

## "FRACKING"

The 2015 Infrastructure Act heightened the considerable national and local concern over the impact of "fracking" and related technologies for extracting unconventional gas: it made it a duty for the government to maximise extraction of such gas (section 41). **This note** reproduces material from the *Timsbury Newsletter* reporting estimates by two different exploration companies of **possible gas resources in the N.E. Somerset area** around Timsbury. The **background to the issues** is explained elsewhere on the Timsbury website in "A Local Gas Field? What if there were Fracking in Timsbury?" see: <http://www.timsbury.org.uk/wp-content/uploads/2017/01/Report-on-Fracking-TEG-for-website.pdf>

### FRACKING IN NORTH-EAST SOMERSET HOW MANY WELLS AND WHERE MIGHT THEY BE?

[From *Timsbury Newsletter*, April 2015]

The present government is keen to promote an American style unconventional gas revolution in Britain. **This could mean big industry moving into our neighbourhood with the attendant disruption, potential risks, and effect on house prices.** Parts of Somerset have been licensed for exploration and development. Industry interest has focused primarily on **coalbed methane (CBM)** with shale gas as a secondary possibility. **Fracking** may be used for both. Extraction of CBM is likely to occur-much nearer the surface than shale.

#### How many wells & where?

In 2000 the American CBM company GeoMet Inc. evaluated the CBM potential of the 400 km<sup>2</sup> area shown in Fig. 1 Its report was retrieved from publicly available sources by Frack Free Chew Valley (FFCV) and is available with a detailed commentary.

[Coalbed Methane Exploration in Somerset, the Chew Valley, Keynsham & the Mendip Hills  
[https://frackfreecv.files.wordpress.com/2014/09/unconventionalgasexplorationinsomerset\\_160614b.pdf](https://frackfreecv.files.wordpress.com/2014/09/unconventionalgasexplorationinsomerset_160614b.pdf) ]

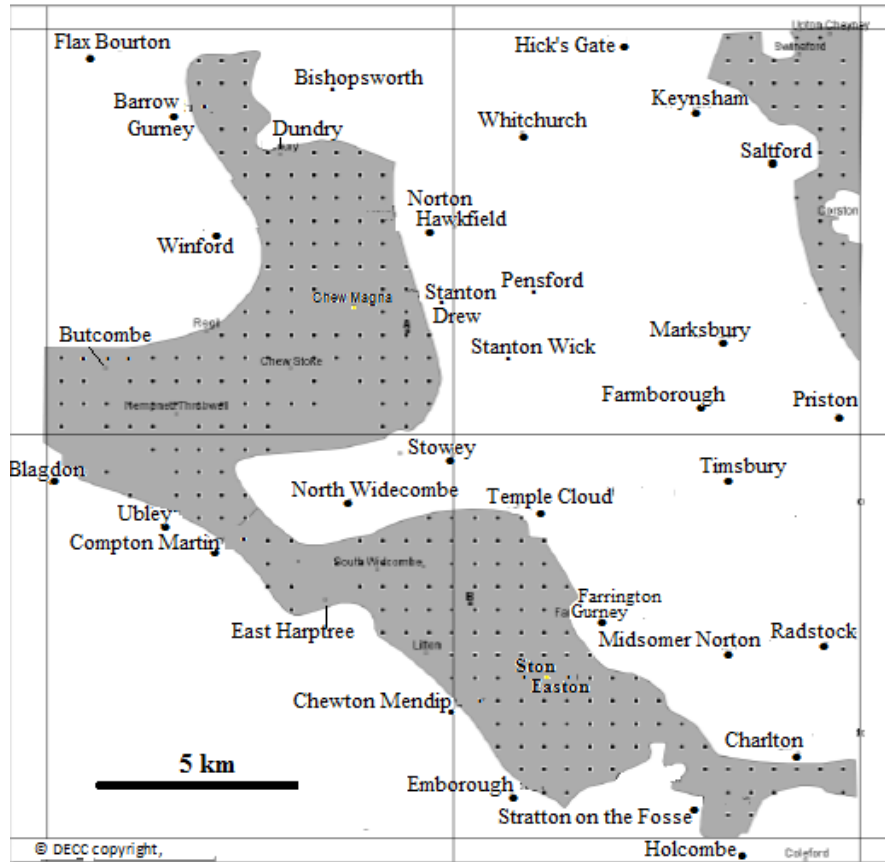
Most of the information here comes from that report where full detail and references should be sought.

In its 2000 assessment GeoMet decided to concentrate on areas with coal measures at optimum depth, shown in grey in Fig. 1, and to exclude urban areas and areas where the coal had been previously worked. There seems to be no reason why CBM might not be extracted from other coal seams, but it appears that GeoMet first concentrated on the least complicated areas. This "developable" area, 108 km<sup>2</sup>, GeoMet stated, could "accommodate" **about 300 gas wells**. Fig. 1 gives an indication of their location, according to FFCV's assumption of even distribution. The numbers in each parish and parliamentary constituency are in Table 1.

#### Could there be more wells – 2000 perhaps?

To attract investors' money gas prospecting companies publish figures for the amount of gas they estimate they will extract from the area covered by their petroleum exploration and development licenses (PEDL). From this, using plausible figures for the average amount of gas obtained per well, an estimate of the number of wells in a given area can be made. The group Frack Off has done this for the area shown in Fig. 1, and give a figure of **over 2000 wells** [ <http://frack-off.org.uk/wells-wells-and-more-fracking-wells/> ] As Frack Off is the first to admit, this can be no more than a rough indication of the number which would be required to achieve the amount of gas the gas company boasts of. What seems clear is that this volume of gas would mean a high density of wells throughout the area of Fig. 1, not confined to the "optimum" areas shaded grey. This is to say nothing of any possible fracking for shale gas!

**Figure 1**  
**GeoMet evaluated the potential of the whole of this area,**  
**and judged the parts in grey as optimum for CBM extraction.**  
**Within this area black dots show how the 300 wells could be distributed.**



**Table 1**  
**Plausible distribution of gas wells at full development of GeoMet's optimum developable area (a) by parish, (b) by parliamentary constituency**

| <b>(a) Parish</b>  | <b>No.</b> | <b>Parish</b>           | <b>No.</b> |
|--------------------|------------|-------------------------|------------|
| Chew Magna         | 38         | Holcombe                | 4          |
| Ston Easton        | 26         | Stratton on the Fosse   | 4          |
| Dundry             | 24         | Wrington                | 3          |
| Chew Stoke         | 23         | Keynsham                | 3          |
| Hinton Blewett     | 14         | Stowey-Sutton           | 3          |
| Cameley            | 13         | Barrow Gurney           | 3          |
| Chewton Mendip     | 13         | Farrington Gurney       | 3          |
| Nempnett Thrubwell | 13         | North Stoke             | 2          |
| Winford            | 11         | Blagdon                 | 2          |
| Chilcompton        | 8          | Norton-Radstock         | 1          |
| Bitton             | 8          | Binegar                 | 1          |
| Compton Martin     | 7          | Marksbury               | 1          |
| West Harptree      | 7          | Coleford                | 1          |
| East Harptree      | 7          | High Littleton          | 1          |
| Ubley              | 6          | Priston                 | 1          |
| Saltford           | 6          | Stanton Drew            | 1          |
| Kelston            | 6          |                         |            |
| Butcombe           | 6          | <b>(b) Constituency</b> | <b>No.</b> |
| Kilmersdon         | 5          | North East Somerset     | 165        |
| Litton             | 5          | Wells                   | 61         |
| Newton St. Loe     | 5          | North Somerset          | 51         |
| Long Ashton        | 4          | Somerton and Frome      | 10         |
| Corston            | 4          | Kingswood               | 8          |
| Emborough          | 4          | Weston-Super-Mare       | 2          |

As Sir Paul Nurse, the President of the Royal Society, has said “*Those living in shale gas areas where there might be fracking have a major stake in the decision. They are the ones who will have a big industry moving into their neighbourhoods, and they need to weigh up the disruption and potential risks against the potential economic benefits for themselves locally and for the UK as a whole.*” The same must surely apply to CBM.

*[This report was prepared by members of the Timsbury Environment Group in March 2015 from the sources cited which must be consulted for more detail.]*

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## **UPDATE: UNCONVENTIONAL GAS RESOURCES IN THE LOCAL AREA.**

[For *Timsbury Newsletter*, Jan 2016]

Last April, the Timsbury Letter published a summary made by the Timsbury Environment Group derived from the 2000 relinquishment report of the American gas exploration company GeoMet Inc.. Readers may remember that GeoMet stated that the local area could "accommodate" **about 300 gas wells**. This summary is/will soon be on the village website for reference.

What has happened since this? Last year the PEDLs (Petroleum Exploration and Development Licences) for essentially the same area as GeoMet considered were held by the company UK Methane, which applied to drill for Coal Bed Methane (CBM) at Hick's Gate. Another paper on the village website explains what CBM is and how its extraction differs from that of shale gas: "A Local Gas Field? What if there were Fracking in Timsbury?":

<http://www.timsbury.org.uk/wp-content/uploads/2017/01/Report-on-Fracking-TEG-for-website.pdf>

UK Methane has recently published its reports on the CBM and shale gas potential of our local area. Its estimates for CBM are similar in magnitude to those of GeoMet, but somewhat lower. However it concludes that the local area is "possible prospective" for both CBM and shale gas, and gives details of the strata where these may be found.

Some local papers have recently reported assurances that Bath and the Mendip areas were "safe from fracking" as there was no shale gas to extract. These originate via the M.P. for Bath from a letter from Andrea Leadsom, Minister of State at Department of Energy and Climate Change [DECC]. See <http://ben4bath.co.uk/news/bath%E2%80%99s-mp-ben-howlett-confirms-bath-will-be-fracking-free>

DECC must know of the UK Methane reports on the area to the south-west of Bath onto the Mendips. Thus the Minister words her letter very carefully, and does not guaranty that, in the longer term, Bath and the Mendip areas are "safe from fracking" or CBM extraction. Continued vigilance is necessary.

This note arises from discussion at the last Timsbury Environment Group meeting.