
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934

(Amendment No. 2)*

Verde Clean Fuels, Inc.

(Name of Issuer)

Class A Common Stock, par value \$0.0001 per share

(Title of Class of Securities)

923372106

(CUSIP Number)

Teresa L. Dick
Diamondback Energy, Inc., 500 West Texas Avenue, Suite 100
Midland, TX, 79701
(405) 463-6900

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

01/29/2025

(Date of Event Which Requires Filing of This Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§ 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

SCHEDULE 13D

CUSIP No. 923372106

Name of reporting person

1

Diamondback Energy, Inc.

2

Check the appropriate box if a member of a Group (See Instructions)

(a)

(b)

3 SEC use only
Source of funds (See Instructions)

4 AF
Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)

5
Citizenship or place of organization

6 DELAWARE

Sole Voting Power

7

14,500,000.00

Number of Shares Beneficially Owned by Each Reporting Person

Shared Voting Power

8

0.00

Each Reporting Person With:

9

14,500,000.00

Shared Dispositive Power

10

0.00

Aggregate amount beneficially owned by each reporting person

11 14,500,000.00

Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)

12
Percent of class represented by amount in Row (11)

13 65.8 %

Type of Reporting Person (See Instructions)

14 CO

SCHEDULE 13D

CUSIP No. 923372106

Name of reporting person

1 Diamondback E&P LLC

Check the appropriate box if a member of a Group (See Instructions)

2 (a)
 (b)

3 SEC use only
Source of funds (See Instructions)

4 AF
Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)

5
Citizenship or place of organization

6 DELAWARE

Number of 7 Sole Voting Power

Shares Beneficially Owned by Each Reporting Person With: 14,500,000.00
 Shared Voting Power
 8
 0.00
 Sole Dispositive Power
 9
 14,500,000.00
 Shared Dispositive Power
 10
 0.00
 Aggregate amount beneficially owned by each reporting person
 11
 14,500,000.00
 Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)
 12

 Percent of class represented by amount in Row (11)
 13
 65.8 %
 Type of Reporting Person (See Instructions)
 14
 OO

SCHEDULE 13D

CUSIP No. 923372106

1 Name of reporting person
 Cottonmouth Ventures LLC
 Check the appropriate box if a member of a Group (See Instructions)
 2
 (a)
 (b)
 3 SEC use only
 Source of funds (See Instructions)
 4
 WC
 Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)
 5

 Citizenship or place of organization
 6
 DELAWARE
 Sole Voting Power
 7
 Number of Shares Beneficially Owned by Each Reporting Person With: 14,500,000.00
 Shared Voting Power
 8
 0.00
 Sole Dispositive Power
 9
 14,500,000.00
 Shared Dispositive Power
 10
 0.00
 11 Aggregate amount beneficially owned by each reporting person

14,500,000.00

Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)

12



Percent of class represented by amount in Row (11)

13

65.8 %

Type of Reporting Person (See Instructions)

14

OO

SCHEDULE 13D

Item 1. Security and Issuer

Title of Class of Securities:

(a)

Class A Common Stock, par value \$0.0001 per share

Name of Issuer:

(b)

Verde Clean Fuels, Inc.

Address of Issuer's Principal Executive Offices:

(c)

711 Louisiana Street, Suite 2160, Houston, TEXAS , 77002.

Item 1 Comment: This Statement on Schedule 13D initially filed with the U.S. Securities and Exchange Commission (the "Commission") on March 1, 2023 (the "Original Schedule 13D"), with respect to the Class A Common Stock of Verde Clean Fuels, Inc. (the "Issuer"), as amended by Amendment No. 1 filed on December 20, 2024 ("Amendment No.1"), is hereby amended and supplemented by this Amendment No. 2 to Schedule 13D (the "Amendment No. 2"). All capitalized terms contained herein but not otherwise defined shall have the meanings ascribed such terms in the Original Schedule 13D, Amendment No. 1 and this Amendment No.2. Except as otherwise provided herein, each Item of the Statement remains unchanged. Information given in response to each item shall be deemed to be incorporated by reference in all other items, as applicable.

Item 3. Source and Amount of Funds or Other Consideration

The information in Item 6 is incorporated herein by reference.

Item 4. Purpose of Transaction

The information in Item 6 is incorporated herein by reference.

Item 5. Interest in Securities of the Issuer

Item 5 is supplemented and superseded, as the case may be, as follows: As of the close of business on January 29, 2025, the Reporting Persons beneficially owned an aggregate of 14,500,000 shares of Class A Common Stock of the Issuer, which represents approximately 65.8% of the outstanding shares of Class A Common Stock, based upon 9,549,621 shares of Class A Common Stock outstanding as of November 11, 2024, which is the total number of shares of Class A Common Stock outstanding as reported in the Issuer's Quarterly Report on Form 10-Q filed with the Commission on November 13, 2024, plus the PIPE Shares (as defined below) issued and sold to Cottonmouth at the closing of the PIPE Investment, as further described in Item 6 below.

(a) Sole Voting Power: 14,500,000 Shared Voting Power: 0 Sole Dispositive Power: 14,500,000 Shared Dispositive Power: 0

(b) Except as otherwise described herein, none of the Reporting Persons nor, to the Reporting Persons' knowledge, the Listed Persons has effected any transactions in the shares of Class A Common Stock during the past 60 days.

(c) The Reporting Persons have the right to receive distributions from, and the proceeds from the sale of, the shares of Class A Common Stock reported for the Reporting Persons on the cover pages of this Amendment No. 2 and in this Item 5. No other person is known by the Reporting Persons to have the right to receive or the power to direct the receipt of distributions from, or the proceeds from the sale of, the shares of Class A Common Stock beneficially owned by the Reporting Persons.

(d) Not applicable.

Item 6. Contracts, Arrangements, Understandings or Relationships With Respect to Securities of the Issuer

Item 6 is hereby amended and supplemented to add the following: On January 29, 2025, the previously announced PIPE Investment closed, and the Issuer issued and sold to Cottonmouth an aggregate of 12,500,000 shares of the Issuer's Class A Common Stock (the "PIPE Shares") at a price of \$4.00 per share for an aggregate purchase price of \$50,000,000 (the "Closing"). Registration Rights Agreement In connection with the Closing, Cottonmouth entered into a registration rights agreement with the Issuer and the other parties thereto on January 29, 2025 (the "Registration Rights Agreement"), requiring the Issuer to register the resale of the PIPE Shares. The Registration

Rights Agreement grants Cottonmouth and its permitted transferees certain customary demand and piggyback rights with respect to the PIPE Shares, and contains other customary terms and conditions, including mutual indemnifications by the Issuer and Cottonmouth. The foregoing description of the Registration Rights Agreement is qualified in its entirety by reference to the full text of the Registration Rights Agreement, which is incorporated by reference as Exhibit 99.2 and incorporated herein by reference. Amendment No. 1 to Equity Participation Right Agreement In connection with the Closing, on January 29, 2025, the Issuer and Verde Clean Fuels OpCo, LLC entered into Amendment No.1 to Equity Participation Right Agreement with Cottonmouth (the "EPA Amendment"), to amend that certain Equity Participation Right Agreement, dated as of February 13, 2023 (the "Original EPA"). The EPA Amendment removes certain contractual preemptive rights relating to the sale of equity securities of the Issuer that were granted to Cottonmouth in the Original EPA. The foregoing description of the EPA Amendment is qualified in its entirety by reference to the full text of the EPA Amendment, which is incorporated by reference as Exhibit 99.3 and incorporated herein by reference. Board Designation and Observer Rights In connection with the Closing, on January 29, 2025, the Issuer filed its Fifth Amended and Restated Certificate of Incorporation with the Delaware Secretary of State (the "Restated Charter"), pursuant to which Cottonmouth (together with any other Cottonmouth Stockholders (as defined in the Restated Charter)) shall have the right to designate one director nominee and one observer to the Issuer's Board of Directors for so long as the Cottonmouth Stockholders and their respective affiliates collectively beneficially own, in the aggregate, 10% or more of the then outstanding voting power of the combined Class A common stock and the Class C common stock, par value \$0.0001 per share, of the Issuer entitled to vote generally in the election of the Issuer's directors (the "Board Designation Right"). Pursuant to the Board Designation Right and in connection with the Closing, the Issuer appointed Cottonmouth designee Johnny Dossey to its Board of Directors on January 29, 2025, to serve on the Board as a Class I director until the Company's 2027 Annual Meeting of Stockholders and until his successor has been duly elected and qualified, or, if sooner, until his death, resignation or removal. The foregoing description of the Restated Charter is qualified in its entirety by reference to the full text of the Restated Charter, which is incorporated by reference as Exhibit 99.4 and incorporated herein by reference.

Item 7. Material to be Filed as Exhibits.

Exhibit 99.1 Class A Common Stock Purchase Agreement, dated as of December 18, 2024, by and between Verde Clean Fuels, Inc. and Cottonmouth Ventures LLC (incorporated by reference to Exhibit 10.1 to the Issuer's Current Report on Form 8-K, filed with the SEC on December 19, 2024). Exhibit 99.2 Registration Rights Agreement, dated as of January 29, 2025, by and among Verde Cleans Fuels, Inc., Cottonmouth Ventures LLC and the other parties thereto (incorporated by reference to Exhibit 10.1 to the Issuer's Current Report on Form 8-K, filed with the SEC on January 29, 2025). Exhibit 99.3 Amendment No. 1 to Equity Participation Right Agreement, dated as of January 29, 2025, by and between Verde Clean Fuels, Inc., Verde Clean Fuels OpCo, LLC and Cottonmouth Ventures LLC (incorporated by reference to Exhibit 10.2 to the Issuer's Current Report on Form 8-K, filed with the SEC on January 29, 2025). Exhibit 99.4 Fifth Amended and Restated Certificate of Incorporation of Verde Clean Fuels, Inc. (incorporated by reference to Exhibit 3.1 to the Issuer's Current Report on Form 8-K, filed with the SEC on January 29, 2025).

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Diamondback Energy, Inc.

Signature: /s/ Teresa L. Dick

Name/Title: Teresa L. Dick/Executive Vice President, Chief Accounting Officer and Assistant Secretary

Date: 01/31/2025

Diamondback E&P LLC

Signature: /s/ Teresa L. Dick

Name/Title: Teresa L. Dick/Executive Vice President, Chief Accounting Officer and Assistant Secretary

Date: 01/31/2025

Cottonmouth Ventures LLC

Signature: /s/ Teresa L. Dick

Name/Title: Teresa L. Dick/Executive Vice President, Chief Accounting Officer and Assistant Secretary

Date: 01/31/2025