

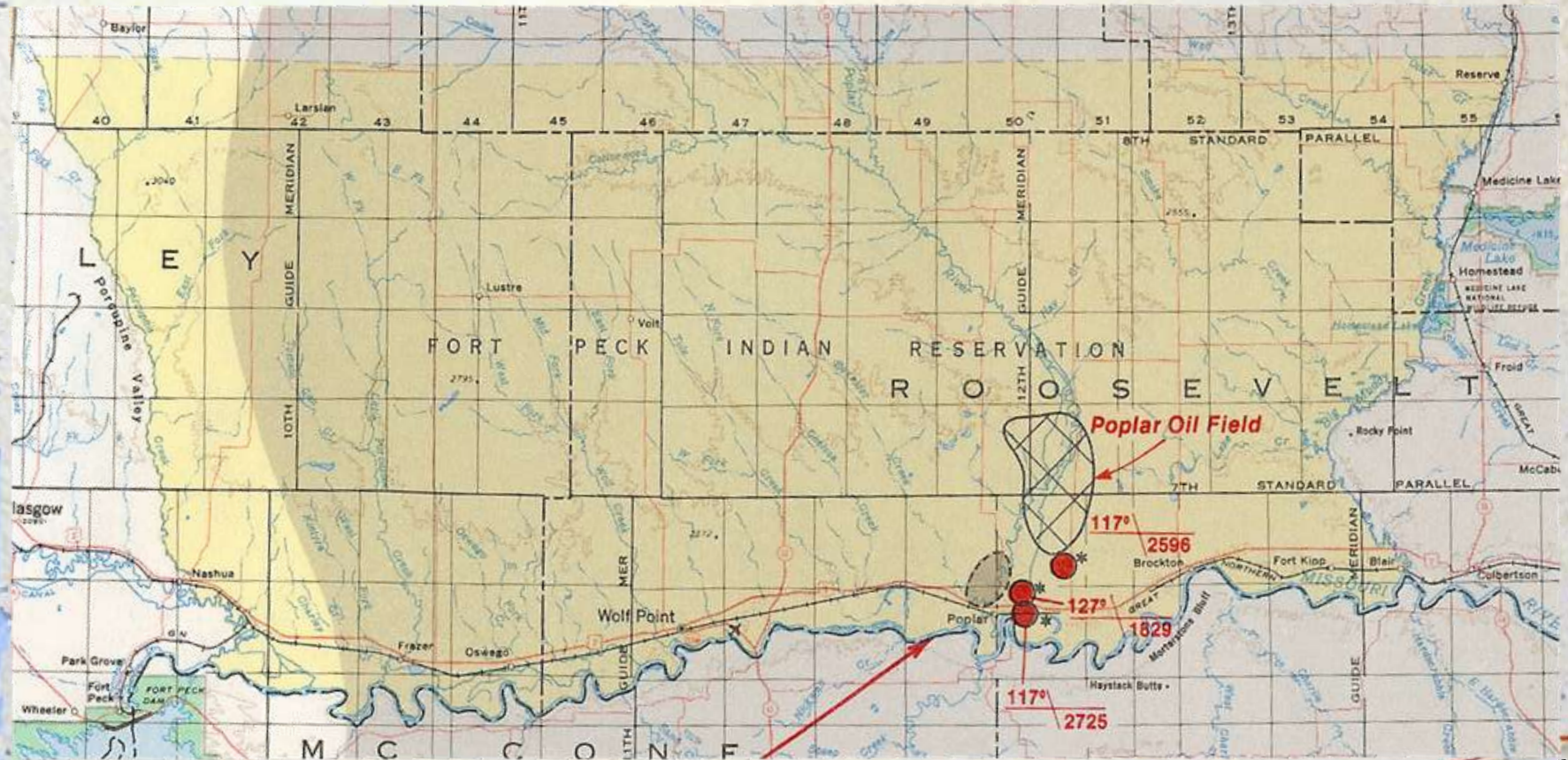
Assiniboine & Sioux Tribes of the Fort Peck Indian Reservation

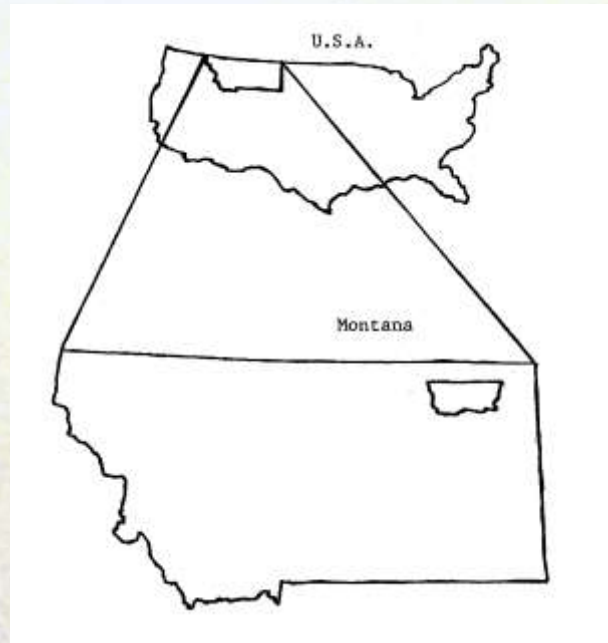


Office of Economic Development

October 25, 2010

Nakota & Dakota Nations





- 2.1 Million Acres (50% Fee)
- ≈16,000 Membership
- 6 Communities along Highway 2
- 100 mi. x 35 mi.
- Southern Boundary - Missouri River





“TJF, Quackman” and a
TJF. All names and addresses
are needed to see his picture.

TFF, Quakana, and a
TFF, Quakana, and a
see needed to see a fish picture.



Fort Peck Tribes

10 Year Plan





Fort Peck Energy Office
“The People’s Electricity”





Fort Peck Energy Office
"The People's Electricity"

VISION

*Become the Regional Leader in
Renewable Energy Generation and
Delivery*

MISSION

*Build Energy Independence For The
Tribe One Family At A Time*



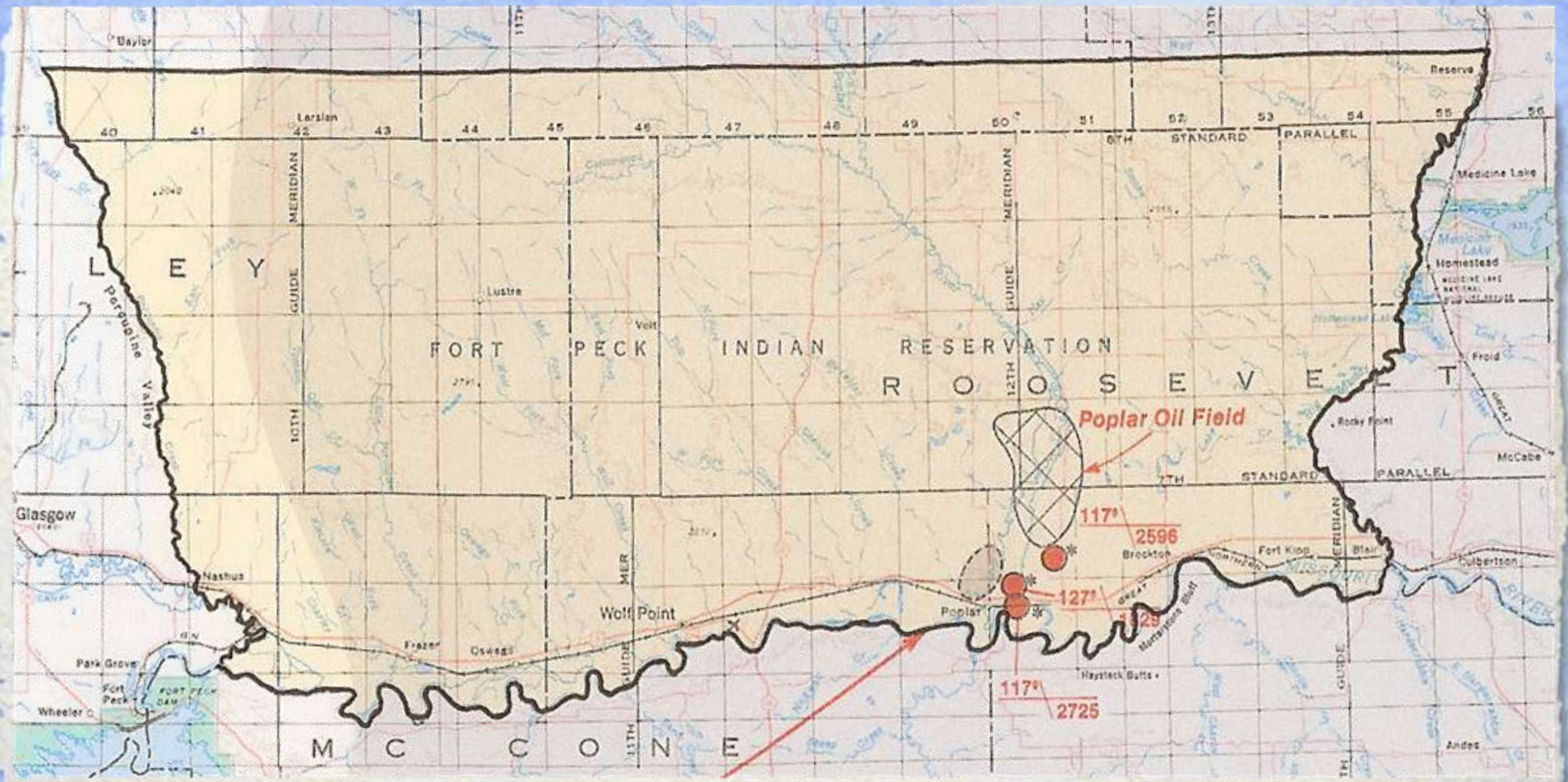


Fort Peck Energy Office
"The People's Electricity"

EECBG

- Train 6 installers of GSHP at the IGSHPA
- Install 20 GSHP on tribal houses
- Monitor savings via electric bills
- Calculate Carbon Credits





Black Line is the Reservation Boundary
MT Bureau of Mines and Geology Map - 1981
Potential Geothermal Sites.

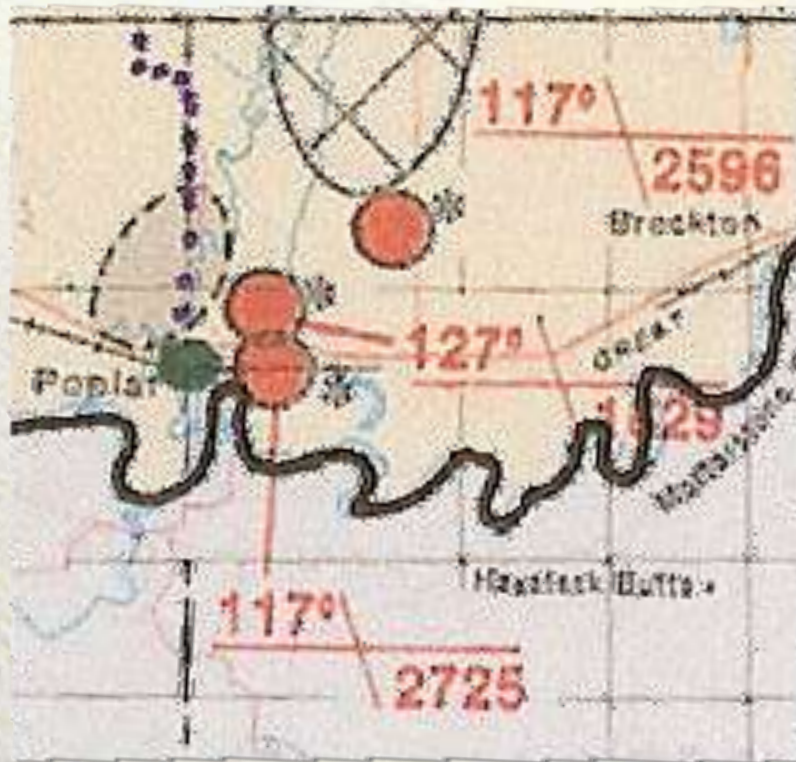


Geothermal

- 1979 Feasibility Study - Scientific Foundation
- MIT-Study 2006
- Montana Bureau of Mines Information
- Co-Produced Liquids Technology - Using abandoned oil wells, current wells.



MIT STUDY



OIL FIELDS

132° C at 2.2km

GRANITE BASEMENT

250° C at 6.5km (or less)

Little deep exploration

Few temperature data available

Generally normally pressured



Geothermal Feasibility Study

- Data from existing wells
- Fault line
- Technology improvements since 1979
- District heating for Poplar, MT

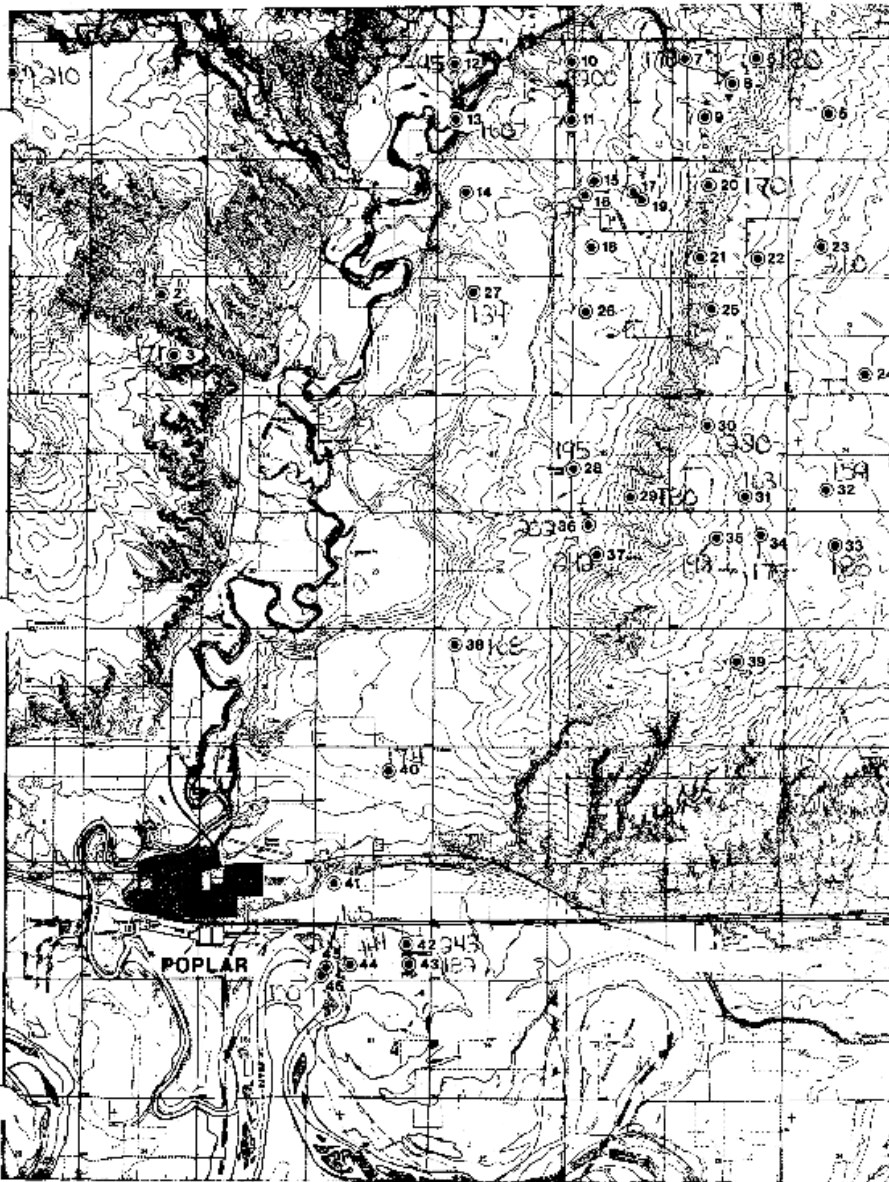
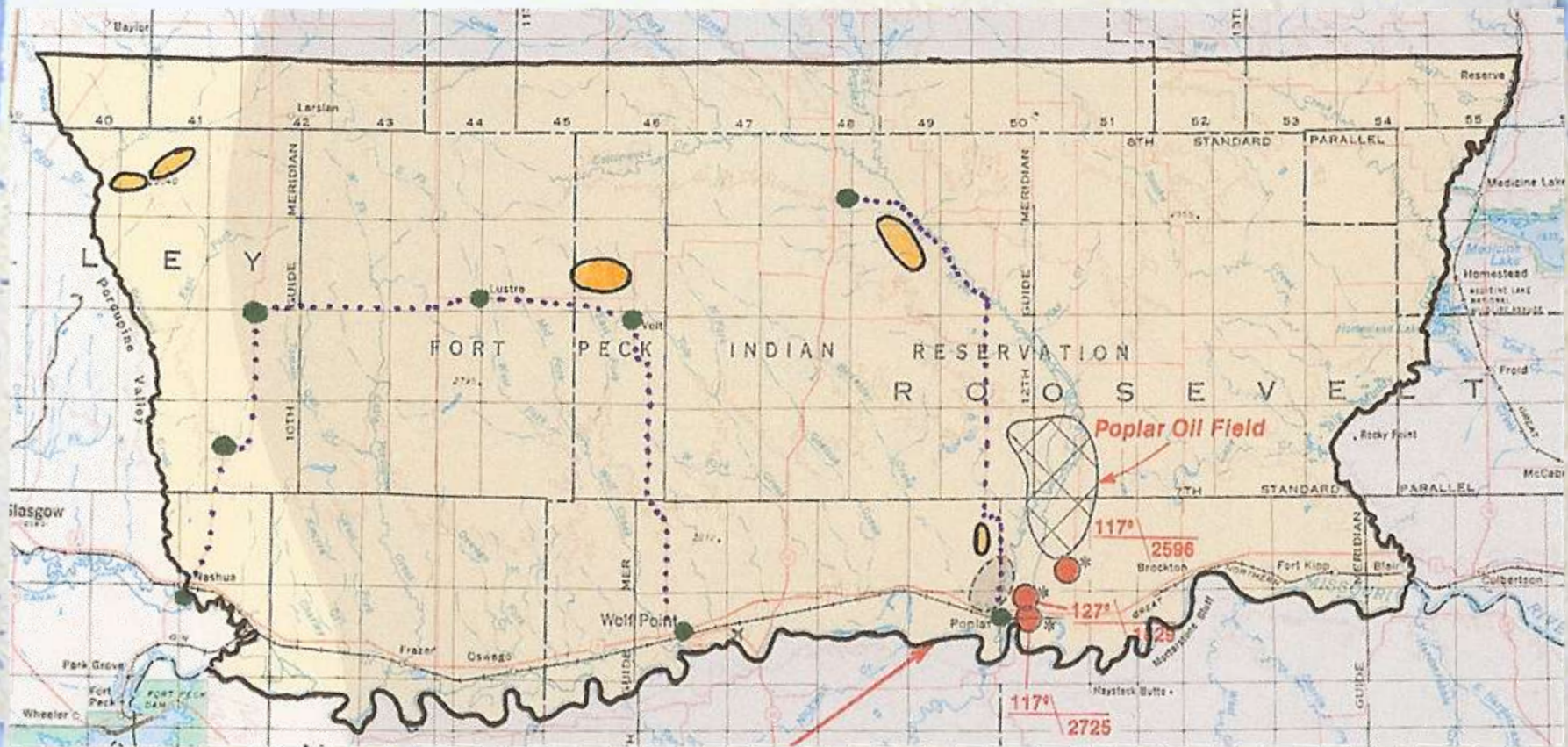


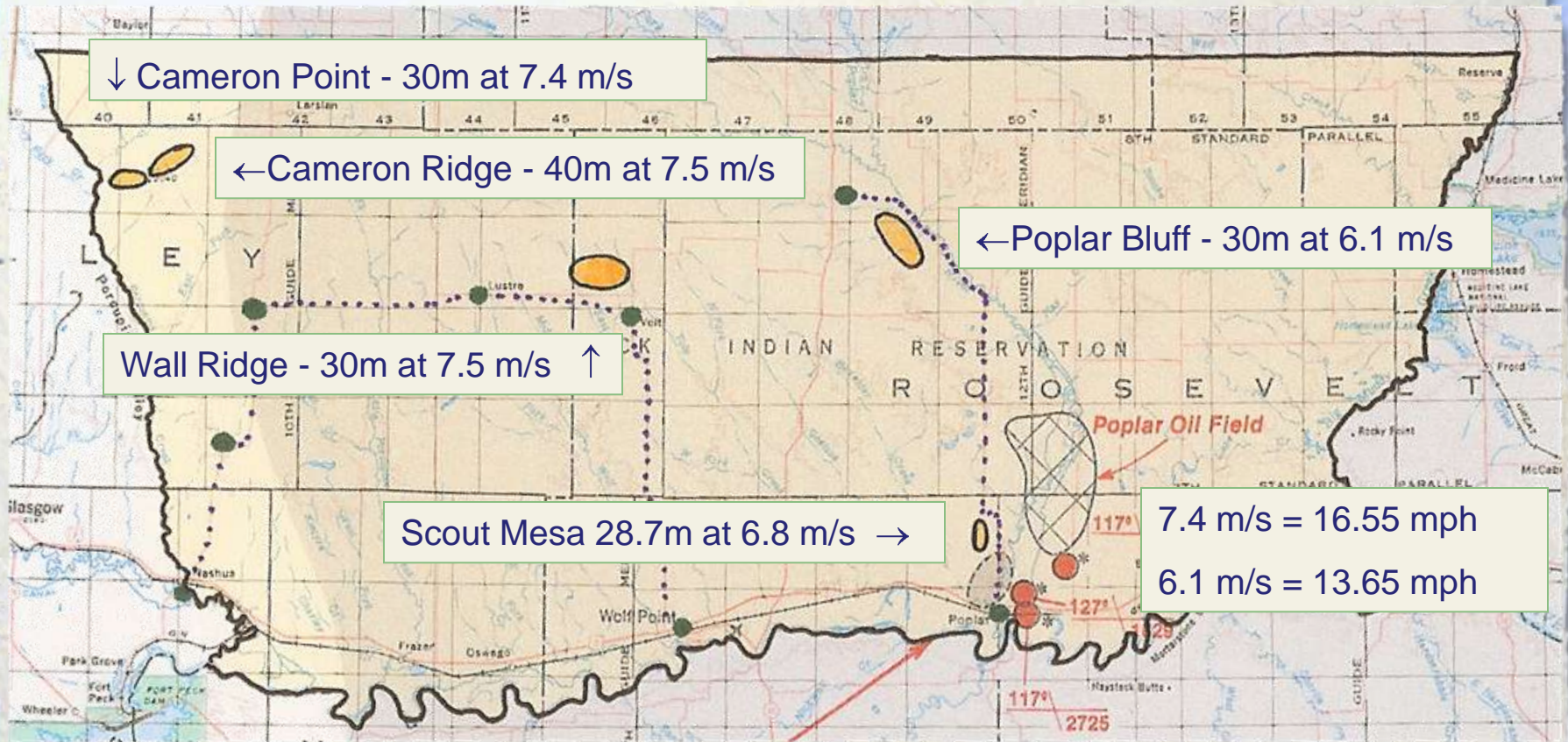
FIGURE III-2 LOCATION OF OIL WELLS USED IN ANALYSIS





- Wind Sites - Bechtel Study (1995)
- 30m Anemometer Towers/ 1 Radio Tower



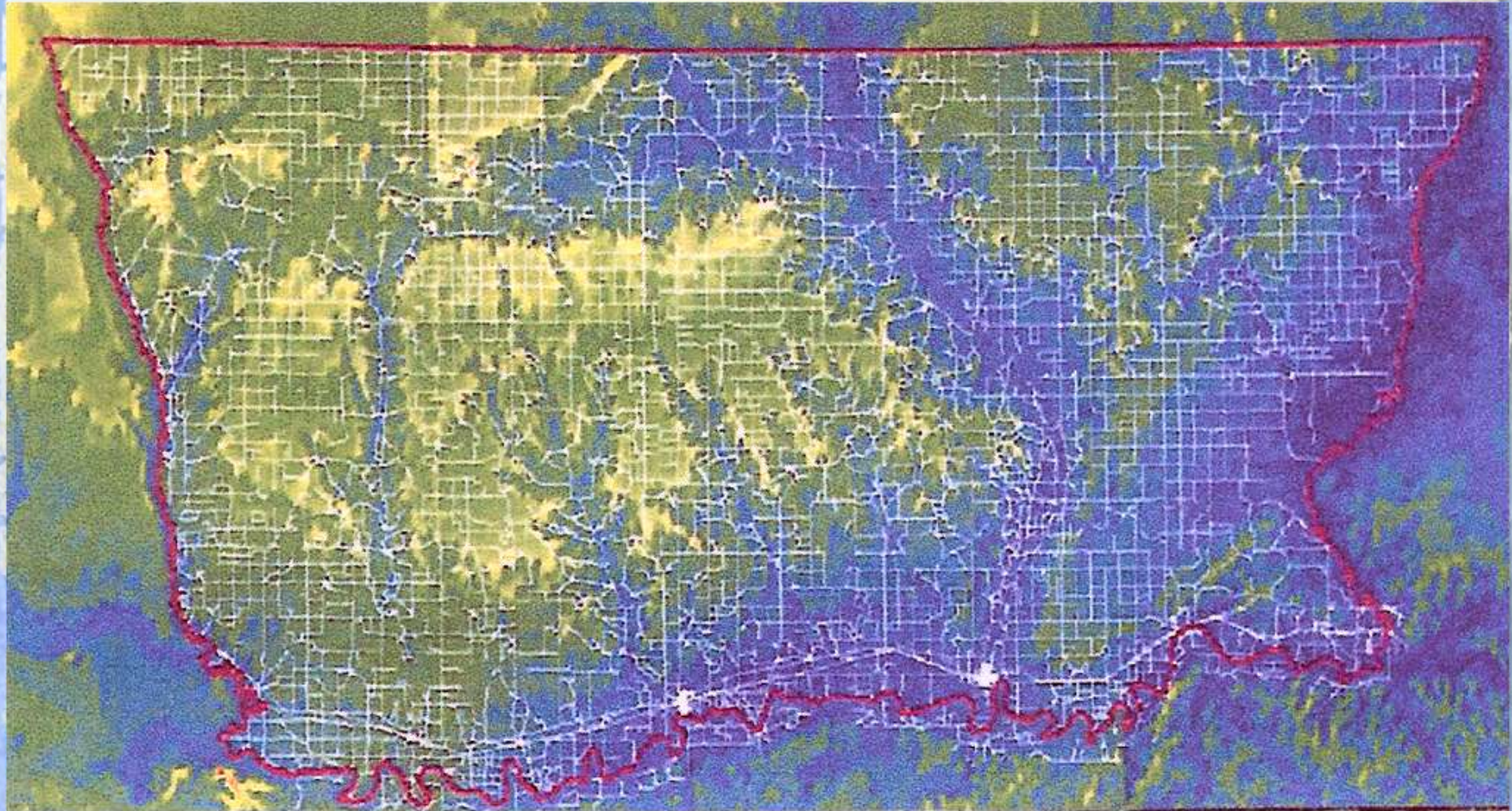


- Wind Speeds are Class 5 and Class 6
- Low Turbulence Intensity (less stress on turbines)
- Vertical Sheer is high (more power captured w/ taller tower)



The maps/models were created by WindMap, a software program produces models to estimate wind speeds, wind power density and turbine output for a region. It models effects of ridges, hills, other terrain features on wind flow and incorporates data from existing surface stations. Producing these models, the input was a 250 k scale map of the Fort Peck area, maps with the wind direction and speed data collected by Beck's, Fort Peck, and Wall, Bismarck.

Fort Peck Average Annual Wind Speed (M/s) at 60M



7.1



7.5



7.9



8.3



8.7



References

- MIT Study -

http://geothermal.inel.gov/publications/future_of_geothermal_energy.pdf



W. A. White Tail Feather

Director

Fort Peck Tribes Economic Development Office/Energy Office

500 Medicine Bear Road

P.O. Box 1027

406.768.2344

wwhitetailfeather@fortpecktribes.org

