



DIVISION OF
CORPORATION FINANCE
MAIL STOP 4628

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-4628

September 10, 2009

Mr. Richard Cowan, Chief Financial Officer
Cannabis Science, Inc.
6946 N. Academy Blvd., Suite B No. 254
Colorado Springs, CO 80918

Re: Cannabis Science, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2008
Filed April 15, 2009
Form 10-K/A for the Fiscal Year Ended December 31, 2008
Filed May 14, 2009
Form 10-Q for the Fiscal Quarter Ended March 31, 2009
Filed May 15, 2009
Form 10-Q for the Fiscal Quarter Ended June 30, 2009
Filed August 21, 2009
File No. 0-28911

Dear Mr. Cowan:

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 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, 2008

Consolidated Statements of Cash Flows, page F-7

1. Please explain the nature of the caption 'Shares to be issued' within the adjustment to reconcile net income (loss) to cash used in operating activities. Explain why you recorded \$5 million of cash inflows in fiscal year 2007 and \$5 million of cash outflows in fiscal year 2008.

Note 1 – Summary of Significant Accounting Policies, page F-8

2. Your disclosure indicates that you entered into an Asset Acquisition Agreement on June 6, 2008 with K&D to acquire additional leases in exchange for common stock and a Stock Purchase Agreement with South Beach Live to purchase 100% of the common shares of Curado Energy Partners, Inc ("Curado"). We note that you consolidated the operations Curado based on the consummation of these agreements. Please address the following comments with respect to your accounting:
 - Further clarify the consideration received and paid by all parties involved in this transaction.
 - Further explain the provisions that required you to grant South Beach concessions in the third quarter of fiscal year 2008 and to surrender the interest in Putnam "M" oil and gas lease and waive any claim on the shares of Curado common stock on October 6, 2008.
 - Tell us how you evaluated SFAS 94, paragraph 13.a, when determining that it was appropriate to consolidate Curado on June 6, 2008. In this respect, please clarify how you determined that you had control over Curado and it was not likely to be temporary.

Note 9 – Extinguishment of Debt, page F-16

3. We note from your disclosure here and from your consolidated statements of operations that you recorded a \$6.3 million gain on the extinguishment of liabilities. Your disclosure indicates that you voided the contracts related to two former directors which resulted in the extinguishment of debt. Please address the following comments with respect to your accounting:
 - Please further clarify how the debt to these two directors originated.
 - Explain how you evaluated and satisfied the criteria of paragraph 16 of SFAS 140 when determining that the liabilities due to the directors had been

extinguished. Explain how you determined that you have been legally released from debt.

- If you have satisfied the criteria of SFAS 140 to extinguish your debt, please clarify how you determined that it was appropriate to record the gain to the statement of operations. In this respect, since the debt was due to related party directors, the extinguishment of the debt should be recorded to equity as a capital transaction. We refer you to APB 26, paragraph 20, footnote 1.
- Explain why you have not reported the gain on the extinguishment of debt as an adjustment to reconcile net income (loss) to cash used in operating activities within your statement of cash flows for the year ended December 31, 2008.

Form 10-Q for the Fiscal Quarter Ended June 30, 2009

Consolidated Statement of Operations, page 4

4. We note the description of your business in footnote one, which states that you disposed of Curdo and its assets and that you have become a development stage company. Please clarify how you evaluated SFAS 144, paragraphs 41 through 44, when determining that you should not report your oil and gas operations as discontinued operations.

Notes to the Consolidated Financial Statements

Note 1 – Nature of Activities and Significant Accounting Policies, page 7

5. We note that you entered into an agreement on March 30, 2009 whereby you and your largest shareholder transferred 10.6 million shares of your common stock for the assets of Cannex Therapeutics. It appears from your disclosure that you accounted for this transaction as the acquisition of assets. Please tell us how you evaluated SFAS 141(R), paragraphs 4 and A4 through A9, when determining that the assets acquired did not constitute a business. Please provide your complete response, which address all aspects of this guidance.
6. If you determine that you did acquire a business, please tell us how you determined that you were the accounting acquirer. Please provide your complete analysis of paragraphs A10 through A15 of SFAS 141(R) which supports your conclusion.

7. If you determine that you did not acquire a business, please clarify how you measured the assets received. Please tell us how the measurement of the assets complies with paragraph D5 of SFAS 141(R) and APB 29.
8. Tell us and disclose your accounting policy for testing your intellectual property for impairment.

Exhibits 31.1 and 31.2

9. We note that paragraph 3 of the certifications required by Exchange Act Rule 13a-14(a) is intentionally omitted. We also note that you intentionally omitted this paragraph in your certifications filed in connection with your March 31, 2009 Form 10-Q. Please file an amendment to the Forms 10-Q that includes the entire periodic report and new, corrected certifications worded exactly as required by Regulation S-K Item 601(b)(31).

Closing Comments

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 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 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.

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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 Gary Newberry at (202) 551-3461, if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3461 with any other questions.

Sincerely,

Chris White
Branch Chief