

14 February 2017

## Resources Update for the Nilde Oil Field

- **2C Contingent Resource (most likely) of 33 million barrels.**
- **A range of forecast production profiles for the field yielding oil recoveries between 19 and 50 million barrels.**
- **The following probabilistically derived Contingent Resources as per the table below:**

Gross Contingent <sup>1</sup> Oil Resource Volumes (MMstb)			
	1C <sup>2</sup> Estimate	2C <sup>2</sup> Estimate	3C <sup>2</sup> Estimate
<b>Nilde &amp; Nilde Bis</b>	<b>21.7</b>	<b>32.8</b>	<b>49.8</b>

*Table 1: Gross Contingent Oil Resource Volumes (MMstb)*

- **The revised resources and production forecasts are the result of comprehensive geological and reservoir simulation modelling.**

ADX Energy Ltd (**ASX:ADX**) is pleased to announce an update to the Nilde Oil Field Contingent Resources following the completion of static geological and dynamic reservoir modeling honouring all available geological and historical production data from the field. These very encouraging results provide further confidence in the potential of the Nilde Redevelopment Project and compare favourably with the independently derived resource assessment by Senergy. The results of the Senergy study, which was based on an earlier stage volumetric model and empirical recovery factors, were announced on the 16<sup>th</sup> of February 2016.

The production forecasts generated, and the resulting resources estimates, are based on detailed geological and reservoir models which have been history matched against the field's actual production performance from 1979 to 1989 which provides increased confidence in the geological model and the remaining resources available at Nilde.

ADX's goal now is to optimize the development plan and secure funding via the farmout or partial sell down of Nilde to fund appraisal and development activities.

<sup>1</sup> 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.

<sup>2</sup> 1C, 2C, 3C Estimates: in a probabilistic resource size distribution these are the P90 (90% probability), P50, and P10, respectively, for individual opportunities. Totals are by arithmetic summation as recommended under PRMS guidelines. This results in a conservative low case total and optimistic high case total.

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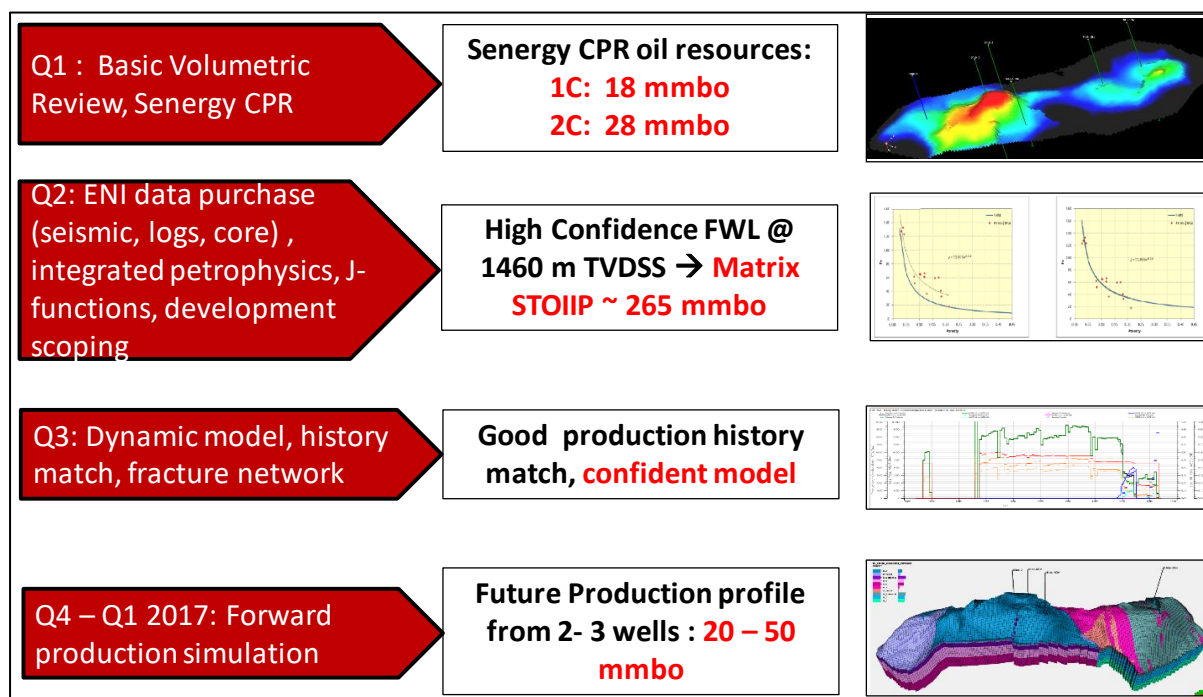
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This reservoir simulation modelling and production forecasting work undertaken for the Nilde oil field and the Nilde Bis discovery respectively, is the culmination of 12 months of data acquisition and geotechnical studies. Specifically, these results build on the static model and the OIIP (oil initially in place) estimates referred to by ADX in the ASX announcement dated 25<sup>th</sup> October 2016 where a range of 3D geological models were developed. Importantly, part of the subsequent work program of history matching these geological models by reservoir simulation has enabled some of the uncertainties in these geological models to be eliminated and ADX believes the OIIP range now lies between 176 and 237 million barrels (including OIIP from both matrix and fractures).

This phase of reservoir simulation work has consisted of three key steps:

1. History matching of past production data against production predicted by the geological model derived by ADX for the period of field production between 1979 and 1989 ensuring that the geological model incorporating all available data generates reliable forecast results.
2. The modelling of reservoir recharging from the time the field was abandoned in 1989 to now.
3. Dynamic forward modelling of future oil, gas and water production on a well by well basis based on ADX' development scenarios.

The work program that has been completed is summarised in figure 1 below which has resulted in a (most likely) 2C resource of 33 mmbo.



**Figure 1: Completed Work Program**

The revised resource estimates derived from production forecasting announced today compare favourably with and provide a significantly more technically robust prediction of future recoveries than the earlier stage Senergy Competent Persons Report announced in February 2016 (refer Table 2 below). This is due to the utilisation of a much more comprehensive database, additional detail in the models and a set of history matched reservoir production predictions. A notable difference is the estimated 3C resource (upside) case, where the new data (i.e. core data) and reservoir simulation model suggests the possibility for a relatively larger undrained deeper oil pool which could result in up to 50 mmbo of remaining recoverable oil resources. (As per table 2 below, the upside case for Nilde & Nilde Bis as per the previous volumetric method was  $17.8+21 = 38.8$  mmbo)

**Table 2: Senergy CPR resources, announced February 2016**

Gross Contingent <sup>1</sup> Resources Volumes (MMstb)			
	1C <sup>2</sup> Estimate	2C <sup>2</sup> Estimate	3C <sup>2</sup> Estimate
Nilde Field	8.7	13.1	17.8
Nilde - Bis Discovery	9.3	15.3	21.0
Norma Discovery	1.2	3.9	12.9
Naila Discovery	1.0	1.7	2.7
<b>Total<sup>3</sup></b>	<b>20.2</b>	<b>34.0</b>	<b>54.4</b>

In contrast to the relatively crude volumetric method of resource estimation used earlier, the dynamic reservoir simulation forecasting method not only provides a total recoverable oil resource volume, but also a well by well production profile prediction with daily oil, gas and water production volumes. These production forecasts also provide an important tool for development design optimisation.

Table 3 below summarizes a number of selected production profile forecasts which provide the input for the contingent resource distribution shown in table 1. An important feature of the table is the forecast oil production plateau rates per well. In most cases, the likelihood of high oil rates results in 80% of the entire forecast oil resource being produced within the first four to five years of production which significantly enhances the economic potential of the Nilde development project.

**Table 3: Selected Production Forecasts from History Matched Simulation**

Selected History Matched Model	Slanted/horizontal well No	Plateau daily Oil Rate [bopd]	Spontaneous imbibition <sup>1</sup>	OWC <sup>2</sup> [mss]	OIIP <sup>3</sup> matrix [mmbbls]	OIIP <sup>3</sup> fractures [mmbbls]	Remaining produceable oil [mmbbls]
Non Compartmentalized	3	13,500	30%	1,610	171.3	4.6	32.7
Non Compartmentalized	3	19,500	40%	1,610	171.3	7.9	44.3
Fault Seal	4	20,000	30%	1,600	173.5	14.2	19.0
Fault Seal	3	16,500	40%	1,600	173.5	14.2	23.0
Fault Seal	3	25,000	40%	1,610	217.9	19.1	33.5

**Notes:** <sup>1</sup> Spontaneous Imbibition is a measure of the oil displacement by water within the reservoir due to capillary pressure <sup>2</sup> OWC means oil water contact or the lowest point of oil moveable oil in a reservoir and <sup>3</sup> OIIP Matrix and OIIP fractures refers to the original oil in place in reservoir matrix and reservoir fractures respectively.

This reservoir simulation modelling and production forecasting work provides ADX with the most credible estimate of the range of future resources from the Nilde field from the data available. ADX is now in a position to further progress field re development concept studies, a revised economic assessment of the field and progress discussions with potential investors or farminees.

ADX looks forward to providing shareholders with a revised economic assessment for the project by the end of February 2017 and actively pursuing farmin or co-investment discussions with other oil companies and/or financial investors.

### Qualified Resource Evaluator Statement

The information in this report and the contingent resources and related supporting documentation and data have been reviewed by Mr. Paul Fink who is a petroleum consultant to ADX and serves on the board of ADX as an executive director. He holds an MSc from the Mining University of Leoben, is a chartered Engineer, a member of Fidic (International Federation of Consulting Engineers) and a member of EAGE (European Association of Geoscientists and Engineers) and is qualified in accordance with ASX listing rule 5.41.

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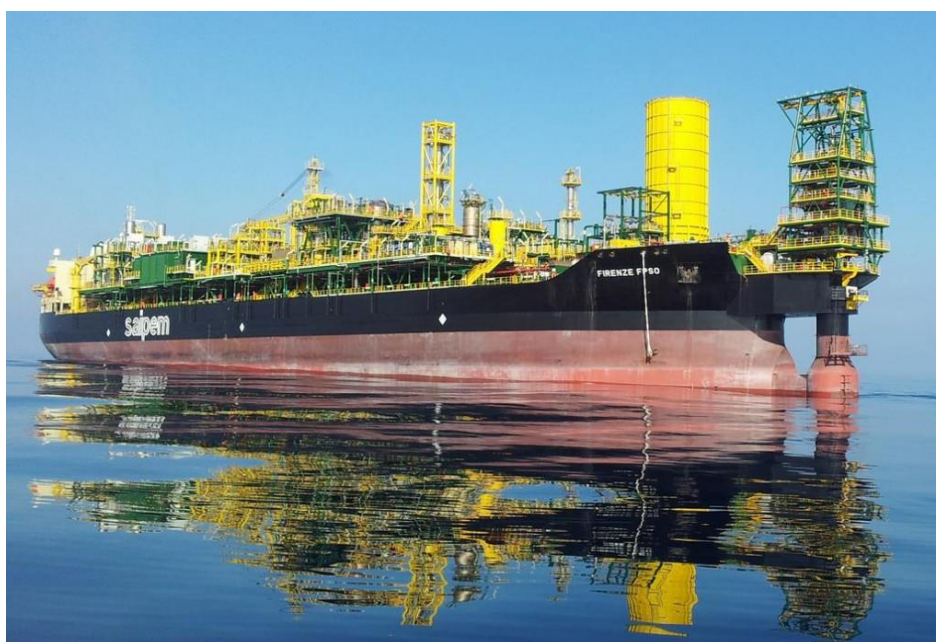
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## Nilde Area Background

The Nilde oil field was discovered by ENI in shallow water offshore Sicily and came on stream with one vertical well (Nilde-2) in 1980 when the oil price was US\$37 per barrel. High productivity of light oil was achieved (around 10,000 bopd of 39° API oil from Nilde-2) in shallow reservoirs at a depth of approximately 1500 meters. The Nilde-2 well produced at high rates for over 7 years. A horizontal production well was drilled very close by (less than 1km) in 1986 which increased field production to 12,000 bopd when oil prices started to decrease significantly. Both wells had subsea wellhead completions that were tied in to an FPSO (Figure 2 below) which essentially was a converted tanker tied to a so called SALS (single anchor leg storage system) system. The FPSO was subsequently upgraded and used for the ENI operated Aquila oil field.



**Figure 2: “Firenze” FPSO, as it looks today. Source: SAIPEM**

Late life well performance was affected by an interpreted strong water aquifer which resulted in an increase in water cut. The effect of the increased watercut on well productivity could not be remedied due to the lack of provision of production facilities capable of artificially lifting the wells. The decision was made prematurely to abandon production instead of drilling additional development/appraisal wells within potentially undrained areas in the field in 1988. The decision to abandon was coincident with and is reported to have been triggered by a collapse in oil price to US\$14 per barrel.

In addition to developing the Nilde field, ENI also made several oil discoveries in the area, notably nearby Nilde-Bis wells, Norma-1 and Naila-1 which were all successfully tested and

proved the presence of both light oil and the excellent Miocene age Nilde carbonate reservoir. To date these discoveries remain undeveloped.

The d363 CR.AX application permit was awarded to ADX via gazettal in May 2014 at a 100% equity interest. ADX has committed to seismic reprocessing, and development studies in the first license phase (6 years) and a well within the first four years of this phase. An extension of one year is possible. Upon drilling a well the license can be extended for another 6 (3+3) years.

ADX initially applied for the d363 CR.AX license unaware of the remaining resource potential of Nilde and the nearby discoveries. The focus at the time was to explore the 3D seismic covered foothill anticline structural play of its neighbouring Tunisian Kerkouane license.

Since the award of the permit ADX has undertaken geotechnical studies focusing on the Nilde shut in oil field and three discoveries in close proximity, the Nilde-Bis, Norma and Naila discoveries (see figure 1) with a view to determining their resource potential and the potential commercial viability of the resources. ADX was very encouraged by the production performance of the reservoirs at Nilde, the modest water depths (90 meters at Nilde), modest drill depths as well as excellent fiscal terms which enhance the potential commerciality of the resources even in a low oil price environment.

The important attributes of the Nilde Area observed from the technical and economic work undertaken to date are summarised as follows:

- The presence of historical production data at Nilde and test data for all undeveloped discoveries provides significant confidence in relation to the performance of reservoirs and crude quality which is light oil (39° API) discovered within the Nilde Area.
- High well productivities demonstrated by previous production wells (approximately 10,000 BOPD from vertical wells).
- Shallow drill depths (less than 1700m).
- Modest water depths (approximately 90m at Nilde main field location) and relatively benign sea conditions offshore Sicily.
- Excellent seismic data quality and good vintage 2D seismic coverage.
- Potential for a staged low cost development focusing initially on Nilde remaining resources and Nilde-Bis (32.8 million barrels 2C resource).
- A substantial 1C resource at Nilde and Nilde-Bis of 21.7 million barrels.
- Simple, modest royalty based regime (4% royalty, with royalty free production of first 350,000 bbls oil).
- The combination of the above factors results in robust indicative economics at sub US\$20 per barrel oil pricing for the 1C resource case.
- Further 2C resources of 5.6 million barrels at the Norma and Naila discoveries.
- Near field exploration potential exists in the block which may provide significant upside beyond the discovered resources, notably a sizable undrilled anticline structure located just 7 kilometers NW of the Nilde main field area.