



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

Mail Stop 3030

December 23, 2009

Via Facsimile and U.S. Mail

Mr. Keith Merrell
Chief Financial Officer
Reflect Scientific, Inc.
1270 South 1380
West Orem, Utah 84058

Re: Reflect Scientific, Inc.
Form 10-K for the Year Ended December 31, 2008
Filed April 15, 2009
File No. 000-31377

Dear Mr. Merrell:

We have reviewed your filing and have the following comments. We have limited our review to only your financial statements and related disclosures and will make no further review of your documents. Where indicated, we think you should revise your documents in response to these comments. If you disagree, we will consider your explanation as to why our comments are inapplicable or a revision is unnecessary. 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 year ended December 31, 2008

Item 9(A)T. Controls and Procedures, page 17

Evaluation of Disclosure Controls and Procedures, page 17

1. We note your statement that a “controls system cannot provide absolute assurance, however, that the objectives of the controls system are met, and no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within a company have been detected.” Please revise future filings to state clearly, if true, that your disclosure controls and procedures are designed to provide reasonable assurance of achieving their objectives and that your principal executive officer and principal financial officer concluded that your disclosure controls and procedures are effective at that reasonable assurance level. In the alternative, remove the reference to the level of assurance of your disclosure controls and procedures. Please refer to Section II.F.4 of Management’s Reports on Internal Control Over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports, SEC Release No. 33-8238, available on our website at <<http://www.sec.gov/rules/final/33-8238.htm>>. This comment also applies to your subsequent Forms 10-Q for the quarter ended March 31, 2009, June 30, 2009, and September 30, 2009.
2. We note that you identified material weaknesses as part of your evaluation of the effectiveness of your internal control over financial reporting as of December 31, 2008 that appear to also impact disclosure and controls and procedures. For example, we note material weaknesses relating to insufficient written policies and procedures for accounting and financial reporting with respect to the requirements and application of US GAAP and SEC disclosure requirements, and ineffective controls over period end financial disclosure and reporting processes. Please explain to us how management considered these material weaknesses in concluding that your disclosure controls and procedures were effective as of December 31, 2008.

Management’s Report on Internal Control over Financial Reporting, page 26

3. We note your disclosure here related to management’s report on internal control over financial reporting as of December 31, 2008. However, we do not see where you have made a clear and definite statement as to whether your internal control over financial reporting was effective or not effective as of December 31, 2008. Please amend your filing to provide management’s conclusion as to the effectiveness of your internal control over financial reporting as of December 31, 2008. Refer to Item 308T(a)(3) of Regulation S-K.

Consolidated Balance Sheet, page 32

4. We note from the disclosures provided in Note 14 that the line item “Intangible Assets, net” includes goodwill. In future filings, please make a separate presentation of goodwill on the face of the balance sheet. Refer to the guidance in Section 350-20-45 of the FASB Accounting Standards Codification.

Consolidated Statements of Operations, page 34

5. We note the line item “Share-based compensation” presented on the face of this statements. Please revise the statements of operations in future filings to present expense for stock-based compensation in the same line or lines as cash compensation paid to the same employees in accordance with SAB Topic 14F.

Note 2 – Summary of Significant Accounting Policies, page 37

-q. Impairment, page 43

6. Please revise future filings to disclose your accounting policy for your annual goodwill impairment test. Describe the two-step impairment test you perform in accordance with Section 350-20 of the FASB Accounting Standards Codification. In addition, disclose the number of reporting units you have identified and when you test for impairment.

Exhibits 31.1 and 31.2

7. We note that your certifications filed pursuant to Exchange Act Rule 13a-14(a) are not in the exact form prescribed by Item 601(b)(31) of Regulation S-K. We note similar modifications within your March 31, 2009 and June 30, 2009 Forms 10-Q. For instance, we note that you have made certain modifications including but not limited to paragraph 4(c) and paragraph 5, 5(a) and 5 (b). We also note that you refer to the “quarterly report” in paragraphs 2, 3, 4, 4(a), 4(c) and 4(d) rather than “annual report.” Accordingly, please revise this filing and your March 31, 2009 and June 30, 2009 Forms 10-Q to include certifications that conform to the exact wording required by Item 601(b)(31) of Regulation S-K.

As appropriate, please amend the appropriate Exchange Act Reports and 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 amendments to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested. Detailed cover letters greatly facilitate our review. Please file your cover letter on EDGAR. Please understand that we may have additional comments after reviewing your amendments and responses to our comments.

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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.

You may contact David Burton, Staff Accountant at (202) 551-3626 or me at (202) 551-3639 if you have questions regarding comments on the financial statements and related matters. In this regard, do not hesitate to contact Kevin L. Vaughn, Accounting Branch Chief, at (202) 551-3643.

Sincerely,

Tara L. Harkins
Reviewing Accountant