

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

**FORM S-8
REGISTRATION STATEMENT
UNDER THE SECURITIES ACT OF 1933**

TIMBERLINE RESOURCES CORPORATION

(Exact name of Registrant as specified in its charter)

Delaware
(State or other jurisdiction of Incorporation or
organization)

82-0291227
(I.R.S. Employer Identification No.)

**101 East Lakeside Avenue
Coeur D'Alene Idaho 83814**
(Address of Principal Executive Offices)(Zip Code)

**Timberline Resources Corporation
Amended 2005 Equity Incentive Plan**
(Full title of the plan)

**Dorsey & Whitney LLP
Republic Plaza, Suite 4700
370 Seventeenth Street
Denver, CO 80202
(303) 629-3400**
(Telephone number, including area code, of agent for service)

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(Do not check if a smaller reporting company)

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered ⁽¹⁾	Amount to be Registered	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Shares not subject to outstanding options under the Plan	3,000,000	\$0.97 ⁽²⁾	\$2,910,000	\$207.48
Total	3,000,000	N/A	\$2,910,000	\$207.48

(1) Shares of Common Stock, par value \$0.001, available for issuance by the Registrant pursuant to the Timberline Resources Corporation Amended 2005 Equity Incentive Plan.

(2) The proposed maximum offering price per share of Common Stock and the registration fee were calculated in accordance with Rule 457(c) and (h) of the Securities Act of 1933, as amended, based on the average of the high and low prices (\$1.00 and \$0.94, respectively) for the Registrant's Common Stock on June 10, 2010, as quoted on the NYSE Amex.

INTRODUCTORY STATEMENT

On September 4, 2008, Timberline Resources Corporation (the “Registrant”) filed a Registration Statement on Form S-8 (SEC File No. 333-153328) to register 6,590,833 shares of common stock of the Registrant, par value \$0.001 (“Common Stock”), issuable upon exercise of options granted or to be granted under the Registrant’s Amended 2005 Equity Incentive Plan (the “Plan”). On May 28, 2010, at a Special Meeting of the Registrant’s stockholders, an amendment to the Plan was approved pursuant to which the number of shares of Common Stock issuable under the Plan was increased by 3,000,000 shares of Common Stock. Accordingly, this Registration Statement on Form S-8 registers the additional 3,000,000 shares of Common Stock issuable upon exercise of options granted under the Plan, as approved by the Registrant’s stockholders on May 28, 2010.

The contents of the Registrant’s Registration Statement on Form S-8 (File No. 333-153328), as filed with the SEC on September 4, 2008, are hereby incorporated by reference herein.

EXHIBITS

<u>Exhibit Number</u>	<u>Exhibit</u>
4.1	Amendment No. 2 to the Timberline Resources Corporation Amended 2005 Equity Incentive Plan
4.2	Amendment No. 1 to the Timberline Resources Corporation Amended 2005 Equity Incentive Plan (incorporated by reference to Appendix “E” to the Registrant’s definitive proxy statement on Schedule 14A filed with the SEC on May 3, 2010)
4.3	Timberline Resources Corporation Amended 2005 Equity Incentive Plan (incorporated by reference to Appendix “E” to the Registrant’s definitive proxy statement on Schedule 14A filed with the SEC on May 3, 2010)
5.1	Opinion of Dorsey & Whitney LLP
23.1	Consent of DeCoria, Maichel & Teague P.S.
23.2	Consent of Dorsey & Whitney LLP (included in Exhibit 5.1)
24.1	Power of Attorney (See page 3 of this Registration Statement)

SIGNATURES

The Registrant. Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Coeur D'Alene, State of Idaho, on this 14th day of June, 2010.

TIMBERLINE RESOURCES CORPORATION

/s/ Randal Hardy

Name: Randal Hardy

Title: Chief Executive Officer, Chief Financial Officer,
and Director

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints Randal Hardy and Paul Dircksen his attorney-in-fact, with the power of substitution, for them in any and all capacities, to sign any amendments to this Registration Statement, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that said attorneys-in-fact, or their substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the date indicated.

<u>Name</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Randal Hardy</u> Randal Hardy	Chief Executive Officer, Chief Financial Officer, and Director (Principal Executive Officer and Principal Financial Officer)	June 14, 2010
<u>/s/ Paul Dircksen</u> Paul Dircksen	Executive Chairman, Director and Vice President of Exploration	June 14, 2010
<u>/s/ Craig Crowell</u> Craig Crowell	Chief Accounting Officer (Principal Accounting Officer)	June 14, 2010
<u>/s/ Vance Thornsberry</u> Vance Thornsberry	Director	June 14, 2010
<u>/s/ Eric Klepfer</u> Eric Klepfer	Director	June 14, 2010
<u>/s/ Ron Guill</u> Ron Guill	Director	June 14, 2010
<u>/s/ James Moore</u> James Moore	Director	June 14, 2010
<u>/s/ Robert Martinez</u> Robert Martinez	Director	June 14, 2010

SECOND AMENDMENT
TO THE
TIMBERLINE RESOURCES CORPORATION
AMENDED 2005 EQUITY INCENTIVE PLAN

The undersigned hereby certifies that he is the duly elected, qualified and acting Chief Executive Officer of Timberline Resources Corporation (the “*Company*”) and, as permitted by Section 15 of the Timberline Resources Corporation Amended 2005 Equity Incentive Plan (the “*Plan*”), that Section 4(a) and Section 16(a) of the Plan have been amended by resolution adopted by the Board of Directors on April 23, 2010 and by vote of the Stockholders of the Company effective as of May 28, 2010, to read in its entirety as follows:

4. SHARES SUBJECT TO THIS PLAN

(a) **Share Reserve.** Subject to the provisions of §6(1) below, the Common Stock that may be issued pursuant to Stock Awards (not including SARs) shall not exceed in the aggregate Ten million (10,000,000) shares of Common Stock (the “*Share Reserve*”). There is no limit upon the number of SARs that may be awarded to Participants.

16. TERMINATION OR SUSPENSION OF PLAN

(a) **Plan Term.** The Committee may suspend or terminate this Plan at any time. Unless sooner terminated, this Plan shall terminate on May 28, 2015. No Stock Awards may be granted under this Plan while the Plan is suspended or after it is terminated.

DATED effective as of the 28th day of May, 2010



Randal Hardy, Chief Executive Officer

June 14, 2010

Timberline Resources Corporation
101 East Lakeside Avenue
Coeur D'Alene, Idaho 83814

Re: Registration Statement on Form S-8
as filed June 10, 2010

Ladies and Gentlemen:

We have acted as counsel to Timberline Resources Corporation, a Delaware corporation (the "Company"), in connection with the registration by the Company pursuant to a registration statement (the "Registration Statement") on Form S-8 filed with the Securities and Exchange Commission under the Securities Act of 1933, as amended, of 3,000,000 shares of common stock of the Company, par value \$0.001 per share (the "Shares"), issuable upon exercise of stock options granted under the Company's Amended 2005 Equity Incentive Plan (the "Plan").

This opinion is being delivered in connection with the Registration Statement, to which this opinion is attached as an exhibit.

We have examined the Registration Statement, and, for the purposes of this opinion, we have also examined the originals, or duplicate, certified, conformed, telecopied or photostatic copies, of such corporate records, agreements, documents and other instruments and have made such other investigations as we have considered necessary or relevant for the purposes of this opinion. With respect to the accuracy of factual matters material to this opinion, we have relied upon the financial statements of the Company, certificates or comparable documents and representations of public officials and of officers and representatives of the Company.

In giving this opinion, we have assumed the genuineness of all signatures, the legal capacity of natural persons, the authenticity of all documents submitted to us as originals, the conformity to authentic original documents of all documents submitted to us as duplicates, certified, conformed, telecopied or photostatic copies and the authenticity of the originals of such latter documents.

Based and relying upon the foregoing, and subject to the qualifications, assumptions and limitations stated herein, we are of the opinion that the Shares have been duly authorized and, upon issuance, delivery and payment therefor in accordance with the terms of the Plan and any relevant agreements thereunder, will be validly issued, fully paid and nonassessable.

This opinion relates solely to the corporate laws of the State of Delaware set forth in the Delaware General Corporation Law. We express no opinion as to the laws of any other jurisdiction.

We hereby consent to the filing of this opinion as Exhibit 5.1 to the Registration Statement.

Timberline Resources Corporation
June 14, 2010
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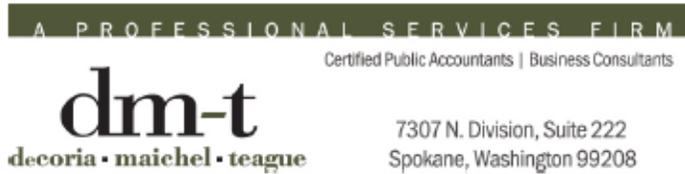
If you have any questions concerning the foregoing, please contact the undersigned.

Sincerely,

DORSEY & WHITNEY LLP

DORSEY & WHITNEY LLP

KGS/KRA



CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the use of our report dated December 4, 2009 with respect to the balance sheets of Timberline Resources Corporation as of September 30, 2009 and 2008, and the related statements of operations, changes in stockholders' equity and cash flows for the years then ended, which report is referred to into the Registration Statement on Form S-8 under the Securities Act of 1933 dated on or about June 14, 2010.

DeCoria, Maichel + Teague P.S.

DeCoria, Maichel & Teague, P.S.
Spokane, Washington
June 14, 2010