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21 April 2022

**Announcement to ASX**

**Electronic lodgement**

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## **ANSHOF-3 DISCOVERY TESTING UPDATE**

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Xstate Resources Limited (**ASX:XST**) ("**Xstate**", "**XST**" or "**the Company**") is pleased to advise shareholders that Operator of the Anshof Prospect, ADX Energy Limited (**ASX:ADX**) has today provided an update advising that well testing equipment, including tubing and perforating guns, have been run in the well in preparation for commencement of flow testing at the Anshof-3 oil and gas discovery. Initial flow results and pressure build-up data are expected to be available early next week.

Xstate holds a 20% working interest in the Anshof Prospect. A copy of the ADX release has been attached to this announcement.

**This release was approved by the board of the Company**

**Andrew Childs**

**Executive Chairman**

Xstate Resources Limited

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***About Xstate Resources Limited:***

*Xstate Resources (ASX Code: XST) is an ASX listed company focused on the oil and gas sector. The Company has existing gas exploration assets located in the Sacramento Basin, California and associated gas production interests together with production interests in Alberta, Canada. Xstate is presently pursuing new opportunities in the oil and gas sector onshore North America and Europe.*

## **Anshof-3 Discovery Testing Update**

### **Well testing equipment has been run in hole in preparation for flow testing of Eocene oil reservoir**

#### **Key points:**

- Following rig mobilisation, rig up, well bore clean-up and a casing integrity survey, well testing equipment including tubing and perforating guns have been run in the well in preparation for flow testing the Eocene oil reservoir Anshof-3 well.
- Eocene oils produced in the area typically have a low gas oil ratio and generally require assistance for oil to flow to surface. Prior to perforation and flowing the well compressed natural gas (“CNG”) will be circulated in the well to reduce the hydrostatic column in order to assist inflow and well clean-up.
- Initial flow results and pressure build-up data are expected to be available early next week.
- The testing program is expected to include up to three CNG liftings and subsequent flow periods and three build-up periods designed to determine reservoir flow characteristics as well as reservoir continuity.
- Following a successful test of the 6 m gross Eocene oil zone, the well is expected to be placed on production with an early production unit utilising a rod pump. Oil can be delivered for sale by truck to a nearby oil terminal prior to securing a production license for the entire Anshof discovery.



**Running 2 7/8 inch tubing into the Anshof- 3 well with the RED W-101 workover rig in preparation for testing operations. Source ADX**



**Running a cement bond survey to check well integrity of the Anshof- 3 well with the RED W-101 workover rig in preparation for testing operations. Source ADX**

ADX Energy Ltd (**ASX Code: ADX**) advises that the Anshof-3 well in the ADX-AT-II license in Upper Austria has been prepared for the flow testing of the Eocene oil zone. Following the recent mobilisation and rig up of the RED W-101 rig, the well bore has been cleaned up and a casing integrity survey undertaken prior to running tubing and perforating guns in the well; showing good cement across all identified hydrocarbon zones; including the shallow imbricates zone. Initial flow results are expected to be available early next week. The testing program is anticipated to include up to three flow periods and three build up periods designed to determine reservoir flow characteristics as well as reservoir continuity.

Eocene oils produced from surrounding fields in the area typically have a low gas oil ratio and generally require assistance from a down hole pump or artificial lift such as gas lift for oil to flow to surface. Prior to perforation and flowing the well CNG will be circulated in the well to reduce the hydrostatic column which in turn will assist inflow and well clean-up.

Following the successful testing of the 6 m gross Eocene oil zone the well is expected to be placed on production with an early production unit utilising a rod pump and delivering oil for sale by truck to a nearby oil terminal. Interim production of up to 37,000 barrels (approximately 100 barrels per day for a period of one year) is allowed under Austrian legislation prior to finalising a production license for the entire much larger discovery area which ADX has mapped to extend over an area of approximately 24 km<sup>2</sup>.

**ADX Energy Ltd (ASX:ADX)**  
**ASX RELEASE**



*Further well testing reports*

Further well testing reports will be provided as relevant information becomes available.

*Note:*

*ADX announced a farmout to ASX listed Xstate Resources Limited to fund 40% of the Anshof-3 well costs to earn a 20% participating interest in the Anshof Prospect. Refer to ASX release dated 22 November 2021.*

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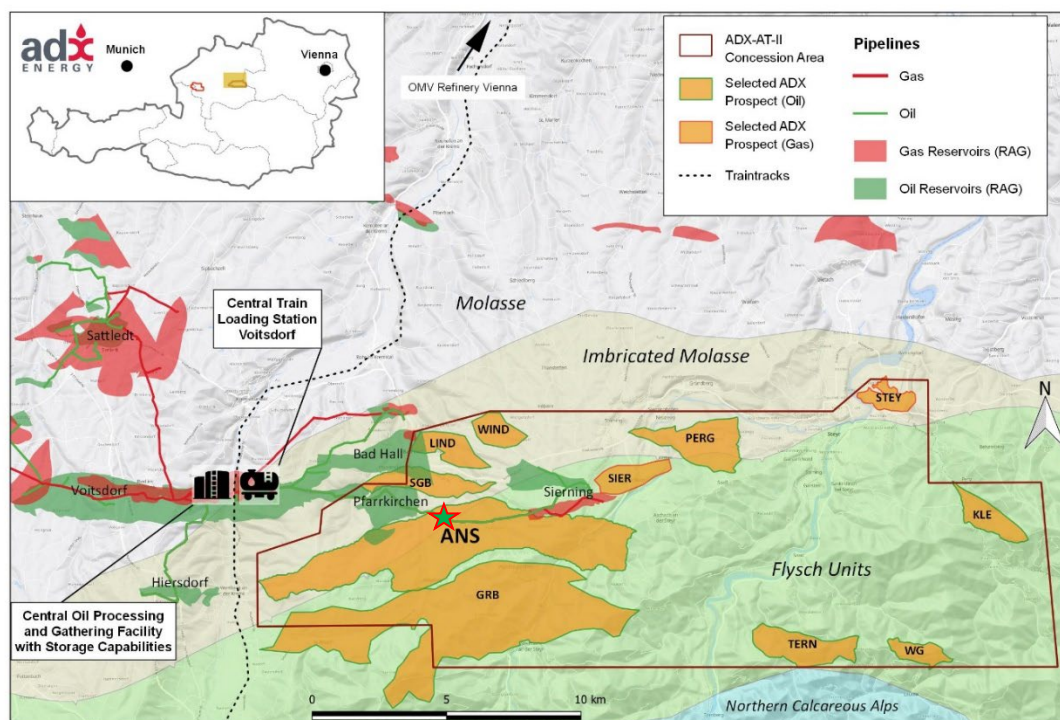
**Authorised for lodgement by Ian Tchacos, Executive Chairman**

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

Pursuant to the requirements of the ASX Listing Rule 5.31, 5.41 and 5.42 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 23 years of technical, commercial and management experience in exploration for, appraisal and development of oil and gas resources. Mr. Fink has reviewed the results, procedures and data contained in this release and considers the resource estimates to be fairly represented. Mr. Fink has consented to the inclusion of this information in the form and context in which it appears. Mr. Fink is a member of the EAGE (European Association of Geoscientists & Engineers) and FIDIC (Federation of Consulting Engineers).

## Appendix

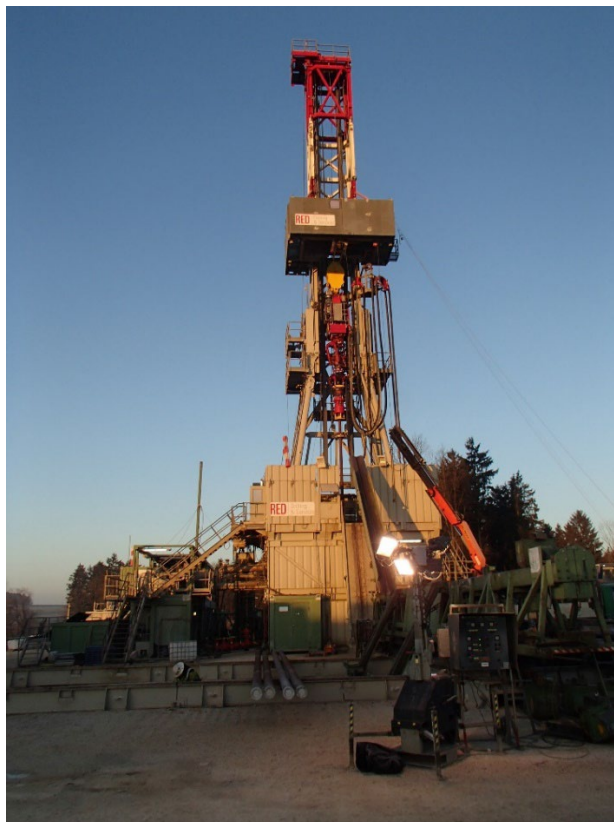
### Summary of Anshof -3 well results, testing program and appraisal strategy



**Map showing Anshof discovery in the ADX-AT-II license and nearby fields Voitsdorf, Bad Hall and Pfarrkirchen and Sierning as well as the nearby train transport oil loading facility. The Anshof-3 well test site is denoted by the green star symbol**

The Anshof-3 well was spudded at 00.30 hours on the 18<sup>th</sup> of December 2021. The Anshof-3 well is located in the ADX-AT-II license in Upper Austria. The Anshof well site has provision for up to 3 drilling slots (the well name Anshof-3 stems from the fact that physical surface location number 3 which was the first approved by all necessary authorities to allow spudding of the well). Well operations were concluded following the running and cementing of 7 inch casing to a total depth (TD) of 2499 m. The RED E-200 rig was released on 15 January 2022. The well has been suspended in preparation for completion with production tubing utilising a workover rig prior to testing and potential long-term production thereafter.

The Anshof discovery well intersected 3 hydrocarbon bearing zones of interest in a large, high relief structure providing very significant appraisal and development potential in an onshore setting adjacent to readily available gathering, production and export infrastructure. The Anshof-3 well is expected to yield a second production asset in Austria for ADX in the near future.



**Running casing using the RED E-200 rig at the Anshof-3 drill site**

### *Drilling and logging evaluation*

The well was successfully open hole logged with an extensive suite of logs, including the standard “triple combo” suite of tools plus sonic and formation imaging (FMI) logs. Several logging runs were necessary due to poor hole conditions to acquire the comprehensive dataset enabling detailed quantification of reservoir parameters.

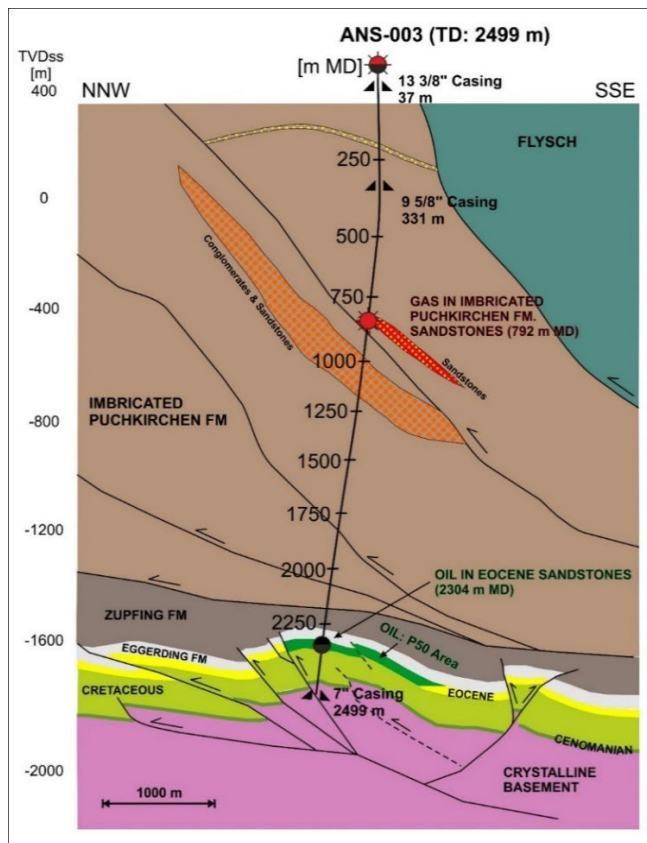
An initial petrophysical interpretation was completed shortly after the last logging runs and confirmed, and further substantiated, the preliminary results obtained from drilling data such as oil and gas shows, gas chromatography logs and Gamma Ray logs recorded while drilling.

From top to bottom of the well, the results can be summarised as follows:

1. Approximately 20 m gross gas reservoir zone at around 800 m of measured depth (MD) within the overthrust Miocene aged imbricates in a finely laminated deep water turbidites clastic section which has an estimated 14 m of gas pay. The finely laminated thin bedded nature of gas sands was further evidenced by FMI logs. It is expected that these sands will contribute significantly to gas flow rates over an anticipated 20 m perforation interval. The perforation intervals are currently under review.
2. The Eocene reservoir section starting around 2302 m MD with oil shows across a 6 m zone of which between 2.5 to 4 m are expected to be productive net pay. This is comparable with nearby production wells.
3. The Cretaceous (Cenomanian) section has been interpreted to contain about 11 m of reservoir section with oil saturation in line with the oil shows seen while drilling the well. Porosity logs (density, neutron and sonic) together with FMI data and cuttings data suggest that this zone at the Anshof-3 drilling location is unlikely to achieve economic oil flow rates. However, it is encouraging that oil presence was proven. Reservoir quality is known to be variable for this section and better reservoir quality may be encountered elsewhere on the large Anshof structure.

*Anshof-3 Well Testing and appraisal strategy*

Well test design and engineering work is focused on the deeper Eocene sandstone reservoir oil zone and the shallower Miocene sandstone reservoir gas zone, as shown in the figure below.



**Geological cross section schematic along the Anshof-3 well path, highlighting the hydrocarbon zones identified for testing. The oil zone will be tested in April 2022**

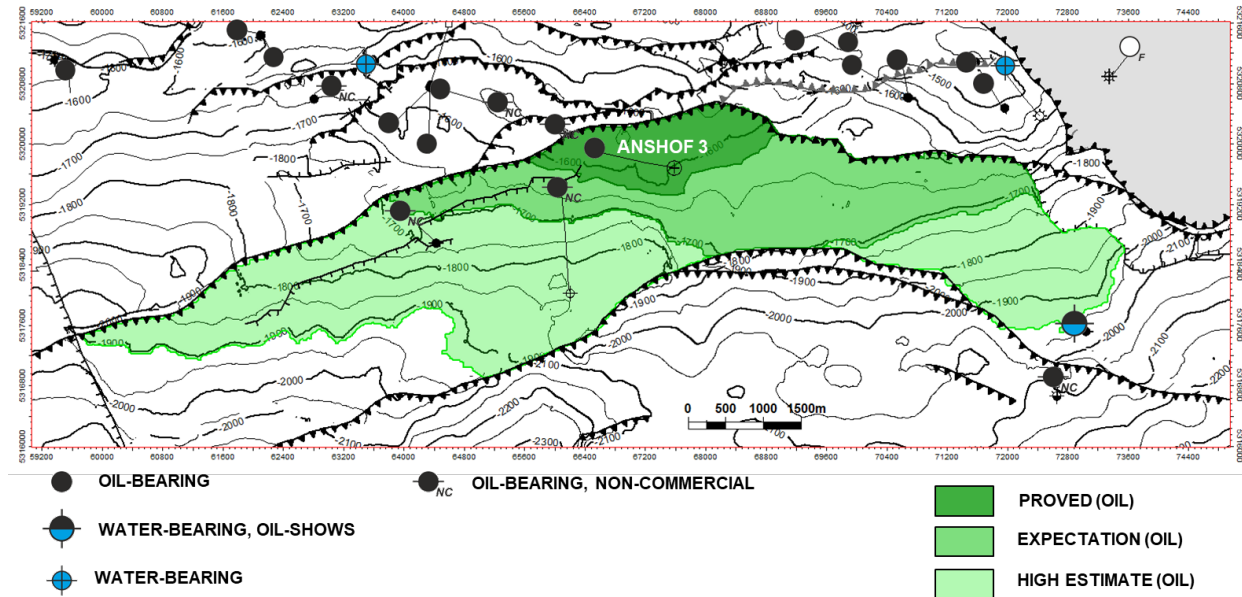
The Cenomanian (Cretaceous) oil zone (11 m gross pay identified on logs and preliminary petrophysical analysis) just above the basement and well TD at 2499 m MD (1730 m TVDSS) will not be tested at the current Anshof-3 bottom hole location because it is likely to exhibit better reservoir quality elsewhere within the large Anshof structure.

Based on well results to date, ADX believes the previously announced pre-drill most likely Eocene oil resources do not warrant revision. (The Original Resources Reporting Date: Upper Austria Exploration was on 30/11/2020, estimates were further revised on 30/3/21).

The current understanding of the Eocene resources is considered to be in line with ADX reported resources and that independently assessed by RISC predrill for the following reasons:

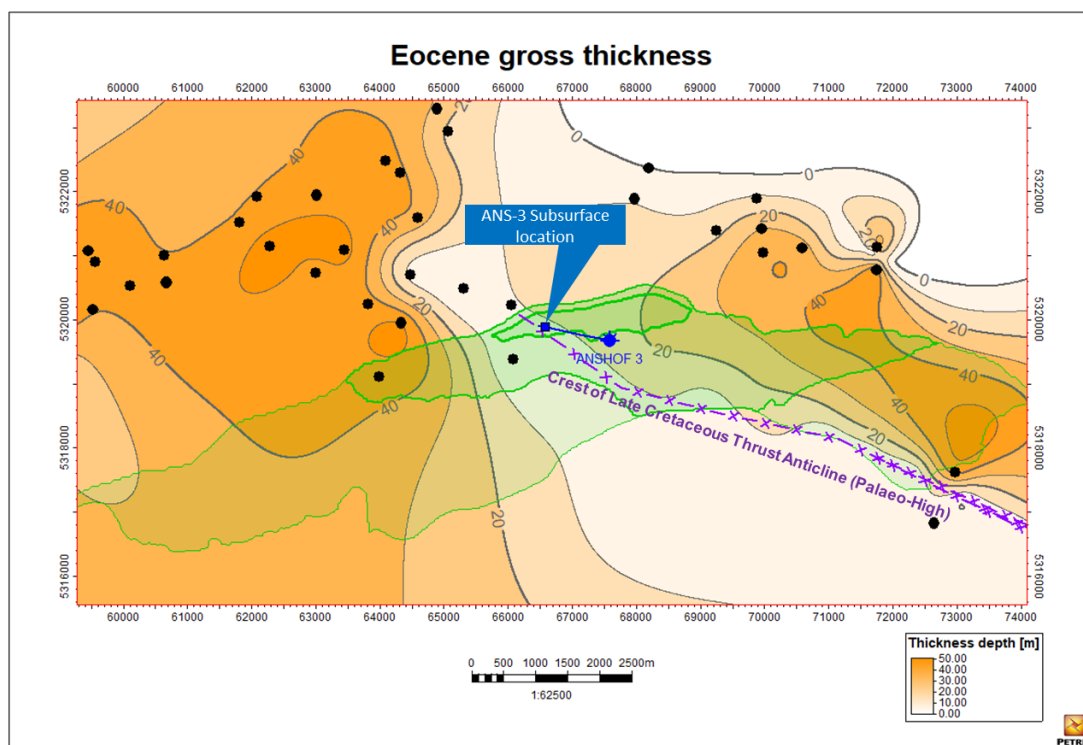
1. The Anshof-3 exploration well intersected the Top Eocene oil zone as predicted by the 3D seismic pre-drill interpretation, i.e. only 4 m higher than prognosed (making the potential oil column slightly larger by a commensurate amount). This excellent result validates the predrill structural model and confirms the presence of a large structure. A major contribution to the oil resource calculation stems from the structural configuration of the oil pool gross rock volume (GRV), which remains largely unchanged. If anything, a slight increase can be expected due to the Anshof-3 well coming in slightly high to prognosis. The figure below shows the updated post-drill map, which compares favourably with the pre-drill interpretation (shown in the RISC Resources Review). The dark green area around Anshof-3 defines the minimum (P90) oil filled area.





**Top oil (Eocene sandstone) post drill depth map (meters TVDSS) incorporating all well results available. The dark green shaded area shows minimum case (P90), light green area showing the maximum case (P10)**

- The presence of reservoir was the main geological risk prior to drilling which has now been mitigated by the intersection of a 6 m gross oil column in the Anshof-3 well with at least 2.5 to 4 m being high quality reservoir net pay section based on the current petrophysical interpretation. No free water or an oil water contact was intersected in the well. This result is within the predrill prediction expectation supported by RISC in its independent resource assessment. Future field appraisal and development wells will focus on drilling locations with the potential for optimal reservoir thickness in contrast to the Anshof-3 well which targeted the crest of the structure to prove the presence of a valid trap and a large structure. The figure below shows the Anshof structure outline in green with an overlay of expected Eocene gross reservoir thickness based on 3D seismic, nearby well data as well as latest Anshof-3 well results. The map indicates areas to the East of the Anshof-3 well where a much thicker Eocene reservoir section can be expected. With the structural risk eliminated by the Anshof-3 well results, these areas can be specifically targeted for high productivity development wells. In addition to the optimal Eocene potential, it is likely that areas away from the Late Cretaceous paleo high as mapped on 3D seismic (see below) may also contain better quality and potentially more productive Cenomanian oil reservoir sections as it has been the case in other nearby oil fields in the area.



**Map showing expected Anshof field outline in green and Eocene oil reservoir gross thickness in metres based on well and seismic data. The Anshof-3 discovery was drilled in a structurally optimal position, the appraisal and development wells will focus on potentially thicker Eocene reservoir development to achieve high production rates**

Subject to the Eocene sandstone producing at commercial rates the Anshof-3 well will be placed on interim production utilising a rod pump and delivering oil for sale by truck to a nearby oil terminal. Interim production of up to 37,000 barrels (approximately 100 barrels per day for a year) prior is allowed under Austrian legislation prior to finalising a production license. The well can eventually be tied into an existing gathering pipeline approximately 70m from the well head. Pipeline tie-in has already approved by the Austrian regulators. A production license can be expected after securing all necessary regulatory approvals as well as the installation of necessary metering and the commissioning of production facilities within 6 months of successful well testing and interim production operations.

#### *Miocene gas reservoir testing and development strategy*

The approximate 20 m gross gas reservoir zone at a depth of around 800 m (MD) within the overthrust imbricates of the Miocene aged finely laminated deep water turbidites clastic section (refer to geological cross section above). There is an estimated total 14 m of gas pay zone based on the preliminary petrophysical interpretation undertaken following wireline logging of the Anshof-3 well. Several gas field analogies exist with similar reservoir sections enabling the design of an optimised testing and completion program for this zone.

Miocene gas reservoir testing is expected after completion of shallower Eocene oil zone well testing.

**End of this Release**