

**NEWS RELEASE**

**Positive assays continue to extend gold zones and prompt additional land acquisition surrounding Goldboro Project; Phase 2B drilling now underway**

**Montreal (Canada), July 31, 2008: OREX EXPLORATION INC. (TSX-V: OX) (FSE: O5D)** is pleased to announce additional gold assay results from the Phase 2A diamond drilling program (Holes BR08-06 to 09) at the Company’s wholly-owned Goldboro Gold Project (“Goldboro”) in north eastern Nova Scotia. All 16 holes (BR08-01 to 16), comprising approximately 4,650 m of the Phase 2A drill program, have been completed with assays pending on holes BR08-10 to 16.

Selected higher grade assay results received for holes BR08-06 to 09\* are tabulated as follows:

HOLE #	FROM (m)	TO (m)	CORE LENGTH (m)	GOLD GRADE (g/t)	ZONE IDENTIFICATION	
<b>BR08-06</b>	115.5	125.5	10.0	<b>0.91</b>	“123” Zone, South Limb	
	145.5	150.5	5.0	<b>3.29</b>	“4” Zone, South Limb/Hinge	
	162.5	168.0	5.5	<b>1.14</b>	“56” Zone, South Limb/Hinge	
	202.5	217.5	15.0	<b>2.49</b>	“78” Zone, North Limb(?) /Hinge	
	including	202.5	203.0	0.5	<b>16.30</b>	
including	208.8	209.0	0.2	<b>21.20</b>	Metallic Screen assay	
<b>BR08-07</b>	122.5	144.0	21.5	<b>1.68</b>	“123” Zone, South Limb/Hinge	
	including	138.5	139.5	1.0	<b>10.98</b>	
	160.0	160.5	0.5	<b>3.18</b>	“4” zone, South Limb	
	167.5	168.0	0.5	<b>4.59</b>	“4” Zone, north Limb	
	176.0	184.0	8.0	<b>0.80</b>	“123” Zone, North Limb	
	190.0	191.0	1.0	<b>3.32</b>	“A” Zone	
<b>BR08-08</b>	150.5	157.5	7.0	<b>1.23</b>	“123” Zone; South Limb	
	181.5	182.5	1.0	<b>3.36</b>	“4” Zone; South Limb	
	188.5	198.0	9.5	<b>3.74</b>	“56” Zone; Hinge	
	including	194.5	195.0	0.5	<b>27.00</b>	
		215.5	218.5	3.0	<b>1.05</b>	“123” Zone; North Limb
<b>BR08-09</b>	145.0	156.0	11.0	<b>1.68</b>	“123” Zone; South Limb	
	183.0	189.0	6.0	<b>0.97</b>	“4” Zone; North Limb/Hinge	
	198.5	205.0	6.5	<b>2.19</b>	“123” Zone; North Limb	
	including	198.5	198.7	0.2	<b>20.60</b>	Metallic Screen assay

\* Assay and QA/QC protocols are outlined below. Assay results reported in this news release are current for samples processed and assayed by the laboratory. Logging and sampling has been completed for BR08-10 to 16, and the remaining assay results are expected within a few weeks.

Mark Billings, President and CEO of Orex commented, “Gold assay results still look very good. They have prompted the Company to significantly increase its land holdings surrounding and contiguous to Goldboro, which I would consider to be a major gold discovery. Our Goldboro claims now consist of over 27,000 hectares (270 square kilometres) of territory, compared with our original claim of 600 hectares (6 square kilometres).”

*“It is apparent that the mineralized hinges or fold axes are much higher grade than the fold limbs. The historically mined portions of the Boston-Richardson Mine straddle the “123” Hinge. The current drilling continues to hit the “123” North and South Limbs probably 50m to 100m below the “123” Hinge. We have, however, intersected the “56” Hinge beneath the “123” several times and this zone continues to demonstrate excellent grades. It is also encouraging to see that the total metallic screen assays, in which all gold is recovered from the sample, are demonstrating much higher grades of gold.”*

*“Results to date continue to indicate that Orex could double its resources from the Ramp Area beneath the historic underground workings of the Boston-Richardson Mine. The Company has already begun the Phase 2B program that will test the gold mineralization over an additional strike length of 350m from the Boston-Richardson Mine eastward to the historic East Gold Brook Shaft.”*

### **The 2008 Goldboro drilling campaign**

The Phase 2A drill program totalled 16 holes spaced on sections approximately 25m apart over a 225m strike length extending east from the current limits of the defined NI 43-101 Mineral Resources (the “Resources”) in the Goldboro Ramp Area (3,105,000 tonnes grading 2.36 g/t gold in the Measured and Indicated Resources categories). The campaign targeted the down-plunge extensions to the “123”, “4”, “56” and other zones of gold mineralization, previously identified by the Company as they plunge shallowly to the east beneath the historic Boston-Richardson Mine at vertical depths ranging from -75m and -200m. The campaign extended the mineralization 225m along strike between the Ramp Resources eastward towards the Boston-Richardson Mine and doubled the strike length of the gold zones.

The Phase 2B drill program has begun and will total 16 holes (BR08-17 to 32, inclusive) spaced on sections approximately 50m apart over a 350m strike length extending from the historic Boston-Richardson Mine eastward towards the historic East Gold Brook Shaft. Drilling will target the down-plunge hinge of the historic Boston-Richardson Belt as well as other zones above the Boston-Richardson that plunge similarly eastwards towards East Gold Brook. Historic drill intersections in this area suggest the presence of similar “Slate Belt” zones stratigraphically above the Boston-Richardson that may correlate and form continuous zones with the East Gold Brook slate belts.

In 2008, the Company plans to drill the Boston-Richardson Anticline Structure over its entire 2.5km length in successive drill programs (from Phases 2B to 2E) totaling 16,275m in 63 drill holes to define the ultimate gold potential. The work will also include updating the geological and resource model, and producing a mineral resource estimate by year-end in follow-up to the NI 43-101 Mineral Resource estimates completed in August 2006.

Sample preparation and assaying are being performed by the *ALS Laboratories Group* facility in Val-d’Or, Quebec, using the Fire-Assay Method with Atomic Absorption Spectrometry Finish. The NQ-sized drill core is being logged, sampled, bagged, tagged and sealed at the Goldboro site by qualified personnel. Samples were inserted in numbered pails and shipped to the laboratory in Val-d’Or by commercial trucking. Sample pails were opened at the laboratory; sample bags were checked, contents dried and weighed; crushed to -10 mesh (2mm), followed by pulverizing a 250 gram sample fraction to -150 mesh size (0.125mm), from which a 50 gram sample of the pulp was fire assayed. Pulp duplicate check assays are completed in each batch of samples fire assayed and metallic screen assays for samples containing Visible Gold are included in the initial assay protocols. Field blank and certified

reference standards are also routinely included to monitor the laboratories' performance. After review of initial assay results and reconciliation with the logged zones of mineralization, specific samples are being identified for re-assaying of a duplicate coarse crush sample split or by Total Metallic Screen assaying of the entire remaining crushed sample. Multiple assay determinations provide a more accurate determination of gold content in the samples and in the case of Total Metallic Screen assaying, all gold is recovered in the entire sample.

***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](http://www.orexexploration.ca).

*The information contained in this news release has been prepared by Mr. Jean Lafleur, M. Sc., P. Geo., Director and Technical Advisor at Orex. The drill campaign, core descriptions and assay sample preparations are being done under the supervision of Billy Shaw, P. Geo., of W.G. Shaw & Associates (Antigonish, Nova Scotia) and Mr. Alex Horvath, P. Eng., of A.S. Horvath Engineering Inc. (Ottawa, Ontario). All individuals are Qualified Persons under National Instrument 43-101 regulations.*

**For further information, please contact**

**Mark Billings, President and CEO**

(514) 296-1641

[mark@atwaterfin.com](mailto:mark@atwaterfin.com)

**Paradox Investor Relations**

1-866-460-0408

[infoparadox@qc.aira.com](mailto:infoparadox@qc.aira.com)

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