

Saturday June 9 2008

GAS POWER IS THE ROAD AHEAD by *Courier Mail Columnist Des Houghton*

Further to the editorial:

...and here's more food for thought by *Courier Mail Columnist Des Houghton*

QUEENSLAND'S newest beef feedlot will provide 50 million meals to the world this year – as well as taking part in an extraordinary water experiment.

Grassdale, which sits on a picturesque country road between **Cecil Plains** and **Dalby**, will produce 90 million meals a year to Asia, North America and Australia when it reaches full capacity, according to David Palmer, the managing director of Meat and Livestock Australia.

He told me Australia now exports \$100 million worth of beef a week, and Australians should proudly see their country as the food bowl of Asia.

Grassdale is owned by beef baron Peter Hughes and his wife Jane and Charlie Mort's Mort & Co of Toowoomba. The feedlot is currently home to 32,000 head of cattle in 52ha of pens behind 21km of metal fences.

By any measure Grassdale is an impressive place and I left feeling someone could make a small fortune conducting bus tours there. (America's biggest feedlot in Texas holds 100,000 head and is a major tourist attraction.)

At full capacity Grassdale will hold 48,000 head, maybe more. Grassdale has 690 gates but few stockmen. Larger gates operate automatically at the click of handset which looked like a television remote control device.

No less than 350 tonnes of sorghum is milled every day for feed. Each animal eats 16kg to 17kg of fodder a day.

Cattle arrive daily from as far north as Cloncurry and as far south as Wodonga in Victoria. They come in at 420kg and go out at 640kg. They produce mountains of manure – and I mean mountains – that are composted and turned into fertilizer.

Primary Industries minister Tim Mulherin told me the \$40 million invested so far in Grassdale had already bolstered the economies of Dalby, Millmerran and Chinchilla. I found Grassdale a fascinating place for another reason. The cattle drink water brought to the surface from deep underground by coal-seam gas producer, Arrow Energy.

Arrow draws the water from coal seams below the aquifer as part of the gas production process. This coal-seam gas water has been filtered in carbon for generations and is about one-sixth the

concentration of sea water. Some cattlemen have complained that gas producers may poison the ground with salt, but there is little evidence of this.

One of Arrow's gas fields is conveniently next door to Grassdale. You can see the Arrow plant from atop the Grassdale dam wall. The cattle are thriving on a shandy of the coal-seam water mixed with bore water.

Arrow is pumping the water to the cattle for free. Arrow also has 75 gas wells on Grassdale land. Numerous gas producers intend to bring oceans of water to the surface as they crank up production. Think of the impact this could have on agriculture.

At Berwyndale South gas fields not far away at Chinchilla, Queensland Gas Company will eventually pump more than 100 million litres of water to the surface a day. It currently holds water in evaporation ponds lined with clay to prevent salt from seeping into the aquifer. The water will be cleaned up and used to drought-proof Miles.

Shaun Scott, Arrow's chief executive, says treated gas water will supplement Dalby's dwindling town supply with up to five million litres of drinking water a day. Arrow and Dalby council are upgrading a reverse osmosis plant to treat coal seam gas water from Arrow's nearby gas fields at **Tipton West** (near Cecil Plains), Daandine and Kogan North.

Scott says the water could also be used to irrigate crops, wash coal, or be used in water-hungry cooling towers at power stations. Arrow has also raised 15,000 fingerlings in a saltwater fish farm experiment.

Coal-seam water could also be used to replace town water at sewerage treatment plants. Origin, Australia's largest producer of coal-seam gas, sees similar industrial uses for coal-seam water.

British-born Paul Zealand, the company's general manager for exploration and production, said the obvious benefit was the conservation of water in the aquifers. As Grassdale was being opened, Origin was launching its \$20 million reverse osmosis water treatment plant at Spring Gully near Roma. It has begun to desalinate nine million litres per day – the equivalent daily use of 50,000 people.

Zealand said the plant in Origin's coal seam gas fields north of Roma, is Australia's first fully integrated coal seam gas water treatment facility.

The treated water is currently being pumped into the local creek while Origin and the council work out the best ways to use it.

Some of the water is nourishing a pongamia tree plantation. The native Australian tree produces a bean from which oil is extracted.

The beneficial uses of coal-seam water seem endless.