

EXHIBIT 3
DATE 1-15-13
HB SJR-#2

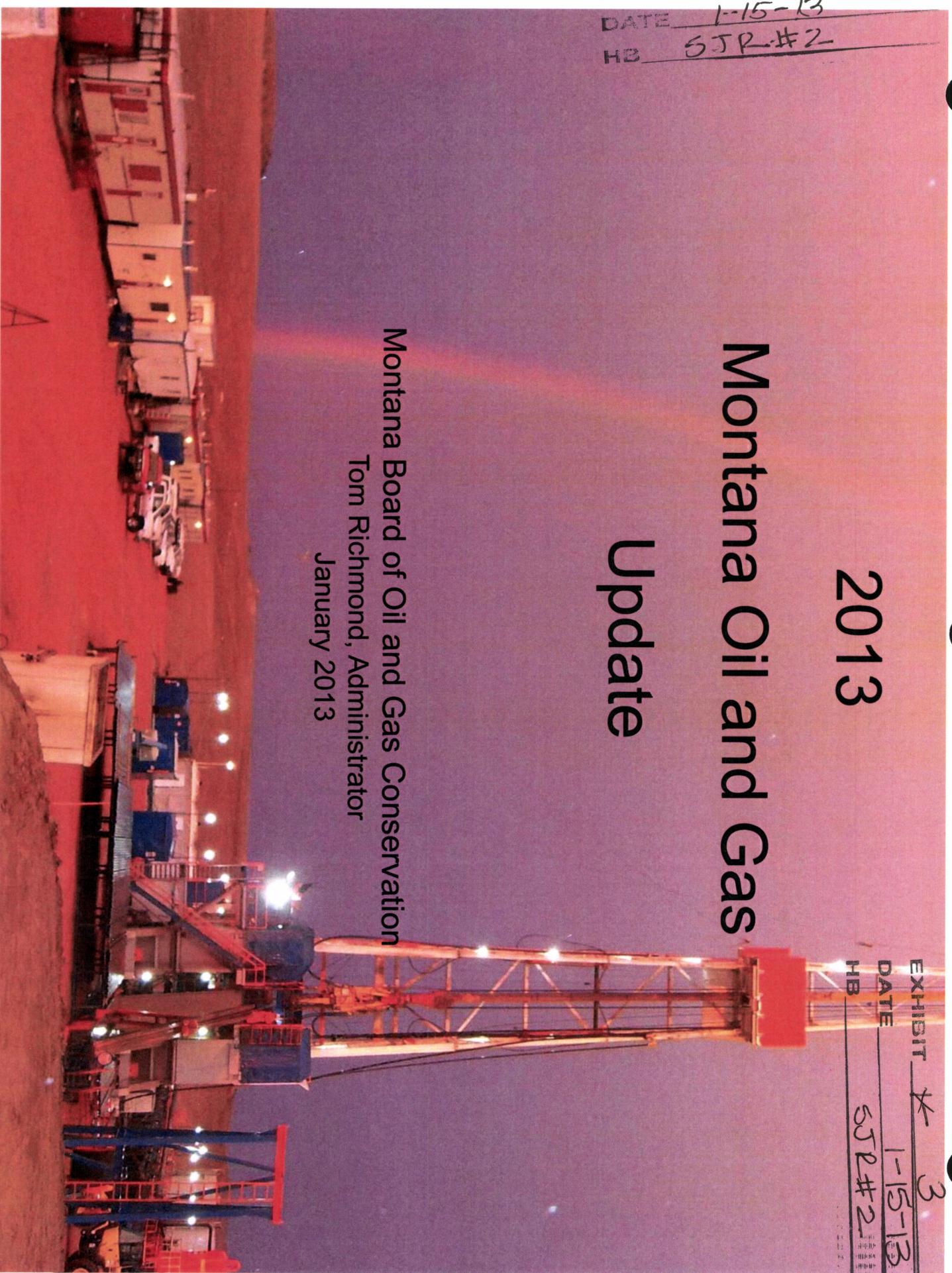
2013

Montana Oil and Gas

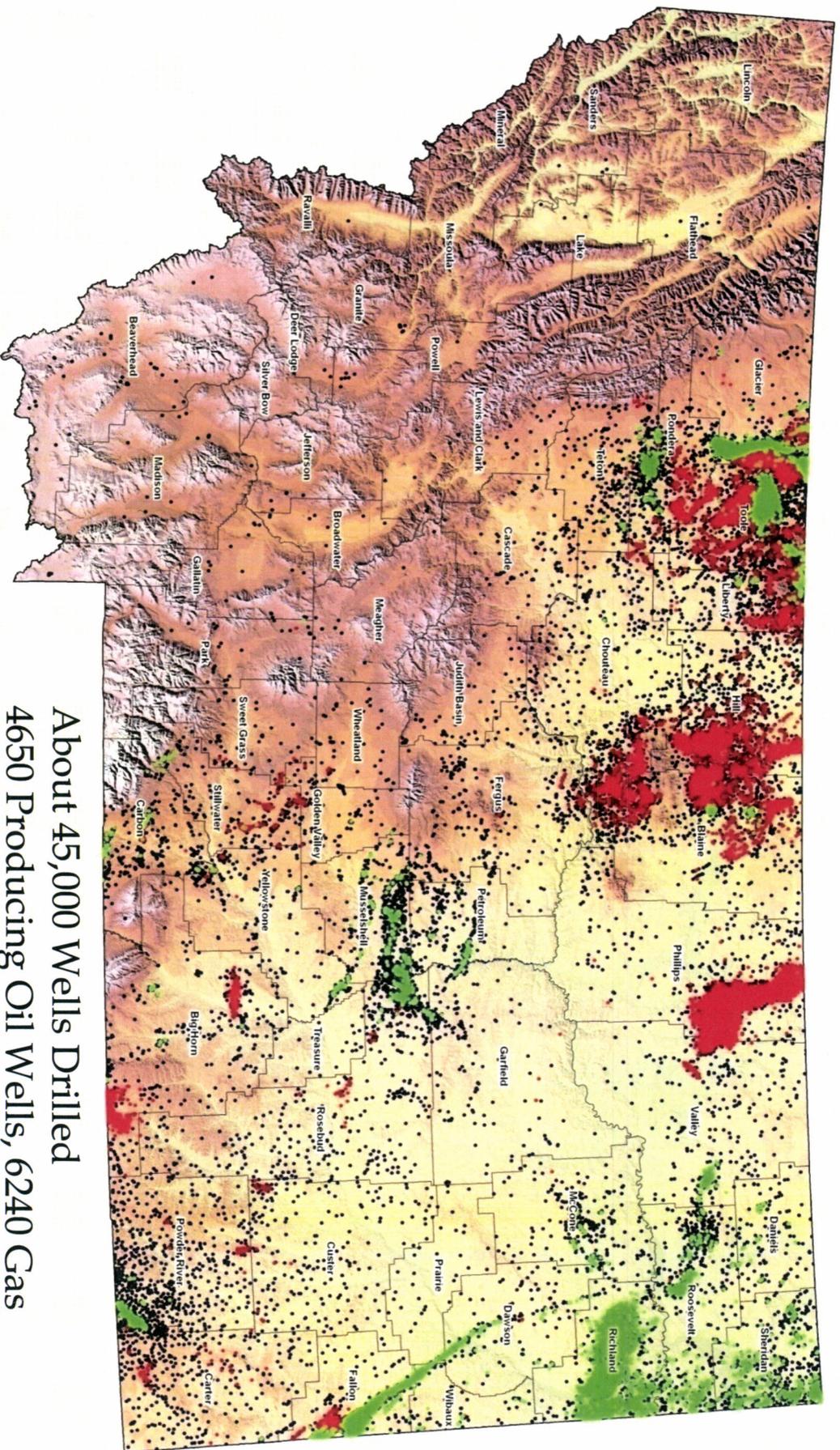
Update

Montana Board of Oil and Gas Conservation
Tom Richmond, Administrator
January 2013

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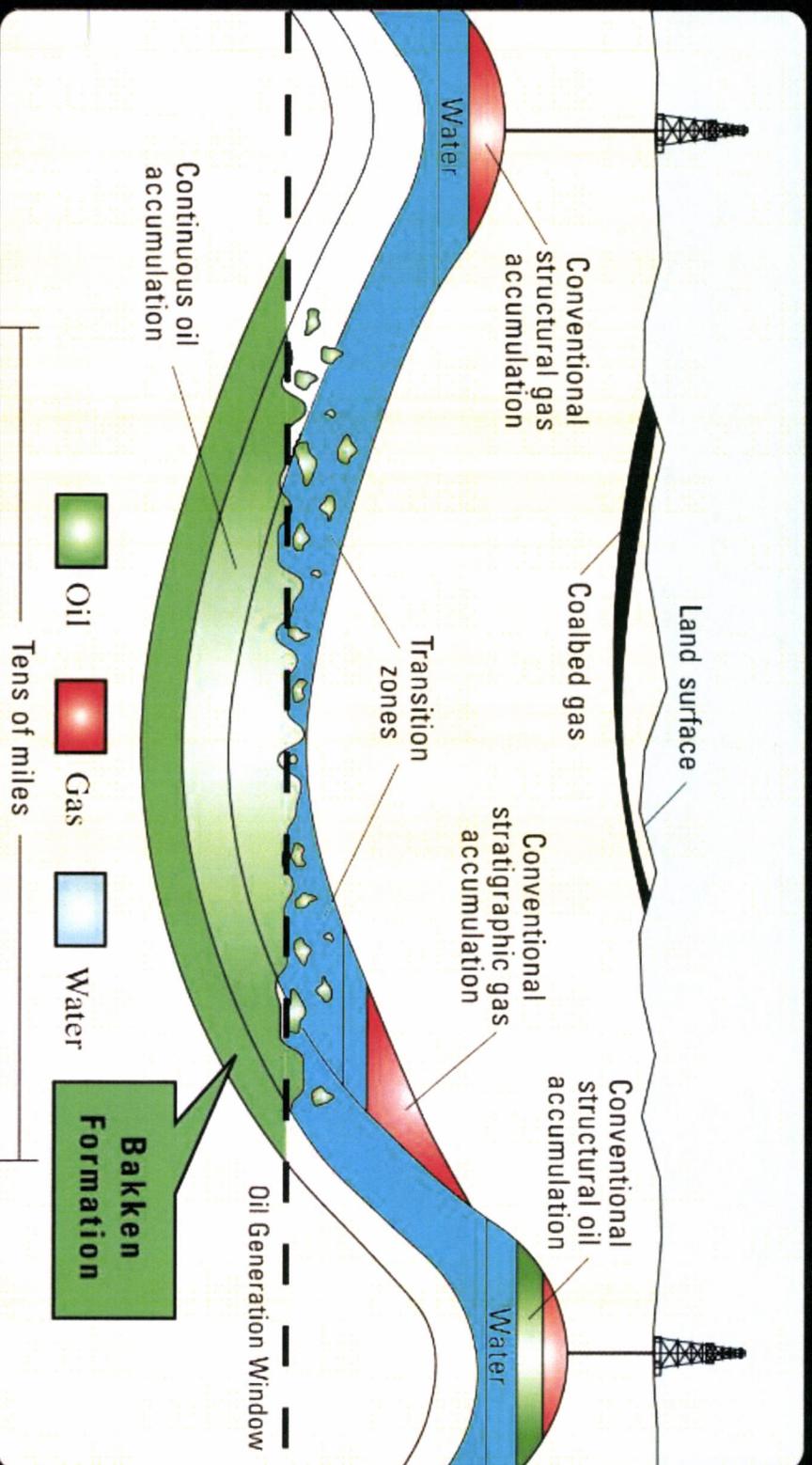
Montana Oil and Gas Activity



About 45,000 Wells Drilled
4650 Producing Oil Wells, 6240 Gas
Wells

Conventional vs Continuous Resources

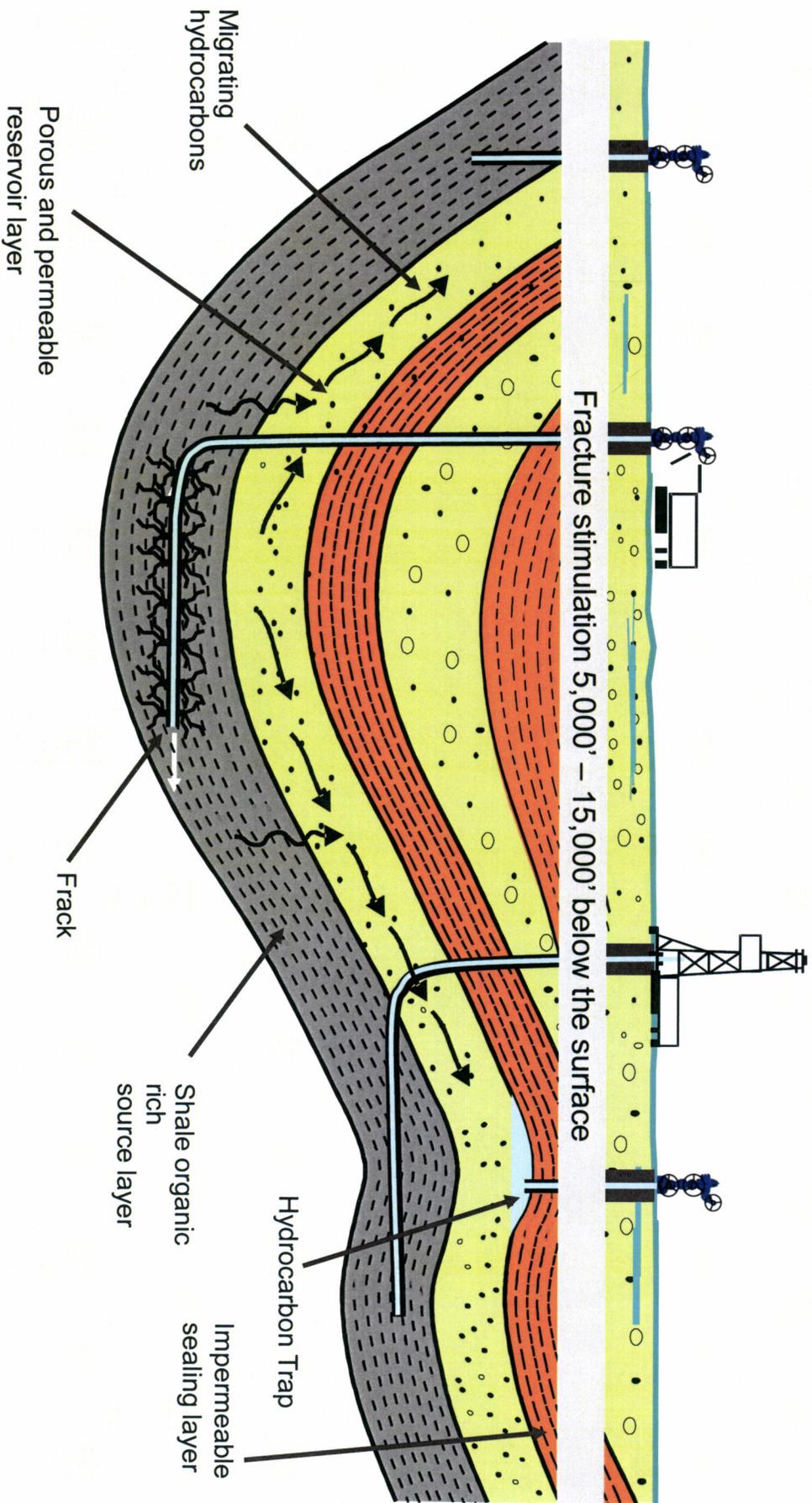
Continuous Shale Accumulations



REQUIREMENT ... the shale is now, or was at sometime in its history, within the oil or gas generation window

Technology's Role

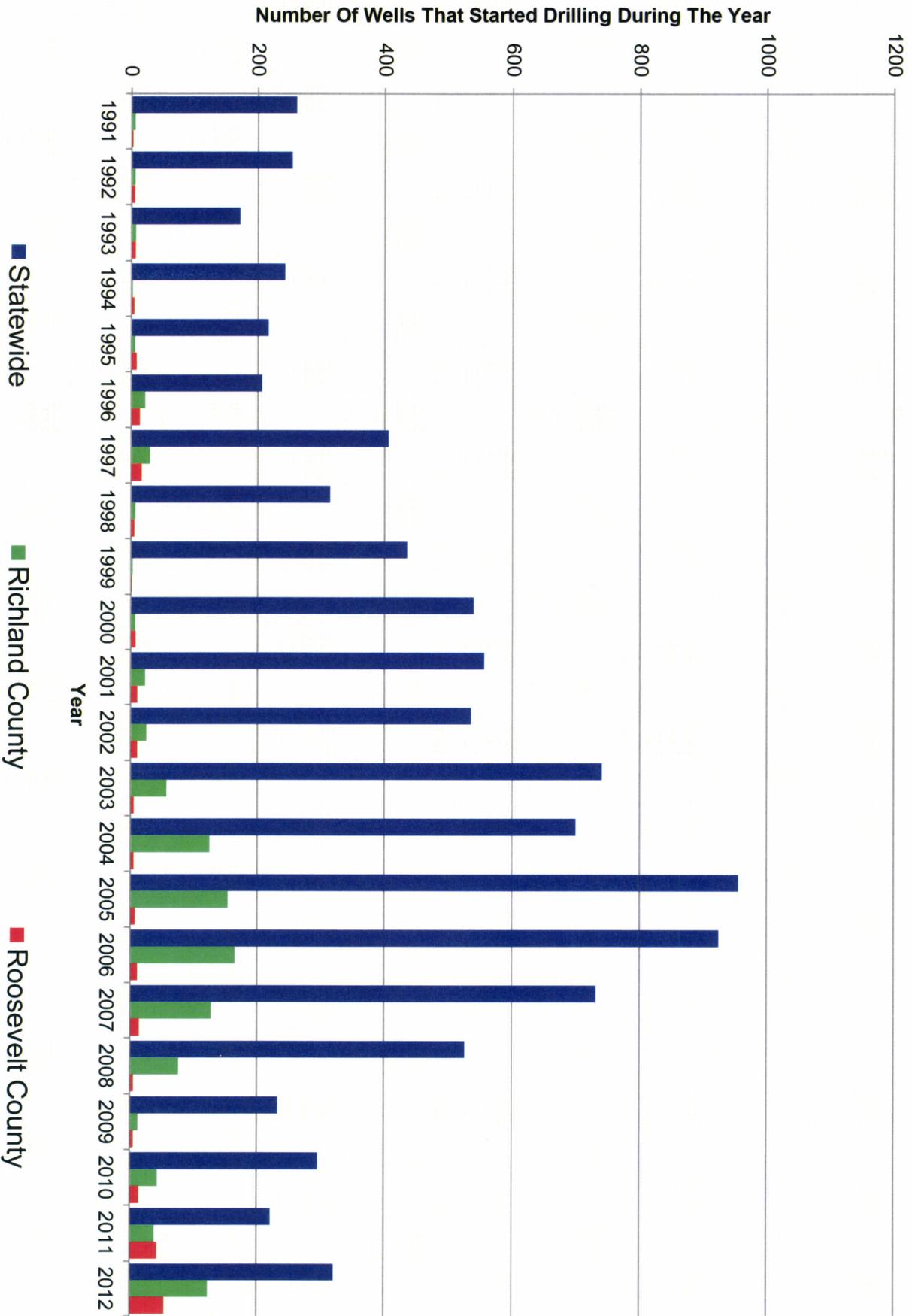
Why the revolution?



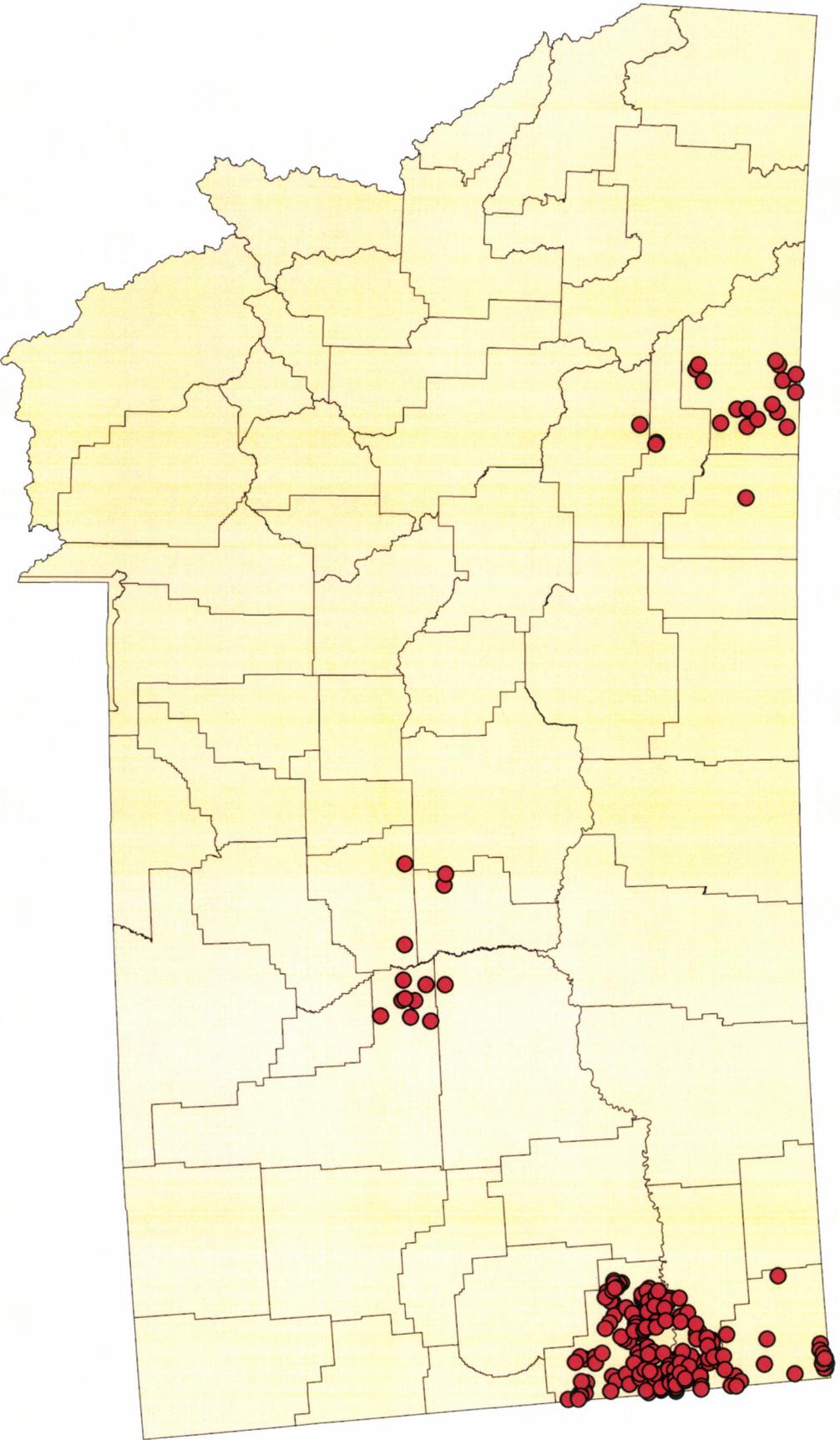
Montana Drilling Permits



Wells Spudded (Through 2012)

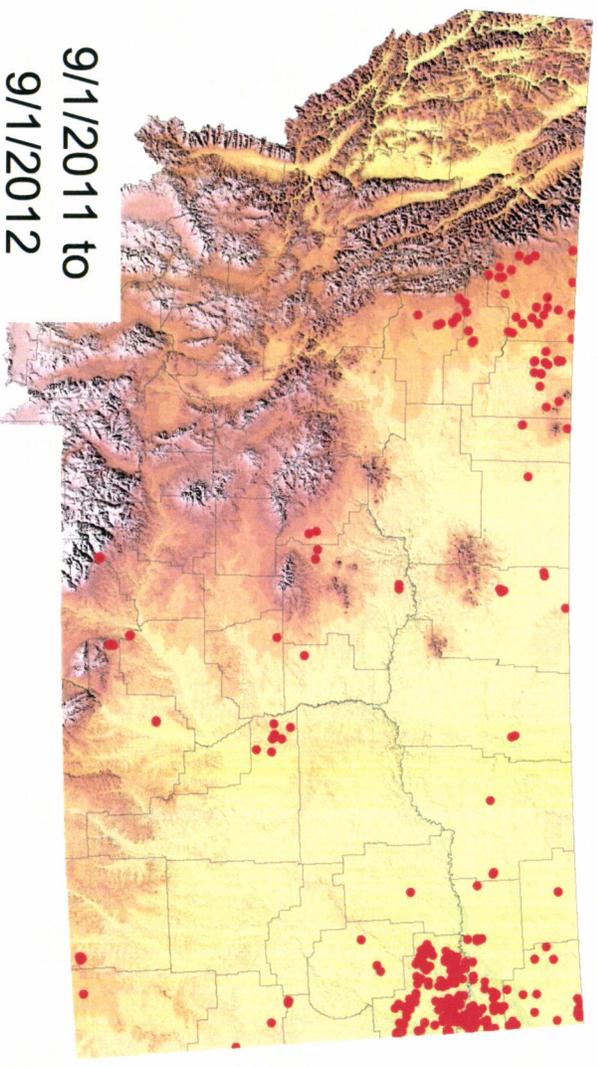
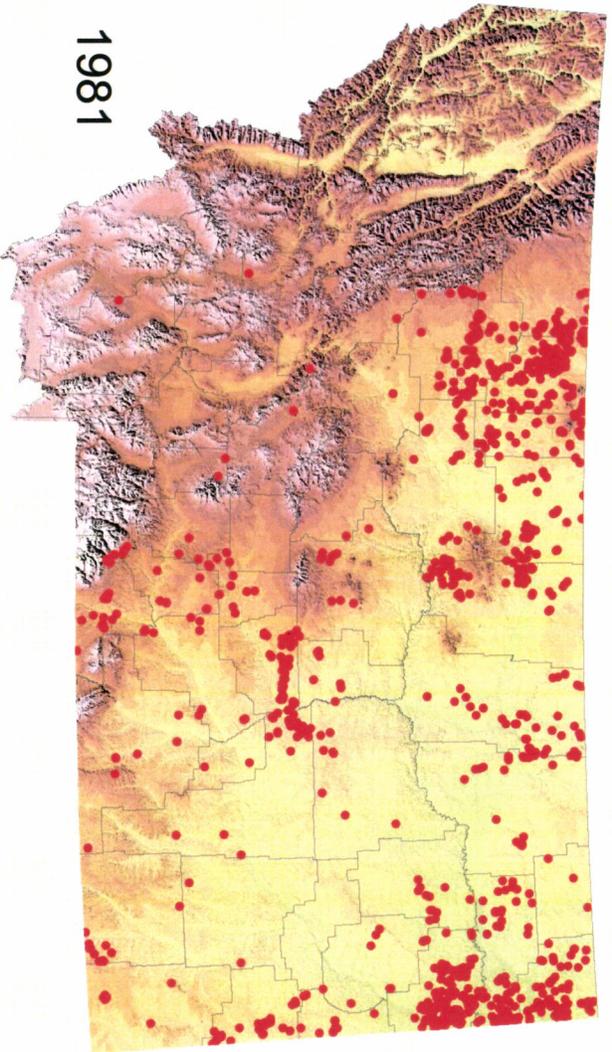


Drilling Permits, Horizontal Wells

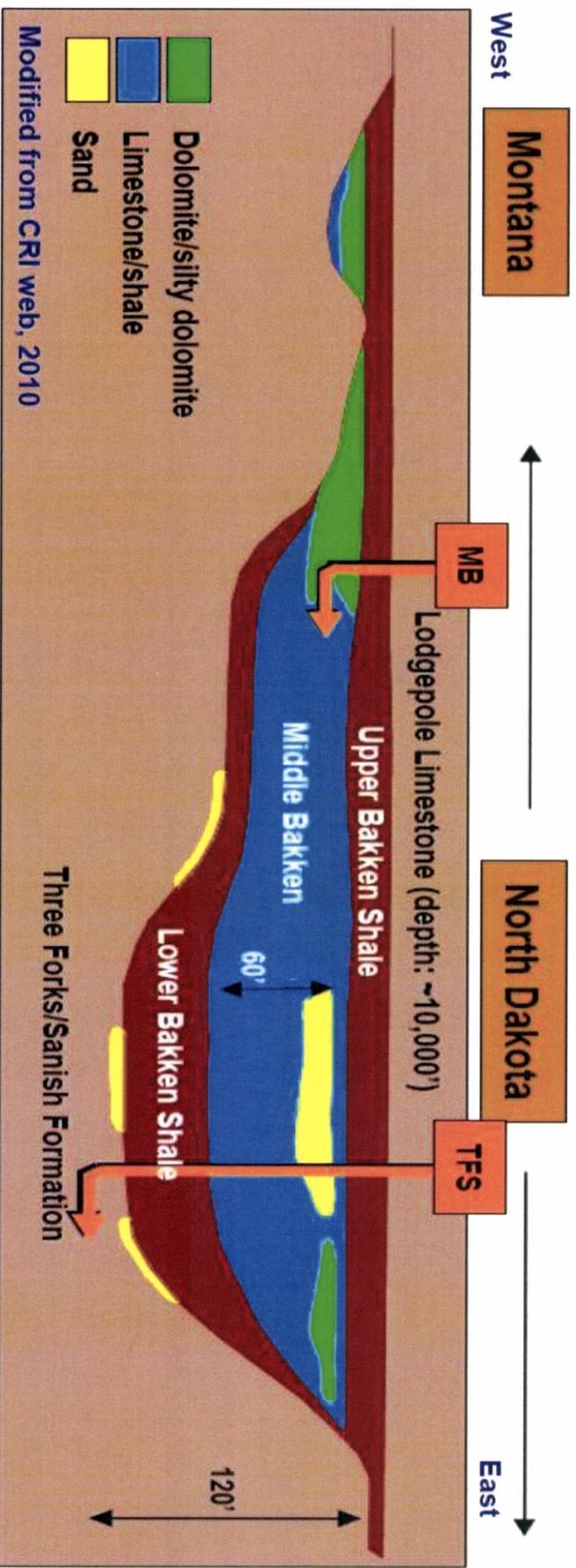


Horizontal Oil Shale Activity

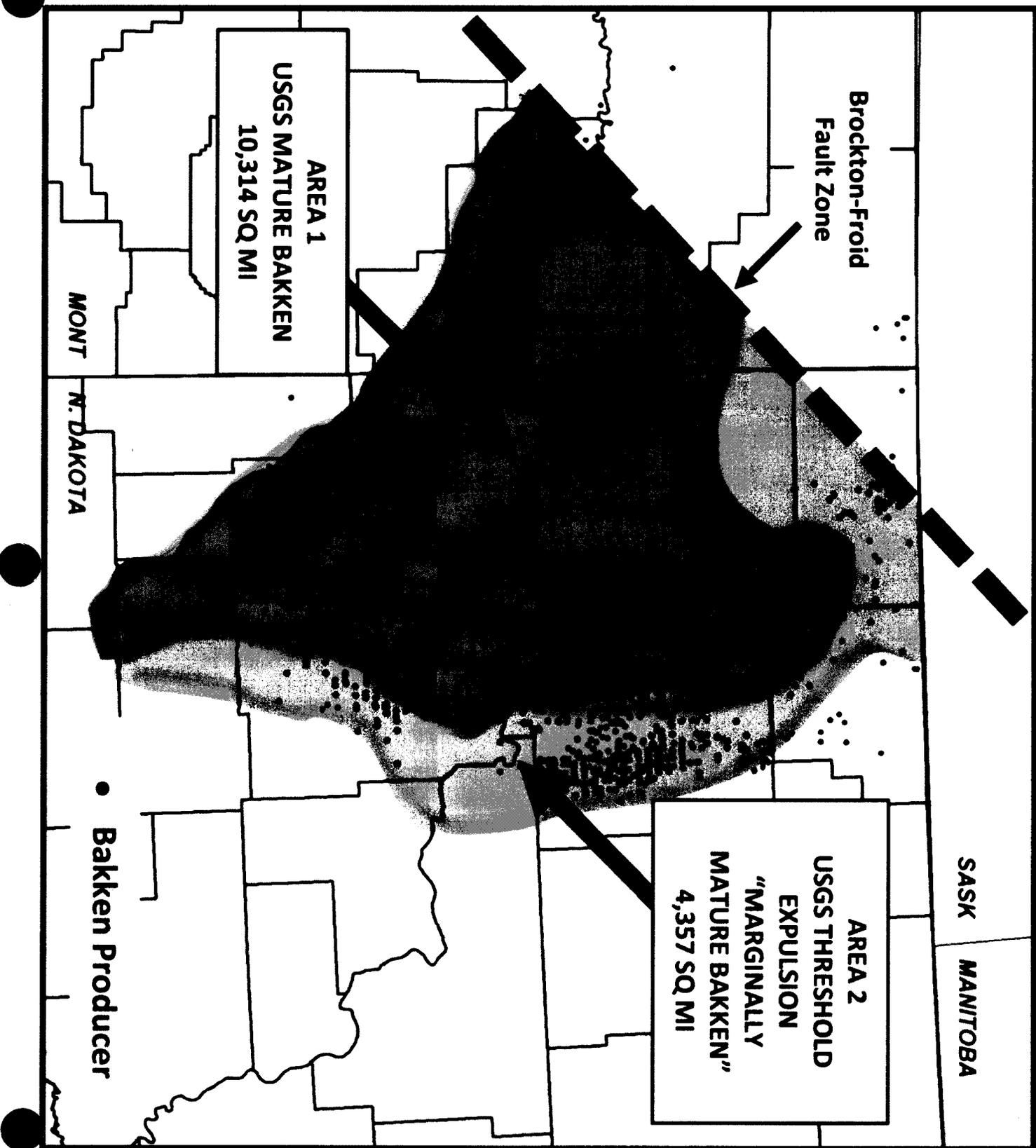
1981 vs. Current Activity



Middle Bakken / Three Forks Pay Variation



- Middle Bakken pay not a shale lithology
Complex, laterally varying lithology & play types
Stratigraphic / diagenetic trap drivers
- Underlying Three Forks 'non-shale' play potential established 2008
Also sourced by Bakken shale
Dual zone development underway



AREA 1
USGS MATURE BAKKEN
10,314 SQ MI

Brockton-Froid
Fault Zone

AREA 2
USGS THRESHOLD
EXPULSION
"MARGINALLY
MATURE BAKKEN"
4,357 SQ MI

MONT

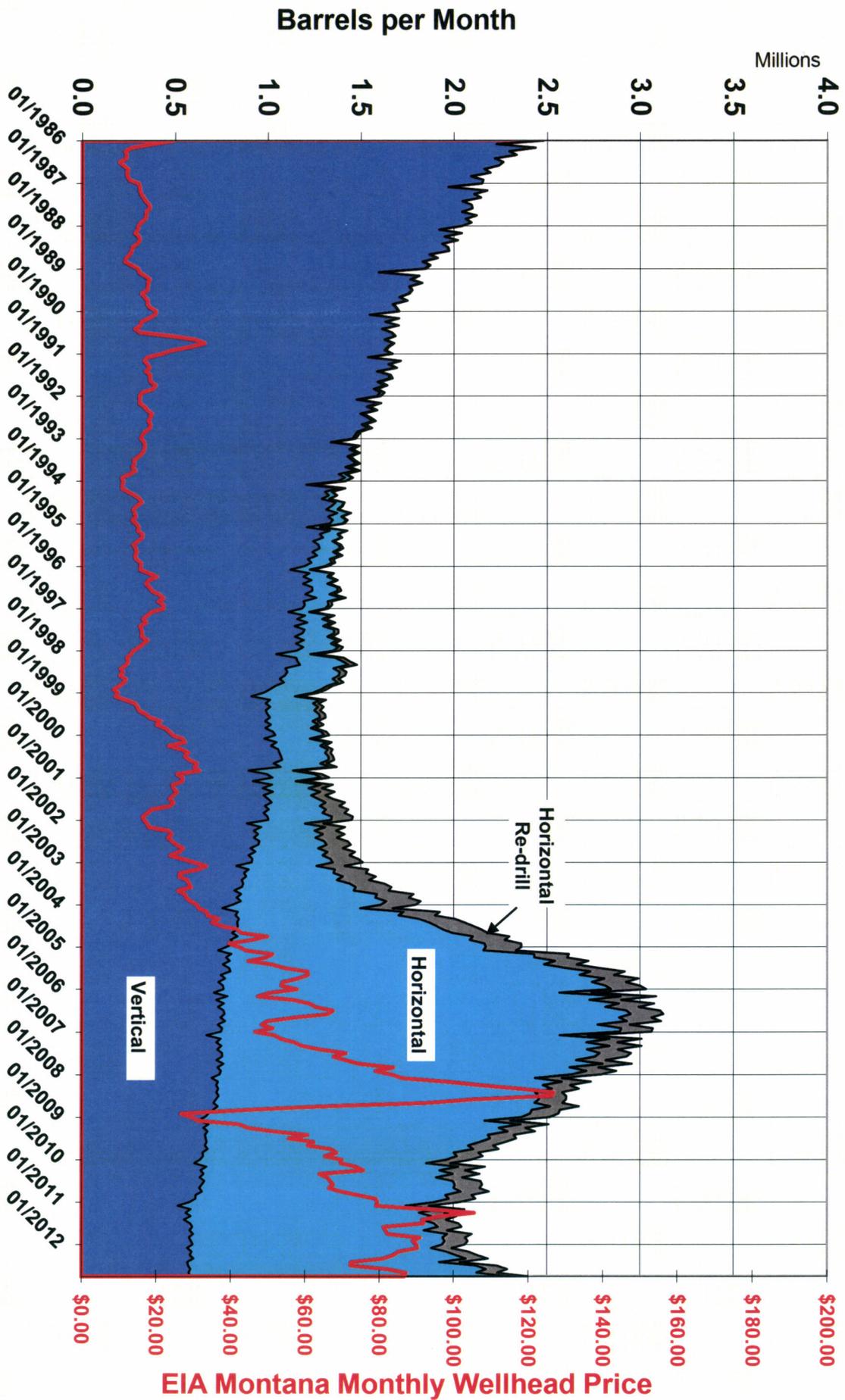
N. DAKOTA

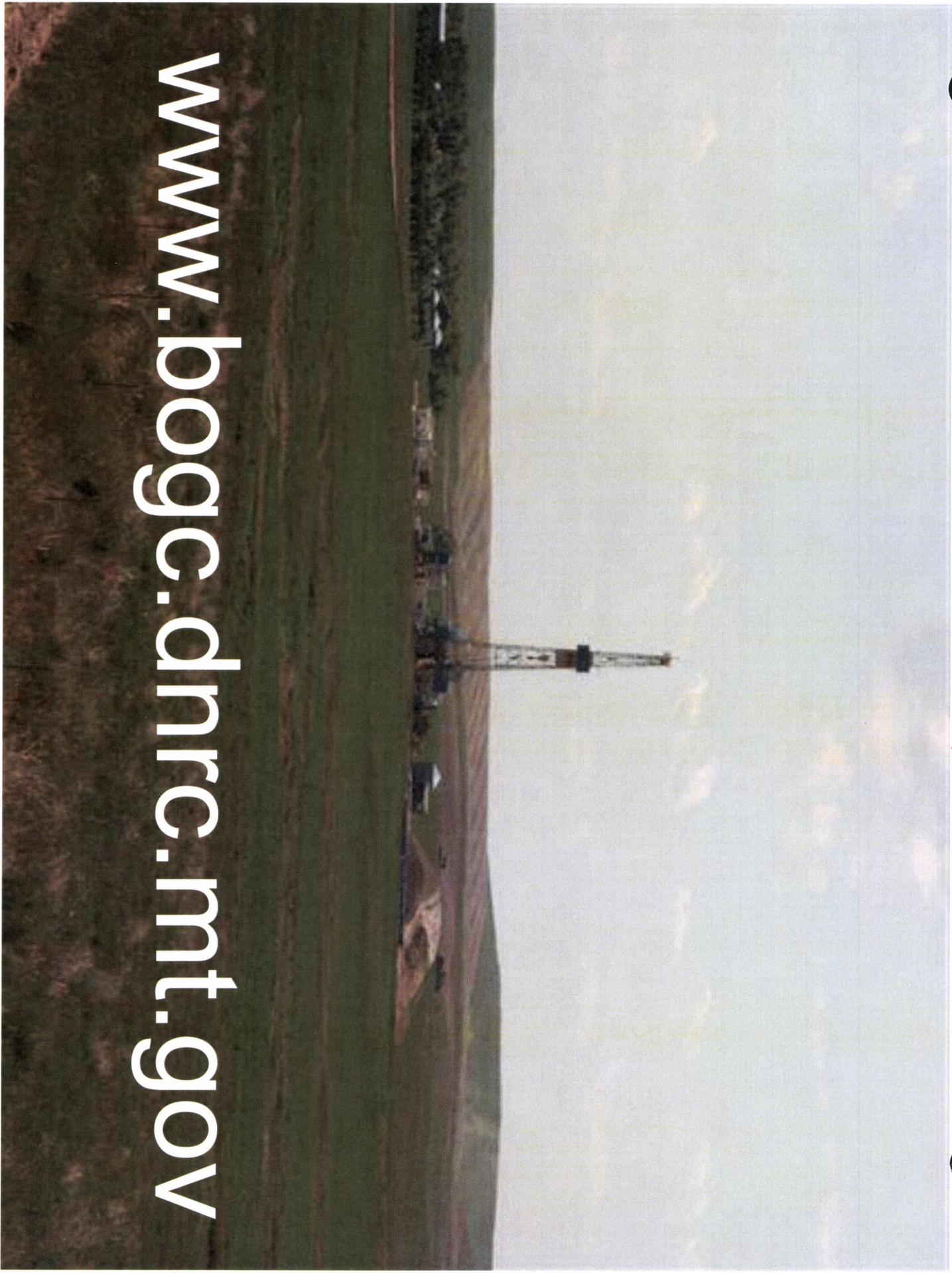
SASK

MANITOBA

• Bakken Producer

Monthly Oil Production, Vertical vs. Horizontal Wells January 1986 through October 2012





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