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Diamond Drill Program Report

On the

"A" Zone

Jacobson-Riggs Township Project, Ontario

For

First Minerals Exploration Limited

Submitted by Bruce Edgar (H.BSc, P. Geo)

August 20, 2016

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Summary

The May 21 to June 20, 2016 diamond drill program on the First Minerals Exploration Ltd (FMEL) "A" Zone was successful in demonstrating the continuity of gold mineralization within the assumed steep easterly plunge of the zone. Holes 16-1, 16-2 and 16-3 intersected the zone at vertical depths of 45, 90 and 130 metres respectively, returning values from 3.51 gpt Au/1.5 metres to 4.68 gpt Au/7.65 metres.

The program was also successful in demonstrating that the "A" zone dips steeply north near surface and bends to dip steeply south under 100 metres vertical depth.

Visible gold is not evident within the zone and values for gold appear to be intimately related to a specific mineralogy within the quartz veining: 2 to 5% pyrite, lesser pyrrhotite, ± chalcopyrite, ± sphalerite, and a fine, metallic, silvery mineral (galena?). Hole 16-4 overshot the plunge of the zone and as a result did not intersect the specified mineralogy, returning no significant values for gold.

The "A" zone remains open at depth below 280 metres vertical.

The author recommends further work on the "A" zone to test the down-plunge extension below 280 metres vertical.

The "A" zone is one of a number of gold zones and occurrences that may be found in an eastwest trend within the eastern Goudreau Lake Deformation Zone (GLDZ). Beginning with the "88-60" zone on the Cline Property in Jacobson Township, and heading east through the "single claim" occurrence of Strike Minerals, the Markes North, the McColl, and the "A" zone in Riggs Township, a total of over 5,500 metres of strike length is indicated. All of the zones that have significant diamond drilling performed, indicate zones of limited (65 to 70 metre) strike length with steep easterly plunging ore shoots. All of the zones remain open at depth.

Given the limited amount of outcrop in most of the area, it is reasonable to assume the possibility of many more zones within the trend that have yet to be discovered within the FMEL property package.

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Introduction

This report on the Diamond Drilling Program on the "A" Zone, Jacobson –Riggs Project, has been completed at the request of Mr. Robert Young, President, First Minerals Exploration Limited. The report summarizes the results of the diamond drill program on the historical "A" Zone carried out from May 21 through June 20, 2016.

The author, Bruce Edgar, has been responsible for the concept, planning and supervision of the program, as well as the logging and splitting of core, quality control measures, and the writing of this report.

The author has worked in the region off and on for 28 years, and is very familiar with the geology and deposits of the Jacobson-Riggs project area.

Property Description, Location and Accessibility

The Jacobson-Riggs Project is located in Jacobson and Riggs Townships, Ontario, Canada, and encompasses 31 staked claims (168 units) held 100% by First Minerals Exploration Ltd. (FMEL) and 13 staked claims (43 units) and 53 patented claims optioned from Argonaut Gold Inc. (Prodigy Gold).

The contiguous property spans from the western boundary of Jacobson Township (approximately 692400E, UTM NAD83, Zone 16) to Dog Lake in the eastern portion of Riggs Township (approximately 709670E, UTM NAD83, zone 16). It resides within and along the geologically favourable Goudreau Lake Deformation Zone (GLDZ) as outlined by the Ontario Geological Survey. The "A" zone is one of seven historical gold occurrences/zones within the Argonaut Gold portion of the FMEL property, and is located within patented claim number SSM 539887, just to the northeast of Godin Lake. It is centered at UTM coordinates 702106E and 5355750N.

The area is easily accessed by taking Trans-Canada Highway 17 for 42 kilometres north of Wawa, and highway 519 east to Dubreuilville. On the outskirts of town the Goudreau road (locally Cemetery road) heads southeast for 15 kilometres to the Goudreau- Lochalsh road. This road is taken east past the Richmont Island Gold Mine for approximately 17 kilometres just past Lochalsh, and the Godin Lake road south for 1.5 kilometres to the site of the "A" Zone.



Figure 1. Location Map FMEL "A" Zone

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History

The "A" Zone (historically known as the "Three Mile Post" Occurrence or the "Michael-Webb" Occurrence) has a long, but intermittent, exploration history. Originally discovered by W. J. Webb in 1920, it was optioned to Algoma Exploration Company in 1922 and Erie Canadian Mines Ltd in 1938. Both companies completed stripping, trenching and sampling of the zone, with Erie Canadian reporting grades up to 1.60 ounces Au per ton over 0.9 metres.

There is no record of further work in the assessment files until R. Cambell drilled 12 diamond drill holes (3,500 feet) in 1975/76, with hole 75-3 returning 8.23 gpt Au over 4.7 metres. D. F. Burt drilled two holes (225 feet) in 1977.

The "A" Zone was part of a larger property package put together by Vega Gold Exploration Ltd from 1979 to 1982. Vega completed a program of mapping, ground geophysics and 39 diamond drill holes over the entire property, 7 (1,339 feet) of which appear to have been drilled to trace the "A" zone. Hole 80-2 returned the best result, intersecting 0.305 ounces Au per ton over 14.3 feet (10.44 gpt over 4.36 metres). Geophysics (IP) traced the shear/alteration zone for 460 metres on surface.

The property was optioned by Anaconda Canada in 1983/84 with mapping and ground geophysics and one diamond drill hole being completed.

In 1993, Noranda Exploration completed mapping, ground geophysical surveys, soil sampling and 13 diamond drill holes (2,097 metres) designed to test for mineralization at depth on the "A" and "E" zones of the current property. Hole 93-1 returned 3.50 gpt Au over 8.5 metres. Other holes were believed to have been drilled outside of the assumed plunge of the ore zone.

From 1996 through 2000, Pele Mountain Resources completed mapping, ground geophysical surveys, and till sampling on the property and targeted the "A" zone with 12 diamond drill holes. Unfortunately a number of the holes over-shot the steep easterly plunge of the zone, but most holes intersected significant gold mineralization, including hole 97-28 which intersected two areas of mineralization returning 8.26 gpt Au over 4.24 metres and 5.42 gpt Au over 7.3 metres from 90 to 105 metres vertical.

A resource (non- 43-101) was completed (Bevan, 1997) indicating 148,657 tonnes averaging 5.92 gpt Au. In 1999, a bulk sample of 3,090 tonnes was removed from surface on the "A" zone, at a grade of approximately 5.0 gpt Au.

In 2010, Pele Mountain Resources completed 29 closely spaced diamond drill holes to test the potential under the existing pit on the "A" zone and completed preliminary engineering plans for removal of another bulk sample.

In 2012 Prodigy Gold (Argonaut) acquired the property, and in 2015 First Minerals Exploration Ltd optioned the property containing the "A" zone from Argonaut.

First Minerals Exploration Ltd has completed a 4- hole diamond drill program on the "A" zone from May 21 through June 20, 2016, which is the subject of this report.

GEOLOGICAL SETTING

Regional Geology

The FMEL properties are situated within the Michipicoten (Wawa) greenstone belt, which is sub-divided into three episodes of mafic- felsic volcanism and sedimentation referred to as the Hawk, Wawa and Catfish assemblages. Based on U-Pb zircon dating and whole rock geochemistry, these assemblages have dates of 2900 Ma, 2749 Ma and 2700 Ma respectively. The gold occurrences within the FMEL property occur on the contact between the Wawa and Catfish assemblages, which feature intermediate to mafic volcanic rocks of tholeiitic to high-iron tholeiitic composition. The intermediate to felsic volcanic rocks of these cycles are calcalkalic rhyolites and dacites. Each episode of volcanism is capped by chemical metasedimentary rocks consisting of siderite-, pyrite-, or chert-magnetite iron formations and/ or clastic meta-sedimentary rocks consisting of argillites, siltstones, sandstones and conglomerates. All volcanic cycles are intruded by dikes and sills of gabbroic to quartz diorite composition. Granitoid rocks of several ages and varied composition have intruded the supracrustal rocks.

A more detailed description of the regional geology may be found in reports by Sage and Heather (1991) and Williams et al (1991).

Goudreau- Lochalsh Area Geology

The FMEL property lies within the Goudreau- Lochalsh area which features supracrustal rocks near the contact of the Wawa (Cycle 2) and Catfish (Cycle 3) assemblages. The top of the Wawa assemblage (located in the southern Goudreau- Lochalsh area) features felsic to intermediate, pyroclastic metavolcanics capped by iron formation intercalated with clastic sediments and chemical precipitates. The iron formation includes magnetite and chert facies rock and carbonate sulphide and graphite facies deposits. The pyrite- rich iron formations were mined through World War I and were referred to as the "Goudreau Iron Range".

To the north are the massive, pillowed and schistose magnesium- and iron- rich tholeiitic flows of the Catfish assemblage. The upper portion of the assemblage features intermediate to felsic metavolcanics intercalated with metasediments, indicating contemporaneous volcanism and sedimentation. Both the metavolcanic and metasedimentary rocks throughout the assemblage have been intruded by numerous mafic to felsic intrusives. Sills, dikes and oblongshaped units of gabbro and diorite intrude the volcanics and sediments. Multiple intermediate to felsic intrusions of various textures form sills, dikes and stocks all along the Goudreau Lake Deformation Zone and include granites, granodiorites, syenites, quartz and feldspar porphyries, tonalite and trondhjemites. All of the Archean supracrustal rocks and intrusives are intruded by much younger diabase dikes associated with the Matachewan dike swarm.

All of the volcanic and sedimentary rocks in the area have undergone greenschist facies metamorphism, with rocks adjacent to the external northern granitoids exhibiting amphibolite grade metamorphism. The alteration commonly associated with the deformation is characterized by quartz, sericite, chlorite, epidote, tourmaline, ca- carbonate, fe- carbonate (ankerite), actinolitic amphibole and biotite. Shear zones exhibit a more intense alteration which commonly destroys any original texture and minerology.

The Michipicoten greenstone belt is believed to be a monoclinal sequence of supracrustal rocks thickened by regional folding, with an initial period of multiple recumbent folding and thrusting at, or close to, lithological boundaries. This was followed by upright folding, reverse faulting and more folding. The geometry of the Goudreau- Lochalsh area is that of an inverted anticline known as the Goudreau anticline. The regional strike of the rock units is approximately parallel to the axial surfaces of the prominent folds and thrusts. In Abotossaway Township, the strike is just north of east- west, and in Jacobson and Riggs townships the strike is east- west.

Structurally, the Goudreau Lake Deformation Zone is the dominant feature in the Goudreau-Lochalsh area. The GLDZ is up to 4.5 kilometers in width and strikes 30 or more kilometers in an arcuate form sub-parallel to the stratigraphy and regional foliation. The GLDZ is coincident with the major contact between the Cycle 2 (Wawa) and Cycle 3 (Catfish) assemblages. Structural controls are the most important factor in the localization of gold- bearing quartz veins in the area, and the GLDZ is comprised of numerous, systematically oriented shear zones. In Abotossaway Township, the western domain of the GLDZ is approximately 9 kilometers long and 2.3 kilometres wide and composed of brittle and brittle- ductile high- strain zones displaying dextral oblique slip displacement. The western domain is truncated to the east by the north- south trending McVeigh Creek fault. In Jacobson and Riggs Townships, the eastern domain of the GLDZ is approximately 9 kilometers long and 2 kilometres wide and contains narrow brittle and brittle- ductile high-strain zones displaying dextral, oblique slip displacement. The Eastern domain is truncated to the west by the Maskinonge Lake fault.

The Dog Lake Deformation Zone (DLDZ) is located in the central part of Riggs Township and extends eastwards into West Township. It is a 1.5 to 2.5 kilometre- wide, southeast trending zone of moderately to strongly strained rocks. The DLDZ is characterized by ductile and brittle-ductile shear zones occurring in two dominant directions of 90 to 100 degrees and 110 to 120 degrees.

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Figure 2. Goudreau Lake Deformation Zone (GLDZ) after Heather, 1992

Local Geology- "A" Zone

The area in the vicinity of the "A" zone is underlain predominantly by mafic lavas metamorphosed to greenschist facies. They are generally chloritized to varying degrees, are locally epidotized and may exhibit pillows and amygdules, and are massive to well-foliated. Grain size varies from very fine to coarser, almost gabbroic texture, and color is most often various shades of green to green-grey. Alteration includes silicification, carbonitization (ca-carbonate) and locally ankeritic (fe-carbonate) alteration.

A unit of Felsic Volcanic- Rhyolitic in nature- is central to the "A" zone geology and shearing. In general, the unit is darker beige to slightly olive-green in colour, displaying an aphanitic to coarser grain size with indistinguishable boundaries between quartz and feldspar phenocrysts, and altered and sheared due to the positioning of the unit within a shear zone. The unit often features fine, light-coloured, siliceous crenulated banding and alternating fine dark bands, giving it the appearance of a tuffaceous unit. Alteration includes silicification, sericitization (saussurite?) and carbonitization (ca-carbonate and fe- carbonate).

A few narrow dikes (less than 4 metres wide) of felsic Intrusive- Quartz Porphyry have been intersected during the diamond drill program. They are typically a light beige-tan colour and aphanitic with coarse (3-4 mm) prolific, quartz eyes. The units are generally not as strongly foliated or strained by shearing as the Felsic and Mafic volcanics and display sharp, chilled contacts with the host mafic and felsic volcanics.

Narrow (less than 4 metres) dikes of Felsic intrusive (Felsite) are encountered in a few locations exhibiting a medium grey colour and aphanitic ground mass. Contacts with other units display a bleached, chilled margin and the unit is generally very hard and siliceous, with blocky fractures.

A swarm of narrow (maximum 15 cm wide) Mafic intrusive-Lamprophyre dikes over core lengths of 4 to 7 metres have been intersected in the two deepest holes of the program at approximately 165 metres vertical depth. They are typically fine to coarse grained with rounded phenocrysts, a brown-grey colour, strongly magnetic and often display a "bluish" colour near sharp, well-defined contacts with mafic volcanics.

In one instance a narrow (40 cm) Mafic Intrusive- Diabase dike was intersected. The dike displayed sharp contacts with chilled, aphanitic margins grading to a fine/medium grained center, a dark greyblack colour and was strongly magnetic.

Structure, Alteration and Mineralization

Structural controls are the most important factor in the localization of gold bearing quartz veins in the GLDZ. At the "A" zone location, shearing on surface trends at 100 to 105°, dips steeply north, and appears to be approximately 30 metres wide and has been exposed for over 125 metres. In diamond drill holes, the shearing varies from 10 to 40+ metres in width. The shearing is hosted within carbonate

altered mafic volcanics and carbonate-sericite altered felsic volcanics (Rhyolite) and quartz porphyry intrusives.

The shearing is predominantly hosted by the Rhyolitic unit. Within the shear zone, the units are moderately to strongly deformed and altered. Narrow (1 to 2 cm), crenulated quartz + ankerite (Fe carbonate) banding is found throughout the shear in varying amounts and can be observed locally accounting for 15 to 20% of the core, but is generally 3 to 5%. The Rhyolite exhibits a banded (almost tuffaceous) appearance, with alternating dark and fine, light, siliceous, crenulated and boudinaged bands. Fine, disseminated grains and masses of pyrite are found throughout the shearing in amounts generally less than 1%, but locally up to 2 to 3%. In general, a peripheral zone of chlorite- calcite- pyrite alteration grades inwards towards mineralized quartz veining to an ankerite (Fe- carbonate) - pyrite-sericite alteration.

Values for gold appear to be limited to wider (>15 cm) quartz + minor ankerite veining which displays 2 to 5% sulphides in the form of fine pyrite, lesser pyrrhotite, ± trace chalcopyrite, ± trace sphalerite, and a very fine, shiny, silvery- metallic mineral (galena?). The author witnessed no visible gold in any of the intersections. The quartz veining which hosts the gold mineralization is found on the southern contact area (hanging wall) between the rhyolitic unit and the mafic volcanics, or within the southern portion of the rhyolitic unit. Gold mineralization is not found throughout the shear, but is limited to the wider quartz veining found on, or near, the hanging wall (southern) contact area.

Historical drilling on the zone has indicated a steeply eastward plunging ore shoot of approximately 65 metres in strike length, remaining open at depth.

Diamond Drill Program

Four_diamond drill holes totaling 785.75 metres have been completed between May 21 and June 20, 2016. Superior Diamond Drilling of Sault Ste. Marie, Ontario, was the drill contractor hired to provide NQ wireline core. Core recovery was excellent, with no detectable losses of material.

Collar locations were spotted using a GPS. Coordinates from re-located, pre-existing, known collars of historical diamond drill holes, and from the historical survey pin location of the #3 post for claim SSM 539888, were shot in to assure the appropriate location of the new drill holes.

All assaying of split core samples was completed by Swastika Laboratories of Swastika, Ontario, using standard assaying procedures for gold. FMEL has implemented a quality control program to comply with best practices in the sampling and analysis of diamond drill core. As part of the QA/QC program, FMEL inserts gold standards (varying from low to high grade) and blanks every 20 samples within the sampling stream.

Diamond drill core samples are transported in security sealed bags for analyses at Swastika Laboratories Ltd. in Swastika, Ontario. Individual samples are tagged in plastic sample bags and sealed. Groups of ten samples are sealed in rice bags and shipped. One half of the diamond drill core is retained on-site, and coarse reject portions of the assayed samples remain in storage at Swastika labs in the event that further verification is required.

The drill core from the program is stored in core racks at the adjacent Edwards Mine Site of Strike Minerals Inc. which has a locked gate at the entrance to the property.





Results

The diamond drill program was developed by the author to test the historical "A" zone on the current property of First Minerals Exploration Ltd (FMEL) to better define the geological, structural and mineralizing environment. The locations of three of the drill holes were chosen to test the zone within the steep easterly plunge of the suspected ore shoot in areas that the author believed required more information. The fourth hole was designed to intersect the zone at depth within the assumed plunge in an area deeper than any previous historical intersection.

Following is a summary of results from all holes drilled to date.

* For the purposes of this report an intersection is defined as any assayed length over 1.0 grams per tonne gold.

DDH FMAZ 16-1 (location 0702086E, 5355747N, azimuth 358°, dip -42°)

- Final depth of 84.43 metres, shear zone intersected from 58.78 metres to EOH (84.43 metres).
- 2.40 gpt Au over 2.4 metres intersected from 62.2 to 64.7 metres down-hole
- 1.11 gpt Au over 1.0 metres intersected from 70.5 to 71.5 metres down-hole

DDH FMAZ 16-2 (location 0702086E, 5355747N, azimuth 358°, dip -60°)

- Final depth of 148.43 metres, shear zone intersected from 98.80 metres to 138.40 metres.

- 4.68 gpt Au over 7.65 metres intersected from 100.45 to 108.30 metres down-hole, (including 6.68 gpt Au over 4.0 metres, and 17.26 gpt Au over 0.6 metres)

DDH FMAZ 16-3 (location 0702086E, 5355747N, azimuth 358°, dip -70°)

- Final depth of 212.44 metres, shear zone intersected from 120.98 to 171.55 metres.
- 1.09 gpt Au over 1.20 metres intersected from 123.9 to 125.1 metres down-hole.
- 3.51 gpt Au over 1.5 metres intersected from 134.05 to 135.55 metres down-hole.



Figure 4. Section 16-1



Figure 5. Section 16-4

DDH FMAZ 16-4 (location 0702151E, 5355682N, azimuth 358°, dip -62°)

- Final depth of 340.45 metres, shear zone intersected from 220.53 to 238.82 metres.
- No significant values

Discussion

The diamond drill program on the "A" zone has provided important information on the geological, structural and mineralizing environment.

Historically, diamond drilling of the "A" zone has been completed by drilling perpendicular to the steeply north dipping zone (drilling from north to south- 180°). However, the author noted that the deepest holes drilled by previous operators did not intersect the sheared rhyolitic unit prevalent in the near surface holes. Historical sections appeared to indicate that the zone dips steeply north near surface, and swings to dip steeply south at depth. As a result, the May to June 2016 diamond drill program was purposely designed to drill from south to north.

Significant values for gold were returned from holes FMAZ 16-1 through 16-3 at vertical depths of 45, 90 and 130 metres within the steep easterly plunge of the ore shoot. A non-43-101 resource completed by Bevan (1997) used a polygon method around drill pierce points on a longitudinal to calculate a resource of 148,657 tonnes averaging 5.92 gpt Au. Some of the ore blocks were quite large with over 50 metres between drill pierce points. It was the intention of the author to bisect some of those areas with intersections from the May- June 2016 program. Results indicated continuity of the zone, but the overall average grade of the newer drill intersections was lower, demonstrating the variability of gold contained within the zone.

During the program it became evident that the values for gold were restricted to specific areas within the shear zone. Values were not evident in all of the narrow (1-3cm) quartz + ankerite veining, but found within sections of wider (15cm+) quartz veins. The quartz veins contained 2 to 5% pyrite, lesser pyrrhotite, \pm chalcopyrite, \pm sphalerite and darker masses and narrow pseudo-bands of a fine, shiny, silvery-metallic mineral which the author believes to be galena. Where this specific mineralogy was absent, so too were values for gold. This quartz veining was also found in close proximity to the hanging wall (south) contact of the rhyolitic unit and the mafic volcanics.

DDH FMAZ 16-4 was designed to intersect within the plunge of the "A" zone at a depth never before tested (approximately 300 metres vertical). Unfortunately, a miss-communication with the drill crew resulted in the hole being drilled at -62° instead of -67°, and as a result, the hole intersected the zone above the expected steep easterly plunge (at approximately 215 metres

vertical). However, the hole has been instrumental in showing that the zone does indeed dip south at depth. It has also demonstrated that the thickness of the rhyolitic unit decreases, as does the width of the shearing in this location outside of the plunge of the ore shoot.

It is also important to note that no visible gold was witnessed during the program. Indeed, the author has viewed all the historical drill records and there is no mention of visible gold. The values for gold appear to be intimately related to the specific mineralogy mentioned previously.

The "A" zone is one of a number of gold zones and occurrences that may be found in an eastwest trend within the eastern GLDZ. Beginning with the "88-60" zone on the Cline Property in Jacobson Township, and heading east through the "single claim" occurrence of Strike Minerals, the Markes North, the McColl, and the "A" zone in Riggs Township, a total over 5,500 metres of strike length is indicated. All of the zones that have significant diamond drilling performed, indicate zones of limited (65 to 70 metre) strike length with steep easterly plunging ore shoots. All of the zones remain open at depth. Given the limited amount of outcrop in most of the area, it is reasonable to assume the possibility of many more zones within the trend that have yet to be discovered.

Conclusions and Recommendations

The May 21 to June 20 diamond drill program on the FMEL "A" Zone was successful in demonstrating the continuity of gold mineralization within the assumed steep easterly plunge of the zone. Holes 16-1, 16-2 and 16-3 intersected the zone at vertical depths of 45, 90 and 130 metres respectively, returning values from 3.51 gpt Au/1.5 metres to 4.68 gpt Au/7.65 metres.

The program was also successful in demonstrating that the "A" zone dips steeply north near surface and bends to dip steeply south under 100 metres vertical depth.

Visible gold is not evident within the zone and values for gold appear to be intimately related to a specific mineralogy within the quartz veining: 2 to 5% pyrite, lesser pyrrhotite, ± chalcopyrite, ± sphalerite, and a fine, metallic, silvery mineral (galena?). Hole 16-4 overshot the plunge of the zone and as a result did not intersect the specified mineralogy, returning no significant values for gold.

The "A" zone remains open at depth below 280 metres vertical.

The author recommends further work on the "A" zone to test the down-plunge extension below 280 metres vertical.

References

Archibald, F. T. Diamond Drill Logs and Sections, Vega Gold Explorations, 1980-81

Arias, Z. G. and Heather, K. B. Regional Structural Geology Related to Gold mineralization in the Goudreau- Lochalsh area, District of Algoma, 1987

Bevan, P. A. A Report on the Geology and Mineral Resources of Pele Mountain Resources Inc., Wawa properties- Jacobson and Riggs Townships, 1997

Bruce, E. L. Geology of the Goudreau-lochalsh Area, ODM annual Report, 1940

Cooper, M. S. 2010 Drill Program Report for Pele Gold Corporation, Highland Gold Project, 2010

Delisle, PC. Geological evaluation of the Markes Zone, Jacobson township, Goudreau- Lochalsh Area, 1999

Delisle, P-C. Diamond Drill Logs, Pele Mountain Resources Inc., 1998-99

Edgar, B. Edwards Mine Property Technical Report, Jacobson Township, Ontario, prepared for Strike Minerals Incorporated, 2013

Grant, J. C. Geophysical Report for Pele Mountain Resources Inc. on the Wawa Property, Jacobson Township by Exsics Exploration Ltd, 1997

Heather, K. B. and Arias, Z. Geological and Structural Setting of Gold Mineralization in the Goudreau- Lochalsh Area, Wawa Gold Camp, 1992

McBride, D. NI43-101 Report on the Jacobson Township Property of Cline Mining Corporation, 2009

Sage, R. P. Geology of Aguonie, Bird, Finan and Jacobson Townships, District of Algoma, OGS Open File Report 5588, 1993

Srivastava, P. and Bennett, G. Geology of Riggs and West Townships, District of Algoma, OGS Report 174, 1978

Walker, E. C. Highland Project Technical Report, Wawa, Ontario 2007

Williams H. R. et al, Wawa Subprovince, Geology of Ontario, OGS special volume 4, 1991

Various Authors, Diamond Drill Hole Logs and Sections, Pele Mountain Resources Inc., 1996-97/1998-99 Various Authors, Horizontal Aero-Magnetic Gradient and XDS VLF-EM Survey by Terraquest Ltd. for Prodigy Gold Inc., 2012

Various Authors, Drill holes database, Abandoned Mines and Mineral Deposits Inventory, MNDM website, OGS

CERTIFICATE OF AUTHOR

I, Bruce Alexander Edgar, Honors BSc., P. Geo, do hereby certify that:
I am currently employed as a Consulting Geologist residing at:
5782 Highland Avenue, Niagara Falls, Ontario, L2G-4X4

I graduated with an Honors Bachelor of Science Degree in Geological Sciences from Brock University in 1981.

I am a practising member of the Association of Professional Geoscientists of Ontario (Registration Number 2018).

I have worked as a geologist for over 30 years since graduation from Brock University. My experience includes conception, planning/budgeting, implementation and completion of numerous surface geological, geophysical, geochemical programs, and underground programs on many properties for numerous Exploration and Mining companies. The work has included the writing of project reports and technical reports.

This report is <u>not</u> an NI 43-101 technical report. This Diamond Drill Program Report has been completed for First Minerals Exploration Limited, a non- publicly traded company, to provide summary data on the FMEL Diamond Drill program and act as a tool to plan future exploration activities.

I have had prior involvement with many areas of the current FMEL property having worked as a geologist for a number of companies on claims in the area over the past 28 years.

I have received no compensation for this report other than normal consulting fees.

Dated this 20th day of August, 2016.

Bruce Edgar, Honørs BSc, P. Geo.

Diamond Drill Program Report on the "A" Zone, Jacobson-Riggs Township Project, Ontario

First Minerals Exploration Ltd

List of Symbols and Abbreviations used in Diamond Drill Logs:

| ank | - | ankerite |
|-------|---|----------------|
| са | - | calcium |
| carb | - | carbonate |
| chl | - | chlorite |
| cm | - | centimetre |
| сру | - | chalcopyrite |
| C.A. | - | core axis |
| dk | - | dark |
| diss | - | disseminated |
| f | - | fine |
| fe | - | iron |
| feld | - | feldspar |
| fol'n | - | foliation |
| med | - | medium |
| mm | - | millimetre |
| mv | - | mafic volcanic |
| осс | - | occasional |
| ро | - | pyrrhotite |
| ру | - | pyrite |
| qtz | - | quartz |
| tr | - | trace |
| v.f. | - | very fine |
| Х | - | cross |
| % | - | percent |
| • | - | degrees |
| | | |



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| PROPE | RTY: Jac | cobson-Rig | ggs | | COMPANY: Firs | t Mine | rals Exploration Ltd | FOOTAGE | DIP | AZIMUTH | FOOTAGE | DIP | AZIMUTH | HOLE No. | FMAZ 16-1 | | Sheet No | 1 | |
|--------------|--------------|--|---|--|--|---|--|---|---|---------|---------|-------|-----------|-----------------------------|-----------------------------------|----------------|----------|-----------|--------|
| HOLE N | I.FMAZ | Z 16-1 | | LENGTH 84.43 | m | EXTEN | SION: | | | | | | | | | | | | |
| LOCAT | ION APPRO | ox. Claim 747N (NA | 539888 D 83, Z | 8 Z 16) | SURVEYED | 2086E | | - | | | | | | Sample 0863- (NQ Cor | s: 0801- (0865 re stored a |)823 at Edw | rards M | line Site | \sum |
| ELEVAT | TION: | | AZIMUTI | H:359° | DIP:-42° | | LIGHT LOG | - | | | | - | | | D | T 1 | 1 | | |
| START | May 21 | , 2016 | | FINISHMay 23, | 2016 | COLLA | R SURVEY | | | | | | | LOGGED | BY:Bruce | Edgar | 20 | ling | د |
| FOO | TAGE | Superior | Diamo | nd Drilling | DESCI | | ON . | | | | SA | MPLE | - | | | ASS | AYS | | |
| FROM | то | 1 | | | DESCI | | | | | NUMBER | F | OOTAG | E(metres) | - | | | | | |
| | 2.20 | | - 1 | | | | | | | | FROM | T | 0 TOTAL | g/t | СНЕСК | Av. | Oz/t | СНЕСК | Av. |
| 3.39 5.81 | 5.81 7.64 | MAFIC - medium carboniti: - very fin to moder FELSIC - bleache groundma blocky fr | VOLCA n to dari zation i ately por ately m INTRU d, some ass with actures | ANIC ker green, fine g ncreasing towar phyritic appeara agnetic,- fine, d SIVE ewhat intercalate h moderate to st ,- trpy,- loer con | grained, chloritiz rds lower contac ance with fine, li lisspy less than 1 ed upper margin rong foliation @ ntact sharp @ 65 | ed, mod t,- some ghter fe % ,- low becom 50° to C.A | lerate foliation 55° to C. what blocky/ rusty weath ldspars in chloritized gro ver contact sharp in block ing more med grey, gene C.A.,- weak ca carbonitiz | A.,- moderation nered fractur oundmass,- w ky, broken control erally aphani- zation in place | e ca- es, veakly ore tic ces,- | 7 | | | | | | | | | |
| 7.64 | 50.36 | MAFIC V - as befor @ 40° to 9.45 - 9 - after 11 diminishe than 1% of frequent of - after 38 magnetish | VOLCA re- initia 55° to 9.57- q .40m- c es,- unit dis spy, ca carb .00m- in m,- unit | ANIC ally moderate to C.A.,- some qtz tz, lesser carb ve ca carb veinlets a t becomes increa - unit remains n fracture-fill ncreasing ca car t begins to displa | strong ca carbo -carb banding in ein @ 60° to C. and fracture-fill asingly magnetic ned-dkchloritic g bonitization and ay weak foliatio | nitizatio itially A.,- 1% less frec display reen an frequer n 50° to | on and prolific carbonate py juent,- overall ca carboni ving overall strong magned d fine grained,- occasion at to prolific fine carb bac C.A. | banding/ vei tization etism,- tr to l al to more nding,- decre | inlets less easing | 0801 | 9.40 | 9.70 | 0.30 | <0.01 | | | | | |

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| PROPERTY: | COMPANY: | HOLE No. FMAZ 16-1 | SHEET No. 2 | |
|-----------|----------|--------------------|-------------|---|
| | | | | S |

| FOO | TAGE | DESCRIPTION | | SAI | MPLE | | | | ASSA | YS | т. " | |
|-------|-------|--|--------|-------|---------|-------|-------|-------|------|------|-------|-----|
| FROM | то | | NUMBER | | FOOTAGE | | | | | | | |
| | | | | FROM | то | TOTAL | g/t | CHECK | Av. | Oz/t | CHECK | Av. |
| | | -after 42.00m- foliation stronger @ 45-50° to C.A. | | | | | | | | | | |
| | | -after 45.00m- strong foliation 35° to C.A.,- prolifinc fine ca carb streetched and boudinaged stringers/ fracture fill along foliation,- appearance of occasional fine cubic py | | | | * | | | | | | |
| | | -after 48.00m- foliation less intense, remains moderate to strong @ 35° to C.A. | | | | | | | | | | |
| | | -unit becomes harder, more silicified towards lower contact, sharp @ 35° to C.A. | | ÷ | | | | | | | | |
| 50.36 | 54.28 | FELSIC VOLCANIC (RHYOLITE) - dark beige/tan colour,- aphanitic,- very fine grained darker material along foliation @ 35° to C.A.,- fine ca carb stringers and fracture fill along foliation,- lower contact sharp @ 35° to C.A. with siliceous banding and minor py | | | | | | | | | | |
| 54.28 | 58.78 | MAFIC VOLCANIC - hard, silicified, grey-green, fine grained, well-foliated @ 35° to C.A.,- quite strongly ca carbonitized,- frequent carb stringers and fracture-fill along foliation | 0802 | 54.10 | 54.40 | 0.30 | <0.01 | | | | | |
| | | -55.50m- 1cm folded carb/qtz veinlet @ 35° to C.A.,- 40% po | | | 4 | | | | | | | |
| | | -55.72 – 55.94m- cherty qtz carb with $40 - 50\%$ py, minor cpy + tr sphalerite? @ $30-35^{\circ}$ to C.A. | 0803 | 55.50 | 56.00 | 0.50 | 0.02 | | | | | |
| | | -57.70- 57.75- dikelet of Felsic Intrusive Quartz Porphyry @ 40° to C.A. | | | | | | | | | | ġ |
| | | -unit features rusty weathered fractures (ankeritic?) to lower contact, with ankeritic and darker bands @ 45° to C.A.,- minor py | 0804 | 58.60 | 58.90 | 0.30 | 0.15 | | u - | ,e | | |
| 58.78 | 62.26 | FELSIC INTRUSIVE-(QUARTZ PORPHYRY) SHEAR ZONE COMMENCES | | 20.00 | 20.90 | 0.50 | 5.15 | | | | | |
| | | beige/tan coloured,- aphanitic to very f grained groundmass with prolific quartz eyes up to 3-4mm,- strongly foliated/sheared @ 35° to C.A.,- saussuritized lower contact sharp @ 35° to C.A. | | | | | ÷ | | | | | |
| - | | | 0805 | 61.80 | 62.20 | 0.40 | 0.01 | | | | | |

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| PROPERTY: | COMPANY: | HOLE No. FM |
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No. FMAZ 16-1 SHEET No. 3

| FOOT | TAGE | DESCRIPTION | | SAM | IPLE . | | | | ASS | AYS | 51 K | |
|-------|-------|---|------------|--------|---------|-------|------|-------|-----|------|--------|-----|
| FROM | то | DESCRIPTION | NUMBER | | FOOTAGE | | | | | | | _ |
| | | | | FROM | то | TOTAL | g/t | CHECK | Av. | Oz/t | CHECK | Av. |
| 62.26 | 84.43 | FELSIC VOLCANIC (RHYOLITE) – <u>SHEARED</u> | 0806 | 62.20 | 62.60 | 0.40 | 9.25 | | | | | |
| | EOH | - in general a beige/tan but mottled and slightly olive-green in areas,- aphanitic to very f grained | 807 | 62.60 | 63.20 | 0.60 | 0.24 | | | | | |
| | | groundmass, darker and lighter banded appearance in places,- sheared and saussuritized @ 40° to | 808 | 63.20 | 63.70 | 0.50 | 0.06 | | | | | |
| | | C.A.,- in general 5 to 10% qtz + ankerite veining along foliation, some secondary (later) x- cutting | 809 | 63.70 | 64.30 | 0.60 | 0.13 | (17 | | | | |
| | | white qtz veinlets | 810 | 64.30 | 64.70 | 0.40 | 5.90 | 6.17 | | | | |
| | | 62.26 62.50m 800/ analysistic at a vairing with darkon handing compring 1.20/ find my and no + | 811 | 65.20 | 65.00 | 0.60 | 0.31 | | | | | |
| | | -02.20- 02.50II- 80% grey/white qtz venning with darker banding carrying 1-2% line py and po + | 012 012 | 65.00 | 66 50 | | 0.18 | | | | | |
| | | me, smiry, sirvery-metame mineral (galena:) | 814 | 66 50 | 67.10 | | 0.07 | | | | | |
| | - | -64.30-64.70m- as above- with fine disspy in darker banded areas all @ 40° to C A | 815 | 67.10 | 67.70 | | 0.05 | | | | | |
| | | o 1.50 o 1.70m us doove whit the disspy in darker banded areas, an 16 to 0.71. | 816 | 67.70 | 68.30 | | 0.03 | | | | | |
| | | -banding throughout unit is crenulated, sometimes boudinaged, darker and lighter pytr to less than | 817 | 68.30 | 68.90 | | 0.02 | | | | | |
| | | 1% generally | 818 | 68.90 | 69.50 | | 0.10 | | | | | |
| | | | 819 | 69.50 | 70.50 | 1.00 | 0.08 | | | | х. | |
| | | -69.98-71.34m- intercalation of sheared/silicified mv with qtz + ankerite banding,- sharp contacts | 820 | Stand. | G-1 | | 1.11 | | | · | | |
| | | @ 35° to C.A. | 821 | 70.50 | 71.50 | 1.00 | 0.02 | 0.02 | | | | |
| | | - fine siliceous banding reminiscent of felsic tuffs | 822 | 71.50 | 72.50 | 1.00 | 1.11 | | | | | |
| | | | 823 | 72.50 | 73.50 | 1.00 | 0.02 | 0.02 | | | | |
| | | -after 73.50m- 2 to 3% qtz + ankerite banding, crenulated and boudinaged, @ 45° to C.A.,- finely banded and strongly sheared Rhyolite/tuff,- sericitic and saussuritized along shearing plane | | | | | | | | | | |
| | | -75.40- 75.70m- two 5-6cm qtz + ank veinlets @ 45° to C.A.,- trsulphides | 863 | 75.30 | 75.90 | 0.60 | 0.01 | | | | | |
| | | -77.55- 78.15m- 20% qtz + ank veining @ 45° to C.A.,- trsulphides | 864 | 77.55 | 78.15 | 0.60 | 0.06 | | | | | |
| | 5 | -83.00 – 84.00m- 10 to 15% qtz + ank veining @45° to C.A.,- trsulphides | 865 | 83.00 | 84.00 | 1.00 | 0.02 | | | | | |
| | | -unit sheared to EOH | | | | | | | | | | |
| | | | | | | | | | | | | |
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| PROPER | ату: Јасо | bson-Rigg | gs | | COMPANY: Firs | t Miner | als Exploration Ltd | FOOTAGE | DIP | AZIMUTH | FOOTAGE | DIP | AZIMU | | IOLE No. | FMAZ 16-2 | | Sheet No. | 1 | |
|--------|-----------|--------------------------|-------------------|-------------------|---------------------|---------------------|-----------------------------|----------------|-----------|---------|----------|-----|-------|-------|----------|------------|--------|-----------|---------|-----|
| HOLE N | o.FMAZ | 16-2 | | LENGTH 148.43 | 3m | EXTENS | ION: | | | | | _ | | | · · · · | | | | - | |
| LOCATI | ON APPRO | x. Claim 5. | 39888 | | SURVEYED | | | | | | | | | 5 | Samples | s: 0824- (| 0840 | | | |
| | 5255 | | D 02 | 710 | 70 | 200(F | | | | | | | £ | 1 | NQ core | e stored a | t Edwa | ards Mi | ne Site | |
| LATITU | DE: 3333 | /9/N (NA | D 83, 1 | Z 16) | DEPARTURE: /U | 2080E | | | | | | | | | | | | | // | |
| ELEVAT | ION: | Až | ZIMUTH | : 359° | dip:-60° | | LIGHT LOG | | | | | | | I | OGGED | BY: Bruc | e Edga | ar 🦯 | yes | e |
| START | May 23, | 2016 | | FINISH May 30 | ,2106 | COLLAR | R SURVEY | | | | | | | | | | | | l | |
| FOO | TAGE | | | | DEGC | DIDTI | oN | | | | | | | | | | ASS | AYS | | |
| FROM | то | | | | DESC | RIPTI | ON | | | NUMBI | P | FO | OTAGE | | | - | | | | |
| TROM | | | | | | | | | | | FROM | t | то | TOTAL | g/t | СНЕСК | Av. | Oz/t | СНЕСК | Av. |
| 0.00 | 2.82 | CASING | i/OVEI | RBURDEN | | | | | | | | | | | | | | | | |
| 2.82 | 6.90 | MAFIC | VOLC | ANIC | | | | | | | | | | | | | | | | |
| | | - fine/me | d grain | ned, dark chlorit | tic green, weakly | to mod | erately epidotized, broke | en/blocky co | re | | | | | | | | | | | |
| | | initially, | vuggy | with rusty weat | thering, weak fo | liation @ | 35° to C.A.,- weakly to | locally stro | ngly | | | | | | | | | | | |
| | | magnetic | ,- tr to | 1% coarse cubi | ic py,- unit become | nes incr | easingly ca carbonitized | towards low | ver | | | | | | | | | | | |
| | | | marp, i | III DIORCII/DIOCK | y core | | | | | | | | | | | | | | | |
| 6.90 | 10.39 | FELSIC | INTRU | JSIVE | | | | | | | | | | | | | | | | |
| | | - fine/me | dium g | rained qtz and | feldspar, light to | medium | grey, moderately to we | Il foliated @ | , 50° 1 | 0 | | | | | | | | | | |
| | | C.A.,- qu | ite har | d, generally we | akly to moderate | ely ca ca | rbonitized,- grain bounds | aries difficul | t to | , | | | | | | | | | | |
| | | along foli | iation,- | - lower contact | sharp @ 35° to (| C.A. | ionation,- ciongateu ca c | arbonnizeu | gram | , | | | | | | | | | | |
| | | | | | 10 | | | | | | - | | | | | | | | | 2 |
| 10.39 | 103.70 | MAFIC V | VOLCA | ANIC | aula ablauitia ana | | | | | | | | | | | | | | | |
| | * | - as belon carbonitiz | e-1 to zed wit | th frequent calci | ite stringers and | n, weak veins de | creasing after 20.0 metro | moderately (| <i>ca</i> | | | | | | | | | | | |
| | | weakly m | agneti | c, but increasing | g down-hole,- in | itially fo | bliated @ 40° to C.A., w | ith foliation | | | | | | | 5 | | | | | |
| | | weakenin | ig dow | n-hole | | | | | | | | | | | | | | | | |
| | | -after 17 (| $00 m_{-1}$ | unit becomes st | rongly magnetic | annear | ance of fine prolific may | metite grain | and | | | | | | | | | | | |
| | | ca carbon | itizatio | on diminishes | generally trpy, o | ccaision | al coarser agglomeration | is or cubes | s and | | | | | | | | | | | |
| | | 4 | | | | | 66 | | | | | | | | | | | | | |
| | | - unit con | tinues | quite homogene | eous,- infrequen | t ca carb | onate fracture lining, stre | ong magneti | sm | | | | | | | | | | | |

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| PROPERTY: COMPANY: HOLE No. FMAZ 16-2 SHE | T No. 2 |
|---|---------|

| FOOT | AGE | DESCRIPTION | | SAN | 1PLE | | | | ASS | AYS | | |
|------|-----|---|--------------------------|--------------------------------------|--------------------------------------|------------------------------|------------------------------|-------|-----|------|-------|----|
| FROM | то | DESCRIPTION | NUMBER | FROM | FOOTAGE | | g/t | CHECK | Av | Oz/t | CHECK | Av |
| | | f/med grained,- dark chloritic green with mild to moderate epidotization,- weak foliation @ 45° to C.A.,- occasional hematitic fracture lining | | TROM | | | gr | | | 021 | CILER | |
| | | -52.57- 53.55m- abundant fracturing and faulting with gouge @ 15° to C.A.,- ca carbonate and hematitic infill and some slickenslide,- ca carbonate veining/fracture fill on either side of fault area | | | | | | | | | | |
| | | -55.00- 90.00m- unit quite homogeneous,- dark chloritic green with moderate epidotization,- fine to med grained,- strong magnetism,- fine diss magnetite grains abundant,- tr to less than 1% fine py cubes,- foliation 40° to C.A. -after 71.00m- increasing ca carbonitization and fracture fill/stringers, and foliation gradually switching to 25 to 30° to C.A. | | | | | | | | | | |
| | | -after 90.00m- mv is dark chloritic green, generally fine grained,- locally very weakly magnetic,- quite strongly ca carbonitized with frequent ca carb fracture fill and along foliation @ 35 to 40° to C.A.,- fine pytr to less than 1% locally, some py cubes visible | | | | | | | | | | |
| | | - after 93.60m- overall ca carbonitization decreases, remaining in prolific banding with addition of fe carbonate (ankerite),- foliation stronger at 25 to 30° to C.A.,- slight increase in disspy and increasing ankeritic content down-hole,- increasing magnetism (fine disspo and potential v fine magnetite) | | | | | | | | | | |
| | | -after 97.00m- unit becomes more grey in colour, losing chloritic green content,- developing banded appearance with approx. 15% ankerite,- more strongly foliated | | | ٩. | | | | | | | |
| | | SHEAR ZONE BEGINS at approx. 98.80m,- lighter and darker crenulated and boudinaged banding appearance increasing in intensity down-hole,- 15- 20% ankeritic bands and lesserqtz+ ank,- up to 2% disspy | 0824 825 | 100.00 100.45 | 100.45 101.05 | 0.45 0.60 | 0.20 4.02 | | | | | |
| • | | 100.45- 103.70m- 15% crenulated and banded qtz + ank veining @ 30 to 35° to C.A.,- two longest sections of veining from 100.45 to 100.93m and 102.49 to 102.86m feature over 80% qtz + l;esserank veining with fine, siliceous bands + fine py, po, trcpy, tr sphalerite and a very fine, shiny- metallic, silvery mineral (galena?),- mineralization predominantly in dark bands between qtz veins | 826 827 828 829 | 101.05 101.55 102.35 102.90 | 101.55 102.35 102.90 103.50 | 0.50 0.80 0.55 0.60 | 3.18 2.63 1.92 0.63 | | | | | |

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| PROPERTY: | COMPANY: | HOLE No. FMAZ 16-2 | SHEET No. 3 |
|-----------|----------|--------------------|-------------|
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| FOOTAGE | GE | DESCRIPTION | | SAM | IPLE | | | | ASSA | AYS | | |
|-----------|-----------|--|--|--|---|------------------------------|--|---------------------------------------|------|------|-------|-----|
| FROM | то | DESCRIPTION | NUMBER | | FOOTAGE | | | | | | | |
| \$ | | | NUMBER | FROM | то | TOTAL | g/t | CHECK | Av. | Oz/t | CHECK | Av. |
| 103.70 13 | 38.40 | FELSIC VOLCANIC (RHYOLITE) <u>SHEAR ZONE CONTINUES</u> - unit is strongly sheared/altered/silicified, - historically called a rhyolite, some sections difficult to distinguish between altered rhyolite, tuff or highly silicified mv. - in general unit is beige to almost olive green in places, - aphanitic and strongly foliated/sheared @ 35° to C.A., - entire unit is within shear zone and features fine siliceous and alternating darker banding, crenulated and boudinaged, - generally 5 to 7% narrow qtz + ankerite bands -103.70- 107.82m- most prolific qtz + ank veining about 7 to 10% throughout section, with fine siliceous bands and darker mineralized bands carrying 2-3% py, po, lesser cpy and fine silvery-metallic mineral (galena?) -after 107.82m- 2 to 3% qtz + ank veining along foliation @ 30° to C.A.,- unit more rhyolitic in appearance,- beige to olive green,- but remains strongly sheared and banded, with occaisional x-cutting qtz + ank veining -after 112.00m- unit appears the most rhyolitic,- beige to olive green,- 1 to 2% qtz + ank veining along strong foliation/shearing @ 30° to C.A. -121.70- 124.90m- more finely banded appearance,- lighter and darker banding and 5 to 7% narrow, siliceous ank bands -after 131.30m- mottled appearance and potential intercalations of highly altered/silicified mv,-foliation changing to 25° to C.A. -after 134.0m- banded light rhyolitic bands and darker banding, and possible narrow intercallations of mv,- shaering/foliation switching back to 30-35° to C.A. -lower contact is intercalated and arbitrary @ 35° to C.A <u>SHEAR ZONE ENDS</u> | 0830 831 832 833 834 835 836 837 838 839 840 | 103.50 104.10 104.70 105.30 105.70 106.30 107.10 107.70 108.30 108.90 Stand. | 104.10 104.70 105.30 105.70 106.30 107.10 107.70 108.30 109.50 AU 48 | 0.60 0.60 0.40 0.60 | 2.60 5.37 5.87 4.84 5.94 2.53 17.76 4.36 0.92 0.14 15.63 | 5.80 5.86 4.58 5.66 16.76 | | | | |

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| PROPERTY: | COMPANY: | HOLE No. FMAZ 16-2 | SHEET No. 4 |
|-----------|----------|--------------------|-------------|

| FOO | TAGE | DESCRIPTION | | SAM | IPLE | | | | ASS | AYS | | |
|--------|--------|--|--------|------|---------|-------|-----|-------|-----|------|-------|-----|
| FROM | то | DESCRIPTION | NUMBER | | FOOTAGE | | | | | | | |
| 120.40 | 140.42 | | | FROM | то | TOTAL | g/t | CHECK | Av. | Oz/t | CHECK | Av. |
| 138.40 | EOH | - initially strongly foliated @ 35° to C.A re-appearance of weak to more moderate ca carbonitization,- chloritic green colour,- fine grained,- frequent to more prolific ca carb veinlets along foliation,- up to 1% fine disspy | ж | | | | | • | | | | • |
| | | | | | | | | | | | × | |
| | | | a. | ÷ | | | | | | | | |
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| PROPER | ату: Јасо | obson-Riggs | | COMPANY:Firs | t Minera | als Exploration Ltd | FOOTAGE | DIP | AZIMUTH | FOOTAGE | DIP | AZIMUT | гн | HOLENO | FMA7 16-3 | | Sheet No. | 1 | |
|--------|-----------|--|---|--|---|--|---|------------------|---------|---------|-------|--------|-------|----------|------------|--------|-----------|----------|-----|
| HOLE N | o. FMAZ | 2 16-3 | LENGTH 212.44 | 4m | EXTEN | SION: | | | | | | | - - | | FMA2 10-5 | | | | |
| LOCATI | ON APPRO | x. Claim 53988 | 8 | SURVEYED | 12 | | - | - | | | | | | Samples | s: 0841- (| 0862 | | | |
| LATITU | DE: 5355 | 747N (NAD 83 | 6, Z 16) | DEPARTURE: 7 |)2086E | | ┨ | | | | | | | NQ Cor | e stored a | at Edw | ards M | ine Site | R |
| ELEVAT | TION: | AZIMUT | тн: 359° | DIP: -70° | | LIGHT LOG | | | | | | | | | | | | | |
| START | May 30, | 2016 | FINISH June 12 | 2, 2016 | COLLA | R SURVEY | | | | 1 | 1 | 1 | | LOGGED I | BY: Bruce | e Edga | ir / | huy | n |
| FOC | TAGE | | | DEG | | | | | | S | AMPLE | E | | | | ASS | SAYS | | |
| FROM | то | - | | DESC | CRIPT | ION | | | NUMB | ER | FO | OTAGE | | | | | | | |
| 0.00 | 3 20 | CASING/OVE | RBURDEN | | | | | | | FROM | 1 | то | TOTAL | g/t | CHECK | Av. | Oz/t | CHECK | Av. |
| 0.00 | 5.20 | 0/10/10/071 | | | | | | | 2 | | | | | | | | | | |
| 7.70 | 12.71 | - fine/med grait decrerasing too stringers along spotted appear sharp in broker FELSIC INTR | ined, dark chlori wards lower con foliation, more ance,- tr to less t n/blocky core | tic green, moder tact,- weak folia ca carbonate str than 1% dis spy | rately ep tion @ 2 ingers to agglome | idotized,- strongly magn 25 to 30°,- frequent silice owards lower contact,- pre- prations and small masse | etic initially, eous/epidotit olifically fin s,- lower cor | ic e itact | | | | | | | | | | | |
| | | - fine/med grai C.A.,- grain bo foliation,- chill | ined qtz + feldsp oundaries difficu led lower margir | ar,- light to med lt to ascertain,- and lower cont | lium gre fine/ned act sharj | y,- moderately to well fo ca- carbonitized grains e $a = 0^{\circ} (0, 0, 0)^{\circ}$ to C.A. | liated @ 40° longated alo | to ng | | | | | | | | | | | |
| 12.71 | 120.98 | MAFIC VOLC - as before- init increasingly m green becomin | CANIC tially frequent to ore strongly mag g increasingly ep | o more prolific c gnetic down-hol pidotized to mo | a- carbo e,- tr to l lerate ep | nate stringers and fracturess than 1% py,- initially idotization by 35.00 m | re fill to 29.0 y dark chlori | m,- tic | | | | | | | | | | | |
| | | - 39.55- 40.90- - after 40.90 to epidotization,- occaissionalher | broken/blocky 119.00m- unit i fien/med graine matitic fracture l | tractured core w s quite homogen d,- occaissional lining | neous,- d | angle breaks and hematit ark chloritic green with ceous/epidote fracture lir | ic fracture li moderate ting and strir | ning Igers, | - | | | | | | | | | | |

| PROPERTY: | |
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| I ROI DRIII. | |

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COMPANY:

HOLE No. FMAZ 16-3

SHEET No. 2

| FOO | TAGE | DESCRIPTION | | SAN | IPLE | × | - | | ASS | SAYS | | | |
|--------|--------|---|---|--|--|--|--|-------|-----|------|-------|-----|---|
| FROM | то | DESCRIPTION | NUMBER | | FOOTAGE | | | | | | | | 1 |
| | | | | FROM | то | TOTAL | g/t | CHECK | Av. | Oz/t | CHECK | Av. |] |
| | | Slightly coarser appearance down-hole to medium grained laths in places,- almost a gabbroic appearance,- unit remains quite hard, strongly magnetic,- very weak foliation/common fracture fill direction @ 30 to 35° to C.A.,- a few low angle fractures | | | | | | - | | | | | |
| | | - after 115.00 m- unit losing epidote content,- becoming darker green-grey and chloritic,- fine/med grained, foliated @ 20 to 25° to C.A.,- with carb stringers and veinlets commonly @ 30 to 35° to C.A.,- quite strongly carbonitized, occasional cubic py to 3mm,- unit becomes increasingly silicified and more strongly foliated,- lower contact sharp @ 25° to C.A. | | | | | | | - | | | | |
| 120.98 | 171.55 | FELSIC VOLCANIC (RHYOLITIC) <u>SHEAR ZONE COMMENCES</u> initially difficult to ascertain whether unit is intensely silicified/altered mv or altered felsic volcanic in general unit is light grey to beige and slightly olive green in places,- aphanitic to very fine grained,- strongly foliated/sheared @ 25 to 30° to C.A. shearing has caused lighter and darker crenulated and boudinaged banding with both cacarbonate and fe- carbonate (ankerite) associated with qtz,- shaering and banding more intense in some areas -120.98- 127.10m- 7 to 10% crenulated/boudinagedqtz + ankerite + ca carbonate banding, and fine, cherty/siliceous bands and darker bands,- up to 1% dis spy and occasional po - 124.05- 5cm qtz + ank + ca-carb vein @ 20 to 25° to C.A. with 30 to 40% po -127.10- 134.05- 2 to 3% crenulatedbanding, varying shear intensity @ 25 to 30° to C.A.,-to 1% finely dia grouper days according to provide the prov | 0841 842 843 844 845 846 847 848 849 850 | 120.90 121.50 122.10 122.70 123.30 123.90 124.50 125.10 125.70 126.30 | 121.50 122.10 122.70 123.30 123.90 124.50 125.10 125.70 126.30 127.20 | 0.60 | 0.01 0.81 0.29 0.23 0.24 1.15 1.03 0.10 0.03 0.03 | 0.02 | | | | | |
| | | Inely dis spy and po, coarser py in narrow qtz + ank stringers,- host rhyolite becoming lighter beige in colour 134.05- 135.87- 60 to 70% crenulated/boudinagedqtz + ank and lesser ca- carb veining @ 25 to 35° to C.A.,- fine siliceous and dark bands with generally to 3% py, minor po, trcpy and a fine, silvery-metallic mineral (galena?),- main qtz veining from 134.05- 134.55 and 135.00- 135.54m -after 135.87- host rhyolite more beige to slightly olive-green,- crenulated siliceous banding and darker bands, 2 to 3% qtz + ank + lesser ca- carb,- generally 1% py, lesser po with some areas locally to 3% py,- varying shear intensity @ 30 to 35° to C.A.,- occasional x- cutting qtz + ank | 851 852 853 854 855 856 857 858 | 133.45 134.05 134.55 135.00 135.55 136.15 136.75 137.75 | 134.05 134.55 135.00 135.55 136.15 136.75 137.75 138.35 | 0.60 0.50 0.45 0.55 0.60 0.60 1.00 0.60 | 0.19 1.83 0.89 6.94 0.42 0.12 0.40 0.04 | 7.44 | | | | | |

| PROPERTY: | |
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COMPANY:

HOLE No. FMAZ 16-3

SHEET No. 3

| FOO | TAGE | DESCRIPTION | | SAM | PLE | | | | ASS | AYS | | |
|--------|---------------|--|-------------|------------------|-----------------|-------|-----------|-------|-----|------|-------|-----|
| | | DESCRIPTION | | | FOOTAGE | | | | | | | |
| FROM | ТО | | NUMBER | FROM | то | TOTAL | g/t | CHECK | Av. | Oz/t | CHECK | Av. |
| 171.55 | 212.44 EOH | veining with microfaulting 1cm offsets,- some lineations of py masses and fine cubes -after 151.50m- some 1.0 to 1.5 metre sections of more intense shearing/alteration + crenulated qtz + ank banding and "bleached"/ silicified host rock intercalated with sections of relatively less intense alteration and more rhyolitic appearing host,- areas appear "mottled",- shearing @ 20 to 25° to C.A. -158.60- 158.85- intercalation of mv, sharp contacts @ 25° to C.A. (possible inter-flow sediments?) -after 161.00 m- Rhyolitic host appears to be intercalated with mv displaying increased cacarbonitization and coarse cubic py to 7mm. - areas of more intense shearing with mottling and crenulated banding @ 25 to 35° to C.A.,- some x- cutting qtz/ calcite veining SHEAR ZONE ENDS MAFIC VOLCANIC - hard and silicified initially, lighter grey/green, becoming darker chloritic green down-hole,-fine/med grained and initially strongly foliated @ 25° to C.A.,- foliation decreases in intensity down-hole and switching to 35° to C.A. -174.23- 174.26- MAFIC INTRUSIVE (LAMPROPHYRE DIKE) - sharp contacts @ 70° x- foliation,- fine to medium grained, some coarser blue-green chlorite grains, hard, siliceous and strongly magnetic,- fault gouge @ 174.26 (70° to C.A.) -176.21- 176.30- as above, sharp 70° contacts - 179.58- 2cm dikelet as above- -l80.30- 180.45- Lamprophyre dike as above - host my exhibits weaker foliation and prolific ca- carb elongated amyedules - unit becomes | 0859 860 | 145.00 Stand. | 145.80 Au G1 | 0.80 | 0.11 1.06 | | | | | |
| | | - host my exhibits weaker foliation and prolific ca- carb elongated amygdules,- unit becomes | | ъ. | | | | | | | | |

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| PROPERTY: COMPANY | : HOLE No. | . FMAZ 16-3 SHEET No. | 4 |
|-------------------|------------|-----------------------|---|
| | | | |

| FOO | TAGE | DESCRIPTION | | SAN | IPLE | | | | ASS | SAYS | | |
|------|------|--|--------|------|---------------|-------|-----|-------|-----|------|-------|-----|
| FROM | то | | NUMBER | FROM | FOOTAGE TO | TOTAL | g/t | CHECK | Av. | Oz/t | СНЕСК | Av. |
| | | strongly magnetic | | | | | | | | | | |
| | | -181.10- 181.18- Lamprophyre dike as above, sharp 70° contacts x- foliation of host rock | | | | | | 6 | | | | |
| | | -after 191.00m- magnetite grains to 1 to 2mm becoming more prolific,- unit exhibits strong magnetism and prolific ca- carb amydules and some low angle fracture fill @ 20° to C.A. | | | | | | | | | | |
| ŧ | | -203.80- 7cm section @ 20° to C.A. with 15% py cubes and agglomerations | | | | | | | | | | |
| | | -occasional masses and cubes py down-hole | | | | | | | | | | |
| | | | | | | | | | | | | |
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| PROPER | ату: Јас | obson-Ri | iggs | COMPANY:Firs | t Miner | als Exploration Ltd | FOOTAGE | DIP | AZIMUTH | FOOTAGE | DIP | AZIMUTH | Н | OLE No. | FMAZ 16-4 | | Sheet No. | . 1 | |
|--------|----------|---|---|--|--|--|--|----------------------------------|---------|---------|-------|---------|------|---------|------------|--------|-----------|---------|--------|
| HOLE N | o.FMAZ | Z 16-4 | LENGTH 340. | 45m | EXTEN | SION: | | | | | | | | | | | | | |
| LOCATI | ON APPRO | ox.claim 5 | 539888 | SURVEYED | | | | | | | | | S | amples | s: 0866- 0 | 0882 | | | |
| LATITU | DE: 535 | 5682N (N | AD 83, 7, 16) | DEPARTURE: 7 | 2151 | | | | | | | | N | Q core | stored a | t Edwa | ards mi | ne Site | \sum |
| ELEVAT | | | | DEFARICRE. 7 | /2131 | | _ | | | | | | | | | | | // | |
| ELEVAI | IUN: | | AZIMUTH: 358° | DIP:-62° | COLL | | | | | | | | | OGGED H | BY: Bruc | e Edg | ar | un | u |
| STARTJ | une 12, | 2016 | FINISH June 2 | 20, 2016 | COLLA | | | | | | | | | | | | | | |
| FOO | TAGE | | | DEGC | | | | | | SA | AMPLE | : | | | | ASS | SAYS | | |
| FROM | то | | | DESC | RIPII | UN | | | NUMBE | R | FO | OTAGE | | | | | | i. | |
| | | | | | | | | | | FROM | | то то | DTAL | g/t | CHECK | Av. | Oz/t | CHECK | Av. |
| 0.00 | 3.37 | CASING | GING/OVERBURDE | N | | | | | | | | | | | | | | | |
| 3.37 | 79.38 | MAFIC - fine/ma appearan carb frac disspy an -after 29 35°,- uni -40.00 to 7cm calc -after 50 -after 55 -after 63 frequent along low | VOLCANIC ed grained, dark chlor nce,- quite strongly ma cture fill and stringers, nd agglomerations 9.50m- unit less dark c it quite strongly ca car o 50.50m- unit is stron cite veinlets @ 15° to 9.50m- unit more dark 0.00m- unit becomes st 0.00m- some pillow sel calcite fracture fill alc wer contact, sharp @ 1 | tic green, slightly agnetic,- weakly t - general weak for hlorite green and bonitized and mo gly ca carbonitize C.A. chloritic green/gr rongly magnetic, vages visible,- ur ong foliation, and 5° to C.A. | v epidoti o moder liation (more da re weak ed and a ey,- wea prolific nit remai afew 1 t | tic, initially finely and pr ately carbonitized throug 3 30 to 35° to C.A.,- tr to rk grey,- slightly stronge ly magnetic mygdaloidal with ca carb kly foliated @ 35 to 40° fine magnetite grains ns quite strongly ca carb to 2cm calcite veinlets,- s | olifically spo hout,- freque less than 19 r foliation @ infill,- few to to C.A. | otted ent ca 30 to 5 to | - | | | | | | | | | | |

| PROPERTY: COMPANY: HOLE No. FMAZ 16-4 SHEET No. 2 | | | | |
|---|-----------|----------|--------------------|-------------|
| | PROPERTY: | COMPANY: | HOLE No. FMAZ 16-4 | SHEET No. 2 |

| FOO | TAGE | DESCRIPTION | SAMPLE | | | | ASSAYS | | | | | |
|--------|--------|--|--------|---------|---------|-------|--------|-------|-----|------|-------|-----|
| FROM | то | | | | FOOTAGE | | | | | | | |
| 70.00 | 01.00 | | | FROM | то | TOTAL | g/t | CHECK | Av. | Oz/t | СНЕСК | Av. |
| 79.38 | 81.89 | FELSIC INTRUSIVE - fine to medium grained qtz + feldspar, grain boundaries difficult to distinguish,- medium grey,- quite strongly foliated @ 40° to C.A.,- weak to locally moderate ca carbonitization,- locally to 1% disspy and py cubes,- lower contact sharp @ 15° to C.A. | | | | | | | | • | | 0 |
| 81.89 | 104.39 | MAFIC VOLCANIC - as before- initially quite strongly ca carbonitized,- frequent ca carb fracture fill and stringers,- strong foliation @ 25 to 30° to C.A. | | | | | × | | | | | |
| | | -after 89.00m- frequent to prolific ca carb filled amygdules,- lack of magnetism,- unit remains strongly ca carbonitized | | r Ia | | | | | | | | |
| | | -96.50- 96.90m- MAFIC INTRUSIVE (DIABASE) -chilled aphanitic margins and more medium grained centrally,- dark grey/black,- strongly magnetic,- some fault gouge on sharp contacts, 45° upper, 20° lower | | | | | | | | | 4 | |
| | | -mv unit continues as before to lower contact, sharp @ 30° to C.A. | | | | | | | | | | |
| 104.39 | 111.17 | FELSIC INTRUSIVE - as at 79.38m- initially slightly olive green, quite well foliated @ 30 to 35° to C.A.,- quite strongly ca carbonitized centrally, but more silicified towards contacts,- lower contact sharp @ 15 to 20° To C.A. | | | | | | × | | | | |
| 111.17 | 209.05 | MAFIC VOLCANIC - as before- amygdaloidal type,- dark chloritic green,- fine to med grained,- strongly carbonitized and well foliated @ 25 to 30° to C.A. - unit varies between amygdaloidal and pillowed volcanics,- remains quite strongly carbonitized throughout,- frequent ca carb fracture fill and stringers along moderate foliation @ 30 to 35° to | | | | | | | | | | |
| | | C.A.,- occasional 1 to 2cm calcite veinlets along foliation -174.44- 178.77m- 7 dikelets MAFIC INTRUSIVE- LAMPROPHYRE fine to coarse grained, inequigranular, quite strongly magnetic, some fault gouge along contacts | | | | | - | | | | | |

| PROPERTY: | COMPANY: | HOLE No. FMAZ 16-4 | SHEET No. 3 |
|-----------|----------|--------------------|-------------|
| | | | |

| FOO | TAGE | DESCRIPTION | | DESCRIPTION | | | ASSAYS | | | | | |
|--------|--------|--|------------------------|-------------------|---------|-------|--------|--------|-----|------|-------|-----|
| FROM | то | DESCRIPTION | NUMBED | | FOOTAGE | | | | | | | |
| | | | NUMBER | FROM | то | TOTAL | g/t | CHECK | Av. | Oz/t | CHECK | Av. |
| | | and within intrusive,- sharp contacts 55 to 60° to C.A.,- bluish tinge in contact areas | | | | | | | | | | |
| | | -after 179.00m- unit continues as before,- occasional fracture fill qtz + carb with coarse py agglomerations,- lower contact sharp @20° to C.A. | | | | | | | | | | |
| 209.05 | 210.65 | FELSIC INTRUSIVE - as before,- minor siliceous/carb fracture fill,- weak foliation 40 to 45° to C.A.,- lower contact sharp @ 45° to c.A. | | | | | | | | | | |
| 210.65 | 220.38 | MAFIC VOLCANIC - as before- minor carb filled amygdules in sections, some pillow selvages,- foliation increasing in intensity down-hole @ 45° to C.A. | | | | | | | | | | |
| | | -after 218.00m- unit becomes increasingly silicified and harder, appearance of 1 to 2% py approaching lower contact, sharp @ 45° to C.A. | | | | 2 | | | | | | |
| 220.38 | 235.36 | FELSIC VOLCANIC- RHYOLITIC | 0866 | 220.80 | 221.80 | 1.00 | 0.18 | | | | | |
| | | - initially bleached beige-olive green near contact | 867 | 221.80 | 222.80 | | 0.02 | | | | | |
| | | | 868 | 222.80 | 223.80 | | < 0.01 | | | | | |
| | | -220.53- SHEAR ZONE COMMENCES | 869 | 223.80 | 224.80 | | < 0.01 | | | | | |
| | | - initial 12 cm white qtz + tourmaline vein,- host rhyolite (or tuff?) is intermittently strongly | 870 | 224.80 | 225.80 | | < 0.01 | | | | | |
| | | sheared to more strongly foliated @ 45° to C.A.,- unit altered featuring up to 7 to 10% | 871 | 225.80 | 226.80 | | 0.01 | | | | | |
| | | boudinaged and crenulated $qtz + ca carb + lesser ankerite banding, - fine siliceous (tuffaceous?)$ | 872 | 872 226.80 227.80 | | 0.00 | < 0.01 | < 0.01 | | | | |
| | | bands and dark bands with py and trpo, generally less than 1% | 873 227.80 228.60 0.80 | | 0.01 | | | | | | | |
| | | - unit generally highly sinceous qiz + leidspar, but difficult to ascertain grain size, - slightly olive green colour - some occasional x, cutting atz/calcite/ankarite voining, some minor faulting with | 874 228.60 229.20 0.80 | | 0.80 | 0.01 | | | | | | |
| | | 1 to 2cm slins | 876 230 20 231 20 | | 0.02 | | | | | | | |
| 18 | | | 877 | 230.20 | 232.00 | | 0.09 | | | | | |
| | | -231.85- 10cm atz veining with 3 to 4% py | 878 | 232.00 | 233.00 | | 0.03 | _ | - | | | |
| | | | 879 | 233.00 | 234.00 | | 0.11 | | | 0 | | |
| | | -233.56-18 cm qtz vein with 1% sulphides | 880 | Stand | Au G1 | * | 1.07 | | | | | |
| | | | 881 | 234.00 | 235.00 | 1.00 | 0.12 | | | | | |
| | | | | н. | | | | | | | | |

| | S 5 | | |
|-----------|----------|--------------------|-------------|
| PROPERTY: | COMPANY: | HOLE No. FMAZ 16-4 | SHEET No. 4 |
| | | | |

| FOO | TAGE | DESCRIPTION | | SAN | IPLE | | ASSAYS | | | | | |
|--------|---------------|--|--------|--------|---------|-------|--------|-------|----------|-----|-------|-----|
| FROM | то | | NUMBER | FROM | FOOTAGE | TOTAL | alt | CHECK | A | 0-/ | CUECK | |
| | 5 | Lower contact intercalated, sharp @ 45° to C.A. | | FROM | | IOTAL | g/t | CHECK | AV. | UZA | CHECK | AV. |
| 235.36 | 296.10 | MAFIC VOLCANIC - initially sheared and altered to 238.82 <u>SHEAR ZONE ENDS</u> | 0882 | 235.00 | 236.00 | 1.00 | 0.01 | | | | | |
| | R. | -after 239.00m- strong foliation initially @ 45°, decreasing in intensity down-hole,- frequent qtz+ carb+ ank veinlets initially, decreasing after 243.00m | | | | | | | | | | |
| | | -after 249.00m- foliation weak @ 40 to 45° to C.A.,- mv unit returns to dark chloritic green, fine to med grained with prolific fine, white (qtz+ feldspar) spotting,- tr to less than 1% cubic and dis spy,- unit strongly magnetic | | | | | - | | | 21 | | |
| | | -258.00- 261.00m- 10% white calcite veining and fracture fill with mv fragments | | | | | | | | | | |
| | - - | -after 261.00m- unit quite homogeneous as after 249.00m- frequent carb veinlets and fracture fill, some along foliation and some @ low angles to C.A.,- some coarse cubic py towards lower contact sharp @ 35° to C.A. | | • | | | ÷ | | | | | |
| 296.10 | 299.80 | FELSIC INTRUSIVE - as before- chilled beige to olive green margins,- lower contact sharp @ 40° to C.A. | | | | | | | | | | |
| 299.80 | 340.45 EOH | MAFIC VOLCANIC - as after 261.00m- infrequent carb fracture fill, strong magnetism, initial strong foliation decreases rapidly to homogeneous dark chloritic green, fine/med grained, strongly magnetic unit | | | | | | | | | | |
| | | -317.00 – 336.00m- frequent to prolific carb fracture fill along foliation @ 45° to C.A., -312.3 – 326.5- brecciated appearance of host mv with carb infill | | | | | | | | | | |
| | | - 327.95- 336.00m- minor weak shear zone but pillow selvages still visible, foliation/shearing @ 50° to C.A. | | | | | | | | | | |
| | | - after 336.00m- homogeneous mv, dark chloritic green, slightly epidotized, strongly magnetic,- some coarser chloritized laths, weak foliation @ 45° to C.A. | | | | | | | | | | |

Assaying - Consulting - Representation

Page 1 of 1

Assay Certificate

Certificate Number: 16-723

| Company: | First Minerals Exploration Ltd. |
|----------|---------------------------------|
| Project: | Jacobson-Riggs |
| Attn: | Bruce Edgar |

Report Date:

28-Jun-16

We hereby certify the following Assay of 23 core samples submitted 07-Jun-16 by Bruce Edgar

| | Au | Au Chk | Au Chk |
|-------------|--------|--------|---------|
| Sample . | FA-AAS | FA-AAS | FA-GRAV |
| Number | g/Mt | g/Mt | g/Mt |
| 47. | e: | : * | |
| 801 | < 0.01 | | |
| 802 | < 0.01 | | |
| 803 | 0.02 | | |
| 804 | 1 0.15 | | |
| 805 | 0.01 | | |
| 806 | 9.25 | | |
| 807 | 0.24 | | |
| 808 | 0.06 | 5 | |
| 809 | 0.13 | 3 | |
| 810 | 5.90 |) | 6.17 |
| Blank Value | 0.02 | 2 | |
| OxH97 | 1.25 | ò | |
| 811 | 0.31 | L | |
| 812 | 0.18 | 3 · | |
| 813 | 0.07 | 1 | |
| 814 | 0.05 | ö | |
| 815 | 0.10 |) | |
| 816 | 0.03 | 3 | |
| 817 · | 0.02 | 2 | |
| 818 | 0.10 | D | |
| 819 | 0.08 | 3 | |
| 820 | 1.1 | 1 | |
| 821 | 0.02 | 2 0.02 | |
| 822 | 0.03 | 3 | |
| 823 | 0.03 | 2 | |

1. No Reject

5 chits Certified by

Jing Lin, M Sc.

1 Cameron Ave., P.O. Box 10, Swastika, Ontario P0K 1T0 Telephone (705) 642-3244 Fax (705) 642-3300

Assaying - Consulting - Representation

Page 1 of 1

Assay Certificate

Certificate Number: 16-780

| Company: | First Minerals Exploration Ltd. | | |
|----------|---------------------------------|--------------|-----------|
| Project: | Jacobson-Riggs | Report Date: | 13-Jul-16 |
| Attn: | Bruce Edgar | | |

We hereby certify the following Assay of 17 core samples submitted 15-Jun-16 by Bruce Edgar

| | Au | Au Chk | Au | Au Chk | |
|-------------|--------|--------|---------|---------|--|
| Sample | FA-AAS | FA-AAS | FA-GRAV | FA-GRAV | |
| Number | g/Mt | g/Mt | .g/Mt | g/Mť | |
| | | | | | |
| 824 | 0.20 | | | | |
| 825 | 4.02 | | | | |
| 826 | 3.18 | | | | |
| 827 | 2.63 | | | | |
| 828 | 1.92 | ٠ | | | |
| 829 | 0.63 | - N E | | | |
| 830 | 2.60 | | | | |
| 831 | 5.37 | | | 5.80 | |
| 832 | 5.87 | | | 5.86 | |
| 032 | J. 0/ | 1 50 | | 9.00 | |
| 0.5.5 | 4.04 | 4.50 | | | |
| Blank Value | < 0.01 | | | | |
| OxH97 | 1.26 | | | | |
| 834 | 5.94 | | | 5.66 | |
| 835 | 2.53 | | | | |
| 836 | 17.76 | | | 16.76 | |
| | | | | | |
| 837 | 4.36 | | | | |
| 838 | 0.92 | | | | |
| 839 | 014 | | | | |
| 840 | | | 15.63 | | |

chity Certified by

Denis Chartre

1 Cameron Ave., P.O. Box 10, Swastika, Ontario POK 1T0 Telephone (705) 642-3244 Fax (705) 642-3300

Assaying - Consulting - Representation

Page 1 of 1

Assay Certificate

Certificate Number: 16-797

| Company: | First Minerals Exploration Ltd. | | |
|----------|---------------------------------|--------------|-----------|
| Project: | Jacobson-Riggs | Report Date: | 22-Jul-16 |
| Attn: | Bruce Edgar | | |

We hereby certify the following Assay of 22 core samples submitted 20-Jun-16 by Bruce Edgar

| Sample Number | Au FA-AAS g/Mt | Au Chk FA-AAS g/Mt | Au Chk FA-GRAV g/Mt | |
|------------------|----------------------|-----------------------------|----------------------------------|--|
| 0841 | 0.01 | | | |
| 0842 | 0.81 | | | |
| 0843 | 0.29 | | | |
| 0844 | 0.23 | | | |
| 0845 | 0.24 | | | |
| 0846 | 1.15 | 10. 1111 MILLY WALL 10. | | neede deenee waarde waarde waarde daar een waarde de eerste de eerste de eerste de eerste de eerste waarde waar - |
| 0847 | 1.03 | | | |
| 0848 | 0.10 | | | |
| 0849 | 0.03 | | | |
| 0850 | 0.03 | 0.02 | | |
| Blank Value | < 0.01 | ne në tënës të nga isterati | | nanga angka manga angka manga apada angka an |
| OxH97 | 1.28 | | | |
| 0851 | 0,19 | | | |
| 0852 | 1.83 | | | |
| 0853 | 0.89 | | | |
| 0854 | 6.94 | | 7.44 | ana ang mang mang mang Sana Sana ang sana ang sana ang mang mang mang mang mang sang sang sang sang sana sa sa |
| OxL118 | | | 5.79 | |
| 0855 | 0.42 | | | |
| 0856 | 0.12 | | | |
| 0857 | 0.40 | | | |
| 0858 | 0.04 | en men anne ara an | pe ferrar an ed ar an a serrer a | ارد. بینی بینده بین است بین است در می می می است میش می است است این از در می در می این است است است است است این |
| 0859 | 0.11 | | | |
| 0860 | 1.06 | | | |
| 0861 | 0.03 | 0.03 | | |
| 0862 | < 0.01 | | | |

Certified by Denis Chito

1 Cameron Ave., P.O. Box 10, Swastika, Ontario POK 1T0 Telephone (705) 642-3244 Fax (705) 642-3300

Assaying - Consulting - Representation

Page 1 of 1

Assay Certificate

Certificate Number: 16-904

| Company: | First Minerals Exploration Ltd. | | |
|----------|---------------------------------|--------------|-----------|
| Project: | Jacobson-Riggs | Report Date: | 27-Jul-16 |
| Attn: | Bruce Edgar | | |

We hereby certify the following Assay of 20 core samples submitted 06-Jul-16 by Bruce Edgar

| Sample Number | Au FA-MP g/Mt | Au Chk FA-MP g/Mt | |
|------------------|---------------------|---------------------------------------|---|
| 863 | 0.01 | 192 Millio anno 1970 | and and and the the set of the set |
| 864 | 0.06 | | |
| 865 | 0.02 | | |
| 866 | 0.18 | | |
| 867 | 0.02 | | |
| 868 | 0.01 | | an ana ana ama mana mana sin dana ana ana ana ana ana ana ana ana a |
| 869 | < 0.01 | | |
| 870 | < 0.01 | | |
| 871 | 0.01 | | |
| 872 | < 0.01 | < 0.01 | 5 5 |
| Blank Value | < 0.01 | n no no mus ny _{se w} | nyyy neny mana ama ama ama ama ama na na na na tan tan tan tan tan tan ta |
| OxH97 | 1.26 | | |
| 873 | 0.01 | | |
| 874 | 0.01 | | |
| 875 | 0.02 | | |
| 876 | 0.09 | e seen aanta anna anna a | anna ana ang kan nan nan nan na na na ma nan nan nan n |
| 877 | 0.04 | | |
| 878 | 0.03 | | |
| 879 | 0.11 | | |
| 880 | 1.07 | | |
| 881 | 0.12 | | and |
| 882 | 0.01 | 0.01 | |

mi chito Certified by

Denis Chartre

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