

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP**

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| OMB APPROVAL                                 |           |
|----------------------------------------------|-----------|
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|                                                                                                                                                                                                                                                           |                                                                                  |                                                                                                                                                                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Name and Address of Reporting Person*<br><u>OLSON KENNETH A</u><br><br>(Last) (First) (Middle)<br><u>C/O BERRY PETROLEUM COMPANY</u><br><u>5201 TRUXTUN AVE., SUITE 300</u><br><br>(Street)<br><u>BAKERSFIELD CA 93309</u><br><br>(City) (State) (Zip) | 2. Issuer Name and Ticker or Trading Symbol<br><u>BERRY PETROLEUM CO [ BRY ]</u> | 5. Relationship of Reporting Person(s) to Issuer<br>(Check all applicable)<br><br>Director 10% Owner<br><input checked="" type="checkbox"/> Officer (give title below) Other (specify below)<br><u>Corporate Secretary/Treasurer</u> |
|                                                                                                                                                                                                                                                           | 3. Date of Earliest Transaction (Month/Day/Year)<br><u>09/23/2004</u>            |                                                                                                                                                                                                                                      |
|                                                                                                                                                                                                                                                           | 4. If Amendment, Date of Original Filed (Month/Day/Year)                         | 6. Individual or Joint/Group Filing (Check Applicable Line)<br><br><input checked="" type="checkbox"/> Form filed by One Reporting Person<br>Form filed by More than One Reporting Person                                            |

**Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned**

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) |   | 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5) |            |          | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
|---------------------------------|--------------------------------------|----------------------------------------------------|--------------------------------|---|-------------------------------------------------------------------|------------|----------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------|-------------------------------------------------------|
|                                 |                                      |                                                    | Code                           | V | Amount                                                            | (A) or (D) | Price    |                                                                                               |                                                          |                                                       |
| Class A Common Stock            | 09/23/2004                           |                                                    | M                              |   | 5,000 <sup>(1)</sup>                                              | A          | \$19.375 | 8,430                                                                                         | D                                                        |                                                       |
| Class A Common Stock            | 09/23/2004                           |                                                    | F                              |   | 3,463 <sup>(1)</sup>                                              | D          | \$37.13  | 4,967                                                                                         | D                                                        |                                                       |
| Class A Common Stock            | 09/24/2004                           |                                                    | S                              |   | 1,000                                                             | D          | \$37.74  | 3,967                                                                                         | D                                                        |                                                       |

**Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)**

| 1. Title of Derivative Security (Instr. 3)   | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transaction Code (Instr. 8) |   | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) |       | 6. Date Exercisable and Expiration Date (Month/Day/Year) |                 | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |       |
|----------------------------------------------|--------------------------------------------------------|--------------------------------------|----------------------------------------------------|--------------------------------|---|----------------------------------------------------------------------------------------|-------|----------------------------------------------------------|-----------------|-----------------------------------------------------------------------------------|--------------------------------------------|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--------------------------------------------------------|-------|
|                                              |                                                        |                                      |                                                    | Code                           | V | (A)                                                                                    | (D)   | Date Exercisable                                         | Expiration Date |                                                                                   |                                            |                                                                                                    |                                                           |                                                        | Title |
| Nonstatutory Stock Option (Right to Buy) NSO | \$19.375                                               | 09/23/2004                           |                                                    | M <sup>(1)</sup>               |   |                                                                                        | 5,000 | 12/05/1998                                               | 12/05/2007      | Class A Common Stock                                                              | 5,000                                      | \$0 <sup>(1)</sup>                                                                                 | 0                                                         | D                                                      |       |
| Nonstatutory Stock Option (Right to Buy) NSO | \$15.69                                                |                                      |                                                    |                                |   |                                                                                        |       | 12/02/2001                                               | 12/02/2010      | Class A Common Stock                                                              | 6,000                                      |                                                                                                    | 6,000                                                     | D                                                      |       |
| Nonstatutory Stock Option (Right to Buy) NSO | \$16.3                                                 |                                      |                                                    |                                |   |                                                                                        |       | 12/07/2002                                               | 12/07/2011      | Class A Common Stock                                                              | 4,500                                      |                                                                                                    | 4,500                                                     | D                                                      |       |
| Nonstatutory Stock Option (Right to Buy) NSO | \$16.5                                                 |                                      |                                                    |                                |   |                                                                                        |       | 12/06/2003                                               | 12/06/2012      | Class A Common Stock                                                              | 3,000                                      |                                                                                                    | 3,000                                                     | D                                                      |       |
| Nonstatutory Stock Option (Right to Buy) NSO | \$19.94                                                |                                      |                                                    |                                |   |                                                                                        |       | 12/05/2004                                               | 12/05/2013      | Class A Common Stock                                                              | 5,000                                      |                                                                                                    | 5,000                                                     | D                                                      |       |

**Explanation of Responses:**

1. Exercise of Stock Options under the Company's 1994 Stock Option Plan in a transaction exempt under Rule 16b.

**Remarks:**

Kenneth A. Olson

09/27/2004

\*\* Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

\* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

\*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.

