

## lecea Mica-1 Well – Drilling Update No 5. “Ready to drill ahead to Total Well Depth”

### SUMMARY OF REPORT (DAY 26 since spud date)

@ 6.00 PM 1st of September 2019 Eastern European Summer Time (EESC)

- Following the completion of electric line log evaluation of the 8 1/2” hole to a depth of 2335 meters measured depth (“MD”), 7” casing has been run and cemented.
- Recent operations include:
  - the installation and testing of a 7” well head and high pressure blow out preventer system (10,000 psi);
  - the change to a higher weight mud system in case of overpressure being encountered;
  - the drill out of the casing shoe and 6 meters of formation to a depth of 2342 meters MD with a Tricone bit; and
  - Pull out of hole to replace bit with PDC bit suitable for calcareous claystone formations.
- Future operations – run in hole with 6” PDC bit and drill to the total depth of the well at approximately 2500 meters.
- The next zone of interest is the so called “blow out” horizon at approximately 2400 meters MD. (Note this interval was not logged in the lecea Mare-35 historic well).
- The total time to drill and evaluate the well is approximately 29 days after spud.

#### *REFER TO ATTACHMENT FOR A WELL SUMMARY INCLUDING PROSPECTIVITY ASSESSMENT*

ADX Energy Ltd (ASX Code: **ADX**), is pleased to advise that the lecea Mica-1 (IMIC-1) well, at 6am local Romanian time on the 1<sup>st</sup> of September 2019, located in the lecea Mare production license onshore Western Romania had reached a depth of 2342 meters. The well has been cased and integrity tested in preparation to drill ahead in 6” hole to the total depth of the well.

Since the last well operations report on the 26<sup>th</sup> of August 2019, electric line logging of the 8 1/2 “ hole has been completed; the 7” casing has been run and cemented; the 7” well head and blow out preventer (“BOP”) system installed and tested, and the casing shoe has been drilled out in preparation to drill ahead and evaluate lower section of the well. In anticipation of potentially high reservoir pressures the mud weight has been increased and a high pressure BOP system installed.

The next interval of drilling from 2342 meters MD to the total depth of the well at approximately 2500 Meters MD is exploratory in nature since electric line logs were not obtained in the historic lecea Mare-35 well.

***Asset Ownership Structure***

ADX holds a 63% shareholding in Danube Petroleum Limited (Danube). The remaining shareholding in Danube is held by Reabold Resources Plc. Danube via its' Romanian subsidiary, ADX Panonia, holds a 100% interest in the Parta Exploration license (including a 100% interest in the Parta Appraisal Sole Risk Project) and a 100% interest in the Iecea Mare Production license.

For further details please contact:

**Paul Fink**

**Chief Executive Officer**

+61 (08) 9381 4266

[www.adxenergy.com.au](http://www.adxenergy.com.au)

**Ian Tchacos**

**Executive Chairman**

+61 (08) 9381 4266

## IECEA MICA-1 PRE-DRILL WELL SUMMARY

### Key Points

- The upper 2350 metres of Iecea Mica-1 (IM-1) appraisal well is effectively a redrill of a historic discovery well drilled in the 1980's.
- IM-1 will evaluate multiple gas zones mapped on 3D seismic including a flow tested gas zone and a deeper uncontrolled gas flow in the historic discovery well.
- The Contingent Resources based on an Independent Experts Report of well data with recently acquired 3D seismic is 6.1 Bcf 2C and Prospective Gas Resources are 13 Bcf Best Estimate. <sup>Note 1</sup>

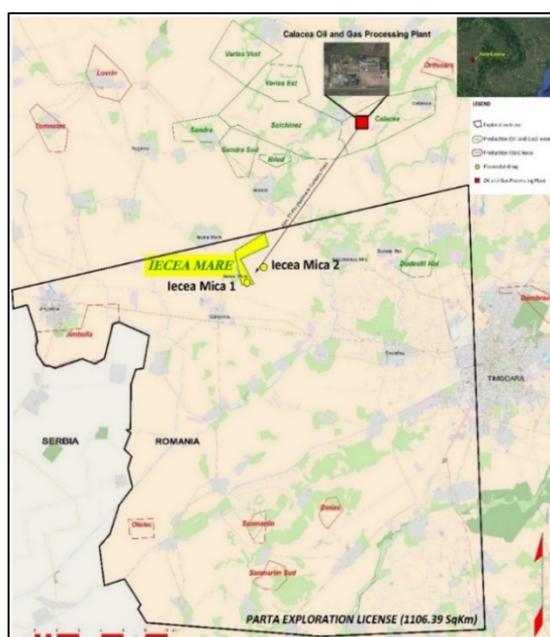
**Prospective Resources** are those estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) related to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further explorations appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.

- The well will be deepened to a depth of 2600 meters to evaluate larger untested exploration potential which is a proven Oil play in other fields in the basin ("Basement Play").
- The *Best Case Prospective Resource* for the deeper exploration upside potential accessible by the well is 16 Bcf (for a gas success case) and 2 MMBBLS (for an oil success case) <sup>Note 1</sup>.
- If the deeper exploration target is successful it is expected to de-risk several follow up prospects with good upside potential which ADX has identified both on 3D and 2D seismic.
- The well has the additional benefit of being proximal to infrastructure for both gas, oil and electricity enabling low cost, highly profitable commercialisation.

**Note 1:** Refer to ASX announcement 20/3/2019, ADX confirms that it is not aware of any new information or data that materially affects the information included in that market announcement and that all the material assumptions and technical parameters underpinning the estimates in that market announcement continue to apply and have not materially changed.

### Well Overview

ADX together with Danube's 37% shareholder, Reabold have elected IM-1 as the first drilling candidate for the two well Parta Appraisal Program. IM-1 is located in the Iecea Mare Production License which is within the Parta Exploration License in the Panonian Basin, onshore Romania.



Location Map – Showing IM-1 Well location, Iecea Mare Production License and Parta License

### Well Prognosis and Resource Potential

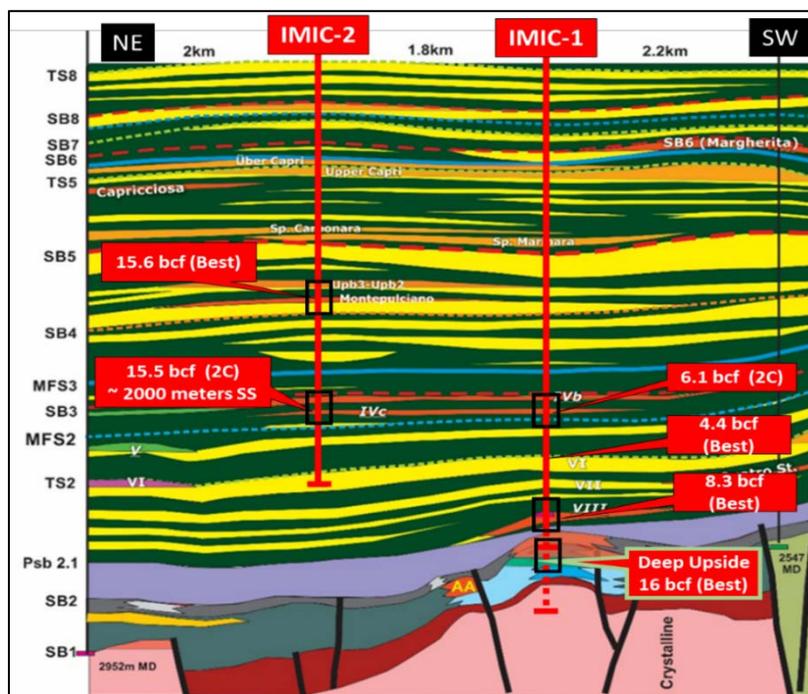
IM-1 is a structural trap targeting multiple (Pliocene to Miocene) pay zones including established appraisal potential from historic wells drilled in the 1980's that were tested but never produced as well as deeper not tested exploration potential defined on recently acquired 3D seismic. The independently assessed contingent and prospective resource potential of IM-1 is summarised in the following table extracted from the ERC Equipose Independent Report (ERCE). This evaluation excludes deeper exploration potential which can be accessed by the IM-1 well. The first proven, previously flow tested gas reservoir section is the Pa IV sand in the IM-1 well. That zone is expected to be encountered at a depth of ca. 1940 meters TVDSS.

**ERCE Independent Resource Estimates\* for Parta Appraisal Program**

Recoverable Hydrocarbon Volumes			ERCE Estimates		
Prospect	Target Reservoir	PRMS Category	P90 (bscf)	P50 (bscf)	P10 (bscf)
IM-1	Pa IV	Contingent <sup>1</sup>	2.0	6.1	16
IM-1	Pa VI	Prospective <sup>2</sup>	2.4	4.4	7.3
IM-1	Pa VIII inf.	Prospective	2.7	8.3	21.3
IM-2	PsB4.3	Prospective	5.4	15.6	39.1
IM-2	Pa IV	Contingent	4.8	15.5	43
<b>Total Program</b>		<b>Contingent</b>	<b>6.8</b>	<b>21.6</b>	<b>59.0</b>
<b>Total Program</b>		<b>Prospective</b>	<b>10.5</b>	<b>28.3</b>	<b>67.7</b>

\* Refer to ASX announcement 11 July 2018, ADX confirms that it is not aware of any new information or data that materially affects the information included in that market announcement and that all the material assumptions and technical parameters underpinning the estimates in that market announcement continue to apply and have not materially changed.

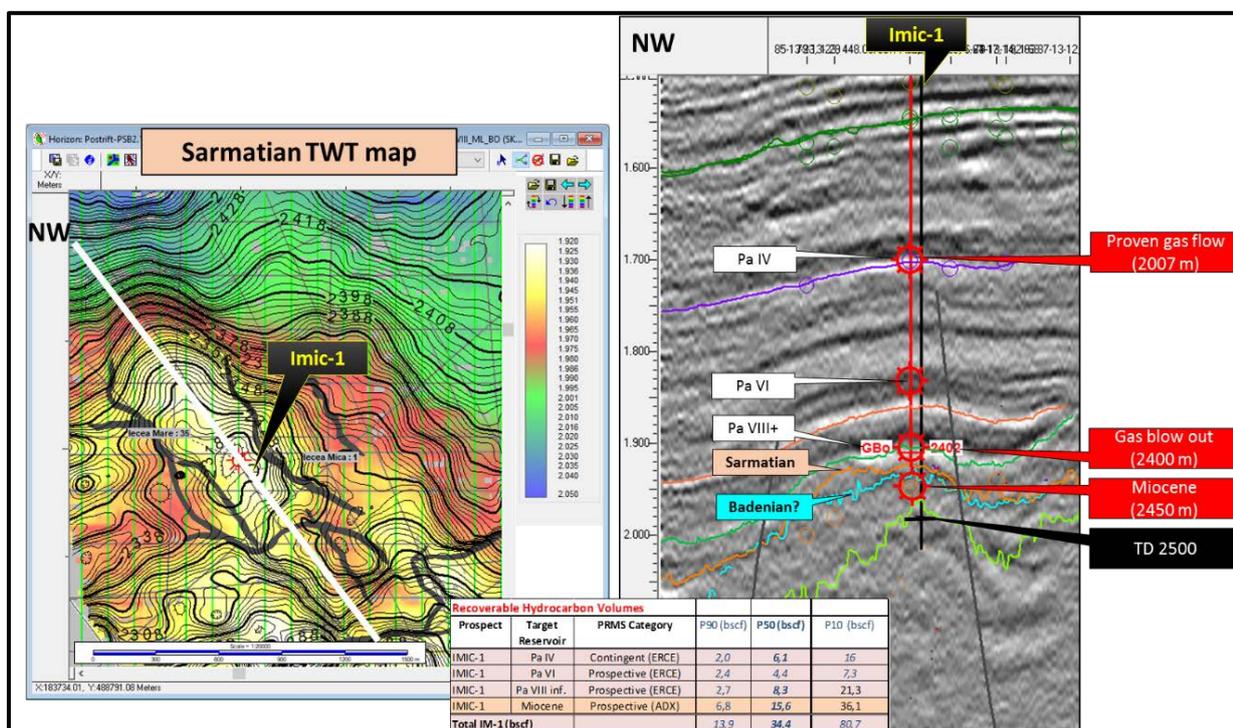
1. **Contingent Resources** are those quantities of petroleum estimated, as at a given date, to be potentially recoverable from known accumulations but, for which the applied project(s) are not yet considered mature enough for commercial development due to one or more contingencies. 1C, 2C, 3C Estimates: in a probabilistic resource size distribution these are the estimates that have a respectively 90% (P90), 50% (P50) and 10% (P10) probability that the quantities actually recovered will be exceeded
2. **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 explorations appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.



**A Simplified Stratigraphic X section through IM-1 and IM-2 showing the potential deeper Badenian (Miocene) build up carbonate play or the alternate fractured basement play.**

In addition to the ERCE independently assessed Contingent and Prospective Resource volumes shown in the previous table, IM-1 offers a larger deeper exploration potential which was not included in ERCE's estimates that can be reached within the current planned 2500 meters TD of the IM-1 well. It is predicted that the well will test a Badenian (Miocene) calcareous sandstone and/or a proven fractured basement play which has been successful in the Satchinez and Calacea fields 12km to the north of IM-1 well location. The Miocene Badenian age carbonate build up play is proven by gas discoveries to the East. Either one of, both of, or none of the deeper upside exploration plays may be present.

The Pa IV (Pannonian – Pliocene) horizon intersected in the original exploration discovery well tested at a rate of 1 MMSCFPD in 1989. It is expected the IM-1 well, with modern drilling and completion practices, will achieve significantly higher rates from this zone. Depending on which hydrocarbon charge model is assumed for the previously undrilled, deeper exploration plays there is also potential for an oil discovery at basement level. It should be noted that the previous Iecea Mare production license operator assessed the potential of the for the basement play to be in excess of 2 mmbbls of recoverable oil. ADX estimates 16 bscf for a best case recoverable prospective gas resource, assuming the intersection of a Miocene Badenian age (Miocene) calcareous sandstone is encountered as a gas bearing reservoir in a deeper exploration play success case. Based on nearby well data the intersection of potential basement reservoir is considered the most likely outcome.

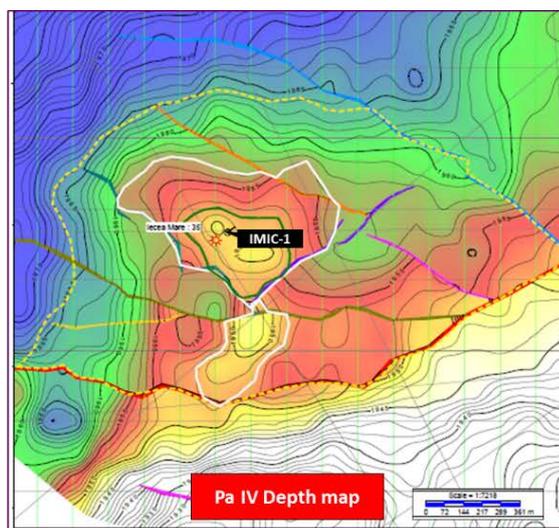
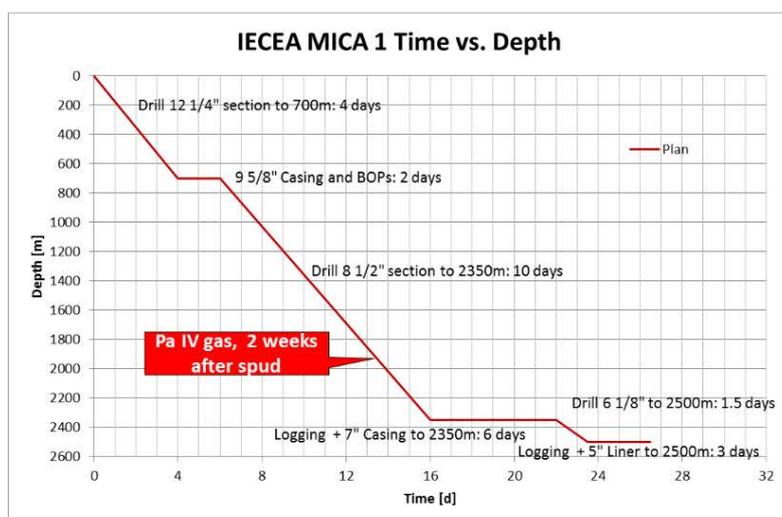


**IM-1 Map and 3D Seismic Section through IM-1 well location**

The above 3D seismic section through the IM-1 well location highlights the various currently identified reservoir targets and their respective depths. Note that the original exploration well only had electric logs down to the Pa VIII reservoir. The well was deepened further but experienced a major kick and overpressure around 2400 meters TVD that was not able to be tested. This is described as an uncontrolled flow in some old well reports for the discovery well.

### Well Design

Due to expected overpressure starting around 2400 meters (“the historic well blow out reservoir”) 7” casing is programmed to be run to a depth of 2350 meters TVDSS. The well will then be drilled through the overpressure zone in a smaller 6 1/8” hole size and will reach TD around 2600 meters.



The most likely well cost estimate for the well is approximately US\$3 million, including evaluation, logging and running casing. The above mentioned cost estimate does but not include well testing operations

which are planned to be undertaken with a much smaller and cheaper work over unit. Included in the well cost estimate is a well head and production tubing which has already been purchased.

The IM-1 well is designed to enable the evaluation of an over pressured zone encountered in the original discovery well as well as highly prospective and potentially material deeper exploration targets not reached previously. These deeper exploration targets which are now mapped on 3D seismic are particularly exciting due to their materiality and the fact they can potentially be reached at minimal incremental cost.

**End of Release**