

**NEWS RELEASE**

**New assays from first 5 drill holes of 2008 at Goldboro Gold Project confirm down-plunge extensions of "123" and "56" Zones**

- "123" Zone grades 9.2 g/t gold over 5 m and 3.1 g/t gold over 15 m
- "56" Zone grades 3.5 g/t gold over 9 m and 4.1 g/t gold over 22 m

**Montreal (Canada), June 5, 2008: OREX EXPLORATION INC. (TSX-V: OX) (FSE: O5D)** is pleased to announce results from the first 5 diamond drill holes of the Phase 2A drilling program in-progress at the Company's wholly-owned Goldboro Gold Project in north eastern Nova Scotia. BR08-01 intersected the "123" Zone grading 9.2 g/t gold over a 5.0 m core interval including a 1.5 m interval grading 29.1 g/t gold that included a 0.5 m interval grading 73.7 g/t gold. BR08-02 intersected the "123" Zone grading 3.1 g/t gold over 15.0 m. The BR08-02 intersection is approximately 40 m down-dip from the BR08-01 intersection.

To date, 13 of the planned 16 holes (BR-08-01 to 13) comprising approximately 3,500 m of the 4,250 m Phase 2A drill program have been completed. Selected higher grade assay results received for the first 5 holes\* are tabulated as follows:

HOLE #	FROM (m)	TO (m)	CORE LENGTH (m)	GOLD GRADE (g/t)	ZONE IDENTIFICATION
<b>BR-08-01</b>	93.0	98.0	5.0	<b>9.24</b>	"123" Zone, North Limb
including	96.0	97.5	1.5	<b>29.07</b>	
including	97.0	97.5	0.5	<b>73.70</b>	
<b>BR-08-02</b>	86.0	101.0	15.0	<b>3.09</b>	"123" Zone, South Limb
including	90.0	91.0	1.0	<b>8.46</b>	
Including	93.5	95.5	2.0	<b>6.56</b>	
including	99.5	101.0	1.5	<b>9.04</b>	
<b>BR-08-03</b>	106.0	116.0	10.0	<b>0.73</b>	"123" Zone; South Limb
	122.5	124.0	1.5	<b>51.01</b>	"4" Zone; South Limb
including	122.5	123.0	0.5	<b>150.0</b>	
	143.0	152.0	9.0	<b>3.53</b>	"56" Zone; Hinge
including	143.8	151.0	7.2	<b>4.20</b>	
including	143.8	146.0	2.2	<b>6.88</b>	
<b>BR-08-04</b>	99.0	110.5	11.5	<b>2.05</b>	"123" Zone; Hinge, North Limb
including	99.0	102.0	3.0	<b>3.61</b>	
including	103.0	105.5	2.5	<b>2.45</b>	
	108.0	109.5	1.5	<b>2.71</b>	
<b>BR-08-05</b>	119.0	127.5	8.5	<b>1.27</b>	"123" Zone; South Limb
including	125.0	127.0	2.0	<b>2.41</b>	
	147.0	152.5	5.5	<b>1.74</b>	"4" zone; south Limb
including	149.5	150.0	0.5	<b>7.58</b>	
	206.0	228.0	22.0	<b>4.07</b>	"56" Zone; Hinge, North Limb
including	218.5	226.0	7.5	<b>9.75</b>	
including	218.5	220.5	2.0	<b>11.05</b>	

\* Sample preparation and gold assaying are being performed at 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 from W.G. Shaw & Associates geological consultants (of Antigonish, Nova Scotia). 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 (2 millimetres), followed by pulverizing a 250 gram sample fraction pulverized to -150 mesh size (0.125 millimetres), from which a 50 gram sample of the pulp was assayed. Pulp and coarse duplicate check assays and metallic screen assays are being completed at this time. Samples with Visible Gold are automatically being re-assayed using the Metallic Screen Method.

Mark Billings, President & CEO of Orex commented, *"I am very pleased with these initial assay results, which show higher grades of gold within the overall lower-grade bulk mineralization. All indications are that Orex could possibly double its resources in the Ramp Area after Phase 2A. These initial positive results certainly confirm the potential of Goldboro to be a potential operating mine. I would like to thank all of those who have worked tirelessly and diligently on the current Phase 2A drill campaign and the shareholders of Orex who have patiently supported the Company."*

The Phase 2A drill program is testing the down-plunge extensions to the "123", "4", "56" and other zones of gold mineralization, previously identified by the Company as part of the existing National Instrument (NI) 43-101 Ramp Area Mineral Resources (the "Resources"), eastward beneath the historic workings of the Boston-Richardson Mine at vertical depths from -75 m and -200 m. The Resources are defined over a 225 m strike length westward from the Ramp portal. The 16-hole Phase 2A program extends 225 m along strike between the Resources eastward towards the Boston-Richardson Mine and is expected to double the strike length of the gold mineralization.

Each of the first 5 holes has successfully intersected the target "123" Zone at the most prolific fold-hinge or down-dip along the North and/or South Limbs. Gold mineralization in each of the slate belt limbs of the historic Boston-Richardson Mine were mined vertically for approximately 150 m and similar down-dip extents are indicated for the other zones of mineralization encountered to-date.

BR08-03 intersected the South Limb of the "123" Zone further down-dip grading 0.7 g/t gold over 10.0 m; however, intersected higher grades in the narrower "4" Zone returning 51.0 g/t gold over 1.5 m and in the fold hinge of the "56" Zone grading 3.5 g/t gold over 9.0 m, including 6.9 g/t gold over 2.2 m. BR08-04 intersected the hinge of the "123" Zone grading 2.05 g/t gold over 11.5 m. BR08-05 intersected the South Limb of the "123" Zone grading 1.3 g/t gold over 8.5 m. The South Limb of the "4" Zone graded 1.74 g/t gold over 5.5 m and the hinge of the "56" Zone graded 4.1 g/t gold over 22.0 m, including a 7.5 m interval grading 9.8 g/t gold. Additional check assaying including metallic screen assay results for samples with Visible Gold are pending.

Metallurgical and quality control testing completed in 2005 demonstrated that multiple samples, assaying and total metallic screen assay results produce higher grades more similar to those obtained by bulk sampling and metallurgical testing. The additional assays pending are likely to improve the final grades and possibly widths of some of the mineralized intersections and zones.

Assay results reported in this news release are current for samples processed and assayed by the laboratory. Another batch of samples for drill holes BR08-06 to 08 (inclusive) were recently shipped and are currently being processed. Results are expected within a few weeks. Logging and sampling of holes BR08-09 to 13 is in-progress.

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

The Phase 2A drill program totals 16 holes spaced on sections approximately 25 m apart over a 225 m strike length extending east from the current limits of the defined NI 43-101 Mineral Resources in the Goldboro Ramp Area. This initial 4,250 m campaign is targeting the down-plunge extension of the higher grade hinge and South Limb areas of the "123" Zone (as well as other

zones, such as the "56" Zone and "78" Zone) as it plunges shallowly to the east beneath the historic Boston-Richardson Mine.

The Phase 2B drill program has been finalized and will commence following completion of the Phase 2A program. The Phase 2B program will total 16 holes (BR08-17 to 32, inclusive) spaced on sections approximately 50 m apart over a 350 m 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.

### ***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. Goldboro hosts a National Instrument 43-101 compliant Mineral Resources of 13.09 million tonnes @ 1.15 g/t gold in the Measured and Indicated categories, and additional Inferred Resources of 15.6 million tonnes @ 0.63 g/t gold (*refer to the technical report dated September 28, 2006, posted on SEDAR at [www.sedar.com](http://www.sedar.com)*).

A comparative analysis of metallurgical test results done in 2006 and historical assay results demonstrated that historical resources estimated at Goldboro using conventional drill assays would significantly underestimate the recoverable gold content and therefore understate Mineral Resources. This grade loss was demonstrated by comparing the more realistic gold grade determined by a 2006 Metallurgical Model when compared to the 187 historic drill hole Assay Model, and is attributable to the nugget effect brought on by conventional assaying of smaller size individual drill core samples in the Assay Model. The 2006 Metallurgical Model grade showed an increase of approximately twice that of the Assay Model grade. The Company has developed a sampling and assaying protocol to identify samples with a probable nugget effect. These samples will be treated by Total Metallic Screen assay methods to recover and account for all coarse gold in the samples, and produce more realistic gold grades. The objective of the Phase 2 exploration program focuses on defining higher quality Mineral Resources. The Orex team is confident in achieving this goal within the next 24 months. 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 reviewed and approved by Mr. Jean Lafleur, M. Sc., P. Geo., Director and Technical Advisor at Orex, and a Qualified Person under National Instrument 43-101 regulations. 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).*

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