

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549**

**POST-EFFECTIVE  
AMENDMENT NO. 1  
TO  
FORM S-3  
REGISTRATION STATEMENT  
UNDER THE SECURITIES ACT OF 1933**

**PHX MINERALS INC.**

(Exact Name of Registrant as Specified in Its Charter)

**Delaware**  
(State or Other Jurisdiction  
Identification No.)

**73-1055775**  
(IRS Employer of Incorporation)

**1601 NW Expressway, Suite 1100  
Oklahoma City, Oklahoma 73118**  
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**Chad L. Stephens  
Chief Executive Officer  
PHX Minerals Inc.  
1601 NW Expressway, Suite 1100  
Oklahoma City, Oklahoma 73118  
(405) 948-1560**  
(Name, address, and telephone number, including area code, of agent for service)

***With a copy to:*  
Kirk Tucker, Esq.  
Jackson Walker LLP  
1401 McKinney Street, Suite 1900  
Houston, Texas 77010  
Telephone: (713) 752-4389**

**Approximate Date of Commencement of Proposed Sale to the Public:** From time to time after the effective date of this registration statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box:

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box:

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering:

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering:

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box:

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box:

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company or an emerging growth company. See definitions of "large accelerated filer", "accelerated filer", "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

**The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.**

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## EXPLANATORY NOTE

This Post-Effective Amendment No. 1 (this “Amendment”) to Registration Statement on Form S-3, File No. 333-249538 (the “Registration Statement”), is being filed pursuant to Rule 414(d) under the Securities Act of 1933, as amended (the “Securities Act”), by PHX Minerals Inc., a Delaware corporation (“PHX Delaware”). This Amendment amends the Registration Statement, as previously amended, which was filed by PHX Minerals Inc., an Oklahoma corporation (“PHX Oklahoma”), prior to the reincorporation from Oklahoma to Delaware described below. No changes or additions are being made hereby to the existing prospectuses, as modified or superseded by information incorporated by reference into the Registration Statement, that already form a part of such Registration Statement. Accordingly, such existing prospectuses are being omitted from this filing. As used in this Amendment, the term “Company” refers to PHX Oklahoma prior to the Reincorporation (as defined below) and PHX Delaware, as the surviving corporation of the merger described below, after the Reincorporation.

Effective as of April 1, 2022, the Company filed a certificate of ownership and merger with the Secretary of State of the State of Oklahoma and filed a certificate of ownership and merger with the Secretary of State of the State of Delaware merging PHX Oklahoma with and into PHX Delaware (the “Merger”), with the result that the jurisdiction of incorporation of the surviving corporation became Delaware (the “Reincorporation”). The Reincorporation was approved by shareholders of PHX Oklahoma at the 2022 annual meeting of shareholders for which proxies were solicited pursuant to Section 14(a) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). As a result of the Reincorporation, pursuant to the Delaware General Corporation Law (the “DGCL”), the Company has continued its existence under the DGCL as a corporation incorporated in the State of Delaware. The business, assets and liabilities of the Company, as well as its principal locations and fiscal year, were the same immediately after the Reincorporation as they were immediately prior to the Reincorporation. In addition, the directors and executive officers of the Company immediately after the Reincorporation were the same individuals who were directors and executive officers, respectively, of the Company immediately prior to the Reincorporation. As a result of the Merger and upon the effective date of the Merger, each outstanding share of Class A common stock, par value \$0.01666 per share, of PHX Oklahoma was automatically converted into one share of common stock, par value \$0.01666 per share, of PHX Delaware. Immediately prior to the consummation of the Merger, PHX Delaware had nominal assets and liabilities.

Except as modified by this Amendment, including modifications resulting from the incorporation of documents by reference, the Company, by virtue of this Amendment, expressly adopts the Registration Statement as its own registration statement for all purposes of the Securities Act and the Exchange Act.

No additional securities are being registered under this Amendment.

**PART II**  
**INFORMATION NOT REQUIRED IN THE PROSPECTUS**

**Item 14. Other Expenses of Issuance and Distribution.**

The information set forth in Item 14 of the Registration Statement at the time of initial effectiveness is incorporated herein by reference.

**Item 15. Indemnification of Directors and Officers.**

Under our Certificate of Incorporation, as amended, and Bylaws (and in accordance with Section 145 of the DGCL), we will indemnify to the fullest extent permitted by the DGCL any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, including civil, criminal, administrative, investigative or other proceedings, by reason of the fact that the person is or was a director, officer or employee of the Company, or is or was serving in that capacity or as an agent at the request of the Company for another entity.

Article IX of our Bylaws provides that we shall indemnify any individual who is or was our director, officer or employee, and any individual who is or was our director, officer or employee and serves or served at our request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, against all expenses (including attorneys' fees) actually and reasonably incurred by, or imposed upon, him or her in connection with any proceeding in which the individual is made a party as a result of his or her service in such capacity, if the individual acted in good faith and in a manner reasonably believed to be in, or not opposed to, our best interests and, with respect to any criminal proceeding, he or she had no reasonable cause to believe the conduct was unlawful, unless such indemnification would be prohibited by law. An individual will not be indemnified in connection with a proceeding by or in our right in which the individual was adjudged liable to us, unless the court in which the suit was brought determines the individual is fairly and reasonably entitled to indemnification in view of all of the relevant circumstances.

We have entered into indemnity agreements with each of our executive officers and our directors. These agreements, as will be amended in connection with the Reincorporation, provide for indemnification to the extent permitted by the DGCL. We also maintain a policy of directors' and officers' liability insurance that insures our directors and officers against the cost of defense, settlement or payment of a judgment under certain circumstances.

**Item 16. Exhibits.**

The exhibits listed in the accompanying Exhibit Index are filed (except where otherwise indicated) as part of this registration statement.

<b>Exhibit Number</b>	<b>Exhibit Description</b>
1.1*	Form of Underwriting Agreement
3.1	Certificate of Incorporation of PHX Minerals Inc., as amended (incorporated by reference to Exhibit <a href="#">3.1</a> to Form 8-K12B filed with the U.S. Securities and Exchange Commission on April 5, 2022).
3.2	Bylaws of PHX Minerals Inc. (incorporated by reference to Exhibit <a href="#">3.2</a> to Form 8-K12B filed with the U.S. Securities and Exchange Commission on April 5, 2022).
5.1 <sup>+</sup>	<a href="#">Opinion of Jackson Walker LLP</a>
23.1 <sup>+</sup>	<a href="#">Consent of Ernst &amp; Young LLP</a>
23.2 <sup>+</sup>	<a href="#">Consent of DeGolyer and MacNaughton</a>
23.3 <sup>+</sup>	Consent of Jackson Walker LLP (included in Exhibit <a href="#">5.1</a> to this Registration Statement)
24.1 <sup>+</sup>	Power of Attorney (included on the signature page of this Registration Statement and on the signature page of the initial filing of this Registration Statement)

+ Filed herewith.

\* To be filed, if necessary, by amendment or as an exhibit to a document filed under the Exchange Act.

**Item 17. Undertakings.**

The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) to include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) to reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price, set forth in the "Calculation of Registration Fee" table in the effective registration statement;

(iii) to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

*provided, however*, that the information required to be included in a post-effective amendment by paragraphs (i), (ii) and (iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act to any purchaser:

(i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(5) That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(6) That, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(7) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this post-effective amendment to Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Oklahoma City, State of Oklahoma, on April 7, 2022.

### PHX Minerals Inc.

/s/ Chad L. Stephens

Chad L. Stephens  
Chief Executive Officer  
(Principal Executive Officer)

## POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints each of Chad L. Stephens and Ralph D'Amico, as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and re-substitution for him and in his or her name, place and stead, in any and all capacities, to sign any and all further amendments (including post-effective amendments) to this Registration Statement, and any subsequent registration statements pursuant to Rule 462 of the Securities Act of 1933 and to file the same, with all exhibits thereto, and other documents in connection therewith, with the U.S. Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that each of said attorney-in-fact or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this post-effective amendment to Registration Statement has been signed by the following persons in the capacities indicated on April 7, 2022.

<b>Signature</b>	<b>Capacity</b>	<b>Date</b>
<u>/s/ Chad L. Stephens</u> Chad L. Stephens	President, Chief Executive Officer and Director (Principal Executive Officer)	April 7, 2022
<u>/s/ Ralph D'Amico</u> Ralph D'Amico	Vice President, Chief Financial Officer and Secretary (Principal Financial and Accounting Officer)	April 7, 2022
<u>*</u> Mark T. Behrman	Director	April 7, 2022
<u>/s/ Glen A. Brown</u> Glen A. Brown	Director	April 7, 2022
<u>*</u> Lee M. Canaan	Director	April 7, 2022
<u>*</u> Peter B. Delaney	Director	April 7, 2022
<u>/s/ Steven L. Packebush</u> Steven L. Packebush	Director	April 7, 2022
<u>/s/ John H. Pinkerton</u> John H. Pinkerton	Director	April 7, 2022

\* Chad L. Stephens, by signing his name hereto, does hereby sign this post-effective amendment to Registration Statement on behalf of each of the above-named directors of the Registrant pursuant to powers of attorney duly executed by such persons.

By: /s/ Chad L. Stephens  
Chad L. Stephens, Attorney-in-Fact



April 7, 2022

PHX Minerals Inc.  
1601 NW Expressway, Suite 1100  
Oklahoma City, Oklahoma 73118

Re: PHX Minerals Inc. – Post-Effective Amendment to Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as counsel to PHX Minerals Inc., a Delaware corporation (the “Company”), in connection with the preparation and filing with the Securities and Exchange Commission (the “Commission”) of the Post-Effective Amendment No. 1 (the “Amendment”) to the Registration Statement on Form S-3, File No. 333-249538 (as amended, the “Registration Statement”), under the Securities Act of 1933, as amended (the “Securities Act”), relating to (a) the proposed resale by a certain selling stockholder of up to 153,375 shares of Common Stock, par value \$0.01666 per share (the “Resale Shares”), originally issued to such selling stockholder pursuant to the Agreements for Purchase and Sale, dated August 24, 2020, by and between such selling stockholder and the Company (the “Purchase and Sale Agreements”), and (b) the offer and sale of one or more of the following securities with an aggregate offering price of up to \$75,000,000:

- (i) shares of the Company’s Common Stock, par value of \$0.01666 per share (the “Common Stock”);
- (ii) shares of the Company’s preferred stock, par value of \$0.01666 per share, which may be issued in one or more classes or series (the “Preferred Stock”);
- (iii) debt securities of the Company, which may be either senior or subordinated and may be issued in one or more series, consisting of notes, debentures or other evidences of indebtedness, and which may be convertible into shares of Common Stock or shares of Preferred Stock (the “Debt Securities”);
- (iv) warrants of the Company to purchase one or more classes or series of the securities registered under the Registration Statement (the “Warrants”); and
- (v) units consisting of one or more shares of Common Stock, shares of Preferred Stock, Debt Securities, Warrants, or any combination of such securities (“Units”) (items (i) through (v) are collectively referred to as the “Shelf Securities”).

The Shelf Securities may be offered and sold by the Company, and the Resale Shares may be offered and sold by the selling stockholder, as applicable, in amounts, at prices, and on terms to be determined at the time of sale and as may be set forth in one or more supplements (each, a

“Prospectus Supplement”) to the prospectus contained in the Registration Statement (the “Prospectus”).

This opinion is being furnished in connection with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act, and no opinion is expressed as to any matter pertaining to the contents of the Registration Statement or related Prospectus, other than as expressly stated in this opinion letter with respect to the Resale Shares and the Shelf Securities.

As such counsel, we have examined those matters of fact and questions of law as we have considered appropriate for purposes of this opinion letter. We have examined and relied upon the Certificate of Incorporation and Bylaws of the Company, each as restated and/or amended to date, the Registration Statement, including the Prospectus, the Purchase and Sale Agreements, certain resolutions adopted by the Board of Directors of the Company and originals, or copies certified to our satisfaction, of such other records, documents, certificates, opinions, memoranda, and other instruments as in our judgment are necessary or appropriate to enable us to render the opinions expressed below. As to certain factual matters, we have relied upon a certificate of certain officers of the Company and have not independently sought to verify such matters.

In rendering this opinion, we have assumed without independent verification: (i) the genuineness and authenticity of all signatures on original documents; (ii) the authenticity of all documents submitted to us as originals; (iii) the conformity to originals of all documents submitted to us as copies; (iv) the accuracy, completeness, and authenticity of certificates of public officials; and (v) that each natural person signing any document reviewed by us had the legal capacity to do so.

To the extent relevant to any opinion below, we have also assumed that, at the time of the sale or delivery of any Shelf Securities under the Registration Statement:

(i) the Registration Statement and any amendments relating thereto (including post-effective amendments) shall have become effective under the Securities Act and will continue to be effective;

(ii) one or more Prospectus Supplements relating to the Shelf Securities being offered will have been prepared and filed in compliance with the Securities Act and the rules and regulations promulgated thereunder, and will comply with all applicable laws;

(iii) if the Shelf Securities being offered are to be sold under a purchase, underwriting, or similar agreement (an “Underwriting Agreement”), such Underwriting Agreement relating to the Shelf Securities being offered, in the form filed as an exhibit to the Registration Statement, any post-effective amendment thereto, or a Current Report on Form 8-K under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), will have been duly authorized, executed, and delivered by the Company and the other parties thereto, and will constitute a valid, binding, and enforceable obligation of the Company and the other parties

thereto, enforceable against each of them in accordance with its terms, and any Securities offered and sold pursuant thereto will have been offered and sold in accordance with the terms thereof;

(iv) any indenture (“Indenture”) relating to Debt Securities, any warrant agreement (“Warrant Agreement”) relating to the Warrants, and any unit agreement (“Unit Agreement”) relating to the Units, in each case in the form filed as an exhibit to the Registration Statement, any post-effective amendment thereto, or a Current Report on Form 8-K under the Exchange Act, will have been duly authorized, executed, and delivered by the Company and the other parties thereto, and will constitute a valid, binding, and enforceable obligation of the Company and the other parties thereto, enforceable against each of them in accordance with its terms;

(v) the Shelf Securities being offered and any related Underwriting Agreement, amendments to the Company’s Certificate of Incorporation, Indenture, Warrant Agreement, or Unit Agreement, as applicable, describing such Shelf Securities will conform in all material respects to the description thereof in the Registration Statement, any amendments thereto (including post-effective amendments), and the Prospectus Supplement relating to the Shelf Securities being offered;

(vi) the Shelf Securities being offered will have been issued and sold in compliance with applicable Federal and state securities laws and for the consideration set forth in, and otherwise as contemplated by and in conformity with, the Registration Statement, any amendments thereto (including post-effective amendments), and the Prospectus Supplement relating to the Shelf Securities being offered;

(vii) any applicable listing or other requirements of any securities exchange on which the Shelf Securities being offered may be listed will have been complied with;

(viii) the rights, powers, privileges, preferences, and other terms, if any, of any Shelf Security to be established after the date hereof, and the terms of the issuance, sale, and delivery of any Shelf Security being offered (a) will be in conformity with the Company’s Certificate of Incorporation and Bylaws as then in effect, (b) will not violate any applicable law or result in a breach of or default under any agreement or instrument to which the Company is then a party or which is then binding upon the Company, and (c) will comply with any requirement or restriction imposed by any court or governmental body having jurisdiction over the Company;

(ix) with respect to any shares of Common Stock or Preferred Stock being offered, there will be sufficient shares of Common Stock or Preferred Stock, as applicable, authorized, designated (in the case of Preferred Stock), and available for issuance, and the consideration for the issuance and sale of the Common Stock or Preferred Stock is in an amount that is not less than the par value of the Common Stock or Preferred Stock, as applicable;

(x) the Debt Securities will have been issued in conformity with the Indenture, authenticated by the appointed trustee under the Indenture, and delivered against payment therefor, and the Indenture will be governed by New York law;

(xi) any securities issuable upon conversion, exchange, or exercise of any Shelf Security being offered will have been duly authorized, created, and, if appropriate, reserved for issuance upon such conversion, exchange, or exercise, and that, upon the issuance of any shares of Common Stock or Preferred Stock issuable upon conversion or exercise of any of the Shelf Securities, the total number of shares of Common Stock and Preferred Stock of the Company, issued and outstanding, as applicable, will not exceed the total number of shares of Common Stock and Preferred Stock that the Company is then authorized to issue under its Certificate of Incorporation; and

(xii) the Company shall be a corporation duly organized, validly existing, and in good standing under the laws of the State of Delaware and shall have the necessary power and authority to issue and sell such Shelf Securities.

Subject to the foregoing and the other matters set forth herein, we are of the opinion that:

1. The Resale Shares, as of the date of this opinion letter, are validly issued, fully paid and non-assessable.

2. When necessary corporate action on the part of the Company has been taken to authorize a particular issuance of shares of Common Stock (including any issuance of shares of Common Stock (a) upon the exchange or conversion of any validly issued, fully paid and non-assessable Preferred Stock that are exchangeable or convertible into Common Stock, (b) upon the exchange or conversion of any Debt Securities representing valid and legally binding obligations of the Company that are exchangeable or convertible into Common Stock in connection with the terms of such Debt Securities and any applicable indenture, or (c) upon the exercise of any validly issued Common Stock Warrants) in accordance with the applicable definitive purchase, underwriting or similar agreement and upon the issuance and delivery of and payment for such Common Stock in the manner contemplated in such agreement, by such corporate action, and by the Registration Statement, the Prospectus and the related Prospectus Supplement (and in the case of the issuance of Common Stock pursuant to clauses (a), (b), or (c) above, upon the satisfaction of and compliance with the conditions to such exchange, conversion or exercise), such Common Stock will be validly issued, fully paid and non-assessable.

3. When (a) necessary corporate action on the part of the Company has been taken to designate a series or class of Preferred Stock and authorize a particular issuance of shares of such series or class of Preferred Stock (including any issuance of shares of a series or class of Preferred Stock (i) upon the exchange or conversion of Debt Securities representing valid and legally binding obligations of the Company that are exchangeable or convertible into Preferred Stock or (ii) upon the exercise of any validly issued Preferred Stock Warrants), (b) the filing of the resolutions designating such series or class in accordance with the Delaware General Corporation Law as then in effect has occurred, (c) the taking of any other action necessary under the Delaware General Corporation Law, as then in effect, to create such class or series has occurred, and (d) the issuance and delivery of and payment for such Preferred Stock in the manner contemplated by any applicable definitive purchase, underwriting or similar agreement, such corporate action, and by the Registration Statement, the Prospectus and the related Prospectus Supplement has occurred

(and in the case of the issuance of Preferred Stock pursuant to clauses (i) or (ii) above, upon the satisfaction of and compliance with the conditions to the exercise, exchange or conversion), such Preferred Stock of such series or class will be validly issued, fully paid and non-assessable.

4. With respect to any Debt Securities, when (a) necessary corporate action on the part of the Company has been taken to authorize the issuance and sale of Debt Securities, (b) the applicable indenture and any required supplemental indenture has been duly authorized, executed and delivered by all parties thereto, (c) the applicable indenture and any required supplemental indenture will have become qualified under the Trust Indenture Act of 1939, as amended, (d) the terms of such Debt Securities and of their issuance and sale have been duly established in conformity with the applicable indenture and any applicable supplemental indenture so as to not violate any applicable law or the Company's Certificate of Incorporation or Bylaws, or result in a default under or breach of any agreement or instrument binding upon the Company and so as to comply with any requirement or restriction imposed by any court or governmental body having jurisdiction over the Company, (e) such Debt Securities have been duly executed and authenticated and delivered in accordance with the terms and provisions of the applicable indenture and supplemental indenture, and (f) such Debt Securities have been issued and sold for the consideration as contemplated by the Registration Statement, the Prospectus and the applicable Prospectus Supplement and the acts, proceedings and documents referred to above, such Debt Securities will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their respective terms.

5. With respect to any Warrants, when (a) specifically authorized for issuance by authorizing resolutions, (b) the applicable Warrant Agreement relating to the Warrants has been duly authorized, executed and delivered by all parties thereto, (c) the terms of such Warrants and of their issuance and sale have been duly established in conformity with the applicable Warrant Agreement, do not violate any applicable law or the Company's Certificate of Incorporation or Bylaws, or result in a default under or breach of any agreement or instrument binding upon the Company and comply with any requirement or restriction imposed by any court or governmental body having jurisdiction over the Company, (d) such Warrants have been duly executed and countersigned in accordance with the applicable Warrant Agreement and issued and sold as contemplated by the Registration Statement, the Prospectus and the applicable Prospectus Supplement, and (e) the Company has received the consideration provided for in the authorizing resolutions, such Warrants will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.

6. With respect to any Units, when (a) specifically authorized for issuance by authorizing resolutions, (b) the applicable Unit Agreement relating to the Units has been duly authorized, executed and delivered by all parties thereto, (c) the terms of such Units and of their issuance and sale have been duly established in conformity with the applicable Unit Agreement, do not violate any applicable law or the Company's Certificate of Incorporation or Bylaws, or result in a default under or breach of any agreement or instrument binding upon the Company and comply with any requirement or restriction imposed by any court or governmental body having jurisdiction over the Company, (d) such Units have been duly executed and countersigned in

accordance with the applicable Unit Agreement and issued and sold as contemplated by the Registration Statement, the Prospectus and the applicable Prospectus Supplement, and (e) the Company has received the consideration provided for in the authorizing resolutions, such Units will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.

Our opinions above are subject to applicable bankruptcy, insolvency (including, without limitation, all laws relating to fraudulent transfer or conveyance), reorganization, moratorium and other similar laws affecting creditors' rights generally and to general principles of equity and public policy (regardless of whether enforcement is sought in a proceeding in equity or at law), including, without limitation, (a) the possible unavailability of specific performance, injunctive relief or any other equitable remedy and (b) concepts of materiality, reasonableness, good faith and fair dealing, and we express no opinion herein with respect to provisions relating to severability or separability.

We are opining herein as to the Delaware General Corporation Law, and with respect to the enforceability against the Company of any Debt Securities, the laws of the State of New York, provided that insofar as such opinions pertain to the choice of law provisions of any Debt Securities, are rendered solely in reliance upon New York General Obligations Law Section 5-1401, and are expressly conditioned upon the assumption that the legality, validity, binding effect and enforceability of said provisions will be determined by a court of the State of New York or a United States federal court sitting in New York and applying New York choice of law rules, including said Section 5-1401. We express no opinion as to any constitutional limitations upon said Section 5-1401 or their effect, if any, upon any opinion herein expressed. and we express no opinion with respect to any other laws. Except as set forth in the preceding sentences, we are not rendering any opinion as to compliance with any federal or state law, rule, or regulation relating to the Resale Shares, the Shelf Securities, or to the sale or issuance thereof. This opinion is expressed as of the date hereof, and we disclaim any undertaking to advise you of any subsequent changes in the facts stated or assumed herein or of any subsequent changes in applicable law. We note that our legal opinion is an expression of professional judgment and is not a guarantee of result.

This opinion letter is for your benefit in connection with the Amendment and may be relied upon by you and by persons entitled to rely upon it under the applicable provisions of the Securities Act. We hereby consent to the filing of this opinion letter as an exhibit to the Amendment and to the reference to our firm under the caption "Legal Matters" in any Prospectus Supplement. In giving this consent, we do not admit that we are experts with respect to any part of the Registration Statement or the Prospectus, within the meaning of the term "expert" as used in Section 11 of the Securities Act, or the rules and regulations of the Commission thereunder, nor do we admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act, or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Jackson Walker LLP

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption "Experts" in the Post-Effective Amendment No. 1 to the Registration Statement (Form S-3 No. 333-249538) and related prospectus of PHX Minerals Inc. for the registration of Class A common stock, preferred stock, debt securities, warrants and units and to the incorporation by reference therein of our reports dated December 13, 2021, with respect to the financial statements of PHX Minerals Inc., and the effectiveness of internal control over financial reporting of PHX Minerals Inc. included in its Annual Report (Form 10-K) for the year ended September 30, 2021, filed with the Securities and Exchange Commission.

/s/ Ernst & Young, LLP

Oklahoma City, Oklahoma  
April 7, 2022

**DeGolyer and MacNaughton**

5001 Spring Valley Road

Suite 800 East

Dallas, Texas 75244

April 7, 2022

PHX Minerals Inc.  
Valliance Bank Tower  
1601 NW Expressway, Suite 1100  
Oklahoma City, OK 73118

Ladies and Gentlemen:

We hereby consent to (i) the incorporation by reference in the post-effective amendments to the Registration Statements on Form S-3 (File Nos. 333-249538, 333-256496, 333-260531, and 333-262165) and on Form S-8 (File Nos. 333-245670 and 333-261627) of PHX Minerals Inc. to be filed with the United States Securities and Exchange Commission on or about April 7, 2022, and any amendments and any prospectus supplement filed with respect thereto, (ii) all references to DeGolyer and MacNaughton as an independent petroleum engineering consulting firm in the Registration Statements, including under the heading "Experts," and (iii) the inclusion of information taken from our following reports, each of which were included in the Annual Reports on Form 10-K of PHX Minerals Inc. (formerly known as Panhandle Oil and Gas Inc.) for the years ended September 30, 2021, September 30, 2020, and September 30, 2019, in such Registration Statements, as amended:

- Report as of September 30, 2021 on Reserves and Revenue of Certain Properties with interests attributable to PHX Minerals Inc.
- Report as of September 30, 2020 on Reserves and Revenue of Certain Properties with interests attributable to Panhandle Oil and Gas Inc.
- Report as of September 30, 2019 on Reserves and Revenue of Certain Properties with interests attributable to Panhandle Oil and Gas Inc.

Very truly yours,

/s/ DeGolyer and MacNaughton

DeGOLYER and MacNAUGHTON  
Texas Registered Engineering Firm F-716