



MONETA CONTINUES TO INTERSECT HIGH GRADE GOLD ON THE 55 ZONE

May 17, 2010, Timmins, Ontario - Moneta Porcupine Mines Inc. (TSX: ME / XETRA: MOP) (“Moneta”) announces the next set of high grade drill results from its 100% owned 55 Zone, located in the Golden Highway Project, east of Matheson, Ontario, and part of its ongoing 30,000 metre 2010 drill program.

“The structural understanding of the 55 Zone high grade gold system will provide support in the interpretation of other zones along 6+ kilometres of iron formation in the 100% owned Golden Highway Project, including the Southwest Zone (1.5km east) and Windjammer South (1.2km further east)”, commented Ian C. Peres, President & CEO of Moneta.

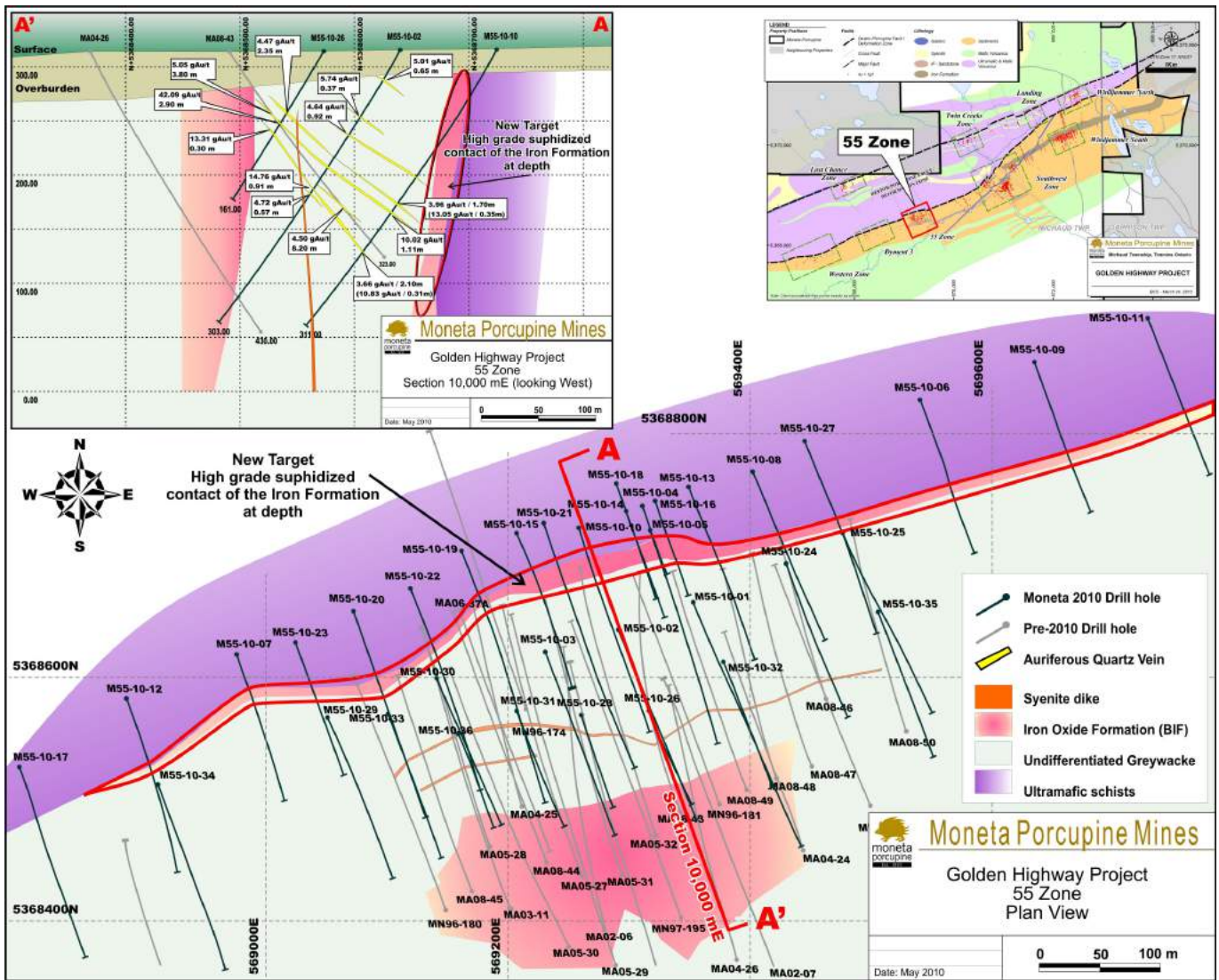
A key geological structure containing high grade gold was interpreted from the 2010 and prior drilling on the 55 Zone. The subsequent 2010 drilling, reported in this press release, continued to intersect high grade veins, confirmed the new structural interpretation, and extended the 55 Zone from 250 metres to 350 metres, with additional potential along strike and to depth. New individual and significant high grade intercepts include:

16.89 g/t over 0.60m in drill hole M55-10-13
18.17 g/t over 0.90m in drill hole M55-10-15
20.88 g/t over 0.30m in drill hole M55-10-16
51.82 g/t over 0.34m in drill hole M55-10-20
31.17 g/t over 0.40m in drill hole M55-10-21
17.20 g/t over 0.35m in drill hole M55-10-27

(Additional results tabulated below)

The structure is a fault system hosting a series of high grade moderately north-dipping and en echelon (stacked) gold-bearing quartz veins often within brecciated wall rocks and carrying elevated levels of pyrite. These high grade quartz vein zones are up to 3 metres in thickness and can be traced over a strike length of more than 350 metres.

In addition to the high-grade quartz veins, drilling in 2010 and a structural review of the 55 Zone has determined that the iron formation is a newly-defined and future high grade target, similar to the Southwest Zone (March 25, 2010 press release), located 1,500 metres along strike to the east from the 55 Zone. As in the Southwest Zone, and over several 55 Zone 2010 and historical drill holes, sulfidized iron formation associated with quartz veining has been intersected along the iron formation contact and/or within the iron formation resulting in significantly elevated gold values (i.e. >15g/t) as confirmed in 2010 drill holes M55-10-04, 11 and 14 (March 5, 2010 press release).



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The Winter 2010 drill program on the 55 Zone totaled 9,600 metres in 36 holes completed over 1,000 metres of strike, primarily testing the upper 200 metres of the zone. The following table excludes the results reported on March 5, 2010 and additional results are pending:

Hole #	From (m)	To (m)	Width (m)	Au g/t	
M55-10-10	165.53	166.13	0.60	5.38	
	170.15	170.50	0.35	13.05	
	178.23	182.00	3.77	3.89	
	incl.	178.53	178.83	0.30	17.25
	and	178.83	179.34	0.51	8.52
	incl.	222.75	225.20	2.45	3.32
M55-10-13	134.33	134.64	0.31	4.56	
	152.70	153.30	0.60	16.89	
M55-10-14 ⁽²⁾	105.00	107.00	2.00	8.28	
	105.79	106.23	0.44	27.75	
M55-10-15	108.80	109.10	0.30	9.72	
	135.72	138.20	2.48	3.35	
	incl.	136.40	137.10	0.70	6.60

	151.60	152.10	0.50	4.93
	209.80	211.81	2.01	9.66
incl.	210.91	211.81	0.90	18.17
	222.65	223.50	0.85	7.60
incl.	223.06	223.50	0.44	9.19
M55-10-16	120.20	120.50	0.30	20.88
	123.00	123.35	0.35	16.02
	140.85	142.00	1.15	5.77
incl.	141.20	141.50	0.30	18.93
M55-10-18	139.60	140.00	0.40	23.37
	178.50	179.67	1.17	3.62
incl.	179.20	179.67	0.47	4.33
M55-10-19	237.55	238.38	0.83	4.32
M55-10-20	105.00	105.60	0.60	5.12
	217.10	219.40	2.30	10.73
incl.	217.86	218.20	0.34	51.82
	227.50	228.00	0.50	4.29
	272.00	279.00	7.00	3.51
incl.	278.00	279.00	1.00	9.54
M55-10-21	126.72	127.25	0.53	5.81
	184.80	185.20	0.40	31.17
	195.10	195.95	0.85	5.10
incl.	195.50	195.95	0.45	6.76
	316.40	317.00	0.60	4.21
	363.50	366.20	2.70	3.63
incl.	364.30	365.00	0.70	7.94
M55-10-23	245.60	245.95	0.35	4.28
M55-10-24	67.00	67.30	0.30	8.25
incl.	72.00	72.55	0.55	8.88
	140.00	143.92	3.92	2.73
incl.	141.39	142.53	1.14	5.66
	153.70	154.70	1.00	4.73
	163.20	163.65	0.45	4.50
M55-10-25	205.90	207.00	1.10	4.65
	240.40	241.40	1.00	4.92
M55-10-26	64.90	67.25	2.35	4.47
	88.85	89.15	0.30	13.31
M55-10-27	280.25	280.60	0.35	17.20

(1) All widths are drilled widths which are believed to approximate true width.

(2) Assay results for hole now complete.

(3) Zones calculated using metallics when completed and averaged duplicates.

R. Skeries, P.Geol., is the Qualified Person for the purposes of NI 43-101 and has approved the technical content of this release.

Assay Reporting

Diamond drill core logging and sampling follows general industry practices whereby logged and sample marked core is sawn in half with one half bagged and tagged for shipment to the assay laboratory and the remaining half of the sawn core returned to the core box for storage and future reference. Pulps and rejects are also stored. Blanks and a range of standards are inserted into the sample stream at regular intervals. Up to 15% of the pulps are submitted to a second laboratory as checks. Initial assays, metallics, and routine duplicates are completed by Expert Laboratories, while check assays and their duplicates are completed by Swastika Laboratory. Both laboratories used standard 30g fire assay techniques. Additional core sampling and assaying, including second

cuts and metallics, may be completed at later dates. Intersections are reported using drilled widths unless specified otherwise with assay values as simple averages of duplicates and gravimetric results.

About Moneta

Moneta is a long-established gold mineral exploration and development company and former gold producer which owns one of the largest property portfolios over approximately 10% (from Timmins, Ontario to the Quebec border) of the Destor Porcupine Fault Zone, one of the key structural features in the Abitibi Greenstone belt in Ontario. Moneta owns 100% of the Golden Highway Project, North Tisdale, Nighthawk Lake, Kayorum and Denton Thornehoe (West Timmins) core projects located in the Porcupine and Golden Highway Camps, one of the most prolific gold producing regions in North America, with over 72 million ounces of gold mined to date.

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Moneta's public documents may be accessed at www.sedar.com. For further information on Moneta, please visit our website at www.monetaporcupine.com or email us at info@monetaporcupine.com.

The TSX does not accept responsibility for the adequacy or accuracy of this release.

This press release contains certain forward-looking statements, which are based on the opinions and estimates of management at the date the statements are made, and are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those projected. Moneta undertakes no obligation to update forward-looking statements if circumstances or management's estimates or opinions should change. The reader is cautioned not to place undue reliance on forward-looking statements.