



DIVISION OF  
CORPORATION FINANCE  
MAIL STOP 7010

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549-7010

April 18, 2007

Mr. A. Wade Pursell  
Chief Financial Officer  
Helix Energy Solutions Group, Inc.  
400 N. Sam Houston Parkway E. Suite 400  
Houston, Texas 77060

**Re: Helix Energy Solutions Group, Inc.  
Form 10-K for the Fiscal Year Ended December 31, 2006  
Filed March 1, 2007  
File No. 1-32936**

Dear Mr. Pursell:

We have reviewed your filing and have the following comments. We have limited our review of your filing to those issues we have addressed in our 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.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the Fiscal Year Ended December 31, 2006

Financial Statements

Note 3 – Initial Public Offering of Cal Dive International, Inc., page 85

1. We note that you reported a gain in your 2006 Statements of Operations of \$223 million in connection with proceeds received from the initial public offering of common stock by your subsidiary, Cal Dive International, Inc., also taking into account borrowing under a revolving credit facility. We understand from your disclosure on page 83 that you have adopted the income statement approach as your policy for recognizing gains on issuances of stock by subsidiaries, as described in IRQ 5 of SAB Topic 5:H.

Please submit your underlying gain computations, indicating the book values of assets and liabilities conveyed, and showing how proceeds from both the stock issuances and credit facilities factored into your result. Explain your rationale for recording gain in conjunction with your receipt of borrowings by the consolidated entity.

Engineering Comments

Risk Factors, page 18

Risk Relating to our Oil and Gas Operations, page 20

Estimates of our oil and gas reserves, future cash flows and abandonment costs may be significantly incorrect, page 21

2. We note your disclosure stating that your reserves may be “significantly incorrect,” making it unclear as to whether you possess the geological and engineering data necessary to demonstrate with reasonable certainty that you would be able to recover the proved reserves that you report in the filing under existing economic and operating conditions. If you believe the reserves may be significantly incorrect, unless you can also show how this view would be consistent with having concluded that recovery is reasonably certain, as would be required under the definition set forth in Rule 4-10(a)(2) of Regulation S-X, revise the reserves to a volume you are reasonably certain of recovering. Otherwise, if you are reasonably certain of recovering the reserves you disclose as proved, then please revise your risk factor to not state that they may be significantly incorrect.

Properties, page 25

3. Please provide us with a copy of your reserve report as of December 31, 2006 on electronic format, if possible.
4. Please expand your disclosure to include the information required for extractive enterprises pertaining to your principal fields to comply with Instruction 3 to Item 102 of Regulation S-K.

Summary of Natural Gas and Oil Reserve Data, page 30

5. We note that you say your reserve estimates have been audited by Huddleston & Co., Inc. (similar references appear on pages 59 and 115), and that you provided a consent from that firm indicating you have incorporated by reference its report letter dated February 14, 2007. Tell us whether you have in fact incorporated that report into your filing; and if so, where the reference appears and where the report has been filed. Otherwise, submit the report for review. Please expand your disclosure to address the following points.
  - Describe the nature and scope of the audit procedures that were performed and identify any limitations imposed by you or encountered by the auditing engineers.
  - With regard to your disclosure identifying the properties subject to audit as "...83% of our most significant U.S. proved reserves on a discounted future net revenue basis," indicate the portion of the U.S. reserves you consider to be significant, and to include the percentage of total reserves subject to audit, using both significant and non-significant reserves in making the calculation, based on discounted future net revenues. Also disclose the percentages of reserves subject to audit, based only on the disclosed quantities of proved developed reserves, proved undeveloped reserves, and both of these categories combined.
  - Explain who selected the properties for review and the basis on which those selections were made. Identify any major properties that were not subject to third party audit and state the reasons.
  - State whether the outside engineering firm determined that your reserve estimates were reasonable or fairly stated, relative to the criteria of "reasonable certainty," as it pertains to expectations about the recoverability of reserves in future years, under existing economic and

operating conditions; consistent with the definition in Rule 4-10(a)(2) of Regulation S-X.

- If the auditing engineers qualified their opinion by stating that your reserve quantities were within a certain range of what they considered to be reasonable, based on their own estimates, disclose the quantity and percentage variances between the reserve estimates you prepared and those of the outside engineering firm, in the aggregate and for individual properties that are material. Under this scenario, also include the percentage of wells having estimates deviating beyond the variance disclosed for reserves in the aggregate, and the percentage of total proved reserves associated with such wells.
- Clarify that your use of the term engineering audit is intended only to refer to the procedures outlined in your disclosure, and that it may be defined and used differently by other companies.

We believe the above information would be meaningfully situated in a separate subsection within your discussion of properties or reserves. Any mention of the independent engineering audits appearing outside of this section should include a cross reference to these disclosures for information about the scope and limitations of the procedures performed.

Management's Discussion and Analysis, page 41

Results of Operations, page 42

Comparison of Years Ended 2006 and 2005, page 43

6. Please disclose the extent to which the production expenses you disclose in the tables on pages 45 and 49 include production taxes.

Standardized Measure of Discounted Future Net Cash Flows, page 118

7. Your 10% discount of \$426,648 thousand in the Standardized Measure appears low, given that 56% of your reserves were undeveloped as of December 31, 2006. Please tell us how this was calculated. Submit the underlying chart, showing the time horizons over which development and production were scheduled, and the related undiscounted revenues and costs associated with these activities for each period.

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### Closing Comments

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

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

Mr. A. Wade Pursell  
Helix Energy Solutions Group, Inc.  
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You may contact Tracie Towner at (202) 551-3744 if you have questions regarding comments on the financial statements and related matters. You may contact Jim Murphy, Petroleum Engineer, at (202) 551- 3703 with questions about engineering comments. Please contact me at (202) 551-3686 with any other questions.

Sincerely,

Karl Hiller  
Branch Chief