

August 16, 2010

Securities and Exchange Commission
100 F Street, NE
Washington, D.C. 20549-7010

Attention: H. Roger Schwall
Assistant Director

Re: Transocean Ltd.'s Response to the Staff's Comment Letter dated August 4, 2010
Form 10-K for the 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. Schwall:

The following is in response to the additional comments of the Staff of the Division of Corporation Finance (the "Staff") contained in the letter dated August 4, 2010, from H. Roger Schwall, Assistant Director, with respect to the above referenced filings of Transocean Ltd. (the "Company"). For your convenience, each of our responses is prefaced by the Staff's comment.

Form 10-K for the 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

Comment:

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

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).

Company Response:

Although our annual effective tax rate (“ETR”) has increased in each of the past three years, we do not believe that this increase is representative of an actual trend indicating that the ETR will be higher in future periods. Our annual effective tax rate for financial reporting purposes fluctuates from year to year considering, among other factors, (a) changes in the blend of income that is taxed based on gross revenues versus income before taxes, (b) rig movements between taxing jurisdictions, and (c) our rig operating structures. We have disclosed these factors in our quarterly report on Form 10-Q for the quarter ended June 30, 2010 (the “Form 10-Q”), in both our notes to condensed consolidated financial statements included in Item 1 and our management’s discussion and analysis of financial condition and results of operations in Item 2. Additionally, the Form 10-Q disclosed that our ETR for the six months ended June 30, 2010 declined to 15.5 percent. We expect further variability in our ETR.

During the interim reporting periods in a given year, we forecast the expected ETR for the current year. We apply this ETR, excluding unusual or discrete items, to our year-to-date activity. The pre-tax amounts included in this expected annual ETR calculation are based on up-to-date actual data available at the time of calculation and estimated pre-tax book income for the remainder of the current calendar year. We update the calculation of ETR each quarter of the current calendar year.

Once a year, typically during the fourth quarter, we budget the expected annual ETR for the upcoming year. We do not include a discussion of this expected annual ETR for the upcoming year in our periodic filings because we believe it contains too many uncertainties and variables, and does not reflect a material change or trend. We do not forecast or budget an annual ETR beyond the next subsequent year in large part because of the factors that cause our ETR to increase or decrease. These factors are generally described in our response to prior comments four and five in our July 1, 2010 letter and summarized in “Income tax expense” in the management’s discussion and analysis of financial condition and results of operations section of the Form 10-Q. We believe these factors would generate significant uncertainty for projections further into the future such that the projections would not be meaningful to management, as evidenced by management’s practice of not considering such projections in our planning and forecasting. Instead, in connection with its long-range planning activities, management generally utilizes the most recent ETR, calculated as described above, rather than a forecasted ETR.

In our annual report on Form 10-K for the year ended December 31, 2009 (the “Form 10-K”), we used 12 months of actual data and therefore did not consider including any additional budgeted or forecasted amounts in that filing. As described above, some forecasted information for the current year is included in our reporting for 2010 interim periods. Because we do not forecast annual ETR beyond the next subsequent year, we did not consider including any additional budgeted or forecasted amounts in our filings.

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.

Company Response:

We have disclosed these factors in the Form 10-Q, in both our notes to condensed consolidated financial statements included in Item 1 and our management's discussion and analysis of financial condition and results of operations in Item 2.

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.

Company Response:

We believe that we have adequately described the significant components of our revenues and expenses in the Form 10-K in satisfaction of Item 303(a)(3) of Regulation S-K and there were no known trends or uncertainties that were expected to materially impact income tax expense. We have, however, expanded disclosures in the Form 10-Q with respect to the factors that cause our ETR to fluctuate irrespective of our income before taxes. See both our notes to condensed consolidated financial statements included in Item 1 and our management's discussion and analysis of financial condition and results of operations in Item 2.

Closing Comments

In connection with this response, we acknowledge that:

- the Company is responsible for the adequacy and accuracy of the disclosure in the Company's filing;
- Staff comments or changes to disclosure in response to Staff comments do not foreclose the Securities and Exchange Commission (the "Commission") from taking any action with respect to the filing; and
- the Company may not assert Staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Very truly yours,

By: /s/ Heather G. Callender
Heather G. Callender
Associate General Counsel