

ABN 38 112 566 499

8 April 2016

## Grieve Project Achieves Major Milestone

- Grieve Oil Field CO<sub>2</sub> EOR Project has achieved minimum miscible pressure a major milestone and key for a successful miscible CO<sub>2</sub> EOR project
- Consistent injection of water and CO<sub>2</sub> at rates of 55-60 mmscf/day has enabled the pressure in Grieve Field to reach estimated minimum miscible pressure of 2,256 PSI
- Latest surveys show field pressures have now reached 2,480 PSI and at current CO<sub>2</sub> injection rates Grieve Field could reach full repressurization ahead of schedule
- Achievement of minimum miscible pressure prepares Grieve Project for the successful commencement of oil production

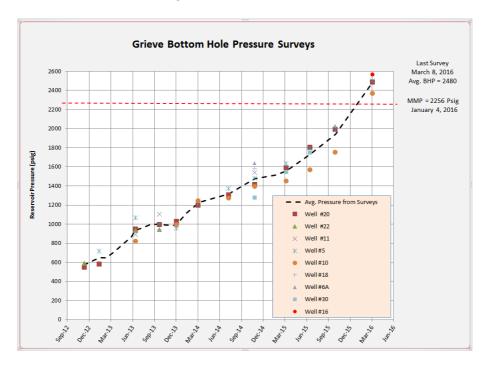
Elk Petroleum Ltd (ASX: ELK) ("Elk" or the "Company") is pleased to advise that a major milestone has been achieved in the Grieve CO<sub>2</sub> Enhanced Oil Recovery (EOR) Project. The latest field pressure surveys conducted by the project operator, Denbury Resources Inc. (Denbury) show that the repressuring of the Grieve Oil Field through the sustained injection of CO<sub>2</sub> supplied by Denbury and water have achieved estimated minimum miscible pressure ("MMP") within the Grieve Field oil reservoir – a major milestone and key for a successful CO<sub>2</sub> EOR project.

Grieve Project based on Restoring Original Field Pressure - The CO<sub>2</sub> enhanced oil recovery redevelopment plan for the Grieve Oil Field is based on restoring the field's original pre-production reservoir pressure of approximately 3,000-3,100 PSI before commencing production. This plan is designed to restore production wells across the field to a free flowing condition. A benefit of obtaining pre-production reservoir pressure is to restore the production wells to a free flowing condition. This eliminates the need to install artificial lift pumping to produce the oil to surface, thereby reducing production well capital and operating expenditures, including workovers. Under the proposed development plan, all of the CO<sub>2</sub> produced is recycled back into the field to recover more of the remaining oil.

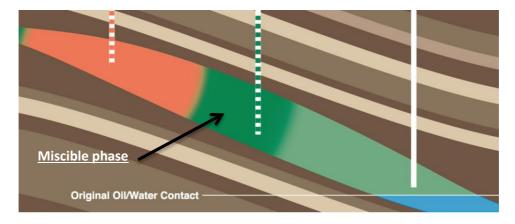
Minimum Miscible Pressure Achieved - Since mid-2015, CO<sub>2</sub> and water has been injected into the Grieve Oil Field. Over the last several months CO<sub>2</sub> injection rates have been averaging 55-60 mmscf/day. Denbury is supplying this CO<sub>2</sub> from its reserves in the Exxon Mobil-operated La Barge CO<sub>2</sub> gas field located in southwestern Wyoming. To date approximately 30 BCF of CO<sub>2</sub> has been injected into the Grieve Field. The latest field pressure survey was completed in late March 2016 and has shown the Grieve Oil Field pressures are now 2,480 PSI.

<u>Field Repressurization Running Ahead of Schedule</u> - Original field development repressurization projections indicated that minimum miscible pressures for the field were likely to be achieved in late March/early April 2016. The latest survey indicates that the field

continues to build pressure in-line with the injection of CO<sub>2</sub> and water. The repressurization of the field is currently ahead of schedule. The Company believes that based on the current CO<sub>2</sub> injection plan, full repressurization of the field could be achieved ahead of the original full field repressurization forecast of August 2017.



Grieve Field Redevelopment as a Miscible CO<sub>2</sub> Flood EOR Project - The Grieve Oil Field redevelopment is being implemented as a miscible CO<sub>2</sub> enhanced oil recovery project. A miscible CO<sub>2</sub> EOR project is a form of oil field redevelopment through which maturing oil fields are restored to or near to original pre-production pressures through the injection of pure CO<sub>2</sub> into the oil reservoir. As CO<sub>2</sub> is injected into the field, there is a point at which the field pressure is sufficiently high that the CO<sub>2</sub> begins to blend into the remaining oil in the field. The pressure in the field at which this begins to happen is referred to as "minimum miscible pressure".



Injected high pressured CO<sub>2</sub> forms a miscible phase with residual oil

Once minimum miscible pressure is reached the CO<sub>2</sub> begins to dissolve into the oil in the reservoir causing the oil to swell and reducing its viscosity. As the pressure further increases through the continued injection of CO<sub>2</sub>, this enables the CO<sub>2</sub> to displace the remaining oil from

the rock pores in the reservoir, pushing it towards production wells in the field. Reaching minimum miscible pressure is a key milestone in any successful miscible CO2 enhanced oil recovery project.

Background on Grieve CO<sub>2</sub> EOR Project Joint Venture & Restructure - The Grieve CO<sub>2</sub> EOR Project is being undertaken by a joint venture formed by Elk and Denbury in 2011 to redevelop the Grieve Oil Field through implementing a miscible CO<sub>2</sub>-flood enhanced oil recovery project. As previously announced on 21 December 2015, Elk and Denbury entered into a non-binding letter of intent ("LOI") outlining the basis for the restructuring of the Grieve CO<sub>2</sub> EOR Project Joint Venture pursuant to which the Company will substantially increase its working and beneficial interest in the project reserves and cash flows.

Elk currently holds a 35% working interest in the Grieve Project with Denbury, as the operator holding the remaining 65% interest in the project. Under the new terms of the joint venture, Elk's interest in the Grieve Project will increase to 49% working interest with Elk also receiving an average 70% of the first 2 million barrels of oil production from the project. Denbury will remain the operator of the project.

Elk will secure this increased interest in the project through funding US\$ 55 million - the final 30% of capital required to complete the project - in return for Denbury agreeing to a fixed cost and schedule to completion and supplying all the required CO2 needed to complete and operate the project.

Managing Director and CEO, Mr. Brad Lingo commented: "Reaching minimum miscible pressure in the Grieve Field is a major milestone for the project. This shows that the project is now advancing ahead quickly and is an essential achievement for any successful miscible CO<sub>2</sub> EOR project."

Mr. Lingo continued "The most recent field pressure survey shows the field is pressuring up consistently and now the injected CO<sub>2</sub> is beginning to dissolve in to the oil. With this blending starting to happen and since oil production will only commence once the field is fully repressured, our expectations are that the field should produce nicely once the production facilities are completed. This is something Elk shareholders have been very patient about and it feels great to be able to provide them with some really good news."

## For further information please contact:

Investor:

Media: Brad Lingo Rebecca Lawson

Managing Director/CEO Media and Capital Partners

P: +61 2 9093 5400 P: +61 433 216 269

E: ir@elkpet.com E: rebecca.lawson@mcpartners.com.au

## 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. Listed on the ASX in 2005, 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. Leveraging proven EOR technology and Company expertise and experience, Elk is currently developing the Grieve oil field in Wyoming (Elk - 35% WI) and is planning for a CO<sub>2</sub>-based EOR project at the Singleton oil field in Nebraska (Elk – 100% WI & operator).