

Submission to:
WA Scientific Inquiry into Hydraulic Fracture Stimulation in

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Organisation (if appropriate, not compulsory): Retired farmer, Handyman and Wood Craftsman, Frack Free Central Midlands

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I am an old man, born in Moora in August 1942, the eldest of 6 kids. I am in part speaking for myself and also for the Central Midlands Anti-fracking group of which I am a member. I began farming at Mingenew with my father after leaving school aged 14. I left my father in late 1967, at that stage we owned 4,250 acres, not hectares – wheat and pigs.

 I had overall twenty years in the hardware industry, the last 16 at Bunnings. I have just read a 39 page White Paper on the unconventional gas development, prepared by Bryan Whan for Lock the Gate Alliance. The summarised factual evidence by prominent people in this paper is mind-blowing to say the least. Although I had for some years been a concerned member of the Moora Community involved in the local Group, this information in this white paper has more than convinced me to make this submission.

I have no experience with unconventional gas mining – it is not necessary. I have been to many meetings, presentations by people with first-hand experience, particularly with John Fenton from the USA State of Wyoming. His story of his own and his family's ill health caused by this hideous method of extracting gas was horrifying. I have read many articles as well as my natural affinity with the land from my upbringing and heritage.

The whole business of fracking is toxic and I cannot understand why no one or no government has taken any of the companies to Court for their failure of duty of care towards the land, the water and the environment.

Simply put, it will affect me and everyone in Western Australia because no water – no farmers – no food.

With my personal knowledge of pre-drilling for conventional gas, knowledge of the extent of exploration for conventional gas prior to unconventional gas, I know this has already had a huge impact on underground water sources. In Queensland and New South Wales the evidence is overwhelming about the contamination of underground water.

Growing up, my father and I looked at what was being done for conventional drilling for gas and oil in the Irwin Dongara Basin. From Dandaragan north to Northampton, East to Kokatea, Mingenew, etc in that area there is gas and oil we use. At the junction of the Brand Highway and Mingenew/Dongara Road, at the South East section lies an oil well. This was drilled conventionally and the oil has been transported to the Refinery at Fremantle the last 25 years that I know of. I can name the transport companies involved. During the late 1990's, saw U8/U9 Wapet were doing seismic surveys south of Mingenew. The grids were a variety of distances apart – some a half mile, some a mile, e.g., 800mm – 1000 metres – at each square in this grid, holes were drilled at varying depths, charges lowered with wires connected to a instrument at the top and whatever signal came up was recorded so as to ascertain what was down below.

Aeromagnetic surveying was not available at the time, certainly not here.

In 1952 when I was 10 years old, my father took me out to what we now know as the Mt Adams Well. It was, and still is, an oil well. My father spoke with the American engineer running the well and he said it was the purest oil he had ever found. He gave my father a small clear glass jar full of it, and it was the most beautiful emerald green you could ever wish to see. When my sister married a petroleum scientist engineer, I spoke to him about the oil, and he said that, yes. It was very pure and its only fault was that it had too much sulphur for modern diesel engines. In time the refinery corrected this anomaly.

That particular well was drilled (conventional) to 3500 feet - = 1050 metres. They started at the surface with a spud of 610mm down to 152 mm at the last. Every (*decommissioned*) well in that era was filled with concrete. There never was any news of any leakage. We would have known because of the bush telegraph.

That is not the case now when every little spill appears to be hushed up very quickly

Prior to Sir Charles Court bringing down natural gas from the Burrup Peninsula to Perth from the tiny hamlet of Irwin in to Dongara, there was a series of what we called Xmas trees – a series of pipes and valves about 1.8mts high on both sides of the road, over the gas and oil wells. Once the gas got to Perth these Xmas trees all disappeared. The 1973 State Government reported that there is enough conventional gas in this Dongara/Irwin gas field to supply WA into the foreseeable future. The foreseeable future is always put as one hundred years.

Record 1972/142 – Crude Oil Correlations in the Perth and Carnarvon Basins by T.G. Powell and DM McKirdy
https://d28rz98at9flks.cloudfront.net/12823/Rec1972_142.pdf

Regional Geology Of The Perth Basin – 2011 Release of Australian Offshore and Petroleum Exploration Areas

<https://archive-petroleumacreage.industry.slicedtech.com.au/sites/...petroleumacreage/>

Report 46: Stratigraphy and Structure of the Onshore Northern Perth Basin Western Australia by Mory & Lasky

<https://library.dbca.wa.gov.au/static/FullTextFiles/056605.pdf>

So why is there any need and why are they being allowed to Frack?

I want to live in a Gasfield free district along with everybody else. Australia has always been 75% self-sufficient in oil, why we are tied to O.P.E.C., I don't know. The petroleum companies use millions of litres of water that they don't pay for. It is nothing more than a tax dodge because while they are exploring - and this applies to all mining of all types including petroleum - they don't pay tax. They "may" start to pay tax once they declare their operation a commercial find. Last year I read an article which said there "are 800 companies registered in Australia who do not pay tax. The Australian Tax Commission top man said he was not sure how to go about it – well, send them an invoice: you are the boss! All the little P.A.Y.E. people don't get a choice.

Also, when Petroleum companies are fracking cavernous or cracked ground when they start to lose their mud, *they* dump it full of diesel – it sets their mud. They call it "Quick Gel". We would all be in a lot of trouble if we sprayed our yards with diesel to kill caltrop because it also kills the seeds.

Fact : In a frack-type drilling experiment in 2004, in the Whicher Range East of Margaret River, they pumped 1-2 million litres of diesel down the well because other fluids caused the clay soils to swell. They pulled out, leaving around 600,000 litres of diesel down the now to be closed fracking well. Are they going to retrieve it to save contamination of the environment down below? Only last month, January 2018, CalEnergy advised that they cannot justify spending any more money on the site and that they were plugging its gas wells

(<https://www.dontfrackwa.com.au/category/whicher-range/>

<http://www.calenergyresources.com/australia/>

I have read the whole 39 pages of the White Paper and the amount of factual evidence relating to Human Health and the destruction of the environment is horrendous,. It is almost too much to grasp. The shining light on the horizon is battery-powered vehicles, wind power, solar power. Tesla has manufactured a motor car that will go 900 km on a charge. They have also made trucks pulling two trailers, battery

powered. The Chilean Government has released all its lithium deposits to all who choose to use them. Their lithium is very pure, unlike here in WA, where the total substrate mined only yields 30 or 40% lithium

SUMMARY - FUTURE HOPE

1. Battery powered vehicles. Now not far away. Toyota now has car with battery but no combustion engine. Instead two tank full of compressed hydro generators. During the day solar panel batteries, night time electric power from generator driven by compressed hydrogen turning generator. Tesla worked wonders with electric cars and trucks.
2. Solar Power Homes and factories.
3. Wind Power – needs more research
4. Wave power – Carnegie Energy and Bombara Wave now have operational units. HMAS Stirling at Garden Island has been operating now for over two years on wave power which also desalinates their water. Carnegie is in the process of installing a large unit off Albany and Bombara has a contract for their unit off Portugal.

<https://www.carnegiece.com/>

<http://reneweconomy.com.au/bombora-taking-a-new-direction-on-the-renewable-energy-wave-23522/>

5. Deep earth thermal springs to drive turbines, not enough research
6. Salt towers. As in the USA salt water and sun to create electric power – well advanced in some desert areas of the USA.
7. Same could be achieved here, with some of large salt lakes. Similar principal. Salt lake, saltwater, sun, negative and positive poles - don't laugh – this would work.
8. Build a 1 KI high tower out of fire bricks. Install turbines all the way up – driven by the rising temperature (all heat rises). Install catalytic convertors to catch any nasty emissions, put this at the very top. All the rubbish dumped to land fill could be transported and burnt, getting rid of the rubbish , providing electricity – not impossible to do.

I know of a perfect place to build this power station and that is 20 km south of Mingenew. It can be burnt anywhere for that matter, anywhere along the Perth escarpment, Kalamunda, Darlington. Further to the East, just up from Herne Hill. Although this part of my paper may not be considered as an integral part of this submission, but is something for designers and engineers to think about converting waste into electricity.

Conclusions and recommendations

- Government should ban unconventional gas mining immediately and permanently.
- There are sufficient types of sustainable energy to fully power the country including all vehicles at less cost than using gas and oil.

End of submission

Signed

GL Baugh

