

CORE LABORATORIES N V
Form 11-K/A
July 28, 2011

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 11-K / A

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 15 (d) OF THE
SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2010

OR

TRANSITION REPORT PURSUANT TO SECTION 15 (d) OF THE
SECURITIES EXCHANGE ACT OF 1934 (NO FEE REQUIRED)

For the transition period from _____ to _____

Commission File Number 001-14273

A. Full title of the plan and the address of the plan, if different from that of the issuer named below:

CORE LABORATORIES PROFIT SHARING AND RETIREMENT PLAN
6316 Windfern Road
Houston, Texas 77040

B. Name of issuer of the securities held pursuant to the plan and the address of its principal executive office:

Core Laboratories N.V.
Herengracht 424
1017 BZ Amsterdam
The Netherlands

Explanatory Note

This Amendment No. 1 is being filed to include a reconciliation of the net increase in net assets available for benefits in the financial statements to that reported in the Form 5500 in footnote 8. Except for this insertion, there have been no changes in any of the financial or other information contained in the report nor have the disclosures contained therein been updated to reflect any events which occurred at a date subsequent to the date of the Form 11-K. For convenience, the entire Form 11-K, as amended, is being re-filed.

REQUIRED INFORMATION

The Core Laboratories Profit Sharing and Retirement Plan is subject to the requirements of the Employee Retirement Income Security Act of 1974, also known as ERISA.

ITEM 4. As permitted by the U.S. Securities and Exchange Commission Rules, Items 1, 2, and 3 of this Annual Report on Form 11-K/A have been omitted, and the following financial statements of the Plan, notes to such financial statements, and the Report of Independent Registered Public Accounting Firm on such financial statements are being filed in this Report in accordance with ERISA reporting requirements:

- (a) Report of Independent Registered Public Accounting Firm
- (b) Statements of Net Assets Available for Benefits as of December 31, 2010 and 2009
- (c) Statement of Changes in Net Assets Available for Benefits for the Year Ended December 31, 2010
- (d) Notes to Financial Statements as of December 31, 2010 and 2009
- (e) Schedule H, Line 4i - Schedule of Assets (Held at End of Year), as of December 31, 2010

The Independent Registered Public Accounting Firm's Consent to the incorporation by reference of these financial statements in the Registration Statement on Form S-8 (No. 333-73772, 333-73774), which pertains to the Core Laboratories Profit Sharing and Retirement Plan, is being filed as Exhibit 23.1 to this Annual Report on Form 11-K/A.

CORE LABORATORIES
PROFIT SHARING AND RETIREMENT PLAN
DECEMBER 31, 2010 and 2009

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AND SUPPLEMENTAL SCHEDULE

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* All other schedules required by Section 2520.103-10 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 have been omitted because the schedules are not applicable.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Plan Administrator of Core Laboratories Profit Sharing and Retirement Plan:

We have audited the accompanying Statements of Net Assets Available for Benefits of the Core Laboratories Profit Sharing and Retirement Plan (the "Plan") as of December 31, 2010 and 2009 and the related Statement of Changes in Net Assets Available for Benefits for the year ended December 31, 2010. These financial statements are the responsibility of the Plan'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 audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Plan's internal control over financial reporting. Our audits included 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 Plan'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, and 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 net assets available for benefits of the Plan as of December 31, 2010 and 2009 and the changes in net assets available for benefits for the year ended December 31, 2010 in conformity with accounting principles generally accepted in the United States of America.

Our audits were performed for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedule of assets (held at end of year) as of December 31, 2010 is presented for the purpose of additional analysis and is not a required part of the basic financial statements, but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. This supplemental schedule is the responsibility of the Plan's management. This supplemental schedule has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated, in all material respects, in relation to the basic financial statements taken as a whole.

/s/ Ham, Langston & Brezina, L.L.P.

Houston, Texas

June 29, 2011, except for Note 8 as to which the date is July 27, 2011.

CORE LABORATORIES
PROFIT SHARING AND RETIREMENT PLAN
STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS
AS OF DECEMBER 31, 2010 AND 2009

| | 2010 | 2009 |
|---|----------------|----------------|
| ASSETS | | |
| Cash, non-interest bearing | \$— | \$ 6,675 |
| Investments, at fair value: | | |
| Money market funds | — | 1,170 |
| Life insurance contract | 59,916 | 38,305 |
| Group annuity contract | 23,798,145 | — |
| Common collective trust | — | 19,375,185 |
| Core Laboratories N.V. common stock | 51,700,968 | 34,234,365 |
| Registered investment companies (mutual funds) | 71,023,692 | 61,944,906 |
| Total investments, at fair value | 146,582,721 | 115,593,931 |
| Receivables: | | |
| Participants contributions | 115,329 | 169,514 |
| Employer contributions | 1,470,384 | 788,517 |
| Notes receivable from participants | 2,597,668 | 2,372,994 |
| Other | 22,608 | 44,606 |
| Total receivables | 4,205,989 | 3,375,631 |
| Total assets | 150,788,710 | 118,976,237 |
| LIABILITIES | | |
| Other payables | 13,000 | 13,000 |
| Total liabilities | 13,000 | 13,000 |
| NET ASSETS AVAILABLE FOR BENEFITS AT FAIR VALUE | 150,775,710 | 118,963,237 |
| Adjustment from fair value to contract value for interest in collective trust relating to fully benefit-responsive investment contracts | — | (380,308) |
| NET ASSETS AVAILABLE FOR BENEFITS | \$ 150,775,710 | \$ 118,582,929 |

The accompanying notes are an integral part of these financial statements.

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CORE LABORATORIES
 PROFIT SHARING AND RETIREMENT PLAN
 STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
 FOR THE YEAR ENDED DECEMBER 31, 2010

| | |
|---|---------------|
| Additions to net assets attributed to: | |
| Investment income: | |
| Interest and dividend income | \$ 2,191,543 |
| Net appreciation in fair value of investments | 26,033,657 |
| Total investment income, net | 28,225,200 |
| Contributions: | |
| Participant | 6,128,896 |
| Employer | 4,292,037 |
| Participant rollovers | 468,286 |
| Total contributions | 10,889,219 |
| Interest income on notes receivable from participants | 154,189 |
| Total investment income and contributions | 39,268,608 |
| Deductions from net assets attributed to: | |
| Withdrawals and retirement benefits | 7,049,369 |
| Administrative expenses | 26,458 |
| Total deductions | 7,075,827 |
| Net increase in net assets available for benefits: | 32,192,781 |
| Net assets available for benefits, beginning of year | 118,582,929 |
| Net assets available for benefits, end of year | \$150,775,710 |

The accompanying notes are an integral part of these financial statements.

CORE LABORATORIES
PROFIT SHARING AND RETIREMENT PLAN
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2010 and 2009

1. SUMMARY OF SIGNIFICANT PLAN PROVISIONS

The Core Laboratories Profit Sharing and Retirement Plan (the "Plan" or "Core Lab Plan") is sponsored by an entity (the "Company") wholly owned by Core Laboratories N.V. and was established through its predecessor entity, Core Laboratories, Inc. effective October 1, 1994. The following brief description of the Plan provides only general information. Participants should refer to the summary plan description or Plan document for a more complete description of the Plan's provisions.

The Plan is a defined contribution plan and is subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended ("ERISA") and the Internal Revenue Code (the "Code").

Plan Amendments

Effective November 1, 2010, the Plan was amended to allow Roth elective deferrals to be made to the Plan, including an option allowing participants to convert deferrals into Roth deferrals.

Plan Administrator and Trustee

An administrative committee appointed by the Company is the Plan administrator as defined under ERISA. Effective January 4, 2010, Prudential Retirement Insurance and Annuity Company (the "Record-keeper") and Prudential Bank and Trust FSB (the "Trustee") have been contracted to serve as the record-keeper and the trustee of the plan, respectively. Prior to January 4, 2010, such services were provided by the 401K Company and Charles Schwab Trust Company, respectively. Effective January 4, 2010, the Trustee was the custodian of the mutual fund investments. Prior to January 4, 2010, the management companies that issue securities were custodians of the mutual fund investments. Pershing Division of The Bank of New York Mellon Corporation is custodian of Core Laboratories N.V. common stock ("Company Common Stock").

Eligibility

Substantially all of the Company's employees are eligible to participate in the Plan. For most eligible employees, participation may commence upon the later of the first day of the calendar quarter coincident with or following such eligible employee's date of hire or the date on which such employee attains the age of 21. However, certain designated classes of employees must satisfy a service requirement of either six months or 1,000 hours of service during a Plan year before becoming eligible to participate.

Contributions

The Plan allows each participant to make pre-tax contributions or after tax Roth contributions of up to 60% of his or her compensation, as defined by the Plan, up to the statutory limit of \$16,500 for 2010 and 2009. The Plan also allows

participants who attained age 50 before the close of the Plan year to contribute an additional "catch-up" contribution as permitted under the Code. The Company may, in its discretion, make matching contributions equal to a designated percentage of each participant's pre-tax contributions, up to a maximum of a designated percentage of the participant's compensation. In addition, the Company may, in its discretion, make an additional discretionary contribution for a Plan year with respect to each participant who has completed one year of service (as defined by the Plan) and is employed by the Company on the last day of such Plan year. During 2010 and 2009, the Company made matching contributions in accordance with the Plan provisions

up to a maximum of 4% of the participants' compensation totaling \$2,874,956 and \$2,659,565, respectively. In addition, the Company made discretionary contributions for 2010 and 2009 Plan years equal to 2% and 1%, respectively, of the base compensation of the participants eligible to share in the contribution totaling \$1,417,081

and \$692,194, respectively. Such discretionary contribution was allocated to those eligible participants based upon a formula which included the employee's compensation and weighted average years of service, in accordance with the terms of the Plan document.

The application of certain rules and restrictions under the Code may require that a portion of the contributions from certain highly compensated employees, as well as a portion of the corresponding Company matching contributions, be refunded in order to comply with the Code.

Participant Accounts

Each participant's account is credited with the participant's contribution, the Company's matching contribution, allocations of any additional Company contribution and Plan earnings, and charged with an allocation of administrative expenses. Allocations are generally based on participant earnings or account balances, as applicable, in accordance with the terms of the Plan. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account balance.

Vesting

Participants are fully vested in their contributions and related earnings/losses. Participants vest in Company matching and discretionary contributions and the related investment earnings or losses at the rate of 20% for each completed year of service (as defined by the Plan). A participant becomes fully vested in Company contributions and related earnings/losses if such participant, while employed by the Company, becomes totally and permanently disabled, attains normal retirement age, or dies.

Investment Program

Participants may direct the investment of their contributions, the Company's matching contributions, and any additional Company contributions in any of ten mutual funds, one group annuity contract and Company Common Stock. The Plan's life insurance holdings were not available during 2010 and 2009 as a participant investment option.

Contributions may be invested in one fund or divided among two or more funds. Participants may transfer some or all of the balances out of any fund into one or any combination of the other funds on a daily basis. Participants can also choose from four Asset Allocation Models: Conservative Model; Moderate Model; Moderate Aggressive Model or Aggressive Model, each of which represents a designated blend of the available mutual funds. Participants who select one of the Asset Allocation Models can also choose to invest a portion of their account balances in Company Common Stock.

Administrative Expenses

The Plan pays substantially all administrative expenses. For 2010, expenses were comprised of approximately \$10,000 for record keeper fees, \$1,000 for attorney fees, and \$13,000 for audit fees. In addition, the Record-keeper received indirect compensation related to the Plan of \$174,000.

Notes Receivable from Participants

The Plan permits participants to borrow a minimum of \$1,000 and up to a maximum amount equal to the lesser of \$50,000 or 50% of their vested account balances in the Plan. Notes receivable bore interest ranging from 4.25% to 9.13% and 4.36% to 9.13% for the years ended December 31, 2010 and 2009, respectively. Notes receivable are repaid through payroll deductions over a period not to exceed five years and are collateralized by the vested balance in

the participant's account.

Payment of Benefits and Forfeitures

Upon termination of employment, death, disability, or retirement, a participant, or the participant's estate in the case of death, may elect to receive a distribution equal to the participant's vested interest in his or her Plan account balance. A participant may elect an in-kind distribution of the portion of his or her vested account balance that is invested in Company Common Stock.

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A participant may make an in-service withdrawal from his or her vested account balance at age 59 1/2. Subject to satisfying the applicable requirements of the Code, a participant also may make an in-service withdrawal from his or her pre-tax contributions in the event of financial hardship, although such participant will be suspended from making additional pre-tax contributions to the Plan for a period of six months. A participant can withdraw his or her rollover contributions, if any, from the Plan without being suspended from making additional pre-tax contributions to the Plan.

Upon a participant's termination of employment, any unvested Company contributions and the related investment earnings or losses will be forfeited. Subject to certain conditions, a participant who returns to employment within five years from his or her previous termination date is entitled to have his or her forfeited account balance restored. Forfeitures, net of amounts restored, are used to reduce future Company contributions under the Plan or to pay Plan expenses. During 2010, forfeitures of \$100,000 were used to reduce Company contributions and \$16,248 were used to pay Plan fees. Forfeitures of \$525,537 and \$121,784 were available to reduce future Company contributions or to pay Plan expenses, at December 31, 2010 and 2009, respectively.

Priorities Upon Plan Termination

Although it has not expressed any intent to do so, the Company has the right under the Plan to discontinue its contributions at any time and to terminate the Plan subject to the provisions of ERISA. In the event of Plan termination, participants will become 100% vested in their accounts and the net assets of the Plan will be allocated and distributed among the participants and beneficiaries of the Plan in accordance with ERISA and the terms of the Plan.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The financial statements of the Plan are prepared on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America ("GAAP").

As described in the Financial Accounting Standards Board Codification (the "FASB Codification"), investment contracts held by a defined-contribution plan are required to be reported at fair value. However, contract value is the relevant measurement attribute for that portion of the net assets available for benefits of a defined-contribution plan attributable to fully benefit-responsive investment contracts because contract value is the amount participants would receive if they were to initiate permitted transactions under the terms of the Plan. As required by the FASB Codification, the Statement of Net Assets Available for Benefits presents the fair value of the investment contracts as well as the adjustment of the fully benefit-responsive investment contracts from fair value to contract value. The Statement of Changes in Net Assets Available for Benefits is prepared on a contract value basis.

Investment Valuation

Company Common Stock and mutual fund securities are valued at fair value. Company Common Stock values are based on their quoted market prices. Investments in registered investment companies (shares of mutual funds) are valued using quoted market prices which represent the net asset values of shares held by the Plan at year-end. The Plan's interest in the group annuity contract is valued based on the information provided by the issuer and is carried at the contract value which approximates fair value. The Plan's 2009 interest in the common collective trust is valued based on information reported by the investment advisor using the audited financial statements of the collective trust at year-end. Cash is stated at account value. Investments in life insurance policies are

recorded at the cash surrender value of the life insurance policies, as determined by the issuer of the insurance policy, which approximates fair value.

Purchases and sales of securities are recorded on a trade date basis. Dividends are recorded on the ex-dividend date.

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Investment Income

Investment income includes the net appreciation in the fair value of the Plan's fair value investments, consisting of realized and unrealized gains and losses. Dividend and interest income from investments are recorded as earned and allocated to participants based upon their proportionate share of assets in each investment fund.

Use of Estimates

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of assets and liabilities at the date of the financial statements and the reported amount of net assets available for benefits and changes therein.

We evaluate our estimates on an ongoing basis and utilize our historical experience, as well as various other assumptions that we believe are reasonable in a given circumstance, in order to make these estimates. Actual results could differ from our estimates, as assumptions and conditions change.

Benefit Payments

Benefits are recorded when paid.

Recent Accounting Pronouncements

The Financial Accounting Standards Board ("FASB") amended Accounting Standard Codification Topic 820 ("ASC 820") to require expanded disclosures related to 1) transfers in and out of Levels 1 and 2 fair value measurements, and 2) presentation of gross versus net information in the roll forward activity for Level 3 fair value measurements. In addition, the amendment clarified disclosures regarding disaggregation, inputs and valuation techniques. The amendment has been adopted in the Plan's 2010 financial statements, except for the change in the roll forward activity for Level 3 fair value measurements, which is effective for the Plan's 2011 financial statements. Since this standard impacts disclosure requirements only, its adoption did not have a material impact on the Plan's financial statements.

In September 2010, the FASB issued new accounting guidance which requires participant loans to be measured at their unpaid principal balance plus any accrued but unpaid interest and classified as notes receivable from participants. Previously, participant loans were measured at fair value and classified as investments. This guidance is effective for fiscal years ending after December 15, 2010 and is required to be applied retrospectively. This guidance was adopted in the Plan's 2010 financial statements and did not affect or change the value of participant loans as of December 31, 2010 and 2009. Participant loans outstanding at December 31, 2009, have been reclassified to participant notes receivable in the accompanying statement of net assets available for benefits.

Reclassifications

Certain amounts in the 2009 financial statements have been reclassified to conform to the 2010 presentation, with no effect on the net assets available for benefits or changes therein.

3. INVESTMENTS

The following table presents investments that individually represent five percent or more of the Plan's net assets available for benefits as of December 31, 2010 and 2009.

| | 2010 | 2009 |
|---|---------------|---------------|
| Core Laboratories N.V. Common Stock | \$51,700,968 | \$34,234,365 |
| Prudential Guaranteed Income Fund | 23,798,145 | — |
| Amvescap Stable Value Fund | — | 19,375,185 |
| Washington Mutual Investors Fund - Class A | 12,504,607 | 11,687,594 |
| The Growth Fund of America - Class A | 11,541,298 | 9,310,118 |
| PIMCO Total Return Fund - Class A | 10,495,927 | 8,725,092 |
| EuroPacific Growth Fund - Class A | 9,272,651 | 8,120,444 |
| Investments less than 5% of the Plan's net assets | 27,269,125 | 24,141,133 |
| Total investments | \$146,582,721 | \$115,593,931 |

During the year ended December 31, 2010, the Plan's investments (including realized gains and losses on investments bought and sold, as well as held during the year) appreciated in fair value as follows:

| | |
|--|---------------|
| Registered investment companies (mutual funds) | \$ 8,680,449 |
| Core Laboratories N.V. Common Stock | 17,353,208 |
| Net appreciation in fair value of investments | \$ 26,033,657 |

4. FAIR VALUE MEASUREMENTS

The Plan categorizes its investments using a three tier fair value hierarchy that is dependent upon the various “inputs” used to determine the value of the Trust's investments. The three levels of the fair value hierarchy are described below:

Level 1 includes observable inputs which reflect quoted prices for identical assets or liabilities in active markets at the measurement date.

Level 2 includes observable inputs for assets or liabilities other than quoted prices included in Level 1 and it includes valuation techniques which use prices for similar assets and liabilities in active or inactive markets, inputs other than quoted prices that are observable for the asset or liability, or inputs that are derived principally from or corroborated by observable market data by correlation or other means.

Level 3 includes unobservable inputs which reflect the Plan's estimates of the assumptions that market participants would use in pricing the asset or liability, including assumptions about risk.

The asset's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs. There have been no changes in the methodologies used at December 31, 2010 and 2009.

The following is a description of the valuation methods used for assets measured at fair value at December 31, 2010 and 2009.

Mutual funds: The fair value of these securities is based on observable market quotations and is priced on a daily basis at the close of business.

Common stock: The fair value of these securities is based on observable market quotations and is priced on a daily basis at the close of business.

Group annuity contract: The fair value of the contract is based on the principal invested and earnings at the

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contractual guaranteed interest rate.

Money market funds: The fair value of these securities is based on observable market quotations and is priced on a daily basis at the close of business.

Common collective trusts: The fair value of the investments in the common collective trust is determined based on the fair value of the underlying securities within the fund, which represents the net asset value of the shares held by the Plan at year end.

Life insurance contracts: The fair value of these contracts is based on the cash surrender value of the contracts.

The methods described above may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement.

The following table sets forth by level, within the fair value hierarchy, the Plan's assets measured at fair value on a recurring basis as of December 31, 2010 and 2009:

| | Total | Fair Value Measurement at December 31, 2010 | | |
|-------------------------|---------------|---|---------|--------------|
| | | Level 1 | Level 2 | Level 3 |
| Assets: | | | | |
| Mutual funds: | | | | |
| Index Funds | \$5,145,380 | \$5,145,380 | \$— | \$— |
| Balanced Funds | 14,601,057 | 14,601,057 | — | — |
| Growth Funds | 40,781,328 | 40,781,328 | — | — |
| Fixed Income Funds | 10,495,927 | 10,495,927 | — | — |
| | 71,023,692 | 71,023,692 | — | — |
| Company Common Stock | 51,700,968 | 51,700,968 | — | — |
| Group annuity contract | 23,798,145 | — | — | 23,798,145 |
| Life insurance contract | 59,916 | — | — | 59,916 |
| Total | \$146,582,721 | \$122,724,660 | \$— | \$23,858,061 |

| | Total | Fair Value Measurement at December 31, 2009 | | |
|-------------------------|----------------------|---|---------------------|-----------------|
| | | Level 1 | Level 2 | Level 3 |
| Assets: | | | | |
| Mutual funds: | | | | |
| Index Funds | \$4,645,813 | \$4,645,813 | \$— | \$— |
| Balanced Funds | 14,867,305 | 14,867,305 | — | — |
| Growth Funds | 33,706,696 | 33,706,696 | — | — |
| Fixed Income Funds | 8,725,092 | 8,725,092 | — | — |
| Money market | 1,170 | 1,170 | — | — |
| | 61,946,076 | 61,946,076 | — | — |
| Company Common Stock | 34,234,365 | 34,234,365 | — | — |
| Common collective trust | 19,375,185 | — | 19,375,185 | — |
| Life insurance contract | 38,305 | — | — | 38,305 |
| Total | \$115,593,931 | \$96,180,441 | \$19,375,185 | \$38,305 |

The following table presents the changes in fair value of the Plan's Level 3 investment assets:

| | Group Annuity Contract | Life Insurance Contract | Total |
|--|------------------------|-------------------------|---------------|
| Balance at January 1, 2010 | \$— | \$38,305 | \$ 38,305 |
| Interest and dividends | 620,045 | — | 620,045 |
| Realized and Unrealized gains and losses, net | — | 1,014 | 1,014 |
| Purchases, sales issuances and settlements (net) | 23,178,100 | 20,597 | 23,198,697 |
| Balance at December 31, 2010 | \$23,798,145 | \$59,916 | \$ 23,858,061 |

Group Annuity Contract

At December 31, 2010, the Plan was invested in a benefit responsive group annuity contract with Prudential Retirement Insurance and Annuity Company ("PRIAC"). The fund invests in a group annuity insurance contract with PRIAC with the purpose to fund the guaranteed benefits for the Plan.

The group annuity contract is fully benefit-responsive, therefore contract value is the relevant measurement attribute for that portion of the net assets available for benefits attributable to the Plan. Contract value, which estimates fair value, as reported to the Plan by PRIAC, represents contributions made under the contract, plus earnings, less participant withdrawals and administrative expenses.

The concept of a value other than contract value does not apply to this insurance company issued general account backed evergreen (no maturity date) group annuity spread product. Even upon a discontinuance of the contract, contract value would be paid no later than 90 days from the date notice of discontinuance is provided. This contract's operation does not have provisions to contract at a value other than contract value. The fund is not backed by specific securities but instead backed by PRIAC's general account. As a result of the contract terms, contract value approximates fair value.

There are no reserves against contract value for credit risk of the contract issuer or otherwise. The fair value of the group annuity insurance contract at December 31, 2010 is \$23,798,145. The crediting interest rate is based on a formula agreed upon with the issuer, but it may not be less than 1.50%. The crediting interest rate for the year ended December 31, 2010 was 3.00%. A single crediting rate is applied to all contributions made to the fund regardless of the timing of those contributions. Such interest rates are reviewed on a semi-annual basis. The average yield for the year ended December 31, 2010 was 3.00%.

Common Collective Trust

At December 31, 2009, the Plan was invested in a fully benefit-responsive common collective trust with Invesco National Trust Company ("Invesco"). Invesco maintains the contributions in a general account within its Invesco Stable Value Trust (the "Trust"). On January 4, 2010, the Plan redeemed its shares of this common collective trust in order to invest in a group annuity contract as a result of the Plan's change in trustees.

The common collective trust is fully benefit-responsive, therefore contract value is the relevant measurement attribute for that portion of the net assets available for benefits attributable to the common collective trust. Contract value, as reported to the Plan by Invesco, represents contributions made under the contract, plus earnings, less participant withdrawals and administrative expenses.

The Trust invests primarily in investment contracts from high-quality insurance companies or banks that serve to substantially offset the price fluctuations in the underlying investments caused by movements in interest rates. The investment contract obligates the provider to maintain the "contract value" of the underlying investments. The contract value is generally equal to the principal amounts invested in the underlying investments, plus interest accrued at a crediting rate established under the contract, less any adjustments for withdrawals. The investment contract provides that the adjustments to the interest crediting rate will not result in a future interest crediting rate that is less than zero. This provision is designed to protect participants' principal and accrued interest.

There are no reserves against contract value for credit risk of the contract issuer or otherwise. The fair value of the common collective trust at December 31, 2009 was \$19,375,185. The crediting interest rate is based on a formula agreed upon with the issuer, but it may not be less than zero percent. The crediting interest rate for the year ended December 31, 2009 was 3.89%. Such interest rates are reviewed on a quarterly basis. The average yield for the year ended December 31, 2009 was 3.01%.

Certain events limit the ability of the Plan to transact at contract value with the issuer. Such events include the following: (1) amendments to Plan documents (including complete or partial plan termination or merger with another plan), (2) changes to the Plan's prohibition on competing investment options or deletion of equity wash provisions, (3) bankruptcy of the Plan sponsor or other Plan sponsor events (for example, divestitures or spin-offs of a subsidiary) that cause a significant withdrawal from the plan or do not meet the contract issuer's underwriting criteria for issuance of a clone contract, (4) the failure of the trust to qualify for exemption from federal income taxes or any required prohibited transaction exemption under ERISA, or (5) the employer elects to withdraw from a contract in order to switch to a different investment provider. The Plan administrator does not believe that the occurrence of any such event, which would limit the Plan's ability to transact at contract value with participants, is probable.

5. RISKS AND UNCERTAINTIES

The Plan provides for various investments in a mutual funds, a group annuity contract and Company Common Stock. Investment securities, in general, are exposed to various risks, such as interest rate, foreign exchange, credit and overall market volatility risks. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the values of investment securities will occur in the near term and such changes could materially affect the amounts reported in the Statements of Net Assets Available for Benefits and the amounts reported in participant accounts.

6. FEDERAL INCOME TAX STATUS

The Plan received a favorable determination letter dated July 25, 2003, in which the Internal Revenue Service stated that the Plan, as then designed, was in compliance with the applicable requirements of the Code. The Plan has been amended and restated since filing for this determination letter. However, the Plan administrator believes the Plan is currently designed and is being operated in compliance with the applicable requirements of the Code.

7. PARTY-IN-INTEREST TRANSACTIONS

The Plan provides for investment in shares of Company Common Stock and the Plan allows participants to borrow

from their vested balances. These transactions qualify as party-in-interest transactions. These transactions are exempt from the ERISA prohibited transaction rules; consequently, these transactions are permitted.

8. RECONCILIATION OF FINANCIAL STATEMENTS TO FORM 5500

The following is a reconciliation of net assets available for benefits as of December 31, 2010 and 2009, as reflected in these financial statements, to the amounts reflected in the Plan's Form 5500:

| | 2010 | 2009 |
|--|----------------|----------------|
| Net assets available for benefits as reported in the financial statements | \$ 150,775,710 | \$ 118,582,929 |
| Adjustment from fair value to contract value for fully benefit-responsive investment contracts | — | 380,308 |
| Net assets available for benefits as reported in the Form 5500 | \$ 150,775,710 | \$ 118,963,237 |

The following is a reconciliation of the net increase in net assets available for benefits for the year ended December 31, 2010, as reflected in these financial statements, to the amounts reflected in the Plan's Form 5500:

| | |
|---|---------------|
| Net increase in net assets available for benefits as reported in the financial statements | \$ 32,192,781 |
| Prior year adjustment from fair value to contract value for fully benefit-responsive investment contracts | (380,308) |
| Net increase in net assets available for benefits as reported in the Form 5500 | \$ 31,812,473 |

SUPPLEMENTAL SCHEDULE

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SCHEDULE H, line 4i

CORE LABORATORIES
PROFIT SHARING AND RETIREMENT PLAN
SCHEDULE OF ASSETS (HELD AT END OF YEAR)
AS OF DECEMBER 31, 2010

Plan Number: 001

EIN: 76-0446294

| (a) | (b) Identity of Issuer, Borrower, Lessor or Other Similar Party | (c) Description of Investment Including Maturity Date, Rate of Interest, Collateral, Par or Maturity Value | *** (e) Current Value | |
|-----|--|--|--------------------------|----|
| * | Core Laboratories N.V. | Company Common Stock | \$51,700,968 | ** |
| * | Prudential Retirement | Guaranteed Income Fund | 23,798,145 | ** |
| | American Funds | Mutual Fund - Washington Mutual Investors Fund - Class A | 12,504,607 | ** |
| | American Funds | Mutual Fund - The Growth Fund of America - Class A | 11,541,298 | ** |
| | PIMCO Funds | Mutual Fund - PIMCO Total Return Fund Class A | 10,495,927 | ** |
| | American Funds | Mutual Fund - EuroPacific Growth Fund - Class A | 9,272,651 | ** |
| | Franklin Templeton Investments | Mutual Fund - Franklin Balance Sheet Investment Fund - Class A | 6,949,598 | |
| | Lord Abbett & Company | Mutual Fund - Lord Abbett Developing Growth Fund - Class A | 6,858,795 | |
| | The Vanguard Group | Mutual Fund - Vanguard 500 Index Fund | 5,145,380 | |
| | Lazard Funds | Mutual Fund - Lazard Emerging Markets | 3,789,124 | |
| * | Participant Notes Receivable | Interest rates ranging from 4.25% to 9.13% with varying maturity dates | 2,597,668 | |
| | Invesco AIM | Mutual Fund - AIM International Small Company Fund - Class A | 2,369,862 | |
| | Cohen & Steers Funds | Mutual Fund - Cohen & Steers Realty Shares | 2,096,450 | |
| | Conseco Life Insurance Company | Life Insurance Policies - Cash surrender value | 59,916 | |
| | | Total assets held for investment purposes | \$149,180,389 | |

* Represents a party-in-interest transaction.

** Represents investments comprising at least 5% of net assets available for benefits.

*** Cost information is not presented because all investments are participant directed.

SIGNATURE

The Plan. Pursuant to the requirements of the Securities Exchange Act of 1934, the Plan administrator has duly caused this annual report to be signed on its behalf by the undersigned thereunto duly authorized.

CORE LABORATORIES
PROFIT SHARING AND RETIREMENT PLAN

By: Administrative Committee of the
Core Laboratories Profit Sharing and
Retirement Plan

Date: June 29, 2011, except for Note 8 as
to which the date is July 27, 2011.

By: /s/ Richard L. Bergmark
Richard L. Bergmark
Administrative Committee Member,
Core Laboratories Profit Sharing and
Retirement Plan

INDEX TO EXHIBITS

| Exhibit Number | Description |
|-------------------|---|
| 23.1 | Exhibit 23.1 - Consent of Independent Registered Public Accounting Firm - Ham, Langston & Brezina L.L.P. |

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EXHIBIT 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 (No. 333-73772, 333-73774) of Core Laboratories N.V. of our report dated June 29, 2011, except for Note 8 as to which the date is July 27, 2011, relating to the financial statements of Core Laboratories Profit Sharing and Retirement Plan, which appears in this Form 11-K/A.

/s/ Ham, Langston & Brezina, L.L.P.

Houston, Texas
July 27, 2011.