



Cuadrilla Resources Limited
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Head of Planning
Lancashire County Council
County Hall
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3D Geophysical Survey Correspondence
should be addressed to:-

Cuadrilla Resources Ltd
Preese Hall Site Office
C/O Preese Hall Farm
Weeton
Kirkham
Preston
Lancashire
PP3 3RT

Date: 16th November 2011.

Dear Sir/Madam

**BOWLAND '3D' GEOPHYSICAL SURVEY FOR CUADRILLA RESOURCES LIMITED
PETROLEUM EXPLORATION AND DEVELOPMENT LICENCE PEDL 165**

We wish to advise you that Cuadrilla Resources Limited, as holder of Petroleum, Exploration and Development (PEDL) Licence 165 has commissioned a feasibility study to ascertain if a 3D geophysical survey is possible within the Fylde area of Lancashire. The survey will be conducted under Schedule 2, Part 22, Class B of the Town and Country Planning (General Permitted Development) Order 1995.

Cuadrilla would like to improve the knowledge of the geophysical data currently held by the government and is therefore proposing to acquire approximately 100 square kilometres of three dimensional (3D) geophysical data along several individual survey routes in the Fylde area of Lancashire, within the area as detailed on the enclosed plan.

A 3D survey operation would involve a slow moving convoy of up to four specialist vibrator tractor units surveying along each individual survey route in turn. In effect it is a 'land sonar' process which allows three-dimensional imaging of the sub surface to be undertaken, this being an important element in the appraisal process of an area for potential hydrocarbons (oil and gas) bearing structures.

Vibration frequency signals generated from a small base plate lowered onto the ground surface by each tractor unit are reflected off the deep subsurface rock interfaces and picked up and transmitted to a stationary recording vehicle via a small diameter surface laid microphone and cable spread positioned along the route of the survey. It is expected that the tractor units will cover several kilometres a day whilst the cable spread will be left in position along the survey routes for up to two weeks before being retrieved.

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Registered at: Cuadrilla Resources Limited Cuadrilla House Stowe Court Stowe Street Lichfield Staffordshire WS13 6AQ
Registration No: 06472493
VAT Registration No: 945 6375 88

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In areas of restricted access the energy source will be created by small explosive detonations known as 'shot firing'. It is expected that a shot pattern will comprise three individual holes drilled close together at 50m intervals, each being 10 centimetres in diameter, augered to an approximate depth no greater than 5 metres, and spaced 1 - 2 metres apart.

Neither the vibrating nor shot firing will take place close to residential property.

Part of the feasibility study involves consultation with the County Council and the local Borough Councils. Any restrictions imposed by these Authorities will be strictly followed and no work will commence until formal consent has been received from the Head of Planning. In addition, all Statutory Undertakers, Emergency Services, Archaeology and Conservation organisations are being consulted.

The feasibility study will also involve contacting landowners and seeking their permission in principle ahead of a proposed survey.

During any survey all households/businesses fronting each survey route will receive an explanatory leaflet at least three days prior to the survey recording operation commencing. Both this leaflet and a public notice placed in the local newspaper will display a local field office telephone number.

Subject to the results of the feasibility study the 3D study is anticipated to commence in the early part of 2012 and is expected to last for several months.

I would be grateful if you would bring this to the attention of any interested parties within the County Council. Details of the feasibility study have been sent to all County and Borough Councillors, Borough and Parish Councils. If you should need any further information at this stage then please do not hesitate to contact me at the address or phone number below.

Yours sincerely,
on behalf of Cuadrilla Resources Limited



Phil Mason
Planning Consultant
Tel: 07974 577920.

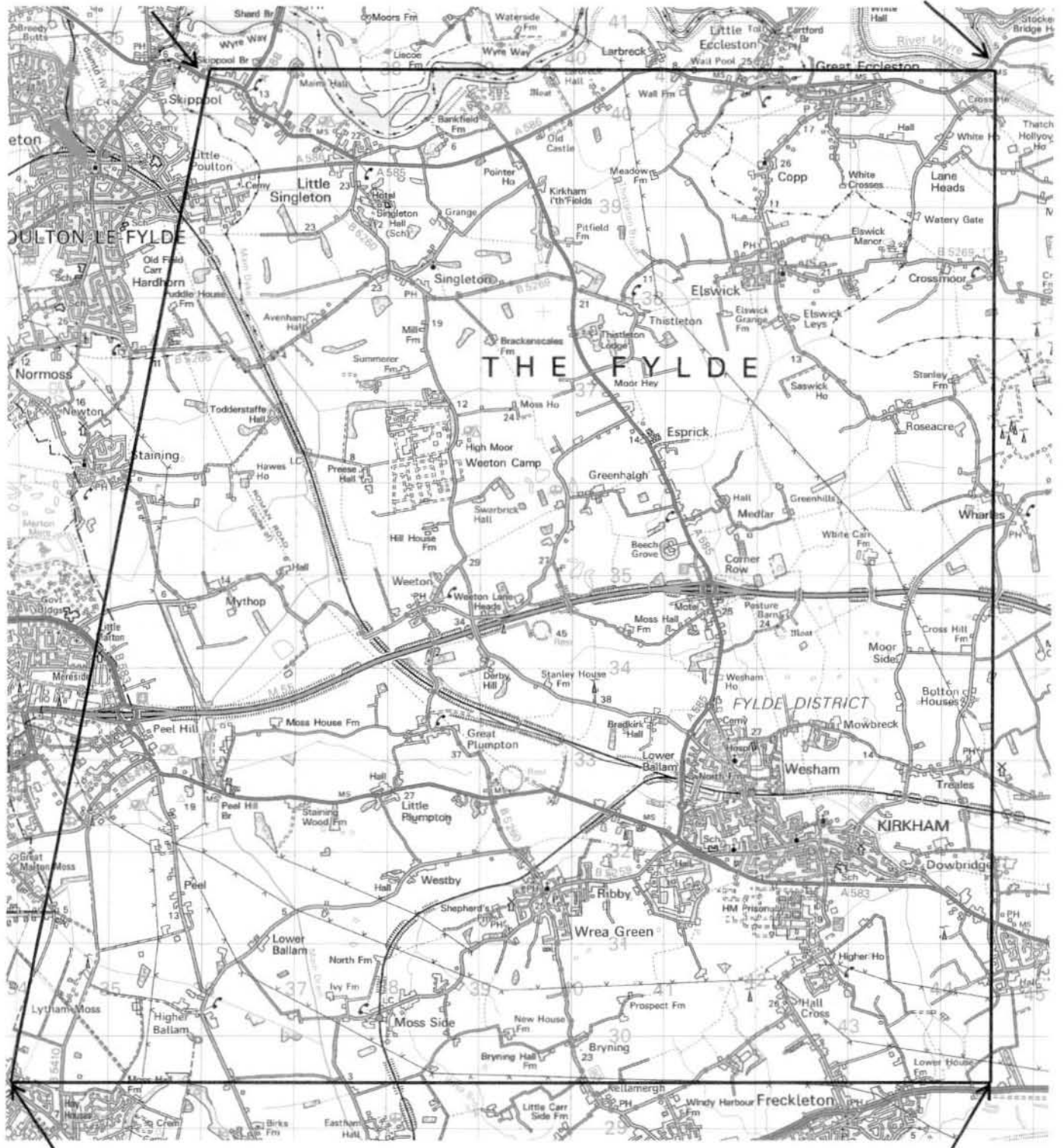
cc Stuart Perigo, Jonathan Haine and Robert Jones.

CUADRILLA RESOURCES LIMITED
BOWLAND 3D GEOPHYSICAL SURVEY
FEASIBILITY AREA



E336000 - N440500

E344500 - N440500



E334500
N429500

Not To Scale

E344500
N429500