
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-KSB

ANNUAL REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the Fiscal Year Ended December 31, 2004

TRANSITION REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission file number: 001-13467

COMMONWEALTH BIOTECHNOLOGIES, INC.

(Name of small business issuer in its charter)

Virginia
(State or other jurisdiction of
incorporation or organization)

54-1641133
(I.R.S. Employer Identification No.)

601 Biotech Drive
Richmond, Virginia 23235
(Address of principal executive offices) (Zip Code)

Issuer's telephone number: (804) 648-3820

Securities registered pursuant to Section 12(b) of the Act:
Common Stock, without par value per share
NASDAQ SmallCap Market

Securities registered pursuant to Section 12(g) of the Act:
None

Check whether the issuer (1) filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the past 12 months (or for such shorter period that the issuer was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Check if there is no disclosure of delinquent filers in response to Item 405 of Regulation S-B contained in this form, and no disclosure will be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-KSB or any amendment to this Form 10-KSB .

The issuer's revenues for the year ended December 31, 2004 were \$ 5,748,704.

The aggregate market value of the shares of common stock, without par value ("Common Stock"), of the registrant held by non-affiliates on March 21, 2005 was approximately \$1,181,991 based on the closing sales price of the shares of \$ 4.22 per share, as reported on the NASDAQ Market on March 21, 2005.

As of March 21, 2005, there were 3,203,556 shares of Common Stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement for its Annual Meeting of Shareholders to be held on May 20, 2005 are incorporated by reference into Part III of this Form 10-KSB.

Portions of the registrant's 2004 Annual Report to Shareholders are incorporated by reference into Part II of this Form 10-KSB.

Transitional Small Business Disclosure Format (check one:) Yes No .

PART I

Item 1. Description of Business.

Overview

Commonwealth Biotechnologies, Inc. (the “Company” or “CBI”) was founded in 1992 to provide sophisticated research and development support services in the life sciences on a contract basis to private companies, academic institutions and government agencies. In each of these areas, the Company provides sophisticated macromolecular synthetic and analytical services, integrating individual platform technologies so as to provide a comprehensive approach to solving complex problems in life science research.

The Company provides these services to customers on a contract basis and derives its revenues from these services, and not only from sales of commercial products resulting from the research. This arrangement distinguishes the Company from many other biotechnology companies in that the Company’s revenues are not derived from successful commercialization of a new biotechnology product. The Company has developed a strong reputation as a leading provider of biotechnology research and development analytical services and in particular, has positioned itself as a leading provider of fundamental programs as they relate to bio-defense. The Company is focusing its expansion efforts on increasing its long-term relationships with customers in the private sector biotechnology companies, in major pharmaceutical companies, and in comprehensive government programs. The Company continues to keep pace with new technologies and is able to offer these new services to its customers. In particular, the Company is focused on providing its technology offerings under strict Good Laboratory Practices “GLP” guidelines, which makes the Company very attractive to those entities, which require assurance that the work done is of the highest quality possible.

The Company’s approach to providing services is called “Concept-to-Clinic” and is the key to CBI’s continued success. It defines the approach taken with all clients – design, development, implementation and testing. Whether the client is a start-up company with research and development needs, or an established firm wishing to move a product through clinical regulation, CBI stands ready as partner of choice to provide the required services that ensures success. The use of Concept-to-Clinic is evidenced in the broad array of services CBI offers its clients.

Growth Strategy

On December 16, 2004, the Company purchased the assets of Fairfax Identity Labs, “FIL”, a division of Genetics and In-Vitro Fertilization Institute and their operations were moved to the corporate office in Richmond, VA. The principal focus of the purchase was to increase the revenue base of private paternity, contract paternity testing, and forensic DNA analysis. There has been a significant increase in the number of private paternity cases implemented at the Company and in the number of molecular diagnostic assays performed.

The Company is vigorously pursuing revenue opportunities in four principal focus areas: bio-defense; laboratory support services for on-going clinical trials; comprehensive contract projects in the private sector; paternity testing, forensic case-work analysis and CODIS (Combined DNA Index System) work through it’s FIL division. While the majority of the Company’s customers are in the private sector, the bulk of the Company’s revenues (about 71%) in 2004 were derived from government contracts, and in particular, from government contracts dealing with bio-defense related matters. Results derived by the Company are used by others to support their own compliance filings, to further their own in-house research efforts, to implement new assay technologies, and the like.

In all its core focus areas, the Company is continuing to grow its contract base. With regard to government contracts, the Company acts as both prime and subcontractor to numerous federal agencies. More often than not, the Company is the prime (if not the only) contractor performing clinical laboratory or comprehensive contracts for its private sector clients. The Company is moving towards equalizing revenues from the private sector and the government sector. To this end, the Company formed an exclusive alliance with Fisher Scientific, LLC, Pittsburgh, PA with the principle objective of using the Fisher sales force to promote CBI's platform technologies with private sector companies. The Fisher/CBI alliance was officially launched in October, 2004.

The Company also derives revenues from genetic identity and clinical services. The Company designed and implemented molecular diagnostic assays for the presence of DNA attributable to the various human herpes viruses. This platform technology is being used to serve individual patients across the country and in support of an on-going clinical study with a new anti-viral therapeutic. The Company has grown its molecular diagnostic platform in several other critical areas and its services are being used in support of still other on-going clinical trials and in support of fundamental research and development programs for its clients.

The Company's customers provide repeat business to the Company. The Company views commercial and government contracts as its most important sources of revenue and for this reason, has moved away from concept of "piece work" for individual investigators. With all its contracts, revenues are generally recognized as services are rendered or as products are delivered. In some instances, revenue is also recognized with performance-based installments payable over the contract as milestones are achieved.

Other areas for the Company's growth include:

- Laboratory Services in Support of Vaccine Development. The Company believes that there is a continuing need for GLP rated facilities to perform validated assay work on experimental vaccines targeting select agent pathogens. CBI is currently performing such work under long-term contracts to different industry clients and has expanded its technical and compliance capabilities in this area.
- Microbiology. Working individually or teamed with industry partners, CBI offers traditional and cutting edge microbiological analyses. Current clients include those looking to confirm the presence of suspected pathogens in suspicious powders. CBI also is consulting with major food providers to put in place rapid and meaningful assays and surveys for food borne pathogens.
- Genomics/Proteomics. As the DNA make-up of individual organisms (including humans) is unveiled, CBI is able to help identify and characterize the proteins that make up the "proteome" encoded by the DNA. The Company believes that its genomics and proteomics capabilities are well recognized and has received to contracts from non-profit private organizations "IITRI" and from the National Institutes of Health in pursuit of these kinds of studies. CBI specializes at developing novel mass spectral methods for characterization of organismal proteomes.
- DNA Reference Lab Activities. Through its FIL division, CBI has greatly expanded and enhanced its capabilities in this area, where chain-of-custody and accurate analyses are absolute requisites. In addition to paternity testing, CBI offers analysis of forensic samples, Y-chromosome STR analysis, to help clearly distinguish the male contributor in a mixed DNA sample, genetic and CODIS (Combined DNA Index System) analyses, mitochondrial DNA sequence analysis, to help identify a suspect individual by direct comparison with a maternally related individual, specimen matching and ID Personal DNA Profiling. In this last technology area, termed "CID" for "Confidential Identity," a client is provided with a DNA profile sufficient to serve as the basis of identification in case of tragedy.

Regulatory Compliance

The Company is registered under the Clinical Laboratories Improvement Act "CLIA" that enables the Company to accept human samples for analysis and to perform analysis of human clinical samples for the presence of known genetic markers.

The Company is also accredited under the guidelines of the National Forensic Science Technology Center, "NFSTC", to perform DNA identity testing for submission of data into the CODIS data base, and is one of a select few commercial facilities nationwide accredited by the NFSTC to perform criminal (felony) DNA database testing for submission into the FBI CODIS database.

The American Association of Blood Banks "AABB" accredits the Company, and the Company has participated in a validation study through the College of American Pathologists "CAP". Accreditation by the AABB enables the Company to perform paternity testing on private and public cases.

The Company is also accredited by the Centers for Disease Control to receive and handle select agents. The Company operates and maintains an accredited Biosafety level 3 facility which houses bacteriology and virology laboratories.

The Company operates under strict Good Laboratory Practices "GLP" guidelines and has been successfully audited by a number of private companies and governmental agencies.

Analytical Support Services

The Company is a fee-for-service contractor offering integrated programs that span the gamut of state-of-the-art life sciences investigations. Typically, the Company takes no ownership position in the intellectual property rights resulting from services it performs under contract for its customers. Since commencing operations, the Company has become noted for providing a wide range of services relating to design, synthesis, purification, and analysis of peptides, proteins, and oligonucleotides and in creating unique assay and detection methods.

CBI's competitive edge resides in its ability to provide a wide range of services in fully integrated research programs. There are few major competitors, which offer integrated DNA/RNA and protein/peptide technologies and none that offer these technologies combined with sophisticated biophysical analytical techniques, such as calorimetry, spectroscopy, and mass spectral analysis. Thus, the Company can provide complete research programs to its customers. "One stop biotechnology shopping" has proved attractive in securing long-term contracts with customers ranging from major pharmaceutical industry researchers to major government sponsors of research, including agencies of the Department of Defense.

The services offered by the Company are fully detailed in its promotional brochures, and on its World Wide Web page. The Company offers "fax-on-demand" for customers who seek technology descriptions and pricing information.

Customers

CBI re-defined its client base to focus on long-term project goals, rather than on individual orders for selected technologies. CBI's clients are from private companies, academic institutions and government agencies across the globe. Whether the client is a start-up company with research and development needs, or an established firm wishing to move a product through the regulatory process, CBI stands ready as partner of choice to provide the required services that ensure success.

Over the years, CBI has re-priced its platform technologies to maintain its margins while maintaining its competitive edge. In several instances, CBI ceased to offer a technology service when it became clear that the price needed to pay its overhead and maintain its margin made CBI non-competitive in the market place. CBI management continuously reviews its pricing policies.

Proprietary Research and Development

CBI has developed its own intellectual properties that could potentially add a significant revenue stream to the Company when they are fully commercialized. However, CBI is focused entirely on its core competencies and as such, has more or less abandoned development of intellectual properties. CBI's focus with regard to its patent portfolio is to find third party licensees who can fully exploit a product's potential.

The Company takes appropriate steps to protect its intellectual property rights and those of its customers. The Company's practice is to require its employees and consultants to execute non-disclosure and proprietary rights agreements upon commencement of employment or consulting arrangements with the Company. These agreements acknowledge the Company's exclusive ownership of all intellectual property developed by the individual during the course of his work with the Company and require that all proprietary information disclosed to the individual by the Company or its customers remain confidential.

Marketing

The Company has expanded its customer base primarily through word-of-mouth referrals, attendance at a limited number of trade shows, seminars, and on-site meetings with decision makers. Because of its ability to offer a wide range of biotechnology research services, the Company enjoys a favorable reputation among its customers, and many new customers come to the Company by word-of-mouth recommendation. The Company has constructed its own World Wide Web Home Page (www.cbi-biotech.com) and is listed with several bio-technical and biomedical oriented sites on the World Wide Web.

The Company has developed a marketing plan which addresses several key issues, including;

- **New web-based initiatives:**

The CBI web page is being re-designed to make it more user friendly and easier to navigate. New web sites will promote the forensics capabilities at CBI, and the herpes virus testing platform web page will be upgraded. CBI's web site prominence will be enhanced through search engine optimization, and finally, the Company is planning on providing periodic, information-based newsletters.

- **A refocus of the Company's media efforts:**

The Company will update and re-vamp its technical brochures, promotional pieces, and trade show booth presentations. Individual sales flyers will be distributed which detail the specific technologies available through CBI. The new trade sale booth is being designed to be versatile enough to serve our diverse client base.

Human Resources

The Company currently has 52 full time employees including 5 employees in administration; 5 in marketing, sales, and/or customer relations; 1 computer network specialist; and 41 employees in laboratory operations. 11 of the Company's employees hold doctorate degrees, and 7 have master's degrees. None of the Company's employees are represented by a labor union. The Company has experienced no work stoppages and believes its relations with its employees to be good.

Competition

The Company faces several types of competition, but the Company believes that there are fewer than 5 companies which can be considered direct competitors across multiple technologies. However, there are virtually no other companies which offer the breadth of CBI's services, especially with regard to its expertise in bio-defense related work.

Government Regulation

The Company does not require government regulatory approvals to provide its current services. Numerous federal, state and local agencies, such as environmental, working condition and other similar regulators, have jurisdiction to take action that could have a material adverse effect upon the Company's ability to do business. The Company believes that it is in general compliance with existing federal, state and local laws and regulations and does not anticipate that continuing compliance will have any material effect upon the capital expenditures, earnings or competitive position of the Company.

The Company anticipates that its pursuit of its growth strategy will subject the Company to a heightened level of government regulation of its operations. For example, in pursuing opportunities to provide analytical services to customers seeking the approval of the United States Food and Drug Administration "FDA" of products, the Company's operations will become subject to compliance with standards established by the FDA, including inspections by the FDA and other federal, state and local agencies regarding work performed by the Company on specific FDA submission projects. If significant violations are discovered during an inspection, the Company may be restricted from undertaking additional work on projects until the violations are remedied. The Company has a license from the Nuclear Regulatory Commission "NRC" for conduct of work involving radio-nuclides and operates a BSL3 facility under accreditation from the Centers for Disease Control.

Item 2. Description of Property.**Facilities**

Construction of the Company's present facility was completed in November 1998 at an overall cost of approximately \$ 5.1 million financed primarily through the Virginia Small Business Financing Authority "VSBFA" that issued \$ 4,000,000 in tax-exempt industrial revenue bonds "IRBs" for the benefit of the Company. On November 17 2004, the Company redeemed the IRBs for a conventional note payable to a bank. The note matures in November 2009, with monthly payments of \$25,347 of principal and interest at 5.25%.

The Company's facility, located in Richmond, VA, encompasses 32,000 square feet of state-of-the-art laboratory and administrative space. The building is designed to facilitate movement of samples throughout each laboratory, and where necessary, to maintain and ensure custody of samples. The building houses expansion space, which was purposefully left undeveloped to accommodate new technologies as they come on board. The Company took possession of its current facility in late November 1998, and all labs were fully operational in the facility by mid December 1998. The Company believes that the facility is adequately insured.

Item 3. Legal Proceedings.

The Company is not subject to any pending legal proceeding required to be disclosed.

Item 4. Submission of Matters to a Vote of Security Holders.

No matter was submitted to a vote of security holders in the fourth fiscal quarter of 2004.

PART II

Item 5. Market for Common Equity and Related Stockholder Matters.

The information set forth on page 5 the Company's 2004 Annual Report to Shareholders under the caption "Market for Common Equity" is incorporated herein by reference.

The following table provides information about our equity compensation plans as of December 31, 2004.

	a Number of securities to be issued upon exercise of outstanding options, warrants and rights	b Weighted-average exercise price of outstanding options, warrants and rights	c Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Plan Category			
Equity compensation plans approved by security holders	855,153	\$ 6.34	184,847
Equity compensation plans not approved by security holders	0	0	0
Total	855,153	\$ 6.34	184,847

Item 6. Management's Discussion and Analysis or Plan of Operation

The information set forth on pages 11 through 21 of the Company's 2004 Annual Report to Shareholders under the caption "Management's Discussion and Analysis of Financial Condition and Results of Operations" is incorporated herein by reference.

Item 7. Financial Statements.

The Company's financial statements and the related notes thereto, together with the report of BDO Seidman LLP for 2004 and 2003, set forth on pages 23 through 39 of the Company's 2004 Annual Report to Shareholders are incorporated herein by reference.

Item 8. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

The Company is not presently involved in any disagreements with its independent auditors on accounting financial disclosures.

Item 8A. Controls and Procedures.

The Company maintains a system of controls and procedures designed to provide reasonable assurance as to the reliability of the financial statements and other disclosures included in this report, as well as to safeguard assets from unauthorized use or disposition. The Company evaluated the effectiveness of its disclosure controls and procedures (as defined in Rule 13a-14(c) and Rule 15a-14(c) under the Securities Exchange Act of 1934) under the supervision and with the participation of management, including the Company's Chief Executive Officer and Controller, within 90 days prior to the filing date of this report. Based upon that evaluation, the Company's Chief Executive Officer and Controller concluded that the Company's disclosure controls and procedures are effective in timely alerting them to information required to be included in the Company's periodic Securities and Exchange Commission filings. There were no significant changes in the Company's internal controls or in other factor that could significantly affect these controls subsequent to the date of their evaluation.

Item 8B Other Information.

The Company has previously reported all information required to be disclosed during the fourth quarter of 2004 in a report on Form 8-K.

PART III

**Item 9. Directors, Executive Officers, Promoters and Control Persons;
Compliance with Section 16(a) of the Exchange Act.**

Directors

The information relating to the directors of the Company set forth in the Company's definitive proxy statement relating to the Company's Annual Meeting of Shareholders to be held on May 21, 2005 (the "Proxy Statement") under the caption proposal one is incorporated herein by reference.

Executive Officers

The information relating to the executive officers of the Company set forth in the Proxy Statement under the caption "Management-Business History of Executive Officers" is incorporated herein by reference.

Compliance with Section 16(a) of the Securities Exchange Act of 1934

The information relating to compliance with Section 16(a) of the Securities Exchange Act of 1934, as amended, set forth in the Proxy Statement under the caption Section 16(a) Beneficial Ownership Reporting Compliance is incorporated herein by reference.

Code of Conduct

The information relating to the Company's Code of Conduct is set forth in the Proxy Statement under the caption "Code of Conduct" is incorporated herein by reference.

Item 10. Executive Compensation.

The information set forth in the Proxy Statement under the caption "Executive Compensation" is incorporated herein by reference.

Item 11. Security Ownership of Certain Beneficial Owners and Management

The information set forth in the Proxy Statement under the caption "Security ownership of Certain Beneficial owners and Management" is incorporated herein by reference.

Item 12. Certain Relationships and Related Transactions

Not applicable.

Item 13. Exhibits**(a) Exhibits**

<u>Exhibit Number</u>	<u>Description of Exhibit</u>
3.1	Amended and Restated Articles of Incorporation (1)
3.2	Second Amended and Restated Bylaws (6)
4.1	Form of Common Stock Certificate (1)
10.1	Placement Agreement by and between the Company and Anderson & Strudwick, Incorporated ("A&S") (1)
10.2	Warrant Agreement between the Company and A&S (1)
10.3	Warrant Agreement between the Company and Richard J. Freer, as amended (1)
10.4	Warrant Agreement between the Company and Thomas R. Reynolds, as amended (1)
10.5	Warrant Agreement between the Company and Robert B. Harris, as amended (1)
10.6	Employment Agreement for Richard J. Freer (2)
10.7	First Amended and Restated Employment Agreement for Thomas R. Reynolds (2)
10.8	First Amended and Restated Employment Agreement for Robert B. Harris (3)
10.9	Executive Severance Agreement for Richard J. Freer (1)
10.10	1997 Stock Incentive Plan, as amended (1)
10.11	2000 Stock Incentive Plan (4)
10.12	2002 Stock Incentive Plan (5)
13.1	Annual Report to Shareholders for the Fiscal Year Ended December 31, 2004 incorporated in Form 10-KSB (6)
23.1	Letter of Consent from BDO Seidman LLP (6)
31.1	Certification of Robert B. Harris, Ph.D. (6)
31.2	Certification of James H. Brennan (6)
32.1	Section 906 Certification of Robert B. Harris, Ph.D. (6)
32.2	Section 906 Certification of James H. Brennan (6)

- (1) Incorporated by reference to the Company's Registration Statement on Form SB-2, Registration No. 333-31731.
- (2) Incorporated by reference to the Company's Current Report on Form 8-K, dated February 10, 2005, File No. 001-13467.
- (3) Incorporated by reference to the Company's Current Report on Form 8-K dated February 8, 2005, File No. 001-13467.
- (4) Incorporated by reference to the Company's Registration Statement on Form S-8, Registration No. 333-51074.

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- (5) Incorporated by reference to the Company's Registration Statement on Form S-8, Registration No. 333-102368.
 - (6) Filed herewith.

Executive Compensation Plans and Arrangements

The following is a list of all executive compensation plans and arrangements filed as exhibits to this annual report on Form 10-KSB or incorporated herein by reference:

- 1. Warrant Agreement between the Company and Richard J. Freer, as amended (1)
- 2. Warrant Agreement between the Company and Thomas R. Reynolds, as amended (1)
- 3. Warrant Agreement between the Company and Robert B. Harris, as amended (1)
- 4. Employment Agreement between the Company and Richard J. Freer (1)
- 5. First Amended and Restated Employment Agreement between the Company and Thomas R. Reynolds (2)
- 6. First Amended and Restated Employment Agreement between the Company and Robert B. Harris (3)
- 7. Executive Severance Agreement between the Company and Richard J. Freer (1)
- 8. 1997 Stock Incentive Plan (1)
- 9. 2000 Stock Incentive Plan (4)
- 10. 2002 Stock Incentive Plan (5)

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- (1) Previously filed as an exhibit to the Company's Registration Statement on Form SB-2, Registration No. 333-31731, and incorporated by reference herein.
 - (2) Incorporated by reference to the Company's Current Report on Form 8-K dated February 10, 2005, File No. 001-13467.
 - (3) Incorporated by reference to the Company's Current Report on Form 8-K dated February 8, 2005 File No. 001-13467
 - (4) Previously filed as an exhibit to the Company's Registration Statement on Form S-8, Registration No. 333-116583, and incorporated by reference herein.
 - (5) Previously filed as an exhibit to the Company's Registration Statement on Form S-8, Registration No. 333-102368, and incorporated by reference herein.

Item 14. Principal Accountant Fees and Services

The information set forth in the Proxy Statement under the caption "Appointment of Independent Registered Public Accountants" is incorporated herein by reference.

SIGNATURES

In accordance with Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

COMMONWEALTH BIOTECHNOLOGIES, INC.

Date: March 30, 2005

By: /s/ Robert B. Harris, Ph.D.
Robert B. Harris, Ph.D.
President

In accordance with the Exchange Act, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>Name</u>	<u>Title(s)</u>	<u>Date</u>
<u>/s/ Richard J. Freer, Ph.D.</u> Richard J. Freer, Ph.D.	Chairman, COO and Director (Principal Executive Officer)	March 30, 2005
<u>/s/ Robert B. Harris, Ph.D.</u> Robert B. Harris, Ph.D.	President, CEO and Director	March 30, 2005
<u>/s/ Thomas R. Reynolds</u> Thomas R. Reynolds	Executive Vice President, Secretary and Director	March 30, 2005
<u>/s/ James H. Brennan</u> James H. Brennan	Controller (Principal Financial and Accounting Officer)	March 30, 2005
<u>/s/ James P. Causey</u> James P. Causey	Director	March 30, 2005
<u>/s/ Samuel P. Sears, Jr.</u> Samuel P. Sears, Jr.	Director	March 30, 2005
<u>/s/ Gerald P. Krueger PhD.</u> Gerald P. Krueger PhD.	Director	March 30, 2005
<u>/s/ Dr. Donald McAfee</u> Dr. Donald McAfee	Director	March 30, 2005
<u>/s/ Peter C. Einselen</u> Peter C. Einselen	Director	March 30, 2005

COMMONWEALTH BIOTECHNOLOGIES, INC.
SECOND AMENDED AND RESTATED BYLAWS

ARTICLE I

Meeting of Shareholders

Section 1. Places of Meetings. All meetings of the shareholders shall be held at such place, either within or without the State of Virginia, as may, from time to time, be fixed by the Board of Directors.

Section 2. Annual Meetings. The annual meeting of the shareholders, for the election of directors and transaction of such other business as may come before the meeting, shall be held in each year on the second Thursday in March, or on such other date and at such other time as the Board of Directors of the Corporation may designate from time to time.

Section 3. Special Meetings. Special meetings of shareholders for any purpose or purposes may be called at any time by the Chairman of the Board, by at least three (3) members of the Board of Directors or by the President. At a special meeting no business shall be transacted and no corporate action shall be taken other than that stated in the notice of the meeting.

Section 4. Meetings of Shareholders. Except as otherwise required by law, written or printed notice stating the place, day and hour of every meeting of the shareholders and, in case of a special meeting, the purpose or purposes for which the meeting is called, shall be mailed not less than ten (10) nor more than sixty (60) days before the date of the meeting to each shareholder of record entitled to vote at such meeting, at his address which appears in the share transfer books of the Corporation. Meetings may be held without notice if all the shareholders entitled to vote at the meeting are present in person or by proxy or if notice is waived in writing by those not present, either before or after the meeting.

Section 5. Quorum. Except as otherwise required by the Articles of Incorporation, any number of shareholders together holding at least a majority of the outstanding shares of capital stock entitled to vote with respect to the business to be transacted, who shall be present in person or represented by proxy at any meeting duly called, shall constitute a quorum for the transaction of business. If less than a quorum shall be in attendance at the time for which a meeting shall have been called, the meeting may be adjourned from time to time by a majority of the shareholders present or represented by proxy without notice other than by announcement at the meeting.

Section 6. Voting. At any meeting of the shareholders, each shareholder of a class entitled to vote on the matters coming before the meeting shall have one vote, in person or by proxy, for each share of capital stock standing in his or her name on the books of the Corporation at the time of such meeting or on any date fixed by the Board of Directors not more than seventy (70) days prior to the meeting. Every proxy shall be in writing, dated and signed by the shareholder entitled to vote or his duly authorized attorney-in-fact.

Section 7. Voting List. The officer or agent having charge of the stock transfer books for shares of the Corporation shall make, at least ten (10) days before each meeting of shareholders, a complete list of the shareholders entitled to vote at such meeting or any adjournment thereof, with the address of and the number of shares held by each. Such list, for a period of ten (10) days prior to such meeting, shall be kept on file at the registered office of the Corporation or at its principal place of business or at the office of its transfer agent or registrar and shall be subject to inspection by any shareholder at any time during usual business hours. Such list shall also be produced and kept open at the time and place of the meeting and shall be subject to the inspection of any shareholder during the whole time of the meeting. The original stock transfer books shall be prima facie evidence as to who are the shareholders entitled to examine such list or transfer books or to vote at any meeting of shareholders. If the requirements of this Section 7 have not been substantially complied with, the meeting shall, on the demand of any shareholder in person or by proxy, be adjourned until the requirements are complied with. Section 8. Shareholder Proposals. To be properly brought before an annual meeting of shareholders, business must be (i) specified in the notice of meeting (or any supplement thereto) given by or at the direction of the Board of Directors, (ii) otherwise properly brought before the meeting by or at the direction of the Board of Directors, or (iii) otherwise properly brought before the meeting by a shareholder. In addition to any other applicable requirements, for business to be properly brought before an annual meeting by a shareholder, the shareholder must have given timely notice thereof in writing to the Secretary of the Corporation. To be timely, a shareholder's notice must be given, either by personal delivery or by United States mail, postage prepaid, to the Secretary of the Corporation not later than ninety (90) days in advance of the annual meeting. A shareholder's notice to the Secretary shall set forth as to each matter the shareholder proposes to bring before the annual meeting (i) a brief description of the business desired to be brought before the annual meeting (including the specific proposal to be presented) and the reasons for conducting such business at the annual meeting, (ii) the name and record address of the shareholder proposing such business, (iii) the class and number of shares of the Corporation that are beneficially owned by the shareholder, and (iv) any material interest of the shareholder in such business. In the event that a shareholder attempts to bring business before an annual meeting without complying with the provisions of this Section 8, the Chairman of the meeting shall declare to the meeting that the business was not properly brought before the meeting in accordance with the foregoing procedures, and such business shall not be transacted. No business shall be conducted at the annual meeting except in accordance with the procedures set forth in this Section 8, provided, however, that nothing in this Section 8 shall be deemed to preclude discussion by any shareholder of any business properly brought before the annual meeting.

Section 9. Inspectors. An appropriate number of inspectors for any meeting of shareholders may be appointed by the Chairman of such meeting. Inspectors so appointed will (i) ascertain the number of shares outstanding and the voting powers of each, (ii) determine the shares represented at a meeting and the validity of proxies and ballots, (iii) count all votes and ballots, (iv) determine and retain for a reasonable period a record of the disposition of any

challenges made to any determination by the inspectors, and (v) certify their determination of the number of shares represented at the meeting and their count of all votes and ballots. The inspectors may appoint or retain other persons or entities to assist the inspectors in the performance of the duties of the inspectors.

ARTICLE II

Directors

Section 1. General Powers. The property, affairs and business of the Corporation shall be managed under the direction of the Board of Directors, and except as otherwise expressly provided by law, the Articles of Incorporation or these Bylaws, all of the powers of the Corporation shall be vested in such Board.

Section 2. Number of Directors. The Board of Directors shall be at least five and no more than nine in number. The number of directors of the Corporation may be changed by (i) the affirmative vote of the Corporation's shareholders or (ii) the affirmative vote of the Corporation's Board of Directors taken at a meeting of which the directors received at least ten (10) days advance notice (including a majority of the non-employee-directors and a majority of the employee-directors). Notwithstanding the foregoing, however, any vote to reduce the number of the Corporation's directors shall not result in the removal of a director previously elected or appointed. Rather, such a vote will simply reduce the number of directors to be elected at the next succeeding election of directors by the Corporation's shareholders.

Section 3. Election of Directors.

(a) Directors shall be elected at the annual meeting of shareholders to succeed those directors whose terms have expired and to fill any vacancies thus existing.

(b) Directors shall hold their offices for terms as set forth in the Articles of Incorporation and until their successors are elected. Any director may be removed from office only for Cause (as such term is defined in the Corporation's Amended and Restated Articles of Incorporation).

(c) Any vacancy of a Board seat previously held by a non-employee-director of the Corporation may be filled by the affirmative vote of a majority of the remaining non-employee-directors of the Corporation. If such vacancy is not filled by the remaining non-employee-directors within thirty (30) days of the creation of the vacancy, the vacancy may be filled by the affirmative vote of a majority of all remaining members of the Board of Directors. Directors so appointed shall serve as directors of the Corporation until the Corporation's next annual meeting of shareholders. At such meeting, the Corporation's shareholders will elect a director to serve the remaining portion of the vacating director's term.

(d) Any vacancy of a Board seat previously held by an employee-director of the Corporation may be filled by the affirmative vote of a majority of the remaining

employee-directors of the Corporation. If such vacancy is not filled by the remaining employee-directors within thirty (30) days of the creation of the vacancy, the vacancy may be filled by the affirmative vote of a majority of the remaining members of the Board of Directors. Directors so appointed shall serve as directors of the Corporation until the Corporation's next annual meeting of shareholders. At such meeting, the Corporation's shareholders will elect a director to serve the remaining portion of the vacating director's term.

(e) Provided that each director is afforded at least three business days' notice of a meeting of the Board of Directors, a majority of the number of directors in office immediately prior to the beginning of a meeting of directors shall constitute a quorum for the transaction of business at such meeting.

If each director is only provided with notice of a meeting of the Board of Directors in accordance with Section 4 hereof, the act of a majority of the directors present at a meeting at which a quorum is present (including a majority of the non-employee-directors) shall be the act of the Board of Directors.

Section 4. Meetings of Directors. Meetings of the Board of Directors shall be held at places within or without the Commonwealth of Virginia and at times fixed by resolution of the Board, or upon call of (i) the Chairman of the Board, (ii) the President, or (iii) two directors, and the Secretary or Officer performing the Secretary's duties shall give not less twenty-four (24) hours' notice by letter, telegraph, or telephone (or in person) of all meetings of the directors, provided that notice need not be given of regular meetings held at times and places fixed by resolution of the Board. An annual meeting of the Board of Directors shall be held as soon as practicable after the adjournment of the annual meeting of shareholders. Meetings may be held at any time without notice if all of the directors are present, or if those not present waive notice in writing either before or after the meeting. All non-employee directors will receive an annual retainer fee ("Retainer Fee") and a fee for each of the regularly scheduled Board meetings attended per year (collectively, the "Director's Fee"). Employee directors will not be eligible to receive the Retainer Fee or the Director's Fee. The Retainer Fee and Director's Fee, all non-employee directors will receive reimbursement for travel and other related expenses incurred in attending Board meetings and committee meetings.

Section 5. Nominations. Nominations for the election of directors shall be made by the Board of Directors or a committee appointed by the Board of Directors or by any shareholder entitled to vote in the election of directors; provided, however, that all nominations must be made at least ninety-five (95) days prior to the next meeting at which directors of the Corporation shall be elected. However, any shareholder entitled to vote in the election of directors generally may nominate one or more persons for election as directors at a meeting only if written notice of such shareholder's intent to make such nomination or nominations has been given, either by personal delivery or by United States mail, postage prepaid, to the Secretary of the Corporation not later than (i) with respect to an election to be held at an annual meeting of shareholders, ninety (90) days in advance of such meeting, and (ii) with respect to an election to be held at a special meeting of shareholders for the election of directors, the close of business on

the seventh day following the date on which notice of such meeting is first given to shareholders. Each notice shall set forth: (a) the name and address of the shareholder who intends to make the nomination and of the person or persons to be nominated; (b) a representation that the shareholder is a holder of record of stock of the Corporation entitled to vote at such meeting and intends to appear in person or by proxy at the meeting to nominate the person or persons specified in the notice; (c) a description of all arrangements or understandings between the shareholder and each nominee and any other person or persons (naming such person or persons) pursuant to which the nomination or nominations are to be made by the shareholder; (d) such other information regarding each nominee proposed by such shareholder as would be required to be included in a proxy statement filed pursuant to the proxy rules of the Securities and Exchange Commission, had the nominee been nominated, or intended to be nominated, by the Board of Directors; and (e) the consent of each nominee to serve as a director of the Corporation, if so elected. The Chairman of the meeting may refuse to acknowledge the nomination of any person not made in compliance with the foregoing procedure.

ARTICLE III

Committees

Section 1. Compensation Committee. The Board of Directors, at its regular annual meeting, shall designate a Compensation Committee which shall consist of two or more directors who shall not be employees of the Corporation. In addition, the Board at any time may designate one or more alternate members of the Compensation Committee who shall be directors who are not employees of the Corporation and who may act in place of any absent regular member upon invitation by the Chairman or Secretary of the Compensation Committee. With respect to bonuses, the Compensation Committee shall have and may exercise the powers to determine the amounts annually available for bonuses pursuant to any bonus plan or formula approved by the Board, to determine bonus awards to executive officers and to exercise such further powers with respect to bonuses as may from time to time be conferred by the Board of Directors. With respect to salaries, the Compensation Committee shall have and may exercise the power to fix and determine from time to time all salaries of the executive officers of the Corporation, and such further powers with respect to salaries as may from time to time be conferred by the Board of Directors. While the Compensation Committee possesses the authority to determine the salaries and bonuses of the Corporation's executive officers, the Compensation Committee shall recognize that the Corporation was founded on a "team-oriented" philosophy. Consequently, during the first five (5) years following the adoption of these Bylaws, the salaries of Drs. Freer, Harris and Buck, as three of the Corporation's founders, should not materially differ (assuming equal contribution to the Corporation). The Compensation Committee shall administer the Corporation's Stock Incentive Plan (the "Plan") and from time to time may grant, consistent with the Plan, stock options, shares of restricted stock and/or tax offset rights. Vacancies in the Compensation Committee shall be filled by the Board of Directors, and members shall be subject to removal by the Board at any time. The Compensation Committee shall fix its own rules of procedure. A majority of the number of regular members then serving shall constitute a quorum; and regular and alternate members present shall be counted to determine whether there is a quorum. The Compensation Committee shall keep minutes of its meetings, and all action taken by it shall be reported to the Board of Directors.

Section 2. Audit Committee. The Board of Directors at its regular annual meeting shall designate an Audit Committee which shall consist of two or more directors who shall not be employees of the Corporation. Vacancies in the Audit Committee shall be filled by the Board of Directors with directors meeting the requirements set forth above, giving consideration to continuity of the Audit Committee, and members shall be subject to removal by the Board at any time. The Audit Committee shall fix its own rules of procedures and a majority of the members serving shall constitute a quorum. The Audit Committee shall meet at least twice a year with both the internal and the Corporation's outside auditors present at each meeting and shall keep minutes of its meetings and all action taken shall be reported to the Board of Directors. The Audit Committee shall review the reports and minutes of any audit committees of the Corporation's subsidiaries, if any. The Audit Committee shall review the Corporation's financial reporting process, including accounting policies and procedures. The Audit Committee shall examine the report of the Corporation's outside auditors, consult with them with respect to their report and the standards and procedures employed by them in their audit, report to the Board the results of its study and recommend the selection of auditors for each fiscal year.

Section 3. Nominating Committee. The Board of Directors shall designate a Nominating Committee which shall consist of two or more directors, including at least one non-employee-director. The Committee shall make recommendations to the Board regarding nominees for election as directors by the shareholders at each annual meeting of shareholders and make such other recommendations regarding tenure, classification and compensation of directors as the Nominating Committee may deem advisable from time to time. The Nominating Committee shall fix its own rules of procedure and a majority of the members serving shall constitute a quorum.

Section 4. Other Committees of Board. The Board of Directors, by resolution duly adopted, may establish such other committees of the Board having limited authority in the management of the affairs of the Corporation as it may deem advisable and the members, terms and authority of such committees shall be as set forth in the resolutions establishing the same.

Section 5. Advisory Committees to President. After consultation with the Board of Directors, the President may establish such advisory committees as he may deem advisable to assist him in the administration and management of the business of the Corporation; such committees shall consist of officers, employees or consultants to be appointed by the President who shall serve for such terms and have such authority as may be designated by the President.

ARTICLE IV

Officers

Section 1. Election. The officers of the Corporation shall consist of a Chairman of the Board, a President, one or more Vice Presidents (any one or more of whom may be designated as Executive Vice Presidents or Senior Vice Presidents) and a Secretary. In addition, such other officers as are provided in Section 3 of this Article may from time to time be elected by the Board of Directors. All officers shall hold office until the next annual meeting of the

Board of Directors or until their successors are elected. The Chairman of the Board shall be chosen from among the directors. Any two officers may be combined in the same person as the Board of Directors may determine.

Section 2. Removal of Officers; Vacancies. Any officer of the Corporation may be removed summarily with or without cause, at any time by a resolution passed at any meeting by affirmative vote of a majority of the members of the Board of Directors. Vacancies may be filled at any meeting of the Board of Directors.

Section 3. Other Officers. Other officers may from time to time be elected by the Board, including, without limitation, one or more Assistant Secretaries.

Section 4. Duties. The officers of the Corporation shall have such duties as generally pertain to their offices, respectively, as well as such powers and duties as are hereinafter provided and as from time to time shall be conferred by the Board of Directors. The Board of Directors may require any officer to give such bond for the faithful performance of his duties as the Board may see fit.

Section 5. Duties of the Chairman of the Board. The Chairman of the Board, while he is a full-time employee of the Corporation, shall serve as the Chairman of the Executive Committee, if any. Except as otherwise provided in these Bylaws or the resolutions establishing such committees, he shall be ex officio a member of all committees of the Board (with the exception that if the Chairman is also an employee of the Corporation, then he shall not be ex officio a member of the Audit Committee and the Compensation Committee) with the power to vote. He shall preside at all meetings of shareholders and the Board of Directors. In the incapacity or absence of the President, the Chairman of the Board shall perform the duties and have the authority of the President. The Chairman of the Board may sign and execute in the name of the Corporation deeds, mortgages, bonds, contracts or other instruments, except in cases where the signing and the execution thereof shall be expressly delegated by the Board of Directors or by these Bylaws to some other officer or agent of the Corporation or shall be required by law otherwise to be signed or executed. In addition, he shall perform all duties incident to the office of the Chairman of the Board and such other duties as from time to time may be assigned to him by the Board of Directors.

Section 6. Duties of the President. The President shall have direct supervision over the business of the Corporation, subject to the Board of Directors and the Chairman of the Board, and shall consult with and report to the aforementioned officer. Except as otherwise provided in these Bylaws or the resolutions establishing such committees, he shall be ex officio a member of all committees of the Board (with the exception that the President shall not be ex officio a member of the Audit Committee and the Compensation Committee), with power to vote, and in the incapacity of the Chairman of the Board, the President shall perform the duties of the Chairman of the Board and in the incapacity of the Chairman of the Board or, in the absence of the Chairman of the Board and upon his designation, the President shall preside at all meetings of shareholders, the Board of Directors and all committees of the Board of Directors of which he is a member. The President may sign and execute in the name of the Corporation deeds,

mortgages, bonds, contracts or other instruments, except in cases where the signing and the execution thereof shall be expressly delegated by the Board of Directors or by these Bylaws to some other officer or agent of the Corporation or shall be required by law otherwise to be signed or executed. He may appoint advisory committees as provided in Section 6 of Article III. In addition, he shall perform all duties incident to the office of the President and such other duties as from time to time may be assigned to him by the Board of Directors or the Chairman of the Board.

Section 7. Duties of the Vice Presidents. Each Vice President of the Corporation (including any Executive Vice President and Senior Vice President) shall have powers and duties as may from time to time be assigned to him by the Board of Directors. When there shall be more than one Vice President of the Corporation, the Board of Directors may from time to time designate one of them to perform the duties of the President in the absence of the President. Any Vice President of the Corporation may sign and execute in the name of the Corporation deeds, mortgages, bonds, contracts and other instruments, except in cases where the signing and execution thereof shall be expressly delegated by the Board of Directors or by these Bylaws to some other officer or agent of the Corporation or shall be required by law otherwise to be signed or executed.

Section 8. Duties of the Secretary. The Secretary shall act as secretary of all meetings of the Board of Directors and all other Committees of the Board, and the shareholders of the Corporation, and shall keep the minutes thereof in the proper book or books to be provided for that purpose. He shall see that all notices required to be given by the Corporation are duly given and served; shall have custody of the seal of the Corporation and shall affix the seal or cause it to be affixed to all certificates for stock of the Corporation and to all documents the execution of which on behalf of the Corporation under its corporate seal is duly authorized in accordance with the provisions of these Bylaws; shall have custody of all deeds, leases, contracts and other important corporate documents; shall have charge of the books, records and papers of the Corporation relating to its organization and management as a Corporation; shall see that the reports, statements and other documents required by law (except tax returns) are properly filed; and shall, in general, perform all the duties incident to the office of Secretary and such other duties as from time to time may be assigned to him by the Board of Directors, the Chairman of the Board or the President.

Section 9. Other Duties of Officers. Any officer of the Corporation shall have, in addition to the duties prescribed herein or by law, such other duties as from time to time shall be prescribed by the Board of Directors, the Chairman of the Board or the President.

ARTICLE V

Capital Stock

Section 1. Certificates. The shares of capital stock of the Corporation shall be evidenced by certificates in forms prescribed by the Board of Directors and executed in any manner permitted by law and stating thereon the information required by law. Transfer agents and/or registrars for one or more classes of the stock of the Corporation may be appointed by the

Board of Directors and may be required to countersign certificates representing stock of such class or classes. In the event that any officer whose signature or facsimile thereof shall have been used on a stock certificate shall for any reason cease to be an officer of the Corporation and such certificate shall not then have been delivered by the Corporation, the Board of Directors may nevertheless adopt such certificate and it may then be issued and delivered as though such person had not ceased to be an officer of the Corporation.

Section 2. Lost, Destroyed and Mutilated Certificates. Holders of the stock of the Corporation shall immediately notify the Corporation of any loss, destruction or mutilation of the certificate therefor, and the Board of Directors may, in its discretion, cause one or more new certificates for the same number of shares in the aggregate to be issued to such stockholder upon the surrender of the mutilated certificate or upon satisfactory proof of such loss or destruction, and the deposit of a bond in such form and amount and with such surety as the Board of Directors may require.

Section 3. Transfer of Stock. The stock of the Corporation shall be transferable or assignable only on the books of the Corporation by the holders in person or by attorney on surrender of the certificate for such shares duly endorsed and, if sought to be transferred by attorney, accompanied by a written power of attorney to have the same transferred on the books of the Corporation. The Corporation will recognize the exclusive right of the person registered on its books as the owner of shares to receive dividends and to vote as such owner.

Section 4. Fixing Record Date. For the purpose of determining shareholders entitled to notice of or to vote at any meeting of the shareholders or any adjournment thereof, or entitled to receive payment for any dividend, or in order to make a determination of shareholders for any other proper purpose, the Board of Directors may fix in advance a date as the record date for any such determination of shareholders, such date in any case to be not more than seventy (70) days prior to the date on which the particular action, requiring such determination of shareholders, is to be taken. If no record date is fixed for the determination of shareholders entitled to notice of or to vote at a meeting of shareholders, or shareholders entitled to receive payment of a dividend, the date on which notice of the meeting is mailed or the date on which the resolution of the Board of Directors declaring such dividend is adopted, as the case may be, shall be the record date for such determination of shareholders. When a determination of shareholders entitled to vote at any meeting of shareholders has been made as provided in this section such determination shall apply to any adjournment thereof.

ARTICLE VI Miscellaneous Provisions

Section 1. Seal. The seal of the Corporation shall consist of a flat-face circular die, of which there may be any number of counterparts, on which there shall be engraved in the center the words "Commonwealth Biotechnologies, Inc."

Section 2. Fiscal Year. The fiscal year of the Corporation shall end on December 31st of each year, and shall consist of such accounting periods as may be recommended by the Treasurer and approved by the Board of Directors.

Section 3. Books and Records. The Corporation shall keep correct and complete books and records of accounts and shall keep minutes of the proceedings of its shareholders and Board of Directors; and shall keep at its registered office or principal place of business, or at the office of its transfer agent or registrar a record of its shareholders, giving the names and addresses of all shareholders, and the number, class and series of the shares being held. The Board of Directors shall, subject to the provisions of the foregoing paragraph of this section, to the provisions of Section 7 of Article I and to the laws of the Commonwealth of Virginia, have the power to determine from time to time whether and to what extent and under what conditions and limitations the accounts, records and books of the Corporation, or any of them, shall be open to the inspection of the shareholders.

Section 4. Checks, Notes and Drafts. Checks, notes, drafts and other orders for the payment of money shall be signed by such persons as the Board of Directors from time to time may authorize. When the Board of Directors so authorizes, however, the signature of any such person may be a facsimile.

Section 5. Amendment of Bylaws. These Bylaws may be amended, in whole or in part, by at least a two thirds (2/3) vote of the Board of Directors including a majority of the non-employee-directors, or by the holders of at least two-thirds (2/3) of all shares entitled to vote. Bylaws made or amended by the Board of Directors may be altered or repealed by the shareholders, but shall remain in effect unless and until such action be taken by the shareholders.

Section 6. Voting of Stock Held. Unless otherwise provided by resolution of the Board of Directors, the Chairman of the Board, the President or any Vice President shall from time to time appoint an attorney or attorneys or agent or agents of this Corporation, in the name and on behalf of this Corporation, to cast the vote which this Corporation may be entitled to cast as a shareholder or otherwise in any other corporation, any of whose stock or securities may be held in this Corporation, at meetings of the holders of the stock or other securities of such other corporation, or to consent in writing to any action by any of such other corporation, and shall instruct the person or persons so appointed as to the manner of casting such votes or giving such consent and may execute or cause to be executed on behalf of this Corporation and under its corporate seal or otherwise, such written proxies, consents, waivers or other instruments as may be necessary or proper in the premises; or, in lieu of such appointments, the Chairman of the Board, the President or any Vice President may attend in person any meetings of the holders of stock or other securities of any such other corporation and there vote or exercise any or all power of this Corporation as the holder of such stock or other securities of such other corporation.

Section 7. Control Share Acquisition Statute. To the full extent permitted by Article 14.1 of the Virginia Stock Corporation Act, as amended, ("Control Share Acquisition Act"), the Corporation is authorized to redeem shares acquired in a control share acquisition, as that term is defined under the Control Share Acquisition Act.

Section 8. Implied Amendments. Any action taken or authorized by the shareholders or by the Board of Directors which would be inconsistent with the Bylaws then in effect, but which is taken or authorized by the affirmative vote of not less than that number of shares or the number of directors that would be required to amend these Bylaws so that the Bylaws would be consistent with such action, shall be given the same effect as if these Bylaws had been temporarily amended or suspended to the extent necessary to permit the specific action so taken or authorized.

Section 9. Future Issuances of Capital Stock. Notwithstanding the Corporation's general ability to issue additional capital stock or other securities convertible into capital stock of the Corporation ("Convertible Securities") at any time upon the affirmative vote of the Board of Directors, if the Corporation shall desire to issue (i) shares of its capital stock for less than Fair Market Value (as defined below) or (ii) Convertible Securities with exercise or conversion prices less than Fair Market Value, such issuance must be approved by the majority of the Corporation's non-employee-directors. For the purpose of these Bylaws, the term "Fair Market Value" shall mean (i) the average closing price of the capital stock over the twenty (20)-day period prior to the vote of the Board of Directors if the capital stock is traded on an exchange or an inter-dealer quotation system or (ii) that price per share mutually agreeable to the Corporation's non-employee-directors (as a group) and the Corporation's employee- directors. If the two groups of directors are unable to agree, then each group of directors shall choose an appraiser and the Fair Market Value of the Corporation's capital stock shall be the arithmetic mean of the values determined by each appraiser. The cost of the appraisers, if any, shall be borne solely by the Corporation. Notwithstanding the foregoing, however, until the date upon which the Corporation's convertible, subordinated notes, issued to investors on or about June 25, 1997, convert into shares of the Corporation's common stock, Fair Market Value shall mean \$6.00 per share.

Commonwealth Biotechnologies, Inc.
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To the Shareholders of Commonwealth Biotechnologies, Inc.

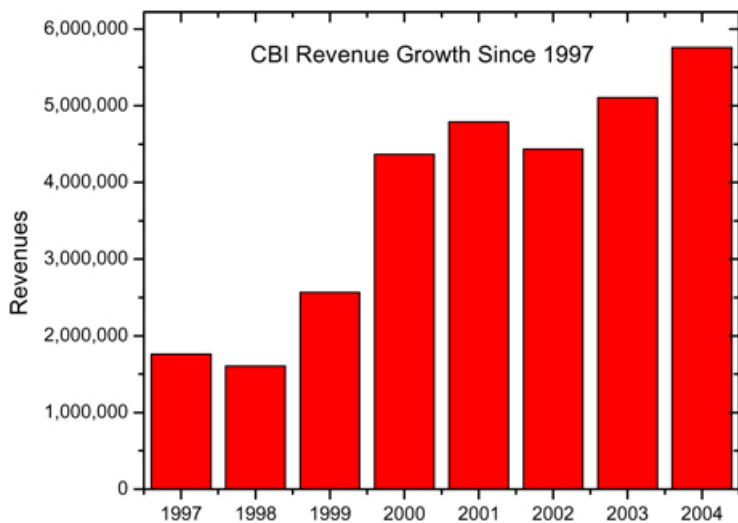
This past year should be considered a watershed year for CBI. We have been working towards profitability ever since going public in 1997 and in 2004, accomplished this goal by posting our sixth consecutive profitable quarter (prior to one-time expenses of approximately \$600,000 – see chart below) which dropped CBI's operating profit to a net loss of approximately \$367,000. CBI posted record revenues of \$5.75 million for fiscal year 2004. This compares to a loss of approximately \$81,000 on \$5.1 million in revenues in 2003, an increase of about 13% over last year. The fourth quarter of 2004 was also the strongest revenue quarter for the Company since its inception — the Company posted revenues of \$1.52 million.

The Company was EBITDA positive for the third consecutive year, recording \$882,000 for 2004, which compares with \$776,000 for 2003. As a percentage of revenues, there was an actual decrease in 2004 in the principal major cost areas of direct labor, materials, and overhead, and just as important, as a percentage of revenue, CBI's SG&A costs have remained constant over the last three years.

Calculation of 2004 Adjusted Net Operating Income and EBIDTA and 2003 EBIDTA

	2004	2003
Net Operating Loss	\$(367,548)	\$ (80,601)
One Time Expenses		
FIL Acquisition Costs	50,000	—
FIL Start Up Costs	93,861	—
Bond Pre-Payment and Penalty Costs	246,129	—
Bond Write-off Costs	206,930	—
Net Adjusted Operating Income	\$ 229,372	\$ (80,601)
Net Operating Loss	\$(367,548)	\$ (80,601)
Depreciation	586,621	598,764
Bond Prepayment Penalties	217,800	—
Bond Write-off Costs	206,930	—
Interest/Amortization	238,077	258,764
EBITDA	\$ 881,880	\$776,927

For the second consecutive year, CBI set a record in signed contract valuation, exceeding \$ 8 million in new and continuing projects. For the first time in its history, CBI captured enough contracts to form a stable base-line source of revenues sufficient to pay for the day-to-day operations of the Company. Compared with 2003, the revenues of the Company in the government sector in 2004 increased by approximately 30%. More specifically, revenues from bio-defense related contracts in 2004 totaled about \$4.08 million, compared to \$ 3.15 million in 2003. Going forward, as new contracts are added that build upon existing strengths at CBI, we expect to see an increase in bottom-line profitability.



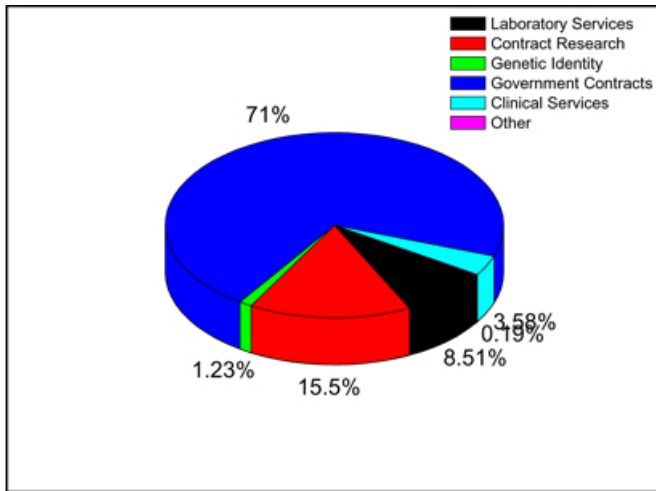
Since 1997, CBI's overall gross revenues have increased nearly 240%, from a little over \$1.7 million to about \$5.75 million and at the same time, the Company's operating losses have decreased to the point where the Company recorded positive adjusted net income for 2004.

Even while its financial condition continues to improve through organic growth, CBI also successfully completed several major business initiatives in 2004 which are expected to significantly impact revenues.

The Company established a new virology bio-safety level 3 lab within its accredited BSL-3 Suite, qualifying CBI for the most advanced bio-defense research and development work. In March, the Company entered into a two-year Broad Teaming Agreement with DynPort Vaccine Company LLC, Frederick, MD, under which CBI and DynPort will co-venture to compete for new biodefense vaccine development funding. In August, CBI announced that it had entered into an exclusive Distribution and Sales Agreement with Fisher Scientific, LLC, based in Pittsburgh, PA. Fisher Scientific is a leading provider of equipment, supplies, and services for the clinical laboratory and global scientific research markets. Fisher's team of 22 Life Science Specialist and some 440 sales representatives nationwide are proffering CBI's platform technologies and its products to its very large client base. CBI is branded in the Fisher catalog which is distributed world-wide to literally hundreds of thousands of customers. The official launch of the Fisher-CBI joint alliance took place in October and by year's end, Fisher had already introduced CBI to numerous private sector clients for whom CBI has submitted high value proposals for work. The Company was also selected by the National Cancer Institute as subcontractor to test the efficacy of the first DNA-based bladder cancer diagnostic, and of course, the Company successfully completed acquisition of the assets of Fairfax Identity Labs (FIL).

The transition of key FIL employees and equipment to CBI took place in the last week of December, but even before the move was complete, CBI was already performing the work. FIL, like CBI, is one of just eight labs accredited by the National Institutes of Justice for performing DNA CODIS (Combined DNA Index System) related work and in

this regard, CBI acquired a company which is completely complementary to its existing business lines. The acquisition of FIL substantially increased CBI's sample processing capabilities, and better positions CBI to compete for new CODIS and forensic related contracts as the relevant proposals are released through the states from the National Institutes of Justice. CODIS and forensic funding initiatives were highlighted in President Bush's State of the Union address in January, 2005.



The acquisition of FIL is already proving noteworthy; the division signed its first \$500,000 contract as a CBI division in January, 2005, and in March, FIL was notified that one of its existing contracts for paternity testing with a major metropolitan area was renewed for the next year. In 2005, revenues from the FIL division are expected to be derived predominantly from private, contract and immigration paternity work.

Prior to 2002, private sector clients accounted for nearly 60% of CBI's revenues. When the economic recession and downturn hit, much of the work from the private sector which was routinely outsourced to CBI was discontinued. Outsourcing from the private sector has change so much that for past two years, private sector clients have accounted for less than 20% of CBI's total revenues. In 2004, revenues from government contracts accounted for nearly 71% of CBI's total revenues. Management is focused on re-capturing and increasing the revenue stream from the private sector to ward against the time when government contracting drops and the CBI-Fisher alliance is but one example where CBI is working to build its revenue base from non-government sources.

In 2005, CBI will recognize revenue from two divisions, its on-going core business unit and from its DNA reference lab activities, which have all been consolidated into the FIL division. CBI entered 2005 with approximately \$6 million in anticipated laboratory work, another record for the Company. The Company is actively engaged in on-going contract work and has submitted numerous long-term contract proposals to prospective government and private sector clients. By early March, 2005, the Company had already announced nearly \$ 3 million in new contract work.

GOOD HELP WAS HARD TO FIND..



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Thank You for Your Continued Support

Through press releases and 8-K announcements, CBI endeavors to keep its shareholders informed of new contract signings and significant news of Company's operations. As always, CBI's dramatic turnabout is directly attributable to the hard work and dedication of its employees and its Board of Directors. Management is again beholden to their efforts.

You are cordially invited to attend CBI's 2005 Annual Meeting of Shareholders on May 20, 2005 at 11:00 a.m. at the Company's facility.

With best regards,

Richard J. Freer, Ph.D.
Chairman of the Board, COO

Thomas R. Reynolds
Executive Vice-President,
Science and Technology

Robert B. Harris, Ph.D.
President, CEO

James H. Brennan
Controller

**Commonwealth Biotechnologies Is Your Source for Complete
Project Support and Program Management**

Peptide/Protein Technologies

- **Peptide Synthesis**
 - Solid-Phase
 - Solution-Phase (multi-gram)
 - Multiple Simultaneous Synthesis
 - Chromogenic, Fluorogenic
 - Peptides
- **Protein Sequencing**
 - N& C Terminal
 - Complex Mixtures, SDS Gels, and Transblots
 - Solid Phase Sequencing
 - Peptide Mapping
- **Amino Acid Analysis**
 - Protein Purification
 - Recombinant Proteins
 - Overexpression Experiments
 - Preparation for Immunogens
- **Antibody Services**
 - Polyclonals and Monoclonals
 - Purification
 - Sub-typing
 - Binding Studies
- **ELISA Development**
- **Calorimetry Experiments**
 - Isothermal Titration
 - Differential Scanning
- **CD and UV Fluorescence Spectroscopies**
- **Mass Spectroscopy**
 - MALDI TOF/MS
 - PSD/CID CAF Analysis
 - Peptide Mapping
 - Q-TOF/MS
- **Proteomics**
 - Comparative 2D Gels

DNA Technologies

- **GLP DNA Sequencing**
 - Plasmid, PCR, Cosmids, BAC
 - Econo-Sequencing
 - Comprehensive Sequencing
 - Small Genomes
 - cDNA Library Projects
 - Computer Analyses
- **Nucleic Acid Synthesis**
 - Custom DNA Synthesis
 - Custom PNA Synthesis
 - Custom RNA Synthesis
 - Custom Gene Synthesis
- **Genetic Testing Services**
 - Human DNA Identity Testing
 - Human Genetic Analysis, P53, BRCA1
- **Molecular Biology Services**
 - Large Scale Plasmid Preps
 - Cloning Projects
 - Overexpression Projects
 - Site-Directed Mutagenesis
 - Batch Fermentation Services
 - Library Screening
- **TaqMan & PCR Assays**
 - Accurate Gene Expression
 - Profiling
 - Quantification of RNA and DNA
 - Targets
 - Diagnostic Applications
 - Pharmacogenomics
 - Custom Assay Development

Microbiology

- **CDC Select Agent Registered**

- Fully Capable BSL3 Labs
- Pathogen Detection
- Food Safety Testing
- Large and Small Scale Preps
- Purification of Cellular Components

Biodefense Related Activities at CBI



The horrific events of September 11th and the subsequent anthrax related events heightened the awareness of every US citizen to the global threats of terrorism and bioterrorism. CBI recognized the growing concerns over domestic chemical, biological or radiological terrorism and responded with innovative services to support different government agencies and the military with *cutting edge science and technology*. CBI operates in a secure environment and several key staff members hold security clearances and credentials. Strong program management and quality science are the driving force behind our success and rapid expansion into the biodefense business sector. CBI has developed strong programs in microbial genomics of select agent pathogens and has developed an extensive catalog of molecular diagnostic capabilities. CBI's novel use of mass spec analysis techniques has permitted rapid detection and confirmation of numerous bioagents, including toxins.

Pathogen Testing Service



CBI has developed services for detection and confirmation of select agent pathogens, including *B.anthraxis*, the causative agent of anthrax. CBI provides all the work necessary to identify these human pathogens in suspect environmental samples, suspicious powders, swabs, and other unusual test matrices. CBI's work has helped advance the knowledge and understanding of detection in complex samples.

Mass Spec Analyses

CBI has been in the forefront of the use of novel mass spec approaches for detection and confirmation of bio agent toxins and select agent pathogens in unqualified test samples. Our mass spec and proteomic contract studies have lead to discovery of strain specific biomarkers for several different select agent pathogens.

Vaccine Development

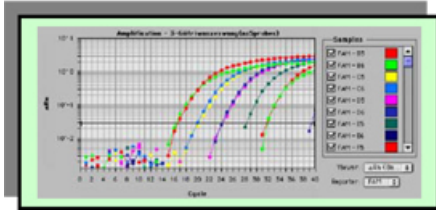
CBI provides laboratory support for those entities who are developing vaccine against potential bio- and/or chemical warfare agents, such as Venezuelan Equine Encephalitis or sarin. CBI's array of clinical biosafety testing services and assays are all done under strict GLP guidelines and adhere to 21 CFR guidelines. CBI's focus is on laboratory

analysis to vaccine developers throughout the manufacturing process of pre-clinical and early-stage (Phase I/II) clinical trial materials

DNA Sequencing for Identification of Bacterial and Viral Strains

CBI uses high throughput DNA sequence analysis techniques to provide for bacterial and virus strain identification. The sequences that are derived experimentally are then compared to the various data bases to provide unambiguous identification.

Real Time PCR Detection of Pathogens



CBI has implemented and helped develop many real time PCR methods for detection and identification of viral and bacterial pathogens. CBI is an industry leader in developing novel technology for rapid of detection of microbial and viral agents in environmental and complex samples.

FIL ACTIVITIES at CBI



Fairfax Identity Laboratory (FIL), a Division of Commonwealth Biotechnologies Inc.

Paternity Testing

FIL is fully accredited by the American Association of Blood Banks for paternity testing. Paternity testing is done using PCR-based technologies in a state-of-the-art facility using cutting edge equipment. Samples are processed in a semi-automated system using robotics, bar coding, and laser based fluorescence technologies.

Paternity testing in the United States is currently based in contract and private paternity cases. Contract paternity consists primarily of casework done on behalf of state and local government child support agencies to resolve questions of parentage. Federal and state laws permit women with dependent children to legally establish parentage and thereby collect child support from the biological fathers.

Most of FIL's private sector clients are identified through the internet and through the efforts of its sales force. Additional customers are identified through direct advertising in a limited number of professional and trade journals and magazines, and by attendance at trade shows and meetings.

FIL also offers a Home Test for Paternity at reduced rates. The Home Test does not carry legal standing and is usually ordered by clients for informational purposes only.

CODIS and Forensics Services

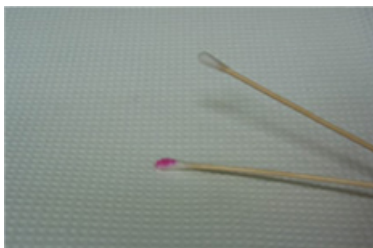
FIL ACTIVITIES at CBI

Accreditation



Fairfax Identity Laboratory (FIL), a Division of Commonwealth Biotechnologies Inc. (CBI), is one of only 13 private laboratories worldwide with the NFSTC accreditation. By joining forces, CBI and FIL are able to provide one of the few comprehensive forensic laboratories which provides both comprehensive human DNA analysis services and microbial and toxin analyses. FIL has been a leading provider of human DNA analysis for the past 15 years and has provided forensic analyses to numerous police departments and state crime labs using state-of-the-art STR technologies. CBI/FIL accreditation is based on the guidelines set forth in the quality assurance standards for forensic DNA testing laboratories and convicted offender DNA data-basing laboratories issued by the FBI. All requirements of chain-of-custody, sample security, laboratory security, documentation, and contamination control are observed.

DNA Analysis of Forensic Samples



FIL performs DNA analysis on convicted offender samples, active forensic cases, criminal paternity cases, post-conviction cases and backlogged cases. DNA analysis can be performed by automated fluorescent STR analysis on reference standards and on any item of evidence.

FIL provides screening of evidentiary forensic samples to confirm presence of semen or human blood prior to DNA analysis.

Y-chromosome STR Analysis

FIL provides Y-STR analysis on forensic casework samples. Some samples are resistant to conventional STR analysis and fail to clearly distinguish the male contributor in a mixed DNA sample, such as one obtained from a sexual assault case. Y-STR analysis can provide the clarity necessary to render a conclusion regarding the inclusion or exclusion of a specific individual.

Genetic and CODIS Identity Analyses



FIL is accredited by the National Forensic Science Technology Center (NFSTC) as a DNA Data Base Laboratory for analysis of samples for entry into the FBI Combined DNA Index System (CODIS) database. In December 1997, the FBI identified thirteen (13) loci that are examined for each sample entered into the CODIS database. These 13 loci provide an extremely high level of confidence for the sample identification. **FIL** provides a high throughput and low cost source for this service.

Mitochondrial DNA (mtDNA) sequencing

Mitochondrial DNA (mtDNA) sequence analysis is fast becoming a powerful tool for forensic DNA typing in certain cases. The high number of sequence variants allows possible discrimination among individuals and/or biological samples. The likelihood of recovering mtDNA in small or degraded biological samples is greater than for nuclear DNA because mtDNA molecules are present in hundreds to thousands of copies per cell compared to the nuclear complement of two copies per cell. Therefore, muscle, bone, hair, skin, blood and other body fluids, even if degraded by environmental insult or time, may provide enough material for typing the mtDNA locus. mtDNA is inherited from the mother only so that in situations where a suspect individual is not available for a direct comparison with a biological sample, any maternally related individual may provide a reference sample.

Specimen Matching

Specimen matching cases are not necessarily connected to crimes. In these cases, CBI is requested to confirm the source of a sample. Typical specimen matching cases include:

- a urine drug screen that has been reported as positive for a substance of abuse
- biopsy samples from a physician's office or hospital to verify that the sample has been taken from a particular patient.

CID Personal DNA Profiling

Personal safety is no longer guaranteed; tragedy can strike at any time. To aid in providing some measure of closure in the event of such tragedies **FIL** announces the availability of its personal DNA profiling service.



“Confidential IDentity” or CID, provides clients with a DNA profile sufficient to serve as the basis of identification in case of tragedy. Working from an easily obtained swab of the inside of the cheek, FIL determines the nature of the genetic markers commonly used to identify the donor of that DNA sample. The markers are informative only for establishing identification; they convey no information that can be misused medically or for any other purpose.

CID profiles can be provided to you on a printed certificate that you store securely, or the profile can be retained by the laboratory in a secure computer database, inaccessible to anyone but select members of our lab staff.

CID represents the kind of planning that is uncomfortable to consider, but one which loved ones appreciate should it become necessary to provide closure after a loss. This service is intended for those in the military or other high risk professions, or for small children or adults under assisted care.

Stockholder Matters**Market for Common Equity**

The Company completed its initial public offering on October 28, 1997 at a price per share of \$6.00. Since that time, the common stock has traded on the NASDAQ SmallCap Market ("NASDAQ"). The following table sets forth the range of high and low sales price per share of common stock for 2004 and 2003. These market quotations reflect inter-dealer prices, without retail mark-up, mark-down, or commission and may not necessarily represent actual transactions.

<u>Period</u>	<u>High Stock Price</u>	<u>Low Stock Price</u>
1 st Quarter, 2004	\$ 10.41	\$ 3.00
2 nd Quarter, 2004	\$ 10.12	\$ 4.66
3 rd Quarter, 2004	\$ 7.66	\$ 3.78
4 th Quarter, 2004	\$ 7.47	\$ 5.74

<u>Period</u>	<u>High Stock Price</u>	<u>Low Stock Price</u>
1 st Quarter, 2003	\$ 2.52	\$.54
2 nd Quarter, 2003	\$ 2.26	\$ 1.01
3 rd Quarter, 2003	\$ 4.21	\$ 1.44
4 th Quarter, 2003	\$ 4.08	\$ 2.60

On March 21, 2005, the last reported sales price for a share of the Company's Common Stock on NASDAQ was \$4.22. As of March 21, 2005 there were 31 holders of record of the Company's Common stock and 1,544 beneficial holders.

The Company has not paid any cash dividends on its Common Stock. The Company intends to retain its earnings to finance the growth and development of its business and does not expect to declare or pay dividends in the foreseeable future. The declaration of dividends is within the discretion of the Company.

Selected Financial Data

Set forth below is selected financial data with respect to the Company for the years ended December 31, 2004, December 31, 2003, and December 31, 2002, which has been derived from the audited financial statements of the Company. The selected financial data set forth below should be read in conjunction with "Management's Discussion and Analysis of Financial Conditions and Results of Operation."

For the years Ended December 31,

	2004	2003	2002
Operational Data:			
Revenues:	\$ 5,748,704	\$ 5,104,056	\$ 4,434,379
Net Loss	\$ (367,549)	\$ (80,601)	\$ (625,726)
Basic and diluted loss per common and common equivalent share	\$ (0.12)	\$ (0.03)	\$ (0.29)
Weighted average common shares outstanding	3,001,682	2,488,699	2,194,029
Balance Sheet Data:			
Total Current Assets	\$ 4,139,195	\$ 1,155,839	\$ 838,687
Total Assets	\$ 11,003,008	\$ 7,581,213	\$ 7,823,073
Total Current Liabilities	\$ 959,747	\$ 579,920	\$ 751,986
Total Liabilities	\$ 5,041,200	\$ 4,209,920	\$ 4,481,986
Total Stockholders equity	\$ 5,961,808	\$ 3,371,293	\$ 3,341,087

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

The following should be read in conjunction with "Selected Financial Data" and the Company's Audited Financial Statements and Notes thereto included herein.

Overview

The Company is vigorously pursuing revenue opportunities in four principal focus areas; bio-defense; laboratory support services for on-going clinical trials; comprehensive contract projects in the private sector; and through it FIL division, for paternity testing, forensic case-work analysis and CODIS work. In each of these areas, the Company provides sophisticated macromolecular synthetic and analytical services, integrating individual platform technologies so as to provide a comprehensive approach to solving complex problems in life science research. While the majority of the Company's customers are in the private sector, the bulk of the Company's revenues (about 71%) in 2004 were derived from government contracts, and in particular, from government contracts dealing with bio-defense related matters. Results derived by the Company are used by others to support their own compliance filings, to further their own in-house research efforts and to implement new assay technologies.

In all its core focus areas, the Company is continuing to grow its contract base. With regard to government contracts, the Company acts as both prime and subcontractor to numerous federal agencies. More often than not, the Company is the prime (if not the

only) contractor performing clinical laboratory or comprehensive contracts for its private sector clients.

The Company is moving towards equalizing revenues from the private sector and the government sector. To this end, the Company has formed an exclusive alliance with Fisher Scientific, LLC, Pittsburgh, PA with the principle objective of using the Fisher sales force to promote CBI's platform technologies with private sector companies. The Fisher/CBI alliance was officially launched in October, 2004.

The Company also derives revenues from genetic identity and clinical services. The Company designed and implemented molecular diagnostic assays for the presence of DNA attributable to the various human herpes viruses. This platform technology is being used to serve individual patients across the country and in support of an on-going clinical study with a new anti-viral therapeutic. The Company has grown its molecular diagnostic platform in several other critical areas and its services are being used in support of still other on-going clinical trials and in support of fundamental research and development programs for its clients.

On December 16, 2004, the Company purchased the assets of Fairfax Identity Labs, (FIL), a division of Genetics and In-Vitro Fertilization Institute and their operations were moved to the Corporate Office in Richmond, Virginia. The principal focus of the purchase was to increase the revenue base of private paternity, contract paternity testing, and forensic DNA analysis. There has been a dramatic and constant increase in the number of private paternity cases implemented at the Company and in the number of molecular diagnostic assays performed.

On November 17, 2004, the Company retired both the Series 1998A and 1998B Industrial Development Revenue Bonds used to finance construction of its physical facility. This was accomplished by refinancing the facility with a mortgage loan of \$3,900,000.

The Company's customers consistently provide repeat business to the Company. The Company views commercial and government contracts as its most important sources of revenue and for this reason, has moved away from concept of "piece work" for individual investigators. With all its contracts, revenues are generally recognized as services are rendered or as products are delivered. In some instances, revenue is also recognized with performance-based installments payable over the contract as milestones are achieved.

Results of Operations**Year Ended December 31, 2004 Compared to Year Ended December 31, 2003.****Revenues**

Gross revenues increased by \$644,648 or 12.6% from \$5,104,056 during the year ended December 31, 2003 ("2003") to \$5,748,704 during the year ended December 31 2004 ("2004").

The Company experiences fluctuations in all revenue categories. Continuation of existing projects, or engagement for future projects is usually dependent upon the customer's satisfaction with the scientific results provided in initial phases of the scientific program. Continuation of existing projects or engagement of future projects also often depends upon factors beyond the Company's control, such as the timing of product development and commercialization programs of the Company's customers. The Company is unable to predict for more than a few months in advance the volume and dollar amount of future projects. The combined impact of commencement and termination of research contracts from several large customers and unpredictable fluctuations in revenue for laboratory services can result in very large fluctuations in financial performance.

Revenues from lab services decreased by \$39,409 or 7.5% from \$526,128 during 2003 to \$486,719 during 2004. This decrease is primarily due to an the effort of the Company to move away from short term work and begin to focus on long-term commercial and government contracts. The Company continues to view lab services as a potential revenue source. However, the Company views commercial and government projects as the more important source of revenue and has continued to focus its efforts on identifying long-term contractual customers.

Revenues realized from various commercial contracts decreased by \$100,243 or 10.1%, from \$997,680 during 2003 to \$897,437 during 2004. This decrease is primarily due to (1) work being completed with two major clients and (2) increased focus in government contracts awarded to the Company. Of the \$897,437 in commercial contracts, two major clients represented 59.8% and 11.0%, respectively of the revenue earned during 2004. The Company will continue to work with both of these clients in 2005.

Revenues realized from various government contracts increased by \$929,574 or 29.5%, from \$3,153,690 during 2003 to \$4,083,264 during 2004. This increase was primarily due to eight new contracts awarded to the Company in 2004. Revenue in 2004 amounted to \$1,916,620 for these projects. In addition work that is being performed on fourteen projects that were awarded in prior years, are still continuing to bring revenue into the Company.

Revenues realized from various genetic testing decreased by \$156,441 or 67.9%, from \$230,422 during 2003 to \$73,981 during 2004. This decrease is a direct result of the ending of two major contracts in performing genetic identity analysis.

Cost of Services

Cost of services consists primarily of materials, labor, subcontractor costs and overhead. The cost of services increased by \$239,779 or 6.8% from \$3,528,499 during 2003 to \$3,768,278 during 2004. The cost of services as a percentage of revenue was 65.6% and 69.2% during 2004 and 2003, respectively.

Direct labor costs increased by \$75,835, or 6.6%, from \$1,141,551 during 2003 to \$1,217,386 during 2004. This increase is a direct result of additional projects initialized during the year.

The costs for direct materials increased by \$3,583, or 0.4%, from \$936,205 during 2003, to \$939,788 during 2004. Costs in materials remained constant due to the more efficient utilization of the purchasing of materials from the Company's suppliers.

Overhead cost consists of indirect labor, depreciation, freight charges, repairs, travel and miscellaneous supplies not directly related to a particular project. Total overhead costs increased by \$151,788 or 10.6%, from \$1,438,708 during 2003 to \$1,590,496 during 2004. This increase is primarily due additional staff added to the Company in the last month from the Fairfax Identity Labs acquisition and additional repairs needed to equipment throughout the course of the year.

Sales, General and Administrative

Sales, general and administrative expenses ("SGA") consist primarily of compensation and related costs for administrative, marketing, facility expenditures, professional fees, consulting, taxes, and depreciation. Total SGA costs increased by \$297,995, or 21.0%, from \$1,420,879 during 2003 to \$1,718,874 during 2004. As a percentage of revenue, these costs were 29.9% and 27.8% during 2004 and 2003, respectively.

Total compensation and benefits increased by \$40,847 or 8.1% from \$505,678 during 2003 to \$546,525 during 2004. This increase is primarily due to corporate bonuses accrued in 2004.

Professional fees increased by \$133,768 or 57.3% from \$233,288 during 2003 to \$367,056 during 2004. This increase is primarily due one-time costs associated with the elimination of the Industrial Revenue Bonds. Additional costs associated with recruitment charges for the hiring of additional personnel. Office expenses increased by \$32,843 or 32.7%, from \$100,350 during 2003 to \$133,193 during 2004. This increase is primarily due to additional costs associated with travel expenses for employees

attending meetings with potential clients. Other costs increased by \$36,105 or 49.6% from \$72,816 during 2003 to \$108,921 during 2004. Increases in this category were from expenses associated with the relocation of employees from the acquisition of Fairfax Identity Labs as well as increasing the allowance for potential write-offs in bad debt.

Marketing costs increased by \$61,395 or 26.4%, from \$232,950 during 2003 to \$294,345 during 2004. This increase was primarily due to consulting fees. Additional costs associated with press releases for the Company also led to the increase over 2003.

Other Income (Expenses)

Other income remained relatively flat from 2004 compared to 2003.

Other expenses includes (1) interest expense paid in the fourth quarter for the refinance of the facility with Branch Banking and Trust, (2) interest paid for the Company's IRBs; (3) prepayment penalty for the refinancing of the industrial revenue bonds to a variable rate mortgage and (4) write-off of remaining unamortized bond issuance costs. Interest costs increased by \$197,629 or 79.8% from \$247,505 during 2003 to \$445,134 during 2004. Amortization costs increased by \$196,186 or 1,826.0% from \$10,744 during 2003 to \$206,930 during 2004. This increase is due to paying off the Industrial Revenue Bonds in November 2004.

Results of Operations

Year Ended December 31, 2003 Compared to Year Ended December 31, 2002.

Revenues

Gross revenues increased by \$669,677 or 15.1% from \$4,434,379 during the year ended December 31, 2002 ("2002") to \$5,104,056 during the year ended December 31, 2003 ("2003").

Revenues from lab services decreased by \$227,209 or 30.2% from \$753,337 during 2002 to \$526,128 during 2003. This decrease is primarily due to an the effort of the Company to move away from short term work and begin to focus on long-term commercial and government contracts. The Company continues to view lab services as a potential revenue source. However, the Company views commercial and government projects as the more important source of revenue and has continued to focus its efforts on identifying long-term contractual customers.

Revenues realized from various commercial contracts decreased by \$494,183 or 33.1%, from \$1,491,863 during 2002 to \$997,680 during 2003. This decrease is

primarily due to (1) work being completed with three major clients and (2) increased focus in government contracts awarded to the Company. Of the \$997,680 in commercial contracts, three major clients represented 37.3%, 14.3% and 11.6%, respectively, of the revenue earned during 2003. The Company continued to work with these three clients in 2004.

Revenues realized from various government contracts increased by \$1,228,204 or 63.8%, from \$1,925,486 during 2002 to \$3,153,690 during 2003. This increase was primarily due to a new contract that began in early February. Total revenues for this contract were \$1,154,278. Revenue from all of the other government contracts is comparable with last year. Revenues recognized from the Illinois Institute of Technology Research Institute (IITRI) subcontract were \$696,381 during 2003. Of the \$696,381, \$218,569 represents revenue from the fifth year of the contract, which was awarded in September 2003. Revenues recognized from the second government sponsor for 2002 amounted to \$719,471. Revenues recognized from a third government sponsor for 2003 amounted to \$799,452. This project was completed in January 2004.

Revenues realized from various genetic testing increased by \$96,141 or 71.6%, from \$134,281 during 2002 to \$230,422 during 2003. This increase is a direct result of the continuation of two major contracts to perform genetic identity analysis.

Revenues realized from other genotyping services increased by \$112,138 or 140.6%, from \$79,766 during 2002 to \$191,904 during 2003. This increase is a direct result of the continuation of two major contracts to perform genetic identity analysis.

Cost of Services

Cost of services consists primarily of materials, labor, subcontractor costs and overhead. The cost of services increased by \$157,368 or 4.7% from \$3,371,131 during 2002 to \$3,528,499 during 2003. The cost of services as a percentage of revenue was 69.1% and 75.9% during 2003 and 2002, respectively. This percentage decrease was primarily due to additional expenditures in labor and materials (see below.) Direct labor costs increased by \$57,448, or 5.3%, from \$1,084,103 during 2002 to \$1,141,551 during 2003.

The costs for direct materials increased by \$110,308, or 13.4%, from \$825,897 during 2002, to \$936,205 during 2003. This increase is directly attributable to the growth in net revenue of the Company.

Overhead cost consists of indirect labor, depreciation, freight charges, repairs and miscellaneous supplies not directly related to a particular project. Total overhead costs increased by \$20,007 or 1.4%, from \$1,418,701 during 2002 to \$1,438,708 during 2003. This decrease is primarily due to reduced or eliminated production related expenditures.

Sales, General and Administrative

Sales, general and administrative expenses ("SGA") consist primarily of compensation and related costs for administrative, marketing, facility expenditures, professional fees, consulting, taxes, and depreciation. Total SGA costs increased by \$16,930, or 1.2%, from \$1,403,949 during 2002 to \$1,420,879 during 2003. As a percentage of revenue, these costs were 27.8% and 31.7% during 2003 and 2002, respectively.

Total compensation and benefits decreased by \$18,161 or 3.5% from \$523,839 during 2002 to \$505,678 in 2003. Costs in compensation remained relatively flat as compared to last year.

Professional fees decreased by \$83,851 or 26.4% from \$317,139 during 2002 to \$233,288 during 2003. This decrease is primarily due to a rate reduction in legal fees and one time consulting costs paid in 2002 that did not occur in 2003. Taxes and Licenses decreased by \$28,564 or 28.3% from \$100,872 during 2002 to \$72,308 during 2003. This decrease is primarily due to a rate reduction in personal property taxes paid to the county. Office expenses increased by \$6,832 or 11.4%, from \$59,918 during 2002 to \$66,750 during 2003. This increase is primarily due to additional office supplies.

Marketing costs increased by \$114,061 or 95.9%, from \$118,889 during 2002 to \$232,950 during 2003. This increase was primarily due to the addition of a Senior Vice President for Strategic Business Development with his focus on building the revenue stream of the Company.

Other Income (Expenses)

Other income increased by \$14,590, or 174.1% from \$8,380 during 2002 to \$22,970 during 2003. This increase is due to a one-time payment from the insurance company for downed equipment due to a power outage.

Interest costs incurred by the Company during the 2003 and 2002 period's included (1) interest paid to financial institutions for loans made to the Company; (2) interest paid for the Company's IRBs; and (3) amortization of costs incurred as a consequence of the completion of the Company's IRB financing. Interest expense decreased by \$35,156 or 12.4% from \$293,405 during 2002 to \$258,249 during 2003.

Liquidity and Capital Resources

The 2004 Period reflected negative cash used in operating activities of \$40,334, as compared to a positive cash of \$248,625 during the 2003 Period. This was primarily due to the Company reporting net loss of \$367,549, an increase in accounts receivable of approximately \$532,000 and a decrease in accounts payable of approximately

\$77,000. Depreciation expense amounted to \$586,620 and amortization costs of \$206,462 (bond amortization write-off) for the 2004 Period.

The 2004 Period reflected a use of cash from investing activities of \$1,089,690, as compared to \$49,694 during the 2003 Period. The increase is a result in the purchase of Fairfax Identity Labs in the last quarter in 2004.

The 2004 Period reflected net cash from financing activities of \$3,577,136, as compared to a negative of \$174,153 during the 2003 Period. In March 2004, the Company received approximately \$563,000 from the exercise of stock options. In May 2004, the Company received approximately \$2,300,000 (net of expenses) from the private placement of 400,000 shares of its common stock. In addition, the Company used its restricted cash to assist in the pay off the Industrial Revenue Bond in November of 2004.

Net working capital as of December 31, 2004 and December 31, 2003 was \$3,179,448 and \$575,919 respectively. This increase is a direct result from the cash received from the exercise of stock options, the private placement and increase in accounts receivables.

Critical Accounting Policies

A summary of the Company's accounting policies follows:

Estimates: The preparation of the financial statements requires management to make estimates and assumptions that affect the reported amounts of asset and liabilities and disclosure of contingent asset and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the period. Actual results could differ from those estimates.

Revenue Recognition: The Company recognizes revenue upon the completion of laboratory service projects, or upon the delivery and acceptance of biologically relevant materials that have been synthesized in accordance with project terms. Laboratory service projects are generally administered under fee for service contracts. Any revenues from research and development arrangements, including corporate contracts and research grants, are recognized pursuant to the terms of the related agreements as work is performed, or scientific milestones, if any are achieved. Amounts received in advance of the performance of services or acceptance of a milestone, are recorded as deferred revenue.

Accounts receivable: Accounts receivable are carried at original invoice amount less an estimate for doubtful receivables based on a review of all outstanding amounts on a monthly basis. Management determines the allowance for doubtful accounts by regularly evaluating individual customer receivables and considering a customer's financial condition, credit history, and current economic conditions. Accounts receivable are written off when deemed uncollectible. Recoveries of accounts receivable previously written off are recorded when received.

CBI has met the SEC and NASDAQ Corporate Governance Rules.

As a consequence of the Sarbanes-Oxley Act, the NASDAQ imposed certain changes in the rules of corporate governance which are aimed at strengthening its listing standards. The Securities and Exchange Commission (SEC) approved the rules imposed by NASDAQ which include

- Independent Directors. CBI's Board is composed of 5 independent and 3 employee directors.
- The Independent Directors serve on the three principal committees; Audit, Compensation, and Nominations.
- The Independent Directors meet in executive session at each quarterly Board meeting.
- At least one Independent Director, Mr. Sam Sears, who serves on the Audit Committee, meets all of the requirements as defined by the SEC for being a "financial expert."

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- The Audit Committee reviews and approves all related-party transactions. CBI has adapted a formal Corporate Code of Conduct. Copies are available on request from Dr. Robert B. Harris, President and Chief Executive Officer, and on the Company's website at www.cbi-biotech.com.

Forward Looking Statements

Management has included herein certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. When used, statements that are not historical in nature, including the words "anticipated", "estimate", "should", "expect", "believe", "intend", and similar expressions are intended to identify forward-looking statements. Such statements are, by their nature, subject to certain risks and uncertainties.

Among the factors that could cause the actual results to differ materially from those projected are the following:

- business conditions and the general economy,
- the development and implementation of the Company's long-term business goals,
- federal, state, and local regulatory environment,
- lack of demand for the Company's services,
- the ability of the Company's customers to perform services similar to those offered by the Company "in-house,"
- potential cost containment by the Company's customers resulting in fewer research and development projects,
- the Company's ability to receive accreditation to provide various services, including, but not limited to paternity testing, and
- the Company's ability to hire and retain highly skilled employees,

Other risks, uncertainties, and factors that could cause actual results to differ materially from those projected are detailed from time to time in reports filed by the company with the Securities and Exchange Commission, including Forms 8-K, 10-QSB, and 10-KSB.

CONTROLS AND PROCEDURES

The Company's Chief Executive Officer and Controller have concluded that the Company's controls and other procedures designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Securities and Exchange Act of 1934, as amended, is recorded, processed, summarized and reported within the time periods as specified in the Commission's rules and forms are effective, based upon their evaluation of these controls and procedures as of December 31, 2004.

There were no significant changes in the Company's internal controls or in other factors that could significantly affect those controls subsequent to the date of this evaluation, including any corrective actions with regard to significant deficiencies and weaknesses.

Report of Independent Registered Public Accounting Firm

Board of Directors
Commonwealth Biotechnologies, Inc.
Richmond, Virginia

We have audited the accompanying balance sheets of Commonwealth Biotechnologies, Inc. as of December 31, 2004 and 2003, and the related statements of operations, stockholders' equity and cash flows for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits include consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Commonwealth Biotechnologies, Inc. as of December 31, 2004 and 2003, and the results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.



BDO Seidman, LLP

Richmond, Virginia
February 3, 2005

Balance Sheets

<i>December 31,</i>	2004	2003
Assets		
Current assets (Note 2)		
Cash and cash equivalents	\$ 2,742,034	\$ 294,922
Accounts receivable, net of allowance for doubtful accounts of approximately \$92,000 and \$71,000 (Note 5)	1,331,940	799,981
Prepaid expenses and other current assets	65,221	60,936
Total current assets	<u>4,139,195</u>	<u>1,155,839</u>
Property and equipment, net (Note 1)	5,701,158	5,649,657
Other assets		
Bond issuance costs, less accumulated amortization 2004 - \$0; 2003 - \$62,137	—	206,462
Intangible assets (Note 9)	561,569	—
Mortgage costs (Note 2)	111,086	—
Goodwill (Note 9)	490,000	—
Restricted cash (Note 2)	—	569,255
Total other assets	<u>1,162,655</u>	<u>775,717</u>
	\$ 11,003,008	\$ 7,581,213

See accompanying summary of accounting policies and notes to financial statements.

Balance Sheets
(continued)

<i>December 31,</i>	2004	2003
Liabilities and Stockholders' Equity		
Current liabilities		
Current maturities of long-term debt (Note 2)	\$ 409,541	\$ 100,000
Accounts payable and other current liabilities	377,862	241,769
Deferred revenue	161,511	14,296
Interest payable	10,833	90,596
Deferred compensation	—	133,259
Total current liabilities	959,747	579,920
Long-term debt , less current maturities (Notes 2)	4,081,453	3,630,000
Total liabilities	5,041,200	4,209,920
Commitments and contingencies (Notes 3 and 4)		
Stockholders' equity		
Common stock, no par value, 10,000,000 shares authorized, 2004 – 3,203,556; 2003 – 2,534,928, shares issued and Outstanding (Notes 7 and 8)	—	—
Additional paid-in capital	15,273,870	12,315,806
Accumulated deficit	(9,312,062)	(8,944,513)
Total stockholders' equity	5,961,808	3,371,293
	\$11,003,008	\$ 7,581,213

See accompanying summary of accounting policies and notes to financial statements.

Statements of Operations

Year Ended December 31,

	2004	2003
Revenues (Note 5)		
Government contracts	\$ 4,083,264	\$ 3,153,690
Commercial contracts	897,437	997,680
Laboratory services	486,719	526,128
Clinical services	194,473	191,904
Genetic identity	73,981	230,422
Other revenue	12,830	4,232
Total revenues	5,748,704	5,104,056
Cost of services		
Overhead	1,590,496	1,438,708
Direct labor	1,217,386	1,141,551
Direct materials	939,788	936,205
Other direct costs	20,608	12,035
Total cost of services	3,768,278	3,528,499
Gross profit	1,980,426	1,575,557
Selling, general and administrative	1,718,874	1,420,879
Operating income	261,552	154,678
Other income (expense)		
Interest expense and financing costs	(652,064)	(258,249)
Other income	22,963	22,970
Total other income (expense)	(629,101)	(235,279)
Net loss	\$ (367,549)	\$ (80,601)
Loss per common share, basic and diluted	\$ (0.12)	\$ (0.03)

See accompanying summary of accounting policies and notes to financial statements.

Statements of Changes in Stockholders' Equity

	Number of Shares Outstanding	Additional Paid-in Capital	Accumulated Deficit	Total
Balance, December 31, 2002	2,433,779	\$ 12,204,999	\$ (8,863,912)	\$ 3,341,087
Stock options exercised	101,149	110,807	—	110,807
Net loss	—	—	(80,601)	(80,601)
Balance, December 31, 2003	2,534,928	12,315,806	(8,944,513)	3,371,293
Issuance of common stock and stock options exercised	668,628	2,958,064	—	2,958,064
Net loss	—	—	(367,549)	(367,549)
Balance, December 31, 2004	3,203,556	\$ 15,273,870	\$ (9,312,062)	\$ 5,961,808

See accompanying summary of accounting policies and notes to financial statements.

Statements of Cash Flows

Year Ended December 31,

	2004	2003
Operating activities		
Net loss	\$ (367,549)	\$ (80,601)
Adjustments to reconcile net loss to cash provided by (used in) operating activities		
Depreciation and amortization	793,082	609,508
Issuance of stock in lieu of board fees	—	109,167
Changes in assets and liabilities		
Accounts receivable	(531,958)	(307,418)
Prepaid expenses	(4,286)	15,045
Accounts payable	(76,929)	(26,525)
Deferred revenue	147,306	(70,551)
Cash provided by (used in) operating activities	<u>(40,334)</u>	<u>248,625</u>
Investing activities		
Purchases of property and equipment	(551,272)	(49,694)
Purchase of FIL, net	(538,418)	—
Cash used in investing activities	<u>(1,089,690)</u>	<u>(49,694)</u>
Financing activities		
Decrease (increase) in restricted cash	569,255	(802)
Principal payments on debt obligations, including capital lease obligations	(100,000)	(174,991)
Increase in loan costs, net	(111,086)	—
Proceeds from debt obligations, net	260,903	—
Proceeds from issuance of common stock	2,958,064	1,640
Cash provided by (used in) financing activities	<u>3,577,136</u>	<u>(174,153)</u>
Net increase in cash and cash equivalents	2,447,112	24,778
Cash and cash equivalents, beginning of year	294,922	270,144
Cash and cash equivalents, end of year	<u>\$ 2,742,034</u>	<u>\$ 294,922</u>
Supplemental Disclosure of Cash Flow Information		
Cash payments for interest	<u>\$ 307,096</u>	<u>\$ 247,505</u>

See accompanying summary of accounting policies and notes to financial statements.

Nature of Business

Commonwealth Biotechnologies, Inc., (the "Company"), was formed on September 30, 1992, for the purpose of providing specialized analytical laboratory services for the life scientist. As the Company matured, it re-focused its core business activities and now provides integrated contract research support in four principal areas; bio-defense; laboratory support services for on-going clinical trials; comprehensive contract projects in the private sector; and through its FIL division, for paternity testing, forensic case-work analysis and CODIS work. In each of these areas, the Company provides sophisticated macromolecular synthetic and analytical services, integrating individual platform technologies so as to provide a comprehensive approach to solving complex problems in life science research.

Estimates

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent asset and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the period. Actual results could differ from those estimates.

Revenue Recognition

The Company recognizes revenue upon the completion of laboratory service projects, or upon the delivery and acceptance of biologically relevant materials that have been synthesized in accordance with project terms. Laboratory service projects are generally administered under fee-for-service contracts or purchase orders. Any revenues from research and development arrangements, including corporate contracts and research grants, are recognized pursuant to the terms of the related agreements as work is performed, or as scientific milestones, if any, are achieved. Amounts received in advance of the performance of services or acceptance of a milestone, are recorded as deferred revenue.

Long-Lived Assets

Long-lived assets, such as property, plant, and equipment, are evaluated for impairment when events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable through the estimated undiscounted future cash flows from the use of those assets. When any such impairment exists, the related assets will be written down to fair value. No impairment losses have been recorded through December 31, 2004.

Cash and Cash Equivalents

The Company considers all highly liquid debt instruments purchased with an original maturity of three months or less to be cash equivalents. At times, the Company maintains cash balances in excess of FDIC insured amounts. As of December 31, 2004 the excess over the FDIC amount was \$42,785.

Accounts Receivable

Accounts receivable are carried at original invoice amount less an estimate made for doubtful receivables based on a review of all outstanding amounts on a monthly basis. Management determines the allowance for doubtful accounts by regularly evaluating individual customer receivable and considering a customer's financial condition, credit history, and current economic conditions. Accounts receivable are written off when deemed uncollectible. Recoveries of accounts receivable previously written off are recorded when received.

Summary of Significant Accounting Policies
(continued)**Property and Equipment**

Property and equipment are recorded at cost. Depreciation is computed principally by the straight-line method over the following estimated useful lives providing depreciation and amortization for financial reporting purposes. The cost of repairs and maintenance is expensed as incurred. The estimated useful lives of the assets are as follows:

	<u>Years</u>
Buildings	39.5
Laboratory and computer equipment	3 – 10
Furniture and fixtures and office equipment	7

Intangible assets

Intangible assets consist of a covenant not to compete, commercial contracts, listing of draw sites, listing of providers to assist in paternity testing and other related intangibles acquired in the purchase of Fairfax Identity Labs which are being amortized over 2 to 3 years.

Loan Costs

Loan costs are being amortized on a straight-line basis over the expected term of the mortgage.

Goodwill

Goodwill, which represents the excess of purchase price over fair value of net assets acquired, is evaluated at least annually for impairment by comparing its fair value with its recorded amount and is written down when appropriate. Projected net operating cash flows are compared to the carrying amount of the goodwill recorded and if the estimated net operating cash flows are less than the carrying amount, a loss is recognized to reduce the carrying amount to fair value. The goodwill as of December 31, 2004 is a result of the acquisition by the Company of Fairfax Identity Labs during 2004.

Bond Issuance Costs

Bond issuance costs consisted of origination cost associated with the 2000 bond issue and were amortized over twenty-five years using the straight-line method, which did not differ materially from the effective interest method. The bonds were re-financed with a conventional mortgage during 2004 and all remaining unamortized costs for the Company were expensed in total. Amortization costs were \$206,960 and \$10,744 for the years ended December 31, 2004 and 2003, respectively. In addition the Company paid \$217,800 in prepayment penalties to eliminate the Industrial Revenue Bonds in 2004.

Income Taxes

Deferred taxes are provided on the asset and liability method whereby deferred tax assets are recognized for deductible temporary differences and deferred tax liabilities are recognized for taxable temporary differences. Temporary differences are the differences between the reported amounts of assets and liabilities and their tax bases. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized. Deferred tax assets and liabilities are adjusted for the effects of changes in tax laws and rates on the date of enactment.

Loss Per Common Share

Basic loss per share has been computed on the basis of the weighted-average number of common shares outstanding. Common shares which can be issued upon exercise of stock options and warrants (see Note 8) have not been included in the computation because their inclusion would have been antidilutive. Weighted average shares outstanding for basic and diluted loss per common share were 3,001,682 and 2,486,699 for the years ended December 31, 2004 and 2003, respectively.

Employee Stock Plans

The Company adopted a Stock Incentive Plan on June 24, 1997. The Plan provides for granting to employees, officers, directors, consultants and certain other non-employees of the Company options to purchase shares of common stock. A maximum of 410,000 shares of common stock may be issued pursuant to the Plan. Of the maximum number of shares to be issued under the Plan, 270,000 have been reserved for incentive awards to be granted to the founders of the Company, and 140,000 are reserved for incentive awards to be granted to others.

A 2000 Stock Incentive Plan was adopted by the Board of Directors and approved by the shareholders. The Plan makes up to 300,000 shares of common stock available for grants of restricted stock awards and stock options in the form of incentive stock options and non-qualified options to employees, directors and consultants of the Company.

A 2002 Stock Incentive Plan was adopted by the Board of Directors and approved by the shareholders. The Plan makes up to 600,000 shares of common stock available for grants of restricted stock awards and stock options in the form of incentive stock options and non-qualified options to employees, directors and consultants of the Company.

Incentive awards may be in the form of stock options, restricted stock, incentive stock or tax offset rights. In the case of incentive stock options (within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended), the exercise price will not be less than 100% of the fair market value of shares covered at the time of the grant, or 110% for incentive stock options granted to persons who own more than 10% of the Company's voting stock. Options granted under the Plans generally vest over a five-year period from the date of grant and are exercisable for ten years, except that the term may not exceed five years for incentive stock options granted to persons who own more than 10% of the Company's outstanding common stock. Options granted in 2004 is vested immediately.

Summary of Significant Accounting Policies
(continued)**Employee Stock Plans: (continued)**

The Company applies Accounting Principles Board Opinion No. 25 and related accounting interpretations in accounting for its plan and for management warrants and, accordingly, no compensation cost has been recognized. Had compensation cost for the Company's plan been determined based on the fair value at the grant dates for awards under the plan consistent with the method prescribed by FASB No. 123, *Accounting for Stock-Based Compensation*, the Company's net loss and loss per share would have increased to the pro-forma amounts indicated below:

	2004	2003
Net loss		
As reported	\$(367,549)	\$ (80,601)
Proforma effect of recognizing stock-based compensation in accordance with FASB No. 123	(144,964)	(58,322)
Proforma	(512,513)	(138,923)
Basic and diluted loss per common share		
As reported	(0.12)	(0.03)
Proforma effect of recognizing stock-based compensation in accordance with FASB No. 123	(0.17)	(0.02)
Proforma	(0.29)	(0.06)

Under FASB No. 123, the fair value of each stock option and warrant is estimated on the date of grant using the Black-Scholes option pricing model. The following weighted-average assumptions were used for grants in 2004 and 2003, respectively: No dividend yield, expected volatility of 93% and 144%, risk-free interest rate of 4.28% and 4.38%, and expected lives of 10 years.

Fair Value of Financial Instruments

The Company has determined, based on available market information and appropriate valuation methodologies, that the fair value of its financial instruments approximates carrying value. The carrying amounts of cash and cash equivalents, accounts receivable and accounts payable approximate fair value due to the short-term maturity of the instruments. The carrying amount of debt approximates fair value because the interest rates under the credit agreement are predominantly variable, based on current market conditions.

New Accounting Pronouncements

In December 2003, the FASB issued FIN No. 46R, "Consolidation of Variable Interest Entities," an interpretation of Accounting Research Bulletin No. 51. FIN No. 46R requires that variable interest entities be consolidated by a company if that company is subject to a majority of the risk of loss from the variable interest entity's activities or is entitled to receive a majority of the entity's residual returns or both. FIN 46R also requires disclosure about variable interest entities that companies are not required to consolidate but in which a company has a significant variable interest. The consolidation requirements must be adopted no later than the beginning of the first fiscal year or interim period beginning after March 15, 2004. The adoption of FIN No. 46R did not have a material impact on the Company's results of operations, financial position or cash flows.

SFAS No. 123 (Revised 2004), "Share-Based Payment," issued in December 2004, is a revision of FASB Statement 123, "Accounting for Stock-Based Compensation" and supersedes APB Opinion No. 25, "Accounting for Stock Issued to Employees," and its related implementation guidance. The Statement focuses primarily on accounting for transactions in which an entity obtains employee services in share-based payment transactions. SFAS No. 123 (Revised 2004) requires an entity to measure the cost of employee services received in exchange for an award of equity instruments based on the grant-date fair value of the award (with limited exceptions). That cost will be recognized over the period during which an employee is required to provide service in exchange for the award. This statement is effective as of the beginning of the interim or annual reporting period that begins after December 15, 2005. Although the Company has not completed its assessment, it does not believe the impact on the financial position or results of operations will be material.

1. Property and Equipment

Property and equipment consisted of the following:

<i>December 31,</i>	2004	2003
Land	\$ 403,919	\$ 403,919
Building	4,999,496	4,904,666
Laboratory equipment	3,851,501	3,383,151
Furniture, fixtures and office and computer equipment	498,737	423,796
	9,753,653	9,115,532
Less accumulated depreciation	4,052,495	3,465,875
	\$ 5,701,158	\$ 5,649,657

Depreciation expense was \$586,620 and \$598,765 for the years ended December 31, 2004 and 2003, respectively.

2. Long-Term Debt

Long-term debt consists of:

<i>December 31,</i>	2004	2003
Note payable to Bank, maturing November 2009; with monthly payments of \$25,347 of principal and interest, interest at 5.25%; collateralized by building and other assets of the Company.	\$ 3,890,994	\$ —
Note payable to Genetics & IVF Institute due in two installments on December 15, 2005 and December 15, 2006. Secured by letter of credit.	600,000	—
Industrial Revenue Development Bonds Series 1998A (5.2% - 7%), payable in monthly installments of interest only through March 15, 2000, annual installments of principal and interest from March 15, 2001 through March 15, 2023, secured by a first deed of trust on land and building. Paid off in 2004.	—	3,400,000
Industrial Revenue Development Bonds Series 1998B (8%), payable in monthly installments of interest only through March 15, 2023 and a final payment of \$330,000 due March 15, 2023, secured by a second deed of trust on land and building. Paid off in 2004.	—	330,000
	4,490,994	3,730,000
Less current maturities	409,541	100,000
	\$ 4,081,453	\$ 3,630,000

Scheduled maturities of long-term debt are as follows:

2005	\$ 409,541
2006	415,129
2007	121,103
2008	126,878
2009	3,418,343
	\$4,490,994

2. Long Term (continued):

The mortgage agreements required the Company to maintain a reserve fund for a period of one year which was held in a certificate of deposit. This reserve fund is included in the balance sheet as a cash equivalent to the Company.

The bond agreements required the Company to maintain debt service reserve funds, which were held by the trustee. Debt service reserve funds are included in the balance sheets as restricted cash. During 2004, the Company used the proceeds from the mortgage payable to repay the Industrial Revenue Bonds. In accordance with the bond documents, a prepayment penalty of \$217,000 was paid by the Company in 2004.

3. Leasing Commitments

The Company leases equipment under non-cancelable operating leases. Total expense for the years ended December 31, 2004 and 2003 was \$37,236 and \$42,800, respectively. Future minimum rental commitments under operating leases as of December 31, 2004 are as follows:

2005	\$25,314
2006	24,034
2007	10,387
2008	2,079
	<u>\$61,814</u>

4. Retirement Plan

The Company maintains a 401(k) Plan (the "Plan") which covers substantially all employees. Under the Plan, employees may elect to defer a portion of their salary, up to the maximum allowed by law, and the Company can elect to match the contribution up to 1% of the employee's salary. Company contributions in 2004 were \$5,231. No contributions were made in 2003.

5. Major Customers

Revenues for the years ended December 31, 2004 and 2003 include revenues from nine major customers in 2004 of approximately \$2,805,540 or 48% of total revenues and in 2003, two major customers of approximately \$1,154,000 or 23% of total revenues. Trade receivables due from these customers as of December 31, 2004 and 2003 were \$624,278 and \$365,000, respectively.

6. Income Taxes

The difference between expected income tax benefits and income tax benefits recorded in the financial statements is explained below:

<u>Year Ended December 31,</u>	<u>2004</u>	<u>2003</u>
Income taxes (benefit) computed at 34% statutory rate	\$(124,900)	\$(27,400)
State income tax benefit, net	(18,400)	(4,200)
Change in valuation allowance	117,400	26,200
Other	25,900	5,400
	<u>\$ —</u>	<u>\$ —</u>

The significant components of deferred income tax assets and liabilities consist of the following:

<u>December 31,</u>	<u>2004</u>	<u>2003</u>
Deferred tax assets		
Net operating loss carryforward	\$ 3,586,400	\$ 3,499,000
Research and development credit carryforward	52,600	52,600
Deferred compensation	20,800	50,600
Other	42,200	40,600
	<u>3,702,000</u>	<u>3,642,800</u>
Deferred tax liabilities		
Tax depreciation in excess of book depreciation	301,100	359,300
	<u>3,400,900</u>	<u>3,283,500</u>
Net deferred tax asset before valuation allowance	3,400,900	3,283,500
Less valuation allowance	3,400,900	3,283,500
	<u>\$ —</u>	<u>\$ —</u>

Operating loss carryforwards of approximately \$9,438,000 may be used to offset future taxable income and expire in various years through 2023. The Company also has research and development credit carryforwards of approximately \$53,000 that expire in various years through 2020.

7. Stock Compensation

In addition to employee stock option awards, the Company has reserved an aggregate of 383,889 shares of common stock for issuance upon exercise, management warrants (100,000), warrants issued in connection with the 2002 private placement (83,889).

Stock option transactions are summarized as follows:

	2004	Weighted Average Exercise Price	2003	Weighted Average Exercise Price
Options and warrants outstanding, beginning of year	1,186,572	\$ 5.01	1,286,817	\$ 5.05
Granted	177,903	6.47	31,700	2.84
Exercised	(268,628)	2.69	(30,445)	.90
Expired	(206,249)	3.40	(101,500)	6.50
Options and warrants outstanding, end of year	<u>889,598</u>	<u>6.34</u>	<u>1,186,572</u>	<u>5.01</u>
Options and warrants exercisable, end of year	<u>889,598</u>	<u>6.34</u>	<u>979,322</u>	<u>4.76</u>
Weighted-average fair value per option and warrants for options and warrants granted during the year		<u>\$ 2.79</u>		<u>\$ 1.84</u>

The following table summarizes information about stock options and warrants outstanding at December 31, 2004:

Exercise Prices Per Share	Outstanding		Exercisable		
	Number Outstanding	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price Per Share	Number Exercisable	Weighted Average Exercise Price Per Share
\$0.90 – 2.00	72,882	8	\$ 1.15	72,882	\$ 1.15
\$2.01 – 5.49	244,694	7	3.94	244,694	3.94
\$5.50 – 7.49	215,663	3	6.39	215,663	6.39
\$7.50 – 9.49	139,000	6	7.56	139,000	7.56
\$9.50 – 12.00	217,359	4	9.95	217,359	9.95
\$0.90 – 12.00	<u>889,598</u>		<u>\$ 6.34</u>	<u>889,598</u>	<u>\$ 6.34</u>

8. Private Placement Offering

On May 27, 2004, the Company completed an offering of 400,000 shares of its common stock, without par value per share, and warrants to purchase an additional 100,000 shares of common stock to several accredited investors. The shares were sold for a cash consideration of \$6.25 per share, for a total of \$2,500,000. Net proceeds to the Company were \$2,299,842. The exercise price for the warrants, which are exercisable for a period of five years were set at 110% of the closing price of the Company's common stock on the closing date of the transaction.

9. Purchase of Fairfax Identity Labs

In December, 2004, the Company purchased the assets of Fairfax Identity Labs, (FIL), a division of Genetics and In-Vitro Fertilization Institute for total consideration, including associated costs of \$1,149,000. The principal focus of the purchase was to increase the revenue base of private paternity, contract paternity testing, and forensic DNA analysis. The acquisition has been accounted for by the purchase method of accounting.

A Summary of the transaction is as follows:

Purchase Price	\$ 1,149,000
Less fair value of assets acquired	
Equipment	97,000
Draw Sites	307,000
Physicians Listing	145,000
Covenant Not to Compete	110,000
	<hr/>
Total fair value of assets acquired	659,000
Goodwill	\$ 490,000

Notes to Financial Statements
(continued)

The pro forma, unaudited financial information below is presented as if the acquisition had occurred at the beginning of the respective periods. It is not necessarily indicative of the operating result that would have actually occurred and is not indicative of future operating results.

	Year Ended December 31,	
	2004	2003
Operating revenue	\$ 7,355,989	\$ 7,029,441
Net loss	(791,806)	(809,165)
Basic and diluted loss per common share	\$ (.25)	\$ (.32)

The results for 2004 include FIL's operating results through September 30, 2004, the last interim date prior to the consummation of the acquisition.

Corporate Information**Corporate Office****Commonwealth Biotechnologies, Inc.**

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Independent Auditors

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Suite 520
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Executive Officers and Board of Directors**Executive Officers****Richard J. Freer, Ph.D.**

Chairman of the Board; COO

Thomas R. Reynolds

Executive Vice President,
Science and Technology;
Secretary

Directors**Richard J. Freer, Ph.D.**

Chairman of the Board; COO

Thomas R. Reynolds

Executive Vice President
Science and Technology;
Secretary

James Causey

VP, Consumer Industry Magazines
Trader Publications

Peter Einselen

Broker
Anderson and Strudwick, Inc.

Robert B. Harris, Ph.D.

President; CEO

James H. Brennan, MBA

Controller

Robert B. Harris, Ph.D.

President, CEO

Samuel P. Sears, Jr., Esq.

Attorney at Law

Donald A. McAfee, Ph.D.


VP New Product Development
Cardiome Pharma Corp

Gerald P. Krueger, Ph.D., CPE

Director, Human Factors and Ergonomics

CONSENT OF INDEPENDENT
REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements Form S-8 (No. 333-51074) and S-3 (No. 333-51078) of Commonwealth Biotechnologies, Inc. of our report dated February 3, 2005, relating to the financial statements, which appears in the Annual Report to Shareholders, which is incorporated by reference in this Form 10-KSB.


BDO Seidman, LLP

Richmond, Virginia
March 29, 2005

CERTIFICATION

I, Robert B. Harris, Ph.D., certify that:

1. I have reviewed this Annual Report on Form 10-KSB of Commonwealth Biotechnologies, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the small business issuer as of, and for, the periods presented in this report;
4. The small business issuer's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the small business issuer and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the small business issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the small business issuer's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

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- (d) Disclosed in this report any change in the small business issuer's internal control over financial reporting that occurred during the small business issuer's most recent fiscal quarter (the small business issuer's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the small business issuer's internal control over financial reporting; and
5. The small business issuer's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the small business issuer's auditors and the audit committee of the small business issuer's board of directors (or persons performing the equivalent functions):
- (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the small business issuer's ability to record, process, summarize and report financial information; and
- (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the small business issuer's internal control over financial reporting.

Date: March 30, 2005

/s/ Robert B. Harris, Ph.D.

Robert B. Harris, Ph.D.
President and Chief Executive Officer

CERTIFICATION

I, James H. Brennan, certify that:

1. I have reviewed this Annual Report on Form 10-KSB of Commonwealth Biotechnologies, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the small business issuer as of, and for, the periods presented in this report;
4. The small business issuer's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the small business issuer and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the small business issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the small business issuer's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

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- (d) Disclosed in this report any change in the small business issuer's internal control over financial reporting that occurred during the small business issuer's most recent fiscal quarter (the small business issuer's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the small business issuer's internal control over financial reporting; and
5. The small business issuer's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the small business issuer's auditors and the audit committee of the small business issuer's board of directors (or persons performing the equivalent functions):
- (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the small business issuer's ability to record, process, summarize and report financial information; and
- (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the small business issuer's internal control over financial reporting.

Date: March 30, 2005

/s/ James H. Brennan

James H. Brennan
President and Chief Executive Officer

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Commonwealth Biotechnologies, Inc. (the "Company") on Form 10-KSB for the period ending December 31, 2004 as filed with the Securities and Exchange Commission on March 31, 2005 (the "Report"), I Robert B. Harris, Ph.D., President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. ss. 1350, as adopted pursuant to ss. 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

March 30, 2005

/s/ Robert B. Harris, Ph.D.

Robert B. Harris, Ph.D.
President and Chief Executive Officer

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Commonwealth Biotechnologies, Inc. (the "Company") on Form 10-KSB for the period ending December 31, 2004 as filed with the Securities and Exchange Commission on March 31, 2005 (the "Report"), I, James H. Brennan, Controller of the Company, certify, pursuant to 18 U.S.C. ss. 1350, as adopted pursuant to ss. 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

March 30, 2005

/s/ James H. Brennan

James H. Brennan
Controller