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NEWS RELEASE

Orex Exploration announces additional drilling results including 4.07 g/t Au over 35.5 meters

Montreal, Canada, May 11, 2010: OREX EXPLORATION INC. (“Orex” or the “Company”) is pleased to provide shareholders with additional results from 11 holes of the 4,728 metres / 18 holes Phase 2F diamond drilling campaign (the “Campaign”) at the Company’s wholly-owned Goldboro Gold Property in Nova Scotia. The current drill holes will replace 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.

In the last Mineral Resource Estimates (MRE) compliant with the NI-43-101 Technical Report dated August 4, 2009, the results of some historic drill holes were assumed at 0 g/t Gold; the 18 holes of the Phase 2F were drilled in order to replace some of those historic drill results by assay results which are in conformity with the QAQC Sampling and Analytical Protocols actually in application – Refer to the section “the Goldboro Gold Property” hereunder and to the NI 43-101 Technical Report posted on Sedar at www.sedar.com.

Highlights from these 11 additional drill holes* of the Campaign are presented in the following table:

| HOLE # | FROM (m) | TO (m) | CORE LENGTH (m) | GOLD GRADE (g/t) |
|------------------|---------------|---------------|-----------------|------------------|
| OSK-10-02 | 233.70 | 300.00 | 66.30 | 1.17 |
| <i>including</i> | 234.50 | 235.00 | 0.50 | 35.60** |
| <i>including</i> | 267.50 | 268.00 | 0.50 | 46.40** |
| OSK-10-10 | 162.00 | 205.00 | 43.00 | 0.51 |
| | 245.50 | 248.00 | 2.50 | 3.90 |
| OSK-10-12 | 130.00 | 153.90 | 23.90 | 0.43 |
| | 229.00 | 240.55 | 11.55 | 0.92 |
| OSK-10-13 | 202.00 | 220.50 | 18.50 | 0.86 |
| <i>including</i> | 202.00 | 202.50 | 0.50 | 16.10** |
| | 248.50 | 267.00 | 18.50 | 0.45 |
| <i>including</i> | 259.50 | 260.00 | 0.50 | 6.19** |
| OSK-10-14 | 146.00 | 160.00 | 14.00 | 1.86 |
| <i>including</i> | 148.00 | 152.00 | 4.00 | 10.75 |
| OSK-10-16 | 136.50 | 172.00 | 35.50 | 4.07 |
| <i>including</i> | 144.50 | 155.00 | 10.50 | 12.97 |
| <i>including</i> | 146.00 | 146.50 | 0.50 | 237.00** |
| | 229.00 | 242.50 | 13.50 | 0.90 |
| OSK-10-19 | 173.00 | 215.20 | 42.20 | 1.97 |
| <i>including</i> | 198.10 | 198.60 | 0.50 | 27.90** |
| | 229.50 | 252.50 | 23.00 | 0.65 |
| <i>including</i> | 246.00 | 247.00 | 1.00 | 6.70 |

| HOLE # | FROM (m) | TO (m) | CORE LENGTH (m) | GOLD GRADE (g/t) |
|------------------|----------|--------|-----------------|------------------|
| OSK-10-21 | 57.00 | 70.50 | 13.50 | 4.76 |
| <i>including</i> | 70.00 | 70.50 | 0.50 | 117.50** |
| | 152.00 | 165.00 | 13.00 | 0.45 |
| | 178.50 | 236.00 | 57.50 | 0.63 |
| <i>including</i> | 209.00 | 210.00 | 1.00 | 15.75 |
| OSK-10-23 | 140.00 | 159.00 | 19.00 | 0.53 |
| | 207.00 | 213.70 | 6.70 | 13.40 |
| <i>including</i> | 207.00 | 208.50 | 1.50 | 55.70 |
| OSK-10-24 | 90.00 | 150.00 | 60.00 | 0.48 |
| <i>including</i> | 115.30 | 116.00 | 0.70 | 19.10 |
| OSK-10-25 | 36.00 | 83.00 | 47.00 | 0.42 |
| | 235.00 | 238.00 | 3.00 | 6.68 |
| <i>including</i> | 235.00 | 236.00 | 1.00 | 19.10 |

Notes: * Assay results from drill holes OSK-10-01, 03, 05, 07 and 08 were previously issued on April 29, 2010; ** Metallic Screen Assay / Visible Gold

The reported intersections in the table above 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 (i.e. 6.7 meters of 13.40 g/t - OSK-10-23).

Mark Billings, President and CEO of Orex, commented, *“As anticipated, these additional results from the infill drilling continue to show significant zones of low-grade gold in areas which were previously assumed to be barren. Management of Orex believes that these results will help us to improve the gold resources at Goldboro when we update our Mineral Resource Estimates with this new information.”*

The drill holes were angled from each side (ie., north and south) of the approximately 100 metre wide deformation zone centred on the hinge of the Boston-Richardson Anticline Structure (the “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 (ie., one limb of the BRAS).

Gold in the Ramp Area 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.

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 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 - Goldboro Project for Osisko Mining Corporation. Both individuals are Qualified Persons under National Instrument 43-101 regulations.

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