

Mail Stop 3561

September 21, 2006

Mr. David Pollock
President and Chief Executive Officer
Hydron Technologies, Inc.
4400 34th Street North, Suite F
St. Petersburg, Florida 33714

**Re: Hydron Technologies, Inc.
Form 10-KSB for the Fiscal Year Ended December 31, 2005
Filed April 19, 2006**

**Form 10-QSB for the Fiscal Quarter Ended June 30, 2006
Filed August 14, 2006**

File No. 0-6333

Dear Mr. Pollock:

We have reviewed your filings and have the following comments. We have limited our review of your filings to those issues we have addressed in our comments. 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 comment is 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 filings. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on 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, 2005

1. Where a comment below requests additional disclosures to be included or a revision to existing disclosures, please show us in your supplemental response what the revised disclosures will look like. These additional disclosures should be included in your future filings.

Item 4. Consolidated Financial Statements

Notes to Consolidated Financial Statements

Note 7. Acquisition, page 34

2. It appears that your transaction with Clinical Results, Inc. on July 1, 2005 is a significant acquisition. We note Form 8-K filed on July 8, 2006, but have been unable to locate your filing of the required financial statements. Accordingly, please provide us with the audited financial statements of Clinical Results, Inc. as required by Item 310(c) of Regulation S-B or provide us with your calculations of the tests of significance levels supporting your determination that financial statements were not required.
3. We note your acquisition of all the outstanding common stock of Clinical Results, Inc. on July 1, 2005 in exchange for 2,000,000 shares of your common stock valued at \$260,000. Please tell us and disclose the basis and method used to determine the fair value of the shares of common stock issued as consideration. Please also tell us and disclose the amount of each major asset classes within the \$241,311 assigned to identifiable intangible assets. See paragraphs 50, 51 and 52(a) of SFAS 141.

Note 12. Stock Options and Warrants, page 38

4. We note that on October 24, 2005 you extended the exercise period from three to five years on a portion of the 1,750,000 options that were originally issued in 2002 at an exercise price of \$0.20 per share of common stock. Please explain to us and disclose the number of options that were affected by this extension and the additional compensation cost you recorded as a result of the modification of the terms of these options. Tell us how you calculated the incremental compensation cost. Refer to paragraphs 32 through 37 of FIN 44 for guidance.

Item 8A. Controls and Procedures, page 46

5. Your disclosure regarding the evaluation of disclosure controls and procedures does not comply with the current requirements of Item 307 of Regulation S-B. Specifically, your reference to Rule 13a-14 of the Exchange Act was outdated at

the time your Form 10-KSB was filed. The current definition of disclosure controls and procedures is located in Rules 13a-15(e) and 15d-15(e) of the Exchange Act. Your rule references are also incorrect for the disclosure controls and procedures included in Item 3 of both of the quarterly reports you filed in 2006 on Form 10-QSB. In future filings, please revise your Item 8A and Item 3 disclosures accordingly to reflect the current rule references.

* * *

As appropriate, please revise your filings 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 amendment to expedite our review. Please furnish a cover letter with your amendment 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 filings to be certain that the filings include 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 Milwood Hobbs, Staff Accountant, at (202) 551-3241 or Donna DiSilvio, Senior Staff Accountant, at (202) 551-3202 or, in their absence, the undersigned, at (202) 551-3841, if you have questions regarding our comments on the

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financial statements and related matters. Please contact H. Christopher Owings, Assistant Director, at (202) 551-3725 with any other questions.

Sincerely,

Michael Moran
Accounting Branch Chief