



**ELK PETROLEUM**  
L I M I T E D

## ASX Release

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**Monday 31 July 2006**

**ELK PETROLEUM  
LIMITED**

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For the latest news:

<http://www.elkpet.com>

**Directors / Officers:**

Richard Wood  
Robert Cook  
Matthew Wood  
Glenda McLoughlin  
Timothy Flavel  
Bryant Mook

**Issued Capital:**

60.7 million shares

**ASX Symbol: ELK**

## JUNE 2006 QUARTERLY REPORT

### HIGHLIGHTS

- The Company has sold 17,511 barrels of net oil from the Grieve and Sand Draw South Oil Fields since listing. The Company has also sold 5.6 MMSCF of net gas since listing.
- Bottom hole pressure surveys across the Grieve Oil Field have revealed it to be far more compartmentalised than previously modelled. While this has the disadvantage of restricting communication across the field it has upgraded the possibility of virgin oil being contained in compartments that are yet to be drilled.
- Previously shot early generation two dimensional seismic of the Grieve Oil Field is being acquired for re-processing whilst new seismic is to be shot and combined with the re-processed seismic. This should define the faulting within the field and highlight the compartmentalisation across the field.
- Previously shot 2D and 3D seismic of the Sand Draw South Field is to be acquired and is to be re-processed with the view to identify new well targets.
- The Grieve Oil Field has been found to contain deeper oil bearing formations namely the Phosphoria and Tersleep, which warrant further investigation.
- An attempt to isolate the Upper Frontier Sands at the # 21 well was unsuccessful due to well bore conditions and hence the appraisal of the oil potential of this sand identified in the MHA report was not possible.
- The Company has assessed that the deeper of the Upper Sands can be more economically appraised with a new well drilled with modern techniques. The location of this new appraisal well will be selected following analysis of the seismic results.
- The test in the Lower Sussex at well #50 was non-commercial. The Lower Sussex will be re tested as part of the new appraisal well programme.
- The shallower Upper Sand units (Parkman and Phayles) at the Grieve Oil Field are to be appraised using selected existing wells.



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- The Cloverly Formation at the Grieve Field is currently being appraised.
- The development of a program for well workovers at Sand Draw South is underway with a view to redeveloping at least three of the temporarily abandoned wells. These workovers will be concurrent with work to determine the location of new well targets from the re-processing of existing seismic.

## **GRIEVE OIL FIELD**

On 12<sup>th</sup> May 2006 the Company mobilised a workover rig to appraise the Upper Sands identified in the independent MHA report, in addition to appraising the deeper Cloverly Formation.

The Lower Sussex was selected as the first sand to be appraised at well #50 because of encouraging indicators found in the drilling history of the well. Oil shows had been found in side wall cores of the Lower Sussex when the well was drilled which prompted the owners at the time to isolate this sand with cement behind casing when they completed the well.

Testing of the well proved the sand to be tight at the #50 well location. Hydraulic fracturing and subsequent extended pump testing of the sand produced only modest shows of hydrocarbon.

The Company is currently analysing the results of the #50 Sussex test and will evaluate other potential locations for a more extensive evaluation of this particular sand.

It is felt that the most appropriate manner to test this sand further will be as part of a new appraisal well.

The workover rig was moved to well #21 which was selected from the RST logs as being an excellent prospect to appraise the Frontier Formations. The initial part of this workover required that the Frontiers be isolated from the other Upper Sands by squeezing cement behind the casing of the well. Several attempts at isolation proved inadequate because of the condition of the hole behind casing. The Company will determine a location for a new well so that these deeper Upper Sands can be successfully appraised in a cost effective manner.

The appraisal of an Upper Sand at a particular well does not categorically prove or disprove the potential of the total sand but will provide an indication at that particular well. In either case, step out wells will be required to prove up reserves in the case of a positive result and wells in other faulted areas / compartments in the case of an unsuccessful outcome.



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The workover rig has been moved to well #7 to test the Cloverly Formations for hydrocarbons. The pre-existing Muddy perforations in this well have been cement squeezed to isolate that zone from the test interval. The upper Cloverly sand is then to be perforated and tested separately

Production from the Grieve Field was interrupted for approximately one month whilst the last portion of the northern arm of the production header was replaced. This was necessary because of corrosion in the buried pipeline. The Company took this opportunity to also replace and re-configure other buried process lines to simplify and improve the safety of the piping and processing operations.

Bottom hole pressures have been measured in a number of wells across the field. This new data which when combined with earlier pressure measurements taken by both the Company and earlier producers of the Field, suggests far more extensive faulting and therefore compartmentalisation than previously modelled.

This has prompted the acquisition of available seismic data across the field for re-processing and has identified the need to acquire at least one new line on strike to identify faulting in more detail. This will not only assist in locating potential Muddy Formation compartments that have not been drilled, but will also greatly assist with appraisal of the Upper Sands and the deeper Tensleep and Phosphoria Formations.

The Company has acquired approximately 200 acres adjacent to the Grieve Oil Field.

## **SAND DRAW SOUTH OIL FIELD**

Operations at the two 100% Company owned oil wells continue to perform well. A minor power outage resulted in the need for the pump in well #10 to be pulled and refurbished. This resulted in a modest drop in production for the quarter.

Oil production is currently averaging 44 BOPD with the total oil production for the quarter being 4,085 barrels. Gas production has been reasonably steady and has resulted in the highest quarter rate since the Company acquired Sand Draw South. The Company's net gas production (25% equity) was 2.1 MMSCF.

Redevelopment of other temporarily abandoned oil wells is currently being planned with the view to have a program ready for implementation at the end of August.



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Sand Draw South was one of the first fields in Wyoming to be the subject of 3D seismic. The Company has located that data and is in the process of acquiring it and other available 2D seismic over the field. The seismic data will be reprocessed with the aim of locating possible new well targets within the Frontier, Muddy, Phosphoria and Tensleep Formations.

## NEW PROJECTS

The Company continues to assess a number of hydrocarbon opportunities in North America.

## CORPORATE

The Company's gross and attributable oil and gas production for the year to 30 June 2006 is detailed in the following table:

		Qtr 1	Qtr 2	Qtr 3	Qtr 4	Total
<b>Gross Production:</b>						
Grieve Oil	barrels	1,137	1,447	1,375	1,338	5,297
Sand Draw South Oil	barrels	3,120	3,547	3,941	4,084	14,692
Sand Draw South Gas	MCF	8,222	3,844	4,174	9,599	25,839
<b>Attributable Production:</b>						
Grieve Oil	barrels	1,031	1,312	1,245	1,214	4,802
Sand Draw Oil	barrels	2,699	3,068	3,410	3,532	12,709
Sand Draw South Gas	MCF	1,799	841	913	2,101	5,654

Oil and gas sales (per the Income Statement) attributable to the Company for the quarter amounted to \$368,665 (YTD\$1,151,272) from 4,746 barrels of oil (YTD 17,511 barrels) and 2,101 MCF of gas (YTD 5,654 MCF).

Cash sales included in the Appendix 5B cash flow are attributable to the Company and exclude cash receipts for June that were received in July.

Cash reserves at 30<sup>th</sup> June 2006 were \$10.283 million.

**Robert Cook**  
**Managing Director**