# **ASX** Release



27 August 2018

# **Dougga Gas Condensate Project Update**

# **Highlights of this Release**

- ERCE Independent Evaluation Report is now accessible via the ADX website.
  - 405 Bscf Gas <sup>Note 1</sup>, 31 MMbbl Condensate and 32 MMbbl LPG (totalling 122 MMBOE <sup>Note 3</sup>)
     Unrisked 2C Contingent Resources for the Dougga Discovery as announced on 16 July
     2018.
  - ERCE has assessed the Dougga project has a 70% chance of being commercialised Note 4
- The Noble Globetrotter II drilling rig availability has been deferred to April 2019 and the rig contract has been extended to end May 2019 on same commercial terms.
- Farmout and funding discussions for Dougga appraisal ongoing with multiple parties.
- The Hydrocarbon Consultative Committee has deferred and reduced the requirement for a bank guarantee to ensure the completion of the Dougga Sud testing program.

ADX Energy Ltd (ASX Code: **ADX**) is pleased to update its Shareholders regarding progress in relation to the independent evaluation of the resource potential and viability of the Dougga Gas Condensate Project (Dougga) offshore Tunisia, the planned drilling of the Dougga Sud appraisal well, ongoing discussions for funding the appraisal program and permit renewal terms.

#### Independent Evaluation Report

On the 16<sup>th</sup> of July 2018, ADX announced the assessment of the Contingent Resources at Dougga as well as the Prospective Resources of the Dougga South West prospect determined in the Independent Evaluation Report by ERC Equipoise Pte Ltd (ERCE) <sup>Note 2</sup>. In addition to the Dougga resource assessments previously announced, ERCE has assessed that chance of the development of Dougga to be 70% <sup>Note 4</sup>. A summary of the results of the ERCE Independent Evaluation is attached to this release. Given the importance of the Dougga project and the relevance of the ERCE report, the Board of ADX has made the report available to its shareholders via the Company's website.

#### Dougga Sud Appraisal Well

Noble Drilling Services Inc has advised that the Noble Globe Trotter II drilling rig is now scheduled to be available to spud the Dougga Sud appraisal well in April 2019 following completion of its current program in the Black Sea. Noble have extended the drilling contract on the same excellent commercial terms as agreed previously. Well planning and approvals for drilling and testing are ongoing. The delay provides additional time for ADX to secure funding and secure long lead items for the Dougga Sud well.

### **Appraisal Well Funding**

Data room due diligence and funding discussions are ongoing with multiple parties with a view to securing either a farmout, vendor finance or a combination of both. The recently completed ERCE report, in



combination with the TechnipFMC Concept Study, provides potential funding partners with independent confirmation of the potential viability of the Dougga Gas Condensate Project by highly respected third parties. ADX continues to work towards the finalisation of funding for Dougga at an asset level and the introduction of a capable partner to the project that can not only fund the appraisal well but, upon appraisal success, also enable the commercialisation of Dougga.

#### Work Program Approvals

On December 2017 ADX announced that the Director General of Hydrocarbons (DGH) advised that the Hydrocarbon Consultative Committee (HCC) Note 5 had approved the application for a change of work program in the Kerkouane permit from an exploration well and the acquisition of 500 km2 of 3D seismic to the drilling and testing of the Dougga Sud appraisal well. The revised work program, which replaces the previously unfulfilled permit work program during the first renewal period, is a precondition to the entry for a second renewal period of 3 years.

The DGH also advised the requirement for a bank guarantee in relation to the modification of the work program, which will be lifted upon the testing of the Dougga Sud well. Following discussions between the DGH and ADX, the DGH has advised that the HCC has agreed to reduce the proposed bank guarantee for the completion of the Kerkouane testing program from US\$ 8 million to US\$ 3 million and delayed its timing to the spudding of the well. This is a significant concession by the HCC facilitated by the DGH. ADX intends to secure the funding from potential farminees or providers of vendor finance.

lan Tchacos, Executive Chairman of ADX, commented "The Board of ADX is pleased with the progress at Dougga. The independent assessment by ERCE that the Dougga project has a high chance of being commercialised is very positive from both a project and farmout perspective. ADX is now receiving strong funding interest at an asset level from a number of parties and we anticipate securing funding commitments well in advance of rig availability enabling sufficient time to conclude planning, long lead item purchases and regulatory approvals. The reduction and delay of the requirement to post a work program guarantee is a substantial concession by the Tunisian authorities."

**Note 1:** Gas Net of Inerts (after deduction for removal of  $CO_2$  and gas shrinkage when liquids are removed) **Note 2:** The work has been carried out using international resources and reserves reporting and classification standard adopted by the ASX and the LSE - the March 2007 SPE/WPC/AAPG/SPEE Petroleum Resources Management System ("PRMS")

**Note 3:** ERCE has not reported volumes in MMBOE in its report; the MMBOE resources, and percentage variances, have been calculated by ADX using the oil equivalent conversion factors from the TRACS 2011 report.

**Note 4:** ERCE has assigned the Contingent Resources to the Dougga discovery as Development Unclarified. ERCE considers that a future development of Dougga is contingent on:

- The appraisal Well Dougga-Sud is successfully drilled and tested and acquires representative reservoir information and fluid samples
- Well Dougga-Sud broadly confirms the current assumptions about reservoir quality and fracture distribution and establishes that future horizontal development wells will be able to flow at the required commercial flow rates sufficient to support the proposed development plan
- The preparation and approval by all stakeholders of a development plan ERCE has assessed the chance of development as 70%.



**Note 5:** "The Hydrocarbon Consultative Committee "Comite Consultatif des Hydrocarbures" (HCC) is a Ministerial Committee responsible for providing advice on the granting of title to hydrocarbon permits and/or concessions in Tunisia.

#### For further details please contact:

Paul Fink Ian Tchacos

**Chief Executive Officer Executive Chairman** +61 (08) 9381 4266 +61 (08) 9381 4266

www.adxenergy.com.au

#### PERSONS COMPILING INFORMATION ABOUT HYDROCARBONS:

Pursuant to the requirements of the ASX Listing Rules 5.41 and 5.42, the technical and resource information contained in this document has been reviewed by Paul Fink, Technical Director of ADX Energy Ltd. Mr. Fink 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 presentation 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).

ERC Equipoise Pte Ltd, the independent resource reviewer named in this document, has consented to the inclusion of information relevant to their review in the form and context in which it appears.

#### **CAUTIONARY STATEMENTS:**

CONTINGENT RESOURCES: Those quantities of petroleum estimated, as of 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.

PROSPECTIVE RESOURCES: The estimated quantities of petroleum that may potentially be recovered by the application of a future development project relate 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 a significant quantity of potentially moveable hydrocarbons.



# Summary of ERCE Independent Evaluation Report (as announced on 16 July 2018)

## **Dougga Discovery Evaluation**

- Unrisked 2C Contingent Resources of 405 Bscf Gas Note 1 and 31 MMbbl Condensate and 32 MMbbl LPG (totalling 122 MMBOE Note 3) at Dougga, a 63% increase over the last independent review by TRACS in 2011.
- The liquids content comprises approximately 50% of the oil equivalent volumes
- An unrisked 3C Contingent Resources upside potential of 227 MMBOE Note 3.
- The key appraisal objectives of the Dougga Sud well are appropriate.
- The development concept that has been selected with TechnipFMC and the level of design maturity, flow assurance and risk management adopted by ADX is considered appropriate for the appraisal phase of the project.

## Dougga SW Prospect Evaluation (adjacent undrilled structure next to Dougga)

- Unrisked Best Estimate Prospective Resources of 762 Bscf Gas and 37.5 MMbbl Condensate (totalling 169 MMBOE Note 3) at Dougga SW with 41% estimated within the Kerkouane Permit
- Chance of success at Dougga SW of 30%.
- Dougga and Dougga SW may form a single, connected structure (in the maximum case).

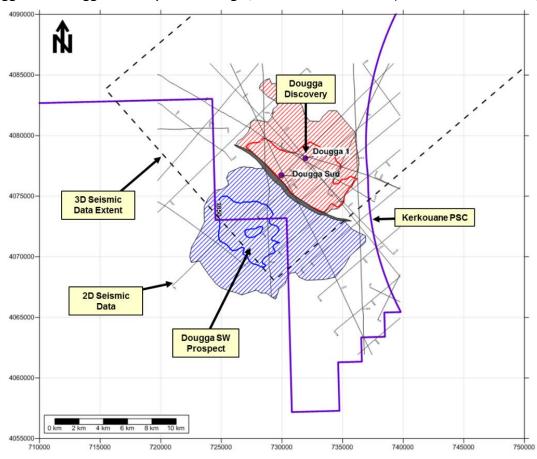


Figure 1: Dougga and Dougga SW Location Map



| ent Resources Note 6, 7    | 1C  | 2C   | 3C               |
|----------------------------|---|--|------------------|
|                            |   |  |                  |
| Bscf                       | 238   | 405  | 772              |
| MMbbl                      | 15  | 31   | 64               |
| MMbbl                      | 19  | 32   | 56               |
| ММВОЕ                      | 69  | 122  | 227              |
| MMBOE - Total              | 98  | 162  | 273              |
| ternal                     | -30%  | -25%   | -17%             |
| spective Resources Note 10 | Low   | Best   | High             |
|                            |   |  |                  |
| Bscf                       | 383   | 762  | 1550             |
| MMbbl                      | 15  | 37.5   | 88               |
| ММВОЕ                      | 81  | 169  | 355              |
| MMROE                      | 22  | 60   | 145              |
| ı                          |   |  | 41%              |
|                            | Bscf MMbbl MMBOE  MMBOE - Total  Fernal  spective Resources Note 10  Bscf MMbbl | Bscf   238     MMbbl   15   MMbbl   19     MMBOE   69     MMBOE   -Total   98     Spective Resources Note 10   Low   Bscf   383   MMbbl   15   MMBOE   81     MMBOE   33 | Bscf   238   405 |

#### Where

"Low" means a conservative estimate of the quantity that will actually be recovered from the accumulation by the project; there is a 90% probability (P90) that the quantity actually recovered will equal or exceed the best estimate "Best" means a best estimate of the quantity that will actually be recovered from the accumulation by the project; there is a 50% probability (P50) that the quantity actually recovered will equal or exceed the best estimate "High" means an optimistic estimate of the quantity that will actually be recovered from the accumulation by the project; there is a 10% probability (P10) that the quantity actually recovered will equal or exceed the best estimate

#### **Notes**

- 6. All Resources guoted are at ADX 100% equity interest in the Kerkouane Permit.
- 7. The total Contingent Resources estimates presented in the table above are unrisked and have not been adjusted for the chance that the Contingent Resources will be developed and will reach commercial producing status.
- 8. The gas contingent resources estimates presented are gas net of inerts (after deduction for removal of CO2 and gas shrinkage when liquids are removed).
- 9. The MMBOE resources and the percentages variances have been calculated by ADX using the oil equivalent conversion factors from the TRACS 2011 report.
- 10. The total Prospective Resources estimates presented in the table above are unrisked and have not been adjusted for the chance of discovery and chance of development.
- 11. The gas prospective resources estimates presented are gross raw gas and do not account for shrinkage fuel and flare or inerts.
- 12. 41% has been used for low, best and high cases for the percentage of volumes within the Permit. This is based on the percentage of gross rock volume within the Permit, which is 38% for the low case and 44% for the high case; 41% the average which has then been used for all cases.

Table 1: Dougga Contingent Resources and Dougga South West Prospective Resources Range

<sup>&</sup>quot;Bscf" means thousands of millions of standard cubic feet

<sup>&</sup>quot;MMbbl" means millions of barrels

<sup>&</sup>quot;MMBOE" means millions of barrels of oil equivalent – where gas and LPG are converted to barrels of oil equivalent ("boe") using conversion factors of 5800 scf/boe for gas and 1.484 bbl LPG/boe

<sup>&</sup>quot;scf" means standard cubic feet of gas measured at 14.7 pounds per square inch and 60 degrees Fahrenheit

<sup>&</sup>quot;1C" means Low Estimate Contingent Resources

<sup>&</sup>quot;2C" means Best Estimate Contingent Resources

<sup>&</sup>quot;3C" means High Estimate Contingent Resources