SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549

SCHEDULE 13D

AMENDMENT NO. 1

| ProPhase Labs, Inc. |
|--|
| (Name of Issuer) |
| Common Stock, par value \$0.0005 per share |
| (Title of Class of Securities) |
| 74345W 10 8 |
| (CUSIP Number) |
| Bonnie J. Roe, Esq. Cohen & Gresser LLP 800 Third Avenue New York, NY 10022 (Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications) |
| September 23, 2011 |
| (Date of Event which Requires Filing of this Statement) |
| If the filing person has previously filed a statement on Schedule 13G to report the acquisition which is the subject of this Schedule 13D, and is filing this schedule because of § 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box. |
| |

| 1. | NAME OF REP | ORTING PERSON: | | | | |
|----------------|--|----------------------------------|-------------------------------|------------------------------|--|--|
| | Phosphagenics Limited | | | | | |
| 2. | CHECK THE A | PPROPRIATE BOX IF A MEMBE.s): | R OF A GROUP | | | |
| | (a) | | | | | |
| 3. | SEC USE ONL | Y | | | | |
| 4. | SOURCE OF F | UNDS (See Instructions) | Not applicable. | | | |
| 5. | CHECK IF DIS | CLOSURE OF LEGAL PROCEEDI | NGS IS REQUIRED PURSUANT TO I | TEMS 2(d) or 2(e): \square | | |
| 6. | CITIZENSHIP | OR PLACE OF ORGANIZATION | Australia | | | |
| | BER OF | 7. | SOLE VOTING POWER | <u>0</u> | | |
| | FICIALLY | 8. | SHARED VOTING POWER | <u>0</u> | | |
| OWNE EACH | | 9. | SOLE DISPOSITIVE POWER | <u>0</u> | | |
| REPOI PERSO | N WITH | 10. | SHARED DISPOSITIVE POWER | <u>0</u> | | |
| 11. | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON | | | | | |
| | 0 | | | | | |
| 12. | CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (See Instructions) | | | | | |
| 13. | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) | | JNT IN ROW (11) | 0% | | |
| 14. | TYPE OF REPO | ORTING PERSON (See Instructions) |) | СО | | |
| | | | | | | |
| | | | | | | |

CUSIP No: 74838L304

This Amendment No. 1 amends the Schedule 13D filed by Phosphagenics Limited (the 'Reporting Person') on April 1, 2010, to the extent specifically set forth below.

Item 1. Security and Issuer.

This Amendment No. 1 relates to the common stock, par value \$0.0005 per share ('Common Stock''), of ProPhase Labs, Inc., a Nevada corporation (the 'Issuer'').

This Amendment No. 1 is being filed by the Reporting Person as a result of the Reporting Person's entry into agreements to sell (i) 690,000 shares of Common Stock to the Issuer pursuant to a Redemption Agreement, dated September 23, 2011 by and between the Reporting Person and the Issuer (the "Redemption Agreement"), attached as Exhibit 1 hereto; and (ii) 750,000 shares of Common Stock, in the aggregate, to seven individual purchasers pursuant to identical agreements with the Issuer and the respective purchasers, each dated September 23, 2011 and each in the form of the Private Resale Agreement and Representation Letter (the "Private Resale Agreement"), attached as Exhibit 2 hereto. The closing under the Redemption Agreement and the Private Resale Agreements is subject to ordinary closing conditions.

Item 5. Interest in Securities of the Issuer.

- (a) None.
- (b) None.
- (c) None.
- (d)-(e) Not applicable.

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

Redemption Agreement

Under the Redemption Agreement, the Issuer agreed to purchase 690,000 shares of Common Stock from the Reporting Person in consideration of an aggregate price of Four Hundred Forty-Eight Thousand Five Hundred dollars (\$448,500) in cash, or \$0.65 per share of Common Stock.

Private Resale Agreements

The Reporting Person entered into seven Private Resale Agreements with the seven purchasers named in Exhibit A attached to the Form of Private Resale Agreement and Representation Letter, attached as Exhibit 2 hereto, under which the Reporting Person agreed to sell an aggregate of 750,000 shares of Common Stock for an aggregate price of Four Hundred Eighty-Seven Thousand Five Hundred dollars (\$487,500) in cash, or \$0.65 per share of Common Stock.

Under the Private Resale Agreements, the purchasers may not, without the prior written consent of the Issuer, prior to the one year anniversary of the Private Resale Agreements, directly or indirectly, sell, give, pledge, hypothecate, assign or otherwise transfer the purchased shares, in whole or in part.

Item 7. <u>Material to be Filed as Exhibits.</u>

Exhibit 1 - Redemption Agreement, dated September 23, 2011, by and between the Reporting Person and the Issuer.

 $Exhibit \ 2- \\ Form \ of \ Private \ Resale \ Agreement \ and \ Representation \ Letter.$

SIGNATURE

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

Dated: September 27, 2011

Phosphagenics Limited

By: /s/ Harry Rosen

Name: Harry Rosen
Title: President and Chief Executive Officer

REDEMPTION AGREEMENT

THIS REDEMPTION AGREEMENT (this "Agreement") is made and entered into this 23rd day of September, 2011, by and between Phosphagenics Ltd., an Australian corporation ("Phosphagenics"), and ProPhase Labs, Inc., a Nevada corporation (the "Company"). Phosphagenics and the Company are sometimes referred to herein individually as a "Party" and collectively as the "Parties".

WHEREAS, Phosphagenics is the sole beneficial and record owner of 1,440,000 shares of common stock, par value \$0.0005 per share (the <u>Common Stock</u>"), of the Company;

WHEREAS, the Company desires to redeem 690,000 shares of Common Stock (the 'Redeemed Shares'') in consideration for the Redemption Price (as defined below) pursuant to the terms and conditions set forth herein.

NOW THEREFORE, in consideration of the promises and mutual obligations set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties, intending to be legally bound, hereby agree as follows:

- 1. Redemption. Promptly following execution of this Agreement but no later than three business days thereafter, Phosphagenics shall surrender Stock Certificate No. TQC2910 (the "Surrendered Certificate") and all rights and privileges attaching thereto. Within one business day following the Company's receipt of the Surrendered Certificate and duly executed stock power in the form provided by the Company's transfer agent, the Company shall pay to Phosphagenics an aggregate redemption price of Four Hundred Forty Eight Thousand Five Hundred Dollars (\$448,500) (the "Redemption Price") by wire transfer of immediately available funds to an account designated in writing by Phosphagenics to the Company (such transaction, the "Transaction"). Such Redemption Price shall be held in escrow by the Company's law firm, Reed Smith LLP, pending transfer to Phosphagenics in accordance with this Section 1.
- 2. Ownership. Phosphagenics represents and warrants to the Company that it owns and shall deliver the Redeemed Shares free and clear of all liens, claims, encumbrances, interests and restrictions of any kind or nature, except for restrictions on transfer imposed under applicable securities and other than this Agreement, there are no outstanding or authorized options, warrants, redemption rights, repurchase rights or other commitments that could require Phosphagenics to sell or otherwise transfer the Redeemed Shares to anyone other than the Company. All action on the part of Phosphagenics necessary for the authorization, execution, delivery and performance by it of this Agreement, and the consummation of the transactions contemplated hereby and thereby, has been taken. This Agreement constitutes the valid and legally binding obligation of Phosphagenics, enforceable in accordance with its terms, except as may be limited by any bankruptcy, insolvency, reorganization, moratorium, or other similar law affecting the enforcement of creditor's rights generally or by general principles of equity.
- 3. <u>Representations</u>. Phosphagenics acknowledges and agrees as follows:

- (i) Phosphagenics has reviewed or had the opportunity to review the Annual Report of the Company on Form 10-K for the fiscal year ended December 31, 2010 and all subsequent public filings of the Company with the U.S. Securities and Exchange Commission; and
- (ii) Phosphagenics has made its own decision to consummate the Transaction based on its own independent review.
- 4. <u>Execution</u>. This Agreement may be executed by electronic transmission, including facsimile or e-mail of a .pdf counterpart, which transmission shall constitute the delivery of an originally executed document.
- 5. Headings. The section headings contained in this Agreement are inserted for convenience only and shall not affect the meaning or interpretation of this Agreement.
- 6. Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of New York, without regard to the choice of law or conflicts of law provisions thereof that would require application of the laws of a jurisdiction other than the State of New York. The Parties hereby irrevocably agree that any suit, action, proceeding or claim against them arising out of or in any way relating to this Agreement, or any judgment entered by any court in respect thereof, may be brought or enforced in the state or federal courts located in the county of New York, New York, and hereby irrevocably waive, to the fullest extent permitted by law, any objection which they may now or hereafter have to the venue of any proceeding brought in New York, New York and further irrevocably waive any claims that any such proceeding has been brought in an inconvenient forum. The Parties hereby expressly waive any right to a trial by jury in any action or proceeding to enforce or defend any right, power, or remedy under or in connection with this Agreement.
- 7. Severability; Further Assurances. If any provision of this Agreement shall be determined by a court of competent jurisdiction to be invalid or unenforceable, such determination shall not affect the remaining provisions of this Agreement, all of which shall remain in full force and effect. The Parties agree to use all reasonable efforts to take, or cause to be taken, all actions and do, or cause to be done all other things necessary, proper or appropriate to consummate and effectuate the transaction contemplated hereby, including the furnishing to the other party or any other appropriate party such further certifications, agreements, affidavits or other documents necessary to effectuate the purposes hereof.
- Entire Agreement; Miscellaneous. This Agreement sets forth the entire agreement and understanding of the Parties relating to the subject matter hereof, and supersedes all prior agreements, arrangements and understandings, written or oral, relating to the subject matter hereof. To avoid any ambiguity, the Parties agree that this Agreement in no way changes or impacts the existing obligations of each of the Parties under (i) certain Limited Liability Company Operating Agreement of Phusion Laboratories, LLC, dated March 22, 2010, (ii) certain Amended and Restated License Agreement, dated March 22, 2010 (the "Original License Agreement"), and (iii) certain Contribution Agreement, dated March 22, 2010, each by and between the Company, Phosphagenics, Phosphagenics Inc. and Phusion Laboratories, LLC. No representation, promise or inducement has been made by either Party that is not embodied in this Agreement, and neither Party shall be bound by or liable for any alleged representation, promise or inducement not so set forth. This Agreement may be amended only by a written agreement signed by each Party. This Agreement shall be binding upon and shall inure solely to the benefit of the Parties hereto and their respective successors and permitted assigns. Nothing in this Agreement, express or implied, is intended to and shall not under any circumstances create any enforceable right or benefit in any other person whatsoever, nor shall any other person whatsoever be entitled to have any claim, cause of action or right based upon or arising out of the existence of this Agreement or the consummation of the transactions contemplated hereby.

[REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK, SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed and delivered as of the date set forth above.

PHOSPHAGENICS LTD.

By: <u>/s/ Esra Ogru</u> Name: Esra Ogru Title: Chief Executive Officer

PROPHASE LABS, INC.

By: <u>/s/ Ted Karkus</u> Name: Ted Karkus

Title: Chief Executive Officer

[SIGNATURE PAGE TO REDEMPTION AGREEMENT]

PRIVATE RESALE AGREEMENT AND REPRESENTATION LETTER

| THIS PRIVATE RESALE AGREEMENT AND REPRESENTATION LETTER (this "Agreement") is entered into as of September 23, 2011 by and between Phosphagenics Ltd., an Australian corporation ("Seller"), ("Purchaser"), and ProPhase Labs, Inc., a Nevada corporation (the "Issuer"). |
|---|
| WITNESSETH: |
| WHEREAS, Seller is the beneficial owner of 750,000 shares (the 'Shares'') of common stock, par value \$0.0005 per share (the 'Common Stock''), of the Issuer, the Shares having been purchased by the Seller from the Issuer in a private transaction in March 2010 pursuant to that certain Share Transfer Restriction Agreement, dated March 22, 2010 (the "Share Transfer Restriction Agreement"); and |
| WHEREAS, Seller desires to sell, and Purchaser desires to purchase [] shares of Common Stock (the Purchased Shares ") in accordance with the terms and conditions hereof (such transaction, the " Transaction "). |
| NOW, THEREFORE, in consideration of the premises and of the mutual covenants and agreements herein contained and the parties hereto agree as follows: |
| 1. Representations of Seller. |
| (a) Seller acknowledges and confirms that the Purchased Shares were acquired directly from the Issuer in a private placement transaction, and acknowledges that the Shares have not been registered under the Securities Act of 1933, as amended (the "Act"). |
| (b) Seller acknowledges that the Purchased Shares were acquired for investment purposes only and not with a view to the distribution, resale, subdivision or fractionalization thereof. Seller represents that the transaction contemplated hereby is being made based upon the Purchaser's representations herein. |
| (c) Seller represents and warrants that the execution, delivery and performance of this Agreement by Seller and the consummation by it of the transactions contemplated hereby have been duly and effectively authorized by all requisite action, and when fully executed and delivered, this agreement will constitute a legal, valid and binding obligation of Seller, enforceable in accordance with its terms. |
| (d) Seller represents and warrants that the Purchased Shares to be sold by Seller pursuant to this Agreement are owned by the Seller and shall be sold to the Purchaser free and clear of any and all liens, charges, security interests, options, encumbrances and claims of any kind or nature (other than securities law restrictions and restrictions referenced in Section 1(e)) and the sale of such Purchased Shares to Purchaser will transfer title to such Purchased Shares, free and clear of all such claims, charges and encumbrances. |

- (e) Seller represents and warrants that the transaction contemplated by this Agreement will not violate the terms of, and is not in contravention of, any agreement that the Seller is a party to (whether with the Issuer, any other stockholder of the Issuer, or otherwise) governing the sale, transfer, gift or other disposition of the Purchased Shares; and that any rights of first refusal, redemption, co-sale or similar rights regarding the Purchased Shares held by any of such persons have been duly waived, satisfied or applicable consents obtained.
- **Representations of Purchaser.** The Purchaser represents that it is acquiring the Purchased Shares for investment purposes only and not with the view to the distribution, resale, subdivision or fractionalization thereof, and that the transaction contemplated hereby is exempt from the registration provisions of the Act. The Purchaser represents that it is acquiring the Purchased Shares for its own account and not for the account, benefit or interest, directly or indirectly, of any other person. The Purchaser represents that he or it is an "accredited investor" as such term is defined in Rule 501(a) under the Act and is not an associated person of an NASD member firm. The Purchaser represents that no portion of the Consideration (as defined below), has been provided by the Seller for this transaction and that no repurchase rights, options, calls, puts or similar rights have been granted to the Seller regarding the Purchased Shares. The Purchaser acknowledges that the Purchased Shares are "restricted securities" as that term is defined in Rule 144 adopted under the Act; that the Purchaser's right to resell the Purchased Shares is subject to Rule 144 under the Act; and that, if and when available, if at all, Rule 144 may impose volume limitations, and certain other conditions on resales made pursuant thereto. Purchaser represents and warrants that the execution, delivery and performance of this Agreement by Purchaser and the consummation by it of the transactions contemplated hereby have been duly and effectively authorized by all requisite action and constitutes a legal, valid and binding obligation of Purchaser, enforceable in accordance with its terms. The Purchaser represents that it (i) has purchased restricted securities in the past and understands and acknowledges the lack of liquidity involved in the ownership of restricted securities; (ii) has such knowledge and experience in business matters and is was capable of evaluating the merits and risks of investing in the Purchased Shares for an indefinite period

3. Purchaser Acknowledgements and Agreements. Purchaser acknowledges and agrees as follows:

- (a) Purchaser has carefully reviewed the Annual Report of the Issuer on Form 10-K for the fiscal year ended December 31, 2010 and all subsequent public filings of the Issuer with the U.S. Securities and Exchange Commission, other publicly available information regarding the Issuer, and such other information that it and its advisers deem necessary to make its decision to enter into the Transaction;
- (b) Purchaser has made its own decision to consummate the Transaction based on its own independent review and consultations with such investment, legal, tax, accounting and other advisers as it deemed necessary, prudent or advisable. Purchaser has made its own decision concerning the Transaction without reliance on any representation or warranty of, or advice from, the Seller or the Issuer. Neither the Seller or the Issuer nor anyone affiliated with the Seller or the Issuer has made any representations or warranties, express or implied, regarding the Issuer, the Purchased Shares or any aspect of the Transaction, except as specifically, and not by implication, set forth in this Agreement. Neither the Seller or the Issuer nor anyone affiliated with the Seller or the Issuer has made any representations or warranties, express or implied, regarding the Issuer, the Purchased Shares or any aspect of the Transaction, except as specifically, and not by implication, set forth in this Agreement;

- (c) Purchaser acknowledges and understands that Seller and its officers and affiliates may possess material non-public information not known to Purchaser that may impact the value of the Purchased Shares (the "Seller Information"), that Seller has not disclosed to Purchaser, including without limitation, (i) information received by principals and employees of the Seller, and (ii) information received on a privileged basis from the attorneys and financial advisers representing the Seller. Purchaser understands, based on its experience, the disadvantage to which Purchaser is subject due to the disparity of information between the Purchaser and the Seller. Notwithstanding this, Purchaser has deemed it appropriate to engage in the Transaction; and
- (d) Purchaser agrees that Seller and its affiliates, principals, stockholders, partners, employees and agents shall have no liability to Purchaser or its principals, partners, employees or agents, whatsoever due to or in connection with Seller's use or non-disclosure of the Seller Information or otherwise as a result of the Transaction contemplated hereby, and Purchaser hereby irrevocably waives any claim that it might have based on the failure of the Seller to disclose the Seller Information.
- 4. Transfer Restrictions. Without the prior written consent of the Issuer, prior to the one year anniversary of this Agreement, Purchaser shall not, directly or indirectly, sell, give, pledge, hypothecate, assign or otherwise transfer (collectively "transfer") the Purchased Shares, in whole or in part. Further, Purchaser agrees to be bound by the transfer restrictions imposed upon the Purchased Shares under the Act and agrees not to transfer the Purchased Shares unless and until (i) a Registration Statement under the Act shall have become effective with respect thereto, or (ii) the Issuer shall have received an opinion of counsel satisfactory to the Issuer to the effect that registration under the Act is not required in connection with such proposed transfer nor is such proposed transfer in violation of any applicable state securities law. Any purported transfer in contravention of this Section 4 will be null and void *ab initio*.
- 5. Restrictive Legends; Stop Transfers. Purchaser consents to the placement of a legend on the certificate representing the Purchased Shares reflecting the fact that they have been acquired for investment purposes only and are restricted securities under Rule 144 and consents to the placing of stop transfer orders in the appropriate records of the Issuer or those of its transfer agent with respect to the Purchased Shares.
- 6. Closing and Payment. Following execution of this Agreement by all parties thereto, receipt by the Company's transfer agent of the share certificate representing such Purchased Shares (accompanied by a duly executed stock power in the form provided by the Company's transfer agent) and upon receipt by the Seller of immediately available funds to an account designated by Seller in the amount of \$ [_____] representing the purchase price of the Purchased Shares (the "Consideration"), the Issuer shall promptly instruct its transfer agent to deliver to Purchaser a stock certificate representing the Purchased Shares. Such Consideration shall be deposited by Purchaser and held in escrow by the Issuer's law firm, Reed Smith LLP, pending transfer to Seller in accordance with this Section 6.

- 7. **Issuer Consent.** The Issuer hereby grants its consent to the transfer of the Purchased Shares under the terms of this Agreement pursuant to the Share Transfer Restriction Agreement.
- 8. Entire Agreement; Miscellaneous. This Agreement sets forth the entire agreement and understanding of the parties relating to the subject matter hereof, and supersedes all prior agreements, arrangements and understandings, written or oral, relating to the subject matter hereof. No representation, promise or inducement has been made by either party that is not embodied in this Agreement, and neither party shall be bound by or liable for any alleged representation, promise or inducement not so set forth. This Agreement may be executed in multiple counterparts, and any party may execute any such counterpart, each of which when executed and delivered will thereby be deemed to be an original and all of which taken together will constitute one and the same instrument. This Agreement may be amended only by a written agreement signed by each party. This Agreement shall be binding upon and shall insure solely to the benefit of the parties hereto and their respective successors and permitted assigns. Nothing in this Agreement, express or implied, is intended to and shall not under any circumstances create any enforceable right or benefit in any other person whatsoever, nor shall any other person whatsoever be entitled to have any claim, cause of action or right based upon or arising out of the existence of this Agreement or the consummation of the transactions contemplated hereby. If any provision of this Agreement shall be determined by a court of competent jurisdiction to be invalid or unenforceable, such determination shall not affect the remaining provisions of this Agreement, all of which shall remain in full force and effect. References in this Agreement to "he" or "it" shall be deemed to refer to the pronoun of the appropriate gender, be it masculine, feminine or neuter.
- 9. Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of New York, without regard to the choice of law or conflicts of law provisions thereof that would require application of the laws of a jurisdiction other than the State of New York. The parties hereby expressly waive any right to a trial by jury in any action or proceeding to enforce or defend any right, power, or remedy under or in connection with this Agreement.

[REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK, SIGNATURE PAGE FOLLOWS]

PHOSPHAGENICS LTD.

By:_______
Name:
Title:

PROPHASE LABS, INC.*

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

Title:

*As to Sections 6, 7, 8 and 9

[REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK, SECOND SIGNATURE PAGE FOLLOWS]

By:___ Name:

| Second s | signature | page of | f Agreement | t. |
|----------|-----------|---------|-------------|----|
|----------|-----------|---------|-------------|----|

| PURCHASER | |
|-----------|--|
| | |
| | |

EXHIBIT A

The Seller entered into seven Private Resale Agreements with the following individuals, in the following quantities, for the following aggregate amounts:

| Purchaser | Number of Shares | Aggregate Purchase Price |
|--|------------------|--------------------------|
| Hoffman, Alan | 30,000 | \$19,500 |
| Jelco, Inc. | 100,000 | \$65,500 |
| John DeShazo Revocable Trust | 100,000 | \$65,000 |
| Korin, Ted | 20,000 | \$13,000 |
| Leonard, Jillian E.; by Jennifer L. Leonard as custodian | 50,000 | \$32,500 |
| Leonard, Justin J.; by Jennifer L. Leonard as custodian | 50,000 | \$32,500 |
| Ligums, John E. | 400,000 | \$260,000 |
| TOTAL | 750,000 | \$487,500 |