

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Schedule 13D
Under the Securities Exchange Act of 1934

Chembio Diagnostics Inc.
(Name of Issuer)

Common Stock, \$0.01 par value
(Title of Class of Securities)

89268C103
(CUSIP Number)

Avi Pelossof
3661 Horseblock Road
Medford, NY 11763
(Name, Address and Telephone Number of Person Authorized to Receive Notices
and Communications)

May 5, 2004
(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of Sections 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box [].

NOTE: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Section 240.13d-7(b) for other parties to whom copies are to be sent.

*The remainder of this cover page shall be filled out for the Reporting Person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

(1) Names of Reporting Persons and I.R.S. Identification Nos. of Such Persons (entities only)

Avi Pelossof

(2) Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

(3) SEC Use Only _____

(4) Source of Funds (See Instructions):

OO

(5) Check if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e)

N/A

(6) Citizenship or Place of Organization

United States

Number of Shares Beneficially Owned by Each Reporting Person with:	(7) Sole Voting Power:	498,911
	(8) Shared Voting Power:	0
	(9) Sole Dispositive Power:	498,911
	(10) Shared Dispositive Power:	0

(11) Aggregate Amount Beneficially Owned by Each Reporting Person:

498,911

(12) Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

☐

(13) Percent of Class Represented by Amount in Row (11):

6.4%

(14) Type of Reporting Person (See Instructions):

IN

Item 1. Security and Issuer.

Name and address of principal executive offices of Issuer:

Chembio Diagnostics, Inc.
3661 Horseblock Road
Medford, NY 11763

Title and class of equity securities:

Common Stock, \$0.01 par value (the “Common Stock”)

Item 2. Identity and Background.

(a) Name of person filing:

Avi Pelossof

(b) Residence or Business Address:

3661 Horseblock Road
Medford, NY 11763

(c) Principal occupation:

Vice President of Sales, Marketing, and Business Development of Chembio Diagnostics, Inc.

(d) Criminal proceedings:

During the last five years, Mr. Pelossof has not been convicted in any criminal proceeding.

(e) Civil Proceedings:

During the last five years, Mr. Pelossof has not been a party to any civil proceedings of a judicial or administrative body of competent jurisdiction as a result of which that person would have been subject to any judgment, decree or final order enjoining future violations of or prohibiting or mandating activities subject to Federal or State Securities laws or finding any violation with respect to such laws.

United States

Item 3. Source and Amount of Funds or Other Consideration.

On May 5, 2004, Trading Solutions.com, Inc. (the “Issuer”) acquired Chembio Diagnostic Systems Inc., a privately held corporation (“Chembio”), through a merger of a wholly owned subsidiary with and into Chembio. Pursuant to the terms of the merger, each stockholder of Chembio received shares of common stock of the Issuer in exchange for Chembio common stock owned. The Issuer also assumed all the outstanding warrants and options to acquire Chembio common stock. Each assumed warrant and option is now exercisable for shares of the Issuer’s common stock. Mr. Pelossof received 225,554 shares of the Issuer’s common stock in exchange for his Chembio common stock and received warrants to purchase 22,555 shares of the Issuer’s common stock and options to purchase 100,000 shares of the Issuer’s Common Stock in exchange for warrants and options, respectively, that he held of Chembio.

On May 5, 2004, the Issuer consummated a private offering of its 8% Series A Convertible Preferred Stock (together with warrants to purchase shares of its common stock) in exchange for certain indebtedness of Chembio that was previously outstanding. The conversion price at which such debt was exchanged into 8% Series A Convertible Preferred Stock (together with warrants to purchase shares of the Issuer’s common stock) was \$30,000 per share. Mr. Pelossof converted \$4,047.12 of Chembio indebtedness that he held prior to the merger into .202 shares Series A Convertible Preferred Stock (together with warrants to purchase 12,120 shares of common stock). The shares of Series A Convertible Preferred Stock held by Mr. Pelossof are convertible into 10,078 shares of the Issuer’s common stock. On November 15, 2004, as payment of accrued dividends on the Series A Convertible Preferred Stock, Mr. Pelossof received 403 shares of common stock. On May 14, 2005, as payment of accrued dividends on the Series A Convertible Preferred Stock, Mr. Pelossof received 399 shares of common stock.

On May 28, 2004, in connection with his employment, Mr. Pelossof was granted options to purchase 200,000 shares of the Issuer’s common stock. One-half of these options became exercisable on May 28, 2004, one-fourth of these options became exercisable on May 28, 2005, and one-fourth of these options become exercisable on May 28, 2006.

On May 17, 2005, in connection with his employment, Mr. Pelossof was granted options to purchase 50,000 shares of the Issuer’s common stock, one-half of which become exercisable on January 1, 2006, and one-half become exercisable on January 1, 2007.

Mr. Pelossof’s beneficial ownership of 498,911 shares of the Issuer’s common stock does not include 100,000 shares issuable upon the exercise of options that are not exercisable within the next 60 days. In addition, it does not include 10,078 shares issuable upon the conversion of the Series A Convertible Preferred Stock and 12,095 shares issuable upon the exercise of certain warrants because of restrictions preventing Mr. Pelossof from converting any shares of Series A Convertible Preferred Stock, or exercising those warrants, if such conversion or exercise would result in Mr. Pelossof beneficially owning in excess of 4.99% of the then issued and outstanding shares of the Issuer’s common stock.

Item 4. Purpose of the Transaction.

Mr. Pelessof does not have any plans or proposals that relates to or would result in any of the actions enumerated in Item 4 of Schedule 13D.

Item 5. Interests in Securities of the Issuer.

- (a) Mr. Pelessof, after accounting for all options and warrants presently exercisable, beneficially owns 498,911 shares of the Issuer's common stock comprising approximately 6.4% of the outstanding shares of common stock of the Issuer's.

Mr. Pelessof's beneficial ownership of 498,911 shares of common stock does not include 100,000 shares issuable upon the exercise of options that are not exercisable within the next 60 days. In addition, it does not include 10,078 shares issuable upon the conversion of the Series A Convertible Preferred Stock and 12,095 shares issuable upon the exercise of certain warrants because of restrictions preventing Mr. Pelessof from converting any shares of Series A Convertible Preferred Stock, or exercising those warrants, if such conversion or exercising would result in Mr. Pelessof beneficially owning in excess of 4.99% of the then issued and outstanding shares of the Issuer's common stock.

- (b) Mr. Pelessof has sole voting and dispositive powers with respect to all shares of the Issuer's common stock held in his own name.

- (c) On May 14, 2005, as payment of accrued dividends on the Series A Convertible Preferred Stock, Mr. Pelessof received 399 shares of common stock.

On May 17, 2005, in connection with his employment, Mr. Pelossof was granted options to purchase 50,000 shares of the Issuer's common stock for \$0.80 per share, one-half of which become exercisable on January 1, 2006, and one-half become exercisable on January 1, 2007.

On May 28, 2005, options to purchase 50,000 shares of the Issuer's common stock for \$0.90 per share, which were granted on May 28, 2004, became exercisable.

- (d) Rights with respect to dividends or sales proceeds:

N/A

- (e) Date of cessation of five percent beneficial ownership:

N/A

Item 6. Contracts, Arrangements, Understandings or Relationships With Respect to Securities of the Issuer.

In connection with the offering of the Series A Convertible Preferred Stock, Mr. Pelessof entered into a Lockup Agreement pursuant to which he agreed not to sell any shares of the Issuer's common stock until six (6) months after a registration statement registering the resale of such shares of common stock was declared effective. During the subsequent six (6) month period, this contractual provision was eliminated with respect to twenty percent (20%) of the shares of common stock that he owns. After twelve (12) months following the effectiveness of the registration statement, he will be not be subject to any contractual restrictions on the transfer of his shares of common stock. The registration statement was declared effective on November 4, 2004.

Item 7. Material to be Filed as Exhibits.

Agreement and Plan of Merger dated as March 3, 2004 (the "Merger Agreement"), by and among the Issuer, New Trading Solutions, Inc. ("Merger Sub") and Chembio (1)

Amendment No. 1 to the Merger Agreement dated as May 1, 2004, by and among the Issuer, Merger Sub and Chembio (1)

Certificate of Designation of the Relative Rights and Preferences of the Series A Convertible Preferred Stock of the Issuer (1)

Registration Rights Agreement, dated as of May 5, 2004, by and among the Issuer and the Purchasers listed therein (1)

Lock-Up Agreement, dated as of May 5, 2004, by and among the Issuer and the shareholders of the Issuer listed therein (1)

Form of Common Stock Warrant issued pursuant to the Stock and Warrant Purchase Agreement (1)

Series A Convertible Preferred Stock and Warrant Purchase Agreement (the "Stock and Warrant Purchase Agreement"), dated as of May 5, 2004, by and among the Issuer and the Purchasers listed therein (1)

(1) Incorporated by reference to the Issuer's Current Report on Form 8-K filed with the Commission on May 14, 2004.

SIGNATURE

After reasonable inquiry and to the best of the Reporting Person's knowledge and belief, the Reporting Person certifies that the information set forth in this statement is true, complete and correct.

Date: June 3, 2005

/s/ Avi Pelessof

Avi Pelessof, Individually