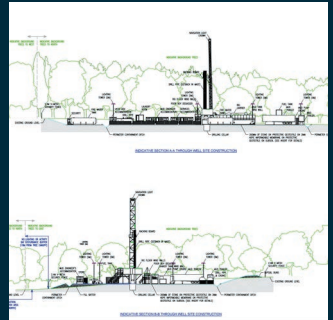
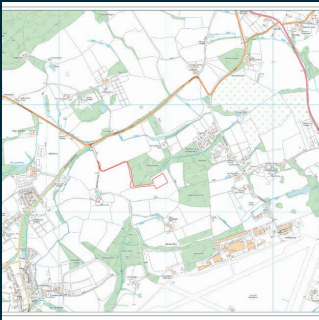


UKOG (234) Ltd Dunsfold 1





Facts About Dunsfold-1



Dear Resident,



What we WOULD LIKE to do & what we DON'T want to do

WHERE?

A discreet field adjacent to Dunsfold Road and High Loxley Road

WHY?

To find much-needed oil & gas for the UK's energy security

WHEN?

Submission of the planning application is imminent; if granted by Surrey County Council, we hope to begin work in late 2019, early 2020

Welcome to our community engagement meeting at The Winn Hall in Dunsfold. The purpose of this meeting is to give you a few FACTS and counter-act the FICTION being circulated by well-known and ill-informed scaremongers.

We have agreed the land lease with a landowner near High Loxley and will shortly be submitting the full planning application to Surrey County Council.

UK Oil & Gas PLC (UKOG) operates within a highly-regulated industry, led by the Oil and Gas Authority, a Government agency, reporting to the Department for Business, Energy & Industrial Strategy, who are responsible for checking a company's financial and operational competency before issuing a Petroleum Exploration and Development Licence (PEDL).

Dunsfold-1 is administered through UKOG (234) Ltd, a wholly owned subsidiary of UKOG, which holds a 100% interest in PEDL234. Dunsfold-1 is within PEDL234, which covers 300km², including the existing Broadford Bridge well site near Billingshurst.





The Key Facts



The Key Facts



We are **NOT FRACKING**. We do not want to and do not need to because the rock formations we're targeting are naturally fractured by Mother Nature and can flow oil & gas sufficiently well on their own. This statement of fact is supported by our activities at Horse Hill near Gatwick Airport and at Broadford Bridge near Billingshurst.

We are not looking for shale gas or shale oil as in the North of England. Our work uses only conventional oil field techniques as used in over 2,000 wells in the onshore UK and the three wells drilled in the Dunsfold area in the late 1980s. Our aim is to assess the commercial viability of the conventional oil and gas discovery made by these three 1980s wells. Our well will involve drilling a small 7-inch diameter hole (i.e. the size of a small domestic drain pipe) which will be lined with steel and impermeable concrete some three-quarters of a mile or more below the surface.

We are heavily regulated by four bodies that ensure our practices are physically safe (Heath and Safety Executive), environmentally safe and best practice (Environment Agency), have minimal impact on the locality (Surrey CC) and comply with the terms and operational standards of the licence issued by the Government (Oil and Gas Authority). We cannot undertake any activities without the relevant permits from all four regulators.

We are **NOT POLLUTING** the area. Just like our other sites at Horse Hill and Broadford Bridge, Dunsfold will be a zero-discharge site.

The ground will be protected over the whole well pad area and perimeter ditches by an impermeable membrane. Any water (including rainwater) cannot penetrate below or away from the site and will be removed and disposed of at an Environment Agency approved waste facility. There will also be secondary containment protecting oil and water-based drilling fluid tanks, plus the membrane lined ditch to contain any external floodwater and other liquids within the site perimeter.

As per Broadford Bridge and Horse Hill, there are also no significant potable drinking water aquifers below our site as we rest upon a thick sequence of impermeable Weald Clay.

We are **NOT CAUSING EARTHQUAKES**. The British Geological Survey and the Government have concluded that seismic activity in Surrey is not as a result of low impact drilling and oil and gas extraction. These small, low magnitude tremors are interpreted by the BGS to be entirely natural, being centred on movements on a seismically active fault near Newdigate.

We will **NOT INDUSTRIALISE SURREY OR SUSSEX**. We also live in the area and do our utmost to select sites that are well screened and cause little or no disruption to the community and to the ecology and environment. Each site, including Dunsfold, is under the size of two football pitches. Other than the mast of a drilling rig (which is only present for around 60 days maximum), our equipment is low-rise and low visual profile, being no higher than a portacabin. We are only seeking initial permission to drill and flow test one well, on a limited size well pad. Oil and gas activities are by nature temporary. Once our activities have finished at the site, we will plug the well by filling it with high grade impermeable concrete and restore the site, with the original topsoil, to green fields and trees.

We will **NOT CREATE HGV CHAOS** in the area. From our experience and actual data from the nearby Broadford Bridge well site and at Horse Hill, the number of lorries during the short drilling phase average at about 2.5 per day with a peak in the first and last week of drilling up to about 8 per day. Significantly fewer than a construction site of the same size.

If the Dunsfold well is successful, we will **SHARE OUR PROFITS WITH THE COMMUNITY**. We will commit to paying a 6% gross royalty in business rates and cash contributions to the local community and near-neighbours.

I am often asked the simple question: **DO WE STILL NEED TO FIND MORE OIL??** Absolutely we do. Apart from fuel for vehicles and ships, around 50% of our oil consumption goes towards aviation and oil derived materials, which are a major component of countless everyday items, including:

Medical equipment, mobile phones, computers, clothing, vehicles, car and bicycle tyres, toiletries and essential pharmaceuticals and even the turbines for wind farms.

It is estimated that up to 50% of components in future electric vehicles will be derived from oil based materials as is the case for the new breed of fuel efficient, quiet aeroplanes.

Our activities are designed to increase the UK's energy security by reducing the increasing dependence on long-distance oil imports from places that often have less rigorous safety and environmental standards than the UK. Even if all vehicles become electric by 2030, we'll still need to import 300-400,000 barrels of oil per day without increased UK onshore oil production.

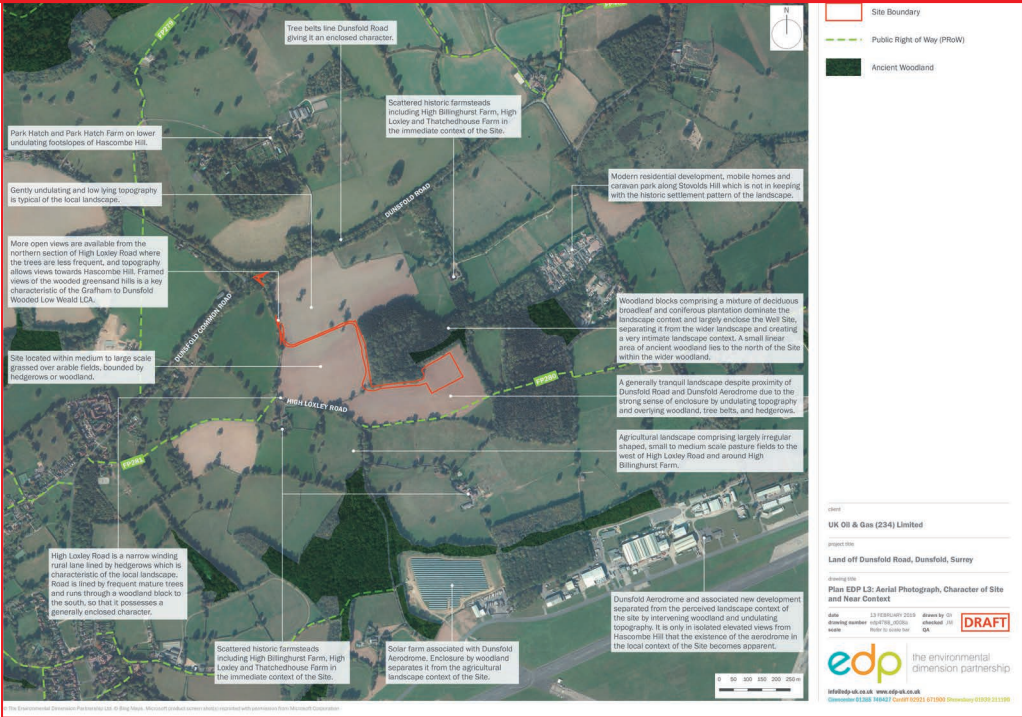
Stephen Sanderson, Chief Executive, UK Oil & Gas PLC



Location of the Site



HGV Movements



Dunsfold-1 comprises 1.8 hectares, inclusive of an access track to High Loxley Road (the public highway). The site is open countryside, screened to the north and east and partly screened to the west by mature woodland. Mature trees along field boundaries and within highway verges limit views to the site.

The wider landscape supports isolated residential properties and farmsteads with the nearest being Thatchedhouse Farm 350m to the north, High Billingshurst Farm, approximately 400m to the south, and High Loxley approximately 570m to the west.

The table below provides our actual forecast of two-way movements per day when the site has settled into its long-term proper production cycle.

Dunsfold-1 Development Programme:

PHASE 1: ACCESS AND WELL SITE CONSTRUCTION PROGRAMME	Hours of Site Operations			Estimated Duration
	Mon - Fri	Sat	Sun/Bank Hols	
1A: Access and Well Construction	07:00 – 19:00	09:00 – 13:00	None	14 weeks
PHASE 2: DRILLING, TESTING AND APPRAISAL PROGRAMME	Hours of Site Operations			Estimated Duration
	Mon - Fri	Sat	Sun/Bank Hols	
2A: Drilling - Mobilisation/Demobilisation	07:00 – 19:00	09:00 – 13:00	None	3 weeks
2B: Drilling	24hrs	24hrs	24hrs	12 weeks
2C: Testing - Mobilisation/Demobilisation	07:00 – 19:00	09:00 – 13:00	None	3 weeks
2D: Testing - Initial and Extended Well Testing	24hrs	24hrs	24hrs	26 weeks
2E: Sidetrack Drilling	24hrs	24hrs	24hrs	12 weeks
2F: Maintenance Workover	24hrs	24hrs	24hrs	4 weeks
PHASE 3: WELL PLUGGING, ABANDONMENT AND DECOMMISSIONING PROGRAMME	Hours of Site Operations			Estimated Duration
	Mon - Fri	Sat	Sun/Bank Hols	
3A: Plugging and Abandonment	24hrs	24hrs	24hrs	3 weeks
3B: Removal of Surface Equipment	07:00 – 19:00	09:00 – 13:00	None	2 weeks
PHASE 4: SITE RESTORATION OR RETENTION PROGRAMME	Hours of Site Operations			Estimated Duration
	Mon - Fri	Sat	Sun/Bank Hols	
4A: Site Restoration	07:00 – 19:00	09:00 – 13:00	None	5 weeks
4B: Site Retention	None			26 weeks

Dunsfold-1 Development Traffic and Transport

DUNSFOLD WELL SITE – HEAVY GOODS VEHICLE SCHEDULE						
PHASE	Sub-Phase	Hours of HGV Operation			Estimated Duration	Maximum 2-Way HGV Movements (in and out)
		Mon – Fri	Sat	Sun/Bank Hols		
PHASE 1: ACCESS AND WELL SITE CONSTRUCTION	1A Access and Well Site Construction	07:00 – 19:00	09:00 – 13:00	None	14 weeks	up to 10 per day
	2A: Drilling - Mobilisation/Demobilisation	07:00 – 19:00	09:00 – 13:00	None	3 weeks	up to 10 per day
PHASE 2: DRILLING, TESTING AND APPRAISAL	2B: Drilling	07:00 – 19:00	09:00 – 13:00	None	12 weeks	
	2C: Testing - Mobilisation/Demobilisation	07:00 – 19:00	09:00 – 13:00	None	3 weeks	up to 5 per day
	2D: Testing - Initial and Extended Well Testing	07:00 – 19:00	09:00 – 13:00	None	26 weeks	
	2E: Sidetrack Drilling	07:00 – 19:00	09:00 – 13:00	None	12 weeks	up to 10 per day
	2F: Maintenance Workover	07:00 – 19:00	09:00 – 13:00	None	None	
PHASE 3: WELL PLUGGING, ABANDONMENT AND DECOMMISSIONING	3A: Plugging and Abandonment	07:00 – 19:00	09:00 – 13:00	None	3 weeks	up to 10 per day
	3B: Removal of Surface Equipment	07:00 – 19:00	09:00 – 13:00	None	2 weeks	up to 5 per day
PHASE 4: SITE RESTORATION/RETENTION	4A Site Restoration	07:00 – 19:00	09:00 – 13:00	None	5 weeks	up to 10 per day
	4B Site Retention	None			26 weeks	None



Dunsfold-1 The Four Phases



Fluids



PHASE
01

Access and Well Site Construction



Minor highway improvements at the junction of Dunsfold Road and High Loxley Road. The construction of a new junction within High Loxley Road, the installation of up to 1km of new compacted-stone access track to the well site, construction of a compacted-stone well site with an impermeable liner, perimeter surface run off containment ditch and drilling cellar to accommodate a conductor casing with security fencing, entrance gates and other minor ancillary development.

PHASE
02

Phase 2: Drilling, Testing and Appraisal

Mobilisation/demobilisation of surface plant and machinery for the drilling of one borehole (Dunsfold-1) and one sidetrack borehole (Dunsfold-1z), followed by subsequent well testing.



PHASE
03

Phase 3: Well Plugging, Abandonment and Site Decommissioning



The safe plugging and abandonment of the well followed by the removal of surface plant and machinery.

PHASE
04

Phase 4: Site Retention/Restoration

Retention of the site to allow for a period of review prior to either a further application to authorise work (further testing or production) or restore the Site to its original use subject to a period of aftercare.



In order to authorise the Dunsfold-1 project, UKOG is seeking planning permission from Surrey County Council under the Town and Country Planning Act 1990 and environmental permits from the Environment Agency under the Environmental Permitting (England and Wales) Regulations 2016.

In addition, applications for consents and/or notifications required under other regulatory regimes, such as those regulated by the Health and Safety Executive and the Oil and Gas Authority, will be submitted in due course, at the appropriate time.

For clarity, high volume hydraulic fracturing (fracking) does not form part of the Dunsfold-1 project.



Any fluids produced from the well during testing will be subject to separation at surface, with oil being diverted to tanks for subsequent transfer to an oil terminal or refinery, formation water being diverted to tanks for subsequent offsite treatment at an Environment Agency approved water treatment facility and any residual gas diverted to a shrouded flare (no visible flame) for incineration.

Vinegar/Acetic Acid

There are many unfounded claims made about acidisation or acid-wash, which has been used safely in the global oil & gas and water industries for 120 years, and for over 50 years throughout the UK. As an example, this technique has been safely used over many years in a limestone oil reservoir in the Wytch Farm oil field in Dorset.

During a flow test, it may be apparent that the natural fractures within the target formation have become blocked by the drilling and well construction debris (drilling fluids and rock cuttings).

Where this is the case, a dilute acetic acid (i.e. vinegar) will be used to clean out the natural fractures and restore natural permeability. This activity is known as an acid wash and is a similar technique to those used in the water industry. The acid reacts with the debris, resulting in carbon dioxide gas (CO₂), water (H₂O) and calcium chloride (CaCl₂), a non-hazardous salt.



Potential impacts of the proposed development have been considered with respect to the following environmental topics, with a summary of each environmental topic set out below:

Air quality, Climate Change

The proposed development will use predominantly diesel-fuelled plant and machinery and may call for the flaring of natural gas at times. These operations will result in the release of pollutants to atmosphere and greenhouse gas emissions with a consequential air quality impact.

The planning application will be supported by an air quality impact assessment undertaken in accordance with the Environment Agency (Air emissions risk assessment) and DEFRA (LAQM TG16) guidance. It will engage UK ADMS and US EPA AERMOD dispersion models across a study area incorporating nearby locations of prolonged human exposure and sensitive ecological sites.

It will rely upon meteorological data representative for the area obtained from the UK Met Office and an inventory of construction and operation releases across the project duration. The significance of the impact will be assessed against the Environment Agency screening criteria for human health and ecology.

Arboriculture

Where the access track meets the public highway, two trees (assessed to be of low value and quality) would be removed from the eastern side of High Loxley Road to accommodate a 30m wide temporary vehicular junction.

We may also need to remove some hedgerow for highway safety reasons but we are aiming to limit any hedge works to trimming and reduction rather than removal.

Cultural Heritage and Archaeology

There are no World Heritage Sites, Scheduled Monuments, Registered Parks and Gardens or Registered Battlefields within 1km of the site. There are 13 Listed Buildings within 1km all of which are Grade II Listed with the nearest being Thatchedhouse Farm approximately 350m to the north, High Billingham Farm approximately 400m to the south and High Loxley approximately 570m to the west.

Dunsfold Conservation Area is approximately 1.3km to the west with Dunsfold Church Conservation Area approximately 1.9km to the west. The nearest Scheduled Monument is Hascombe Camp, a small hill fort approximately 1.8km to the north-west. The separation distances from the site are sufficient to avoid any unacceptable effects.

The land immediately to the north of the proposed development is designated as an Area of High Archaeological Potential. Data held by Exploring Surrey's Past records the presence of a buried Roman settlement approximately 500m to the south of the Site and a buried Canadian World War II camp approximately 180m to the north-east. As above, the separation distances achieved between the Site and these assets is sufficient to avoid any unacceptable effects.



Ground and Groundwater Protection

Dunsfold's well pad will be specifically designed and constructed to ensure that zero fluids, including rainwater, can discharge down into the ground beneath and adjacent to the site.

The pad has five liquid containment systems to ensure zero discharge and complete isolation of surface activities from the underlying and surrounding ground, including: both a man-made impermeable membrane and an impermeable natural clay-layer underlying the entire well pad, a membrane-lined perimeter ditch, impermeable concrete well cellars and bunding of all storage tanks and chemicals. Even rainwater from the site is not discharged locally during operations but is collected by road tanker by an approved specialist waste company and sent to an Environment Agency approved disposal site.

A preliminary hydrogeological risk assessment has been carried out in accordance with Environment Agency technical guidance, Department of the Environment and Rural Affairs (DEFRA) risk assessment methodology and taking account of mitigation embedded in the well design. All the identified hazards are minor and not significant.

Landscape and Visual Impact

The access and egress of construction and other heavy goods vehicles will be the most visible sign of development activity and this will not give rise to any significant effects versus current vehicle movements in the local area.

During drilling, testing and appraisal and decommissioning, the drilling rig will be the tallest component on site with its lattice mast up to 37m (for drilling only) above ground level when fully extended.



Lighting

The proposed development will require artificial lighting for site safety and security. A lighting management plan will be in operation during periods of activity, but we will continually monitor the lighting arrangements to ensure we avoid any unacceptable light pollution.



Environmental Considerations



Local Community Royalty Payment



Traffic, Transport and Access

The well site would be accessed via a new access track from the public highway. A new junction is to be constructed in-off the public highway. During site construction, two-way HGV movements would be up to 10 per day.

During drilling activity the two-way HGV movements would again be up to 10 per day, which is not significant in the context of the local highway network and its carrying capacity. During the predicted 26-week duration of testing, two-way HGV movements would be up to 5 per day which, again, is not significant.

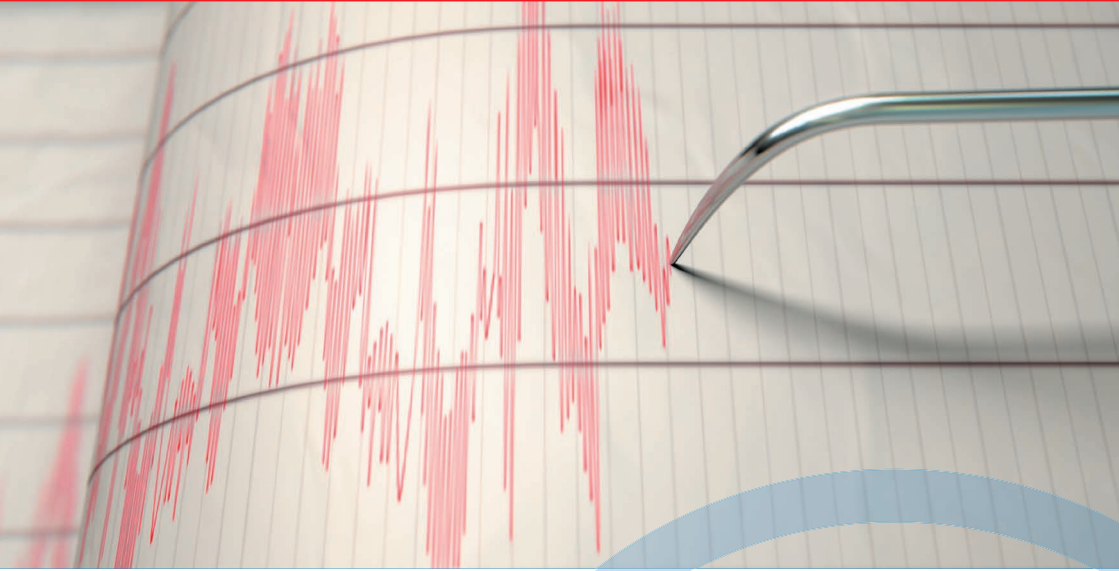
Mobilising and demobilising the drilling rig and/or workover rig and the delivery of some components of plant and machinery ancillary to the drilling operation would engage abnormal load vehicles. However, the number of movements is very low.

UKOG is committed to paying 6% of gross revenues to the local community (including business rates). We are in discussions with the industry trade body, UK Onshore Oil & Gas (UKOOG) and HMRC to finalise the details of this scheme. At our estimated peak production rate and current oil prices, this royalty would equate to around £1 million per year.





Earthquakes



Following the number of unexplained tremors in Surrey over the past year, earthquake monitoring stations were installed by independent experts at various appropriate locations. A subsequent meeting organised by the Oil and Gas Authority with various academics and including the British Geological Survey concluded there was no link between exploration activities for hydrocarbons and the tremors.

