

## **Notes on Presentation by Frack Free Isle of Wight to Arreton Parish Council on 29<sup>th</sup> July 2019 at Arreton Community Centre.**

(Arreton PC comments in italics)

Attendees

### **Frack Free Isle of Wight**

- Steve Davis
- Sylvia May
- John Redman

### **Arreton Parish Council**

- Martin Kimber (Part time)
- Heather Calloway
- John Cooper
- Simon Dodson
- David Healy
- John Orchard
- Venetia Verey
- Sheila Caws

### **Apologies** Vivian Roberts

The meeting comprised a presentation on the techniques and associated impacts of oil and gas extraction on the UK mainland. The aim of the presentation was to ensure that councilors were better informed in the event that they had to consider a planning application to drill for oil in Arreton Parish. The following represents Arreton Parish Council's understanding of the material presented by Frack Free Isle of Wight and, as such, does not represent the views of the Parish Council and may not be entirely factually correct.

The presentation started by Frack Free IoW (FFIoW) introducing themselves as Island residents concerned about the potential impact of oil drilling, whilst accepting that they had felt ignorant about oil exploration and seeking to better inform themselves and other Island residents. The high-level concern is that whilst UK offshore oil and gas exploration and production has a long history and is extensively regulated and well understood, onshore is neither. FFIoW felt that as the Parish Council has no experience in this area, it was important that any proposals for oil exploration that the Parish Council had to comment on were thoroughly and critically reviewed.

FFIoW stated that they have researched into onshore oil and gas exploration and production, including legal and technical terminology, and have the primary aim of providing accurate and balanced information to Island residents. The members of the group have no party-political affiliations but have an ideological, environmental and aesthetic opposition to onshore oil and gas exploration. Fracking is only one part of the industry but attracts all the headlines. Other aspects of the industry should also be considered.

Licences to explore for oil and gas in England, including the IW, were awarded in late 2015 and exploratory, appraisal and some production work is already underway on the mainland. An application for exploratory drilling is expected shortly for the Arreton area. Currently the IW Council has no formal policy on oil and gas exploration – the subject is not covered in the Council's planning policies.

FFIoW stated that oil beneath the Isle of Wight is not extractable commercially using conventional oil extraction techniques. In a conventional production well, the well is drilled vertically into a trapped reservoir of oil and gas, and natural pressure forces the oil to the surface without the need for additional measures to encourage flow. It will therefore be necessary to use unconventional measures. Unconventional measures range from drilling horizontal wells through to various forms of flow augmentation with Hydraulic Fracking being the extreme form. Hydraulic Fracking involves injecting water, silica and chemicals into horizontal or angled wells to fracture the adjacent strata improving the gross permeability and thus increasing oil and gas flows. According to FFIoW the Government's definition of Hydraulic Fracking requires 10 million+ litres or more of fluid to be injected to a depth beyond 1,000 metres during one appraisal period, for example: if processes similar to fracking are used but with lower quantities of water injected or at a lesser depth, this does not constitute fracking. *(This is in the Infrastructure Act 2015 and suggests that a process similar to fracking could be used without meeting the precise definition of fracking. This would need to be questioned with the licence-holder to seek clarification when they present their proposals).* Hydraulic Fracking is the only unconventional method recognized by the Government and is subject to extra regulations. Other unconventional methods have been employed offshore and FFIoW would like to impress on the Government that that they also require extra regulation onshore.

The licences for the Isle of Wight allow for both conventional and unconventional extraction to be used. In a conventional well, the drill goes straight down and natural pressure forces the oil to the surface. Unconventional wells can use horizontal drilling and stimulation is required as the oil or gas cannot flow as freely.

The sequence of activities for an onshore oil well is:

- Seismic survey (already completed)
- Exploration drilling (current application will cover)
- Appraisal – duration one to two years
- Flow testing – one year
- Production – typically 5 to 20 years
- Decommissioning

Drilling the well requires of the order of 100 cum of water and leads to some discharge of methane, which is either flared or discharged into the atmosphere

Slides were shown of the Broadford Bridge and Horse Hill sites to emphasise the amount of equipment on the sites and the number of containers. The point was that there would be significant traffic associated with drilling and appraisal.

The oil and gas potential of the IW was assessed by the company Xodus. They identified three potential fields in the Arreton area - Arreton Main; Arreton North; and Arreton South. The previous well at Perreton is designated Arreton 2. The current work relates to Arreton Main but FFIoW believe there could be further work on the other fields. The total amount of oil is believed to be in the region of 15 days of UK supply to be extracted for a period up to 20 years.

Environmental safeguards – this is an area of concern for FFIoW. The Health and Safety Executive cover the surface site and workers only and largely rely on self-regulation to ensure satisfactory environmental performance. They have no interest in what happens underground. The Environment Agency (EA) and Southern Water have an interest, the EA licensing any discharges to the environment and Southern Water with an interest in protecting water sources and potentially supplying water. FFIoW showed a slide of water sources on the Island showing both minor and major sources – there were a lot of them. FFIoW said that some of the potential drilling area is in the same location as the

main underground source of water for the Island. There are multiple regulations to be considered at the planning application stage but once an application is granted, self-regulation is the order of the day.

The Island should be protected by its UNESCO Biosphere status and a considerable area is covered by the AoNB, SSSIs and Marine Protection Zones amongst other designations. However, FFIoW have concerns that because underground work is out of sight and multiple contractors will be used, this makes the oversight of compliance difficult. In addition, because many of the processes are relatively new, this means that the consequences of their use are not fully known.

FFIoW have concerns over potential pollution, both surface and sub-surface, where used fluids are injected into the wells at the end of an operation. They also said that if any exploration company were to run into financial difficulties, it maybe that landowners could end up being responsible for clean-up costs. They also have concerns about the depletion of the water table. Southern Water is keen for domestic users to reduce their consumption but the oil industry is water hungry. Dirty water can be re-used and some can be dumped into decommissioned wells. However, there are currently no facilities on the Island for storing or disposing of the millions of litres of dirty water, impregnated with chemicals, that would be generated. In the event of an accident, FFIoW believe that it would be impossible to clean up the water table. In the USA, 6% of decommissioned wells leaked immediately, 50% in 20-30 years and all of them will eventually.

Other pollution concerns include light pollution, as any drilling site would be lit 24 hours a day. Also, the noise generated by construction and drilling operations. Industrialization has an impact on health and the consequences of venting methane should be considered.

Traffic – consideration needs to be given to the size of vehicles that would be required, especially at the construction stage, as most drilling equipment is large and heavy. It may be that tracks and lanes will have to be widened to accommodate such vehicles. This is before the daily movements of tankers and other vehicles, should any of the sites prove to be viable. The potential surface damage to roads that were not designed to take such loads could be expensive.

All in all, FFIoW are concerned for the ecology and environment of the Island and the possibility of a damaging effect to the economy and tourism. However, they are well aware that any response must be solid and factual and not emotional.