

## Welchau Gas Exploration Well Update Drilling Operations Report No. 3

### Key points:

- The Welchau-1 gas exploration well was spudded on the 24<sup>th</sup> of February using the RED Drilling & Services GmbH (RED) E200 drill rig in the ADX-AT-II exploration licence in Upper Austria.
- Operations at 6.00 am Central European Time (CET) on the 10<sup>th</sup> of March were drilling out of 9 5/8 inch casing at a depth of 1028 metres in the 8 1/2 inch hole.
- Progress since the last report on the 4<sup>th</sup> of March was drilling 12 1/4 inch hole to a depth of 930 metres, running wireline logging tools, setting and cementing 9 5/8 inch casing then commence drilling ahead in 8 1/2 inch hole.
- The planned forward program is to drill ahead in 8 1/2 inch hole to the main target.
- Drilling and logging results to date can be summarised as follows;
  - “Quick look” interpretation of image and dip logs taken in the 12 1/4 inch open hole section confirms that the well intersected a large North-verging anticline close to the crest of the structure.
  - Carbonate formations intersected show evidence of fracturing, faulting and gentle folding, resulting from deformation that was predicted at the crestal location of the Welchau anticline structure. Fractures are important for enhanced productivity in carbonate reservoirs.
  - The 9 5/8 inch casing has been set in a clay and siltstone section (Lunz Formation) for well integrity that may also provide a seal for an underlying reservoir.
  - Minor hydrocarbon shows were encountered in the carbonate formations. Formation gas shows have increased from 0.0099% to 0.1765% primarily for methane as well as ethane and propane also measured upon entering the Lunz Formation where 9 5/8 inch casing has been set.
  - Drilling penetration rates are faster than projected and the well is about 4 days ahead of the well plan.

The **Welchau gas prospect** has exceptional gas resource potential, located in the heart of Europe at a relatively shallow drill depth and proximal to gas pipelines. ADX estimates that Welchau has **best technical Prospective Resources of 807 BCFE (134 MMBOE)**<sup>1</sup>. Welchau is targeting the same reservoirs as the nearby Molln-1 well which tested condensate rich, pipeline quality gas at rate of 4.0 MMSCFPD in 1989.

**Prospective Resources** are those estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) related 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 significant moveable hydrocarbons.

---

<sup>1</sup> Best Technical Prospective Resources reporting date 22.06.2023

ADX Energy Ltd (ASX Code: ADX) is pleased to advise that the Welchau-1 gas exploration well reached a depth of 1028 metres in 8 ½ inch hole at 6.00 am CET on the 10<sup>th</sup> of March 2024, drilling ahead in the Lunz Formation. The well is being drilled using the RED E200 drill rig in the ADX-AT-II exploration licence in Upper Austria (refer to Location Map on figure 2).

Since the last report on the 4<sup>th</sup> of March 2024, the well was drilled to depth of 930 metres in 12 ¼ inch hole, wireline logs have been run, 9 5/8 inch casing has been run then cemented and the well drilled in 8 ½ inch hole to the current depth of 1028 metres.

The planned forward program is to drill ahead in 8 ½ inch hole to the main target.

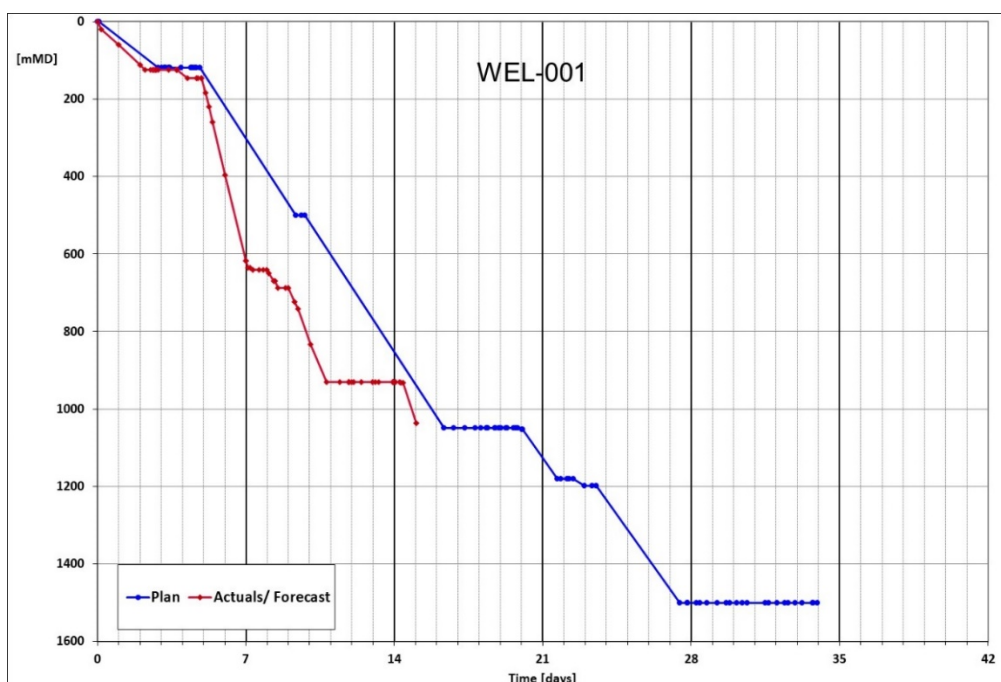
**Drilling and logging results in the well to date**

The well has been drilled efficiently and safely, with minor drilling mud fluid losses but without any drilling problems. Well penetration rates have been faster than projected and the well is about 4 days ahead of the original well plan (refer to Well Plan Drilling Performance on Figure 1).

Carbonate formations intersected in the well to date show evidence of fracturing, faulting and gentle folding, resulting from deformation that was predicted at the crestal location of the Welchau anticline structure. Fractures are important for enhanced productivity in carbonate reservoirs.

The 9 5/8 inch casing has been set in a clay and siltstone section (Lunz Formation) to provide well integrity. The shaly section may also provide an effective seal for an underlying reservoir.

Minor hydrocarbon shows have been encountered in the carbonate formations. Formation gas shows have increased from 0.0099% to 0.1765% primarily for methane as well as ethane and propane also measured upon entering the Lunz Formation where the 9 5/8 inch casing has been set<sup>2</sup>.



**Figure 1: Well Plan Drilling Performance (Plan versus Actuals)**

<sup>2</sup> Formation gas is gas that is entrained in the drilling fluid during the tripping of drill pipe (pulling pipe out of the hole). Formation gas is not expected to be producible from the shallow carbonate or Lunz formations, however the formation gas is evidence of an active petroleum system at the Welchau-1 well location that may result in a producible gas zone deeper in the well where the target reservoirs are expected to be encountered.

**Summary of Well Program**

The Welchau-1 gas exploration well is targeting the mid Triassic age Steinalm formation in which gas was discovered at the nearby Molln-1 well. The expected total drill depth is between 1500 metres to 1900 metres measured depth. The main target depth is between 1100 metres and 1800 metres measured depth. The success case drilling and evaluation program is anticipated to take between 34 to 39 days from the spud date.

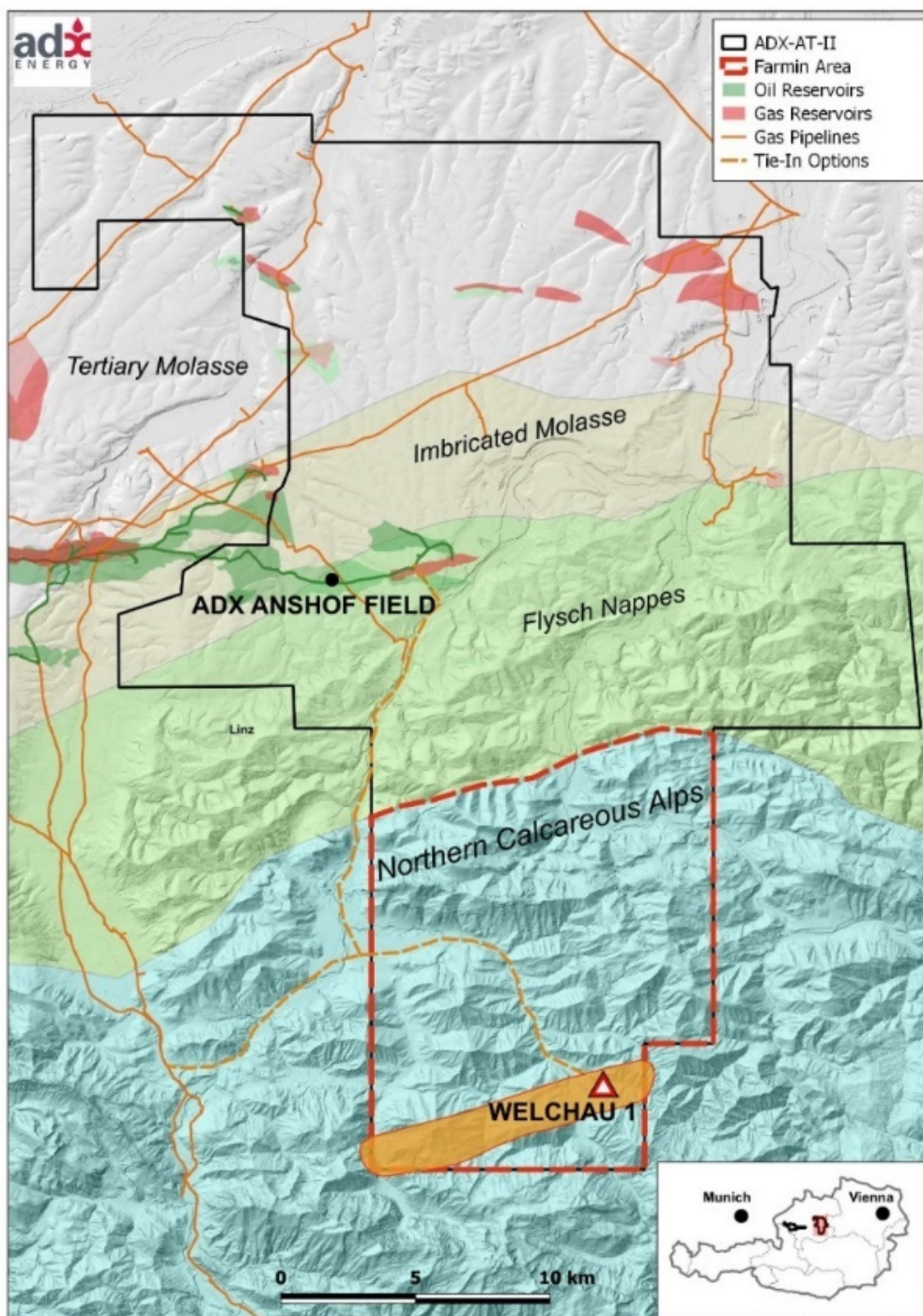


Figure 2: Map showing ADX-AT-II license area and the Welchau-1 drilling location in the Northern Calcareous Alps



**RED E200 drilling rig operations at the Welchau-1 location**

#### ***Economic Participation in the Welchau Investment Area***

ADX has executed an Energy Investment Agreement with MCF Energy Ltd. via its subsidiary MCF Energy GmbH (MCF) to fund 50% of Welchau-1 well costs up to a well cost cap of EUR 5.1 million to earn a 25% economic interest in the Welchau Investment Area which is part of ADX's ADX-AT-II licence in Upper Austria. The Welchau Investment Area contains the Welchau Gas Prospect and other emerging oil and gas prospects. Upon completion of MCF's funding obligations ADX will hold a 75% economic interest in the Welchau Investment Area. ADX holds a 100% economic interest in the remainder of the ADX-AT-II license other than the Anshof Discovery Area.

#### **For further details please contact:**

Ian Tchacos

Executive Chairman

+61 (08) 9381 4266

[ian.tchacos@adxenergy.com.au](mailto:ian.tchacos@adxenergy.com.au)

**Authorised for lodgement by Ian Tchacos, Executive Chairman**

#### **Persons compiling information about Hydrocarbons:**

Pursuant to the requirements of the ASX Listing Rule 5.41 the technical and reserves information relating to Austria contained in this release has been reviewed by Paul Fink as part of the due diligence process on behalf of ADX. Mr Fink is Technical Director of ADX Energy Ltd is a qualified geophysicist with 30 years of technical, commercial and management experience in exploration for, appraisal and development of oil and gas resources. Mr Fink is a member of the EAGE (European Association of Geoscientists & Engineers) and FIDIC (Federation of Consulting Engineers).

### **Previous Estimates of Reserves and Resources:**

ADX confirms that it is not aware of any new information or data that may materially affect the information included in the relevant market announcements for reserves or resources and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed.

### **Reporting Standards for Resource Estimation**

Reserves and resources are reported in accordance with the definitions of reserves, contingent resources and prospective resources and guidelines set out in the Petroleum Resources Management System (PRMS) prepared by the Oil and Gas Reserves Committee of the Society of Petroleum Engineers (SPE) and reviewed and jointly sponsored by the American Association of Petroleum Geologists (AAPG), World Petroleum Council (WPC), Society of Petroleum Evaluation Engineers (SPEE), Society of Exploration Geophysicists (SEG), Society of Petrophysicists and Well Log Analysts (SPWLA) and European Association of Geoscientists and Engineers (EAGE), revised June 2018.

### **Prospective Resource Classifications**

**Low Estimate** scenario of Prospective Resources - denotes a conservative estimate of the quantity that will actually be recovered from an accumulation by an oil and gas project. When probabilistic methods are used, there should be at least a 90% probability (P90) that the quantities actually recovered will equal or exceed the low estimate.

**Best Estimate** scenario of Prospective Resources - denotes the best estimate of the quantity that will actually be recovered from an accumulation by an oil and gas project. It is the most realistic assessment of recoverable quantities if only a single result were reported. When probabilistic methods are used, there should be at least a 50% probability (P50) that the quantities actually recovered will equal or exceed the best estimate.

**High Estimate** scenario of Prospective Resources - denotes an optimistic scenario of the quantity that will actually be recovered from an accumulation by an oil and gas project. When probabilistic methods are used, there should be at least a 10% probability that the quantities actually recovered will be equal or exceed the high estimate.

### **Nomenclature and conversions used in this release**

*BBL* means US barrel

*MMBBL* means million US barrels

*MCF* means thousand cubic feet

*MMCF* means million cubic feet

*BCF* means billion cubic feet

*TCF* means trillion cubic feet

*BOE* means barrel of oil equivalent

*MMBOE* means million barrels of oil equivalent

*MMSCFPD* means million standard cubic feet per day

**End of this Release**