
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 11-K

Annual Report Pursuant to Section 15(d) of the Securities Exchange Act of 1934

For the fiscal year ended December 31, 2015

or

Transition Report Pursuant to Section 15(d) of the Securities Exchange Act of 1934

For the transition period from _____ to _____.

Commission file number (of issuer): 1-5667

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

Cabot 401(k) Plan

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

**Cabot Corporation
Two Seaport Lane, Suite 1300
Boston, Massachusetts 02210-2019**

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* All other supplemental schedules required by Section 2520.103-10 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA have been omitted because they are not applicable.

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Report of Independent Registered Public Accounting Firm

To the Trustee and Participants of the Cabot 401(k) Plan:

We have audited the accompanying statements of net assets available for benefits of the Cabot 401(k) Plan (the Plan) as of December 31, 2015 and 2014, and the related statement of changes in net assets available for benefits for the year ended December 31, 2015. 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. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes 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 net assets available for benefits of the Plan as of December 31, 2015 and 2014, and the changes in net assets available for benefits for the year ended December 31, 2015, in conformity with accounting principles generally accepted in the United States of America.

The supplemental information in the accompanying schedule of Schedule of Assets (Held at End of Year) have been subjected to audit procedures performed in conjunction with the audit of the Plan's financial statements. The supplemental information is the responsibility of the Plan's management. Our audit procedures included determining whether the supplemental information reconciles to the financial statements or the underlying accounting and other records, as applicable, and performing procedures to test the completeness and accuracy of the information presented in the supplemental information. In forming our opinion on the supplemental information in the accompanying schedules, we evaluated whether the supplemental information, including its form and content, is presented in conformity with the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. In our opinion, the supplemental information is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

/s/ Caron & Bletzer, PLLC

Kingston, NH

June 24, 2016

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Cabot 401(k) Plan
Statements of Net Assets Available for Benefits
As of December 31, 2015 and 2014

	<u>2015</u>	<u>2014</u>
Assets:		
Investments, at fair value	\$593,015,718	\$619,319,920
Receivables:		
Employer contribution receivable	2,020,059	273,000
Other employer contribution receivable	—	400,000
Notes receivable from participants	4,823,007	4,919,713
Total receivables	<u>6,843,066</u>	<u>5,592,713</u>
Net assets available for benefits	<u>\$599,858,784</u>	<u>\$624,912,633</u>

See notes to financial statements.

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Cabot 401(k) Plan
Statement of Changes in Net Assets Available for Benefits
For the Year Ended December 31, 2015

	<u>2015</u>
Additions	
Interest and dividend income	\$ 19,597,992
Interest on notes receivable from participants	247,718
Net depreciation in fair value of investments	(25,548,739)
Employer contributions	15,203,876
Participant contributions	14,440,901
Rollovers	1,125,579
Total additions	<u>25,067,327</u>
Deductions	
Benefits paid to participants	49,765,201
Administrative expenses	355,975
Total deductions	<u>50,121,176</u>
Net decrease in net assets	(25,053,849)
Net assets available for benefits	
Beginning of year	624,912,633
End of year	<u>\$599,858,784</u>

See notes to financial statements.

Cabot 401(k) Plan

Notes to Financial Statements as of December 31, 2015 and 2014, and for the Year Ended December 31, 2015

1. Description of the Plan

General

Cabot Corporation (“Cabot” or the “Company”) initially adopted the Cabot Corporation Employee Stock Ownership Plan (the “ESOP”) in 1988, the Cabot Retirement Incentive Savings Plan in 1994 (previously the Cabot Profit-Sharing and Savings Plan, adopted in 1952) (the “CRISP”), and the Cabot Employee Savings Plan in 1987 (the “CESP”). As of December 31, 2000, the CRISP and the CESP were merged with and into the ESOP. The combined amended and restated plan was a defined contribution plan and was renamed the Cabot Retirement Savings Plan, which had two components, a 401(k) plan and an Employee Stock Ownership Plan (“ESOP”). As of December 31, 2013, all shares under the ESOP component of the Plan have been fully allocated and the related debt repaid, and the remaining 401(k) component of the Plan was amended and renamed the Cabot 401(k) Plan (the “Plan”). The Plan is subject to provisions of the Employee Retirement Income Security Act of 1974 (“ERISA”).

As of the close of business on July 31, 2012, Cabot acquired Norit Americas Inc. (“Purification Solutions”). The Norit Americas Inc. Employees 401(k) Plan (“Norit Plan”) was merged with and into the Plan effective January 1, 2013.

The following brief description of the Plan is provided for general information purposes only. Participants should refer to the Plan document for more complete information.

Eligibility

All U.S. employees of the Company and its participating subsidiaries (except certain temporary and leased employees) are eligible to participate in the Plan beginning on the later of the first day of employment or the date the employee is included in an employee group which participates.

Employee Contributions

By means of a salary reduction arrangement, a Cabot participant may make contributions to his or her account. Participants may elect to contribute up to 50% of their U.S. eligible compensation on a before-tax basis (includes catch-up contributions), an after-tax basis, a Roth after-tax basis or a combination thereof, subject to certain limitations under the Internal Revenue Code (the “Code”). Participants may also contribute amounts representing distributions from other qualified defined benefit or defined contribution plans. Participants are automatically enrolled in the Plan if they do not make an election to contribute within 60 days of their eligibility to participate. Participants who are automatically enrolled are deemed to have made an election to make pre-tax contributions in an amount of 6% of their eligible compensation and to increase this contribution rate by 1% of employee eligible compensation each year in January, up to a maximum deferral rate of 15%. Participants may choose to opt out or change their contribution rate at any time.

Company Contributions

Effective January 1, 2014, the Company matching contribution is 100% up to the first 6% of eligible compensation and is made each pay period. The Plan also provides an employer matching true up contribution at year-end to ensure all participants receive a total match in the amount of the lesser of (1) 100% of the participant’s contribution for the year; or (2) 6% of the participant’s eligible compensation for the year. In addition to the match, a Company retirement contribution of 4% of eligible earnings is paid at the end of each quarter. The Company match and Company retirement contributions are invested in accordance with participant allocations.

The Company may make discretionary contributions to participants under the terms of the Plan. No such discretionary contributions were made during the year ended December 31, 2015.

Cabot 401(k) Plan

Notes to Financial Statements as of December 31, 2015 and 2014, and for the Year Ended December 31, 2015

Participant Accounts

Individual accounts are maintained for each Plan participant. Each participant account is credited with the participant's contribution, Company contributions and Plan earnings, and charged with withdrawals and an allocation of Plan losses. Allocations are based on participant earnings or account balances, as defined. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account.

Investments

Participants direct the investment of their contributions into various investment options offered by the Plan including the Cabot Common Stock Fund which consists primarily of Cabot common stock.

Vesting

Each Cabot participant is at all times 100% vested in his or her contributions. Effective January 1, 2014, all participants are 100% vested in the Company match and earnings thereon, and are vested in the Company retirement contribution upon completion of 2 years of service. In addition, a participant's entire account balance becomes 100% vested and payable upon the participant's attainment of age 65, disability, or death.

Distribution of Benefits

The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account. Benefits may be distributed to participants upon termination of employment by reason of retirement, disability, death or other severance of employment. Participants who terminate employment and have a vested account balance of less than \$1,000 will receive a lump sum distribution of 100% of their vested benefits. Distributions for participants with vested account balances greater than \$1,000 but not in excess of \$5,000 who terminate employment and fail to make a timely distribution election will be paid to an individual retirement account designated by the plan administrator. For Cabot employees not subject to certain collective bargaining agreements, effective April 30, 2001, the Plan requires all new benefits to be paid in the form of a lump sum distribution.

A participant may withdraw up to 100% of his or her before-tax or Roth contributions upon showing a financial hardship exists, as defined by the Plan, but only after the participant has withdrawn all other vested benefits from the Plan and the maximum loan has been made from the participant's account. Participants may withdraw at any time any after-tax contributions made.

A participant may make withdrawals from his or her entire vested account balance once the participant reaches age 59 ¹/₂.

A participant may elect to defer payment of a benefit until April 1 following the year that the participant reaches age 70 ¹/₂.

Participant Loans

Cabot employees may obtain loans from the Plan in an amount not to exceed, in the aggregate, the lesser of \$50,000 or 50% of the total vested amount in the participant's account. Each loan must be paid in full within five years through payroll deductions and is secured by the participant's remaining account balance. The Plan provides that loans may bear interest at reasonable rates as determined by the Benefits Committee of the Company. The interest rate is currently the prime rate plus 2%, and is adjusted quarterly for new loans to reflect changes in the prime rate. Interest rates on outstanding loans as of December 31, 2015 ranged from 3.25% to 5.25% per annum. Participant loans are classified as notes receivable from participants on the Statements of Net Assets Available for Benefits.

Cabot 401(k) Plan

Notes to Financial Statements as of December 31, 2015 and 2014, and for the Year Ended December 31, 2015

2. Summary of Significant Accounting Policies

Basis of Accounting

The accompanying financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America (“GAAP”).

Recent Accounting Pronouncements

In May 2015, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update 2015-07 “Disclosures for Investments in Certain Entities that Calculate Net Asset Value Per Share (or its Equivalent),” (“ASU 2015-07”). ASU 2015-07 removes the requirement to categorize within the fair value hierarchy investments for which fair values are estimated using the net asset value practical expedient provided by Accounting Standards Codification 820, “Fair Value Measurement”. Disclosures about investments in certain entities that calculate net asset value per share are limited under ASU 2015-07 to those investments for which the entity has elected to estimate the fair value using the net asset value practical expedient. ASU 2015-07 is effective for fiscal years beginning after December 15, 2015, with early adoption permitted.

In July 2015, the FASB issued Accounting Standards Update 2015-12, “Plan Accounting: Defined Benefit Pension Plans (Topic 960), Defined Contribution Plans (Topic 962), Health and Welfare Benefit Plans (Topic 965)” (“ASU 2015-12”). The amendments in Part I of ASU 2015-12 eliminated the requirements that participant benefit plans measure the fair value of fully benefit-responsive investment contracts and provide the related fair value disclosures under Subtopic 820-10; rather, these contracts will be measured and disclosed only at contract value. The amendments in Part II of ASU 2015-12 will require plans to disaggregate their investments measured using fair value only by general type, either on the financial statements or in the notes. Part II also eliminated the requirement to disclose the net appreciation/depreciation in fair value of investments by general type and the requirements to disclose individual investments that represent 5% or more of net assets available for benefits. The amendments in Part III of ASU 2015-12 provide a practical expedient to permit plans to measure its investments and investment related accounts as of a month-end date closest to its fiscal year for a plan with a fiscal year end that does not coincide with the end of a calendar month, which is not applicable to the Plan. The amendments in ASU 2015-12 are effective for reporting periods beginning after December 15, 2015, with early adoption permitted.

Plan management reviewed both ASU 2015-07 and ASU 2015-12, and decided to early adopt both standards as they believe it will simplify Plan accounting and its presentation in the financial statements. As such, the accounting and disclosures in these financial statements and notes follow ASU 2015-07 and ASU 2015-12.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of additions and deductions during the reporting period. Actual amounts could differ from those estimates.

Risk and Uncertainties

The Plan allows for various investment options (as selected by the plan administrator) in any combination of stocks, bonds, fixed income securities, mutual funds and other investment securities. Investment securities are exposed to various risks, such as interest rate, market and credit 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 that such changes could materially affect participants’ account balances and the amounts reported in the financial statements.

Cabot 401(k) Plan

Notes to Financial Statements as of December 31, 2015 and 2014, and for the Year Ended December 31, 2015

Investment Valuation

The Statements of Net Assets Available for Benefits reflect the Plan's investments at their fair values. Fair value of a financial instrument is the price that would be received on the sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. See Note 3 for a discussion of fair value measurements.

Income Recognition

Purchases and sales of securities are reflected on a trade date basis. Gains or losses on sales of securities are based on average cost.

Dividends received in cash are recorded on the ex-dividend date. Dividend payments received in shares of Cabot common stock are recorded on the ex-dividend date in an amount equal to the fair value of the common stock on that date. Interest income is recorded as earned on the accrual basis.

The Plan presents in the Statement of Changes in Net Assets Available for Benefits, the net appreciation (depreciation) in the fair value of its investments which consists of (i) realized gains or losses, and (ii) unrealized appreciation (depreciation) on those investments.

Management fees and operating expenses related to investments in the mutual funds and common collective trust funds are charged directly to the mutual funds and deducted from income earned on a daily basis by the mutual funds and are not separately reflected in the accompanying financial statements. Consequently, management fees and operating expenses are reflected as a reduction of investment return for such investments.

Notes Receivable from Participants

Notes receivable from participants are measured at their unpaid principal balance plus any accrued but unpaid interest. Delinquent participant loans are recorded as distributions based on the terms of the Plan document.

Benefit Payments

Benefit payments to participants are recorded upon distribution.

3. Fair Value Measurements

The Plan classifies its investments into Level 1, which refers to securities valued using quoted prices from active markets for identical assets; Level 2, which refers to securities not traded on an active market but for which observable market inputs are readily available; and Level 3, which refers to securities valued based on significant unobservable inputs. Assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. There were no transfers of assets between levels during the year ended December 31, 2015. The Plan's policy is to recognize significant transfers between levels at the beginning of the reporting period.

Following is a description of the valuation methodologies used by the Plan. There have been no changes in the methodologies used at December 31, 2015 and 2014.

Common collective trusts – Valued at the net asset value ("NAV") based on information reported by the trustee with reference to the market value of the trust's underlying assets at year end. The common collective trusts are audited annually.

Cabot 401(k) Plan**Notes to Financial Statements as of December 31, 2015 and 2014, and for the Year Ended December 31, 2015**

The Vanguard Retirement Savings Trust (“VRST”), a common collective trust, invests primarily in synthetic guaranteed investment contracts and short-term money market funds. The VRST is valued at the NAV as provided by the trustee, which is used as a practical expedient to estimate fair value. The NAV is based on the fair value of the underlying investments held by the fund less its liabilities and then divided by number of shares outstanding. This practical expedient is not used when it is determined to be probable that the fund will sell the investment for an amount different than the reported NAV. The Plan has no unfunded commitments to the VRST, which allows for daily transactions. The Plan may be subject to a 12 month notice period for redemptions, and redemptions are allowed daily for participants.

Mutual funds – Valued at the NAV of the shares held by the Plan at year end as determined by quoted market prices.

Company stock – Valued at the closing price reported on the active market on which the individual securities are traded.

The preceding methods described may produce a fair value calculation that may not be indicative of the amount realized upon disposition. Furthermore, although 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 at reporting date.

The following tables set forth by level and major categorization within the fair value hierarchy, the Plan’s assets at fair value as of December 31:

	2015			
	Total	Level 1	Level 2	Level 3
Mutual funds	\$515,882,034	\$515,882,034	\$ —	\$ —
Company stock*	67,888,786	67,888,786	—	—
Total assets in fair value hierarchy	583,770,820	583,770,820	—	—
Investments measured at net asset value**	9,244,898	—	—	—
Total	\$593,015,718	\$583,770,820	\$ —	\$ —

* Includes both Cabot Common ESOP Stock Fund and Cabot Common Stock Fund.

** In accordance with Subtopic 820-10, certain investments that were measured at net asset value per share (or its equivalent) have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the line items presented in the Statement of Net Assets Available for Benefits.

[Table of Contents](#)**Cabot 401(k) Plan****Notes to Financial Statements as of December 31, 2015 and 2014, and for the Year Ended December 31, 2015**

	2014			
	Total	Level 1	Level 2	Level 3
Mutual funds	\$446,168,290	\$446,168,290	\$ —	\$ —
Company stock*	82,097,811	82,097,811	—	—
Total assets in fair value hierarchy	528,266,101	528,266,101	—	—
Investments measured at net asset value**	91,053,819	—	—	—
Total	\$619,319,920	\$528,266,101	\$ —	\$ —

* Includes both Cabot Common ESOP Stock Fund and Cabot Common Stock Fund.

** In accordance with Subtopic 820-10, certain investments that were measured at net asset value per share (or its equivalent) have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the line items presented in the Statement of Net Assets Available for Benefits.

4. Forfeitures

Upon termination of a participant from the Company before his or her benefits are fully vested, the unvested portion of the Company retirement contributions is forfeited. The Plan allows the Company to apply participant forfeitures toward Plan expenses or to offset the Company contributions. During 2015, the Company used \$135,389 of participant forfeitures toward the payment of the Company contribution. As of December 31, 2015 and 2014, participant forfeitures totaling \$73,249 and \$128,123, respectively, were available for future use by the Company.

5. Administrative Expenses

Effective January 1, 2014, the Plan was amended to permit the payment of usual and reasonable expenses not paid by the Company to be paid by the Plan, to the extent permitted by ERISA. These expenses are deducted from participant accounts. With this change, certain redemption, special managed account and participant loan fees, as well as other administrative expenses required for the operation of the Plan are deducted from participant accounts. Costs paid by the Company include audit fees, consulting and investment service expenses.

6. Federal Income Tax Status

In a letter dated July 9, 2014, the Internal Revenue Service (“IRS”) advised the Company of its favorable determination with respect to the qualified status of the Plan, as amended and restated through December 31, 2013, under the Code. The Plan is intended to qualify as a profit sharing plan under section 401(a) of the Code that contains a stock bonus feature constituting an employee stock ownership plan under section 4975(e) of the Code. The Plan has been amended since receiving the determination letter, however, the Company and Plan management believe that the Plan has been designed and, except as described within this footnote, has been and is being operated in compliance with the applicable requirements of the Code. Therefore, no provision for income tax has been accrued.

In May 2014, the Company became aware of a discrepancy between the Plan language and the administrative process used to calculate the matching contribution. The Company filed a Voluntary Correction Program (“VCP”) submission requesting IRS approval for a retroactive Plan amendment that would more explicitly conform the terms of the Plan to the administration of the Plan. In March 2015, the IRS approved the correction of the operational failure with the amendment of the Plan, which was adopted by the Company in May 2015. Accordingly, no additional contributions were required to resolve this matter.

Cabot 401(k) Plan

Notes to Financial Statements as of December 31, 2015 and 2014, and for the Year Ended December 31, 2015

In 2015, the Company identified errors in the calculation of the Company matching contribution due to participants in the Plan and an error in the payroll system that affected eligible compensation for one group of participants that impacted employee deferrals, employer matching contributions, and employer retirement contributions. The amount of these contributions and the lost earnings thereon was estimated to be approximately \$400,000, and was reflected as Other employer contribution receivable in the Statement of Net Assets Available for Benefits as of December 31, 2014. The Company took corrective action under the IRS' Employee Plans Compliance Resolution System during plan year 2015 to correct these errors.

7. Plan Termination

The Plan was established with the intention that it will continue indefinitely. However, the Company reserves the right to suspend its contributions or to terminate the Plan at any time. In the event the Plan is terminated, all participants become 100% vested and the assets of the Plan, after payment of any expenses, taxes or proper charges of the trustee, will be allocated in accordance with the provisions of ERISA.

8. Party-In-Interest

The Plan's investment options include certain mutual funds and common collective trusts of The Vanguard Group. Vanguard Fiduciary Trust Company is the record keeper and trustee of certain of the Plan's assets and, therefore, participant investments in mutual funds and common collective trusts within The Vanguard Group qualify as party-in-interest transactions. Management fees paid for investment management services are charged directly to the mutual funds and common collective trusts by Vanguard, and are reflected as a reduction of the return earned on each mutual fund. The Plan does not separately pay any management fees to The Vanguard Group.

In addition, the Plan is invested in common stock of the Company and these transactions qualify as party-in-interest transactions.

At December 31, 2015 and 2014, the Plan held common stock of the Company, the sponsoring employer. During the year ended December 31, 2015, the Plan earned dividend income of \$1,548,183 related to the common stock of the Company.

9. Reconciliation of Financial Statements to Form 5500

A reconciliation of net assets available for benefits as reflected in the financial statements to the total net assets as reflected in the Form 5500 as of December 31, 2015 and 2014, and the increase in net assets as reflected in the financial statements to amounts reflected in the Form 5500 for the year ended December 31, 2015 is as follows:

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Cabot 401(k) Plan

Notes to Financial Statements as of December 31, 2015 and 2014, and for the Year Ended December 31, 2015

	<u>2015</u>	<u>2014</u>
Net assets available for benefits per the financial statements	\$599,858,784	\$624,912,633
Deemed distributions - reduction of loans	(5,387)	(5,387)
Adjustment from contract value to fair value for the fully benefit responsive common collective trust*	—	202,200
Net assets available for benefits per Form 5500	<u>\$599,853,397</u>	<u>\$625,109,446</u>
	<u>2015</u>	
Net increase in net assets available for benefits per the financial statements	\$ (25,053,849)	
Adjustment from contract value to fair value for the fully benefit responsive common collective trust*	(202,200)	
Net income per Form 5500	<u>\$ (25,256,049)</u>	

* Prior to the adoption of ASU 2015-12

10. Subsequent Events

The Company has evaluated subsequent events through June 24, 2016, the date these financial statements were issued. There were no subsequent events that require recognition or additional disclosure in these financial statements.

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Cabot 401(k) Plan
Schedule H, Line 4i – Schedule of Assets (Held At End of Year)
As of December 31, 2015

EIN: 04-2271897 PN: 022

(a)	(b)	(c)	(d)	(e)
	Identity of issue, borrower, lessor or similar party	Description of investment including maturity date, rate of interest, collateral, par or maturity value	Cost	Current value
*	Cabot Corporation	Company Stock	**	\$67,888,786
*	Vanguard Institutional Index Fund	Mutual fund	**	78,826,941
*	Vanguard Wellington Fund	Mutual fund	**	60,495,333
*	Vanguard PRIMECAP Fund	Mutual fund	**	59,129,889
*	Vanguard Total Bond Market Index Fund	Mutual fund	**	51,432,258
*	Vanguard Windsor II Fund	Mutual fund	**	36,310,450
*	Vanguard International Growth Fund	Mutual fund	**	31,389,931
*	Vanguard Prime Money Market Fund	Mutual fund	**	26,528,525
*	Vanguard Explorer Fund	Mutual fund	**	23,808,703
*	Vanguard Extended Market Index Fund	Mutual fund	**	22,241,827
*	Vanguard Institutional Target Retirement 2020 Fund	Mutual fund	**	15,787,572
*	Vanguard Total International Stock Index Fund	Mutual fund	**	15,188,435
*	Vanguard Short-term Federal Fund	Mutual fund	**	13,648,144
*	Vanguard Institutional Target Retirement 2025 Fund	Mutual fund	**	11,965,793
*	Vanguard Institutional Target Retirement 2030 Fund	Mutual fund	**	10,992,317
*	Vanguard Institutional Target Retirement 2015 Fund	Mutual fund	**	10,300,318
*	Vanguard Institutional Target Retirement 2035 Fund	Mutual fund	**	10,284,156
*	Vanguard Institutional Target Retirement 2040 Fund	Mutual fund	**	8,240,385
*	Vanguard International Value Fund	Mutual fund	**	7,522,570
*	Vanguard Institutional Target Retirement 2045 Fund	Mutual fund	**	5,906,611
*	Vanguard Institutional Target Retirement 2050 Fund	Mutual fund	**	4,940,095
*	Vanguard Institutional Target Retirement Income Fund	Mutual fund	**	4,752,763
*	Vanguard Total International Bond Index Fund	Mutual fund	**	1,875,185
*	Vanguard Institutional Target Retirement 2010 Fund	Mutual fund	**	1,651,785
*	Vanguard Institutional Target Retirement 2055 Fund	Mutual fund	**	1,194,923
*	Diamond Hill Small Cap Fund	Mutual fund	**	895,943
*	Vanguard Inflation-Protected Securities Fund	Mutual fund	**	477,711
*	Vanguard Institutional Target Retirement 2060 Fund	Mutual fund	**	93,471
*	Vanguard Retirement Savings Trust III	Common collective trust	**	9,244,898
	Total investments on the Statement of Net Assets Available for Benefits			593,015,718
*	Participant Loans	(3.25%-5.25%)	—	4,823,007
	Total investments on the Form 5500			<u>\$597,838,725</u>

* Indicates party-in-interest to the Plan

** Cost omitted for participant directed investments

SIGNATURES

The Plan. Pursuant to the requirements of the Securities Exchange Act of 1934, the trustees (or other persons who administer the employee benefit plan) have duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

Cabot 401(k) Plan
(Name of Plan)

Date: June 24, 2016

/s/ Robby D. Sisco
Robby D. Sisco
Senior Vice President

Exhibit Index

Exhibit
Number

Exhibit 23.1 — Consent of Independent Registered Public Accounting Firm

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statements Nos. 333-19103, 333-19099, 333-161253 and 333-177176 of Cabot Corporation on Form S-8 of our report dated June 23, 2016 relating to the statements of net assets available for plan benefits of the Cabot 401(k) Plan as of December 31, 2015 and 2014, and the related statement of changes in net assets available for plan benefits for the year ended December 31, 2015, and the related schedule, included in this annual report on Form 11-K.

/s/ Caron & Bletzer, PLLC

Kingston, NH
June 24, 2016