UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of report (date of earliest event reported): February 1, 2005

DAWSON GEOPHYSICAL COMPANY

(Exact name of Registrant as specified in its charter)

TEXAS (State of incorporation or organization) 2-71058 (Commission file number) **75-0970548** (I.R.S. employer identification number)

508 West Wall, Suite 800 Midland, Texas 79701 (Address of principal executive offices)

(432) 684-3000

(Registrant's telephone number, including area code)

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (*see* General Instruction A.2. below):

o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

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Item 2.03 Creation of a Direct Financial Obligation or an Obligation under an Off- Balance Sheet Arrangement of a Registrant.

On February 1, 2005, Dawson Geophysical Company (the "Company") borrowed the remaining \$5.0 million available under its existing revolving line of credit loan agreement (the "Credit Agreement") with Western National Bank (the "Bank"). The Company had previously borrowed \$5.0 million on January 12, 2005 under such Credit Agreement.

A summary of the material terms and conditions of the Company's existing Credit Agreement with the Bank is included in Item 2.03 of the Form 8-K filed by the Company on December 22, 2004 and is incorporated herein by reference.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: February 4, 2005

DAWSON GEOPHYSICAL COMPANY

By: /s/ Christina W. Hagan

Christina W. Hagan Chief Financial Officer

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