

# **Winchester to Drill Lightning Prospect**

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**ASX Code: WEL** 

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## **Highlights**

- Winchester to spud new well Arledge 16#2 in July 2019 targeting the relatively shallow Cisco Sands at the Lightning Prospect
- The Lightning Prospect has a Gross Prospective Resource best estimate P50 of 1.95mmbo<sup>1</sup> in the lower sand lobe within the Cisco Formation.
- The Cisco Sands occur at the base of the Permian section or Wolfcamp 'C' and comprise marine shelf and slop fan deposits with porosities typically in the 12 - 16% range. However, porosities exceeding 20 percent can be observed on logs.
- Cisco Sands are a proven producer in the Permian basin, historically producing a cumulative 5 million barrels of oil and 2.25 billion cubic feet of gas. The average producer makes 57,000 barrels of oil and 25 million cubic feet of gas totaling 98,000 barrels of oil equivalent per 40 acre well.
- The well will test a 150 foot section of the Cisco Formation and targets a thick sequence of thin bedded pay, demonstrated in offset wells and mappable on seismic. It is a stratigraphic trap and the Arledge 16#2 will test 150 ft of potential gross oil pay in the lower sand lobe with anticipated net potential of 29%.
- The target interval, the lower lobe, is interpreted to have about 40 feet of net pay based on wireline logs in Arledge 16#1 well. Forty-six thousand (46,000) barrels of oil was produced from the same interval in Arledge 215 #1 down dip from the current location and oil shows were observed in up dip wells along with a positive DST test, all of which support the possible presence of oil.
- Arledge 16#2 has a planned total depth of 5,500ft and will satisfy lease hold drilling commitments and extend the Arledge lease (3,342 acres) by a further year

<sup>&</sup>lt;sup>1</sup> Cautionary Statement - The estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons. Mmbo mean million barrels of oil



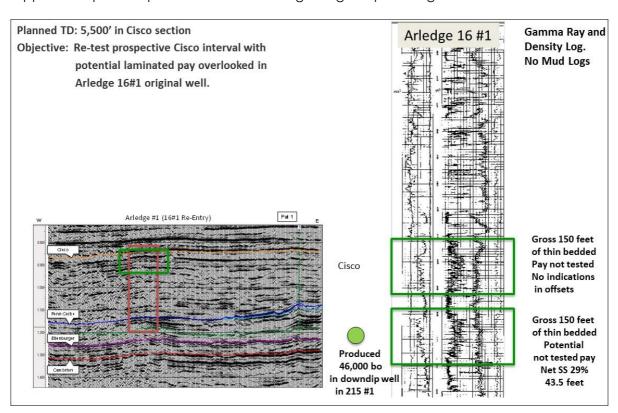
Winchester Energy Limited (Winchester) will spud new well Arledge 16#2 in July 2019 targeting the relatively shallow Cisco Sands at the newly defined Lightning Prospect.

The Cisco Sands are a proven producer in the Permian Basin, historically producing over 5 million barrels and 2.25 billion cubic feet of gas with 89 producing wells averaging 57,000 barrels and 25 million cubic feet of gas per well a broad area. The Cisco sands have produced approximately 100,000 barrels in the Bast Field located 1 mile to the northeast of the Arledge 16 #2 proposed well location.

The prospect targets a thick sequence of thin bedded pay, demonstrated in offset wells and mappable on 3D seismic. It is a stratigraphic trap and the Arledge 16#2 will test 150 ft of potential gross oil pay with a net pay of 29%.

The target interval, the lower sand lobe, is interpreted to have about 40 feet of net pay from wireline logs in the Arledge 16#1 well. Production from a down dip location recovered 46,000 barrels of oil from the same interval and oil shows were observed in updip wells along with a positive DST test results, all of which support the possible presence of oil.

The well will essentially twin the Arledge 16#1 well drilled in 1982 targeting the Ellenburger Formation. Arledge 16#1 encountered 300ft of laminated sands (Cisco Sand) in two sand lobes as interpreted from wireline logs. Down dip oil production recorded from historic wells supports the possible presence of oil in the Lightning Prospect target zone.





Arledge 16#2 has a planned total depth of 5,500ft and will satisfy lease hold drilling commitments and thereby extend the Arledge lease (3,342 acres) by a further year.

Gross Prospective Resources calculated for the lower sand lobe of the Lightning prospect are estimated in the table below. The Chance of Success (COS) of recovering oil and gas has been estimated at 22.5%\*\* based on the risks proportioned as 50% Trap, 50% Seal, 90% Charge and 100% Reservoir.

### Revised Prospective Resources Estimate for the Lightning Prospect (Cisco Sands)

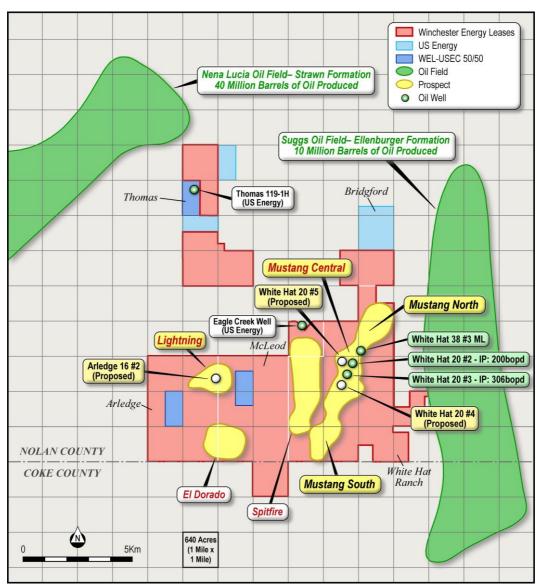
Lightning Prospect	Low Estimate P90*	Best Estimate P50*	High Estimate P10*
Gross Prospective Resources	0.602mmbo	1.95mmbo	6.392mmbo
Total Net to WEL***	0.482mmbo	1.56mmbo	5.11mmbo

<sup>\*</sup>Cautionary Statement - The estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.

<sup>\*\*</sup> Estimated probability of success in finding oil is based on Winchester's analysis of the risk relating to presence of: Trap X Reservoir X Seal X Charge.

<sup>\*\*\*</sup> Total Net to WEL is its current Entitlement Share (80%), net of applicable lease royalties and 100% working interest in the Lightning prospect. WEL's future entitlement share may be subject to reduction in the event of farmout in the future, should any farmout occur.





Location of Lightning Prospect and the Arledge 16#2 well

### **About Winchester Energy Ltd (ASX Code: WEL)**

Winchester Energy Ltd (ASX Code: WEL) is an Australian ASX listed energy company with its operations base in Houston, Texas. The Company has a single focus on oil exploration, development and production in the Permian Basin of Texas. The Company has established initial oil production on its large 17,000 net acres leasehold position on the eastern shelf of the Permian Basin, the largest oil producing basin in the USA. Winchester's lease position is situated between proven significant oil fields. Winchester is of the view that with the several known oil productive horizons in its lease holding, that it can build through the application of modern geology, 3D geophysical analysis, drilling and completion methods, a potentially significant proven reserves and oil production asset.



#### **Competent Persons Statement**

The information in this ASX announcement is based on information reviewed by Mr Neville Henry. Mr Henry is a qualified petroleum geologist with over 43 years of Australian, USA and other international technical, operational and executive petroleum experience in both onshore and offshore environments. Mr. Henry has extensive experience of petroleum exploration, appraisal, strategy development and reserve/resource estimation, as well as new oil and gas ventures identification and evaluation. Mr Henry has a BA (Honours) in geology from Macquarie University.

The Prospective Resources estimates in this report have been compiled by Kurt Mire, P.E. of Mire & Associates, Inc. from information provided by Winchester Energy. Mr Mire is a registered professional Engineer in the State of Texas and has over 30 years' experience in petroleum engineering. These Prospective Resource estimates may be subject to revision if amendments to mapping or other factors necessitate such revision.

Mr Mire consents to the inclusion in this report of information relating to the hydrocarbon Prospective Resources in the form and context in which it appears.

#### **Prospective Resource Estimates Cautionary Statement**

The estimated quantities of petroleum in this report that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.

#### **Prospective Resources**

All Prospective Resource estimates provided in this report are prepared as of 25 September 2018. The prospective resource estimates provided in this report are low estimate, best estimate and high estimate and represent that there is a 90%, 50% and 10% probability that the actual resource volumes will be in excess of the amounts reported. The estimates are on a 100% basis and have been prepared in accordance with the definitions and guidelines set forth in the Petroleum Resource Management System 2007 "PRMS" approved by the Society of Petroleum Engineers and have been prepared using probabilistic methods. Unless otherwise stated the estimates provided in this report are Best Estimates. The estimates are unrisked and have not been adjusted for an associated risk of discovery and risk of development. The 100% basis refers to the gross total prospective resource. The net to WEL prospective resource estimates include royalty interests payable to royalty interest holders.

#### **Prospects**

The meanings of "Prospects" in this report are in accordance with the Petroleum Resource Management System 2007 approved by the Society of Petroleum Engineers. A Prospect is a project that is sufficiently well defined to represent a viable drilling target.

Prospective Resources Reporting Notes for the Lightning Prospect Reported for the First Time

• The prospective resources information is effective as at 25 September 2018 (Listing Rule (LR) 5.25.1).



- The prospective resources information has been estimated and is classified in accordance with SPE PRMS (Society of Petroleum Engineers Petroleum Resources Management System) (LR 5.25.2).
- The prospective resources information is reported according to the Company's economic interest in each of the resources and net of royalties (LR 5.25.5).
- The prospective resources information in this document has been estimated and prepared using the probabilistic method (LR 5.25.6).
- Prospective resources are reported on a P10-P50-P90 basis (LR 5.28.1).
- For prospective resources, the estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons (LR 5.28.2).
- The Lightning Prospect is located on a private lease. In respect of the prospective resources for the prospect referred to in this report, Winchester currently owns a 100% of the Lightning prospect. However, it is noted that third-party companies may additionally farmin to the prospects, leases and/or wells (LR 5.35.1).
- The P10-P50-P90 and mean prospective resource volumes for the three prospects were estimated using modern 3D seismic data. Such data are standard in the oil and gas industry as a tool for identifying prospects and these data currently provide the industry's most accurate method of estimating prospective resource volumes and attendant risks. The parameters used in the acquisition and processing of the seismic surveys is commensurate with the industry standard for the East Permian Basin area. Exploration drilling will be required to assess these resources. (LR 5.35.2):
- The probability of discovery for the prospect is outlined in the report. There is a risk that exploration will not result in sufficient volumes of oil and/or gas for a commercial development (LR 5.35.3).
- Prospective resources in this report are un-risked and have not been adjusted for an associated chance of discovery and a chance of development. The report includes volumes which are the probabilistic addition of the risked prospective resource distributions. See below for further explanation (LR 5.35.4).

### Further Notes on the Prospective Resources Calculation at the Lightning Prospect

Winchester has accumulated a massive proprietary regional East Permian Basin database comprising well drilling and production information from private and public sources. This database is used by Winchester and Mire and Associates, Inc in generating probabilistic estimates for future wells and programs where the data can be tailored to the specific parameters required for analysis such as depth, play type, etc.

The Prospective Resources were calculated utilising the above mentioned regional database. From the regional database Mire and Associates, Inc developed a series of expectation curves from which the P90-P50-P10 outcomes shown have been extracted. Winchester has undertaken its own due diligence on these data and is satisfied that they represent a good estimate for the portfolio of opportunities to be drilled.

For the prospect, a probabilistic prospective resource was calculated using analogue offset well information and high-quality 3D seismic data. The probabilistic additions above have been undertaken using a Monte Carlo approach to each prospect's expectation curve.



Forward Looking Statements - This document may include forward looking statements. Forward looking statements include, are not necessarily limited to, statements concerning Winchester Energy Limited's planned operation program and other statements that are not historic facts. When used in this document, the words such as "could", "plan", "estimate", "expect", "intend", "may", "potential", "should" and similar expressions are forward looking statements. Although Winchester Energy Limited believes its expectations reflected in these are reasonable, such statements involve risks and uncertainties, and no assurance can be given that actual results will be consistent with these forward looking statements. Winchester Energy Limited confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning this announcement continue to apply and have not materially changed.