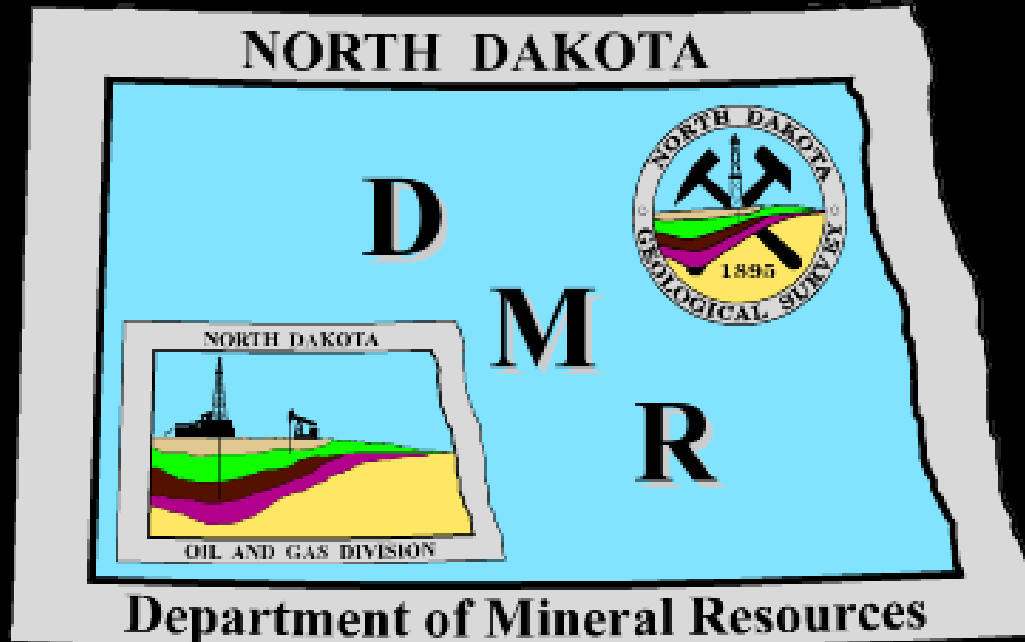


North Dakota Department of Mineral Resources



<http://www.oilgas.nd.gov>

<http://www.state.nd.us/ndgs>

600 East Boulevard Ave. - Dept 405

Bismarck, ND 58505-0840

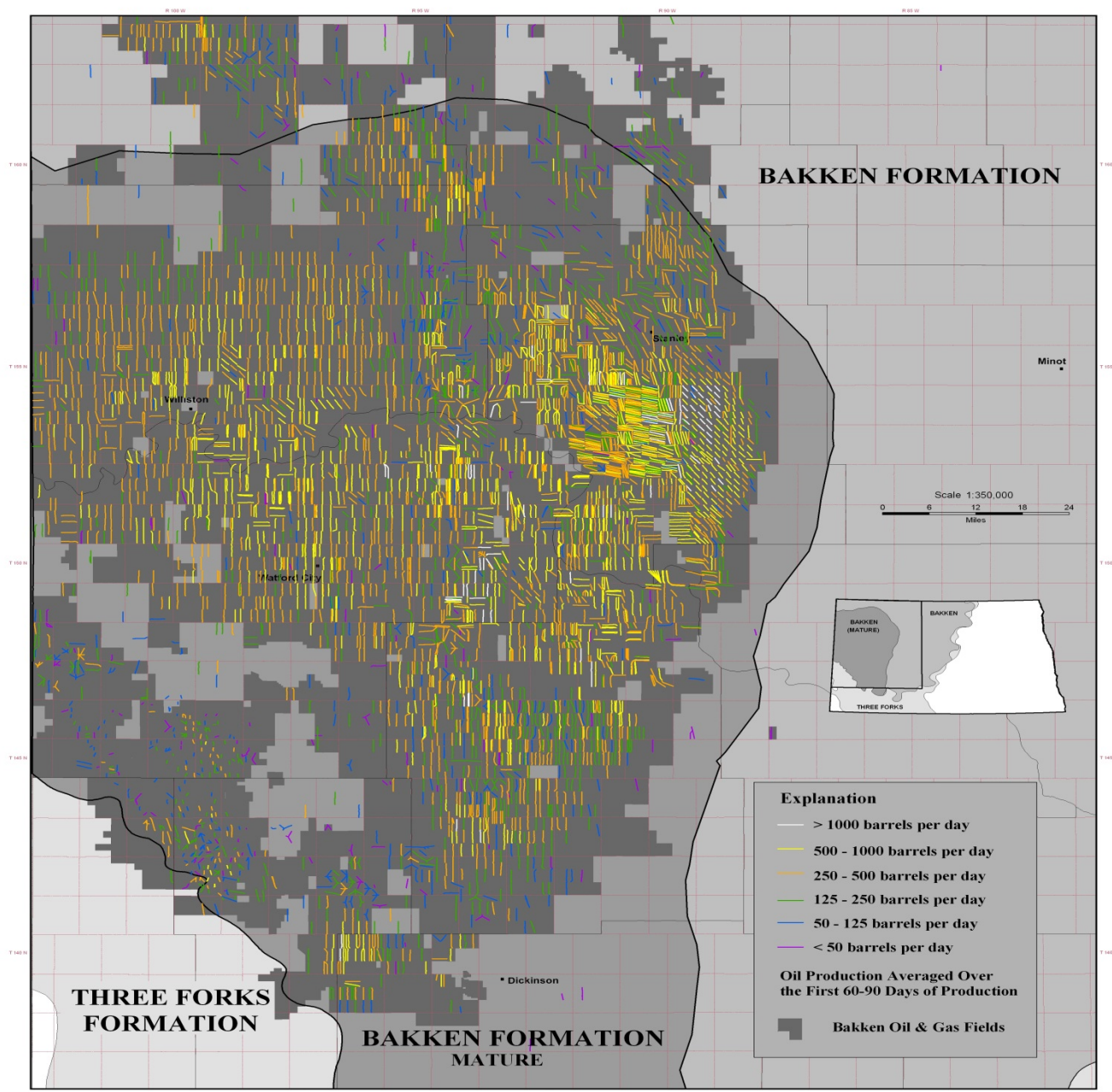
(701) 328-8020

(701) 328-8000



First 60 - 90 Day Average Bakken Horizontal Production by Well

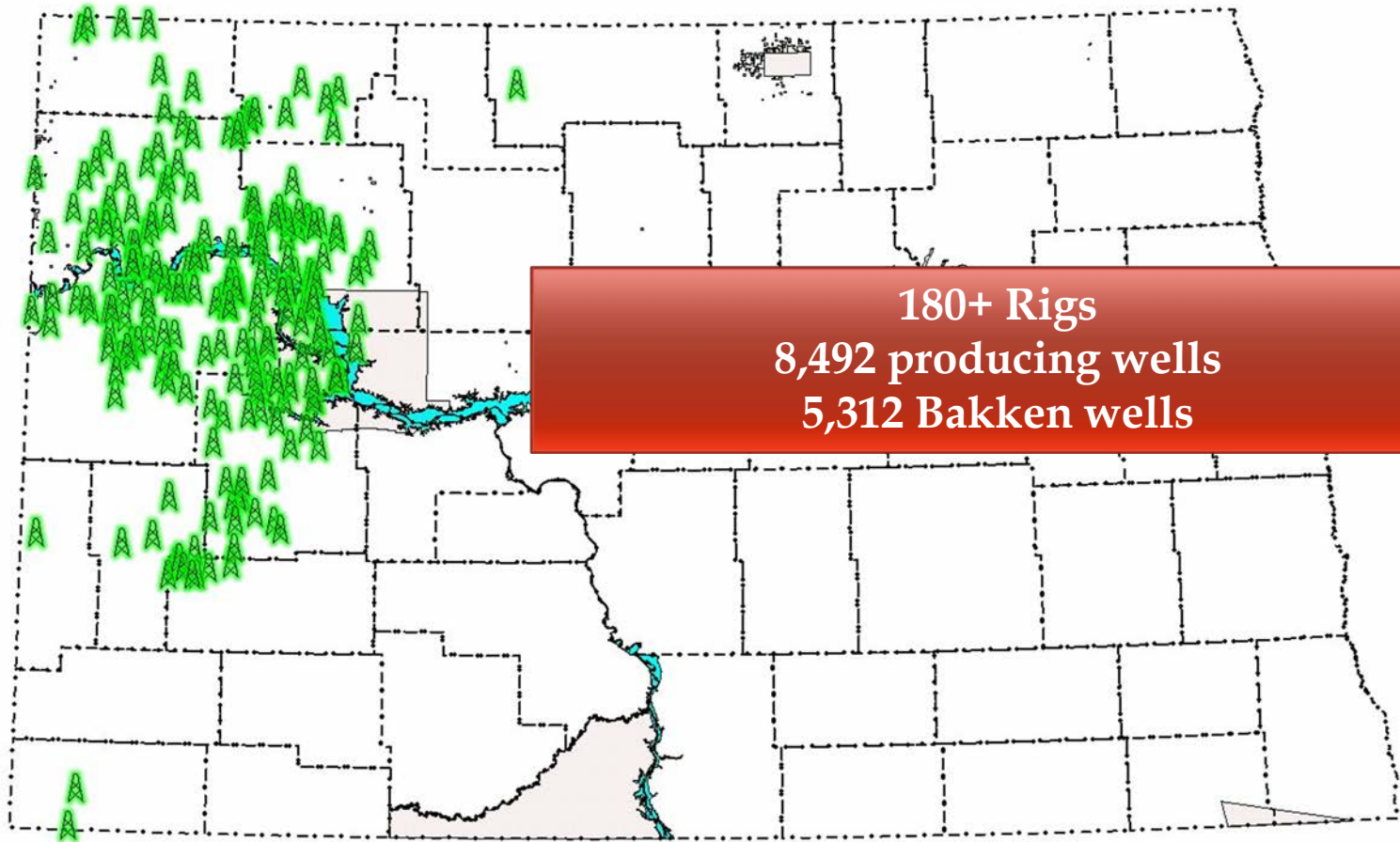
April 2013



NORTH DAKOTA UPDATE

- **February production 21.8 million barrels of oil or 778,971 barrels/day. (NEW all-time high)**
- **23.8 Billion cubic feet of natural gas or 850 million cubic feet/day.**
 - **About 30% of natural gas is still flared a month, due to lack of gathering infrastructure.**

NORTH DAKOTA UPDATE



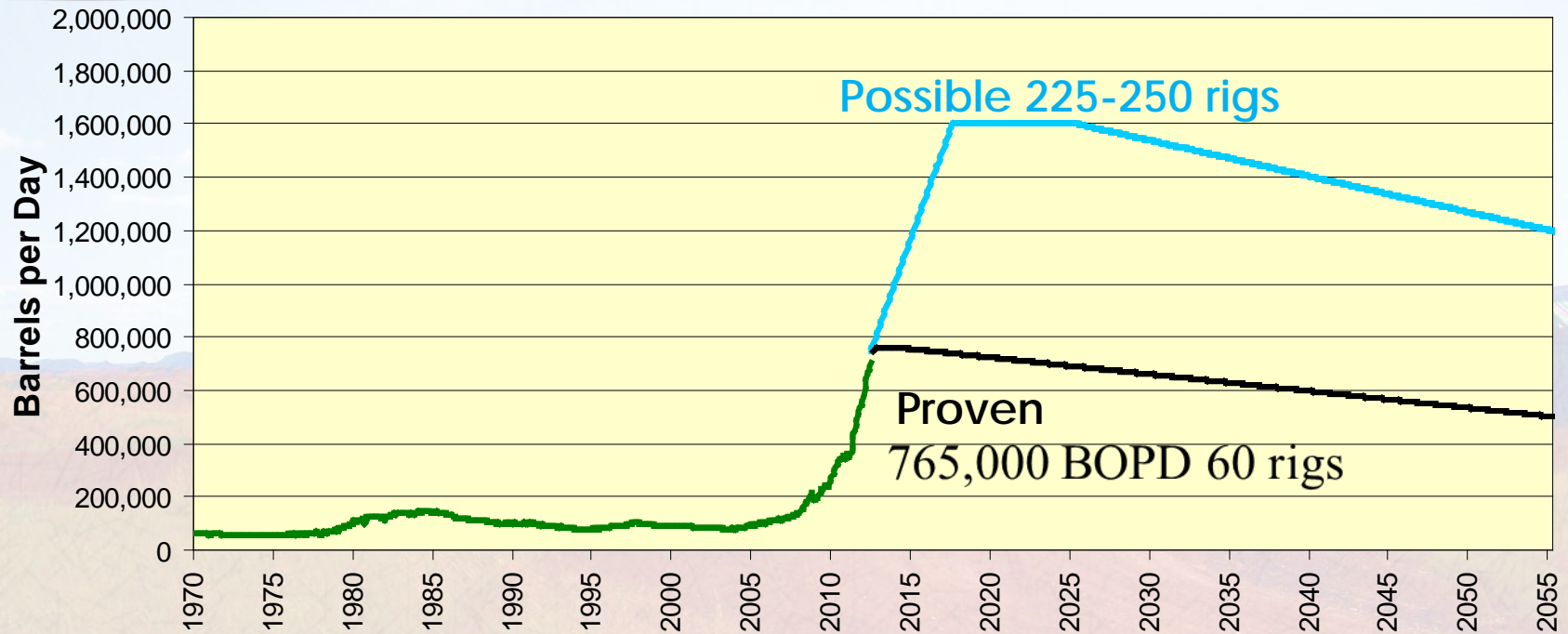
NORTH DAKOTA UPDATE

- **1,100 to 2,700 wells/year = 2,000 expected**
 - 170 rigs = 20,000 temporary drilling jobs
 - Another 12,000 temporary jobs building infrastructure
 - 2,000-3,000 permanent jobs added each year
 - 170 rigs can complete the first phase of drilling in 14 months
 - 170 rigs will require more than 21 years to complete phase 2 drilling
 - 2,000 new wells per year require 11-22 million gallons of frac water per day
 - 40,000-45,000 new wells = 40,000-70,000 long term jobs

NORTH DAKOTA UPDATE



North Dakota Oil Production



History

Bakken - Three Forks P10

Bakken - Three Forks P90

NORTH DAKOTA UPDATE

- Future:
 - As of April 2013, Department Director Lynn Helms had signed 530 Administrative Orders for multiple well pads, with 334 cases pending.
 - Each order averages 7 wells per pad, but some up to 18 and possibly 24.
 - To date the largest permitted pad, 14 wells.
 - 6,000 future wells already approved or pending.



NORTH DAKOTA UPDATE

- Spotlight on the Bakken: Media Coverage
 - National Geographic
 - New York Times
 - The Globe and Mail (Canada)
 - BBC
 - Daily: California, Florida, New York, Washington, D.C., Colorado
 - Inquiries from Australia, France, Germany, Japan, United Kingdom, Poland
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