ASX Release

26 August 2019

Iecea Mica-1 Well – Drilling Update No 4. "Multiple Hydrocarbon Zones Intersected"

SUMMARY OF REPORT (DAY 19 since spud date)

@ 6.00 PM 25th of August 2019 Eastern European Summer Time (EESC)

- Well has reached total depth for the 8½" hole at 2335 meters measured depth ("MD") and electric line logging has just been completed.
- A number of potential Pannonian reservoirs ("PA", Pliocene to uppermost Miocene) have been intersected and logged with observed hydrocarbon shows including;
 - A 2 meter sandstone at a depth of approximately 1863 meters MD with (C1) gas shows at the PA III stratigraphic interval
 - A 5 meter sandstone at a depth of 2033 meters MD with (C1) gas shows as expected at the PA IV stratigraphic level (the zone that was successfully tested in the historic well)
 - A stratified sandstone and siltstone section from 2140 to 2163 meters MD (23 meters) including a number of potential reservoirs with heavier gas shows (C1, C2 & C3) in the PA IV interval (Note: Offset production well has produced oil from this interval)
 - A preliminary petrophysical analysis is expected to be completed and subsequently reported over the coming days however the results of the PA IV sand and the PA V sand are encouraging based on drilling and raw wireline log data assessed to date.
- Current operations running a wiper trip and preparation to run 7" casing.
- Future operations run 7" casing, install well head and blow out preventers then commence drilling 6" hole to well total depth.
- 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 25th of August 2019, located in the lecea Mare production license onshore Western Romania has reached the casing depth of 2335 meters MD.

Since the last well operations report on the 19th of August 2019 the IMIC-1 well has intersected a number of sandstone reservoir intervals with corresponding gas shows as follows;

- The Pa III stratigraphic interval was intersected at a depth of 1835 meters MD, approximately 3 meters shallower than at the control well lecea Mare 35. Two significant gas peaks associated with sandstone intervals were encountered. A 2 meter reservoir sandstone at 1863 meters was associated with the most pronounced gas peak.
- The Pa IV section was intersected as predicted around 2033 meters MD and encountered very strong C1 and also some C2 gas shows related to the main Pa IV sandstone reservoir which is seen as a very



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clean approximately 5 meter thick sand on the MWD GR log. Two more strong gas peaks were encountered at depths of 2053 and 2061 meters MD respectively. They are not associated with clean sandstone reservoirs but silty intervals within an otherwise, predominantly claystone section.

• The Pa V stratigraphic interval was intersected at a depth of 2140 meters MD and is associated with 23 meters of strong gas peaks, including higher hydrocarbon composition (C2 & C3). While this section is an alternation of claystone, siltstone and finely laminated sandstones of less than 2-meter thickness, the most pronounced gas shows are associated with the clean sandstone reservoir intervals. A downdip control well at a distance of approximately 2.5 km has produced oil from this interval.

The current 8½" hole TD is within the upper part of the PA VII stratigraphic interval. It is expected that at approximately 2400 meters the well will reach the crest of a significant basement high area which lacks a number of Lower Pannonian reservoirs due to onlap and non-deposition. It is therefore expected that the well will soon thereafter intersect potential Miocene (Sarmatian & Badenian) and fractured basement related reservoir zones in a deeper hydrocarbon system (refer to Well Summary and prospectivity assessment attached to this release).

The Production License is owned 100% by ADX Energy Panonia SRL, a wholly owned subsidiary of Danube Petroleum Limited (Danube). ADX holds a 63% shareholder interest in Danube and is contract Operator for the License and the surrounding Parta Exploration Permit ("Permit") in which the Production License is located. The well is being funded through equity contributions of approximately US\$3 million in Danube by 37% shareholder, Reabold Resources PLC ("Reabold").







Electric line logging in 8 $\frac{1}{2}$ hole



Electric line logging in 8 ½" hole





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 lecea Mare Production license.

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IECEA MICA-1 PRE-DRILL WELL SUMMARY

Key Points

- The upper 2350 metres of lecea 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. Note 1

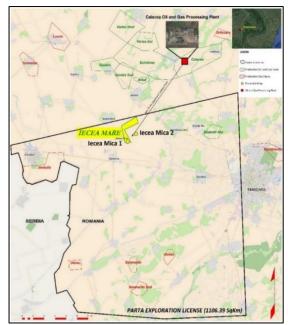
Prospective Resources are those estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) related to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further explorations appraisal 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)*^{Note 1}.
- 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 lecea Mare Production License which is within the Parta Exploration License in the Panonian Basin, onshore Romania.



Location Map – Showing IM-1 Well location, lecea 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 Equipoise 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.

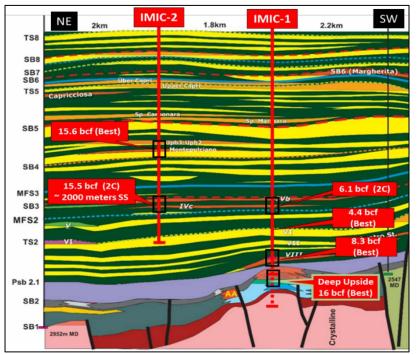
Recoverable Hydrocarbon Volumes		ERCE Estimates			
Prospect	Target	PRMS	P90	P50	P10
	Reservoir	Category	(bscf)	(bscf)	(bscf)
IM-1	Pa IV	Contingent ¹	2.0	6.1	16
IM-1	Pa VI	Prospective ²	2.4	4.4	7.3
IM-1	Pa VIII inf.	Prospective	2.7	8.3	21.3
IM-2	PsB4.3	Prospective	5.4	15.6	39.1
IM-2	Pa IV	Contingent	4.8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

ERCE Independent Resource Estimates* for Parta Appraisal Program

* 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.



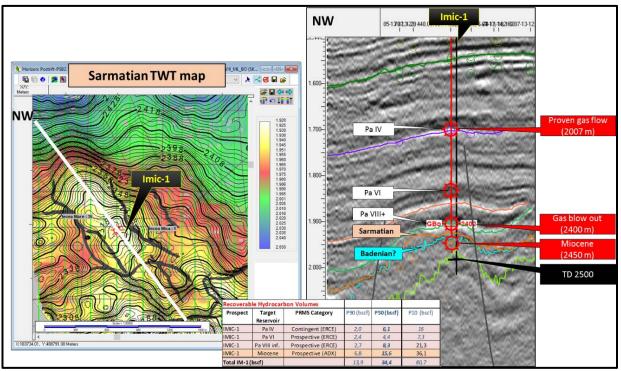


A Simplified Stratigraphic X section through IM-1 and IM-2 showing the potential deeper Badenian (Miocene) build up carbonate play or the alternate fractured basement play.

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 lecea 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.



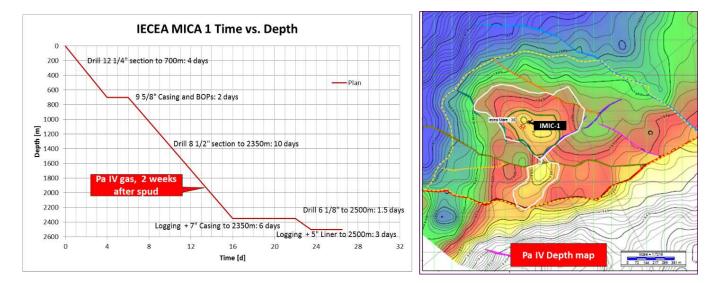


IM-1 Map and 3D Seismic Section through IM-1 well location

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 $\frac{1}{2}$ " 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