

**Longhorn Exploration Corp.**

**Form 51-101F1**

***Statement of Evaluation of the Prospective  
Hydrogen Resources and Other Oil And Gas  
Information***

## INTRODUCTION

The oil and gas resources and operational information of Longhorn Exploration Corp. and its subsidiaries (the “**Company**” or “**Longhorn**”) contained in this Form 51-101F1 contains the information required to be included in the Evaluation of the Prospective Hydrogen Resources and Other Oil and Gas Information pursuant to National Instrument 51-101 - *Standards of Disclosure for Oil and Gas Activities* (“**NI 51-101**”) adopted by the Canadian securities’ regulatory authorities. Readers should also refer to the Form 51-101F2 - *Report on Evaluation of the Prospective Hydrogen Resources by Independent Qualified Reserves Evaluator* and the Form 51-101F3 - *Report of Management and Directors on Oil and Gas Disclosure*, which are both accessible through SEDAR+ at [www.sedarplus.ca](http://www.sedarplus.ca).

### **Forward Looking Statements**

This Form 51-101F1 contains certain forward-looking statements and forward-looking information (collectively referred to herein as “**forward-looking statements**”) within the meaning of Canadian securities laws. All statements other than statements of historical fact are forward-looking statements. Forward-looking information typically contains statements with words such as “anticipate”, “estimate”, “forecasts”, “schedule”, “potential”, “believe”, “plan”, “continuous”, “expect”, “may”, “will”, “should”, “could”, or similar words suggesting future outcomes. In particular, this Form 51-101F1 contains forward-looking statements pertaining to the estimated future net revenue of reserves; forecast price and cost assumptions; changes to reserve estimates; future development plans of undeveloped reserves; costs associated with converting undeveloped reserves to developed reserves; potential impacts of fluctuating commodity prices and their effect on future net revenue of the Company; availability of funds for any future development costs; accuracy of timing and impacts of any future development projects; anticipated oil production from operating wells; production optimization; success of future interventions to improve and stabilize well flow rates; future oil and gas prospects; plans to develop wells for future use; future partnerships or joint ventures and any new business opportunities; success of maintaining existing or new permits; expiry of existing unproved acreage or permits; and amount of income taxes payable.

The forward-looking statements contained in this document are based on certain assumptions and, although management considers these assumptions to be reasonable based on information currently available to them, there can be no assurance that the plans, intentions or expectations upon which forward-looking statements are based, will in fact be realized. Undue reliance should not be placed on the forward-looking statements because the Company can give no assurances that they may prove to be correct. This includes, but is not limited to, assumptions related to, among other things: forecast price and cost assumptions based on the independent reserve evaluator report; the Company's current commodity price and other cost assumptions will generally be accurate; interest and foreign exchange rates will remain consistent; the Company's ability to develop future natural gas and oil production levels in the manner contemplated; the Company's ability to maintain and acquire key permits; the Company having sufficient cash flow, debt or equity sources or other financial resources required to fund its capital and operating expenditures and requirements as needed; the Company's ability to add production and reserves through

development and exploration activities will be consistent with its expectations; the information provided by its independent reserve evaluator is accurate; the estimates of the Company's reserves volumes and the assumptions related thereto are accurate in all material respects; and the Company has the ability to obtain labour and equipment in a timely manner to carry out development activities contemplated.

Forward-looking statements are subject to certain risks and uncertainties (both general and specific) that could cause actual events or outcomes to differ materially from those anticipated or implied by such forward-looking statements. Such risks and other factors include, but are not limited to political, social, and other risks inherent in daily operations for the Company, including; risks associated with oil and gas exploration; operational risks; development and operating costs; ability to access sufficient capital from internal and external sources; volatility of natural gas and oil prices; government regulation; health, safety and environmental risks; interest rate risks; dependence on key personnel; delays or changes in plans with respect to growth projects or capital expenditures; availability of drilling equipment and access; variations in foreign exchange rates; expiration of licenses and leases; reserves estimates; competition and risks associated with the industries in which the Company operates; and litigation. Further information regarding these factors may be found under the heading "Risk Factors" in the Company's Amended and Restated Annual Information Form for the year ended August 31, 2024. Readers are cautioned that the foregoing list of factors that may affect future results is not exhaustive.

The forward-looking statements contained in this Form 51-101F1 are made as of the date hereof and Longhorn does not undertake any obligation to update publicly or to revise any of the included forward-looking statements, except as required by applicable law. The forward-looking statements contained herein are expressly qualified by this cautionary statement.

### **Currency and Measurement**

All currency amounts in this Form 51-101F1 are stated in Canadian dollars unless otherwise indicated.

### ***Abbreviations***

<b><u>Crude Oil and Natural Gas Liquids</u></b>		<b><u>Natural Gas</u></b>	
bbl	Barrel or barrels	Mcf	Thousand cubic feet
bbl/d	Barrels per day	MMcf	Million cubic feet
Mbbl	Thousand barrels	Mcf/d	Thousand cubic feet per day
MMbbl	Million barrels	MMcf/d	Million cubic feet per day
boe	Barrel or barrels of oil equivalent of natural gas and crude oil, unless otherwise indicated	Bcf	Billion cubic feet
boe/d	Barrel or barrels of oil equivalent per day		

MMboe    Million barrels of oil  
 NGL        equivalent  
               Natural gas liquids

***Conversion***

The following table sets forth certain standard conversions from Standard Imperial units to the International System of Units (or metric units).

<u>To Convert from</u>	<u>To</u>	<u>Multiply by</u>
Mcf	Thousand cubic meters	0.0282
Thousand cubic meters	Mcf	35.494
bbl	Cubic meters	0.159
Cubic meters	bbl	6.290
Feet	Meters	0.305
Meters	Feet	3.281
Miles	Kilometers	1.609
Kilometers	Miles	0.621
Acres	Hectares	0.405
Hectares	Acres	2.471

**Disclosure provided herein in respect of boe (barrels of oil equivalent) may be misleading, particularly if used in isolation. A boe conversion ratio of 6 Mcf: 1 bbl is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead.**

**Notes and Definitions**

Certain of the following definitions and guidelines are contained in the Glossary to NI 51-101 contained in CSA Notice 51-324, which incorporates certain definitions from the COGE Handbook. Readers should consult CSA Notice 51-324 and the Canadian Oil and Gas Evaluation Handbook (“COGE”) Handbook for additional explanation and guidance.

### ***Description of Price and Cost Assumptions***

“Forecast prices and costs” means future prices and costs that are:

- (i) generally accepted as being a reasonable outlook of the future; and
- (ii) if, and only to the extent that, there are fixed or presently determinable future prices or costs to which the Company is legally bound by a contractual or other obligation to supply a physical product, including those for an extension period of a contract that is likely to be extended, those prices or costs rather than the prices or costs referred to in paragraph (i).

### **PART 1      DATE OF STATEMENT**

Longhorn Exploration Corp. (TSX-V: LEX) (“Longhorn” or the “Company”) has entered into non-arm’s length share exchange agreement (the “Agreement”) with PureWave Hydrogen Corp. (“PureWave”) and each of the shareholders of PureWave (the “Vendors”) dated November 4, 2024, pursuant to which the Company has acquired all of the issued and outstanding shares of PureWave, a private Colorado incorporated company, that has five (5) natural hydrogen lease agreements in Kansas, USA (the “Natural Hydrogen Lease Agreements”) covering approximately 829.20 gross acres and 725 net acres.

This report evaluates the prospective hydrogen resources of Longhorn on the Natural Hydrogen Lease Agreements. Throughout the report, specific mentions are made of PureWave and Longhorn, while other times mentions are made of the “Company” which can be interpreted as an interchangeable term for Longhorn or PureWave.

This evaluation is a geologic and engineering evaluation, based on the analysis methodology described herein using technical and economic data supplied by the Company, and has an effective date of November 4, 2024. This evaluation does not include estimates of recoverable hydrogen volumes from either Reserves or Contingent Resources. Prospective Resources carry significant exploration risks. This evaluation is provided as an update to the Sproule June 1, 2024 Report “Evaluation of the Prospective Hydrogen Resources for Lily Rock Project in Eastern Kansas” known as the Sproule June 2024 Report. PureWave has leased an additional 205.6 net acres in Pottawatomie and Wabaunsee Counties Kansas on the Lily Rock Prospect.

The evaluation contained in this report is prepared in accordance with the COGEH guidance and the principles of NI 51-101 and provides a review under a set of assumptions deemed most appropriate by a practitioner. Sproule’s evaluation is based upon data supplied by the Company, supplemented where necessary by Sproule’s corporate awareness of current US industry costs and best practices.

Resource Estimates Sproule reviewed the technical workflows and assumptions of the Company in its exploration assessment of the hydrogen prospects of its Lily Rock Project in Eastern Kansas, USA and has independently derived its own volumetric analysis of these prospects as shown in Table S-1 and Table 1. The volumetric analyses were conducted using a probabilistic methodology.

<b>Table S-1</b> <b>Company Interest of Updated Low, Best, and High Estimates of Unrisked Undiscovered Gas Initially-In-Place and Prospective Resources in the Lily Rock Prospect (as of November 4, 2024)</b>								
Gross Volumes (100% WI)								
Prospect	Fluid Type <sup>(7,8)</sup>	Undiscovered Gas Initially-In-Place <sup>(9)</sup>			Prospective Hydrogen Resources <sup>(4)</sup>			
		Unrisked			Unrisked			Risked <sup>(5,6)</sup>
		Low <sup>(1)</sup>	Best <sup>(2)</sup>	High <sup>(3)</sup>	Low <sup>(1)</sup>	Best <sup>(2)</sup>	High <sup>(3)</sup>	Best <sup>(2)</sup>
Lily Rock	Raw Gas (MMcf)	325	3,549	10,180	75	892	3,082	60
	Liquid Hydrogen Equivalent (Kg) <sup>10</sup>	N/A	N/A	N/A	180,055	2,141,457	7,399,069	144,548

(1) Low represents the P90 volume estimate

(2) Best represents the P50 volume estimate

(3) High represents the P10 volume estimate

(4) Prospective Resources are sub-classified as Prospective - Prospects (Risked = Best\*6.75%)

(5) It is mathematically invalid to determine a risked success-case distribution for any probability level other than the mean itself by multiplying an unrisked success case by the geological chance of success

(6) Risked: A 6.75 percent geological chance of success 93.25 percent chance of no discovery)

(7) Oil resources are presented in thousands of barrels

(8) Gas (raw) resources are presented in millions of cubic feet before processing (i.e., shrinkage and natural gas liquid recovery)

(9) UGIIP represents that quantity of petroleum that is estimated, as of July 15, 2023, to be contained in accumulations yet to be discovered

(10) Sproule has additionally made note that it has become common practice to state hydrogen volumes in liquid weight equivalents. These Unrisked Recoverable Prospective Hydrogen Resources may also be reported as weight equivalents as shown in Table S-1. A hydrogen density of 2,400.736 Kg/MMscf at STP of 14.65 psia and 60 def F. was used to convert Hydrogen gas volume in MMscf to Hydrogen liquid weight in Kg.

There is no certainty that any portion of the resources will be discovered. If discovered, there is no certainty that it will be commercially viable to produce any portion of the

resources.

## **PART 6 OTHER OIL AND GAS INFORMATION**

### **Oil and Gas Properties and Wells**

Longhorn Exploration Corp. (TSX-V: LEX) (“Longhorn” or the “Company”) has entered into non-arm’s length share exchange agreement (the “Agreement”) with PureWave Hydrogen Corp. (“PureWave”) and each of the shareholders of PureWave (the “Vendors”) dated November 4, 2024, pursuant to which the Company has acquired all of the issued and outstanding shares of PureWave, a private Colorado incorporated company, that has five (5) natural hydrogen lease agreements in Kansas, USA (the “Natural Hydrogen Lease Agreements”) covering approximately 829.20 gross acres and 725 net acres.

## **PART 6 OTHER OIL AND GAS INFORMATION**

### **Item 6.1 Oil and Gas Properties and Wells**

1. Identify and describe generally the *reporting issuer’s* important *properties*, plants, facilities and installations:
  - (a) identifying their location (province, territory or state if in Canada or the United States, and country otherwise);
  - (b) indicating whether they are located onshore or offshore;
  - (c) in respect of properties to which reserves have been attributed and which are capable of producing but which are not producing, disclosing how long they have been in that condition and discussing the general proximity of pipelines or other means of transportation; and describing any statutory or other mandatory relinquishments, surrenders, back-ins or changes in ownership.
2. State, separately for *oil* wells and *gas* wells, the number of the *reporting issuer’s* producing wells and non-producing wells, expressed in terms of both *gross* wells and *net* wells, by location (province, territory or state if in Canada or the United States, and country otherwise).

### **Item 6.2 Properties With No Attributed Reserves**

1. For *unproved properties* disclose:
  - (a) the *gross* area (acres or hectares) in which the *reporting issuer* has an interest;
  - (b) the interest of the reporting issuer therein expressed in terms of net area (acres or hectares);

- (c) the location, by country; and
  - (d) the existence, nature (including any bonding requirements), timing and cost (specified or estimated) of any work commitments.
2. Disclose, by country, the *net* area (acres or hectares) of *unproved property* for which the *reporting issuer* expects its rights to explore, develop and exploit to expire within one year.

#### *INSTRUCTION*

*If the **reporting issuer** holds interests in different formations under the same surface area pursuant to separate leases, disclose the method of calculating the **gross and net** area. A general description of the method of calculating the disclosed area will suffice.*

#### **Item 6.2.1 Significant Factors or Uncertainties Relevant to *Properties* with No Attributed Reserves**

Identify and discuss significant economic factors or significant uncertainties that have affected or are reasonably expected to affect the anticipated development or production activities on *properties* with no attributed *reserves*.

#### *INSTRUCTIONS*

- (1) *A **reporting issuer** must, under this Item, include a discussion of any significant **abandonment and reclamation costs**, unusually high expected **development costs** or **operating costs**, or contractual obligations to **produce** and sell a significant portion of **production** at prices substantially below those which could be realized but for those contractual obligations.*
- (2) *If the information required by this Item is presented in the **reporting issuer's** financial statements and notes thereto for the most recent financial year ended, the **reporting issuer** satisfies this Item by directing the reader to that presentation.*

#### **Item 6.3 Forward Contracts**

- 1. If the *reporting issuer* is bound by an agreement (including a transportation agreement), directly or through an aggregator, under which it may be precluded from fully realizing, or may be protected from the full effect of, future market prices for *oil* or *gas*, describe generally the agreement, discussing dates or time periods and summaries or ranges of volumes and contracted or reasonably estimated values.
- 2. A *reporting issuer* may satisfy the requirement in section 1 by including the information required by that section in its financial statements for the financial year ended on the *effective date*.

3. If the *reporting issuer's* transportation obligations or commitments for future physical deliveries of oil or gas exceed the *reporting issuer's* expected related future *production* from its *proved reserves*, estimated using *forecast prices and costs* and disclosed under Part 2, discuss such excess, giving information about the amount of the excess, dates or time periods, volumes and reasonably estimated value.

**Item 6.4 Repealed(July 1, 2015)**

**Item 6.5 Tax Horizon**

If the *reporting issuer* is not required to pay income taxes for its most recently completed financial year, discuss its estimate of when income taxes may become payable.

**Item 6.6 Costs Incurred**

Disclose, by country for the most recent financial year ended each of the following:

- (a) *property acquisition costs*, separately for *proved properties* and *unproved properties*;
- (b) *exploration costs*;
- (c) *development costs*.

**INSTRUCTION**

*If the costs specified in paragraphs (a), (b) and (c) are presented in the **reporting issuer's** financial statements and the notes to those statements for the most recent financial year ended, the **reporting issuer** satisfies this Item by directing the reader to that presentation.*

**Item 6.7 Exploration and Development Activities**

1. Disclose, by country and separately for *exploratory wells* and *development wells*:
  - (a) the number of *gross wells* and *net wells* completed in the *reporting issuer's* most recent financial year; and
  - (b) for each category of wells for which information is disclosed under paragraph (a), the number completed as *oil wells*, *gas wells*, *service wells* and *stratigraphic test wells* and the number that were dry holes.
2. Describe generally the *reporting issuer's* most important current and likely exploration and development activities, by country.