

FAQs Updated January 2021

Where are UKOG proposing to drill? How much oil is there?

Firstly at Arreton: the wellsite is in a field below St Georges Down and the plan is to create a new access road into the field and construct a well pad to drill 2 wells.

Well 3 - A vertical exploration well & **Well 3z** - A horizontal appraisal well up to 1km in length.

UKOG has submitted planning application documents during 2020. The first consultation period ended in July 2020.

The second Public Consultation is now open until February 12th 2021.



The Planning Committee has undertaken virtual Government training for Fossil Fuel applications.
A PLANNING DECISION DATE HAS NOT YET BEEN DECIDED

The amount of oil to be targeted in Arreton is estimated to be **2.6 million barrels** which represents **2¹/₂ days supply for the UK** at current levels of usage.

If confirmed to be viable, a further planning permission for full production will be submitted to the Oil and Gas Authority for the number of wells required to extract the oil. We estimate this could take at least 5 to 10 years and up to 7 wells if the wells can produce 1000 or 500 barrels per day. This will require a new planning application to IWC to go into full production - drilling further wells as necessary.

Secondly at Godshill: If Arreton exploration and appraisal is successful UKOG has stated they will then submit a further planning application to construct a well pad to explore and appraise a site in Roud below **Godshill**. Amounts of oil here for extraction are still not confirmed but could be **6.8 million barrels** which represents **4¹/₄ days supply for the UK** at current levels of usage.



What will happen to the oil ?

Any oil recovered will be removed from the Island to a refinery for processing.

There is no assurance us that the oil will remain in the UK since at least half of the oil produced from UK wells is exported.

How will they get the oil off the Island?

According to their application the oil will be stored on site and then this will be pumped into and transported by HGVs to a port by road across the island and ferried across by local ferry companies to be delivered to the nearest oil refinery. They are not planning to build a pipeline or use an oil barge as far as we know.

We did an estimate of how many oil tankers it might take to ferry off 2.6 million barrels of oil if it could all be retrieved.

Each tanker carries around 218 barrels of oil so it would take around 11,926 tankers to remove it from the Island.

That means 2 tanker trips to and from the site to the port which makes 23,853 tanker trips. That would need approximately 7 tankers each day for 365 days for 5 years or 3 tankers each day for 365 days for 10 years.

Of course 10 tankers could do a faster job. But this would mean that the wells would need to be producing enough oil, and fast enough, for them to be able to transport it every day and the island would need to be able to cope with a daily train of 10 tankers.

Waste water from the well construction and formations will also need to be transported off the island to a suitable waste water facility for disposal as there is no facility on the island.

What are Conventional Wells?

Traditional Conventional extraction has taken place over the past 80 years from trapped pools or reservoirs of oil beneath the surface, by drilling a single vertical well into the reservoir which allows oil to be pumped to the surface under pressure. But things are changing.

These reservoirs are now depleting in the UK and, for this reason, new **Unconventional** forms of extraction, of oil trapped inside less permeable strata, are being used and promoted.

These modern techniques drilling multiple horizontal wells into limestones and sandstones, using various concentrations of chemical stimulation, are therefore **not Conventional**. But they are labelled by industry and Government regulators as **Conventional** wells, to separate them from the criteria used for **Unconventional** drilling using **Hydraulic Fracturing** (Known as **Fracking**) in impermeable shale strata formations.

So what are Unconventional Wells? Fracking & Acidisation

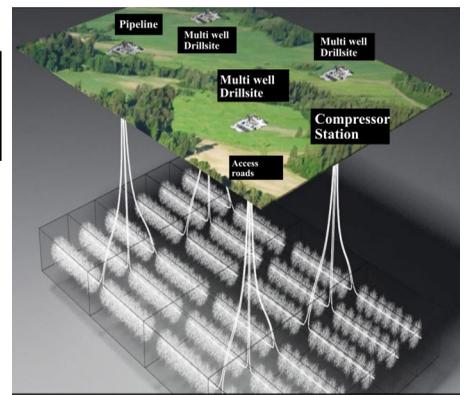
Fracturing is a term used to describe how vertical and horizontal wells which are drilled into strata containing trapped fossil fuels, are perforated and the strata cracked open using a perforating gun. Then chemicals (and sometimes sand) are pumped into the well to penetrate further into the fissures in the strata to either keep them open or dissolve the confining rock to enable the trapped oil and gas to flow into the wellbore to travel to the surface.

This can be achieved in two ways.

1. **Fracking - High Volume Hydraulic Fracturing (HVHF)**
2. **Acidisation**

Fracking - High Volume Hydraulic Fracturing (HVHF)
according to industry & government criteria;

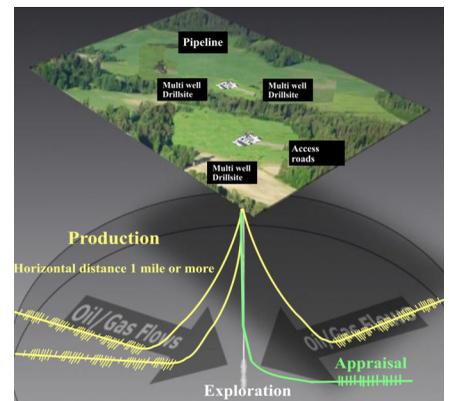
An Environmental Impact Assessment is mandatory for this type of drilling.



- takes place in multiple horizontally drilled shafts, drilled **below 1000m** in dense shale and tight rock formations using more than 10,000 cubic metres (10 million litres) of fluids for the full process of each fracked well.
However if this definition is to be believed then all of the wells that have been hydraulically fracked in the USA would not be seen as FRACKING since they used less than this amount of fluid.
- after fracturing the strata, an average 20 million litres of fresh water and 182,000 gallons or more of chemicals and silica (sand) **per well** are pumped at extreme high pressure into the wellbore to force the strata cracks to open further and remain open.
- **HVHF wells cannot be drilled from the surface of AONBs and other sensitive areas unless it can be demonstrated that both exceptional circumstances exist and such development is in the public interest.** But HVHF wells can be drilled **horizontally** beneath them from well pads at the borders of AONBs.

Acid Wash, *Acid Fracking and *Matrix Acidisation

Methods classified by the Government as **Conventional** because wells are drilled into strata which contains “**tight oil**” trapped within impermeable limestones and sandstone or are confined by layers of shales or calcereous strata. These do not match the Government criteria of unconventional HVHF in shale and therefore do not need to be regulated in the same way.



No Environmental Impact Assessment is mandatory for this type of drilling but should be requested by the Planning Officer.

- takes place in multiple horizontally drilled shafts, drilled **above 1000m** - therefore closer to **water aquifers** and fractured at various pressures to access or penetrate the strata.
- Uses approximately 10% less water than for HVHF
- these wells are permitted to be drilled from the surface of AONBs in less permeable limestone and sandstone strata.
- uses differing concentrations of acetic, hydrochloric or hydrofluoric acid, to clean and /or penetrate the well strata and to clean or dissolve natural tight fractures that may hold fossil fuels, to allow the oil and gas to be pumped or travel to the surface

*** These methods require special permits but the EA does not require evidence of whether applicants are using these methods, they rely on the applicant to inform them.**

Why is it better for the industry to say the wells are Conventional?

FRACKING HAS A BAD REPUTATION. The experiences of drilling in the North of England with earthquakes caused by the method, has made the Government halt the process and issued a moratorium.

Conventional sounds less threatening but Acidisation can be as devastating to the environment. It is also a very real possibility that companies will state they will target smaller 'conventional' strata resources initially, and only when the well is in place will we learn the full extent of their intentions. They may apply to target and Frack the deeper unconventional resources themselves, or sell their licence on to other developers who will.

Additionally

- No Government community payment of £100,000 for fracked well and 1% of profits is paid for "conventional" wells.
- No portion of the Shale Wealth Fund is paid for "conventional" wells
- They can be drilled from the surface of AONBs and other protected sites
- Environmental Impact Assessments are not mandatory

Why not have our own supply of Oil and Gas? Don't we need it?

Isle of Wight Oil will not stay on the island and may not even stay in the UK.

This is not about NIMBYism. It is about planning for the development of a sustainable future energy mix that can create a safer and greener legacy for generations to come.

There are still plenty of existing global supplies of fossil fuels **but we can only use 70% of these** if we are to prevent the planet warming beyond 1.5 degrees and triggering the developments of massive changes to our planet's climate.

Other fossil-rich nations have, over time, wisely invested profits in their country's own public infrastructure to develop renewable technologies and create new alternative energies to add to the mix for the future.

According to UKOG 70% of the UK's oil consumption is for transport and 30% is for petrochemical feed stocks (plastics, heating and others).

For decades our economy, industry, banks and **even our own Council's pension fund has depended on investment in fossil fuels both directly and indirectly.**

In the decades of glut of our home grown energy sources, supplies have been sold off in the rush for profits and not used to help secure sustainability at home through innovative technologies to create renewable energy independence. **It is not too late.....**

NOW A CLIMATE EMERGENCY HAS NOW BEEN RECOGNISED BY MOST NATIONS

World Governments are realising that the joy ride is over and that we need to invest in developing green energy solutions.

We **DO** understand the global need to use less of existing supplies of Oil and Gas **WISELY.**

We **DO** have to educate ourselves and others to change our perception and reduce consumption to make these reserves last longer.

We **DO** have to develop a willingness to make the transition to renewable energies, improve energy storage and create alternatives for durable plastics and low emission fuels in order to prevent further global pollution of land sea and air.

BUT WE MUST NOT CREATE ANY NEW FOSSIL FUEL WELLS

What about the safety regulations? - Claimed to be Gold Standard!

UKOG claims they will not use acidisation to stimulate the wells, only acetic acid to clean the debris from within the well casing, but it is difficult to enforce or differentiate an acid wash from acid stimulation due to **Self Regulation** .

There are many regulations and regulators for the processes and requirements of planning applications for developments. These are governed by the National Planning Framework and utilised in local council strategies, planning authorities and policies. Some agencies have more power and influence than others and some are poorly funded and find it challenging to function effectively.

However, once a development has been granted by either a local planning authority or the Secretary of State for Communities, the operators become **Self-Regulating and are responsible for volunteering information and reports** of development progress, accidents and impacts, changes in operation and any subsequent mitigation or outcomes after the event.

The oil and gas industry's global environment and safety track record is unimpressive. **Industrial accidents and polluting incidents are caused by equipment failure, adverse weather conditions, inadequate mechanical or inaccurate geophysical data, lack of diligence and human error.**

REGULATIONS ARE ONLY EFFECTIVE IF THEY ARE ADHERED TO BY THE OPERATORS AND THEIR WORKFORCE.

Agencies rely on irregular inspection and trust that the developers will accurately report to them what is happening on the site and underground. **Reports are not necessarily challenged** unless there are concerns lodged by the public or site workers or in the event of obvious accidents or impacts on site or within the environments of communities

There were 1768 reported incidents on Offshore UK oil and gas rigs between 2013 and 2016. These were published but there is no such formal record of events for onshore wells.

However we received detailed research from news reports, Freedom of Information requests, the public, visits to onshore sites, monitored video, photos and direct observations revealing the following data....

There were 40 known incidents on 7 exploration Onshore sites in UK including :

- permit breaches,
- chemical fluid spills,
- illegal waste run-offs into agricultural ditches,
- oil blow outs,
- faulty equipment,
- dumping of toxic well waste into a local canal,
- excessive methane emissions beyond permitted limits,
- earthquakes and seismic shocks,
- lack of safety monitoring, use of illegal rigs and drilling equipment,
- failure to report major incidents to the appropriate authority.

What are the benefits that the Island will receive?

For the general public none whatsoever. **Business Tax, Supplementary Charge and Petroleum Revenue Tax have been cut to levels below 2003** and the industry also receives government subsidies. So there is little in taxation for the island.

It is predicted that the taxpayer pays for the oil and gas industry to receive more than **£1.1 billion each year** in subsidies and could do so for the next 10 to 15 years unless things change.

UKOG claims a benefit of 6% from the company profits during full production and local business rates will be paid to the IW Council.

But, to date, this company has made no profit. Business rates will be paid - but these will be minimal and only valued against the temporary equipment and structures on the site.

Any rates will be swallowed up by expenses for road repairs across the traffic route, accidents and costs of policing and emergency service action.

We also believe that our **Tourism Economy** will be hardest hit if the island loses its Eco and Biosphere standing because of expansion of this industry within the licence area.

Of course the landowner and some local businesses and providers of materials for the site will benefit in the short term, but the main beneficiary will be UKOG

UKOG's portfolio is based on making as much money from exploration and appraisal projects with promises of lucrative oil recovery, to encourage investment through their shareholders and share price.

Any money made from the selling of the actual oil they retrieve, is used to help pay off their expenses, debts and any loans.

Also the more promises they make of future production, the more shares they sell and trade, the more they can use these to pay off thousands of pounds or dollars that are owed for equipment and loans.

Promises of local employment opportunities and training in specialist areas are unfounded. (Possibly 12 for Arreton according to UKOG's CEO Stephen Sanderson.)

Specialist workers will be imported and will either live on site temporarily or in rented accommodation.

There are very few local jobs predicted. Most jobs are very short term, and are mainly for HGV drivers, security and some manual groundwork for the development and restoration of the site and entrance road.

Can the IWCouncil stop this from happening?

Yes, if relevant objections, by statutory consultees, organisations, agencies, businesses and professionals and members of the public, are submitted in writing to the Planning Officer during the consultation period.

The Planning Committee can refuse planning permission outright by a majority vote, for specific reasons - either against, or on the advice, of the Planning Officer.

They can also agree to the development on condition that a list of recommendations for improvement are met and a second submission is made.

If this is again refused, the applicant can appeal and apply for a judicial review and legal proceedings or appeal directly to the Secretary of State for Communities or the Oil and Gas Authority to overthrow the decision.

What are the main impacts of oil and gas exploration & production?

Possible Health Impacts

These have been evidenced in medical studies and reports from the UK, USA and Australia. There is evidence now from across the globe of long term effects of living near oil and gas field sites and along HGV routes to and from sites. Increases in air pollutants have been identified in

- Cancers
- Asthma and lung diseases,
- Skin and immune system illnesses,
- Hormone disruption, risks during pregnancy,
- Nausea and headaches due to proximity of sites,
- Depression and sleep deprivation

NHS

Possibly increases in pressures on our already stretched NHS facilities due to Covid 19, cuts in budgets, illnesses and health related impacts.

Possible Environmental Impacts

Increased Emissions of CO₂, NOx and other greenhouse gases are admitted in the application. Unwanted methane from wells to be flared on site.

Industrialised Pollution of the island environment, air pollution (HGV traffic, chemical vapours and drilling), noise and light (24 hours).

Soil pollution and agricultural land loss from construction of well pad and track. Possible loss of organic status for farmers whose land is in proximity to the wellpad or sits above 1km long horizontal wells.

Disturbance of local fauna migration and endangered species. Separation of habitats and destruction of agricultural sustainable land and all related flora, fauna and eco-systems. Endangered species survey data now outdated and needs to be updated during 2021.

Water and soil pollution entering domestic water, rivers and streams - from spills, leaks or HGV accidents on roads and entry track (without non-permeable surface) .

Sub- surface pollution of domestic water aquifers from migration of gas and fluids from abandoned leaking well structures as they disintegrate. **Currently there is no legal requirement to maintain abandoned onshore wells.**

Seismic shifts: Only outdated information used for well construction data and guidance for directional drilling into target formation. Inaccurate geological information and UKOG's lack of ensuring up-to-date 2D or 3D seismic analysis is undertaken.

Well Structure and Cement Bonding Leakage: Due to inaccurate geophysical information creating earth movements during horizontal drilling processes and high pressure waste fluid re-injection into disused wells within unstable geology close to fault lines.

Water depletion from already overstretched resources. We have to import 30% of our water from Southern Water, who have already identified the need to cut our usage due to falling amounts of reservoir capacity. It will require huge numbers of HGV vehicles on roads to bring water to the sites and to transport waste water back to the mainland.

Damage to roads and traffic congestion across the Island. Multiple oil tanker trips per day during the lifetime of the wells until decommissioned. Increase of possible accidents.