
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 11-K

(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

Commission File Number 1-9735

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

BERRY PETROLEUM COMPANY THRIFT PLAN

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

Berry Petroleum Company

1999 Broadway, Ste 3700
Denver, CO 80202

BERRY PETROLEUM COMPANY
THRIFT PLAN

FINANCIAL STATEMENTS
AND SUPPLEMENTAL SCHEDULE
(With Report of Independent Registered Public Accounting Firm)

December 31, 2010 and 2009

BERRY PETROLEUM COMPANY THRIFT PLAN

INDEX

[Report of Independent Registered Public Accounting Firm](#) 2

[Report of Prior Year Independent Registered Public Accounting Firm](#) 3

Financial Statements

[Statements of Net Assets Available for Benefits as of December 31, 2010 and 2009](#) 4

[Statement of Changes in Net Assets Available for Benefits for the year ended December 31, 2010](#) 5

[Notes to Financial Statements](#) 6

Supplemental Schedule

[Table of Contents](#)**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Benefit Plans Committee of the
Berry Petroleum Company Thrift Plan:

We have audited the accompanying statements of net assets available for benefits of the Berry Petroleum Company Thrift Plan (the Plan) as of December 31, 2010, 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 audit 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. The Plan is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit 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 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 audit provides 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 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 audit was made for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental Schedule H, Line 4i — Schedule of Assets (Held at End of Year), is presented for the purpose of additional analysis and is not a required part of the basic 2010 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. The supplemental schedule has been subjected to the auditing procedures applied in our 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/ Ekrhardt Keefe Steiner Hottman PC

Ekrhardt Keefe Steiner Hottman PC

June 2, 2011
Denver, Colorado

[Table of Contents](#)**Report of Independent Registered Public Accounting Firm**

To the Participants and the Administrator of the
Berry Petroleum Company Thrift Plan:

We have audited the accompanying statement of net assets available for benefits of the Berry Petroleum Company Thrift Plan (the "Plan") as of December 31, 2009. This financial statement is the responsibility of the Plan's management. Our responsibility is to express an opinion on this financial statement based on our audit.

We conducted our audit 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. The Plan is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit 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 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 audit provides a reasonable basis for our opinion.

In our opinion, the financial statement referred to above presents fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2009 in conformity with U.S. generally accepted accounting principles.

/s/ KMJ Corbin & Company LLP

KMJ Corbin & Company LLP
Costa Mesa, California

[Table of Contents](#)

BERRY PETROLEUM COMPANY THRIFT PLAN
Statements of Net Assets Available for Benefits
December 31, 2010 and 2009

	<u>2010</u>	<u>2009</u>
ASSETS:		
Investments, at fair value:		
Interest bearing cash	\$ 459,558	\$ 383,228
Shares in registered investment companies	21,931,852	17,172,417
Common and collective trust	3,705,873	3,623,964
Common stock of plan sponsor	9,420,016	6,572,188
Total investments at fair value	<u>35,517,299</u>	<u>27,751,797</u>
Notes receivable from participants	872,874	859,923
Receivables	317	—
Total receivables	<u>873,191</u>	<u>859,923</u>
Total assets	36,390,490	28,611,720
LIABILITIES:		
Other liabilities	—	9,269
Net assets available for benefits, at fair value	36,390,490	28,602,451
Adjustment from fair value to contract value for fully benefit-responsive investment contracts	<u>(30,132)</u>	<u>67,388</u>
Net assets available for benefits, at contract value	<u>\$ 36,360,358</u>	<u>\$ 28,669,839</u>

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

[Table of Contents](#)

BERRY PETROLEUM COMPANY THRIFT PLAN
Statement of Changes in Net Assets Available for Benefits
Year Ended December 31, 2010

Additions to (deductions from) net assets attributable to:	
Contributions:	
Employer	\$ 1,494,621
Participants	2,208,432
Rollovers	264,564
Total contributions	<u>3,967,617</u>
Investment income	
Interest and dividends	391,829
Interest from participant loans	47,039
Net appreciation in fair value of investments	5,872,593
Net investment income	<u>6,311,461</u>
Total additions	<u>10,279,078</u>
Deductions:	
Benefits paid to participants	(2,581,129)
Administrative fees	(7,430)
Total deductions	<u>2,588,559</u>
Net increase in net assets	7,690,519
Net assets available for benefits:	
Beginning of year	<u>28,669,839</u>

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

5

[Table of Contents](#)

**BERRY PETROLEUM COMPANY THRIFT PLAN
NOTES TO FINANCIAL STATEMENTS**

Note 1. Description of Plan

The following description of the Berry Petroleum Company Thrift Plan (the Plan) is provided for general information purposes only. Participants should refer to the Plan Agreement for more complete information.

General

The Plan is sponsored and administered by Berry Petroleum Company (the Company, Plan Sponsor or Plan Administrator). The Plan is a defined contribution plan under Section 401(a) of the Internal Revenue Code (the Code), which includes a cash or deferred arrangement under 401(k) of the Code, and is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA), as amended. Effective December 31, 2009, the Plan was amended (the Amendment). The Amendment, among other things, added an automatic enrollment feature to the Plan. All new employees, and all existing employees that did not previously participate in the Plan, are automatically enrolled into the Plan. In addition, 6% of eligible compensation for participants automatically enrolled is contributed to the Plan, unless the participant declines the automatic enrollment. This percentage of eligible compensation is increased by 1% on an annual basis up to a maximum of 8% of eligible compensation.

The Plan was amended in November 2010 to allow In-Service Plan withdrawals when a participant reaches the age of 59 and ½ and also to allow Roth In-Plan conversions effective as of December 1, 2010.

Administration

The Benefit Plans Committee (the "Committee") appointed by the Board of Directors of Berry Petroleum Company and consisting of at least three members, has the authority to control and manage operation and administration of the Plan. The Plan assets are held under a trust for which Fidelity Management Trust Company, (Fidelity) acts as trustee and are administered under a trust agreement which requires that the trustee hold, administer, and distribute the funds of the Plan in accordance with the Plan document and the instructions of the Committee or its designees. Certain administrative expenses are paid by the Company.

Contributions

Employees who elect to participate in the Plan may contribute from 1% to 60% of their eligible compensation, as defined in the Plan Agreement. The Company match consists of a 100% match of each participant's contribution up to the first 8% of the participant's eligible compensation.

Participant and employer contributions are subject to statutory limitations, which for 2010 and 2009 were \$16,500 for employee contributions and \$49,000 for total employee and employer contributions, respectively. Employees who have attained the age of 50 by the end of the Plan year are eligible to make an additional catch-up contribution, for which the limit was \$5,500 for 2010 and 2009. Participants vest immediately in their contributions, and vesting in employer contributions is at a rate of 20% per year of service during the first five years of employment. In addition, participants may elect to contribute a percentage of eligible compensation into the Plan on an after-tax basis or as noted above as a Roth 401(k) contribution. After-tax contributions are subject to special Internal Revenue Code rules which must be satisfied and reduce the maximum amount a participant may contribute. Any contributions that adversely affect the Plan's non-discrimination tests may be refused or refunded.

6

[Table of Contents](#)

**BERRY PETROLEUM COMPANY THRIFT PLAN
NOTES TO FINANCIAL STATEMENTS**

Note 1. Description of Plan, continued

Contributions, continued

Contributions made by or on behalf of Plan participants are invested as directed by the participants and held under a trust agreement in one or more of the investment options as directed by participants in accordance with the provisions of the Plan Agreement.

Investment Funds

The investment selections available to participants are as follows:

Berry Petroleum Company Common Stock Fund
Fidelity Managed Income Portfolio Fund
Fidelity Contrafund
Fidelity Diversified International Fund
Fidelity Low-Priced Stock Fund

ABF Large Cap Value PA Fund
Columbia Acorn International Z Fund
CRM Mid Cap Value Investor Fund
JP Morgan Small Cap Growth A Fund
Morgan Stanley Institutional Equity Growth B Fund

Fidelity Puritan Fund
 Fidelity Freedom Income Fund
 Fidelity Freedom Funds (1)
 Fidelity U.S. Bond Index Fund
 ABF Small Cap Value PA Fund

Oppenheimer Developing Markets A Fund
 Pimco High Yield Admin Fund
 Pimco Real Return Bond Fund
 Spartan U.S. Equity Index Fund

(1) The entire range of Freedom Funds are available and comprise the Freedom 2000, 2005, 2010, 2015, 2020, 2025, 2030, 2035, 2040, 2045 and 2050.

The following investments had fair values at December 31, 2010 and 2009 representing more than 5% of net assets available for benefits:

	2010	2009
Berry Petroleum Company Common Stock Fund	\$ 9,420,016(a)	\$ 6,946,113(a)
Fidelity Managed Income Portfolio	3,705,873(b)	3,623,964(b)
Fidelity Diversified International Fund	2,768,673	2,606,449
Fidelity Contrafund	2,561,149	2,521,561
Spartan U.S. Equity Index Fund	(1)	1,646,954
Fidelity Low-Priced Stock Fund	(1)	1,486,795

(1) Investment was less than 5% at the respective date.

(a) Investment balances include cash and cash equivalents of \$459,570 and \$383,194, other receivables of \$317 and \$0 and other liabilities of \$0 and \$9,269 at December 31, 2010 and 2009, respectively.

(b) The schedule reflects the fair value. The contract value of the investment at December 31, 2010 and 2009, was \$3,675,740 and \$3,691,352, respectively.

7

[Table of Contents](#)

**BERRY PETROLEUM COMPANY THRIFT PLAN
 NOTES TO FINANCIAL STATEMENTS**

Note 1. Description of Plan, continued

Participant Accounts

Participants can access their accounts at any time with Fidelity's Net Benefits online service. Each participant account is credited with the participant's and the Company's contributions, and the allocation of any Plan earnings or losses and Plan expenses. Earnings or losses are allocated on a fund-by-fund basis. Allocations are based on the ratio of the participant's account balance in each investment option to the total assets of the investment option. Forfeitures may be used to reduce the amount the Company is required to fund for matching contributions. The Plan had a balance of forfeitures at December 31, 2010 and 2009 of \$2 and \$783, respectively. For the years ended December 31, 2010 and 2009, \$146,314 and \$170,904 respectively, of forfeitures were applied to employer matching contributions.

Participant Loans

Participants are entitled to borrow from their vested account balances in amounts from \$1,000 to \$50,000, but not in excess of 50% of their vested account balances. Interest is computed based on the prime rate in the Wall Street Journal on the date of the application, plus 1%. A maximum of two loans can be outstanding at any one time and each loan must be repaid over a period of 1 to 5 years, unless the loan is for the purchase of a principal residence, in which case the loan may be repaid over a period of 10 years. Each loan is supported by a promissory note with the participant's account balance as collateral. In the event of default, death, disability or termination of employment, the entire outstanding principal balance and accrued interest becomes immediately due and payable.

Hardship Withdrawals

The Plan allows for hardship withdrawals to pay certain housing, health or education expenses if the participant does not have other funds available for these expenses. Internal Revenue Service (IRS) regulations require that a participant cannot make contributions to the Plan for six months after taking a hardship withdrawal. In addition, participants will not receive matching contributions or forfeitures for the six months they are ineligible to participate in the Plan.

Payment of Benefits

Upon termination of service due to retirement, death, disability or other reasons, the participant or beneficiary, in the case of death, can request withdrawal of his or her account equal to the value of the vested balance in the participant account, reduced by any unpaid loan balance. If desired, a participant can leave the account balance in the Plan until the participant attains the age of 70 ½ unless the participant's vested account balance is less than \$5,000, in which case the vested account balance can be distributed to the participant at the discretion of the Plan Sponsor. The Plan allows withdrawals from the participant accounts in the form of installment payments in addition to lump sum distributions.

8

[Table of Contents](#)

**BERRY PETROLEUM COMPANY THRIFT PLAN
NOTES TO FINANCIAL STATEMENTS**

Note 1. Description of Plan, continued

Plan Termination

Although it is anticipated that the Plan will remain in effect indefinitely, the Company has the right to discontinue its contributions and terminate the Plan subject to the provisions of ERISA. In the event of complete or partial termination of the Plan, participants become 100% vested in their account balances.

Note 2. Summary of Significant Accounting Policies

Basis of Accounting

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

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of net assets available for benefits and changes therein and related disclosures. Actual results could differ from those estimates.

Investments

Investments are stated at fair value. See "Fair Value Measurements" below.

Fidelity Managed Income Portfolio Fund (Managed Income Fund) is held in a common/collective trust and consists primarily of investments in fixed-income securities and bond funds; however, the fund will also purchase third-party wrap contracts and investment contracts which result in the probability that participant directed transactions with investments in the fund will be at contract value. Therefore, investments in the Managed Income Fund are considered to be fully benefit-responsive. As a result, Plan investments in the Managed Income Fund are reported at fair value.

As 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, the statements of net assets available for benefits also present an adjustment from fair value to contract value for investments in the Managed Income Fund so that such investments are ultimately reflected at contract value in the statement of net assets available for benefits.

In accordance with the policy of stating Plan investments at fair value, the Plan presents the net appreciation (depreciation) in the fair value of its investments in the statement of changes in net assets available for benefits, which consists of the realized gains or losses and the unrealized appreciation (depreciation) on those investments.

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

[Table of Contents](#)

**BERRY PETROLEUM COMPANY THRIFT PLAN
NOTES TO FINANCIAL STATEMENTS**

Note 2. Summary of Significant Accounting Policies, continued

Payment of Benefits

Benefit payments to participants are recorded when paid.

Expenses of the Plan

The Plan's administrative expenses are paid by either the Plan or the Plan's Sponsor, as provided by the Plan Agreement.

Fair Value Measurements

The Plan adopted Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Topic 820, *Fair Value Measurements and Disclosures*, which defines fair value, establishes a framework for measuring fair value in accordance with GAAP and expands required disclosures about fair value measurements. ASC 820 defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal, or in the absence of a principal market, the most advantageous market for the asset or liability, in an orderly transaction between market participants on the measurement date. ASC 820 also establishes a fair value hierarchy that requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The standard describes three levels of inputs which prioritize the inputs used in measuring fair value:

Level 1—Quoted prices in active markets for identical assets or liabilities

Level 2—Observable inputs other than quoted prices included within Level 1, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; inputs other than quoted prices that are observable for the asset or liability (for example interest rates and yield curves, credit risks and

default rates) or other inputs that are principally derived or corroborated by observable market data, correlation, or by other means.

Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The following is a description of the valuation methodologies used for the investments measured at fair value, including the general classification of such instruments pursuant to the valuation hierarchy.

Registered investment companies

The shares in registered investment companies are valued at quoted market prices in an exchange and active market, which represents the net asset values of shares held by the Plan at year end and are classified as Level 1 investments.

[Table of Contents](#)

BERRY PETROLEUM COMPANY THRIFT PLAN NOTES TO FINANCIAL STATEMENTS

Note 2. Summary of Significant Accounting Policies, continued

Fair Value Measurements, continued

Common/collective trust funds

Investments in common/collective trust consist of investments in the Managed Income Fund, and the fair value of these investments is determined by the fund's trustee based on the fair value of the underlying securities within the fund, which represent the net asset value of the shares held by the Plan at year end. Investments in common and collective trust are classified as Level 2 investments.

Bonds

The fair value of the bonds investments are determined based on quoted net asset values that are directly observable in the marketplace.

Interest bearing cash

The carrying value approximates fair value.

As of December 31, 2010, the Plan's investments measured at fair value on a recurring basis were as follows:

Fair value disclosure:	Quoted Prices in Active Markets for Identical Assets (Level 1)	Quoted Prices in Active Markets for Identical Assets (Level 2)	Significant Unobservable Inputs (Level 3)	Total Investments at Fair Value
Registered Investment Companies:				
Large cap equities	\$ 7,302,289	\$ —	\$ —	\$ 7,302,289
Blended equities	4,010,159	—	—	4,010,159
International equities	3,561,630	—	—	3,561,630
Mid cap equities	2,693,488	—	—	2,693,488
Small cap equities	1,543,505	—	—	1,543,505
Total equities	19,111,071	—	—	19,111,071
Corporate bonds	703,699	—	—	703,699
U.S. Government securities	2,117,082	—	—	2,117,082
Total bonds	2,820,781	—	—	2,820,781
Total Registered Investment Companies:	21,931,852	—	—	21,931,852
Berry Petroleum Company Common Stock:	9,420,016	—	—	9,420,016
Interest bearing cash:	459,558	—	—	459,558
Collective Trusts:	—	3,705,873	—	3,705,873
Total by Level:	\$ 31,811,426	\$ 3,705,873	\$ —	\$ 35,517,299

[Table of Contents](#)

BERRY PETROLEUM COMPANY THRIFT PLAN NOTES TO FINANCIAL STATEMENTS

As of December 31, 2009, the Plan's investments measured at fair value on a recurring basis were as follows:

Fair value disclosure:	Quoted Prices in Active Markets for Identical Assets (Level 1)	Quoted Prices in Active Markets for Identical Assets (Level 2)	Significant Unobservable Inputs (Level 3)	Total Investments at Fair Value
Registered Investment Companies:				
Large cap equities	\$ 6,428,788	\$ —	\$ —	\$ 6,428,788
Blended equities	2,309,844	—	—	2,309,844
International equities	3,016,836	—	—	3,016,836
Mid cap equities	2,274,148	—	—	2,274,148

Small cap equities	978,986	—	—	978,986
Total equities	15,008,602	—	—	15,008,602
Corporate bonds	472,622	—	—	472,622
U.S. Government securities	1,691,193	—	—	1,691,193
Total Bonds	2,163,815	—	—	2,163,815
Total Registered Investment Companies:	17,172,417	—	—	17,172,417
Berry Petroleum Company Common Stock:	6,572,188	—	—	6,572,188
Interest bearing cash:	383,228	—	—	383,228
Collective Trusts:	—	3,623,964	—	3,623,964
Total by Level:	\$ 24,127,833	\$ 3,623,964	\$ —	\$ 27,751,797

Recent Accounting Pronouncements

In September 2010, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2010-25, Reporting Loans to Participants by Defined Contribution Pension Plans, which requires participant loans to be classified as loans receivable and measured at unpaid principal balance plus accrued but unpaid interest. Previously, these participant loans were classified as Plan investments, and were subject to the fair value measurement and disclosure requirements of Accounting Standards Codification (“ASC”) Topic 820, Fair Value Measurements and Disclosures. The Plan has adopted ASU 2010-25 for the Plan year ending December 31, 2011. The adoption of ASU 2010-25 did not have a material impact on the Plan’s financial statements.

In January 2010, the FASB issued ASU 2010-06, Improving Disclosures about Fair Value Measurements. This guidance requires additional disclosure of transfers of assets and liabilities between Levels 1 and 2 of the fair value hierarchy and disclosure of activities, on a gross basis, including purchases, sales, issuances, and settlements in the reconciliation of the assets and liabilities measured under Level 3 of the fair value hierarchy.

[Table of Contents](#)

BERRY PETROLEUM COMPANY THRIFT PLAN NOTES TO FINANCIAL STATEMENTS

Note 2. Recent Accounting Pronouncements, cont’d

This standard also clarifies existing disclosure requirements on levels of disaggregation and disclosures about inputs and valuation techniques. ASU 2010-06 was effective for the Plan’s year ended December 31, 2010, except for the disclosure requirements on Level 3 activity that will be effective for the Plan’s year ending December 31, 2010. The adoption of this standard did not have a material impact on the Plan’s financial statements.

Note 3. Tax Status

Fidelity, the Plan’s trustee, received a favorable IRS Opinion Letter from the IRS for their Plan (the Plan) in March 2008. The Company has adopted Fidelity’s Prototype 401(k) Plan conforming the operations of the Plan to the Prototype Plan, thereby allowing the Company to rely on Fidelity’s current and future favorable IRS opinion letters. Although the Plan has been amended since receiving the opinion letter, the Plan Sponsor believes the Plan is designed, and is currently being operated, in compliance with the applicable requirements of the Code. Therefore no provisions for income tax have been included in the Plan’s Financial Statements.

Accounting principles generally accepted in the United States of America require Plan management to evaluate tax positions taken by the plan and recognize a tax liability (or asset) if the organization has taken an uncertain position that more likely than not would not be sustained upon examination by the Internal Revenue Service or the states of Colorado, California, Texas, Utah or Nevada. The Plan Administrator has analyzed the tax positions taken by the plan, and has concluded that as of December 31, 2010, there are no uncertain positions taken or expected to be taken that would require recognition of a liability (or asset) or disclosure in the financial statements. The Plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress. The Plan Administrator believes it is no longer subject to income tax examinations for years prior to 2006.

Note 4. Transactions with Parties-in-Interest and Related Party Transactions

During the years ended December 31, 2010 and 2009, there were transactions involving investment of Plan assets in investment funds maintained by the trustee and participant loans. The trustee and participants are considered to be parties-in-interest as defined in Section 3(14) of ERISA. One of the Plan’s investment options is Berry Petroleum Company Common Stock which is purchased by the trustee in the open market.

During the year ended December 31, 2010, the Plan Sponsor paid \$51,808 of Plan administration and employee education costs. In addition, as of December 31, 2010 and 2009, the Plan had outstanding participant loan balances of \$872,874 and \$859,923, respectively. All of these transactions are considered exempt party-in-interest transactions under ERISA.

[Table of Contents](#)

BERRY PETROLEUM COMPANY THRIFT PLAN NOTES TO FINANCIAL STATEMENTS

Note 5. Reconciliation of Financial Statements to Form 5500

The following is a reconciliation of net assets available for benefits per the financial statements to the amount per the Form 5500 as of December 31, 2010 and 2009:

	2010	2009
Net assets available for benefits per the financial statements	\$ 36,360,358	\$ 28,669,839
Adjustment from fair value to contract value for fully benefit responsive investment contracts	30,132	(67,388)
Net assets available for benefits per the Form 5500	<u>\$ 36,390,490</u>	<u>\$ 28,602,451</u>

The following is a reconciliation of the net increase in net assets per the financial statements to the amount per the Form 5500 for the year ended December 31, 2010:

Net increase in net assets per the financial statements	\$ 7,690,519
Change in the adjustment from fair value to contract value for fully benefit-responsive investment contracts for the year ended December 31, 2010	97,520
Net increase in assets available for benefits per the Form 5500	<u>\$ 7,788,039</u>

Note 6. Risks and Uncertainties

The Plan provides for investments in any combination of mutual funds, Berry Petroleum Company Common Stock, corporate bonds, common stock and the Managed Income Portfolio, with different investment strategies. These investments are exposed to various risks, such as interest rate, market and credit risks. Due to the level of risk associated with certain investments and the level of uncertainty related to the changes in the value of these investments, it is at least reasonably possible that changes in risks in the near term would materially affect participants' account balances and the amounts reported in the statements of net assets available for benefits and the statement of changes in net assets available for benefits.

Note 7. Subsequent Events

The Plan has evaluated subsequent events through June 2, 2011, the date of this report, and determined that no subsequent events have occurred that would require recognition in the financial statements or disclosure in the notes thereto other than as disclosed in the accompanying notes.

[Table of Contents](#)

BERRY PETROLEUM COMPANY THRIFT PLAN
Plan # 002 EIN # 77-0079387
Schedule I - Schedule H, Line 4i-Schedule of Assets (Held at End of Year)
As of December 31, 2010

(a)	(b) Identity of issuer, borrower, lessor, or similar party	(c) Description of investment, including maturity date, rate of interest, collateral, par or maturity value	(e) Current Value
*	Berry Petroleum Company Common Stock Fund **	Class A Common Stock Fund (\$0.01 par value)	\$ 9,879,891
*	Fidelity Managed Income Portfolio Fund	Common Collective Trust	3,705,873
*	Fidelity Diversified International Fund	Mutual Fund	2,768,673
*	Fidelity Contrafund	Mutual Fund	2,561,149
*	Fidelity Low-Priced Stock Fund	Mutual Fund	1,701,842
*	Spartan U.S. Equity Index Fund	Mutual Fund	1,694,041
	ABF Large Cap Value PA Fund	Mutual Fund	1,649,098
	Morgan Stanley Institutional Equity Growth B Fund	Mutual Fund	1,398,001
	Pimco Real Return Bond Fund	Mutual Fund	1,238,940
	CRM Mid Cap Value Investor Fund	Mutual Fund	991,646
*	Fidelity US Bond Index Fund	Mutual Fund	878,142
	JP Morgan Small Cap Growth A Fund	Mutual Fund	791,875
*	Fidelity Freedom 2015 Fund	Mutual Fund	778,145
	ABF Small Cap Value PA Fund	Mutual Fund	751,630
	Pimco High Yield Admin Fund	Mutual Fund	703,699
*	Fidelity Puritan Fund	Mutual Fund	686,046
	Columbia Acorn International Z Fund	Mutual Fund	514,570
*	Fidelity Freedom 2020 Fund	Mutual Fund	483,916
*	Fidelity Freedom 2010 Fund	Mutual Fund	476,512
*	Fidelity Freedom 2030 Fund	Mutual Fund	407,874
*	Fidelity Freedom 2025 Fund	Mutual Fund	381,066
	Oppenheimer Developing Markets A Fund	Mutual Fund	278,387
*	Fidelity Freedom 2040 Fund	Mutual Fund	229,317
*	Fidelity Freedom 2050 Fund	Mutual Fund	161,601
*	Fidelity Freedom 2035 Fund	Mutual Fund	132,143
*	Fidelity Freedom Income Fund	Mutual Fund	124,664
*	Fidelity Freedom 2045 Fund	Mutual Fund	113,161
*	Fidelity Freedom 2000 Fund	Mutual Fund	35,256
*	Fidelity Freedom Fund 2005	Mutual Fund	458
			<u>35,518,616</u>
*	Participant Loans	Interest bearing loans at prime rate plus 1% to 2%; interest rates on outstanding loans range from 4.25% to	872,874

9.25% for a period of 1 to 5 years, collateralized by participant balances.

\$ 36,390,490

* Party-in-interest

** Includes 215,561 shares of Class A Common Stock, \$0.01 par value, and cash of \$459,558 and other receivables of \$317.

15

[Table of Contents](#)

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Administrative Committee has duly caused this annual report to be signed on behalf of the Plan by the undersigned hereto duly authorized.

BERRY PETROLEUM COMPANY

Thrift Plan

/s/ Kenneth A. Olson

Kenneth A. Olson
Member of the Benefits Plan Committee
Date: June 9, 2011

16

[Table of Contents](#)

EXHIBIT INDEX

<u>Exhibit Number</u>	<u>Description</u>
23.1	Consent of Independent Registered Public Accounting Firm (filed herewith).
23.2	Consent of prior year Independent Registered Public Accounting Firm (filed herewith).

17

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statements (Nos. 333-62871) on Form S-8 of our report dated June 2, 2011, with respect to the statements of net assets available for benefits of Berry Petroleum Company as of December 31, 2010, the related statement of changes in net assets available for distribution to participants for the year ended December 31, 2010, and the related supplemental schedule of Schedule H, line 4i — schedule of assets (held at end of year), which report appears in the December 31, 2010 Annual Report on Form 11-K of the Berry Petroleum Company Thrift Plan.

/s/ Ehrhardt Keefe Steiner & Hottman

Ehrhardt Keefe Steiner & Hottman

Denver, Colorado
June 2, 2011

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement on Form S-8 No. 333-62871 pertaining to the Berry Petroleum Company Thrift Plan of our report dated June 9, 2010, with respect to the statements of net assets available for the Berry Petroleum Company Thrift Plan as of December 31, 2009 and the related supplemental schedule, which report appears in the December 31, 2010 Annual Report on Form 11-K of the Berry Petroleum Company Thrift Plan.

KMJ | Corbin & Company LLP

Costa Mesa, California
June 9, 2010
