FORM 4

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

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

| | pe Response | | | 1 | | | | | | | | 1 | | | | |
|----------------------------------------------------------|-----------------------------------------------------------------------|--------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------|-------------|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|--------------|--------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|------------------------------------------------|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|--------------------------------------|
| 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) Director X Officer (give title below) Other (specify below) | | | | | | |
| (Last) (First) (Middle) 200 PUBLIC SQUARE, SUITE 3300 | | | 3. Date of Earliest Transaction (Month/Day/Year) 03/11/2013 | | | | | | | SVP, | Global Ferro | alloys. | | | | |
| | | (Street) | | 4. If Amendment, Date Original Filed(Month/Day/Year) | | | | | | 6. Individual or Joint/Group Filing(Check Applicable Line) X_ Form filed by One Reporting Person Form filed by More than One Reporting Person | | | | e Line) | | |
| CLEVEI | LAND, OF | I 44114-231 | 5 | | | | | | | | | Form me | ed by More mar | i One Reporting i | erson | |
| (City | r) | (State) | (Zip) | | Т | able I | - Nor | ı-Der | ivative | Securities | Acqu | ired, Disp | osed of, or l | Beneficially (| Owned | |
| (Instr. 3) Date | | 2. Transaction Date (Month/Day/Year) | Execution Date, if Code | | ction | tion 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) | | | Ownership Form: Direct (D) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) | | | |
| | | | | | | | ode | V | Amour | (A) or (D) | Price | | (I) | | | (Instr. 4) |
| Common | Shares | | 03/11/2013 | | | | A | | 4,660 (1) | A | \$ 0 | 44,076.7 | 7724 | | D | |
| Common | Shares | | | | | | | | | | | 17,986.1 | 12 (2) | | | VNQDC |
| Reminder: | Report on a | separate line fo | r each class of secur | ities bene | eficially (| owned | | Pers cont | ons whained i | no respoi n this for | rm ar | e not requ | | formation spond unlea trol number | ss | 474 (9-02) |
| | | | Table II - l | | | | | | | of, or Ben tible secu | | | | | | |
| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | | Transaction 3A. Deemed Execution Date (onth/Day/Year) any | 4. Transaction Code of (Instr. 8) Se Ac (A Di of (Instr. 8) Of (Instr. 8) | | 5. Num of Deriv Secu Acqu (A) o Dispo of (D (Instr | 5. 6. D Number and (Mo Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5) | | Date Exercisable I Expiration Date onth/Day/Year) | | 7. T Am Und Sec (Ins 4) | Citle and count of derlying urities str. 3 and | 8. Price of Derivative Security (Instr. 5) | 9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | Ownersh Form of Derivativ Security: Direct (D or Indirect | Beneficial Ownershi (Instr. 4) |
| | | | | | | | | Date | cisable | Expiration Date | n Titl | e Number | | | | |

Reporting Owners

| | Relationships | | | | | | |
|-------------------------------------------------------------------------------|---------------|--------------|--------------------------|-------|--|--|--|
| Reporting Owner Name / Address | Director | 10% Owner | Officer | Other | | | |
| Boor William C 200 PUBLIC SQUARE SUITE 3300 CLEVELAND, OH 44114-2315 | | | SVP, Global Ferroalloys. | | | | |

Signatures

| /s/ Carolyn Cheverine by Power of Attorney | 03/13/2013 |
|--------------------------------------------|------------|
| | |

| **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 the number of restricted share units granted to the Reporting Person on March 11, 2013 for the Performance Period 2013 to 2015 from the Issuer's 2012 Incentive Equity Plan.
- (2) Balance shown reflects 106.12 shares acquired March 1, 2013 pursuant to the dividend reinvestment feature of the Issuer's 2005 Voluntary Non-Qualified Deferred Compensation Plan ("VNQDC").
- (3) Held for the benefit of the Reporting Person by the 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.