

2.46107

MONETA PORCUPINE MINES

Assessment Report 2010 DIAMOND DRILL PROGRAM

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



September 2010

.

R. Skeries



North Tisdale Project

Summary

The Moneta Porcupine property lies 6 kilometers north of Timrnins, Ontario and is accessed by Highway 655 and adjoining bush roads.

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 August 31st and September 12th, 2010, Moneta completed 1 diamond drill hole totalling 470 metres. DDH MNT10-01 was drilled on the "City Patent" (13262 W&T) testing a west-southwesterly trending ultramafic/mafic volcanic contact within the northern volcanic package.

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 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 generally negative reults.

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 volcanics.

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

Geology

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 komatilitic 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 drill area 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 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 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).

Exploration Work

Between August 31st and September 12th, 2010, Moneta completed a one diamond drill hole program totalling 470 metres. DDH MNT10-01 was drilled north to test a magnetically well defined potential structural contact between mafic and ultramafic volcanics, a broad moderate multiline IP chargability anomaly, and the North Tisdale anticline axis.

Unaltered to locally moderately altered (serpentenized) and magnetic ultramafic 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 deci-centimetre quartz, carbonate and quartz carbonate veins were intersected no significant mineralization was noted.

Access was through the Custom Concrete yard and pits to the north then easterly along an abandoned powerline road.

References

-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:
-Independence Mining Co.
-Placer Dome work filed under W9860.00875 / 880
-Pentland Firth work filed
Internal company information

<u>R.Skeries</u> September 12th , 2010

D	ate: 12	Sept, 201	C	MONETA PORCUPINE MINES INC.					Pag	ge: 1	of 9				
	orthing:		0	DRILL HOLE RECORD		Dr	ill Hol	Le:	MN	10-01					
	asting: levation		0 0	*** Dip Tests *** Depth Azi. Dip			oject:	:		Porcupine Camp North Tisdale					
	Collar Az Collar D:		360.0 ~50.0	32 360.0 -52.0 119 360.0 -52.0 200 360.0 -56.0		Nc Ea	aim: orthing: sting:		~9. ~1:	tent 132 000 N 1450 E	(' 96) ('96)				
Hole length: Units: Core size: Grid: Materials left: Collar survey: DH Survey method: Comments:			470.00 Metric NQ	200 360.0 -56.0 470 360.0 -57.0		GH Da Da Di	PS North PS East: Ate Stan Ate comp cilled h	ing: rted: pleted by;	48 Sej L: Sej Cr	5374720 NAD83 480725 NAD83 Sept.1, 2010 Sept.11, 2010 Crites Drilling N/A					
		urvey:	Casing GPS Acid			Ar La Sa	ample ty nalyses ab FA: ample se ab FA re	: eries	FA:	A					
I I I	Logged b Date(s) Purpose:	y: logged:	New Mines Trend M.Terry Sept.2-12, 2010 Test UM/MV contact, IP anoma	aly		La Cl	ab meta heck la heck as	llics: b (P,F	R):						
	Core sto	rage:	Moneta Facility Timmins		ł	-	1	1	1	1	1	¥			
rom (m)	TO (m)			Geology	Sample	From (m)	ТО (m)	L (m)	AU g/t	AU(D) g/t	AU(P) g/t	AU 9			
.00	23.44	OVERBURDI													
3.44	80.65	Dark gre komatiit as mino: occur ti	IC VOLCANICS - KOMATIITE sen-grey to medium grey to ic ultramafic volcanics. So r shearing or faulting. A nroughout the unit, some whic	well veins Veins											
		serpinti: Alterati 24.37 25 26.32 26	st ultramafics are sulphide ne \$. on as well as talc-chlorite. .27 Broken, blocky core with r .33 Small minor shear at 40 de .65 23cm white carbonate ve (Smm) discontinuous vei)	thin							and a second biological database whereas a second second				
		vein. Asbestos vein at degrees to core axis.	20 degrees to core axis, carbonate vein	at 50											
in distance of the second s				rbonate vein with asbestos fibers throug and subparallel to core axis - possible p	ii										

.

From	То						P	age: 2	2 of 9	
(m)	(m)	Geology	Sample		То	L	AU	AU(D)		AU (R)
┝╼═━┪				(m)	(m)	(m)	g/t	g/t	g/t	g/t
		34.48 34 65 17cm white corrected with 1	-r							
ļ		34.48 34.65 17cm white carbonate vein with 3 narrow (1mm to 1cm) asbestos-ric veinlets within the carbonate vein. Vein at 45 to the core axis.	h				Ì			Ì
1		50.97 38.99 1Cm to 2Cm white carbonate vein at 45 degroop to the same and	ļ							
	l í	33.00 40.00 SUCM LO 32CM White Carbonate vein with a minor amount of all at	-		ļ					
		Libers. A rew subrounded inclusions of host ultramatic up to Fem annea	ii							
. I		contacts are irregular and range from 40 degrees to the core again the								
1 1		Palallel to the core axis								
1 1		40.93 41.67 Interval displaying weak shearing subparallel to the core axis.	Ï	Ï		i i				
j i		42.62 45.03 Interval of very weak shearing and brecciation with narrow irregula carbonate stringers. Vein frequency approximately 1 every 15cm.	r		İ					
j j		46.18 47.63 Interval with blocky, sheared core (talc-chlorite). Some gouge from the formula of t						Í	İ	ĺ
		53.35 53.56 Smm to 1cm white carbonate yein with minor amount of fine buse the	e							
		GPPCA CONCACE WILL DUST DIFTAMATIC VAID is slightly bouddated at	s							
i i		at 25 degrees to the core axis. 56.57 57.08 Interval with weak breciation, strong carbonatization.	Ï							
1 1		57.82 57.91 8cm to 9cm white-grey carbonate vein with minor chlorite. Vein at 7				Ĭ	ĺ	Í		
. I	ļ	degrees to tore axis.	5					ļ		
		59.00 60.20 Blocky core with some grinding minor gouge on some function								
		1 00122 00.25 MINUL YOUNE (SLIDDAGE DIANE OF MICRO fault) at 60 domates to .	ų į							
i i		04.07 BIOCKV, ground core with some gouge at 20 dogmoon to any in (c. 1.0)	ji –	İ İ		í í				
1 1		76.53 76.88 22cm (true width) grey-white weakly sheared carbonate vein with severa thin laminae of dark green chlorite and minor graphite. Vein at 4	1			l i		İ İ		
l I		uegrees to core axis	- ii					ļ		
1)		80.48 80.65 15cm to 17cm white-grey weakly sheared carbonate wein with sourcest the	- N							
		Chioficic laminae and stvolites. Minor graphite Several inclusions			ļ	}				
		I CLASES OF NOST ULTRAMATIC VOLCANICS UP to 5cm in size Those inclusion	- 11	ĺ	Ì					
i i		range from subrounded to angular in shape. Lower contact at 20 degree to core axis.	s				ĺ	i i		
ļ ļ		80.64 80.65 Contact between the ultramafic and ultramafic brecciated flow is the						ļ		
	ĺ	carbonate vein above.	e							
80.65	103.65	ULTRAMAFIC VOLCANICS - BRECCIATED KOMATIITE (?)					ĺ			
		80.65 103.65 Dark green weak to moderately magnetic brecciated komatijte with a wea	∥ עו ∣							
		I co moderately carbonatized matrix. A few white cabonate weine occu	~ II							
		Inroughout, most at low angles to the core axis. The magnetic strongt	ษ‼ี ∣		i i					
		decreases below the 92m mark, with only patchy weak magnetism noted				l i				
i i	i i	Both the veins and brecciated komatiite are sulphide-poor. Pathcy weak chlorite and carbonate alteration is observed throughout but r	k							
	[Significant diferation was identified within this work					ļ			ļ
		85.03 85.07 Blocky core with minor grinding								
l II		85.25 85.28 3cm white carbonate vein with well developed asbestos (chrysotile	> 1							
i P		crystals. Vein is at 60 degrees to the core axis. 85.76 85.81 5cm white carbonate vein with minor asbestos fibers. Vein at 40 degree	Į.		İ	Í	Ì			Ì
1 1	i i	LU LNE COTE AXIS.	11							
		90.94 91.02 5cm to 8cm white-grey carbonate wein with well developed actuate	s							
		I Clystals confined to narrow (]mm to 3mm) stringers within the mai	~ II							
		I Calbonate vein. The aspestos-rich stringers are at various orientation	s							l
ľ		and the main carbonate vein is at 60 degrees to the core axis. 92.59 92.67 8cm white-grey carbonate vein with several narrow chloritic laminae.			ļ			ļ		
	ļ	narrow (1mm to 3mm) carbonate stringer bleeding off from the main ver	A							ļ
		i the main ver								
<u></u>					L		L			

Page: 3 of 9

From To		r					age: :	3 of 9	
(m) (m)	Geology	Sample	From (m)	To (m)	L (m)	AU g/t	AU(D) g/t	AU(P) g/t	AU(R) g/t
(m) (m)	 hosts 5% fine Py which occurs as small blebs or concentrations of fine anhedral crystals. The main vein is at 30 degrees to the core axis. The stringer with Py is at 15 degrees to the core axis. 94.45 94.91 43cm to 46cm white carbonate vein breccia. True width is unknown since it appears that the vein breccia is parallel to the core axis. Some minor chlorite and asbestos fibers. 95.52 95.88 35cm to 36cm white carbonate vein breccia parallel to subparallel to the core axis. Bost brecciated komatite is non magnetic. The unit remains non magnetic down to the lower contact between the brecciated komatile and the komatite. Same as breccia above. 96.35 96.82 47cm white weakly sheared carbonate vein with contacts subparallel to the core axis. Possibly related to the two vein breccias above. 103.64 103.65 Contact between the brecciated komatite and the komatite is slightly irregular and diffuse at 40 degrees to the core axis. ULTRAMAFIC VOLCANICS - KOMATITE Dark green to dark grey-black moderate to strongly magnetic komatite airs of sufficient width to label as separate units. 108.27 108.35 8cm white carbonate vein breccia with several narrow white carbonate stockworks cutting through the dark grey ultramafic. No alteration associated with the veining. The average orientation is 60 degrees to the core axis. 113.28 113.38 Interval with blocky, ground core. 116.37 116.48 11cm white-grey carbonate vein with several narrow chloritic styplites and a minor amount of host rock inclusions. Vein at 65 degrees to the core axis. 120.21 120.33 10cm (true width) white-grey carbonate vein with numerous hairline black (chlorite?) laminae and styplites. Vein is at 55 degrees to the core axis. 122.59 122.66 5cm to 7cm white carbonate vein with few minor inclusions of host rock. Minor chlorite? laminae and styplites occur throwghout the vein. Yein is at 50 degrees to the core axis. 								H
	 147.15 144.46 Blocky ground core with some gouge. Shear (fault?) at 55 to 65 degrees to core axis. 147.71 147.72 Boundary between magnetic and non magnetic komatiite. 147.72 152.71 Interval of ultramafic with very weak or no magnetism. At 152.71 the magnetism is moderate to strong and remains almost continuously to approximately 167.55m. 160.45 160.46 2mm to 5mm carbonate vein with 10% Py which occurs as clusters of fine anhedral crystals. Vein is irregular, boudinaged, and is at a low angle (0 to 10 degrees) to core axis. 								

Page: 4 of 9

From							P	age: 4	4 of 9	
(m)	(m)	Geology	Sample	From (m)	То (m)	L (m)	AŬ g/t	AU(D) g/t	AU(P) g/t	AU(R) g/t
		161.52 161.77 5mm to 2cm fault at 15 degrees to the core axis.						;		
	li	162.29 162.37 8cm grey-white carbonate vein with a few elongated inclusions of hos					ĺ	j i		
	l	I I I I I I I I I I I I I I I I I I I	ii i					<u> </u>		ĺ
		1 1/4.75 102.32 Poorly developed spinifex texture with some microfracturing Descibl						<u> </u>		
		Up of itow unit. Interval has a slightly lighter colour with a fair	. 11		1					
ļ	l	grey-prownish hue. Minor thin (<1cm) discontinuous and impouse	_ N]	1			l			
		Calbonate Stringers occur throughout with an overall percentered								
		1955 than 5%. Brownish hue due to carbonatization		Ì	i i					
		187.77 187.78 lcm white carbonate vein with minor chlorite along vein-host contacts Vein is at 80 degrees to the core axis.		Ì				i i	İ	
	Ĭ	188.38 188.50 12cm section of sheared and brecciated core with some gouge. Gouge and								
	Į.	Snear are at 40 degrees to the core axis	11 1					l I		
		188.50 191.32 Blocky, ground core with some gouge Likley fault from 188.20m t						1		
	ļ	191.32m. Major core loss of 1.5m from 188.50m to 190m. Some gouge as				l				
		55 degrees to the core axis at 191 20m	i i							
		191.92 192.93 Interval with poorly developed spinifex texture.	ji j							
	l	193.94 195.32 Interval with fractured core and minor or weak shearing. Most of the fractures are at 40 degrees to the core axis. Poorly rgd.	2							
1	Ï	195.36 196.36 Blocky, ground core with significant amount of gouge. Fault results i							i i	ĺ
	Ű.	U.40m OI COTE 10ss. The fault (gouge) is at 40 degrees to the cor	, íí í							
		axis. Magnetic strength begins to be noticeable again below the state						H		
	1	202.51 202.91 BLOCKY, ground core with approximately 0 10m core loss								
		204.14 204.45 Blocky, ground core. 209.43 209.62 Blocky core.	i i							
		203.43 209.62 BIOCKY COPE.		Ì						
	ii	211.96 211.98 1cm to 2cm white carbonate vein with some asbestos fibers and chloritic laminae. The vein is at 40 degrees to the core axis.	1 I					í (Í Í	
	Į	217.59 217.66 6cm to 7cm white-grey carbonate vein breccia with up to 40% composed								
	1	or small angular to subrounded elongated inclusions of dar	, li					a a		
		green-black host komatiite. More dark laminae (chlorite2) than wei								
		preccia above. Breccia at 75 degrees to the core avia								
		219.11 220.05 Blocky core with minor grinding.	ji i							
		222.29 222.34 4cm to 5cm grey-white carbonate vein with narrow chloritic laminae and	1 I			Í I				
	ii	styolites. Vein contacts are very irregular. Minor amount of smal host rock inclusions. Average measurement is 40 degrees to the cor	L II							
	l.	axis.	ii							
		222.74 223.02 25cm grey-white-green chlorite-rich carbonate vein breccia. Breccia i								
		Approximately 60% matrix and 40% inclusions or clasts The matrix is	, II i						l	
		grey-white carbonate with several chloritic laminae and small clots	ii i							
		Some inclusions of host rock komatiite which are mainly subrounded an	1 I	ĺ				i i		
		up to 1cm in size. Vein-host contacts are at 70 degrees to the cor	2	ļ						
		axis (upper contact) and 65 degrees for the irregular lower contact. 226.12 226.25 10cm to 13cm white-grey carbonate vein breccia. Breccia is matri								
l.	Ĩ	supported with a white-grey carbonate and pale green chloritic matri	. 11							
		supporting several elongated angular to subrounded inclusions of hos	- II I							l
		dark green-black ultramafic (komatiite). Vein breccia is at 50 dogree	3							
		to the core axis. Inclusions range from up to 5mm to 5cm in length	1	İ						
		229.06 229.52 Approximately 30cm (true width) ductile shear/fault with whit	e	ļ				ļ i		
ĺ	l.	carbonate veins and dark mafic (chlorite?) stringers each hostin elonagted and sheared clasts or inclusions of host komatiites. Shea	a					1		1
		15 at 15 to 20 degrees to the core avis	ii ii							
		230.56 230.58 2cm to 3cm white carbonate vein with a 1cm wide band or lense o	: ₽					I		
		in a row while band of rense of						1		
								11		li i

*

Page: 5 of 9

From	То		r				P	age:	o of 9	
(m)	(m)	Geology	Sample	From (m)	T0 (m)	L (m)	AU g/t	AU(D) g/t	AU(P) g/t	AU(R) g/t
			<u> </u>							
		chlorite at the footwall contact. Minor chloritic laminae near the								
		hangingwall. Vein at 55 degrees to the core axis. 233.92 235.02 Interval with pervassive strong carbonatization with a 20cm+ cabonate					l			
		the second second to 234.45m +. Vein is irraeular and ranges from						1		
		Valaties to 30 degrees to the core swim								
		234.88 234.94 5cm to 6cm irregularly shaped grey-white carbonate wein with a f						ĥ		
	1	scringer preduing out into the host at approximately 5 degrees to the	11 1							
		core axis. Of note is a large 2cm x 5cm) inclusion of grey quartz vein material. The quartz inclusion appears to be alligned parallel to the							i	İ
		I modul Velu-nost contact at 40 degrees to the some suin	ii 4							
		230.33 230.35 2cm grey-white carbonate vein with slightly contorted contacts at 45								
		degrees to core axis. 243.68 243.83 Blocky, ground core.								
		243.83 244.02 12cm (approximate true width) while								
		243.83 244.02 12cm (approximate true width) white-grey carbonate vein with a few hairline chloritic styolites and laminae as well as a few small (<5mm)								Ì
		inclusions of host komatiite. The vein is at 20 degrees to the core								
	1	dX15.								
		246.33 246.62 Interval of very weak chloritic brecciation.								
		248.94 249.24 Interval of weak chlorite-carbonate brecciation. 252.96 255.19 Interval of shearing, faulting, and brecciation. The zone consists of								
	8	sheared ultramatic clasts mainly alligned (alongsted) along	i i							
	1	Chiofite-carbonate rich foliation plance Classe of model								
	l	ultramatics range from a few millimeters to 10cm those closes and	i i							
1		mainly in a dark green-black chlorite-rich matrix. The clasts are from angular to round and are more evident in the chlorite-rich matrix							Í	
		undin in the carbonate rich sections which appear to be more showned as	i ii							
		opposed to precchated. Fault gouge occurs from 253 27m to 253 22m and								
		at 253.44m to 253.45m. The overall structure is at 40 degrees to 55					l			1
		degrees to the core axis. 257.68 257.89 Blocky core with some grinding.								
j j		258.28 258.89 Blocky core with talc-chlorite evident on most fractured surfaces.								
		Majority of fractures are at low angles to the core axis (20 to 26)								
		uegrees to the core axis).	i ii							
		260.35 260.81 1cm white carbonate vein which runs parallel to the core axis. Vein pinches out.								
		261.35 261.52 Blocky core.								
		262.45 262.49 5cm white carbonate vein with a few large (up to 4cm) inclusions of								
		nost komatilite. Vein is at 80 degrees to the core axis								
		268.21 268.53 Blocky, ground core								
		276.55 293.00 Interval with a slight increase in talc-chlorite. More fracturing of the core (schistosity) and as a result poorly rgd.								
		290.06 291.52 Interval of sheared talc-chlorite altered ultramafic with carbonate								
		veining throughout. The shear ranges from 15 degrees to parallel to								
		the core axis.								
		298.42 298.72 Narrow shear at 10 to 15 degrees to the core axis.								
		302.99 303.02 3cm white carbonate vein with some minor host rock inclusions. Chlorite accumulations evident along vein-host contacts. Vein at 20								
		l degrees to the core axis								
		305.91 307.06 Interval of weak shearing along talc-chlorite rich foliation planes								
1		Some minor intermittent or patchy brecciation								
		311.00 311.24 Interval with minor carbonate veining (stockwork) which results in a								
Ľ	ال									

MNT10-01 (continued)

Page: 6 of 9

From	То				·		P 8	age: (5 of 9	
(m)	(m)	Geology	Sample	From (m)	T0 (m)	L (m)	AU g/t	AU(D) g/t	AU(P) g/t	AU(R) g/t
		 weakly brecciated texture. Interval displays very weak to no magnetism with the surrounding core showing strong magnetism. 315.09 315.22 Carbonate rich section with very weak magnetism. Lower contact is ground core. 318.11 318.67 Fracture running at 5 to 10 degrees to the core axis. 321.03 321.07 Blocky, ground core. 321.19 321.27 8cm white carbonate vein with some chloritic laminae and styolites. Vein contacts at 80 degrees to the core axis. 322.05 322.18 12cm to 13cm white carbonate vein breccia with several angular inclusions of host komatiite up to 5cm in length. Some chloritic laminae and small styolites. Upper contact is at 60 degrees to the core axis. 338.57 338.58 Approximate contact between moderate to strongly magnetic komatiite and weak to non magnetic komatiite at 60 degrees to core axis. 345.55 345.88 Weakly brecciated section with hairline irregular discontinuous carbonate stringers. 345.88 346.74 Blocky, sheared core with some gouge. Poorly rqd. Probable fault. Due to the broken and ground nature of the core, no orienation measurement is possible. 357.26 357.31 Isolated section with 1cm x 5cm Py rich bleb. 357.29 358.01 Approximately 2cm x 6cm Py bleb. 359.42 359.43 Imm to 2mm pyrrohite stringer at 40 degrees to the core axis. 367.28 367.29 Contact between the ultramafic and silicious mafic flow is at 40 								
367.29	369.33	degrees to the core axis. MAFIC VOLCANICS - ALTERED Light to kaki green silicious very fine textured mafic volcanic with sevral hairline white carbonate stringers and stockworks. The stockworks give certain sections a pseudo brecciated texture. Only very minor (a few small crystals) Py were noted within the unit. A few clasts of ultramafic are found in the lower half of the unit. Lower contact is irregular - not able to take a proper measurement. There is a 22cm baked chloritic contact between the altered mafic volcanic and the underlying altered komatiite. The chloritic contact is baked komatiite and is at 60 degrees to the core axis.								
369.33	389.50	ULTRAMAFIC VOLCANICS - ALTERED Medium grey-green mottled textured altered komatiite with talc chlorite, carbonate, and weak patchy serecite alteration throughout. The talc-chlorite alteration is similar to what was observed higher up in the hole. The carbonate alteration is stronger, and with the addition of serecite, the result is a lighter coloured and mottled komatiite. A few quartz carbonate veins are found within the unit. Minor amounts of sulphides (mainly pyrite but pyrrhotite was also noted) are found within some of the veins as well as within the altered komatiite. 374.99 375.05 5cm to 6cm irregularly shaped white carbonate vein which hosts a few hairline quartz stringers. One 5mm x 2cm bleb of pyrite with minor								

Page: 7 of 9

From	То	Geology						ige:	7 of 9	
(m)	(m)	Georogy	Sample	From (m)	TO (m)	L (m)	AU g/t	AU(D) q/t	AU(P) g/t	AU(R) g/t
					(201)	()	970	97 C	g/c	g/c
		interstitial pyrrhotite occurs at the intersection of two of these			1					
		hairline quartz stringers. Some large inclusions of dark grey green to black komatiite are found within the carbonate vein. Vein-host								
		Contacts are too irregular to take a reliable measurement								
		577.08 377.97 95cm to 99cm white-grey quartz carbonate wein with minor by Wein by								
		several most rock inclusions and could be classified as a main	í í							
		Diecold, Majority of the vein is white carbonate with up to 20% being								
	l	quartz. Upper contact at 30 degrees to the core axis, the lower contact is 50 degrees to the core axis.								
		378.33 378.39 Interval with several white carbonate stringers at various								
		Orientations (stockworks). No to 5% By within the intermed bath of		1						
		Carbonate veins and altered host komatilite. The Pu occurs mainly as	i ii	1						
		coarse euhedral to subhedral crystals. The most common orientation is at 40 degrees to the core axis.								
		378.46 378.48 lcm to 2cm white-grey guartz carbonate vein with 3% coarse subodral to								
		Subhedral pyrite. Some minor chloritic laminae in the southeast i								
		Component of the vein, Majority of the vein is carbonate with only a								
		small percentage of quartz noted. The pyrite occurs in the carbonate component in association with chlorite. Vein at 40 degrees to the core								
		dX15.								
		384.28 384.33 5cm grey laminated and composite quartz vein with up to 1% Py. Upper		1			1			
		contact at 80 degrees to the core axis, lower contact at 75 degrees to the core axis.								
		384.34 384.38 Interval with 4 to 5 parrow grey stringers could be attingered		1						
		Dieeding out from the main vein above. Minor fine Py occurs throughout		1	1					
		some of the quartz stringers. The stringers are at 70 degrees to the core axis.	ĺ							
i i		385.49 385.82 40cm to 43cm grey-white quartz carbonate vein breccia with very minor		1						
		FY. Several inclusions of intensely altered boot rook come								
		translucent smokey grey guartz is noted throughout the weigh brokening								
		Upper contact is at 75 degrees to the core axis. Lower contact is at too irregular to make a reliable measurement.			1					
		385.85 385.91 5cm grey quartz vein with some white carbonate mainly confined to the								
		outer magins of the vein. Very minor Py was noted along the vein-boot								
		Contacts. Upper contact is at 60 degrees to the core avia toward								
		contact is approximately 50 degrees to the core axis. 386.71 386.76 5cm grey quartz carbonate vein with only a small percentage of the	1			l i				
li li	Î	vein being quartz. No sulphides were noted. A few small inclusions of		1						
		nost rock are found within the vein. The vein is at 30 degrees to the			1					
	1	Core axis.	l	Į.						
		389.49 389.50 Contact between the altered komatiite and altered (silicified) mafic volcanic is at 30 degrees to the core axis.								
389.50	390.91	MAFIC VOLCANICS - ALTERED								
		Light to kaki green silicious very fine textured mafic volcanic with course height				Í				
		white Carbonate stringers and stockworks. The stockworks give cortain particular i	1	1	1					
		pseudo precciated texture. Only very minor (a few small crustale) of Du your actual								
	1	within the unit. A few clasts of ultramafic are found in the lower half of the unit. This is similar to the altered mafic volcanic intersected at a depth of 367.29m.		l						
1		Dower contact is at 60 degrees to the core avia								
		390.90 390.91 Contact between the altered mafic and the altered ultramafic is at 60								
	J									
•			I	<u>الــــــــــــــــــــــــــــــــــــ</u>		الا			L	

MNT10-01 (continued)

From То Geology Sample From То AD AU (D) (m)(m) Ť. AU(P) AU(R) (m) (m) (m) a/t g/t q/t q/t degrees to the axis. 390.91 414.03 ULTRAMAFIC VOLCANICS - ALTERED Medium grey-green mottled textured altered komatiite with talc chlorite, carbonate, and weak patchy serecite alteration throughout. The talc-chlorite alteration is similar to what was observed higher up in the hole. The carbonate alteration is stronger, and with the addition of serecite, the result is a lighter coloured and mottled komatiite. A few quartz carbonate veins are found within the unit. The unit is basically the same as the ultramafic unit described above. 391.93 391.97 3cm to 4cm grey-white quartz vein with no sulphides. Upper contact is at 60 degrees to the core axis. The lower contact is slightly irregular at 60 degrees to the core axis. 396.81 396.85 4cm white quartz carbonate vein with no sulphides. Vein is perpendicular to the core axis. 408.13 408.65 52cm white-grey quartz carbonate vein breccia with no sulphides. Several inclusions of host komatiite occur throughout and range in size from up to 1cm to over 10cm. Several chloritic styolites occur throughout. The upper contact is at 50 degrees to the core axis. The lower contact is very irregular. 410.74 410.77 3cm grey quartz vein with a very minor amount of fine pyrite near the footwall contact. A few minor chloritic laminae and small blebs are found within the vein. The vein is at. 50 Degrees to the core axis. 411.79 411.72 1cm to 3cm white-grey quartz carbonate vein with no sulphides. A few chloritic laminae are noted. The vein is at 50 degrees to the core axis. 412.14 412.18 3cm to 4cm white-grey quartz carbonate vein with no sulphides. Vein is at 55 degrees to the core axis. 414.02 414.03 Contact between the ultramafics and the mafic volcanics is at 40 degrees degrees to core axis. 414.03 445.85 MAFIC VOLCANICS - UNDIVIDED Light to pale green magnesium tholeiitic baslt with some minor sections of variolitic basalt. Patchy magnetism is noted throughout caused by the increased presence of pyrrhotite. A few quartz carbonate veins occur within the unit but fewer in number and width than the veins hosted in the ultramafics in this hole. Less than 1% sulphides throughout overall, with some isolated sections hosting up to 3% of 2cm. Pyrite is present but pyrrhotite appears to be the more common sulphide. 414.54 414.58 4cm white carbonate vein at 50 degrees to the core axis. 415.51 415.67 12cm to 13cm (estimated true width) white quartz carbonate vein with very minor pyrite. Vein is at 45 degrees to the core axis. 417.82 417.83 1cm grey-white quartz vein. Vein is slightly boudinaged and is at 40 degrees to the core axis. 420.14 420.69 Interval of variolitic basalt with varioles ranging in size from 1mm to 1cm. 423.46 423.47 lcm white quartz vein. No sulphides. Upper contact at 60 degrees, lower contact at 55 degrees to the core axis. 423.49 423.64 Interval with 5 narrow (< 1cm) grey-white quartz veinlets. Veinlest range from 45 degrees to 50 degrees to the core axis. 427.43 427.55 10cm to 12cm white quartz-carbonate vein wth no sulphides. A few minor inclusions of host volcanic. Some translucent aqua marine coloured

Page: 8 of 9

.

Page: 9 of 9

From (m)	To (m)	Geology	Sample	From (m)	T0 (m)	L (m)	AU	 AU(P)	AU(R) g/t
		quartz. Vein is at 50 degrees to the core axis. 445.22 445.25 2cm to 3cm grey-white quartz carbonate vein with no sulphides. Vein has irregular contacts at 45 degrees to the core axis. 445.84 445.85 Contact between the fine textured well laminated light green-grey medium grained basalt and the coarse textured light grey-green mafic intrusive is sharp at 50 degrees to the core axis.							
445.85	470.00	 Light grey-green to green-grey intrusive with white to light grey leucoxene of calcite and rarely quartz and chlorite. The mafic intrusive has a very weakly defined fabric or alignment of the leucoxenes in some sections. Other sections display no obvious fabric. Only a few narrow quartz veins occur within the unit. The unit is non magnetic. 449.06 449.09 2cm to 3cm grey-white quartz vein with minor chloritic clots as well as minor inclusions of host volcanic. Vein-host contacts are irregular at 30 degrees to the core axis. 451.25 451.26 5mm to 1cm white quartz vein with very minor pyrite consisting of one fine crystal at the footwall contact. Vein is white quartz but there are some small isolated components of grey translucent quartz. A few small inclusions of host volcanic occur within the vein. Vein is at 40 degrees to the core axis. 453.27 453.31 4cm white-grey quartz vein. Majority of the vein is white quartz but there are some small isolated components of grey translucent quartz. A few small inclusions of host volcanic occur within the vein. Vein is at 40 degrees to the core axis. 454.07 5mm dark grey diabase dyke at 30 degrees to the core axis. 455.97 456.25 Same type of diabase dyke as mentioned above. Dyke at 35 degrees to the core axis. There are a few small blebs of fine anhedral pyrite in some hairline fractures within the dyke. 458.44 458.45 1cm grey-cream coloured carbonate and 30% being grey translucent quartz. Minor chlorite. Vein at 45 degrees to the core axis. 466.31 466.39 7cm to 8cm white-grey quartz carbonate vein with no sulphides. Vein is predominantly light grey-white opaque quartz with 30% to 35% white carbonate at 70 degrees to the core axis. Upper contact at 70 degrees to the core axis. 							
470.00		degrees to the core axis. END OF HOLE							



