



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 6010

December 3, 2007

VIA U.S. MAIL AND FAX (858) 410-4949

Mr. Robert Saltmarsh
Chief Financial Officer
Nanogen, Inc.
10398 Pacific Center Court
San Diego, California 92121

Re: Nanogen, Inc.
Form 10-K for the year ended December 31, 2006
Filed March 16, 2007
Form 10-Q for the quarter ended September 30, 2007
Filed November 9, 2007
File No. 000-23541

Dear Mr. Saltmarsh:

We have reviewed your filings 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 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 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 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 year ended December 31, 2006

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 35

Results of Operations, page 44

Cost and Expenses, page 46

1. We note that in December 2006, you determined that the inventory reserve as originally recorded exceeded the carrying value of the related inventory and as such, you reversed the reserve related to your first generation instrument by approximately \$0.8 million. Please tell us and revise your future filings to clearly disclose how your inventory valuation policies comply with SAB 100 and Chapter 4 of ARB 43.

Consolidated Statements of Cash Flows, page F-8

2. We note that the effect of exchange rate changes of \$(840,000), \$(58,000) for the years ended December 31, 2006 and 2005, respectively, is as same as your foreign currency translation adjustments on your consolidated statements of stockholders' equity in the corresponding years. Please note that a statement for cash flows of an enterprise with foreign currency transactions or foreign operations shall report the reporting currency equivalent of foreign currency *cash flows* using the exchange rates in effect at the time of the cash flows. Refer to paragraph 25 of SFAS 95 and please explain to us why the exchange rate changes on the consolidated statements of cash flows are same as the foreign currency translation adjustments on your consolidated statements of stockholders' equity. Please revise any future filings if necessary.

Note 1. Organization, page F-9

Variable Interest Entities, page F-9

3. We note that in a series of investments from July 2005 to June 2006 you purchased \$3.0 million in equity of Jurilab Ltd (Jurilab) and you determined that you are required to include Jurilab's assets and liabilities in your consolidated financial statements under FIN 46(R). You also stated that your maximum loss is limited to your \$3.0 million investment. Please respond to the following:
 - It is unclear to us how you accounted for noncontrolling interest of Jurilab. Paragraph 22 of FIN 46(R) states that after the initial measurement, the assets, the liabilities, and noncontrolling interests of a consolidated variable interest entity shall be accounted for in consolidated financial statements as if the entity were consolidated based on voting interests. Please explain to us in greater detail about

your process of consolidating Jurilab and specifically demonstrate to us (via references to the applicable sections of the literature that support your conclusions) how your accounting policy is compliant with the guidance in FIN 46(R).

- Please tell us how your statement that the maximum loss is limited to \$3.0 million is correct in light of the disclosures at page 12 of your September 30, 2007 Form 10-Q which indicate you recorded losses of \$5.8 million in excess of your initial \$3 million investment.
- In this regard, we note, “acquired capital deficit in variable interest entity” in the amount of \$(6,856,000) and \$(517,000) in 2006 and 2005, respectively on your consolidated statements of stockholders’ equity. Please explain to us the nature of these items and why your accounting for and presentation of them in your financial statements is appropriate, citing the accounting literature you relied upon to support your accounting.
- Finally, we see from disclosures in your September 30, 2007 Form 10-Q that an additional equity investment in July 2007 by a new investor resulted in a reconsideration of your position that you qualified as a primary beneficiary under FIN 46(R), that based on this reconsideration event you no longer believe you are a primary beneficiary and that you no longer consolidate Jurilab’s financial statements. Please explain to us in detail why consolidating Jurilab is no longer required under FIN 46(R) or other GAAP (via references to the applicable sections of the literature that support your conclusions).

Note 2. Summary of Significant Accounting Policies, page F-10

Goodwill and Other Intangible Assets, page F-11

4. We note that your goodwill has been subjected to annual review for *indicator of impairment* and, during your annual review of impairment in 2006 there were no material events or changes in circumstances to indicate that the carrying amount of your goodwill might not be recoverable.
- Please note that goodwill of a reporting unit shall be tested for impairment on an annual basis. Also note that goodwill of a reporting unit shall be tested for impairment between annual tests if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount. Refer to paragraphs 26 and 28 of SFAS 142. Further note that recognition and measurement of an impairment loss should be performed in accordance with paragraphs 19 – 22 of SFAS 142.

Please explain to us how your accounting policy is compliant with paragraph 26 and 28 and 19-22 of SFAS 142. Otherwise, please tell us the result of your goodwill impairment test in 2006 and revise your accounting policy disclosures in your future filings as necessary to address the concerns outlined in our comment.

Note 5. Commitments and Contingencies, page F-25

Assigned Royalty Interest, page F-25

5. We see that in September 2006 you entered into an agreement to assign certain rights associated with your Applied Biosystems, Inc. (“Applied Biosystems”) royalty agreement from the period of July 2006 through December 2011 to Drug Royalty Trust (“DRT”) for an upfront payment of \$20.0 million. We also see under the agreement, you have guaranteed minimum royalty payments from Applied Biosystems to DRT and note if the royalty payments fall below certain minimums in a given fiscal year, you are required to pay cash to DRT for the difference between the actual royalty payments from Applied Biosystems and the minimums. In addition, if royalty payments from Applied Biosystems are above certain thresholds for a given calendar year you will receive, in cash, a certain percentage of the amount above the threshold. Please tell us the business purpose for the referenced DRT transaction. Tell us and revise your future filings to disclose the actual or expected economic risks and benefits to you. Also, please explain to us and revise your future filings to disclose how you accounted for and presented this transaction in your financial statements, citing the accounting literature you relied upon to support your accounting.

Shares Reserved for Future Issuance, page F-32

6. We note that you have total of 2,157,042 warrants outstanding with various warrant holders at December 31, 2006. Please revise future filings to disclose the terms of these warrants as well as how you valued and accounted for them.

Form 10-Q for the Quarter Ended September 30, 2007

Condensed Consolidated Statements of Cash Flows, page 5

7. We note that you had proceeds from the conversion of restricted cash to cash in your investing activities. Please explain to us the nature and circumstances of this item and tell us why your classification of this item as investing activities is in accordance with GAAP. Please cite the accounting literature which you relied on to support your accounting.
8. We see you have cash flows from factoring receivables. Please tell us and revise future filings to disclose the nature of such transactions and your accounting policy for them. Please specifically address the impact of SFAS 140 on you in your response.

Notes to Consolidated Financial Statements, page 6

Note 3. Exit of Micro Array Business, page 10

9. Please explain to us the facts and circumstances about this exit plan in greater detail, tell us how you accounted for this plan and how your accounting is compliant with SFAS 146. Specifically tell us how SFAS 144 impacts your required accounting and disclosure for the transaction. Please revise your future filings as necessary to address our concerns.

As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter that keys your responses to our comments and provides any requested supplemental information. Detailed cover 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 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 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.

Mr. Robert Saltmarsh
Nanogen, Inc.
December 3, 2007
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You may contact Andri Boerman, Staff Accountant, at (202) 551-3645 or me at (202) 551-3603 if you have any questions regarding these comments. In this regard, do not hesitate to contact Angela Crane, Branch Chief, at (202) 551-3554.

Sincerely,

Jay Webb
Reviewing Accountant