DIMENSIONAL MODELLING

Moneta provided Micon with wireframes of the 64 interpreted veins. Micon and Moneta had various review sessions and discussions to achieve the final wireframes. Figure 14.1 illustrates the final wireframes for the multiple deposits. They can also be seen in Figure 14.6.

14.5 DATA PROCESSING

14.5.1 Compositing

The selected intercepts for the Golden Highway Project were composited to 1.0 m equal length intervals, with the composite length selected based on the most common original sample length. Table 14.4 summarizes basic statistics for the composited data.

Table 14.4
Summary of the Basic Statistics for the 1.0 m Composites

Description	Deposit						
Selection	Entire Database	Discovery	South West	West Block	WJN	WJS	55 Zone
Count	12,718	762	7,065	1,103	500	2,093	1,119
Length	12,289.37	748.89	6,802.21	1,094.94	482.98	2,012.19	1,074.61
Mean	1.65	1.53	1.47	2.28	2.13	1.72	1.90
Standard deviation	16.20	2.19	3.35	53.05	4.11	4.37	4.27
Coefficient of variation	9.81	1.43	2.28	23.24	1.93	2.54	2.25
Variance	262.56	4.79	11.24	2,814.50	16.87	19.08	18.26
Minimum	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lower quartile	0.07	0.08	0.04	0.04	0.33	0.35	0.11
Median	0.67	0.98	0.61	0.26	1.19	0.98	0.69
Upper quartile	1.78	2.21	1.82	0.78	2.40	1.80	1.93
Maximum	1,755.40	33.14	131.86	1,755.40	65.00	107.63	68.32

WJN = Windjammer North, WJS = Windjammer South

14.5.2 Grade Capping

All outlier assay values for gold were analyzed individually by vein, and when grouped by deposit, using log probability plots and histograms. It was decided to cap based on the data grouped by deposit as the veins are close together and are assumed to have similar mineralogical history.

In order to identify true outliers, and reduce the effect of short sample bias, the data were reviewed after compositing to constant intervals using the most common sample length of 1.0 m. Table 14.5 summarizes the capping grades used.

Table 14.5
Selected Capping Grades on 1m Composites

Deposit	Max. Grade (Au g/t)	Capping Grade (Au g/t)	Capped Composites	Total Composites
55 Zone	68.32	32.0	3	927
South West	131.86	37.0	8	7,065
West Block	1,755.40	13.0	2	1,103
WJ North	65.00	13.0	2	268
WJ South	107.63	17.0	10	2,093
Discovery	33.14	15.0	1	696

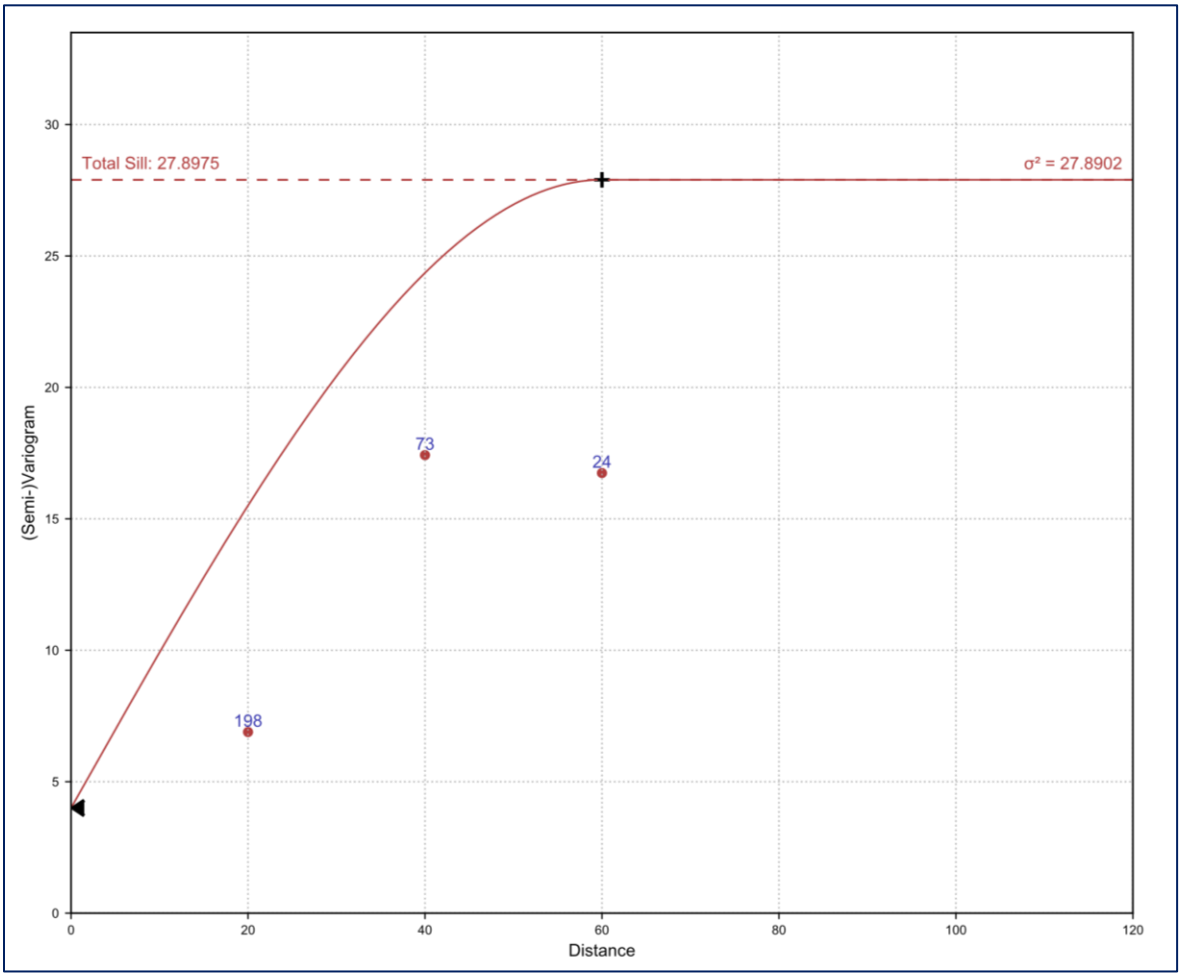
WJN = Windjammer North, WJS = Windjammer South

14.6 MINERAL DEPOSIT VARIOGRAPHY

Variography is the analysis of the spatial continuity of grade for the commodity of interest. In the case of the Golden Highway deposits the analysis was done on each individual vein using down-the-hole variograms and 3D variographic analysis, in order to define the directions of maximum continuity of grade, and, therefore, the best parameters to interpolate the grades of each deposit.

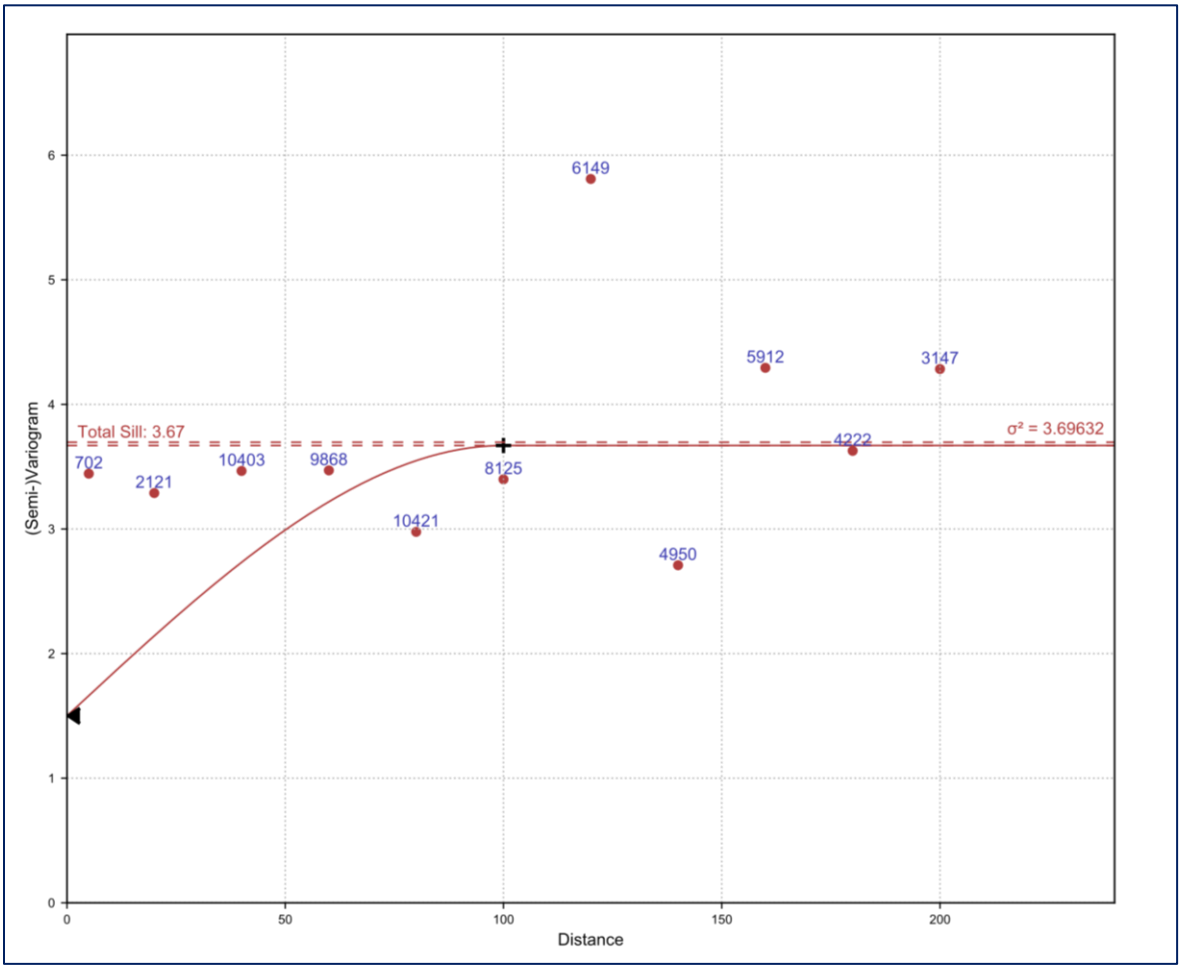
Variography must be performed on regular coherent shapes with geological continuity support. First, down-the-hole variograms were constructed for each vein, to establish the nugget effect to be used in the modelling of the 3D variograms. Figures 14.2 to 14.5 show some of the more relevant major variograms of the gold within the veins.

Figure 14.2
55 Zone - Major Variogram



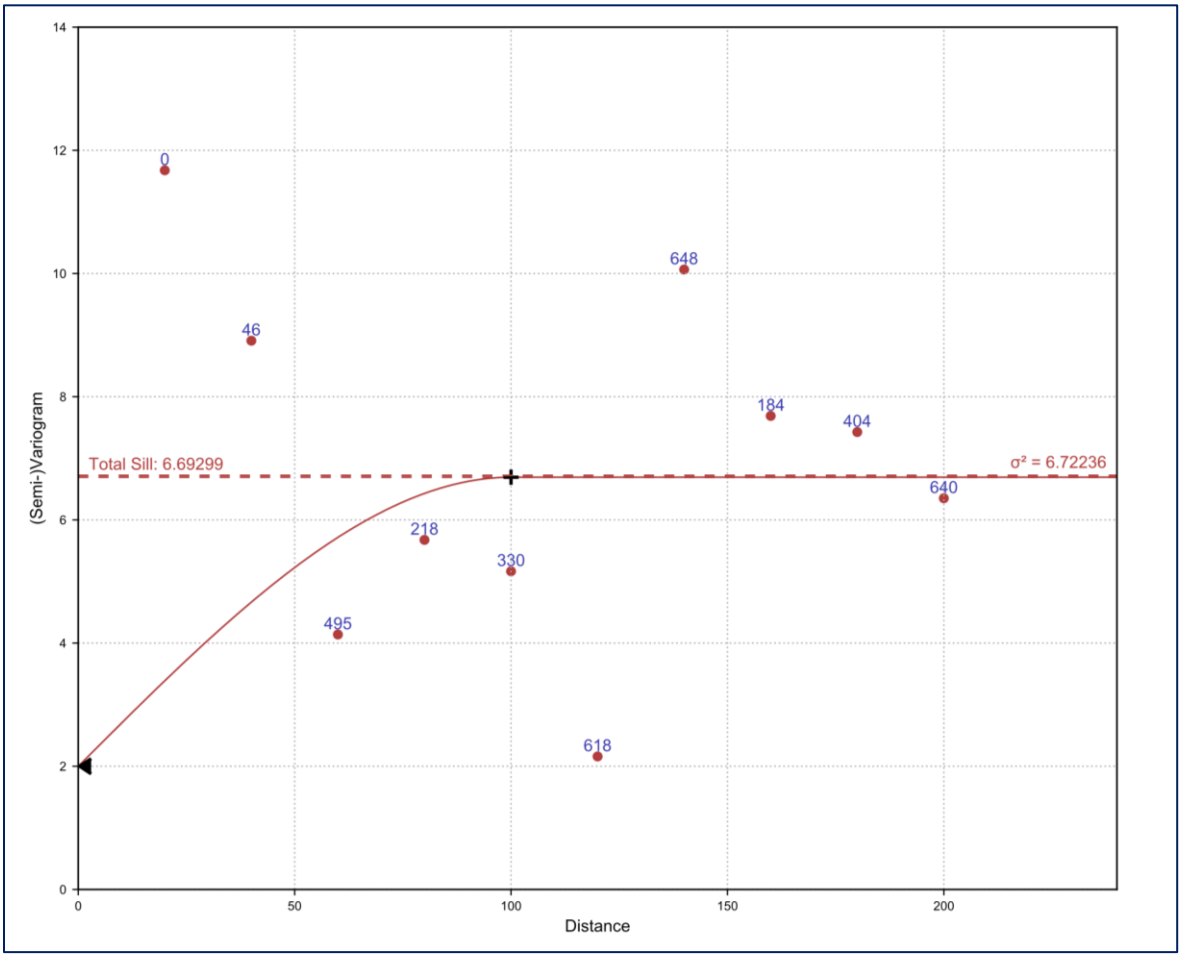
Source: Micon, 2019

Figure 14.3
South West - Major Variogram



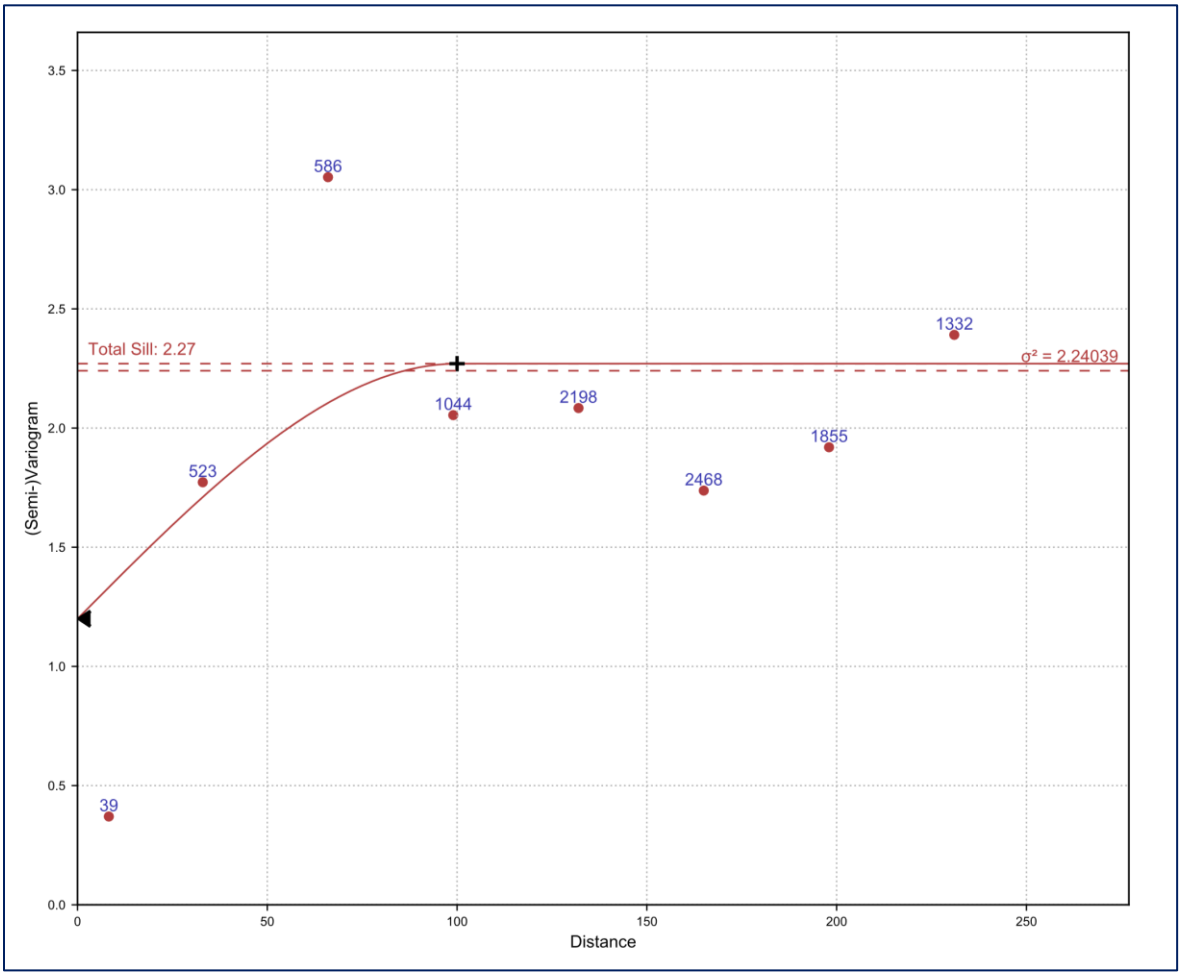
Source: Micon, 2019

Figure 14.4
Windjammer North - Major Variogram



Source: Micon, 2019

Figure 14.5
Windjammer South - Major Variogram



Source: Micon, 2019

For most of the 64 veins good variogram models were achieved. They were sufficient to support the use of the Kriging interpolation method. Major variogram ranges between 60 m and 100 m were modelled. Most ranges were 70 m or more. The variography results were used to support the search ranges and anisotropy directions. More details are discussed in section 14.7.2, Search Strategy and Interpolation.

14.6.1 Continuity and Trends

The Golden Highway deposits present variable strikes and dips, grouped in parallel veins with well-defined geometry. They are generally supported by geology, grades and abundant drill hole intercepts giving sufficient confidence to their continuity along strike and down dip. The general deposit bearings and dips are as follows:

- 55 Zone, 250º dip direction and -71º dip.
- South West, 230º dip direction and -68º dip.

- Windjammer North, 337º dip direction and -75º dip.
- Windjammer South, 242º dip direction and -60º dip.
- West Block, 263º dip direction and -82º dip.
- Discovery, 154º dip direction and -75º dip.

14.7 MINERAL RESOURCE ESTIMATION

The commodity of economic interest at the Golden Highway Project is gold. The estimation of the deposit tonnage and grade was performed using Leapfrog Geo/EDGE software.

14.7.1 Block Model

A total of five block models were constructed to contain the vein codes, gold grades and density. A summary of the definition of the block models is shown in Table 14.6. The West Block veins were included in the same block model as the South West deposit.

Table 14.6
Information Summary, Project Block Models

Description	55 Zone (UG55BM)	South West (UGSWBM)	West Block (UGWBBM)	WJN * (UGWJNBM)	WJS (UGWJSBM)
Model Dimension X (m)	230	690	300	1560	380
Model Dimension Y (m)	465	1495	270	220	540
Model Dimension Z (m)	400	1230	400	530	410
Origin X (Easting)	569068.83	570530.77	570547.00	571522.89	571936.95
Origin Y (Northing)	5368848.47	5369297.02	5369493.00	5370751.20	5370314.16
Origin Z (Upper Elev.)	300	300	288	346.55	295
Rotation (º)	73	50	71	340	62
Parent Block Size X (m) - Along Strike	10	15	10	10	10
Parent Block Size Y (m) - Across Strike	5	5	5	5	5
Parent Block Size Z (m) - Down Dip	10	15	10	10	10
Child Block Size X (m) - Along Strike	2	5	2	2	2
Child Block Size Y (m) - Across Strike	1	1	1	1	1
Child Block Size Z (m) - Down Dip	1	5	2	2	2

WJN = Windjammer North, WJS = Windjammer South
* - Includes the Discovery Zone

Intercepts used to model the wireframes were flagged as to which mineral envelope they belonged so that assays outside of the wireframes, or from adjacent wireframes, would not be used to interpolate grade into the wrong vein while each block model was run.

14.7.2 Search Strategy and Interpolation

A set of parameters were derived from variographic analysis to interpolate the composite grades into the blocks. A summary of the Golden Highway Project Ordinary Kriging (OK) interpolation parameters is shown in Table 14.7.

Table 14.7
Ordinary Kriging Interpolation Parameter Summary
(Parameters from the Vein with the Most Data within Each Deposit Presented*)

Deposit* Code(s)	Nº of Veins	Pass	Orientation	Search Parameters							
			Dip Az (°)	Pitch (°)	Dip (°)	Range Major Axis (m)	Range Semi-Major Axis (m)	Range Minor Axis (m)	Minimum Samples	Maximum Samples	Maximum Samples per Hole
55 Zone	15	1	250	10	-73	90	90	40	1	20	5
South West	25	1	216	124	-66	150	150	100	1	20	5
West Block	4	1	270	170	-75	150	150	100	1	20	5
WJN	1	1	334	23	-73	150	130	20	1	20	5
WJS	14	1	238	79	-53	100	70	60	1	20	5
Discovery	5	1	151	135	-85	120	80	20	1	20	5

*Note: Each deposit contains multiple individual veins with their own slightly different interpolation parameters. The variability of parameters between veins in each deposit was limited.

Due to the large number of wireframes present, and the very large number of small blocks included, it was decided to interpolate the model in a single pass using 150% of the range of the variogram. Indicated Resources were determined using approximately 2/3 of the variogram range. (See Section 14.9.)

14.8 PROSPECTS FOR ECONOMIC EXTRACTION

The CIM standards require that a mineral resource must have reasonable prospects for eventual economic extraction.

This mineral resource has been constrained by reasonable mining shapes using economic assumptions of an underground mining scenario. The potential mining shapes are conceptual in nature, not stope designs, and are based on a single cut-off value of 3.0 g/t Au.

The gold price and operating costs were suggested by Moneta and approved by Micon. In the QPs opinion the economic parameters are reasonable, but they were not developed from first principles and are considered conceptual in nature.

Table 14.8 summarizes the underground economic assumptions upon which the resource estimate for the Golden Highway Project is based.

Table 14.8
Summary of Economic Assumptions for the Conceptual Underground Scenario.

Description	Units	Value Used
Gold Price	USD$/t	1250.00
Mining Cost	CAD$/t	70.00
Processing Cost	CAD$/t	25.00
General & Administration	CAD$/t	5.00
Gold Recovery (Metallurgical)	%	93.00
Exchange Rate	CAD/US	0.75

The underground parameters noted above suggested a cut-off grade of 2.00 g/t Au, however, Moneta and Micon concurred in using 3.00 g/t Au to be more consistent with other Canadian resources estimates, and to be selective and improve the overall gold average grade.

14.8.1 Pit Optimization Attempt

Using a mining cost of CAD$2.70/t, a 45º slope angle and the rest of parameters shown in table 14.8, a quick open pit optimization was attempted for the Windjammer Central deposit. No significant inventory of mineral resources resulted and none are reported.

14.9 CLASSIFICATION OF THE MINERAL RESOURCE ESTIMATE

Micon has classified the mineral resource estimate at the Golden Highway Project in the Indicated and Inferred categories. No Measured resource is declared at this time. The West Block, Windjammer North and Discovery deposits are entirely classified as Inferred Resources due to the lack of sampling and data spacing. No resources were reported for West Block due to low grades and widely spaced data.

The approach used to categorize the Indicated resource was to select those blocks informed by more than 3 drill holes and within 50 m distance from closest composite. (Forty metres was used in one case where the range of the variogram was shorter.) The results were then smoothed out to remove isolated small blocks and produce coherent shapes of reasonable volume eliminating the spotted dog effect. All other blocks were classified in the Inferred category.

14.10 MINERAL RESOURCE STATEMENT

The mineral resource statement for the Golden Highway Project is summarized in Table 14.9.

Table 14.9
Golden Highway Project Mineral Resource Estimate by Deposit

Deposit Name	Indicated			Inferred		
	Tonnes (t)	Grade (g/t)	Ounces (oz)	Tonnes (t)	Grade (g/t)	Ounces (oz)
South West	2,007,000	4.63	298,900	5,583,000	4.21	755,800
Windjammer South	364,000	4.19	49,100	173,000	4.59	25,500
55	216,000	5.11	35,400	327,000	4.31	45,300
Discovery	-	-	-	108,000	4.12	14,300
Windjammer North	-	-	-	265,000	3.80	32,400
Total	**2,587,000**	**4.61**	**383,400**	**6,456,000**	**4.21**	**873,300**

Notes:
1. Mineral Resource Estimates are reported at a cut-off grade of 3.00 g/t Au for an underground mining scenario. The cut-off grade was calculated at a gold price of US$1,250 per ounce, an exchange rate of USD$/CDN$ of 0.75 and operational assumptions outlined in Section 14 of this report.
2. The resource estimate is supported by statistical analysis with different high grade capping applied to each of the deposits ranging from 13.0 g/t Au to 37.0 g/t Au on 1-m composites.
3. The mineral resources presented here were estimated with a block size of 5 m x 5 m x 10 m utilizing sub-blocks as required and constrained within geological wire frames with a minimum width of 1.50 m. The cells are estimated by Ordinary Kriging using the appropriate variogram model of each structure with individual search ellipsoids.
4. The mineral resources presented here were estimated by Micon International Limited using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definitions and Standards on Mineral Resources and Reserves.
5. Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, market or other relevant issues.
6. The quantity and grade of reported Inferred Resources are uncertain in nature and there has not been sufficient work to define these Inferred Resources as Indicated or Measured Resources.

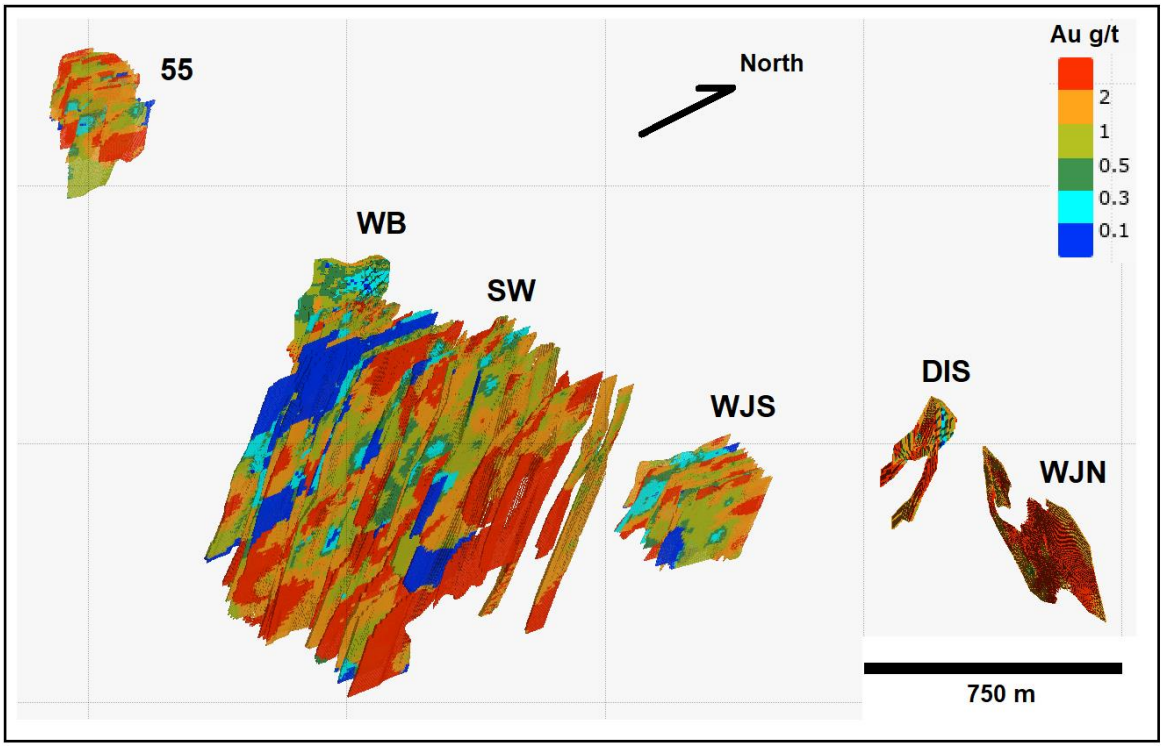
7. There are no historical underground voids from mining including shafts, ramps drifts or stopes in any of the deposit areas.
8. Tonnage estimates are based on bulk densities individually measured and calculated for each of the deposit areas, averaging 2.78 tonnes per cubic metre for the total resource. Resources are presented as undiluted and in situ.
9. This mineral resource estimate is dated January 15, 2019. The effective date for the drill hole database used to produce this updated mineral resource estimate is November 19, 2018. Tonnages and ounces in the tables are rounded to the nearest thousand and hundred respectively. Numbers may not total due to rounding.
10. There were no West Block mineral resources reported due to low grades and a lack of data and thus continuity.
11. At the present time, Micon does not believe that the mineral resource estimate is materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.

The QP considers that the resource estimate for the Golden Highway Project has been reasonably prepared and conforms to the current CIM standards and definitions for estimating mineral resources.

The process of mineral resource estimation includes technical information which requires subsequent calculations or estimates to derive sub-totals, totals and weighted averages. Such calculations or estimations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, Micon does not consider them to be material.

The mineral resources summarized in Table 14.9 above are shown graphically in Figure 14.6.

Figure 14.6
Resource Blocks - Isometric View



Source: Micon 2019

14.11 MINERAL RESOURCE SENSITIVITY

Table 14.10 presents an analysis of the mineral inventory's sensitivity to cut-off.

Table 14.10
Mineral Inventory Sensitivity Table

Cut-Off Grade (g/t)	Indicated			Inferred		
	Tonnes (t)	Grade (g/t)	Ounces Au (oz)	Tonnes (t)	Grade (g/t)	Ounces Au (oz)
4.50	966,929	6.33	196,663	1,706,160	5.48	300,740
4.00	1,326,092	5.76	245,623	3,499,852	4.87	548,450
3.50	1,940,391	5.12	319,332	4,792,856	4.57	704,136
3.00	2,587,000	4.61	383,400	6,456,000	4.21	873,200
2.50	4,503,000	3.87	560,000	10,846,000	3.64	1,267,900
2.00	7,353,000	3.23	763,700	17,656,000	3.09	1,753,200
1.50	12,666,444	2.60	1,058,641	27,776,693	2.61	2,331,599
1.00	20,528,224	2.08	1,373,708	41,086,071	2.17	2,862,682
0.50	27,000,469	1.77	1,533,384	54,789,734	1.81	3,196,824

Note: The mineral inventory used in the sensitivity analysis table at cut-off grades, except at the 3.00 g/t Au cut-off, have not been corrected to remove isolated blocks which do not have a reasonable chance of extraction. The removal of isolated blocks has been conducted for the mineral resource estimate reported at a 3.00 g/t Au cut-off (Table 14.9) resulting in a loss of 9.8% of tonnes and 7.6% of ounces from the mineral inventory at this cut-off grade.

14.12 MINERAL RESOURCE VALIDATION

Micon has validated the block model using statistical comparisons and visual inspection.

14.12.1 Statistical Comparison

The average grade of the composites within each mineralized envelope was compared to the average grade of all blocks therein. Table 14.11 summarizes the results of this comparison.

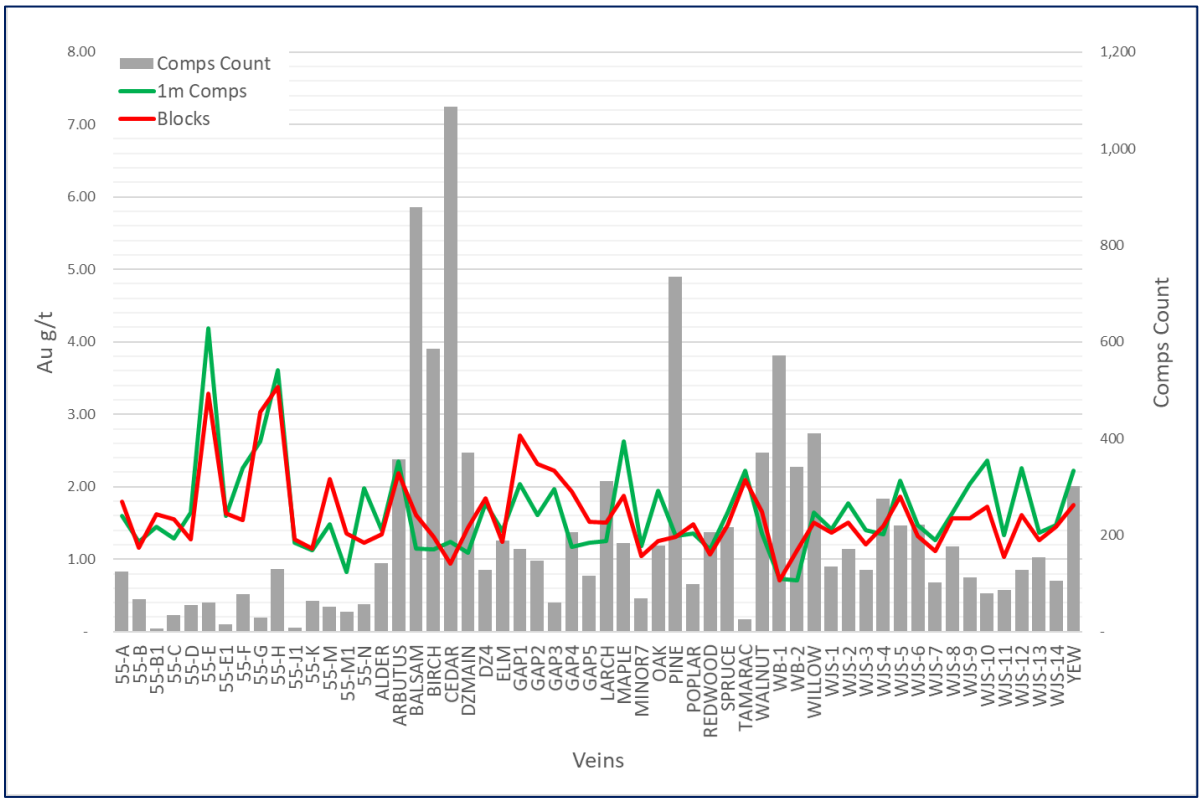
Table 14.11
Comparison - 1 m Composite Grades versus Block Grades

Vein Name	1m Composites			Block Model		
	Nº of Comps	Total Length	Au g/t	Nº of Blocks	Volume m^3	Au g/t
55-A	124	119.9	1.60	57,592	115,184	1.80
55-B	68	63.5	1.23	55,591	111,182	1.16
55-B1	6	5.6	1.44	47,461	94,922	1.63
55-C	35	33.5	1.29	42,445	84,890	1.55
55-D	55	52.6	1.64	53,594	107,188	1.28
55-E	61	58.1	4.18	44,145	88,290	3.28
55-E1	16	15.1	1.60	54,775	109,550	1.63
55-F	77	72.0	2.26	62,512	125,024	1.54
55-G	29	25.1	2.63	23,194	46,388	3.04

Vein Name	1m Composites			Block Model		
	Nº of Comps	Total Length	Au g/t	Nº of Blocks	Volume m^3	Au g/t
55-H	130	127.6	3.61	47,763	106,980	3.38
55-J1	9	8.8	1.23	49,354	98,708	1.27
55-K	63	62.1	1.13	50,533	103,556	1.15
55-M	51	48.5	1.49	54,604	109,208	2.10
55-M1	41	40.6	0.82	85,248	177,966	1.36
55-N	56	53.4	1.98	40,838	81,676	1.23
ALDER	141	131.6	1.40	302,063	1,382,814	1.35
ARBUTUS	356	341.9	2.35	365,910	1,846,044	2.19
BALSAM	879	859.3	1.15	162,854	760,856	1.61
BIRCH	586	568.9	1.14	166,508	818,757	1.31
CEDAR	1,087	1,058.5	1.24	404,834	1,955,093	0.94
DZMAIN	371	368.1	1.09	119,884	796,480	1.44
DZ4	127	124.2	1.77	27,895	126,956	1.84
ELM	188	175.5	1.39	18,822	470,550	1.23
GAP1	172	164.4	2.04	39,346	1,002,350	2.71
GAP2	147	141.8	1.61	33,182	848,250	2.31
GAP3	61	53.6	1.97	8,485	212,125	2.22
GAP4	206	201.7	1.17	19,443	542,175	1.94
GAP5	115	113.2	1.23	27,039	723,275	1.52
LARCH	312	306.0	1.25	80,703	2,062,675	1.51
MAPLE	184	175.4	2.62	47,058	1,202,850	1.88
MINOR7	69	63.4	1.18	2,088	52,200	1.05
OAK	179	167.9	1.94	40,169	1,004,225	1.26
PINE	735	716.7	1.32	59,021	1,539,325	1.31
POPLAR	98	93.0	1.36	27,185	679,625	1.49
REDWOOD	206	187.5	1.13	56,415	1,410,375	1.06
SPRUCE	216	201.5	1.64	54,160	1,355,100	1.47
TAMARAC	26	23.4	2.22	5,765	144,125	2.10
WALNUT	370	355.1	1.36	71,892	1,811,600	1.66
WB-1	571	567.5	0.73	140,675	1,077,052	0.71
WB-2	341	339.4	0.71	106,422	686,088	1.13
WILLOW	411	394.5	1.64	65,493	1,657,125	1.50
WJS-1	134	125.1	1.41	64,657	258,628	1.37
WJS-2	172	165.7	1.77	59,789	240,644	1.50
WJS-3	128	124.2	1.40	58,488	233,952	1.20
WJS-4	275	266.6	1.34	111,721	471,188	1.46
WJS-5	220	212.9	2.08	97,986	414,264	1.87
WJS-6	222	216.5	1.47	93,953	419,460	1.32
WJS-7	101	96.4	1.27	76,535	306,140	1.11
WJS-8	176	170.1	1.64	105,820	436,672	1.57
WJS-9	113	108.8	2.04	76,411	305,644	1.56
WJS-10	80	76.8	4.42	51,214	204,856	1.72
WJS-11	86	81.3	1.33	71,986	287,944	1.03
WJS-12	127	119.8	2.26	69,479	277,916	1.61
WJS-13	154	148.2	1.36	67,388	269,552	1.26
WJS-14	105	99.9	1.47	55,196	220,784	1.45
YEW	301	287.4	2.22	73,222	1,958,150	1.75

The average composite grades and block grades compare reasonably closely, however, for those veins with few samples the difference tends to be higher. Figure 14.7 shows the statistical comparison graphically.

Figure 14.7
Vertical 1m Comps vs Blocks Plot



Source: Micon, 2019.

14.12.2 Visual Inspection

The model blocks and the drill hole intercepts were reviewed interactively in three dimensional mode to ensure that the blocks were honouring the drill hole data. The agreement between the block grades and the drill intercepts of the Golden Highway deposits was found to be satisfactory. Due to the complexity and the narrow nature of the parallel veins there are no suitable still images to attach to this report.

Because of the tight clustering of veins within each block, model and the number of veins, producing swath plots was deemed to be impractical.

14.13 Responsibility for Estimation

The mineral resources presented in this report have been prepared under the direction of B. Terrence Hennessey, P.Geo., of Micon International Limited.

15.0 MINERAL RESERVE ESTIMATES

As no feasibility or pre-feasibility studies have been completed at this time no mineral reserves have been estimated for the Golden Highway Project.

16.0 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

16.1 GENERAL

Due to the current development phase of the project, Moneta's primary focus has been to explore and assess the potential economic viability of the property gold deposits. It has not yet commenced formal discussions with regulatory authorities in regard to environmental assessment and permitting requirements which are well established in Ontario. Under current legislation, the environmental assessment process for the property would be federally and provincially coordinated and encompass additional stakeholder consultation requirements that come into effect in 2013.

Information on the environmental assessment and permitting process for mines is available on Federal and Provincial government websites such as the Canadian Environmental Assessment Agency (www.ceaa-acee.gc.ca), Ontario Ministry of Northern Development and Mines (www.mndm.gov.on.ca), and the Ontario Ministry of the Environment (www.ene.gov.on.ca). Moneta has started to develop an environmental baseline database and anticipates that it will commence initial consultations with regulators, advanced discussions with First Nation communities and other interested people as required.

16.2 ENVIRONMENTAL BASE LINE STUDIES

The development of any project will require a full environmental baseline study and environmental assessment study.

16.2.1 Phase 1

Moneta initiated Phase 1 environmental base line studies with Blue Heron Solutions for Environmental Management Inc. in May, 2011. This involved the following:

- Site reconnaissance tour.
- Design of baseline study.
- Submission of program for Phase 2.

16.2.2 Phase 2

Blue Heron initiated monthly sampling for Phase 2 of the Environmental Baseline Study for the Golden Highway Project during April, 2012. This was conducted at eight locations as recommended in the designed program (Table 20.1) and covered monitoring of water quality at all locations and stream flow at five locations. The baseline program was conducted monthly from April to July, 2012 (Mascioli, 2012). The of the collection of the base line data will continue as required.

Table 16.1
Surface Water Quality Monitoring Sampling locations

Sample Points	Description	Location UTM	Monitoring
1	Pike Lake	568525 E, 5371088 N	Water quality
2	Emens Lake	569506 E, 5371589 N	Water quality
3	Emens Creek	570320 E, 5370370 N	Water quality, streamflow
4	Pike River Upstream	570125 E, 5370237 N	Water quality, streamflow
5	Unnamed Tributary	570817 E, 5369976 N	Water quality, streamflow
6	Pike Mid-Stream	570717 E, 5369445 N	Water quality, streamflow
7	Dewhirst Lake	573346 E, 5369445 N	Water quality
8	Pike River Downstream	568605 E, 5368130 N	Water quality, streamflow

16.3 PERMITTING

Any proposed program would require permitting on a local, provincial, and national level. The current exploration work is being conducted under an exploration permit, number PR-16-10985A2 which covers the mechanized drilling activities performed. Extensions and renewal of the permit, and others, will be conducted as required.

16.4 COMMUNITY AND SOCIAL IMPACT

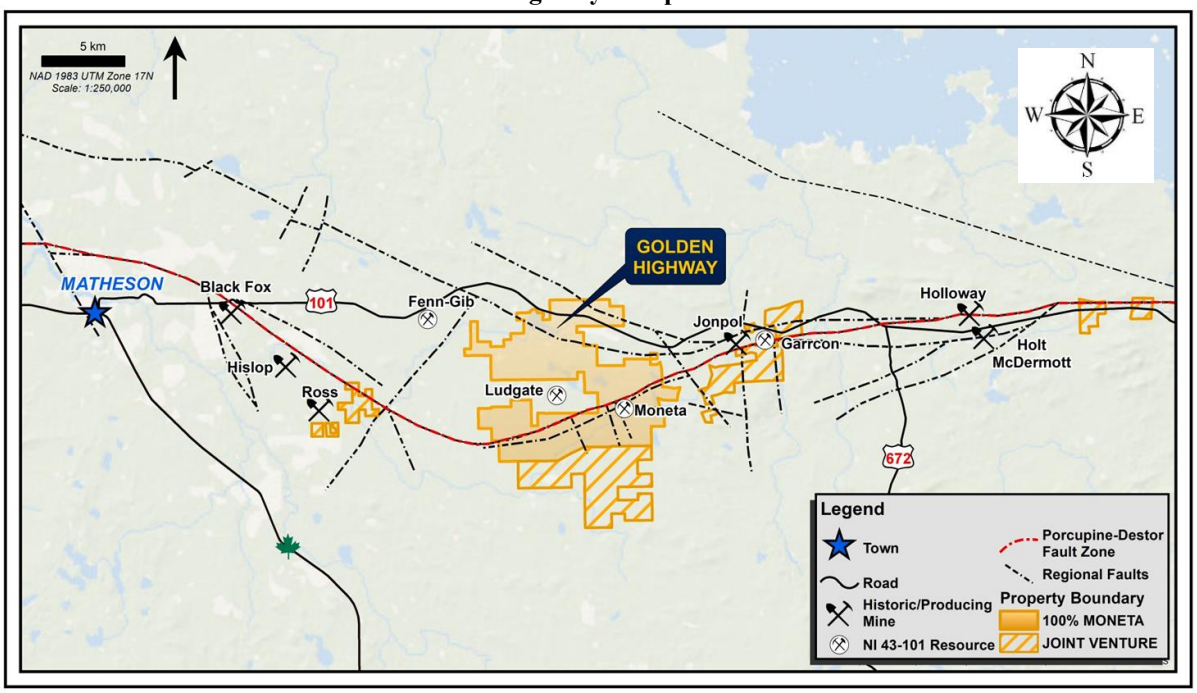
The Golden Highway Project is currently at an early development stage and the community and social impact is minor and short term. Moneta has commenced discussions, consultation and liaison with the local communities. No people reside on a full time basis within the project area, however, the project falls within the traditional lands of the Wahgoshig First Nation. The Wahgoshig First Nation community, a political member of the Algonquin Anishinabeg Nation Treaty Council, is located approximately 20 km northeast of the project area.

17.0 ADJACENT PROPERTIES

17.1 GENERAL

Moneta's Golden Highway Project is located on the DPFZ, a major gold mineralized regional fault structure. Figure 17.1 shows the location of the DPFZ and several prominent gold deposits including the Black Fox Mine, Hislop Mine, Ross Mine, Holloway Mine and Holt-McDermott Mine that are located within an approximately 25 km radius of the Golden Highway Project. The project is surrounded by claims, mining leases, or patents held by other mining and exploration companies. The most active of the neighbouring companies are Tahoe Resources, Kirkland Lake Gold Mines and Osisko Mining.

Figure 17.1
Golden Highway Camp Location



Source: Moneta, 2019.

The current resources on the adjacent properties are reported on the corporate websites and SEDAR filings of the holding companies. These data have not been verified by Micon and are not reported here. The information presented may not necessarily be indicative of the geology or mineralization on the Golden Highway Project that is the subject of this Technical Report.

17.2 FENN-GIB DEPOSIT

Tahoe Resources acquired Lakeshore Gold in 2016 which had acquired the Fenn-Gib property to the west-northwest of Moneta's Property in 2012. Pan American Silver Corp. completed an acquisition of Tahoe on February 22, 2019. SGS Canada Inc. completed an NI 43-101 resource

estimate for the Fenn-Gib deposit in January, 2012 and no more recent resource estimate has been released to date.

The Fenn-Gib property is located along Highway 101, approximately 80 km east of Timmins and 21 km east of Matheson, Ontario. Geologically, the Fenn-Gib property is located in the southern portion of the Abitibi Subprovince, which is part of the Superior Province of the Canadian Shield. The Abitibi Subprovince is principally underlain by volcanic and sedimentary assemblages that have generally been metamorphosed to greenschist facies. The property area is underlain by rocks of the Hoyle Sedimentary Assemblage and the Kidd-Munro Volcanic Assemblage. In places the contact has been intruded by a series of felsic to intermediate intrusions. The property lies on the northern portion of the Blake River Synclinorium and approximately three kilometres north of the DPFZ. (See Figure 17.2.)

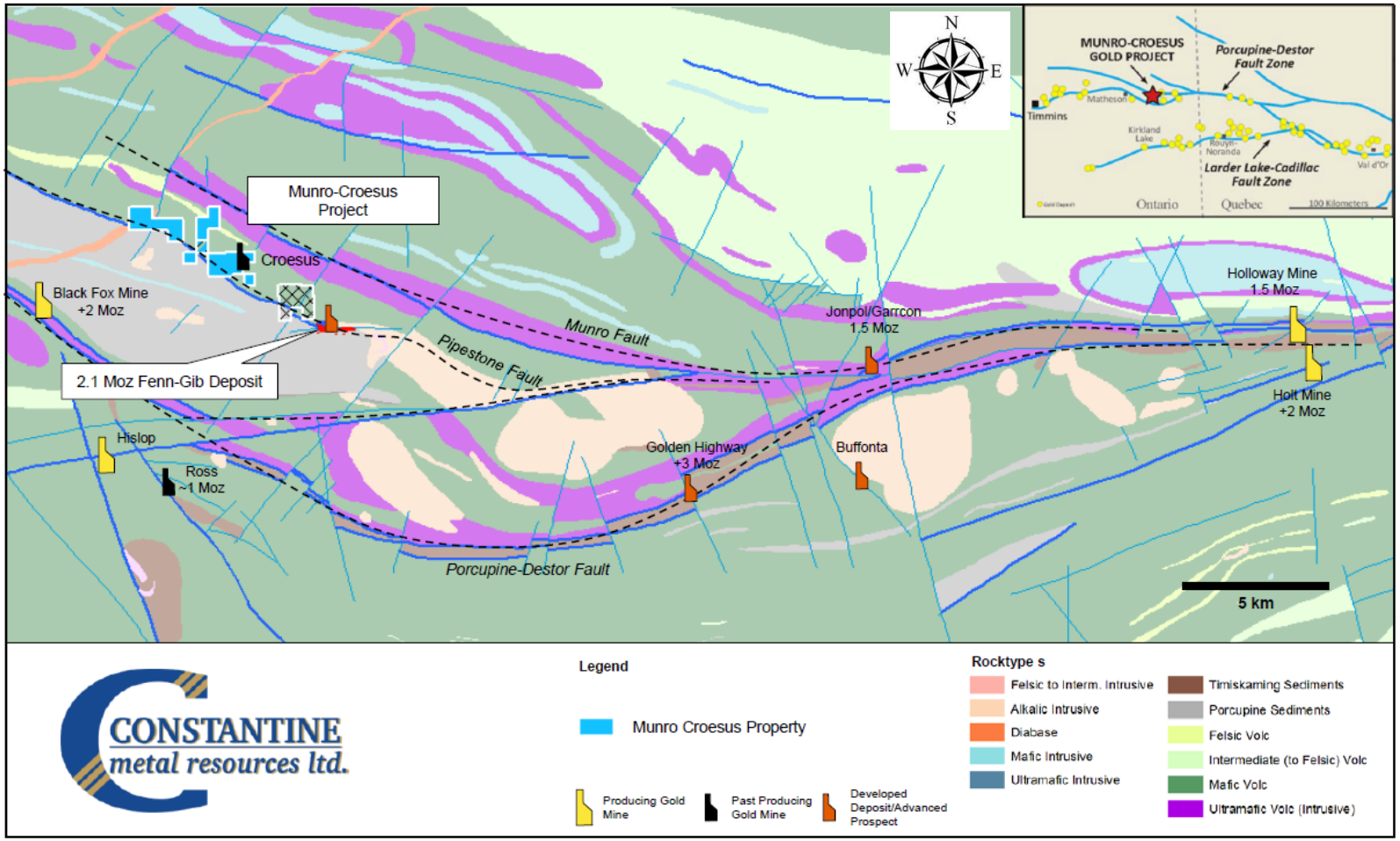
Gold within the Fenn-Gib deposit is primarily associated with disseminated pyrite in syenites and basalts affected by albitization and silicification in proximity to the fault contact between the Hoyle and Kidd-Munro packages. There appears to be a close association of the mineralization with syenite dykes and intrusions. The deposit itself can be traced for 1.25 km along strike, and is thickest at the western end (300 m). The mineralization forms a thinner extension to the east along the same contact concentrated within the deformation zone itself. Although the deposit is reported to be open in all directions, the quality of mineralization (grade and thickness) appears to decrease away from the core of the Fenn-Gib deposit.

17.3 GARRCON DEPOSIT

Osisko Mining acquired Northern Gold in 2015 to gain ownership of the Garrison Project. The Garrison Project is located to the northeast of Moneta's Property and is reported to contain several zones of gold mineralization including the Garrcon, Jonpol, and newly discovered 903 Zone. In March, 2014, A.C.A. Howe International Limited (Howe) completed an NI 43-101 technical report on the Garrison Project that describes the mineralization and provides a resource estimate. The Garrison Project is underlain by the Kidd Munro Assemblage metavolcanic rocks that are in fault contact with or unconformably overlain by metasedimentary rocks of the Timiskaming assemblage. Banded magnetite-hematite iron formation is interbedded with and structurally interleaved with clastic metasedimentary rocks.

At the Garrison Project, gold mineralization occurs as gold bearing quartz veins and as disseminated sulphide bearing zones adjacent to the deformation zones. (See Figure 17.3.) The Garrcon deposit gold mineralization on the Garrison property is primarily associated with quartz-pyrite vein stockworks hosted in altered and metamorphosed Timiskaming metasediments along the northern edge of the DPFZ. The Jonpol deposit, comprising the JD, JP, RP and East Zones, is associated with sulphide-rich (pyrite-arsenopyrite) mineralization in deformed ultramafic metavolcanics in the Munro Fault Zone. The 903 Zone has a similar type of mineralization and is located within the DPFZ south of the Garrcon deposit.

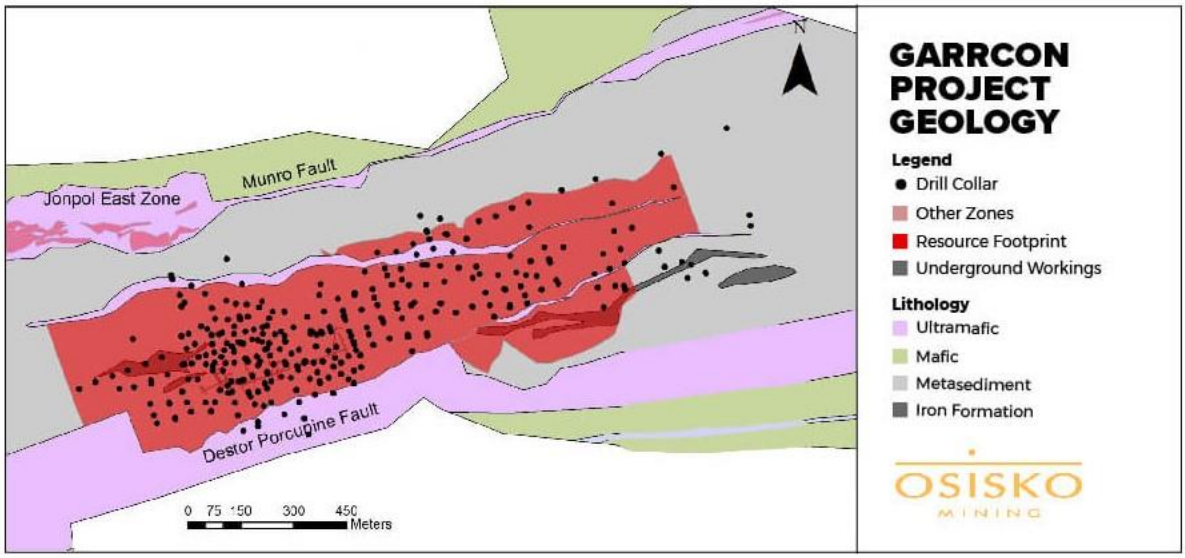
Figure 17.2
Fenn-Gib Project Property Geology



Source: http://constantinemetals.com

The style of mineralization at the Garrcon deposit has some similarities to the gold mineralization on Moneta's Windjammer South, South West, and 55 deposits.

Figure 17.3
Garrcon Project Geology Map

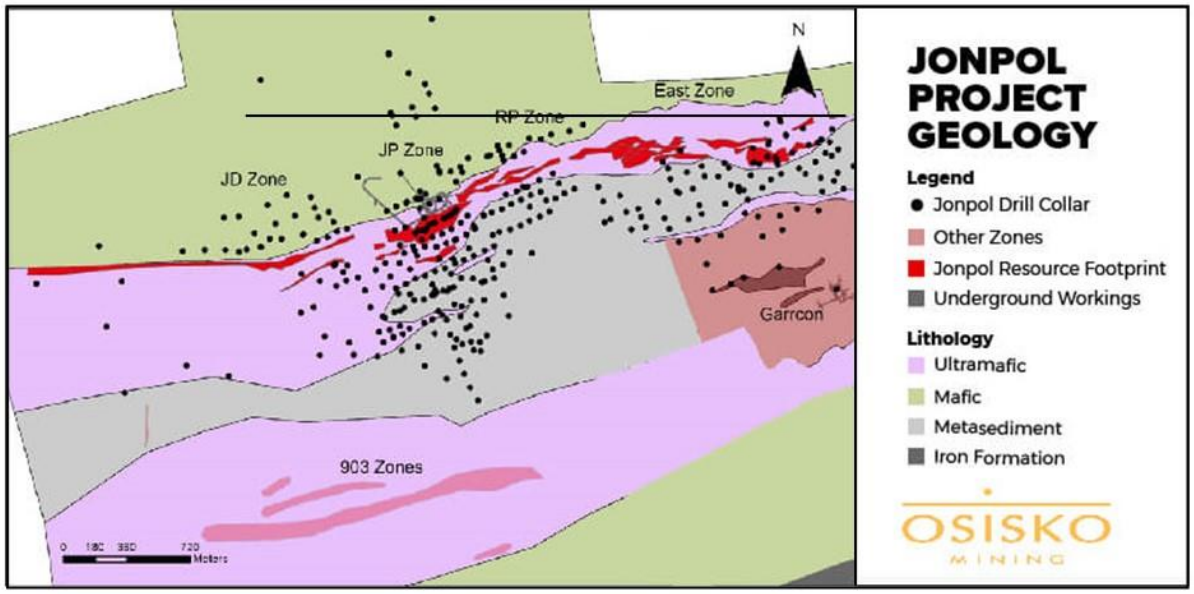


Source: www.osiskomining.com

17.4 JONPOL DEPOSIT

The Jonpol deposit, comprising the JD, JP, RP and East Zones, is associated with sulphide-rich (pyrite-arsenopyrite) mineralization in deformed ultramafic metavolcanics in the Munro Fault Zone, a west striking splay off the north side of the DPFZ. The fault is a shear zone, tens of metres wide in altered mafic volcanic rocks. (See Figure 17.4).

Figure 17.4
Jonpol Project Geology Map



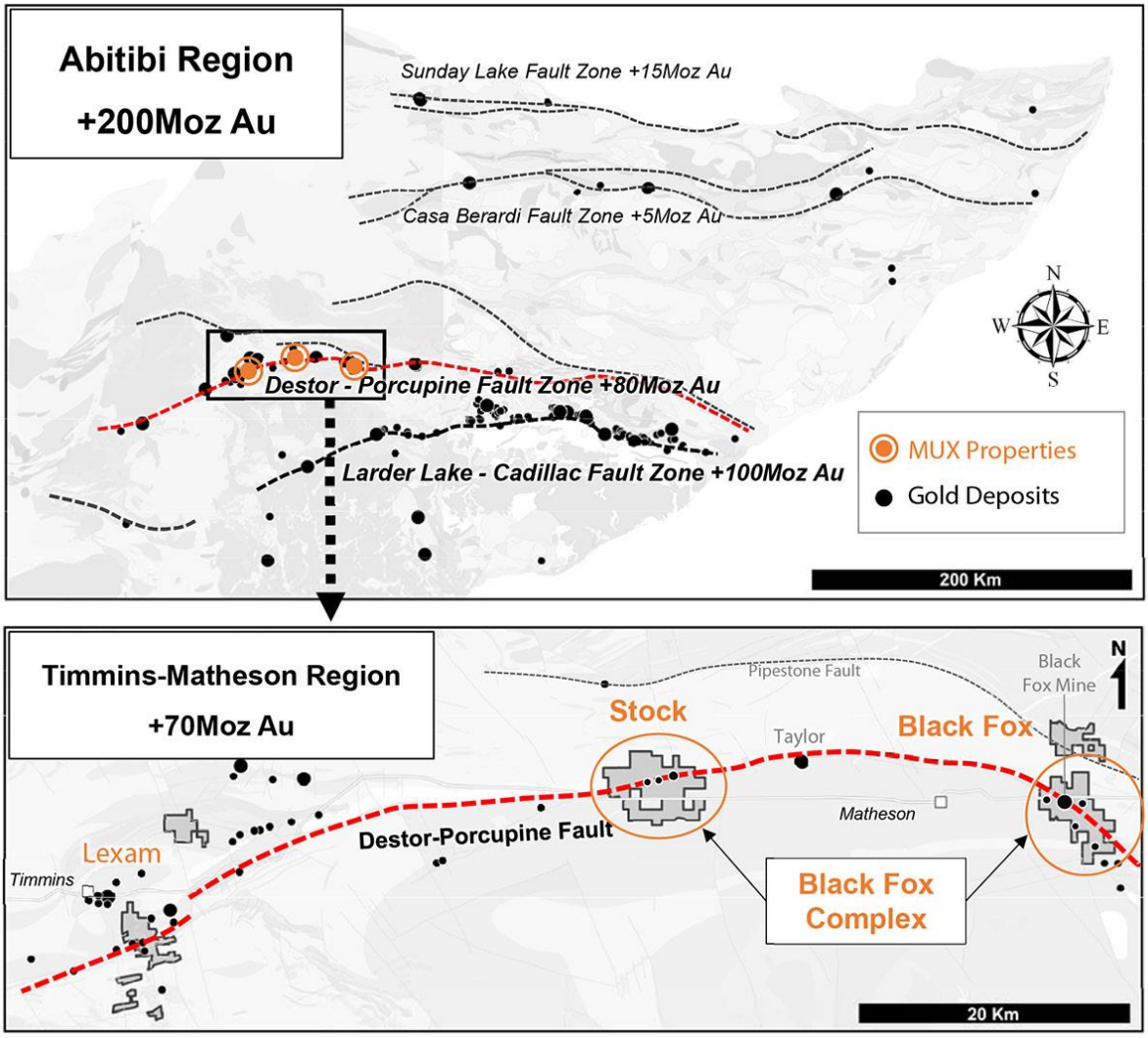
Source: www.osiskomining.com

17.5 BLACK FOX MINE PROJECT

The Black Fox Complex is located approximately 10 km east of the town of Matheson, 65 km east of the city of Timmins and is adjacent to Provincial Highway 101. The complex is composed of two land packages that total 1,750 ha and covers 11 km of the DPFZ, sometimes known as the 'Golden Highway'. The DPFZ has a total strike length of approximately 200 km and hosts many of Ontario's gold mines and deposits.

The Black Fox Mine is a key component of the complex, which also includes the Black Fox-Stock mill and the Froome and Grey Fox deposits. (See Figure 17.5.) The Black Fox mine had an initial production run from 1997 to 2001 and was later recommissioned, operating continuously from 2009. Commercial production from the Black Fox open pit occurred from May, 2009 to September, 2015, while underground mining commenced in October, 2011. The open pit and underground operations at the Black Fox mine have produced a total of 835,000 ounces of gold to date. The Stock property surrounding the Black Fox-Stock mill is also the site of the former Stock Mine, which produced 137,000 ounces of gold from an underground operation between 1989 and 2005, bringing the combined production at the Black Fox Complex to 972,000 ounces of gold.

Figure 17.5
Black Fox Project Location



Source: www.mcewenmining.com

Although there is a history of exploration and production, the land packages of the Black Fox Complex remain relatively underexplored. Black Fox has a high gold endowment, presence of high grade mineralization, multiple prospective structural trends, as well as various styles of mineralization and host rock types.

The Stock property covers a 6.5 km section of the prolific DPFZ. The property is the site of the current Black Fox Stock Mill and of the former Stock Mine.

17.6 HOLT MINE PROJECT

The Holt Mine was originally built and operated by Barrick in the late 1980's. The mine has a long history of reserve replacement. Approximately 85% of the current reserves are situated in three zones: Zone 4, Zone 6 and Zone 7.

Kirkland Lake Gold acquired St Andrew Goldfields Ltd. in January of 2016, which included the Taylor, Holloway, Holt and Hislop mines and a milling facility on the Holt property.

The Holt Mine is a mafic volcanic, sulphide-replacement-hosted gold deposit. The mineralized zones are structurally controlled by both the McDermott Fault and the Ghostmount Fault Zone, which are splays off the DPFZ. Unlike other quartz vein hosted deposits in the region, native gold at the Holt Mine occurs as very fine grains spatially associated with pyrite, typically located in fractures, on grain boundaries, or encapsulated in pyrite grains. Zone thickness can widen from less than 10 m to locally more than 50 m. Historically mined zones include the South (Zone 4), C-104, McDermott, Worvest/Three Star, Mattawasaga, and C-97, which occur over a strike length of three kilometres and have been mined to depths of over one kilometre below surface. More recently, the bulk of the existing gold mineralization is located within Zone 4, Zone 6, Zone 7 and C Zones.

The mineralized zones at the Holt Mine display two pronounced shoot plunges: (a) moderate to steep east plunges that outline the major zones, and (b) alignment of zones and small mineralized shoots along shallow west plunging axes.

18.0 OTHER RELEVANT DATA AND INFORMATION

No additional information or explanation is necessary to make this Technical Report understandable and not misleading.

19.0 INTERPRETATION AND CONCLUSIONS

Since the early 1980s, exploration on the Golden Highway Property has resulted in the discovery of a number of gold deposits and gold-mineralized zones. These can be classified as structurally-controlled orogenic gold deposits in an Archean greenstone belt setting.

Six of these (South West, Windjammer South, Windjammer Central, Windjammer North, 55 and Discovery) have been sufficiently drilled to have mineral resource estimates prepared for them. For all but Windjammer Central narrow, higher-grade vein structures have been modelled. Central is a wider, lower grade bulk tonnage target potentially suitable for open pit mining. However, the deep overburden in the area has resulted in only a small tonnage of mineralization lying with a pit shell floated on it. For this reason no resources have been reported for Central.

Other zones (Western, Dyment 3, LC, Westaway, Halfway, Twin Creeks, and Landing) and isolated drill intersections have also been found which deserve follow-up exploration.

19.1 MINERAL RESOURCES

The mineral resource estimates for the five reportable deposits (South West, Windjammer South, Windjammer North, 55 and Discovery) are set out in Table 19.1.

Table 19.1
Golden Highway Project Mineral Resource Estimate by Deposit

Deposit Name	Indicated			Inferred		
	Tonnes (t)	Grade (g/t)	Ounces (oz)	Tonnes (t)	Grade (g/t)	Ounces (oz)
South West	2,007,000	4.63	298,900	5,583,000	4.21	755,800
Windjammer South	364,000	4.19	49,100	173,000	4.59	25,500
55	216,000	5.11	35,400	327,000	4.31	45,300
Discovery	-	-	-	108,000	4.12	14,300
Windjammer North	-	-	-	265,000	3.80	32,400
Total	**2,587,000**	**4.61**	**383,400**	**6,456,000**	**4.21**	**873,300**

Notes:
1. Mineral Resource Estimates are reported at a cut-off grade of 3.00 g/t Au for an underground mining scenario. The cut-off grade was calculated at a gold price of US$1,250 per ounce, an exchange rate of USD$/CDN$ of 0.75 and operational assumptions outlined in Section 14 of this report.
2. The resource estimate is supported by statistical analysis with different high grade capping applied to each of the deposits ranging from 13.0 g/t Au to 37.0 g/t Au on 1-m composites.
3. The mineral resources presented here were estimated with a block size of 5 m x 5 m x 10 m utilizing sub-blocks as required and constrained within geological wire frames with a minimum width of 1.50 m. The cells are estimated by Ordinary Kriging using the appropriate variogram model of each structure with individual search ellipsoids.
4. The mineral resources presented here were estimated by Micon International Limited using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definitions and Standards on Mineral Resources and Reserves.

5. Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, market or other relevant issues.
6. The quantity and grade of reported Inferred Resources are uncertain in nature and there has not been sufficient work to define these Inferred Resources as Indicated or Measured Resources.
7. There are no historical underground voids from mining including shafts, ramps drifts or stopes in any of the deposit areas.
8. Tonnage estimates are based on bulk densities individually measured and calculated for each of the deposit areas, averaging 2.78 tonnes per cubic metre for the total resource. Resources are presented as undiluted and in situ.
9. This mineral resource estimate is dated January 15, 2019. The effective date for the drill hole database used to produce this updated mineral resource estimate is November 19, 2018. Tonnages and ounces in the tables are rounded to the nearest thousand and hundred respectively. Numbers may not total due to rounding.
10. There were no West Block mineral resources reported due to low grades and a lack of data and thus continuity.
11. At the present time, Micon does not believe that the mineral resource estimate is materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.

20.0 RECOMMENDATIONS

20.1 RECOMMENDED FUTURE WORK

Moneta staff have produced a recommended program of continued exploration which has been reviewed by the QP. It is recommended that the following activities and programs be conducted to continue to advance the development of the project:

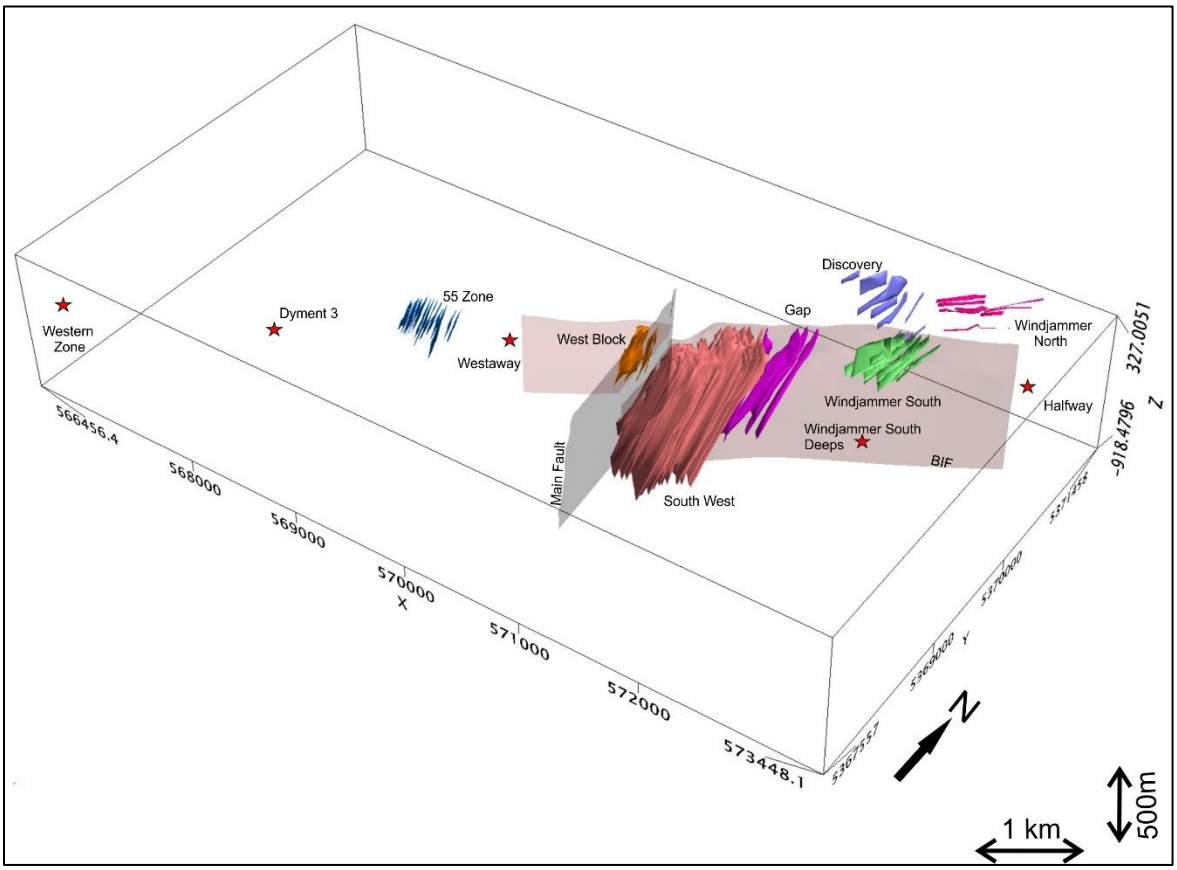
- Exploration drilling program to test mineralized targets already identified.
- Exploration drilling to expand the mineral resources.
- Exploration drilling to test new drill targets.
- Infill drilling within the current resource where gaps occur or to upgrade confidence categories.
- Further geological interpretation and modelling.
- Mineralogical and petrological studies to determine the deportment of gold.
- Metallurgical test work of the different styles and geological settings of mineralization to test recoveries near cut-off grade, the new higher average grade, as well higher-grade areas of the resources.
- Metallurgical test work to include acid base accounting and trace element background data collection.
- Geotechnical data collection and test work to establish geotechnical aspects of mining the project.
- Environmental study programs including aquatic, terrestrial, hydrology, and groundwater to provide data for planning and permitting.
- First Nation and other stakeholder consultation.
- Scoping study: An updated resource and preliminary economic assessment (PEA) of the project is required to determine the focus, direction and plans for further resource development

An infill drilling program of 40,000 m is recommended to infill portions of the resource where drill spacing is not sufficient within the interpreted wireframes to fully interpolate grade between more widely spaced drill holes and to connect shallower structures with extensions at depth.

A 60,000 m exploration drilling program is recommended to expand the currently modelled resources. Drilling should be allocated to the following target areas: down dip and strike extensions of the 55, South West-West Block, South West east extension (former Gap area) and Windjammer South deposits as well as the Discovery and Windjammer North deposits and associated zones along the northern splay of the DPFZ.

A number of new targets not included in the current resource have been identified and found to host gold mineralization, notably along the southern contact of the regional banded iron formation (BIF). A program of 35,000 m is recommended to test the Halfway, Westaway, Dyment and Western Zones. (See Figure 20.1.)

Figure 20.1
Golden Highway Project, 3D Isometric View, Main Target Zones



Source: Moneta, 2019.

A number of zones including LC, Landing Zone and Twin Creeks occur along the northern splay of the DPFZ within the Tisdale and Kidd-Munro Formations which warrant additional drill testing. A large portion of this structure east of Windjammer North has not been tested. Approximately 2 km of strike length of untested BIF between the South West and 55 deposits requires drill testing as does the BIF to the east of Halfway. It is recommended to conduct 65,000 m of exploration drilling.

Upon completion of the proposed additional drilling an updated mineral resource and, subsequently, a preliminary economic assessment (PEA) should be completed to first determine the overall size of the project and then determine the potential economics and outline the best program to advance the project.

It is recommended that Moneta characterize the acid generation/acid consuming and metal leaching potential of the different mineralized zones and rock types potentially to be mined/exposed.

Commencing geotechnical data collection is recommended in line with the current status of the project in order to establish suitable base line data as required for further development.

A program of environmental and social base line data collection and studies is recommended to reflect the current status of the project and situate the project favourably for further advancement. The commencement of suitable hydrology, ground water and weather data are also recommended.

20.2 RECOMMENDED PROGRAM BUDGET

Moneta has also prepared a program budget which is based in part on Micon's recommendations (Table 20.1).

Table 20.1
Recommended Work Program Budget

Program	Units (m)	Unit Cost (CDN$/m)	Budget
Mine Property General			
Infill Drilling Program	40,000	$135	$5,400,000
Resource Expansion Drilling	60,000	$135	$8,100,000
Exploration Drilling	65,000	$135	$8,775,000
Drill test Known Targets	35,000	$135	$4,725,000
Metallurgical Recovery Test Work			$250,000
Petrographic and Mineralogical Studies			$50,000
Geological Interpretation and Modelling			$250,000
Environmental Base Line Study Work: Aquatic, Terrestrial, Ground Water, Water Quality			$350,000
First Nation Consultation and Archaeological Studies			$650,000
Geotechnical and Hydrology programs and studies			$250,000
Scoping Study: Resource update and PEA			$850,000
Total			**$29,650,000**

The QP has reviewed the proposed program of work and budget and finds them to be reasonable and justified in light of the observations made in this report. The QP recommends that Moneta conduct the planned activities subject to availability of funding and any other matters which may cause the objectives to be altered in the normal course of business activities.

21.0 DATE AND SIGNATURE PAGE

MICON INTERNATIONAL LIMITED

"*B. Terrence Hennessey" {signed, sealed and dated}*

B. Terrence Hennessey, P.Geo.
Vice President
Micon International Limited

February 28, 2019

"Richard M. Gowans" {signed, sealed and dated}

Richard M. Gowans, P.Eng.
President and Principal Metallurgist
Micon International Limited

February 28, 2019

22.0 REFERENCES

Acar, S., 2001. Metallurgical Study Results for the Windjammer Property: Unpublished Memorandum, Newmont Canada Ltd.

Atkinson, B. T., Bousquet, P., Pace, A., Burnett, S., Butorac, S., Draper, D.M., Metsaranta, D.A., and Wilson, A.C., 2011. Report of Activities 2010, Resident Geologist Program, Timmins Regional Resident Geologist Report: Timmins and Sault Ste. Marie Districts; Ontario Geological Survey, Open File Report 6264, 127p.

Ayer, J. A. and Trowell, N. F., 2001. Project Unit 95-24, The Abitibi Greenstone Belt: A Program Update. In Summary of Field Work and Other Activities 2001, Ontario Geological Survey, OFR 6070, p. 4-1 to 4-9.

Ayer, J.A., Thurston, P. C., Bateman, R., Dubé, B., Gibson, H. L., Hamilton, M. A., Hathway, B., Hocker, S. M., Houlé, M. G., Hudak, G., Ispolatov, V. O., Lafrance, B., Lesher, C. M., MacDonald, P. J., Péloquin, A. S., Piercey, S. J., Reed, L. E., and Thompson, P. H., 2005. Overview of results from the greenstone architecture project: Discover Abitibi Initiative: Ontario Geological Survey, Open File Report 6154, 146 p.

Berger, B. R., 2002. Geological Synthesis of the Highway 101 Area, East of Matheson, Ontario: Ontario Geological Survey, Open File Report 6091, 124p.

Cargill, D. G., July 28, 2008. NI-43-101 Technical Report on the Windjammer Project, Michaud and Garrison Townships, Ontario, prepared for Moneta Porcupine Mines Inc.

Cargill, D. G., March 30, 2009. NI-43-101 Technical Report on the Windjammer Project, Matheson, Ontario, prepared for Moneta Porcupine Mines Inc.

Carré, M., and Lei, Y., 1996. Moneta and Nufort Projects South West Zone, 1996 Integrated Report: Unpublished Report, Barrick Gold Corporation (Lac Exploration Inc.).

Carré, M., and Lei, Y., 1997. Moneta Project (736) 1996 Exploration Program Report, Lac Exploration Inc., Volumes 1 to 4.

Carré, M., and Lei, Y., 1997. Nufort Project (737) 1996 Exploration Program Report, Lac Exploration Inc., Volumes 1 to 5.

Carré, M., 1997. Moneta (736) and Nufort (737) Projects 1997 Diamond Drilling Program Report, Lac Exploration Inc., Volumes 1 to 5.

Carré, M., and Lei, Y., October 1997. Moneta (736) and Nufort (737) Projects South West Project Resource Inventory.

Colvine, A. C., Fyon, J. A., Heather, K. B., Marmont, Soussan, Smith, P. M., and Troop, D. G., 1988. Archean Lode Gold Deposits in Ontario, Ontario Geological Survey Misc. Paper 139, 136 p.

Core, D., 2012. Enhancement Filtering of Golden Highway Project Magnetic Data by Dan Core, Fathom Geophysics for Rainer Skeries and Kirsty Nicholson, Moneta Porcupine Mines Inc. June 2012.

Corfu, F., Krough, T. E., Kwok, Y. Y., and Jensen, L. S., 1989. U-Pb zircon geochronology in the southwestern Abitibi greenstone belt, Superior Province, Canadian Journal of Earth Sciences, v. 26, p. 1747-1763.

Dawson, D., 2009. Geophysical Survey Interpretation Report, Tuned Gradient /Insight Section DCIP Surveys on the Michaud Property, Matheson, Ontario on behalf of Moneta Porcupine Mines Inc.: Unpublished Report.

Dubé, B., and Gosselin, P., 2007. Greenstone-hosted Quartz-carbonate Vein Deposits, in Goodfellow, W.D., ed., Mineral Deposits of Canada: A Synthesis of Major Deposit-Types, District Metallogeny, the Evolution of Geological Provinces, and Exploration Methods: Geological Association of Canada, Mineral Deposits Division, Special Publication No. 5, p. 49-73.

Dubé, B., Mercier-Langevin, P., Ayer, J., Atkinson, B., and Monecke, T., 2017. Orogenic Greenstone-Hosted Quartz-Carbonate Gold Deposits of the Timmins-Porcupine Camp, SEG Reviews in Economic Geology, Volume 19, 2017.

Fyon, J. A., and Green, A. H. (editors), 1991. Geology and Ore Deposits of the Timmins district, Ontario, 8th International Association on the Genesis of Ore Deposits (IAGOD) Symposium, Field Trip 6 Guidebook, Geological Survey of Canada, Open File Report 2161, 156 pages.

Guindon, D. L., Grabowski, G. P. B., Wilson, A. C., Metsaranta, D. A. and Greenfield, M. J., 2011, Report of Activities 2010. Resident Geologist Program, Kirkland Lake Regional Resident Geologist Report: Kirkland Lake District; Ontario Geological Survey, Open File Report 6265, 49p.

Jackson, S. L., and Fyon, J. A., 1991. The Western Abitibi Subprovince in Ontario; in Geology of Ontario, Special Volume 4, Part 1, Chapter 11, p.405-482.

Kerrich, R., and Wyman, D. 1990. Geodynamic setting of mesothermal gold deposits: An association with accretionary tectonic regimes, Geology, v. 18, n. 9, pp. 882-883.

Knox, A. W., 1989. 1989 Exploration Program Phases I and II: Unpublished Report, Unocal Canada Ltd.

Lascelles, D., 2018. Scoping Level Study on samples from the Golden Highway Project, SGS Canada Inc. Project 50286-001 - Final Report, prepared for Moneta Porcupine Mines Inc.

Lanouette, M., 1996. Project Moneta, Preliminary Metallurgical Test, Report #96-01, Barrick Bousquet, div. est Malartic.

Mascioli, A., 2012, Moneta Porcupine Mines, Golden Highway Project, Phase 2 Environmental Baseline Monitoring Report, Blue Heron Solutions for Environmental Management Inc, June, 2012.

Meixner, H., 2001. Geological Report on the Michaud Gold Property, Michaud Township, Ontario, Larder Lake Mining Division - Matheson Area, prepared for Acrex Ventures Ltd.

Meixner, H., 2004. 2003-2004 Drilling Report on the Michaud Gold Property, Michaud Township, Ontario, Larder Lake Mining Division - Matheson Area, prepared for Moneta Porcupine Mines Inc.

Ministry of Northern Development, Mines, and Forestry, Ontario Government website, Mining Lands, Dec 2011. www.mndm.gov.on.ca.

Moneta Porcupine Mines Inc., 2012. Annual Information Form for the year ended December 31, 2011.

Moneta Porcupine Mines Inc., 2011. Annual Information Form for the year ended December 31, 2010.

Moneta Porcupine Mines Inc., 1986-2011. unpublished internal memos on drilling programs, geophysical surveys and geological studies.

Moneta Porcupine Mines Inc., 2018. NI 43-101 F1 Technical Report, Updated Mineral Resource Estimate For The Golden Highway Property, Michaud And Garrison Townships, Ontario, Canada. Moneta_Golden Highway_43101_20190107.docx. Draft “Boiler Plate” Sections for the Technical Report.

Nassif, M. T., Kuiper Y. D., Goldfarb R. J., Monecke T., Holm-Denoma C. S., 2018. Structural Evolution of a Gold-bearing Transtensional Zone within the Archean Porcupine-Destor Deformation Zone, Southern Abitibi Greenstone Belt, Eastern Ontario, Canada, Journal of Structural Geology 117 (2018) pp 203-218.

Nemcsok, G., and Tims, A., 1995. Michaud Moneta Project (1836) A Summary of Work Completed in 1994 on Moneta Porcupine Mines Property: Unpublished Report, Lac Exploration Inc.

Puritch, E., Armstrong, T., Burga, D., and Yassa, A., January 13, 2012. NI-43-101 Technical Report and Resource Estimates on the Windjammer South, South West Zone and 55 Zone

Golden Highway Project, Michaud and Garrison Townships, North Eastern Ontario, Canada for Moneta Porcupine Mines Inc.

Puritch, E., Rodgers, K., Sutcliffe, R. H., Pearson J. L., Orava, D., Hayden, A., Burga, D., Wu, Y., Armstrong, T., Yassa, A., November 01, 2012. NI-43-101 Technical Report, Updated Resource Estimate and Preliminary Economic Assessment of the Golden Highway Project (Windjammer, South West, Gap and 55 Zones), Michaud and Garrison Townships, North Eastern Ontario, Canada for Moneta Porcupine Mines Inc.

Satterly, J., 1949. Geology of Garrison Township; Ontario Department of Mines Annual Report, v.58, pt.4, 33 p., including Map M1949-01, Scale 1:12,000.

Satterly, J., 1948. Geology of Michaud Township; Ontario Department of Mines Annual Report, v.57, pt.4, 27 p., including Map M1947-3, Scale 1:12,000.

Vachon, A., and Chenard, D., 1996. Moneta Project (736) Report on 1994-95 Drilling Program, Lac Exploration Inc.,Volume 1 & 2.

Van Hees E. H., Pace A., Bustard A., Gomwe T. S., Bousquet P., Daniels C.M., Wilson A. C., Streit L., Sword P., Patterson C. and Fudge S. P, 2018. Report of Activities, 2017 Regional Resident Geologist Report: Timmins and Sault Ste. Marie Districts, Ontario Geological Survey, Open File Report 6339.

23.0 CERTIFICATES

CERTIFICATE OF QUALIFIED PERSON
B. TERRENCE HENNESSEY

As an author of this report titled "A Mineral Resource Estimate For The Golden Highway Project, Black River - Matheson Area, Northeastern Ontario" dated February 28, 2019, with an effective date of January 19, 2019 (the "Technical Report"), I, B. Terrence Hennessey, P.Geo., do hereby certify that:

1. I am employed by, and carried out this assignment for Micon International Limited, 900 - 390 Bay Street, Toronto, Ontario M5H 2Y2, Tel.: (416) 362-5135; Fax: (416) 362-5763, e-mail: thennessey@micon-international.com

2. I hold the following academic qualifications:

B.Sc. (Geology) McMaster University 1978

3. I am a registered Professional Geoscientist with the Association of Professional Geoscientists of Ontario (membership # 0038); as well, I am a member in good standing of several other technical associations and societies, including:

The Canadian Institute of Mining, Metallurgy and Petroleum (Member).

4. I have worked as a geologist in the minerals industry for over 35 years.

5. I have read the definition of "Qualified Person" set out in National Instrument 43-101 (NI 43-101) and, by reason of my education, past relevant work experience and affiliation with a professional association, fulfill the requirements to be a Qualified Person for the purposes of NI 43-101. My work experience includes 7 years as an exploration geologist looking for iron ore, gold, base metal and tin deposits, more than 10 years as a mine geologist in both open-pit and underground mines and 20 years as a consulting geologist working in precious, ferrous and base metals as well as industrial minerals.

6. I have visited the Golden Highway Project near Matheson, Ontario and Moneta's core logging facility and office in Timmins, Ontario.

7. I am responsible for Sections 2 to 12, and 14 to 17, and summaries therefrom in Sections 1, 18 and 19, of the Technical Report titled "A Mineral Resource Estimate For The Golden Highway Project, Black River - Matheson Area, Northeastern Ontario" dated February 28, 2019 and with an effective date of January 19, 2019.

8. I am independent of Moneta Porcupine Mines Inc., as defined in Section 1.5 of NI 43-101.

9. I have had no prior involvement with the property that is the subject of the Technical Report.

10. I have read NI 43-101 and Form 43-101F1 and the portions of this report for which I am responsible have been prepared in compliance with that instrument and form.

11. As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make this report not be misleading.

Signing Date: February 28, 2019
Effective Date: January 19, 2017

"B. Terrence Hennessey" {signed and sealed}

B. Terrence Hennessey, P.Geo.

CERTIFICATE OF QUALIFIED PERSON
RICHARD GOWANS, P.ENG.

As an author of this report titled "A Mineral Resource Estimate For The Golden Highway Project, Black River - Matheson Area, Northeastern Ontario" dated February 28, 2019, with an effective date of January 19, 2019 (the "Technical Report"), I, Richard Gowans do hereby certify that:

1. I am employed by, and carried out this assignment for, Micon International Limited, 900 - 390 Bay Street, Toronto, Ontario M5H 2Y2, tel. (416) 362-5135, fax (416) 362-5763, e-mail rgowans@micon-international.com.

2. I hold the following academic qualifications:

   B.Sc. (Hons) Minerals Engineering, The University of Birmingham, U.K. 1980.

3. I am a registered Professional Engineer in Ontario (membership number 90529389); as well, I am a member in good standing of the Canadian Institute of Mining, Metallurgy and Petroleum.

4. I am familiar with NI 43-101 and by reason of education, experience and professional registration and fulfill the requirements of a Qualified Person as defined in NI 43-101. I have been continuously employed in the mining industry since graduation and my work experience includes over 30 years of the management of technical studies and design of numerous metallurgical testwork programs and metallurgical processing plants.

5. I have not visited the site.

6. I am responsible for Section 13, and summaries therefrom, in Sections 1, 18 and 19 of this Technical Report titled "A Mineral Resource Estimate For The Golden Highway Project, Black River - Matheson Area, Northeastern Ontario" dated February 28, 2019, with an effective date of January 19, 2019.

7. I have no prior involvement with the Golden Highway Project that is the subject of the Technical Report.

8. As of the date of this Certificate, to the best of my knowledge, information, and belief, this Technical Report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

9. I am independent of Moneta Porcupine Mines Inc. as defined by Section 1.5 of the Instrument.

10. I have read National Instrument 43-101 and the Technical Report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1.

Signing Date: February 28, 2019
Effective Date: January 19, 2019

"Richard Gowans" {signed and sealed as of the report date}

Richard Gowans P.Eng.

24.0 APPENDIX 1: CLAIMS LIST

Table 24.1
Golden Highway Property, Patented Mining Claims List

Patent ID	Parcel	Claim No.	Township	Con.	Lot	Half	Quarter	Area (ha)
PAT-3005	9921 SEC	L 38501	Michaud	3	2	S	NW	15.479
PAT-3006	9926 SEC	L 38929	Michaud	3	3	N	SW	16.238
PAT-3007	9924 SEC	L 38497	Michaud	3	3	S	NE	16.238
PAT-3008	9925 SEC	L 38493	Michaud	3	3	S	NW	16.238
PAT-3009	9922 SEC	L 38498	Michaud	3	3	S	SE	16.238
PAT-3010	9923 SEC	L 38494	Michaud	3	3	S	SW	16.238
PAT-3011	9927 SEC	L 38490	Michaud	3	4	S	SE	16.236
PAT-3012	9928 SEC	L 38504	Michaud	3	4	S	SW	16.39
PAT-3013	11561 SEC	L 47194	Michaud	2	3	N	SE	16.086
PAT-3014	10215 SEC	L 38505	Michaud	2	4	N	NW	16.491
PAT-3015	10214 SEC	L 38491	Michaud	2	4	N	NE	16.491
PAT-3016	10216 SEC	L 38502	Michaud	3	2	S	SW	15.479
PAT-3017	10217 SEC	L 38500	Michaud	3	2	N	SW	15.479
PAT-3018	10219 SEC	L 38492	Michaud	3	4	S	NE	16.236
PAT-3019	10221 SEC	L 38930	Michaud	3	4	N	SE	16.236
PAT-3020	10218 SEC	L 38928	Michaud	3	3	N	SE	16.238
PAT-3021	10220 SEC	L 38503	Michaud	3	4	S	NW	16.697
PAT-3022	10213 SEC	L 38495	Michaud	2	3	N	NW	16.086
PAT-3023	10212 SEC	L 38499	Michaud	2	3	N	NE	16.086
PAT-3024	11562 SEC	L 47193	Michaud	2	3	N	SW	16.086
PAT-3025	11563 SEC	L 47191	Michaud	2	4	N	SE	16.491
PAT-3026	11564 SEC	L 47192	Michaud	2	4	N	SW	16.491
							Total	**355.968**

Table 24.2
Golden Highway Property, Leased Mining Claims List

Legacy Claim ID	Historic Lease No.	Parcel No.	Area (ha)	Township	Lease Expiry Date	Rights
LEA-109306	ML 106312	1665 LC	175.13	Michaud	2033-May-31	Mining only
LEA-108823	ML 105641	1599 LC	180.91	Garrison	2032-Apr-30	Mining only
LEA-108690	ML 105465	1588 LC	1,102.060	Michaud	2031-Nov-30	Mining and Surface
LEA-108691	ML 105466	1589 LC	195.103	Michaud	2031-Dec-31	Mining and Surface
		Total	**1653.203**			

Table 24.3
Golden Highway Property, Unpatented Mining Claims List

Record #	Legacy Claim ID	Township / Area	Cell ID	Tenure Type	Due Date	Tenure Percentage
1	3015387	Guibord, Michaud	102202	Single Cell Mining Claim	2023-05-20	100
2	4205463	Michaud	103280	Boundary Cell Mining Claim	2023-06-05	100
3	1199994	Barnet, Michaud	103365	Boundary Cell Mining Claim	2023-08-01	100
4	1226789	Michaud	103497	Single Cell Mining Claim	2023-03-31	100
5	3019466	Michaud	103523	Single Cell Mining Claim	2023-11-06	100
6	1226789	Michaud	103843	Boundary Cell Mining Claim	2023-03-31	100
7	949283	Michaud	104192	Boundary Cell Mining Claim	2023-10-24	100
8	1207486	Michaud	105030	Boundary Cell Mining Claim	2023-09-26	100
9	1240793	Michaud	106702	Single Cell Mining Claim	2023-06-27	100

Record #	Legacy Claim ID	Township / Area	Cell ID	Tenure Type	Due Date	Tenure Percentage
10	1166919	Guibord, Michaud	109704	Boundary Cell Mining Claim	2023-07-24	100
11	3015290	Michaud	109851	Boundary Cell Mining Claim	2023-05-20	100
12	3015381	Michaud	110755	Single Cell Mining Claim	2023-05-20	100
13	1235305	Michaud	115107	Boundary Cell Mining Claim	2023-05-31	100
14	3003825	Guibord	116916	Single Cell Mining Claim	2023-09-27	100
15	4205463	Michaud	117398	Single Cell Mining Claim	2023-06-05	100
16	4257846	Michaud	117421	Single Cell Mining Claim	2023-11-30	100
17	843893	Michaud	117917	Boundary Cell Mining Claim	2023-10-24	100
18	1243890	Michaud	118218	Boundary Cell Mining Claim	2023-08-01	100
19	3013806	Guibord	118331	Single Cell Mining Claim	2023-05-20	100
20	1248402	Michaud	118785	Boundary Cell Mining Claim	2023-11-06	100
21	1226789	Michaud	119125	Single Cell Mining Claim	2023-06-27	100
22	1248410	Michaud	119835	Single Cell Mining Claim	2023-08-01	100
23	949291	Michaud	121892	Single Cell Mining Claim	2023-10-24	100
24	1240793	Michaud	122128	Boundary Cell Mining Claim	2023-06-27	100
25	843892	Michaud	124464	Single Cell Mining Claim	2023-10-24	100
26	1167280	Michaud	125024	Boundary Cell Mining Claim	2023-06-14	75
27	843897	Michaud	125025	Single Cell Mining Claim	2023-06-13	100
28	678859	Michaud	125735	Single Cell Mining Claim	2023-11-06	100
29	3015290	Michaud	125736	Single Cell Mining Claim	2023-05-20	100
30	3013806	Guibord	126399	Single Cell Mining Claim	2023-05-20	100
31	4220423	Michaud	127123	Single Cell Mining Claim	2023-06-13	100
32	4205463	Michaud	127149	Boundary Cell Mining Claim	2023-06-05	100
33	653659	Garrison	127601	Boundary Cell Mining Claim	2023-09-15	100
34	3015379	Guibord, Michaud	127729	Boundary Cell Mining Claim	2023-05-20	100
35	643686	Garrison	128913	Single Cell Mining Claim	2023-08-27	100
36	1248401	Michaud	129488	Boundary Cell Mining Claim	2023-06-05	100
37	1248401	Michaud	130274	Single Cell Mining Claim	2023-06-05	100
38	1248402	Michaud	133430	Single Cell Mining Claim	2023-06-05	100
39	643688	Michaud	135518	Single Cell Mining Claim	2023-09-20	100
40	3015379	Michaud	137045	Boundary Cell Mining Claim	2023-05-20	100
41	1219657	Michaud	137381	Single Cell Mining Claim	2023-04-09	100
42	3003825	Guibord	137652	Single Cell Mining Claim	2023-09-27	100
43	3015380	Michaud	138343	Single Cell Mining Claim	2023-05-20	100
44	4257849	Michaud	138844	Boundary Cell Mining Claim	2023-11-30	100
45	3015381	Michaud	140215	Single Cell Mining Claim	2023-06-05	100
46	949284	Michaud	143821	Single Cell Mining Claim	2023-10-24	100
47	959277	Michaud	144331	Boundary Cell Mining Claim	2023-03-31	100
48	3002169	Michaud	146189	Single Cell Mining Claim	2023-06-05	100
49	849660	Michaud	147469	Single Cell Mining Claim	2023-04-29	100
50	3004007	Michaud	150967	Single Cell Mining Claim	2023-09-30	100
51	1207486	Michaud	151803	Single Cell Mining Claim	2023-09-26	100
52	1167280	Michaud	153019	Single Cell Mining Claim	2023-07-26	75
53	653659	Garrison, Michaud	153611	Boundary Cell Mining Claim	2023-09-15	100
54	1219657	Michaud	153800	Single Cell Mining Claim	2023-06-27	100
55	843895	Michaud	155054	Single Cell Mining Claim	2023-06-13	100
56	1243891	Michaud	155660	Single Cell Mining Claim	2023-05-03	100
57	3015379	Guibord, Michaud	155676	Single Cell Mining Claim	2023-05-20	100
58	1166919	Guibord	156460	Single Cell Mining Claim	2023-07-24	100
59	3015379	Guibord, Michaud	157219	Boundary Cell Mining Claim	2023-05-20	100
60	643683	Garrison, Michaud	158187	Single Cell Mining Claim	2023-09-20	100
61	1248410	Michaud	158324	Boundary Cell Mining Claim	2023-08-01	100
62	1248410	Barnet, Michaud	158325	Boundary Cell Mining Claim	2023-08-01	100

Record #	Legacy Claim ID	Township / Area	Cell ID	Tenure Type	Due Date	Tenure Percentage
63	843899	Michaud	161552	Single Cell Mining Claim	2023-06-13	100
64	653659	Garrison	162465	Boundary Cell Mining Claim	2023-09-15	100
65	1238680	Michaud	162913	Single Cell Mining Claim	2023-05-31	100
66	1166919	Guibord, Michaud	163821	Single Cell Mining Claim	2023-07-24	100
67	643684	Garrison	164212	Single Cell Mining Claim	2023-08-27	100
68	643685	Garrison, Michaud	164213	Single Cell Mining Claim	2023-09-20	100
69	3019466	Michaud	167093	Boundary Cell Mining Claim	2023-11-06	100
70	3015382	Michaud	169025	Single Cell Mining Claim	2023-06-13	100
71	3015380	Michaud	169026	Single Cell Mining Claim	2023-05-20	100
72	1219657	Michaud	170432	Single Cell Mining Claim	2023-04-09	100
73	1206790	Michaud	170433	Boundary Cell Mining Claim	2023-09-26	100
74	4263033	Michaud	171203	Boundary Cell Mining Claim	2023-05-05	100
75	4205463	Michaud	172220	Boundary Cell Mining Claim	2023-06-05	100
76	949286	Michaud	172249	Single Cell Mining Claim	2023-10-24	100
77	3015388	Guibord	172330	Single Cell Mining Claim	2023-05-20	100
78	949285	Michaud	172564	Single Cell Mining Claim	2023-10-24	100
79	1219657	Michaud	172568	Single Cell Mining Claim	2023-09-30	100
80	3015380	Michaud	172898	Single Cell Mining Claim	2023-05-20	100
81	3015380	Michaud	172899	Single Cell Mining Claim	2023-05-20	100
82	1225544	Michaud	172902	Boundary Cell Mining Claim	2023-09-22	75
83	1225544	Michaud	172903	Boundary Cell Mining Claim	2023-09-22	75
84	1129845	Garrison, Michaud	173795	Boundary Cell Mining Claim	2023-09-20	100
85	949285	Michaud	174507	Single Cell Mining Claim	2023-10-24	100
86	1243891	Michaud	174559	Single Cell Mining Claim	2023-05-31	100
87	1243891	Michaud	174560	Single Cell Mining Claim	2023-08-01	100
88	4257846	Michaud	174694	Boundary Cell Mining Claim	2023-11-30	100
89	3002169	Michaud	174772	Single Cell Mining Claim	2023-06-05	100
90	1248401	McCool, Michaud	175567	Boundary Cell Mining Claim	2023-06-05	100
91	1166919	Guibord, Michaud	175572	Single Cell Mining Claim	2023-07-24	100
92	1247526	Michaud	177221	Single Cell Mining Claim	2023-05-31	100
93	843893	Michaud	177224	Single Cell Mining Claim	2023-06-13	100
94	1248410	Barnet, Michaud	177849	Boundary Cell Mining Claim	2023-08-01	100
95	1248410	Barnet, Michaud	177850	Boundary Cell Mining Claim	2023-08-01	100
96	843894	Michaud	179280	Single Cell Mining Claim	2023-06-13	100
97	3019466	Michaud	180500	Boundary Cell Mining Claim	2023-11-06	100
98	3013403	Michaud	180501	Boundary Cell Mining Claim	2023-11-06	100
99	3015380	Michaud	182221	Single Cell Mining Claim	2023-05-20	100
100	843898	Michaud	182558	Single Cell Mining Claim	2023-06-13	100
101	1129845	Michaud	184327	Boundary Cell Mining Claim	2023-03-30	100
102	1248402	McCool, Michaud	185413	Boundary Cell Mining Claim	2023-06-05	100
103	4257847	Michaud	185904	Single Cell Mining Claim	2023-11-30	100
104	3013403	Michaud	186567	Single Cell Mining Claim	2023-11-06	100
105	1240794	Michaud	186733	Boundary Cell Mining Claim	2023-06-27	100
106	949291	Michaud	187529	Single Cell Mining Claim	2023-10-24	100
107	1166919	Guibord	188911	Single Cell Mining Claim	2023-07-24	100
108	949683	Michaud	189125	Single Cell Mining Claim	2023-11-06	100
109	3015379	Michaud	189126	Single Cell Mining Claim	2023-05-20	100
110	3013806	Guibord	189243	Single Cell Mining Claim	2023-05-20	100
111	1219657	Michaud	189412	Single Cell Mining Claim	2023-06-05	100
112	3015379	Michaud	189677	Single Cell Mining Claim	2023-05-20	100
113	3015379	Guibord, Michaud	189678	Boundary Cell Mining Claim	2023-05-20	100
114	1226791	Michaud	190028	Boundary Cell Mining Claim	2023-03-31	100
115	4257849	Michaud	190820	Single Cell Mining Claim	2023-11-30	100

Record #	Legacy Claim ID	Township / Area	Cell ID	Tenure Type	Due Date	Tenure Percentage
116	1243891	Michaud	191097	Single Cell Mining Claim	2023-05-31	100
117	3015388	Guibord	191114	Boundary Cell Mining Claim	2023-05-20	100
118	3015381	Michaud	192236	Boundary Cell Mining Claim	2023-06-05	100
119	843891	Michaud	193224	Single Cell Mining Claim	2023-06-13	100
120	1199892	Michaud	193389	Single Cell Mining Claim	2023-09-22	75
121	1247515	Michaud	193535	Single Cell Mining Claim	2023-05-31	100
122	4220423	Michaud	196887	Boundary Cell Mining Claim	2023-02-17	100
123	949282	Michaud	196936	Boundary Cell Mining Claim	2023-10-24	100
124	1240794	Michaud	198945	Single Cell Mining Claim	2023-06-27	100
125	643837	Michaud	200880	Single Cell Mining Claim	2023-09-20	100
126	3016589	Michaud	201799	Single Cell Mining Claim	2023-02-18	100
127	3015379	Michaud	202369	Single Cell Mining Claim	2023-05-20	100
128	3015379	Michaud	202370	Single Cell Mining Claim	2023-05-20	100
129	3015379	Michaud	202371	Single Cell Mining Claim	2023-05-20	100
130	3015379	Michaud	202372	Boundary Cell Mining Claim	2023-05-20	100
131	3003825	Guibord	202486	Boundary Cell Mining Claim	2023-09-27	100
132	3015380	Michaud	203122	Single Cell Mining Claim	2023-05-20	100
133	3015380	Michaud	203148	Single Cell Mining Claim	2023-05-20	100
134	3015380	Michaud	206328	Single Cell Mining Claim	2023-05-20	100
135	3013806	Guibord	206934	Boundary Cell Mining Claim	2023-05-20	100
136	1166919	Guibord	208410	Single Cell Mining Claim	2023-07-24	100
137	949284	Michaud	209085	Single Cell Mining Claim	2023-10-24	100
138	678858	Michaud	210386	Single Cell Mining Claim	2023-11-06	100
139	3015380	Michaud	210450	Single Cell Mining Claim	2023-05-20	100
140	3015380	Michaud	210451	Boundary Cell Mining Claim	2023-05-20	100
141	653660	Garrison	210771	Boundary Cell Mining Claim	2023-09-15	100
142	1129845	Michaud	213699	Boundary Cell Mining Claim	2023-03-31	100
143	3013806	Guibord	214796	Single Cell Mining Claim	2023-05-20	100
144	4261890	Guibord	215049	Single Cell Mining Claim	2023-03-24	100
145	4220423	Michaud	217707	Single Cell Mining Claim	2023-06-13	100
146	949683	Michaud	218689	Single Cell Mining Claim	2023-11-06	100
147	3015386	Michaud	219058	Single Cell Mining Claim	2023-05-20	100
148	843891	Michaud	219243	Boundary Cell Mining Claim	2023-06-13	100
149	1129845	Michaud	219334	Single Cell Mining Claim	2023-09-20	100
150	1243891	Michaud	220507	Single Cell Mining Claim	2023-05-03	100
151	1243891	Michaud	220508	Single Cell Mining Claim	2023-08-01	100
152	1243891	Michaud	220509	Single Cell Mining Claim	2023-08-01	100
153	1243891	Michaud	221014	Single Cell Mining Claim	2023-08-01	100
154	3015388	Guibord	221029	Single Cell Mining Claim	2023-05-20	100
155	4257847	Michaud	221289	Boundary Cell Mining Claim	2023-11-30	100
156	4220423	Michaud	221773	Boundary Cell Mining Claim	2023-02-13	100
157	1226789	Michaud	222866	Boundary Cell Mining Claim	2023-06-27	100
158	1248410	Barnet, Michaud	223700	Boundary Cell Mining Claim	2023-08-01	100
159	3015384	Michaud	224349	Single Cell Mining Claim	2023-05-20	100
160	1248401	Michaud	225204	Single Cell Mining Claim	2023-06-05	100
161	1240793	Michaud	225205	Single Cell Mining Claim	2023-06-27	100
162	949295	Michaud	226497	Single Cell Mining Claim	2023-11-06	100
163	1243890	Michaud	226521	Single Cell Mining Claim	2023-05-31	100
164	4263033	Michaud	226689	Boundary Cell Mining Claim	2023-05-05	100
165	1219657	Michaud	226696	Single Cell Mining Claim	2023-06-05	100
166	3013806	Guibord	227156	Boundary Cell Mining Claim	2023-05-20	100
167	643687	Michaud	227300	Single Cell Mining Claim	2023-09-20	100
168	4205463	Michaud	228403	Boundary Cell Mining Claim	2023-06-05	100

Record #	Legacy Claim ID	Township / Area	Cell ID	Tenure Type	Due Date	Tenure Percentage
169	643684	Garrison	228419	Boundary Cell Mining Claim	2023-08-27	100
170	1240788	Michaud	229255	Boundary Cell Mining Claim	2023-06-27	100
171	1240788	Michaud	229256	Boundary Cell Mining Claim	2023-06-27	100
172	1238680	Michaud	229597	Single Cell Mining Claim	2023-05-31	100
173	4261890	Guibord	233560	Single Cell Mining Claim	2023-03-24	100
174	3019466	Michaud	234385	Boundary Cell Mining Claim	2023-11-06	100
175	1207486	Michaud	235757	Boundary Cell Mining Claim	2023-09-26	100
176	949294	Michaud	236190	Single Cell Mining Claim	2023-10-24	100
177	4263034	Michaud	236916	Single Cell Mining Claim	2023-05-05	100
178	1166919	Guibord	237060	Single Cell Mining Claim	2023-07-24	100
179	1206790	Michaud	237313	Single Cell Mining Claim	2023-09-26	100
180	3015380	Michaud	239073	Boundary Cell Mining Claim	2023-05-20	100
181	1219657	Michaud	239326	Single Cell Mining Claim	2023-04-09	100
182	1206790	Michaud	239327	Single Cell Mining Claim	2023-09-26	100
183	1243891	Michaud	241155	Single Cell Mining Claim	2023-05-03	100
184	4220423	Michaud	241905	Boundary Cell Mining Claim	2023-02-13	100
185	1247515	Michaud	242173	Single Cell Mining Claim	2023-05-31	100
186	1248402	McCool, Michaud	245356	Boundary Cell Mining Claim	2023-06-05	100
187	1248402	Michaud	245370	Single Cell Mining Claim	2023-06-05	100
188	3015380	Michaud	247139	Single Cell Mining Claim	2023-05-20	100
189	3002169	Michaud	247760	Single Cell Mining Claim	2023-09-30	100
190	4211425	Michaud	248251	Single Cell Mining Claim	2023-06-05	100
191	1247515	Michaud	249675	Single Cell Mining Claim	2023-05-31	100
192	678858	Michaud	249715	Single Cell Mining Claim	2023-03-31	100
193	1248402	McCool, Michaud	252218	Boundary Cell Mining Claim	2023-06-05	100
194	1240793	Michaud	252715	Single Cell Mining Claim	2023-11-06	100
195	1240793	Michaud	253448	Boundary Cell Mining Claim	2023-11-06	100
196	1240793	Michaud	253449	Boundary Cell Mining Claim	2023-06-27	100
197	1166919	Guibord	255722	Boundary Cell Mining Claim	2023-07-24	100
198	1219657	Michaud	256059	Single Cell Mining Claim	2023-06-05	100
199	1219657	Michaud	256060	Single Cell Mining Claim	2023-09-30	100
200	3015380	Michaud	256986	Single Cell Mining Claim	2023-05-20	100
201	653660	Garrison, Michaud	257491	Boundary Cell Mining Claim	2023-09-15	100
202	1243891	Michaud	257703	Single Cell Mining Claim	2023-08-01	100
203	3015379	Michaud	257896	Single Cell Mining Claim	2023-05-20	100
204	3015379	Michaud	257897	Boundary Cell Mining Claim	2023-05-20	100
205	3015379	Guibord, Michaud	257898	Boundary Cell Mining Claim	2023-05-20	100
206	3015381	Michaud	259153	Single Cell Mining Claim	2023-05-20	100
207	3015380	Michaud	259179	Single Cell Mining Claim	2023-05-20	100
208	3002169	Michaud	259935	Single Cell Mining Claim	2023-06-05	100
209	3013806	Guibord	262263	Single Cell Mining Claim	2023-05-20	100
210	4220423	Michaud	263479	Single Cell Mining Claim	2023-06-13	100
211	3015380	Michaud	264933	Boundary Cell Mining Claim	2023-05-20	100
212	3015290	Michaud	266263	Boundary Cell Mining Claim	2023-05-20	100
213	1247526	Michaud	266426	Single Cell Mining Claim	2023-05-31	100
214	959276	Michaud	267131	Boundary Cell Mining Claim	2023-03-31	100
215	4205463	Michaud	267652	Single Cell Mining Claim	2023-06-05	100
216	4205463	Michaud	267653	Boundary Cell Mining Claim	2023-06-05	100
217	1166919	Guibord	267686	Boundary Cell Mining Claim	2023-07-24	100
218	1166919	Guibord	267687	Single Cell Mining Claim	2023-07-24	100
219	843895	Michaud	270938	Single Cell Mining Claim	2023-06-13	100
220	1247526	Michaud	273060	Single Cell Mining Claim	2023-05-31	100
221	3015379	Michaud	274231	Single Cell Mining Claim	2023-05-20	100

Record #	Legacy Claim ID	Township / Area	Cell ID	Tenure Type	Due Date	Tenure Percentage
222	3015379	Michaud	274232	Single Cell Mining Claim	2023-05-20	100
223	1243892	Guibord, Michaud	274243	Boundary Cell Mining Claim	2023-05-03	100
224	1243891	Michaud	276220	Single Cell Mining Claim	2023-05-03	100
225	1238680	Michaud	276798	Single Cell Mining Claim	2023-05-31	100
226	1235308	Michaud	276820	Boundary Cell Mining Claim	2023-06-27	100
227	1166919	Guibord, Michaud	278320	Single Cell Mining Claim	2023-07-24	100
228	1248410	Barnet, Michaud	279188	Boundary Cell Mining Claim	2023-08-01	100
229	849662	Michaud	279842	Single Cell Mining Claim	2023-04-29	100
230	1240793	Michaud	281848	Single Cell Mining Claim	2023-11-06	100
231	1206790	Michaud	283213	Boundary Cell Mining Claim	2023-09-26	100
232	1129845	Michaud	284001	Single Cell Mining Claim	2023-09-20	100
233	1167280	Michaud	285101	Boundary Cell Mining Claim	2023-07-26	75
234	1219657	Michaud	285206	Single Cell Mining Claim	2023-05-06	100
235	1219657	Michaud	285207	Single Cell Mining Claim	2023-04-09	100
236	849664	Michaud	285613	Single Cell Mining Claim	2023-04-29	100
237	1226791	Michaud	285846	Boundary Cell Mining Claim	2023-06-27	100
238	949295	Michaud	286312	Single Cell Mining Claim	2023-11-06	100
239	3015290	Michaud	286314	Single Cell Mining Claim	2023-05-20	100
240	1243892	Guibord, Michaud	286333	Single Cell Mining Claim	2023-05-31	100
241	3013806	Guibord	286453	Boundary Cell Mining Claim	2023-05-20	100
242	1243891	Michaud	287782	Single Cell Mining Claim	2023-05-31	100
243	1243891	Michaud	287783	Single Cell Mining Claim	2023-05-03	100
244	1238680	Michaud	288892	Single Cell Mining Claim	2023-05-31	100
245	1235305	Michaud	288893	Boundary Cell Mining Claim	2023-05-31	100
246	1199994	Michaud	288894	Boundary Cell Mining Claim	2023-08-01	100
247	843891	Michaud	289196	Single Cell Mining Claim	2023-06-13	100
248	949283	Michaud	289237	Single Cell Mining Claim	2023-10-24	100
249	949293	Michaud	290075	Single Cell Mining Claim	2023-10-24	100
250	4220423	Michaud	290379	Boundary Cell Mining Claim	2023-06-13	100
251	3015381	Michaud	291633	Single Cell Mining Claim	2023-05-20	100
252	1167280	Michaud	292421	Boundary Cell Mining Claim	2023-06-14	75
253	643838	Michaud	292656	Single Cell Mining Claim	2023-11-06	100
254	1219657	Michaud	293314	Boundary Cell Mining Claim	2023-06-05	100
255	3015379	Michaud	293522	Single Cell Mining Claim	2023-05-20	100
256	3015379	Michaud	293523	Single Cell Mining Claim	2023-05-20	100
257	3015379	Michaud	293524	Single Cell Mining Claim	2023-05-20	100
258	1129845	Garrison, Michaud	294491	Boundary Cell Mining Claim	2023-08-20	100
259	653659	Garrison, Michaud	294849	Single Cell Mining Claim	2023-09-15	100
260	1243891	Michaud	295094	Single Cell Mining Claim	2023-05-03	100
261	1243891	Michaud	295095	Single Cell Mining Claim	2023-05-03	100
262	1248401	McCool, Michaud	296811	Boundary Cell Mining Claim	2023-06-05	100
263	1248401	Michaud	296812	Single Cell Mining Claim	2023-06-05	100
264	1247515	Michaud	296816	Single Cell Mining Claim	2023-05-31	100
265	843899	Michaud	300072	Single Cell Mining Claim	2023-06-13	100
266	1248401	McCool, Michaud	301467	Boundary Cell Mining Claim	2023-06-05	100
267	1240794	Michaud	301468	Single Cell Mining Claim	2023-06-27	100
268	1240793	Michaud	302188	Single Cell Mining Claim	2023-06-27	100
269	1247526	Michaud	303012	Single Cell Mining Claim	2023-05-31	100
270	4263033	Michaud	305944	Single Cell Mining Claim	2023-05-05	100
271	1226791	Michaud	306049	Boundary Cell Mining Claim	2023-03-31	100
272	3015380	Michaud	306360	Single Cell Mining Claim	2023-05-20	100
273	4257848	Michaud	306827	Boundary Cell Mining Claim	2023-11-30	100
274	1240788	Michaud	308079	Single Cell Mining Claim	2023-06-27	100

Record #	Legacy Claim ID	Township / Area	Cell ID	Tenure Type	Due Date	Tenure Percentage
275	1248401	McCool, Michaud	309523	Boundary Cell Mining Claim	2023-06-05	100
276	1247515	Michaud	309527	Single Cell Mining Claim	2023-05-31	100
277	3015381	Michaud	313646	Single Cell Mining Claim	2023-05-20	100
278	3015380	Michaud	313667	Boundary Cell Mining Claim	2023-05-20	100
279	1199892	Michaud	316020	Boundary Cell Mining Claim	2023-09-22	75
280	1248401	Michaud	316258	Single Cell Mining Claim	2023-06-05	100
281	1248402	Michaud	318118	Single Cell Mining Claim	2023-06-05	100
282	4257848	Michaud	319418	Single Cell Mining Claim	2023-11-30	100
283	949282	Michaud	321583	Single Cell Mining Claim	2023-10-24	100
284	3015382	Michaud	321653	Single Cell Mining Claim	2023-05-20	100
285	1219657	Michaud	322447	Single Cell Mining Claim	2023-06-27	100
286	1226791	Michaud	322558	Boundary Cell Mining Claim	2023-06-27	100
287	4263033	Michaud	323243	Boundary Cell Mining Claim	2023-05-05	100
288	3001162	Garrison, Michaud	323692	Boundary Cell Mining Claim	2023-08-20	100
289	4205463	Michaud	323704	Boundary Cell Mining Claim	2023-06-05	100
290	1238680	Michaud	325454	Boundary Cell Mining Claim	2023-05-31	100
291	1235309	Michaud	325455	Boundary Cell Mining Claim	2023-05-31	100
292	1247515	Michaud	326346	Single Cell Mining Claim	2023-05-31	100
293	1248410	Barnet, Michaud	326945	Single Cell Mining Claim	2023-08-01	100
294	1248410	Barnet, Michaud	326946	Boundary Cell Mining Claim	2023-08-01	100
295	1207486	Michaud	327597	Single Cell Mining Claim	2023-09-26	100
296	3003825	Guibord	328901	Single Cell Mining Claim	2023-09-27	100
297	3019466	Michaud	329640	Boundary Cell Mining Claim	2023-11-06	100
298	1243891	Michaud	336148	Single Cell Mining Claim	2023-08-01	100
299	1243891	Michaud	336149	Single Cell Mining Claim	2023-08-01	100
300	1248401	McCool, Michaud	337148	Boundary Cell Mining Claim	2023-06-05	100
301	4220423	Michaud	337395	Boundary Cell Mining Claim	2023-02-13	100
302	1248402	McCool, Michaud	339692	Boundary Cell Mining Claim	2023-06-05	100
303	1240793	Michaud	340904	Single Cell Mining Claim	2023-06-27	100
304	3019466	Michaud	341506	Boundary Cell Mining Claim	2023-11-06	100
305	1166919	Guibord	343091	Single Cell Mining Claim	2023-07-24	100
306	3004007	Michaud	343813	Single Cell Mining Claim	2023-09-30	100
307	3015379	Michaud	343869	Single Cell Mining Claim	2023-05-20	100
308	3015382	Michaud	344042	Single Cell Mining Claim	2023-06-13	100
309	3015380	Michaud	345130	Single Cell Mining Claim	2023-05-20	100
310	3015380	Michaud	345156	Single Cell Mining Claim	2023-05-20	100
311	3015380	Michaud	345157	Single Cell Mining Claim	2023-05-20	100

25.0 APPENDIX 2: DRILL HOLES

Table 25.1
Drill Holes

Hole Name	X	Y	Z	Length	Az.	Incl.	Type	Zone	Company
659-01	569962	5373799.6	325	171.9	180	-45	DDH	Outside Property - Perry Lake	Falconbridge
659-02	569531.2	5373870	325	157	180	-45	DDH	Outside Property - Perry Lake	Falconbridge
659-03	570839.8	5373418.1	325	152.9	180	-45	DDH	Outside Property - Perry Lake	Falconbridge
659-04	569475.9	5373694.3	325	221.3	360	-50	DDH	Perry Lake Area	Falconbridge
659-05	570265.9	5373830.6	325	187.8	180	-50	DDH	Outside Property - Perry Lake	Falconbridge
659-06	570495.6	5374662.2	325	129.5	360	-45	DDH	Outside Property - Perry Lake	Falconbridge
Jan-80	576038.4	5369873.1	325	198.12	360	-55	DDH	Outside Property - Garrison; Winter Road	Windjammer Power and Gas Ltd.
Feb-80	576094.6	5369903.1	325	183.49	360	-55	DDH	Outside Property - Garrison; Winter Road	Windjammer Power and Gas Ltd.
Jan-83	575872.7	5370081.6	325	320.65	8	-45	DDH	Outside Property - Garrison; Winter Road	Garrison
Feb-83	575754.7	5370182	325	148.13	359	-50	DDH	Outside Property - Garrison; Winter Road	Garrison
Mar-83	575732.5	5370051.6	325	226.16	10	-45	DDH	Outside Property - Garrison; Winter Road	Garrison
85-081-B	565380	5371150	325	2	0	-90	TP	Outside Property - Michaud; Ludgate	Ontario Geological Survey
85-130-B	563670	5374480	325	1.8	0	-90	TP	Outside Property - Michaud; Perry Lake	Ontario Geological Survey
85-18	567070	5370670	339	12.5	0	-90	RC	Outside Property - Michaud; Ludgate	Ontario Geological Survey
85-19	571580	5373950	338	78	0	-90	RC	Outside Property - Michaud; Hwy 101	Ontario Geological Survey
85-20	572200	5370450	330.5	46.3	0	-90	RC	Windjammer South Zone	Ontario Geological Survey
87-38	569340	5368450	318	45.7	0	-90	RC	55 Zone	Ontario Geological Survey
87-39	565542	5369264	320	52.4	0	-90	RC	Far Western Zone	Ontario Geological Survey
87-41	563300	5372600	323	11.3	0	-90	RC	Perry Lake Area	Ontario Geological Survey
Jan-89	575360.1	5369854	325	151.18	360	-45	DDH	Outside Property - Garrison; Winter Road	Winteroad Resources Ltd.
Feb-89	575358.2	5369961	325	163.07	360	-45	DDH	Outside Property - Garrison; Winter Road	Winteroad Resources Ltd.
Mar-89	575178.7	5369736.3	325	154.23	360	-45	DDH	Outside Property - Garrison; Winter Road	Winteroad Resources Ltd.
Apr-89	575873.3	5370214.6	325	55.17	50	-45	DDH	Outside Property - Garrison; Winter Road	Winteroad Resources Ltd.
Jan-95	575661.5	5370091.6	325	47.55	180	-60	DDH	Outside Property - Garrison; Winter Road	Patrician Gold Mines Ltd.
Feb-95	575660.9	5370126.8	325	76.2	180	-60	DDH	Outside Property - Garrison; Winter Road	Patrician Gold Mines Ltd.
Mar-95	575630.8	5370103.4	325	45.72	180	-60	DDH	Outside Property - Garrison; Winter Road	Patrician Gold Mines Ltd.
Apr-95	575629.8	5370159.8	325	104.85	180	-60	DDH	Outside Property - Garrison; Winter Road	Patrician Gold Mines Ltd.
May-95	575604.5	5370124.9	325	93.57	180	-60	DDH	Outside Property - Garrison; Winter Road	Patrician Gold Mines Ltd.
95-IP-01	575606.6	5370002.6	325	551.08	360	-65	DDH	Outside Property - Garrison; Winter Road	Patrician Gold Mines Ltd.
95-IP-02	575667.3	5369760.1	325	457.5	360	-55	DDH	Outside Property - Garrison; Winter Road	Patrician Gold Mines Ltd.
95-IP-03	575480.8	5369940.2	325	411.78	360	-65	DDH	Outside Property - Garrison; Winter Road	Patrician Gold Mines Ltd.
95-IP-04	575610	5369545.2	325	152.4	360	-75	DDH	Outside Property - Garrison; Winter Road	Patrician Gold Mines Ltd.
97IRI-01	566958.4	5372109.5	325	93.27	180	-45	DDH	Perry Lake Area	Totem Mining Corp.
97IRI-02	567174.8	5371999	325	98.15	180	-45	DDH	Perry Lake Area	Totem Mining Corp.
97IRI-03	566662.4	5371907.5	325	102.41	180	-45	DDH	Perry Lake Area	Totem Mining Corp.
DM-02	563020	5371240	325	228.6	10	-35	DDH	Outside Property - Guibord	Dunmar Mines Ltd.
DM-03	562540	5370920	325	278.28	45	-42.5	DDH	Outside Property - Guibord	Dunmar Mines Ltd.
DM-04	563845	5370450	325	42.67	0	-90	DDH	Outside Property - North of Far Western Zone	Dunmar Mines Ltd.
DM-05	565265	5371245	325	237.74	170	-33.5	DDH	Outside Property - Ludgate Area	Dunmar Mines Ltd.

Hole Name	X	Y	Z	Length	Az.	Incl.	Type	Zone	Company
DM-06	565390	5370475	325	191.26	0	-61.5	DDH	Outside Property - Ludgate Area	Dunmar Mines Ltd.
DM-07	565450	5370475	325	198.42	0	-60	DDH	Outside Property - Ludgate Area	Dunmar Mines Ltd.
DM-08	565340	5370475	325	179.22	0	-61	DDH	Outside Property - Ludgate Area	Dunmar Mines Ltd.
DM-09	565340	5370500	325	241.1	180	-63.5	DDH	Outside Property - Ludgate Area	Dunmar Mines Ltd.
DM-10	565275	5370385	325	128.32	0	-60	DDH	Far Western Zone	Dunmar Mines Ltd.
DM-11	565390	5370115	325	305.71	0	-53	DDH	Far Western Zone	Dunmar Mines Ltd.
FC03-01	564204.7	5375147.8	325	129	17	-50	DDH	Outside Property - North Perry Lake	SAS Four Corners Meunier
FC03-02	564208.6	5375147.8	325	135	17	-62	DDH	Outside Property - North Perry Lake	SAS Four Corners Meunier
FC03-03	564029.7	5375197.8	325	51	17	-50	DDH	Outside Property - North Perry Lake	SAS Four Corners Meunier
FC03-04	564154.7	5375155.8	325	84	17	-50	DDH	Outside Property - North Perry Lake	SAS Four Corners Meunier
FC03-05	564248.7	5375131.8	325	108	17	-50	DDH	Outside Property - North Perry Lake	SAS Four Corners Meunier
FC04-06	564186.6	5375086.6	325	161.5	17	-55	DDH	Outside Property - North Perry Lake	SAS Four Corners Meunier
FC04-07	564308.6	5375154.6	325	186	17	-50	DDH	Outside Property - North Perry Lake	SAS Four Corners Meunier
FC04-08	564108.6	5375173.6	325	144	17	-50	DDH	Outside Property - North Perry Lake	SAS Four Corners Meunier
GC-18	575666.7	5369967.9	325	229.21	350	-50	DDH	Outside Property - Garrison	Garrison
GHM97-01	570425.8	5373660	325	302	210	-50	DDH	Outside Property - Perry Lake	Golden Hart/Pentland
GHM97-02	570978.7	5373523	325	302	180	-45	DDH	Outside Property - Perry Lake	Golden Hart/Pentland
GHM97-03	570225	5373732	325	302	180	-45	DDH	Outside Property - Perry Lake	Golden Hart/Pentland
GHM97-04	569794.7	5373812.5	325	221	180	-50	DDH	Outside Property - Perry Lake	Golden Hart/Pentland
GHM97-05	570746.8	5373597	325	267	180	-45	DDH	Outside Property - Perry Lake	Golden Hart/Pentland
GHM97-06	569691.8	5373981	325	307	180	-45	DDH	Outside Property - Perry Lake	Golden Hart/Pentland
GHM97-07	569145.1	5373963.5	325	350	180	-45	DDH	Outside Property - Perry Lake	Golden Hart/Pentland
GNG-90-01	574811.1	5369788	325	184.95	360	-45	DDH	Outside Property - Garrison; Winter Road	Great Northern Gold
GNG-90-02	574809.1	5369898	325	183.95	360	-45	DDH	Outside Property - Garrison; Winter Road	Great Northern Gold
GNG-90-03	574808.1	5369959.1	325	403.89	360	-45	DDH	Outside Property - Garrison; Winter Road	Great Northern Gold
GNG-90-04	574807.3	5370001.9	325	286.94	360	-45	DDH	Outside Property - Garrison; Winter Road	Great Northern Gold
GNG-90-05	574076.8	5369945.8	330	78.97	360	-45	DDH	Outside Property - Garrison; Winter Road	Great Northern Gold
GNG-90-06	574803.8	5370203.5	325	214.94	360	-45	DDH	Outside Property - Garrison; Winter Road	Great Northern Gold
GNG-90-07	574797.9	5370539.6	325	300.93	360	-45	DDH	Outside Property - Garrison; Winter Road	Great Northern Gold
GNG-90-08	574795.2	5370698.5	325	343.91	360	-45	DDH	Outside Property - Garrison; Winter Road	Great Northern Gold
GNG-90-09	574789.3	5371037.6	325	529.86	360	-45	DDH	Outside Property - Garrison; Winter Road	Great Northern Gold
H-81-01	567846.7	5374244.2	325	154.23	20	-60	DDH	Perry Lake Area	J. Tesluk
HV-86-01	575732.6	5370049.2	325	135.64	8	-62	DDH	Outside Property - Garrison; Winter Road	Great Northern Gold
HV-86-02	575732.6	5370049.2	325	47.85	340	-45	DDH	Outside Property - Garrison; Winter Road	Great Northern Gold
HV-86-02A	575732.6	5370049.2	325	52.43	20	-45	DDH	Outside Property - Garrison; Winter Road	Great Northern Gold
HV-86-03	575729.8	5370036.3	325	66.14	10	-60	DDH	Outside Property - Garrison; Winter Road	Great Northern Gold
HV-86-04	575729.8	5370036.3	325	26.52	10	-45	DDH	Outside Property - Garrison; Winter Road	Great Northern Gold
HV-86-05	575779.2	5370037.1	325	78.33	10	-45	DDH	Outside Property - Garrison; Winter Road	Great Northern Gold
HV-86-06	575779.2	5370037.1	325	75.9	340	-45	DDH	Outside Property - Garrison; Winter Road	Great Northern Gold
HV-86-07	575680.8	5370035.4	325	78.33	10	-45	DDH	Outside Property - Garrison; Winter Road	Great Northern Gold
HV-86-08	575685	5370058.5	325	42.06	10	-45	DDH	Outside Property - Garrison; Winter Road	Great Northern Gold
HV-86-09	575685	5370058.5	325	47.85	340	-45	DDH	Outside Property - Garrison; Winter Road	Great Northern Gold
HV-86-10	575685	5370058.5	325	40.54	40	-45	DDH	Outside Property - Garrison; Winter Road	Great Northern Gold
HV-86-11	575639.2	5370059.7	325	50.9	40	-45	DDH	Outside Property - Garrison; Winter Road	Great Northern Gold
HV-86-12	575639.2	5370059.7	325	58.52	340	-45	DDH	Outside Property - Garrison; Winter Road	Great Northern Gold

Hole Name	X	Y	Z	Length	Az.	Incl.	Type	Zone	Company
HV-87-13	575917	5369989.1	325	218.54	10	-45	DDH	Outside Property - Garrison; Winter Road	Great Northern Gold
HV-87-14	575925.1	5370049.4	325	152.4	10	-45	DDH	Outside Property - Garrison; Winter Road	Great Northern Gold
HV-87-15	575680.8	5370035.4	325	117.96	340	-50	DDH	Outside Property - Garrison; Winter Road	Winteroad Resources Ltd.
HV-87-16	575680.8	5370035.4	325	99.06	10	-60	DDH	Outside Property - Garrison; Winter Road	Winteroad Resources Ltd.
HV-87-17	575685	5370058.5	325	61.26	40	-60	DDH	Outside Property - Garrison; Winter Road	Winteroad Resources Ltd.
HV-87-18	575685	5370058.5	325	63.7	40	-60	DDH	Outside Property - Garrison; Winter Road	Winteroad Resources Ltd.
HV-87-19	575685	5370058.5	325	32.31	10	-60	DDH	Outside Property - Garrison; Winter Road	Winteroad Resources Ltd.
HV-87-20	575685	5370058.5	325	27.74	340	-60	DDH	Outside Property - Garrison; Winter Road	Winteroad Resources Ltd.
HV-87-21	575639.2	5370059.7	325	76.5	10	-45	DDH	Outside Property - Garrison; Winter Road	Winteroad Resources Ltd.
HV-87-22	575639.2	5370059.7	325	22.86	10	-60	DDH	Outside Property - Garrison; Winter Road	Winteroad Resources Ltd.
HV-87-22A	575639.2	5370059.7	325	93.57	10	-60	DDH	Outside Property - Garrison; Winter Road	Winteroad Resources Ltd.
HV-87-23	575596.5	5370052.2	325	84.43	10	-45	DDH	Outside Property - Garrison; Winter Road	Winteroad Resources Ltd.
HV-87-24	575596.5	5370052.2	325	76.5	10	-60	DDH	Outside Property - Garrison; Winter Road	Winteroad Resources Ltd.
HV-87-25	575552.2	5370056.2	325	57	360	-50	DDH	Outside Property - Garrison; Winter Road	Winteroad Resources Ltd.
HV-87-26	575552.2	5370056.2	325	59.44	360	-60	DDH	Outside Property - Garrison; Winter Road	Winteroad Resources Ltd.
JM-82-01	572567.4	5371878.8	332.5	377.34	188	-50	DDH	North of Windjammer North; Turner Lake	J. Moses
JM-82-02	572695.7	5372221.7	339.28	251.76	205	-45	DDH	North of Windjammer North; Turner Lake	J. Moses
JM-83-03	572968.7	5372159	340	70.1	360	-45	DDH	North of Windjammer North; Turner Lake	J. Moses
JM-83-04	573419.7	5371968.1	338.84	304.8	360	-45	DDH	North of Windjammer North; Turner Lake	J. Moses
JM-93-05	573632.3	5371919.8	340.16	334	180	-45	DDH	North of Windjammer North; Turner Lake	J. Moses
JRM-95-01	573992.1	5370379.3	331	157.58	360	-90	DDH	Outside Property - Garrison; Winter Road	Patrician Gold Mines Ltd.
JRM-95-02	575253.4	5370975.4	325	154.23	270	-45	DDH	Outside Property - Garrison; Winter Road	Patrician Gold Mines Ltd.
JRM-95-03	575325.1	5370105.6	325	190.8	270	-45	DDH	Outside Property - Garrison; Winter Road	Patrician Gold Mines Ltd.
JRM-95-04	575323.8	5370182	325	157.28	290	-45	DDH	Outside Property - Garrison; Winter Road	Patrician Gold Mines Ltd.
KX25-67	569760	5369225	322.25	110.03	343	-50	DDH	East of 55 Zone	AMAX EXL INC.
KX26-68	570020	5368580	318.75	106.98	343	-47	DDH	Southeast of 55 Zone	AMAX EXL INC.
M-01-225	570356.6	5370385.6	324.25	210.6	260	-45	DDH	Twin Creeks Zone	Moneta Porcupine Mines Inc.
M-01-226	571635.6	5370937.6	330.25	174	224	-45	DDH	Landing Zone	Moneta Porcupine Mines Inc.
M-03-236	571637.6	5370761.6	328.25	245	160	-45	DDH	Landing Zone	Moneta Porcupine Mines Inc.
M-03-237	571415.6	5370660.6	327	356	160	-50	DDH	Landing Zone	Moneta Porcupine Mines Inc.
M-03-238	570788.6	5370416.6	324.25	344	340	-50	DDH	Twin Creeks Zone	Moneta Porcupine Mines Inc.
M-03-239	570665.6	5370400.6	325.25	305	340	-50	DDH	Twin Creeks Zone	Moneta Porcupine Mines Inc.
M-04-257	569668.6	5369403.6	322.75	314	10	-45	DDH	North of 55 Zone	Moneta Porcupine Mines Inc.
M-04-258	569501.6	5369456.6	323	231	10	-45	DDH	North of 55 Zone	Moneta Porcupine Mines Inc.
M-08-259	571635.3	5369843.3	328.41	437	336.7	-59.6	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
M55-10-01	569371.2	5368879.9	318.88	404	158.6	-61.9	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-02	569309.4	5368857.3	319.22	303	158.1	-62	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-03	569249	5368839.1	319.22	289.95	159.4	-60.7	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-04	569329.2	5368959	319.48	119	160	-60	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-05	569335.7	5368938.9	319.47	335	161.3	-58.3	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-06	569558.6	5369045.3	320.94	271.75	157.1	-61.4	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-07	568994	5368837.3	319.53	281.1	162.3	-60.2	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-08	569420.3	5368987	320.58	305	155.1	-64.4	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-09	569653.3	5369076.8	321.41	253.95	158.5	-60	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-10	569276.6	5368941.2	319.55	311	162.5	-61.2	DDH	55 Zone	Moneta Porcupine Mines Inc.

Hole Name	X	Y	Z	Length	Az.	Incl.	Type	Zone	Company
M55-10-11	569747	5369112.5	321.59	286.41	158.4	-61.2	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-12	568902.8	5368800.9	319.73	302.15	154	-62.3	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-13	569367.4	5368974.6	319.73	296	159.3	-58.8	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-14	569315.8	5368954.7	320.01	179	163.5	-60.1	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-15	569225.3	5368936.6	319.79	251	156.4	-59.7	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-16	569339.8	5368963	319.91	161	161.4	-61.2	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-17	568814.3	5368744.5	319.12	248.82	158.1	-53.8	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-18	569307.7	5368977.4	319.98	191	160.4	-59.6	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-19X	569179.8	5368922	319.93	427.85	157.2	-61	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-20	569090.5	5368872.5	320.09	359.05	160.6	-60.1	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-21	569247.7	5368944.9	319.6	371	162.1	-61	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-22	569137.5	5368891.2	319.94	337.9	158.2	-62.4	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-23	569042.5	5368846.9	319.54	254	159	-60	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-24	569448	5368911.6	319.33	224	160.1	-62	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-25	569494.7	5368936.9	319.95	278	157.1	-59.3	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-26	569334.5	5368790.9	318.04	170	158.7	-65	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-27	569463.5	5369012.1	320.47	314	158.1	-59.4	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-28	569278.6	5368787.2	318.65	158	155.9	-62	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-29	569069	5368785.3	319.03	260.15	161.2	-59.1	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-30	569159.2	5368817.5	319.12	263	154.5	-61.8	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-31	569225.3	5368790.7	318.85	205.95	159	-64.4	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-32	569396.1	5368831.1	319.57	212	159.2	-59.7	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-33	569119	5368788.1	319.09	236	161.7	-58.9	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-34	568928.9	5368730.3	319.39	302	159.7	-62.6	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-35	569523.9	5368871.9	319.49	235.9	157.4	-63	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-10-36	569177	5368771.7	318.88	161	158.5	-61	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-12-37	569579.2	5368963.8	320.39	315	158.7	-51.1	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-12-38	569675.9	5368995.7	321.03	218.84	160.8	-50.7	DDH	55 Zone	Moneta Porcupine Mines Inc.
M55-12-39	569575	5368980	320.39	303	160	-60	DDH	55 Zone	Moneta Porcupine Mines Inc.
M-86-01	570718.9	5370620.3	328.57	151.2	154	-45	DDH	Twin Creeks Zone	Moneta Porcupine Mines Inc.
M-87-01	570248.2	5369936.3	325.25	88.39	343	-50	DDH	Twin Creeks Zone	Moneta Porcupine Mines Inc.
M-87-02	570184.9	5370130.3	324.42	257.86	343	-50	DDH	Twin Creeks Zone	Moneta Porcupine Mines Inc.
M-87-03	570601.4	5370250.2	323.25	153.31	343	-50	DDH	Twin Creeks Zone	Moneta Porcupine Mines Inc.
M-87-04	570706.7	5370317.9	322.93	38.1	343	-50	DDH	Twin Creeks Zone	Moneta Porcupine Mines Inc.
M-87-05	570916.8	5370639.9	327.75	141.88	163	-50	DDH	Twin Creeks Zone	Moneta Porcupine Mines Inc.
M-87-06	571022.2	5370708.3	327.76	230.73	163	-50	DDH	Landing Zone	Moneta Porcupine Mines Inc.
M-87-06A	571036	5370668	327.82	60.96	163	-50	DDH	Landing Zone	Moneta Porcupine Mines Inc.
M-87-07	570971.4	5370845.6	329.67	355.4	163	-50	DDH	Landing Zone	Moneta Porcupine Mines Inc.
M-87-08	569710	5371365	330	459.03	0	-65.5	DDH	Emens Lake	Moneta Porcupine Mines Inc.
M-87-09	571236	5369744.6	323.02	241.4	328	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-10	571163.9	5369868.6	323.5	242.62	330	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-11	571006.9	5370687	328.73	91.44	163	-50	DDH	Landing Zone	Moneta Porcupine Mines Inc.
M-87-12	571055.9	5370713.5	328.54	91.44	163	-50	DDH	Landing Zone	Moneta Porcupine Mines Inc.
M-87-13	570024.7	5371332.6	327.5	304.8	15	-50	DDH	Emens Lake	Moneta Porcupine Mines Inc.
M-87-14X	571252.6	5370806.8	328.41	341	163	-54	DDH	Landing Zone	Moneta Porcupine Mines Inc.

Hole Name	X	Y	Z	Length	Az.	Incl.	Type	Zone	Company
M-87-15	571476.6	5370877.3	329.84	243.84	161	-50	DDH	Landing Zone	Moneta Porcupine Mines Inc.
M-87-16	571214.9	5369786.2	322.7	85.04	333	-51	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-17	571210.7	5369729	322.84	152.4	329	-49	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-18	571263.6	5369758.4	323.33	159.11	328	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-19	571210.5	5369729.4	322.75	213.66	328	-66	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-20	571310.3	5369790.8	324.55	175.56	325	-51	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-21	571186.3	5369715.2	323.32	150.57	319	-51	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-22	571165.2	5369698.8	323.01	151.18	322	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-23	571186.9	5369765.8	323.5	108.51	328	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-24	571196.4	5369774.3	322.63	94.18	330	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-25	571135.8	5369864.3	323.5	245.06	150	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-26	571068.1	5369470	322.5	213.36	330	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-27	571236	5369718.3	323.53	105.13	281	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-27A	571236	5369718.3	323.53	206.04	330	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-28	571068.1	5369470	322.5	281.94	330	-65	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-28A	571068.1	5369470	322.5	106.98	330	-90	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-29	571171	5369811.8	322.83	182.88	330	-90	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-30	571189.5	5369782.3	322.6	182.88	330	-90	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-31	571172.7	5369763.5	323.5	182.88	300	-90	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-32	571220	5369803.4	322.6	182.88	310	-90	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-33	571206.1	5369858.1	322.56	182.88	150	-60	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-34	571220.5	5369886.1	322.82	137.16	150	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-35	571101.7	5369472.7	323	47.55	330	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-36	571101.7	5369472.7	323	57.91	330	-65	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-37	571101.7	5369472.7	323	182.88	0	-90	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-38	571066.7	5369471.5	322.24	122.32	330	-65	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-39	571078.3	5369464.2	322.75	183.19	0	-90	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-40	571064.2	5369416.3	322.22	115.82	330	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-41	571063.8	5369417.8	322.22	138.99	330	-65	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-42	571038.4	5369397.6	322.25	122.83	330	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-43	571038.4	5369397.6	322.25	149.35	330	-70	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-44	571132.7	5369823.1	322.96	259.08	150	-70	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-44A	571134.2	5369823.2	322.96	245.67	90	-65	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-45	571110.7	5369805.6	322.01	154.23	150	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-46	571110.7	5369808.6	322.01	260.91	150	-70	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-47	571087	5369791.5	322.25	152.4	150	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-48	571082.2	5369789.4	323	26.21	0	-90	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-49	571036.1	5369755.2	322.15	312.72	150	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-50	571550.6	5369917.7	327.61	153.01	342	-50	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
M-87-51	571022.8	5369367.3	321.2	152.4	330	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-52	571123.8	5369438.8	323	110.03	330	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-53	571147	5369459.7	323	129.84	330	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-54	571171.2	5369477.7	322.1	137.46	330	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-57	571813.3	5369918.1	328.5	243.84	342	-50	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
M-87-58	570988.8	5369512.7	322	276.15	150	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.

Hole Name	X	Y	Z	Length	Az.	Incl.	Type	Zone	Company
M-87-59	571775.6	5370006.7	328.14	271.27	342	-50	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
M-87-60	570690	5369394	320.1	259.08	343	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-61	571742.3	5370124.6	326.86	274.93	343	-50	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
M-87-62	571659.6	5370353.6	326.52	291.39	343	-50	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
M-87-63	571613	5370498.8	325.57	267	343	-50	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
M-87-64	570520.1	5369359.8	321.26	126.49	343	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-65	570378.7	5369187.1	320.99	148.13	343	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-66	570387.4	5368840.2	319.5	285.9	163	-50	DDH	South of South West Zone	Moneta Porcupine Mines Inc.
M-87-67	571268.8	5370740.7	327.68	152.4	163	-50	DDH	Landing Zone	Moneta Porcupine Mines Inc.
M-87-68	571083.3	5369538.8	321.8	367.59	148.5	-53.5	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-70	570961.1	5369497.4	321.88	369.42	150	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-70A	571007.1	5369489.5	321.88	365.76	138.8	-62	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-71	571019.2	5369523	322.25	71.17	150	-65	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-72	571032.3	5369530.3	321.4	523.04	150	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-74	570961.1	5369497.4	321.1	330.71	150	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-76	571063.7	5369392	321.6	230.43	331	-53.5	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-77	571092.7	5369341.8	321.8	275.23	330	-53	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-78	571123.5	5369288.9	321.8	268.83	330	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-78A	571123.5	5369288.9	321.83	385.88	330	-60	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-80	571095.2	5369391.6	321.7	199.95	330	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-81	571122.8	5369338.8	321.7	324.92	330	-55	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-82	571125.8	5369407.2	323	234.39	330	-55	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-83	571155.1	5369354.4	323	302.36	330	-55	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-85	571118.3	5369486.3	323	276.15	150	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-86	570625.5	5369595.6	321.4	306.63	163	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-87	570953.5	5369435.7	321.4	337.11	89	-56	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-88A	570587.4	5369571.3	322.25	101.5	157	-51.5	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-89	571023.2	5369367.8	322.07	257.86	102.5	-66.5	DDH	South West Zone	Moneta Porcupine Mines Inc.
M-87-90	570091.6	5369639.7	324.5	325.83	6.5	-53	DDH	Northwest of South West Zone	Moneta Porcupine Mines Inc.
M-87-91	571770.2	5369659.5	327.79	181.66	341	-55	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MA02-01	571190.9	5369732.2	323.74	150	330	-70	DDH	South West Zone	Acrex
MA02-02	571049.4	5369343.3	322.13	239.5	26.5	-69.2	DDH	South West Zone	Acrex
MA02-03	571049.3	5369343.5	322.1	248	11.4	-57.8	DDH	South West Zone	Acrex
MA02-04	570696.9	5369406.1	320.95	261	328.1	-72.7	DDH	South West Zone	Acrex
MA02-05	570359.3	5368981.7	320.21	395	322.7	-57	DDH	South West Zone	Acrex
MA02-06	569297.4	5368611.1	317.35	407	340.8	-57.1	DDH	55 Zone	Acrex
MA02-07	569454	5368541	316.72	551	346.5	-62.9	DDH	55 Zone	Acrex
MA02-08	570830	5369609.4	321.12	416	36.8	-52	DDH	South West Zone	Acrex
MA02-09	570829.6	5369609.8	321.15	371	353.3	-51.7	DDH	South West Zone	Acrex
MA03-10X	569358.4	5368525.4	318.26	482	342.5	-63.1	DDH	55 Zone	Acrex
MA03-11	569220.7	5368628.2	318.75	401	333.7	-59.8	DDH	55 Zone	Acrex
MA03-12	567285.7	5368113.9	313	150	340	-50	DDH	Western Zone	Acrex
MA03-13	567377.7	5367855.9	311.95	290	340	-50	DDH	Western Zone	Acrex
MA03-14	567275.7	5367802.9	312	323	340	-50	DDH	Western Zone	Acrex
MA04-15	567055.7	5368047.9	314	359	160	-50	DDH	Western Zone	Acrex

Hole Name	X	Y	Z	Length	Az.	Incl.	Type	Zone	Company
MA04-16	567509.7	5367881.9	311	299	340	-50	DDH	Western Zone	Acrex
MA04-17	566914.7	5368092.9	314	422.1	160	-50	DDH	Western Zone	Acrex
MA04-18	566793.7	5368062.9	314.3	452	160	-50	DDH	Western Zone	Acrex
MA04-19	566671.7	5368048.9	315	432	160	-50	DDH	Western Zone	Acrex
MA04-20	567609.7	5367941.9	311	286.5	340	-50	DDH	Western Zone	Acrex
MA04-21	567241.7	5368069.9	313.51	461	225	-50	DDH	Western Zone	Acrex
MA04-22	567371.7	5368070.9	312.37	371	225	-50	DDH	Western Zone	Acrex
MA04-23	567259.7	5367867.9	312.55	215	340	-45	DDH	Western Zone	Acrex
MA04-24	569462.1	5368676.1	318.19	344	343.8	-60.9	DDH	55 Zone	Acrex
MA04-25	569229.8	5368712.2	319.01	254	342.7	-47.9	DDH	55 Zone	Acrex
MA04-26	569407.2	5368586.3	317.86	430	346.8	-64.1	DDH	55 Zone	Acrex
MA05-27	569275.2	5368654.8	317.34	314	340	-45	DDH	55 Zone	Acrex
MA05-28	569199.2	5368678.9	317.71	251	340	-45	DDH	55 Zone	Acrex
MA05-29	569307.3	5368581.9	317.34	515	340.2	-66.4	DDH	55 Zone	Acrex
MA05-30	569264.3	5368597	316.99	401	336	-54	DDH	55 Zone	Acrex
MA05-31	569312.9	5368655.7	318.81	356	337.7	-52.3	DDH	55 Zone	Acrex
MA05-32	569336.2	5368687.8	317.27	305	342	-45	DDH	55 Zone	Acrex
MA06-33	568402.7	5368605.9	318.5	343	206	-50	DDH	Dyment 3	Acrex
MA06-34	568175.7	5368498.9	317.25	104	160	-50	DDH	Dyment 3	Acrex
MA06-35	568688.7	5368499.9	317.25	60	160	-50	DDH	Dyment 3	Acrex
MA06-36	568959.2	5368487.8	317.22	311	341	-50	DDH	55 Zone	Acrex
MA06-37A	569175.6	5368880.6	319.81	299	153.9	-49	DDH	55 Zone	Acrex
MA07-35X	568191.7	5368488.9	317.25	323	160	-50	DDH	Dyment 3	Acrex
MA07-39	568327.7	5368249.9	315.5	347	340	-50	DDH	Dyment 3	Acrex
MA07-40	568416.7	5368356.9	316.25	257	340	-50	DDH	Dyment 3	Acrex
MA07-41	568349.7	5368368.9	316.25	209	340	-50	DDH	Dyment 3	Acrex
MA07-42	568505.7	5368322.9	316	350	340	-50	DDH	Dyment 3	Acrex
MA08-43	569360.9	5368707.1	317.61	323	337.6	-57	DDH	55 Zone	Acrex
MA08-44	569250.2	5368666.2	317.8	329	341.8	-55.6	DDH	55 Zone	Acrex
MA08-45	569188.3	5368642.5	317.87	317	337.8	-58.7	DDH	55 Zone	Acrex
MA08-46	569481	5368800.5	318.54	248	342	-57.3	DDH	55 Zone	Acrex
MA08-47	569469.3	5368745.1	317.49	302	337.2	-58.7	DDH	55 Zone	Acrex
MA08-48	569440.2	5368735.2	317.49	296	344.2	-55.7	DDH	55 Zone	Acrex
MA08-49	569415.4	5368726	317.68	332	338.4	-55.4	DDH	55 Zone	Acrex
MA08-50	569547.4	5368774	318.69	302	341	-54.6	DDH	55 Zone	Acrex
MBL-46-01	570553.6	5370505.5	331.5	320.04	333	-50	DDH	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MBL-46-02	570553.6	5370505.5	331.5	144.78	153	-40	DDH	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MBL-46-03	570580.1	5370456.6	332.75	189.56	153	-50	DDH	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MBL-46-04A	570661.5	5370726.3	327.25	38.4	153	-52	DDH	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MBL-46-04B	570660.5	5370729.2	327.25	287.27	153	-55	DDH	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MBL-46-05	570719.3	5370621.9	329	246.89	153	-44	DDH	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MBL-46-06	570735	5370596.8	329	106.07	153	-45	DDH	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MBL-46-07	570746.2	5370639.3	329.5	195.38	158	-50	DDH	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MBL-46-08	570692.5	5370608	329	178.61	153	-52	DDH	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MBL-46-09	570613.4	5370559.5	327.5	223.42	153	-53	DDH	Twin Creeks Zone	Moneta Porcupine Mines Inc.

Hole Name	X	Y	Z	Length	Az.	Incl.	Type	Zone	Company
MBL-46-10	570794.2	5370490.1	325.75	286.51	333	-57	DDH	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MBL-46-11	570728.2	5370180.4	323	335.28	333	-55	DDH	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MBL-47-12	570768.1	5370669.4	329.5	109.42	333	-50	DDH	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MBL-47-13	570780.6	5370445.2	324.5	124.05	333	-57	DDH	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MBL-47-14	570447.6	5370846.6	325	304.8	153	-56	DDH	North of Twin Creeks Zone	Moneta Porcupine Mines Inc.
MBL-47-15	570488.6	5370746.6	324.5	423.06	333	-51	DDH	North of Twin Creeks Zone	Moneta Porcupine Mines Inc.
MD-1-86	563596	5367988.5	317	206.65	360	-50	DDH	Far Western Zone	Lacana
MD-2-86	563847.6	5367598.6	316.19	206.96	360	-55	DDH	Far Western Zone	Lacana
MD-88-03	566463.6	5368353.6	317	270.05	180	-50	DDH	Far Western Zone	Lacana
MD-88-04	566463.6	5368223.6	316.3	199.95	180	-50	DDH	Far Western Zone	Lacana
MD-88-05	566463.6	5367944.6	314	287.19	180	-50	DDH	Far Western Zone	Lacana
MD-88-06	566213.6	5368174.6	316	221.28	360	-47	DDH	Far Western Zone	Lacana
MD-88-07	564469.6	5368444.5	316	291.46	180	-50	DDH	Far Western Zone	Lacana
MD-90-08	564345.6	5367918.6	313.43	217	360	-45	DDH	Far Western Zone	Lacana
MD-90-09	564344.6	5368019.6	314	248.25	360	-45	DDH	Far Western Zone	Lacana
MD-90-10	564837.6	5368079.6	315	252	360	-45	DDH	Far Western Zone	Lacana
MD-90-11	567831.6	5367843.6	309	200	360	-45	DDH	Western Zone	Lacana
MGH13-001	571530.7	5369792.4	326.48	350.58	338.1	-53.6	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MGH13-002	571556.2	5369697.5	326.33	490.65	334.6	-54.1	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MGH13-003	571615	5369838	328.44	357.25	334.3	-54.4	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MGH13-004	571679.4	5369814.3	328.39	436.9	338	-53.7	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MGH13-005	571497.8	5369719.4	325.54	436.3	334.6	-54.1	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MGH13-006	571746.3	5369921.5	328.42	363.38	336.3	-55.3	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MGH13-007	571434.1	5369746	325.45	234.15	335.9	-53.3	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MGH13-008	571724.9	5369835.9	328.32	462.3	336.2	-53.9	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MGH13-009	571450.9	5369694.7	325.19	429	330.6	-58.4	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MGH13-010	571118.2	5369271.2	318.95	339	330.8	-62.8	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH13-011	571455.8	5369809.1	325.47	280	338.3	-56.8	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MGH13-012	571430.7	5370051.6	325.62	234.86	337.2	-58.3	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MGH13-013	571374.3	5370192.8	325.16	456.43	156.5	-57.5	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-014	571590.8	5369770.9	327.01	397	334.1	-53.6	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MGH13-015	571374.8	5370196.9	324.86	314.14	337.3	-57	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-016	571775.5	5370418.4	328.12	425.07	334	-55.8	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-017	571458.1	5370252.8	325.83	320	336.9	-56.1	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-018	571599.5	5370306.5	327.27	420.88	337.2	-51.4	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-019	571459.1	5370249.6	325.78	485	157.8	-52.9	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-020	571600.9	5370303.4	327.08	405	156.7	-52	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-021	571768.9	5370214.7	328.39	210.18	155.1	-57.2	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MGH13-022	571728.3	5370309.2	328.09	279	156.8	-51.9	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-023	572409.4	5371291.2	338.4	299	156.8	-61.7	DDH	Windjammer North Zone	Moneta Porcupine Mines Inc.
MGH13-024	572508.7	5370878.6	358.46	574	335.9	-52.1	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-025	572360.8	5371290.1	337.77	501	157.6	-60.3	DDH	Windjammer North Zone	Moneta Porcupine Mines Inc.
MGH13-026	572448.8	5370754.8	349.41	501	335.9	-52.8	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-027	572477.5	5370830.7	360.53	429	335.5	-52.2	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-028	572430	5370801	347.07	425	335.8	-52	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.

Hole Name	X	Y	Z	Length	Az.	Incl.	Type	Zone	Company
MGH13-029	572528.5	5370688.3	362.43	402	336.9	-50.5	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-030	572350.2	5370602.9	335.23	601	334.4	-53.4	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-031	572505.8	5370733.4	362.3	536.33	336.4	-50	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-032	572305.2	5370722.7	334.81	426	337.9	-49.8	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-033	572444.7	5370630.6	343.87	600	332.5	-54.3	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-034	572286.3	5370771.5	332.35	359	336.4	-51.2	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-035	572263.5	5370836.5	332.7	401	335.5	-53.5	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-036	572398.8	5370729.2	341.25	456.5	335.4	-49.5	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-037	572297.3	5370880.9	333.86	425	337.8	-51.8	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-038	572240.7	5370722.9	331.91	404	337.9	-51.4	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-039	572347.1	5370739.6	337.13	426	335.5	-54.1	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-040	572149.2	5370718	330.04	375	333.9	-55.2	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-041	572378.6	5370613	337.02	575	338.8	-59.1	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-042	572313.1	5370252.3	331	428	335.3	-62.3	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MGH13-043	572303.7	5370122.5	330.37	513	334.6	-54.5	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MGH13-044	572093.6	5370725.2	329.16	279	334.6	-53.8	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-045	572182.6	5370739	330.74	339	335.2	-53.6	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-046	572419.2	5370393.3	336.74	255	342	-63.3	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MGH13-047	572540	5370315.9	345.25	414	334.7	-53.2	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MGH13-048	572263.8	5370673.9	331.72	477	333.6	-53.6	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-049	572195.2	5370126.9	330.01	459.25	335.4	-63.1	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MGH13-050	572241.1	5370610.2	330.9	585	331.8	-53.9	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-051	572145.3	5370120.9	331.21	438	330.3	-60.4	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MGH13-052	572167.3	5370648.1	330	495	336	-54.4	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-053	571816.8	5370003	329.13	134	337.6	-52.5	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MGH13-053A	571803.5	5370034.5	328.63	353	337.7	-56	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MGH13-054	572142.8	5370587.7	329.09	506.56	333.4	-56.9	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-055	572380.2	5370211.9	332.46	539	336.8	-61.6	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MGH13-056	572466.5	5370706.2	350.93	617	335.7	-52.5	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-057	572540.8	5370315.1	345.05	239	332.8	-62.8	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MGH13-058	572607.1	5370328	352.33	402	336	-49.6	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MGH13-059	572549.8	5370781.3	363.93	447	337.3	-52.6	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-060	572354.9	5370141.8	331.66	318.15	338.3	-54.3	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MGH13-061	572125.6	5370024.1	329.86	95	338	-56	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MGH13-061A	572118.4	5370042.7	329.94	443.6	344.6	-57.8	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MGH13-062	572551	5370899	357.16	513	338.7	-60.7	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-063	572252.3	5370135.3	329.72	120	335.2	-66.8	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MGH13-063A	572252.3	5370135.3	329.72	726	335.2	-66.8	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MGH13-064	572595.7	5370946.6	346.62	295	334.8	-47.9	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-065	572366.7	5370688.7	337.71	550.4	336.1	-51.2	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-066	572753	5371414.1	330.75	450	160.7	-53.9	DDH	Windjammer North Zone	Moneta Porcupine Mines Inc.
MGH13-067	572437	5370218	334.5	326	335.3	-52.5	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MGH13-068	571871.3	5369995.4	330	389	336.5	-52.1	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MGH13-069	572103.3	5370531.7	329.06	574	333.4	-57	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-070	572530.1	5370829.6	359.52	450	336.1	-54.3	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.

Hole Name	X	Y	Z	Length	Az.	Incl.	Type	Zone	Company
MGH13-071	573149.3	5371175.9	338.79	86	24	-50	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-071A	573148.9	5371174.7	338.91	500	25.2	-54.3	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-072	572009.3	5370486.9	329.08	600	337.1	-54.9	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-073	573356	5371020	329.52	218	195	-50	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-073A	573330.8	5370967.7	330.55	569	194.9	-55.4	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-074	572027.7	5370019.6	330.97	459	336.6	-54.4	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MGH13-075	571292.8	5369115.8	323.14	908	336	-58.1	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH13-076	571246.8	5368933.5	323.01	1233.2	337	-67.9	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH13-077	571827.5	5371104.9	331.05	510	158.2	-53	DDH	Discovery Zone	Moneta Porcupine Mines Inc.
MGH13-078	571186.4	5368959	322.86	870	334.5	-63.3	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH13-079	571737.1	5371401.4	332.56	798	157.7	-47.7	DDH	Discovery Zone	Moneta Porcupine Mines Inc.
MGH13-080	571299.9	5368932.6	323.03	1244	337.1	-68	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH13-081	571886.5	5370973.5	329.94	56	154.4	-53.9	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-081A	571886.5	5370973.5	329.94	314	154.4	-53.9	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MGH13-082	572430.2	5371250.1	335.32	324.5	158.9	-50.8	DDH	Windjammer North Zone	Moneta Porcupine Mines Inc.
MGH13-083	571803.5	5371205	331.61	660	156.3	-61.6	DDH	Discovery Zone	Moneta Porcupine Mines Inc.
MGH13-084	572454.4	5371317.7	335.52	423	155.7	-62.1	DDH	Windjammer North Zone	Moneta Porcupine Mines Inc.
MGH13-085	572500.5	5371345.1	333.35	33	158	-58	DDH	Windjammer North Zone	Moneta Porcupine Mines Inc.
MGH13-085A	572500.1	5371345.2	333.29	288	156	-59.3	DDH	Windjammer North Zone	Moneta Porcupine Mines Inc.
MGH13-086	570599.7	5371763.6	340.83	655.3	223	-51.3	DDH	Emens Lake	Moneta Porcupine Mines Inc.
MGH13-087	571932.8	5371144.7	330.89	422	155.8	-57.8	DDH	Discovery Zone	Moneta Porcupine Mines Inc.
MGH13-088	571742	5371076.2	330.47	509	157.2	-51	DDH	Discovery Zone	Moneta Porcupine Mines Inc.
MGH13-089	571913.6	5371196.2	331.1	560	157.7	-58.4	DDH	Discovery Zone	Moneta Porcupine Mines Inc.
MGH13-090	571760.8	5371032.2	330.29	434	157.8	-46.2	DDH	Discovery Zone	Moneta Porcupine Mines Inc.
MGH13-091	570787.7	5371942.3	350.42	531	223.4	-50.3	DDH	Emens Lake	Moneta Porcupine Mines Inc.
MGH13-092	571802.4	5371175.8	331.3	642	155.6	-61.3	DDH	Discovery Zone	Moneta Porcupine Mines Inc.
MGH13-093	571913.2	5371197.2	331.18	661	156	-69.9	DDH	Discovery Zone	Moneta Porcupine Mines Inc.
MGH13-094	570931	5372095	357.43	465	224.6	-49.8	DDH	Emens Lake	Moneta Porcupine Mines Inc.
MGH13-095	571838.7	5371071.5	330.27	290	158.1	-47.3	DDH	Discovery Zone	Moneta Porcupine Mines Inc.
MGH13-096	571827.1	5371105.3	330.63	444	156.6	-69.2	DDH	Discovery Zone	Moneta Porcupine Mines Inc.
MGH13-097	571658.1	5371078.2	330.58	450	158.1	-52.3	DDH	Discovery Zone	Moneta Porcupine Mines Inc.
MGH13-098	571874.2	5371110.7	333.8	402	156.9	-53.4	DDH	Discovery Zone	Moneta Porcupine Mines Inc.
MGH13-099	571781.4	5371145.5	335.74	425	160.7	-50.8	DDH	Discovery Zone	Moneta Porcupine Mines Inc.
MGH13-100	571874	5371111	333.82	456	157	-60.6	DDH	Discovery Zone	Moneta Porcupine Mines Inc.
MGH13-101	571781.3	5371145.9	335.7	525	161.4	-62	DDH	Discovery Zone	Moneta Porcupine Mines Inc.
MGH13-102	571646.4	5371106.7	331.39	504	161	-60.7	DDH	Discovery Zone	Moneta Porcupine Mines Inc.
MGH13-103	571741.8	5371077.2	330.52	398	157.8	-58	DDH	Discovery Zone	Moneta Porcupine Mines Inc.
MGH13-104	571741.6	5371077.7	330.48	423	160.1	-62.1	DDH	Discovery Zone	Moneta Porcupine Mines Inc.
MGH13-105	571827.8	5371104.4	330.51	65	158.6	-52.5	DDH	Discovery Zone	Moneta Porcupine Mines Inc.
MGH13-105A	571827.5	5371104.6	330.43	351	157.8	-60.1	DDH	Discovery Zone	Moneta Porcupine Mines Inc.
MGH16-001	566881.3	5369052.8	320.48	152	4.47	-50	DDH	Destor West	Moneta Porcupine Mines Inc.
MGH16-002	566881.2	5369052.4	320.55	587	8.72	-66	DDH	Destor West	Moneta Porcupine Mines Inc.
MGH16-003	566678.7	5368946.2	321.07	500	7.95	-52	DDH	Destor West	Moneta Porcupine Mines Inc.
MGH16-004	566283.6	5368668.7	316.27	945	214	-69.4	DDH	Destor West	Moneta Porcupine Mines Inc.
MGH16-005	566209.1	5368782.6	320.95	33	0	-50	DDH	Destor West	Moneta Porcupine Mines Inc.

Hole Name	X	Y	Z	Length	Az.	Incl.	Type	Zone	Company
MGH16-005A	566209.1	5368781.8	321	429.23	4.63	-51	DDH	Destor West	Moneta Porcupine Mines Inc.
MGH16-006	565967	5368644.8	315.96	722.5	169.1	-70.7	DDH	Destor West	Moneta Porcupine Mines Inc.
MGH16-007	566217.9	5368840.9	321.41	387	175.62	-51	DDH	Destor West	Moneta Porcupine Mines Inc.
MGH16-008	565821.5	5368851.1	321.56	396.62	153.67	-51	DDH	Destor West	Moneta Porcupine Mines Inc.
MGH16-009	565362.3	5368999.5	321.17	452	208.97	-55	DDH	Destor West	Moneta Porcupine Mines Inc.
MGH16-010	565726	5368689	320	884.69	168	-77	DDH	Destor West	Moneta Porcupine Mines Inc.
MGH16-011	567978.7	5369268.3	292.46	563	308.47	-52	DDH	LC Zone	Moneta Porcupine Mines Inc.
MGH17-012	565675	5374095	325	694	330	-65	DDH	Perry Lake	Moneta Porcupine Mines Inc.
MGH17-013	568346.6	5369443.7	324.02	449	335.53	-52	DDH	LC Zone	Moneta Porcupine Mines Inc.
MGH17-014	567275.7	5367802.9	312	519	220	-50	DDH	Western Zone	Moneta Porcupine Mines Inc.
MGH17-015	567725	5369258	322	488	20	-52	DDH	LC Zone	Moneta Porcupine Mines Inc.
MGH17-016	568114	5369358	324	447	340	-50	DDH	LC Zone	Moneta Porcupine Mines Inc.
MGH17-017	567480	5369200	320	301.37	40	-50	DDH	West of LC Zone	Moneta Porcupine Mines Inc.
MGH17-018	567395	5369105	320	492.13	40	-50	DDH	West of LC Zone	Moneta Porcupine Mines Inc.
MGH17-019X	570571.22	5369832.83	324.67	878.79	90.2	-55.5	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-020	567280	5369200	320	341	35	-50	DDH	West of LC Zone	Moneta Porcupine Mines Inc.
MGH17-021	567195	5369110	320	493.65	40	-50	DDH	West of LC Zone	Moneta Porcupine Mines Inc.
MGH17-022	567080	5369150	320	284.2	40	-50	DDH	West of LC Zone	Moneta Porcupine Mines Inc.
MGH17-023	570570	5369933	324	647.3	90	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-024	566995	5369055	320	489	40	-50	DDH	West of LC Zone	Moneta Porcupine Mines Inc.
MGH17-025	569860	5370115	326.5	302.1	340	-50	DDH	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MGH17-026	569860	5370115	326.5	500	40	-50	DDH	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MGH17-027	568009.9	5369359.4	323	180	40	-50	DDH	LC Zone	Moneta Porcupine Mines Inc.
MGH17-028	570060	5370150	324.75	321	340	-50	DDH	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MGH17-029	570444	5369720	324	662.86	162	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-030	567826	5369570	326	698.93	192	-50	DDH	LC Zone	Moneta Porcupine Mines Inc.
MGH17-031	570145	5370164	324	548	40	-50	DDH	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MGH17-032	570145	5370164	324	338	340	-50	DDH	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MGH17-033	567862	5369496	325	445.85	192	-50	DDH	LC Zone	Moneta Porcupine Mines Inc.
MGH17-034	567912	5369490	325	440.98	192	-50	DDH	LC Zone	Moneta Porcupine Mines Inc.
MGH17-035	570420	5370390	326	139.7	340	-50	DDH	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MGH17-037	571876.9	5371148.8	332.93	632.6	159.01	-61.85	DDH	Discovery Zone	Moneta Porcupine Mines Inc.
MGH17-038	571918.9	5371163.4	332.61	566	160	-56.6	DDH	Discovery Zone	Moneta Porcupine Mines Inc.
MGH17-039	568467.84	5369562.96	323.95	348.18	293.48	-63	DDH	LC Zone	Moneta Porcupine Mines Inc.
MGH17-039A	568468.5	5369563.6	325	76	#N/A	#N/A	DDH	LC Zone	Moneta Porcupine Mines Inc.
MGH17-040	572362.6	5371355.5	339.2	629.97	158.37	-66.32	DDH	Windjammer North Zone	Moneta Porcupine Mines Inc.
MGH17-041	571977.5	5371161.2	332.63	648.1	162.3	-68.09	DDH	Discovery Zone	Moneta Porcupine Mines Inc.
MGH17-042	572407.9	5371447.3	334.89	651	158.2	-61.91	DDH	Windjammer North Zone	Moneta Porcupine Mines Inc.
MGH17-043	568301.9	5369567.6	324.06	351	297.74	-62.15	DDH	LC Zone	Moneta Porcupine Mines Inc.
MGH17-044	568223.5	5369460.8	323.52	411.4	300.51	-55.88	DDH	LC Zone	Moneta Porcupine Mines Inc.
MGH17-045	571906.9	5371201	332.99	636	158.45	-62.42	DDH	Discovery Zone	Moneta Porcupine Mines Inc.
MGH17-046	572616.2	5371376.4	334.54	450.11	160.95	-66.84	DDH	Windjammer North Zone	Moneta Porcupine Mines Inc.
MGH17-047	568150	5369383.4	322.95	402.9	296.99	-57.47	DDH	LC Zone	Moneta Porcupine Mines Inc.
MGH17-048	572020.7	5371180.3	332.19	634.64	158.9	-61.94	DDH	Discovery Zone	Moneta Porcupine Mines Inc.
MGH17-049	572696.8	5371376.9	337.78	401.98	161.89	-67.78	DDH	Windjammer North Zone	Moneta Porcupine Mines Inc.

Hole Name	X	Y	Z	Length	Az.	Incl.	Type	Zone	Company
MGH17-050	569113.7	5368849.4	320.4	239.15	115.3	-56.54	DDH	55 Zone	Moneta Porcupine Mines Inc.
MGH17-051	570672.6	5369298.8	321.72	723	89.52	-52.38	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-052	569127.8	5368762.7	319.82	252	111	-59.33	DDH	55 Zone	Moneta Porcupine Mines Inc.
MGH17-053	572267.1	5371313.3	333.68	653.88	160.07	-67.23	DDH	Windjammer North Zone	Moneta Porcupine Mines Inc.
MGH17-054	572903.4	5371388.1	339.53	300.1	158.88	-61.21	DDH	Windjammer North Zone	Moneta Porcupine Mines Inc.
MGH17-055	569330.9	5368842.9	319.74	248.85	113.05	-58.29	DDH	55 Zone	Moneta Porcupine Mines Inc.
MGH17-055A	569330.9	5368842.9	319.74	30	115	-55	DDH	55 Zone	Moneta Porcupine Mines Inc.
MGH17-056	570674.3	5369377.8	322.09	774.06	88.97	-55.42	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-057	569320.3	5368810.4	325	246.47	113.03	-56.75	DDH	55 Zone	Moneta Porcupine Mines Inc.
MGH17-057A	569320.3	5368810.4	325	72.9	115.2	-55	DDH	55 Zone	Moneta Porcupine Mines Inc.
MGH17-057B	569321.9	5368807.4	319.12	81	115.2	-55	DDH	55 Zone	Moneta Porcupine Mines Inc.
MGH17-057C	569321.9	5368807.4	319.12	33	115.2	-55	DDH	55 Zone	Moneta Porcupine Mines Inc.
MGH17-058	571473	5369805	326.59	210	13.52	-63.69	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-059	570647.1	5369341.1	322.09	699	84.51	-50.91	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-060	571361	5369669.2	325.35	636	35.01	-57.19	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-061	569233	5368792.1	320.63	405	112.4	-56.1	DDH	55 Zone	Moneta Porcupine Mines Inc.
MGH17-062	570613.3	5369485.1	323.12	507	88.61	-57.04	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-062A	570613.3	5369485.1	325	81	90	-55	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-063	571517.1	5369914.2	328.21	435	34.78	-57.21	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-064	570673	5369413.9	322.29	699	89.39	-50.47	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-065	570540.5	5369299.3	323.13	793.9	90.06	-55.89	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-066	571472.9	5369805.5	326.6	536.95	4.22	-66.35	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-067	571263.86	5369683.03	324.77	453	91.96	-48.04	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-068	571201.31	5369627.92	324.49	452.97	91.93	-53.9	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-069X	571570.9	5369897	325	704.95	31.59	-61.75	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-070	571209.6	5369758	324.68	525	88.36	-55.85	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-071	570597.36	5369218.77	321.84	844.7	88.9	-50.72	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-071A	570597.36	5369218.77	321.84	63	90	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-072	570555.91	5369441.97	323.39	579.7	90.71	-54.19	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-073	570995.59	5369756.07	323.92	600.03	85.6	-61.54	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-073A	570995.59	5369756.07	323.92	42	90	-58	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-073B	570995.59	5369756.07	323.92	39	90	-58	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-074	570888.18	5369594.42	322.8	713.96	85.93	-58.92	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-074A	570888.18	5369594.42	322.8	78	90	-55	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-075	571031.8	5369455.18	323.39	593.88	89.49	-50.7	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-076	570849.53	5369411.59	322.56	628.1	86.58	-52.43	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-077	571006.87	5369214.42	323.5	672.15	92.4	-54.9	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-077A	571006.87	5369214.42	323.5	189.25	90	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-077B	571005	5369217	323.5	57	90	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-078	570751.29	5369095.84	321.39	735.75	92.65	-56.44	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-079	571199.57	5369396.81	324.41	501	89.65	-55.74	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-080	571208.87	5369334.56	324.56	500	89.33	-57.04	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-081	571000.65	5369338.78	323.27	528	88.79	-55.21	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-082	571050.1	5369557.61	323.67	696	87.64	-51.72	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH17-083	570847.97	5369499.95	322.46	737.84	85.74	-54.13	DDH	South West Zone	Moneta Porcupine Mines Inc.

Hole Name	X	Y	Z	Length	Az.	Incl.	Type	Zone	Company
MGH17-086	571055	5369138	320	600	89.9	-50.8	DDH	SW	Moneta Porcupine Mines Inc.
MGH18-069X	571570.9	5369897	325	704.94	#N/A	#N/A	DDH	Gap Zone	Moneta Porcupine Mines Inc.
MGH18-083	570850	5369500	325	737.84	90	-50	DDH	South West	Moneta Porcupine Mines Inc.
MGH18-084	570766.14	5369256.11	321.38	848.4	86.92	-67.96	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH18-085	570701.04	5369146.79	321.37	812.3	83.41	-64.1	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH18-086	571055.06	5369138.52	323.83	600	89.58	-54.02	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH18-087	570959.93	5369371.21	322.9	591.07	89.21	-51.68	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH18-088	571000.9	5369271.39	323.38	713.85	92.88	-55.21	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH18-089	570951	5369697.39	323.54	453	86.46	-57.96	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH18-089A	570950.92	5369696.72	323.35	57	90	-57	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH18-089B	570950.92	5369696.72	323.35	249	90	-60		South West Zone	Moneta Porcupine Mines Inc.
MGH18-090	570999.42	5369797.7	324.51	624.22	85.35	-65.98	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH18-091	571102.71	5369904.35	324.57	780.02	88.44	-59.65	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH18-092	571369.36	5369395.94	325.57	791.46	91.66	-53.66	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH18-093	570784.7	5369003.229	322.735	786	2.57	-72.99	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH18-093A	570781.728	5368993.863	322.628	366.02	0.47	-68.82	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH18-093B	570781.728	5368993.863	322.628	99	359.93	-72.83	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH18-094	570819.91	5368955.49	322.96	824.96	4.9	-74.3	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH18-095	570820.49	5369481.27	322.24	801	87.91	-73.41	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH18-096	570820.69	5369600.35	323.28	839.36	92.62	-70.17	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH18-097	570850.69	5369700.35	323.28	831	81.8	-73.7	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH18-098	570885.42	5369767.67	324.22	767.95	88.47	-67.08		South West Zone	Moneta Porcupine Mines Inc.
MGH18-099	571055	5369635	320	750	92.15	-56.55	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH18-100	571757.88	5369998.36	329.84	474.31	11.81	-55.84	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH18-101	571169.203	5369610.25	324.232	366.1237	48	-58	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH18-102	571521.366	5369725.933	326.685	737	3.37	-66.72	DDH	Gap Zone	Moneta Porcupine Mines Inc.
MGH18-103	571204.385	5369657.995	324.352	588.01	34.86	-66.16	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH18-104	571812.208	5370127.386	327.278	249	7.98	-56.34	DDH	Gap Zone	Moneta Porcupine Mines Inc.
MGH18-105	571662.575	5370203.195	327.131	372	89.16	-55.29	DDH	Gap Zone	Moneta Porcupine Mines Inc.
MGH18-106	571220.836	5369900.052	324.864	351	92.2	-60.52	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH18-107	571323.81	5369946.854	325.73	239.64	88.32	-51.84	DDH	South West Zone	Moneta Porcupine Mines Inc.
MGH18-108	572368.105	5370242.707	331.325	648	281.59	-55.77	DDH	Windjammer South	Moneta Porcupine Mines Inc.
MH-23	570081	5368496	319	8.84	0	-90	CP	South West Zone	Moneta Porcupine Mines Inc.
MH-24	570047	5368607	319	8.84	0	-90	CP	South West Zone	
MH-25	570021.5	5368690	318.5	8.84	0	-90	CP	South West Zone	
MH-35	569800	5369384.5	322.5	8.84	0	-90	CP	South West Zone	
MH-36	569767.5	5369495	323	8.84	0	-90	CP	South West Zone	
MI54-01	568948	5373116.6	350.5	358	360	-50	DDH	Perry Lake Area	Falconbridge
MI55-01	570792.5	5373624.2	342.9	341.1	180	-50	DDH	Outside Property	Falconbridge
MI55-02	571098.9	5374367.4	342.9	285.6	180	-50	DDH	Outside Property	Falconbridge
MI-91-139	570228.8	5370475.5	326	387.7	163.6	-57	DDH	Twin Creeks Zone	Independence
MI-91-140	570388.5	5370535.8	323.99	302	162	-60	DDH	Twin Creeks Zone	Independence
MI-91-141	570443.4	5370329.1	324.65	202.9	343	-60	DDH	Twin Creeks Zone	Independence
MI-91-142	570324.8	5370233.6	322.44	305	341.7	-59.1	DDH	Twin Creeks Zone	Independence
MI-91-143	571329.3	5370543.3	325	89.46	342	-55	DDH	Landing Zone	Independence

Hole Name	X	Y	Z	Length	Az.	Incl.	Type	Zone	Company
MI-91-144	571317.3	5370568.9	325	323	345	-59.5	DDH	Landing Zone	Independence
MI-91-145	571223.4	5370844.2	328.78	122.08	163	-61	DDH	Landing Zone	Independence
MI-91-146	571234.5	5370840.3	328.47	315.5	164	-67	DDH	Landing Zone	Independence
MI-91-147	571335.6	5370903	330.25	400.5	163	-60	DDH	Landing Zone	Independence
MI-91-148X	571616.6	5370844.8	329.5	371	164	-54.5	DDH	Landing Zone	Independence
MI-91-149X	570125.6	5370458	324.63	536	164.2	-52.3	DDH	Twin Creeks Zone	Independence
MI-91-150	570015.3	5371009.9	329.96	294.44	343	-51.5	DDH	Emens Lake	Independence
MICH-96-01	570915	5375735	325	61.57	0	-90	DDH	Gem Lake Area	Gem Lake Project Group
MJB-87-01	572014.9	5371645.9	336.5	62.8	0	-90	RC	North of North Zone	Moneta Porcupine Mines Inc.
MJB-87-02	571669.6	5371764.3	342	63.72	0	-90	RC	North of North Zone	Moneta Porcupine Mines Inc.
MJB-87-03	571555.6	5371801.9	342.5	82.62	0	-90	RC	North of North Zone	Moneta Porcupine Mines Inc.
MJB-87-04	571265	5371824.7	344	77.13	0	-90	RC	Emens Lake	Moneta Porcupine Mines Inc.
MJB-87-05	571107.6	5371778.1	344	70.43	0	-90	RC	Emens Lake	Moneta Porcupine Mines Inc.
MJB-87-06	570813.1	5372110.5	325	83.54	0	-90	RC	Emens Lake	Moneta Porcupine Mines Inc.
MJB-87-07	570771.8	5371814.9	344	74.39	0	-90	RC	Emens Lake	Moneta Porcupine Mines Inc.
MJB-87-08	570524.2	5371858	338	66.77	0	-90	RC	Emens Lake	Moneta Porcupine Mines Inc.
MJB-87-09	570249.5	5372025.1	325	64.94	0	-90	RC	Emens Lake	Moneta Porcupine Mines Inc.
MJB-87-09A	570252.9	5372025.1	325	65.55	0	-90	RC	Emens Lake	Moneta Porcupine Mines Inc.
MJB-87-10	569588.2	5371921.5	325	60.96	0	-90	RC	Emens Lake	Moneta Porcupine Mines Inc.
MJB-87-11	569393.4	5371818.8	333.5	55.18	0	-90	RC	Emens Lake	Moneta Porcupine Mines Inc.
MJB-87-12	569439.3	5371700.5	329	58.23	0	-90	RC	Emens Lake	Moneta Porcupine Mines Inc.
MJB-87-13	569505	5371530.8	328	59.45	0	-90	RC	Emens Lake	Moneta Porcupine Mines Inc.
MJB-87-14	569737.6	5371396.8	327.25	68.9	0	-90	RC	Emens Lake	Moneta Porcupine Mines Inc.
MJB-87-15	569593	5371297.9	329.5	63.72	0	-90	RC	Emens Lake	Moneta Porcupine Mines Inc.
MJB-87-16	569344.3	5371313.1	338.5	60.37	0	-90	RC	Emens Lake	Moneta Porcupine Mines Inc.
MJB-87-17	569238.1	5371311.6	335.25	62.2	0	-90	RC	Emens Lake	Moneta Porcupine Mines Inc.
MJB-87-18	569232	5371120.2	329.5	50.3	0	-90	RC	Emens Lake	Moneta Porcupine Mines Inc.
MJB-87-19	569118.3	5371295.1	335	57.62	0	-90	RC	Emens Lake	Moneta Porcupine Mines Inc.
MJB-87-20	569177.1	5370980.9	328.75	50.3	0	-90	RC	Emens Lake	Moneta Porcupine Mines Inc.
MJB-87-21	569508.1	5371031.1	329	49.09	0	-90	RC	Emens Lake	Moneta Porcupine Mines Inc.
MJB-87-22	569682.7	5371126.8	329.25	62.5	0	-90	RC	Emens Lake	Moneta Porcupine Mines Inc.
MJB-87-23	569813.6	5371127.1	329.25	56.1	0	-90	RC	Emens Lake	Moneta Porcupine Mines Inc.
MJB-87-24	569857.6	5371202.4	328	56.4	0	-90	RC	Emens Lake	Moneta Porcupine Mines Inc.
MJB-87-25	569968.5	5371131.7	328.75	50.91	0	-90	RC	Emens Lake	Moneta Porcupine Mines Inc.
MJB-87-26	570094.9	5371292.3	326.75	73.48	0	-90	RC	Emens Lake	Moneta Porcupine Mines Inc.
MJB-87-27	570224.2	5370984.9	328	60.96	0	-90	RC	Emens Lake	Moneta Porcupine Mines Inc.
MJB-87-28	570020	5370620	327	44.2	0	-90	RC	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MJB-87-29	570250	5370700	325.75	46.63	0	-90	RC	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MJD-86-01	570520	5370300	324	9.75	0	-90	RC	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MJD-86-02	570550	5370215	323	24.38	0	-90	RC	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MJD-86-03	570655	5370280	323.25	27.43	0	-90	RC	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MJD-86-04	570765	5370335	323.75	19.2	0	-90	RC	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MJD-86-05	570830	5370345	324	16.76	0	-90	RC	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MJD-86-06	570870	5370405	324.5	21.03	0	-90	RC	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MJD-86-07	570930	5370410	324.5	14.02	0	-90	RC	Twin Creeks Zone	Moneta Porcupine Mines Inc.

Hole Name	X	Y	Z	Length	Az.	Incl.	Type	Zone	Company
MJD-86-07A	570930	5370410	324.5	17.37	0	-90	RC	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MJD-86-08	571115	5370430	324	17.37	0	-90	RC	Landing Zone	Moneta Porcupine Mines Inc.
MJD-86-09	571235	5370450	323.75	16.46	0	-90	RC	Landing Zone	Moneta Porcupine Mines Inc.
MJD-86-10	571355	5370485	324.5	19.81	0	-90	RC	Landing Zone	Moneta Porcupine Mines Inc.
MJD-86-11	571415	5370300	325	29.26	0	-90	RC	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MJD-86-12	571605	5370515	326.5	23.47	0	-90	RC	Landing Zone	Moneta Porcupine Mines Inc.
MJD-86-13	571350	5370870	330	51.82	0	-90	RC	Landing Zone	Moneta Porcupine Mines Inc.
MJD-86-14	571380	5370785	329.25	21.34	0	-90	RC	Landing Zone	Moneta Porcupine Mines Inc.
MJD-86-15	571260	5370760	328.5	21.34	0	-90	RC	Landing Zone	Moneta Porcupine Mines Inc.
MJD-86-16	571130	5370760	330.5	24.99	0	-90	RC	Landing Zone	Moneta Porcupine Mines Inc.
MJD-86-17	571035	5370675	327.75	20.73	0	-90	RC	Landing Zone	Moneta Porcupine Mines Inc.
MJD-86-18	570780	5370650	329.25	24.38	0	-90	RC	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MJD-86-19	570555	5370560	326.5	26.21	0	-90	RC	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MJD-86-20	570290	5370220	323.25	15.24	0	-90	RC	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MJD-86-21	570185	5370150	325.75	27.43	0	-90	RC	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MJD-86-22	570185	5370350	324.5	27.43	0	-90	RC	Twin Creeks Zone	Moneta Porcupine Mines Inc.
MJL-87-01	572030	5370015	331	79.86	0	-90	RC	Windjammer South Zone	Moneta Porcupine Mines Inc.
MJL-87-02	571800	5369935	328.5	60.66	0	-90	RC	Windjammer South Zone	Moneta Porcupine Mines Inc.
MJL-87-03	571755	5370075	327.75	37.8	0	-90	RC	Windjammer West Zone	Moneta Porcupine Mines Inc.
MJL-87-04	571700	5370215	328	28.04	0	-90	RC	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MJL-87-05	571655	5370350	327.5	29.57	0	-90	RC	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MJL-87-06	571545	5370315	326.5	32.61	0	-90	RC	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MJL-87-07	571475	5370135	326	39.32	0	-90	RC	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MJL-87-08	571525	5369995	327	38.4	0	-90	RC	Windjammer West Zone	Moneta Porcupine Mines Inc.
MJL-87-09	571560	5369855	326.5	70.1	0	-90	RC	Windjammer West Zone	Moneta Porcupine Mines Inc.
MJL-87-10	571680	5369895	328	57.91	0	-90	RC	Windjammer West Zone	Moneta Porcupine Mines Inc.
MJL-87-11	571740	5369730	328	54.56	0	-90	RC	Windjammer West Zone	Moneta Porcupine Mines Inc.
MJL-87-12	571800	5369565	328.25	57.61	0	-90	RC	Windjammer West Zone	Moneta Porcupine Mines Inc.
MJL-87-13	571570	5369485	325.5	57.3	0	-90	RC	Windjammer West Zone	Moneta Porcupine Mines Inc.
MJL-87-14	571510	5369650	325	40.84	0	-90	RC	Windjammer West Zone	Moneta Porcupine Mines Inc.
MJL-87-15	571450	5369830	325	59.13	0	-90	RC	Windjammer West Zone	Moneta Porcupine Mines Inc.
MJL-87-16	571405	5369955	324.75	28.65	0	-90	RC	Windjammer West Zone	Moneta Porcupine Mines Inc.
MJL-87-17	571300	5369890	324	25.45	0	-90	RC	South West Zone	Moneta Porcupine Mines Inc.
MJL-87-18	571340	5369775	324.5	34.75	0	-90	RC	South West Zone	Moneta Porcupine Mines Inc.
MJL-87-19	571230	5369745	323.5	52.12	0	-90	RC	South West Zone	Moneta Porcupine Mines Inc.
MJL-87-20	571205	5369795	323.5	29.26	0	-90	RC	South West Zone	Moneta Porcupine Mines Inc.
MJL-87-21	571190	5369850	323.5	24.99	0	-90	RC	South West Zone	Moneta Porcupine Mines Inc.
MJL-87-22	571145	5369960	323.5	39.32	0	-90	RC	South West Zone	Moneta Porcupine Mines Inc.
MJL-87-23	571110	5370070	325	36.88	0	-90	RC	South West Zone	Moneta Porcupine Mines Inc.
MJL-87-24	571080	5370155	322.75	32.61	0	-90	RC	South West Zone	Moneta Porcupine Mines Inc.
MJL-87-25	570855	5370075	322.25	32	0	-90	RC	South West Zone	Moneta Porcupine Mines Inc.
MJL-87-26	570890	5369965	322.25	32.92	0	-90	RC	South West Zone	Moneta Porcupine Mines Inc.
MJL-87-27	570940	5369825	323.25	22.25	0	-90	RC	South West Zone	Moneta Porcupine Mines Inc.
MJL-87-28	570845	5369730	321.5	29.26	0	-90	RC	South West Zone	Moneta Porcupine Mines Inc.
MJL-87-29	570880	5369620	321.5	41.15	0	-90	RC	South West Zone	Moneta Porcupine Mines Inc.

Hole Name	X	Y	Z	Length	Az.	Incl.	Type	Zone	Company
MJL-87-30	571000	5369650	322	41.45	0	-90	RC	South West Zone	Moneta Porcupine Mines Inc.
MJL-87-31	571095	5369695	322.75	45.11	0	-90	RC	South West Zone	Moneta Porcupine Mines Inc.
MJL-87-32	571245	5369680	323.5	28.65	0	-90	RC	South West Zone	Moneta Porcupine Mines Inc.
MJL-87-33	571290	5369545	323.75	49.38	0	-90	RC	South West Zone	Moneta Porcupine Mines Inc.
MJL-87-34	571150	5369590	323	35.66	0	-90	RC	South West Zone	Moneta Porcupine Mines Inc.
MJL-87-35	571035	5369550	322.25	36.88	0	-90	RC	South West Zone	Moneta Porcupine Mines Inc.
MJL-87-36	570920	5369510	321.75	46.94	0	-90	RC	South West Zone	Moneta Porcupine Mines Inc.
MJL-87-37	570815	5369440	321	42.98	0	-90	RC	South West Zone	Moneta Porcupine Mines Inc.
MJL-87-38	570860	5369300	320.75	33.68	0	-90	RC	South West Zone	Moneta Porcupine Mines Inc.
MJL-87-39	570955	5369400	322	41.45	0	-90	RC	South West Zone	Moneta Porcupine Mines Inc.
MJL-87-40	570575	5369390	321.5	73.76	0	-90	RC	South West Zone	Moneta Porcupine Mines Inc.
MJL-87-41	570530	5369340	321.75	74.07	0	-90	RC	South West Zone	Moneta Porcupine Mines Inc.
MJL-87-42	570380	5369195	321.5	73.76	0	-90	RC	South West Zone	Moneta Porcupine Mines Inc.
MJL-87-43	570472	5368912	322.25	48.16	0	-90	RC		Moneta Porcupine Mines Inc.
MJL-87-44	570300	5368847	320	65.84	0	-90	RC		Moneta Porcupine Mines Inc.
MJL-87-45	570118	5368782	318.75	68.88	0	-90	RC		Moneta Porcupine Mines Inc.
MJL-87-46	569515	5368600	317	45.11	0	-90	RC	55 Zone	Moneta Porcupine Mines Inc.
MJL-87-47	569260	5368690	318	27.13	0	-90	RC		Moneta Porcupine Mines Inc.
MJL-87-48	569200	5368836	319.25	27.13	0	-90	RC		Moneta Porcupine Mines Inc.
MJL-87-49	569432	5368912	319.25	34.75	0	-90	RC		Moneta Porcupine Mines Inc.
MJL-87-50	569665	5369030	321	35.36	0	-90	RC	55 Zone	Moneta Porcupine Mines Inc.
MJL-87-51	569900	5369085	322	68.58	0	-90	RC	East of 55 Zone	Moneta Porcupine Mines Inc.
MJL-87-52	569955	5369295	322.5	34.14	0	-90	RC	South West Zone	Moneta Porcupine Mines Inc.
MJL-87-53	569720	5369240	322	29.87	0	-90	RC	North of 55 Zone	Moneta Porcupine Mines Inc.
MJL-87-54	569335	5369230	322	21.34	0	-90	RC	North of 55 Zone	Moneta Porcupine Mines Inc.
MJL-87-55	569105	5369150	321.5	37.49	0	-90	RC	North of 55 Zone	Moneta Porcupine Mines Inc.
MJL-87-56	569160	5369010	320.75	37.19	0	-90	RC	North of 55 Zone	Moneta Porcupine Mines Inc.
MJN-87-01	569910	5369435	323	25.3	0	-90	RC	South West Zone	Moneta Porcupine Mines Inc.
MJN-87-02	569880	5369505	323.5	19.51	0	-90	RC	South West Zone	Moneta Porcupine Mines Inc.
MJN-87-03	569730	5369530	323.25	26.21	0	-90	RC	North of 55 Zone	Moneta Porcupine Mines Inc.
MJN-87-04	569540	5369385	322.75	28.35	0	-90	RC	North of 55 Zone	Moneta Porcupine Mines Inc.
MJN-87-05	569055	5369295	322.5	26.82	0	-90	RC	North of 55 Zone	Moneta Porcupine Mines Inc.
MJN-87-06	568940	5368895	320	31.7	0	-90	RC	North of 55 Zone	Moneta Porcupine Mines Inc.
MJN-87-07	568710	5368810	319.5	51.51	0	-90	RC	North of 55 Zone	Moneta Porcupine Mines Inc.
MJN-88-01	566455	5369375	325	9.45	0	-90	RC	Far Western Zone	Moneta Porcupine Mines Inc.
MJN-88-02	566560	5369070	320	18.9	0	-90	RC	Far Western Zone	Moneta Porcupine Mines Inc.
MJN-88-03	566655	5368785	320	48.77	0	-90	RC	Far Western Zone	Moneta Porcupine Mines Inc.
MJN-88-04	566450	5368690	320	29.57	0	-90	RC	Far Western Zone	Moneta Porcupine Mines Inc.
MJN-88-05	566490	5368535	320	27.43	0	-90	RC	Far Western Zone	Moneta Porcupine Mines Inc.
MJN-88-06	566945	5368715	320	38.1	0	-90	RC	Far Western Zone	Moneta Porcupine Mines Inc.
MJN-88-07	566890	5368850	320	33.83	0	-90	RC	Far Western Zone	Moneta Porcupine Mines Inc.
MJN-88-08	567105	5368945	320	23.77	0	-90	RC	Far Western Zone	Moneta Porcupine Mines Inc.
MJN-88-09	567220	5369010	320	40.23	0	-90	RC	Far Western Zone	Moneta Porcupine Mines Inc.
MJN-88-10	567280	5368835	320	46.33	0	-90	RC	Far Western Zone	Moneta Porcupine Mines Inc.
MJN-88-10A	567280	5368835	320	52.43	0	-90	RC	Far Western Zone	Moneta Porcupine Mines Inc.

Hole Name	X	Y	Z	Length	Az.	Incl.	Type	Zone	Company
MJN-88-11	567340	5368645	320	47.85	0	-90	RC	Far Western Zone	Moneta Porcupine Mines Inc.
MJN-88-12	566415	5369495	325	8.23	0	-90	RC	Far Western Zone	Moneta Porcupine Mines Inc.
MJN-88-13	567620	5368955	320	60.96	0	-90	RC	LC Zone	Moneta Porcupine Mines Inc.
MJN-88-14	567815	5369155	321.5	49.68	0	-90	RC	LC Zone	Moneta Porcupine Mines Inc.
MJN-88-15	568035	5369260	322.25	37.8	0	-90	RC	LC Zone	Moneta Porcupine Mines Inc.
MJN-88-16	568080	5369120	321.5	31.7	0	-90	RC	LC Zone	Moneta Porcupine Mines Inc.
ML94-01	563622.9	5374392.2	325	311	30	-44	DDH	Outside Property - North Perry Lake	
ML94-02	563029.5	5374762	325	350	30	-45	DDH	Outside Property - North Perry Lake	
ML94-03	562904.4	5374550.2	325	207	30	-45	DDH	Outside Property - North Perry Lake	
ML94-04	564005.9	5374056.7	325	326	30	-45	DDH	Outside Property - North Perry Lake	
ML95-05	563707.2	5374693.2	325	361	210	-45	DDH	Outside Property - North Perry Lake	
ML95-06	563430.9	5375054.7	325	397	210	-45	DDH	Outside Property - North Perry Lake	
ML95-07	564174.8	5374543.3	325	360	210	-45	DDH	Outside Property - North Perry Lake	
ML95-08	563900.7	5374471.3	325	258	210	-45	DDH	Outside Property - North Perry Lake	
ML95-09	563672.6	5374753.5	325	446	210	-55	DDH	Outside Property - North Perry Lake	
ML95-10	563568.9	5374696	325	246.5	30	-45	DDH	Outside Property - North Perry Lake	
ML95-11	563470	5374775	325	175	210	-45	DDH	Outside Property - North Perry Lake	
ML95-12	562957.7	5375037.8	325	266	210	-45	DDH	Outside Property - North Perry Lake	
MM-94-132X	571650.9	5370754.4	328	398.2	342	-52	DDH	Landing Zone	Lac Minerals
MM-94-151	571711.3	5370778.3	328	419.7	342	-60	DDH	Landing Zone	Lac Minerals
MM-95-102X	570499.8	5370061.6	322.25	535.5	341	-50	DDH	Twin Creeks Zone	Lac Minerals
MM-95-152	571167.5	5369233	322.83	529.8	330	-60	DDH	South West Zone	Lac Minerals
MM-95-152A	571166.5	5369195.8	322.83	50	330	-60	DDH	South West Zone	Lac Minerals
MM-95-153	570736.7	5369341.5	320.48	306	341	-63	DDH	South West Zone	Lac Minerals
MM-95-153A	570742.5	5369310.8	320.48	50	341	-60	DDH	South West Zone	Lac Minerals
MM-95-154	570657.4	5369345.5	320.95	270.4	335	-55	DDH	South West Zone	Lac Minerals
MM-95-155	571209.8	5369090.4	322.65	619	335	-57	DDH	South West Zone	Lac Minerals
MM-95-156	570846.2	5369425.4	321.36	303.8	335	-59	DDH	South West Zone	Lac Minerals
MM-95-157	570809	5369306.2	320.17	422.7	335	-55	DDH	South West Zone	Lac Minerals
MM-95-158	571053.6	5369244.4	322.34	584.35	335	-57	DDH	South West Zone	Lac Minerals
MM-95-159	571226	5369269.1	323.09	550.7	335	-57	DDH	South West Zone	Lac Minerals
MM96-168	570696.7	5369301	320.48	372	330	-62	DDH	South West Zone	Lac Minerals
MM96-169	571111.2	5369172	321.15	576.65	330	-60	DDH	South West Zone	Lac Minerals
MM96-170	571274.1	5369644.5	323.87	486.75	330	-60	DDH	Windjammer West Zone	Lac Minerals
MM96-172	571318	5369719.3	324.03	301	330	-55	DDH	South West Zone	Lac Minerals
MM96-173	570944.2	5369267.4	321.47	551	340	-62	DDH	South West Zone	Lac Minerals
MM96-177	571270	5368993.8	322.16	1047	330	-68.8	DDH	South West Zone	Lac Minerals
MM96-179	571321.6	5369559.2	323.52	541.4	330	-63	DDH	Windjammer West Zone	Lac Minerals
MM97-177A	571270	5368993.8	322.16	864	330	-68.8	DDH	South West Zone	Lac Minerals
MM97-177B	571270	5368993.8	322.16	309	330	-68.8	DDH	South West Zone	Lac Minerals
MM97-182	570917.6	5369490.6	320.9	630	127	-55	DDH	South West Zone	Lac Minerals
MM97-183	571076.4	5369341.8	322.5	264	330	-60	DDH	South West Zone	Lac Minerals
MM97-185	571003.1	5369269.2	322	282.5	330	-60	DDH	South West Zone	Lac Minerals
MM97-187	571147.2	5369213	322.2	445	330	-60	DDH	South West Zone	Lac Minerals
MM97-188	570804.9	5369467.9	320.3	732	120	-55	DDH	South West Zone	Lac Minerals

Hole Name	X	Y	Z	Length	Az.	Incl.	Type	Zone	Company
MM97-189	571190.5	5369265.4	322.6	639	330	-61.5	DDH	South West Zone	Lac Minerals
MM97-190	570765.2	5369467.2	320.55	996	114	-69.5	DDH	South West Zone	Lac Minerals
MM97-192	571202.2	5369319.8	322.5	531	330	-60	DDH	South West Zone	Lac Minerals
MM97-193	571223.4	5369391.9	323.25	660	330	-61.5	DDH	South West Zone	Lac Minerals
MM97-194	570526	5369504.3	322.3	971	120	-61	DDH	South West Zone	Lac Minerals
MM97-198	570978.5	5369484.8	321.2	597	120	-60	DDH	South West Zone	Lac Minerals
MM97-200	570566.3	5369539.5	322	812	105	-58	DDH	South West Zone	Lac Minerals
MM97-201	571029.5	5369829.5	323.5	402	125	-55	DDH	South West Zone	Lac Minerals
MM97-203X	570944.9	5369316	321.23	777.47	24.6	-53.3	DDH	South West Zone	Lac Minerals/Moneta Porcupine
MM97-204	571011	5369278.3	321.3	402	20	-55	DDH	South West Zone	Lac Minerals
MM97-206	570960.2	5369904.9	322.2	526	117	-55	DDH	South West Zone	Lac Minerals
MM97-207	570469.4	5369476.5	325	474	115	-62	DDH	South West Zone	Lac Minerals
MM97-208	570935.1	5369238.5	321.4	385	20	-60	DDH	South West Zone	Lac Minerals
MM97-209	571010.2	5369377.4	321.8	212.5	25	-55	DDH	South West Zone	Lac Minerals
MM97-210	570616	5369304.2	320.4	646	88	-60	DDH	South West Zone	Lac Minerals
MM97-211	570897.5	5369354.5	320.8	397	85	-60	DDH	South West Zone	Lac Minerals
MM97-212	571082.6	5369173.2	321.8	429	30	-60	DDH	South West Zone	Lac Minerals
MM97-213	570968.7	5369177.9	321.9	462	20	-58	DDH	South West Zone	Lac Minerals
MM97-214	571066.3	5369306.7	321.8	159	30	-58	DDH	South West Zone	Lac Minerals
MM97-214A	571066.3	5369306.7	321.8	56	30	-55	DDH	South West Zone	Lac Minerals
MM97-214B	571066.3	5369306.7	321.8	156	30	-60	DDH	South West Zone	Lac Minerals
MM97-215	570612.7	5369304.3	320.5	386	20	-60	DDH	South West Zone	Lac Minerals
MM97-216X	570929.2	5369053.7	321.75	1346.05	30	-55.7	DDH	South West Zone	Moneta Porcupine Mines Inc.
MM97-217	570958.4	5369298.4	321.2	420	30	-57	DDH	South West Zone	Lac Minerals
MM97-218	570555.3	5369246.2	320.6	444	20	-65	DDH	South West Zone	Lac Minerals
MM97-219	570885.2	5369129.7	321.25	570	30	-65	DDH	South West Zone	Lac Minerals
MM97-220	570539.2	5369483	322.3	414	90	-60	DDH	South West Zone	Lac Minerals
MM97-221	570836.8	5369165.7	320.4	449	16	-65	DDH	South West Zone	Lac Minerals
MM97-222	570885.2	5369129.7	321.25	558	24	-55	DDH	South West Zone	Lac Minerals
MM97-223	570908	5369333.8	321.14	258	20	-65	DDH	South West Zone	Lac Minerals
MM97-223A	570908	5369333.8	321.14	38	20	-60	DDH	South West Zone	Lac Minerals
MM97-224	570836.8	5369165.7	320.4	383	14	-57	DDH	South West Zone	Lac Minerals
MN96-131AX	567725.8	5369258.3	322.14	436	340.5	-62	DDH	LC Zone	Lac Minerals
MN96-160	567893.8	5369150.9	321.83	525	341.83	-59	DDH	LC Zone	Lac Minerals
MN96-161	567813.1	5369196.8	322.06	429	338.32	-59	DDH	LC Zone	Lac Minerals
MN96-162	571336.4	5368876.9	323.17	1248	330.9	-73.4	DDH	South West Zone	Lac Minerals
MN96-163	567982.7	5369260.6	322.19	405	340.4	-60	DDH	LC Zone	Lac Minerals
MN96-164	568187.2	5369235.9	321.85	471	345	-60	DDH	LC Zone	Lac Minerals
MN96-165	568511	5369389.4	323.96	78	340.52	-59	DDH	LC Zone	Lac Minerals
MN96-166	567698.7	5368940.4	320.45	732	342.8	-59	DDH	LC Zone	Lac Minerals
MN96-167	567883.1	5368997.5	320.82	699.3	340.4	-58	DDH	LC Zone	Lac Minerals
MN96-171	568482.3	5369465.1	323.33	369	340	-60	DDH	LC Zone	Lac Minerals
MN96-174	569233	5368792.2	319.55	363	340	-55	DDH	55 Zone	Lac Minerals
MN96-175	571314.8	5370233.3	323.86	771	150	-58.5	DDH	Windjammer Central Zone	Lac Minerals
MN96-176	569375.8	5369124.3	320.3	340	340	-55	DDH	North of 55 Zone	Lac Minerals

Hole Name	X	Y	Z	Length	Az.	Incl.	Type	Zone	Company
MN96-178	570272.1	5369043.8	320.1	390	330	-60	DDH	South West Zone	Lac Minerals
MN96-180	569166.8	5368627.1	321.16	321	340	-55	DDH	55 Zone	Lac Minerals
MN96-181	569393	5368713.9	320.87	306.2	340	-54	DDH	55 Zone	Lac Minerals
MN97-184	570305.3	5368981.3	319.4	366	330	-65	DDH	South West Zone	Lac Minerals
MN97-186	570373.3	5369082.7	320.25	364	330	-75	DDH	South West Zone	Lac Minerals
MN97-186A	570208.9	5368951	319	54	330	-65	DDH	South West Zone	Lac Minerals
MN97-186B	570382.1	5369051	320	72	330	-65	DDH	South West Zone	Lac Minerals
MN97-186C	570370.6	5369070.9	320	61	330	-70	DDH	South West Zone	Lac Minerals
MN97-191	569975.8	5369159.3	321.3	558	120	-65	DDH	South West Zone	Lac Minerals
MN97-195	569361.2	5368620.8	317.95	432	340	-60	DDH	55 Zone	Lac Minerals
MN97-196	571544.7	5369777	326.62	777.5	327	-60	DDH	Windjammer West Zone	Lac Minerals
MN97-197	569517.7	5368712.9	320.47	342	337	-55	DDH	55 Zone	Lac Minerals
MN97-199	570330.2	5369347.6	323.5	523	118	-65	DDH	South West Zone	Lac Minerals
MN97-199A	570330.2	5369347.6	323.5	111	120	-65	DDH	South West Zone	Lac Minerals
MN97-202	570198.5	5368874.4	318.6	591	15	-60	DDH	South West Zone	Lac Minerals
MN97-205	570260.3	5368859.2	318.6	510	10	-58	DDH	South West Zone	Lac Minerals
MPL11-01	568500	5373375	325	322.69	135	-50	DDH	Perry Lake Area	Moneta Porcupine Mines Inc.
MPL11-02	568600	5373275	325	257	135	-50	DDH	Perry Lake Area	Moneta Porcupine Mines Inc.
MPL11-03	568700	5373400	325	256.47	135	-50	DDH	Perry Lake Area	Moneta Porcupine Mines Inc.
MPL11-04	568900	5373419	325	195.01	135	-50	DDH	Perry Lake Area	Moneta Porcupine Mines Inc.
MPL11-05	568500	5373300	325	259.92	0	-50	DDH	Perry Lake Area	Moneta Porcupine Mines Inc.
MPL11-06	567200	5373450	325	208.93	199	-50	DDH	Perry Lake Area	Moneta Porcupine Mines Inc.
MPL11-07	566340	5372920	325	201.14	190	-50	DDH	Perry Lake Area	Moneta Porcupine Mines Inc.
MPL11-08	565950	5373075	325	329.1	180	-50	DDH	Perry Lake Area	Moneta Porcupine Mines Inc.
MPL11-09	569075	5372475	325	462	265	-50	DDH	Perry Lake Area	Moneta Porcupine Mines Inc.
MPM1939	567822.8	5374014.3	325	100	0	0	DDH	Perry Lake Area	Stellar
MPM1939-04	567803.2	5374170.2	325	68.95	0	0	DDH	Perry Lake Area	Stellar
MPM-89-01	569120	5372195	325	340.46	270	-50	DDH	Perry Lake Area	Moneta Porcupine Mines Inc.
MR-01	570364	5368562	320.5	3.51	0	-90	HA	South West Zone	
MR-02	570185.5	5368159	319.5	3.66	0	-90	HA	South West Zone	
MR-03	570021.5	5368690	318.5	1.83	0	-90	HA	South West Zone	
MR-04	569922	5368997	322	3.66	0	-90	HA	South West Zone	
MR-05	569835.5	5369270	322.5	2.13	0	-90	HA	South West Zone	
MR-06	569664.5	5369830.5	324.5	1.98	0	-90	HA	South West Zone	
MR-07	569493	5370380	327	1.83	0	-90	HA	South West Zone	
MR-08	569854	5370193	326	7.01	0	-90	CP	South West Zone	
MR-09	569942	5369918	326	4.27	0	-90	CP	South West Zone	
MR-10	570010.5	5369694	324.5	3.66	0	-90	CP	South West Zone	
MR-11	570046	5369583	327.5	4.27	0	-90	CP	South West Zone	
MR-12	570080	5369474	324	0.76	0	-90	CP	South West Zone	
MR-13	570116	5369360.5	324.5	7.01	0	-90	CP	South West Zone	
MR-14	570148	5369250.5	325	7.01	0	-90	CP	South West Zone	
MR-15	570183.5	5369139.5	325.5	7.01	0	-90	CP	South West Zone	
MR-16	570221	5369016	320.5	7.01	0	-90	CP	South West Zone	
MR-17	570252	5368920	319	8.84	0	-90	CP	South West Zone	

Hole Name	X	Y	Z	Length	Az.	Incl.	Type	Zone	Company
MR-18	570364	5368562	320.5	8.84	0	-90	CP	South West Zone	
MR-19	570324	5368694	320	8.84	0	-90	CP	South West Zone	
MR-20	570286	5368805	319.5	8.84	0	-90	CP	South West Zone	
MR-21	570185.5	5368159	319.5	8.84	0	-90	CP	South West Zone	
MR-22	570116	5368383	319.5	8.84	0	-90	CP	South West Zone	
MR-34	569835.5	5369270	322.5	8.84	0	-90	CP	South West Zone	
MR-37	569733	5369607	323.5	8.84	0	-90	CP	South West Zone	
MR-38	569664.5	5369830.5	324.5	8.84	0	-90	CP	South West Zone	
MR-39	569571	5370134.5	327	10.67	0	-90	CP	South West Zone	
MR-40	569493	5370380	327	2.44	0	-90	CP	South West Zone	
MSW10-162A	571336.4	5368876.9	323.17	1435.19	330.9	-73.4	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-162B	571336.4	5368876.9	323.17	1320.16	330.9	-73.4	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-162C	571336.4	5368876.9	323.17	897.22	330.9	-73.4	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-162D	571336.4	5368876.9	323.17	1364.78	330.9	-73.4	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-162E	571336.4	5368876.9	323.17	872.95	330.9	-73.4	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-162F	571336.4	5368876.9	323.17	753.39	330.9	-73.4	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-162G	571336.4	5368876.9	323.17	1392.61	331.9	-72.1	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-260	571084.9	5369140.8	322.11	446.27	317.5	-63	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-261	571114.5	5369086.9	322.17	251.69	321.2	-66.3	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-262	571115.2	5369086	322.44	135	327	-65	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-263	571102.5	5369010.9	322.49	137.5	317.1	-70	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-264	570863.7	5369363.4	321.78	318.92	319.8	-61.8	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-265	570819.7	5369470.5	321.07	265.85	296.1	-58.6	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-267	571336.7	5368876.5	323.17	1515.86	309.2	-81.3	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-267A	571336.7	5368876.5	323.17	1169.83	309.2	-81.3	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-267B	571336.7	5368876.5	323.17	850.84	309.2	-81.3	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-267C	571336.7	5368876.5	323.17	1198.1	309.2	-81.3	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-267D	571336.7	5368876.5	323.17	921.68	309.2	-81.3	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-267E	571336.7	5368876.5	323.17	1121.7	309.2	-81.3	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-267F	571336.7	5368876.5	323.17	1310.8	309.2	-81.3	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-267G	571336.7	5368876.5	323.17	1531.1	309.2	-81.3	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-268	571173.6	5368533.4	327.43	1395	315.8	-70.3	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-268A	571173.6	5368533.4	327.43	1463	315.8	-70.3	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-269	570963.5	5368888.2	322.56	844.9	315.8	-73.6	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-270	570963.5	5368888.2	318.89	278	322	-67	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-271	570963.5	5368888.2	318.89	740.5	321	-64.3	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-272	570963.5	5368888.2	318.89	754.5	321.5	-68.6	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-272A	570963.5	5368888.2	318.89	767.2	321.5	-68.6	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-273	571459.7	5369039.1	324.21	1275	306.5	-72.6	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-273A	571459.7	5369039.1	324.21	771.12	306.5	-72.6	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-273B	571459.7	5369039.1	324.21	1152	306.5	-72.6	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-274	571447	5368645.9	325.1	335.45	326.4	-54.8	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-275	571690.6	5368603.2	326.48	642.8	12	-50.9	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW10-276	571418.5	5369078.4	324.3	639	21.7	-50.9	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW11-277	571541.5	5369782	326.49	496.35	30.1	-58.9	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.

Hole Name	X	Y	Z	Length	Az.	Incl.	Type	Zone	Company
MSW11-278	570995.6	5368880.8	322.71	267	13.5	-78.5	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW11-278A	570995.6	5368880.8	322.71	251.87	13.5	-78.5	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW11-279	570995.8	5368880.5	323.18	1443.06	19.2	-78.8	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW11-280	571190.9	5369732.2	323.56	289.33	19.9	-57.3	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW11-281	571165	5369702.6	322.97	504.62	25.9	-62.3	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW11-282	571113.4	5369689.2	322.86	336.55	23.8	-57.5	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW11-283	571312.8	5369645	324.46	564.2	20.6	-54.1	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MSW11-284	570995.8	5368880.5	319.52	257.9	17.7	-75.4	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW11-285X	570996.4	5368880.6	322.53	1366	26.5	-75.9	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW11-286	571324.7	5369742.2	325.21	453.57	20.3	-51.4	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MSW11-287	571464.4	5369793.2	325.71	327.3	25.2	-49.4	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MSW11-288	571429.4	5369713.2	324.82	525.63	23.7	-50.9	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MSW11-289	571428.9	5369712	323.51	478.85	0.1	-64.6	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MSW11-290	571390	5369615.9	324.46	654.72	19.3	-54.7	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MSW11-290A	571390	5369615.9	324.46	656.9	19.3	-54.7	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MSW11-291	571387.5	5369608.2	324.29	338.77	17	-71.8	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MSW11-291AX	571387.5	5369608.2	324.29	1047.75	17	-71.8	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MSW11-292	571370.3	5369829.8	324.4	214.4	16.3	-51.7	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MSW11-293	572065.9	5369573.6	329.2	386.86	27	-53.3	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MSW11-294	571165	5369975	324	299.86	330	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW12-295	571447	5369854.1	325.34	60	18.7	-51.5	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MSW12-295A	571447	5369854.1	325.34	332.7	18.7	-51.5	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MSW12-296	571394.3	5369371.4	324.6	383.87	332.4	-53.7	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW12-297X	570570.6	5369832.7	323.64	535	121.1	-51.5	DDH	South West	Moneta Porcupine Mines Inc.
MSW12-298	570444.6	5369720.3	324.22	218.83	125.3	-52.9	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW12-299	570555.3	5369246.2	320.98	107	340	-50	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW12-300	571243.2	5370155.1	324.15	348.2	141.3	-52.7	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MSW12-301	571586.6	5369919	328.32	294.07	14.7	-50.8	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MSW12-302	570676	5368998.8	321.31	417.03	13.1	-55.4	DDH	South West Zone	Moneta Porcupine Mines Inc.
MSW12-303	571402	5369983.3	324.94	326.44	11.2	-53.5	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MSW12-304	571655	5369969.5	327.55	287.3	16.3	-50.9	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MSW12-305	571590.9	5369851.7	328.08	395.98	10.9	-50.8	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MSW12-306	571358.8	5370148	325.43	357.11	137.9	-51.8	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MSW12-307	571626.7	5370009.8	327.04	167.53	11	-51.5	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MSW12-308	571684.6	5369924.6	327.56	455.8	10.6	-53.5	DDH	Windjammer West Zone	Moneta Porcupine Mines Inc.
MSW12-309	571345.3	5370130.9	325.43	303.2	316.3	-62.8	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MT-84-01	563597.1	5367971	317	27	0	-90	RC	Far Western Zone	Goldfields Canadian Mining Ltd
MT-84-02	563974	5367748	315	30.6	0	-90	RC	Far Western Zone	Goldfields Canadian Mining Ltd
MT-84-03	564283	5367801	313.5	34.5	0	-90	RC	Far Western Zone	Goldfields Canadian Mining Ltd
MT-84-04	564598	5367898	313.5	31.5	0	-90	RC	Far Western Zone	Goldfields Canadian Mining Ltd
MT-84-05	564909	5367918	315	43.5	0	-90	RC	Far Western Zone	Goldfields Canadian Mining Ltd
MT-84-06	565220	5367957	314	21.5	0	-90	RC	Far Western Zone	Goldfields Canadian Mining Ltd
MT-84-07	565530	5368025	314	16.5	0	-90	RC	Far Western Zone	Goldfields Canadian Mining Ltd
MT-84-08	565840	5368072	314	14.5	0	-90	RC	Far Western Zone	Goldfields Canadian Mining Ltd
MT-84-09	566153	5368137	316	19.5	0	-90	RC	Far Western Zone	Goldfields Canadian Mining Ltd

Hole Name	X	Y	Z	Length	Az.	Incl.	Type	Zone	Company
MT-84-10	566464	5368171	316	27	0	-90	RC	Far Western Zone	Goldfields Canadian Mining Ltd
MT-84-11	568833	5367735	310	16.7	0	-90	RC	Far Western Zone	Goldfields Canadian Mining Ltd
MT-84-12	567520	5367675	310	37.5	0	-90	RC	Far Western Zone	Goldfields Canadian Mining Ltd
MT-84-13	567200	5367612	310	96.5	0	-90	RC	Far Western Zone	Goldfields Canadian Mining Ltd
MT-84-14	566845	5367162	310	20.4	0	-90	RC	Far Western Zone	Goldfields Canadian Mining Ltd
MT-84-15	566553	5367168	310	21	0	-90	RC	Far Western Zone	Goldfields Canadian Mining Ltd
MT-84-16	566234	5367145	315	16	0	-90	RC	Far Western Zone	Goldfields Canadian Mining Ltd
MT-84-17	565920	5367115	315	27.5	0	-90	RC	Far Western Zone	Goldfields Canadian Mining Ltd
MT-84-18	565640	5367055	315	18	0	-90	RC	Far Western Zone	Goldfields Canadian Mining Ltd
MT-84-19	567200	5367612	310	87.7	0	-90	RC	Far Western Zone	Goldfields Canadian Mining Ltd
MT-84-20	565320	5367000	315	37.5	0	-90	RC	Far Western Zone	Goldfields Canadian Mining Ltd
MT-84-21	565025	5366950	315	29	0	-90	RC	Far Western Zone	Goldfields Canadian Mining Ltd
MT-84-22	564750	5366880	315	21.4	0	-90	RC	Far Western Zone	Goldfields Canadian Mining Ltd
MT-84-23	564430	5366830	315	28.5	0	-90	RC	Far Western Zone	Goldfields Canadian Mining Ltd
MT-84-24	564100	5366775	315	38.4	0	-90	RC	Far Western Zone	Goldfields Canadian Mining Ltd
MTL05-01	572128.6	5371767.6	340.5	560	0	-50	DDH	North of Windjammer North	
MTL05-02	573188.6	5372084.6	340	479	160	-45	DDH	North of Windjammer North	
MU-89-100	570775	5369485.9	321	230	292	-50	DDH	South West Zone	Unocal Canada Ltd.
MU-89-101	570291.7	5370297.5	323.05	229.05	342	-50	DDH	Twin Creeks Zone	Unocal Canada Ltd.
MU-89-102	570438.8	5370034.3	323.25	228	342	-50	DDH	Twin Creeks Zone	Unocal Canada Ltd.
MU-89-103	567897	5369140.3	321.05	257	342	-52	DDH	LC Zone	Unocal Canada Ltd.
MU-89-104	567811.4	5369383.1	322.9	182	346.4	-49.5	DDH	LC Zone	Unocal Canada Ltd.
MU-89-105	566494.3	5368641.2	317.87	231.17	8.6	-50	DDH	Far Western Zone	Unocal Canada Ltd.
MU-89-106	566479.2	5368893	321.86	263.9	0	-50	DDH	Far Western Zone	Unocal Canada Ltd.
MU-89-107	569974.3	5369227.7	322.25	68.85	161.2	-50	DDH	South West Zone	Unocal Canada Ltd.
MU-89-108	567853.5	5369275.1	322.71	284	340.25	-47	DDH	LC Zone	Unocal Canada Ltd.
MU-89-109	569943.7	5369325.9	322.5	504.99	162	-50	DDH	South West Zone	Unocal Canada Ltd.
MU-89-110	571599.8	5370808.4	328.71	178.92	340	-51	DDH	Landing Zone	Unocal Canada Ltd.
MU-89-111	571625.2	5370784.3	328.53	187.45	340.2	-49	DDH	Landing Zone	Unocal Canada Ltd.
MU-89-112	571652.2	5370792.9	328.5	184.4	335.5	-51	DDH	Landing Zone	Unocal Canada Ltd.
MU-89-113	571635.9	5370888.2	330	153.92	340	-52.5	DDH	Landing Zone	Unocal Canada Ltd.
MU-89-114	571735.8	5370882.5	329.5	184.4	341.7	-50.5	DDH	Discovery Zone	Unocal Canada Ltd.
MU-89-115	571502.4	5370825.4	328.71	141.73	346.7	-53	DDH	Landing Zone	Unocal Canada Ltd.
MU-89-116	570264.4	5370290.2	324	135.03	340	-57.2	DDH	Twin Creeks Zone	Unocal Canada Ltd.
MU-89-117	570285.5	5370263	322.83	60.4	342	-50	DDH	Twin Creeks Zone	Unocal Canada Ltd.
MU-89-117A	570290	5370266	322.83	169.16	348	-52.6	DDH	Twin Creeks Zone	Unocal Canada Ltd.
MU-89-118	570315.6	5370272.3	322.92	47.24	340	-50	DDH	Twin Creeks Zone	Unocal Canada Ltd.
MU-89-118A	570315.6	5370272.3	322.92	184.4	343	-52.4	DDH	Twin Creeks Zone	Unocal Canada Ltd.
MU-89-119	570317.7	5370308.9	323.65	123.44	351	-52	DDH	Twin Creeks Zone	Unocal Canada Ltd.
MU-89-120	570436.5	5370337.1	323.5	178.31	341	-51.5	DDH	Twin Creeks Zone	Unocal Canada Ltd.
MU-89-121	570131	5370206.6	322.89	238.6	339.5	-57	DDH	Twin Creeks Zone	Unocal Canada Ltd.
MU-89-122	569976.1	5370124.5	324.75	306.32	339	-49.5	DDH	Twin Creeks Zone	Unocal Canada Ltd.
MU-89-123	567830.1	5369333	322.84	216.78	337.97	-49	DDH	LC Zone	Unocal Canada Ltd.
MU-89-124	567750.4	5369548.4	324.48	329.52	160	-50.5	DDH	LC Zone	Unocal Canada Ltd.
MU-89-125	567824.8	5369265	322.22	289.56	338.1	-47	DDH	LC Zone	Unocal Canada Ltd.

Hole Name	X	Y	Z	Length	Az.	Incl.	Type	Zone	Company
MU-89-126	567882	5369285.2	322.33	294.13	341.02	-50	DDH	LC Zone	Unocal Canada Ltd.
MU-89-127	567812.5	5369294.8	322.52	262.13	339.85	-49	DDH	LC Zone	Unocal Canada Ltd.
MU-89-128	567871.4	5369315.1	322.75	248.41	344.92	-46	DDH	LC Zone	Unocal Canada Ltd.
MU-89-129X	568009.9	5369359.4	323	421	341	-50	DDH	LC Zone	Moneta Porcupine Mines Inc.
MU-89-130	568225.8	5369468.1	323.2	205.74	341.5	-55	DDH	LC Zone	Unocal Canada Ltd.
MU-89-131A	567725.8	5369258.3	322.14	224.03	340.5	-62	DDH	LC Zone	Unocal Canada Ltd.
MU-89-133	567859.8	5369256	322.22	309.37	340.37	-52	DDH	LC Zone	Unocal Canada Ltd.
MU-89-134	570198.7	5370281	324.25	150.88	343	-51.9	DDH	Twin Creeks Zone	Unocal Canada Ltd.
MU-89-135	570375	5370342.6	323.5	135.64	343	-50	DDH	Twin Creeks Zone	Unocal Canada Ltd.
MU-89-136	570476.4	5370392.6	325.91	129.54	338	-50	DDH	Twin Creeks Zone	Unocal Canada Ltd.
MU-89-137	570905.4	5370579.3	325.91	143.26	340	-50.5	DDH	Twin Creeks Zone	Unocal Canada Ltd.
MU-89-138	570204	5370447.3	323.87	220.98	357	-55	DDH	Twin Creeks Zone	Unocal Canada Ltd.
MU-89-94	571281.3	5370672.6	327	200	342	-50	DDH	Landing Zone	Unocal Canada Ltd.
MU-89-95	571629.7	5370816.1	329.25	236	342	-49	DDH	Landing Zone	Unocal Canada Ltd.
MU-89-96	571179.1	5370633.5	327	234.35	342	-50	DDH	Landing Zone	Unocal Canada Ltd.
MU-89-97	571628.8	5370028.2	327.25	243.99	296	-50	DDH	Windjammer West Zone	Unocal Canada Ltd.
MU-89-98	571165.1	5369479.5	323.25	172.8	286	-50	DDH	South West Zone	Unocal Canada Ltd.
MU-89-99	571165.1	5369416.9	323.25	233.44	286	-50	DDH	South West Zone	Unocal Canada Ltd.
MW-26	569961	5368883	318.5	7.01	0	-90	CP		
MW-27	569922	5368997	322	8.84	0	-90	CP		
MW-28	569900	5369078	322	7.92	0	-90	CP		
MW-29	570021	5369179	322.5	6.1	0	-90	CP		
MW-30	570064	5369041	322.5	8.84	0	-90	CP		
MW-31	569789	5368950	322	8.84	0	-90	CP		
MW-32	569744	5369090.5	321.5	8.84	0	-90	CP		
MW-33	569873	5369162	322	8.84	0	-90	CP		
MWJ07-01	572366.5	5370355.7	334.77	239	329.6	-67.8	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ07-02	572209.2	5370219.8	330.12	380	341	-60.2	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ07-03	572269.6	5370248.3	330.95	369	334.8	-64.8	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ08-05	573994.9	5370740.1	331	401	336.2	-56.1	DDH	East of Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ08-06	572060.5	5370167.4	328.62	336	343.1	-58.5	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ08-07	572257.7	5370042.2	329.91	556.86	339.8	-53.5	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ08-08	572479.1	5370322.6	338.95	443	342	-60	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ08-09	572415.3	5370362.8	335.83	398	340.8	-61.9	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ08-10	572332.9	5370327.6	333.57	266	338.4	-62.9	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ08-11	572396	5370414.1	335.68	166	340.2	-61	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ08-12	572504.7	5370398.5	343.23	341	348.2	-60.7	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ08-13	572313.8	5370378.6	332.98	185	339.6	-61.3	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ08-14X	572447.8	5370434.7	339.07	524	349.6	-60.6	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ08-15	572437.4	5370304.7	335.28	464	340	-60	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ08-15A	572437.4	5370304.7	335.28	119	335	-60	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ08-16	572347.6	5370262	331.87	413	342.8	-59.7	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ08-17X	572308.3	5370045.7	330.44	455	345.7	-48	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ08-18	572283.1	5370275.3	330.12	299	344.4	-60	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ08-19	571889.2	5370058.1	328.83	360	337	-60.5	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.

Hole Name	X	Y	Z	Length	Az.	Incl.	Type	Zone	Company
MWJ08-20	572231.6	5370255.2	330.43	317	340.9	-65	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ08-21	572184.2	5370180.7	329.12	362	339.3	-59.8	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ08-22	572405.5	5370315.6	334.54	446	340.1	-62.5	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ09-23	572413.8	5370125.3	332.25	590	341.5	-52.4	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ09-24	572541.6	5370091.6	339.38	470	339.2	-51.4	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ09-25	572350.5	5370387.4	334.32	536	330.8	-54	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ09-26	572506.1	5371298.6	334.55	365	156	-56	DDH	Windjammer North Zone	Moneta Porcupine Mines Inc.
MWJ09-27	572386	5371265.2	337.69	436	157.5	-59.4	DDH	Windjammer North Zone	Moneta Porcupine Mines Inc.
MWJ09-28	572321.4	5371276	333.3	587	160	-59.7	DDH	Windjammer North Zone	Moneta Porcupine Mines Inc.
MWJ09-29	572213.4	5370681.3	331.41	485	340.4	-49	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MWJ09-30	572267.5	5370539.2	331.77	530	339.9	-51.9	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MWJ09-31	572108.1	5370318.6	329.84	473	266.2	-47.7	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ10-32	572118	5370045.8	330.23	451.82	43.2	-53.4	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ10-33	572005.1	5370118.2	328.62	530	40.6	-52.6	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ11-34	574174.8	5370812	331.37	463.62	24.3	-54.1	DDH	East of Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ11-35	572101.2	5370136.6	330.51	423.14	38.7	-54	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ11-36	572194.1	5370034.2	330.03	457.75	36.1	-54.3	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ11-37	572233.4	5370188.8	329.95	498.85	34.5	-49.2	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ11-38	572174.2	5370503	330.97	426.3	158.1	-50.9	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ11-39	571859.9	5370105.5	328.06	429	29.5	-57.4	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ11-40	572053.8	5369975.6	330.74	432	34.7	-56	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ11-41	572412.7	5370317.3	334.86	543.03	36.3	-50.7	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ11-42	572498.2	5370403.5	343.33	306.9	29	-50.7	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ11-43	572612.1	5370433.1	352.22	429	32.5	-54.2	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ11-44	572553.5	5370421.6	351.96	480	35.3	-53.9	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ11-45	572447.1	5370433.8	339.06	342.22	34.8	-59.5	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ11-46	572517.4	5370461.6	346.54	296.3	32.6	-52	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ11-47	572057.2	5370074.9	328.8	404.28	37.9	-58.5	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ11-48	572224.5	5370101.7	329.38	363	37.8	-50.7	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ11-49	571942.8	5370139.3	328.16	267	30.5	-54	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ11-50	571833	5370179.5	328.1	310.03	38.4	-52.3	DDH	Windjammer South Zone	Moneta Porcupine Mines Inc.
MWJ11-51	572216.9	5370675.6	331.6	504	16.4	-50.7	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MWJ11-52	572388.9	5370781.7	341.33	465	27.3	-51	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MWJ11-53	572376.3	5370881.7	339.77	396	24.9	-50.3	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MWJ11-54	572549.4	5370893.9	357.83	459	24.4	-52.4	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MWJ11-55	572301.8	5370808.7	333.84	318.04	350	-50.8	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MWJ11-56	571925.2	5370599	328.23	108.75	340	-50	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MWJ11-57	572108.1	5370678.5	329.09	384.13	341.2	-53.7	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MWJ11-58	571908.3	5370643.5	328.13	330.06	339.3	-52.5	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MWJ11-59	572079	5370461.9	330.56	324.02	340.1	-51.4	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MWJ12-60	572221.1	5370779.2	331.15	312.03	338.1	-52	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MWJ12-61	572375.2	5370843.1	340.25	278.73	347.8	-48.9	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MWJ12-62	572461.2	5370569.3	344.1	390.03	351.4	-48.7	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MWJ12-63	572654.6	5370615.9	350.66	417	335	-50	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MWJ12-64	571846.3	5370524.4	328.1	63.61	160	-50	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.

Hole Name	X	Y	Z	Length	Az.	Incl.	Type	Zone	Company
MWJ12-64A	571846.3	5370524.4	328.1	303.09	156	-49.2	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MWJ12-65	572125.2	5370785.5	329.37	237.25	332.9	-48.8	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MWJ12-66	572697.9	5371096.3	331.52	213.15	342.2	-60.7	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MWJ12-67	572693.9	5370943	340.77	392.94	342	-51.8	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MWJ12-68	572765.9	5371068.9	330.48	318.55	340.4	-62.2	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MWJ12-69	572213.5	5370896	330.95	377.88	344.5	-49.7	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MWJ12-70	572629.7	5371408.9	334.83	393	162.1	-52.2	DDH	Windjammer North Zone	Moneta Porcupine Mines Inc.
MWJ12-71	572801.2	5371120.9	330.63	213	335.1	-59.7	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MWJ12-72	572383.1	5370786.8	340.37	399.02	347.4	-52.6	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MWJ12-73	572897.9	5371148.8	330.07	231.3	334.8	-59.6	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MWJ12-74	572173.7	5370504.7	330.73	413.56	337.4	-54.8	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MWJ12-75	572356.3	5370554.6	335.31	540.58	345.6	-51.5	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MWJ12-76	572559.7	5370592.2	360.2	462.07	349.9	-50.9	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MWJ12-77	572323.3	5370658.5	334.1	513.7	345.2	-50	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MWJ12-78	572420.5	5370675.6	342.66	423.27	343.2	-51.8	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
MWJ12-79	572422.2	5370674	342.74	406.12	30.6	-50.2	DDH	Windjammer Central Zone	Moneta Porcupine Mines Inc.
NM82-1	571765.6	5368600.6	325.75	152.7	135	-55	DDH	South West Zone	
NM82-2	571365.6	5368583.6	324.25	169.77	153.5	-60	DDH	South West Zone	
NM82-3	571529.6	5368825.6	326	172.21	229	-60	DDH	South West Zone	
NM82-4	566486	5369137.5	321.7	205.74	0	-60	DDH	Far Western Zone	
NM83-5	566856.6	5368836.6	319	359.05	155	-55	DDH	Far Western Zone	
NM83-6	566469.7	5368915.6	325	121.92	180	-55	DDH	Far Western Zone	
NM83-7	571738.6	5368829.6	325.5	152.7	350	-60	DDH	South West Zone	
NM86-10	571739.6	5368474.6	327.73	160.32	360	-55	DDH	South West Zone	
NM86-11	571890.6	5368206.6	332.25	106.68	40	-50	DDH	South West Zone	
NM86-12	571790.6	5368834.6	325.25	138.99	360	-55	DDH	South West Zone	
NM86-13	571889.6	5368804.6	325	206.04	360	-60	DDH	South West Zone	
NM86-8	571889.6	5368628.6	326.5	155.45	180	-50	DDH	South West Zone	
NM86-9	572000.6	5368304.6	334	81.38	220	-45	DDH	South West Zone	
PL-01	567036	5373300	325	29.27	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-02	566643	5373275	325	35.98	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-03	566236	5373273	325	12.96	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-03A	566238	5373260	325	12.2	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-04	565851	5373286	325	1.83	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-04A	565819	5373285	325	1	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-05	565452	5373285	325	2.74	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-06	565057	5373101	325	11.89	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL06-01	568087.3	5371239.7	333.5	350	145	-50	DDH	Outside Property - South Perry Lake	Battle Mountain Gold
PL06-02	568718.3	5371358.7	336.5	311	195	-50	DDH	Outside Property - South Perry Lake	Battle Mountain Gold
PL-07	564657	5373283.7	325	11.59	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-08	564280	5373250	325	9.45	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-09	563873	5373263	325	24.39	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-10	563481	5373265	325	35.37	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-11	563078	5373263	325	32.32	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-12	562681	5373261	325	1.37	0	-90	RC	Perry Lake Area	Battle Mountain Gold

Hole Name	X	Y	Z	Length	Az.	Incl.	Type	Zone	Company
PL-12B	562724	5373276	325	3.66	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-13	562289	5373277	325	4.88	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-14	563327	5372432	325	2.74	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-14A	563325	5372432	325	4.88	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-15	563721	5372469	325	15.55	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-16	564097	5372483	325	25.61	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-17	564517	5372475	325	21.04	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-18	564922	5372472	325	7.93	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-19	565296	5372415	325	19.51	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-20	565712	5372472	325	4.88	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-21	566101	5372487	325	8.54	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-22	566500	5372468	325	17.68	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-23	563523	5371670	325	21.04	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-24	563900	5371682	325	17.99	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-25	564257	5371673	325	17.68	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-26	564700	5371674	325	40.55	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-27	565095	5371685	325	13.72	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-28	565500	5371640	325	5.79	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-29	565882	5371675	325	4.27	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-30	566263	5371680	325	12.5	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-31	566655	5371680	325	6.71	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-32	567070	5371680	325	7.93	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-33	567463	5371680	325	65.85	0	-90	RC	Perry Lake Area	Battle Mountain Gold
PL-84-01	565690	5373700	325	150.31	180	-45	DDH	Perry Lake Area	Asarco
PL-87-01	565637.6	5372740.4	325	148.13	195	-45	DDH	Perry Lake Area	Battle Mountain Gold
PL-87-02	565464.8	5373077.3	325	245.67	15	-45	DDH	Perry Lake Area	Battle Mountain Gold
PL-87-03	565022.1	5373329.2	325	215.19	195	-45	DDH	Perry Lake Area	Battle Mountain Gold
PL-87-04	564558.7	5373490.4	325	47.55	195	-45	DDH	Perry Lake Area	Battle Mountain Gold
PL-87-04A	564563.3	5373489.6	325	201.17	195	-45	DDH	Perry Lake Area	Battle Mountain Gold
PL-87-05	564649.2	5373884.1	325	80.77	195	-45	DDH	Perry Lake Area	Battle Mountain Gold
PL-87-05A	564649.2	5373884.1	325	187.45	195	-45	DDH	Perry Lake Area	Battle Mountain Gold
PL-87-06	565371.9	5373217.5	325	114.6	195	-45	DDH	Perry Lake Area	Battle Mountain Gold
PL-87-07	565614.3	5373183.7	325	74.98	195	-45	DDH	Perry Lake Area	Battle Mountain Gold
PL-87-08	565377.3	5372696.9	325	53.64	15	-45	DDH	Perry Lake Area	Battle Mountain Gold
PL-87-08A	565396	5372698	325	117.65	195	-45	DDH	Perry Lake Area	Battle Mountain Gold
PL-87-09	565727.7	5372588.2	325	226.77	15	-45	DDH	Perry Lake Area	Battle Mountain Gold
PL-87-10	563575.4	5372479.2	325	334.06	15	-45	DDH	Perry Lake Area	Battle Mountain Gold
PL-87-11	563580.1	5372478.3	325	85.34	195	-45	DDH	Perry Lake Area	Battle Mountain Gold
PL-87-12	563691.2	5372438.5	325	352.35	15	-45	DDH	Perry Lake Area	Battle Mountain Gold
PL-88-13	563524.8	5372782	325	361.49	195	-47	DDH	Perry Lake Area	Battle Mountain Gold
PL-88-14	563609.5	5372606.1	325	193.85	15	-45	DDH	Perry Lake Area	Battle Mountain Gold
PL-88-15	563615.6	5372088.5	325	245.67	195	-45	DDH	Perry Lake Area	Battle Mountain Gold
PL-88-16	564244	5372100.5	325	193.85	195	-48	DDH	Perry Lake Area	Battle Mountain Gold
PL-90-1B	565220	5375375	325	243	195	-55	DDH	Perry Lake Area	Corona Corporation
PL-96-01	565889	5373429	325	224	190	-45	DDH	Perry Lake Area	Battle Mountain Gold

Hole Name	X	Y	Z	Length	Az.	Incl.	Type	Zone	Company
PL-96-02	565690	5373375	325	346	190	-45	DDH	Perry Lake Area	Battle Mountain Gold
PL-97-03	565284	5373371	325	274	190	-45	DDH	Perry Lake Area	Battle Mountain Gold
PL-97-04	566306	5373485	325	276.1	190	-45	DDH	Perry Lake Area	Battle Mountain Gold
PL-97-04A	566304.3	5373475.2	325	21	190	-45	DDH	Perry Lake Area	Battle Mountain Gold
PL-97-05	564798	5373522	325	343	190	-45	DDH	Perry Lake Area	Battle Mountain Gold
PL-98-06	566506	5373433.4	325	335	190	-45	DDH	Perry Lake Area	Battle Mountain Gold
PL-98-07	566099	5373429	325	302	190	-45	DDH	Perry Lake Area	Battle Mountain Gold
PL-98-08	566322	5373577	325	623	190	-62	DDH	Perry Lake Area	Battle Mountain Gold
PL-98-09	566121	5373635	325	548	190	-45	DDH	Perry Lake Area	Battle Mountain Gold
PL-98-10	565941.1	5373685.3	325	653	190	-45	DDH	Perry Lake Area	Battle Mountain Gold
PL-98-11	564191.8	5372978.3	325	251	190	-45	DDH	Perry Lake Area	Battle Mountain Gold
PL-98-12	564184.5	5373512.7	325	113	190	-45	DDH	Perry Lake Area	Battle Mountain Gold
PMT1	570357.5	5373759.7	325	218	180	-50	DDH	Outside Property - Perry Lake	
PMT2	570372.3	5373743.7	325	206	180	-50	DDH	Outside Property - Perry Lake	
PMT3	570423.6	5373766.7	325	272	180	-50	DDH	Outside Property - Perry Lake	
PMT4	570399	5373678.2	325	146	180	-55	DDH	Outside Property - Perry Lake	
R83-1	567580	5369130	320	44	0	-90	RC	LC Zone	
R83-10	568880	5369490	323.5	37.5	0	-90	RC	Far Western Zone	Nahanni
R83-11	569085	5369570	323.5	36.5	0	-90	RC	Far Western Zone	Nahanni
R83-12	568180	5369520	324	26.5	0	-90	RC	LC Zone	Nahanni
R83-13	568080	5369325	322.75	38.5	0	-90	RC	LC Zone	Nahanni
R83-14	567970	5368900	320.5	39.5	0	-90	RC	LC Zone	Nahanni
R83-15	567700	5368690	318.5	49.5	0	-90	RC	Far Western Zone	Nahanni
R83-2	567050	5368843	320	23.7	0	-90	RC	Far Western Zone	Nahanni
R83-3	567180	5368765	320	49.5	0	-90	RC	Far Western Zone	Nahanni
R83-4	566995	5368625	320	36.5	0	-90	RC	Far Western Zone	Nahanni
R83-5	566685	5368635	320	33.1	0	-90	RC	Far Western Zone	Nahanni
R83-6	567775	5368985	320.5	43.5	0	-90	RC	LC Zone	Nahanni
R83-7	567975	5369085	321.25	29.5	0	-90	RC	LC Zone	Nahanni
R83-8	568240	5369355	322.75	36	0	-90	RC	LC Zone	Nahanni
R83-9	568580	5369390	323.5	33.4	0	-90	RC	LC Zone	Nahanni
RM-01	568628.7	5373236.2	325	279.5	314	-50	DDH	Pipestone East Target	Renzy Mines
RM-02	568568	5373413	325	309.37	138.5	-45	DDH	Pipestone East Target	Renzy Mines
RM-03	568266	5373515.8	325	200.86	192	-47.5	DDH	Pipestone East Target	Renzy Mines
RM-04	568136.1	5373367.6	325	160.02	9.5	-50	DDH	Pipestone East Target	Renzy Mines
RM-05	567748.1	5373257.6	325	148.13	179	-45	DDH	Pipestone East Target	Renzy Mines
RM-06	567389	5373169	325	166.73	176.8	-45	DDH	Pipestone East Target	Renzy Mines
RM-07	567645.7	5373440.9	325	156.06	176.6	-45	DDH	Pipestone East Target	Renzy Mines
RM-08	567748.1	5372952	325	175.08	169.6	-45	DDH	Pipestone East Target	Renzy Mines
RM-09	568366.8	5373129.2	325	134.75	181	-45	DDH	Pipestone East Target	Renzy Mines
RM-10	568240	5373323.3	325	152.67	178	-45	DDH	Pipestone East Target	Renzy Mines
RM-11	568814.4	5373702.1	325	141.73	173.5	-45	DDH	Pipestone East Target	Renzy Mines
RM-12	568432	5373195	325	172.21	1	-45	DDH	Pipestone East Target	Renzy Mines
T96-01	565092.6	5368168.6	315	94.51	360	-50	DDH	Far Western Zone	Tandem
T96-01A	565092.6	5368113.6	314.71	146.55	360	-46	DDH	Far Western Zone	Tandem

Hole Name	X	Y	Z	Length	Az.	Incl.	Type	Zone	Company
T96-02	565341.6	5368193.6	315.7	82.93	360	-52.5	DDH	Far Western Zone	Tandem
T96-02A	565341.6	5368193.8	315.71	243.11	360	-52	DDH	Far Western Zone	Tandem
T96-03	565214.6	5367833.6	314	246.04	360	-50	DDH	Far Western Zone	Tandem
T96-04	564723.6	5368198.6	315	367.99	360	-56.5	DDH	Far Western Zone	Tandem
TH03-08	569494.5	5373694.3	325	236	180	-50	DDH	Perry Lake Area	St Andrews/Royal Victoria
TH06-09	571138.3	5373508.7	350	401	180	-50	DDH	Outside Property - Perry Lake	St Andrews/Royal Victoria?
TH06-10	571223.3	5374168.7	350	180.2	180	-50	DDH	Outside Property - Perry Lake	St Andrews/Royal Victoria?
TH06-11	570008.3	5374578.7	350	263	180	-50	DDH	Outside Property - Perry Lake	St Andrews/Royal Victoria?
TH06-12	569908.3	5374378.7	350	148.5	180	-50	DDH	Outside Property - Perry Lake	St Andrews/Royal Victoria?
TM-1	563722.2	5368122.6	317	22.5	0	-90	RC	Far Western Zone	Homestake Can Inc.
TM-10	563724.1	5368569.4	317	36.25	0	-90	RC	Far Western Zone	Homestake Can Inc.
TM-11	563724.1	5368619.7	317	36.2	0	-90	RC	Far Western Zone	Homestake Can Inc.
TM-12	563724.1	5368669	317	35.1	0	-90	RC	Far Western Zone	Homestake Can Inc.
TM-13	563724.1	5368718.2	317	36.8	0	-90	RC	Far Western Zone	Homestake Can Inc.
TM-14	563480.1	5368420.9	317	24.5	0	-90	RC	Far Western Zone	Homestake Can Inc.
TM-15	563480.1	5368372	317	24	0	-90	RC	Far Western Zone	Homestake Can Inc.
TM-16	563480.1	5368469.8	317	24	0	-90	RC	Far Western Zone	Homestake Can Inc.
TM-17	563343.8	5368420.3	317	26.7	0	-90	RC	Far Western Zone	Homestake Can Inc.
TM-2	563722.2	5368172.6	317	24.5	0	-90	RC	Far Western Zone	Homestake Can Inc.
TM-3	563722.4	5368222.5	317	22.5	0	-90	RC	Far Western Zone	Homestake Can Inc.
TM-4	563722.4	5368271.4	317	17	0	-90	RC	Far Western Zone	Homestake Can Inc.
TM-5	563722.4	5368321.7	317	26.25	0	-90	RC	Far Western Zone	Homestake Can Inc.
TM-6	563722.4	5368372.3	317	31.5	0	-90	RC	Far Western Zone	Homestake Can Inc.
TM-7	563722.4	5368419.3	317	34	0	-90	RC	Far Western Zone	Homestake Can Inc.
TM-8	563722.4	5368468.8	317	35.3	0	-90	RC	Far Western Zone	Homestake Can Inc.
TM-9	563724.1	5368519.8	317	36.1	0	-90	RC	Far Western Zone	Homestake Can Inc.
WH-47-01	572614	5370801.3	358.5	181.96	180	-50	DDH	Windjammer Central Zone	Wright Hargreaves Gold Mines
WH-47-02	572584.6	5370723.8	360.75	335.28	180	-50	DDH	Windjammer Central Zone	Wright Hargreaves Gold Mines
WH-47-03	572591.2	5370607.6	356.5	441.35	345	-50	DDH	Windjammer Central Zone	Wright Hargreaves Gold Mines
WH-47-03W	565561.6	5368300.6	316	339.55	180	-50	DDH	Far Western Zone	Wright Hargreaves Gold Mines
WH-47-04	572589.1	5370573.6	358	374.6	155	-60	DDH	Windjammer South Zone	Wright Hargreaves Gold Mines
WH-47-04W	565687.6	5368012.6	314.08	68.58	180	-50	DDH	Far Western Zone	Wright Hargreaves Gold Mines
WH-47-05A	565688.6	5367878.6	313.63	220.68	360	-50	DDH	Far Western Zone	Wright Hargreaves Gold Mines
WH-47-06	565800.6	5367604.6	313	171.6	180	-50	DDH	Far Western Zone	Wright Hargreaves Gold Mines
WH-47-07	565799.6	5367572.6	313	335.28	360	-50	DDH	Far Western Zone	Wright Hargreaves Gold Mines
WH-49-01	565356.6	5368809.6	319.02	308.15	180	-50	DDH	Far Western Zone	Wright Hargreaves Gold Mines
WH-49-02	565340.6	5368664.6	318.12	332.54	180	-50	DDH	Far Western Zone	Wright Hargreaves Gold Mines
WH-49-08	565673.6	5367966.6	314	304.5	360	-50	DDH	Far Western Zone	Wright Hargreaves Gold Mines
WH-49-09	568629.8	5368492.5	317.5	269.14	345	-50	DDH	Dyment 3	Wright Hargreaves Gold Mines
WH-49-10	568620.9	5368536.3	317.75	305.41	165	-50	DDH	Dyment 3	Wright Hargreaves Gold Mines
WJ83-1	574130.8	5371195.2	331.5	87.78	180	-50	DDH	Windjammer Central Zone	Noranda
WJ83-2	574145.5	5370933.4	332.5	219.45	0	-53	DDH	East of Windjammer South Zone	Noranda
WJ85-1	572456.5	5371232.4	336.5	256	340	-55	DDH	Windjammer North Zone	Noranda
WJ85-2	572404.1	5371367.6	336.5	333.6	340	-55	DDH	Windjammer North Zone	Noranda
WJ87-1	572145.8	5370295.7	330.14	398.17	340	-60	DDH	Windjammer South Zone	Noranda

Hole Name	X	Y	Z	Length	Az.	Incl.	Type	Zone	Company
WJ87-10	572395.3	5371042.3	342.18	397.76	340	-60	DDH	Windjammer North Zone	Noranda
WJ87-11	572247.3	5370307.6	331.72	254.81	340	-62	DDH	Windjammer South Zone	Noranda
WJ87-2	572468.1	5371111	345.5	408.74	340	-60	DDH	Windjammer North Zone	Noranda
WJ87-3	572533.9	5370952.5	348.91	623.62	340	-63.5	DDH	Windjammer Central Zone	Noranda
WJ87-4	572198.1	5370283.7	329.88	317.91	342	-61	DDH	Windjammer South Zone	Noranda
WJ87-5	572108.3	5370255.1	329.46	307.54	340	-60	DDH	Windjammer South Zone	Noranda
WJ87-6	572452.2	5371083	346.5	352.04	346	-63	DDH	Windjammer North Zone	Noranda
WJ87-7	572156.1	5370267.4	329.33	263.96	340	-60	DDH	Windjammer South Zone	Noranda
WJ87-8	572504.7	5371085.5	346	388.92	340	-60	DDH	Windjammer North Zone	Noranda
WJ87-9	572061.5	5370238.5	329.14	257.86	340	-62	DDH	Windjammer South Zone	Noranda
WJ88-12	572294.2	5370325	332.51	251.96	340	-60	DDH	Windjammer South Zone	Noranda
WJ88-13	572521.6	5371112.4	344	346.5	340	-61	DDH	Windjammer North Zone	Noranda
WJ88-14	572125.9	5370277.2	329.71	227.38	340	-60	DDH	Windjammer South Zone	Noranda
WJ88-15	572410.3	5371338.4	335.71	334.06	160.3	-65.2	DDH	Windjammer North Zone	Noranda
WJ88-16	572172.5	5370295.1	330.35	239.27	340	-60	DDH	Windjammer South Zone	Noranda
WJ88-17	572218.7	5370312.8	331.07	273.1	340	-61	DDH	Windjammer South Zone	Noranda
WJ88-18X	572108.2	5370324.9	330.69	339.86	340	-60	DDH	Windjammer South Zone	Noranda/Moneta Porcupine Mines
WJ88-19	572491.5	5371128.4	343.5	310.29	340	-60	DDH	Windjammer North Zone	Noranda
WJ88-20	572155.1	5370342	330.5	203.91	340	-60	DDH	Windjammer South Zone	Noranda
WJ88-21	572201.8	5370360.6	330.84	175.6	340	-60	DDH	Windjammer South Zone	Noranda
WJ88-22	572539.8	5371147.3	339.75	343.2	340	-60	DDH	Windjammer North Zone	Noranda
WJ88-23	572265.6	5370331.2	331.56	257.86	340	-60	DDH	Windjammer South Zone	Noranda
WJ88-24	572590.5	5371166.7	340.11	388.92	340	-60	DDH	Windjammer North Zone	Noranda
WJ88-25	572248.4	5370376.2	331.41	199.95	340	-60	DDH	Windjammer South Zone	Noranda
WJ88-26	572919.8	5370471.1	365	413.21	340	-60	DDH	Windjammer South Zone	Noranda
WJ88-27	572492.5	5371369.7	334.7	410.26	160.8	-63.8	DDH	Windjammer North Zone	Noranda
WJ88-28	572984.2	5370600.5	364.5	251.76	340	-60	DDH	Windjammer South Zone	Noranda
WJ88-29	572364.3	5371318.9	338.96	362.41	160	-65	DDH	Windjammer North Zone	Noranda
WJ88-30	572525.4	5371031	348.31	428.55	340	-60	DDH	Windjammer North Zone	Noranda
WJ88-31	572496.6	5370983.2	355.13	502.32	340	-60	DDH	Windjammer North Zone	Noranda
WJ88-32	572403.1	5370951.9	345.3	510.54	340	-60	DDH	Windjammer North Zone	Noranda
WJ88-33	572586.3	5371024	343.2	554.13	340	-61	DDH	Windjammer North Zone	Noranda
WJ88-34	572154.9	5370214.7	329.3	327.96	340	-60	DDH	Windjammer South Zone	Noranda
WJ88-35	572648.9	5371142.9	341	371.25	340	-60	DDH	Windjammer North Zone	Noranda
WJ88-36	572209.8	5370223.4	330.04	371.55	340	-60	DDH	Windjammer South Zone	Noranda
WJ88-37	572388.4	5371101.6	339.5	310.29	340	-60	DDH	Windjammer North Zone	Noranda
WJ88-38	572284.1	5370999.6	340.35	438.3	340	-60	DDH	Windjammer North Zone	Noranda
WJ88-39	572113.6	5370171	330.53	383.38	340	-60	DDH	Windjammer South Zone	Noranda
WJ88-40	572229.6	5370129.8	329.35	1008.28	340	-81.8	DDH	Windjammer South Zone	Noranda
WJ88-41	572871.2	5371323.4	332.02	306.63	340	-60	DDH	Windjammer North Zone	Noranda
WJ88-42	572902.5	5371235.9	331	361.49	340	-60	DDH	Windjammer North Zone	Noranda
WJ88-43	572112.4	5370949.7	329.73	330.71	340	-60	DDH	Windjammer North Zone	Noranda
WJ88-44	572050.1	5370833.1	329.08	298.09	340	-61	DDH	Windjammer North Zone	Noranda
WJ88-45	572364.2	5370354.5	334.08	313.33	340	-60	DDH	Windjammer South Zone	Noranda
WJ88-46	572068.6	5371065.4	330.72	303.58	340	-60	DDH	Windjammer North Zone	Noranda

Hole Name	X	Y	Z	Length	Az.	Incl.	Type	Zone	Company
WJ88-47	572457.9	5370386.6	338.92	382.82	340	-60	DDH	Windjammer South Zone	Noranda
WJ88-48	572390.2	5370286.3	333.8	494.38	340	-62.5	DDH	Windjammer South Zone	Noranda
WJ88-49	572385.7	5371401.3	335.67	395.63	160	-60	DDH	Windjammer North Zone	Noranda
WJ89-50	572327.9	5371413.1	335.27	499.26	160	-65	DDH	Windjammer North Zone	Noranda
WJ89-51	572448.3	5371460	336.04	519.7	158	-65.7	DDH	Windjammer North Zone	Noranda
WJ89-52	572226.8	5370184.3	329.68	444.4	340	-60	DDH	Windjammer South Zone	Noranda
WJ89-53	572319.6	5370218.9	331.06	514.5	340	-61.7	DDH	Windjammer South Zone	Noranda
WJBPG-2	573078	5371418	332.75	336.19	160	-60	DDH	East of Windjammer North Zone	Broulan Gold
WJBPG-3	573078	5371393.6	332.25	213.97	340	-50	DDH	East of Windjammer North Zone	Broulan Gold
WJDM66-1	572166	5371130.5	331	264.87	160	-50	DDH	Windjammer North Zone	Dalhousie Michaud
WJDM66-2	572748.2	5371092.6	330.25	384.05	340	-50	DDH	Windjammer North Zone	Dalhousie Michaud
WJMPH-1	572038.6	5370318.4	329.18	198.12	0	-60	DDH	Windjammer South Zone	Windjammer Power & Gas
WJMPH-2	572198.2	5370425.4	331.16	169.16	0	-60	DDH	Windjammer South Zone	Windjammer Power & Gas