

MONETA PORCUPINE MINES

Assessment Report
2010 DIAMOND DRILL PROGRAM

Porcupine Mining Division Timmins, Ontario N.T.S. 42A/6 & 42A/II

Moneta Porcupine Mines Inc.



North Tisdale Project

<u>Summary</u>

The Moneta Porcupine property lies between 2 and 10 kilometers north of Timrnins, Ontario and is accessed by Highway 655 and adjoining bush roads, including a haulage road linking the McIntyre tailings dam to Hwy.655.

The property potentially covers the extension of the Hollinger - McIntyre gold system to the north east, the western extension of the Bell Creek - Hoyle Pond belt, and the western extension of the Pipestone fault system.

Past and recent work has confirmed that the Property is underlain an east-west trending belt of intercalated (tholeiitic) mafic volcanics and minor (komatiitic) ultramafic volcanic flows locally intercalated with graphitic argillites, recognizable as a prominent regional EM airborne conductors from historical surveys. Due to the lack of outcrop and thick overburden (5-50m) on the property, areas of interest detected by geophysics are best tested by diamond drilling.

Between September 12th and 15th 2010, Moneta completed 1 diamond drill hole totalling 317 metres. DDH MNT10-02 was drilled on the southeasterly and historical "Porcupine Prime" portion of the property (P948851/852) testing for a northwesterly trending structure with an associated felsic/porphyry intrusive. No significant gold mineralization was intersected.

Previous Work

Several major campaigns of exploration have been completed on this property due to its' proximity to the Hollinger-McIntyre gold mines (35 million ounces gold -past production) 5 km south of the property. These included phases of linecutting, ground and airborne geophysical surveys as well as diamond drilling on various portions of the property by various operators including Keevil Exploration in 1964-65, Esso Minerals in 1982-1983, Hollinger Argus in 1984, Robert S. Middleton Exploration Services and Newmont Canada in 1984, and Moneta Porcupine Mines in 1987-2007.

From 1989 to 1991 Independence Mining completed linecutting, ground mag, IP, and a total of 5 diamond drill holes totalling 1500 metres with no significant results.

The work completed in 1996 by Placer Dome (Canada) included complete blanket coverage of Magnetic and HLEM geophysical surveys that generated several drill targets within the north-central portion of the Property. Seven diamond drill holes totalling 1667 metres were completed to test stratigraphy, and investigate numerous geophysical targets. The best results from this drilling were from Hole 546-005, which intersected 1.99 g/t Au over 1.18 m (including 10 g/t Au over 0.22 m from within "Grey Zone" carbon altered mafic volcanic in the central portion of the property.

Pentland Firth completed a MMI soil geochem survey over selected areas of the central and "Prime" areas of the property in 1998 and drilled 2 follow-up holes testing identified trends. Results were generally negative.

<u>Geology</u>

The geology of the area has been well documented in the OGS reports by D.R. Pyke (1982) and by S.A. Ferguson (1968). The majority of the rocktypes underlying the Timmins area are

Archean in age. Metavolcanic rocks have been subdivided into two groups, the Deloro and Tisdale assemblages with the latter being the target stratigraphy for gold mineralization.

A major change in volcanism marks the beginning of the younger Tisdale Group. The basal formations are largely made up of ultramafic to mafic komatiitic flows, which are overlain by a thick sequence of tholeiitic basalts. The top of the group is composed primarily of calc-alkaline, dacitic volcanoclastics. Small quartz-feldspar porphyry intrusions, possibly of subvolcanic origin, were intruded into a restrictive stratigraphic interval of the Tisdale mafic flows.

The property is underlain by the lower portion of the favourable Tisdale Assemblage stratigraphy and most of the magnesium tholeiitic rocks of the Tisdale Group. including intercalated graphitic argillites and feldspar porphyry. Numerous zones of "grey zone" altered mafic volcanics containing quartz veining with locally anomalous gold values, were intersected by several drill holes throughout the northern volcanic stratigraphy. Structural trends are generally east southeasterly and east westerly often localized along graphitic horizons and major lithological contacts. Large scale fold axis follow a similar orientation.

The various volcanic central and northern horizons tested by past drill holes are thought to represent the extension of the general North Mine trend west of the Burrows Benedict fault. Past diamond drill holes had found weak gold values and carbonate/grey zone alteration. This geology also appears to be defined by several MMI soil geochem anomalies (Pentland Firth). To the south volcanic stratigraphy is more directly related to the flows associated with the historical Timmins camp with associated felsic intrusives and quartz tourmaline veining.

Exploration Work

Between September 12th and 15th 2010, Moneta completed a one diamond drill hole totalling 317 metres. DDH MNT10-02 was drilled northeast to test target C which represents a magnetically inferred northwest structure and its contact to a potential felsic intrusive, as well as historical drilling results from Porcupine Prime Gold Mines (1950). These include 14 g/t Au over 0.76m and 73 g/t Au over 0.77m in DDH PRG-12, as well as 113.5 g/t Au over 0.46m in DDH PRG-16.



Gold mineralization in this area may be associated with prominent NW-trending faults, magnetic trends, and EM anomalies. The NWtrend is present in the SE portion of the property where one historical drill hole drilled into the margin of the magnetic low anomaly and intersected a porphyry body. Other holes drilled in to the west of the magnetic low anomaly intersected altered rocks/additional porphyry(?), sometimes described as felsic rocks. To the SW of the property, gold zones and mines are associated with porphyry units.

The drill area was accessed first by powerline, road, then the haulage road.

Fig.2

Magnetic map (total field) of the SE corner of North Tisdale property with location of historical high grade intercepts. Small white dots are DDH. Magnetic low interpreted as porphyries and confirmed in some cases with drilling Note that when assays/samples from the historical drill hole that returned high grade values in the SE part of the property were repeated or re-split, they did not return similar values and frequently were nil. In addition to the questionable results, it may be possible that veins (qtz/qtz-tour) are oriented parallel to the drill hole (or NW-trending) and thus were missed by most holes.

From DDH PRG-16

9051 - 913 Core removed entirely. Same	oled
three times. Split core carried no	
values - Re-split cuarter carried 3.3	31
ounces from 907.2 - 908.7. Final qua	art-
er did not assay. Reported to be qua	artz
tourmaline vein.	

Unaltered to locally moderately altered mafic volcanics with scattered narrow carbonate veining constituted the upper portion of the drill hole. Deformation was variable with local shearing, blocky, and contorted sections. The drill hole ended in an undifferentiated mafic intrusive after crossing a series of mafic volcanic flows with minor pervasive carbonate alteration and minor shear in the contact area. The bulk of the deformation was within the ultramafic volcanics. A narrow intercalated mafic volcanic was crossed near the footwall contact of the ultramafic package which may represent the core of the North Tisdale Anticline. Several centimetre quartz, carbonate and quartz carbonate veins were intersected no significant mineralization was noted with trace results. Additional drilling along this drill hole azimuth is recommended as the current hole steepened and may not have advanced far enough.

<u>References</u>

-ODM Rpt. 219, Geology of the Timmins Area, by D.R. Pyke (1982)
-ODM GR 58, Geology and Ore Deposits of Tisdale Twp., S.A. Ferguson (1968).
-Geological Setting of Gold Deposits in the Porcupine Gold Camp, Timmins, Ont., PhD Thesis, Dan Brisbin (1997)
Company reports in the assessment files by:
-Porcupine Prime Gold Mines (assessment files)
-Independence Mining Co.
-Placer Dome work filed
-Pentland Firth work filed
Internal company information

<u>R.Skeries</u> April 30th , 2011

	Date: 1	May, 2011	MONETA PORCUPINE MINES INC.									Pag	ge: 1	of 5		
	Northing	1:	0	DRI	LL HOLE RE	CORD			D	rill Ho	le:	MN	r10-02			
	Elevatic Collar A Collar I	on: Azi.: Dip:	o *** Dip Tests *** Proj 0 *** Dip Tests *** Proj 50.0 Claim Claim -53.0 150 50.0 North 317 50.0 -58.0 East						roject: roperty laim: orthing asting: PS Nortl	: : hing:	Po: No: 53	Porcupine Camp North Tisdale 5372429 NAD 83/17U				
Hole length: Units: Core size: Grid: Matorials loft:			317.05 Metric NQ No Casing	.05 ic							ing: rted: pletec by: ype: :	48 Sej 1: Sej De: Co: Au	480295 NAD 83/170 Sept.12, 2010 : Sept.15, 2010 Denis Crites Dia.Dril. Core Au 30g FA			
	Collar s	survey: ey method:	GPS Acid	lage road aggess					Li Si Li	ab FA: ample se ab FA re	eries eport:	Exj FA: A5 29	pert 1830-36 205			
	Logged k Date(s) Purpose: Core sto	by: logged: prage:	M.Terry sept.13-17, 2010 Test for historical gold ir Moneta Facility Timmins	n Porc.Prime along p	potential	NW structure			C] C]	heck la	b (P,H	<): ept:				
From (m)	To (m)			Geology				Sample	From (m)	То (m)	L (m)	AU g/t	AU(D) g/t	AU(P) g/t	AU(R) g/t	
.00	24.24	OVERBURDE MAFIC VOL 24.24 170 28.31 28. 29.42 29. 43.22 43. 47.18 47. 54.06 54. 60.76 60. 73.36 73. 77.25 77.	 N CANICS - FLOW BRECCIA .42 Light green to grey-gr in excess of 10cm bu length. Most of the subrounded clasts beir noted but overall vein amounts of sulphides display moderate to strce 32 5mm to 1cm grey-white bo Vein is at 20 degrees to 78 Blocky core. 24 1cm to 2cm grey quartz axis. 23 3cm to 5cm (estimated tr vein which runs subpara 47.49m. 17 Interval of strong carbor 78 1cm to 2cm white carbona core axis. 37 5mm to 1cm grey-white the core axis. 27 1cm to 2cm grey-white laminae and elongated in 	The mafic volcanic to the vast majority clasts are angula ng rare. A few wh development in this were observed. A ong carbonatizaton. Dudinaged quartz cas the core axis. The core axis. Th	flow brec y are arou r to subam ite quartz s unit is few isola rbonate ve vein at 30 te boudina o the core Py. . Vein is vein. Vein carbonate olcanic. V	ccia. Some cla ind lcm to 2cm gular wth rou carbonate ve poor. No appr ited narrow in in with no su degrees to t ged quartz ca axis from 47 at 20 degrees is at 30 deg vein. Some ch cein is at 20	sts are nodule nded to ins are eciable tervals lphide. he core rbonate .12m to to the rees to loritic degrees									

MNT10-02 (continued)

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From (m)	То (m)	Geology	Sample	From (m)	То (m)	L (m)	AU g/t	AU(D) g/t	AU(P) g/t	AU(R) g/t
		 to the core axis. 93.22 93.58 Pillow rim with 5% fine Py. 97.64 99.13 Well developed mafic flow breccia with weak chill margins around many of the clasts. 102.25 102.73 Interval with three parallel irregularly shaped white-cream coloured quartz carbonate veins with a few minor fine anhedral pyrite crystals. Veins range from 2cm to 5cm in width and are at 20 degrees to the core axis. 110.26 110.34 8cm white-cream colured quartz vein breccia with several elongated inclusions of pale green mafic volcanic flow breccia. Vein is more of a stockwork vein breccia and is at 25 degrees to the core axis. 116.84 116.99 15cm grey-cream coloured ladder quartz vein. No pyrite. Several hairline grey quartz stringers perpendicular to the main vein give the vein a brecciated and ladder like appearance. Other hairline discontinuous grey quartz stringers occur parallel to subparallel to the main vein, and in most cases are offset by the set of quartz stringers perpendicular to the wain to subrounded clasts of host mafic volcanic. These clasts range from up to 1cm to 5cm and most are alligned parallel to the vein breccia. Several inregular discontinuous translucent grey quartz stringers are parallel to subparallel to the vein breccia. Several of light green-brown fine textured mafic volcanic. These clasts as tringers. 134.06 134.06 1164.67 3cm to 4cm grey-white quartz carbonate vein which runs subparallel to the core axis. Probable pillow rim. 149.00 150.42 Well developed mafic flow breccia with several of the clasts. 145.45 124.59 Blocky core. 155.86 166.07 Localized zone of bleaching, carbonate veining and minor quartz stringers. Carbonate and quartz veining is wavy and parallel to the interval. 								
170.42	174.12	MAFIC VOLCANICS - ALTERED 170.42 174.12 Unit of bleached pale green carbonatized mafic volcanic flow breccia with carbonate and lesser quartz carbonate stringers throughout. The unit hosts a minor amount (<<1%) of pyrite and the veins in general are barren of any sulphides. The main feature of the unit is a white quartz carbonate vein which runs parallel to the core axis from 171.14m to 171.82m. 171.14 171.82 2cm + white quartz carbonate vein which appears to be sheared (ductile shear zone) \$. Several elongated host rock inclusions and chloritic laminae which run parallel to								

MNT10-02 (continued)

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From (m)	To (m)	Geology	Sample	From (m)	То (m)	L (m)	AU g/t	AU(D) g/t	AU(P) g/t	AU(R g/t
		 subparallel to the main sheared vein. 172.26 172.46 18cm to 20cm grey-white quartz carbonate vein breccia with very minor pyrite (only a few isolated fine anhedral crystals noted). Several angular to subrounded clasts of host carbonateized volcanic breccia occur throughout. Vein breccia is at 45 degrees to the core axis. 172.73 173.06 Interval of intensely bleached cream coloured silicious volcanic breccia with several hairline grey translucent quartz stringers and stockworks. 174.11 174.12 Contact between the strong to intensesly altered (bleached, carbonatized) and a weaker altered light grey-green mafic volcanic is gradational over 15cm. 								
174.12	193.75	MAFIC VOLCANICS - UNDIVIDED 174.12 193.75 Light grey to grey-green mafic volcanic with localized intervals displaying weak to moderate brecciation. Much of the brecciation appears to be associated with increases in carbonate stringers and hairline stockworks. Unit hosts very minor amount of pyrite. Veining is primarily carbonate with only a very minor amount of quartz veining. 193.74 193.75 Assumed contact between the unaltered mafic volcanic and the altered volcanic is 35 degrees to the core axis.								
193.75	203.18	 MAFIC VOLCANICS - ALTERED 193.75 203.18 Unit of weak to moderately bleached moderately carbonatized and weakly sheared mafic volcanic. Carbonate and minor quartz veining increases noticeably from 199.33m to 202.75m. This veining may represent a ductile shear zone at 15 degrees to core axis. 194.14 194.17 2cm to 3cm white carbonate vein, weakly sheared. Vein at 25 degrees to core axis. 199.32 202.75 1cm to 3cm grey-white quartz carbonate vein which runs parallel to subparallel to the core axis. Vein is boudinaged. No pyrite was noted in the vein or sheared host. The quartz component is grey opaque fragments up to 3cm in size which are suspended in a white carbonate matrix. Lower contact at 15 degrees to the core axis. 203.17 203.18 Contac between the sheared weakly altered volcanic and the unaltered mafic volcanic is at 20 degrees to the core axis. 								
203.18	264.35	 MAFIC VOLCANICS - UNDIVIDED 203.18 264.35 Medium grey-green fine to medium textured mafic volcanic. Only minor carbonate and quartz veining occurs within the unit. Very minor pyrite was observed, much less than 1%. 204.61 204.62 1cm cream coloured quartz carbonate vein with several hairline grey translucent quartz stringers cutting through the vein. Main vein is at 35 degrees to the core axis. Average measurement of the hairline quartz stringers is at 140 degrees to the core axis (85 degrees to the main vein). 204.89 204.94 4cm to 5cm white quartz vein vein with no pyriet. Vein is at 70 degrees to the core axis. 205.88 205.92 4cm white quartz carbonate vein. Most of the vein is white carbonate with less than 10% composed of translucent quartz. Vein is at 50 degrees to the core axis. 208.66 208.68 2cm white carbonate vein with some minor gouge along the hangingwall. 	A51830 A51831 A51832 A51833 A51834 A51835 A51836	212.25 212.25 213.25 213.25 214.25 214.25 214.75 215.45	212.25 213.25 213.25 214.25 214.75 215.45 216.45	.00 1.00 .00 1.00 .70 1.00	<.005 .01 4.66 .02 .01 .00		4.80	

MNT10-02 (continued)

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From (m)	T0 (m)	Geology	Sample	From (m)	T0 (m)	L (m)	AU g/t	AU(D) g/t	AU(P) g/t	AU(R) g/t
		 Vein and gouge are at 30 degrees to the core axis. 212.25 Blank. 213.25 Standard 61d. 214.27 214.75 Shear zone consisting of narrow white carbonate veining, green chloritic veining and laminae, host green mafic volcanic, small angular clasts of black mafic material (chlorite?), and approximately 10% pyrrhotite. The carbonate, chlorite, and pyrrhotite are orientated in the direction of the shear which is approximatly 20 degrees to the core axis. 216.00 216.21 Sheared, blocky core with some minor gouge. Possible shear/fault at 20 degrees to the core axis. 223.08 223.14 6cm grey opaque quartz vein with 15% to 29% white carbonate. The carbonate concentrates within microfractures and along the vein-host contacts. Host is a moderately carbonatized mafic volcanic with numerous hairline carbonat stockworks. Vein is at 60 degrees to the core axis. 229.15 229.23 5cm to 8cm irregulaly shaped white quartz carbonate vein. No sulphides. Vein is mainly carbonate with up to 5% being quartz. A few large (up to 6cm in length) inclusions of host mafic volcanic are found in the vein. Upper contact at 60 degrees to the core axis. 248.61 248.86 Interval of blocky core and gouge. Probable orientation of shearing is at 30 degrees to the core axis. 250.23 528.56 Another brownish grey fine textured volcanic. Less carbonate stockworks than above. 264.34 264.35 Contact between the fine to medium textured light green to 								
264.35	270.65	<pre>flow breccia is at 50 degrees to the core axis. MAFIC VOLCANICS - FLOW BRECCIA 264.35 270.65 Medium to dark green chlorite-rich mafic volcanic flow breccia. Breccia is matrix supported with less than 25% composed of clasts. The clasts range from angular to subrounded and the vast majority are less than 1cm in size, with only a few clasts exceeding 2cm. Only a few narrow carbonate stringers occur within the unit. 266.03 266.04 5mm to 1cm grey-white carbonate vein at 30 degrees to the core axis. 267.31 267.32 5mm to 1cm grey-white carbonate vein at 30 degrees to the core axis. 268.58 268.59 2mm to 5mm discontinuous white carbonate vein with 2% pyrhotite. Vein is irregular and parallels the dominant foliation at 30 degrees to the core axis. 270.64 270.65 Contact between the mafic flow breccia and the light green fine textured silicified mafic volcanic is irregular at 25 degrees to the core axis. MAFIC VOLCANICS - ALTERED 270.65 279.53 Light green to greenish-grey very fine textured mafic volcanic with several sections of moderate silicification. Numerous irregular hairline carbonate stringers and stockworks occur throughout the unit.</pre>								

MNT10-02 (continued)

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From (m)	To (m)	Geology	Sample	From (m)	To (m)	L (m)	AU g/t	AU(D) g/t	AU(P) g/t	AU(R) g/t
		<pre>the core shows a weak pseudo brecciated texture. Very minor amount of sulphides are hosted by this unit. Vein development is poorly with only a few narrow carbonate veins noted and quartz veining is rare. 277.81 277.82 2mm to 5mm grey-white quartz carbonate vein. No sulphides. Vein is composed of 60% grey translucent quartz and 40% white carbonate. Vein is at 55 degrees to the core axis. 279.52 279.53 Contact between the silicified mafic volcanic and the mafic flow breccia is at 50 degrees to the core axis.</pre>								
279.53	299.28	 MAFIC VOLCANICS - FLOW BRECCIA Medium to dark green chlorite-rich debris flow breccia with minor tuffaceous intervals. Breccia is matrix supported but has more clasts and thus a more brecciated texture or appearance than the breccia from 264.35m to 270.65m. Clasts range from up to 1cm to over 5cm in size and range from angular to rounded. A few lenses (or large clasts?) of the light green silicious pillows occur within this breccia. Only minor veining is evident throughout the unit. 286.63 286.66 1cm to 2cm grey quartz carbonate vein. One small speck of pyrite noted at the hangingwall contact. Vein is at 20 degrees to the core axis. 287.49 287.91 Dark grey to black fine textured mafic dyke. Strong magnetism throughout. Much of the dyke interval consists of blocky broken core and rubble. Upper contact is at 60 degrees to the core axis. 299.27 299.28 Contact between the debrid flow breccia and pillowed basalt is an elongated pillow rim. 								
299.28	317.05	<pre>MAFIC VOLCANICS - PILLOWED 299.28 317.05 Green pillowed basalt with light green pillows in a tuffaceous flow matrix. Pillows show well developed reaction rims. The pillows range in size from a few centimeters to over 25cm. Some intervals show minor brecciation and a few distinct varioles in some of the pillow clasts. Vein development is poorly with only minor carbonate. No sulphides were observed.</pre>								
317.05		END OF HOLE								





Date : 2011/02/22

Laboratoire Expert Inc. 127, Boulevard Industriel Rouyn-Noranda, Québec Canada, J9X 6P2 Telephone : (819) 762-7100, Fax : (819) 762-7510

Client	: Moneta Porcupine Mi	nes Inc.		
Addressee	: Rainer Skeries 65, Third Avenue Timmins Ontario P4N 1C2	Telephone Fax	: (705) 264-2296 : (705) 267-7490	Folder : 29205 Your order number : Project : MNT Total number of samples : 24
Designation	Au FA-GEO ppb 5	Au-Dup FA-GEO ppb 5	Au FA-GRAV g/t 0.03	
A51813	7	7		
A51814	12			
A51815	<5			
A51816	12			
A51817	7			
A51818	6			
A51819	13			
A51820	24			
A51821	13			
A51822	6			
A51823	12			
A51824	18			
A51825	7	7		
A51826	8			
A51827	9			
A51828	7			
A51829	9			
A51830	<5			
A51831	10			
A51832	4660		4.80	

Joe Landers, Manager

Date : 2011/02/22

Laboratoire Expert Inc.

127, Boulevard Industriel Rouyn-Noranda, Québec Canada, J9X 6P2 Telephone : (819) 762-7100, Fax : (819) 762-7510

Client	Moneta	a Porcupine M	ines Inc.		
		<u></u>			
Addressee	Rainer Skeries				Folder : 29205
	65, Third Avenue Timmins			Your order number :	
			Timmins		
	Ontario		Telepho	one : (705) 264-2296 : (705) 267 7490	Total number of samples : 24
	P4N 1C2	2	Fax	. (705) 207-7490	
		Au FA-GEO ppb	Au-Dup FA-GEO	Au FA-GRAV g/t	
Designation		5	5	0.03	
A51833		23			
A51834		13			
A51835		5			
A51836		6			