



INVICTUS
ENERGY LIMITED

Seismic inversion results show potential for multiple stacked hydrocarbon bearing zones in Mukuyu Prospect

12 May 2022

HIGHLIGHTS

- **Seismic Inversion and further quantitative analysis studies indicate strong potential for stacked pay intervals at shallow target level in Post Dande (Horizon 200)**
- **Likely to comprise of multiple stacked hydrocarbon bearing zones from 40-80m thick**
- **500 Horizon Target (Upper Angwa) demonstrates extensive flat spot across southern flank of structure**
- **New PSDM (Pre-Stack Depth Migration) studies show anomalous, low interval velocity zones, correlative with target intervals within structural closure in Upper Angwa primary target (Horizon 500 & 600) potentially indicative of gas fill**

Invictus Energy Limited ("Invictus" or "the Company"), is pleased to provide an update on the activities of its 80% owned and operated Cabora Bassa Project in Zimbabwe.

Seismic inversion results show potential for multiple stacked hydrocarbon bearing zones in new Post Dande target (Horizon 200)

Further quantitative analysis (QA) studies continue to provide support for the presence of potential hydrocarbons in the Mukuyu structure. The results from a seismic inversion/QA study indicate that the section immediately below the Horizon 200 target is likely to comprise multiple stacked hydrocarbon bearing zones, ranging in thickness from 40 to 80m. Accordingly this has necessitated an update to the drilling program to include a diverter system for the shallow sections of the Mukuyu-1 well.

This attribute, Lambda-Rho (LR) is shown in Figure 1 below.

The [ASX release](#) on 7 April 2022 highlighted the extensive amplitude anomaly at the Horizon 200 level and the very positive correlation of amplitude extent and structural closure – this fit to structure is regarded as a very strong attribute for any prospect and a potential Direct Hydrocarbon Indicator (DHI).

The Horizon 200 target is newly identified from the 2021 Cabora Bassa 2D Seismic Survey ("CB21 Survey") and will be first target tested in the Mukuyu-1 well as shown in Figure 7.

ABOUT INVICTUS ENERGY

Invictus Energy Ltd is an independent oil and gas exploration company focused on high impact energy resources in sub-Saharan Africa. Our asset portfolio consists of a highly prospective 250,000 acres within the Cabora Bassa Basin in Zimbabwe. Special Grant 4571 contains the world class multi-TCF Mukuyu (Muzarabani) and Msasa conventional gas-condensate

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Non-executive Chairman

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Non-Executive &
Deputy Chairman

Scott Macmillan
Managing Director

Gabriel Chiappini
Non-Executive Director
& Company Secretary

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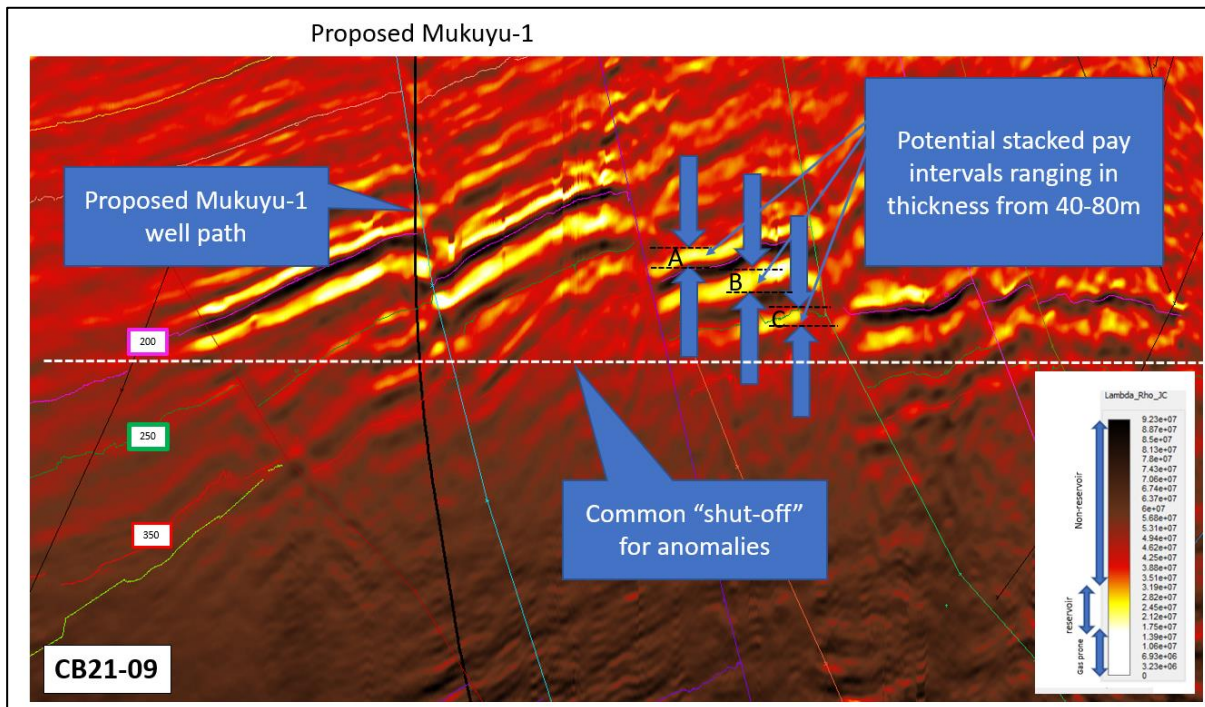


Figure 1 – Lambda-Rho attribute for Line CB21-09 showing potential for stacked hydrocarbon bearing zone below Horizon 200

While there are no wells present in the basin to enable calibration of the results, the strength of the anomaly and the values calculated are in the range that potentially indicate the presence of light hydrocarbons (most likely gas). The common depth shut-off of the anomaly as seen on multiple lines is further indication of a trapped accumulation – this is illustrated in Figure 2.

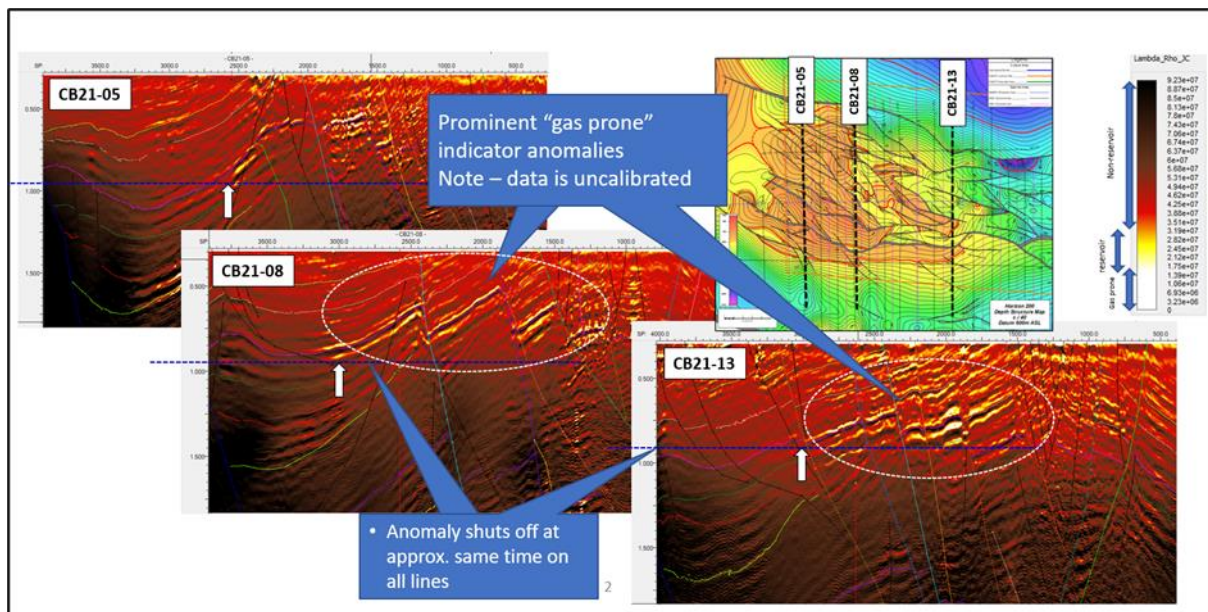


Figure 2 – Lambda-Rho attribute for Line CB21-09 showing potential for stacked pay below horizon 200 shown across multiple dip lines.

500 Horizon Target (Upper Angwa) demonstrates extensive flat spot across southern flank of structure

Additional studies from the seismic interpretation have revealed some very positive elements in the section immediately below the Horizon 500 level.

Figure 3 shows the FAR offset stack section for a series of nine consecutive dip lines across the Mukuyu structure, while Figure 4 highlights the location of these lines. The anomalies within the coloured circles in Figure 3 highlight where an anomalous Nears to Fars anomaly has been noted at the Horizon 500 level.

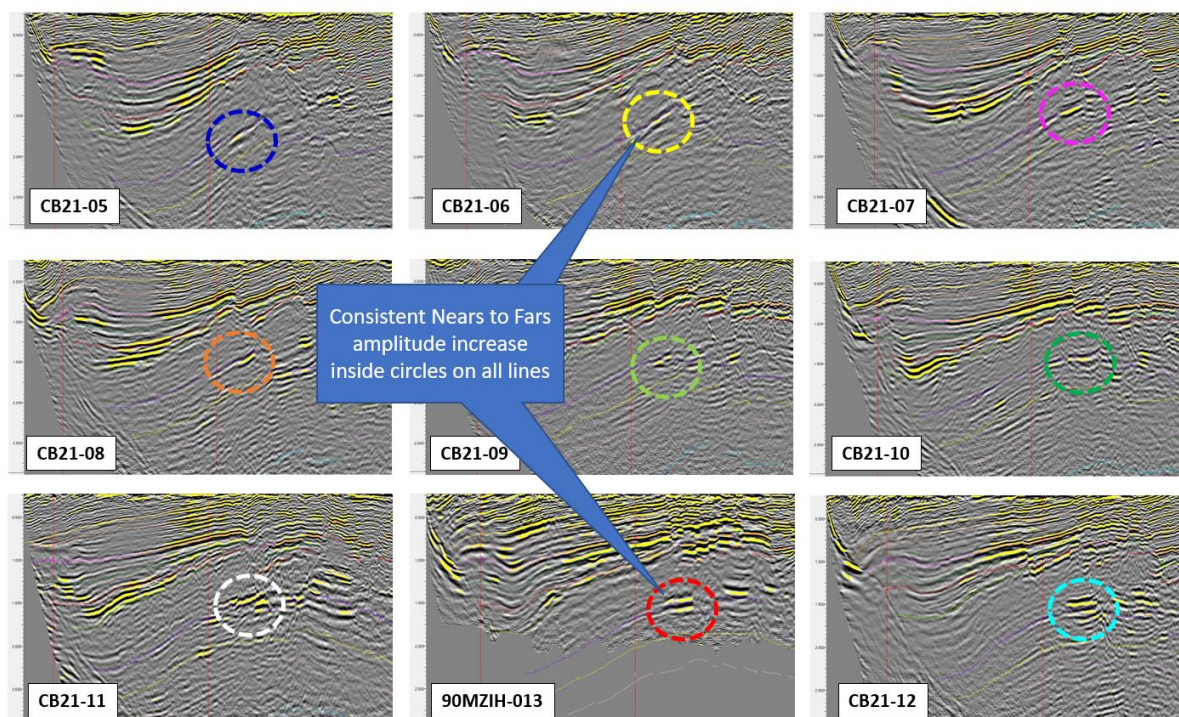


Figure 3 – “FARS” section for dip lines across the Mukuyu structure (refer to Figure 2 for map reference line locations).

The positions of these anomalies are annotated (and colour coded accordingly) on Figure -4. Of particular interest is the consistent positioning of each of these anomalies and the persistence at which they occur.

These anomalies do extend across to the northern side of the Mukuyu structure, however as the overlying horizons are more faulted there, the seismic raypaths are more complex and therefore less conducive to clearly reveal the AVO (Amplitude Versus Offset) Nears to Fars anomaly on the northern side of the structure.

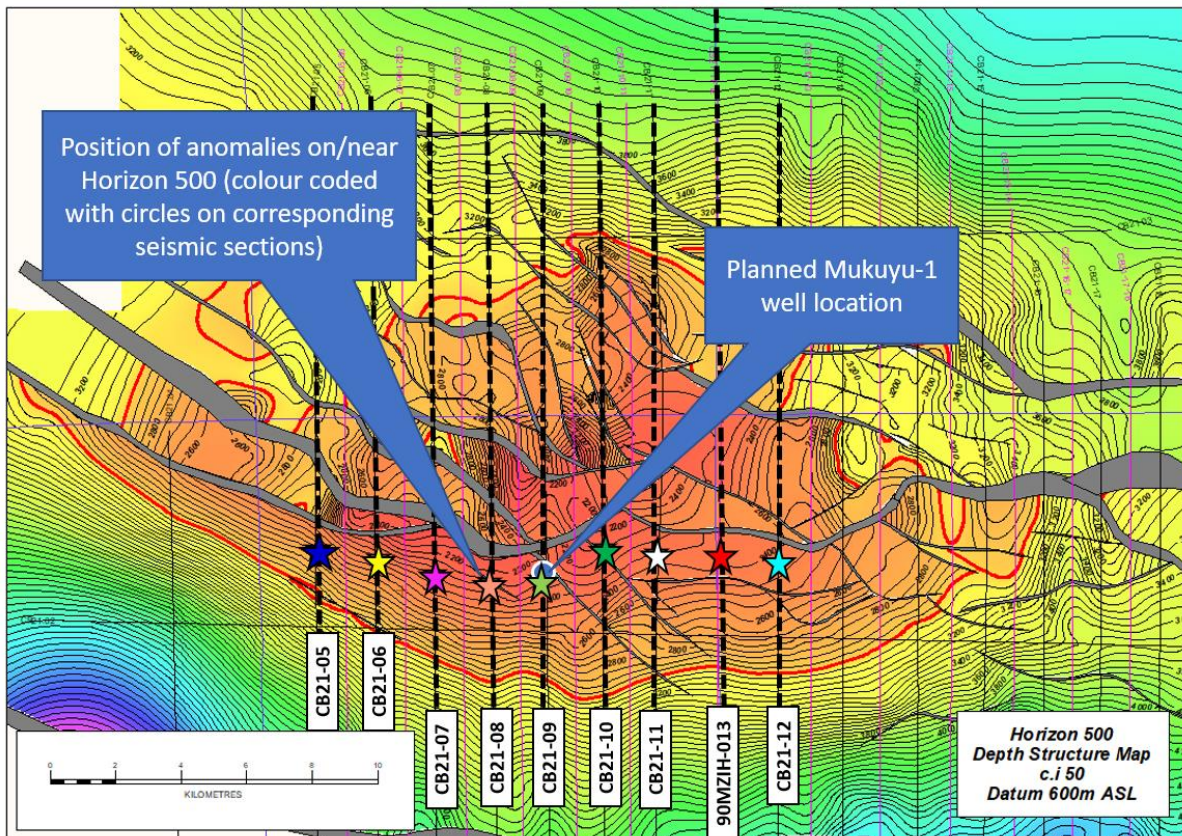


Figure 4 – Locations of FARS anomalies on the Mukuyu structure at primary target Horizon 500.

In places the anomaly often reveals a “flat spot” which can be seen as further validation for the potential presence of hydrocarbons. Such flat spots are usually the seismic reflection from the base of a hydrocarbon column. An example from the lines above is shown at Figure 5.

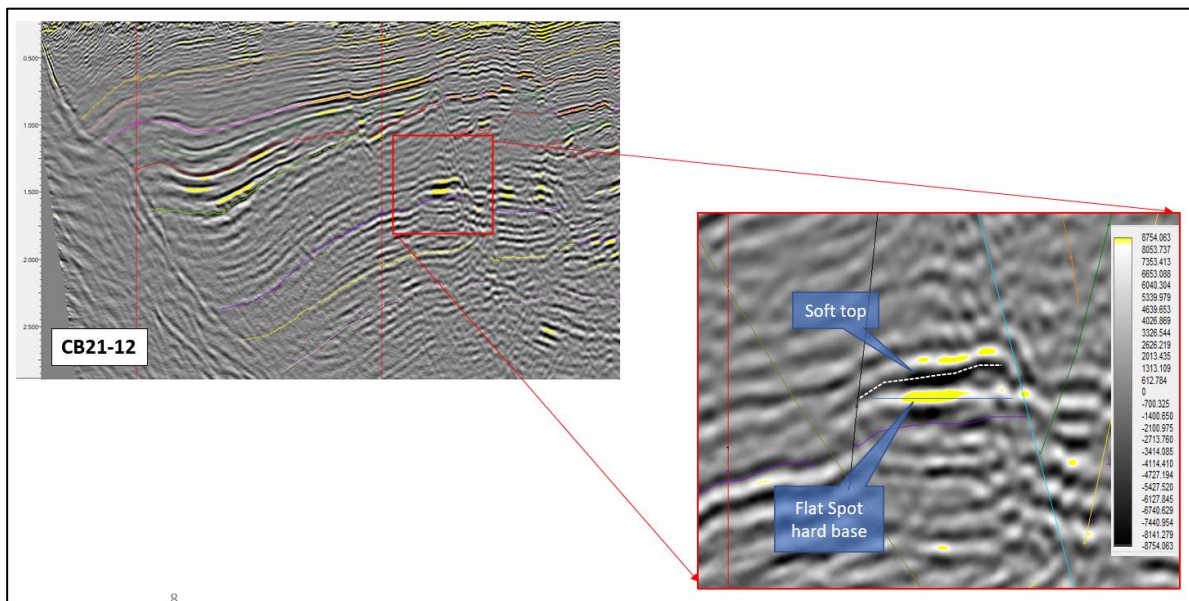


Figure 5 – Example of “flat spot” from line CB21-12 (refer to Figure 2 for line location).

Pre-Stack Depth Migration (PSDM) show anomalous, low interval velocity zones, correlative with target intervals within structural closure in Upper Angwa primary target (Horizon 500 & 600) potentially indicative of gas fill

Further positive indicators for the potential presence of hydrocarbons can be shown by interval velocity data. Interval velocities are usually slower in the presence of gaseous hydrocarbons where the interval is of sufficient thickness to provide a response.

Pre-Stack Depth Migration (PSDM) was undertaken on selected lines for depth control across the project area. As part of the PSDM processing, a detailed interval velocity model is derived.

Figure 6 shows the interval velocity overlay for dip lines CB21-06 and strike line CB21-02. On strike line CB21-02, there is a clear lens of lower interval velocity at the 500 - 600 level. This lens appears limited in extent to the breadth of the Mukuyu structure. Similar lenses of lower interval velocity are seen on dip line CB21-06.

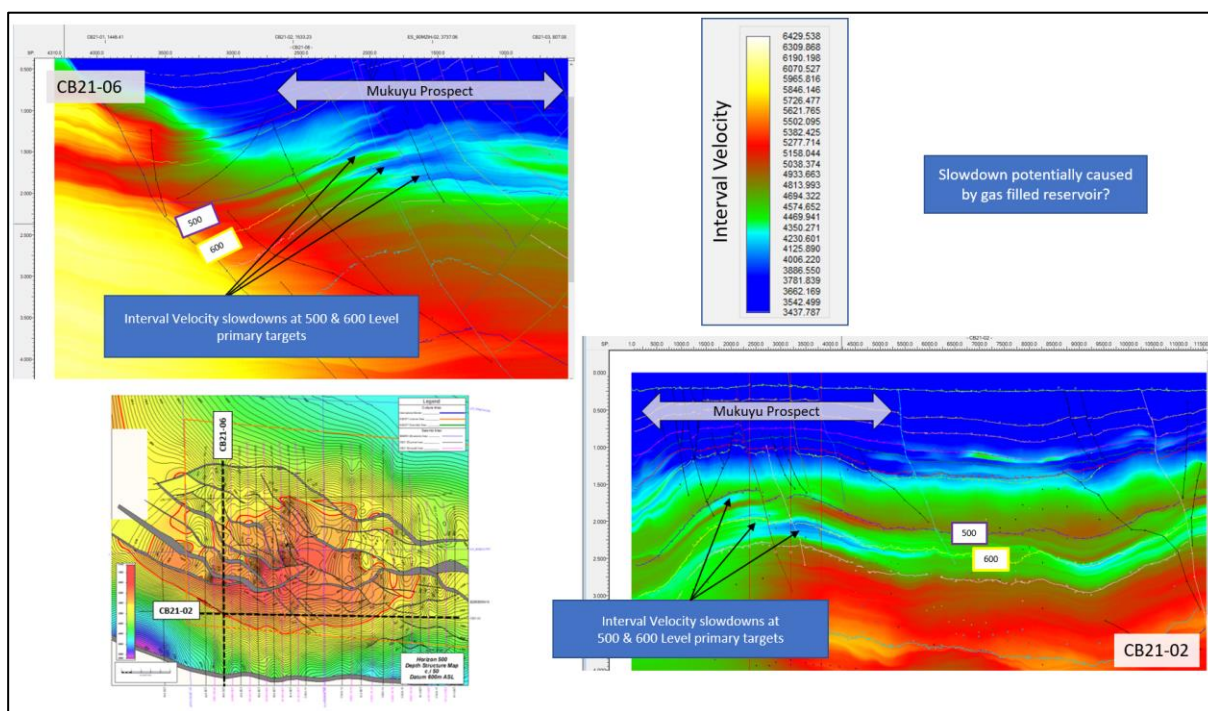


Figure 6 – Interval velocity overlay showing lower interval velocity lenses coincident with structure at deeper levels

This anomalous, relatively slower interval velocity appears to be uniquely associated with the extent of the Mukuyu structure at the lower horizons where gaseous hydrocarbons are more likely. This uniqueness is considered to be a very positive encouragement for the presence of a significant gas interval in the lower primary targets of the Mukuyu structure.

The Mukuyu-1 well will test multiple stacked targets within the greater Mukuyu structure which is independently estimated to contain 8.2 Tcf + 247 million barrels of conventional gas-condensate (gross mean unrisks).

Managing Director Scott Macmillan commented

"The Cabora Bassa 2021 Seismic Survey data continues to deliver results ahead of the 2-well drilling program scheduled to commence in July.

"The multiple seismic anomalies evident in the Mukuyu prospect across our numerous stacked target horizons, which also demonstrate structural conformance, is highly encouraging and provides us with increased confidence in delivering a successful exploration outcome.

"The drilling campaign is taking shape with the Exalo Rig 202 preparing for mobilisation to Zimbabwe and long lead items arriving at our warehouse.

"The Mukuyu-1 wellpad construction is anticipated to be completed in the next few weeks and we are also continuing to make progress on the selection of the second well location for the upcoming campaign."

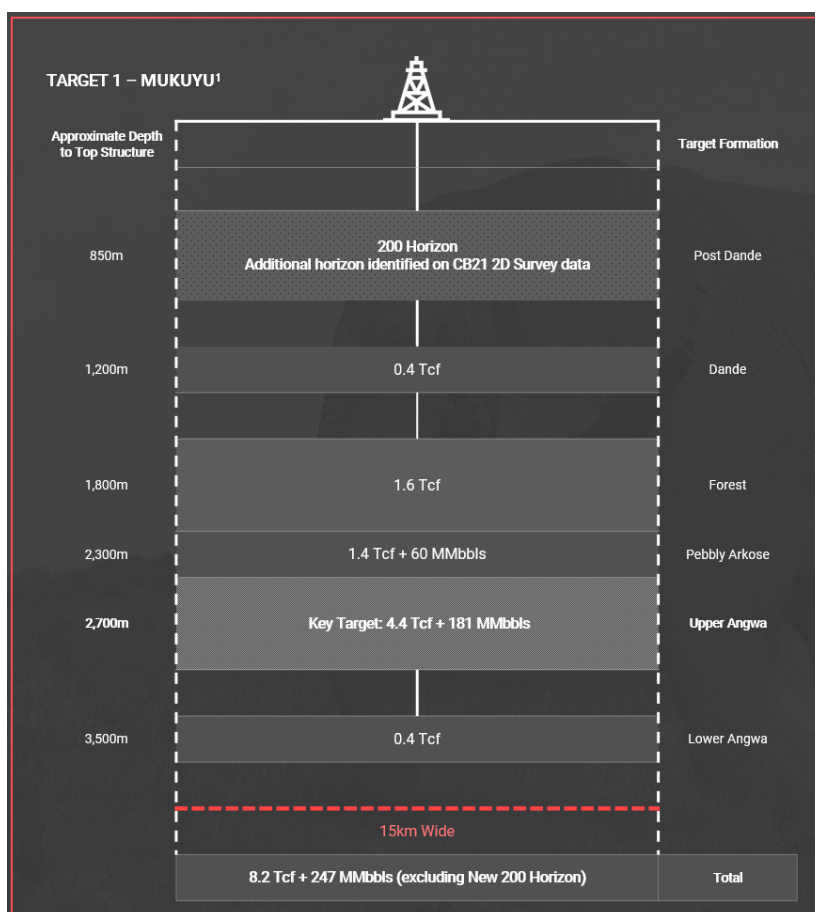


Figure 7 – Mukuyu-1 well conceptual well diagram

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Approved for release by the Board

Questions and enquiries

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About Invictus Energy Ltd (ASX: IVZ)

Invictus Energy Ltd is an independent upstream oil and gas company listed on the Australian Securities Exchange (ASX: IVZ). The Company is headquartered in Perth, Australia and has offices in Harare, Zimbabwe. Invictus is opening one of the last untested large frontier rift basins in onshore Africa – the Cabora Bassa Basin – in northern Zimbabwe through a high impact exploration program.

The Company's principal asset is SG 4571 located in the Cabora Bassa Basin in Zimbabwe which contains the world class Mukuyu (Muzarabani) prospect – the largest undrilled prospect onshore Africa independently estimated to contain 8.2 Tcf and 247 million barrels of conventional gas condensate (gross mean unrisksed basis).

Invictus Energy is committed to operating in a safe, ethical and responsible manner, respecting the environment, our staff, contractors and the communities in which we work.