



28 November 2023

# Anshof-2 Appraisal Well Update Drilling Operations Report No 3

#### Key points:

- The Anshof-2 appraisal well is located in the ADX-AT-II licence in Upper Austria (refer to figure 1). The well was spudded at 10:00 am Central European Time (CET) on the 13<sup>th</sup> of November 2023. ADX is the operator and has a 60% economic interest in the well.
- The RED Drilling & Services GmbH (RED) E-202 rig is being used to drill the Anshof-2 well, the same rig used to drill Anhof-3 discovery well.
- At 6:00 am CET on the 27<sup>th</sup> of November 2023 the status of well operations was drilling ahead at a depth of 1108 meters in 8 ½ inch hole.
- Previous operations since last report include the drilling of 12 ¼ inch hole to 730 meters (Casing Depth). Run and cement 9 ½ inch casing to Casing Depth. Set up for new 8 ½ inch hole size, drill out casing shoe and drill ahead in 8 ½ inch hole to the current depth.
- Planned future operations include the drilling of the 8 ½ inch hole to a total depth of 2650 m with a directional drill string configuration. The planned well trajectory is intended to intersect Eocene oil reservoir at near horizontal angle of 79 ° to maximize the wells linear intersection with the target reservoir in order to maximise production rate and reserves recovery (refer to figure 2).
- The next routine Drilling Operations Report will be provided on the 5<sup>th</sup> of December 2023. Well drilling results will be provided as they become available.

An overview of the Anshof -2 Well Objectives is available in Appendix 1 at the end of this release.



Drilling operations at Anshof-2 with the RED E-202 drilling rig.



ADX Energy Ltd (**ASX Code: ADX**) is pleased to advise that at 6:00 am CET on the 27<sup>th</sup> of November 2023 the status of drilling operations on the Anshof-2 well was drilling ahead at a depth of 1108 meters in 8 ½ inch hole. The well was spudded at 10:00 am Central European Time on the 13<sup>th</sup> of November 2023. The Anshof-2 well is located in the ADX-AT-II license in Upper Austria. RED Drilling & Services GmbH (RED) E-202 rig is being used to drill the Anshof-2 well. The RED E-202 rig is the same drilling rig that was used to drill the Anshof-3 discovery well.

The planned future Anshof-2 well operations include the drilling of the 8 ½ inch hole to a total depth of 2650 m with a directional drill string configuration enabling steering of the well trajectory. The planned well trajectory is intended to intersect Eocene oil reservoir at near horizontal angle of 79 ° to maximize the wells linear intersection with the target reservoir in order to maximise production rate and reserves recovery (refer to figure 2).

The previous drilling operations since last report include the drilling of 12  $\frac{1}{4}$  inch hole to 730 meters (Casing Depth). The running and cementing of 9  $\frac{5}{8}$  inch casing to the Casing Depth. Set up for new 8  $\frac{1}{2}$  inch hole size, drill out the casing shoe and drill ahead in 8  $\frac{1}{2}$  inch hole to the current depth.



Figure 1: Location map for the Anshof-2 well (ANS-2) within the ADX-AT-II licence. The low-risk appraisal follow up satellite prospects (ADX 100% economic interest) including SGB, LIND and GRB North and South of the Anshof field are also shown.



#### Gas Shows Encountered While Drilling

Several additional elevated gas shows and peaks were experienced while drilling the 8 ½ inch hole within thin sandstone and shale layers of the so called imbricated clastic Puchkirchen formation of Oligocene/Miocene age which are over-thrusted by the geologically older Cretaceous age Flysch formation.

ad <sup>‡</sup>		Well scheme							Permit: ADX AT-II	
		Success case Well name: ANSHOF 2								
E	NERGY	UWI: ANS-002								
E 67587.81 5319705.08	N E; N; TVDSS Elevation Target 1: 683	[m] 51.7: 53	19577.8: -166:	1.8		Polyg	on snape:	weipan: nign an	igie sianteo	
(MSL): 406. RT above G	6 m iL: 6,23 m Target 2: 686	500; 5319	515; -1711.2							
Schem	e not scaled. All depth on this p	age cou								
[m]	Stratigraphy and Mud system			Wellscheme			Casing and Cementation Direct		Directional	
	Quarternery	[mMD] 0			4			20" Conductor 4 1 13 3/8" 54.5# K5	m 5 BTC	
100	Flysch	20	Gel 1.20	Challow	4			130 m		
200			pnu	gas 150-						
300			ner m //	200 m			-	12 1/4" Hole Class G 1.9 kg/l		
400	Imbricated	400	olym 25 kg	Fault zone						KOP @ 450 m
500	Puchkirchen Fm.		ОЗ Р 1.2	350390 m						Az. 97.29° DLS 3°/30 m
600			K2C(							EOB @ 650 m
700					Ľ		-	9 5/8" 40# L80-1 730 m	BTC	Incl. 20.02°
800										
900	IMB PK Gas Sands	874								
1000							•	Class G 1.7 kg/l L	_ead	
1100										
1200										
1300										
1400			kg/l							
1500			1.30							
1600			; pnc							
1700			ler n							
1800			olyn					8 1/2" Hole		
1900			03 P							KOP 2 @ 1871 m Az. 104.2°
2000			K2C							DLS max. 4°/30m
2100	Zupfing Fm.	2073								
2200	Eggerding Fm. Dynow marl	2153 2246					-	Class G 1.9 kg/l 1	Fail	
2300	Schoeneck Fm. Upper Eocene	2278 2318								EOB 2 @ 2315 m
2400										Incl. 79.10°
2500										
2600	Upper Cretaceous	2598						7", 26 lbs/ft, L80.	BTC-TX	5
2700	TD (TVD 2132 m)	2650						TD 2650 m		EOT @ 2650 m TVD 2132 m
2800										

Figure 2: Anshof-2 well (ANS-2) well plan showing planned drilling depths, drill hole sizes and casing depths.



Figure 3 below is a screen shot from the rig site mud log showing gas peaks within a generally shaly and silty section and elevated gas shows at the top of a blocky sandstone package. These sands are productive in many gas fields to the north and are a secondary exploration target of the well Anshof-2 as highlighted in Figure 2.

The shallow imbricated gas reservoir discovered in Anshof-3 was expected (based on 3D seismic interpretation) to pinch out towards Anshof-2. The actual well data appears to support this interpretation. The gas peaks above and below around 850 meters (2.52% and 1.27%, respectively) are likely to correlate with the Anshof-3 shallow gas discovery as they represent the distal part of a possible shallow gas field. It should however be noted that further data including the yet to be acquired electrical logs are required to more precisely define the extend of these gas sandstone reservoirs, including a blocky thick sandstone interval with elevated gas shows starting around 930 meters. The mud weight is higher in this section compared to Anshof-3 well which was a program adaption from the last well in order to reduce any borehole breakouts and allow faster drilling - a goal which has been achieved well so far, however the higher mud weight is likely to suppress gas shows.



Figure 3: Mudlog from the Anshof-2 (ANS-2) rigsite showing gas peaks within the Imbricated Puchkirchen sandstone formation (Oligocene/ Miocene), which are a secondary exploration target in ANS-2



#### Further Operational Updates

ADX will provide weekly Anshof-2 well operations updates to shareholders and drilling results as they become available. The next routine Drilling Operations Report will be provided on the 5<sup>th</sup> of December 2023.

#### Well Participation and Operatorship

In accordance with Anshof Discovery Area Partnership agreements the economic interests in the Anshof-2 well will be 60% ADX and 40% MND. ADX is the Operator of the Anshof Discovery Area Partnership and the ADX-AT-II licence.

XST has elected not to participate in the Anshof-2 well. ADX and MND will fund XST's share of well costs on 50:50 basis and will in turn obtain the right to 60% and 40% respectively of production from the well unless XST opts to buy back into the well at a premium of 400% to well costs. XST retains its 20% economic interest in the remainder of the Anshof Discovery Area Partnership (i.e. Anshof Discovery Area less the Anshof-2 well) with both ADX and MND's economic interests remaining at 50% and 30% respectively.

#### For further details please contact:

Paul Fink	Ian Tchacos
Chief Executive Officer	Executive Chairman
+61 (08) 9381 4266	+61 (08) 9381 4266
paul.fink@adx-energy.com	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 5.31, 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).

#### 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.



### Appendix 1: Anshof-2 Appraisal Well Overview

The Anshof oil field was discovered with the exploration well Anshof-3 in January 2022. Anshof-3 was completed as an oil producer in October 2022 with its production performance during eleven months of long term testing exceeding expectations. Anshof-2 will be the second well in the Anshof field. The well will be drilled as an appraisal well 80m downdip of the oil-down-to seen in the Anshof-3 well to appraise the depth of the postulated 2P oil-water contact and the expected reserves in the Anshof oil field. The well is planned to intersect the targeted Eocene sandstone reservoir some 1.8 km East of the Eocene intersection in Anshof-3. The location, based on AI geological modelling, is expected to have both higher gross and net reservoir Eocene sandstone thickness relative to that in the crestal Anhsof-3 well. Anshof-2 will be a high angle well (79°) penetrating both the top and base of the Eocene reservoir to maximise net reservoir intersection. The well has dual objectives of appraising the Anshof field structural and depositional model as well as being completed as a producer.



**Figure A1: Anshof Eocene depth map, seismic Cross section and schematic interpretation (clockwise).** The map: surface locations are shown as white circles, the subsurface penetration points of the Eocene oil reservoir as black circles. The white diamond symbols show the expected subsurface penetrations of Anshof-2 and future planned Anshof-1 well





## Figure A2: Anshof Eocene cross section showing Anshof-2 appraisal well downdip relative to the Anshof-3 discovery well

The Anshof-2 well is also expected to deliver additional production and cash flow from an approx. 280 metre long planned completion within the Eocene oil reservoir. Anshof-2 is expected to contribute approx. 300 barrels of oil per day with an ultimate recovery of 0.8 million barrels from the well.

Success at Anshof-2 has the potential to increase the independently certified 2P reserves of 5.2 MMBOE to up to 26 MMBOE <sup>1</sup>, which is the certified 3P + 3C reserves / contingent resources estimate. In addition, the validation of ADX's structural and depositional model will de-risk multiple follow up prospects such as GRB in the adjacent structural block to the south.

<sup>1</sup> The Original Reserves Reporting Date of Anshof was on 30/10/2022.

#### Access to Production Infrastructure

As was the case with Anshof-3, a successful Anshof-2 oil well will be produced using a leased production facility with a purchase option. A new higher production capacity production facility capable of up to 3000 barrels of oil per day will be mobilised to the Anshof location following drilling of the Anshof-2 well. The oil will be trucked to a nearby RAG Exploration & Production GmbH (RAG E&P) hydrocarbon gathering facility from which oil is delivered by train to the OMV refinery in Vienna.



Figure A3: Image of the leased production unit which will be used at the Anshof field and drilling location. ADX Energy Ltd | ABN 50 009 058 646 -Registered and Principal Office Australia 29 Bay Road, Claremont WA 6010, Australia Telephone: +61 8 9381 4266 | admin@adxenergy.com.au | adxenergy.com.au



ADX benefits from an existing agreement with RAG E&P that provides access to infrastructure operated by RAG E&P. The agreement reduces ADX capital expenditures and minimises the time taken from drilling to commercial production due to the ability to tie into RAG E&P's existing hydrocarbon gathering, processing and storage facilities which are connected to Austria's oil and gas infrastructure network.

#### **Reporting Standards**

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.

#### PRMS 2018 Reserves Classifications

**1P** Denotes low estimate of Reserves (i.e., Proved Reserves). Equal to P1.

**2P** Denotes the best estimate of Reserves. The sum of Proved plus Probable Reserves.

**3P** Denotes high estimate of Reserves. The sum of Proved plus Probable plus Possible Reserves.

- 1. Developed Reserves are quantities expected to be recovered from existing wells and facilities.
  - a. *Developed Producing Reserves* are expected to be recovered from completion intervals that are open and producing at the time of the estimate.
  - b. Developed Non-Producing Reserves include shut-in and behind-pipe reserves with minor costs to access.
- 2. Undeveloped Reserves are quantities expected to be recovered through significant future investments.

A. **Proved Reserves** are those quantities of Petroleum that, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be commercially recoverable from known reservoirs and under defined technical and commercial conditions. If deterministic methods are used, the term "reasonable certainty" is intended to express a high degree of confidence that the quantities will be recovered. If probabilistic methods are used, there should be at least a 90% probability that the quantities actually recovered will equal or exceed the estimate.

B. **Probable Reserves** are those additional Reserves which analysis of geoscience and engineering data indicate are less likely to be recovered than Proved Reserves but more certain to be recovered than Possible Reserves. It is equally likely that actual remaining quantities recovered will be greater than or less than the sum of the estimated Proved plus Probable Reserves (2P). In this context, when probabilistic methods are used, there should be at least a 50% probability that the actual quantities recovered will equal or exceed the 2P estimate.

C. **Possible Reserves** are those additional Reserves that analysis of geoscience and engineering data suggest are less likely to be recoverable than Probable Reserves. The total quantities ultimately recovered from the project have a low probability to exceed the sum of Proved plus Probable plus Possible (3P) Reserves, which is equivalent to the high-estimate scenario. When probabilistic methods are used, there should be at least a 10% probability that the actual quantities recovered will equal or exceed the 3P estimate. Possible Reserves that are located outside of the 2P area (not upside quantities to the 2P scenario) may exist only when the commercial and technical maturity criteria have been met (that incorporate the possible development scope). Standalone Possible Reserves must reference a commercial 2P project.

#### End of this Release