
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM 8-K

**CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934**

Date of Report (Date of earliest event reported): April 16, 2010 (April 16, 2010)

TRANSOCEAN LTD.

(Exact name of registrant as specified in its charter)

Switzerland
(State or other jurisdiction of
incorporation)

000-53533
(Commission File Number)

98-0599916
(I.R.S. Employer Identification No.)

**10 Chemin de Blandonnet
1214 Vernier, Geneva
Switzerland**
(Address of principal executive offices)

CH-1214
(Zip code)

Registrant's telephone number, including area code: +41 (22) 930-9000

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (*see* General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
 - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
 - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
 - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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Item 7.01 Regulation FD Disclosure.

On May 15, 2009, our shareholders approved and authorized our board of directors, at its discretion, to repurchase an amount of our shares for cancellation with an aggregate purchase price of up to CHF 3.5 billion. On February 12, 2010, our board of directors authorized our management to implement share repurchases under the share repurchase program.

As of April 14, 2010, we indirectly (through our subsidiary Transocean Inc.) or directly held 14,966,436 of our own shares, 1,407,900 of which had been repurchased under the share repurchase program for cancellation. In addition to these 14,966,436 shares, we expect to settle share repurchases under the share repurchase program for 345,300 additional shares on or about Wednesday, April 21, 2010. Upon such settlement, we will indirectly or directly hold 15,311,736 of our own shares, 1,753,200 of which will have been repurchased under the share repurchase program for cancellation.

Following the listing of our shares on the SIX Swiss Exchange on April 20, 2010, we will be required to publish, on a weekly basis, the number of shares that have been repurchased pursuant to the share repurchase program during the last five trading days and since commencement of the share repurchase program. We will be further required to publish, on a weekly basis, subject to certain exceptions such as the delivery of shares in connection with awards granted under our incentive plans, the number of our own shares that we sold during the last five trading days and the percentage of shares held in treasury. You may find the publication on our website at www.deepwater.com under the caption "Investor Relations" then "Stock Info & Analysis."

Statements regarding listing on the SIX Swiss Exchange and settlement of share repurchases, as well as any other statements that are not historical facts, are forward-looking statements that involve certain risks, uncertainties and assumptions. These include but are not limited to actions by SIX and other third parties and other factors detailed in our most recent Form 10-K and other filings with the Securities and Exchange Commission (SEC), which are available free of charge on the SEC's website at www.sec.gov. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those indicated.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

TRANSOCEAN LTD.

Date: April 16, 2010

By: _____ /s/ MARGARET C. FITZGERALD
Margaret C. Fitzgerald
Associate General Counsel