



DIVISION OF
CORPORATION FINANCE

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

January 24, 2011

Mr. Jerry W. Fanska
Senior Vice President – Finance & Treasurer
Layne Christensen Company
1900 Shawnee Mission Parkway
Mission Woods, KS 66205

Re: Layne Christensen Company
Form 10-K for the Fiscal Year Ended January 31, 2010
Forms 10-Q for the Fiscal Quarters Ended April 30, 2010, July 31, 2010 and
October 31, 2010
File No. 001-34195

Dear Mr. Fanska:

We have reviewed your filings and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Fiscal Year Ended January 31, 2010

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 22

Comparison of Fiscal 2010 to Fiscal 2009, page 24

1. We note your discussion of several factors that impact your segment revenue and segment income. Please revise future filings to quantify the impact of each of these factors, where practicable.

Critical Accounting Policies and Estimates, page 29
Goodwill and Other Intangibles, page 30

2. To the extent that any of your reporting units have estimated fair values that are not substantially in excess of their carrying values and goodwill for such reporting units, in

the aggregate or individually, if impaired, could materially impact your results or total shareholders' equity, please identify and provide the following disclosures for each such reporting unit in future filings:

- The percentage by which fair value exceeds carrying value as of the most-recent step-one test.
- The amount of goodwill allocated to the unit.
- A description of the material assumptions that drive estimated fair value.
- A discussion of any uncertainties associated with each key assumption.
- A discussion of any potential events, trends and/or circumstances that could have a negative effect on estimated fair value.

If you have determined that estimated fair values substantially exceed the carrying values of your reporting units, please disclose that determination in future filings. Refer to Item 303 of Regulation S-K.

Other Long-lived Assets, page 31

3. Please revise future filings to include a more specific and comprehensive discussion regarding how you consider current events and circumstances in determining whether it is necessary to test your long-lived assets for recoverability. If an analysis is conducted in a given period, please include a specific and comprehensive discussion regarding the results of that analysis.

Item 8. Financial Statements and Supplementary Data, page 33

Note 17. Segments and Foreign Operations, page 55

4. Please revise future filings to disclose revenue by product line as required by ASC 280-10-50-40.

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 the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. 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 responding to our comments, please provide a written 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

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- 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.

You may contact Dale Welcome at (202) 551-3865 or Tricia Armelin at (202) 551-3747 if you have questions regarding these comments.

Sincerely,

John Cash
Accounting Branch Chief