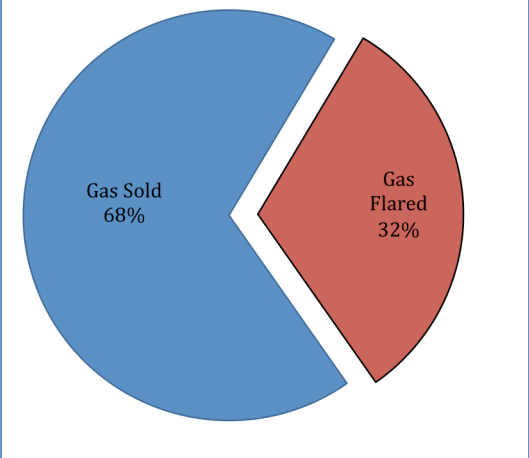


The Bakken formation in North Dakota is experiencing an oil and gas boom driven by the use of newer drilling technologies, specifically horizontal drilling and hydraulic fracturing. A considerable amount of attention has recently been directed at the Bakken and its high flaring rate. Local residents, state government and Federal officials have voiced concerns over the flaring of gas in North Dakota. In 2013, industry flared 32% of all gas produced in the Bakken. A number of reasons have been cited for why so much flaring is occurring, including inability to get permits for pipelines from federal land managers and lack of pipeline infrastructure, among others. However, a close look at the data for flaring from the North Dakota Industrial Commission’s Department of Mineral Resources on a well-by-well basis tells a very different story.

The majority of flaring occurs at wells located on privately owned land (72%). In addition, 57% of the flaring is from wells that are already connected to natural gas gathering pipelines.

Figure 1: Gas Utilization in North Dakota, 2013



There are several reasons why these wells still flare gas even after they are connected:

- Gathering infrastructure (such as pipelines and compressors) might be too small to handle the amount of gas that is being produced. If pipelines are too small, they won’t be able to transport all the produced gas. If compression is insufficient, there could be pressure imbalances between multiple wells connected to the same gathering pipeline, which could make it difficult to transport gas.
- Production companies might not be able to come to agreement to sell their gas to midstream gas processing companies.

Figure 2: Breakdown of Flaring by Land Status, 2013

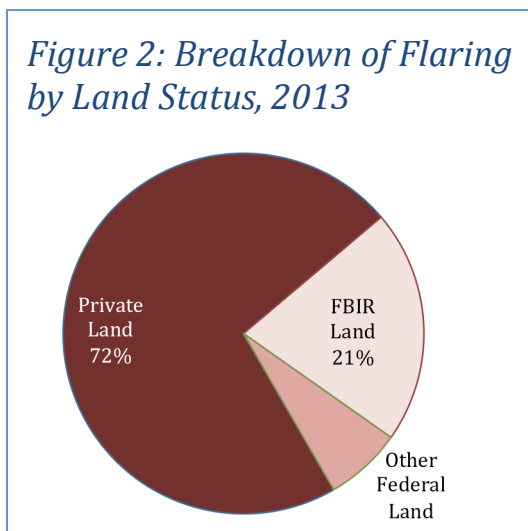
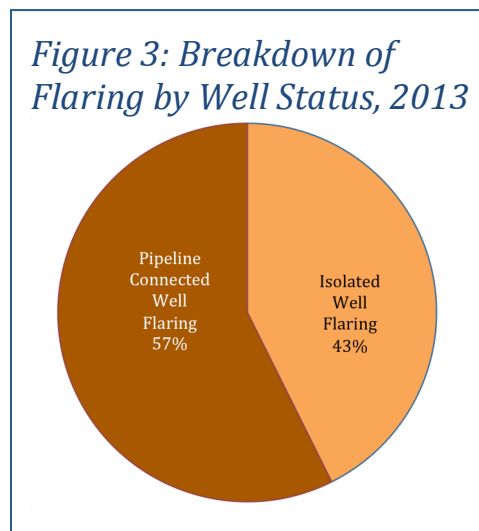
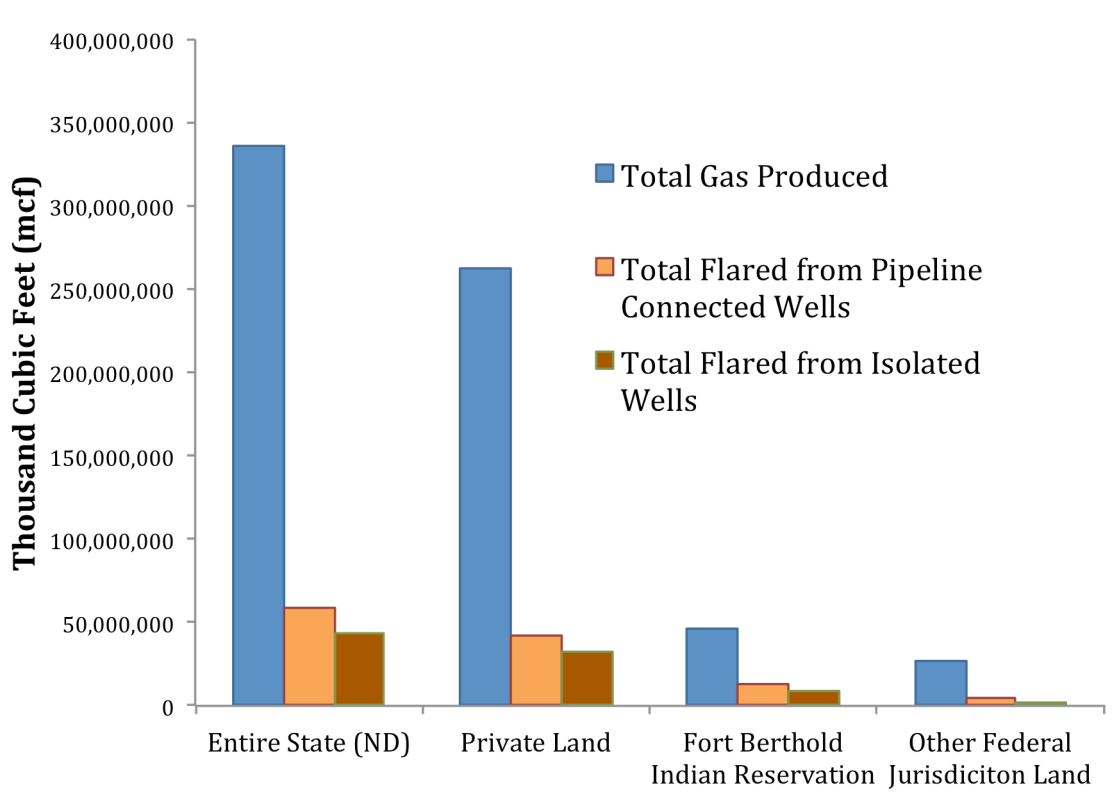


Figure 3: Breakdown of Flaring by Well Status, 2013



For each type of land, both private and federal, the majority of flaring occurs from wells that are already connected to pipelines.

Figure 4: Flaring by Land Status and Pipeline Status, 2013



	Entire State (ND)	Private Land	Fort Berthold Indian Reservation	Other Federal Land
Total Gas Produced	335,665,081	262,123,426	46,848,658	26,692,997
Total Flared from Isolated Wells	44,283,625	32,659,661	9,307,652	2,316,312
Flared from Isolated Wells as Percent of Total Produced	13%	12%	20%	9%
Total Flared from Pipeline Connected Wells	59,538,880	42,251,976	12,443,515	4,843,389
Flared from Pipeline Connected Wells as Percent of Total Produced	18%	16%	27%	18%
Total Flared	103,822,505	74,911,637	21,751,167	7,159,701
Total Flared as Percent of Total Produced	31%	29%	46%	27%