

16 July 2018

## Dougga Gas Discovery - Independent Evaluation Results

- **405 Bscf Gas <sup>Note 1</sup> and 31 MMbbl Condensate and 32 MMbbl LPG (totalling 122 MMBOE <sup>Note 3</sup>) Unrisked 2C Contingent Resources for the Dougga Discovery, and**
- **762 Bscf and 37.5 MMbbl Condensate (totalling 169 MMBOE <sup>Note 3</sup>) Unrisked Best Estimate Prospective Resources for the Dougga SW Prospect with 41% in Permit**

ADX Energy Ltd (ASX Code: **ADX**) is pleased to announce that an independent evaluation of the Dougga Gas Condensate discovery (Dougga) and potential extension of Dougga - the Dougga South West prospect (Dougga SW) offshore Tunisia has been completed by ERC Equipoise Pte Ltd (ERCE) on behalf of ADX. ADX is the 100% equity holder and operator of the Kerkouane license. For Dougga, the evaluation report includes a review and evaluation of geological and geophysical data, reservoir engineering modelling data and recovery factors, Contingent Resources quantification, development concept maturity, facilities engineering review, project schedule, project flow assurance and the suitability of the planned appraisal well. For the adjacent Dougga SW undrilled prospect, the evaluation includes the review and evaluation of geological and geophysical data, Prospective Resources quantification and risking. The evaluation report by ERCE does not include other exploration potential within the Kerkouane license.

It is ADX's intention to drill and test the Dougga Sud appraisal well during Q1 2019 utilising the Noble Globe Trotter II drilling rig and ADX are in discussion with a number of parties regarding the funding of the well. The report will be used by ADX in support of ongoing financing discussions for the Dougga Sud appraisal well as well as a potential compliance listing of ADX on the Alternative Investment Market ("AIM") of the London Stock Exchange (LSE)<sup>Note 2</sup>. ERCE is an international, independent consultancy specialising in geoscience evaluation, engineering and economic assessment.

### Key Highlights of findings from the ERCE Evaluation Report are as follows;

#### *Dougga Discovery Evaluation*

- **Unrisked 2C Contingent Resources of 405 Bscf Gas <sup>Note 1</sup> and 31 MMbbl Condensate and 32 MMbbl LPG (totalling 122 MMBOE <sup>Note 3</sup>) at Dougga, a 63% increase over the last independent review by TRACS in 2011.**
- The carbonate reservoirs are considered to be fractured; with resource recovery factors ranging from 63% to 79% being assumed.
- The liquids content comprises approximately 50% of the oil equivalent volumes.
- An unrisked 3C Contingent Resources upside potential of 227 MMBOE <sup>Note 3</sup>.
- 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.
- Current project uncertainties have been addressed by assuming conservative inputs to critical elements of the facilities design concept.

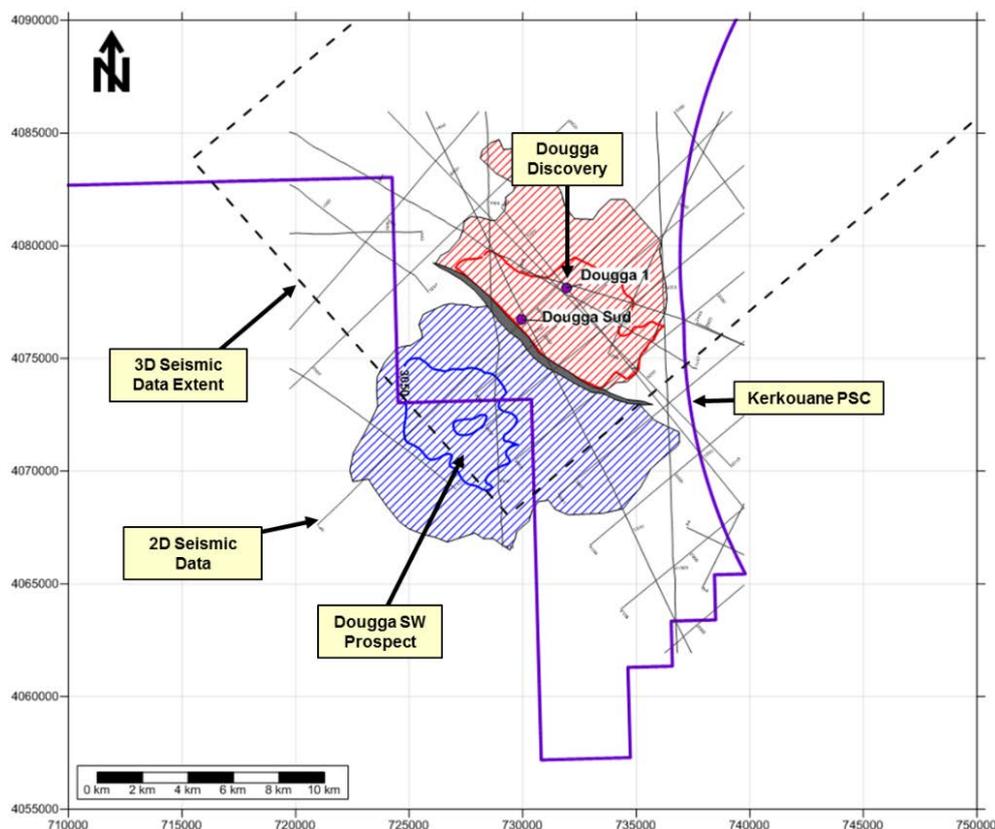
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**Figure 1: Dougga and Dougga SW Location Map**

**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 <sup>Note 3</sup>) 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).

**Note 1:** Gas Net of Inerts (after deduction for removal of CO<sub>2</sub> 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.

**Ian Tchacos, Executive Chairman of ADX, commented** "The Board of ADX is pleased that ERCE has independently supported the detailed integrated subsurface, appraisal and development studies completed by ADX over the last 18 months with a view to progressing the commercialization of Dougga. While the resource estimates are lower than those of ADX they are significantly greater than the last independent review for Dougga which enhance the credibility of Dougga as a potentially significant resource which justifies ADX's intended appraisal program. This independent evaluation supports ADX's view that the Dougga gas condensate discovery is a potentially viable and important strategic resource with further upside potential identified at the relatively low risk Dougga SW prospect in a country that is supportive of hydrocarbon development and has a desperate requirement for gas, LPG and condensate."

## Dougga Contingent Resources Estimates

The ERCE unrisks Contingent Resource estimates represent a 40% to 101% increase over the last independent review conducted by TRACS in 2011 (Table 1) resulting largely from improved reservoir property modelling and characterization work completed by ADX in 2017.

<b>Dougga Unrisks Contingent Resources</b> Note 4, 5, 6		<b>1C</b>	<b>2C</b>	<b>3C</b>
<b>ERCE (2018) Estimates</b>				
Gas Net of Inerts <sup>Note 7</sup>	Bscf	238	405	772
Condensate	MMbbl	15	31	64
LPG	MMbbl	19	32	56
<b>Total Oil Equivalent</b> <sup>Note 8</sup>	<b>MMBOE</b>	<b>69</b>	<b>122</b>	<b>227</b>
<b>TRACS (2011) Estimates</b>				
	<b>MMBOE - Total</b>	<b>49</b>	<b>75</b>	<b>113</b>
<b>ERCE Variance to TRACS</b>		<b>+40%</b>	<b>+63%</b>	<b>+101%</b>
<b>ADX Internal (Current)</b>				
	<b>MMBOE - Total</b>	<b>98</b>	<b>162</b>	<b>273</b>
<b>ERCE Variance to ADX Internal</b>		<b>-30%</b>	<b>-25%</b>	<b>-17%</b>
<p>Where</p> <p>"Bscf" means thousands of millions of standard cubic feet  "MMbbl" means millions of barrels  "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  "scf" means standard cubic feet of gas measured at 14.7 pounds per square inch and 60 degrees Fahrenheit  "1C" means Low Estimate Contingent Resources  "2C" means Best Estimate Contingent Resources  "3C" means High Estimate Contingent Resources</p> <p><b>Notes</b></p> <p>4. All Resources quoted are at ADX 100% equity interest in the Kerkouane Permit.  5. 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.  6. The total Contingent Resources estimates presented in the table above are unrisks and have not been adjusted for the chance that the Contingent Resources will be developed and will reach commercial producing status.  7. The gas resources estimates presented are gas net of inerts (after deduction for removal of CO2 and gas shrinkage when liquids are removed).  8. The MMBOE resources and the percentages variances have been calculated by ADX using the oil equivalent conversion factors from the TRACS 2011 report.</p>				

**Table 1: Dougga Contingent Resources Range and Comparison Between Estimating Parties**

ADX has slightly adjusted its internal estimation methodology following feedback and discussions with ERCE and as a consequence has expanded its resource range shown in Table 1 marginally from the resources previously announced on 20/12/2017. ERCE and ADX agree on the majority of Dougga reservoir parameters including the overall size of the Dougga structure, the matrix reservoir quality and distribution, the gas quality as well as the reservoir connectivity and productivity. The ERCE resource estimates are lower than ADX's own internal resource estimates largely due to a differing view on the estimation of fracture porosity. Greater definition of the fracture porosity is one of the key objectives of the Dougga Sud appraisal well.

In advance of the appraisal well, ADX believes that there is sufficient evidence from the drilling and testing information from Dougga-1 and other producing analogues in Tunisia to support its current fracture porosity range. ERCE has assumed a fracture porosity range based on its regional knowledge and broader experience with fractured reservoirs more generally. This view by ERCE is in the current absence of more direct data from Dougga reservoirs available to date prior to the drilling of the Dougga Sud appraisal well.

While Contingent Resources estimated by ERCE are lower than ADX, ADX economic modeling indicates that the ERCE's Best Estimate 2C Contingent Resources will result in a commercially attractive outcome which supports ADX appraisal strategy for Dougga.

### **Dougga SW Prospective Resources Estimates**

Dougga SW is an exploration prospect defined on both 3D and 2D seismic. Dougga SW is potentially a structural extension and in connection with the Dougga discovery which is proven to contain hydrocarbons by the Dougga-1 discovery well. ERCE has independently confirmed this prospect and assessed a 30% chance of success.

<b>Dougga SW Unrisked Prospective Resources</b> Note 9, 10		<b>Low</b>	<b>Best</b>	<b>High</b>
<b>ERCE (2018) Estimates</b>				
Gas Note 11	Bscf	383	762	1550
Condensate	MMbbl	15	37.5	88
<b>Total Oil Equivalent</b> Note 12	<b>MMBOE</b>	<b>81</b>	<b>169</b>	<b>355</b>
<b>Within Kerkouane PSC</b>	<b>MMBOE</b>	<b>33</b>	<b>69</b>	<b>145</b>
	% age in Permit Note 13	41%	41%	41%

#### **Where**

*"Bscf" means thousands of millions of standard cubic feet*

*"MMbbl" means millions of barrels*

*"MMBOE" means millions of barrels of oil equivalent – where gas is converted to barrels of oil equivalent ("boe") using a conversion factor of 5800 scf/boe*

*"scf" means standard cubic feet of gas measured at 14.7 pounds per square inch and 60 degrees Fahrenheit*

*"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*

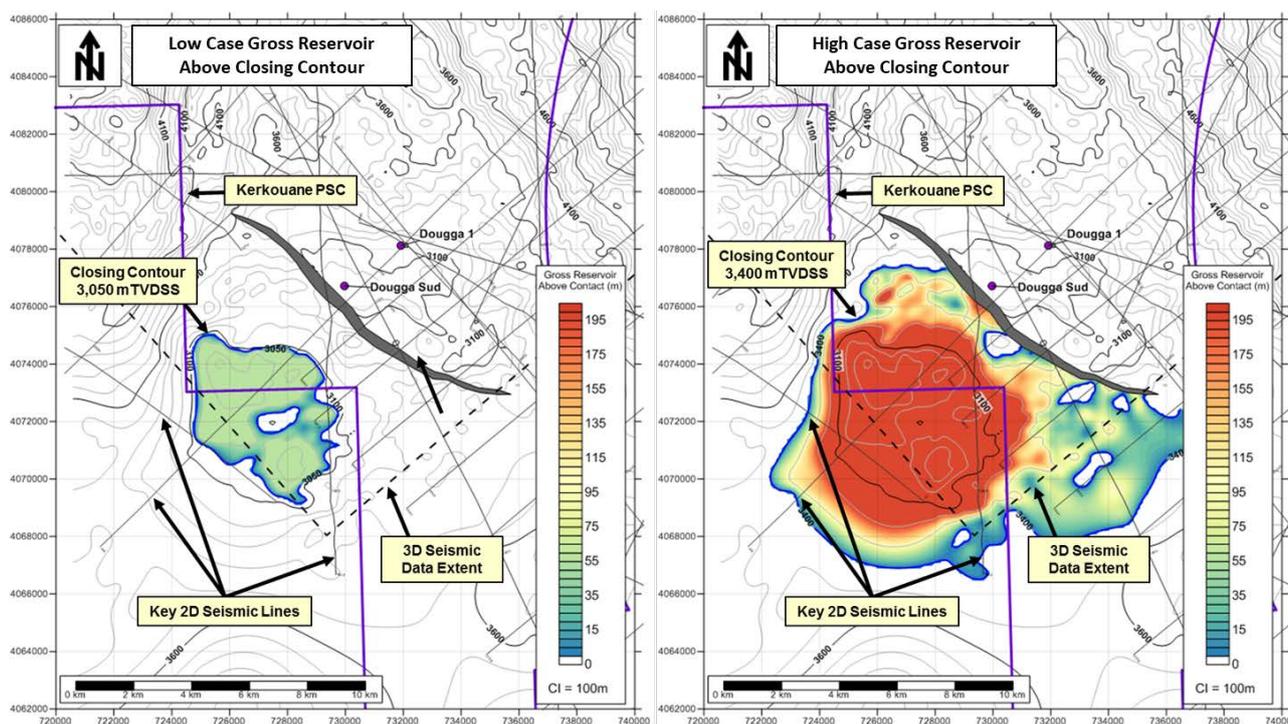
*"Best" means a best estimate of the quantity that will actually be recovered from the accumulation by the project; there is a 50% probability (P50) that the quantity actually recovered will equal or exceed the best estimate*

*"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**

9. 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.
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 resources estimates presented are gross raw gas and do not account for shrinkage fuel and flare or inerts.
12. The MMBOE resources have been calculated by ADX using the oil equivalent conversion factors from the TRACS 2011 report.
13. 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 2: Dougga Southwest Prospective Resources Range Estimated by ERCE**



**Figure 2: Dougga SW Structural Interpretation for Low and High Cases**

ADX and ERCE are in general agreement with the Dougga SW structural interpretation. The range in structural interpretation is shown above in Figure 2. The majority of the structure is defined on 3D seismic, with the southwestern area of the structure mapped on 2D seismic lines, and approximately 41% of the Prospective Resources are estimated to lie within the Kerkouane PSC. The reservoir parameters utilized by ERCE in its assessment are drawn from the assessment of the Dougga main area which ADX believes is an appropriate methodology given the proximity and depositional environment.

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*PERSON 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).

*DISCLAIMER:* 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. ERC Equipose 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.

**END OF RELEASE**