Oil Shows in Target Strawn Formation - White Hat 20#3 Mustang Prospect, Permian Basin, Texas

Highlights

- Currently drilling ahead at 6,020 feet. Primary target formation, the Strawn Sand, has recorded good to excellent oil shows.

- The Strawn Sand target was intersected at 5,920 feet. The Sand had visual porosity of 10–12%, increasing to 18%. This exceeds porosity found in the successful While Hat 20 #2 well.

- The sand appears 20 feet high to prognosis based on cuttings and the samples suggest that net sand is over 30–45 feet - at the high end of the predicted thickness.

- Above the Strawn sand, a thick section of Strawn Lime was drilled between 5,770 feet and 5,910 feet with fair to good oil shows in cuttings. This follows the oil shows and elevated gas readings observed in the Three Fingers Shale interval (5,550–5,610 feet).

Winchester Energy Limited (Winchester), as operator, advises that it is currently drilling ahead at 6,020 feet in the White Hat 20#3 well (Winchester 75% WI) targeting the Mustang Prospect.

The White Hat 20#3 well is a step out on a large stratigraphic sand play in the Strawn Formation that will also test fractured Ellenburger and other prospective units.

The primary target, the upper Strawn Sand (Fry), was reported at 5,920 feet by the wellsite geologist, 20 feet higher than prognosis. Good to excellent oil and gas shows were observed and the visual porosity is very encouraging, estimated between 10–12% with intervals as high as 18%. At 35–45 net feet, the thickness of the sand appears to be at the upper end of the predicted range. The well was still in Strawn Sand at 6,000 feet.
Fair and good oil shows were also encountered in the Strawn Lime, a secondary target between 5,770 ft and 5,910 ft, 50 feet high to the nearby producing White Hat 20#2. The shows were observed with good fluorescence and cut in limestones with thin interbeds of dark organic, laminated shale. These shows follow oil and gas shows found in the Three Fingers organic shale (5,550 – 5,610 ft) announced 25 March 2019.

The White Hat 20#3 well is drilling ahead at 6,020 feet and is expected to drill through additional lower Strawn sands prior to logging at 6,450 feet. It is estimated that White Hat 20#3 will reach total depth of 6,870 feet in the Ellenburger in approximately 3 - 4 days.

Carl E Gungoll Exploration LLC (CEGX), a private independent Texas based company, is participating for a 25% working interest in the drilling of White Hat 20#3.

White Hat 20#3 represents the first well in a significant forthcoming exploration drilling campaign. In an exciting time for the company, over the coming months Winchester will be drilling several new vertical wells targeting Prospective Resources within the Mustang, Spitfire and El Dorado prospects.

The Mustang Prospect has a gross Prospective Resource target best estimate P50 of 2 million bbls recoverable and high estimate P10 of 5 million bbls recoverable. Only the Strawn sand and Ellenburger carbonates are considered in the determination of the Prospective Resources for the Mustang Prospect.

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. See announcement dated 15 October 2018 for further detail.
Mustang Prospect Background - Winchester 75% Working Interest (WI)

The area of the Eastern Permian Basin surrounding Winchester’s large leasehold position has produced over 100 million barrels of oil from the Strawn Formation and the Ellenburger Limestone.

Reprocessing of 3D seismic data and detailed analysis of past wells drilled within Winchester’s large leasehold has defined several overlooked stratigraphic traps in Strawn Formation sands. The first evidence of the oil bearing potential of this ‘new’ stratigraphic play (the Mustang Prospect) was the successful White Hat 20#2 well.

White Hat 20#3 is a 3D seismically defined step out well of the initial ‘discovery’ well, White Hat 20#2, to determine whether the Mustang Prospect stratigraphic trap as interpreted extends over an area of up to 2,000 acres.

The location of White Hat 20#3 is approximately 510 metres to the south west of the White Hat 20#2 well. White Hat 20#2 produces oil from the Strawn sand. This well had an initial production rate of 200 barrels of oil per day (bopd) following a frac stimulation and...
continues to produce oil at 40 bopd. Mire and Associates recently increased the estimated ultimate recovery (EUR) from the White Hat 20#2 well to 112,000 barrels of oil (bo).

In more detail, the Mustang Prospect is a Strawn sand stratigraphic trap interpreted to be composed of a series of Strawn quartz, low stand sand lobes deposited in a linear NE-SW trend in front of the regional Pennsylvanian carbonate shelf located to the east.

![Mustang Prospect, Strawn Sand Isopach (ft) showing Strawn & Ellenburger oil production](image)

A secondary target is the underlying Ellenburger Limestone. The JF#3 well, 420 metres to the southwest of White Hat 20#3, has produced 150,000 bo from the Ellenburger formation with an initial production rate of 100 bopd.

Given the control over the Mustang Prospect provided by the 3D seismic, a producing well in the primary Strawn target zone 510 metres to the northeast of the drill location (White Hat 20#2), past Ellenburger oil production 420 metres to the southwest (JF#3) and 220,000 bo from Winchester’s White Hat 21#1 and White Hat 21#4 wells to the northeast, the estimated probability of success for both targets is 58%.

Cautionary Statement: 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.

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SW – NE 3D Seismic Line through Proposed Drill Location White Hat 20#3
The importance of the Strawn Formation as a potentially significant exploration and development target within Winchester’s leasehold is demonstrated by successful industry activity 18 miles to the northwest of Winchester’s leasehold in the Hermleigh Field.

Recent horizontal drilling and multi stage fracture programs in the Hermleigh Field have produced initial flow rates of up to 1,461 bopd from the Strawn Formation. As vertical wells, they produced at low rates of 35 bopd and 40 thousand cubic feet of gas per day.

The White Hat 20#3 well will penetrate the Strawn Lime which has produced oil in White Hat 39#1. The well will also evaluate the Three Fingers Shale and lower Penn shales of the organic-rich section of the Wolfcamp “D” formation which is currently being considered as a resource target by US Energy Corporation (USEC) in the Thomas and Bridgford lease areas.

Winchester regards all these units, along with the Strawn Sand and Ellenburger as potentially prospective for oil and/or gas.
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**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 Person’s Statement**

The information in this ASX announcement is based on information compiled or 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. He 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.