

NEWS RELEASE

Assays continue to provide positive results and increase size of gold system

Montreal, Canada, August 26, 2008: OREX EXPLORATION INC. (TSX-V: OX) (FSE: O5D) would like to provide its shareholders with additional gold assay results from the Phase 2A diamond drilling program (Holes BR08-10 and 11) 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 BR08-12 to 16. Selected higher grade assay results received for holes BR08-10 and 11* are tabulated as follows:

HOLE #	FROM (m)	TO (m)	CORE LENGTH (m)	GOLD GRADE (g/t)	ZONE IDENTIFICATION
BR08-10	210.0	215.5	5.5	5.50	“56” Zone, North Limb
including	215.0	215.5	0.5	141.50	
	222.0	226.5	4.5	4.50	“56” Zone, South Limb
	289.0	292.5	3.5	3.50	“4” Zone, South Limb
including	289.5	290.0	0.5	9.59	
	323.5	330.5	7.0	2.34	“123” Zone, South Limb
including	324.0	324.5	0.5	12.85	
and	330.0	330.5	0.5	12.84	
BR08-11	168.0	187.5	19.5	3.30	“123” Zone, North Limb/Hinge
including	168.0	168.5	0.5	9.53	
	173.5	178.5	5.0	8.82	
including	173.5	174.75	1.25	23.01	
and	176.75	178.5	1.75	8.50	
	181.5	183.5	2.0	4.33	
including	183.0	183.5	0.5	12.35	
	192.0	194.0	2.0	3.48	“4” Zone, North Limb / Hinge
	223.5	228.0	4.5	3.09	“56” Zone; South Limb
including	223.5	225.0	1.5	4.74	
and	227.5	228.0	0.5	10.35	
	232.0	235.5	3.5	2.26	“4” Zone, South Limb
	258.5	265.5	7.0	1.92	“123” Zone, South Limb
including	265.0	265.5	0.5	20.70	

* 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 BR08-12 to 16, and the remaining assay results are expected within a few weeks.

The Company is continuing Phase 2B of its drilling program, which consists of 16 holes (BR08-17 to 32), comprising 4,525 m of drilling towards the East Gold Brook Shaft area, adding an additional 350 m strike length to the 450 m length tested in 2005 and 2008 to date along the mineralized Boston-Richardson Antiform Structure (please refer to the appended Goldboro surface map).

Mark Billings, President and CEO of Orex commented, “I am pleased that the results from Holes BR08-10 and 11 continue to demonstrate good gold grades. Orex looks forward to providing

shareholders with an updated resource estimate before the end of this calendar year. The management of Orex is also actively planning roadshow presentations that will begin in early September, with the objective of increasing investor awareness of our Goldboro project.”

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 continues 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 and 2009, 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) totalling 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 2008 in follow-up to the NI 43-101 Mineral Resource estimates completed in August 2006.

Assay Protocols

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. A portion of the samples are to be re-processed / assayed by total metallic screen methods, while other samples will have a second pulp prepared from the coarse reject and re-assayed by fire assay. Multiple assay determinations provide a more accurate determination of gold content in the samples.

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 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.

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