

## 1. LOCATION AND OPERATING METHODS

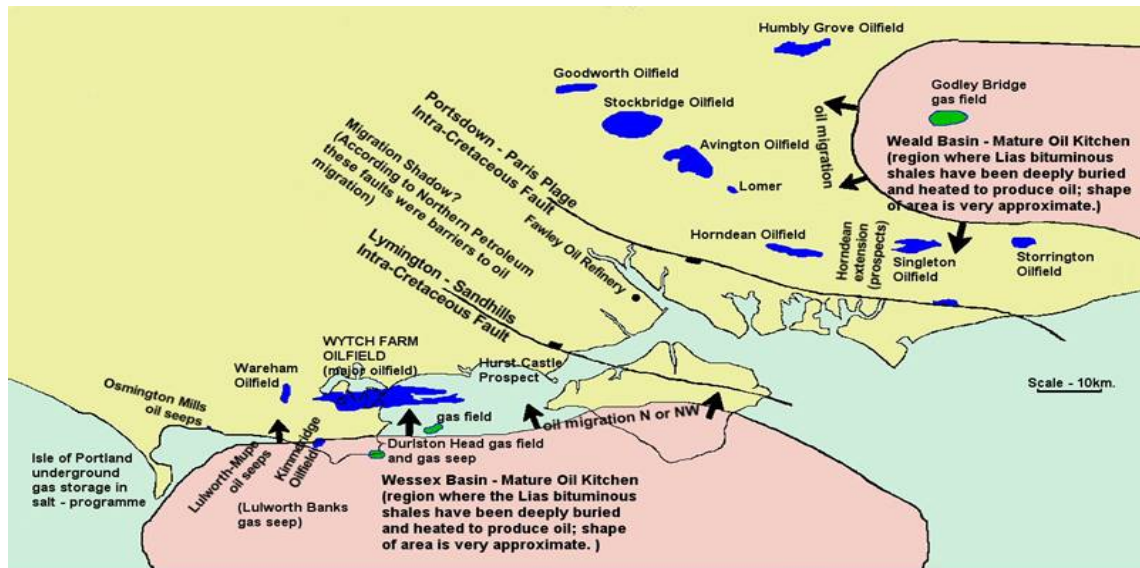
- **Which company will be functioning as the operator for the drill site?** What is their experience? Can we view their industry profiles?
- **Where are the actual well pads going to be built ? (If not in the document or displayed)**
- **Are well pads going to be on AONBs or on existing Brownfield sites?**
- **What is the distance from closest habitations?**
- **UKOG has multiple other sites in the Weald - none of which has yet returned an operating profit. Should you be delivering proof of viability before creating more environmental disturbance?**
- **So you have 2 sites. When do you hope to drill these and will you do both at the same time?**
- **Was 2D or 3D Seismic testing done?** If only 2D why not 3D as this is now the most accurate method of understanding the nature of the geology?
- **Will Exploration sites be used as main production sites** if exploration and flow tests are successful?
- **What will you do if they are not successful? Try another site?**
- **Has UKOG used their Xodus 2018 Competent Person Report** to assess amounts of oil and gas in place and recoverable? If not what are they using ? Is this available on line?

## 2. GEOLOGY, SEISMIC ANALYSIS AND POSSIBLE EARTHQUAKES

**I am concerned about earthquakes and seismic events at Newdigate that could be linked your site at Horse Hill .** I am aware that Stuart Haszeldine, Professor of Carbon Capture and Storage at the University of Edinburgh has investigated probable links between drilling in the Weald and the swarm of seismic events at Newdigate while the British Geological Society has says this is unlikely.

- **Can you categorically assure us that the processes you will use will have no similar seismic impacts on our already very fractured geology? YES ? NO?**

- You keep comparing our oil finds to those in strata at Horse Hill but our strata is part of the Wessex Basin and not the Weald. Can you explain why this is?



Oilfields and surface indications of oil in the Wessex Basin and the western part of the Weald Basin. Based on BERR (2008), Marinex Petroleum Limited (1980), Northern Petroleum (website) and other sources. This is schematic and simplified and should not be regarded as geographically precise. Refer to specific publications on individual oilfields for detailed information. Ian West and Tonya West (c) 2008.

- Which strata layers are you actually focussing on exploring because you mention four types in different announcements and reports. Portland – Purbeck (limestones)– Kimmeridge and Inferior Oolite?
- When was 2D or 3D Seismic testing done? If only 2D why not 3D as this is now the most accurate method of locating faults and the nature of the geology?
- What date of the British Geographical Survey Mapping data for the island will form the basis of identifying fault lines? Can we see this online?
- Do you have baseline information about historic seismic events on the island?
- As our island is prone to small landslips and shifts and coastal erosion how will Seismic Events be monitored? Will UKOG or the British Geological Society or the Oil and Gas Authority pay for independent monitoring equipment to be put in place, since the island only has a monitoring station that does not record historic information? YES? NO? MAYBE?
- Given that historically Ventnor has had landslips and seismic movements how you assure us we will not be affected by any drilling or well compression and decompression? YES? NO?

### **3. WATER USAGE, POLLUTION AND WASTEWATER**

I understand that many thousands of litres are needed to drill oil wells and we have a real problem with shortage of island supply

- **How much water per exploration well are you anticipating using ?**
- **How much for appraisal and then full production per well?**
- **Where will you get it from? 30% is already needed to be piped from Mainland to meet local demand.** How will this be brought to the sites?
- **Wastewater,** approximately how much wastewater will be produced per well from all drilling activities and what will it contain?
- **How will you dispose of it?** will it be transported off the island?
- **At Horse Hill you have applied for a deep waste water well.** Do you plan a reinjection well at any point if so when?
- **Your planning application to drill for production at Markwells Wood** was denied after the Environment Agency and Portsmouth Water said that the risks to groundwater and the public water supply were unacceptable. Can you comment on why that was?

### **4. DRILLING METHODS AND FRACTURING STIMULATION**

I understand that drilling for exploration will be a conventional vertical well to take a core sample.

- **How far down** will you drill these exploration wells?
- **How much Hydrochloric Acid (in barrels)** do you anticipate using for exploration and at what percentage concentration 5% or 15%
- **Acid Wash and Acid Matrix Stimulation** are two very different operations requiring different quantities and concentrations of acid. How will we know what you are doing underground?
- **When you drill unconventional horizontal wells, what method will you use** to fracture the dense strata of the Portland, Purbeck, to extract the tight oil from sandstone and limestone in the horizontal wells?
- **Do you expect to have to use any extra stimulation methods to achieve your projected targets in the future?**

- **You mention extraction from the Kimmeridge strata in many of your briefings and reports. This is a Micrite formation which contains shale deposits. What method will you use to fracture this dense strata if you are not Hydraulically Fracking or using Acid Stimulation?**
- **How much oil do you hope to get from each site and over what period of time.**
- **What other chemicals will you be using for exploration and how much of it ?**
- **What other chemicals will you be using for appraisal and how much of it?**
- **Will you be applying to the Environment Agency for a permit for the use of Hydrochloric Acid?**
- **What is the difference between an acid wash to clear the well and a “workover” to clean strata?**
- **What pressures (above or equal to the formation) will be used to pump these fluids into the formation at each stage & who will be monitoring the amount of chemicals, acid and fluids and the pressures used?**
- **According to research by Schlumberger 6% of wells will leak immediately and all wells will leave eventually. What will you leave behind in these wells after decommissioning to leak into the strata?**

## **5. HEALTH AND SAFETY AND AIR QUALITY**

**Have you engaged with emergency services. Yes? No?**

If there's a major traffic or site incident involving your equipment, materials and products how will local people be made aware and what measures are in place to inform and protect them?

**Do you have an Emergency plan policy to protect your workers and the members of community in event of a blow out or fire on the premises? Yes? No?**

**In your meeting with Arreton Parish Council you stated that monitoring the production site will be done remotely. Who will be responsible for dealing with incidents at the site and initiating your emergency plan - emergency services – e.g fires, blowouts, tank leakage or chemical spillage?**

**At Horse Hill the locals experienced headaches, nose bleeds and respiratory issues at the time of the flow tests. Do you have a comment for our communities about this?**

**St Mary's is under pressure to cope with general emergencies**

Will you check with St. Mary's A&E that they will be able to cope with patients in an emergency situation (site blow out, fire, gas releases)

**Reported HS2 (Hydrogen Sulphide) smells and emissions at Horse Hill** - Have reports from communities been investigated and addressed?

**6. ECONOMY AND COMMUNITY BENEFITS**

- **What will your 6% community fund comprise of? When would it be paid?**
- **What % of Business Rates will be paid to IWC?**
- **How much oil do you hope to get from each site and over what period of time ?**
- **How many wells do you expect to have to drill to achieve these results.**
- **How many shares does director Stephen Sanderson hold in his own company?**
- **Given that UKOG filed a deficit of over £16 million last tax year how can they pay any percentage of profits to the community?**
- **I understand that your subsidiary company UKOG 234 is currently in debt up to around £6million. Is this of concern?**
- **How many local people do you plan to employ and what will their jobs be?**
- **How much will it cost UKOG to create each well site given the need to ship large equipment and specialist materials?**
- **What time frames do you classify as the busy tourist season on the island?**

- **If the exploration for oil fails and you have to decommission the well sites how much will that cost UKOG?**
- **Are you prepared to put up a bond to cover the cost of decommissioning should you fail to economical quantities of oil?**

## **7. CLIMATE and CO<sub>2</sub> EMISSIONS**

- **Will you be flaring or venting gas from your drilling activities?**
- **What steps have you taken to accurately assess the emissions from this site during the entire process of extraction and production? How will these be recorded and will they be in the public domain?**
- **What data have you based these estimates on.**
- **How will these emissions be recorded, by whom and will records be in the public domain?**
- **How does your emissions activity fit within the now accepted climate emergency and the governments requirements to reduce all emissions by 2030?**

## **8. ENVIRONMENT & HABITATS**

- **Which of the many IOW Ecology, Environment and Archaeology Study Groups will you be contacting for their detailed records and data on local areas of specific scientific interest and habitat protection?**
- **Given the location of the Arreton site and proximity to the vulnerable Eastern Yar will you be undertaking a full Environment Impact Assessment?**
- **When will your findings from pre- scoping screening reports be available to the public and these interest groups so that they can offer any detailed information you may miss?**
- **What percentage of environmental risk factor do you consider to be non- significant and acceptable?**