

FORM 4

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

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| OMB APPROVAL | |
| OMB Number: | 3235-0287 |
| Estimated average burden hours per response... | 0.5 |

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

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

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

(Print or Type Responses)

| | | | | | |
|---|---------|--|--|--|--|
| 1. Name and Address of Reporting Person Boor William C | | 2. Issuer Name and Ticker or Trading Symbol CLIFFS NATURAL RESOURCES INC. [CLF] | | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input type="checkbox"/> Director <input type="checkbox"/> 10% Owner <input checked="" type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below) EVP Corp Dev & Chief Strat Off | |
| (Last) | (First) | (Middle) | 3. Date of Earliest Transaction (Month/Day/Year) 08/06/2014 | | 6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person |
| 200 PUBLIC SQUARE, SUITE 3300 CLEVELAND, OH 44114-2315 | | | 4. If Amendment, Date Original Filed (Month/Day/Year) | | |
| (City) | (State) | (Zip) | | | |

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 | | | |
| Common Shares | 08/06/2014 | | A | | 19,320 <u>(1)</u> | A | \$ 17.15 | 93,372.7724 | D | |
| Common Shares | 08/06/2014 | | D | | 6,430 <u>(2)</u> | D | \$ 17.15 | 86,942.7724 | D | |
| Common Shares | 08/06/2014 | | D | | 19,320 <u>(3)</u> | D | \$ 17.15 | 67,622.7724 | D | |
| Common Shares | | | | | | | | 18,717.57 | I | VNQDC <u>(4)</u> |

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

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 control number.

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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 Underlying Securities (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 of Derivative Security: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
|--|--|--------------------------------------|--|--------------------------------|---|---|--|-----------------|---|--|--|--|--|
| | | | | Code | V | | Date Exercisable | Expiration Date | | | | | |

Reporting Owners

| Reporting Owner Name / Address | Relationships | | | |
|---|---------------|-----------|--------------------------------|-------|
| | Director | 10% Owner | Officer | Other |
| Boor William C 200 PUBLIC SQUARE SUITE 3300 CLEVELAND, OH 44114-2315 | | | EVP Corp Dev & Chief Strat Off | |

Signatures

| | | |
|--|--|------------|
| /s/ James D. Graham by Power of Attorney | | 08/13/2014 |
| Signature of Reporting Person | | Date |

Explanation of Responses:

- * 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).
- (1) Reflects a payout of performance shares at 100 percent target for the 2012-2014 and 2013-2015 performance periods which were deemed earned under the change in control provision of the Issuer's 2012 Incentive Equity Plan, as amended.
- (2) Reflects the number of restricted share units vested from the 2012-2014 and 2013-2015 grants under the Issuer's 2012 Incentive Equity Plan, as amended. The vested shares converted into a cash payment due to a trigger of the change in control provision of the Issuer's 2012 Incentive Equity Plan, as amended.
- (3) The performance shares were converted into a cash payment due to a trigger of the change in control provision of the Issuer's 2012 Incentive Equity Plan, as amended.
- (4) Held for the benefit of the Reporting Person by the Issuer's 2005 Voluntary Non-Qualified Deferred Compensation Plan ("VNQDC").

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

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