



## ASX Announcement / Media Release

11 April 2017

### Material Increase in Reserves and Production (additional information provided on pages 4 and 5)

- **New independent reserves report from Netherland Sewell & Associates for Madden Gas Field**
- **Total Madden Gas Field Proved Gas Reserves increase to 79.5 BCF (13.3 MMBOE) – up 13%**
- **2P Proved + Probable Oil & Gas Reserves increase to 20.5 MMBOE – up 10%**
- **Madden Gas Field Production ahead of forecast at 4,000 BOE/day 24 MMCF/day – up 20%**

Elk Petroleum Ltd (ASX: ELK) (“Elk” or the “Company”) is pleased to advise that following an independent review by Netherland Sewell & Associates, Inc. (“NSAI”) the Reserves for the Madden Gas Field have materially increased and that gas production from the Madden Gas Field for the first quarter of 2017 is running well ahead of previous forecasts.

### Long-life Reserves

Following the completion of the Madden Gas Field acquisition, the Company engaged NSAI to conduct an independent review of the Reserves for the field based on the latest field performance, proposed operations plans and production information provided by the operator, ConocoPhillips. The Company’s Total Proven, Probable and Possible Reserves for the Grieve CO<sub>2</sub> EOR Project and the Madden Gas Field are set out in the table below.

Summary of Elk Petroleum Oil & Gas Reserves		
As of 1 January 2017		
Reserve Category	Elk Net (BCFE)	Elk Net (MMBOE)
Proved (1P)	79.5	13.3
Proved + Probable (2P)	123.1	20.5
Proved + Probable + Possible (3P)	145.0	24.2

Reserves independently audited by Netherland Sewell & Associates, Inc and VSO Petroleum Consultants as of 1 January 2017



The result of the NSAI independent review based on the latest operator data has resulted in a 13% increase in the 1P Total Proven Reserves for the Madden Gas Field and an overall 10% increase to 20.5 MMBOE in the Company's Total 2P Proven + Probable Reserves covering both the Madden Gas Field and the Grieve CO<sub>2</sub> EOR Project up from 18.3 MMBOE.

These significant increases in the 1P Total Proven and 2P Total Proven + Probable Reserves further highlight the high quality and material impact on the Company of the Madden Gas Field acquisition. A more complete break-down of the Company's Reserves is included in a detailed table included as an Appendix to this ASX release.

As previously announced there are significant behind-pipe discovered oil and gas Contingent Resources in the Madden Gas Field that have been identified by the operator. Over the coming months, the Company intends to conduct a further detailed review with NSAI to fully identify and account for these Contingent Resources. When this additional review is complete a further update will be provided.

### **Madden Gas Production Running Ahead of Forecast**

The Company is pleased to report that gas production from the Madden Gas Field for the first quarter CY 2017 has been running at approximately 24 MMSCF/day (4,000 BOE/day) which is well ahead of previous forecasts. The operator has also advised that while conducting additional production performance tests on the Lost Cabin Gas Plant that production net to Elk for the month of April 2017 is forecast to be approximately 28.7 MMSCF/day (~4,780 BOE/day) and that gas marketing arrangements should be made for these higher forecast volumes. Under the terms of the acquisition of the Madden Gas Field which completed on 17 March 2017, all production associated with the working interest acquired are for Elk's account effective 1 January 2017.

Upon announcing the Madden Gas Field acquisition on 4 January 2017, the Company advised that the Madden Gas Field acquisition would deliver long-term, low decline rate profitable production of approximately 20 MMCFD/day (3,400 BOEPD). As a result of sustained field production performance and high operator production efficiency, the Madden Gas Field is achieving significantly better production rates approximately 20% ahead of initial forecasts provided upon announcing the acquisition.

Managing Director Brad Lingo commented "The outcome of the NSAI Report and the production performance from the Madden Gas Field really highlight how attractive and how material the Madden Gas Field acquisition is to the Company. Our initial engagement with the operator ConocoPhillips has been excellent and they have clearly demonstrated that they have a team in place that knows this asset well and know how to get the best out of the Madden Gas Field and the Lost Cabin Gas Plant and are looking at both to be long-term profitable and material production assets."

Mr. Lingo continued, "We see lots of additional upside in the Madden Gas Field from both the current gas production as well as significant behind-pipe resources that have been identified by ConocoPhillips. We are also very focused on making the most out of the significant CO<sub>2</sub> resource that the Lost Cabin Gas Plant provides which has already been commercialized and connected into the Wyoming CO<sub>2</sub> Pipeline Network. This asset is an excellent fit for Elk and we will certainly be making the most of it."



## For further information, please contact:

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### **ABOUT ELK PETROLEUM**

Elk Petroleum Limited (ASX: ELK) is an oil and gas company specialising in Enhanced Oil Recovery (EOR), with assets located in one of the richest onshore oil regions of the USA, the Rocky Mountains. Elk's strategy is focused on applying proven EOR technologies to mature oil fields, which significantly de-risks the Company's strategy of finding and exploiting oil field reserves.

### **COMPETENT PERSONS STATEMENT**

The reserves and resources assessment follows the guidelines set forth by the Society of Petroleum Engineers – Petroleum Resource Management System (SPE-PRMS).

The Reserves and Contingent Resources in this announcement relating to the Madden Gas Field is based on an independent review and audit conducted by Netherland, Sewell & Associates, Inc. for Elk Petroleum Limited and fairly represents the information and supporting documentation reviewed. The review and audit was carried out in accordance with the SPE Reserves Auditing Standards and the SPE-PRMS guidelines under the supervision of Mr. Shane M. Howell and Mr. John R. Cliver, both Vice Presidents of Netherland, Sewell & Associates, Inc., an independent petroleum advisory firm. Mr. Howell is a Registered Professional Geologist in the State of Texas and Mr. Cliver is a Registered Professional Engineer in the State of Texas. Mr. Howell's qualifications include Master of Science in Geological Sciences, San Diego State University and a Bachelor of Science in Geological Sciences, San Diego State University. Mr. Howell has more than 10 years of relevant experience. Mr. Cliver's qualifications include a Masters of Business Administration from the University of Texas, Austin and a Bachelor of Science in Chemical Engineering from Rice University. Mr. Cliver has more than 10 years of relevant experience. Mr. Howell and Mr. Cliver meet the requirements of Qualified Petroleum Reserve and Resource Evaluator as defined in Chapter 19 of the ASX Listing Rules.

The Reserves and Contingent Resources in this announcement relating to the Grieve CO<sub>2</sub> EOR project, operated by Denbury Resources, is based on an independent review and audit conducted by VSO Petroleum Consultants, Inc. and fairly represents the information and supporting documentation reviewed. The review and audit was carried out in accordance with the SPE Reserves Auditing Standards and the SPE-PRMS guidelines under the supervision of Mr. Grant Olsen, a Director of VSO Petroleum Consultants, Inc., an independent petroleum advisory firm. Mr. Olsen is a Registered Professional Engineer in the State of Texas and his qualifications include a Bachelor of Science and Master of Science (both in Petroleum Engineering) from Texas A&M University. He has more than 10 years of relevant experience. Mr. Olsen is a member of the Society of Petroleum Engineers (SPE) and an Associate Member of the Society of Petroleum Evaluation Engineers. Mr. Olsen meets the requirements of Qualified Petroleum Reserve and Resource Evaluator as defined in Chapter 19 of the ASX Listing Rules and consents to the inclusion of this information in this report.

The information in this ASX release or presentation that relates to Reserve and Contingent Resources estimates for the Grieve CO<sub>2</sub> EOR project and the Reserve and Contingent Resource estimates for the newly acquired Madden Deep Gas Field and the Madden Deep Unit Singleton CO<sub>2</sub> EOR project have been compiled and prepared by Mr. David Evans, COO and Mr. Brian Dolan, COO-USA and VP-Engineering of Elk Petroleum Inc. who are both qualified persons as defined under the ASX Listing Rule 5.11 and both have consented to the use of the reserves figures in the form and context in which they appear in this presentation.

Mr. Evans is a full-time employee of the company. Mr. Evans earned a Bachelor of Science with Honours in Geology from the University of London, United Kingdom, a Post Graduate Diploma, Petroleum Exploration from Oxford Brookes University, United Kingdom and a Master of Applied Science, Geology from the University of Canberra and Australian National University in Canberra, ACT. Mr. Evans has more than 30 years of relevant experience. Mr. Evans has sufficient experience that is relevant to the company's Reserves and Resources to qualify as a Reserves and Resources Evaluator as defined in the ASX Listing Rules. Mr. Evans consents to the inclusion in this presentation of the matters based on the information in the form and context in which it appears.

Mr. Dolan is a full-time employee of the company. Mr. Dolan earned a degree in Mechanical Engineering from the University of Colorado at Boulder. Mr. Dolan has more than 24 years of relevant experience. Mr. Dolan has sufficient experience that is relevant to the company's Reserves and Resources to qualify as a Reserves and Resources Evaluator as defined in the ASX Listing Rules. Mr. Dolan consents to the inclusion in this presentation of the matters based on the information in the form and context in which it appears.



**Elk Petroleum Limited**  
**Net Oil & Gas Reserves**

<b>Summary of Elk Petroleum Oil &amp; Gas Reserves</b>		
As of 1 January 2017		
<b>Reserve Category</b>	<b>Elk Net (BCFE)</b>	<b>Elk Net (MMBOE)</b>
<b>Proved (1P)</b>		
<b>Madden Gas Field</b>		
Proved Developed Producing	71.3	11.9
Proved Developed Non-Producing	8.2	1.4
<b>Total Proved-Madden</b>	<b>79.5</b>	<b>13.3</b>
<b>Grieve CO<sub>2</sub> EOR Project</b>		
Proved Developed Producing	-	-
Proved Developed Non-Producing	-	-
<b>Total Proved-Grieve</b>	<b>-</b>	<b>-</b>
<b>Total Proved – Madden + Grieve</b>	<b>79.5</b>	<b>13.3</b>
<b>Proved + Probable (2P)</b>		
<b>Madden Gas Field</b>	91.3	15.2
<b>Grieve CO<sub>2</sub> EOR Project</b>	31.8	5.3
<b>Total Proved + Probable</b>	<b>123.1</b>	<b>20.5</b>
<b>Proved + Probable + Possible (3P)</b>		
<b>Madden Gas Field</b>	103.0	17.2
<b>Grieve CO<sub>2</sub> EOR Project</b>	42.0	7.0
<b>Total Proved + Probable + Possible</b>	<b>145.0</b>	<b>24.2</b>
Madden Gas Field Reserves independently audited by Netherland Sewell & Associates, Inc as of 1 January 2017. Grieve Reserves independently audited by VSO Petroleum Consultants, Inc. as of 1 January 2017.		
The Madden Gas Field and the Grieve CO <sub>2</sub> EOR Project Reserve totals provided in the table above have been aggregated on an arithmetic basis.		
Statement of Reserve quantities in “barrels of oil equivalent” or “billion cubic feet of gas equivalent” are based on the commonly accepted and applied conversion factor of 1 barrel of oil is equivalent to 6 mcf of gas.		

The above independent Reserves and Resources assessment follows the guidelines set forth by the Society of Petroleum Engineers – Petroleum Resource Management System (SPE-PRMS) and the reviews and audits by Netherland Sewell and Associates Inc. (“NSAI”) and VSO Petroleum Consultants, Inc (“VSO”) were carried out in accordance with the SPE Reserves Auditing Standards and the SPE-PRMS guidelines.

Both the NSAI and the VSO independent Reserve audits were prepared on a deterministic basis in accordance with U.S. Securities and Exchange Commission guidelines and standards consistent with existing U.S. oil and gas Reserve auditing and reporting standards and practice.



With respect to the Madden Gas Field estimates of Sales Gas Reserves reflected in the table above, these Reserves estimates are of commercial Sales gas quantities net to Elk Petroleum Limited as measured at the outlet of the Lost Cabin Gas Plant into several interstate open access sales gas pipelines connected to the Lost Cabin Gas Plant and through which the Madden Gas Field has been selling gas production processed and the Madden Joint Venture-owned Lost Cabin Gas Plant since 1995.

With respect to the Grieve CO<sub>2</sub> EOR Project estimates of crude oil Reserves reflected in the table above, these Reserves estimates are of commercial crude oil quantities net to Elk Petroleum Limited as measured at the outlet of the Grieve Central Production, Processing and CO<sub>2</sub> Recycle Facility into the Grieve Crude Oil Pipeline which is 100% owned by Elk Petroleum Limited and through which all crude oil production from the Grieve CO<sub>2</sub> EOR Project will be transported to the Casper Crude Oil Transportation and Marketing Hub upon project completion.

The increase in the Madden Gas Field Reserves as estimated by NSAI is based on the latest field production performance and reservoir pressure data provided by the operator, ConocoPhillips which has indicated that the overall field performance is higher than previously estimated and the actual production and field pressure decline rates is much lower than previously estimated. The overall impact of these factors has indicated that the Madden Gas Field is expected to produce significantly higher volumes of commercial quantities of sales gas as set out in the table above.

The economic basis for this evaluation is based on NSAI's independent assessment of forward gas prices which are significantly lower than the gas prices used in the previous Reserve estimates. The Sales gas prices used by NSAI in preparing the Madden Gas Field Reserve estimates are based on the NYMEX Henry Hub prices and are adjusted for energy content, transportation fees and market differentials applicable to the Madden Gas Field gas sales historically and are based on the NYMEX Henry Hub prices before adjustment as follows:

NYMEX Henry Hub Gas Prices	
Period Ending	Gas Price (\$/MCF)
12-31-2017	3.117
12-31-2018	3.009
12-31-2019	2.876
12-31-2020	2.860
Thereafter	2.860

Operating costs used in the NSAI Reserve estimates are based on operating expense records for the Madden Gas Field provided by the operator to Freeport McMoRan and in turn provided to Elk Petroleum Limited. These costs include the per-well overhead expenses allowed under joint operating agreements along with estimates of costs to be incurred at and below the district and field levels.