

**Pinedale Energy Limited**

**FORM 51-101F1**

**STATEMENT OF RESERVES DATA AND OTHER OIL AND GAS INFORMATION  
DATED APRIL 16, 2019**

**EFFECTIVE DATE OF EVALUATION REPORT – DECEMBER 31, 2018**

**PREPARATION DATE OF EVALUATION REPORT – FEBRUARY 27, 2019**

## ABBREVIATIONS AND CONVERSIONS

In this document, the certain abbreviations and definitions set forth below have the following meanings:

“API”	American Petroleum Institute
“degrees API”	an indication of the specific gravity of crude oil measured on the API gravity scale
“bbl”	barrel or barrels
“Mbbbl”	thousand barrels
“bbl/d”	barrels per day
“Mcf”	thousand cubic feet
“Mcf/d”	thousand cubic feet per day
“MMcf”	million cubic feet
“Mcf <sup>e</sup> ”	means thousand cubic feet of natural gas equivalent, using the conversion factor of one bbl of oil to 6 Mcf of natural gas. Mcfes may be misleading, particularly if used in isolation. An Mcfe conversion ratio of 1 bbl:6 Mcf is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead. Given that the value ratio based on the current price of crude oil as compared to natural gas is significantly different from the energy equivalency of 1 bbl: 6 Mcf, utilizing a conversion on a 1 bbl: 6 Mcf basis may be misleading as an indication of value.
“Mcf <sup>e</sup> /d”	thousand cubic feet gas equivalent per day
“MMcf <sup>e</sup> /d”	million cubic feet gas equivalent per day
“MMBtu”	million British Thermal Units
“NYMEX”	New York Mercantile Exchange
“WTI”	West Texas Intermediate
“\$000s”	thousands of dollars
“MM\$”	million dollars
“\$”	Canadian currency
“US\$”	United States currency

<b>To Convert From</b>	<b>To</b>	<b>Multiply By</b>
Mcf	Cubic meters	28.328
Cubic meters	Cubic feet	35.301
Bbl	Cubic meters	0.159
Cubic meters	Bbl oil	6.292
Feet	Meters	0.305
Meters	Feet	3.281
Miles	Kilometers	1.609
Kilometers	Miles	0.621
Acres	Hectares	0.400
Hectares	Acres	2.500

## NOTES AND CERTAIN DEFINITIONS

“**Pinedale Energy Limited**” means Pinedale Energy Limited or “Pinedale”

“**Company**” means Pinedale Energy Limited” or its wholly owned subsidiary Pinedale Energy Inc.

“**COGEH**” means the Canadian Oil and Gas Evaluation Handbook prepared by the Society of Petroleum Evaluation Engineers (Calgary Chapter) and the Petroleum Society of Canada

“**NI 51-101**” means National Instrument 51-101 – Standards of Disclosure for Oil and Gas Activities of the CSA

“**NSAI**” means Netherland, Sewell & Associates, Inc.

“**NSAI Report**” means the report of NSAI prepared February 27, 2019 evaluating the estimates of reserves and future revenue to the Pinedale Energy Inc. interest in certain gas properties located in Pinedale Field, Sublette County, Wyoming as of December 31, 2018.

“**Gross**” means

- (a) in relation to the Company’s interest in production or reserves its “Company gross reserves”, which are its working interest (operating or non-operating) share before deduction of royalty obligations and without any royalty interests owned by the Company
- (b) in relation to wells, the total number of wells in which the Company has an interest; and
- (c) in relation to the Company’s interest in a property, the total area in which the Company has an interest

“**Net**” means

- (a) in relation to the Company’s interest in production or reserves its working interest (operating or non-operating) share after deduction of royalty obligations, plus its royalty interests in production in reserves;
- (b) in relation to the Company’s interest in wells, the number of wells obtained by aggregating the Company’s working interest in each of its gross wells; and
- (c) in relation to the Company’s interest in a property, the total area in which the Company has an interest multiplied by the working interest owned by the Company

“**Future Net Revenue**” a forecast of revenue, estimated using forecast prices and costs or constant prices and costs, arising from the anticipated development and production of resources, net of the associated royalties, operating costs, development costs, and abandonment and reclamation costs. **The estimates of Future Net Revenue do not necessarily reflect fair market value.**

“**Proved Reserves**” are those reserves that can be estimated with a high degree of certainty to be recoverable. It is likely that the actual remaining quantities recovered will exceed the estimated proved reserves.

“**Developed Reserves**” are those reserves that are expected to be recovered from existing wells and installed facilities or, if facilities have not been installed, that would involve a low expenditure (for example, when compared to the cost of drilling a well) to put the reserves on production. The developed category may be subdivided into producing and non-producing.

**“Developed Producing Reserves”** are those reserves that are expected to be recovered from completion intervals open at the time of the estimate. These reserves may be currently producing or shut-in, they must have previously been on production, and the date of resumption of production must be known with reasonable certainty.

**“Developed Non-Producing Reserves”** are those reserves that either have not been on production, or have previously been on production, but are shut-in, and the date of resumption of production is unknown.

**“Undeveloped Reserves”** are those reserves expected to be recovered from known accumulations where a significant expenditure is required to render them capable of production. They must fully meet the requirements of the reserves classification to which they are assigned.

**“Probable Reserves”** are those additional reserves that are less certain to be recovered than proved reserves. It is equally likely that the actual remaining quantities recovered will be greater or less than the sum of the estimated proved plus probable reserves.

**“Light crude oil”** means crude oil with a relative density greater than 31.1 degrees API gravity.

**“Medium crude oil”** means crude oil with a relative density greater than 22.3 degrees API gravity and less than or equal to 31.1 degrees API gravity.

**“Natural gas”** means a mixture of lighter hydrocarbons that exist either in the gaseous phase or in solution in crude oil in reservoirs but are gaseous at atmospheric conditions. Natural gas may contain sulphur or other non-hydrocarbon compounds.

**“Conventional natural gas”** means natural gas that has been generated elsewhere and has migrated as a result of hydrodynamic forces and is trapped in discrete accumulations by seals that may be formed by localized structural, depositional or erosional geological features.

**“Natural gas liquids”** means those hydrocarbon components that can be recovered from natural gas as liquids including, but not limited to, ethane, propane, butanes, pentanes plus, condensate and small quantities of non-hydrocarbons.

**“Abandonment and reclamation costs”** means all costs associated with the process of restoring a property that has been disturbed by oil and gas activities to a standard imposed by applicable government or regulatory authorities

**“Operating costs”** or “production costs” means costs incurred to operate and maintain wells and related equipment and facilities, including applicable operating costs of support equipment and facilities and other costs of operating and maintaining those wells and related equipment and facilities.

**“Reservoir”** means a porous and permeable underground formation containing a natural accumulation of producible oil or gas that is confined by impermeable rock or water barriers and is individual and separate from other reservoirs.

**“U.S.”** or **“United States”** means the United States of America, its territories and possessions, any State of the United States, and the District of Columbia

## OIL AND NATURAL GAS RESERVES AND NET PRESENT VALUE OF FUTURE NET REVENUE

Netherland, Sewell & Associates, Inc. (“NSAI”) of Dallas, Texas, independent petroleum consultants, have evaluated the oil and natural gas reserves attributable to Pinedale Energy Inc.’s existing oil and gas properties as of December 31, 2018 (the “NSAI Report”). The NSAI Report was prepared in accordance with the definitions and guidelines set forth in the COGEH and in accordance with NI 51-101. All of Pinedale’s reserves are situated in the U.S.A., and, specifically, in the State of Wyoming. The Reports of the Independent Qualified Reserves Evaluators or Auditors (“Form 51-101F2”) and the Report of Management and Directors on Oil and Gas Disclosure (“Form 51-101F3”) are available at [www.sedar.com](http://www.sedar.com)

The following tables provide a summary of the Company’s total reserves and value using forecast prices and costs as of December 31, 2018.

It should not be assumed that the estimated net cash flow shown below is representative of the fair market value of the Company’s properties. There is no assurance that the price and cost assumptions will be attained, and variances could be material.

The recovery and reserve estimates provided below and provided in the NSAI Report are estimates only and there is no guarantee that the estimated reserves will be recovered. Actual reserves maybe greater than or less than the estimates provided below and provided in the NSAI Report. The NSAI Report is based on data supplied by the Company. All factual data supplied by the Company, including but not limited to ownership, production, costs, revenues, contracts, and relevant documents, was relied upon by NSAI in preparing the NSAI report.

All evaluated properties are located onshore in the state of Wyoming.

All monetary values in the NSAI Report are expressed in U.S. currency.

### PETROLEUM AND NATURAL GAS RESERVES <sup>(1)</sup> BASED ON FORECAST PRICES AND COSTS as at December 31, 2018

Reserves Category	Conventional Natural Gas (MMcf)		Natural Gas Liquids/Condensates (Mbbbl)		Gas Equivalent (MMcfe)	
	Gross	Net	Gross	Net	Gross	Net
Proved						
Developed Producing	11,952.3	9,388.9	127.4	100.1	12,716.7	9,989.5
Developed Non-Producing	-	-	-	-	-	-
Undeveloped	2,722.5	2,069.4	27.3	20.8	2,886.3	2,194.2
<b>Total Proved</b>	<b>14,674.8</b>	<b>11,458.3</b>	<b>154.7</b>	<b>120.8</b>	<b>15,603.0</b>	<b>12,183.1</b>
Probable	11,676.7	9,032.3	188.7	145.3	12,808.9	9,904.1
<b>Proved + Probable</b>	<b>26,351.5</b>	<b>20,490.6</b>	<b>343.4</b>	<b>266.2</b>	<b>28,411.9</b>	<b>22,087.8</b>

Note:

- 1) Figures may not add due to rounding.

**NET PRESENT VALUES OF FUTURE NET REVENUE <sup>(1)</sup> <sup>(2)</sup>  
 BASED ON FORECAST PRICES AND COSTS  
 as at December 31, 2018**

Reserves Category	Net Present Value of Future Net Revenues <sup>(1)</sup> Before Tax, Discounted at %/year					Unit Value <sup>(2)</sup>
	0% (US\$000)	5% (US\$000)	10% (US\$000)	15% (US\$000)	20% (US\$000)	10% (US\$/Mcf)
Proved						
Developed Producing	11,060.5	8,593.0	7,004.3	5,950.1	5,214.8	0.75
Developed Non-Producing	-	-	-	-	-	-
Undeveloped	1,422.7	673.1	286.6	70.3	-59.9	0.14
<b>Total Proved</b>	<b>12,483.2</b>	<b>9,266.1</b>	<b>7,290.9</b>	<b>6,020.4</b>	<b>5,155.0</b>	<b>0.64</b>
Probable	8,357.4	3,247.7	1,176.6	269.1	-141.0	0.13
<b>Proved + Probable</b>	<b>20,840.6</b>	<b>12,513.8</b>	<b>8,467.5</b>	<b>6,289.5</b>	<b>5,013.9</b>	<b>0.41</b>

Notes:

- 1) Figures may not add due to rounding.
- 2) Unit values are calculated using 10% discount rate divided by net reserve volumes

Reserves Category	Net Present Value of Future Net Revenues <sup>(1)</sup> After Tax, Discounted at %/year				
	0% (US\$000)	5% (US\$000)	10% (US\$000)	15% (US\$000)	20% (US\$000)
Proved					
Developed Producing	7,997.5	5,991.1	4,734.6	3,921.7	3,367.1
Developed Non-Producing	-	-	-	-	-
Undeveloped	1,821.5	1,364.6	1,078.3	893.2	766.8
<b>Total Proved</b>	<b>9,819.0</b>	<b>7,355.7</b>	<b>5,812.9</b>	<b>4,814.9</b>	<b>4,133.9</b>
Probable	6,794.6	2,646.1	954.6	211.4	-123.7
<b>Proved + Probable</b>	<b>16,613.6</b>	<b>10,001.8</b>	<b>6,767.5</b>	<b>5,026.3</b>	<b>4,010.2</b>

Notes:

- 1) Figures may not add due to rounding.

**TOTAL FUTURE NET REVENUE  
 (UNDISCOUNTED)  
 BASED ON FORECAST PRICES AND COSTS  
 as at December 31, 2018**

Reserves Category	Revenue <sup>(1)</sup> (US\$000)	Royalties, Burdens and NPI (US\$000)	Property and Mineral Taxes (US\$000)	Operating Costs (US\$000)	Development Costs (US\$000)	Abandonment and Reclamation Costs (US\$000)	Future Net Revenue Before Tax (US\$000)	Income Tax (US\$000)	Future Net Revenue After Tax (US\$000)
Total Proved	47,356.0	10,377.2	4,318.2	17,692.7	1,339.5	1,145.1	12,483.3	2,664.3	9,819.0
Proved + Probable	90,582.3	20,194.1	8,219.7	28,930.0	10,933.4	1,464.5	20,840.6	4,227.0	16,613.6

Notes:

- 1) Includes all product revenues as forecast.

**FUTURE NET REVENUE BY PRODUCTION TYPE <sup>(1) (2)</sup>  
 BASED ON FORECAST PRICES AND COSTS  
 as at December 31, 2018**

Reserves Category	Product Type	Future Net Revenue Discounted at 10%/year		
		(US\$000s)	Unit Value <sup>(2)</sup> (US\$/Mcf)	Unit Value <sup>(2)</sup> (US\$/Mcfe)
Proved	Conventional Natural Gas <sup>(1)</sup>	7,290.9	0.64	0.60
	Natural Gas Liquids/Condensates	-	-	-
	Total	7,290.9	0.64	0.60
Proved + Probable	Conventional Natural Gas <sup>(1)</sup>	8,467.5	0.41	0.38
	Natural Gas Liquids/Condensates	-	-	-
	Total	8,467.5	0.41	0.38

Notes:

(1) Including by-products but excluding solution gas and by-products from oil wells.

(2) Unit values are calculated using 10% discount rate divided by net reserve volumes

Pinedale Energy Limited's reserves and future revenues are 100% attributable to the Company's wholly owned U.S. subsidiary Pinedale Energy Inc.

**PRICING ASSUMPTIONS**

**Forecast Prices and Inflation Rate Assumptions used in Estimates**

The forecast commodity prices used in the NSAI Report are based on December 31, 2018 NYMEX Henry Hub strip prices for natural gas that are adjusted for energy content and regional market differentials and NYMEX West Texas Intermediate crude oil prices at Cushing Oklahoma prices for condensates that are adjusted for quality, transportation fees and regional market differentials. Forecast Case commodity prices, before adjustments, along with cost escalation parameters are shown in the following table. Inflation rates are assumed at 3 percent per year.

Year	NYMEX <sup>(1)</sup>	NYMEX <sup>(1)</sup>	NYMEX <sup>(2)</sup>	AECO <sup>(2)</sup>	NYMEX <sup>(2)</sup>	Light	Medium	Heavy	\$US to
	Henry Hub	WTI Cushing	Henry Hub	Price	WTI Cushing	Crude Oil <sup>(2)</sup> 40 API at Edmonton	Crude Oil <sup>(2)</sup> 29 API at Cromer	Crude Oil <sup>(2)</sup> 12 API at Hardisty	\$CDN <sup>(2)</sup> Exchange
	<u>\$US/MMBtu</u>	<u>\$US/bbl</u>	<u>\$US/MMBtu</u>	<u>\$/MMBtu</u>	<u>\$US/bbl</u>	<u>\$/bbl</u>	<u>\$/bbl</u>	<u>\$/bbl</u>	<u>Rate</u>
2019	2.854	47.10	3.00	1.85	56.25	63.33	58.90	37.65	0.75
2020	2.665	49.14	3.15	2.29	63.00	75.32	70.05	51.21	0.77
2021	2.606	50.37	3.35	2.67	67.00	79.75	74.16	59.51	0.79
2022	2.648	51.36	3.50	2.90	70.00	81.48	75.58	61.62	0.81
2023	2.706	52.25	3.63	3.14	72.50	83.54	77.69	63.82	0.82
2024	2.797	52.85	3.70	3.23	75.00	86.06	80.04	66.45	0.825
	+3.0%/yr	+3.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	

After 2024 prices and costs are escalated 3 percent on January 1 of each year through December 1, 2030 and held constant thereafter.

Notes:

(1) December 31, 2018 NYMEX Strip prices effective December 31, 2018 applied in the NSAI Report

(2) Comparative benchmark price forecasts published by a major Canadian petroleum consulting firm effective January 1, 2019

Weight average prices realized from the Company's operations for the year ended December 31, 2018 were \$3.49 per Mcf for natural gas and \$83.30 per bbl for condensates.

**RECONCILIATION OF GROSS RESERVES <sup>(1) (2) (3) (4)</sup>**  
**FORECAST PRICES AND COSTS**  
**as at December 31, 2018**

U.S. PROPERTIES	Conventional Natural Gas			Natural Gas Liquids/Condensates		
	Proved	Probable	Proved + Probable	Proved	Probable	Proved + Probable
	(MMcf)	(MMcf)	(MMcf)	(Mbbbl)	(Mbbbl)	(Mbbbl)
<b>31-Dec-2017</b>	<b>43,651.1</b>	<b>7,593.6</b>	<b>51,244.7</b>	<b>434.1</b>	<b>98.9</b>	<b>533.0</b>
Field Extensions <sup>(1)</sup>	433.5	2,724.9	3,158.4	9.2	60.5	69.7
Technical Revisions <sup>(2)</sup>	(18,615.3)	6,586.0	(12,029.2)	(189.5)	75.7	(113.8)
Discoveries	-	-	-	-	-	-
Acquisitions	-	-	-	-	-	-
Dispositions	-	-	-	-	-	-
Economic Factors <sup>(3)</sup>	(8,550.5)	(5,227.8)	(13,778.4)	(77.9)	(46.4)	(124.3)
Production	(2,244.0)	-	(2,244.0)	(21.1)	-	(21.1)
<b>31-Dec-2018</b>	<b>14,674.8</b>	<b>11,676.7</b>	<b>26,351.6</b>	<b>154.7</b>	<b>188.7</b>	<b>343.4</b>

Notes:

- 1) Field extensions include the reserves associated with horizontal wells.
- 2) Technical revisions include the reserves associated with technical changes in recovery for producing wells and undeveloped wells, non-consented AFE wells, as well as new well additions/subtractions for each reserve type.
- 3) Economic revisions resulting from changes in forecast prices and economic parameters applied.
- 4) Totals may not add due to rounding.

**ADDITIONAL INFORMATION RELATING TO RESERVES DATA**

**Undeveloped Reserves**

The following tables set forth the proved undeveloped reserves and the probable undeveloped reserves, each by product type, first attributed to Pinedale's assets for the year ended December 31, 2018 based on forecast prices and costs. Pinedale's ability to participate in development of its undeveloped reserves is dependent on the Pinedale's ability to fund its share of development costs. In estimating reserves NSAI utilized technical and economic data including, but not limited to, core data, well logs, geologic maps, seismic data, well test data, and producing well data to construct an estimated ultimate gas recovery ("EUR") map of the entire Pinedale field area. Reserves estimates for 40-acre undeveloped locations are based on the EUR map. Reserves estimates for 20-acre, 10-acre, and 5-acre infill locations are based on the existing producing well performance with a reduction for potential communication effects. Volumetric estimates of original gas-on-place ("OGIP") for 40-acre areas were used to limit infill reserves if the estimated recovery factor of a 40 acre well location plus 20-acre, 10-acre, and 5-acre wells exceeded 85% of OGIP.

### ***Proved Undeveloped Reserves***

Year	Conventional Natural Gas (MMcf)		Natural Gas Liquids/Condensates (Mbbbl)	
	First Attributed	Cumulative at Year End	First Attributed	Cumulative at Year End
<b>COMPANY TOTAL ALL PROPERTIES</b>				
Prior thereto	-	-	-	-
December 31, 2016	-	-	-	-
December 31, 2017	79,222.8	43,651.1	698.6	434.1
December 31, 2018	-	14,674.8	-	154.7

The Company's proved reserves are estimated for 40-acre, 20-acre, 10-acre and 5-acre directionally drilled vertical locations that are within 40 acres of a producing vertical well and horizontal locations that are direct offsets to horizontal production wells. Proved reserves are expected to be drilled in the next 5 years and have approved well spacing.

### ***Probable Undeveloped Reserves***

Year	Conventional Natural Gas (MMcf)		Natural Gas Liquids/Condensates (Mbbbl)	
	First Attributed	Cumulative at Year End	First Attributed	Cumulative at Year End
<b>COMPANY TOTAL ALL PROPERTIES</b>				
Prior thereto	-	-	-	-
December 31, 2016	-	-	-	-
December 31, 2017	16,255.5	7,593.6	143.6	98.9
December 31, 2018	2,724.9	11,676.7	60.5	188.7

The Company's probable undeveloped reserves are generally those reserves indicated by analogy that are within 80 acres of a proved undeveloped location, infill drilling locations, horizontal locations that are direct offsets to horizontal production wells, and lands contiguous to production that are outside a 5-year drill schedule.

### **Significant Factors or Uncertainties Affecting Reserves Data**

Oil and gas evaluations have certain uncertainties inherent in the interpretation of engineering and geologic data and the conclusions in the NSAI Report represent informed professional judgments of available geological, geophysical, engineering and economic data. The process of evaluating reserves is complex. Estimates may change substantially as additional data from ongoing development activities, and production performance becomes available and as economic conditions impacting oil and gas prices and costs change. The estimates reported on herein are based on current expectations that involve a number of risks and uncertainties, which could cause the actual results to differ from those anticipated. These risks and uncertainties include but are not limited to: the underlying risks of the oil and gas industry (i.e. operational risks in development, exploration and production; potential delays or changes in plans with respect to exploration or development projects or capital expenditures; availability of drill rigs, completion rigs, and qualified field personnel; the uncertainty of reserves estimates; the uncertainty of estimates and projections relating to production, costs and expenses, political and environmental factors), and commodity price and exchange rate fluctuation. Present values for various discount rates documented in the NSAI Report may not necessarily represent fair market value of the reserves. The estimates of reserves may increase or decrease as a result of future operations.

The Company's oil and gas properties have no material extraordinary operational risks or uncertainties beyond those which are inherent to other oil and gas producing companies.

**Future Development Costs  
As at December 31, 2018  
Forecast Prices and Costs**

The following table sets forth the development costs which have been deducted in the estimation of the Company's future net revenue attributable to the Company's reserves at December 31, 2018.

<b>Year</b>	<b>Proved Reserves (US\$000s)</b>	<b>Proved plus Probable Reserves (US\$000s)</b>
2019	-	-
2020	1,339.5	1,339.5
2021	-	-
2022	-	-
2023	-	-
<b>Total Undiscounted</b>	<b>1,339.5</b>	<b>10,933.4</b>

The tabled future development costs are specific to the Company's Wyoming, U.S.A property assets. Undeveloped reserves at Pinedale will be developed with vertical wells and horizontal wells drilled from existing surface drill pad locations situated on or adjacent to Company leasehold. The Company expects to fund the above development costs from a combination of future financings, which may include debt or equity issues, bank borrowings using the Company's reserve-based line of credit and use of free cash flow from operations. The costs of funding the estimated future development costs are not expected to influence disclosed reserves or future net revenue.

**OTHER OIL AND GAS INFORMATION**

**Principal Properties**

Pinedale Energy Limited, formerly known as Outrider Energy Corp., acquired Pinedale Energy Inc. and Pinedale Energy Inc.'s parent company as wholly owned subsidiaries effective June 1, 2017 by way of a reverse takeover. The Company owns certain developed and undeveloped oil and gas leases, referred to as the Pinedale properties, that are located in the northern portion of the Green River Basin in Sublette County, Wyoming, U.S.A.

Pinedale is not the operator of its Pinedale properties and the properties are operated by designated joint interest owners in the leases. The Pinedale properties host commercial reserves of natural gas and natural gas liquids derived from the Lance Pool of the Pinedale natural gas field.

The following is a general description of the Pinedale's principal oil and natural gas properties at December 31, 2018.

The Lance Pool comprises a thick interval of Lower Tertiary and Upper Cretaceous gas charged, low permeability sandstones and siltstones the bulk of which exist within the Lance Formation and Upper Mesaverde interval of the Mesaverde Group. A major northwest and southeast trending compressional structural feature known as the Pinedale anticline is a significant controlling element associated natural gas accumulations and concentrations Pinedale field reservoirs. The Pinedale anticline is about 35 miles long and 6 miles wide.

Historically, wells drilled in this area have encountered gas bearing formations however poor reservoir quality rendered production uneconomic. In 1996-1997 multistage hydraulic frac completions resulted in successful exploitation of gas resources and application of fracture stimulation and completion technologies continues to yield economic success for wells drilled in

this area. Commercial wells have high initial production rates, allowing for rapid return on invested capital. The initially high production rates decline sharply but wells continue to produce for long periods of time. Reservoir quality and thickness generally diminishes eastward, off the crest of the Pinedale Anticline structure. Low reservoir permeabilities and a general lack reservoir interconnectivity result in wells draining a limited area. Typically, vertical wells drilled on 40-acre spacing will not exhibit any production interference with offset wells. To facilitate recoveries of gas in place the Pinedale field is currently approved for development on 5-acre infill vertical well spacing. In addition to the vertical well drilling, certain operators have recently begun to trial horizontal well development in the Lance and Mesaverde reservoirs and variable performance results have been realized.

### Oil and Gas Wells <sup>(1) (2)</sup>

The following table sets forth the number and status of wells in which the Company held a working interest at December 31, 2018:

	<u>Natural Gas Wells</u>				<u>Oil Wells</u>			
	Producing		Non-Producing		Producing		Non-Producing	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Wyoming, U.S.A.	26	4.745	-	-	-	-	-	-
Total	26	4.745	-	-	-	-	-	-

Notes:

(1) "Gross" wells means the number of wells in which the Company has a working interest.

(2) "Net" wells means the aggregate number of wells obtained by multiplying each gross well by the Company's percentage working interest therein.

### Properties Including Properties with No Attributed Reserves

The following table sets out the Company's developed and undeveloped land holdings as at December 31, 2018:

	<u>Undeveloped Acres</u>		<u>Developed Acres</u>		<u>Total Acres <sup>(1)</sup></u>	
	Gross	Net	Gross	Net	Gross	Net
Wyoming, U.S.A.	11,384	1,587	610	93	11,994	1,680
Total	11,384	1,587	610	93	11,994	1,680

Notes:

(1) Includes 380 developed acres (53.9 net) attributable to non-Company interest Lance Pool producing vertical wells owned by others that were developed on the Company's leases prior to 2013.

None of the Company's rights to explore, develop and exploit any of its unproved properties and leases will expire within one year from December 31, 2018 or the date of this filing.

### Forward Contracts

The Company's markets its natural gas production with production sold directly to credit-worthy counterparties and settled monthly. The Company's condensate production is marketed by the operator of its properties. From time-to-time, the Company may employ derivative financial instruments, primarily commodity price hedges, to manage fluctuations in oil and gas market prices. Financial hedges have not been included in the economic forecasts of the NSAI Report. See "Financial Instruments and Risk Management" in Pinedale Energy Limited's MD&A for the year ended December 31, 2018 for details on risk management financial derivative commodity contracts.

### Additional Information Concerning Abandonment and Reclamation Costs

The Company's future well abandonment costs including site reclamation with forecast pricing relating to Proved reserves are estimated to be \$1,145,100 or \$100,800 discounted 10%. The Company's estimates of abandonment costs are guided by area operator commentary. No abandonment or major reclamation costs are anticipated in the next three years. One hundred percent of such amounts were deducted as abandonment costs in estimating future net revenue of the Company in respect of proved reserves as disclosed above.

As at December 31, 2018 the Company expected to incur future abandonment and reclamation costs in respect of 28 gross (5.17 net) proved well locations.

The following table sets forth abandonment costs deducted in the estimation of the Company's future net revenue using forecast prices and costs:

	<u>Future Well Abandonment Costs</u> Forecast Prices Undiscounted (US\$000s)	<u>Future Well Abandonment Costs</u> Forecast Prices Discounted at 10% (US\$000s)
Total as at December 31, 2018	1,145.1	100.8
Anticipated to be paid in 2019	-	-
Anticipated to be paid in 2020	-	-
Anticipated to be paid in 2021	-	-

### Tax Horizon

Pinedale does not expect to pay income taxes for its most recently completed financial year. For additional information on Tax Horizon see "Taxes" in the financial statements and the management's discussion and analysis ("MD&A") of Pinedale Energy Limited for the year ended December 31, 2018

### Costs Incurred

For information on Costs Incurred see "Results of Operations" in the financial statements and the management's discussion and analysis ("MD&A") of Pinedale Energy Limited for the year ended December 31, 2018

### Exploration and Development Activities

The following table sets forth the gross and net exploratory and development wells completed by the Company during the year ended December 31, 2018.

	<u>Exploratory Wells</u>		<u>Development Wells</u>	
	<u>Gross</u>	<u>Net</u>	<u>Gross</u>	<u>Net</u>
Oil	-	-	-	-
Natural Gas	4	0.28	5	1.06
Dry	-	-	-	-
Total	4	0.28	5	1.06

## Production Estimates

The following table sets out the estimated gross production volumes related to the Company's reserves in calendar 2019 as evaluated by NSAI, which are reflected in the estimates of future net revenue disclosed in the tables above.

Category	Natural Gas Production (MMcf)	Natural Gas Liquid Production (Mbbl)	MMcf Gas Equivalent (MMcfe / Day)
Proved reserves	1,475	16.4	1,573
Probable reserves	-	-	-
Proved plus probable reserves	1,475	16.4	1,573

## Production History

	Three Month Period Ending			
	March 31, 2018	June 30, 2018	September 30, 2018	December 31, 2018
<b>Production volumes: <sup>(1)</sup></b>				
Natural Gas (Mcf/day)	6,175	7,311	6,012	5,114
Condensates (bbl/day)	56	72	57	47
Total (Mcf/day)	6,509	7,741	6,355	5,394
<b>Average sale price</b>				
Gas Equivalent (\$/Mcf)	3.80	3.35	3.98	5.41
Royalties (\$/Mcf)	0.80	0.71	0.87	1.17
Production taxes (\$/Mcf)	0.37	0.32	0.38	0.56
Operating expenses (\$/Mcf)	0.64	0.78	0.91	1.08
<b>Field netback (\$/Mcf) <sup>(2)</sup></b>	1.98	1.53	1.82	2.60

Notes:

- 1) Before deduction of royalties
- 2) Netbacks are calculated by subtracting royalties, production taxes and operating costs from revenues

For additional information on Production History and netbacks see "Results of Operations" in the financial statements and the management's discussion and analysis ("MD&A") of Pinedale Energy Limited for the year ended December 31, 2018.