Here in the South East, we can protect our beautiful countryside by coming together to oppose acidising and fracking for oil.

To learn more about acidising, or to find your local campaigning group, visit:

www.wealdactiongroup.org.uk

Acidising:
“This type of oil deposit very much depends on being able to drill your wells almost back to back, so it becomes very much like an industrialised process.”

Stephen Sanderson, CEO, UK Oil & Gas (UKOG), February 2016
Through holes in the well casing, acid fluids crack and/or dissolve the rock to increase flow. Potential leakage of toxic liquids and gases into the aquifer.

Risk of blowouts

Leaks possible between cement and rock and cement and the pipe

Through holes in the well casing, acid fluids crack and/or dissolve the rock to increase flow

Acid stimulation well

Waste water tanks: Risk of spillage and leaks. Air pollution from vent/flare

Cement between metal pipe and rock can be imperfect, will degrade

Steel pipe: corroding over time, added risk from acid

Aquifer

Shale

Why should I care?

**Acidising brings similar risks to fracking** – risks to our health and environment, wildlife and farm animals, the clean country air we breathe, potentially the water we all drink. Drilling and acidising involve noise, flares, heavy traffic on our country roads, and transporting and injecting acids plus a range of chemicals whose toxicity in some cases is unknown. Communities across the South East will be guinea pigs in this industrial experiment.

**There could be hundreds of wells.** So far, oil companies are prospecting in a few scattered places across the South East. But they are thinking big. Is drilling coming to a field near YOU?

**Acidised oil feeds climate change** – it’s the wrong time in history to start producing more fossil fuels.

Fracking or acid stimulation?

**Acidising for oil in South East England** Companies want to extract hard-to-reach oil deposits from under our feet across the Weald of Sussex, Surrey, Hampshire and the Isle of Wight.

**Is it fracking?** Like fracking, acidising is a well stimulation process that releases oil trapped inside rocks. Under the Weald, oil is found not only in the shale but also inside limestone layers – very deep layers called oolite and shallower layers called micrite or Kimmeridge limestone.

**Acidising means more chemicals** Acidising uses much higher concentrations of chemicals than might be used to frack shale.

**Fracking**

- Cracking open the rock (typically shale), using water and chemicals pumped at high pressure, propping the cracks open with particles such as sand.

**Acidising**

- Dissolving pathways through the rock (typically limestone) using a solution of acids and other chemicals. An acid wash in theory merely cleans the well, matrix acidising dissolves rock near the well, and acid fracking is done at a pressure that fractures the rock.

‘But we’ve had oil wells here for decades!’ Technology has evolved. Oil companies today can drill horizontally over long distances into rocks where the oil cannot flow unaided without acidising or fracking. Previously, no one was talking about wells back to back every couple of miles, under our homes, fields and communities. What is proposed now is far more intrusive and intensive. And regulation is lagging behind technology.

**Pulling wool?** Right now, oil companies are drilling, testing, and carefully avoiding using the ‘F word’. At test stage they can acidise the rock near the well bore and see how the oil will flow. To produce oil commercially, they are likely to acid frack the limestone, and then move on to frack the shale above and below. Once companies have drilled and tested, it’s much harder to stop applications for full-scale production.

**Are these new wells ‘conventional’?** Current drilling in the Weald Basin of South East England is being dubiously dubbed ‘conventional’ by industry and planners. But geologists would define the limestone-rich target rocks as unconventional because the oil cannot flow easily from these rocks without stimulation.