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June 11, 2008

**VIA EDGAR AND
VIA FAX (202)772-9366**

Russell Mancuso, Esq.
Branch Chief
U.S. Securities and Exchange Commission
100 F Street, N.E.
Mail Stop 6010
Washington, DC 20549

Re: Neoprobe Corporation
Registration Statement on Form S-1
Filed May 5, 2008
File No. 333-150650

Dear Mr. Mancuso:

On behalf of Neoprobe Corporation ("Neoprobe" or the "Company"), we have filed simultaneously via EDGAR Amendment No. 1 (the "Amendment") to the above referenced registration statement (the "Registration Statement"), which amendment addresses comments contained in your May 30, 2008 letter to Brent L. Larson concerning the Registration Statement (the "Comment Letter"). We have also filed via EDGAR a version of the Registration Statement marked to show the changes made by the Amendment.

This letter is in response to the Comment Letter. For convenience of your review, we have repeated each of your comments in italics immediately above the corresponding response. References herein to the "Prospectus" are to the Prospectus included as part of the Amendment.

Fee Table

I. Please verify the accuracy of the fee calculation.

Response

We have recalculated the fee payable, and it appears that, due to rounding, the fee was underpaid by \$3.24. However, given the reduction in the number of shares registered (see the

response to comment 2 below), the amount of the fee payable is now less than the amount that was remitted.

Selling Stockholder, page 66.

2. *Given the nature and size of the transaction being registered, advise the staff of the company's basis for determining that the transaction is appropriately characterized as a transaction that is eligible to be made on a shelf basis under Rule 415(a)(1)(i).*

Response

Neoprobe sold to the selling stockholder two convertible notes (the Series A Note and the Series B Note) and two warrants (Series W Warrant and Series X Warrant), and agreed to file a registration statement registering the resale by the selling stockholder of the shares of common stock issuable on conversion or exercise of these securities, along with shares issuable in payment of interest on the Series A Note and Series B Note. However, the registration rights agreement was subsequently amended (see Exhibits 10.53 and 10.54 to the Registration Statement) to require the Company to register for resale only the number of shares issuable on conversion of the Series B Note or exercise of the Series W Warrant and Series X Warrant, as well as up to 3,500,000 shares that may be issued in payment of interest on the Series A Note and Series B Note, totaling 26,166,667 shares of common stock, in the aggregate. This is the number of shares included in the original Registration Statement. (see "Acquisition of Common Stock by Selling Stockholder," beginning at page 71 of the Prospectus).

In the Amendment, Neoprobe has reduced the number of shares covered by the registration to 22,088,094, which represents one-third of the shares held by stockholders other than officers, directors and affiliates of Neoprobe at the time of the transaction. (see "Acquisition of Common Stock by Selling Stockholder," Table 6 and note 2, at page 76 of the Prospectus). The Company believes that this is consistent with the Staff's recent positions on secondary offerings of securities issued in "PIPE" transactions under Rule 415. Further, the selling stockholder is not an "affiliate" of Neoprobe, so the offering is not a disguised primary offering, and therefore may be made "at the market" even though Neoprobe is not S-3 eligible. Consequently, the resales being registered under the Registration Statement are eligible to be made on a delayed or continuous basis in an "at the market" offering under Rule 415.

3. *Please provide us, with a view toward disclosure in the prospectus, with the total dollar value of the securities underlying the convertible note that you have registered for resale (using the number of underlying securities that you have registered for resale and the market price per share for those securities on the date of the sale of the convertible note).*
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Response

As noted in the response to comment 2, Neoprobe originally did not seek to register all of the shares of common stock issuable to selling stockholder in the subject transaction, excluding the shares of common stock issuable upon exercise of the Series A Note. Nonetheless, the following information with respect to both the Series A Note and Series B Note are provided in response to your comment.

The Series A Note was issued on December 26, 2007, in the principal amount of \$7,000,000. The selling shareholder may convert \$3,500,000 in principal amount of the Series A Note to common stock at a conversion price of \$0.26 per share. The closing market price per share of the Company's common stock on the date of issuance of the Series A Note was \$0.27 per share. Consequently, the total dollar value of the conversion shares underlying the Series A Note was \$3,634,615 ($(\$3,500,000 / \$0.26) \times \0.27).

The Series B Note was issued on April 16, 2006, in the principal amount of \$3,000,000. The entire principal balance of the Series B Note is convertible into shares of common stock at a conversion price of \$0.36 per share. The closing market price per share of the Company's common stock on the date of issuance of the Series B Note was \$0.52 per share. Consequently, the total dollar value of the conversion shares underlying the Series B Note was \$4,333,333 ($(\$3,000,000 / \$0.36) \times \0.52).

The foregoing information is included in the table referenced in the response to comment 5 below.

4. *Please provide us, with a view toward disclosure in the prospectus, with tabular disclosure of the dollar amount of each payment (including the value of any payments to be made in common stock) in connection with the transaction that you have made or may be required to make to the selling shareholder, any affiliate of a selling shareholder, or any person with whom any selling shareholder has a contractual relationship regarding the transaction (including any interest payments, liquidated damages, payments made to "finders" or "placement agents," and any other payments or potential payments). Please provide footnote disclosure of the terms of each such payment. Please do not include any repayment of principal on the convertible notes in this disclosure.*

Further, please provide us, with a view toward disclosure in the prospectus, with disclosure of the net proceeds to the issuer from the sale of the convertible notes and the total possible payments to the selling shareholder and any of its affiliates in the first year following the sale of convertible notes.

Response

Please see Tables 1 and 4 the accompanying text and footnotes in "Acquisition of Common Stock by Selling Stockholder" at pages 72 and 74 of the Prospectus, respectively.

5. *Please provide us, with a view toward disclosure in the prospectus, with tabular disclosure of:*

- *the total possible profit the selling shareholder could realize as a result of the conversion discount for the securities underlying the convertible note, presented in a table with the following information disclosed separately:*
 - *the market price per share of the securities underlying the convertible note on the date of sale of the convertible note;*
 - *the conversion price per share of the underlying securities on the date of the sale of the convertible note, calculated as follows:*
 - *if the conversion price per share is set at a fixed price, use the price per share established in the convertible note; and*
 - *if the conversion price per share is not set at a fixed price and , instead, is set at a floating rate in relationship to the market price of the underlying security, use the conversion discount rate and the market rate per share on the date of the sale of the convertible note and determine the conversion price per share as of that date;*
 - *the total possible shares underlying the convertible note (assuming no interest payments and complete conversion throughout the term of the note);*
 - *the combined market price of the total number of shares underlying the convertible note, calculated by using the market price per share on the date of the sale of the convertible note and the total possible shares underlying the convertible note;*
 - *the total possible shares the selling shareholder may receive and the combined conversion price of the total number of shares underlying the convertible note calculated by using the conversion price on the date of the sale of the convertible note and the total possible number of shares the selling shareholder may receive; and*
 - *the total possible discount to the market price as of the date of the sale of the convertible note, calculated by subtracting the total conversion price on the date of the sale of the convertible note from the combined market price of the total number of shares underlying the convertible note on that date.*

If there are provisions in the convertible note that could result in a change in the price per share upon the occurrence of certain events, please provide additional tabular disclosure as appropriate. For example, if the conversion price per share is fixed unless and until the market price falls below a stated price, at which point the conversion price per share drops to a lower price, please provide additional disclosure.

Response

Please see Table 2 and the accompanying text and footnotes in “Acquisition of Common Stock by Selling Stockholder” at page 73 of the Prospectus.

6. *Please provide us, with a view toward disclosure in the prospectus, with tabular disclosure of:*
- *the total possible profit to be realized as a result of any conversion discounts for securities underlying any other warrants, options, notes, or other securities of the issuer that are held by the selling shareholder or any affiliates of the selling shareholder, presented in a table with the following information disclosed separately:*
 - *market price per share of the underlying securities on the date of the sale of that other security;*
 - *the conversion/exercise price per share as of the date of the sale of that other security, calculated as follows:*
 - *if the conversion/exercise price per share is set at a fixed price, use the price per share on the date of the sale of that other security; and*
 - *if the conversion/exercise price per share is not set at a fixed price and, instead, is set at a floating rate in relationship to the market price of the underlying security, use the conversion/exercise discount rate and the market rate per share on the date of the sale of that other security and determine the conversion price per share as of that date;*
 - *the total possible shares to be received under the particular securities (assuming complete conversion/exercise);*
 - *the combined market price of the total number of underlying shares, calculated by using the market price per share on the date of the sale of that other security and the total possible shares to be received;*
 - *the total possible shares to be received and the combined conversion price of the total number of shares underlying that other security calculated by using the conversion price on the date of the sale of that other security and the total possible number of underlying shares; and*
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- *the total possible discount to the market price as of the date of the sale of that other security, calculated by subtracting the total conversion/exercise price on the date of the sale of that other security from the combined market price of the total number of underlying shares on that date.*

Response

Please see Table 3 and the accompanying text and footnotes in “Acquisition of Common Stock by Selling Stockholder” at page 74 of the Prospectus.

7. *Please provide us, with a view toward disclosure in the prospectus, with tabular disclosure of*
- *the gross proceeds paid or payable to the issuer in the convertible note transaction;*
 - *all payments that have been made or that may be required to be made by the issuer that are disclosed in response to comment 4;*
 - *the resulting net proceeds to the issuer; and*
 - *the combined total possible profit to be realized as a result of any conversion discounts regarding the securities underlying the convertible notes and any other warrants, options, notes, or other securities of the issuer that are held by the selling shareholder or any affiliates of the selling shareholder that is disclosed in response to comment 5 and comment 6.*

Further, please provide us, with a view toward disclosure in the prospectus, with disclosure — as a percentage — of the total amount of all possible payments as disclosed in response to comment 4 and the total possible discount to the market price of the shares underlying the convertible note as disclosed in response to comment 5 divided by the net proceeds to the issuer from the sale of the convertible notes, as well as the amount of that resulting percentage averaged over the term of the convertible notes.

Response

Please see Tables 4 and 5 and the accompanying text and footnotes in “Acquisition of Common Stock by Selling Stockholder” at pages 74-75 of the Prospectus.

8. *Please provide us, with a view toward disclosure in the prospectus, with tabular disclosure of all prior securities transactions between the issuer (or any of its predecessors) and the selling shareholder, any affiliates of the selling shareholders, or any person with whom any selling shareholder has a contractual relationship regarding the transaction (or any predecessors of those persons), with the table including the following information disclosed separately for each transaction:*
- *the date of the transaction;*
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- *the number of shares of the class of securities subject to the transaction that were outstanding prior to the transaction;*
- *the number of shares of the class of securities subject to the transaction that were outstanding prior to the transaction and held by persons other than the selling shareholder, affiliates of the company, or affiliates of the selling shareholder;*
- *the number of shares of the class of securities subject to the transaction that were issued or issuable in connection with the transaction;*
- *the percentage of total issued and outstanding securities that were issued or issuable in the transaction (assuming full issuance), with the percentage calculated by taking the number of shares issued or issuable in connection with the applicable transaction, and dividing that number by the number of shares issued and outstanding prior to the applicable transaction and held by persons other than the selling shareholder, affiliates of the company, or affiliates of the selling shareholder;*
- *the market price per share of the class of securities subject to the transaction immediately prior to the transaction; and*
- *the current market price per share of the class of securities subject to the transaction.*

Response

There were no such prior transactions with any of the persons described in the foregoing comment. See note 1 to Table 6 in "Acquisition of Common Stock by Selling Stockholder" at page 76 of the Prospectus.

9. *Please provide us, with a view toward disclosure in the prospectus, with tabular disclosure comparing:*
- *the number of shares outstanding prior to the convertible note transaction that are held by persons other than the selling shareholder, affiliates of the company, and affiliates of the selling shareholder;*
 - *the number of shares registered for resale by the selling shareholder or affiliates of the selling shareholder in prior registration statements;*
 - *the number of shares registered for resale by the selling shareholder or affiliates of the selling shareholder that continue to be held by the selling shareholder or affiliates of the selling shareholder;*
 - *the number of shares that have been sold in registered resale transactions by the selling shareholder or affiliates of the selling shareholder; and*
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- *the number of shares registered for resale on behalf of the selling shareholder or affiliates of the selling shareholder in the current transaction.*

In this analysis, the calculation of the number of outstanding shares should not include any securities underlying any outstanding convertible securities, options, or warrants.

Response

Please see Table 6 and the accompanying text and footnotes in “Acquisition of Common Stock by Selling Stockholder” at page 76 of the Prospectus.

10. *Please provide us, with a view toward disclosure in the prospectus, with the following information:*

- *whether the issuer has the intention, and a reasonable basis to believe that it will have the financial ability, to make any required payments on the overlying securities; and*
- *whether – based on information obtained from the selling shareholder – the selling shareholder has an existing short position in the company’s common stock and, if the selling shareholder has an existing short position in the company’s stock, the following additional information:*
 - *the date on which the selling shareholder entered into that short position; and*
 - *the relationship of the date on which the selling shareholder entered into that short position to the date of the announcement of the convertible note transaction and the filing of the registration statement (e.g., before or after the announcement of the convertible note transaction, before the filing or after the filing of the registration statement, etc.).*

Response

Neoprobe has the intention, and a reasonable basis to believe, that it will have the financial ability, to make any required payments on the overlying securities.

The selling stockholder has advised Neoprobe that it does not have an existing short position in the Company’s stock.

11. *Please provide us, with a view toward disclosure in the prospectus, with:*

- *a materially complete description of the relationships and arrangements that have existed in the past three years or are to be performed in the future between the issuer (or any of its predecessors) and the selling shareholder, any affiliates of the selling shareholder, or my person with whom any selling shareholder has a contractual relationship regarding the transaction (or any predecessors of those persons) — the*
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information provided should include, in reasonable detail, a complete description of the rights and obligations of the parties in connection with the sale of the convertible notes; and

- *copies of all agreements between the issuer (or any of its predecessors) and the selling shareholder, any affiliates of the selling shareholder, or any person with whom any selling shareholder has a contractual relationship regarding the transaction (or any predecessors of those persons) in connection with the sale of the convertible notes.*
- *If it is your view that such a description of the relationships and arrangements between and among those parties already is presented in the prospectus and that all agreements between and/or among those parties are included as exhibits to the registration statement, please provide us with confirmation of your view in this regard.*

Response

Neoprobe believes that all material relationships and arrangements with the selling stockholder have been presented in the prospectus and all material agreements have been included as exhibits to the registration statement. See “Acquisition of Common Stock by Selling Stockholder” at page 71 of the Prospectus.

12. *Please provide us, with a view toward disclosure in the prospectus, with a description of the method by which the company determined the number of shares it seeks to register in connection with this registration statement. In this regard, please ensure that the number of shares registered in the fee table is consistent with the shares listed in the “Selling Stockholder” section of the prospectus.*

Response

As noted in response to comment 2, the Company has by the Amendment reduced the number of shares included in the Registration Statement to 22,088,094, which was calculated by multiplying Neoprobe’s outstanding shares of common stock, less the number of shares held by stockholders other than officers, directors and affiliates of Neoprobe, by one-third. See Table 6 and the accompanying text and footnotes in “Acquisition of Common Stock by Selling Stockholder” at page 76 of the Prospectus.

13. *Please disclose the natural person or persons who exercises the sole or shared voting and/or dispositive power with respect to the shares offered.*

Response

The selling stockholder has advised the Company that Marc Nordlicht is the natural person who possesses voting and/or dispositive power with respect to the shares being

Russell Mancuso, Esq.
Securities and Exchange Commission
June 11, 2008
Page 10

offered. This is disclosed in note 3 to the table in "Selling Stockholder" at page 77 of the Prospectus.

14. *Please tell us whether the selling shareholder is a broker-dealer or an affiliate of a broker-dealer.*

Response

The selling stockholder has advised the Company that it is not a broker-dealer or an affiliate of a broker-dealer.

We trust that the foregoing response fully addresses the comments contained in your letter. However, in the event your review of this response prompts additional questions or comments, please contact the undersigned. If you have no further comments or questions, also please so advise the undersigned so that we may request acceleration of the effectiveness of the registration statement.

Very truly yours,

/s/ William J. Kelly, Jr.

William J. Kelly, Jr.

WJK
cc: Mr. Brent L. Larson