FOR IMMEDIATE RELEASE

Suncor Energy reports August production, updates planned maintenance activities at oil sands facilities

Calgary, Alberta (Sept. 8, 2010) — Suncor Energy Inc. reports that oil sands production during August averaged approximately 331,000 barrels per day (bpd). Year-to-date oil sands production at the end of August averaged approximately 270,000 bpd.

The company also reports planned maintenance has begun on one of its two oil sands upgraders (U2) at its oil sands operations near Fort McMurray. The planned maintenance will take place concurrently with repair work underway on a hydrogen reformer connected to U2, which experienced an unplanned outage in August.

During the maintenance period, which is scheduled to last approximately 6 weeks, U2 is expected to operate at reduced rates while the company’s other upgrader (U1) is expected to continue normal operations. The planned maintenance is expected to support safe, reliable operation of upgrading assets as Suncor works to achieve its annualized average oil sands production target of 280,000 bpd (+/- 5%) in 2010.

On a monthly basis, Suncor reports production numbers from its oil sands operation in order to provide stakeholders with a more timely review of operational performance. These numbers are preliminary and subject to adjustment. Monthly totals may differ from the year-to-date total due to rounding, the impact of sales and changes in inventory. Production volumes will be confirmed when Suncor’s third quarter results are released.

Production numbers include upgraded sweet and sour synthetic crude oil and diesel, as well as non-upgraded bitumen sold directly to the market, from all Suncor-operated facilities. Reported volumes do not include Suncor’s proportionate production share from the Syncrude joint venture.

Certain statements in this news release constitute "forward-looking statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995 and "forward-looking information" within the meaning of applicable Canadian securities legislation (collectively, "forward-looking statements"). All forward-looking statements are based on Suncor’s current expectations, estimates, projections, beliefs and assumptions based on information available at the time the statement was made and in light of Suncor’s experience and its perception of historical trends.

Some of the forward-looking statements may be identified by words like "expected," "targets," "schedule," and similar expressions. In addition, all other statements that address expectations or projections about the future, including statements about our strategy for growth, costs, schedules, production volumes, operating and financial results and expected impact of future commitments, are forward-looking statements. Forward-looking statements in this news release include references to a 2010 outlook production range of 280,000 (+/- 5%) bpd, a planned maintenance schedule of six weeks for the U2 upgrader; the expectation that the U2 upgrader will operate at reduced rates during the maintenance period; the expectation that the U1 upgrader will continue normal operations; and the expectation that the planned maintenance will support safe, reliable operation of upgrading assets. Forward-looking statements are not guarantees of future performance and involve a number of risks and uncertainties, some that are similar to other oil and gas companies and some that are unique to our company.
Suncor’s actual results may differ materially from those expressed or implied by our forward-looking statements and you are cautioned not to place undue reliance on them.

Assumptions for the Oil Sands 2010 full year outlook include implementing reliability and operational efficiency initiatives which we expect to minimize further unplanned maintenance in 2010. Suncor’s Earnings Release, Quarterly Report and Management’s Discussion & Analysis for the second quarter of 2010 and its most recently filed Annual Information Form/Form 40-F, Annual Report to Shareholders and other documents it files from time to time with securities regulatory authorities describe the risks, uncertainties, material assumptions and other factors that could influence actual results and such factors are incorporated herein by reference. Copies of these documents are available without charge from Suncor at 150 6th Avenue S.W., Calgary, Alberta T2P 3Y7, by calling 1-800-558-9071, or by email request to info@suncor.com or by referring to the company’s profile on SEDAR at www.sedar.com or EDGAR at www.sec.gov. Except as required by applicable securities laws, Suncor disclaims any intention or obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

Suncor Energy Inc. is Canada’s premier integrated energy company. Suncor's operations include oil sands development and upgrading, conventional and offshore oil and gas production, petroleum refining, and product marketing under the Petro-Canada brand. While working to responsibly develop petroleum resources, Suncor is also developing a growing renewable energy portfolio. Suncor's common shares (symbol: SU) are listed on the Toronto and New York stock exchanges.

For more information about Suncor Energy Inc. please visit our web site at www.suncor.com.

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