GEOLOGICAL REPORT OF THE ELIZABETH LAKE PROJECT

CLAIM No 4241317

MIDLOTHIAN TOWNSHIP, ON

By:

Pierre Vincent, P.Geo

APGO No. 1438

OGQ No. 540

Prepared for:

MCD Exploration and Survey LTD.

www.mcdexplosurvey.com

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APPENDICES

1. INTRODUCTION

This report covers claim CL4241317 located around Elizabeth Lake in Midlothian Township, Ontario. A geological survey was conducted to map and describe existing outcrops and to look for mineral showings of economic interest namely gold and other precious metals. Several quartz-carbonate lode veins and stringers where exposed. Visible gold and sulfide mineralization was encountered in quartz-carbonate samples from steep dipping Timiskaming metasediments displaying strain partitioning related with the Cadillac-Larder Lake deformation zone (CLLdz). From Matachewan, the CLLdz is considered to follow a south-west trace toward Midlothian Township, or farther south toward Shinning Tree. Many gold deposits are associated with splays faults or structures emanating in various directions from these regional faults.

2. LAND STATUS

The property is composed of one 12-unit claim numbered 4241317 in favour of:

100% MCD Exploration and Survey LTD (1789117 Canada LTD)
45 O'Connor, Suite 1150, Ottawa, Ontario K1P 1A4

3. LOCATION AND ACCESS

The property of 192 hectares is located in Midlothian Township, about 64 kilometres south of the Timmins gold-base metal mining areas and 32 kilometres west of Matachewan, enclosing Elizabeth Lake and Roche Lake, at the coordinates 47°50'48.2" N, 80°56'32.05" E, at an elevation of 400 m (**Fig 1**). Access is gained from HWY 566 to Matachewan, and going west past the Young Davidson mine, and at about 75 km from Elk Lake, James Township, ON. A mining road going to the west arm of Lloyd Lake and a high voltage hydro-electric transmission line maintenance road give convenient access to the area.

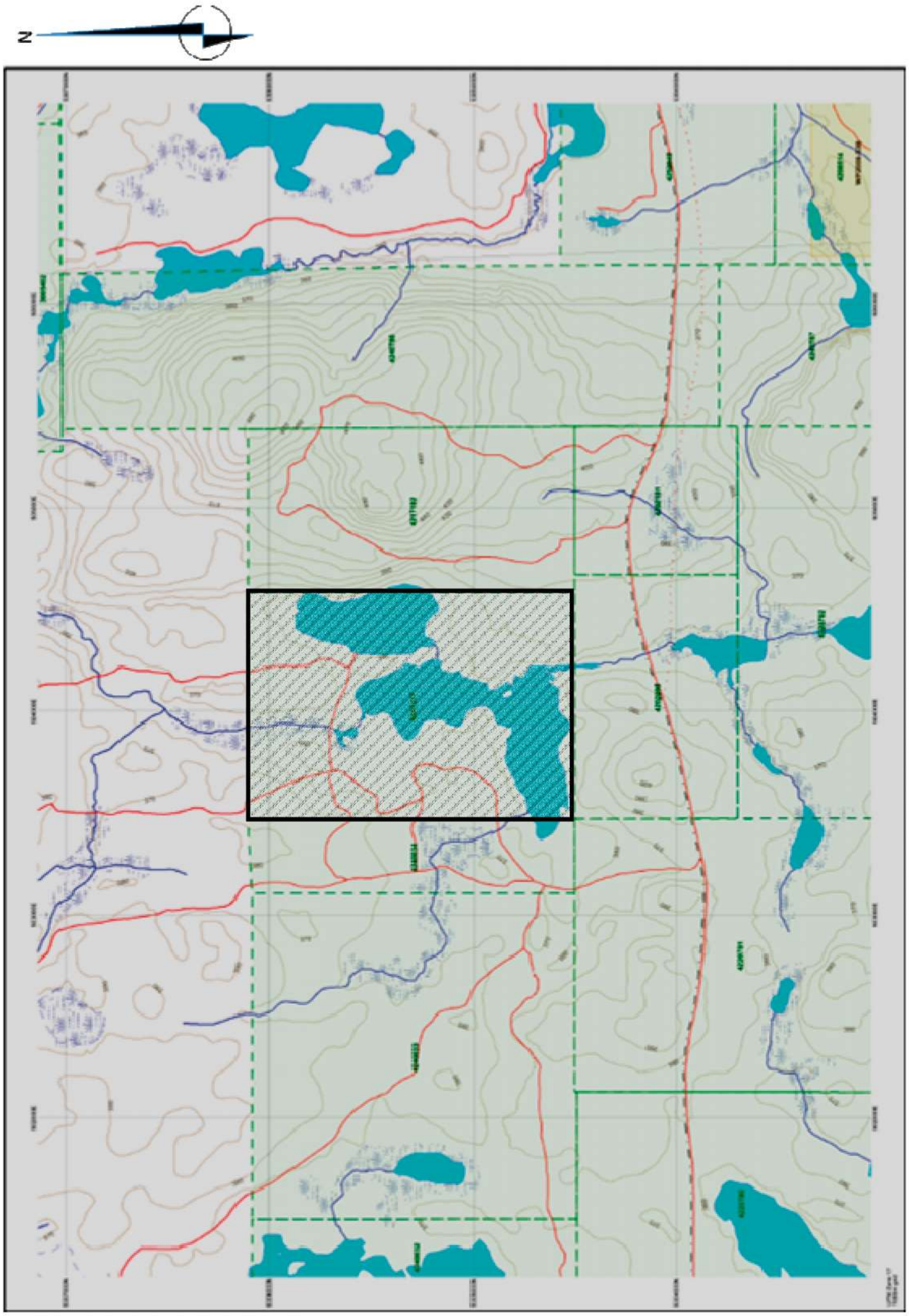


Figure 1 Claim 4241317 location and access

4. HISTORY OF WORKS AND DEVELOPMENTS

Most of the historical records of exploration and mining development with a list of assessment work reports filed to the end of March, 1968 can be found in the Geological Report 79 by E.G. Bright (Bright 1979), published in 1979 by the Ontario Department of Mines. The reader is also invited to consult the MNDM library.

In 1946, Marshall (1947, p.17) visited the Elizabeth Lake showings and described exploration carried out in the area as follows: *'Goodwin et al. have a group of unpatented claims around Elizabeth Lake adjoining those of Laclothian Mines, Limited. The area is covered with considerable overburden, but a few outcrops of Timiskaming sedimentary rocks were mapped. Some stripping and trenching were done in 1945. Several small quartz stringers were noted, and mineralization, chiefly pyrite, is scant. Visible gold was noted in an outcrop on the creek south of Elizabeth Lake'* (Bright, 1970).

Gold was first discovered in Midlothian Township in 1909. Since then the three peak periods of prospecting and staking activity prior to 1970 were 1917, 1944, and 1962. In 1945, Cominco Limited, formerly Consolidated Mining and Smelting Company of Canada Limited, optioned a group of twenty non surveyed claims near Patricia Lake, Midlothian Township, from J. H. Ragan of Elk Lake and A. D. Williams of Toronto. Chip samples of sericite and sericite-chlorite schist from a pit 2,000 feet southwest of Patricia Lake gave an assay of 0.44 opt gold (Gardiner 1946). From 1962 to 1966, Stairs Exploration and Mining Company Limited held these claims.

In 1967, Laroma Midlothian Mines Limited held three surveyed claims, formerly MR13317, MR13320, and MR13321 on the southwest shore of Midlothian Lake. The company was incorporated in 1944, following the discovery of gold between Midlothian and Mitre Lakes. In the pit on former claim MR13320, Bright (1979) observed minor amounts of pyrite, chalcopyrite, and sphalerite in the quartz veins and dolomitic wallrock. A chip sample from this pit gave an assay of 1.34 opt gold (The Northern Miner 1963). Bright (1979) also observed gold in a 1/4-inch wide quartz vein, in a network of narrow quartz veins, in the large pit on former claim MR13317. A bulk sample of about 60 pounds taken from this pit gave an assay of 0.76 opt gold (The Northern Miner 1963). Two holes were drilled near these pits to test the showings at depth. Several holes drilled along the metavolcanic-metasedimentary contact northwest of the green carbonate zone, in former claim MR13583, intersected a number of zones of disseminated to massive graphite-pyrite-marcasite.

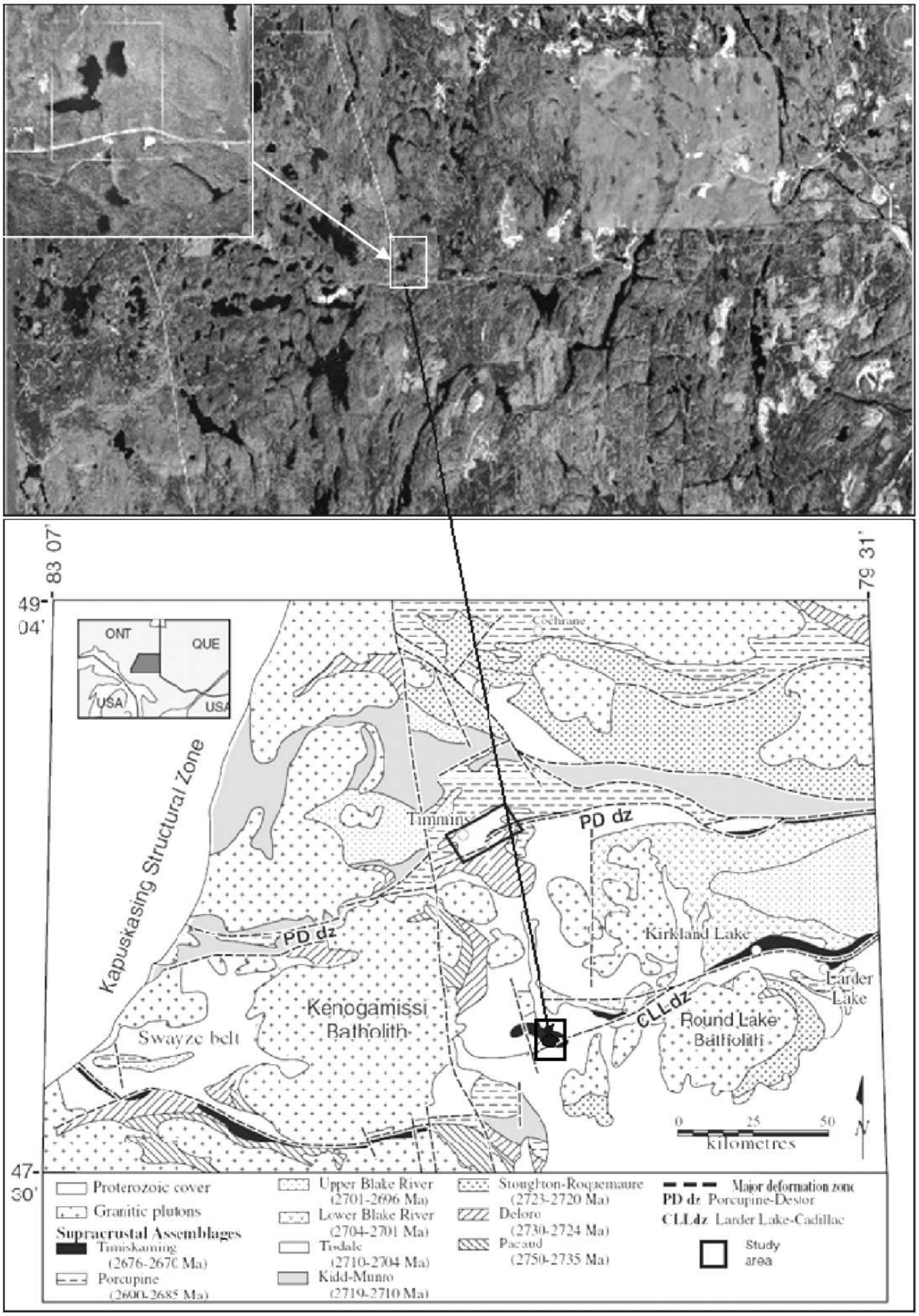
In 1963, Riocanex Limited (Rio Tinto Canadian Exploration Limited) optioned a block of 28 claims, surrounding Holbrooke Lake, from Stairs Exploration and Mining Company Limited. The property included the Stairs' Wood Lake (No. 2) auriferous zone. Before 1963, Stairs had drilled 5 holes on the eastern end of the Wood Lake shear zone in former claim MR33463. Stairs reported assays averaging 0.53 opt gold over an 8-foot core section of sheared carbonatized conglomerate (The Northern Miner 1962).

Gold-bearing quartz veins and stringers are found in a zone of sheared and altered conglomerate and arkose northeast of Wood Lake, Midlothian Township. The zone can be reached by a 1-mile from the Stairs Mine. Stairs reported assays averaging 0.53 opt gold over an 8-foot section of core from a sheared carbonatized conglomerate (The Northern Miner 1962). Assays from each side of this core section are much lower grade. Five holes were drilled on this zone in the eastern part of former claim MR33463. In 1963, Stairs optioned this property to Riocanex Limited.

On 2nd July 1965, Stairs Exploration and Mining Company Limited opened the first producing mine in the area. From September, 1965 to April, 1966, the mine produced 2,674 ounces of gold and 1,318 ounces of silver valued at $100,729. A mill was installed underground on the 80-foot level, largely in a section opened by the original inclined adit that serves this level. Milling, using a gravity-amalgamation circuit of 50 to 75 tons initial capacity, began in September, 1965. Insufficient ore reserves, increased mining costs, and a lack of skilled labour forced the closure of the mine and mill in June, 1966. The mine milled 11,952 tons of ore and produced 2,764 ounces of gold and 1,318 ounces of silver. In 1966, Stairs began a program to investigate several conductive zones indicated by an airborne magnetic and electromagnetic survey on their large claim holdings in Halliday and Midlothian Townships. South of the mine shaft, several drill holes intersected a zone of graphitic tuff and slate about 100 feet wide containing disseminated to massive pyrite and nodular marcasite. Drilling intersected 189 feet of graphitic tuff and slate farther west along strike, near the west end of Bowl Lake in Halliday Township. Still farther west along strike, a drill hole collared on the island in Campbell Lake intersected about 200 feet of the same sulfide zone. Geological and drilling information indicate a possible strike length of 13,000 feet for this graphite-pyrite-marcasite zone. In May, 1966, several holes were drilled on a peridotite-rhyolite contact near the west end of Strange Lake, Midlothian Township. Small areas of carbonate replacement in the rhyolite adjacent to the contact contain disseminated pyrrhotite, chalcopyrite, and sphalerite. A 1/2- by 2-inch core section assayed gave: 0.001 opt Au; 0.30 opt Ag; 0.70 % Zn; 0.27 % Ni; 0.15 % copper; and 0.10 % Pb. During the summer of 1967, Stairs began a stripping program on the east shore of Campbell Lake, Halliday Township, to investigate a conductive zone along the metavolcanic-metasedimentary contact. Some stripping was also done on the Campbell Lake Zone.

In 2003, the Ontario Geological Survey published an airborne magnetic and electromagnetic surveys map (Map 81 763) of the Halliday Dome area, under the Discover Abitibi Initiative Program. The magnetic data exhibit a pattern that suggests a parabolic trace of the Larder Lake-Cadillac Break (LLCB), which would bring the break in a northwest direction towards Hincks Townships. From Matachewan, the LLCB is considered to follow a southwest trace toward Midlothian Township, or farther south toward Shinning Tree. Many gold occurrences are associated with splays faults or structures emanating in various directions from these breaks (**Fig 2**).

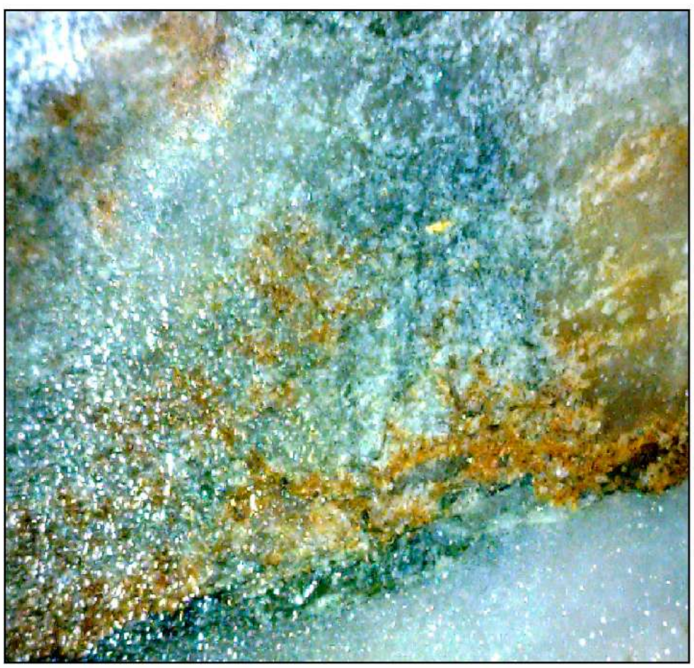
On May 20 to May 29, 2008, and June 6 and 7, 2008, a 12 days geological survey was carried out on claim 4202099 adjacent south of claim 4241317, by P. Vincent and J-P. Nosé, where six grab samples were collected from quartz-carbonate veins. Quantitative fire assays for the six samples were carried out by Swastika Lab, ON. Two of the samples have anomalous values of gold (0.01 – 0.02 g/t). One sample collected from a quartz-carbonate vein on an outcrop of the western portion of the claim 4202099 displays streak and specks of visible gold, evidently displayed through microscopic examination (**Fig 3**). The visible gold was confirmed by G. Grabowski, MNR district geologist in Kirkland Lake, also from microscopic observation, in June 2008. The 1945 Elizabeth Lake gold showing was also investigated with the finding of blocks of quartz-carbonate veins in old buried trenches. Additional quartz veins where exposed in new outcrops exposed nearby the 1945 gold showing.



http://cgc.rncan.gc.ca/mindep/synth_dep/gold/greenstone/index_e.php

Figure 2 Location of the EL Property in relation with regional geology

(a) X 400



(b) X 400

Figure 3 Sulfides with visible gold specks (a) and visible gold streak (b) in quartz vein from claim 420209

5. GEOLOGY

5.1 Regional Geology

The area is part of a central region of rhyolitic to dacitic flows, breccias and tuffs, and an outer region of andesitic to basaltic flow and pyroclastics rocks of Precambrian age which covers the adjoining townships of Sothman, Halliday, and Midlothian. In general, fabrics within the Halliday assemblage are steeply dipping, and northeast trending. Several northeast striking steeply dipping shear zones cut the Halliday assemblage and continue into the younger Neoarchean (*i.e., Timiskaming 2676-2670 Ma*) metasedimentary rocks of Midlothian assemblage along its eastern flank. The shear zones do not appear to displace the contact between felsic metavolcanics rocks of the Halliday assemblage and the metasedimentary rocks (Bright, 1970).

In the western part of the Midlothian metasedimentary belt, interbedded pinkish grey to grey arkose, tuffaceous arkosic grit, and black graphitic tuff and slate form the base of the stratigraphic succession. This assemblage disconformably (and in part gradationally) overlies older rhyolitic pyroclastic rocks. The basal arkosic beds are overlain by a thick sequence of grey-green to greenish black weathering pebble conglomerate containing minor interbeds of greywacke and arkose. The conglomerates consist of an open framework of poorly sorted, sub angular to rounded volcanic pebbles in a grey green to dark grey greywacke matrix. In order of abundance, the pebbles are dacite, rhyolite, quartz-feldspar porphyry, "greenstone", and white vein quartz.

These characteristics suggest a nearby source area for the sedimentary rocks. In the eastern part of the belt, pebble conglomerates similar to those described to the west form the base of the stratigraphic succession. Interbedded with the basal conglomerate are subordinate greywacke, arkose, and slaty argillite. In places zones of graphitic tuff and slate, and green carbonate rock separate the conglomerate from the underlying older rhyolitic strata. The basal conglomerate near the southwest shore of Midlothian Lake is overlain by a 6,000- to 8,000-foot thick sequence of interbedded greywacke and conglomerate. Interbedded with these rocks are subordinate layers of dark green to black finely bedded slaty argillite and fine-to-medium-grained, massive, pinkish grey pebble arkose. Minor andesitic tuff agglomerate lenses are interstratified with the greywacke and slaty argillite near the top of the sedimentary stratigraphic succession (Bright, 1970).

Ultramafic and mafic sills and stocks intrude the outer rhyolitic strata of the area, and younger, Matachewan-type, diabase dikes occupy some of the north-trending faults and fractures. Flat lying Proterozoic sedimentary rocks (Huronian) of the eastern part of the area are intruded by a few small diabase dikes and sills, Nipissing type. The unconsolidated silt, sand and gravel are chiefly of Pleistocene age (Bright, 1970).

To the east in Midlothian Township, a system of north-trending left-lateral faults along Mitt Lake and Fault Lake offset the metavolcanics-metasedimentary contact about 3,500 feet and 600 feet respectively. The abrupt termination of the metasediments between Campbell and Radio Lakes suggests either a major fault displacement or a very rapid pinching out of the strata. The east-trending contact of the metavolcanics with the metasediments is a prominent zone of intensive shearing (Bright, 1970).

Powel (1991), in its report on the structural history and distribution of high-strain zones forming the Larder Lake-Cadillac deformation zone in the Matachewan area, describes 5 distinct deformation events of Archean age (D_A), and two deformation events of Proterozoic to Paleozoic age (D_P), summarized below:

D_A0 resulted in ESE-WNW regional folds, without associated cleavage, and south-verging faults, post-dating Abitibi volcanism but pre-dating Timiskaming Group deposition, and formed between 2701 Ma and 2685 Ma. Late D_A0 faults controlled the creation of *pull-apart basins* deposition of Timiskaming Group, which lies in narrow belts along the Porcupine-Destor and Larder Lake-Cadillac breaks.

D_A1 resulted in strong L-S fabrics in the greenschist-facies thermal aureole of the Round Lake batholith (RLB), formed by the diapiric rise of the batholith during D_A0. Folds with axial traces subparallel to the batholith margin formed in the foliated contact aureole along the northern flank of the RLB.

D_A2 resulted in discrete ESE-WNW trending domainal zones of "banded" cleavage formed by pressure solution of highly CO_2-metasomatized rocks. The intense carbonate alteration accompanied D_A2. The Larder Lake-Cadillac break (LLCB) associated splay faults were formed in D_A2.

D_A3 resulted in crenulations and/or transposition of the S_A2 cleavage, during which some segments of the LLCB and related faults, segments of the LLCB and associated splay faults were re-oriented into ENE-WSW strike and strong, steeply-plunging linear fabrics were formed.

D_A4 resulted in N-S cross-faults (e.g., Mistinikon Lake fault) and open, moderate to steeply-plunging, N to NE folds.

D_P1 resulted in reactivation of D_A2- D_A3 and D_A4, especially near fault intersections, forming upright, open, right-stepping, en echelon folds in the Gowganda Formation, above and adjacent to the reactivated ENE-WSW Archean faults. In the later stages of D_P1, movements along the N-S faults increased, relative to that along the ENE-WSW faults. Extensional quartz veins, and quartz veinlets emplaced in hk0 joints (parallel to fold axes and oblique-orthogonal) are common features of D_P1 zones.

D_P2 resulted in NW-SE and N-S normal faulting and/or reactivation of D_A4 faults as normal faults (e.g., Mistinikon fault).

The Proterozoic Huronian Supergroup of the Southern Province covers the south western extent of the Abitibi belt. The Cobalt Group, the youngest group within the Huronian Supergroup, unconformably overlies the Archean rocks in the eastern part of the Property. The upper-contact of the Gowganda Formation is an intrusive contact where the younger rock is "Nipissing" diabase. The rocks of the Gowganda Formation consist of horizontal or gently dipping interbedded greywacke, conglomerate, quartzite, argillite, and some arkose. Within the coarser-grained strata of the Gowganda Formation, where the Dp1 cleavage is not developed, the presence of linear zones of rocks exhibiting abundant slump features and/or anomalous (relative to the regional trend) bedding orientation can be used to infer the presence of a paleo-valley which may be associated with an Archean fault zone. These buried faults could be the sites for possible development of secondary dispersion of Archean gold and/or elements in gold deposit during earlier deformation events, with gold-bearing fluid migration and precipitation in quartz veinlets developed in the Gowganda Formation during Dp1 folding (Powel, 1991).

5.2 Property Geology

At property scale, the rocks are part of the Midlothian assemblage metasedimentary belts that extends from Elizabeth Lake to Campbell Lake, in Halliday Township. East of Elizabeth Lake, the belt is concealed beneath the Huronian strata. The eastern part of the belt that occupies the Property area ranges from 2,500 to 3,600 meters thick. Pebble conglomerates form the base of the stratigraphic succession. Interbedded with the basal conglomerate are subordinate greywacke, arkose, and slaty argillite. Minor andesitic tuff-agglomerate lenses are interstratified with the greywacke and slaty argillite near the top of the sedimentary stratigraphic succession.

Numerous quartz veins are found in outcrops outlined by sheared and fractured cliffs with related structural features in an east to north-east trend in the deformed rocks. On the eastern shore of Elizabeth Creek, a large outcrop of diabase rock stretches N-S with a width of roughly 80 m and a minimal length of 1300 m within the limit of the claim boundaries.

5.3 Mineralization and deposit type

Evidences shown on deformed outcrops associated with complex vein networks are related with regional strain partitioning within the Cadillac-Larder deformation zone. The timing of the quartz veins would be late stage of Kenoran orogeny and post (+100 Ma), and would correspond with dehydration melting in lower crust of accreted terranes (2700 Ma to 2685 Ma). Terminal subduction, possibly involving complex plate interactions at 2685 to 2675 Ma, generated alkali volcanic rocks and alluvial-fluvial sediments in proximity to crustal-scale shear zones. Important deformation would follow with bulk inhomogeneous shortening of the rock mass, within Timiskaming assemblage (post-2670 Ma). Archean lode gold mineralization generally shows a spatial relationship to these regional shear zones. Late dextral transpressional displacement followed the terminal collision of the accreted terranes, where most gold deposits are associated with, developed largely as oblique slip and extensional vein arrays formed during the late D_A3 strike-slip faulting and D_A4 faulting. Hence, the timing of gold deposits is typically late within the tectonic evolution of its host terranes. The current geometries and their enclosing rocks are essentially the same in map and cross-sectional view as they were at the time of gold mineralization, as the primary control on the sitting of the gold deposits are the geometry (including orientation) of the controlling structures and the nature and geometry of host sequences. Powel (1991) is suggesting that in the latter stages of compressional event (*i.e., Kapuskasing Uplift 225-230 Ma*), the maximum principal stress axis rotated anti-clockwise, so that motion along the east-northeast faults decreased and motion along north-to-south-trending structures increased. Pre-existing

Archean faults with north-northwest to north-northeast trends were activated at this time as reverse faults. However Proterozoic reactivation of the basement faults is small (less than 10's metres) in the Matachewan area, and appears to have been localized particularly at the intersections of east-west and north-south faults (Powel, 1991, in pages 50- 51).

Greenstone–hosted quartz-carbonate vein deposits are normally sited in second-or third order structures, typically near large-scale, commonly transcrustal, first-order compressional or transpressional structures. The controlling structures are commonly ductile to brittle, highly variable in type, including brittle faults to ductile shear zones with both low-angle to high-angle reverse motion and strike-slip or oblique-slip motion, fracture arrays, stockwork networks or brecciated zones in competent rocks, foliated zones and fold hinges, and overturned limbs in ductile metasedimentary sequences. The altered conglomerate is a more favourable host rock for gold-bearing quartz veins than the altered arkose or greywacke.

Numerous quartz-carbonate veins are found associated with these deformation patterns. The general trend is east-northeast-southeast (N070° to N110°) and north-to-south in oblique shear pattern, and shallow-dipping extensional veins extending mostly outside the shear zones, exemplified on claim 4202099 (**Fig 4**). The bearing shear zones and faults associated with this deposit type are mainly compressional and they commonly display a complex geometry with anastomosing and/or conjugate arrays. The laminated quartz-carbonate veins typically infill the central part of, and are sub parallel to slightly oblique to, the host structures. The shallow-dipping extensional veins are either confined within shear zones, in which case they are relatively small and sigmoidal in shape, or they extend outside the shear zone and are planar and laterally much more extensive. Visible gold was encountered in quartz-carbonate veins on the eastern shore of Elizabeth Lake, and also by the main road and access road going to the south shore. The quartz-carbonate veins generally contain 30% inclusions, streaks, or septa of the enclosing rocks (**Fig 5**). Sulfide mineralization is usually scant except in silicified alteration zones associated with intense deformation zones (**Fig 6**).

(a)

(b)

Figure 4 Quartz veins in oblique shear patterns (a) and shallow-dipping extensional vein (b), from claim 4202099

Figure 5 X 400 views of inclusions and septas in quartz vein (claim 4202099)

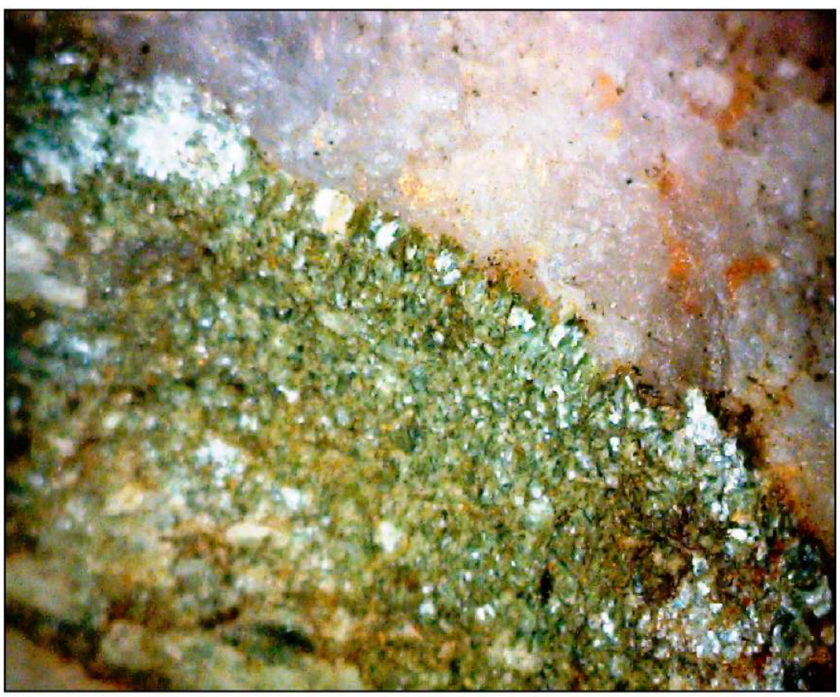


Figure 6 X 400 view of sulfide (pyrite) in quartz vein (claim 4202099)

Veins are sometimes deformed with boudins related with microfoldings associated with shear zones, commonly associated with slikenside fabrics. Color of the quartz veins varies from white to grey, black, and greenish, brownish or bluish grey. The veins are usually in stringer arrays of 5 to 20 cm, anastomosed over a width of 1 to 3 m. Veins arrays are found in areas of 300 m x 100 m in the south and central-east sectors of the claim and are anomalous in gold.

6. FIELD WORK AND EXPLORATION GEOLOGY

A 12 days geological survey was carried out from June 23 to June 27 and from September 9 to September 14, 2009 to map outcrops with existing geological features (lithologies, structure, alteration, and mineralization). The mapping method used traverses along cut-lines, claim boundaries, existing access bush roads and trails. Logistics was facilitated by lake crossing with canoe. Measurements were done with compass and GPS, compiled on field sheets and integrated in electronic files for drafting and cartographic purpose.

The field observations were reported on a 36" x 42" base map at scale of 1: 1250 metric with NAD-83 UTM grid reference covering the claim boundaries. Processed air-photos and satellite images were enhanced to exhibit lineaments representing structural features and geological contacts, to be compared with existing geological and airborne geophysical maps. These structural features were mapped with lineament extraction through image analyses to target favourable areas to be further investigated using geochemical and geophysical techniques.

In September 2009, stripping was carried out on the eastern shore of the lake, north of Elizabeth Creek and nearby the island where large quartz carbonate veins where earlier exposed in June 2009. The outcrop was sketched and mapped to scale 1:20 metric using detailed photography mosaic and image enhancement techniques. Two grab samples of 4.2 and 2.78 kg each were collected (4241317-09-01 and 02) from quartz-carbonate veins and assayed by ALS Chemex in Vancouver, BC, September 11, 2009, for gold and multi-elemental complete characterization (**Appendix A and B**)

In the quantitative fire assay fusion procedure, the sample pulp (1000 g) is passed through a 100 µm (Tyler 150 mesh) stainless steel screen. Any material remaining on the screen (+) 100 µm is retained and analyzed in its entirety by fire assay with gravimetric finish and reported as the Au (+) fraction. The material passing through the screen (-) 100 µm fraction is homogenized and two sub-samples are analyzed by fire assay with AAS finish (Au-AA25 and Au-AA25D). The average of the two AAS results is taken and reported as the Au (-) fraction result. All three values are used in calculating the combined gold content of the plus and minus fractions. The gold values for both the (+) 100 and (-) 100 micron fractions are reported together with the weight of each fraction as well as the calculated total gold content of the sample:

$$\text{Au avg(ppm)} = \frac{\text{Au}^-(1) + \text{Au}^-(2)}{2}$$

$$\text{AuTotal(ppm)} = \frac{(\text{Au avg(ppm)} \times \text{Wt.Minus(g)}) + (\text{Au}^+\text{(ppm)} \times \text{Wt. Plus (g)})}{(\text{Wt.Minus(g)} + \text{Wt.Plus(g)})}$$

Samples were also analysed by complete characterization package with whole rock analyses using ICP-AES (*Inductively Coupled Plasma Atomic Emission Spectroscopy*), plus carbon and sulphur by Leco Corp, (*using time-of-flight mass spectrometry*) to quantify the major elements in the sample. Base metals and trace elements, including the full rare earth suite, were reported using lithium borate fusion of the sample prior to acid dissolution and ICP-MS (*Inductively Coupled Plasma Mass Spectrometry*). The volatile gold related trace elements (path finder's series As, Bi, Hg, Sb, Se, Te) were carried out from a separate aqua regia digestion and using ICP-MS. Base metals (Ag, Co, Cu, Mo, Ni, Pb, and Zn) were also analysed from the four acid leach method followed by ICP-AES.

Quality control consists of using in house or CANMET standards, blanks, and by re-assaying at least 10% of all samples. The Lab supervisor may also have additional pulps prepared from stored rejects for assaying. All data is evaluated by the fire assay supervisor, and additional checks may be run on anomalous values.

7. RESULTS

About 50% of the area of claim 4241317 is covered by water with numerous outcrops encountered along the shores of Elizabeth Lake and Roche Lake, representing roughly 15-to-20% of the exposed landscape (**Fig 7**). The lithology is of Neoarchean metasedimentary rocks of Midlothian Assemblage; mostly composed of clasts-supported pebble conglomerate and lithic wacke intruded by late Matachewan diabase, elsewhere being buried by Pleistocene glacial drifts, gravel, sand and silt. In certain areas the outcrops display signs of deformation in form of stretched clasts in sheared matrix, with various intensity of shortening (**Fig 8**).

Along the eastern shore of Elizabeth Creek south and to the island, a large outcrop of diabase rock of a width of roughly 80 m and a minimal length of 500 m stretches north-to-south within the limit of the claim boundaries. The diabase is fine to medium grained, blue-grey color, composed of lath shaped plagioclases and intersertal pyroxenes, under microscopic observation (x 400). On the outcrop, the rock is fractured 15 cm with conjugated patterns oriented E-W and NNW (**Fig 9**).

By the eastern shore of Elizabeth Lake near the island, a 120 m^2 outcrop was stripped, exposing a lode of quartz carbonate veins (**Fig 10**). The outcrop is 15 metres long by 8 metres wide, oriented north-to-south. It is composed of clasts-supported polymictic conglomerate in faulted contact with diabase visible along shoreline and intensively fractured NE-SW and E-W (**Fig 11**).

The exposed rocks exhibit typical shear fabric, anastomosed with rhomb shape, with orthogonal joints spaced 5- to 20 cm and injected with large quartz-carbonate veins. Brecciated quartz-carbonate veins show fractured wall rock inclusions and septa in sheared patterns (**Fig 12**). The largest vein is 2 metres wide by 6 metre long, oriented NE-SW (N60°), located at the south end of the stripped outcrop (**Fig 13a**), where a large specimen of quartz-carbonate breccia was collected (**Fig 13b**). Other small veins (3m x 50 cm) and veinlets are distributed along the main shear zones in the outcrop's central area (**Fig 14a and b**). Senses of displacement is evidently displayed by kinematic indicators (slicken fabrics) on wall rocks and fracture patterns in the veins and enclosing rocks.

Plan 1, accompanying the report, shows a detailed survey, at 1:20 scale metric, of the fracture patterns with related veins distribution. The sketching was carried out on special photo mosaic documenting detailed structural features. Block displacements are evidently displayed with the breaking and displacement of the large quartz vein, where the western block is offset by a few metres NNE, through a right lateral (dextral) shear zone with the remaining brecciated quartz veins. The fracture pattern in parted in 3 main systems: (1) CS main shear with dextral sense oriented mainly N030°; (2) synthetic Riedel R shear with dextral sense oriented N060° and; (3) antithetic Riedel R' shear with sinistral sense oriented N110°, summarized in **Fig 15**.

Table 1 shows fire assays results for two grab samples 4241317-09-01 and 02, with Au screen fire assay – 100um, ore grade Au 30g FA AA finish and Dup, with trace values not exceeding 0.01 ppm (g/t), below the 0.05 ppm lower limit of detection.

Table 2 shows the results from whole rock analyses package, with similarities between CaO and Al_2O_3 values (8.88-7.52 % vs. 8.48-6.13%), followed by Fe_2O_3 (3.9-2.6%) and MgO (2.43-1.23%); MnO (0.4-0.34%) and K2O (0.34-0.2); TiO2 (0.09-0,01%) and Na2O3 (0.08-0,01%); SiO_2 been the highest (71.5-79%), BaO, SrO and P_2O_5 been the lowest (0.01%).

Table 3 shows the results from the volatile related gold trace elements, or path finder's series, with Sb (1.43-0.58 ppm) and As (1.3-0.1 ppm) been the significant elements associated with gold, probably as sulfo-arsenides, followed by Te (0.13-0.1 ppm), Bi (0.04-0.01 ppm), and last Hg (0.006 ppm).

Table 4 shows the results from the four acids leach and ICP-MS base metals analyses, with Zn been dominant base metal element (143-106 ppm), weakly associated with Ni (44 ppm), where Cu, Co, Pb, Cd, Ag, Mo show trace values or below limit of detection.

Table 5 show the results from fusion ICP-MS analyses for trace elements with REE's series. The average values are distributed in 3 groups; upper (10-100 ppm), mid (1-10 ppm) and lower (0.01-1), which are mostly expressed by the values of sample 4241317-09-01. The upper group elements are Zn, Sr, Cr, Ba, V and Ni, followed by the mid-group elements Zr, Pb, Rb, Co, Ga, Cu, Y, Ce, La, and lastly, the lower group elements with Mo, Sn, W, Ag, and the rest of the REE series. The values are consistent with the ones in table **4.**

Copies of the certificates of analyses are presented in **Appendix A**.

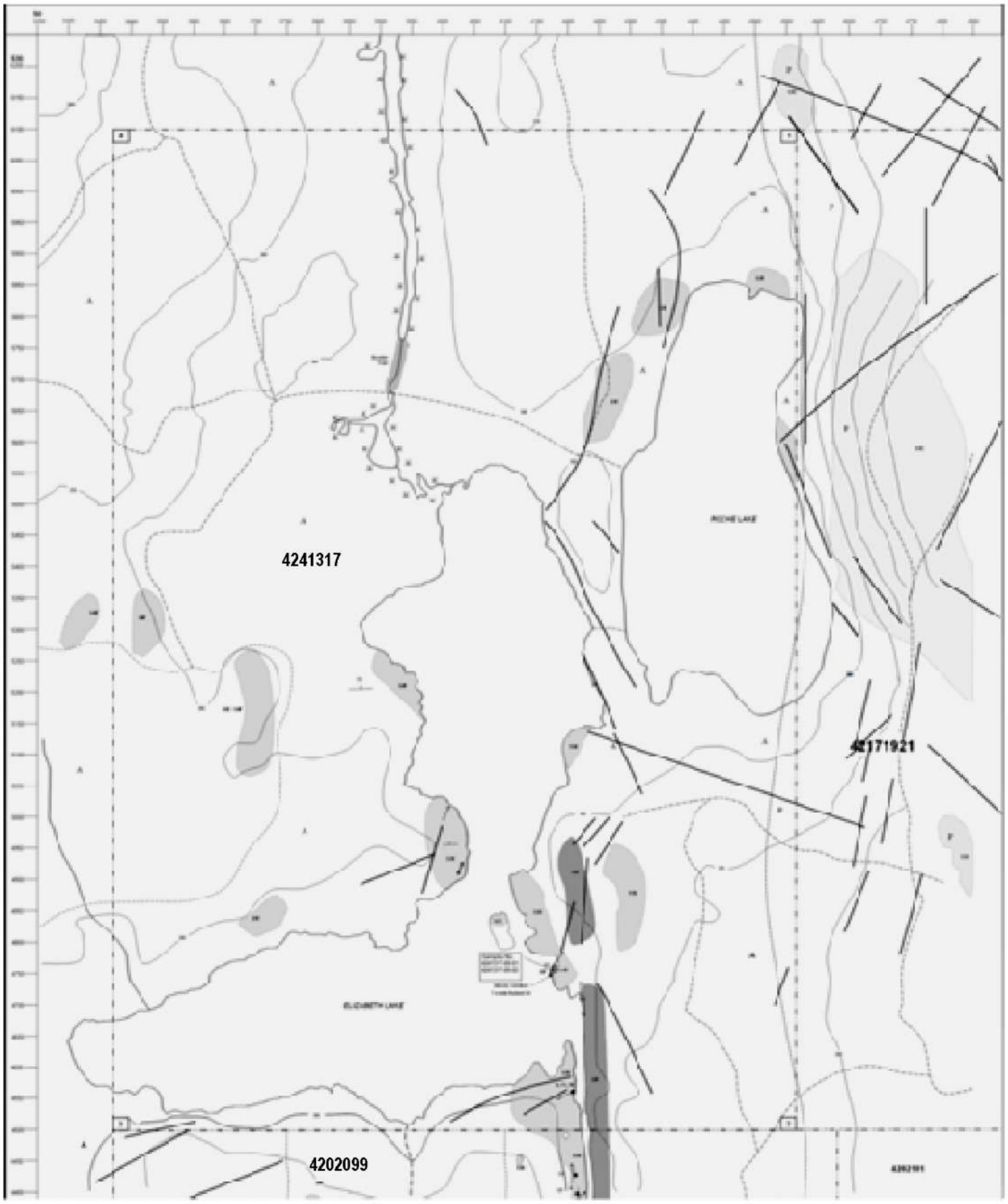


Figure 7 Claim 4241317 enclosing Elizabeth Lake and Roche Lake

Figure 8 Stretched clasts with various intensity of shortening

Figure 9 Fracture pattern in diabase dike, east shore of Elizabeth Creek south

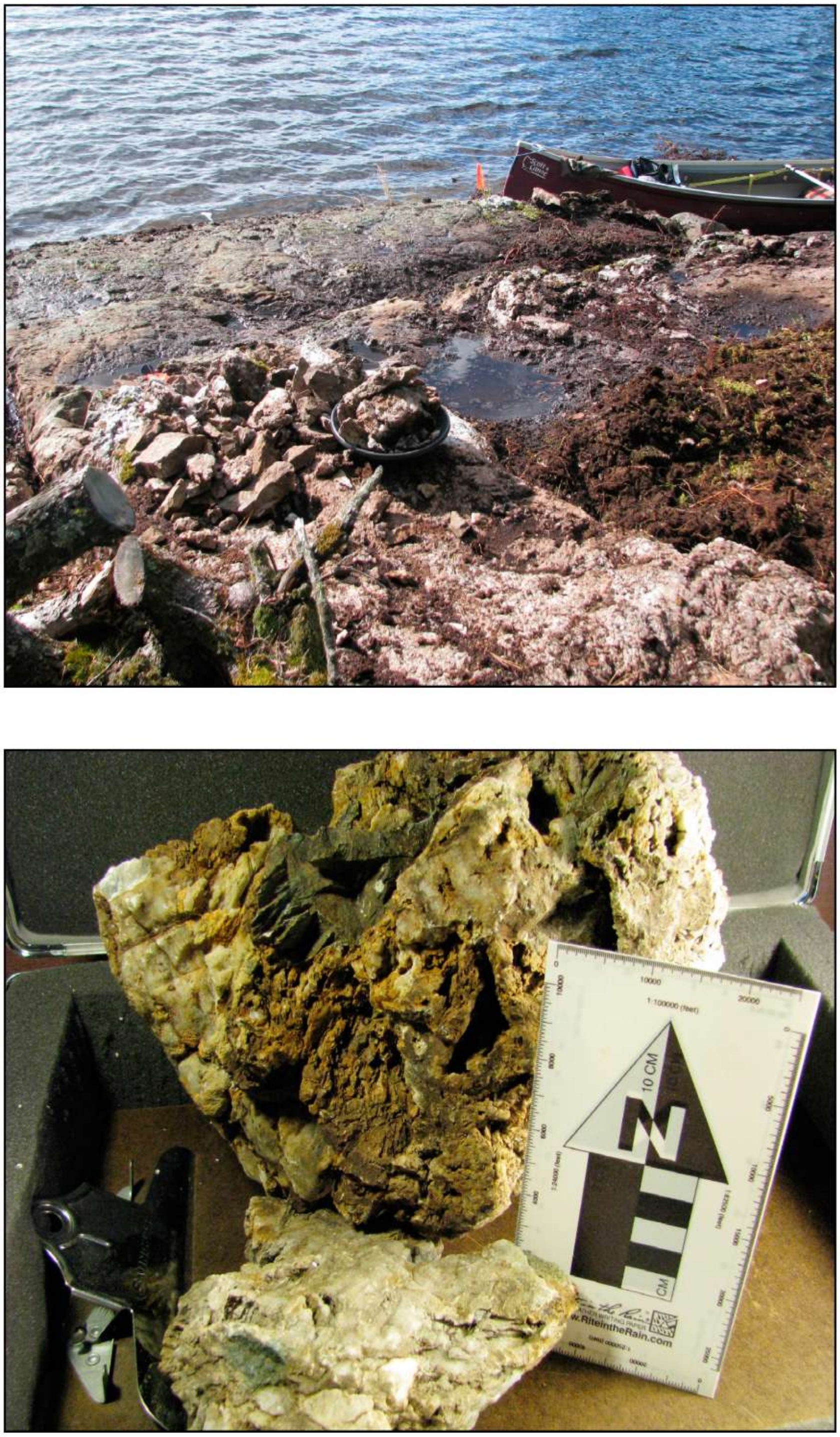
Figure 10 Stripped outcrop eastern shoreline of Elizabeth Lake by the island

Figure 11 Faulted contact with diabase visible along shoreline

(a)

(b)

Figure 12 Brecciated sheared patterns inside large quartz-carbonate vein



(a)

(b)

Figure 13 Large quartz vein (2 x 6 m^2) oriented ENE-WSW (a) with breccia (b)

(a)

(b)

Figure 14 Minor isolated quartz veins emplaced inside fractures and shears

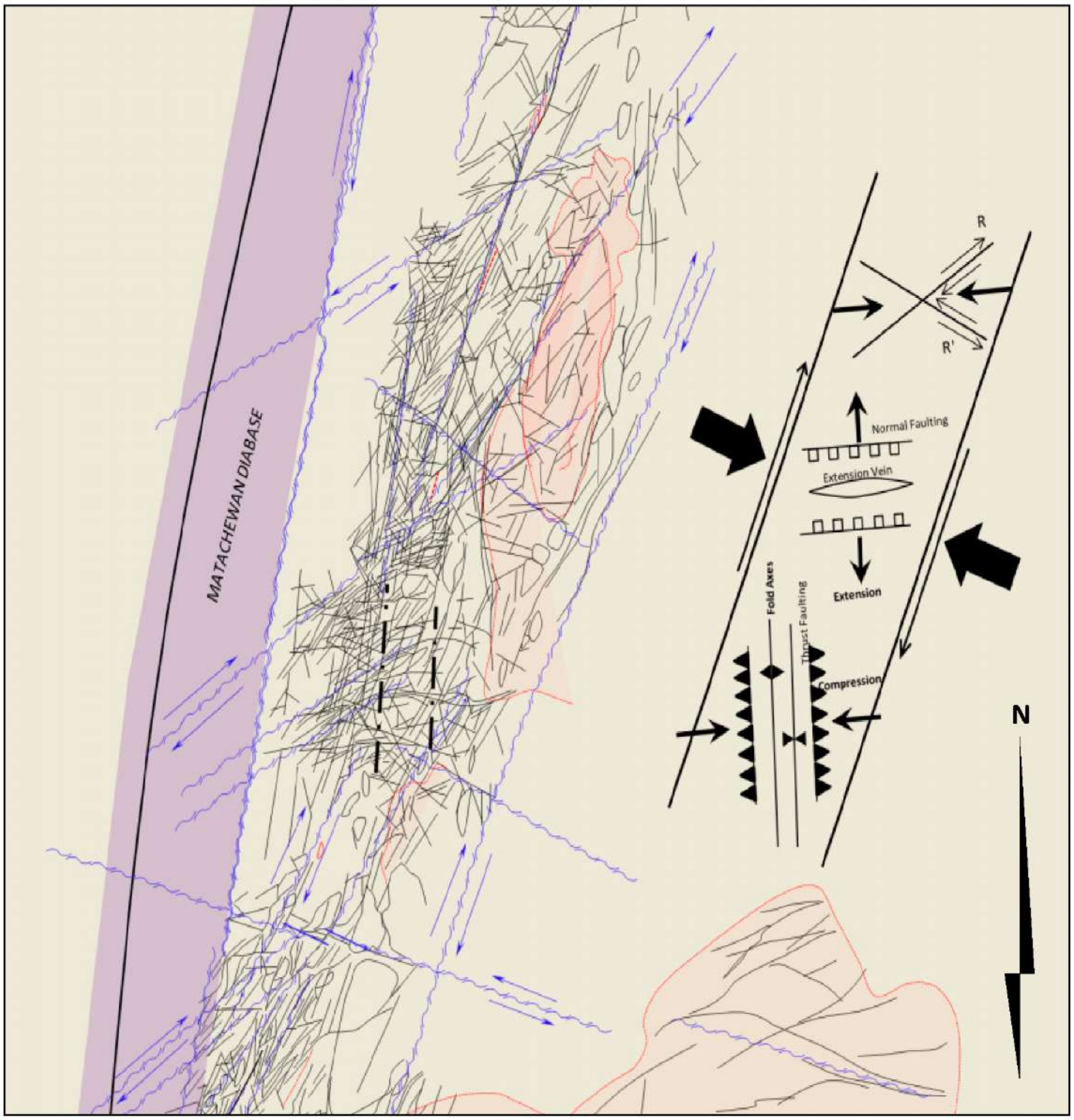


Figure 15 Sketch summarizing the deformation pattern on the stripped outcrop

Table 1 Quantitative analyses Au 30g FA AA (Quartz veins)

	Au-SCR21	Au-SCR21	Au-SCR21	Au-SCR21	Au-SCR21	Au-SCR21	Au-AA25	Au-AA25D
SAMPLE	otal (+)(-) Comb	u (+) Fractic	Au (-) Fraction	Au (+) mg	. + Frac Ent	. - Frac Ent	Au	Au
DESCRIPTION	ppm	ppm	ppm	mg	g	g	ppm	ppm
4241317-09-01	<0.05	<0.05	<0.05	<0.001	31,18	770,7	0,01	<0.01
4241317-09-02	<0.05	<0.05	<0.05	0,002	44,67	754,6	<0.01	<0.01

Table 2 Whole rock analyses (Quartz veins)

	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	C-IR07	S-IR08
SAMPLE	SiO2	Al2O3	Fe2O3	CaO	MgO	Na2O	K2O	Cr2O3	TiO2	MnO	P2O5	SrO	BaO	C	S
DESCRIPTION	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
4241317-09-01	71,5	8,48	3,89	8,66	2,43	0,08	0,34	0,02	0,09	0,4	0,01	0,01	0,01	0,02	0,01
4241317-09-02	79	6,13	2,59	7,52	1,23	0,01	0,2	0,01	0,01	0,34	<0.01	0,01	0,01	0,3	0,01

Table 3 Volatiles related gold trace elements (Quartz veins)

	ME-MS42	ME-MS42	ME-MS42	ME-MS42	ME-MS42	ME-MS42
SAMPLE	As	Bi	Hg	Sb	Se	Te
DESCRIPTION	ppm	ppm	ppm	ppm	ppm	ppm
4241317-09-01	1,3	0,04	0,006	1,43	<0.2	0,13
4241317-09-02	0,1	0,01	<0.005	0,58	<0.2	0,01

Table 4 Base Metals Four acids (Near Total) leach (Quartz veins)

	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD8	ME-4ACD81
SAMPLE	Ag	As	Cd	Co	Cu	Mo	Ni	Pb	Zn
DESCRIPTION	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
4241317-09-01	<0.5	<5	<0.5	8	1	<1	44	6	143
4241317-09-02	<0.5	<5	<0.5	3	<1	<1	3	4	106

Table 5 Trace elements and REE series analyses (Quartz veins)

	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81
SAMPLE	Ag	Ba	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Ho	La
DESCRIPTION	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
4241317-09-01	<1	109	3,1	8,6	160	0,32	<5	0,54	0,39	0,34	6	0,48	0,3	0,11	1,8
4241317-09-02	<1	54,8	1	3	40	0,18	<5	0,23	0,14	0,24	3,7	0,2	<0.2	0,04	0,9

	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81
SAMPLE	Lu	Mo	Nb	Nd	Ni	Pb	Pr	Rb	Sm	Sn	Sr	Ta	Tb	Th	Tl	Tm
DESCRIPTION	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
4241317-09-01	0,05	<2	0,5	1,4	53	9	0,34	7,8	0,35	1	103,5	<0.1	0,09	0,22	<0.5	0,06
4241317-09-02	0,01	<2	<0.2	0,3	6	5	0,08	4,2	0,11	1	88	<0.1	0,04	<0.05	<0.5	0,02

	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81
SAMPLE	U	V	W	Y	Yb	Zn	Zr
DESCRIPTION	ppm	ppm	ppm	ppm	ppm	ppm	ppm
4241317-09-01	0,06	71	1	3,8	0,36	149	12
4241317-09-02	<0.05	51	1	1,9	0,11	106	5

8. INTERPRETATION AND DISCUSSION

8.1 Structural analyses

The deformation pattern observed on the stripped outcrop is a strain partitioning deformation type with sub-vertical to moderately inclined and anastomed shears, displaying strike-slip displacements, and fold axes of Z type. Kinetic indicators, observed in wall rocks when associated with quartz veins, are of slickenside and stretching lineation types. Stretched deformed clasts are of uniaxial oblate SL tectonite style, with the development of flattening strain ($0< K< 1$). This classification is correlative with the one of granitic pebbles within a moderately deformed Timiskaming conglomerate in a D_A2 zone, Midlothian Township, southwest of Elizabeth Lake (Powel, 1991, figure 3.6, p29). Dimensions ratios based on number of measurements 24: xy, 19: xy, and 12: xz, would place its classification as transpressional in limit on wrenching (Y=0.5, K=0.95, with $b_{horizontal} = 1.378$, and $b_{vertical} = 1.147$) on a Flinn diagram (**Fig 16**).

The deformation regime can be subscribed into a global regional coaxial deformation system with bulk inhomogeneous shortening with strain partitioning evolving with non-coaxial sub-systems. Transpressional shear zones are characterized by the co-existence of different structures, related to both strike-slip shear and shortening. End member structures include pure strike-slip faults and pure thrust (reverse) faults. Faults which have component of both types (i.e. oblique slip faults) are abundant. In addition, transpression structures such as folds, tension fractures and Riedel shears all form in the shear zone but at different angles to those observed in simple strike-slip fault zone. Transpression, as defined here, refers to deformation that is accommodated by simultaneous strike-slip and contractional displacement.

Fig 17 shows a sketch summarizing the deformation pattern observed on the stripped outcrop as strain partitioning with normal shortening in a dextral transpression regime where the principal coaxial stress axes are directed SE-NW. It is correlative with the last Archean, deformation event of D_A4, and probably related with the Proterozoic age D_P1 and D_P2, resulting in N-S cross-faults (e.g., Elizabeth Lake fault) and open, moderate to steeply-plunging, N to NE folds. Block displacements are evidently displayed with the breaking and displacement of the large quartz vein, where the western block is offset by a few metres NNE, through a right lateral (dextral) shear zone with the remaining brecciated quartz veins (see **Plan 1).**

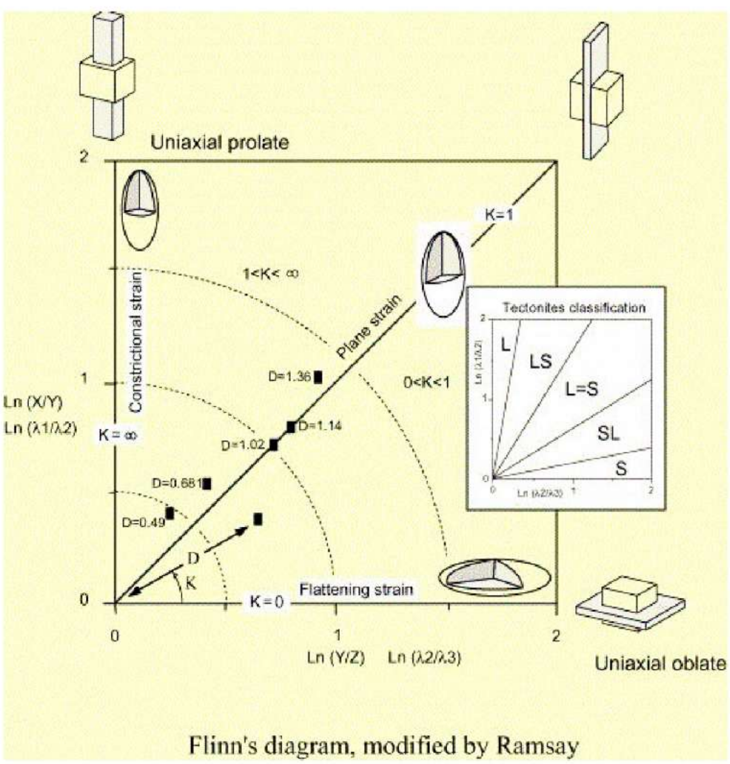


Figure 16 Tectonites classification with Flinn's diagram

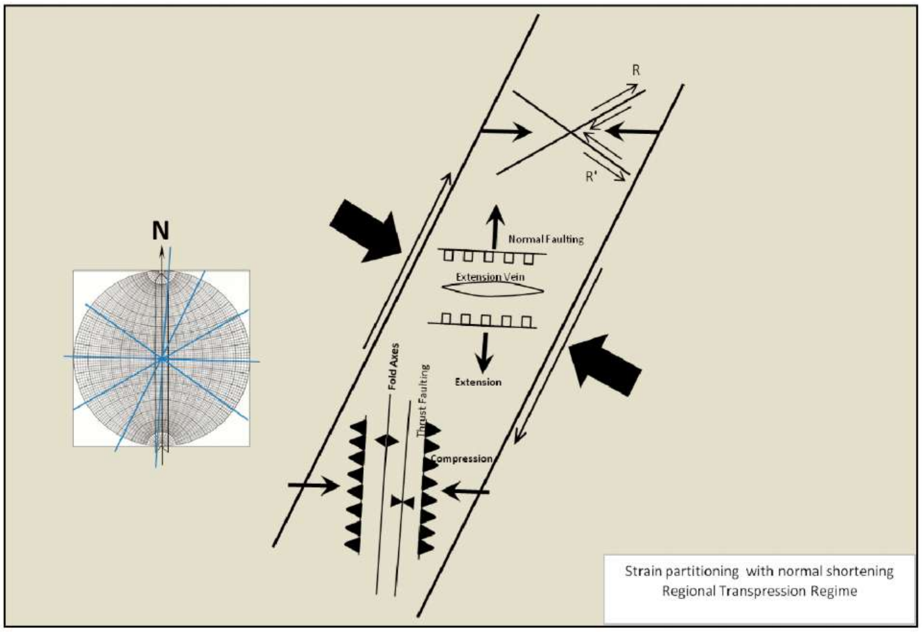


Figure 17 Sketch resuming the deformation pattern on stripped outcrop

Powel (1991) describes the final Archean deformational event in the Matachewan area, DA4, as producing steeply plunging, open folds with an associated north-northeast to north-northwest striking, sub-vertical axial planar cleavage. Structural analyses of poles to bedding of the Timiskaming Group sedimentary rocks in the Midlothian Lake area are dispersed about a great circle whose pole is oriented at 043°/78°. The S_A1 cleavage displays a similar variation in orientation, about an axis oriented at 046°/76°. These patterns of bedding and cleavage orientation are attributed to D_A4 folding. Macroscopic folding of the southern contact of the Timiskaming Group in Midlothian Township is interpreted to have resulted from D_A4. Isolated occurrences of schistose metavolcanic and metasedimentary rocks are present on the shores of Mistinikon Lake and the West Montreal River, suggesting that these N-S trending valleys are coincident with N-S trending Archean faults. In those outcrops, the NNE-SSW trending and subvertical D_A4 cleavage displays crenulations with a D_A3 foliation. Conjugate sets of kink bands, a set of sinistral kink bands striking 120° and a set of dextral kink bands striking 010°, which occur in the zones of D_A3 schist probably developed during D_A4. It is suggested that, initially, the principal coaxial stress axes were subhorizontal and directed SE-NW. A number of east-northeast-trending structural breaks within the Archean basement were reactivated during this compressional event. Displacement along the reactivated faults was dextral-oblique. During the latter stages of compressional event (*i.e., Kapuskasing Uplift 225-230 Ma*), the maximum principal stress axis rotated anti-clockwise, so that motion along the east-northeast faults decreased and motion along north-to-south-trending structures increased. Pre-existing Archean faults with north-northwest to north-northeast trends were activated at this time as reverse faults. However Proterozoic reactivation of the basement faults is small (less than 10's metres) in the Matachewan area, and appears to have been localized particularly at the intersections of east-west and north-south faults (Powel, 1991).

Consequently, the older hydrothermal vein systems that were emplaced during the Archean deformation events and related with strain partitioning in the LLCdz, where affected though NW-SE transpression with a main NNE dextral strike-slip component. As such, the resulting sinistral SE-NW antithetic R' shears offset previous N-S structures and bodies (e.g. diabase dikes and quartz veins) evolving in a NNW, counter clockwise block translation (i.e. non rotational). As well, the resulting synthetic dextral R shears offset the previously emplaced E-W structures and bodies in a NNE, clockwise block translation. A combination of all these movements, including rotation, is more likely to have occurred during the Archean D_A4, and Proterozoic D_P1 and D_P2 events.

8.2 Geochemistry

Table 6 shows the litho-geochemistry of trace elements (Cr, Ba, Cu, Ni, Zn, Co, Pb, Li, and As) from 12 Archean conglomerate samples acquired from the MNDM database (LCG Record 17572). **Fig 18** shows the average values distribution of trace elements from **Table 6**. The Archean conglomerates from the Midlothian assemblage are high in Cr, Ni, Ba, Pb, and Zn, with values between 100 and 1000 ppm. Co, Cu, and Li are also significant with values between 10 and 100 ppm. These values are relevant with the polygenic nature of the clasts composing the conglomerates, mostly of felsic, mafic and ultramafic lithologies. There is a similitude in the distribution pattern of the trace elements of the quartz veins from the stripped outcrop with those of the Archean conglomerates, but with lower values by a $1/10^{th}$ magnitude with Zn and Cr averaging 100 ppm, and Cu, Co from 5-6 ppm. **Fig 19** shows the average values of the trace elements of the quartz veins, derived from **Table 5**.

Table 6 Trace elements (Midlothian Archean conglomerates) MNDM

Field ID	Cr ppm	Ba ppm	Cu ppm	Ni ppm	Zn ppm	Co ppm	Pb ppm	Li ppm	As ppm
M-108-78	940	230	82	490	63	65	42	52	7,2
M-104-78	1060	140	98	490	98	73	30	105	5,9
M-158-78	1650	540	66	540	117	55	52	65	1,6
M-226-78	900	220	58	320	1230	37	220	60	6,8
M-7-78	625	**560**	40	310	93	30	25	64	2,3
M-230-78	930	300	78	330	113	58	-10	148	0,6
M-235-78	**1010**	130	50	510	33	48	13	**21**	**8,1**
M-216-78	260	150	22	108	110	23	14	100	0,2
M-221-78	292	**600**	41	96		22	13	22	3,3
M-231-78	700	80	103	240	12	53	-10	56	0,8
M-156-78	1820	150	90	665	150	82	46	59	1,7
M-122-78	580	180	108	430	158	58	2460	58	8,4

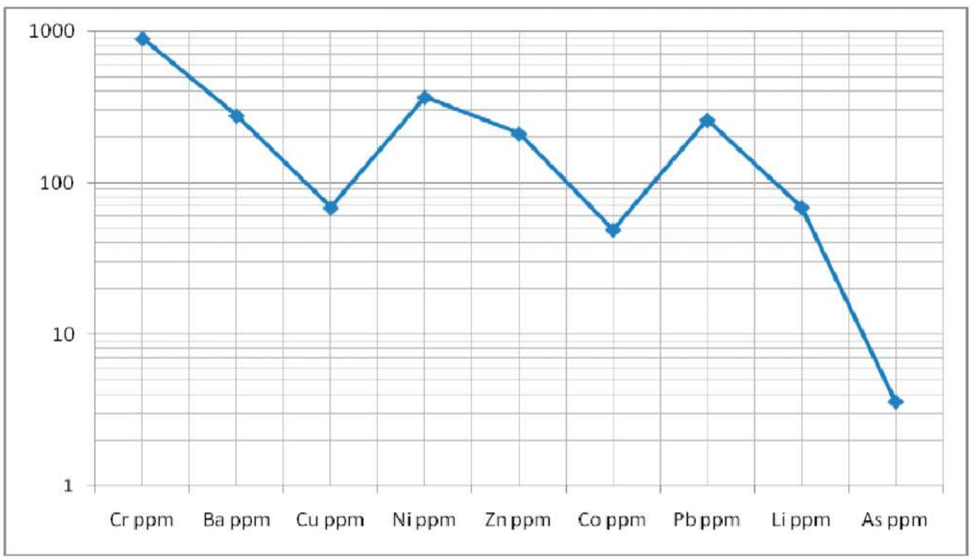


Figure 18 Average values from Table 6 (Midlothian Archean conglomerates)

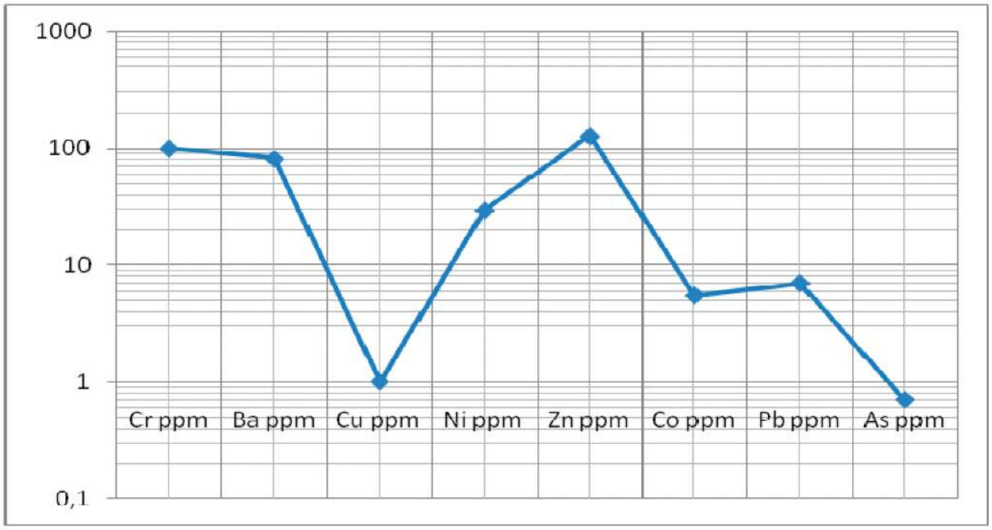


Figure 19 Average values of major trace elements in 4241317-09 quartz veins

There is also a similitude in the distribution pattern of the major elements of the quartz veins with those of the Archean conglomerates. **Table 7** shows the whole rock analyses of the Archean conglomerates from MNDM database (LCG Record 17572). **Fig 21** displays the average values of the major elements. **Fig 22** shows the average values of the major elements of the quartz veins, derived from **Table 2**.

Table 7 Major elements (Midlothian Archean conglomerates) MNDM

Field ID	SiO2 %	Al2O3 %	CaO %	MgO %	Na2O %	Fe2O3 %	K2O %	TiO2 %	MnO %	P2O5.2 %	CO2 %	S %
M-108-78	53	11,9	7,1	3,96	2,37	8,95	0,82	0,75	0,19	0,11	10,9	0,12
M-104-78	50,6	11,4	5,98	5,38	1,76	11,7	0,46	0,77	0,18	0,1	9,75	0,85
M-158-78	45,6	11,3	5,6	9,81	0,93	12,8	0,64	0,77	0,19	0,09	12,3	0,14
M-226-78	53,5	11,9	8,18	5,54	1,62	7,96	1,17	0,61	0,19	0,1	7,22	0,17
M-7-78	57,1	15	3,93	4,27	3,92	5,95	2,17	0,61	0,05	0,19	3,57	0,17
M-230-78	52,1	14,3	3,29	5,28	2,43	12,2	0,81	1,09	0,18	0,17	4,68	0,38
M-235-78	**24,8**	**6,36**	**27,2**	**3,51**	1,09	5,91	0,29	0,23	**0,48**	0,06	**31,5**	**0,38**
M-216-78	57,2	14,5	3,7	4,93	4,91	6,34	1,26	0,7	0,08	0,3	5,13	0,01
M-221-78	52,9	13,6	6,23	3,88	3,35	5,07	2,6	0,57	0,11	0,28	11,6	0,04
M-231-78	50,1	13,5	3,58	6,87	1,66	15,4	0,15	1,15	0,29	0,12	1,68	0,23
M-156-78	46,7	13	4,77	9,87	2,97	14,7	0,27	0,93	0,26	0,09	1,33	0,42
M-122-78	44,31	12,3	7,43	5,58	0,95	13,2	1,35	0,92	0,24	0,1	11,7	0,38

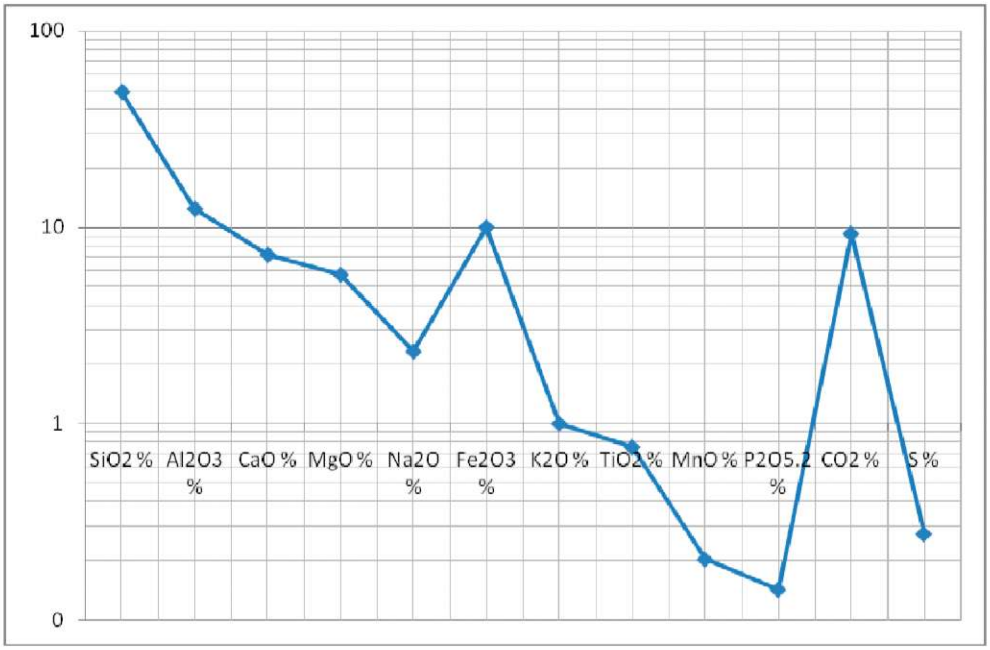


Figure 21 Average values from Table 7 (Midlothian Archean conglomerates)

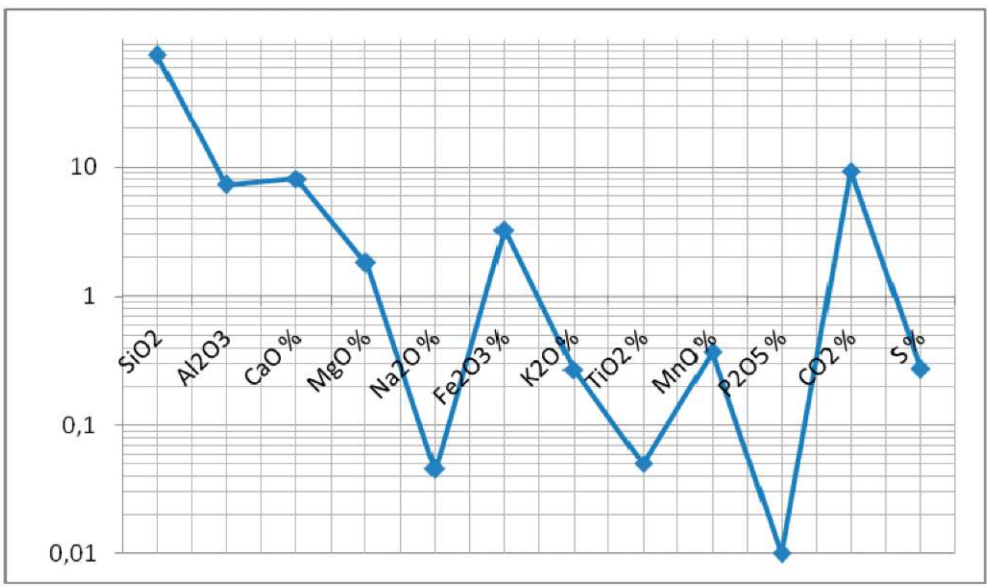


Figure 22 Average values from Table 2 (Midlothian quartz veins 4241317-09)

The litho-geochemical similarities between the Midlothian Archean conglomerates and the quartz- carbonate veins from Elizabeth Lake suggest that a good portion of the hydrothermal fluids from deep crustal melt (i.e., mixing and rising along transpressional shear zones, forming calc-alkaline plutons) have derived from the Archean metasediments. All samples are characterized by higher Cr, Ba, and Zn, sporadically high Ni and Pb and low in As.

Trace elements play an important role in defining the nature of magmatic chambers from which partial melts were derived (i.e., basaltic under-plate melting due to crustal thickening and under-plating). They are valuable indicators because the extent to which different minerals incorporate these elements varies as a function of temperature, pressure or composition of the fluid from which the minerals crystallized. Of special interest are Ba, Rb, Sr, Zr and REE, where they tend to remain in a melt when the olivine and pyroxene of a more mafic material are crystallized. This is so because the ionic radii and charges of these elements prevent them from being accommodated in the olivine and pyroxene crystal structures. As a result, the concentration of these trace elements increases significantly and persistently in the melt than in the more basic magma.

Fig 23 shows the values of traces elements from the Elizabeth Lake quartz veins derived from Table 5 with Cr, Ba, Sr, V, and Zn being the most abundant trace elements. **Fig 24** shows the average values of REE, also derived from Table 5, compared with REE chondrite abundance (**Appendix C**), with a strong similarity in the distribution; Ce, Eu and La being slightly more abundant in the quartz veins.

8.3 Gold exploration

The samples descriptions, samples location maps and analyses are provided in appendices A and B and also on Map 1 and Plan 1. All gold values have trace levels ≤ 10 ppb (0.01ppm) without significant element enrichment in the quartz veins, relative to the conglomerate host rock. However, these analyses, with those undergone in 2008 on claim 4201099 (10-20 ppb), have determined that the assayed quartz veins on the Elizabeth Lake Property are slightly anomalous in gold, with Zn.

In comparison, **Fig 25** shows a frequency histogram of gold values (ppb) from 241 quartz veinlets sampled from a D_P1a zone in the Gowganda Formation of Dasserat Township compiled from Hinse (1982, 1983), and adapted from Powel (1991, fig 4.12).

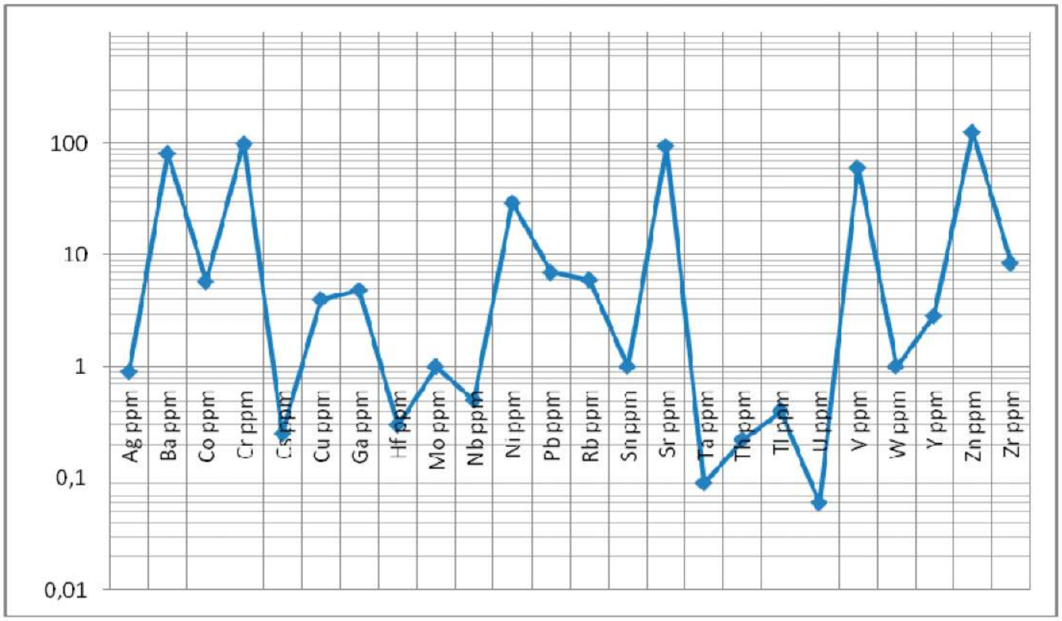


Figure 23 Average values of traces elements (Elizabeth Lake quartz veins)

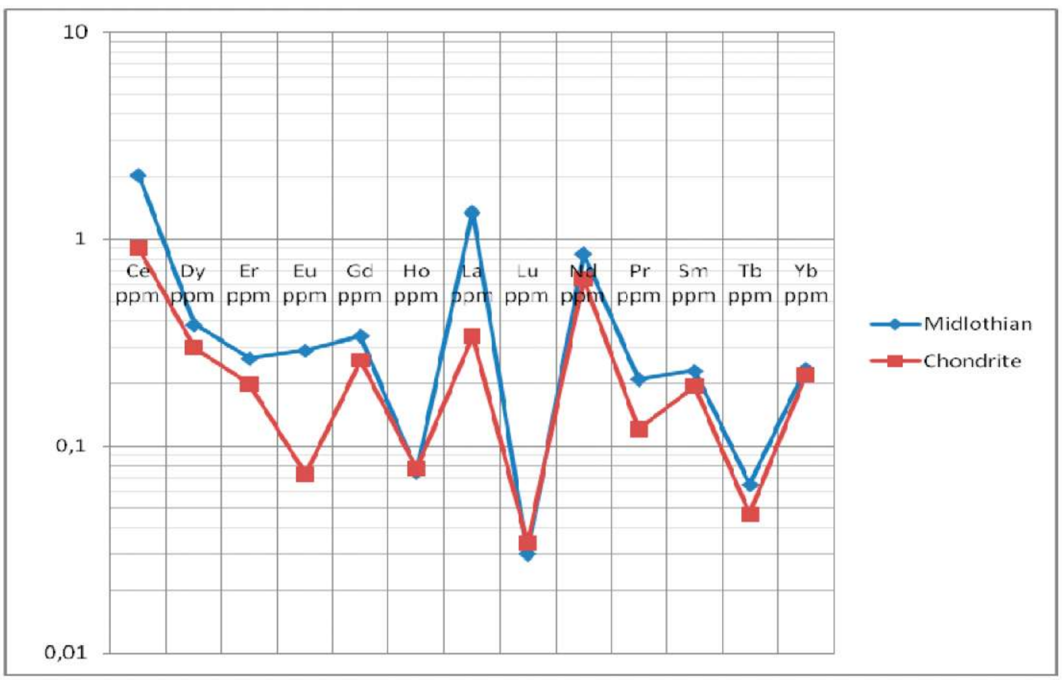


Figure 24 Average values of REE (EL quartz veins vs. Chondrite abundance)

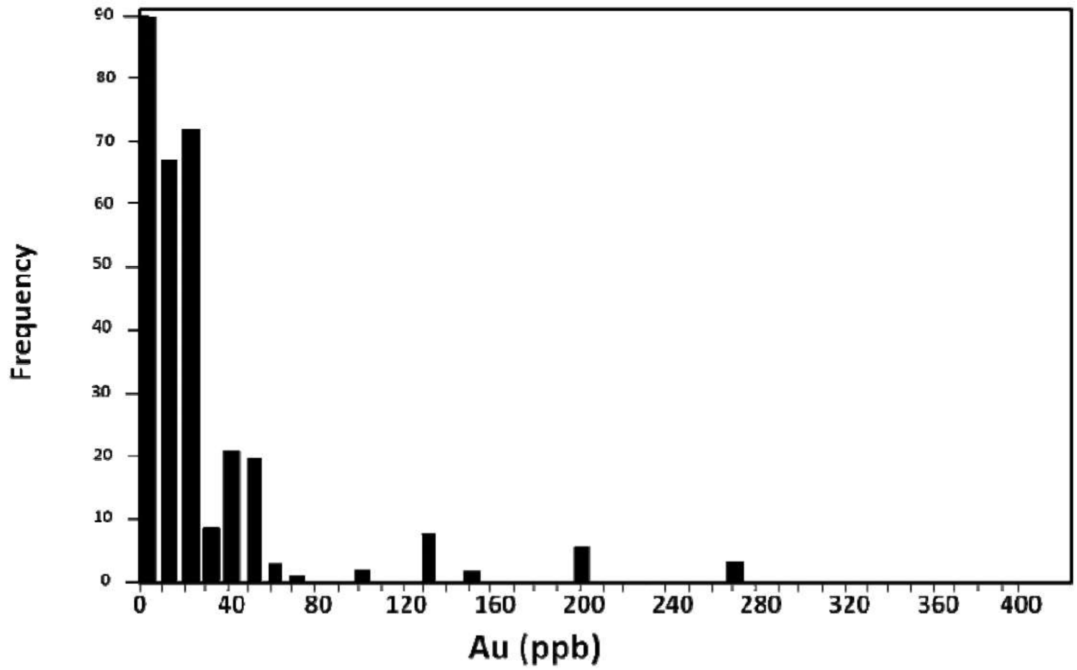


Figure 25 Frequency histogram of gold values (ppb) from 241 quartz veinlets sampled from a Dp1a zone (adapted from fig 4.12 in Powel, 1991).

In nature gold occurs predominantly in the native state or as a major constituent of various alloys containing mainly silver, copper or platinoid metals. The principal ore minerals of gold are the native metal, aurostibnite and the various tellurides. The abundance of gold in the upper lithosphere is about 0.005 ppm, and the Au/Ag ratio is about 0.1. The average gold content of igneous-type rocks in ppm is ultrabasic (0.004), gabbro-basalt (0.007), diorite-andesite (0.005) and granite-rhyolite (0.003). The average gold content of sedimentary rocks in parts per million is sandstone and conglomerate (0.03), normal shale (0.004) and limestone (0.003). Certain graphitic shales, sulphide schists, phosphorites and some types of sandstones and conglomerates may contain up to 2.1 ppm Au or more (Fortescue, 1983).

Sampling for gold poses a special problem due to the heterogeneous nature of its occurrence and the difficulty of grinding free gold; there is no single sample size suitable for all occurrences. The nature of a gold occurrence is critical in determining which size fraction will contain the gold and hence the number of gold particles that will be present in a given sample for a particular concentration of gold (Riddle, 1983).

Only when gold is well disseminated and locked in silicate grains that fine grinding actually result in an increase distribution of the gold. In an optimum distribution of gold particles in a 10 g sample of finely ground silicate rock, a concentration of 100 ppm Au would be distributed in 1,500,000 particles; with 150,000 particles, 10 ppm Au; with 15,000 particles, 1 ppm Au, 1,500 particles would carry 10 ppb Au, and 15 particles would carry 1 ppb Au (Riddle, 1983). As a reference, **Appendix D** shows a diagram showing the grain size of gold versus the number of particles of gold in different sample weights of a sample.

Screen analysis of silicate rocks ground to pass either 100 or 200 mesh has shown that the number of grains per grams can vary widely, from ca. 2 million to ca. 15 billion. If the gold was all in the -100 + 170 fraction then a single gold grain would be expected. If only light grinding had been used then these figures could be off by a factor of 10,000. Such a worst case is unfortunately quite possible as native gold does not grind well and tends to smear (Riddle, 1983).

In general, larger samples in greater numbers should be collected in a gold survey. It is useful, and recommendable, to take several samples from any one geological feature (outcrop) in order to determine a mean value and the extent of variation, and what are the precision and accuracy of the results (Riddle, 1983).

9. CONCLUSION AND RECOMMENDATION

The survey carried out on claim 4241317 has exposed large quartz veins array related with an important hydrothermal system mostly oriented E-to-EW and N-S, and related with regional strain partitioning within the LLCB. The timing of the quartz veins would be late stage of Kenoran orogeny and post (2700 to 2685 Ma, +100 Ma).

The lithology of host rocks is of Neoarchean metasedimentary of Midlothian Assemblage, mostly composed of clast-supported pebble conglomerate and lithic wacke intruded by late Matachewan diabase, elsewhere being buried by Pleistocene glacial drifts, gravel, sand and silt. In certain areas the outcrops display signs of deformation in form of stretched clasts with various intensity of shortening.

Along the eastern shore of Elizabeth Creek south and to the island, a large outcrop of diabase rock of a width of roughly 80 m and a minimal length of 500 m stretches north-to-south within the limit of the claim boundaries. By the eastern shore of Elizabeth Lake near the island, a 120 m^2 outcrop was stripped, exposing a lode of quartz carbonate veins. The outcrop is 15 metres long by 8 metres wide, oriented NE-SW. It is composed of clast-supported polymictic conglomerate in faulted contact with diabase visible along shoreline and intensively fractured NE-SW and E-W.

The fracture pattern in parted in 3 main systems: (1) CS main shear with dextral sense oriented mainly N030°; (2) synthetic Riedel R shear with dextral sense oriented N060° and; (3) antithetic Riedel R' shear with sinistral sense oriented N110°. Block displacements are evidently displayed with the breaking and displacement of the end-part of the large quartz vein, where the western block is offset NNE by a few metres, through a right lateral (dextral) shear zone with the remaining brecciated quartz veins.

The deformation patterns observed on the stripped outcrop are conform with strain partitioning with normal shortening in a dextral transpression regime where the principal coaxial stress axes were directed SE-NW. It is correlative with the last Archean, deformation event of D_A4, and probably related with the Proterozoic age D_P1 and D_P2, resulting in N-S cross-faults (e.g., Elizabeth Lake fault) and open, moderate to steeply-plunging, N to NE folds.

The Archean conglomerates from the Midlothian assemblage are high in Cr, Ni, Ba, Pb, and Zn, with values between 100 and 1000 ppm. Co, Cu, and Li are also significant with values between 10 and 100 ppm. These values are relevant with the polygenic nature of the clasts composing the conglomerates, mostly of felsic, mafic and ultramafic lithologies. There is a similitude in the distribution pattern of the trace elements of the Elizabeth Lake quartz veins with those of the Archean conglomerates, but with lower values by a $1/10^{th}$ magnitude with Zn and Cr averaging 100 ppm, and Cu, Co from 5-6 ppm. Hence, the litho-geochemical similarities between the Midlothian Archean conglomerates and the quartz- carbonate veins from Elizabeth Lake suggest that a good portion of the hydrothermal fluids from deep crustal melt have derived from the Archean metasediments. All quartz vein samples are characterized by higher Cr, Ba, and Zn, sporadically high Ni and Pb and low in As. There is also a strong similarity between the average distributions of REE in the quartz veins and those of normalized chondrite; Ce, Eu and La being slightly more abundant in the Elizabeth Lake quartz veins. Sampling for gold poses a special problem due to the heterogeneous nature of its occurrence and the difficulty of grinding free gold; there is no single sample size suitable for all occurrences. In general, larger samples in greater numbers should be collected in a gold survey.

Following the above mentioned state of affair, it is recommended that additional works should be carried out on claim 4241317 to expose as much as possible any old workings related with quartz vein trenching and to carry out additional stripping and trenching on the lately exposed outcrops. A stripping-trenching-washing program should be carried-out within the next two (2) years in the areas bearing quartz veins. Diamond-saw cutting and sampling should be followed by assays. Soil geochemical survey with geological mapping for target generation should complete the work program. Should the results prove worthy of such, then a core drilling program would follow at a later stage of the development.

The proposed budget for the next stage would range as such:

1) Stripping / trenching with heavy machinery	....	$ 15,000
2) Washing of exposed outcrops with pressure hoses	....	$ 5,000
3) Channel cut sampling with diamond blade saw	....	$ 2,500
4) Assays Au + 30 ICP	....	$ 2,500
5) Soil geochemical survey of 90 hectares with assays	....	$ 8,000
6) Geological mapping, interpretation, target generation	....	$ 8,000
	Total	$ 41,000

The total budget would be in the range of $ 40,000 to $ 42,000 without accommodation and transport fees.

10. REFERENCES

Bright, E. G., 1970. Geology of Halliday and Midlothian Townships. Ontario Department of Mines, Geological Report 79.

Fortescue, J. A. C., 1983. Geochemical Prospecting for Gold in Ontario. Geology of Gold in Ontario, Ontario Geological Survey, Miscellaneous Paper 110.

Marshal, H.I., 1947. Preliminary report on the geology of Midlothian Township, District of Timiskaming. Report P.R 1947-1. Ontario Department of Mines.

Powell, W. G., 1991. The Distribution, Structural History and Relationship to Regional Metamorphism of High-Strain Zones Forming the Larder Lake-Cadillac Deformation Zone, Matachewan Area, Abitibi Belt. MNDM OFR5789.

Riddle, C., 1983. Analytical Methods for gold. Geology of Gold in Ontario, Ontario Geological Survey, Miscellaneous Paper 110.

11. STATEMENT OF QUALIFICATIONS

I, Pierre Vincent, do hereby declare:

- that I reside at: 101 Central Park Drive, Ottawa, Ontario, K2C 4C2,
- that I am a qualified professional geologist, member of OGQ 540 (Québec) and APGO (Ontario) 1438 in full standing order,
- that I have practicing my profession since 1979, upon my graduation at UQAM (Montréal) as a Bachelor in Geology,
- that I have personal knowledge of the facts presented in this report,
- that I am the CEO and Project Director for MCD Exploration and Survey LTD.

__________________________ June 5, 2010

Pierre Vincent, P. Geo.

12. STATEMENT OF COSTS

(1) Work Performed

2009-06- 23 to 27	5 days Geological Survey at $ 700 /day	....	$3,500
2009-08 28 and 29	2 days Compilation / Drafting at $ 700 /day	....	$1,400
2009-09-09 to 14	6 days Geological Survey at $ 700 /day	....	$4,200
2009-10- 20 and 21	2 days Compilation / Drafting at $ 700 /day	....	$1,400
2010-05- 27 to 28	2 days Report writing / Map at $ 700 / day	....	$1,400
2010-06-05	1 day Report completion at $ 700 / day	....	$700
2009-11-06	Assays ALS Chemex	....	$144.75
2009-12-21	Assays ALS Chemex	....	$172.15
		Total (1)	**$12,917**

(2) Transportation Costs

2009-06-22	Plane ticket-return Ottawa-North Bay Bair skin	....	$328.55
2009-06-22	Taxi Airport to National car renting North Bay	....	$20
2009-06-22	Taxi Airport - Travelodge North Bay	....	$17.20
2009-06-29	Greyhound Canada North Bay – Ottawa	....	$69.56
2009-06-29	Taxi Travelodge Bus station Greyhound North Bay	....	$17
2009-06-22 and 29	Transportation to Elk Lake (return June 29, 2009)		
	North Bay-Elk Lake-return 570 km x 0.4$/km	....	$228
2009-06-23 to 27	5 days Transportation to Midlothian TWP		
	From Elk Lake to EL Midlothian 750 km x 0.4$/km	....	$300
2009-09-8 and 15	Transportation to Elk Lake (return Sept 15, 2009)		
	North Bay-Elk Lake-return 570 km x 0.4$/km	....	$228
2009-09-08	Taxi U-need-a-cab North Bay	....	$10
2009-09-09 to 14	6 days Transportation to Midlothian TWP		
	From Elk Lake to EL Midlothian 900 km x 0.4$/km	....	$360
2009-09-11	Transportation of samples to Val d'Or (ALS Chemex)		
	Elk Lake - Val d'Or-return 500km x 0.4$/km	....	$200
2009-09-15	Greyhound Trans Co Ottawa-North Bay-return	....	$120
		Total (2)	**$1,898**

(3) Food and Lodging

2009-06-22	Elk Cabins Elk Lake ON lodging 1 week	....	$588
2009-06-22	Independent Grocery's North Bay	....	$16.13
2009-06-22	Independent Grocery's North Bay	....	$114.19
2009-06-29	Don Cherry restaurant North Bay	....	$28.93
2009-06-29	Independent Grocery's North Bay	....	$34.89
2009-06-29	Travelodge North Bay	....	$120.99
2009-09-08	Basic Food Supply North Bay	....	$82.77
2009-09-11	Independent Grocery Pettenuzzo Kirklan Lake	....	$15.69
2009-09-11	Independent Grocery Pettenuzzo Kirklan Lake	....	$7.88
2009-09-11	Independent Grocery Pettenuzzo Kirklan Lake	....	$158.97
2009-09-14	Elk Cabins Elk Lake ON lodging 1 week	....	$639.35
		Total (3)	**$1,808**

(4) Associated Costs

2009-06-22	Petro Canada New Liskeard	....	$28
2009-06-22	National -Car -renting North Bay	....	$652.66
2009-06-24	Canadian Tire GPS Etrex New Liskeard	....	$150.27
2009-06-24	Petro Canada New Liskeard	....	$42
2009-06-29	Petro Canada New Liskeard	....	$120
2009-09-08	Shoppers Drug Mart North Bay	....	$37.84
2009-09-08	Petro Canada North Bay	....	$65
2009-09-08	Canadian Tire 072 North Bay	....	$27.45
2009-09-09	TSC Store New Liskeard	....	$116.64
2009-09-09	Petro Canada New Liskeard	....	$35
2009-09-11	TSC Store New Liskeard	....	$18
2009-09-11	Husky Mohawk Gas	....	$104.77
2009-09-15	Petro-Canada North Bay	....	$32.60
2009-09-15	Enterprise Rent-A-Car North Bay (1 week)	....	$710.45
		Total (4)	**$2,140**

(1) Work Performed	Total (1)	$12,917
(2) Transportation Costs	Total (2)	$ 1,898
(3) Food and Lodging	Total (3)	$ 1,808
(4) Associated Costs	Total (4)	$ 2,140

TOTAL COSTS **$ 18,763**

________________ June 5, 2010

Pierre Vincent, P.Geo.

APPENDIX A

ASSAY CERTIFICATES

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **7189117 CANADA LTD**
101 CENTRAL PARK DR.
OTTAWA ON K2C 4C2

Page: 1
Finalized Date: 3-OCT-2009
This copy reported on 5-OCT-2009
Account: CAN7189117

CERTIFICATE VO09103640

Project:
P.O. No.:
This report is for 2 Crushed Rock samples submitted to our lab in Val d'Or, QC, Canada on 22-SEP-2009.
The following have access to data associated with this certificate:

PIERRE VINCENT		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
OA-GRA05	Loss on Ignition at 1000C	WST-SEQ
TOT-ICP06	Total Calculation for ICP06	ICP-AES
ME-4ACD81	Base Metals by 4-acid dig.	ICP-AES
ME-ICP06	Whole Rock Package - ICP-AES	ICP-AES
C-IR07	Total Carbon (Leco)	LECO
S-IR08	Total Sulphur (Leco)	LECO
ME-MS81	38 element fusion ICP-MS	ICP-MS
ME-MS42	Up to 34 elements by ICP-MS	ICP-MS

To: **7189117 CANADA LTD**
ATTN: PIERRE VINCENT
101 CENTRAL PARK DR.
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This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:
Colin Ramshaw, Vancouver Laboratory Manager

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Page: 2 - A
Total # Pages: 2 (A - E)
Finalized Date: 3-OCT-2009
Account: CAN7189117

CERTIFICATE OF ANALYSIS VO09103640

Sample Description	Method / Analyte / Units / LOR	WEI-21 Recvd Wt. kg 0.02	ME-ICP06 SiO2 % 0.01	ME-ICP06 Al2O3 % 0.01	ME-ICP06 Fe2O3 % 0.01	ME-ICP06 CaO % 0.01	ME-ICP06 MgO % 0.01	ME-ICP06 Na2O % 0.01	ME-ICP06 K2O % 0.01	ME-ICP06 Cr2O3 % 0.01	ME-ICP06 TiO2 % 0.01	ME-ICP06 MnO % 0.01	ME-ICP06 P2O5 % 0.01	ME-ICP06 SrO % 0.01	ME-ICP06 BaO % 0.01	C-IR07 C % 0.01
4241317-09-01		4.19	71.5	8.48	3.89	8.66	2.43	0.08	0.34	0.02	0.09	0.40	0.01	0.01	0.01	0.02
4241317-09-02		2.78	79.0	6.13	2.59	7.52	1.23	0.01	0.20	0.01	0.01	0.34	<0.01	0.01	0.01	0.30

Comments: Reprise à partir des rejets de VO09099573

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Page: 2 - B
Total # Pages: 2 (A - E)
Finalized Date: 3-OCT-2009
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CERTIFICATE OF ANALYSIS VO09103640

Sample Description	Method Analyte Units LOR	S-IR08 S % 0.01	ME-MS81 Ag ppm 1	ME-MS81 Ba ppm 0.5	ME-MS81 Ce ppm 0.5	ME-MS81 Co ppm 0.5	ME-MS81 Cr ppm 10	ME-MS81 Cs ppm 0.01	ME-MS81 Cu ppm 5	ME-MS81 Dy ppm 0.05	ME-MS81 Er ppm 0.03	ME-MS81 Eu ppm 0.03	ME-MS81 Ga ppm 0.1	ME-MS81 Gd ppm 0.05	ME-MS81 Hf ppm 0.2	ME-MS81 Ho ppm 0.01
4241317-09-01		0.01	<1	109.0	3.1	8.6	160	0.32	<5	0.54	0.39	0.34	6.0	0.48	0.3	0.11
4241317-09-02		0.01	<1	54.8	1.0	3.0	40	0.18	<5	0.23	0.14	0.24	3.7	0.20	<0.2	0.04

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CERTIFICATE OF ANALYSIS VO09103640

Sample Description	Method / Analyte / Units / LOR	ME-MS81 La ppm 0.5	ME-MS81 Lu ppm 0.01	ME-MS81 Mo ppm 2	ME-MS81 Nb ppm 0.2	ME-MS81 Nd ppm 0.1	ME-MS81 Ni ppm 5	ME-MS81 Pb ppm 5	ME-MS81 Pr ppm 0.03	ME-MS81 Rb ppm 0.2	ME-MS81 Sm ppm 0.03	ME-MS81 Sn ppm 1	ME-MS81 Sr ppm 0.1	ME-MS81 Ta ppm 0.1	ME-MS81 Tb ppm 0.01	ME-MS81 Th ppm 0.05
4241317-09-01		1.8	0.05	<2	0.5	1.4	53	9	0.34	7.8	0.35	1	103.5	<0.1	0.09	0.22
4241317-09-02		0.9	0.01	<2	<0.2	0.3	6	5	0.08	4.2	0.11	1	88.0	<0.1	0.04	<0.05

Comments: Reprise à partir des rejets de VO09099573.

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Page: 2 - D
Total # Pages: 2 (A - E)
Finalized Date: 3-OCT-2009
Account: CAN7189117

CERTIFICATE OF ANALYSIS VO09103640

Sample Description	Method / Analyte / Units / LOR	ME-MS81 Tl ppm 0.5	ME-MS81 Tm ppm 0.01	ME-MS81 U ppm 0.05	ME-MS81 V ppm 5	ME-MS81 W ppm 1	ME-MS81 Y ppm 0.5	ME-MS81 Yb ppm 0.03	ME-MS81 Zn ppm 5	ME-MS81 Zr ppm 2	ME-MS42 As ppm 0.1	ME-MS42 Bi ppm 0.01	ME-MS42 Hg ppm 0.005	ME-MS42 Sb ppm 0.05	ME-MS42 Se ppm 0.2	ME-MS42 Te ppm 0.01
4241317-09-01		<0.5	0.06	0.06	71	1	3.8	0.36	149	12	1.3	0.04	0.006	1.43	<0.2	0.13
4241317-09-02		<0.5	0.02	<0.05	51	1	1.9	0.11	106	5	0.1	0.01	<0.005	0.58	<0.2	0.01

Comments: Reprise à partir des rejets de VO09099573.

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Page: 2 - E
Total # Pages: 2 (A - E)
Finalized Date: 3-OCT-2009
Account: CAN7189117

CERTIFICATE OF ANALYSIS VO09103640

Sample Description	Method	OA-GRA05	TOT-ICP06	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81
	Analyte	LOI	Total	Ag	As	Cd	Co	Cu	Mo	Ni	Pb	Zn
	Units	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.01	0.01	0.5	5	0.5	1	1	1	1	1	2
4241317-09-01		2.22	98.1	<0.5	<5	<0.5	8	1	<1	44	6	143
4241317-09-02		0.95	98.0	<0.5	<5	<0.5	3	<1	<1	3	4	106

Comments: Reprise à partir des rejets de VO09099573.

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**Page: 1
Finalized Date: 21-SEP-2009
This copy reported on 22-SEP-2009
Account: CAN7189117**

CERTIFICATE VO09099573

Project:

P.O. No.:

This report is for 2 Rock samples submitted to our lab in Val d'Or, QC, Canada on 11-SEP-2009.

The following have access to data associated with this certificate:

PIERRE VINCENT

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
SCR-21	Screen to -100 um
BAG-01	Bulk Master for Storage
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-32	Pulverize 1000g to 85% < 75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-SCR21	Au Screen Fire Assay - 100 um	WST-SIM
Au-AA25	Ore Grade Au 30g FA AA finish	AAS
Au-AA25D	Ore Grade Au 30g FA AA Dup	AAS

To: **7189117 CANADA LTD
ATTN: PIERRE VINCENT
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Signature:

Colin Ramshaw, Vancouver Laboratory Manager

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Page: 2 - A
Total # Pages: 2 (A)
Finalized Date: 21-SEP-2009
Account: CAN7189117

CERTIFICATE OF ANALYSIS VO09099573

Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg 0.02	Au-SCR21 Au Total ppm 0.05	Au-SCR21 Au (+) F ppm 0.05	Au-SCR21 Au (-) F ppm 0.05	Au-SCR21 Au (+) m mg 0.001	Au-SCR21 WT. + Fr g 0.01	Au-SCR21 WT. - Fr g 0.1	Au-AA25 Au ppm 0.01	Au-AA25D Au ppm 0.01
4241317-09-01		5.05	<0.05	<0.05	<0.05	<0.001	31.18	770.7	0.01	<0.01
4241319-09-02		3.74	<0.05	<0.05	<0.05	0.002	44.67	754.6	<0.01	<0.01

APPENDIX B

SAMPLES COORDINATES
UTM NAD 83

SAMPLE	UTM North	UTM East	DESCRIPTION
4241317-09-01	5304762	504163	GRAB Quartz-carbonate breccia
4241317-09-02	5304762	5044163	Composite of Quartz-carbonate veins

For detailed location, refer to Map 1 and Plan 1 accompanying the report.

APPENDIX C

REE ABUNDANCE

RARE EARTH ELEMENTS

Element	**Symbol**	**Atomic Number**	**Upper Crust ppm**	**Chondrite ppm**
Yttrium	Y	39	22	na
Lanthanum	La	57	30	0.34
Cerium	Ce	58	64	0.91
Praseodymium	Pr	59	7.1	0.121
Neodymium	Nd	60	26	0.64
Promethium	Pm	61	na	na
Samarium	Sm	62	4.5	0.195
Europium	Eu	63	0.88	0.073
Gadolinium	Gd	64	3.8	0.26
Terbium	Tb	65	0.64	0.047
Dysprosium	Dy	66	3.5	0.30
Holmium	Ho	67	0.80	0.078
Erbium	Er	68	2.3	0.20
Thulium	Tm	69	0.33	0.032
Ytterbium	Yb	70	2.2	0.22
Lutetium	Lu	71	0.32	0.034

APPENDIX D

DIAGRAM OF GOLD GRAIN SIZE & PARTICLES

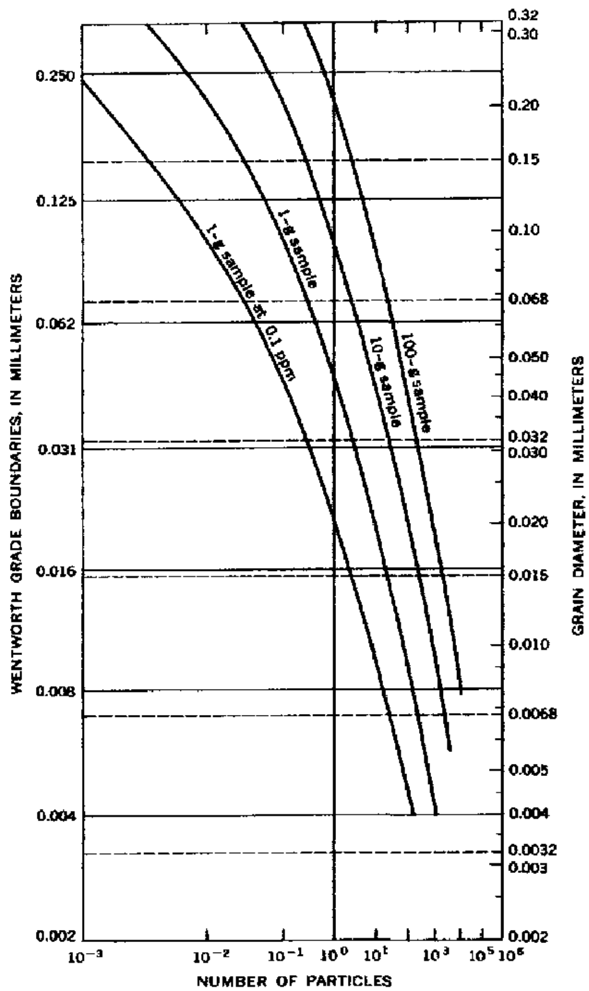

Figure 3. *Number of particles of gold at 1 ppm in samples having different sample weights, and for a 1 g sample at 0.1 ppm (from Tourtelot 1968).*

255

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To: **7189117 CANADA LTD**
101 CENTRAL PARK DR.
OTTAWA ON K2C 4C2

Finalized Date: 21-SEP-2009
This copy reported on 22-SEP-2009
Account: CAN7189117

CERTIFICATE VO09099573

Project:

P.O. No.:

This report is for 2 Rock samples submitted to our lab in Val d'Or, QC, Canada on 11-SEP-2009.

The following have access to data associated with this certificate:

PIERRE VINCENT		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
SCR-21	Screen to -100 um
BAG-01	Bulk Master for Storage
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-32	Pulverize 1000g to 85% < 75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-SCR21	Au Screen Fire Assay - 100 um	WST-SIM
Au-AA25	Ore Grade Au 30g FA AA finish	AAS
Au-AA25D	Ore Grade Au 30g FA AA Dup	AAS

To: **7189117 CANADA LTD**
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Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 21-SEP-2009
Account: CAN7189117

CERTIFICATE OF ANALYSIS VO09099573

Sample Description	Method / Analyte / Units / LOR	WEI-21 Recvd Wt. kg 0.02	Au-SCR21 Au Total ppm 0.05	Au-SCR21 Au (+) F ppm 0.05	Au-SCR21 Au (-) F ppm 0.05	Au-SCR21 Au (+) m mg 0.001	Au-SCR21 WT. + Fr g 0.01	Au-SCR21 WT. - Fr g 0.1	Au-AA25 Au ppm 0.01	Au-AA25D Au ppm 0.01
4241317-09-01		5.05	<0.05	<0.05	<0.05	<0.001	31.18	770.7	0.01	<0.01
4241319-09-02		3.74	<0.05	<0.05	<0.05	0.002	44.67	754.6	<0.01	<0.01

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ALS CODE	DESCRIPTION	INSTRUMENT
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TOT-ICP06	Total Calculation for ICP06	ICP-AES
ME-4ACD81	Base Metals by 4-acid dig.	ICP-AES
ME-ICP06	Whole Rock Package - ICP-AES	ICP-AES
C-IR07	Total Carbon (Leco)	LECO
S-IR08	Total Sulphur (Leco)	LECO
ME-MS81	38 element fusion ICP-MS	ICP-MS
ME-MS42	Up to 34 elements by ICP-MS	ICP-MS

To: **7189117 CANADA LTD**
ATTN: PIERRE VINCENT
101 CENTRAL PARK DR.
OTTAWA ON K2C 4C2

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:
Colin Ramshaw, Vancouver Laboratory Manager

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North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

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Finalized Date: 3-OCT-2009
Account: CAN7189117

CERTIFICATE OF ANALYSIS VO09103640

Sample Description	Method	WEI-21	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	C-IR07
	Analyte	Recvd Wt.	SiO2	Al2O3	Fe2O3	CaO	MgO	Na2O	K2O	Cr2O3	TiO2	MnO	P2O5	SrO	BaO	C
	Units	kg	%	%	%	%	%	%	%	%	%	%	%	%	%	%
	LOR	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
4241317-09-01		4.19	71.5	8.48	3.89	8.66	2.43	0.08	0.34	0.02	0.09	0.40	0.01	0.01	0.01	0.02
4241317-09-02		2.78	79.0	6.13	2.59	7.52	1.23	0.01	0.20	0.01	0.01	0.34	<0.01	0.01	0.01	0.30

Comments: Reprise à partir des rejets de VO09099573.

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CERTIFICATE OF ANALYSIS VO09103640

Sample Description	Method Analyte Units LOR	S-IR08 S % 0.01	ME-MS81 Ag ppm 1	ME-MS81 Ba ppm 0.5	ME-MS81 Ce ppm 0.5	ME-MS81 Co ppm 0.5	ME-MS81 Cr ppm 10	ME-MS81 Cs ppm 0.01	ME-MS81 Cu ppm 5	ME-MS81 Dy ppm 0.05	ME-MS81 Er ppm 0.03	ME-MS81 Eu ppm 0.03	ME-MS81 Ga ppm 0.1	ME-MS81 Gd ppm 0.05	ME-MS81 Hf ppm 0.2	ME-MS81 Ho ppm 0.01
4241317-09-01		0.01	<1	109.0	3.1	8.6	160	0.32	<5	0.54	0.39	0.34	6.0	0.48	0.3	0.11
4241317-09-02		0.01	<1	54.8	1.0	3.0	40	0.18	<5	0.23	0.14	0.24	3.7	0.20	<0.2	0.04

Comments: Reprise à partir des rejets de VO09099573.

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CERTIFICATE OF ANALYSIS VO09103640

Sample Description	Method	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81
	Analyte	La	Lu	Mo	Nb	Nd	Ni	Pb	Pr	Rb	Sm	Sn	Sr	Ta	Tb	Th
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.5	0.01	2	0.2	0.1	5	5	0.03	0.2	0.03	1	0.1	0.1	0.01	0.05
4241317-09-01		1.8	0.05	<2	0.5	1.4	53	9	0.34	7.8	0.35	1	103.5	<0.1	0.09	0.22
4241317-09-02		0.9	0.01	<2	<0.2	0.3	6	5	0.08	4.2	0.11	1	88.0	<0.1	0.04	<0.05

Comments: Reprise à partir des rejets de VO09099573.

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CERTIFICATE OF ANALYSIS VO09103640

Sample Description	Method	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS42	ME-MS42	ME-MS42	ME-MS42	ME-MS42	ME-MS42
	Analyte	Tl	Tm	U	V	W	Y	Yb	Zn	Zr	As	Bi	Hg	Sb	Se	Te
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.5	0.01	0.05	5	1	0.5	0.03	5	2	0.1	0.01	0.005	0.05	0.2	0.01
4241317-09-01		<0.5	0.06	0.06	71	1	3.8	0.36	149	12	1.3	0.04	0.006	1.43	<0.2	0.13
4241317-09-02		<0.5	0.02	<0.05	51	1	1.9	0.11	106	5	0.1	0.01	<0.005	0.58	<0.2	0.01

Comments: Reprise à partir des rejets de VO09099573.

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CERTIFICATE OF ANALYSIS VO09103640

Sample Description	Method	OA-GRA05	TOT-ICP06	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81
	Analyte	LOI	Total	Ag	As	Cd	Co	Cu	Mo	Ni	Pb	Zn
	Units	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.01	0.01	0.5	5	0.5	1	1	1	1	1	2
4241317-09-01		2.22	98.1	<0.5	<5	<0.5	8	1	<1	44	6	143
4241317-09-02		0.95	98.0	<0.5	<5	<0.5	3	<1	<1	3	4	106

Comments: Reprise à partir des rejets de VO09099573.


Elizabeth Lake
MATACHEWAN DIABASE
Sample 4241317-09-02
Sample 4241317-09-01
R
R'
Normal Faulting
Extension Vein
Extension
Fold Axes
Thrust Faulting
Compression
UTM Nad 83
504163 E
5304762 N
± 5.5 m
Elizabeth Lake
SYMBOLOGY
Quartz-Carbonate vein area
Shear zones
R (dextral)
R' (sinistral)
CS (dextral)
Joint
Fold axe
N
0 0,25 0,5 0,75 1 1,25 1,5 1,75 2 2,25 2,5 2,75 3
m
MCD Exploration and Survey LTD
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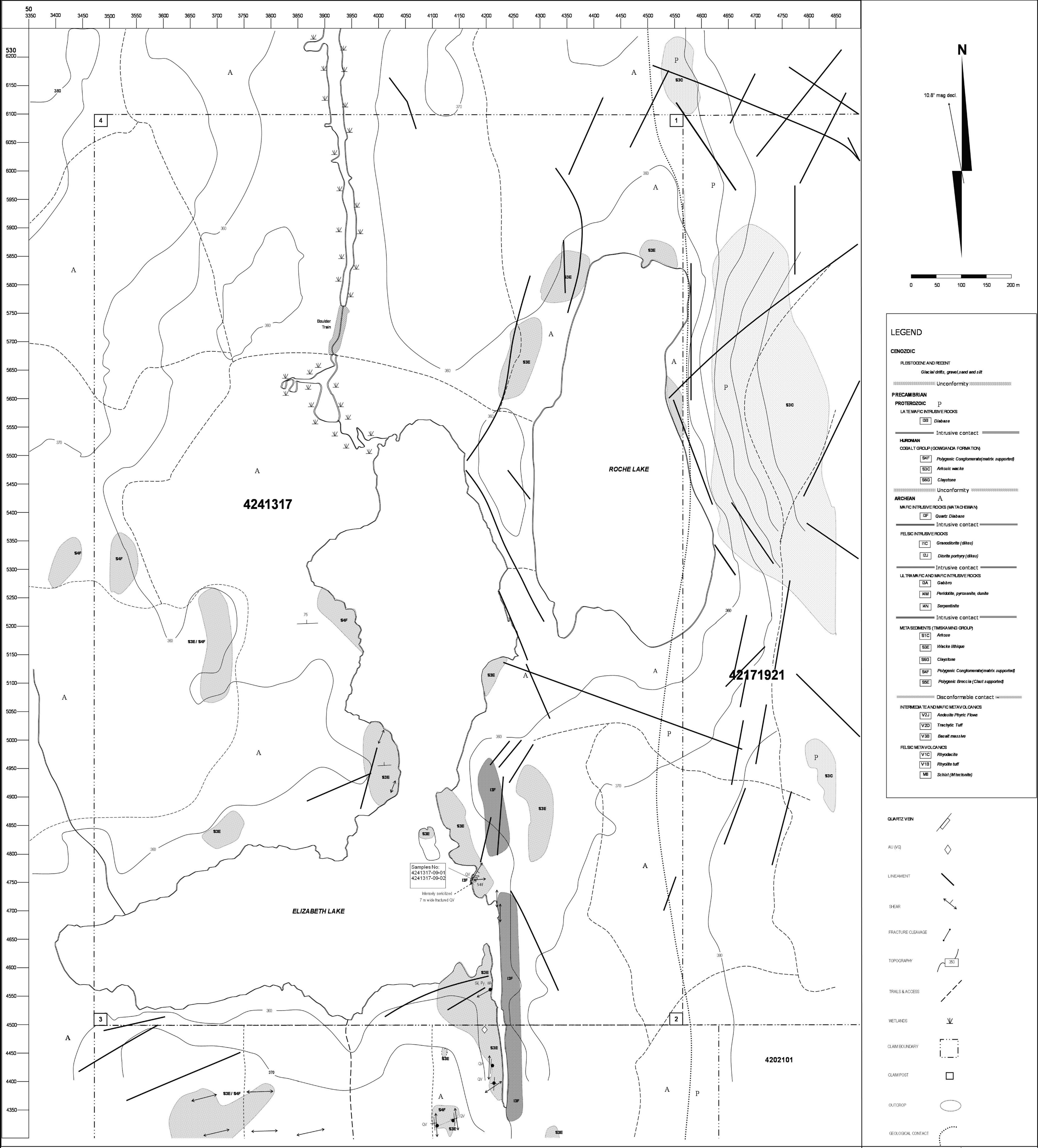
SCALE 1:20
Vertical Exageration 20%
PLAN OF OUTCROP 4241317-0901
CLAIM 4241317 MIDLOTHIAN TWP
ONTARIO
DATE: MAY 26, 2010
GEOLOGY BY: P. VINCENT (P.Geo.)
DRAFTING BY: P.VINCENT (P.Geo.)



GEOLOGICAL MAP OF CLAIM 4241317

MIDLOTHIAN, ONTARIO

ACCOMPANYING THE GEOLOGICAL REPORT FILED FOR ASSESSEMENT WORKS

UTM Coordinates with NAD-83 datum

GEOLOGY :	P. VINCENT, P.Geo.	June 23-27, 2009 September 9-14, 2009
DRAFTING :	P. VINCENT, P.Geo	October 21-21, 2009

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