Doug Burgum and Cristopher Wright

by, Keith Wieland

Doug Burgum is President Trump's confirmed nominee for secretary of the interior. Mr Bergum as a child was part of his family's grain elevator business. His father died while Mr Bergum was in high school. He attended NDSU and notably became President of the student body and started a chimney sweeping business. He went on to obtain his MBA from Purdue, befriending Teve Ballmer who later became CEO of Microsoft.

Mr Burgum returned to ND and used \$250k, his inheritance from his father and led a group of investors to obtain controlling interest in Great Plains Software. GPS developed accounting software. Mr Bergum placed his company to benefit from the constant flow of new software engineers from NDSU. Before selling GPS to Microsoft, Mr Bergum laid off a majority of his staff and became senior VP of Microsoft's Business Solutions Group.

In 2008 he founded a venture capitalist group buying peoperties in Minnesota and North Dakota. He literally changed the landscape of Fargo. He applied for and did not obtain the position of Dean of NDSU.

He then became governor of ND. I can tell you, at this time, the oilfield was looking for a stable place to grow. He enacted a highly functional bureucracy that changed ND forever. When the oilfield was weary of working in the hot and cold economics of west Texas, the liberal and overly regulated NM, the low profit margins of OK and the BLM controlled WY, the oilfield gambled and won with ND. The cattle ranchers of ND were happy to welcome royalty payments from the oilfield.

Mr Bergum set up the ND oil and gas division to manage drilling permits and ensure the oilfield kept clean locations that would not allow for trash to blow across the fields.

Locals personnelled the oil and gas division keeping the land clean from refuse. Drilling in ND was fast at 21 day cycles and operators were intolerant to slowing highly efficient processes. Eventually, batch drilling created fewer rig moves as a rig would drill four sections back to back to back. Four times, to my count ND had to lower taxes due to over funding. ND wss a successful vertical integration of oil and gas drilling including partnering with the BLM drilling in native American nations. Notably, the nations of native Americans required national permitting starting with vehicles and working upward with additional services permitted. ND is the location and destination of carbon injection wells; the destination of the largest carbon pipelines. Carbon pipelines quickly followed Iowa's implementation of Iowa title standards and eminent domain standards for interstate pipelines. These two topics overseen by the same, single

individual in sequence begat carbon pipeline's application of eminent domain. The litmus test for application to common carrier status is now only held by the three commissioners at the IUC. All discussion of application for eminent domain are explicitly excluded from public scrutiny in Iowa. Iowa code chapter 479 automatically includes eminent domain and eliminates an application for eminent domain. Under federal law and in alignment of common law, 49 CFR 192, only allows natural gas pipelines to automatically have eminent domain rights. All other pipelines must apply for eminent domain. The IUC is currently under suit from Iowa legislators. After speaking with a supervisor from Pottawattamie county, carbon injection facilities are planned south of Council bluffs near the oil and gas plants.

Jefferson Fink is the lawfirm for the legislators contesting the IUC. After speaking with the Sierra club, they reported that county ordinances need to focus on abandonment sureties, appropriate legal remedies and setbacks.

Transportation of carbon in pipelines does not make sense. The only purpose I see served is that carbon injection sites without carbon pipelines are purported to be wastelands starving local plantlife of carbon dioxide. Carbon injection facilities in ND under my observation appear to be more robust built injection wells like any other injection facilities.

Outwardly, Mr Burgum is a highly effective businessman. I found nothing negative about him on the internet. Nothing. His wife is described as a long term substance abuse addict advocating for recovery. In today's world, that means someone has taken great lengths to wipe the internet of anything negative against Mr Bergum. With his seniority in Microsoft, one can quickly imagine how their search engine, Bing categorized and made irrevellent negative discussions of Mr Bergum. He has played his cards right for a run at the Presidency. Time and individual interviews will tell if Mr Bergum has a colorful background. My individual requests of ND individuals to speak about him described his negative perspective of abortion rights, however I couldn't find articles on the internet speaking negatively about his perspective.

I believe Mr Bergum to be a highly adept businessman. I am optimistic about his busineess application of the US interior. My only concerns to his success are his squeeky clean internet presence and his acceptqnce and implementation of carbon injection wells in ND imprinting its footprint across the US.

This week, the South Dakota house has approved landowner rights bill protecting landowners from eminent domain use. Iowa code 479 automatically provides all pipelines eminent domain for Iowa Utilities Commission pipeline permits. It will be interesting to see if Iowa changes course on pipeline applicability of eminent domain in accordance with case law and South Dakota's stance. The IUC was expected to vote on Summit Carbon solutions carbon pipeline yesterday. I imagine those articles will hit the news soon. These topics indirectly apply to the carbon pipeline from Iowa to Minnesota to North Dakota specifically on the topic of eminent domain.

Chris Wright is who's known in the oilfield as a fracker. Fracking became very infamous in the 2010's when viral videos came out showing families lighting tap water with cigarette lighters. Those particular videos were rightfully debunked. Throughout my childhood, I remember motivations to work included deriding conversations suggesting oil doesn't just pop out of the ground to surface. You all probably remember the Beverly Hillbillies describing "out came a pool of bubbling crude". Well, these places do exist. Tennesse and Kentucky mountains have faultlines that end up at surface bubbling crude oil and gas.

In the same way, fracking attempts to create fissures by first perforaring the casing and formation and then increasing the pressure of the perforations with water sand and sometimes acidizers. Fracking increases the local volume access and quickly brings hydrocarbons to production. However, in Oklahoma and Pennsylvania the oilfield learned that horizontal drilling and fracking quickly pinches off shale formations as they are very thin and are quickly compressed by the formations above and below; they produces too quickly and didn't allow the production formation to slowly migrate hydrocarbons to production.

Now, why are we spending this minute talking about fracking? The oil and gas fella that won during a time of this poor production method is Chris Wright. Chris Wright owns Liberty Energy. Liberty Energy is a large fracking operation. It is very difficult to build large fracking operations. Liberty Energy competes against the vast multinationals: Halliburton, Weatherford, Baker Hughes and the company that bought my last employer, Schlumberger. Chris Wright's company is in direct competition with massive multinational companies.

Chris Wright, also now confirmed, vows to "unleash" US resources. He is an engineer and businessman. There's a saying that 75% of the incoming freshman engineers at Iowa State graduate in business. Apparently, Mr Wright has both. The oil and gas sector gives particular insight into the resources bidding and leasing process of the US government. Royalties were set by congress in 2022 at 16.7% This is up from 12.5% from the Mineral Leasing Act of 1920. From producing hydrocarbons, which includes oil and gas the United states collected \$74B from oil and gas companies from 2012-2022. Royalties collected from the US government have noticably slide downward since 2012.

During that time, a noticable shift ocurred moving drilling operations and production from US federal oil and gas reserves to private oil and gas leasing. The US government didn't lease as many rights, observed the significant loss in royalties and instead of increasing oil and gas production raised rates. They lowered receipt counts and raised the tax. This has directly resulted in dangerously low refined fuel reserves and thereby allowed Preseident Trump to enact a national emergency to rebuild refined fuel reaerves.

Unrefined US oil and gas reserves exist in the gulf of Mexico soon to be labeled under its new name, the gulf of America. During his last few weeks in office, President Biden made drilling difficult in the gulf of Mexico for a term of a few years. President Trump's recourse was to rename it to the gulf of America.

Little is discussed about Mr Wright's experience in nuclear, geothermal and hydraulic energy production. President Trump has vowed to remove subsidization of wind energy. Little is discussed about solar energy. Locally, Palo is under financial viability review to determine the feasibility of start up nuclear power generation. In Linn county, a judge has placed a moritorium on solar energy expansion. If you have not yet, I encourage you to drive to Palo from south to northwest to see for yourself the miles of solar panels.

What's driving energy? Data centers and a present need for computing in the way of datacenters is locally driving the increase in energy production. Moat homes now have air conditioning. I just saw my cousin's Tesla that rightly boasts 0-60 in 1.9 seconds. Datacenters have targetted Cedar Rapids, Altoona, Council Bluffs and other locations across Iowa. A handful of counties have placed moritoriums on datacenters until they figure out how to tax the datacenters.

I made several inquries to the feasibility of datacenters in Buchanan county. Data centers require large amounts of power and water. Datacenters generally operate profitably during nonpeak hours when energy is cheaper. Datacenters tend to hire IT professionals and conrinue to provide sales tax receipts for equipment and electricity. At that point they ramp up power usage to keep their electric bill efficient. Their water usage is exactly the same as a radiator on a car. They require large amounts of water to ensure the computers stay cool.

On the topic of excess power generation, ERCOT, one of the ISO's of Texas is responsible for buying, selling and forecasting the power usage for a large portion of Texas. During the polar vortex they became famous for reducing their excess availability of electricity. When you turn on the light switch the power comes on, right? In Texas they reduced their over capacity power generation margin. It is currently targetted at 13.5%. In 2019, ERCOT reduced their target generation margin to 8.7% in an attempt to make electricity cheaper for their customers. I can tell you, everything in government is a balance. There is no perfect day.

After ERCOT reduced their overpower generation margin they had one of the worst winters on record freezing their nonwinterized wind turbines and covering their solar panels with snow and ice. To compound matters, their coal piles froze making coal less accessible. It was the perfect storm. I remember that Monday when my brother in law called to advise my parents in Winthrop pour antifreeze in their drain pipes to keep them from freezing as MidAmerican was planning to reduce gas capacity to Buchanan county health center. Normally, this is the last step in the hierarchy of saving gas. I asked him to have his people immediately call my people at the IUB

(IUC). Oh by the way, oil and gas production in the south still relies on 1960's technology that remains closed when temperatures drop below freezing. Newer valves developed since the 1990's do not have the freezing limitation.

President Trump in his first couple of days in office removed the US from the Paris climate accords (again). It will be interesting to see how these two pragmatic businessmen shape the future of US energy policy.

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