



UK Oil & Gas PLC

Horse Hill oil field update

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

Horse Hill oil field update

UK Oil & Gas PLC (London AIM: UKOG) is pleased to provide the following operational update for its 85.635% owned Horse Hill oil field.

Production

To date, the field has produced and exported over 132,000 barrels ("bbl") of Brent quality crude from its Kimmeridge and Portland oil pools.

Despite the planned October and November downtime for the Horse Hill-1 ("HH-1") intervention, the total Portland oil production for the first quarter of UKOG's 2020/21 financial year to December 2020 was 7,045 bbl. The average production uptime was 57% over the period and ranged from 37% during October's main HH-1 intervention period, to 85% in November, post-intervention.

As announced on 5 November 2020, we safely completed an intervention to reperforate the full Portland oil producing section, insert a new simplified production tubing string and set the downhole pump at a deeper level to increase Portland pumping efficiency.

The intervention was immediately followed by an ongoing series of multi-week production optimisation trials to achieve an optimum balance between oil revenues and water handling and other operational costs. Trials include well-cycling (i.e., shutting in the well for a set period each day to reduce water inflow) and pump fill optimisation. The trials are expected to continue for several months. Early results are encouraging, with stable water influx levels achieved by the end of 2020.

Water reinjection plans

Formation water production and an associated drop in overall oil production is entirely normal in conventional oil fields, and its management, necessary to optimise net revenue, is routine oil field practice. For this reason, Horse Hill's planning consent included a provision for a formation water reinjection well.

Consequently, to remove the need for expensive off-site water disposal via tanker and to also help maximise oil recovery by supporting reservoir pressure, HH-2z will now be reconfigured, subject to regulatory consent, into a water re-injection well as soon as practicable. Additional, optimally sited, production infill wells are planned to replace HH-2z as per the original field development plan (see below).

The necessary regulatory consent process for water injection is underway, with permissions currently expected in the second calendar quarter, subject to any pandemic related delays. Until such permissions are in place, it is planned to manage pumping and resultant oil production to maintain water cut at, or, hopefully, below the current level.

Further significant operating cost reductions

In line with the challenging oil price environment, significant further efforts have also been made in managing and reducing operational costs. From January 2020 to January 2021 our total operating costs have reduced by 66%. The savings will help place Horse Hill in a good position to take advantage of the strengthening Brent crude prices seen in the past month.

Forward infill drilling plans

The recent integration of the November pressure build-up ("PBU") data, HH-2z rock data, and a completely revised seismic interpretation has also provided a far better understanding of the Portland reservoir. Several significant infill drilling opportunities have now been identified in the Portland oil pool, all up-dip of HH-1 (i.e., at a shallower depth within the oil pool) and significantly above the oil-water contact.

Following the successful flow testing of the Kimmeridge oil pool, during which 52,780 bbl of 40° API oil were produced, further development of the Kimmeridge oil pool also remains a significant objective for the Company. Consequently, plans have now been made for an infill well to determine the lateral extent of the Kimmeridge oil pool, proven by HH-1 to lie within a natural fracture system of significant vertical extent.

The Kimmeridge HH-4 well, also situated updip of both HH-1 and HH-2z, is likely to be a highly inclined or "slant" well, designed with a lateral orientation approximately orthogonal to the known regional open natural fracture direction, so as to maximise the number of open fractures penetrated.

It is expected that the further HH-3 Portland and HH-4 Kimmeridge infill wells will be planned in detail and drilled at Horse Hill following the completion of the Company's potentially transformational initial Turkey Basur-Resan appraisal drilling campaign.

Further technical analysis

The interpretation of static and flowing data from November's PBU test sequence was also completed, confirming the HH-1 connected oil in place volumes of 7-11 mmbbl previously reported in October 2018. The PBU data also helped identify a potentially significant contribution to Portland fluid flow from a natural fracture system. Technical work is ongoing to further characterise the Portland reservoir's delivery mechanisms and, in particular, the prevalence and role of the natural fracturing within the Portland section.

Ownership

The Horse Hill Portland and Kimmeridge oil field is operated by UKOG's subsidiary company Horse Hill Developments Ltd ("HHDL"), in which UKOG has a direct 77.9%

interest. HHDL has a 65% interest in the field and surrounding PEDL137 and PEDL246 licences, with the remaining 35% interest held by UKOG's wholly owned subsidiary, UKOG (137/246) Ltd.

Stephen Sanderson, Chief Executive of UKOG, commented:

"We look forward to the conversion of HH-2z into a water injector in the Spring and to the resultant increase in net revenue from the reduction in water handling costs. The significant 66% reduction in general field operating costs over the past year also allows the field to take full advantage of the current strengthening oil price.

Once the injector is in place, to boost production and net revenues, we plan two more production infill wells, one in each of the Portland and Kimmeridge oil pools. These will be scheduled after the potentially transformational initial appraisal drilling campaign at the Company's Turkey Basur-Resan oil discovery is completed, later in the year."

Qualified Person's Statement

Matt Cartwright, UKOG's Commercial Director, who has 37 years of relevant experience in the global oil industry, has approved the information contained in this announcement. Mr Cartwright is a Chartered Engineer and member of the Society of Petroleum Engineers.

For further information, please contact:

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Glossary

API	a measure of the density of crude oil, as defined by the American Petroleum Institute
naturally fractured reservoirs	fractured reservoirs contain cracks or surface of breakage within rock; fractures can significantly enhance the permeability of rocks by connecting pores together; naturally fractured reservoirs have been created over geological time by nature, not man-made via hydraulic fracturing
oil field	an accumulation, pool or group of pools of oil in the subsurface that produces, or can produce, oil to surface
oil in place	The quantity of oil or petroleum that is estimated to exist originally in naturally occurring accumulations in the ground before any extraction or production
water cut	water produced from a formation as a percentage of the total liquids produced

UKOG Licence Interests

The Company has interests in the following UK and international licences:

Asset	Licence	UKOG Interest	Licence Holder	Operator	Area (km ²)	Status

Avington 1	PEDL070	5%	UKOG (GB) Limited	IGas Energy Plc	18.3	Field temporarily shut in
Loxley & Broadford Bridge 2, 3, 7	PEDL234	100%	UKOG (234) Ltd ⁴	UKOG (234) Ltd ⁴	300	Loxley/Godley Bridge gas discovery, BB-1/1z oil discovery
Horndean 1	PL211	10%	UKOG (GB) Limited	IGas Energy Plc	27.3	Field in stable production
Horse Hill 1, 5	PEDL137	85.635%	Horse Hill Developments Ltd ⁶	Horse Hill Developments Ltd ⁶	99.3	Field in stable production
Horse Hill 1, 5	PEDL246	85.635%	Horse Hill Developments Ltd ⁶	Horse Hill Developments Ltd ⁶	43.6	Field in stable production
Isle of Wight 2, 3	PEDL331	95%	UKOG	UKOG	200	Planning application submitted for Arreton oil appraisal well
Resan Turkey 2, 3, 8	M-47-b1, b2	50%	UKOG Turkey Ltd	Aladdin Middle East	305	Appraisal of Basur-Resan oil discovery plus further expl. prospects. Drilling planned in 2021

Notes:

- Oil field currently in stable production.
- Oil discovery pending development and/or appraisal drilling.
- Exploration asset with drillable prospects and leads.
- Contains the Loxley Portland gas accumulation, the Broadford Bridge-1/1z Kimmeridge oil discovery, plus further undrilled Kimmeridge exploration prospects.
- Portland and Kimmeridge oil field with productive and commercially viable zones, HH-1 in stable oil production, production planning consent granted in September 2019, long-term production consent granted in March 2020.
- UKOG has a direct 77.9% interest in HHDL, which has a 65% interest in PEDL137 and PEDL246.
- Gas discovery pending appraisal drilling and development with underlying Kimmeridge potential
- High-impact oil appraisal project with an upside OIP range of 150-500 mmbbl gross with expected recovery factors of 10-20% of OIP

The information contained within this announcement is deemed by the Company to constitute inside information under the Market Abuse Regulation (EU) No. 596/2014

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