Northern Shield Announces New Ontario Discovery of High Grade Mineralization at Wabassi; Drill Program Extended

Ottawa (May 4 , 2010) – Northern Shield Resources Inc. ("Northern Shield") (TSX-V: NRN) and its partner Discovery Harbour Resources Corp. ("Discovery Harbour") are pleased to announce that assay results have been received from the first seven of the ten planned drill-holes at Northern Shield's Wabassi property in northern Ontario. The drill program is being funded under the terms of the option agreement between Northern Shield and Discovery Harbour under which Discovery Harbour has the option to earn a 51% interest in the Wabassi property (see press release dated March 17, 2010).

At the A2 anomaly (see Wabassi Target map on Northern Shield's website), drill-hole 10WA-07 intersected 2.25% zinc (Zn), 31.7 g/t silver (0.92 oz/ton) and 0.17% copper over 49.5 meters, including a higher grade section of 7.07% Zn over 7 meters. Three sample intervals from this drill-hole also contained over 100 g/t silver including a 0.7 meter interval grading 536 g/t silver (15.66 oz/ton) and three other intervals contained over 12% Zn.

Drill-holes 10WA-05 and 06, targeting the A1 anomalies, intersected pyrrhotite-dominated massive, semi-massive and disseminated sulphides containing copper, silver, zinc and nickel mineralization. Eighty-five of the one hundred and thirty-four samples assayed from drill-hole 10WA-05 assayed greater than 5g/t silver.

Drilling to date has identified two distinct rock types and styles of mineralization along this target zone. Drill-hole 10WA-07 intersected volcanic rocks and volcanogenic massive sulphide (VMS) zinc-silver-copper mineralization adjacent to the contact with the Wabassi Intrusive Complex. Drill-holes 10WA-04 to 10WA-06 intersected rock types predominantly consisting of mafic and ultramafic lithologies belonging to the Wabassi Intrusive Complex. Drill-hole 10WA-05 intersected pyrrhotite-dominated massive, semi-massive and net-textured sulphides with a chemical signature suggesting that it may be a hybrid mixing of VMS and magmatic (nickel-copper) systems. Drill-hole10WA-06 intersected disseminated copper sulphide mineralization.

Significant assay results include:

Drill Hole	From (m)	To (m)	Interval (m)*	Ag (silver)	Cu (copper)	Zn (zinc)
10-WA-07	37.9	87.38	49.48	31.7 g/t	0.18%	2.25%
Including	39.9	46.9	7.00	9.2 g/t	0.07%	7.07%
and	42.9	43.9	1.00	7.6 g/t	0.06%	12.7%
and	44.9	45.9	1.00	8.1 g/t	-	15.7%
and	50.13	50.75	0.62	8.8 g/t	0.06%	18.8%
and	67.3	68.1	0.80	247.0 g/t	0.17%	0.03%
and	71.1	71.8	0.70	536.0 g/t	0.34%	0.09%
and	72.75	73.7	0.95	138.0 g/t	-	0.02%

Drill Hole	From (m)	To (m)	Interval (m)	Ag	Cu	Ni (nickel)
10-WA-05	123.86	138.78	14.92	14.4g/t	0.13%	
	164.65	174.65	10.00	2.2g/t	0.11%	0.13%
	188.4	196.5	8.10	9.25g/t	0.19%	-
	202.0	215.0	13.00	13.2g/t	0.08%	-
	251.69	264.5	6.98	12.53g/t	-	-
	291.17	298.90	7.73	28.03g/t	0.26%	-

Drill Hole	From (m)	To (m)	Interval (m)	Ag	Cu	
10-WA-06	83.77	86.79	3.02	7.4g/t	0.92%	
	105.75	112.78	7.03	6.4g/t	0.62%	

*All intervals composed of multiple samples are weighted averages. Intervals given are the length of core intersection and may not represent true widths.

Ground and down-hole EM surveys have been running contemporaneously with the drill program to provide better resolution of the conductive bodies discovered from the airborne VTEM magnetic and electromagnetic survey. Preliminary results from the ground and down-hole pulse electromagnetic surveys suggest that drill-hole 10WA-07 (zinc-rich) apparently has only intersected the edge of the A2 anomaly and that this target may be more extensive than previously thought.

The drill program is currently being expanded from a 10 drill-hole/2300 meter program to approximately 2700 meters over 13-14 drill-holes. An additional drill-hole is being planned to intersect the main body of the A2 conductor where higher grades of VMS mineralization may be expected. The survey also showed that the A1 VTEM anomaly is composed of multiple parallel and, sub-parallel conductive zones. The largest and strongest of these conductive bodies was not intersected in the first seven holes and is located wholly within the Wabassi Intrusive Complex. This zone is currently being tested for Ni-Cu-PGE in the expanded drill program.

A map will be available shortly on Northern Shield's website showing the location of the drill-holes.

"We are off to a very successful start on the first substantial drill program at Wabassi with the discovery of a high grade zinc-silver occurrence at the A2 anomaly and evidence of further mineralization at A1," says Northern Shield President and CEO, Ian Bliss. "The commitment to this project by our partners and their rapid and aggressive exploration approach is a testament to the excitement generated from this new discovery. The Wabassi project has become multi-faceted with the discovery of both high grade VMS and, magmatic (Ni-Cu) styles of mineralization. As such we eagerly look forward to further exploration at Wabassi"

Michael Senn, Executive Vice President of Discovery Harbour comments: "From the instant we saw the compelling geophysical signatures from the Wabassi VTEM survey and the geological interpretation that was compiled by the Northern Shield technical staff during PDAC, Discovery Harbour was convinced of the strong probability of success in the drill testing of these exciting targets. Discovery Harbour entered the project with a focus on nickel exploration so the discovery of an apparent volcanogenic massive sulfide (VMS) system adjacent to the correct ultramafic lithologies and magmatic mineralization at Wabassi is truly a most pleasant development. Our assessment of the geological setting through the employment of interpretive methods using geochemistry and geophysics continues to suggest that, particularly the "A1" series targets, have great potential to be sourced by magmatic nickel-copper mineralization. Our continued exploration at Wabassi will be directed toward the further understanding of the VMS system on the property as well as the discovery of high grade nickel-copper mineralization, an indication of which is seen in the trace element geochemistry in drill holes 10WA-05 and 10WA-06. We are most excited with the results of this first round of drilling and are looking forward to results from our continued exploration here at Wabassi"

The drill program is being overseen by Christine Vaillancourt, Chief Geologist for Northern Shield and a Qualified Person under National Instrument 43-101. The drilling is being conducted by Morecore Diamond Drilling Ltd. of Kelowna, British Columbia. The ground and down-hole geophysics was completed by Abitibi Geophysics of Val, D'or Quebec using the InfiniTEM system. Rock samples are being analysed by ALS Chemex laboratories in Vancouver, B.C. for Au, Pt, and Pd by Fire Assay with ICP-AES finish and 27 further elements by four acid digestion and ICP-AES.

Northern Shield is an innovative, results-driven Canadian company focused on Platinum Group Element (PGE) exploration in Ontario and Quebec. Its mission is to create a successful mineral exploration company through technical excellence and efficient management, where success is measured by the identification and development of high-quality mineral exploration projects, which may ultimately be optioned, sold or developed for maximum return on investment. For further information on Northern Shield and its properties, please visit our website at www.northern-shield.com or contact:

Northern Shield Resources Inc.
Ian Bliss
President and CEO
Tel.: (613) 232-0459
Fax: (613) 232-0760
info@northern-shield.com

Forward-Looking Statements Advisory

This news release contains statements concerning the drilling plans, results and potential for Ni-Cu-PGE and Zn-Ag mineralization at the Wabassi property, geological, geophysical and/or geometrical analyses of the Wabassi property, and other expectations, plans, goals, objectives, assumptions, information or statements about future events, conditions, results of exploration or performance that may constitute forward-looking statements or information under applicable securities legislation. Such forward-looking statements or information are based on a number of assumptions which may prove to be incorrect.

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