



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 3720

April 25, 2008

Via U.S. Mail

Mr. James J. TerBeest
Chief Financial Officer
Crdentia Corp.
5001 LBJ Freeway
Suite 850
Dallas, TX 75244

**RE: Crdentia Corp.
Form 10-K for the Year ended December 31, 2007
Filed March 31, 2008
File No. 000-31152**

Dear Mr. TerBeest:

We have reviewed your filing and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. Please address the following comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a future 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 or may not 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 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 Year Ended December 31, 2007

Financial Statements and Notes

Note 1. Organization and Summary of Significant Accounting Policies

Organization, page F-8

1. We note that you consider the services including travel nursing, per diem nursing, contractual clinical service, locum tenens (physician staffing), allied services and private duty home health care to be one segment and that you utilize common systems, databases, procedures, processes and similar method of identifying and servicing these customers. In order for us to better understand the basis for your conclusion that you have one segment, identify for us all of your operating segments as defined under paragraphs 10-15 of SFAS 131. If you are aggregating these segments relying on the guidance in paragraph 17 of SFAS 131, please explain to us in more detail how you consider each of the aggregation criteria in that paragraph in determining that you have one reportable segment given the apparent different nature of these services.

Goodwill and Intangible Assets, page F-10

2. We note you disclose that your valuation of the intangibles is determined based upon valuations performed by third party specialists and management's estimate of fair value. While you are not required to make reference to this independent valuation, when you do you should also disclose the name of the expert. If you decide to delete your reference to the independent valuation, you should revise to provide disclosures that explain the method and assumptions used by management to determine the valuation. Revise to comply with this comment here and elsewhere in future filings.

Note 2.Acquisitions, page F-13

ATS Universal LLC

3. Tell us and disclose the nature of the tangible assets acquired and liabilities assumed in the ATS transaction. Refer to paragraph 51e of SFAS 141.

Note 7. Goodwill and Other Intangible Assets, page F-17

4. With a view towards expanded disclosure, please explain to us your policy for testing goodwill for impairment, including references to the supporting GAAP literature. Specifically address your identification of reporting units and your assignment of goodwill to them. Refer to paragraphs 30, 31 and 34 of SFAS 142.

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please file your letter over EDGAR. Please understand that we may have additional comments after reviewing your responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors require for an informed 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 comment, 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 filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filings; 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 filings or in response to our comments on your filings.

You may contact Andrew Mew, Senior Staff Accountant, at (202) 551-3377 or Robert S. Littlepage, Jr., at (202) 551-3361 if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3810 with any other questions.

Sincerely,

/s/ Larry Spirgel
Assistant Director