



TINKER LANE COMMUNITY UPDATE

What happens next?

Once the evaluation stage is complete, IGas will then make a decision about what the next steps are. There are, essentially, two possible outcomes:

1. The well will be plugged and abandoned with the site being returned to its original state, or
2. IGas will apply for permission to return to the site to either conduct more exploratory work (flow test) or to apply for production both of which could potentially require an application to conduct a hydraulic fracture (frack).

Should IGas decide to plug and abandon the well and restore the site to its original use, IGas will not be required to apply for any additional permissions as this is covered in the existing permission.

Should IGas decide to return to the site to conduct more work, they will be required to apply to Nottinghamshire County Council to for any and all planning permissions required.

For more information about IGas' Tinker Lane site and the onshore oil and gas industry, please use the following links:

Tinker Lane Community Liaison Group website: www.tinkerlane.co.uk

IGas' current exploration projects: www.igas-engage.co.uk

Let's Talk About Shale: www.talkaboutshale.com

United Kingdom Onshore Oil and Gas (UKOOG): www.ukoog.org.uk

We will continue to provide updates to you as our work progresses but, in the meantime, should you have any comments or concerns please don't hesitate to get in touch using our public information line 0203 675 6058 or by email at enquires@igasplc.com



TINKER LANE COMMUNITY UPDATE

Keeping you updated on the Tinker Lane well site



The Tinker Lane exploration site

IGas Energy, the operator of the Tinker Lane exploratory well site located between Blyth and Barnby Moor, gained planning permission to drill a single vertical well and accompanying ground water monitoring boreholes on the site in May 2017.

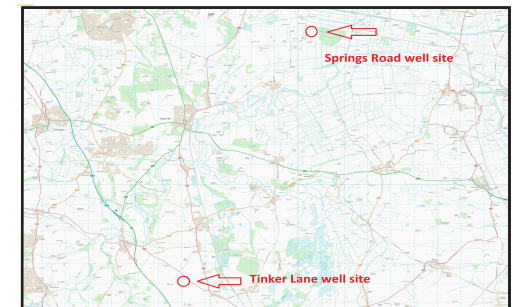
Site operations

IGas started work constructing the site during November 2017. Since then, the following work has been undertaken:

- formation of a new site access
- erection of new gates, fencing and closed circuit television (CCTV) cameras (for the purposes of security)
- removal and storage of top soil and formation of on-site bunds which have been put to grass and will be maintained for the life of the development
- planting of trees and infilling of the existing hedgerow
- creation of a wellsite platform using impermeable geotextile membrane layers covered by a layer of aggregate hardstanding to provide protection to the surrounding environment from spills
- the installation of a well cellar with associated steel conductors (the development incorporates

Along with a similar application at their nearby Springs Road site [see map below], the intention of this operation is to gather information on the rock beneath the surface and to allow IGas to improve their understanding of the hydrocarbon potential in the region, with a primary focus on shale.

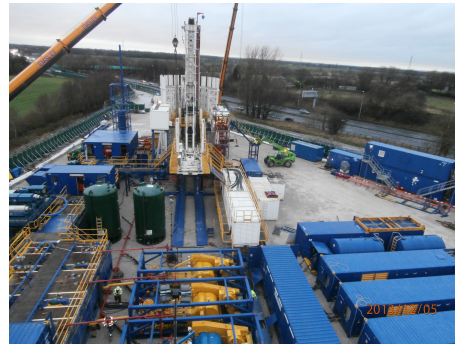
- two conductors, though only one well is applied for and will be drilled. The spare well cellar is a backup and is simply a contingency measure)
- a surface water attenuation tank for surface water management; and
- staff welfare accommodation and on site vehicle parking.



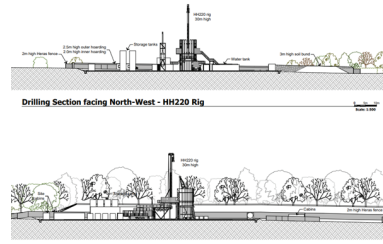
Next steps

Now that the site has been built and the conductor casings have been installed, the next stage of the development is to drill the well.

The delivery of the drilling rig requires an average of 13 HGVs per day over approximately 10 working days. Roughly 10 of all these will be abnormal loads. Light vehicle movements over this period will likely average 10 vehicles per day.



The rig in situ at Barton Moss



A drawing of the rig in profile

Drilling activity for the exploratory well will be a 24 hour, seven day a week operation and, subject to geological conditions, is expected to last for around 60 days. The exploratory well will be a single vertical well drilled to a maximum depth of approximately 1,800 metres (subject to geology).

During the drilling phase, an average of 6 HGVs per day will be required and an average of 20 light vehicle per day.

Following the completion of the drilling operation the drill rig will be removed requiring a similar number.

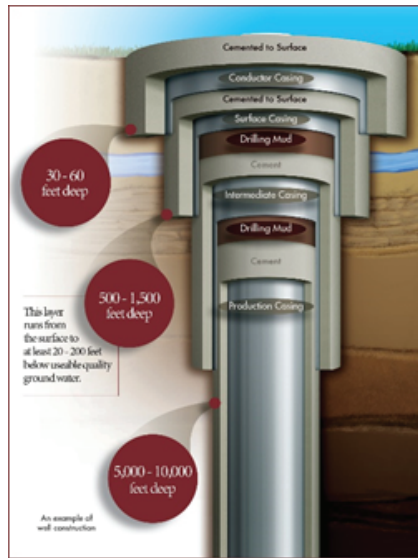


Illustration courtesy of the Texas Oil & Gas Association © 2015

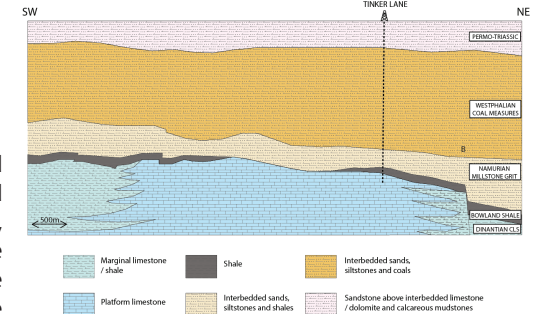
An indicative drawing of the well (depths for illustrative purposes only)

Well Target

The exploratory well has two main targets:

1. Primary target : Bowland Shale; and
2. Secondary target: Millstone Grit Group shales and tight sands.

During drilling, rock samples including cored rock will be collected from the wellbore and brought to surface for analysis. In addition, IGas will assess the physical properties of the subsurface by using specialist tools down the wellbore. It is the combination of these processes that will enable IGas to obtain a better understanding of the geology beneath the site.



Geology under Tinker Lane site

During Drilling - lighting

In addition, during the drilling operation artificial lighting will be required to ensure the safety of site personnel and to allow for the safe operation of equipment. It will be kept to a minimum and is designed to be targeted within the operational area so as much light as possible is kept within the area enclosed by fencing and bunds.



The rig at night

Once the drilling rig has been mobilised and becomes active, at night passers-by will see something similar to the image on the right.

During Drilling - noise

The predicted residual noise level from drilling is below the WHO guideline limits for onset of sleep disturbance effects (42dB). It is not expected that there will be any noticeable change in noise levels at locations where baseline noise levels already exceed the WHO noise criteria.



Noise modelling