

BERRY PETROLEUM CO  
Form 10-K  
March 01, 2011

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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

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**FORM 10-K**

**ý Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

For the fiscal year ended **December 31, 2010**

Commission file number **1-9735**

**BERRY PETROLEUM COMPANY**

(Exact name of registrant as specified in its charter)

**DELAWARE**

(State of incorporation or organization)

**77-0079387**

(I.R.S. Employer Identification Number)

**1999 Broadway  
Suite 3700  
Denver, Colorado 80202**

(Address of principal executive offices, including zip code)

Registrant's telephone number, including area code:

**(303) 999-4400**

Securities registered pursuant to Section 12(b) of the Act:

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<b>Title of each class</b>	<b>Name of each exchange on which registered</b>
Class A Common Stock, \$0.01 par value (including associated stock purchase rights)	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. YES  NO

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. YES  NO

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. YES  NO

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). YES  NO

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer, or a smaller reporting company. See definition of "large accelerated filer", "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). YES  NO

As of June 30, 2010, the aggregate market value of the voting and non-voting common stock held by non-affiliates was \$1,164,242,806.

As of February 11, 2011, the registrant had 51,434,804 shares of Class A Common Stock outstanding. The registrant also had 1,797,784 shares of Class B Stock outstanding on February 11, 2011, all of which are held by an affiliate of the registrant.

### DOCUMENTS INCORPORATED BY REFERENCE

Part III is incorporated by reference from the registrant's definitive Proxy Statement for its Annual Meeting of Shareholders to be filed, pursuant to Regulation 14A, no later than 120 days after the close of the registrant's fiscal year.

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*Forward Looking Statements*

"Safe harbor under the Private Securities Litigation Reform Act of 1995:" Any statements in this Annual Report on Form 10-K that are not historical facts are forward-looking statements that involve risks and uncertainties. Words or forms of words such as "will," "might," "intend," "continue," "target," "expect," "achieve," "strategy," "future," "may," "could," "goal," "forecast," "anticipate," "estimate," or other comparable words or phrases, or the negative of those words, and other words of similar meaning, indicate forward-looking statements and important factors which could affect actual results. Forward-looking statements are made based on management's current expectations and beliefs concerning future developments and their potential effects upon Berry Petroleum Company. These items are discussed at length in Part I, Item 1A. in this Annual Report on Form 10-K, under the heading "Risk Factors."

**PART I**

*Item 1. Business*

**General**

We are an independent energy company engaged in the production, development, exploitation and acquisition of crude oil and natural gas. We were incorporated in Delaware in 1985 and have been a publicly traded company since 1987. We can trace our roots in California oil production back to 1909. Since 2002, we have expanded our portfolio of assets through selective acquisitions driven by a consistent focus on properties with proved reserves and significant growth potential through low risk development. Our principal reserves and producing properties are located in California, Texas (E. Texas and the Permian), Utah (Uinta) and Colorado (Piceance).

We operate in one industry segment, which is the production, development, exploitation and acquisition of crude oil and natural gas, and all of our operations are conducted in the United States. Consequently, we currently report a single industry segment. See Item 8. Financial Statements and Supplementary Data for financial information about this industry segment. Information contained in this Annual Report on Form 10-K reflects our business during the year ended December 31, 2010 unless noted otherwise.

**Restatement of Previously Issued Financial Statements**

In 2009, we sold all of our interest in our properties located in the Denver-Julesburg basin (DJ). At the time of the DJ asset sale, we had designated derivative instruments as cash flow hedges from the forecasted sale of natural gas produced by the DJ assets. We determined that as a result of the sale of the DJ assets, the forecasted transactions were no longer probable of occurring. Accordingly, we discontinued hedge accounting for those hedges and the accumulated amount within Accumulated other comprehensive loss related to those derivatives was included in earnings from continuing operations. In addition, all recurring income statement impacts from the derivatives designated as hedges of future production expected from the DJ assets were classified as continuing operations. We had previously classified the realized gains on derivative instruments designated as cash flow hedges from the forecasted sales of natural gas produced by the DJ assets as part of continuing operations on the basis that our hedging program was managed for the purposes of corporate risk management and that hedge gains and losses were not indicative of individual asset performance when determining the amounts to include in discontinued operations.

However, after discussions with the staff of the Securities and Exchange Commission (SEC), we determined that such gains should have been classified as part of discontinued operations, on the basis that these hedges were documented as relating to the DJ assets to achieve cash flow hedge accounting in accordance with authoritative literature.

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The effect of correcting the classification of these gains resulted in a decrease in earnings from continuing operations of \$12.7 million (\$0.28 per diluted share) and \$1.2 million (\$0.02 per diluted share) for 2009 and 2008, respectively, with a corresponding increase in earnings and earnings per diluted share from discontinued operations, net of income taxes, for the same periods. The change in classification did not affect net earnings for 2009, 2008, or any of our previously issued financial statements, nor did it have an impact on any of our previously issued Balance Sheets, Statements of Shareholders' Equity or Statements of Cash Flows. See Note 16 to the Financial Statements.

**Business Strengths**

**Balanced High Quality Asset Portfolio.** Since 2002, we have grown our asset base and diversified our California heavy oil assets through acquisitions in the Permian, Uinta, E. Texas and Piceance that have significant growth potential. Our diverse asset base provides us with the flexibility to reallocate capital among our assets depending on fluctuations in oil and natural gas prices as well as area economics.

**Long-Lived Proved Reserves with Stable Production Characteristics.** Our properties generally have long reserve lives and reasonably stable and predictable well production characteristics, with a ratio of proved reserves to production of approximately 23 years.

**Low-Risk Multi-Year Drilling Inventory in Established Resource Plays.** Most of our drilling locations are located in proven resource plays that possess low geologic risk, leading to predictable drilling results. We have a significant inventory of primary development locations as well as heavy oil thermal opportunities.

**Operational Control and Financial Flexibility.** We exercise operating control over more than 97% of our assets. We generally prefer to retain operating control over our properties, allowing us to more effectively control operating costs, timing of development activities and technological enhancements, marketing of production, and allocation of our capital budget. In addition, the timing of most of our capital expenditures is discretionary which allows us a significant degree of flexibility to adjust the size of our capital budget. We finance our drilling budget primarily through our internally generated operating cash flows.

**Experienced Management and Operational Teams.** Our core team of technical staff and operating managers has broad industry experience, including experience in heavy oil thermal recovery operations and unconventional reservoir development and completion. We continue to utilize technologies and steam practices that will allow us to improve the ultimate recoveries of crude oil on our California properties.

**Corporate Strategy**

Our objective is to increase the value of our business through consistent growth in our production and reserves, both through the drill-bit and through acquisitions. We strive to operate our properties in an efficient manner to maximize the cash flow and earnings of our assets. The strategies to accomplish these goals include:

**Maximize Production from Our Base Oil Assets.** We are focused on the timely and prudent development of our large oil resource base through developmental and step-out drilling, down-spacing, well completions, remedial work and by application of enhanced oil recovery (EOR) methods and optimization technologies, as applicable.

**Grow Oil Production from Our Inventory of Organic Development Projects.** We have a proven track record of developing reserves through enhanced recovery projects and maximizing the efficiency of

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repeatable development projects. We plan to continue our focus on low-risk development of our existing assets rather than exploration.

**Meet the Growing Demand for Steam Generation.** We expect our enhanced oil development projects will require increasing quantities of natural gas for steam generation. Our E. Texas, Piceance, Uinta and Permian assets produce natural gas that offsets our consumption of natural gas utilized to generate steam used in our EOR activities.

**Invest our Capital in a Disciplined Manner and Maintain a Strong Financial Position.** We focus on utilizing our available capital on projects where we are likely to have success in increasing production and reserves at attractive returns. We believe that maintaining a strong financial position will allow us to capitalize on investment opportunities in all commodity cycles. Our capital programs are generally developed to be fully funded through internally generated cash flows. We hedge a portion of our production and utilize long-term sales contracts to maintain a strong financial position and provide the cash flow necessary for the development of our assets.

**Acquire Additional Resources with an Emphasis on Crude Oil.** We have been successful in expanding operations through targeted acquisitions that meet our economic criteria with a primary focus on large repeatable oil development potential. We target acquisitions in and around our existing core areas and evaluate new core areas if assets become available that complement our existing portfolio. We will also continue to evaluate and make opportunistic acquisitions of natural gas properties that can be developed at reasonable costs.

### Acquisition and Divestiture Activities

The following sets forth our significant acquisitions and divestitures over the last several years:

**2010 Acquisitions.** In 2010, we made multiple acquisitions, each of which involved interests in properties located primarily in the Permian, for approximately \$334 million.

**2009 Divestitures.** In 2009, we sold all of our interest in our DJ assets for approximately \$140 million.

**2008 Acquisitions.** In 2008, we acquired interests in producing properties in Limestone and Harrison counties in E. Texas for approximately \$668 million.

### Properties

The following table provides information regarding our operations by area as of December 31, 2010:

Name, State	Total Net Acres	Proved Reserves (MMBOE)(1)	Proved Developed Reserves (MMBOE)	Proved Undeveloped Reserves (MMBOE)	2010 Gross Wells(2)	2010 Net Wells(2)
S. Midway, CA	3,062	57.8	47.9	9.9	59	58
N. Midway, CA	3,561	59.5	28.3	31.2	71	71
Permian, TX	19,791	33.8	4.5	29.3	26	24
Uinta, UT	107,245(3)	24.3	12.2	12.1	60	58
E. Texas	4,777	40.5	28.0	12.5	8	8
Piceance, CO	8,124	55.3	12.8	42.5	17	13
<b>Totals</b>	<b>146,560</b>	<b>271.2</b>	<b>133.7</b>	<b>137.5</b>	<b>241</b>	<b>232</b>

(1) MMBOE Million BOEs.

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- (2) Gross and net productive wells drilled during 2010.
- (3) Does not include an additional 61,230 net acres that are subject to drill-to-earn agreements. Includes 7,790 net acres in Nevada.

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We currently have six asset teams as follows: South Midway-Sunset (S. Midway), North Midway-Sunset including Diatomite (N. Midway), Permian, Uinta, E. Texas and Piceance.

**S. Midway** We own and operate properties in the South Midway-Sunset Field in the San Joaquin Valley. Production from our properties in the South Midway-Sunset Field relies on thermal EOR methods, primarily cyclic steaming, to place steam effectively into the remaining oil column. This is our most mature thermally enhanced asset, with production from our Ethel D properties having commenced 100 years ago. In 2009, we drilled 19 horizontal wells and 18 vertical producers at the South Midway-Sunset Field. We also accelerated our continuous steam support for these horizontal wells by drilling six vertical steam injectors. In 2010, we expanded cyclic development and drilled 35 new producers, increasing production by 500 BOE/D from 2009. At Homebase and Formax, we continued our horizontal drilling program and expanded the continuous steam injection project by drilling 15 horizontal wells and 10 vertical steam injectors. In 2011, we expect to drill an additional four horizontal wells and 13 vertical injectors at Homebase and Formax. At Ethel D, our steam flood pilot was deemed economic and, as a result, we plan to drill 15 vertical producers and eight steam injectors in 2011.

In 2003, we acquired the Poso Creek properties in the San Joaquin Valley and have proceeded with a successful thermal EOR redevelopment. Average production from these properties increased from 50 BOE/D at acquisition in 2003 to 3,400 BOE/D in 2010. In 2010, we expanded the steam flood by drilling nine new producers and three new injectors. We also commissioned a new water plant to accommodate future production growth. In 2011, we will continue to expand the steam flood at Poso Creek by drilling nine producers and three steam flood injectors.

Average daily production from all S. Midway assets was approximately 11,780 BOE/D in 2010 compared to 11,430 BOE/D in 2009.

**N. Midway** Our N. Midway assets include Diatomite, Placerita and McKittrick. During 2009, we drilled 51 Diatomite wells and installed additional steam generation and water treating facilities. Average production in 2009 was 3,100 BOE/D. Diatomite production in 2010 averaged 2,720 BOE/D and was impacted by a suspension of drilling activity as we worked to secure permits from the California Division of Oil, Gas and Geothermal Resources (DOGGR) and conducted field optimization activities prior to resuming. Steam injection, which had been averaging over 30,000 barrels of steam per day (BSPD) earlier in the year, decreased as a result of the facility and infrastructure modifications. In September 2010, we received approval from the DOGGR for the next phase of development of our Diatomite project, and full project approval appears to be on schedule. The first rig resumed drilling in early October 2010, and a second rig was added in December 2010. Steam injection has steadily increased, and we exited 2010 at approximately 31,500 BSPD. Production from our Diatomite asset is expected to increase to 5,000 BOE/D by mid-2011 as we continue our development program and continue to increase steam injection. At McKittrick 21Z, we evaluated the performance of cyclic steam operations and found them to be economic. As a result, we plan to drill 44 McKittrick wells and expand infrastructure in 2011. We intend to focus additional capital investment in 2011 on initiating steam flood pilots at our Fairfield, Pan, USL-12, and Main Camp properties located in N. Midway. Average daily production from all N. Midway assets was approximately 5,320 BOE/D in 2010 compared to 5,480 BOE/D in 2009.

**Permian** In 2010, we acquired 19,791 net acres in the Wolfberry trend. We have identified over 400 drilling locations on 40-acre spacing and an additional 400 locations on 20-acre spacing. In 2010, we drilled 26 gross (24 net) wells, with 21 gross (19 net) wells coming in the second half of 2010 when we executed a three rig drilling program. In 2011, we plan to average a four rig program and drill approximately 72 gross wells. We exited 2010 at approximately 2,550 BOE/D.

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**Uinta** In 2003, we established our initial acreage position in the Uinta, which includes the Ashley Forest area, targeting the Green River formation that produces both light oil and natural gas. We acquired the Brundage Canyon leasehold in Duchesne County in Northeastern Utah, which consists of working interests in approximately 51,000 gross acres on federal, tribal, and private leases. We have working interests in approximately 57,000 gross acres and exploratory rights in approximately 61,230 net acres in the Lake Canyon project, which is located immediately west of our Brundage Canyon producing properties. In 2010 we drilled 60 gross (58 net) wells, which included 36 gross (35 net) wells in Brundage Canyon, 20 gross (20 net) wells in Ashley Forest and four gross (three net) wells in Lake Canyon. We also participated in four non-operated Lake Canyon wells. The Lake Canyon drilling program identified a new pay interval in the Upper Wasatch that was commingled with the Green River formation, yielding encouraging results. We continue to monitor the progress of our initial water flood pilot in Brundage Canyon, which was implemented in the fourth quarter of 2009, and began injection on our second Brundage Canyon water flood pilot in the fourth quarter of 2010. The Ashley Forest Environmental Impact Study (EIS) continues to progress, and we anticipate approval in 2011. We plan to run a one rig program in the Uinta in 2011 focused toward developing areas of higher oil potential with added emphasis on the development of Lake Canyon. Our drilling inventory in the Uinta is approximately 350 locations distributed between Brundage Canyon, Ashley Forest, and Lake Canyon. Average daily production in Uinta was approximately 5,350 BOE/D in 2010 compared to 4,930 BOE/D in 2009.

**E. Texas** In 2008, we acquired certain interests in natural gas producing properties on approximately 4,500 net acres in Limestone and Harrison Counties in E. Texas. The Limestone County assets include seven productive horizons in the Cotton Valley and Bossier sands at depths between 8,000 and 13,000 feet. Additional potential exists in the Haynesville/Bossier shale. The Harrison County assets include five productive sands as well as the Haynesville/Bossier Shale, with average depths between 6,500 and 13,000 feet. We recently completed an eight well Haynesville horizontal development program. We have deferred drilling in E. Texas during 2011 while we focus on higher return oil development opportunities at our other properties. Average daily production from the E. Texas assets averaged 31 MMcf/D in 2010 as compared to 24 MMcf/D in 2009.

**Piceance** In 2006, we acquired two properties in the Piceance targeting the Williams Fork section of the Mesaverde formation. We have a 62.5% working interest in 6,300 gross acres on our Garden Gulch property, a working interest of 95% in 4,300 gross acres and a 5% non-operating working interest in 90 wells on our North Parachute property. We have accumulated a sizable resource base, which should allow us to add significant proved reserves as we develop these assets. We have successfully drilled 111 gross wells (69 net) at Garden Gulch and 33 gross wells (31 net) on the North Parachute property since the acquisitions of those properties. During 2009, we began a 20 well completion program testing new completion designs and saw improved well performance in line with our expectations. We continue to utilize the improved completion techniques, and results continue to meet our expectations. In January 2011, we renegotiated the agreement covering the North Parachute property such that we have until January 31, 2020 to complete our drilling obligations. See Note 10 to the Financial Statements. In 2010, we continued to develop the Garden Gulch and North Parachute properties through a one rig drilling program. Average daily production in the Piceance has increased from 4 MMcf/D in 2006 to 23 MMcf/D in 2010.

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The following table summarizes our estimated quantities of proved reserves as of December 31, 2010 based on the unweighted arithmetic average of the first-day-of-the month prices during the 12-month period prior to December 31, 2010.

	Estimated Proved Reserves		
	Oil (MBbl)	Natural Gas (MMcf)	Total (MBOE)
Developed	88,917	268,566	133,678
Undeveloped	77,264	361,626	137,535
<b>Total proved December 31, 2010</b>	<b>166,181</b>	<b>630,192</b>	<b>271,213</b>

At December 31, 2010, our proved undeveloped reserves were 137.5 MMBOE. At December 31, 2009, our proved undeveloped reserves were 109.8 MMBOE. During 2010, approximately 9 MMBOE or 8% of our December 31, 2009 proved undeveloped reserves were converted into proved developed reserves from the investment of approximately \$111 million of drilling, completion and facilities capital. Our proved reserves in 2010 were impacted by certain regulatory and permitting delays in our Diatomite asset in Kern County, California and by the acquisition of several properties in the Permian. We invested significant infrastructure capital in the Diatomite asset even though drilling was curtailed until the fourth quarter, which reduced the conversion of proved undeveloped reserves from this asset. The Permian properties were largely undeveloped and approximately 26 MMBOE were added to the proved undeveloped reserves category due to these acquisitions. Drilling and completion activities primarily related to our California and Permian assets, along with engineering revisions, added approximately 15 MMBOE to proved undeveloped reserves, and 5 MMBOE were removed from this category due to performance and as a result of our future development plans. We intend to grow our production and cash flow over the next several years from an increase in capital spending that will facilitate a larger conversion of proved undeveloped reserves. We intend to convert the proved undeveloped reserves recorded as of December 31, 2010 to proved developed reserves within five years of the date the reserves were initially recorded.

**Preparation of Reserves Estimates**

Uncertainties are inherent in estimating quantities of proved reserves, including many factors beyond our control. Reserve engineering is a process of estimating subsurface accumulations of oil and gas that cannot be measured in an exact manner, and the accuracy of any reserve estimate is a function of the quality of available data and its interpretation. As a result, estimates by different engineers often vary, sometimes significantly. In addition to the physical factors such as the results of drilling, testing, and production subsequent to the date of an estimate, economic factors such as changes in commodity prices or development and production expenses, may require revision of such estimates. Accordingly, oil and gas quantities ultimately recovered will vary from reserve estimates. See Part I, Item 1A "Risk Factors," for a description of some of the risks and uncertainties associated with our business and reserves.

All of our oil and natural gas reserves are located in the U.S. We engaged DeGolyer and MacNaughton (D&M) to prepare all of our proved oil and gas reserve estimates and the estimated future net revenue to be derived from our properties. D&M is an independent petroleum engineering consulting firm that has provided consulting services throughout the world for over 70 years. The independent engineers' estimates were prepared by the use of standard geological and engineering methods generally recognized by the petroleum industry. Reserve volumes and values were determined under the method prescribed by the SEC, which requires the application of the 12-month average price for oil and natural gas calculated as the un-weighted arithmetic average of the first-day-of-the-month

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price for each month within the 12-month period prior to the end of the reporting period and year-end costs. The proved reserve estimates represent our net revenue interest in our properties. When preparing our reserve estimates, the independent engineers did not independently verify the accuracy and completeness of information and data furnished by us with respect to property interests, production from such properties, current costs of operation and development, current prices for production agreements relating to current and future operations and sale of production, and various other information and data. See Exhibit 99.3 Report of DeGolyer and MacNaughton dated February 15, 2011.

Reserves are also calculated internally and compared to the reserve estimates received from D&M. When compared on a field-by-field basis, some of our internally generated estimates of net proved reserves were greater and some were less than the estimates prepared by D&M. If a variance of greater than 10% occurs at the field level, it may suggest that a difference in methodology or evaluation techniques exist between us and the independent engineers. Those differences are investigated and discussed with the independent engineers to confirm that the proper methodologies and techniques were applied in the estimated reserves for these fields. There was no material difference, in the aggregate, between our internal estimates of estimated net proved reserves and the estimates prepared by D&M.

Our senior evaluation engineer oversees the reserve estimation process. He holds a Bachelor of Science degree in Mechanical Engineering from Texas A&M University and has over thirty years of petroleum engineering experience in oil and gas exploration, production, and reserve determination. The majority of his time in the industry has been spent in reserve analysis and evaluation. He has performed economic evaluations in all of the areas in which we operate and has supervised operations in a majority of them. Our reserves are also subject to multiple levels of management review.

### **Production, Average Sales Prices and Production Costs**

The following table reflects our production, average sales price and production cost information for the years ended December 31, 2010, 2009 and 2008:

	Net Production Volumes(1)		Average Sales Price(2)		Average Operating Cost
	Crude Oil (BOE/D)	Natural Gas (Mcf/D)	Crude Oil (\$/BOE)	Natural Gas (Mcf)	\$/BOE
<b>Year Ended December 31, 2010</b>					
Total production Continuing operations	21,713	65,720	\$ 67.61	\$ 4.37	\$ 15.95
Diatomite(3)	2,721		75.03		32.08
South Midway Sunset(4)	6,889		63.96		12.77
Piceance(3)	62	22,681	64.14	4.25	8.94
<b>Year Ended December 31, 2009</b>					
Total production Continuing operations	19,688	57,484	50.73	3.61	14.66
Diatomite	3,093		57.00		21.98
South Midway Sunset	7,214		48.68		10.18
Piceance	43	18,981	45.56	3.35	9.05
<b>Year Ended December 31, 2008</b>					
Total production Continuing operations	20,330	50,064	86.90	6.91	17.99
Diatomite	1,843		91.72		32.52
South Midway Sunset	7,790		85.60		