

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

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

| | | |
|---|---|---|
| 1. Name and Address of Reporting Person* <u>Porter J Russell</u> (Last) (First) (Middle) <u>1331 LAMAR, SUITE 650</u> (Street) <u>HOUSTON TX 77010</u> (City) (State) (Zip) | 2. Issuer Name and Ticker or Trading Symbol <u>Gastar Exploration Inc. [GST]</u> | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>Former CEO & President</u> |
| | 3. Date of Earliest Transaction (Month/Day/Year) <u>04/10/2018</u> | |
| 4. If Amendment, Date of Original Filed (Month/Day/Year) | | 6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person 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 | | | |
| Common Stock | 04/10/2018 | | F ⁽¹⁾ | | 978,126 | D | \$0.63 | 4,115,984 | D | |
| Common Stock | 04/10/2018 | | D ⁽²⁾ | | 386,719 | D | \$0.00 | 3,729,265 | D | |
| Common Stock | | | | | | | | 150,000 | I | Trust ⁽³⁾ |

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 | | Date Exercisable | Expiration Date | | | | | | Amount or Number of Shares |
| 2016 Performance Based Units | \$0.00 | 04/10/2018 | | D ⁽⁴⁾ | | 404,412 | (5) | 01/30/2019 | Common Stock | 404,412 | \$0.00 | 0 | D | |
| 2017 Performance Based Units | \$0.00 | 04/10/2018 | | D ⁽⁴⁾ | | 372,741 | (5) | 01/30/2020 | Common Stock | 372,741 | \$0.00 | 0 | D | |
| 2018 Performance Based Units | \$0.00 | 04/10/2018 | | D ⁽⁴⁾ | | 386,719 | (5) | 01/30/2021 | Common Stock | 386,719 | \$0.00 | 0 | D | |

Explanation of Responses:

- Shares forfeited to meet tax obligation of accelerated restricted share vesting upon termination.
- Unvested restricted shares forfeited upon termination.
- On July 10, 2014, the reporting person gifted 150,000 shares to his children in trusts for which the reporting person acts as the trustee as follows: The James Breckenridge Porter Trust of 2014 - 37,500 shares, The Grant Anderson Porter Trust of 2014 - 37,500 shares, The Addison Ann Porter Trust of 2014 - 37,500 shares and The Lily Madeline Porter Trust of 2014 - 37,500 shares. The reporting person disclaims beneficial ownership of these securities except to the extent of his pecuniary interest therein, and the inclusion of these shares in this report shall not be deemed an admission of beneficial ownership of all of the reported shares for the purposes of Section 16 or for any other purpose.
- Unvested performance based units forfeited upon termination.
- These PBUs were to vest in their entirety at the end of a three-year performance period as previously reported.

Remarks:

/s/ J. Russell Porter, by
Michael A. Gerlich as 04/12/2018
Attorney in Fact

** 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.