

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

August 4, 2010

Mr. Steven L Newman Chief Executive Officer Transocean Ltd. Blandonnet International Business Center Chemin de Blandonnet 2 Building F, 7th Floor Vernier, Switzerland

Re: Transocean Ltd.

Form 10-K for Fiscal Year Ended December 31, 2009

Filed February 24, 2010

Form 10-Q for Fiscal Quarter Ended March 31, 2010

Filed May 5, 2010

Response letter dated July 1, 2010

File No. 0-53533

Dear Mr. Newman:

We have reviewed your filings and response letter and have the following comments. Please provide a written response to our comments. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Form 10-K for Fiscal Year Ended December 31, 2009

Management's Discussion and Analysis of Financial Condition and Results of Operations

Results of Operations, Historical 2009 Compared to 2008

Income Tax Expense, page 47

1. We note your responses to comments four and five from our letter dated June 14, 2010. Regardless of the complexity of your tax structure, Item 303(a)(3)(ii) of Regulation S-K requires you to describe any known trends or uncertainties that have had or that you reasonably expect will have a material favorable or unfavorable impact on net sales, revenues or income from continuing operations, and we note from the disclosure in your 10-K that your annual effective tax rate based on net income before income tax after adjusting for certain items for the years ended December 31, 2009, 2008 and 2007 was 16.0 percent, 14.4 percent and 12.5 percent, respectively. Please modify your disclosure to explain whether you believe this represents a trend in your tax rate, and if so, explain

Mr. Steven L. Newman Transocean Ltd. August 4, 2010 Page 2

the reasons for such trend. As part of your response, please tell us if you perform any tax forecasting or budgeting, and if so, how such amounts are determined. Please also tell us how you considered any budgeted or forecasted amounts in preparing your disclosures pursuant to Item 303(a)(3)(ii).

- 2. We further note from your responses that your tax rate from period to period may be uncertain. However, it does not appear you have provided substantive information to the reader as to why that uncertainty arises or what factors impact the uncertainty, as required by Item 303(a)(3)(ii) of Regulation S-K. Please modify your disclosure to provide such information.
- 3. Item 303(a)(3) of Regulation S-K also requires you to "describe any other significant components of revenues or expenses that, in the registrant's judgment, should be described in order to understand the registrant's results of operations." Please tell us why you believe the disclosures currently provided in your Form 10-K provides a reader with sufficient information to understand such component.

Closing Comments

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

You may contact Mark Wojciechowski at (202) 551-3759, or in his absence, Mark Shannon, Branch Chief, at (202) 551-3299 if you have questions regarding comments on the financial statements and related matters. Please contact Sean Donahue at (202) 551-3579, or Norman Von Holtzendorff at (202) 551-3237 with any other questions.

Sincerely,

H. Roger Schwall Assistant Director