



PRESS RELEASE

EMBARGED UNTIL 00.01HRS, WEDNESDAY 24 APRIL 2013

ASA RULING VALIDATES CUADRILLA'S SHALE GAS SAFETY & ECONOMIC CLAIMS BUT SHOULD HAVE CONSULTED SCIENTISTS ON TECHNICAL ADJUDICATIONS

An Advertising Standards Authority adjudication on a communication issued in July 2012 reassuring the public about shale gas exploration underweighted evidence from scientists, Cuadrilla said last night.

While still subject to further appeal, the ASA has upheld seven of the 18 complaints made by an activist (known as Refracttion) about the wording of a Cuadrilla leaflet distributed to a local community in July 2012. Cuadrilla notes that the ASA has not directly consulted some of the world's leading scientists who have been studying the hydraulic fracturing or 'fracing' process in great detail, including experts who conducted scientific inquiries on behalf of UK Regulators.

Cuadrilla CEO Francis Egan said: "We will continue to provide the best scientific information to those people who live in the communities where shale gas exploration will take place. We are disappointed with the minority of adjudications against us but it is important to note that the ASA has confirmed that hydraulic fracturing can be done safely. We do believe the ASA should have consulted scientific experts before reaching its conclusions, and has made some very fine distinctions about what we can and cannot say, but we will be examining the adjudication carefully to see what communication lessons can be learned in future. We are pleased that the ASA has also validated the majority of points made in Cuadrilla's leaflet including:

- ***Hydraulic fracturing can be done safely, given appropriate guidelines and monitoring;***
- ***All our work is highly regulated by the Department of Energy and Climate Change (DECC), the Environment Agency (EA), the Health and Safety Executive (HSE) and Lancashire County Council;***
- ***The Geomechanical Study of the Bowland Shale Seismicity confirms that there is little risk of future seismic events recurring in the Bowland Basin;***



- *As an untapped energy source, natural gas from shale has the potential to boost the UK's gas production, reduce the UK's dependency on expensive and unreliable foreign energy sources and could constrain gas prices;*
- *Shale Gas should also act as a transitional fuel allowing time for Government and industry to develop renewable sources more effectively;*
- *Some critics have suggested that the area would be blighted by densely packed, unattractive developments in the future, if we moved to production stage. This would not be the case."*

ENDS

Notes to editors:

The ASA adjudications follow below, together with comments or response from Cuadrilla.

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Topic	ASA Rules Cuadrilla Can Say	ASA Rules Cuadrilla Cannot Say	Cuadrilla Comments
Safety	<ul style="list-style-type: none"> "...there have been a number of important independent scientific studies carried out, examining hydraulic fracturing. These reports have agreed that hydraulic fracturing can be done safely, given appropriate guidelines and monitoring"; 	<ul style="list-style-type: none"> "Cuadrilla uses proven, safe technologies to explore for and recover natural gas" and "Hydraulic fracturing can be done safely" 	<p>The ASA says that because Cuadrilla has not yet received planning permission to implement all of the recommendations on hydraulic fracturing of the Royal Society and Royal Academy of Engineering joint-report we should not have used the word "<u>proven</u>"</p> <p><u>Crucially however the ASA upheld Cuadrilla's claim that Hydraulic fracturing can be done safely.</u></p> <p>In addition we believe that the ASA chose to ignore the information cited on page one of the Royal Society/Royal Academy of Engineering joint-report which noted that: "Hydraulic fracturing is an established technology that has been used in the oil and gas industries for many decades. The UK has 60 years' experience of regulating onshore and offshore oil and gas industries."¹</p>
Govt & Regulation	<ul style="list-style-type: none"> "All our work is highly regulated by the Department of Energy and Climate Change (DECC), the Environment Agency (EA), the Health and Safety Executive (HSE) and Lancashire County Council" and "Cuadrilla must meet the same stringent regulations which govern all onshore natural gas and oil exploration" 	<ul style="list-style-type: none"> The Government's own review, published in April 2012, also concluded that it was safe to resume hydraulic fracturing [in the Bowland Basin] 	<p>The Royal Society's website quotes the first finding of the review into the risks associated with hydraulic fracturing as follows:</p> <p>"The health, safety and environmental risks can be managed effectively in the UK."</p> <p>The Government's review of April 2012 states:</p> <p>"Based on the induced seismicity analysis done by Cuadrilla and ourselves, together with the agreement to use more sensitive fracture monitoring equipment and a DECC agreed induced seismic protocol for future operations, the authors of this report see no reason why Cuadrilla Resources Ltd. should not be allowed to proceed with their shale gas exploration activities and recommend cautious continuation of hydraulic fracture operations, at the Preese Hall site."²</p> <p>Cuadrilla believes that the ASA has made a very fine distinction here, based on what Cuadrilla could or could not claim about safe hydraulic fracturing, since they accept the basic principle that it can in fact be done safely</p>

¹ Page four, 'Shale gas extraction in the UK: a review of hydraulic fracturing' June 2012 (link: http://royalsociety.org/uploadedFiles/Royal_Society_Content/policy/projects/shale-gas/2012-06-28-Shale-gas.pdf)

² Page three, "Preese Hall Shale Gas Fracturing Review and Recommendations for Induced Seismicity" April 2012 (link: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/15745/5075-preese-hall-shale-gas-fracturing-review.pdf)

<p>Seismicity</p>	<ul style="list-style-type: none"> • "...the Geomechanical Study of the Bowland Shale Seismicity confirms that there is little risk of future seismic events recurring in the Bowland Basin ..." 	<ul style="list-style-type: none"> • "[The report] too set out safeguards to help ensure that there will be minimal seismic activity and no prospect of any resulting damage"; • "This data will allow us to adjust the injection volume and rate during the fracturing procedure, managing the process to ensure that no one should notice any disturbance or even be aware of the activity"; 	<p>DECC Sec of State Ed Davey has said:</p> <p><i>"So far as Cuadrilla's current exploration programme in Lancashire is concerned, the remedial action level for the traffic light system (that is, the "red light") will be set at magnitude 0.5 (far below a perceptible surface event, but larger than the expected level generated by the fracturing of the rock). I consider that this is an appropriately precautionary approach"</i></p> <p>A recent Durham Energy Institute Academic Study on this issue concluded:</p> <p><i>"By comparison, most fracking-related events release a negligible amount of energy roughly equivalent to or even less than someone jumping off a ladder onto the floor. Of the three fracking-related quakes that could be felt, even the largest ever, in the Horn River Basin in Canada in 2011 had a magnitude of only 3.8. That is at the lower end of the range that could be felt by people. The widely-reported quake at Preease Hall near Blackpool in 2011 had a magnitude of 2.3."</i></p> <p>The ASA has apparently ignored the above.</p>
<p>Well Integrity</p>	<ul style="list-style-type: none"> • "Cuadrilla's wells are all designed to best practice standards and are inspected by an independent well examiner before being sent to the HSE for review" 		<p>The ASA agrees with Cuadrilla's assertions</p>
<p>Aquifer Protection</p>	<ul style="list-style-type: none"> • "To ensure that there can be no route for fluid or gas to leak from the shale rock up to the aquifer, we use multiple layers of steel casing sealed by cement"; 	<ul style="list-style-type: none"> • "We also know that hydraulic fracturing does not lead to contamination of the underground aquifer" and "There is 'no evidence of aquifer contamination from hydraulic fracturing'" 	<p>This is one of the most perplexing of the ASA's adjudications because they effectively conclude that because not everyone agrees that hydraulic fracturing does not contaminate aquifers we cannot accept the findings of the most eminent academic experts on the matter</p> <p>Sec. of State Ed Davey has said:</p> <p><i>"no case has yet come to light in which it has been confirmed that fracking has contaminated an aquifer"</i></p> <p>ASA has not quoted any confirmed case of aquifer contamination to support its finding</p>

Fracturing Fluid		<ul style="list-style-type: none"> • <i>"Cuadrilla's fracturing fluid does not contain hazardous or toxic components";</i> 	<p>Cuadrilla actually uses fracturing fluid containing water, sand and polyacrylamide, a non-toxic friction reducer. The Environment Agency has also approved the use of biocide and hydrochloric acid in fracturing fluids, although to date Cuadrilla has not used either substance.</p> <p>The ASA has ruled here that because we could use other approved chemicals which are potentially hazardous or toxic in large amounts, even though we have not actually used them, we cannot claim that our fracturing fluid is not hazardous or toxic. Cuadrilla did not set out to mislead and we regard this distinction between what we do use and what we could use as an absurd and pedantic distinction since we have not used the approved additives, and if we believe it is necessary to use these approved additives we are obliged to disclose this to the regulators.</p>
Survey	<ul style="list-style-type: none"> • <i>"Geophysical Survey of the Fylde ... Why have we done this? The information that we have gathered is essential to help us understand the quantities of natural gas in the rock beneath the Fylde and how much it may be possible to extract in the future"</i> • <i>"The survey [Geophysical Survey of the Fylde] also contributed around £1.5 million to the local economy through salaries and local expenditure"</i> 		<p>The ASA agrees with Cuadrilla's assertions</p>
Production		<ul style="list-style-type: none"> • <i>Our permanent site at Elswick has been quietly producing natural gas since 1993. Located just off the main road in to Elswick ...</i> 	<p>As Elswick is a vertical well, this was vertical fractured. However, there is no difference in the fracturing technique used in a vertical well and a horizontal well and we understand that the ASA did not consult with engineering experts before concluding that the processes are materially different.</p>

Development	<ul style="list-style-type: none"> • <i>"Some critics have suggested that the area would be blighted by densely packed, unattractive developments in the future, if we moved to production stage. This would not be the case."</i> 		<p>The ASA agreed that we had not misled when we said that well pads in production would not be densely packed</p>
Economic Benefit & Emission Reduction	<ul style="list-style-type: none"> • <i>As an untapped energy source, natural gas from shale has the potential to boost the UK's gas production, reduce the UK's dependency on expensive and unreliable foreign energy sources and could constrain gas prices",</i> • <i>"It should also act as a transitional fuel allowing time for Government and industry to develop renewable sources more effectively"</i> 		<p>The ASA agrees with Cuadrilla's assertions</p>