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NEWS RELEASE

Orex Exploration announces more drill results at Goldboro; advances regional exploration program

Montreal, Canada, June 10, 2010: OREX EXPLORATION INC. (“Orex” or the “Company”) is pleased to provide shareholders with additional results from the Phase 2F and new results from the Phases 2D-2E diamond drilling campaigns (59 holes / 12,995.5 meters) at the Company’s wholly-owned **Goldboro Gold Property** (the “Property”) in Nova Scotia, where the project operator Osisko Mining Corporation (“Osisko”) is currently in the first year of an option agreement to eventually earn a 50% direct property interest (*refer below to the Osisko-Orex option agreement terms*).

The **Phase 2F** drilling (18 holes / 4,730 meters) generally replaced a number of incomplete and/or non-compliant historic drill results with compliant assay data primarily in the deeper portions of the Ramp Area and extending westward towards West Goldbrook. The target area covers a 250-meter strike length of the main gold mineralization along the Boston-Richardson Anticlinal Structure (the “BRAS”) between 75 meters and 250 meters vertical depth, immediately below the current Mineral Resources area. Orex previously released 16 of 18 holes (*refer to the Orex news releases dated April 29, 2010, and May 11, 2010*). The two remaining holes OSK-10-18 and 22 are highlighted as follows:

HOLE #	FROM (m)	TO (m)	CORE LENGTH (m)	GOLD GRADE (g/t)	GOLD GRADE 60 g/t cut
Phase 2F					
OSK-10-18	141.00	160.00	19.00	0.79	0.79
<i>including</i>	<i>141.00</i>	<i>141.55</i>	<i>0.55</i>	<i>10.25*</i>	<i>10.25</i>
OSK-10-22	26.00	28.00	2.00	3.36	3.36
<i>including</i>	<i>69.00</i>	<i>102.00</i>	<i>33.00</i>	<i>1.64</i>	<i>1.64</i>
	<i>99.00</i>	<i>99.60</i>	<i>0.60</i>	<i>69.60</i>	<i>60.00</i>
	<i>137.00</i>	<i>161.00</i>	<i>24.00</i>	<i>0.55</i>	<i>0.55</i>

* Metallic Screen Assay / Visible Gold

The **Phase 2D** drilling (25 holes / 4,894 meters) tests the West Goldbrook area over a 350-meter strike length along the BRAS between 25 meters and 200 meters vertical depth, and also replaces non-compliant historic drill results with compliant assay data, as well as extending the mineralization down-dip of known intersections and westwards towards the Dolliver Mountain area. To date, 13 of 25 holes drilled have full gold assay results. Highlights are as follows:

HOLE #	FROM (m)	TO (m)	CORE LENGTH (m)	GOLD GRADE (g/t)	GOLD GRADE 60 g/t cut
Phase 2D					
OSK-10-26	no significant intervals				
OSK-10-27	8.80	28.00	19.20	0.36	0.30
	39.30	74.80	35.50	0.50	0.50
OSK-10-29	16.50	36.00	19.50	0.35	0.35
	144.20	145.00	0.80	6.83	6.83
	246.50	248.00	1.50	6.73	6.73
OSK-10-30 <i>including and</i>	122.00	128.00	6.00	85.75	7.00
	122.00	122.50	0.50	1005.00*	60.0
	125.15	126.00	0.85	9.03	9.03
OSK-10-32 <i>including</i>	153.50	160.35	6.85	4.03	4.03
	159.85	160.35	0.50	49.90*	49.90
OSK-10-33	101.50	113.00	11.50	0.83	0.83
OSK-10-36	149.00	149.50	0.50	11.20*	11.20
OSK-10-37 <i>including including</i>	88.10	100.00	11.90	10.20	8.37
	88.10	89.60	1.50	74.50	60.00
	121.00	139.50	18.50	0.93	0.93
	121.00	125.50	4.50	3.22	3.22
OSK-10-38	153.70	154.20	0.50	4.37	4.37
OSK-10-41 <i>including</i>	13.75	14.75	1.00	52.90	52.90
	63.80	109.70	45.90	0.48	0.48
	105.20	105.70	0.50	8.73*	8.73
OSK-10-43 <i>including and</i>	199.00	247.00	48.00	0.65	0.65
	234.00	234.50	0.50	4.57*	4.57
	234.50	235.00	0.50	13.85*	13.85
OSK-10-44	71.70	100.75	29.05	0.40	0.40
OSK-10-45	207.00	225.82	18.82	0.35	0.35

* Metallic Screen Assay / Visible Gold

The **Phase 2E** drilling (16 holes / 3,371.5 meters) tested the Dolliver Mountain area within the projected historic mineralization over a 200-meter strike length continuing westward from West Goldbrook and a 500-meter strike length at the western end near the historic Dolliver Mountain mine. A 600-meter gap in drilling between the east and west ends remains to be drill tested. Drilling in this campaign is deemed exploratory, since the area has never been drilled by Orex nor worked on since the early 1900's. To date, complete gold assay results have been received for 13 of 16 holes drilled. Highlights are as follows:

HOLE #	FROM (m)	TO (m)	CORE LENGTH (m)	GOLD GRADE (g/t)	GOLD GRADE 60 g/t cut
Phase 2E					
OSK-10-04 <i>including and</i>	129.50	168.55	39.05	1.15	1.15
	129.50	130.00	0.50	50.80*	50.80
	138.00	139.00	1.00	9.71	9.71
	195.50	232.00	36.50	0.32	0.32
OSK-10-06	110.00	110.50	0.50	4.39*	4.39

HOLE #	FROM (m)	TO (m)	CORE LENGTH (m)	GOLD GRADE (g/t)	GOLD GRADE 60 g/t cut
Phase 2E					
OSK-10-09 <i>including and including including including</i>	167.00	203.50	36.50	1.07	1.07
	<i>167.00</i>	<i>168.00</i>	<i>1.00</i>	<i>7.95</i>	<i>7.95</i>
	<i>184.25</i>	<i>184.75</i>	<i>0.50</i>	<i>3.39*</i>	<i>3.39</i>
	<i>193.00</i>	<i>203.50</i>	<i>10.50</i>	<i>2.15</i>	<i>2.15</i>
	<i>203.00</i>	<i>203.50</i>	<i>0.50</i>	<i>7.81*</i>	<i>7.81</i>
	<i>219.00</i>	<i>224.00</i>	<i>5.00</i>	<i>9.81</i>	<i>9.81</i>
<i>223.00</i>	<i>224.00</i>	<i>1.00</i>	<i>44.10</i>	<i>44.10</i>	
OSK-10-11 <i>including</i>	63.00	64.50	1.50	3.20*	3.20
	85.40	86.00	0.60	2.66*	2.66
	118.60	137.00	18.40	0.77	0.77
	<i>118.60</i>	<i>119.30</i>	<i>0.70</i>	<i>15.65</i>	<i>15.65</i>
	152.95	153.50	0.55	12.20	12.20
OSK-10-15	no significant intervals				
OSK-10-17	no significant intervals				
OSK-10-20	117.00	118.00	1.00	2.25*	2.25
OSK-10-51 <i>including</i>	72.50	74.00	1.50	6.16	6.16
	162.00	180.00	18.00	0.75	0.75
	<i>162.00</i>	<i>163.35</i>	<i>1.35</i>	<i>7.89</i>	<i>7.89</i>
OSK-10-52	no significant intervals				
OSK-10-53	no significant intervals				
OSK-10-54	no significant intervals				
OSK-10-55	no significant intervals				
OSK-10--56 <i>including</i>	126.50	130.50	4.00	3.76	3.76
	<i>126.50</i>	<i>127.50</i>	<i>1.00</i>	<i>11.15</i>	<i>11.15</i>
OSK10-57 <i>including</i>	38.50	41.00	2.50	4.90	4.90
	<i>40.00</i>	<i>40.50</i>	<i>0.50</i>	<i>15.45</i>	<i>15.45</i>
OSK-10-58	no significant intervals				
OSK-10-59	no significant intervals				

* Metallic Screen Assay / Visible Gold

The reported intervals in all three tables represent weighted average intervals of no less than 10 meters (for bulk mining scenarios) of individual assays grading above a 0.35 g/t cut-off. In some instances, weighted intervals of less than 10 meters are reported to highlight significantly higher grade intersections. The weighted average grades are also reported in the adjacent column applying a 60 g/t gold maximum value to samples exceeding 60 g/t gold in any interval.

The drill holes were angled from each side (i.e., north and south) of the approximately 100-metre wide BRAS. Each drill hole was terminated near the BRAS hinge to prevent down-dip drilling on the opposing limb, thus each hole penetrated only 50% of the total width of the deformation zone (i.e., one limb of the BRAS). Gold is linked to shears (such as the “123”, “456” and “78” Zones) combining quartz veins, veinlets and stockworks, and highly altered host rocks. These high grade zones host millimetre to centimetre sized gold nuggets in both the quartz veins and host rocks. Assays vary from higher gold grades (in excess of 10 g/t, commonly in the hundreds of g/t) when nuggets are encountered to lower

grades (under 2 g/t) when host rocks are altered with silica, chlorite and sulphides. Correlation of the higher grade individual mineralized shear zones is still pending.

Mark Billings, President and CEO of Orex, commented, “Now that the drilling is completed for Phases 2D, 2E and 2F, our geological team will input this data into our geological model and begin to interpret these many results. I am also pleased to report that we have completed our regional compilation program and have already identified additional targets for further exploration.”

Goldboro Extension Property - regional compilation and synthesis

Nova Scotia based Mercator Geological Services Limited and D.R. Duncan & Associates Ltd., have completed the regional compilation-synthesis on the 960.8 km² Goldboro Extension Property. A number of key Goldboro-type gold targets were identified and are currently being drill-tested using the Reverse Circulation (“RC”) method to recover basal till and bedrock samples for gold assaying and whole-rock analysis. To date 194 RC drill holes are completed for 1,513 meters and 758 samples taken. Assay results will be issued when available.

QA/QC Sampling and Analytical Protocols

Please refer to the Company’s news release dated April 29, 2010 detailing QA/QC sampling and analytical protocols. After review of initial assay results and reconciliation with the logged zones of mineralization, specific samples will be identified for re-assaying by the Total Metallic Screen method while other samples will have a second pulp prepared from the coarse reject and re-assayed by the AAS Method. Multiple assay determinations provide a more accurate determination of gold content in the samples.

The Goldboro Gold Property

The current Mineral Resource Estimates (“MRE”) for Goldboro at a cut-off gold grade of 1.5 g/t are 2.711 million tonnes grading 4.56 g/t gold, totalling 397,200 gold ounces in the Measured + Indicated Resources categories, with an additional 3.438 million tonnes grading 3.67 g/t gold totalling 405,926 gold ounces in the Inferred Resource category. Assuming a lower 0.5 g/t cut-off, the Measured + Indicated Resources are 7.933 million tonnes grading 2.13 g/t gold totalling 542,000 gold ounces, with additional Inferred Resources of 10.389 million tonnes grading 1.78 g/t gold totalling 594,121 gold ounces (refer to Orex’s news release dated August 4, 2009, and the NI 43-101 Technical Report posted on SEDAR at www.sedar.com).

Option on Goldboro Gold Property Granted to Osisko Mining Corporation

In order to acquire a 50% undivided interest in the Goldboro Gold Property on or before September 29, 2013 (the Initial Option), Osisko shall incur exploration and development expenditures in the amount of at least \$1,500,000 on or before September 29, 2010; in the aggregate amount of at least \$3,500,000 on or before September 29, 2011; and in the aggregate amount of at least \$8,000,000 over the following two years, that is, on or before September 29, 2013. Osisko may, at its sole discretion, accelerate and apply exploration and development expenditures to future years’ expenditures and, accordingly, the Initial Option may be exercised sooner. Osisko shall solely fund a prefeasibility study to

earn an aggregate 60% interest (that is, an additional 10% interest) in the Property on or before September 29, 2015 (the Additional Option).

About Orex Exploration Inc.

Orex Exploration Inc. is a Canadian-based junior resource and exploration company trading under the symbol OX on the TSX Venture Exchange and OSD on the Frankfurt Stock Exchange. The Company holds a 100% interest in the Goldboro Gold Project in Nova Scotia. You are invited to browse the Company's website at www.orexexploration.ca.

The technical information contained in this news release has been prepared by Mr. Alex Horvath, B.A.Sc., P. Eng., of A. S. Horvath Engineering Inc. (Ottawa, Ontario), Technical Advisor to Orex, and Mr. Jean Lafleur, M.Sc., P. Geo. (Laval, Quebec), Manager of the Goldboro Project for Osisko Mining Corporation. Both individuals are Qualified Persons under National Instrument 43-101 regulations.

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