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**TECHNICAL REPORT  
AND  
INITIAL RESOURCE ESTIMATE  
ON THE  
McKINNON GOLD PROJECT,  
HAWKINS AND WALLS TOWNSHIPS,  
SAULT STE. MARIE & PORCUPINE MINING DIVISIONS,  
ONTARIO**

**FOR**

**PAVEY ARK MINERALS INC.**

**LATITUDE 48° 59' 09" N LONGITUDE 84° 03' 49" W  
UTM WGS84 Zone 16U 714820 mE 5430045 mN;  
NTS 42C/16**

**NI-43-101 & 43-101F1  
TECHNICAL REPORT**

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**P&E Mining Consultants Inc.,  
Report 313**

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## 1.0 SUMMARY

The following report was prepared to provide a National Instrument (“NI”) 43-101 Technical Report and Resource Estimate for the gold mineralization contained in the McKinnon Gold Property (the “Property” or “McKinnon Property”) in Hawkins and Walls Townships, Sault Ste. Marie and Porcupine Mining Divisions, Ontario, Canada.

The McKinnon Gold Property is located in northern Ontario, 80 km south-southwest of the town of Hearst, Ontario. The Property is located 140 km east-northeast of the producing Hemlo Gold Mine and 205 km northwest of the city of Timmins, Ontario. The McKinnon Gold Property is located at Lat 48° 59’ 09”N, Long 84° 03’ 49”W; UTM WGS84 Zone 16U 714,820 mE 5,430,045 mN; NTS 42C/16.

The McKinnon Property is comprised of 14 contiguous staked claims (4266186, 4266187, 4266188, 4266189, 4278951, 4283665, 4270206, 4272109, 1229071, 1229072, 4267268, 4267269, 4267270, 4242116) covering 144 units (2,304 ha) that spans Hawkins and Walls Townships. The claims are registered in the name of Pavey Ark Minerals Inc., a private Ontario company.

The Property is accessible by all-weather logging roads extending south from Hearst, Ontario. Hearst is located on Trans-Canada Highway 11, has a population of approximately 5,090, and is the northern terminus of Algoma Central Railway. The town of Hearst services the forestry sector and has a saw mill and a plywood and wood products manufacturing plant. The town provides a full range of hotel and motel accommodations, as well as major stores for supplies and services, and several heavy equipment suppliers and contractors.

The McKinnon Property is also crossed by the Algoma Central Railway and is in close proximity to the Canadian National Railway at Oba Station. Pavey Ark holds an exploration permit for drilling and trenching issued by the Ontario Ministry of Northern Development and Mines.

The Property is located in the Arctic watershed. The topography of the area is typical of the Canadian Shield and consists of a peneplained surface with limited local relief consisting of low rocky ridges separated by poorly drained ground. The Property lies within the Boreal Forest vegetation zone. There is approximately 50 to 60 m of total relief with maximum elevations of approximately 390 m above sea level (asl) and minimum elevations of approximately 340 m asl. The climate of the area is characterized by cold winters and warm summers. The Köppen-Geiger climate classification is Dfb (continental warm summer) transitional to Dfc (continental boreal).

The McKinnon Gold Property is underlain by predominately Archean rocks of the Kabinakagami Lake greenstone belt that is part of the Wawa Subprovince of the Superior Province in the Canadian Shield. This east-west trending belt is one to six kilometers wide and composed of predominantly metavolcanic and metasedimentary rocks. The Property straddles the 1 km wide Puskuta Deformation Zone that is a steeply-dipping, dextral, transcurrent deformation zone that on a regional scale bounds the south side of the Kabinakagami Lake greenstone belt and controls the location of gold mineralization.

Gold mineralization on the McKinnon Property is mainly associated with the sheared contact of the tonalite and adjacent mafic metavolcanic rocks to the north. Mineralization is associated with sericite-pyrite-silica alteration and higher gold values are generally found in felsic rocks that have been highly silicified. The main zone of gold mineralization on the Property is named the

McKinnon Gold Deposit. The Deposit is a 3.7 km long zone of low-grade gold mineralization that has been defined to approximately 200 m depth. Within the Deposit there are a number of higher grade historical occurrences including the past-producing Shenango Gold Mine.

The McKinnon Property is one of three Properties that collectively form Pavey Ark's Puskuta Gold Project and together cover over 32 km of strike length of the Puskuta Deformation Zone. The Puskuta Deformation Zone is interpreted as a gold mineralized fault structure that potentially links the Destor-Porcupine Deformation Zone to the east with the Hemlo Deformation Zone to the west. The McKinnon Deposit has characteristics of shear-hosted orogenic gold deposits in a medium metamorphic grade environment.

The McKinnon Property was initially staked by the late Mr. Donald McKinnon in 1997, based on having similar geological characteristics to the Hemlo gold deposits located 140 km to the southwest. The McKinnon Property has been sporadically explored for gold beginning with the discovery of the Taylor Prospect in 1923. The Property hosts the former Shenango Gold Mine that produced intermittently between 1937 and 1945. Exploration by Falconbridge Limited from 1983 to 1986 was the most comprehensive exploration program on the Property with drilling and trenching defining 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.

The Falconbridge data forms the basis of the current Resource Estimate. Pavey Ark has copies of Falconbridge logs, sample records and assay certificates for trenches and drill holes. Additionally, Pavey Ark has reviewed and re-sampled drill core from the 22 complete BQ drill holes from the Falconbridge drilling program on the Property that have been stored at the Ontario Ministry of Northern Development and Mines Core Storage Facility at Sault Ste. Marie, Ontario.

Pavey Ark completed a core resampling program on the Falconbridge core on January 24 to February 1, 2016. Mr. Antoine Yassa, P.Geo, P&E, was present on January 27, 2016 for requirements of the NI 43-101 independent sampling. Pavey Ark submitted a total of 80 samples including 6 certified reference standards, 4 blanks and 70 core samples (1/4 core) that were duplicates of original Falconbridge mineralized assay intervals. 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 core technician to the sample receiving facilities of Accurassay in Thunder Bay, Ontario. Overall, the results of 68 constrained Falconbridge drill core intervals reassayed by Pavey Ark averaged 1.005 g/t Au. This compares with an average of 1.169 g/t Au for the same intervals in the original Falconbridge assay results.

The McKinnon Property was visited by Mr. Eugene Puritch, P.Eng., President of P&E Mining Consultants Inc. on May 11, 2016 for the purposes of completing an independent site visit. During the site visit Mr. Puritch viewed access to the Property, geology and topography, as well as taking several GPS readings to confirm the location of the baseline grid, trenches and several drill hole collars. In addition to the site visit, Mr. Antoine Yassa, P.Geo. of P&E, visited the Ontario Ministry of Northern Development and Mines Core Storage Facility located in Sault Ste. Marie, Ontario, on January 27, 2016, for the purpose of reviewing and independently sampling archived drill core from the McKinnon Property.

Mr. Yassa collected 9 verification samples from 6 Falconbridge drill holes that were stored at the Sault Ste. Marie core storage facility. The verification samples from the Falconbridge holes were collected by cutting the split core for each sample interval selected by Mr. Yassa. One half of the resulting 1/4 core sample was placed into a plastic bag into which the blank sample tag was

placed. The remaining 1/4-core was put back into the core box. The samples were bagged and taken directly by Mr. Yassa to AGAT Labs, ("AGAT") in Mississauga, ON for analysis. Samples at AGAT were analyzed for gold by fire assay with inductively coupled plasma-optical emission spectroscopy (ICP-OES) finish. Samples were also analyzed for silver with an aqua regia digest and an ICP-MS finish. All samples were analyzed by pycnometer at AGAT to determine specific gravity. P&E considers that there is good correlation between Au assay values in Pavey Ark's database from Falconbridge sampling and the independent verification samples collected by P&E and analyzed at AGAT Laboratories. It is P&E's opinion that the data are of good quality and appropriate for use in the current Resource Estimate.

The database as implemented by P&E contains results of 79 diamond drill holes and 32 trenches for a total of 4,994 drill core assays and 684 trench assays by Falconbridge from the 1983 to 1986 programs. All data were provided by Pavey Ark in the form of Excel files and scanned copies of original reports and logs. Industry standard validation checks were completed on the supplied databases. P&E believes that the supplied database is suitable for mineral resource estimation.

Local topography was derived from the Ontario Mining Land tenure map. Domain models were generated by P&E from successive polylines spaced along drill hole sections created every 50 m and oriented perpendicular to the general trend of the mineralization. A total of three domains were developed:

- McKinnon Gold Deposit Main Zone – the main east west striking structure with steep north dip;
- Footwall (FW) Zone – a minor zone paralleling the Main Zone in the footwall at the west end of the Deposit;
- Hangingwall (HW) Zone – a minor zone paralleling the Main Zone in the hanging wall in the central part of the Deposit.

A compositing length of 1.25 m was selected for mineral resource estimation. The presence of high-grade outliers for the composite data was evaluated by a review of composite summary statistics, histograms and probability plots. Based on this analysis, grade capping was deemed to be unnecessary.

An average in-situ bulk density of  $2.72 \text{ t/m}^3$  was applied to the mineralized domains based on an average of 9 specific gravity measurements by pycnometer determined by AGAT Laboratories on verification samples collected by P&E. The McKinnon Gold resource model was divided into a block model framework with blocks extending 5 m in the X direction, 2.5 m in the Y direction and 5 m in the Z direction. The block model framework contains 760 columns (X), 400 rows (Y) and 92 levels (Z), and was not rotated. One block model was interpolated for gold grade.

Mineral resources were estimated and classified in compliance with guidelines established by the Canadian Institute of Mining, Metallurgy and Petroleum. Mineral resource classification was implemented by generating three-dimensional envelopes around those parts of the block model for which the drill hole spacing and grade estimates met the required continuity criteria. As a result of the relatively wide drill hole spacing ranging between 50 to 100 m, an Inferred only interpolation pass was utilized to code the Au grade blocks. As a result, all of the mineralization was classified as Inferred Resources. Inverse distance cubed ( $1/d^3$ ) grade interpolation was utilized.



The mineral resource estimate was derived by applying the Au cut-off grade to the block model and reporting the resulting tonnes and grade for potentially mineable in-pit resources. In order to evaluate the potentially economic open pit mineralization in the McKinnon Gold Deposit, a first pass Whittle 4X pit optimization was carried out to create an optimum pit shell for the McKinnon Deposit. Near-surface resources are constrained within an optimized conceptual pit-shell that utilized the Inferred mineral resources.

The resulting Resource Estimate for the McKinnon Gold Property at a 0.5 g/t Au cut-off is summarized in table 1.1. The Property has estimated Inferred Resources of 4,957,000 tonnes at a grade of 1.50 g/t Au for a total of 239,100 ounces of gold.

<b>TABLE 1.1</b>			
<b>McKINNON DEPOSIT MINERAL RESOURCE ESTIMATE AT 0.5 G/T AU CUT OFF<sup>(1-4)</sup></b>			
	<b>Tonnes</b>	<b>Grade – g/t Au</b>	<b>Au - ounces</b>
<b>McKinnon Gold Deposit</b>			
<b>Inferred</b>	<b>4,957,000</b>	<b>1.50</b>	<b>239,100</b>

- (1) Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues, although Pavey Ark is not aware of any such issues.
- (2) The quantity and grade of reported Inferred Resources in this estimation are uncertain in nature and there has been insufficient exploration to define these Inferred resources as an Indicated or Measured mineral resource and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured mineral resource category.
- (3) The mineral resources were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines.
- (4) Values in the table may differ due to rounding.

P&E considers that the McKinnon Gold Property contains a significant gold resource that is associated with a well-defined structure and alteration system. P&E further considers that property has potential for delineation of additional resources and that further exploration is warranted. P&E's recommendations include an IP geophysical survey to assist in defining drill targets, 2,080 m of diamond drilling, and metallurgical testwork. P&E suggests that initial drilling programs should focus on expanding mineralization and identification of potential higher grade mineralization. A proposed CAD\$500,000 program is recommended.

## **2.0 INTRODUCTION AND TERMS OF REFERENCE**

### **2.1 TERMS OF REFERENCE**

The following report was prepared to provide a National Instrument (“NI”) 43-101 Technical Report and Resource Estimate for the gold mineralization contained in the McKinnon Gold Property (“Property”), in Hawkins and Walls Townships, Sault Ste. Marie and Porcupine Mining Divisions, Ontario, Canada. The claims forming the McKinnon Gold Property are registered to Pavey Ark Minerals Inc. (“Pavey Ark”).

This report was prepared by P&E Mining Consultants Inc. (“P&E”) at the request of Dr. Richard Sutcliffe, President of Pavey Ark, a private Ontario corporation. Pavey Ark has its head office at:

100 Broad Leaf Crescent  
Ancaster, Ontario  
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Tel: 905-304-4499

This report has an effective date of May 11, 2016.

Mr. Eugene Puritch, P.Eng., the President of P&E, and a qualified person under the regulations of NI43-101, conducted a site visit to the Property on May 11, 2016. An independent verification sampling program was conducted by Mr. Antoine Yassa, P.Geo. of P&E and a qualified person under the regulations of NI43-101, at the Ontario Ministry of Northern Development and Mines Core Storage Facility located at Sault Ste. Marie, Ontario, on January 27, 2016.

In addition to the site visit, P&E held discussions with technical personnel from the Company regarding all pertinent aspects of the project and carried out a review of all available literature and documented results concerning the Property. The reader is referred to those data sources, which are outlined in the References section of this report, for further detail.

The present Technical Report is prepared in accordance with the requirements of NI 43-101F1 of the Ontario Securities Commission (“OSC”) and the Canadian Securities Administrators (“CSA”).

### **2.2 SOURCES OF INFORMATION**

This report is based, in part, on internal company technical reports, maps and technical correspondence, published government reports, press releases and public information as listed in the References section at the conclusion of this report. Several sections from reports authored by other consultants have been directly quoted or summarized in this report, and are so indicated where appropriate.

The present Technical Report is prepared in accordance with the requirements of National Instrument 43-101 (NI 43-101) and in compliance with Form NI 43-101F1 of the Ontario Securities Commission (OSC) and the Canadian Securities Administrators (CSA). The Resource Estimate is prepared in compliance with the CIM Definitions and Standards on Mineral Resources and Mineral Reserves, prepared by the CIM Standing Committee on Reserve Definitions that are in force as of the effective date of this report.

## 2.3 UNITS AND CURRENCY

Unless otherwise stated all units used in this report are metric. Gold (Au) assay values are reported in grams of metal per tonne (“g/t Au”) unless ounces per ton (“oz/T Au”) are specifically stated. The CDN\$ is used throughout this report unless the US\$ is specifically stated. At the time of this report the rate of exchange between the US\$ and the CDN\$ is CDN\$1.00=US\$0.78.

The following list shows the meaning of the abbreviations for technical terms used throughout the text of this report.

<b>Abbreviation</b>	<b>Meaning</b>
“AAS”	Atomic Absorption Spectroscopy
“ACR”	Algoma Central Railway
“Ag”	silver
“AGAT”	AGAT Laboratories, Mississauga
“asl”	above sea level
“Au”	gold
“cm”	centimetre(s)
“CNR”	Canadian National Railway
“CRM”	Certified Reference Material
“CSA”	Canadian Securities Administrators
“DDH”	diamond drill hole
“FA”	fire assay
“ft”	foot
“g/t”	grams per tonne
“ha”	hectare(s)
“IP”	induced polarization survey
“km”	kilometre(s)
“NSR”	Net Smelter Royalty
“m”	metre(s)
“Ma”	millions of years
“MNDM”	Ontario Ministry of Northern Development and Mines
“NSR”	Net Smelter Royalty
“NTS”	National Topographic Series
“OEC”	Ontario Exploration Corporation
“OES”	Optical Emission Spectroscopy
“OSC”	Ontario Securities Commission
“oz”	Ounce
“P&E”	P&E Mining Consultants Inc.
“P.Eng.”	Professional Engineer
“P.Geo.”	Professional Geologist
QP	Qualified Person
“t”	metric tonne(s)
“T”	imperial ton(s)
“UTM”	Universal Transverse Mercator grid
“VMS”	Volcanogenic Massive Sulphide

### **3.0 RELIANCE ON OTHER EXPERTS**

P&E has assumed that all of the information and technical documents listed in the References section of this report are accurate and complete in all material aspects. While we have carefully reviewed all of the available information presented to us, we cannot guarantee its accuracy and completeness. We reserve the right, but will not be obligated to revise our report and conclusions if additional information becomes known to us subsequent to the date of this report.

Copies of the tenure documents, operating licenses, permits, and work contracts were not reviewed. Information relating to tenure was reviewed by means of the public information available through the Ontario Ministry of Northern Development and Mines (“MNDM”) website at: <http://www.mndm.gov.on.ca/en/mines-and-minerals/applications> . P&E has relied upon this public information, as well as tenure information from Pavey Ark and has not undertaken an independent detailed legal verification of title and ownership of the McKinnon Gold Property ownership. P&E has not verified the legality of any underlying agreement(s) that may exist concerning the licenses or other agreement(s) between third parties but has relied on, and believes it has a reasonable basis to rely upon Pavey Ark to have conducted the proper legal due diligence.

A draft copy of the report has been reviewed for factual errors by Pavey Ark. Any changes made as a result of these reviews did not involve any alteration to the conclusions made. Hence, the statement and opinions expressed in this document are given in good faith and in the belief that such statements and opinions are not false and misleading at the date of this report.

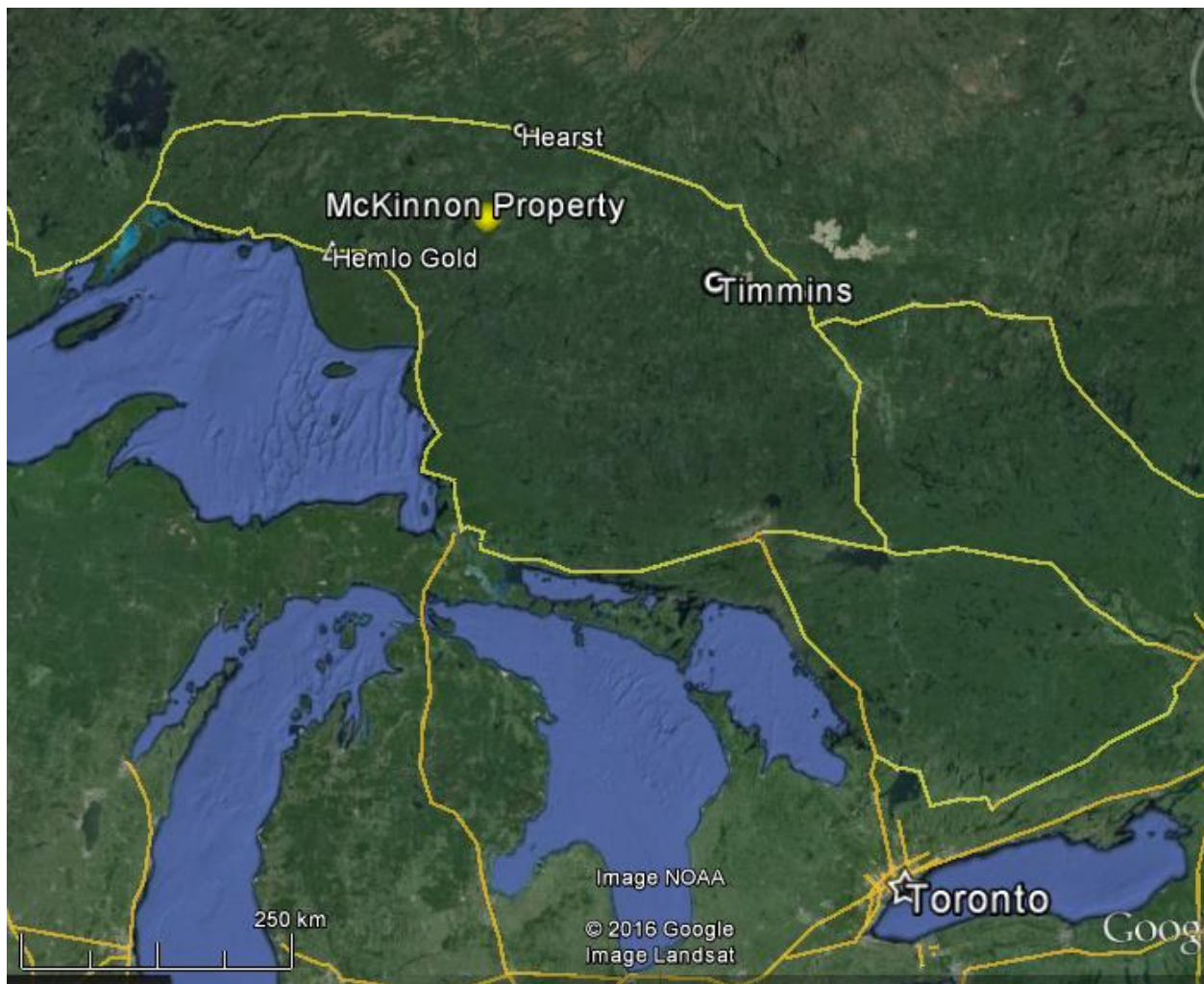
## 4.0 PROPERTY DESCRIPTION AND LOCATION

### 4.1 PROPERTY LOCATION

The McKinnon Gold Property is located in northern Ontario, 80 km south-southwest of the town of Hearst, Ontario (Figure 1). The Property is located 140 km east-northeast of the producing Hemlo Gold Mine and 205 km northwest of the city of Timmins, Ontario.

The McKinnon Gold Property is located at Lat 48° 59' 09"N, Long 84° 03' 49"W; UTM WGS84 Zone 16U 714,820 mE 5,430,045 mN; NTS 42C/16.

**Figure 4.1 McKinnon Gold Property Location Map**



Source: Google Earth 2016

### 4.2 PROPERTY DESCRIPTION AND TENURE

The McKinnon Gold Property is comprised of 14 contiguous staked claims (4266186, 4266187, 4266188, 4266189, 4278951, 4283665, 4270206, 4272109, 1229071, 1229072, 4267268, 4267269, 4267270, 4242116) covering 144 units (2,304 ha) that spans Hawkins and Walls Townships (Table 4.1). The claims are registered in the name of Pavey Ark Minerals Inc., a private Ontario company.

Pavey Ark acquired claims 4266186, 4266187, 4266188 and 4266189 by staking in 2013, and claims 4283665 and 4278951 by staking in 2015.

Subsequently on November 12, 2015, Pavey Ark entered into an option agreement to purchase 100% legal and beneficial interest in 7 claims (4270206, 4272109, 1229071, 1229072, 4267268, 4267269, 4267270) from Canadian Orebodies Inc. a public company listed on the TSXV. Under the terms of the Option agreement, Pavey Ark made the final payment in February 2016, and a 100% interest in the claims was transferred on February 23, 2016.

Subsequent to acquiring the claims from Canadian Orebodies, Pavey Ark staked one additional claim (4242116) to form the current Property.

Canadian Orebodies retained a 0.5% Net Smelter Royalty (NSR) (Orebodies Royalty) on claims 4270206, 4272109, 1229071, 1229072, 4267268, 4267269, and 4267270. In addition, Pavey Ark has assumed a 3% NSR in favour of Stephanie Townsend-McKinnon (McKinnon Royalty). The McKinnon Royalty provides for Pavey Ark to reduce the McKinnon royalty to a 1.5% NSR royalty for \$250,000 and to a 1.0% NSR for a further \$500,000.

Claims 4266186, 4266187, 4266188 and 4266189 are subject to 0.5% NSR in favour of Ontario Exploration Corporation (OEC). The OEC Royalty provides for certain buyback provisions in favour of the claim holder.

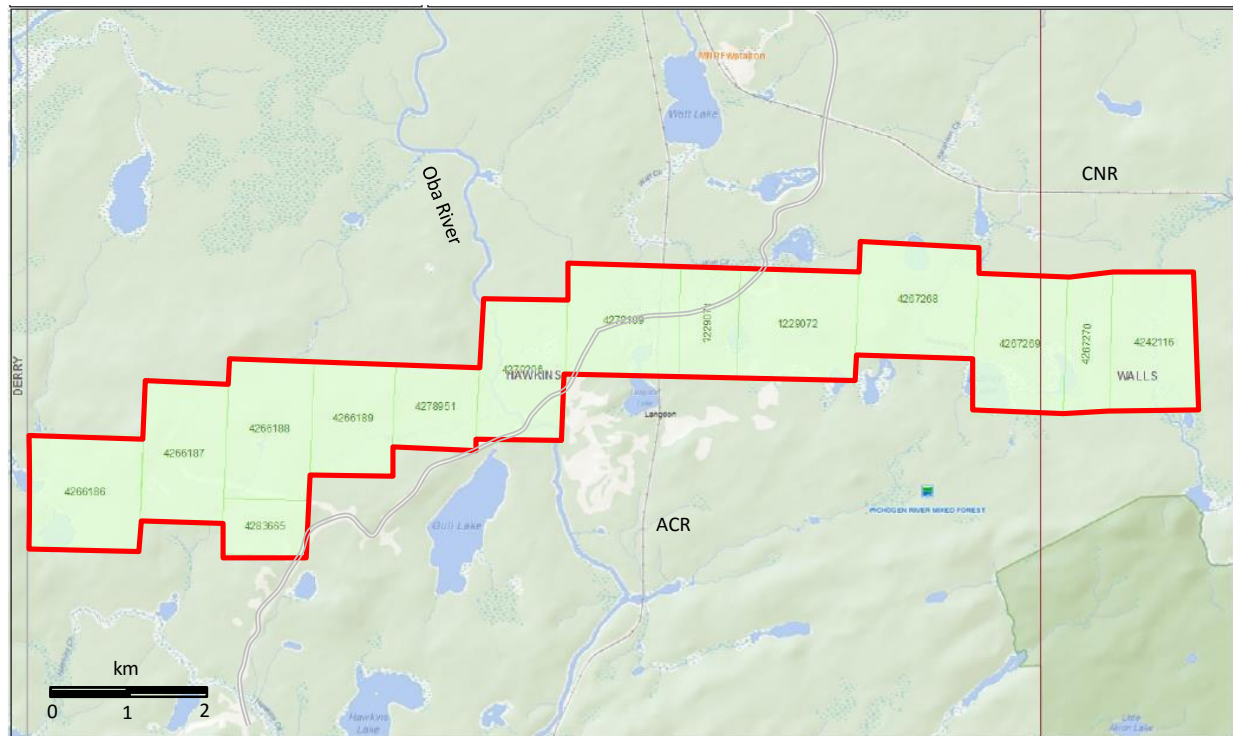
Claims 4283665, 4278951 and 4242116 are not subject to any NSR or other encumbrances.

The Pavey Ark claims are in good standing as of the report effective date and expenditure requirements for 2016 are listed in Table 4.1. At the time of this report, Pavey Ark is conducting trenching, geological mapping and sampling programs to meet assessment expenditure requirements for 2016.

Pavey Ark currently holds an exploration permit (PR-13-10422a) issued by the Ontario Ministry of Northern Development and Mines for drilling and trenching on the claims acquired from Canadian Orebodies. The permit is valid until August 27, 2017. The claims located east of the ACR and south of the CNR tracks are within the Chapleau Crown Game Preserve. Exploration, mining and forestry operations are allowed within the Game Preserve, however, no hunting or trapping of fur bearing animals is permitted.

There are no known environmental liabilities associated with the Pavey Ark claim holdings.

**Figure 4.2 McKinnon Gold Property Claim Map**



Source: MNDM CLAIMaps, 2016

<b>Township / Area</b>	<b>Claim Number</b>	<b>Recording Date</b>	<b>Claim Due Date</b>	<b>Percent Option</b>	<b>Work Required</b>	<b>Total Applied</b>	<b>Total Reserve</b>
HAWKINS	1229071	1997-Jun-06	2016-Jun-06	100 %	\$3,200	\$54,400	\$0
HAWKINS	1229072	1997-Jun-06	2016-Jun-06	100 %	\$6,400	\$108,800	\$763
HAWKINS	4266186	2013-Oct-30	2016-Oct-30	100 %	\$6,400	\$6,400	\$0
HAWKINS	4266187	2013-Oct-30	2016-Oct-30	100 %	\$6,000	\$6,000	\$0
HAWKINS	4266188	2013-Oct-30	2016-Oct-30	100 %	\$6,000	\$6,000	\$0
HAWKINS	4266189	2013-Oct-30	2016-Oct-30	100 %	\$4,800	\$4,800	\$0
HAWKINS	4267268	2012-Jun-25	2016-Jun-25	100 %	\$6,400	\$12,800	\$212
HAWKINS	4270206	2012-Aug-10	2016-Aug-10	100 %	\$6,000	\$12,000	\$0
HAWKINS	4272109	2012-Jun-25	2016-Jun-25	100 %	\$6,400	\$12,800	\$0
HAWKINS	4278951	2015-Sep-22	2017-Sep-22	100 %	\$3,400	\$200	\$0
HAWKINS	4283665	2015-Sep-08	2017-Sep-08	100 %	\$2,335	\$65	\$0
WALLS	4267269	2012-Jun-22	2016-Jun-22	100 %	\$6,000	\$12,000	\$0
WALLS	4267270	2012-Jun-22	2016-Jun-22	100 %	\$4,000	\$8,000	\$0
WALLS	4242116	2016-Feb-08	2018-Feb-08	100 %	\$6,000	\$0	\$0

*An assessment report has been filed and is pending approval to meet June 2016 assessment requirements.*

### **4.3 ONTARIO MINERAL TENURE**

Ontario Crown lands are available to licensed prospectors for the purposes of mineral exploration. A licensed prospector must first stake a mining claim to gain the exclusive right to explore on Crown land. Claim staking is governed by the Ontario Mining Act and is administered through the Provincial Mining Recorder and Mining Lands offices of the MNDM.



Mining claims can be staked either in a single unit or in a block consisting of several single units. In un-surveyed territory, a single unit claim is laid out to form a 16 hectare (40 acre) square with boundary lines running 400 metres (1,320 feet) astronomic north, south, east and west. Multiples of single units, up to a maximum of 16 units (256 hectares), may be staked with only a perimeter boundary as one block claim.

Upon completion of staking, a recording application form is filed with payment to the Provincial Recording Office. All claims are liable for inspection at any time by the Ministry. A claim remains valid as long as the claim holder properly completes and files the assessment work as required by the Mining Act and the Minister approves the assessment work. A claim holder is not required to complete any assessment work within the first year of recording a mining claim. In order to keep an unpatented mining claim current the mining claim holder must perform \$400 worth of approved assessment work per mining claim unit, per year; immediately following the initial staking date, the claim holder has two (2) years to file one year worth of assessment work. Claims are forfeited if the assessment work is not done.

A claimholder may prospect or carry out mineral exploration on the land under the claim. However, the land covered by these claims must be converted to leases before any development work or mining can be performed. Mining leases are issued for twenty-one year terms and may be renewed for further 21-year periods. Leases can be issued for surface and mining rights, mining rights only or surface rights only. Once issued, the lessee pays an annual rent to the province. Furthermore, prior to bringing a mine into production, the lessee must comply with all applicable federal and provincial legislation.





## **5.2 CLIMATE**

The climate of the area is characterized by cold winters and warm summers. The Köppen-Geiger climate classification is Dfb (continental warm summer) transitional to Dfc (continental boreal). In Hearst, the average annual temperature is 0.1 °C. With an average of 16.6 °C, July is the warmest month. The lowest average temperatures in the year occur in January, when it is around -19.0 °C. Extreme lows may reach -45°C and extreme highs over 30°C. Precipitation averages 795 mm annually, with approximately one-third of the precipitation falling as snow. The driest month is February with 43 mm of precipitation. The greatest amount of precipitation occurs in July, with an average of 88 mm. (Data from <http://en.climate-data.org/location/874897/> )

Exploration activities can be conducted all year, although conditions and access may be impacted during the spring break-up period in April to mid-May.

## **5.3 LOCAL RESOURCES AND INFRASTRUCTURE**

The town of Hearst, Ontario, is located approximately 110 km by forestry roads to north-northeast of the Property. Hearst has a population of approximately 5,090 (2011 Census) and is located on Trans-Canada Highway 11. Hearst is also the northern terminus of Algoma Central Railway. The town of Hearst services the forestry sector and has a saw mill and a plywood and wood products manufacturing plant. The town provides a full range of hotel and motel accommodations, as well as major stores for supplies and services, and several heavy equipment suppliers and contractors.

From Hearst it is approximately 92 km east to Kapuskasing, 935 km southeast to Toronto, and 520 km west to Thunder Bay by road on Highway 11. Hearst has a municipal airport, however, the closest scheduled air services are located at the Kapuskasing and Timmins airports.

Oba Railway Station and the small community of Oba, Ontario, are located at the junction of the Canadian National and Algoma Central Railways approximately 8 km north of the Property. The Algoma Central Railway crosses the Property and the Canadian National Railway is approximately 1.5 km north of the Property.

Unpaved forest access roads are common throughout the area and have been developed to provide access to harvesting areas for commercial logging activity and access to the Oba site. These roads provide excellent access to the Property at several locations and are maintained all year.

## **5.4 PHYSIOGRAPHY**

The McKinnon Gold Property is located in the Arctic watershed. The topography of the area is typical of the Canadian Shield and consists of a peneplained surface with limited local relief consisting of low rocky ridges separated by poorly drained ground. The terrain gently slopes north towards James Bay.

The Oba River flows north from Oba Lake and crosses the Property west of the Algoma Central Railway. The Oba River joins the Mattawitchewan River just north of Oba and then joins the Missinaibi River south of Hearst. The Missinaibi flows into the Moose River, southwest of Moosonee, and then into James Bay.

The Property lies within the Boreal Forest vegetation zone. The area covered by the claim group is primarily high ground with numerous outcrops and shallow overburden. The Property is characterized by a prominent east-west trending ridge that parallels the strike of lithologies and slopes gently to the north and south. There is approximately 50 to 60 m of total relief with maximum elevations of approximately 390 m above sea level (asl) and minimum elevations of approximately 340 m asl.

The area is forested and the western part has been replanted. The central and eastern parts have a second growth forest with poplar and some pines in the higher areas and black spruce in the lower areas.

The area covered by the McKinnon Gold Property is sufficiently large to accommodate an open pit and underground operations, including ancillary installations.

## 6.0 HISTORY

The McKinnon Property was initially staked by the late Mr. Donald McKinnon in 1997, based on having similar geological characteristics to the Hemlo gold deposits located 140 km to the southwest. Baltic Resources Inc. (Baltic) acquired the McKinnon Property in 2005 (Baltic Press Release dated July 27, 2005). In conjunction with the acquisition, Boissoneault (2004) completed an NI43-101 Technical Report on the Property known as the “Don McKinnon Property” for Baltic that was filed on SEDAR on February 9, 2005. Canadian Orebodies Inc. became the successor company to Baltic, as the result of the completion of an arrangement with Baltic approved by the Court of the Queen’s Bench of Alberta on March 7, 2008. Although several claims have expired and been re-staked, Pavey Ark’s current McKinnon Property has a similar configuration to the property described by Boissoneault (2004).

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.

A summary of exploration on the McKinnon Property based on the reports by Boissoneault (2004) and Rogers (1987) is provided in Table 3.1. This table is divided into 3 areas. These include: the eastern 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 6.1 SUMMARY OF EXPLORATION ON THE MCKINNON PROPERTY			
Date	Performed By	Work Performed	Results
<b>Taylor Prospect (claim 4267268)</b>			
1925-1929	G. Taylor	Stripping, trenching, sampling	Uncovered 3 quartz veins, gold panned
1929-1935	Hawkins Mining Syndicate	Stripping, trenching, 2x 2000 lb bulk samples	Uncovered 7 quartz veins, bulk samples 0.16 oz/T and 0.48 oz/T (Rogers 1987)
1935	Hollinger Gold Mines	Prospecting, diamond Drilling, 7 holes	Best intersection DDH2 with 4.80 g/t over 4.2 m (Rogers 1987)
1935-1945	Mintor Gold Mines	Prospecting, channel Sampling	No documentation
1960	International Nickel Co.	Diamond drilling	No documentation
1972-1974	Magi Gold Mines Ltd.	Induced polarization and magnetic surveys, 3 diamond drill holes (907 feet)	Large chargeability anomaly, minor finely disseminated sulfides
1979-1980	St. Josephs Exploration Ltd.	Magnetometer, VLF, HLEM Surveys	5 VLF anomalies, very weak HLEM anomalies
1980-1981	Sulpetro Minerals Ltd.:	Geological survey, surface sampling	Encouraging assay values, highest value 20.91 g/t Au (no width reported)
1983-1986	Falconbridge Limited	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

<p align="center"><b>TABLE 6.1</b> <b>SUMMARY OF EXPLORATION ON THE MCKINNON PROPERTY</b></p>			
<b>Date</b>	<b>Performed By</b>	<b>Work Performed</b>	<b>Results</b>
1999-2004	Don McKinnon, Baltic Resources	Trenching, stripping, ground geophysics, diamond drilling (1 hole 217 m)	Presently claim 1229072, exposed wide alteration zone
<b>Shenango Mine (claim 1229071)</b>			
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./T 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./T over 30 ft., 0.18 oz./T over 20 ft. 0.22 oz./T over 15 ft. 0.17 oz./ton over 8 ft.
1945	Shenango Mining Co.	Clean up operation at mill	Recovery of 35.87 ounces of gold and 5 ounces of silver
1979-1981	St. Josephs Exploration Ltd.	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 Limited	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	ground geophysics, stripping, trenching, Diamond drilling (2 holes; 214 meters)	Presently claim 1229072, exposed wide alteration zone
<b>Goldfields and Johnstone-Barnes Showings (claim 4266186)</b>			
1939	Johnstone and Barnes	Trenching, sampling, presently claim 4266186	Gold occurrence discovered, reported assay of 0.24 oz./T over 35 ft.
1975	Rio Tinto Canadian	Ground geophysics, diamond drilling (2 holes; 902 ft.)	No available results
1986	Hawk Resources	Ground geophysics, geochemistry, diamond drilling (20 holes; 6151 ft.)	South of McKinnon Property, results discouraging
1986-1989	Goldfields Canadian Mining Ltd.	Geology, sampling, diamond drilling (13 holes; 1780 ft.)	Results incorporated in Aurlot Exploration Ltd., 1989 report below
1989	Aurlot Exploration Ltd.	Geology, sampling, geochemistry, airborne geophysics, stripping, trenching, IP geophysics	Channel sample assays reflected results; 1.31 oz./T over 3 ft., 0.74 oz./T over 5 ft., 0.42 oz./T over 2 ft., 0.40 oz./T over 2 ft., 0.21 oz./T over 5 ft., 0.11 oz./T over 2 ft., presently claim 4266187

\*A Qualified Person (QP) has not carried out sufficient work to verify historical results prior to the Falconbridge program in 1983.

## **6.1 SHENANGO MINE HISTORIC PAST PRODUCTION**

The past-producing Shenango Mine is located within the western part of the McKinnon Gold Deposit on Pavey Ark's claim 1229071. A summary of exploration and development of the Shenango Mine is reported by Falconbridge (Rogers, 1987) and in the NI43-101 Technical Report for Baltic Resources (Boissoneault, 2004). Boissoneault (2004) reports that the Shenango Mine produced 66.2 ounces of gold from 2,430 tons of mineralization that were mined intermittently between 1937 and 1945. Mining took place from an open cut, and the Shenango #1 and #2 shafts that were sunk to 15.6 m and 40.5 m respectively. *A Qualified Person (QP) has not carried out sufficient work to verify these historical results.*

## **6.2 TAYLOR SHOWING AND CULBERT DUBROY SHOWING AREAS**

The Taylor Showing is located within the eastern part of the McKinnon Gold Deposit on Pavey Ark claim 4267268. The showing was the first gold discovery in the area in 1923. The showing was initially explored by the Hawkins Mining Syndicate who completed test pitting and bulk sampling and subsequently by Hollinger Gold Mines Ltd. who completed a 7-hole diamond drilling program. Mineralization was determined to occur in quartz veins near the contact between mafic metavolcanic and felsic rocks. The best Hollinger intersection was DDH-2 with 4.80 g/t over 4.2 m (Rogers 1987). *A Qualified Person (QP) has not carried out sufficient work to verify these historical results.*

The Culbert Dubroy Showing is further east and outside of the current McKinnon Gold Deposit on Pavey Ark claim 4242116. This showing also consists of quartz veins near the contact between mafic metavolcanic and felsic rocks.

## **6.3 FALCONBRIDGE LIMITED EXPLORATION**

The exploration work on the McKinnon Property by Falconbridge Limited ("Falconbridge") from 1983 to 1986 was the most comprehensive exploration program on the Property to date. At the time, Falconbridge held the property through an option agreement with Mr. Larry Gervais of Timmins, Ontario and the Property was known as the "Gervais Option".

The Falconbridge exploration included 79 diamond drill holes for a total of approximately 14,282 m (Morrison, 1984; Rogers 1987) and excavation of approximately 36 trenches for surface sampling. 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). The majority of the Falconbridge holes tested the zone at depths of less than 200 m. Two deep holes (GO-75 & 76) confirmed that the zone persists to approximately 700 m. The Falconbridge holes were located relative to a local grid and were not surveyed by Falconbridge.

The Falconbridge data forms the basis of the current resource estimate. Pavey Ark has copies of Falconbridge sample records and assay certificates for all of the trench results. Pavey Ark also has logs and assay results for Falconbridge holes GO-1 to 60 inclusive, and has copies of Falconbridge assay results for holes GO-61 to 69 and holes GO-71 to 79. Pavey Ark has copies of the original assay certificates for 16 of the 79 holes. Additionally, Pavey Ark has reviewed and sampled drill core from the 22 complete BQ drill holes from the Falconbridge drilling program that have been stored at the Ontario Ministry of Northern Development core storage facility at Sault Ste. Marie, Ontario.

In 1984, Falconbridge had seven trench samples tested for gold content by the total cyanidation method at Lakefield Laboratories, Lakefield, Ontario. The samples ranged in grade from 0.50 g/t Au to 4.6 g/t Au. Samples were ground to 90% minus 200 mesh and leached in 2 g/L NaCN for 48 hours. Cyanidation recoveries ranged from 82.3% to 98.0% with an average of 92.2% recovery.

Falconbridge considered that the gold mineralization was stratabound and occurred in pyritic schistose felsic tuffs located between mafic amphibolite to the north and biotite tonalite to the south. Falconbridge noted that the mineralized zone is associated with sericite alteration, carbonate veining and silicification. They interpreted the mineralization as being synvolcanic with a tectonic overprint.

## **6.4 GOLDFIELD'S SHOWING AREA**

The Goldfield's showing is located at the western end of the McKinnon Property on Pavey Ark claim 4266186 and was discovered in 1989. Channel sample assays from the showing in 1989 included: 1.31 oz./T over 3 ft.; 0.74 oz./T over 5 ft.; 0.42 oz./T over 2 ft.; 0.40 oz./T over 2 ft.; 0.21 oz./T over 5 ft.; 0.11 oz./T over 2 ft. The Johnstone-Barnes occurrence discovered in the 1920's is located at western end of the Hawkins Property. The surface value reported at this showing is 0.24 oz./T over 35 feet. These results are reported by Lahti (1989).

Subsequent to the discovery of the Goldfield's surface showing, Aurlot Exploration Ltd. (Aurlot) under an agreement with Goldfield's completed geological mapping, sampling, soil geochemistry, IP geophysics, and diamond drilling (13 holes for 1,780 ft). Aurlot's "HK" series holes tested exploration targets west of the Oba River. The best drill result was HK89-01 that intersected 3.8 g/t Au over 1.2 m (Lahti, 1989).

Aurlot completed an IP survey over the western part of the McKinnon Property (west of the Oba River) and identified a several significant chargeability anomalies. Particularly noteworthy is a relatively continuous horizon of elevated chargeability in interlayered mafic and felsic rocks surrounding the tonalite intrusion. This is a potential drill target that is on strike from the McKinnon Deposit.

## **6.5 BALTIC RESOURCES INC.**

Baltic Resources Inc. (Baltic) completed a program of IP geophysical surveys, stripping, channel sampling and drilling in 2006/2007. Nine "HA" series holes were drilled for a total of 1,487.6 m that targeted IP anomalies associated with bands of sericite schist and mafic metavolcanics located immediately east and west of the Oba River. The holes did not intersect significant gold mineralization.

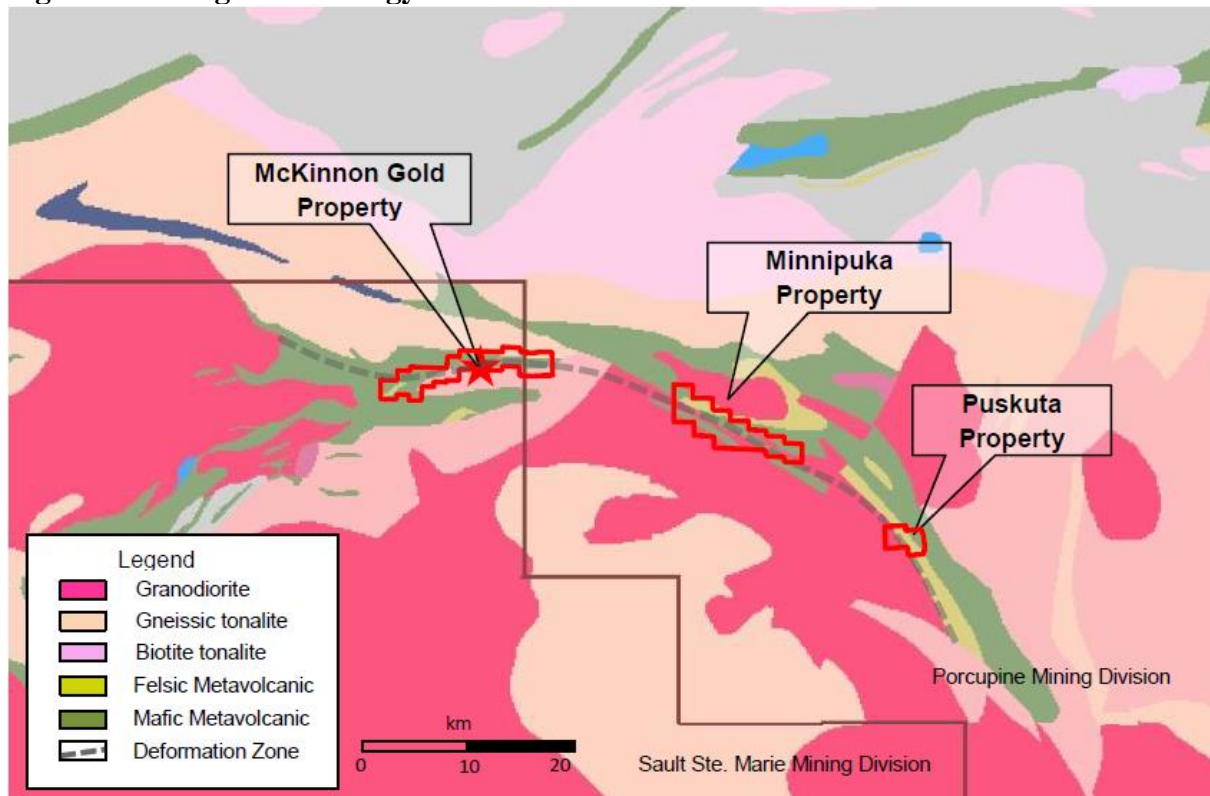
## 7.0 GEOLOGICAL SETTING AND MINERALIZATION

### 7.1 REGIONAL GEOLOGY

The McKinnon Gold Property is underlain by predominately Archean rocks of the Kabinakagami Lake greenstone belt that is part of the Wawa Subprovince of the Superior Province in the Canadian Shield. This belt is composed of metavolcanic and metasedimentary rocks that are from one to six kilometers wide from north to south and extend for a distance of 100 kilometers in a large arcuate shape to the north from Nameigos Township at the western end to Champlain Township at the eastern end. The greenstone belt is intruded by Archean granodiorite to tonalite plutons and by Proterozoic diabase dikes. The area was originally mapped by Maynard (1929). Subsequently Thurston et al. (1977) completed reconnaissance mapping of the eastern part of the Kabinakagami belt. More recent mapping was completed by Wilson (1993) in the area of the Property.

The 1 km wide Puskuta deformation zone is a steeply dipping dextral, transcurrent deformation zone 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 Walls, Minnipuka and Puskuta Townships (Leclair et al., 1993; Wilson, 1993). LeClair and Sullivan (1991) report a U-Pb titanite age of 2,665 Ma for mylonite related to the Puskuta Deformation zone.

**Figure 7.1 Regional Geology**



The McKinnon, Minnipuka and Puskuta properties collectively form Pavey Ark's Puskuta Project.

*Source: MNM CLAIMaps 2016*

### 7.2 LOCAL GEOLOGY

Wilson (1993) describes mafic to intermediate metavolcanic rocks as the dominant rock type in the Kabinakagami greenstone belt. Metavolcanic rocks on the McKinnon Property are dominantly amphibolite metamorphic facies mafic metavolcanics that are strongly foliated to



banded. Banded amphibolites are characterized by mm to cm scale feldspathic layers alternating with more mafic layers. These textures are probably dominantly metamorphic, but banded amphibolites have been mapped as mafic tuffs by some previous workers. Local preservation of pillow structures confirms that the mafic rocks have a volcanic origin. Pillow selvages are defined by distinct darker colour from concentration of amphibole.

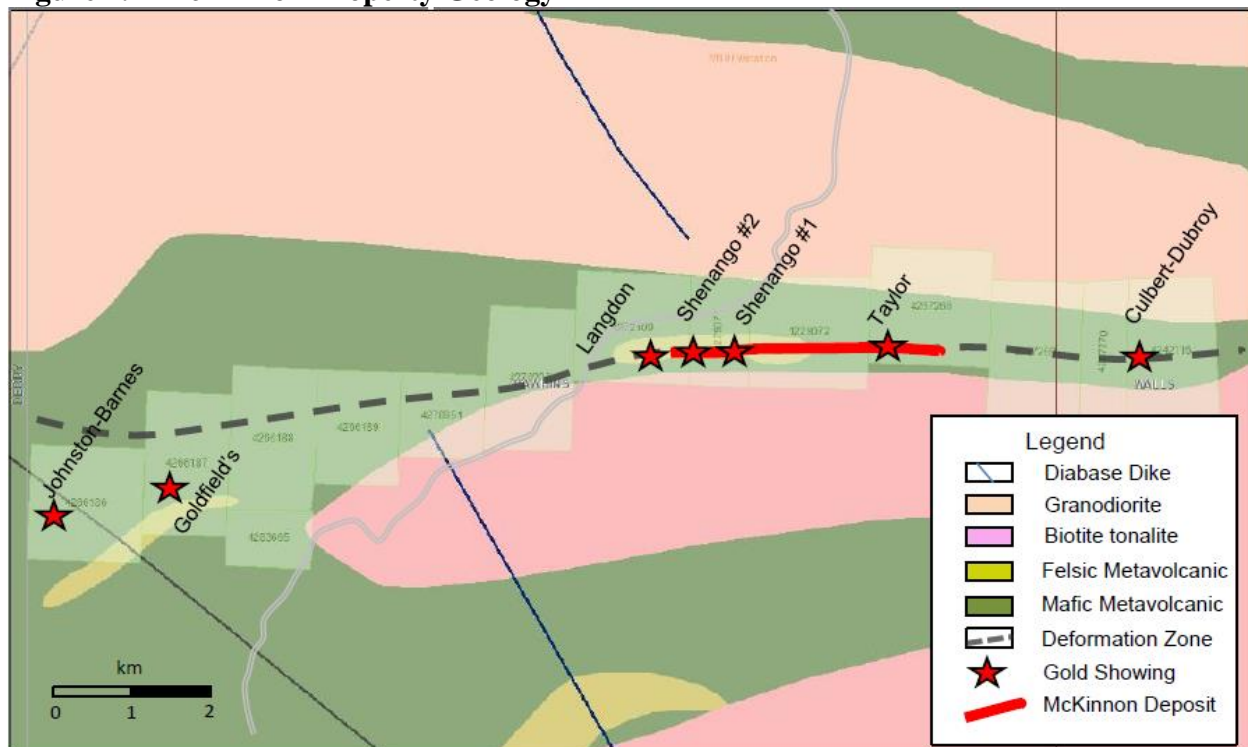
Intermediate to felsic metavolcanic rocks are locally observed in Hawkins Township. A distinctive feature of the property is the presence of numerous cm to metre scale sills of felsite, quartz porphyry and tonalite that intrude the mafic metavolcanics. The felsite is fine grained, equigranular and white to grey. Locally the felsite grades to quartz porphyry with 2 to 3 mm opalescent quartz eyes in a siliceous fine grained groundmass.

Foliated, medium-grained, equigranular biotite tonalite forms an intrusive unit in the southern part of the Property. The tonalite locally contains inclusions of fine-grained felsite and intermediate rock.

The Puskuta Deformation Zone strikes east-west through the McKinnon Property and is defined by outcrops with features of high strain. Typical high strain textures include protomylonite fabric with quartz ribbons, rootless “hook shaped” minor folds, boudinage, and augen or flaser-type textures with clasts of less deformed rock in strongly deformed matrix. Foliation in the Puskuta Deformation Zone is characterized by a broadly east-west strike and north dipping orientation.

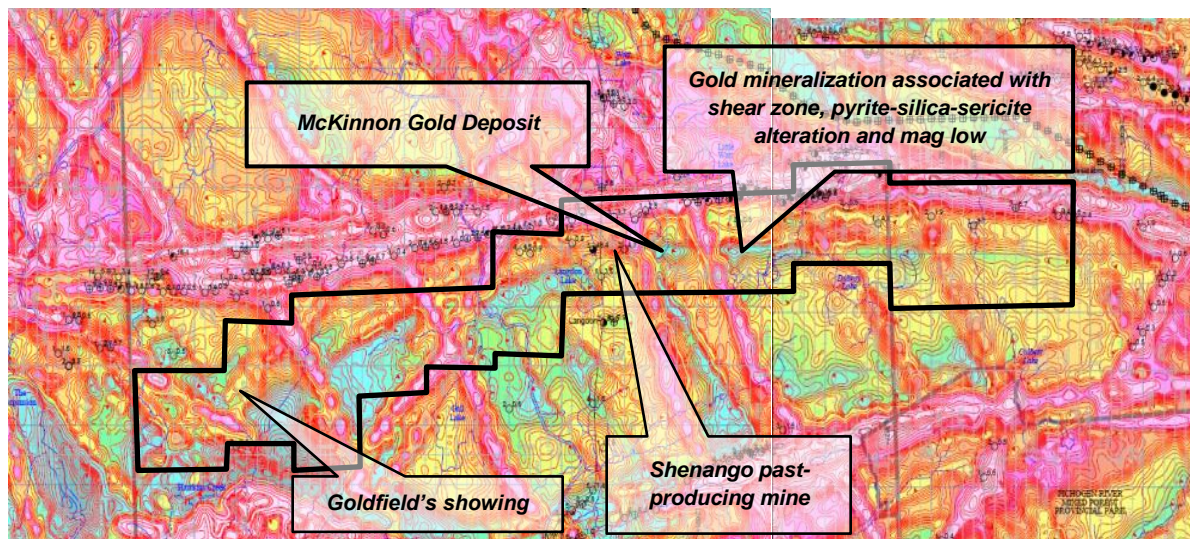
In central Hawkins Township, Wilson (1993) describes the gold showings as occurring in quartz veins at the strongly sheared northern contact of the tonalite intrusion with mafic metavolcanic rocks. Minor sulphides consisting of pyrite and lesser chalcopryite occur in the tonalite in the 500 m to 1000 m wide deformation zone.

**Figure 7.2 McKinnon Property Geology**



Source: OGS CLAIMaps 2016

**Figure 7.3 McKinnon Property Airborne Magnetic Map**



*Source: OGS VTEM Survey 2015.*

### **7.2.1 Structure**

The metavolcanic rocks are characterized by strong penetrative fabrics and ductile deformation. Primary volcanic textures such as pillows and pillow breccia are locally preserved despite amphibolite facies metamorphism and deformation. A distinctive feature of the metavolcanic rocks in the central part of the claim group is the presence of numerous cm to m scale sills of felsite, with local quartz porphyry, that intrude parallel to the amphibolite fabric. Locally the felsite sills have been folded. The large outcrop at the Goldfield's main showing has good examples of relict pillow textures, ductile deformation, and folding of felsite sills.

North of the tonalite intrusion, microbreccias with angular cm scale metavolcanic fragments in a feldspathic matrix provide evidence of late brittle deformation.

Foliations in the metavolcanic rocks in the central part of the claim group, north of the biotite tonalite intrusion, are east-west striking with moderate to steep north dips. There is a pronounced west plunging lineation that is associated with the west end of the biotite tonalite intrusion that is present in both the intrusion and mafic metavolcanic rocks. A lineation defined by minor folds at the Goldfield's main showing has a similar west plunging orientation.

The Puskuta Deformation Zone as defined by outcrops with features of high strain. Foliation in the Puskuta Deformation Zone is characterized by a broadly east-west to east-northeast striking and near-vertically dipping orientation. Minor folds typically have a "Z" asymmetry suggesting a dextral displacement. This is consistent with LeClair et al.'s (1993) interpretation of dextral movement.

### **7.2.2 Alteration**

Varying degrees of sericitization is observed in the felsic sills throughout the McKinnon property. This alteration is especially prominent in zones of deformation and shearing where the rocks can sometimes be classified as sericite schists.

In the central parts of the property, silicification is common near the contact between the tonalite intrusive and the metavolcanic rocks where it is associated with gold mineralization. Within both the mafic metavolcanics and the felsic rocks, silicification is generally accompanied by sulfide enrichment. In the central part of the property, a pinkish staining is observed to be associated with silicification and may be a result of potassic alteration.

Boissoneault (2004) reported that carbonate alteration occurs within the Puskuta shear zone in the vicinity of gold occurrences. Boissoneault (2004) reports that in central parts of the property the carbonate content increases gradually from north towards the tonalite intrusive.

Carbonate alteration is observed in the metavolcanics within the western portion of the property, particularly in the selvages of pillowed flows, where it results in a prominent brown carbonate staining. There is also banded carbonate enrichment in some of the zones of silicification.

### **7.3 MINERALIZATION**

The main zone of gold mineralization on the Property is named the McKinnon Gold Deposit. The gold mineralization is mainly associated with the sheared contact of the tonalite and adjacent mafic metavolcanics to the north. The higher gold values are generally found in the felsic rocks where they have been highly silicified.

The main zone of mineralization has gold values of 0.5 to 4.0 g/t Au over 4 to 30 m widths along a 3.7 km trend (Morrison, 1985). This mineralization is within the Puskuta Deformation Zone and is associated with pervasive sericite and carbonate alteration.

Higher grade gold mineralization occurs within the McKinnon Gold Deposit over strike lengths of 70 to 250 metres and widths of 1 to 10 metres at the Taylor occurrence and past-producing Shenango Mine. The zones contain a number of small quartz veins from 10 to 50 centimeters wide, along with disseminations of pyrite and chalcopyrite, and in some cases pyrite stringers and blebs. At the Taylor occurrence pyrrhotite, sphalerite, and galena are also present in minor quantities. (Boissonault, 2004).

On the western half of the property, there are several gold occurrences in the vicinity of the Goldfields occurrence. This area is about 5.5 kilometers to the west of the McKinnon Gold Deposit. The gold values are found in silicified and sericitized felsic rocks, which have undergone intensive deformation, shearing and small-scale faulting. The gold mineralization is associated with up to 20% pyrrhotite, pyrite, and minor chalcopyrite. This zone occurs in metavolcanics that appear to be on strike with the main McKinnon Gold Deposit.

## 8.0 DEPOSIT TYPES

In the Superior Province, major gold deposits are spatially associated with large scale regional deformation zones and associated Timiskaming-type metasediments. These regional structures are interpreted as zones of transpressive terrain accretion (Kerrick and Wyman 1990). The McKinnon Gold Project is associated with a Puskuta deformation zone that has been proposed as a western extension of the Destor Porcupine deformation zone on the west side of the Kapuskasing Structural Zone and a potential link between the Timmins and Hemlo gold camps (Leclair et al., 1993).

Typical greenstone-hosted, mesothermal gold deposits are associated with structurally controlled quartz-carbonate veins hosted by moderately to steeply dipping, shear zones displaying brittle to ductile deformational features in low grade (greenschist) metamorphic rocks. In contrast, the McKinnon Gold Deposit is hosted in medium-metamorphic grade (amphibolite) rocks that exhibit ductile deformation. This is a similar geological environment to the Hemlo Deposit located 140 km to the southwest. Both Hemlo and the McKinnon deposit are associated with strongly deformed and sheared host rocks that have been intruded by felsite and porphyry sills and exhibit strong association of gold with sericite-silica-pyrite alteration.

The Hemlo Deposit is considered to be the result of hybrid magmatic porphyry/shear zone system in which magmatic/metamorphic fluids enriched in Au and incompatible elements such as K are channelled by the Hemlo shear zone that acted as a conduit for the mineralizing fluids. The flow of mineralizing fluids was focussed in a region of compressive strain along a sinistral ductile shear zone at a 290° orientation (Sutcliffe et al., 1998).

Although Falconbridge considered the McKinnon Deposit to be by stratiform and primarily syngenetic (Morrison 1985), the characteristics of the McKinnon Deposit and the associated Puskuta Deformation Zone suggest a model similar to that proposed for the Hemlo Deposit may be more appropriate. Broadly the gold mineralization at both the Hemlo and McKinnon Deposits have characteristics of shear-hosted, epigenetic, orogenic gold deposits in a medium- grade metamorphic environment.

## **9.0 EXPLORATION**

Pavey Ark has conducted prospecting, mapping and trenching on the McKinnon Property in 2015 and 2016.

### **9.1 GOLDFIELD'S SHOWING AREA**

Pavey Ark conducted mapping and prospecting in the vicinity of the Goldfield's showing in 2015. Significant gold assay results were obtained from grab samples of the showing including one sample with 43.55 g/t Au. Grab samples at locations other than the Goldfield's main showing produced only weakly anomalous results for gold. Gold mineralization on the property is typically associated with anomalous Cu and Zn, low As, low Mo, and moderate Cr values. Channel sampling of the Goldfield's showing by Pavey Ark in 2015 confirmed two significant gold mineralized intervals. Twenty eight (28) channel samples were cut including 22 samples from the main Goldfield's showing.

The 22 samples from the main Goldfield's showing are each 0.5 m long and form an 11.0 m long continuous channel. Samples were analyzed by Accurassay's ALFA1 method code consisting of a fire assay on a 30 g sample aliquot with an atomic absorption finish (FA/AAS). Results over 10 g/t Au were reanalyzed by fire assay with a gravimetric finish. Results included 2.5 m at 18.45 g/t Au and 1.5 m at 21.12 g/t Au. Both intervals are associated with strongly silicified foliated amphibolite, disseminated pyrite-pyrrhotite, ductile folding and quartz veinlets in a west plunging fold structure.

The mafic metavolcanic rocks that host the showing are characterized by strong penetrative fabrics and ductile deformation. The large outcrop at the Goldfield's main showing has good examples of relict pillow textures, ductile deformation, and folding of felsite sills. Primary volcanic textures such as pillows and pillow breccia are locally preserved despite amphibolite facies metamorphism and deformation. A distinctive feature of the metavolcanic rocks in the vicinity of the showing is the presence of numerous cm to m scale sills of felsite, with local quartz porphyry, that intrude parallel to the amphibolite fabric. Locally the felsite sills have been folded. Alteration styles in the vicinity of the showing include silica-pyrite (+/- pyrrhotite)-sericite and silica-pyrite (+/- pyrrhotite) associated with ductile deformation.

### **9.2 MCKINNON GOLD DEPOSIT AREA**

In May 2016, Pavey Ark contracted an excavator to re-open seven north-south trenches formerly excavated by Falconbridge at nominally 100 m spacing that cross the McKinnon Gold Deposit. A total of 205 m of trenches were excavated and a total of 41 grab samples were collected from the 7 trenches. Samples, including 2 blanks and 2 CRM standards, were analyzed by Accurassay's ALFA1 method code consisting of a fire assay on a 30 g sample aliquot with an atomic absorption finish (FA/AAS). Results are presented in table 9.1 and confirmed the surface location of the McKinnon Deposit.

TABLE 9.1 RESULTS FOR PAVEY ARK TRENCH SAMPLING, MCKINNON GOLD DEPOSIT			
Trench	UTM m E	UTM m N at baseline	Grab sample assay results g/t Au
10+75 E	714375	5430050	<0.005, 0.416, 0.193, 0.602, 0.139
12+00 E	714507	5430054	<0.005, 0.011, <0.005, 0.005, 0.098
13+00 E	714610	5430054	0.011, <0.005, 0.029, <0.005, 0.28, 0.168
14+00 E	714709	5430067	0.028, 0.88, 1.294, 0.077, 0.619
15+00 E	714801	5430071	0.038, 0.076, 0.32, 1.051, 2.015, 0.04, 0.318
16+00 E	714904	5430083	4.351, 0.402, 0.185, 2.849, 0.776, 0.376, 0.283, 0.025
17+00 E	715000	5430060	0.088, 0.268, 1.825, 1.756, 0.056

Pavey Ark's trench grab sample results are consistent with Falconbridge historic channel sample results. Pavey Ark's grab samples were slightly lower in trenches 10+75E and 13+00E and higher in 15+00E, 16+00E, and 17+00E. Both Pavey Ark and Falconbridge sampling had no significant gold values in 12+00E.

## 10.0 DRILLING

Pavey Ark has not completed any drilling on the Property to date, however, Pavey Ark has reviewed and sampled drill core from the 22 complete BQ drill holes from the Falconbridge 1984 to 1985 drilling program that have been stored at the Ontario MNM core storage facility at Sault Ste. Marie, Ontario. Pavey Ark collected ¼ core samples that duplicated original Falconbridge samples from within the mineralization wireframe model for 16 of the 22 holes that are stored and the MNM core facility. The Falconbridge holes were located relative to a local grid and were not surveyed by Falconbridge. Pavey Ark has obtained GPS coordinates for a number of locations on the original Falconbridge grid base line, trenches, and drill casings that have been located on the property. This has enabled the grid to be located relative to the UTM grid.

Details of the sampling, assay procedure and QA/QC are described in section 11. Results are presented in Table 10.1

<b>TABLE 10.1</b> <b>McKINNON PROPERTY CORE RE-SAMPLING BY PAVEY ARK</b>											
Hole #	Grid E	Grid N	UTM E	UTM N	Az.	Inc.	Depth (m)	From (m)	To (m)	Int. (m)	g/t Au
GO-10	3300	90	716564	5430124	180	-45	101	29.36	30.36	1.00	0.579
								50.24	51.32	1.08	1.160
GO-20	2650	2	715914	5430036	360	-45	101	76.45	77.40	0.95	0.489
								83.20	84.20	1.00	0.782
GO-24	873	-22	714137	5430012	360	-45	103.6	83.80	84.80	1.00	2.541
								87.00	87.65	0.65	0.518
								92.75	95.00	2.25	0.339
								96.50	97.50	1.00	1.358
GO-25	920	-25	714184	5430009	360	-45	107	84.00	85.00	1.00	0.932
								86.00	87.00	1.00	1.071
								95.00	96.00	1.00	0.330
GO-26	1015	-25	714279	5430009	360	-45	116	90.60	91.60	1.00	0.910
								95.50	96.50	1.00	1.060
								97.50	98.55	1.05	1.331
								98.55	99.45	0.90	0.740
								99.45	100.48	1.03	0.399
								102.50	103.50	1.00	0.544
GO-29	1250	-50	714514	5429984	360	-45	104	72.20	73.10	0.90	0.968
								73.10	74.00	0.90	0.355
								74.00	75.35	1.35	0.618
								87.00	88.00	1.00	0.761
								88.00	89.00	1.00	0.479
								92.00	93.00	1.00	0.224
GO-33	1450	-41	714714	5429993	360	-45	96	88.10	89.10	1.00	0.520
								89.10	90.10	1.00	0.964
GO-34	500	5	713764	5430039	360	-45	138	117.00	119.23	2.23	1.748
								122.04	124.20	2.16	0.581
								124.20	125.46	1.26	0.707
GO-40	531	124	713795	5430158	142	-45	150	96.00	97.00	1.00	0.800
								97.00	98.00	1.00	0.444
								99.00	100.00	1.00	0.680
								100.00	101.00	1.00	2.138
								108.00	109.00	1.00	0.203
GO-41	475	84	713739	5430118	77	-45	85	47.00	48.00	1.00	0.617
								49.00	50.00	1.00	1.982
								55.00	56.00	1.00	0.839
								60.00	61.00	1.00	1.070

<p align="center"><b>TABLE 10.1</b> <b>McKINNON PROPERTY CORE RE-SAMPLING BY PAVEY ARK</b></p>											
Hole #	Grid E	Grid N	UTM E	UTM N	Az.	Inc.	Depth (m)	From (m)	To (m)	Int. (m)	g/t Au
								61.00	62.00	1.00	3.085
								65.00	66.00	1.00	0.756
								66.00	67.00	1.00	1.066
GO-42	613	50	713877	5430084	278	-45	113	58.95	60.00	1.05	1.070
								60.00	61.00	1.00	1.075
								67.00	68.05	1.05	1.443
								68.05	69.00	0.95	0.100
								73.05	74.05	1.00	0.664
								75.00	75.95	0.95	1.171
								82.00	83.00	1.00	0.762
								83.00	83.60	0.60	0.262
GO-43	1991	76	715255	5430110	112	-45	89	37.00	38.00	1.00	0.747
								38.00	39.00	1.00	2.003
								39.00	40.00	1.00	1.458
								42.00	43.00	1.00	0.608
								47.00	48.00	1.00	1.048
GO-45	1350	-98	714614	5429936	357	-50	191.12	170.00	171.00	1.00	1.399
								171.00	172.00	1.00	0.656
								178.00	179.00	1.00	2.579
								179.00	180.00	1.00	0.645
								184.00	185.00	1.00	1.209
GO-47	550	-19	713814	5430015	360	-50	153	129.00	130.00	1.00	0.859
								131.00	132.00	1.00	1.046
								133.00	134.00	1.00	1.374
								134.00	135.00	1.00	2.426
								139.00	140.00	1.00	0.316
GO-57	2575	-35	715839	5429999	360	-65	312	289.45	291.25	1.80	0.293
								293.20	294.70	1.50	0.530
								294.70	296.20	1.50	0.900
								299.10	300.10	1.00	0.160
GO-59	650	-10	713914	5430024	360	-65	190	174.00	175.50	1.50	4.865



## **11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY**

The data reviewed for this Technical Report and Resource Estimate are based on diamond core drilling and surface trenching completed by Falconbridge Limited (Falconbridge) between 1984 and 1987.

### **11.1 HISTORICAL SAMPLING**

In 1984 Falconbridge excavated approximately 36 trenches for a total length of approximately 2,500 m across the mineralized zone. Details of the program are described by Morrison (1985). Chip samples with a nominal length of 1.5 to 2.0 m were taken from fresh rock along the bottom and sides of the trenches. Samples were analyzed for gold by X-Ray Assay Laboratories Limited (XRAL), Don Mills, Ontario, using a fire assay method with a direct couple plasma finish (FA/DCP). Samples with results greater than 5,000 ppb Au by FA/DCP were reanalyzed with a fire assay and gravimetric finish. XRAL reported replicate analyses for approximately 20% of the sample pulps. Pavey Ark has a complete set of trench sampling logs and copies of XRAL certificates for the trenching program.

Between 1984 and 1987, Falconbridge completed 79 drill holes testing the McKinnon Deposit for a total of approximately 14,282 m (Morrison, 1984; Rogers 1987). BQ-size core was recovered from the Falconbridge drilling and core recovery was generally good. The holes are consecutively numbered and prefixed GO- for Gervais Option. Core was logged and marked for sampling by, or under the supervision of, Falconbridge geologists. Core was split and samples of split core were sent to either XRAL or Lakefield Research (Lakefield) in Lakefield, Ontario for gold assay. Sample intervals are nominally either 1.0 or 1.5 m. Descriptions of data verification and QA/QC procedures by Falconbridge are not available.

Drill core samples analyzed for gold at XRAL utilized a fire assay method with a direct couple plasma finish (FA/DCP). Samples with results greater than 5,000 ppb Au by FA/DCP were reanalyzed with a fire assay and gravimetric finish. XRAL reported replicate analyses for approximately 20% of the sample pulps. Drill core samples analyzed for gold at Lakefield utilized the fire assay method with an atomic absorption (AA) finish.

Pavey Ark has copies of Falconbridge logs and assay results for holes GO-1 to 60 inclusive, and has copies of Falconbridge assay results for holes GO-61 to 69 and holes GO-71 to 79. The Falconbridge logs also report pulp duplicate and check assay results. Pavey Ark has copies of the original assay certificates for 16 of the 79 holes. This includes XRAL assay certificates for holes GO-1, 2, 4, 5, 6, 7, 11, 12, 14, 15, 16, 17 and Lakefield certificates for holes GO-37, 38, 39, 43.

Both XRAL and Lakefield were well-respected assay laboratories that are now part of SGS Canada Inc. During the period 1984 to 1987, Lakefield was a division of Falconbridge.

### **11.2 PAVEY ARK MINERALS' DRILL CORE RESAMPLING PROGRAM**

The Ontario Ministry of Northern Development and Mines (MNDM) has stored split drill core for 22 complete holes from the Falconbridge 1984 to 1985 drilling program at the Sault Ste. Marie core storage facility. The drill core is currently stored outdoors in covered cross-piles in a secure, fenced MNDM storage yard located on Fish Hatchery Road, Sault Ste. Marie. Although the core is currently stored outdoors, it had been warehoused indoors for the majority of the past 30 years and is in good condition. Core box labels, original sample tags, and original sampling

marks on the core are clearly visible enabling the original Falconbridge sample intervals to be resampled with a high degree of confidence.

Mr. Antoine Yassa, P.Geo., of P&E, reviewed the McKinnon Property drill data base and selected approximately 80 constrained Falconbridge sample intervals from 18 McKinnon Property drill holes that were available for resampling at the Sault Ste. Marie storage facility. The constrained intervals were all from within the wireframe mineralization model and represented approximately 10% of the total number of assays in the wireframe model, including low, medium and higher grade assay results.

Pavey Ark completed the core resampling program at the MNDM core storage facility in Sault Ste. Marie on January 24 to February 1, 2016. Mr. Antoine Yassa, P.Geo, P&E, was present on January 27, 2016 for requirements of the NI 43-101 independent sampling. Mr. Craig Maitland, a core technician from Clark Exploration Consulting Inc. in Thunder Bay, Ontario, managed the retrieval of core boxes from storage and subsequent sample cutting. Based on Mr. Yassa's selected intervals, Richard Sutcliffe, P.Geo., of Pavey Ark, reviewed the Falconbridge core, confirmed that the Falconbridge sample intervals were valid, that historical sample tags were present, that the split core was intact, and marked out the sample intervals for re-assay. Pavey Ark assigned an identification number to each re-assay sample using uniquely numbered sample tags. Two of the three tags were marked with the date, project, drill hole number, depth from, depth to, and sample interval. The third tag was left blank for inclusion in the sample bag.

Once marked, the core technician cut the split core for each sample interval using an electric tile saw with a diamond-impregnated saw blade. One half of the resulting  $\frac{1}{4}$  core sample was placed into a plastic bag into which the blank sample tag was placed. The remaining  $\frac{1}{4}$  core was put back into the core box. One of the marked sample tags was placed at the end of the sample interval and stapled to the wooden box. The plastic bag with the sample and unmarked tag was rolled up and taped shut with sturdy packing tape, and marked with the sample tag number.

Pavey Ark submitted a total of 80 samples including 6 certified reference standards, 4 blanks and 70 core samples ( $\frac{1}{4}$  core) that were duplicates of original Falconbridge mineralized intervals. Pavey Ark's samples were analyzed for gold by at Accurassay Laboratories (Accuassay) in Thunder Bay, Ontario. Pavey Ark's samples were transported under the direct supervision of the core technician to the sample receiving facilities of Accurassay in Thunder Bay, Ontario.

### **11.3 PAVEY ARK SAMPLE PREPARATION AND ANALYSIS**

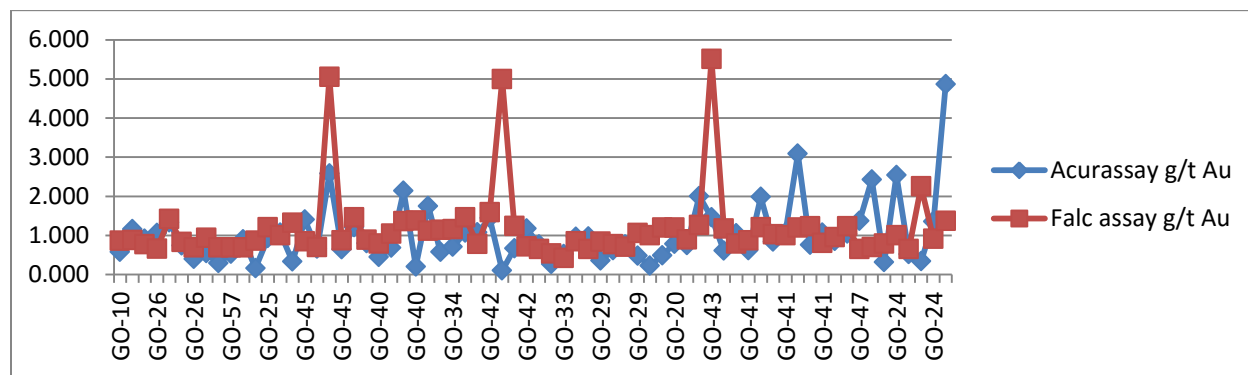
At Accurassay, each sample was prepared using Accurassay's ALP1 preparation code consisting of drying, crushing to 85% -10 mesh (2mm), splitting (500g) and final pulverizing to 85% - 200 mesh (74 $\mu$ ). Silica abrasive is used to clean the pulverizer between each sample.

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.

## 11.4 PAVEY ARK DRILL CORE RESAMPLING PROGRAM RESULTS

A comparison of Au results for Pavey Ark's resampling of Falconbridge core samples analyzed at Accurassay vs. the original Falconbridge results is presented in Figure 11.1.

**Figure 11.1 Comparison of Pavey Ark's Resampling of Falconbridge Core Samples Analyzed at Accurassay vs. the Original Falconbridge Results**



Overall, the results of 68 constrained Falconbridge drill core intervals reassayed by Pavey Ark averaged 1.005 g/t Au. This compares with an average of 1.169 g/t Au for the same intervals in the original Falconbridge assay results. For average grades the reproducibility is good. At higher grades the assays generally showed poor reproducibility, presumably due to nugget effect, however this is not considered to have a major impact on the current Resource Estimate.

## **12.0 DATA VERIFICATION**

### **12.1 P&E SITE VISIT AND INDEPENDENT SAMPLING**

The McKinnon Property was visited by Mr. Eugene Puritch, P.Eng. on May 11, 2016 for the purposes of completing a site visit. During the site visit Mr. Puritch viewed access to the Property, drill hole collar and trench locations, geology and topography, as well as took several GPS readings to confirm the location of the baseline grid intersections and locate several drill hole collars.

In addition to the site visit, Mr. Antoine Yassa, P.Geo. visited the Ontario Ministry of Northern Development and Mines Core Storage Facility located in Sault Ste. Marie, Ontario, on January 27, 2016, for the purpose of reviewing and independently sampling archived drill core from the McKinnon Property.

Mr. Yassa collected 9 verification samples from 6 Falconbridge drill holes that were stored at the Sault Ste. Marie core storage facility. The verification samples from the Falconbridge holes were collected by cutting the split core for each sample interval selected by Mr. Yassa. One half of the resulting  $\frac{1}{4}$  core sample was placed into a plastic bag into which the blank sample tag was placed. The remaining  $\frac{1}{4}$ -core was put back into the core box. The samples were bagged and taken directly by Mr. Yassa to AGAT Labs, ("AGAT") in Mississauga, ON for analysis.

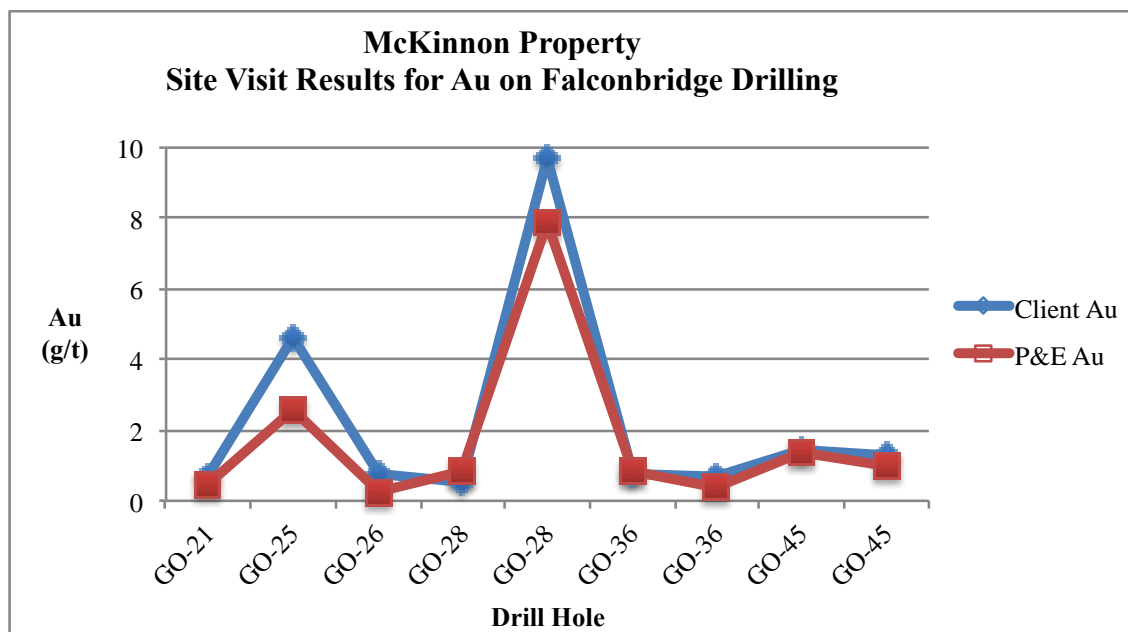
Samples at AGAT were analyzed for gold by fire assay with inductively coupled plasma-optical emission spectroscopy (ICP-OES) finish. Samples were also analyzed for silver with an aqua regia digest and an ICP-MS finish. All samples were analyzed by pycnometer at AGAT to determine specific gravity.

AGAT has developed and implemented at each of its locations a Quality Management System (QMS) designed to ensure the production of consistently reliable data. The system covers all laboratory activities and takes into consideration the requirements of ISO standards.

AGAT maintains ISO registrations and accreditations. ISO registration and accreditation provide independent verification that a QMS is in operation at the location in question. Most AGAT laboratories are registered or are pending registration to ISO 9001:2000.

Results of the McKinnon core site visit verification samples for Au are presented in Figure 12.1.

**Figure 12.1 Results of verification sampling by P&E with analysis at Agat Laboratories**



The P&E results for 9 samples from the McKinnon Property averaged 1.72 ppm Au and 1.44 ppm Ag with a specific gravity of 2.72 g/cm<sup>3</sup>. The Au results for the same intervals in Pavey Ark's database from Falconbridge drilling averaged 2.28 ppm Au. Falconbridge did not assay for Ag.

P&E considers that there is good correlation between Au assay values in Pavey Ark's database from Falconbridge sampling and the independent verification samples collected by P&E and analyzed at Agat Laboratories. Higher grade samples are more difficult to reproduce, presumably due to a nugget effect. It is P&E's opinion that the data are of good quality and appropriate for use in the current Resource Estimate.

## 12.2 QUALITY ASSURANCE/QUALITY CONTROL REVIEW

### 12.2.1 Performance of Certified Reference Materials for Drill Core Re-assay Program

Pavey Ark inserted the OREAS 15h and OREAS 18c certified reference standards into the drill core intervals selected for re-assay. Results are presented in Table 12.1 below.

TABLE 12.1 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
OREAS 18c	3.52 +/- 0.11	3.375	3.340	--	--	3.358

The averages of Pavey Ark's results for both OREAS 15h and 18c are below 2SD for Au. This indicates that the Accurassay results exhibit a low basis. The author considers these results acceptable.

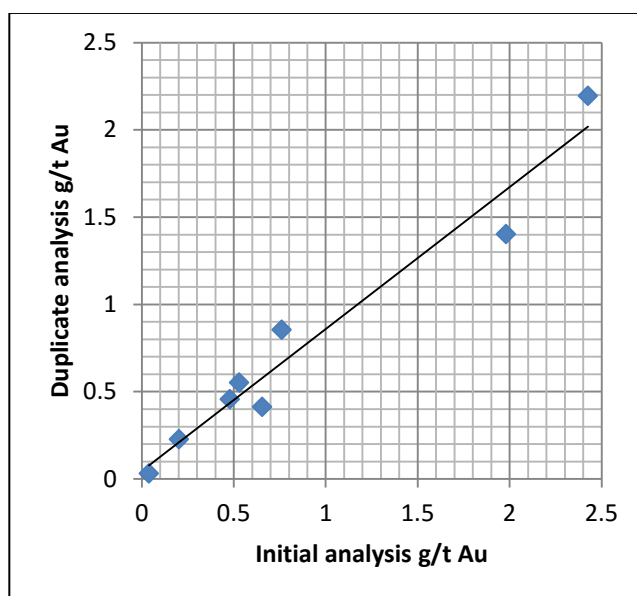
### 12.2.2 Performance of Blank Material for Drill Core Re-assay Program

Pavey Ark inserted four field blanks into the re-assay samples. The blank was obtained from core samples of a barren biotite tonalite in hole GO-57. The field blanks returned 0.010, 0.021, 0.009 and 0.018 g/t Au. These results are considered acceptable.

### 12.2.3 Performance of Pulp Duplicates for Drill Core Re-assay Program

Accurassay reported the results of 8 duplicate pulp analyses for the drill core re-assay program. Results are shown in Figure 12.2. These results are considered acceptable.

**Figure 12.2 Results of Duplicate Pulp Analyses for the Drill Core Re-Assay Program**



It is P&E's opinion that the Falconbridge data are appropriate for use in the current Resource Estimate.

### **13.0 MINERAL PROCESSING AND METALLURGICAL TESTING**

This section is not applicable to this report.

## **14.0 RESOURCE ESTIMATE**

The mineral resource estimate presented herein is reported in accordance with the Canadian Securities Administrators' National Instrument 43-101 and has been estimated in conformity with generally accepted CIM "Estimation of Mineral Resource and Mineral Reserves Best Practices" guidelines. Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no guarantee that all or any part of the mineral resource will be converted into mineral reserve. Confidence in the estimate of Inferred mineral resources is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure. Mineral resources may also be affected by further infill and exploration drilling that may result in changes to subsequent mineral resource estimates.

All mineral resource estimation work reported herein was carried out by Eugene Puritch, P.Eng., an independent Qualified Persons in terms of National Instrument 43-101, from information and data supplied by Pavey Ark. Mineral resource modeling and estimation were carried out using Gemcom modeling software. To the best of P&E's knowledge no previous National Instrument 43-101 mineral resource estimate has been completed for the Property.

At a 0.5 g/t Au cut-off, the McKinnon Gold Property has estimated in-pit Inferred Resource of 4,957,000 tonnes at 1.50 g/t Au containing 239,100 ounces of gold.

### **14.1 DATABASE**

All data were provided by Pavey Ark in the form of Excel files and scanned copies of original reports and logs. The database as implemented by P&E contains results of 79 diamond drill holes and 32 trenches for a total of 4,994 drill core assays and 684 trench assays by Falconbridge from the 1983 to 1986 programs. Drill hole plans are presented in Appendix I.

Industry standard validation checks were completed on the supplied databases. P&E typically validates a mineral resource database by checking for inconsistencies in naming conventions or analytical units, duplicate entries, interval, length or distance values less than or equal to zero, blank or zero-value assay results, out-of-sequence intervals, intervals or distances greater than the reported drill hole length, inappropriate collar locations, and missing interval and coordinate fields. P&E noted no significant validation errors. The database was verified for all historical and current assay results using old certificates and digital copies of assay certificates received from the laboratory. P&E believes that the supplied database is suitable for mineral resource estimation.

### **14.2 DOMAIN INTERPRETATION**

Local topography was derived from the Ontario Mining Land tenure map. Domain models were generated by P&E from successive polylines spaced along drill hole sections created every 50 m and oriented perpendicular to the general trend of the mineralization. The domain outlines were influenced by the selection of mineralized material above 0.5 g/t Au that demonstrated lithological and grade continuity along strike and down dip. Where appropriate lower grade mineralization was included for the purpose of maintaining zonal continuity. On each section polyline interpretations were digitized from drill hole to drill hole but not typically extended more than 50 metres from drilled mineralization. Mineralisation was extended deeper when mineralized intersections were encountered in neighboring sections. All polyline vertices were



snapped directly to drill hole assay intervals, in order to generate a true three-dimensional representation of the extent of the mineralization. Domain wireframes were then clipped above the topographic surface. An overburden surface was created using the lithological description and used to limit the amount of reported volumes. There were a total of 866 constrained assay intervals within the wireframes.

A total of three domains were developed:

- McKinnon Gold Deposit Main Zone – the main east west striking structure with steep north dip;
- Footwall (FW) Zone – a minor zone paralleling the Main Zone in the footwall at the west end of the Deposit;
- Hangingwall (HW) Zone – a minor zone paralleling the Main Zone in the hanging wall in the central part of the Deposit.

Since the Footwall and Hangingwall Zones are minor relative to the Main Zone, the three domains were treated the same for the purpose of rock coding, statistical analysis, compositing limits and definition of the extent of potentially economic mineralization. The 3D domain model is shown in Appendix II.

### **14.3 COMPOSITES**

Assay sample lengths within the defined domains range from 0.2 m to 2.25 m, with an average sample length of 1.23 m. In order to ensure equal sample support, the choice of a compositing length of 1.25 m was utilized for mineral resource estimation.

Length-weighted composites were calculated within the defined domains, starting at the first point of intersection between the drill hole and the domain intersected, and halting upon exit from the domain wireframe. Assays and composites were then assigned a domain rock code value based on the domain wireframe that the interval midpoint fell within. A nominal grade of 0.001 was used to populate a small number of un-sampled intervals. After compositing, a small number of short-length residual composites were discarded to prevent short sample bias. The remaining composites were subsequently exported to extraction files for statistical analysis and estimation.

### **14.4 GRADE CAPPING**

The presence of high-grade outliers for the composite data was evaluated by a review of composite summary statistics, histograms and probability plots (see log normal histograms in Appendix-III). Based on this analysis, grade capping was deemed to be unnecessary.

### **14.5 VARIOGRAPHY**

Due to the relatively wide spaced drilling meaningful variograms were not attainable.

### **14.6 BULK DENSITY**

An average in-situ bulk density of 2.72 t/m<sup>3</sup> was applied to the mineralized domains based on an average of 9 specific gravity measurements by pycnometer determined by AGAT Laboratories

on verification samples collected by P&E. P&E's verification samples ranged between 2.70 and 2.75 t/m<sup>3</sup>.

## **14.7 BLOCK MODELING**

The McKinnon Gold resource model was divided into a block model framework containing blocks extending 5 m in the X direction, 2.5 m in the Y direction and 5 m in the Z direction. The block model framework contains 760 columns (X), 400 rows (Y) and 92 levels (Z), and was not rotated. One block model was interpolated for gold grade.

A volume percent block model was established to accurately represent the volume and subsequent tonnage that was occupied by each block inside the constraining domain. As a result, the domain boundary is properly represented by the percent model ability to measure individual infinitely variable block inclusion percentages within an individual domain.

All composite values were used for the estimation of block grades. P&E considers this to be a robust methodology appropriate for estimating the McKinnon Gold mineral resources. During block estimation, between 2 and 20 composites from one or more drill holes were selected, with the search ellipse for sample selection aligned to the geometry and overall orientation of the constraining mineralization domain. Composite data used during estimation were restricted to samples located in their respective domains.

The resulting Au grade blocks can be seen on the block model cross-sections and plans in Appendix-IV.

## **14.8 RESOURCE CLASSIFICATION**

Mineral resources were estimated and classified in compliance with guidelines established by the Canadian Institute of Mining, Metallurgy and Petroleum:

- Indicated Mineral Resource: "An 'Indicated Mineral Resource' is that part of a mineral resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed."
- Inferred Mineral Resource: "An 'Inferred Mineral Resource' is that part of a mineral resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes."

Mineral resource classification was implemented by generating three-dimensional envelopes around those parts of the block model for which the drill hole spacing and grade estimates met the required continuity criteria. As a result of the relatively wide drill hole spacing ranging between 50 to 100 m, an Inferred only interpolation pass was utilized to code the Au grade

blocks. As a result, all of the mineralization was classified as Inferred Resources. Inverse distance cubed ( $1/d^3$ ) grade interpolation was utilized.

The resulting Au grade blocks can be seen on the block model cross-sections in Appendix-IV.

## 14.9 RESOURCE ESTIMATE

The mineral resource estimate was derived by applying the 0.5 g/t Au cut-off grade to the block model and reporting the resulting tonnes and grade for potentially extractable constrained resources.

In order to evaluate the potentially economic open pit mineralization in the McKinnon Gold Deposit, a first pass Whittle 4X pit optimization was carried out to create an optimum pit shell for the McKinnon Deposit. Near-surface resources are constrained within an optimized conceptual pit-shell that utilized the Inferred mineral resources.

The model used the following assumptions:

- Au price of US\$1,250/oz;
- exchange rate of US\$0.85=CAD\$1.00;
- estimated costs including (\$2.50/t mined), process (\$17/t), G&A (\$5/t processed);
- process recovery of 93%;
- and a pit slope of 50°.

The resulting McKinnon Gold Deposit potentially economic pit shell and mineralized domain can be seen in Appendix V.

The following calculation demonstrates the rationale supporting the 0.5 g/t Au cut-off grade that determines the potentially economic portions of the mineralization.

### 14.9.1 Mineral Resource Estimate Cu Cut-Off Grade Calculation CDN\$

Au Price	US\$1,250/oz
\$US=\$CDN Exchange Rate	\$ US\$0.85=CAD\$1.00
Au Recovery	93%
Mining Cost	\$2.50/tonne mined
Process Cost	\$17/tonne milled
General & Administration	\$5/tonne milled

Therefore, the Au cut-off grade for the in-pit resource estimate is calculated as follows:

$$\text{Operating costs per mineralized tonne} = (\$17 + \$5) = \$22/\text{tonne}$$
$$[(\$22)/[(\$1,250 \times \$0.85 \text{ Exchange Rate} / 31.1035 \times 93\% \text{ Recovery})]] = 0.5 \text{ g/t Au}$$

<b>TABLE 14.1</b>			
<b>McKINNON DEPOSIT MINERAL RESOURCE ESTIMATE AT 0.5 G/T AU CUT OFF<sup>(1-4)</sup></b>			
	<b>Tonnes</b>	<b>Grade – g/t Au</b>	<b>Au - ounces</b>
<b>McKinnon Gold Deposit</b>			
Inferred	4,957,000	1.50	239,100

- (1) Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues, although Pavey Ark is not aware of any such issues.
- (2) The quantity and grade of reported Inferred resources in this estimation are uncertain in nature and there has been insufficient exploration to define these Inferred resources as an Indicated or Measured mineral resource and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured mineral resource category.
- (3) The mineral resources were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines.
- (4) Values in the table may differ due to rounding.

A sensitivity analysis to the in-pit mineral resource estimate was also completed (Table 14.2). The inclusion of this sensitivity analysis is not meant to supersede or replace the results of the mineral resource estimate and should not be construed as a mineral resource.

<b>TABLE 14.2</b>			
<b>SENSITIVITY TO PIT CONSTRAINED RESOURCE ESTIMATE</b>			
<b>McKinnon Gold Deposit</b>			
<b>Inferred</b>			
<b>Cut-Off Au g/t</b>	<b>Tonnes</b>	<b>Au g/t</b>	<b>Au ounces</b>
2.0	1,004,000	3.29	106,200
1.9	1,097,000	3.18	112,200
1.8	1,196,000	3.07	118,000
1.7	1,300,000	2.96	123,700
1.6	1,447,000	2.82	131,200
1.5	1,593,000	2.71	138,800
1.4	1,730,000	2.61	145,200
1.3	1,909,000	2.49	152,800
1.2	2,186,000	2.33	163,800
1.1	2,487,000	2.19	175,100
1.0	2,835,000	2.05	186,900
0.9	3,199,000	1.92	197,500
0.8	3,663,000	1.79	210,800
0.7	4,371,000	1.62	227,700
0.6	4,702,000	1.55	234,300
0.5	4,957,000	1.50	239,100
0.4	5,112,000	1.47	241,600
0.3	5,183,000	1.45	241,600
0.2	5,209,000	1.45	242,800
0.1	5,220,000	1.45	243,300

Using the parameters defined for the block model, at a 0.5 g/t Au cut-off the McKinnon Property has a Global Sensitivity to the Resource Estimate of 15,380,000 tonnes at a grade of 1.17 g/t Au. The Global Sensitivity is not meant to supersede or replace the results of the Mineral Resource estimate and should not be construed as a Mineral Resource Estimate.

#### 14.10 CONFIRMATION OF ESTIMATE

As a test of the reasonableness of the mineral resource estimate the average model block Au grade at a zero cut-off was compared to raw constrained assays as well as to the average of the composite data. The block average is the average grade of all blocks within the mineralized domains (see Table 14.3).

<b>TABLE 14.3</b> <b>COMPARISON OF AU G/T AVERAGES FOR RAW ASSAYS, COMPOSITES &amp; RESOURCE MODEL BLOCKS</b>		
<b>Raw Assays</b>	<b>Composites</b>	<b>Blocks</b>
0.98	1.05	1.13

The comparison above shows the average grade of all the Au blocks in the constraining domains to be somewhat higher than raw assays and composites which is due to some low grade assay clustering. The block model Au values will be more representative than the assays or composites due to the block model's three-dimensional spatial distribution characteristics. In addition, a volumetric comparison was performed with the block model volume of the model blocks versus the geometric calculated volume of the domain solids as follows:

- Geometric Volume = 6,090,804 m<sup>3</sup>
- Block Volume = 6,088706 m<sup>3</sup>
- Difference = 0.03%

## **15.0 MINERAL RESERVE ESTIMATES**

This section is not applicable to this report.

## **16.0 MINING METHODS**

This section is not applicable to this report.

## **17.0 RECOVERY METHODS**

This section is not applicable to this report.



## **18.0 PROJECT INFRASTRUCTURE**

Unpaved forest access roads are common throughout the area and have been developed both to provide access to commercial logging activity and the two rail roads.

The Algoma Central Railway (ACR) and Canadian National Railway (CNR) meet at Oba Station, 8 km north of the Property. The ACR railway crosses the property in a north-south direction immediately west of the McKinnon Gold Deposit and the CNR is located approximately 1.5 km north of the property.

## **19.0 MARKET STUDIES AND CONTRACTS**

This section is not applicable to this report.

## **20.0 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT**

Pavey Ark has not carried out any environmental studies, development permitting, or social or community impact studies. The Property is located with the traditional lands of the Missanabie Cree First Nation and Brunswick House First Nations. Pavey Ark has held initial discussions with the two First Nations groups to inform them of planned exploration activities. Pavey Ark holds an Exploration Permit issued by the MNDM for drilling and trenching programs on the McKinnon Property and has filed Exploration Plans for early stage exploration such as line cutting on the McKinnon Property.

## **21.0 CAPITAL AND OPERATING COSTS**

This section is not applicable to this report.

## **22.0 ECONOMIC ANALYSIS**

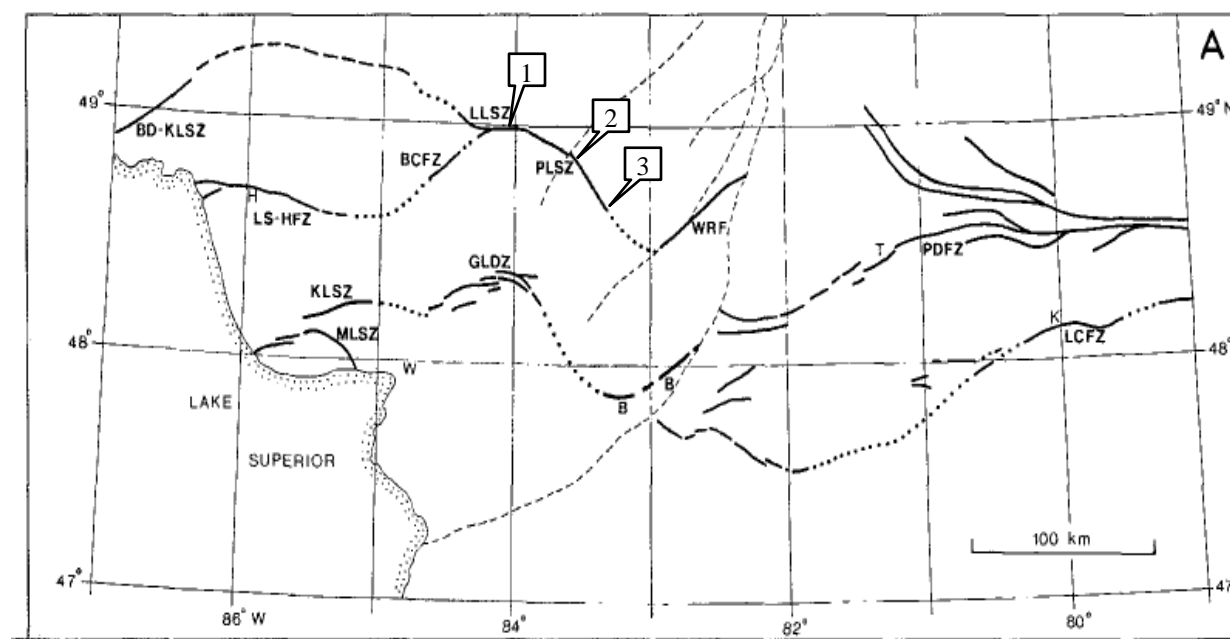
This section is not applicable to this report.

## 23.0 ADJACENT PROPERTIES

There are no directly adjacent properties to the McKinnon Gold Property. Pavey Ark has two additional, non-contiguous, claim groups located to the east of the McKinnon Gold Property that target potential gold mineralization on the Puskuta Deformation Zone. These Properties are the Minnipuka Property in southwest Minnipuka Township and the Puskuta Property in Puskuta Township. The Properties are centered 21 km and 38 km east-southeast of the McKinnon Property respectively. The McKinnon, Minnipuka and Puskuta Properties collectively form Pavey Ark's Puskuta Gold Project and together cover over 32 km of strike length of the Puskuta Deformation Zone.

The primary rationale for the Puskuta Gold Project is that the Puskuta Deformation Zone is a major underexplored gold mineralized fault structure that potentially links the Destor-Porcupine Deformation Zone east of the Kapuskasing Structure with the Hemlo Deformation Zone to the west (Leclair et al. 1993) (Figure 23.1).

**Figure 23.1 Regional correlation of major fault zones in the Superior Province**



\*PDFZ – Porcupine Destor ; LCFZ – Larder Cadillac; GLDZ – Goudreau; PLSZ – Puskuta; LLSZ – Langdon Lake; BCFZ – Bear Creek; HFZ – Hemlo; T – Timmins; K – Kirkland Lake; B – Borden; H – Hemlo; 1- McKinnon; 2 – Minnipuka; 3 – Puskuta Property

**Source:** Leclair et al. (1993).

On the Minnipuka Property, in addition to the gold exploration potential associated with the Puskuta Deformation Zone, there are a number of VTEM anomalies associated with rhyolite that were identified on the recent government airborne magnetic and VTEM survey (OGS, 2015). Wilson (1993) has noted that these felsic metavolcanics may correlate with the felsic metavolcanic rocks hosting volcanogenic massive sulphide (VMS) deposits in the Manitouwadge area.

## **24.0 OTHER RELEVANT DATA AND INFORMATION**

To the best of the authors' knowledge there is no other relevant data, additional information or explanation necessary to make the Report understandable and not misleading.

## 25.0 INTERPRETATION AND CONCLUSIONS

Pavey Ark's McKinnon Gold Property is located in northern Ontario, 80 km south-southwest of the town of Hearst, Ontario. The Property is located 140 km east-northeast of the producing Hemlo Gold Mine and 205 km northwest of the city of Timmins, Ontario.

The McKinnon Property is comprised of 14 contiguous staked claims covering 144 units (2,304 ha) that spans Hawkins and Walls Townships. The Property is accessible by all-weather logging roads extending south from the Trans-Canada Highway 11. The Property is also crossed by the Algoma Central Railway and is in close proximity to the Canadian National Railway at Oba Station. Pavey Ark holds an exploration permit for drilling and trenching issued by the Ontario Ministry of Northern Development and Mines.

The McKinnon Gold Property is underlain by predominately Archean rocks of the Kabinakagami Lake greenstone belt that is part of the Wawa Subprovince of the Superior Province in the Canadian Shield. This east-west trending belt is composed of metavolcanic and metasedimentary rocks that are from one to six kilometers wide. The Property straddles the 1 km wide Puskuta Deformation Zone, a steeply dipping dextral, transcurrent deformation zone that on a regional scale bounds the south side of the Kabinakagami Lake greenstone belt and controls the location of mineralized zone.

Gold mineralization on the McKinnon Property is mainly associated with the sheared contact of the tonalite and adjacent mafic metavolcanics to the north. Mineralization is associated with sericite-pyrite-silica alteration and higher gold values are generally found in felsic rocks that have been highly silicified. The gold mineralization at the McKinnon Deposit has characteristics of shear-hosted orogenic gold deposits in a medium metamorphic grade environment.

The McKinnon Property was initially staked by the late Mr. Donald McKinnon in 1997, based on having similar geological characteristics to the Hemlo gold deposits located 140 km to the southwest. The McKinnon Property has been sporadically explored for gold beginning with the discovery of the Taylor Prospect in 1923. The Property hosts the former Shenango Gold Mine that produced intermittently between 1937 and 1945. Exploration by Falconbridge Limited from 1983 to 1986 was the most comprehensive exploration program on the Property with drilling and trenching defining 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.

The Falconbridge data forms the basis of the current resource estimate. Pavey Ark has copies of Falconbridge sample records and assay certificates for all of the trench results and many of the drill holes. Additionally, Pavey Ark has reviewed and re-sampled drill core from the 22 complete BQ drill holes from the Falconbridge drilling program that have been stored at the Ontario Ministry of Northern Department core storage facility at Sault Ste. Marie, Ontario.

The McKinnon Property was visited by Mr. Eugene Puritch, P.Eng. on May 11, 2016 for the purposes of completing an independent site visit. In addition, Mr. Antoine Yassa, P.Geo. visited the Ontario Ministry of Northern Development and Mines Core Storage Facility located in Sault Ste. Marie, Ontario, on January 27, 2016, for the purpose of reviewing and independently sampling archived drill core from the McKinnon Property. P&E considers that there is good correlation between Au assay values in Pavey Ark's database from Falconbridge sampling and the independent verification samples collected by P&E and analyzed at AGAT Laboratories. It is



P&E's opinion that the data are of good quality and appropriate for use in the current Resource Estimate.

The database for this Resource Estimate as implemented by P&E contains results of 79 diamond drill holes and 32 trenches for a total of 4,994 drill core assays and 684 trench assays by Falconbridge from the 1983 to 1986 programs. At a 0.5 g/t Au cut-off, the McKinnon Gold Property has estimated in-pit Inferred Resource of 4,957,000 tonnes at 1.50 g/t Au containing 239,100 ounces of gold.

The McKinnon Property is one of three Properties that collectively form Pavey Ark's Puskuta Gold Project and together cover over 32 km of strike length of the Puskuta Deformation Zone. The Puskuta Deformation Zone is interpreted as a gold mineralized fault structure that potentially links the Destor-Porcupine Deformation Zone to the east with the Hemlo Deformation Zone to the west.

The mineral resources in this report were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council. Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues. The quantity and grade of reported Inferred resources in this estimation are uncertain in nature and there has been insufficient exploration to define these Inferred resources as an Indicated or Measured mineral resource and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured mineral resource category.

## 26.0 RECOMMENDATIONS

### 26.1 RECOMMENDATIONS AND PROPOSED BUDGET

P&E considers that the McKinnon Gold Property contains a significant gold resource that is associated with a well-defined structure and alteration system. P&E further considers that property has potential for delineation of additional resources and that further exploration is warranted. P&E's recommendations include an IP geophysical survey to assist in defining drill targets, additional diamond drilling, and initial metallurgical testwork.

P&E suggests that initial drilling programs should focus on expanding mineralization and identification of potential higher grade mineralization. Specific exploration targets include:

- Mineralization is open along strike. In particular there is potential to extend the McKinnon Deposit along strike to the west where there is an IP chargeability anomaly associated with a magnetic low at the tonalite/metalvolcanic contact, and to the east where there is a continuation of the magnetic low associated with the known mineralization;
- There is the potential for delineation of higher grade zones of mineralization within the McKinnon Deposit associated with the historical Shenango, Taylor and Dubroy Occurrences. At the west end of the McKinnon Property there is an indication of a westerly plunging orientation of higher grade intersections that is consistent with west plunging mineral lineations and minor folds;
- The mineralized zone has not been systematically tested beneath a depth of approximately 200 m.

P&E recommends that an IP survey should be completed to develop drill targets within the defined resource, as well as along strike and down dip from the current resource. The pyrite-silica-sericite alteration that is associated with gold mineralization would be expected to provide an IP chargeability response.

P&E recommends that preliminary metallurgical testwork should be completed as a first step in evaluating the potential for an open pit mining operation. Given the proximity of the railroads, an opportunity exists to develop a test open-pit mining program with rail haulage of mineralization for processing at either Hemlo or Timmins.

A proposed CAD\$500,000 program is recommended in table 26.1.

<b>TABLE 26.1</b>			
<b>RECOMMENDED PROGRAM AND BUDGET</b>			
<b>Program</b>	<b>Units</b>	<b>Unit Cost (\$)</b>	<b>Budget</b>
Line Cutting	40 km	\$1,000/km	\$40,000
IP Geophysical Survey	40 km	\$1,500/km	\$60,000
Drilling including logging and assays	2,080 m	\$125/m	\$260,000
Metallurgical Testwork			\$50,000
Management	6 months	\$15,000	\$90,000
<b>Total</b>			<b>\$500,000</b>

## 27.0 REFERENCES

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## 28.0 CERTIFICATES

### CERTIFICATE OF QUALIFIED PERSON

**EUGENE J. PURITCH, P. ENG.**

I, Eugene J. Puritch, P. Eng., residing at 44 Turtlecreek Blvd., Brampton, Ontario, L6W 3X7, do hereby certify that:

1. I am an independent mining consultant and President of P&E Mining Consultants Inc.
2. This certificate applies to the technical report titled “Technical Report and Initial Resource Estimate on the McKinnon Gold Property, Hawkins and Walls Townships, Sault Ste. Marie and Porcupine Mining Divisions, Ontario, for Pavey Ark Minerals Inc.” (the “Technical Report”), with an effective date of May 11, 2016.
3. I am a graduate of The Haileybury School of Mines, with a Technologist Diploma in Mining, as well as obtaining an additional year of undergraduate education in Mine Engineering at Queen’s University. In addition I have also met the Professional Engineers of Ontario Academic Requirement Committee’s Examination requirement for Bachelor’s Degree in Engineering Equivalency. I am a mining consultant currently licensed by Professional Engineers and Geoscientists New Brunswick (License No. 4778), Professional Engineers and Geoscientists Newfoundland & Labrador (License No. 5998), Association of Professional Engineers and Geoscientists Saskatchewan (License No. 16216) and Ontario Association of Certified Engineering Technicians and Technologists (License No. 45252) the Professional Engineers of Ontario (License No. 100014010) and registered with the Ontario Association of Certified Engineering Technicians and Technologists as a Senior Engineering Technologist. I am also a member of the National and Toronto Canadian Institute of Mining and Metallurgy.

I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that, by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.

I have practiced my profession continuously since 1978. My summarized career experience is as follows:

- Mining Technologist - H.B.M. & S. and Inco Ltd., ..... 1978-1980
- Open Pit Mine Engineer – Cassiar Asbestos/Brinco Ltd., ..... 1981-1983
- Pit Engineer/Drill & Blast Supervisor – Detour Lake Mine, ..... 1984-1986
- Self-Employed Mining Consultant – Timmins Area, ..... 1987-1988
- Mine Designer/Resource Estimator – Dynatec/CMD/Bharti, ..... 1989-1995
- Self-Employed Mining Consultant/Resource-Reserve Estimator, ..... 1995-2004
- President – P&E Mining Consultants Inc, ..... 2004-Present

4. I visited the Property that is the subject of this report on May 11, 2016.
5. I am responsible for authoring Sections 13 and 14 of the Technical Report along with those parts of the Executive Summary, and Sections 25 and 26 pertaining thereto.
6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
7. I have had no prior involvement with the project that is the subject of this Technical Report.
8. I have read NI 43-101 and Form 43-101F1. This Technical Report has been prepared in compliance therewith.
9. As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: May 11, 2016

Signed Date: May May 31, 2016

**{SIGNED AND SEALED}**

[Eugene J. Puritch]

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Eugene J. Puritch, P.Eng.

## CERTIFICATE OF QUALIFIED PERSON

**ANTOINE R. YASSA, P. GEO.**

I, Antoine R. Yassa, P. Geo., residing at 3602 Rang des Cavaliers, Rouyn-Noranda, Quebec, J0Z 1Y2, do hereby certify that:

1. I am an independent geological consultant contracted by P&E Mining Consultants Inc.
2. This certificate applies to the technical report titled “Technical Report and Initial Resource Estimate on the McKinnon Gold Property, Hawkins and Walls Townships, Sault Ste. Marie and Porcupine Mining Divisions, Ontario, for Pavey Ark Minerals Inc.” (the “Technical Report”), with an effective date of May 11, 2016.
3. I am a graduate of Ottawa University at Ottawa, Ontario with a B.Sc (HONS) in Geological Sciences (1977). I have worked as a geologist for 30 years since obtaining my B.Sc. degree. I am a geological consultant currently licensed by the Order of Geologists of Québec (License No 224) and a practising member of the APGO (Registration Number 1890).

I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that, by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.

My relevant experience for the purpose of the Technical Report is:

- Minex Geologist (Val d’Or), 3D Modeling (Timmins), Placer Dome ..... 1993-1995
  - Database Manager, Senior Geologist, West Africa, PDX ..... 1996-1998
  - Senior Geologist, Database Manager, McWatters Mine ..... 1998-2000
  - Database Manager, Gemcom modeling and Resources Evaluation (Kiena Mine) QAQC Manager (Sigma Open pit), McWatters Mines..... 2001-2003
  - Database Manager and Resources Evaluation at Julietta Mine, Far-East Russia, Bema Gold Corporation ..... 2003-2006
  - Consulting Geologist ..... since 2006
4. I have visited the MNDM Sault Ste Marie drill core library where the drill core that is the subject of this Technical Report is stored on January 27, 2016. I have not visited the Property that is the subject of this Technical Report.
  5. I am responsible for co-authoring Section 12 of the Technical Report along with those parts of the Executive Summary and Sections 25 and 26 pertaining thereto.
  6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
  7. I have had no prior involvement with the Property that is the subject of this Technical Report.
  8. I have read NI 43-101 and Form 43-101F1 and this Technical Report has been prepared in compliance therewith.
  9. As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: May 11, 2016

Signed Date: May May 31, 2016

**{SIGNED AND SEALED}**

*[Antoine Yassa]*

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Antoine R. Yassa, P. Geo.

## CERTIFICATE OF QUALIFIED PERSON

**JARITA BARRY, P.GEO.**

I, Jarita Barry, P.Geo., residing at 3053 Keniris Road, Nelson, British Columbia, V1L 6Z8, do hereby certify that:

1. I am an independent geological consultant contracted by P & E Mining Consultants Inc.
2. This certificate applies to the technical report titled “Technical Report and Initial Resource Estimate on the McKinnon Gold Property, Hawkins and Walls Townships, Sault Ste. Marie and Porcupine Mining Divisions, Ontario, for Pavey Ark Minerals Inc.” (the “Technical Report”), with an effective date of May 11, 2016.
3. I am a graduate of RMIT University of Melbourne, Victoria, Australia, with a B.Sc. in Applied Geology. I have worked as a geologist for a total of 9 years since obtaining my B.Sc. degree. I am a geological consultant currently licensed by the Association of Professional Engineers and Geoscientists of British Columbia (License No. 40875). I am also a member of the Australasian Institute of Mining and Metallurgy of Australia (Member No. 305397);.

I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.

My relevant experience for the purpose of the Technical Report is:

- Geologist, Foran Mining Corp. ....2004
- Geologist, Aurelian Resources Inc. ....2004
- Geologist, Linear Gold Corp. ....2005-2006
- Geologist, Búscore Consulting. ....2006-2007
- Consulting Geologist (AusIMM) ....2008-2014
- Consulting Geologist, P.Geo. (APEGBC/AusIMM) .....2014-Present.

4. I have not visited the Property that is the subject of this Technical Report.
5. I am responsible for authoring Section 11, coauthoring Section 12, along with those parts of the Executive Summary and Sections 25 and 26 pertaining thereto.
6. I am independent of the Issuer applying all of the tests in section 1.5 of National Instrument 43-101.
7. I have not had prior involvement with the project that is the subject of this Technical Report.
8. I have read NI 43-101 and Form 43-101F1 and the Technical Report has been prepared in compliance therewith.
9. As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: May 11, 2016

Signed Date: May 31, 2016

***{SIGNED AND SEALED}***

*[Jarita Barry]*

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Jarita Barry, P.Geo.

## CERTIFICATE OF QUALIFIED PERSON

**DAVID BURGA, P.GEO.**

I, David Burga, P. Geo., residing at 3884 Freeman Terrace, Mississauga, Ontario, do hereby certify that:

1. I am an independent geological consultant contracted by P & E Mining Consultants Inc.
2. This certificate applies to the technical report titled "Technical Report and Initial Resource Estimate on the McKinnon Gold Property, Hawkins and Walls Townships, Sault Ste. Marie and Porcupine Mining Divisions, Ontario, for Pavey Ark Minerals Inc." (the "Technical Report"), with an effective date of May 11, 2016.
3. I am a graduate of the University of Toronto with a Bachelor of Science degree in Geological Sciences (1997). I have worked as a geologist for a total of 12 years since obtaining my B.Sc. degree. I am a geological consultant currently licensed by the Association of Professional Geoscientists of Ontario (License No 1836).

I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.

My relevant experience for the purpose of the Technical Report is:

Exploration Geologist, Cameco Gold.....	1997-1998
Field Geophysicist, Quantec Geoscience .....	1998-1999
Geological Consultant, Andeburg Consulting Ltd.....	1999-2003
Geologist, Aeon Egmond Ltd. ....	2003-2005
Project Manager, Jacques Whitford.....	2005-2008
Exploration Manager – Chile, Red Metal Resources.....	2008-2009
Consulting Geologist .....	2009-Present

4. I have not visited the Property that is the subject of this report.
5. I am responsible for authoring Sections 2-10, 15-24 of the Technical Report along with those parts of the Summary and Sections 25 and 26 pertaining thereto.
6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
7. I have had no prior involvement with the Property that is the subject of this Technical Report.
8. I have read NI 43-101 and Form 43-101F1 and this Technical Report has been prepared in compliance therewith.
9. As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: May 11, 2016

Signed Date: May 31, 2016

**{SIGNED AND SEALED}**

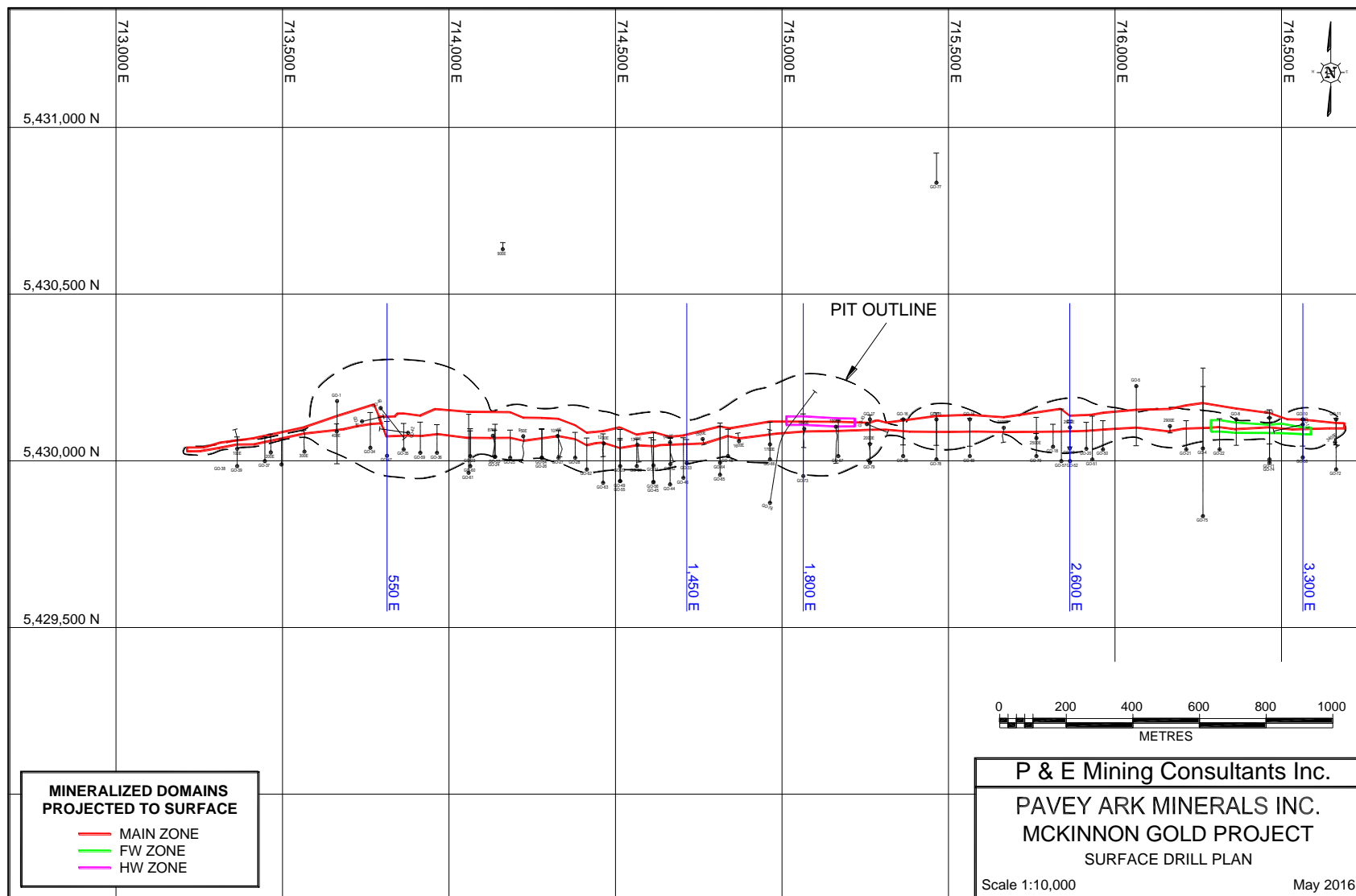
*[David Burga]*

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David Burga, P.Geo.

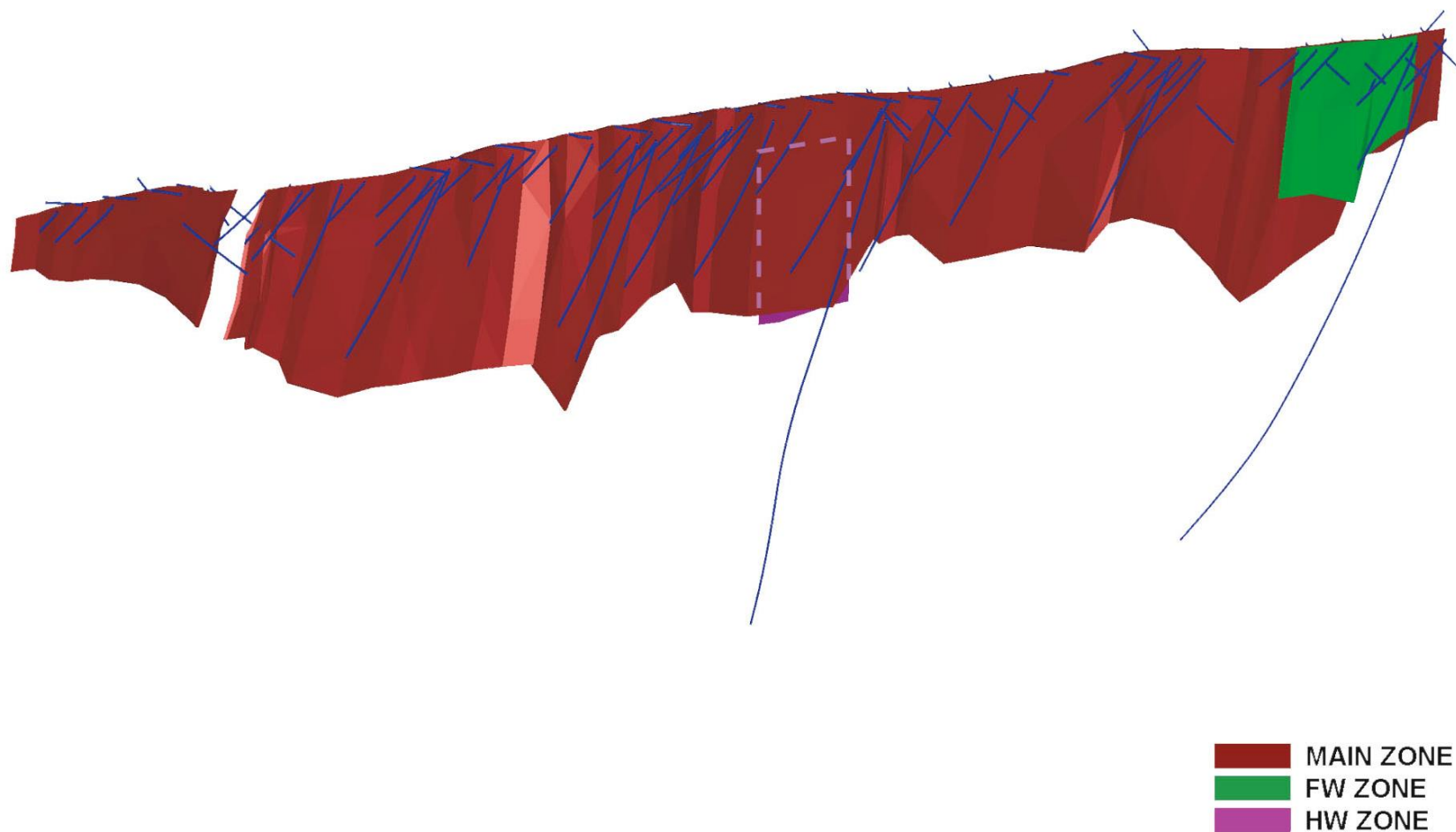
## **APPENDIX I. SURFACE DRILL HOLE PLAN**





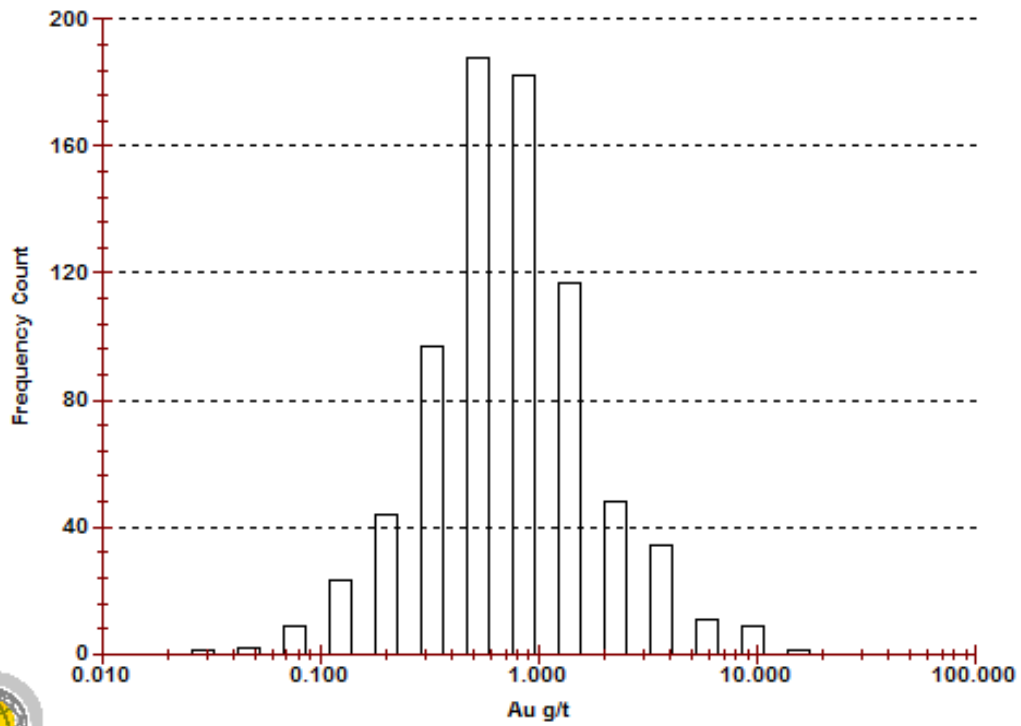
## **APPENDIX II. 3D DOMAINS**

## MCKINNON GOLD PROJECT - 3D DOMAINS



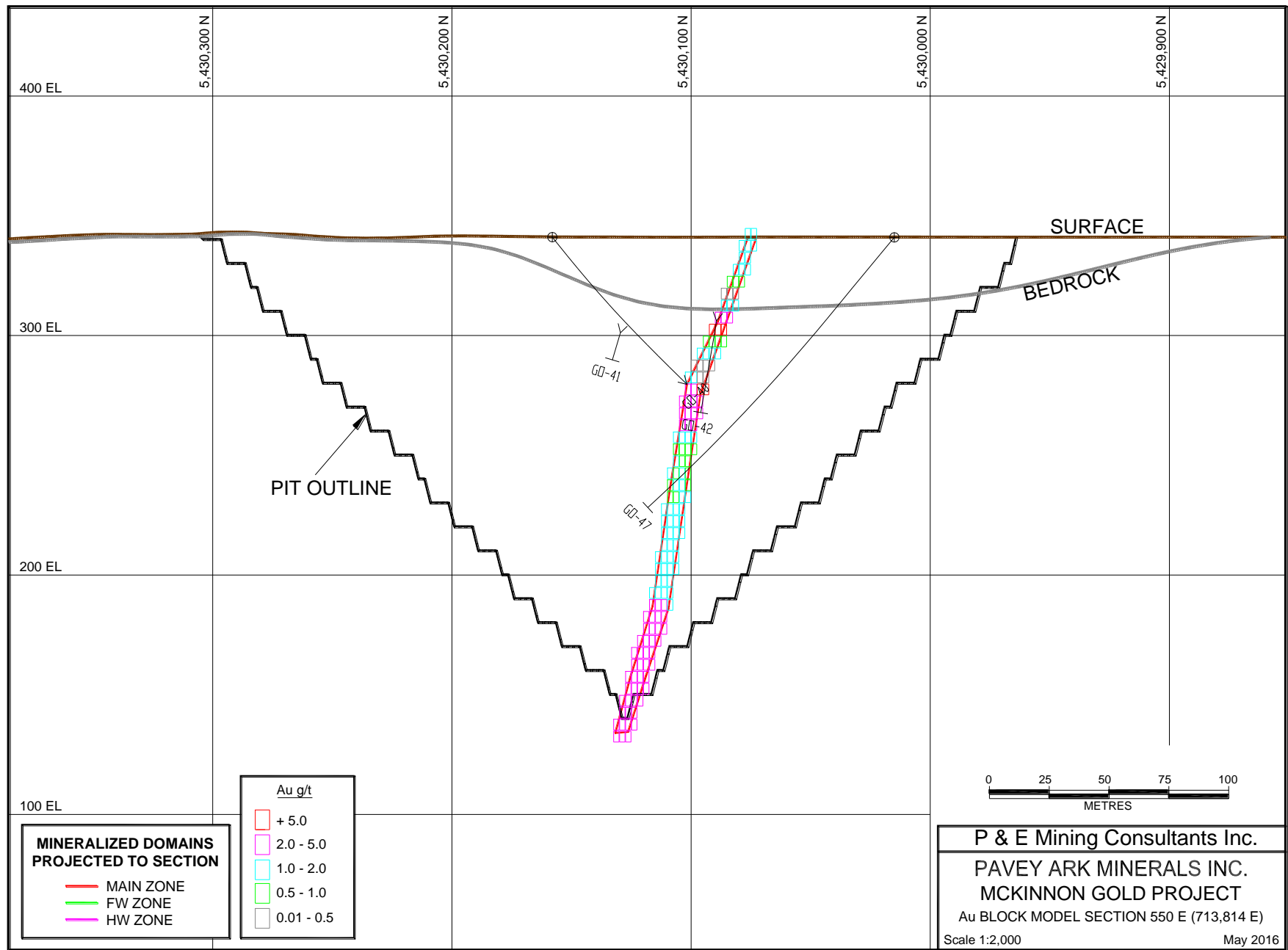
### **APPENDIX III. LOG NORMAL HISTOGRAM**

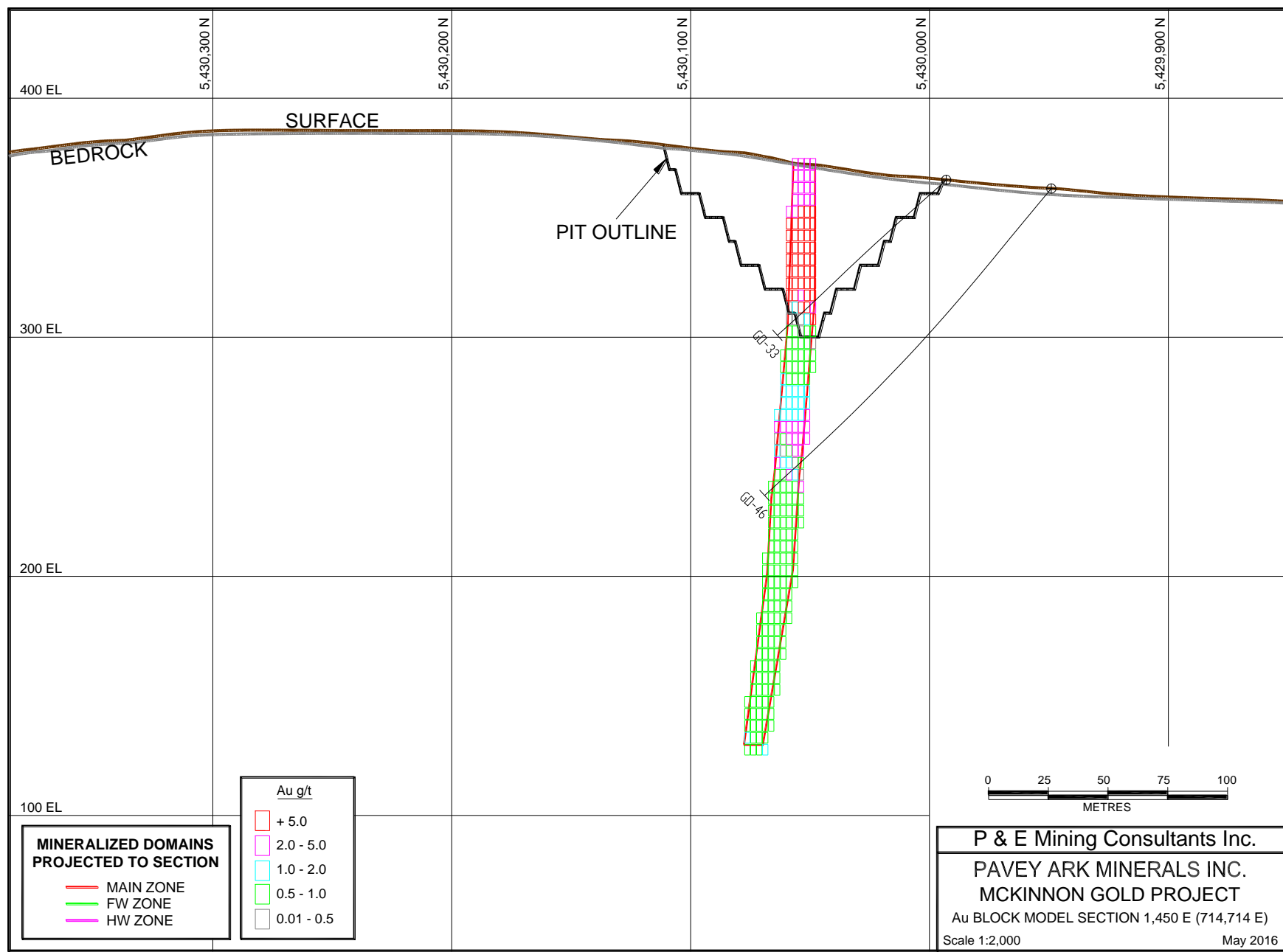
### Au Composites Log Normal Histogram



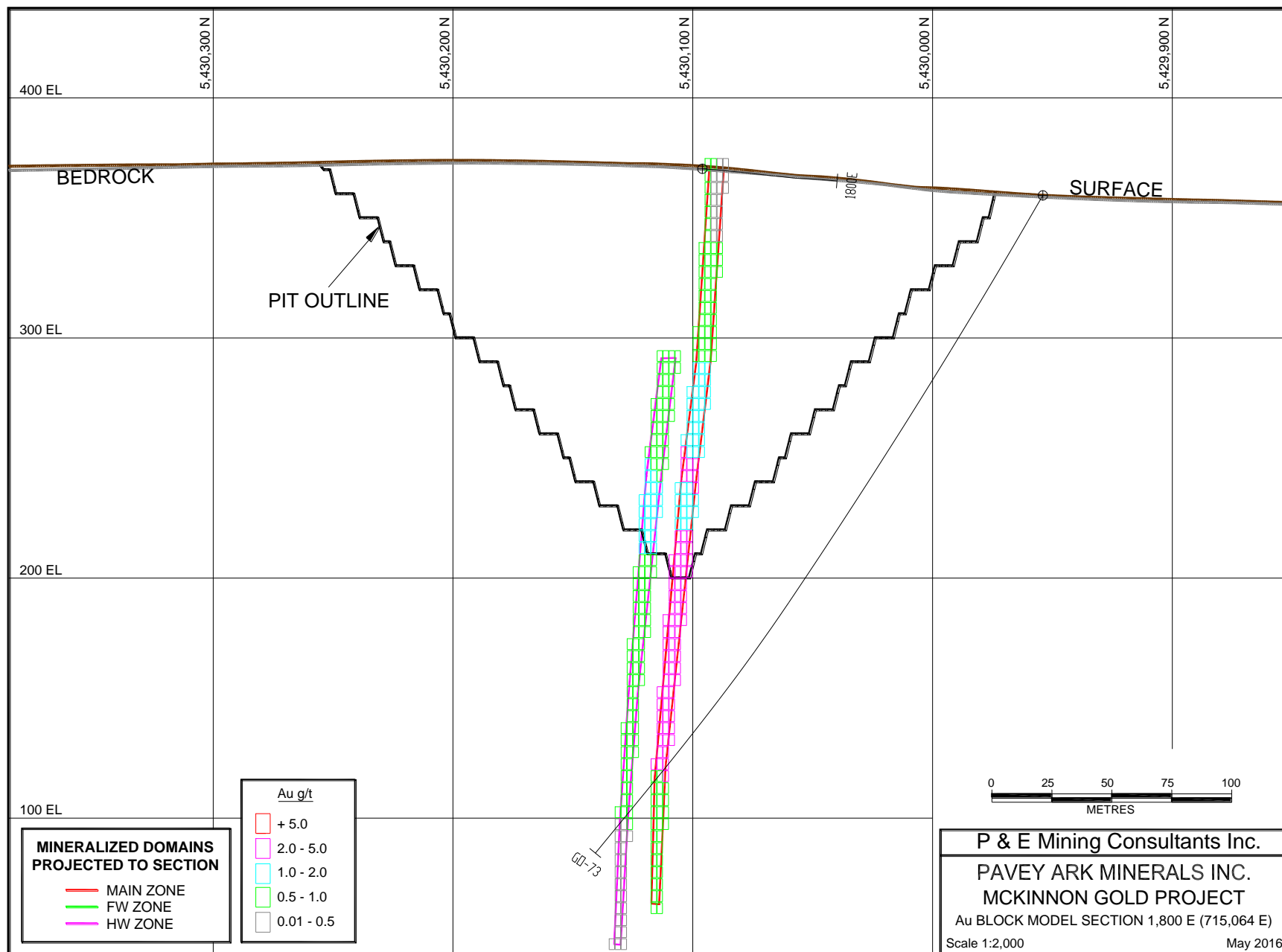
Software by Glencom

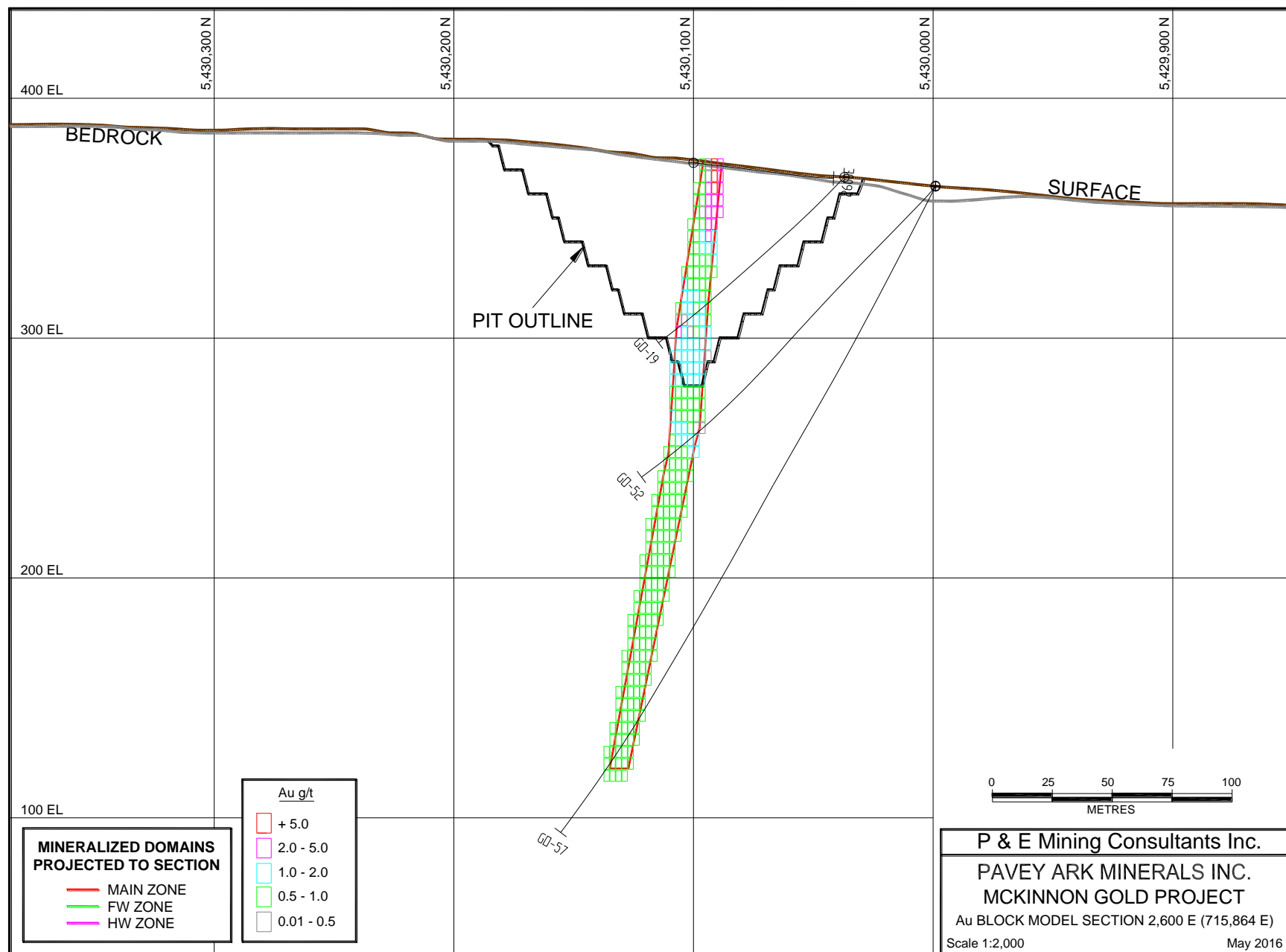
## **APPENDIX IV. AU BLOCK MODEL CROSS SECTIONS AND PLANS**

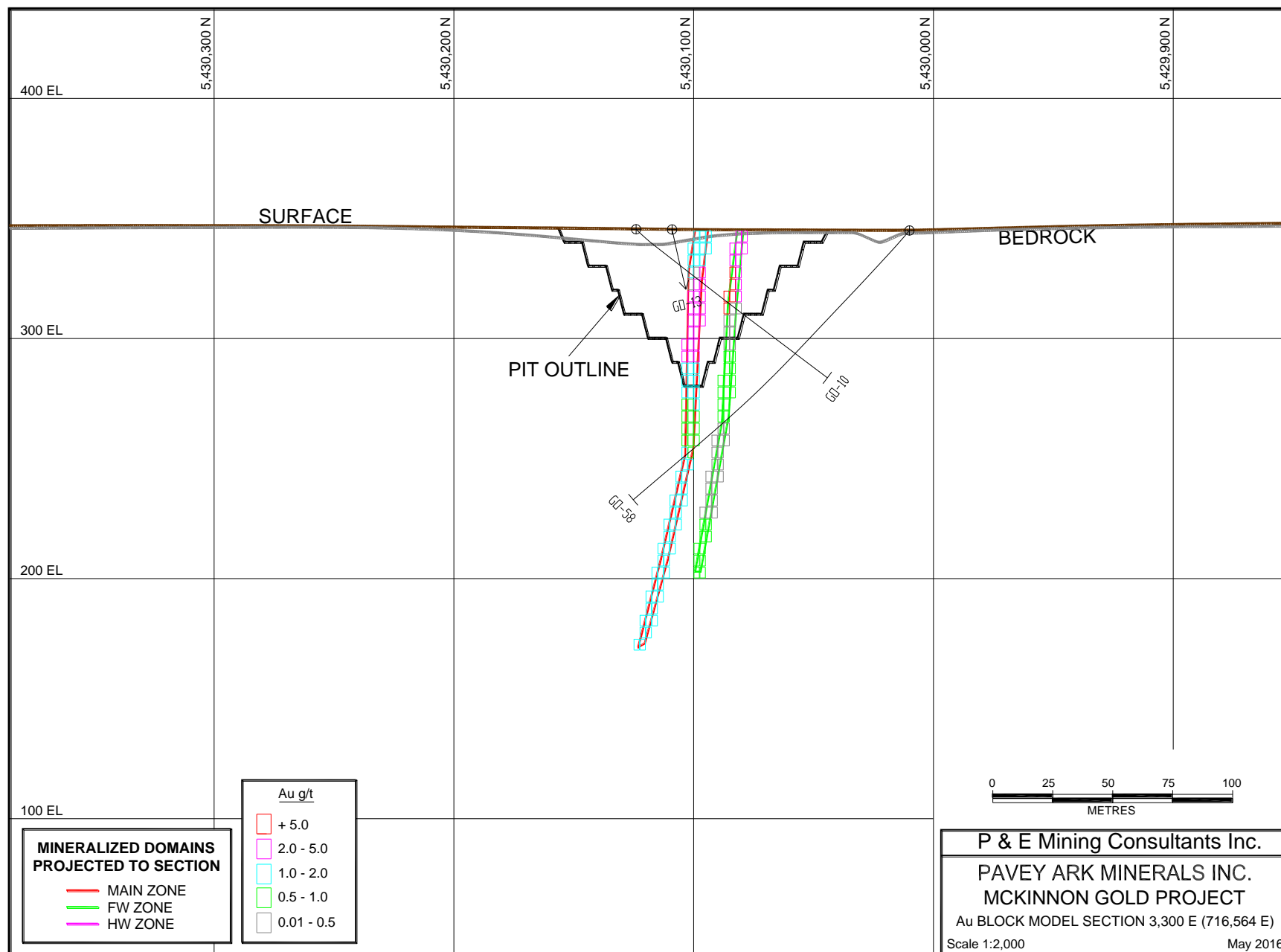


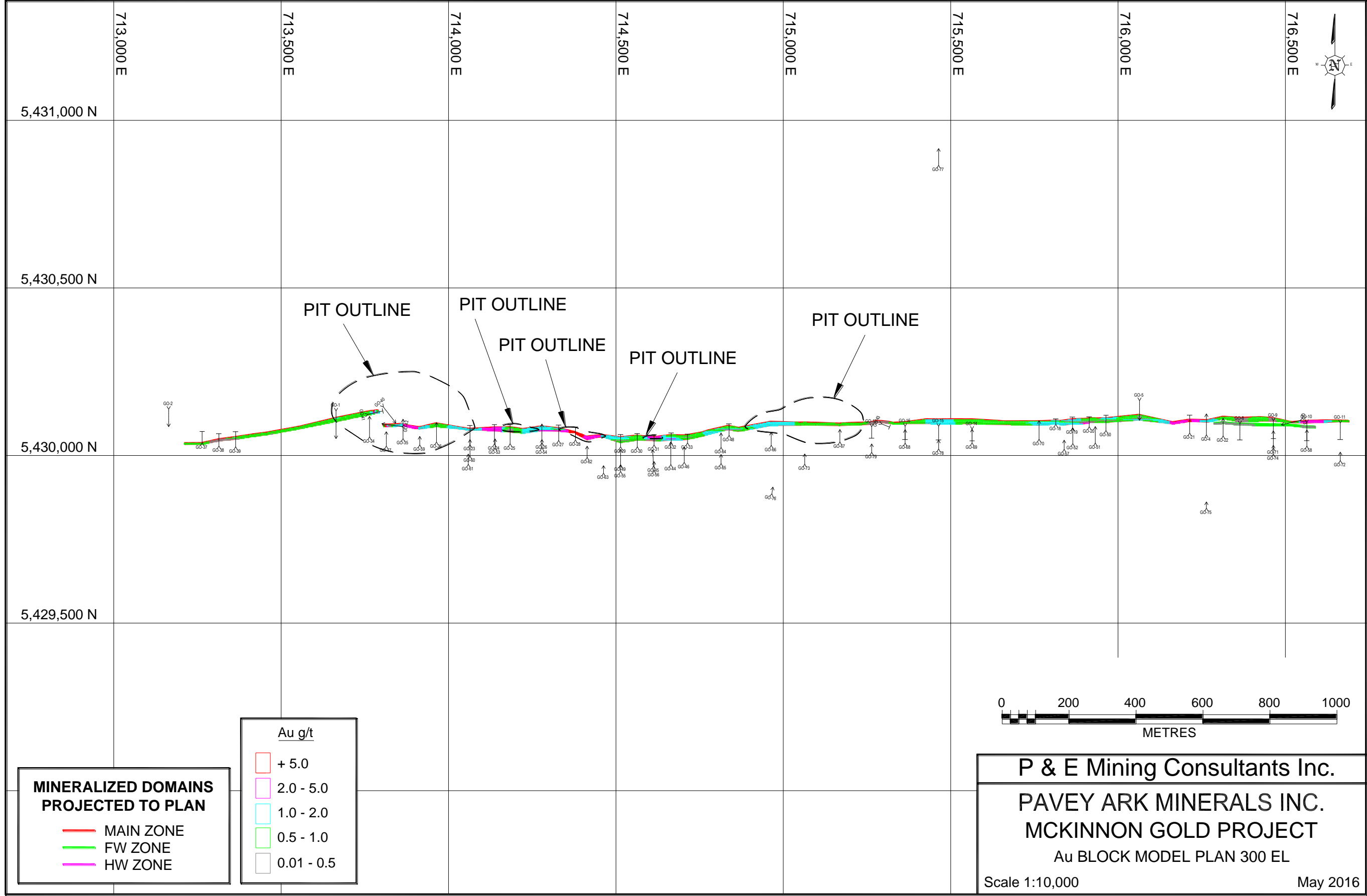


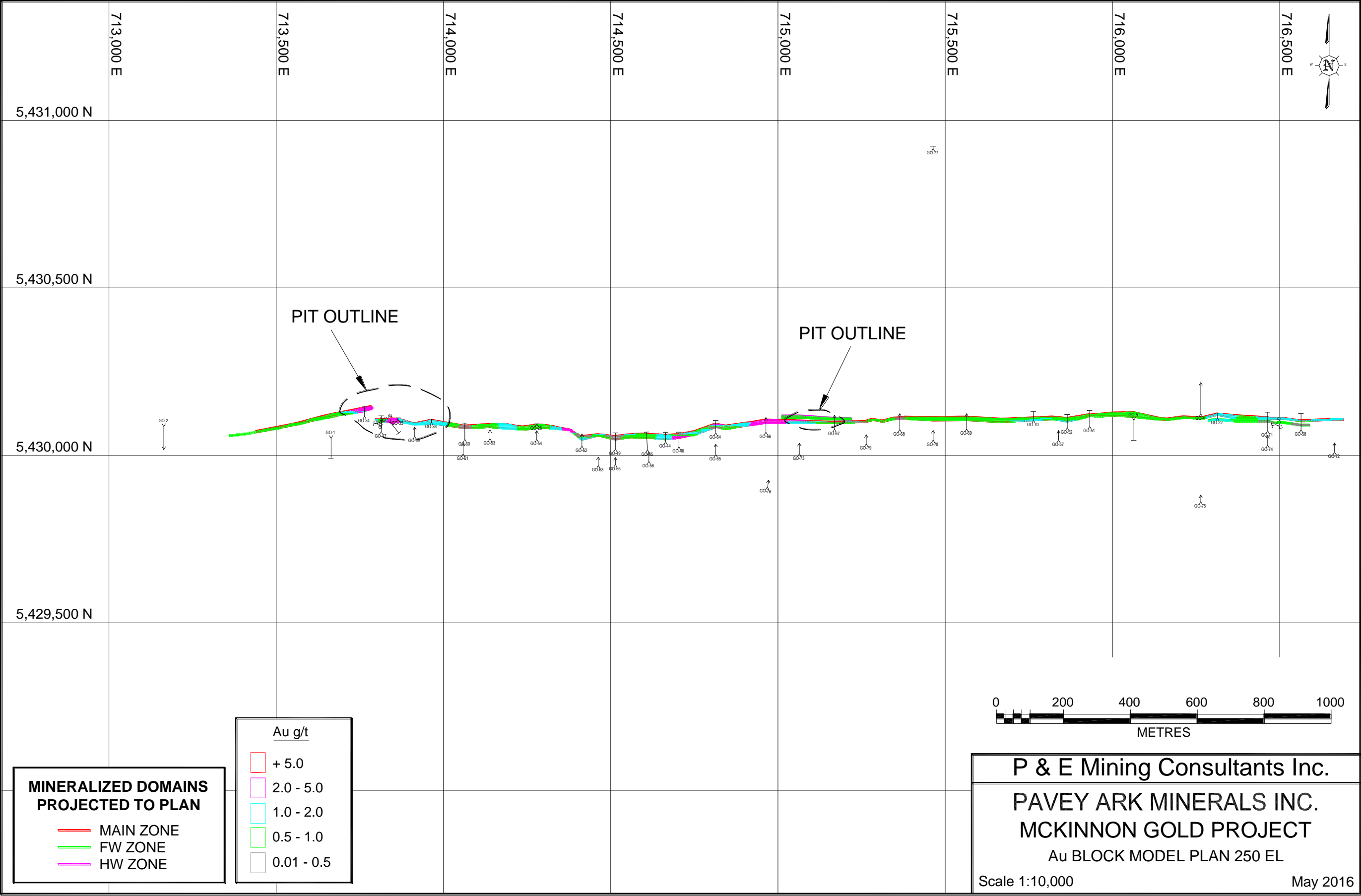


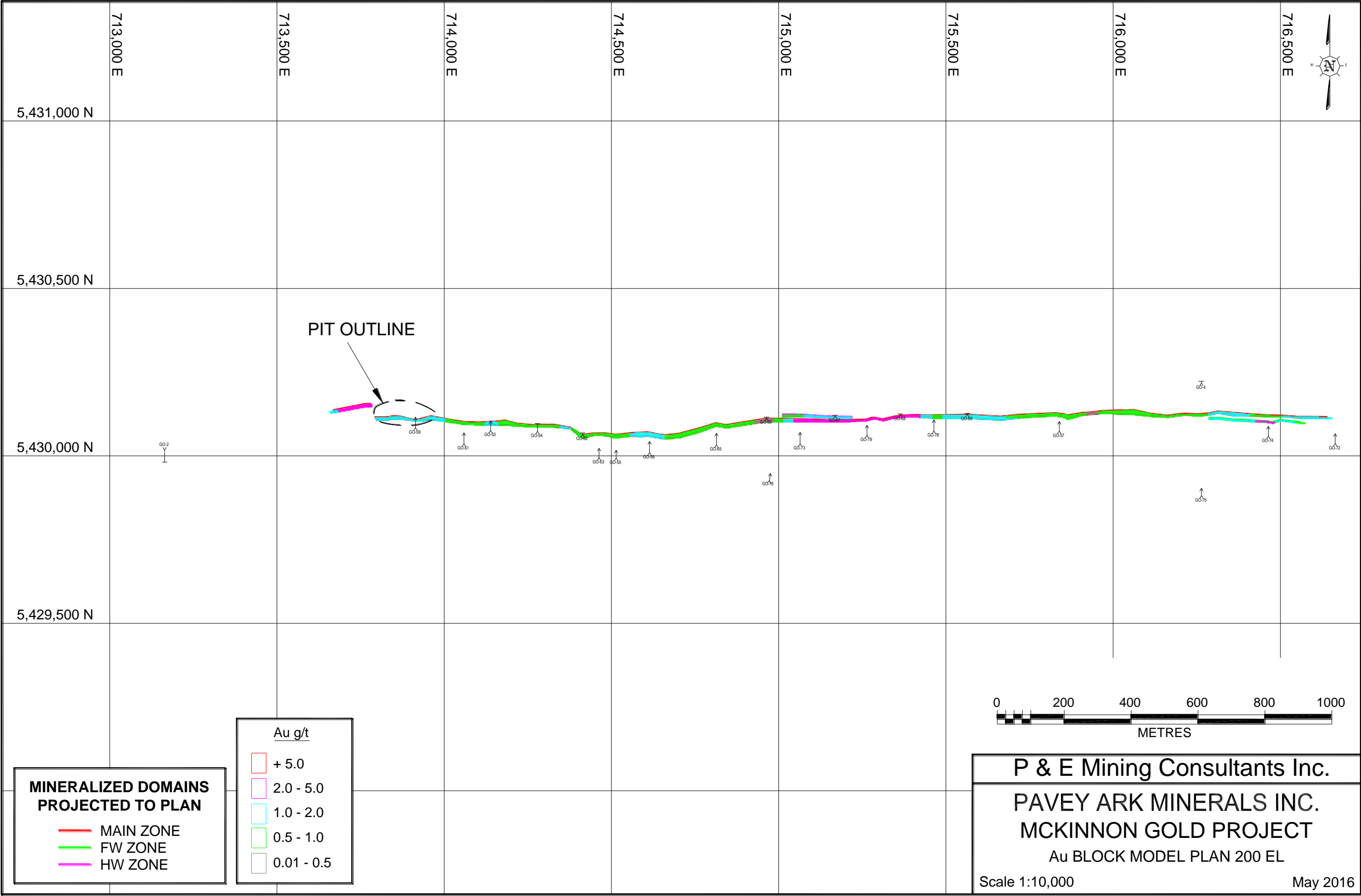


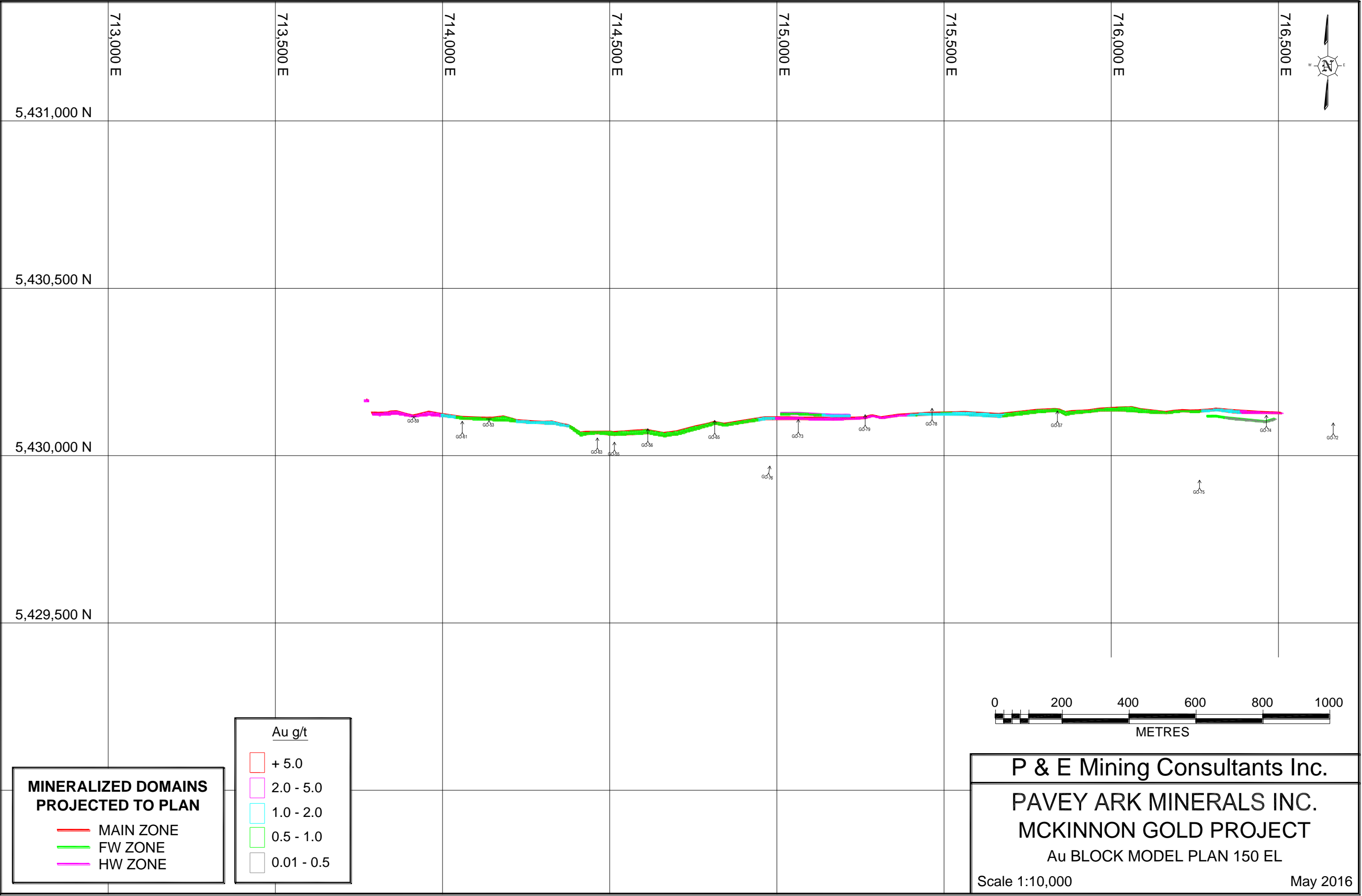


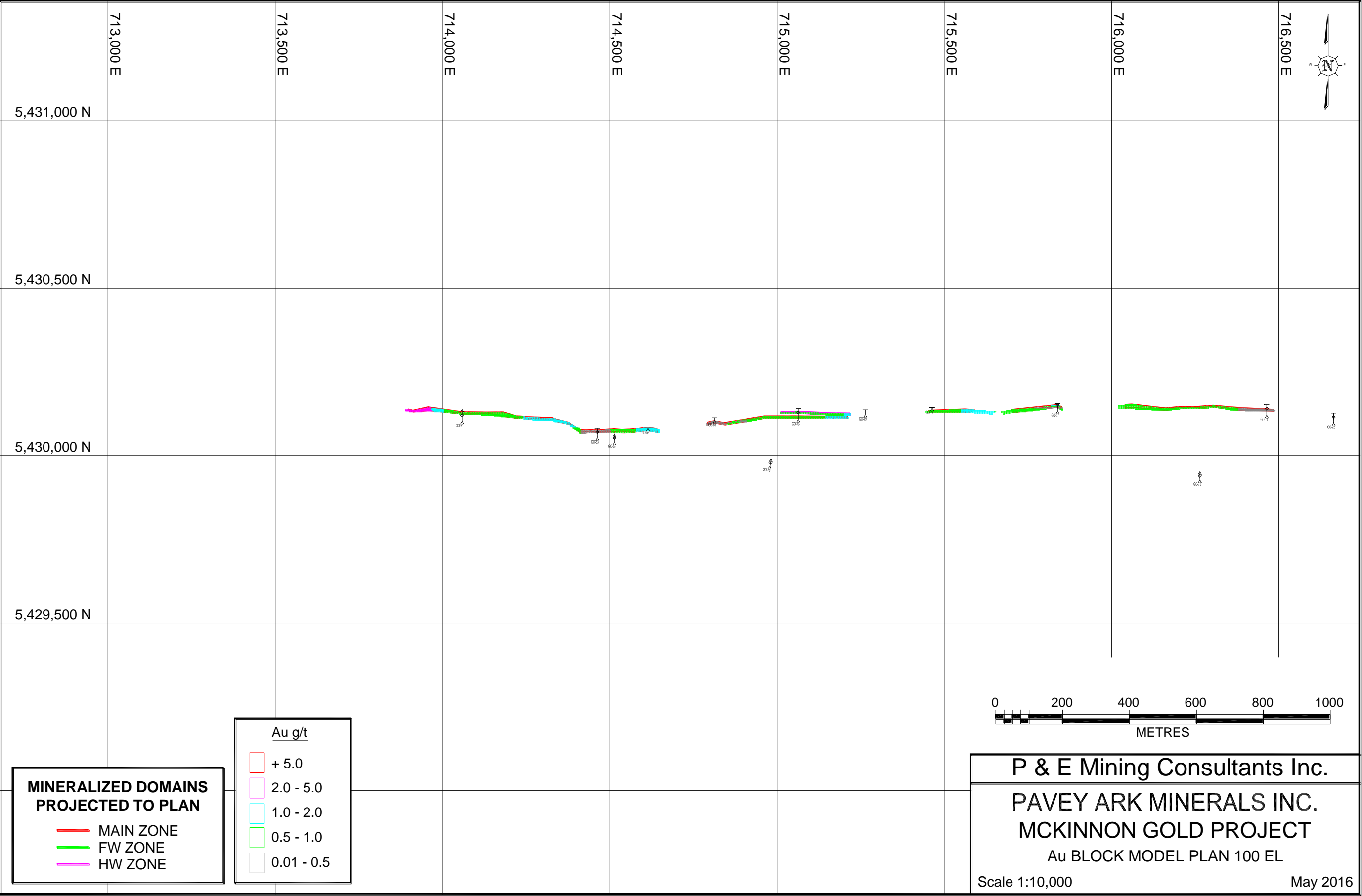








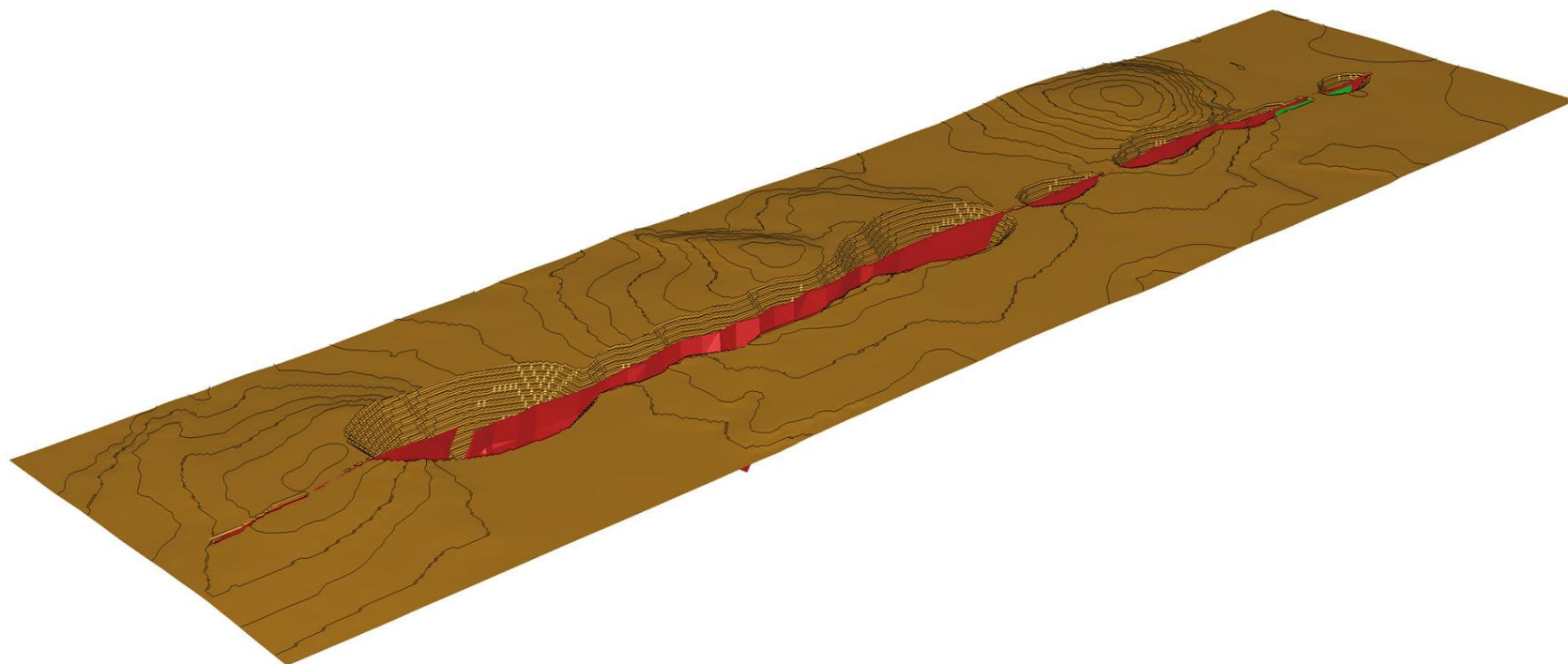






## **APPENDIX V. OPTIMIZED PIT SHELL**

# MCKINNON GOLD PROJECT OPTIMIZED PIT SHELL



MAIN ZONE  
FW ZONE  
HW ZONE