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UK Oil & Gas Investments PLC  
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("UKOG" or the "Company")

### **Weald Basin - Conceptual Low-Impact Oil Development Plan for Jurassic Limestones**

UK Oil & Gas Investments PLC (LSE AIM: UKOG) announces that, as part of its ongoing evaluation of the viability of the Jurassic Kimmeridge limestone tight oil play in the eleven licences in the Weald and Purbeck-Wight Basins of southern England in which the Company has an interest, it has now received conceptual oil development studies from Xodus Group Ltd. ("Xodus") and Barton Willmore. The conceptual studies are based on developing multiple potential sites across the Company's licences, each of which would consist of a conceptual multi-well pad with 12 horizontal production wells delivering around 2,500 barrels of oil per day at peak production, plus an associated production processing facility site. The development studies are only conceptual at this stage and should not be misconstrued so as to convey that recoverable resources, contingent resources or reserves have been proven to exist within the Jurassic limestone tight oil play at Horse Hill or over other UKOG assets in the Weald and Purbeck-Wight basins.

Xodus and Barton Willmore are specialist consultancy groups well versed in facilities design, and in planning applications and environmental impact assessment respectively. The studies have reviewed how a conceptual Jurassic tight oil play, based on the subsurface findings from wells within UKOG's licenced areas, could potentially be developed with low impact upon the surrounding environment and locality. The Executive Summaries by Xodus and Barton Willmore, can be viewed on UKOG's website: [www.ukogplc.com](http://www.ukogplc.com).

The Company has interests in nine licences, plus a further two subject to Oil and Gas Authority approval or award, which total over 650 square kilometres within the Jurassic tight oil play fairway over the south of England (details are provided at the end of this RNS). In order to assess the economic viability of a potential Jurassic limestone tight oil development and whether this development could be accomplished while preserving the rural way of life and beauty of the Weald area, these studies addressed two key elements:

1. A conceptual facilities study for well pads and the related production process (Xodus)
2. Identification of potential well and production site locations over the Company's licence areas and generally over the Weald Basin (Barton Willmore).

The development studies are based on a conceptual multi-well pad with 12 horizontal production wells delivering around 2,500 barrels of oil per day at peak production, plus an associated production processing facility site. At this stage, drilling and completion of four wells per year are conservatively envisaged. These input assumptions for well performance are at a scoping level only and are based upon preliminary reservoir engineering assumptions, modelling, use of analogues and calculations from the Horse Hill-1 and other wells. A further calibration of these initial assumptions will be made following the planned flow testing of this well.

The reports detail the following conclusions:

- The conceptual development would have a low visual impact that has a significantly lower visual profile than existing UK and Weald oil developments.
- The well pad would have a zero above-ground profile by siting wellheads and manifolds below ground level in a cellar.
- Use of electric downhole pumps for artificial lift removes the necessity for above ground beam pumps ("nodding donkeys").
- The footprint of the conceptual well pad is 3-4 acres occupying an area less than the current Horse Hill site.
- The production profile and number of wells was designed to limit necessary oil tanker export to a maximum of around 8 tankers per day (one tanker every three hours) to transport produced oil to Fawley Oil Refinery. Within 3 years of initial production, the amount of tanker movements would reduce to 4 per day. Over the estimated 30-year life of a multi-well pad, it is expected that the number of road tankers will average less than one every two days.
- Produced water would be cleaned, filtered and re-injected to remove the necessity of disposal via tankers, further reducing the HGV impact.
- Any associated gas would be used as fuel for sites, with the surplus used to generate electrical power exported to the National Grid.
- A robust site selection methodology has been developed so as to minimise noise and traffic impacts on local residents and make maximum use of existing "brown field" sites. National Parks and Areas of Outstanding Natural Beauty were excluded from the initial site search.
- A significant number of potentially suitable low impact sites have been located over the Company's licence interests and over the wider Weald area.

Stephen Sanderson, UKOG's Executive Chairman, commented:

"These studies are an essential part of our Jurassic limestone tight oil 'proof of concept' process, as they enable the Company to gain an initial understanding of the scope, potential economics and operational viability of a possible future development of the Kimmeridge limestones in multiple sites over our licences whilst considering how to keep the environmental impact to a minimum to respect the rural beauty and way of life of the south east of England. Clearly we will be in a better position to refine our view of the economics of the wider tight oil play over the area following the planned flow test of the Horse Hill-1 well. We will now also deploy these valuable learnings regarding low impact facilities options to our proposed development of the Markwells Wood conventional Great Oolite limestone discovery, and to further economic evaluation and appraisal of the conventional Upper Portland sandstone discovery at Horse Hill."

#### **Qualified Person's Statement:**

Stephen Sanderson, UKOG's Executive Chairman, who has over 30 years of relevant experience in the oil and gas industry, has approved the information contained in this announcement. Mr Sanderson is a Fellow of the Geological Society of London and is an active member of the American Association of Petroleum Geologists.

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**Glossary:**

contingent resources	contingent resources are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations, but the applied project(s) are not yet considered mature enough for commercial development due to one or more contingencies. Contingent Resources may include, for example, projects for which there are currently no viable markets, or where commercial recovery is dependent on technology under development, or where evaluation of the accumulation is insufficient to clearly assess commerciality. Contingent Resources are further categorized in accordance with the level of certainty associated with the estimates and may be sub-classified based on project maturity and/or characterized by their economic status
discovery	a discovery is a petroleum accumulation for which one or several exploratory wells have established through testing, sampling and/or logging the existence of a significant quantity of potentially moveable hydrocarbons
flow test	a flow test or well test involves testing a well by flowing hydrocarbons to surface, typically through a test separator. Key measured parameters are oil and gas flow rates, downhole pressure and surface pressure. The overall objective is to identify the well's capacity to produce hydrocarbons at a commercial flow rate
horizontal well	a high-angle well (with an inclination of generally greater than 85°) drilled to enhance reservoir performance by placing a long wellbore section within the reservoir.
limestone	a sedimentary rock predominantly composed of calcite (a crystalline mineral form of calcium carbonate) of organic, chemical or detrital origin. Minor amounts of dolomite, chert and clay are common in limestones. Chalk is a form of fine-grained limestone
oil field	an accumulation, pool or group of pools of oil in the subsurface. An oil field consists of a reservoir in a shape that will trap hydrocarbons and that is covered by an impermeable or sealing rock
oil in place or stock tank oil in place	the quantity of oil or petroleum that is estimated to exist originally in naturally occurring accumulations before any extraction or production
oolite	oolite is a sedimentary rock formed from ooids, being spherical grains comprised of concentric layers of calcium carbonate and of diameter 0.25-2

	mm. Ooids are usually formed in warm, supersaturated, shallow, highly agitated marine water intertidal environments such as the present day Bahama Banks
play	a set of known or postulated oil and or gas accumulations sharing similar geologic, geographic, and temporal properties, such as source rock, migration pathways, timing, trapping mechanism, and hydrocarbon type
recoverable resources	those quantities of petroleum (oil in this case) estimated, as of a given date, to be potentially recoverable from known accumulations
reserves	those quantities of petroleum anticipated to be commercially recoverable by application of development projects to known accumulations from a given date forward under defined conditions; reserves must further satisfy four criteria: they must be discovered, recoverable, commercial and remaining (as of the evaluation date) based on the development project(s) applied; reserves are further categorized in accordance with the level of certainty associated with the estimates and may be sub-classified based on project maturity and/or characterised by development and production status
reservoir	a subsurface rock formation containing an individual natural accumulation of moveable petroleum
sandstone	a clastic sedimentary rock whose grains are predominantly sand-sized. The term is commonly used to imply consolidated sand or a rock made of predominantly quartz sand
sidetrack	re-entry of a well from the well's surface location with drilling equipment for the purpose of deviating from the existing well bore to achieve production or well data from an alternative zone or bottom hole location, or to remedy an engineering problem encountered in the existing well bore
tight oil play	a play where oil is found or expected to be present within a reservoir with low permeability, i.e. a tight reservoir. The term, in the case of the Kimmeridge limestone, is applied to a play where trapped petroleum accumulations are expected to be pervasive throughout a large area and that are not significantly affected by hydrodynamic influences (also called "continuous-type deposits")
well stimulation	well stimulation is a well intervention performed on an oil or gas well to increase production by improving the flow of hydrocarbons from the drainage area into the well bore.

## Notes to Editors:

### About Xodus

Xodus Develop, who prepared the conceptual development study is the concept development engineering division of Xodus Group Ltd. a large oil & gas focussed energy consultancy with over 500 employees providing integrated subsurface and surface solutions to a global client base. Xodus was established in 2005 and since then has undertaken a large number of projects of various sizes across most hydrocarbon regions of the world. Xodus staff bring extensive experience in key regions and basins including the North Sea, West Africa, North Africa, Middle East, South America, and Asia. Further information can be found on Xodus' website: [www.xodusgroup.com](http://www.xodusgroup.com).

### About Barton Willmore

Barton Willmore is one the UK's largest planning practices, specialising in the planning, design and environmental assessment of energy projects from eleven regional offices. Barton Willmore and their energy projects can be found on their website: [www.bartonwillmore.co.uk/energy/](http://www.bartonwillmore.co.uk/energy/).

## UKOG Licence Interests

The Company has interests in the following Production, Development, Appraisal and Exploration Assets in the UK Sector:

Asset	Licence	UKOG Interest	Licence Holder	Operator	Area (km <sup>2</sup> )	Status
Offshore Isle of Wight <sup>4</sup>	P1916	77.5%	UKOG Solent Limited	UKOG	46.7	Awaiting announcement of 14th Round awards. UKOG has applied for the adjacent 200 km sq onshore acreage. See below
Markwells <sup>2</sup> Wood	PEDL126	100%	UKOG (GB) Limited	UKOG	11.2	Awaiting extension of PEDL126 planning permission by the SDNPA, compiling FDP
Horndean <sup>1</sup>	PL211	10%	UKOG (GB) Limited	IGas Energy Plc	27.3	Field in stable production.
Avington <sup>1</sup>	PEDL070	5%	UKOG (GB) Limited	IGas Energy Plc	36.0	Field in stable production.
Baxters <sup>2</sup> Copse	PEDL233	50%	UKOG Weald Limited	IGas Energy Plc	89.6	Reviewing economics of drilling an appraisal / development well.
Horse Hill <sup>3</sup>	PEDL137	20.358%	Horse Hill Developments Limited <sup>6</sup>	UKOG/HHDL	99.3	Flow testing of the HH-1 discovery planned, awaiting regulatory approvals.
Horse Hill <sup>3</sup>	PEDL246	20.358%	Horse Hill Developments Limited <sup>6</sup>	UKOG/HHDL	43.6	Flow testing of the HH-1 discovery planned, awaiting regulatory approvals.
Holmwood <sup>4</sup>	PEDL143	20%	UKOG	Europa Oil & Gas (Holdings) plc	91.8	Awaiting OGA consent of farmin, drilling of exploration well planned.
Lidsey <sup>1</sup>	PL241	4.2%	Angus Energy <sup>5</sup>	Angus Energy Limited	5.3	Drilling of an infill well being considered.
Brockham <sup>1</sup>	PL234	3.6%	Angus Energy <sup>5</sup>	Angus Energy Limited	8.9	Drilling of a sidetrack well being considered.
Onshore Isle of Wight	tba	65%	tba	UKOG	~200	Licence applied for in the 14 <sup>th</sup> Licence Round.

Notes:

1. Oil Field currently in production
2. Oil Discovery pending development and or appraisal drilling
3. Oil Discovery pending flow test
4. Exploration asset with drillable prospects and leads
5. UKOG has a direct 30% interest in HHDL, plus an indirect 1.32% interest via Angus Energy; HHDL has a 65% interest in PEDL137 and PEDL246.
6. UKOG has a 6% interest in Angus Energy; Angus Energy has a 70% interest in Lidsey and a 60% interest in Brockham.

This information is provided by RNS  
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