Unfortunately time hasn't allowed me to complete my report on my trip to the US to look at gas production and fracking in line with today's closing comments on your draft fracking inquiry so my comments will be a quick summary of my views on this issue.

I feel that green politics and an anti-gas ideology have taken over this discussion in Australia and there has not been enough done to test the claims by groups espousing these ideologies.

My reason for saying that is because much of the anti-fracking debate originates from a number of issues that were raised in America through a movie called Gaslands.

From there we had a protests in Australia using issues raised in that movie as therefore reasons as to why we shouldn't support fracking in the Territory and elsewhere in Australia.

But having recently been to Wyoming I have started to doubt how fair dinkum are those who have driven the anti-fracking campaign here in the NT.

Firstly two weeks ago I met with Louis Meeks who lives outside a little town called Pavillion in Wyoming. He was the person in the Gaslands movie who had gas in his water. He said to me that fracking was not the issue, it was poor well construction – in other words if the well had been constructed properly then there would not have been a problem. Louis said he was not against gas. So is the issues about fracking or poor well construction?

Secondly I intended to meet a Mr John Fenton who was in the Territory last year. I sent him an email and phoned him but received no response as when he was in Australia I said I would visit him if I was in the US. I rang the Powder River Resource Council who told me to instead ring Louis Meeks which is how I got to talk to Louis. Now the Lock the Gate people and the ABC described Mr Fenton as a rancher and cattle producer from Wyoming. Louis Meeks said that Mr Fenton does not own a horse, a cow or any land – he is a hired hand who works for his father-in-law! So why was he promoted as a rancher?

Regardless there are a number of other issues which must be taken into account in relation to gas in Pavillion.

For instance the geology of the region. A ground water study by the US EPA stated the following *Records obtained on line from WOGCC indicate that hydraulic fracturing in gas production wells occurred as shallow as 372 m below ground surface (bgs) with associated surface casing in production wells as shallow as 110 m bgs. Records from the Wyoming State Engineer's Office and homeowners indicates that domestic wells (including stock wells) in the area of investigation are screened as deep as 245 m bgs. With the exception of two production wells, surface casing of gas production wells do not extend below the maximum depth of domestic wells in the area of investigation.* 

This just highlights that using Pavillion as an example of gas extraction as to why we shouldn't extract shale gas 4km below the surface is simply an unreasonable comparison. Gas production in Wyoming also produces condensate which I don't believe is the case in the Territory.

Also in the US, land tenure is totally different form the Northern Territory. There is different land tenure in each state and is regulated by different bodies. For instance in Wyoming, the US Bureau of Land Management regulates gas on Tribal lands, the US regulates wells on Federal Land, and the Wyoming Oil and Gas conservation Commission regulates Fee and State lands. In Wyoming the Federal Government can own minerals, the Indian groups own minerals, private people called Fee own land and so does the State.

I have attached some 2007 figures re Wyoming economy which I am presently updating.

I also travelled to Ohio and British Columbia.

Other things of note.

In relation to earthquakes in Oklahoma, Ohio Oil and Gas Commission (OOGC) manages the issue of earthquakes by regulation which up to 5 years ago Oklahoma wasn't doing. Ohio has seismic monitors around the state. If a company is drilling and they reach a certain level on the seismic recorders they must stop and produce a plan which reduces that seismic level – until they do that drilling must stop. Problems in Ohio solved by proper and enforceable regulation.

Secondly, in your report you say that water won't be able to be discharged underground. Used water is discharged underground in Wyoming, Ohio and British Columbia under licence and of course only if the geology allows it. I think a blanket ban without looking at each circumstance is too restrictive.

When you consider that over 1 million wells have been fracked in the US and considering the small number of issues raised some of which have not be proven then you get the impression that the perceived problems with gas extraction are exaggerated for political and ideological reasons using end of the world scenarios to push a cause. In the places I visited you don't see anti fracking signs and as the Commissioner for Fremont County said 90% of people in his county support the gas industry.

In a small town, Carrollton, in Ohio there were 7 businesses closing down until gas was found and now all going again. One motel now three motels. 13.6% unemployment down to 4%.

In relation to studies re water affected by fracking it is worth reading the University of Cincinnati report

## Wyoming's Economy

Components of Wyoming's economy differ significantly from those of other states. The mineral extraction industry and the travel and tourism sector are the main drivers behind Wyoming's economy. Unlike other states, Wyoming does not possess an individual or corporate income tax. The Federal government owns 42.3% of its landmass, while 6% is controlled by the state. Total taxable values of mining production in Wyoming for 2007 was over \$14.5 billion. The tourism industry accounts for over \$1 billion in revenue for the state.

In 2007 over six million people visited Wyoming's national parks and monuments. The key tourist attractions in Wyoming include Grand Teton National Park, Yellowstone National Park, Devil's Tower National Monument, and Fossil Butte National Monument. Each year Yellowstone National Park receives three million visitors.

Wyoming's unemployment rate for 2007 was approximately 3.5%, which was significantly lower than the national average of 4.6%. Per capita income (PCI) for Wyoming in 2007 was \$43,226.

Historically, agriculture has been an important component of Wyoming's economic identity. Its overall importance to the performance of Wyoming's economy has waned. However, it is still an essential part of Wyoming's culture and lifestyle. In 2007 the total value of agricultural production in

Wyoming was \$1021.4 million. The main agricultural commodities produced in Wyoming include livestock (beef), hay, sugar beets, grain (wheat and barley), and wool. Over 91% of land in Wyoming is classified as rural.

## Wyoming Mineral Production

Wyoming's mineral commodities include coal, natural gas, coal bed methane, crude oil, and trona. Wyoming ranks highest in mining employment in the U.S. In fiscal year 2007 Wyoming collected over \$145 million in sales taxes from the mining industry.

Coal: Wyoming produced 452.1 million short tons of coal in 2007. The state is the number one producer of coal in the U.S. Coal is mainly used to produce electricity. Wyoming possesses a reserve of 68.7 billion tons of coal.

Natural Gas: In 2007 natural gas production was 2,145 billion cubic feet. Wyoming ranks 5th nationwide for natural gas production. The major markets for natural gas include industrial, commercial, and domestic heating.

Coal Bed Methane (CBM): The boom for CBM began in the mid-1990's. CBM is characterized as methane gas that is extracted from Wyoming's coal bed seams. It is another means of natural gas production. There has been substantial CBM production the Powder River Basin. In 2007 the CBM production yield was 436.3 billion cubic feet.

Crude Oil: Production of Wyoming crude oil in 2007 was 53.3 million barrels. The state is ranked 7th among producers of oil in the U.S. Petroleum is most often used as a motor fuel, but it also utilized in the manufacturing of plastics, paints, and synthetic rubber.

Trona: Wyoming possesses the largest known reserve of trona in the world. Trona is used for glass manufacturing, paper, soaps, baking soda, water softeners, and pharmaceuticals. In 2007 Wyoming produced 17.1 million short tons of trona.