# Assessment Report
# 2016 Trenching Program
# McKinnon Gold Property, Hawkins Township

Claim 1229072
G-2316, Hawkins Township, Sault Ste. Marie Mining Division
UTM WGS84 Zone 16U 714820 mE 5430045 mN;
Lat 48$^{o}$ 59’ 09” N Long 84$^{o}$ 03’ 49” W
NTS 42C16 - Kabinakagami Lake

For:
Pavey Ark Minerals Inc.
Client number 411465

Prepared By:
Richard Sutcliffe, P.Geo. (Client number 225603)
100 Broad Leaf Crescent,
Ancaster, ON, L9G 3R8

June 5, 2016

**Executive Summary**

This assessment report documents the re-excavation and sampling of 7 trenches on the McKinnon Gold Property that were originally excavated by Falconbridge in 1894. The work was conducted on claim 1229072 located in Hawkins Township in the Sault Ste. Marie Mining Division, Ontario to validate the historical trench results on the property. The claims are part of a larger contiguous property in Hawkins and Walls Townships that is owned by Pavey Ark Minerals Inc.

The Property is located 80 km south-southwest of Hearst, Ontario and is directly accessed by route 583 and the Caithness logging road system that extends south from the Trans-Canada Highway 11 at Hearst. The work for this report took place between May 1st to June 3rd, 2016. The total assessment expenditure is $18,081. The work was completed under Exploration Permit PR-13-10422a.

The McKinnon Property contains gold mineralization associated with the Puskuta deformation zone, a steeply dipping dextral, transcurrent structure that on a regional scale bounds the south side of the Kabinakagami Lake greenstone belt and extends for approximately 60 km to the southeast through Hawkins, Walls, Minnipuka and Puskuta Townships. The McKinnon Property has been sporadically explored for gold beginning with the discovery of the Taylor Prospect in 1923 in Hawkins Township close to the ACR tracks. The Shenango Gold Mine operated in Hawkins Township from 1935 to 1941 and is located on the McKinnon Property. Exploration work on the Property by Falconbridge in 1983 to 1986 included 79 drill holes for a total of 14,200 m and extensive surface trenching. This drilling and trenching defined an auriferous shear zone with values of 0.5 to 4.0 g/t Au over 4 to 30 m widths along a 3.7 km trend. Pavey Ark has a complete set of Falconbridge drill records with sample numbers, sample intervals and assay results for the drill holes and surface trenching.

In the current trenching Program, Pavey Ark re-established the Falconbridge baseline from 16+00E to 11+00E and contracted Kuzmich Prospecting of Thunder Bay, Ontario to excavate 7 of the historical Falconbridge trenches from 17+00E to 10+75E with a Kubota 040 excavator. The 7 trenches expose the McKinnon gold deposit over a strike length of approximately 600 m. Dasti Consulting sampled the excavated trenches and submitted 42 grab samples for gold assay. Additionally 2 certified reference standards and 2 blanks were submitted for QA/QC purposes. The samples were analyzed for Au by fire assay with an atomic absorption finish (FA/AA) at Accurassay Laboratories in Thunder Bay, Ontario.

Grab samples assay values ranged from Nil to 4.35 g/t Au with 7 samples reporting over 1 g/t Au and 11 samples reporting over 0.5 g/t Au. The trench sampling program was successful in confirming significant surface gold values on the McKinnon Gold Property. The program has validated the historical trench results and confirmed the location of the surface exposure of the McKinnon Gold Deposit.

**Table of Contents**

## 1.0 Introduction

This assessment report documents results of 42 gold assays from 7 trenches on the McKinnon Gold Property. The work was conducted on claim 1229072 located in Hawkins Township in the Sault Ste. Marie Mining Division, Ontario. The claim is part of a larger contiguous property in Hawkins and Walls Townships that is owned by Pavey Ark Minerals Inc.

The work for this report took place between May 1 and June 3, 2016. Pavey Ark submitted a total of 46 samples for assay including 42 grab samples, 2 certified reference standards and 2 blanks that were submitted for QA/QC purposes. The Pavey Ark samples were analyzed for Au by fire assay with an atomic absorption finish (FA/AA) at Accurassay Laboratories in Thunder Bay, Ontario.

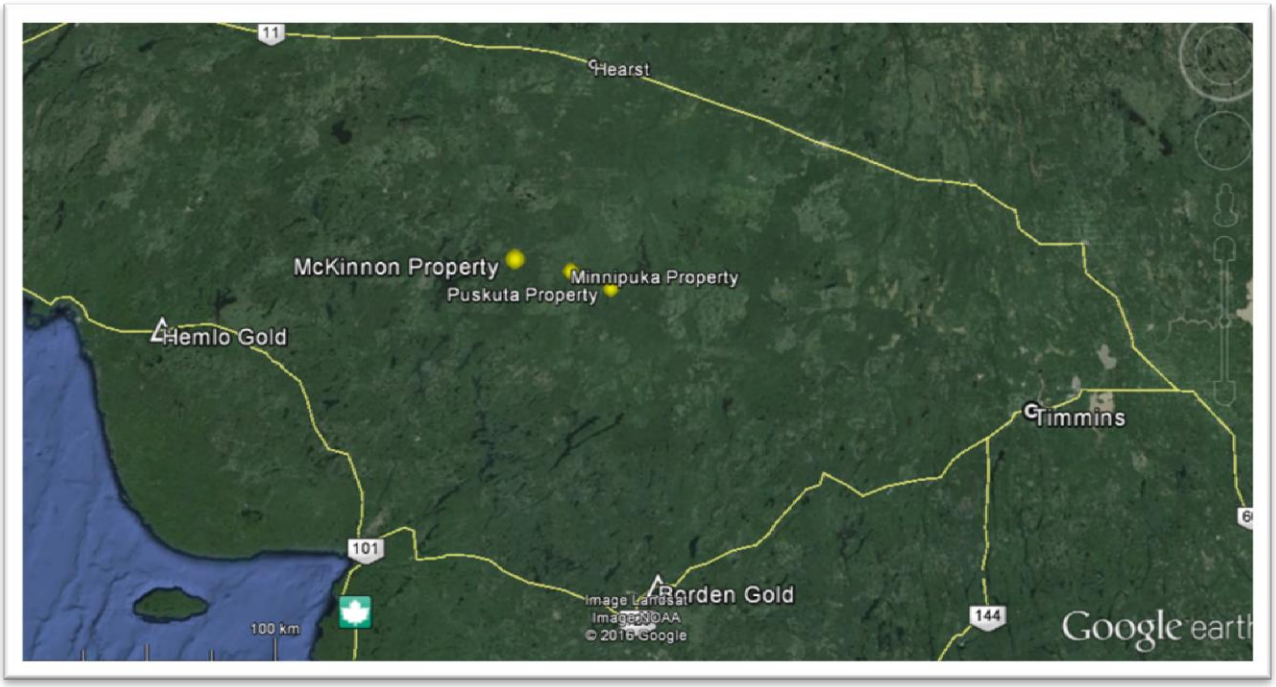
The work was done to validate the historical trench results on the property and to validate the surface exposure of gold mineralization. The total assessment expenditure is $18,081. The work was completed under Exploration Permit PR-13-10422a.

## 2.0 Location and Access

The McKinnon Gold Property is located 80 km south-southwest of Hearst, Ontario (Figure 1). The Project is directly accessed by route 583 and the Caithness logging road system that extends south from the Trans-Canada Highway 11 at Hearst. The logging road system is maintained all year.

At approximately 10.5 km south of Hearst on route 583, the Project is accessed by turning left onto the Caithness Road. At approximately 70 km south on the Caithness Road, a right turn on the Oba Road provides access to the McKinnon Property by continuing west on Oba Road for 26.1 km to the intersection with Irving Road and turning left (south) on Irving Road and then continuing on the Irving road for 3.2 km past CNR tracks, toward the junction with Poulin road. The McKinnon Property is accessed by a trail that extends south from the Irving Road 400 m east of the Poulin Road junction. Total road distance from highway 11 at Hearst to the McKinnon Property on 583/Caithness/Oba/Irving route is approximately 110 km.

**Figure 1. McKinnon Property Location**




*Source: Google Earth 2016*

## 3.0 Claim Holdings and Property Disposition

The McKinnon Property is comprised of 14 contiguous staked claims (4266186, 4266187, 4266188, 4266189, 4278951, 4283665, 4270206, 4272109, 1229071, 1229072, 4267268, 4267269, 4267270, 4267268) covering 144 units (2,304 ha) that spans Hawkins and Walls Townships (Table 1). The claims are registered in the name of Pavey Ark Minerals Inc., a private Ontario company. A claim map is provided as Map 1. The work was performed on claim 1229072 in the centre of the Property.

**Table 1. List of McKinnon Property Claims held by Pavey Ark Minerals Inc.**

| Township / Area | Claim Number | Recording Date | Claim Due Date | Status | Percent Option | Work Required | Total Applied | Total Reserve | Claim Bank |
|---|---|---|---|---|---|---|---|---|---|
| HAWKINS | 1229071 | 1997-Jun-06 | 2016-Jun-06 | A | 100 % | $3,200 | $54,400 | $0 | $0 |
| HAWKINS | 1229072 | 1997-Jun-06 | 2016-Jun-06 | A | 100 % | $6,400 | $108,800 | $763 | $0 |
| HAWKINS | 4266186 | 2013-Oct-30 | 2016-Oct-30 | A | 100 % | $6,400 | $6,400 | $0 | $0 |
| HAWKINS | 4266187 | 2013-Oct-30 | 2016-Oct-30 | A | 100 % | $6,000 | $6,000 | $0 | $0 |
| HAWKINS | 4266188 | 2013-Oct-30 | 2016-Oct-30 | A | 100 % | $6,000 | $6,000 | $0 | $0 |
| HAWKINS | 4266189 | 2013-Oct-30 | 2016-Oct-30 | A | 100 % | $4,800 | $4,800 | $0 | $0 |
| HAWKINS | 4267268 | 2012-Jun-25 | 2016-Jun-25 | A | 100 % | $6,400 | $12,800 | $212 | $0 |
| HAWKINS | 4270206 | 2012-Aug-10 | 2016-Aug-10 | A | 100 % | $6,000 | $12,000 | $0 | $0 |
| HAWKINS | 4272109 | 2012-Jun-25 | 2016-Jun-25 | A | 100 % | $6,400 | $12,800 | $0 | $0 |
| HAWKINS | 4278951 | 2015-Sep-22 | 2017-Sep-22 | A | 100 % | $3,400 | $200 | $0 | $0 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| HAWKINS | 4283665 | 2015-Sep-08 | 2017-Sep-08 | A | 100 % | $2,335 | $65 | $0 | $0 |
| WALLS | 4267269 | 2012-Jun-22 | 2016-Jun-22 | A | 100 % | $6,000 | $12,000 | $0 | $0 |
| WALLS | 4267270 | 2012-Jun-22 | 2016-Jun-22 | A | 100 % | $4,000 | $8,000 | $0 | $0 |
| WALLS | 4242116 | 2016-Feb-08 | 2018-Feb-08 | A | 100 % | $6,000 | $0 | $0 | $0 |

## 4.0 Previous Work

The McKinnon Property has been sporadically explored for gold beginning with the discovery of the Taylor Prospect in 1923 in Hawkins Township close to the ACR tracks. The Shenango Gold Mine operated in Hawkins Township from 1935 to 1941 and is located on the McKinnon Property. Boissoneault (2004) reports that the Shenango Mine produced 66.2 ounces of gold from 2,430 tons of mineralization between 1937 and 1941. The McKinnon Property was initially staked by Mr. Donald McKinnon in 1997, based on having similar geological characteristics to the Hemlo gold deposits located 140 km to the southwest.

A summary of exploration on the McKinnon Property based on the report by Boissoneault (2004) is provided in Table 2. This table is divided into 3 geographic areas. These include: the western part of the McKinnon Property in the vicinity of the Taylor Prospect (on claim 4267268); the central part of the Property in the vicinity of the past-producing Shenango Mine (on claim 1229071); and the western part of the Property in the vicinity of the Goldfield's showing (on claim 4266187).

**Table 2. Summary of Exploration on the McKinnon Property**

| Date | Performed By: | Work Performed: | Results: |
|---|---|---|---|
| ***Taylor Prospect (claim 4267268)*** | | | |
| 1925-1929 | G. Taylor | Stripping, trenching, sampling | Uncovered 3 quartz veins, gold panned |
| 1929-1935 | Hawkins Mining Syndicate | Stripping, trenching, bulk sampling (2000 lb) | Uncovered 7 quartz veins 30.5 g/t Au over 0.30 m; 5.1 g/t Au from test pit |
| 1935 | Hollinger Gold Mines | Prospecting, diamond Drilling | 31.31 g/t Au over 6.1 m, no other documentation |
| 1935-1945 | Mintor Gold Mines | Prospecting, channel Sampling | No documentation |
| 1960 | International Nickel Co. | Diamond drilling | No documentation |
| 1972-1974 | Magi Gold Mines Ltd. (fiche: Hawkins; 0015-0018) | Induced polarization and magnetic surveys, 3 diamond drill holes (907 feet) | Minor finely disseminated sulfides |
| 1979-1980 | St. Josephs Exploration Ltd. (fiche: Hawkins; 0012, 0013) | Magnetometer, VLF, HLEM Surveys | 5 VLF anomalies, very weak HLEM anomalies |
| 1980-1981 | Sulpetro Minerals Ltd.: (fiche: Hawkins; 0011) | Geological survey, surface sampling | Encouraging assay values, highest value 20.91 g/t Au (no width reported) |
| 1983-1986 | Falconbridge Exploration Ltd. (fiche: Hawkins; 0035) | Geochemical and geophysical surveys, trenching, diamond drilling (79 holes for 14,200 m) | Defined auriferous shear zone with values of 0.5 to 4.0 g/t Au over 4 to 30 m widths |

| | | | |
|---|---|---|---|
| 1999-2004 | Don McKinnon (WP Hawkins-2) | Trenching, stripping, ground geophysics, diamond drilling (1 hole 217 m) | Presently claim 1229072, exposed wide alteration zone |
| ***Shenango Mine (claim 1229071)*** | | | |
| 1935-1937 | Shenango Mining Co. | Trenching (1000 ft.), channel sampling, exploration shaft (52 ft. deep), adit (90 ft.), open cut mining, diamond drilling (2500 ft.) | Assays average 0.140 oz./ton over 5 ft. wide and 400 ft. of strike length |
| 1937-1941 | Shenango Mining Co. | Diamond drilling (400 ft.), trenching, production shaft (135 ft.) | Reported assay results underground; 0.14 oz./ton over 30 ft., 0.18 oz./ton over 20 ft. 0.22 oz./ton over 15 ft. 0.17 oz./ton over 8 ft. |
| 1945 | Shenango Mining Co. (fiche: Hawkins; 0019) | Clean up operation at mill | Recovery of 35.87 ounces of gold and 5 ounces of silver |
| 1979-1981 | St. Josephs Exploration Ltd. (fiche: Hawkins; 0012, 0013) | Ground geophysics including I.P., geological mapping and sampling | Samples taken from muck pile returned assays of: 7.54 g/t, 6.69 g/t, 52.4 g/t |
| 1983-1986 | Falconbridge Exploration Ltd. (fiche: Hawkins; 0021-0035) | Geochemical and geophysical survey (I.P.), trenching, diamond drilling | Defined auriferous shear zone with values of 0.5 to 4.0 g/t Au over 4 to 30 m widths |
| 2000-2004 | Don McKinnon (WT Hawkins-30) | ground geophysics, stripping, trenching, Diamond drilling (2 holes; 214 meters) | Presently claim 1229072, exposed wide alteration zone |
| ***Goldfields and Johnstone-Barnes Showings*** | | | |
| 1939 | Johnstone and Barnes | Trenching, sampling, presently claim 4266186 | Gold occurrence discovered, reported assay of 0.24 oz./ton over35 ft. |
| 1975 | Rio Tinto Canadian (fiche: Hawkins; 0010) | Ground geophysics, diamond drilling (2 holes; 902 ft.) | No available results |
| 1986 | Hawk Resources (fiche: Hawkins; 0042, WT2, WT16, WT19) | Ground geophysics, geochemistry, diamond drilling (20 holes; 6151 ft.) | South of McKinnon Property, results discouraging |
| 1986-1989 | Goldfields Canadian Mining Ltd. (fiche: Hawkins; WT 11, WT20, WT21) | Geology, sampling, diamond drilling (13 holes; 1780 ft.) | Results incorporated in Aurlot Exploration Ltd., 1989 report below |
| 1989 | Aurlot Exploration Ltd. (fiche: Hawkins; WT13, WT17, WT18) | Geology, sampling, geochemistry, airborne geophysics, stripping, trenching, | Channel sample assays reflected results; 1.31 oz./ton over 3 ft., 0.74 oz./ton over5 ft., 0.42 oz./ton over 2 ft., 0.40 oz./ton over2 ft., 0.21 oz./ton over5 ft., 0.11 oz./ton over2 ft., presently claim 4266187 |
| *Source: Boissoneault 2004* | | | |

Exploration work on the McKinnon Property by Falconbridge in 1983 to 1986 included 79 drill holes for a total of 14,200 m and extensive surface trenching. This drilling and trenching defined an auriferous shear zone with values of 0.5 to 4.0 g/t Au over 4 to 30 m widths along a

3.7 km trend (Morrison, 1985). Pavey Ark has a complete set of Falconbridge drill records with sample numbers, sample intervals and assay results for the drill holes and surface trenching.

The Ontario Geological Survey (2015) released results of a helicopter mounted Geotech VTEM plus magnetic and electromagnetic surveys flown at 200 m line spacing that covered Hawkins Township and adjacent townships.

## 5.0 Geology

The McKinnon Property contains gold mineralization associated with the Puskuta deformation zone, a steeply dipping dextral, transcurrent structure that on a regional scale bounds the south side of the Kabinakagami Lake greenstone belt and extends for approximately 60 km to the southeast through Hawkins, Walls, Minnipuka and Puskuta Townships (Leclair, 1990; Wilson, 1993). LeClair and Sullivan (1991) report a U-Pb titanite age of 2,665 Ma for mylonite related to the Puskuta Deformation zone.

The McKinnon Property is underlain by predominately Archean rocks of the Kabinakagami Lake greenstone belt and by Archean granodiorite to tonalite plutons. The Archean rocks are intruded by Proterozoic diabase dikes of the Hearst swarm. The area was originally mapped by Maynard (1929) with more recent mapping by Wilson (1993).

Wilson (1993) describes mafic to intermediate metavolcanic rocks as the dominant rock type in the Kabinakagami greenstone belt. In Hawkins Township, these rocks are strongly foliated and of amphibolite metamorphic grade. Felsic metavolcanic rocks are locally observed in Hawkins Township. Wilson (1993) describes quartz porphyry, and to a lesser extent, quartz-feldspar porphyry, sills and dikes as a prominent feature in western Hawkins Township. The dikes and sills are light grey to white on their weathered surfaces and contain up to 15 percent, 5 mm to 15 mm opalescent quartz eyes in a siliceous fine grained groundmass.

The tonalite mapped by Wilson (1993) in central Hawkins Township is described as sheared, light grey to white, with a cataclastic texture. This tonalite separates the two units of metavolcanic rocks in Hawkins Township and occurs along the south side of the Puskuta shear zone. Clots of sulphides (pyrite and chalcopyrite) and quartz are prominent within the tonalite in the 500 m to 1000 m wide deformed zone.

In central Hawkins Township, Wilson (1993) describes the gold showings as occurring in quartz veins at the strongly sheared northern contact of the tonalite intrusion with mafic metavolcanic rocks. Gold is associated with well-developed sericite-silica-pyrite alteration in sheared host rocks.

## 6.0 Trenching and Sampling Program

The 1984 Falconbridge baseline was located between 16+00E and 12+00E based on evidence of 32 year old cutting, tree blazes, and position relative to the historical Falconbridge trenches. After locating the baseline, the interval between 16+00E and 12+00E was recut. The baseline cutting was done by Maurice Lecours of Hearst on May 9 and 10, 2016.

Kuzmich Prospecting of Thunder Bay, Ontario was contracted to complete the re-excavation of the Falconbridge trenches that had originally been established in 1984. The Kubota 040 excavator was mobilized to the site on May 8th, 2016 and completed the re-excavation from May 9th to 13th, 2016. Mr. Ben Kuzmich of Thunder Bay was the operator.

The historical trenches had been excavated in approximately 1.0 m of overburden. While the historical trenches could be readily located they had been generally filled by slumping overburden and vegetation. A total of 7 trenches nominally spaced at 100 m (10+75E, 12+00E, 13+00E, 14+00E, 15+00E, 16+00E and 17+00E) over a strike length of 625 m were re-excavated. The re-excavated trenches have a north-south orientation with an average length of 32 m for a total of approximately 221 meters. The trenches are all located on claim 1229072.

**Figure 2. Location of Trenches relative to claim 1229072 –South end of trenches plotted**


*Source: Google Earth 2016*

Trenches were sampled by Ian Dasti of Thunder Bay between May 8 to 15, 2016. The position of samples relative to the baseline grid was recorded and GPS coordinates were taken. A metal tag with the sample number was affixed to the bedrock exposed in the trench.

Pavey Ark submitted a total of 46 samples including 2 certified reference standards and 2 blanks. Pavey Ark's samples were analyzed for gold by at Accurassay Laboratories (Accurassay) in Thunder Bay, Ontario. Pavey Ark's samples were transported under the direct supervision of the Geologist to the sample receiving facilities of Accurassay in Thunder Bay, Ontario.

At Accurassay, each sample was prepared using Accurassay's ALP1 preparation code consisting of drying, crushing to 85% -10 mesh (2mm), splitting (500g) and final pulverizing to 85% - 200 mesh (74µ). Silica abrasive is used to clean the pulverizer between each sample.

The pulverized samples were analyzed for gold with Accurassay's ALFA1 method code consisting of a fire assay on a 30 g sample aliquot with an atomic absorption finish (FA/AAS). This method has detection limits of 0.005 g.t Au up to 10.0 g/t Au. No other elements were analyzed. Sample descriptions, locations and results are presented in Appendix 1. Accurassay's certificate is presented in Appendix II.

Pavey Ark inserted the OREAS 15h certified reference standards into the drill core intervals selected for re-assay. Results are presented in Table 3 below.

**Table 3. Results for OREAS 15h and OREAS 18c reference materials**

| | **Certified value +/- 1SD** | **Accurassay results Au g/t** | | | | |
|---|---|---|---|---|---|---|
| | | | | | | Average |
| **OREAS 15h** | 1.019 +/- 0.025 | 0.975 | 0.954 | 0.959 | 0.942 | 0.958 |

The averages of Pavey Ark's results for both OREAS 15h are within 2SD for Au. This indicates that the Accurassay results are acceptable. Pavey Ark inserted two field blanks into the assay samples. The blank was obtained from core samples of a barren biotite tonalite. The field blanks returned 0.011 g/t Au and 0.111 g/t Au. The later suggests that contamination is occurring.

## 7.0 Conclusions and Recommendations

The trench sampling program was successful in validating Falconbridge historical assays and in confirming the location of the surface exposure of the McKinnon gold deposit. Gold mineralization is hosted in silica-pyrite-sericite altered tonalite immediately south of the amphibolite/tonalite contact.

The McKinnon Gold Property contains significant gold mineralization associated with a well-defined structure and alteration system. The property has potential for delineation of additional mineralization and further exploration is warranted. Recommendations include an IP geophysical survey to assist in defining drill targets, 2,080 m of diamond drilling, and metallurgical testwork.

## 8.0 References


Boissoneault, J.R., 2004, Technical Report on the Don McKinnon Property, for Baltic Resources Inc., August 17, 2004, 25 p.

Lahti, H. R. 1989, Report on the Hawkins Property, Hawkins Township, Ontario, for Aurlot Exploration Ltd., November 15, 1989, AFRI 42C16NE8216.

Leclair, A.D., Ernst, R.E., and Hattori, K. 1993. Crustal scale auriferous shear zones in the central Superior province, Canada. Geology, v. 21, pp. 399-402.

Maynard, J.E. 1929, Oba Area, District of Algoma, Ontario Department of Mines, Annual Report 1929, v. 38, pt. 6, pp. 114-125.

Morrison I.R. (1984) Trenching Program on the Gervais Option, Oba Property, 1984, NTS: 42C 16. Internal Report for Falconbridge Limited, Winnipeg, Manitoba.

Ontario Geological Survey, 2015. Airborne magnetic and electromagnetic surveys, colour-filled contours of the residual magnetic field and electromagnetic anomalies, Kabinakagami Lake area; Ontario, Geological Survey, Map 82 754, scale 1:50 000.

Rogers, G.P. (1987) Falconbridge Limited Diamond Drill Report, Gervais Option, 1986-1987, NTS: 42C 16. Internal Report for Falconbridge Limited, Winnipeg, Manitoba.

Wilson, A.C., 1993, Geology of the Kabinakagami Lake Greenstone Belt, Ontario Geological Survey, Open File Report 5787, 80 p.

## 9.0 Statement of Qualifications

I, Richard H. Sutcliffe, of 100 Broadleaf Crescent, Ancaster, Ontario, do hereby certify that:
I am a graduate of University of Toronto (B.Sc. Geology, 1977, M.Sc Geology 1980), and a graduate of University of Western Ontario (Ph.D. Geology, 1986) and I have been practising my profession as a geologist since.
I am a member with the Association of Professional Geoscientists of Ontario (#852).
I have direct knowledge of the exploration work performed for this assessment and I am indirectly the owner of the claims on which the work was performed.

*Signed*

*"R.H. Sutcliffe"*

Richard H. Sutcliffe, Ph.D., P.Geo.
June 3, 2016
Ancaster, Ontario

## Appendix 1. McKinnon Property Trench Samples

| Lab ID | Sample ID | Trench | Trench grid coord. (+ is N, - is S) | g/t Au | UTM_Easting | UTM_Northing | Sample Description |
|---|---|---|---|---|---|---|---|
| 447151 | MC16-1101 | 10.75E | BL+24.0 | <0.005 | 714376 | 5430074 | deformed/foliated tonalite, weak sericite, weak silicification, as rare sub cm qtz vns, no py |
| 447152 | MC16-1102 | 10.75E | BL+30.0 | 0.416 | 714376 | 5430080 | deformed/foliated tonalite, rusty, intense to moderate sericite, moderate silicification, trace-0.5% py |
| 447153 | MC16-1103 | 10.75E | BL+34.0 | 0.193 | 714376 | 5430084 | deformed tonalite, moderate sericite, moderate silicification, minor gossan (tr. Py) |
| 447154 | MC16-1104 | 10.75E | BL+37.5 | 0.602 | 714376 | 5430088 | deformed tonalite, moderate sericite, moderate silicification, 0.5% py, py in qtz veinlets/bands |
| 447155 | MC16-1105 | 10.75E | BL+46.0 | 0.139 | 714376 | 5430096 | deformed tonalite, friable, intense sericite, weak silicification, tr-nil py |
| 447156 | MC16-1201 | 12E | BL-5.0 | <0.005 | 714499 | 5430042 | Sheared mafic to possibly intermediate chlorite-sericite schist. Friable, possible shear, relatively homogenous looking. Green. |
| 447157 | MC16-1202 | 12E | BL | 0.011 | 714500 | 5430053 | deformed/foliated tonalite, moderate to intense sericite, weak to moderate silicification, somewhat friable |
| 447158 | MC16-1203 | 12E | BL+7.0 | <0.005 | 714501 | 5430066 | deformed/friable tonalite, moderate sericite, weak to moderate silicification. Tr. Py |
| 447159 | MC16-1204 | 12E | BL+12.5 | 0.005 | 714500 | 5430076 | deformed/foliated tonalite with rare small quartz veins; generally weakly silicified, moderate sericite, tr py |
| 447160 | MC16-1205 | 12E | BL+15.5 | 0.098 | 714500 | 5430066 | Deformed/foliated tonalite, moderate sericite, moderate to intense silicification as small quartz veins |
| 447161 | Blank | | Tonalite Field Blank | 0.011 | | | |
| 447162 | Standard | | OREAS-15H | 1.026 | | | |
| 447163 | MC16-1301 | 13E | BL-8.3 | 0.011 | 714609 | 5430039 | Deformed/foliated tonalite with quartz vein. White-grey, biotite tonalite with 2-3cm wide quartz vein. Quartz vein has trace py, tonalite has trace-0.5% py |
| 447164 | MC16-1302 | 13E | BL-4.8 | <0.005 | 714604 | 5430045 | Deformed/foliated tonalite similar to above with moderate sericite, weakly silicified, trace pyrite |
| 447165 | MC16-1303 | 13E | BL+1.5 | 0.029 | 714605 | 5430051 | Biotite tonalite, grey-white, looks the same as sample MC16-1302 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 447166 | MC16-1304 | 13E | BL+7.0 | <0.005 | 714602 | 5430054 | deformed/foliated tonalite, moderate sericite, weak silicification, tr py |
| 447167 | MC16-1305 | 13E | BL+10.3 | 0.28 | 714601 | 5430061 | Deformed/foliated tonalite sample taken near boudinage in tonalite. Moderate sericite, moderately silicified, trace pyrite |
| 447168 | MC16-1306 | 13E | BL+29.0 | 0.168 | 714601 | 5430066 | deformed / foliated tonalite, moderate to intense sericite, moderate silicification, 0.5%-1%py |
| 447169 | MC16-1401 | 14E | BL-2.9 | 0.028 | 714705 | 5430058 | Foliated / deformed tonalite, less altered than other 1400E samples. Contains biotite flakes up to 1cm in bands, low silicification, trace pyrite associated with weak silicification / quartz bandsd. Weak to nil sericite. |
| 447170 | MC16-1402 | 14E | BL+2.0 | 0.88 | 714707 | 5430061 | deformed/foliated tonalite, intense sericite, internsely silicified, moderate to intense pyrite with silicification (2%) |
| 447171 | MC16-1403 | 14E | BL+12.1 | 1.294 | 714702 | 5430066 | deformed/foliated tonalite, moderate sericite, weak to moderate silicification, trace-0.5% py, locally (rarely) 3% (rare small bands) |
| 447172 | MC16-1404 | 14E | BL+15.0 | 0.077 | 714705 | 5430074 | deformed/foliated tonalite, moderate to intense sericite, moderately silicified, trace-0.5% py associated with quartz bands / veining |
| 447173 | MC16-1405 | 14E | BL+18.2 | 0.619 | 714710 | 5430073 | deformed/foliated tonalite with moderate to intense sericite, moderate silicification, trace pyrite. Sample incorporates sub cm shearing with highly friable material; beige-light grey |
| 447174 | MC16-1501 | 15E | BL+19.0 | 0.038 | 714798 | 5430078 | Intensely altered (kspar?) pink/green tonalite. Green is from moderate epidote (disseminated and as small veinlets). Sericite not observed, weak to moderate silicification, moderate gossan (tr-0.5% py) |
| 447175 | MC16-1502 | 15E | BL+20.6 | 0.076 | 714800 | 5430083 | Deformed/foliated tonalite, intense silicification, epidote, k-spar?(pink) |
| 447176 | MC16-1503 | 15E | BL+25.56 | 0.32 | 714800 | 5430088 | medium grained deformed / foliated tonalite, pink/beige, weak epidote, intense silicification, weak to nil sericite, tr py overall up to 2% associated with quartz veins/bands |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 447177 | MC16-1504 | 15E | BL+29.52 | 1.051 | 714799 | 5430093 | medium grained deformed/foliated tonalite, similar to MC16-1503. Weak-nil sericite, intense silicification, common pink coloration, trace-weak epidote |
| 447178 | MC16-1505 | 15E | BL+32.0 | 2.015 | 714798 | 5430100 | fine grained deformed/foliated tonalite, grey-beigs, with minor pink color, ~1% fine py, weak to moderate silicification, weak-nil sericite |
| 447179 | MC16-1506 | 15E | BL+36.64 | 0.04 | 714802 | 5430099 | hornfelsed felsite / tonalite? Fine grained, light beige color, with buck white quartz vein/sweats. |
| 447180 | MC16-1507 | 15E | BL+41 | 0.318 | 714798 | 5430104 | diabase with minor pink aplite? (could be assimilated tonalite?) contains 3% fine to medium grained pyrite, overall dark green mafic coloration with red (kspar? Hematite?) ribbons, py is sometimes fine grained and patchy |
| 447181 | MC16-1602 | 16E | BL+23.85 | 4.351 | 714905 | 5430107 | deformed/foliated tonalite, weak to moderate sericite, weak to moderate silicification, up to 0.5cm x 0.5cm quartz bands/ veinlets. Localy minor gossan indicating trace py; less biotite than MC16-1601 |
| 447182 | MC16-1601 | 16E | BL+20.4 | 0.402 | 714903 | 5430101 | Overall white to beige color, closer to white. Deformed / foliated tonalite (in notes as felsic schist) moderate (~5-10%) biotite, moderate silicification and sub mm pyrite rimming small quartz bands / veinlets; otherwise close to nil py. Likely moderate ser, but presence of biotite makes it somewhat difficult to tell exactly how much is present |
| 447183 | MC16-1603 | 16E | BL+25.28 | 0.185 | 714904 | 5430108 | Weathered/friable felsic schist (tonalite) in small shear, moderate gossan indicating at least trace py, possibly 0.5-1%. No fresh surface available; intense ser, moderately silicified where somewhat competent. Likely a shear, 13cm wide, oriented the same as foliation |
| 447184 | MC16-1604 | 16E | BL+25.38 | 2.849 | 714904 | 5430108 | deformed/foliated tonalite, moderate sericite, weak to moderate silicification, trace-0.5% py, locally (rarely) 3% (rare small bands) |
| 447185 | Blank | | Field Blank | 0.111 | | | |
| 447186 | Standard | | OREAS-15H | 1.052 | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 447187 | MC16-1605 | 16E | BL+27.05 | 0.776 | 714898 | 5430109 | Felsic schist (deformed /foliated tonalite) intense sericite, intense silicification, ~1% py, as discreet subhedral to euhedral grains up to 0.3x0.5cm |
| 447188 | MC16-1606 | 16E | BL+28.0 | 0.376 | 714899 | 5430109 | Deformed/foliated tonalite (felsic schist). Intense sericite, moderate to intense silicification, 0.5-1%py as generally sub mm grains, locally 0.1-0.2mm associated with quartz bands / ribbons. Quartz bands ~0.2cm wide, 2-20cm long. Tonalite is white/light grey beige color overall |
| 447189 | MC16-1607 | 16E | BL+30.7 | 0.283 | 714900 | 5430114 | Deformed/foliated tonalite (felsic schist). Contact with mafics is ~1cm adjacent to sample. Considerably darker (light purple grey) and homogenous color; weak sericite and weak silicification. |
| 447190 | MC16-1608 | 16E | BL+30.85 | 0.025 | 714900 | 5430114 | Fine grained deformed amphibolite (mafic volcanics), more deformed / possibly sheared, with pronounced foliation and weakly friable. Contains uncommon 2cm quarzt bands, very weak to nil ser along quartz veins. Veins are close to contact with tonalite and do not penetrate very far north. |
| 447191 | MC16-1701 | 17E | BL+48 | 0.088 | 715000 | 5430108 | Felsic schist (deformed / foliated tonalite) with quartz veining, moderate to intense sericite, 1% py |
| 447192 | MC16-1702 | 17E | BL+55.9 | 0.268 | 715000 | 5430116 | felsic schist (deformed/foliated tonalite) with abundant sericite, moderate silicification, tr py |
| 447193 | MC16-1703 | 17E | BL+58 | 1.825 | 715000 | 5430118 | felsic schist (deformed/foliated tonalite) slightly more intermediate looking (grey) than previous samples. Tr py, weak sericite |
| 447194 | MC16-1704 | 17E | BL+60.5 | 1.756 | 715000 | 5430121 | deformed/foliated tonalite (felsic schist) with moderate sericite, moderate to locally intense silicification, trace-1%py. |
| 447195 | MC16-1705 | 17E | BL+66 | 0.056 | 715000 | 5430126 | 3cm quartz vein with deformed / foliated tonalite (felsic schist) around it. Tonalite has abundant ser and 0.5-1% py |

## Appendix 2. Accurassay Assay Certificate

See attachments

ACCURASSAY LABORATORIES
1046 Gorham Street
Thunder Bay, ON
Canada P7B 5X5
Tel: (807) 626-1630
Fax: (807) 622-7571
www.accurassay.com
assay@accurassay.com

Friday, May 27, 2016

# Final Certificate

Pavey Ark Minerals Inc.
100 Broadleaf Cres.
Ancaster,, ON, Can
L9G 3R8
Ph#: (905) 304-4499
Fax#: (905) 920-0436
Email: rhsutcliffe@paveyarkminerals.com

Date Received: 05/19/2016
Date Completed: 05/27/2016
Job #: 201641030
Reference:
Sample #: 45

| Acc # | Client ID | Au g/t (ppm) |
|---|---|---|
| 112888 | 447151 | <0.005 |
| 112889 | 447152 | 0.416 |
| 112890 | 447153 | 0.193 |
| 112891 | 447154 | 0.602 |
| 112892 | 447155 | 0.139 |
| 112893 | 447156 | <0.005 |
| 112894 | 447157 | 0.011 |
| 112895 | 447158 | <0.005 |
| 112896 | 447159 | 0.005 |
| 112897 | 447160 | 0.098 |
| 112898 | 447160 Dup | 0.083 |
| 112899 | 447161 | 0.011 |
| 112900 | 447162 | 1.026 |
| 112901 | 447163 | 0.011 |
| 112902 | 447164 | <0.005 |
| 112903 | 447165 | 0.029 |
| 112904 | 447166 | <0.005 |
| 112905 | 447167 | 0.280 |
| 112906 | 447168 | 0.168 |
| 112907 | 447169 | 0.028 |
| 112908 | 447170 | 0.880 |
| 112909 | 447170 Dup | 0.699 |
| 112910 | 447171 | 1.294 |
| 112911 | 447172 | 0.077 |
| 112912 | 447173 | 0.619 |

APPLIED SCOPES: ALP1, ALFA1

**Validated By:**
Shawn Rask
Laboratory Assistant Manager

**Certified By:**
Andrew Oleski
Lab Manager - Thunder Bay

**Authorized By:**
Derek Demianiuk, VP Quality

**The results included on this report relate only to the items tested.**
**The Certificate of Analysis should not be reproduced except in full, without the written approval of the laboratory.**

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Date Received: 05/19/2016
Date Completed: 05/27/2016
Job #: 201641030
Reference:
Sample #: 45

| Acc # | Client ID | Au g/t (ppm) |
|---|---|---|
| 112913 | 447174 | 0.038 |
| 112914 | 447175 | 0.076 |
| 112915 | 447176 | 0.320 |
| 112916 | 447177 | 1.051 |
| 112917 | 447178 | 2.015 |
| 112918 | 447179 | 0.040 |
| 112919 | 447180 | 0.318 |
| 112920 | 447180 Dup | 0.314 |
| 112921 | 447181 | 4.351 |
| 112922 | 447182 | 0.402 |
| 112923 | 447183 | 0.185 |
| 112924 | 447184 | 2.849 |
| 112925 | 447185 | 0.111 |
| 112926 | 447186 | 1.052 |
| 112927 | 447187 | 0.776 |
| 112928 | 447188 | 0.376 |
| 112929 | 447189 | 0.283 |
| 112930 | 447190 | 0.025 |
| 112931 | 447190 Dup | 0.026 |
| 112932 | 447191 | 0.088 |
| 112933 | 447192 | 0.268 |
| 112934 | 447193 | 1.825 |
| 112935 | 447194 | 1.756 |
| 112936 | 447195 | 0.056 |

APPLIED SCOPES: ALP1, ALFA1

**Validated By:**
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Laboratory Assistant Manager

**Certified By:**
Andrew Oleski
Lab Manager - Thunder Bay

**Authorized By:**
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Job #: 201641030
Reference:
Sample #: 45

**Control Standards**

| QC Type | Element | QC Performance (ppm) | Mean (ppm) | Std Dev (ppm) |
|---|---|---|---|---|
| GS42 | Au | 0.729 | 0.650 | 0.040 |
| GS42 | Au | 0.711 | 0.650 | 0.040 |

APPLIED SCOPES: ALP1, ALFA1

**Validated By:**
Shawn Rask
Laboratory Assistant Manager

**Certified By:**
Andrew Oleski
Lab Manager - Thunder Bay

**Authorized By:**
Derek Demianiuk, VP Quality

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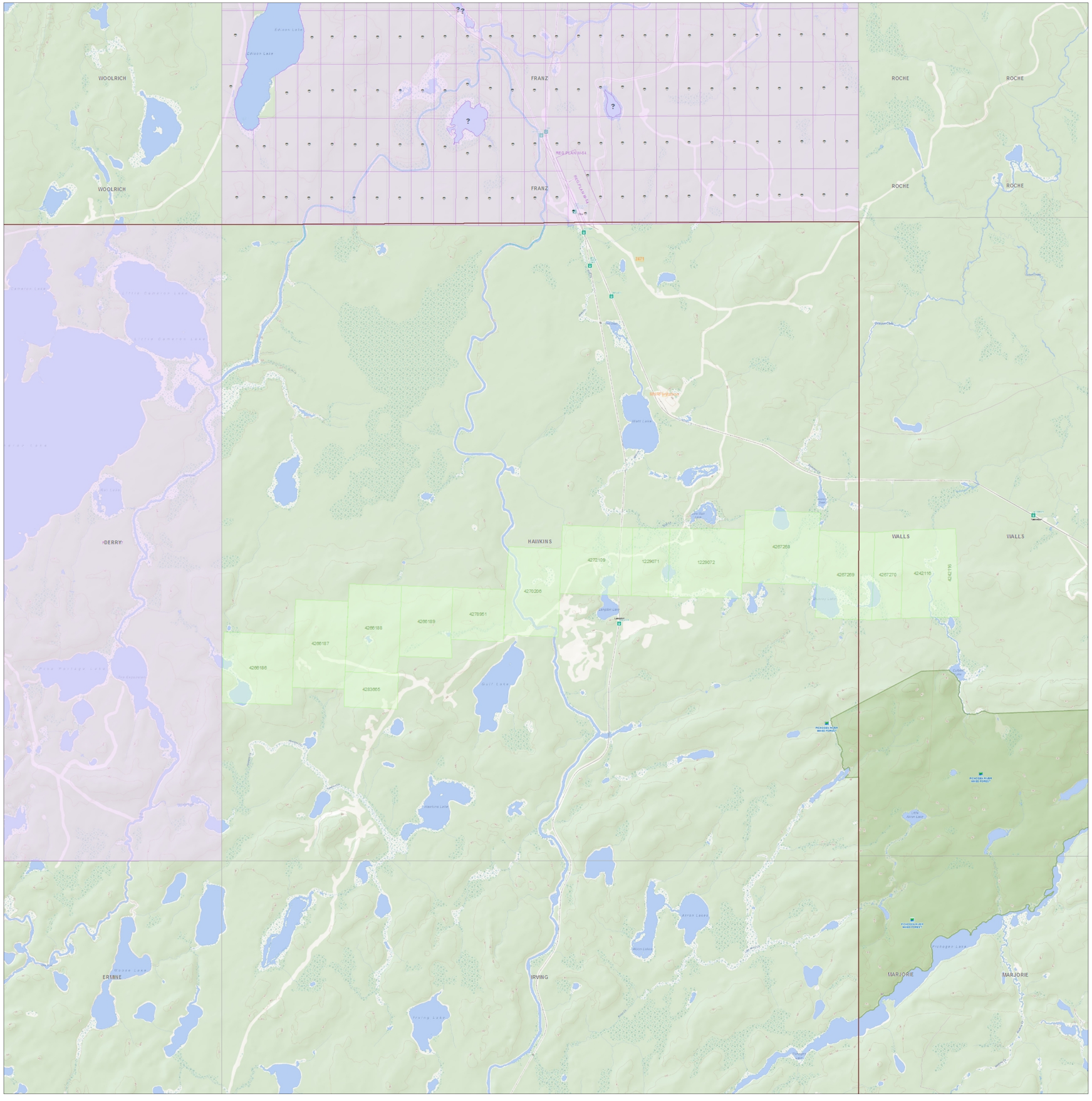
## Appendix 3. Expenditures

| Item | Units | Unit Cost | HST | Total |
|---|---|---|---|---|
| **Geologist – R. Sutcliffe, P.Geo** | | | | |
| Field management – May 9 to 11, 2016 | 3 days | $650/day | $253.50 | $2,203.50 |
| Data management and reporting –June 2,3, 2016 | 2 days | $650/day | $169.00 | $1,519.00 |
| | | | | |
| **Contractor Services** | | | | |
| Kuzmich Prospecting – Kubota 040 excavator, plus mob/demob, site costs – May 9 to 13 | 60 hours | | 643.50 | 5,593.50 |
| Dasti Consulting – Geologist - May 1, May 8 to 15, 2016 –Geology, sampling, plus assistant for line cutting for 2 days, mob/demob, site costs and accommodation | 9 days | | 507.00 | 6,316.73 |
| | | | | |
| **Analytical** | | | | |
| Accurassay Labs | 46 samples | $16.95/sample | 99.16 | 861.91 |
| | | | | |
| **Travel** | | | | |
| Personal vehicle – Ancaster/Hearst/Site/Hearst/Site/Hearst/Ancaster | 2,424 km | $0.50 | | 1,212.00 |
| | | | | |
| **Food and Accommodation** | | | | |
| Meals | 2 days | $25/day | | 50.00 |
| Companion Motel, Hearst – 2 rooms May 10, 2016 plus Dinner, 2 Breakfasts, 2 Lunches | 2 rooms | | 22.30 | 308.84 |
| | | | | |
| **Office Supplies & Field consumables** | | | | |
| Copying maps - Staples | | | 1.74 | 15.09 |
| | | | | |
| | | | | |
| **TOTAL EXPENDITURES** | | | | **$18,080.57** |




Date / Time of Issue: Tue May 03, 14:42:36 EST 2016

Ontario

Ontario Ministry of Northern Development and Mines
Mining Lands Claim Map

## Administrative Districts

Township

*HAWKINS*

Mining Division

*Sault Ste. Marie*

Land Registry

*ALGOMA*

MNRF District Office

*WAWA*

### Topographic

- Building as Symbol
- Building to Scale
- Runway
- Heliport \ Hospital Heliport
- Seaplane Base
- Ferry Route
- Trail Head \ Trail
- Railway \ Train Station
- Railway with Bridge
- Railway with Tunnel
- Road (Major → Minor)
- Winter Road
- Road with Bridge
- Road with Tunnel
- Primary, King or Provincial Highway
- Secondary Highway
- Tertiary Highway
- District, County, Regional or Municipal Road
- Toll Highway
- One Way Road
- Road with Permanent Blocked Passage
- Road with Address Ranges
- Hydro Line, Communication Line or Unknown Transmission Line
- Natural Gas Pipeline, Water Pipeline or Unknown Pipeline
- Spot Height
- Index Contour
- Contour
- Wooded Area
- Wetland
- Waterbody
- Waterbody Elevation
- Watercourse
- Falls
- Rapids
- Rapids \ Falls
- Rapids
- Rocks
- Lock Gate
- Dam \ Hydro Wall
- Dam \ Hydro Wall
- Provincial \ State Boundary
- International Boundary
- Upper Tier \ District Municipal Boundary
- Lower Tier \ Single Tier Municipal Boundary
- Lot Line
- Indian Reserve
- Provincial Park
- National Park
- Conservation Reserve
- Military Lands

### Mining Lands

**Administration Boundaries**
- Mining Divisions
- Resident Geologist District
- Townships and Areas

**Mineral Tenure Grid**
- OMTG Tenure Grid

**Alienations**
- Withdrawal
- Notice

**Unpatented Claim**
- Active
- Pending

**Disposition**
- Disposition

**Disposition Symbols**
- Camp
- Disposition Unknown/Pending
- Freehold Patent Mining Rights Only
- Freehold Patent Surface Rights Only
- Freehold Patent Surface and Mining Rights
- Land Use Permit
- Leasehold Patent Mining Rights Only
- Leasehold Patent Surface Rights Only
- Leasehold Patent Surface and Mining Rights
- License of Occupation Mining Use Only
- License of Occupation Surface Use Only
- License of Occupation Surface and Mining Rights
- License of Occupation Uses Not Specified
- Order in Council
- Tower
- WPLA

**Geology Layers**
- AMIS Sites
- AMIS Features
- Drill Holes
- Mineral Occurrences

Scale
1:50,000

0 — 6.1 km

Map Datum: NAD 83
Projection: Web Mercator

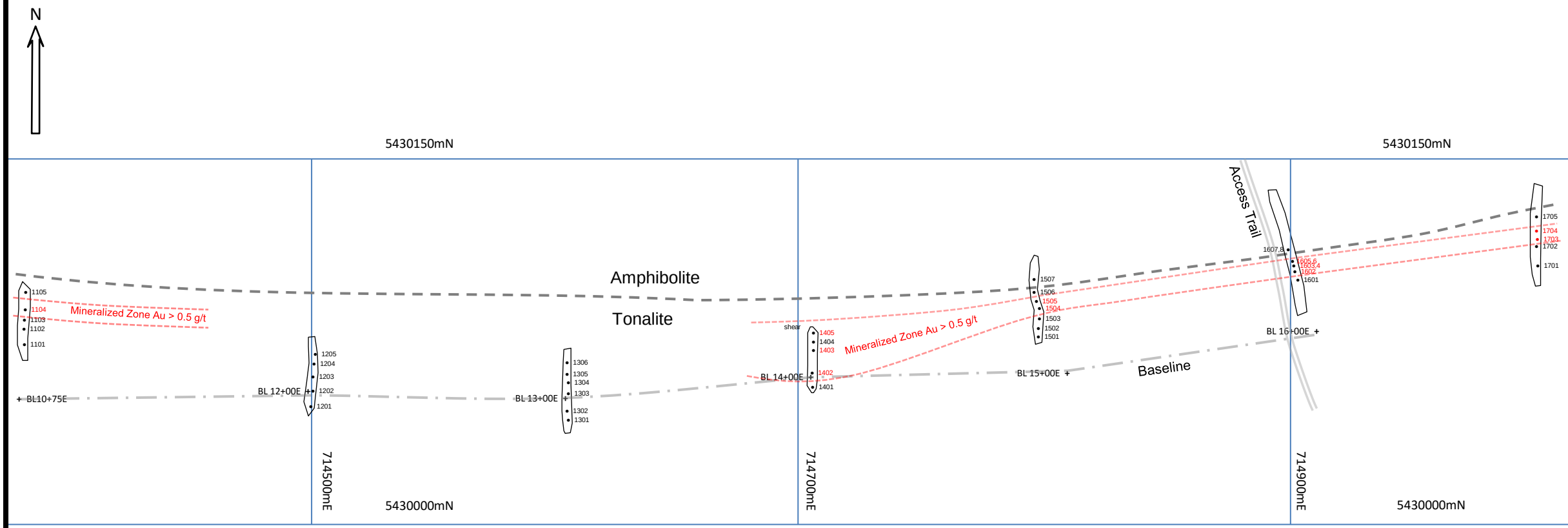

N

Those wishing to stake mining claims should consult with the Provincial Mining Recorders' Office of the Ministry of Northern Development and Mines for additional information on the status of the lands shown hereon. This map is not intended for navigational, survey, or land title determination purposes as the information shown on this map is compiled from various sources.

Completeness and accuracy are not guaranteed.

Additional information may also be obtained through the local Land Titles or Registry Office, or the Ministry of Natural Resources and Forestry.

The information shown is derived from digital data available in the Provincial Mining Recorders' Office at the time of downloading from the Ministry of Northern Development and Mines web site.




Map 2. McKinnon Property, Trench and Sample Locations
Claim 1229072
G-2316, Hawkins Township, Sault Ste. Marie Mining Division
NTS 42C16 - Magnetic declination 8º24’ West
For: Pavey Ark Minerals Inc., Client number 41165
Prepared By: R. H. Sutcliffe, P.Geo., Ian Dasti, M.Sc.
June 3, 2016

Trench outline

• 1301 Grab sample location MC16-series samples

• 1504 Samples with >0.5 g/t Au in red

+ BL10+75E Baseline grid coordinates

0 meters 100

Scale 1:2,000
when scale bar is 5 cm