

Badlands NGL inking deals, inching closer to the Bakken

Recently, I came across a press release about Badlands NGL and the newest milestones in their polyolefin plant in North Dakota. Now, there is no con-



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crete date for when the plant will be constructed; but it is reassuring to see progress and deals happening in today's energy climate.

Badlands NGL is best known for development, construction and management of natural gas liquid ("NGL") to polyolefin products. The first press release I read was that Badlands NGL had entered into an agreement with Continental Resources Inc., for long-term ethane supplies for a \$4.2 billion polyethylene (PE) manufacturing project.

About a year ago, Badlands' North Dakota PE facility was originally announced by the North Dakota Industrial Commission and Gov. Jack Dalrymple. Since then, the start of construction has been put on hold, and a second site in North America was secured for polyethylene production.

William Gilliam, the CEO of Badlands NGL, has said repeatedly that the company will still build a plant in North Dakota, but the Marcellus and other factors have shifted the timelines. The proposed facility has been touted by North Dakota officials as a world-scale plant and the largest single private investment in North Dakota's history.

Another recent milestone for Badlands is their agreement with Univation Technologies, LLC, a wholly-owned subsidiary of The Dow Chemical Company. Badlands will license the Univation Technology UNIPOL™ PE Process for four polyethylene reactor lines, representing a total capacity of 2.4 million metric tons.

According to the press release, the capacity is to be split between its two sites, one in North Dakota and one in a yet-to-be-named site also in North America. This is a good sign for the future economic outlook in oil and gas.

"We are delighted to announce our selection of the UNIPOL™ PE Process for the Badlands sites," said Gilliam said. "With Univation's strong history of ex-

cellence, safety, and reliability, as well as a commitment to continued innovation, we believe we have chosen the strongest technology to deliver a broad range of high-performing polyethylene resins into the market. Univation is the only technology licensor with demonstrated capability in plants at or larger than 600kta in operation; this was critically important to us given the size of our planned facilities."

These milestones are good news for North Dakota on a number of levels. A few months ago, I sat down with Gilliam, and that conversation is still relevant – especially after the latest Badlands deals in the current energy climate.

"Oil has gone from \$100 to less than \$50. Polyethylene profits remain the same," Gilliam said this past summer. "But a lot of the ethane crackers on the Gulf Coast, if they weren't being built as of the end of 2014, have gone on hold. Every single one of them is on hold. No new crackers are getting built today, other than our two."

One of the drivers in getting value-added companies into the Bakken is to lower flaring. Gilliam believes the infrastructure delays and pipeline projects not being built will impact flaring in the future.

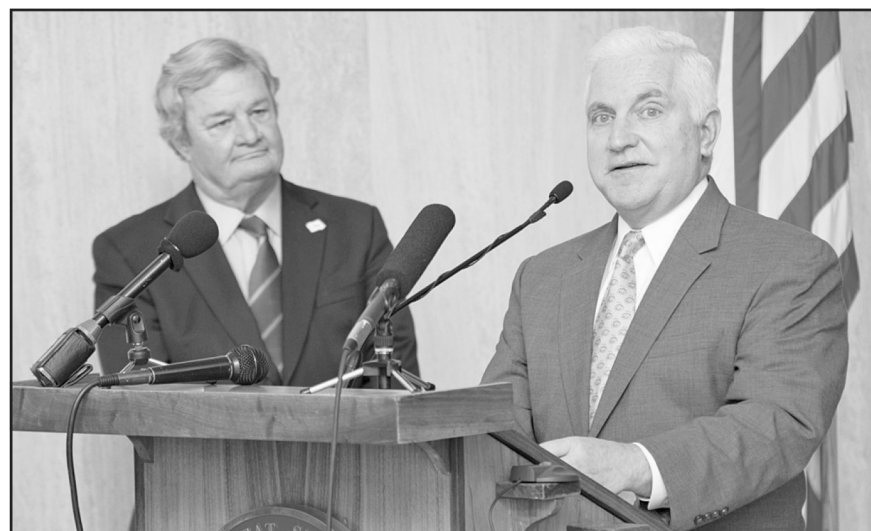
"When Badlands NGL first started looking at the possibility of building a polyethylene plant in North Dakota and was it needed, we looked at the flaring issue," Gilliam said. "And we said because of gas and because of ethane, you could run into an infrastructure problem where production kept growing, flaring may have to go back over 50 or 60 percent... Right now because of the fact MDU Dakota pipeline was not built, I don't think that was a good decision."

Gilliam added he felt MDU did not have sufficient support; however, it created a monopoly for exporting gas out of state.

"There's exactly one way of getting gas out of North Dakota, [and] that's Northern Border. Northern Border is about one-third American gas, two-thirds Canadian gas. It comes into the state dry as a bone," Gilliam said.

"Polyethylene is taken out. We leave all the ethane in in here. So right now today you have about 2.4 billion cubic feet of natural gas leaving the state, going to Ventura out in Iowa, and in Chicago."

The resource has between 10/50 and 10/70 BTUs of heat content, according to Gilliam. He added that is very close to the upper limits of where the gas can be



JASON SPEISS/For the Tribune
William Gilliam and North Dakota Jack Dalrymple at the October 14, 2014 press conference in the Capitol Memorial Hall.

sold.

"So if you look at the actual committed sellers of natural gas in North Dakota by 2020, that's going to turn around. Instead of being one-third American gas, it will be two-thirds American gas," Gilliam said. "This isn't a function on whether or not oil goes back to \$100, this is just a function of math."

Gilliam said they have gotten some proprietary work done that says by 2020, assuming \$70 oil, the ethane content in Northern Borders will increase from 120,000 barrels a day to 200,000 barrels a day.

"At 200,000 barrels a day, that gas cannot be sold. It's too hot. What are you going to do about that?" Gilliam said. "You are going to have to shut some production or flare a hell of a lot of gas."

Gilliam also took the time to explain their strategy in midst of a volatile and fragile marketplace.

"We identified a strategy of building as close to the wellhead as possible and building something that was going to take advantage of physically and economically stranded ethane," Gilliam said. "I think we feel the ethane disparity, the Bakken Marcellus disparity, is not a sustainable business model. It will not last. It will not stand."

Gilliam also commented on the shift happening in oil and gas regarding business models and over infrastructure goals.

"There has been a paradigm shift in oil and gas, and in polyethylene and polypropylene. In the 1980's more than 50% of the market were companies that

were fully integrated oil and gas and plastics. That's not true today," Gilliam said. "There are very large companies, like Dow, like Lando Vauzelle, that are not basic in oil and gas but are huge producers of polyethylene. I think you have very big companies here. Who would have thought Exxon and Mobil would merge, or that Texaco would become part of Chevron? These companies are of size where literally a single world scale polyethylene business doesn't move the earnings needle at all.

"Then you have companies like Continental Resources and Whiting that have wonderful property and do a great job of bringing oil out of the ground, and are cost effective and driven the cost curve," Gilliam said. "Now would it benefit them as a business model to have more integration? Sure, and if they went to Wall Street and said look what we are going to do, we are going to build a polyethylene plant, we are going to build a refinery, Wall Street would annihilate them. Absolutely kill them."

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