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NEWS RELEASE

Orex Exploration issues final assay drill results from the Phase 2 program at Goldboro

Montreal, Canada, June 30, 2010: OREX EXPLORATION INC. (TSX-V: OX; FSE: O5D) (“Orex” or the “Company”) is pleased to provide shareholders with additional results from the Phase 2D diamond drilling campaigns 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*). A total of **59 drill holes / 12,995.5 meters** were completed during the winter 2010 program in three campaigns (Phases 2D, 2E and 2F) covering the Ramp Area, West Goldbrook and Dolliver Mountain segments of the gold mineralized Boston-Richardson Anticlinal Structure (“BRAS”). All gold assays have now been received. Significant gold intervals from the remaining gold assays from Phase 2D are as follows:

HOLE #	FROM (m)	TO (m)	CORE LENGTH (m)	GOLD GRADE (g/t)	GOLD GRADE (60 g/t cut)
Phase 2D					
OSK-10-34	181.08	184.0	2.92	15.56	15.56
OSK-10-35	94.7	95.2	0.5	154.50*	60.00
	161.5	178.1	16.6	0.59	0.59
OSK-10-46	22.80	33.00	10.20	0.92	0.92
<i>including</i>	32.20	33.00	0.80	10.05	10.05
	89.95	111.00	21.05	9.32	3.62
<i>including</i>	89.95	90.45	0.50	9.55*	9.55
<i>and</i>	103.00	104.00	1.00	180.00	60.00
OSK-10-47	6.20	18.50	12.30	0.89	0.89
<i>including</i>	14.00	15.50	1.50	5.06	5.06
OSK-10-48	135.50	136.00	0.50	49.80*	49.80
OSK-10-49	61.00	99.00	38.00	0.61	0.61
<i>including</i>	88.10	88.60	0.50	32.80*	32.80

* Metallic Screen Assay / Visible Gold

Mr. Alex S. Horvath, P. Eng., Senior Technical Advisor for Orex, stated, “All gold intervals from the 2010 drilling are being reviewed and samples selected for check assays using the Fire-Assay Method and/or the Total Metallic Screen Method to produce the most reliable sample grades and validate

intersections. The multiple and Total Metallic Screen determinations yield average grades for samples that demonstrate better continuity across mineralized intersections and overall increased average gold grades, as was the case in the 2005 and 2008 drilling campaigns at Goldboro.”

The Goldboro Phase 2D, 2E and 2F diamond drilling program

The **Phase 2D drilling (25 holes / 4,894 meters)** tested 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.

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.

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 BRAS between 75 meters and 250 meters vertical depth, immediately below the current Mineral Resources area.

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 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 addition of an assay grade cutting factor at the exploration stage is traditionally used to reduce the effect of higher gold grades. Assay grades at Goldboro were cut to 66 g/t gold for the August-September 2009 Mineral Resources estimates, with the number being derived from the geostatistical analysis of all assay grades to that time – refer to the National Instrument 43-101 Technical Report titled *The 2009 Mineral Resource Estimate for the Goldboro Property (Guysborough County, Nova Scotia)*, by D. Gervais, B.Sc., P.Geo., A. Carrier, M.Sc., P.Geo., and K. Brousseau, B. Sc., Eng., of InnovExplo – Consulting Firm, Val-d’Or (Quebec), dated September 15, 2009, available under Orex Exploration Inc., on SEDAR at www.sedar.com.

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 dilatant zones in shears (such as the “123”, “456” and “78” Zones) combining quartz veins, veinlets and stockworks, the geometry of which are influenced by the 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.

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 O5D 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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