



North Dakota Geological Survey
Geologic Investigation No. 284
2025
Plate No. 1

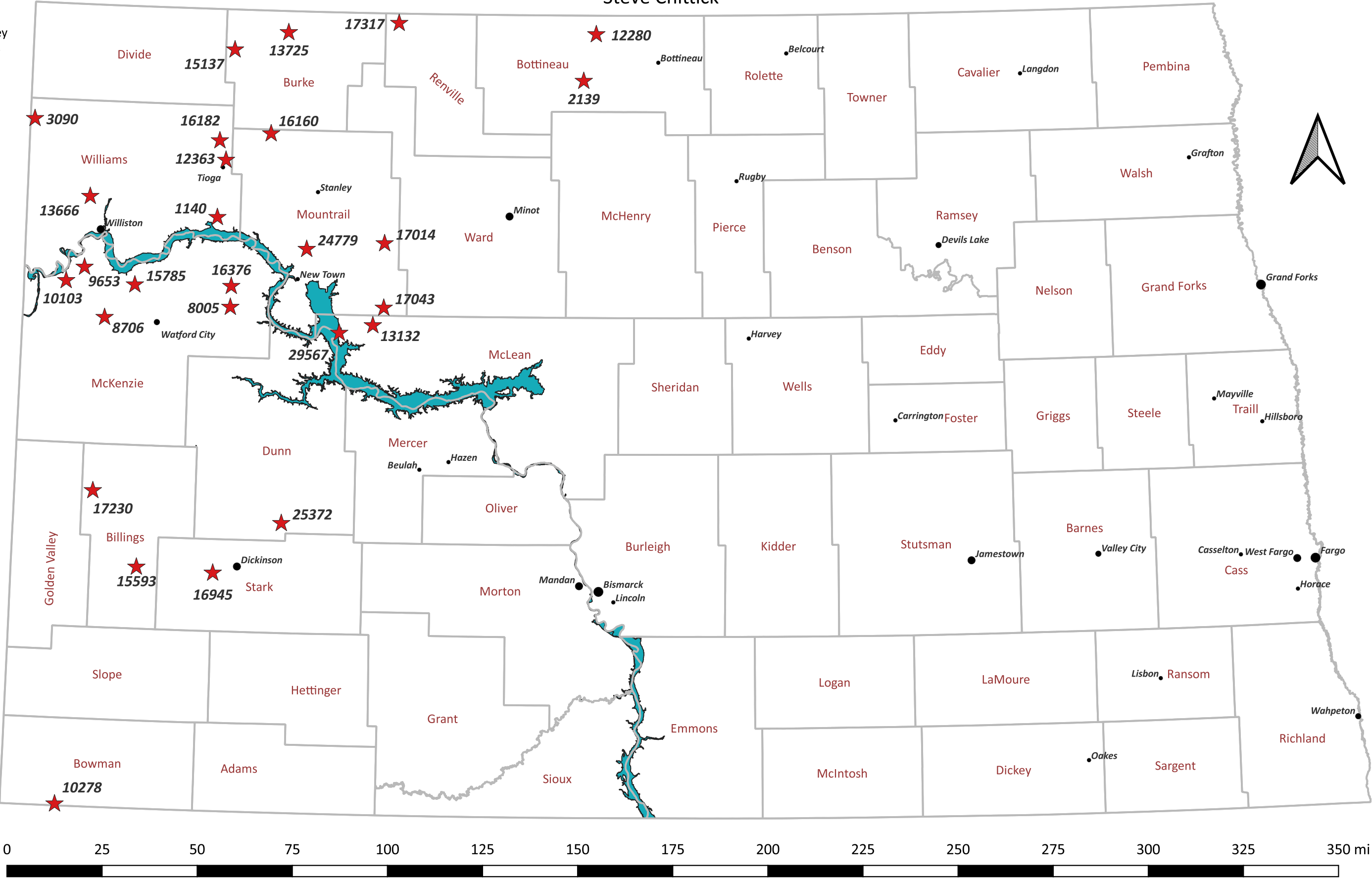
Static Temperatures Wells NDIC No.

Williston Basin, North Dakota

Steve Chittick

Edward C. Murphy, State Geologist
Nathan D. Anderson, Director Dept. of Mineral Resources

- ★ Static Temp Wells
- Missouri River
- ND Counties
- ND Cities
 - 1500 - 5000
 - 5000 - 10000
 - 10000 - 50000
 - 50000 - 126000





North Dakota Geological Survey
Geologic Investigation No. 284
2025
Plate No. 2

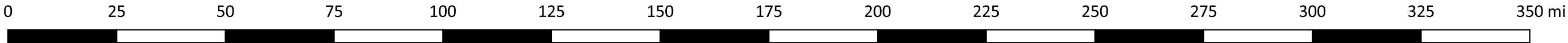
Static Temperature Wells UWI/API No.

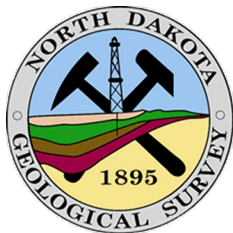
Williston Basin, North Dakota

Steve Chittick

Edward C. Murphy, State Geologist
Nathan D. Anderson, Director Dept. of Mineral Resources

- ★ Static Temp Wells
- Missouri River
- Roosevelt Nat'l Park
- ND Counties
- ND Cities (2010 Pop.)
 - 1500 - 5000
 - 5000 - 10000
 - 10000 - 50000
 - 50000 - 126000





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Plate No. 3

Pierre Shale Temps

Temperature °F

50 - 59

59 - 68

68 - 77

77 - 86

86 - 95

★ Static Form. Temp.

★ Proj. Form. Temp.

Missouri River

ND Counties

Pierre Structure
TVDSS

2,500 ft



0 ft

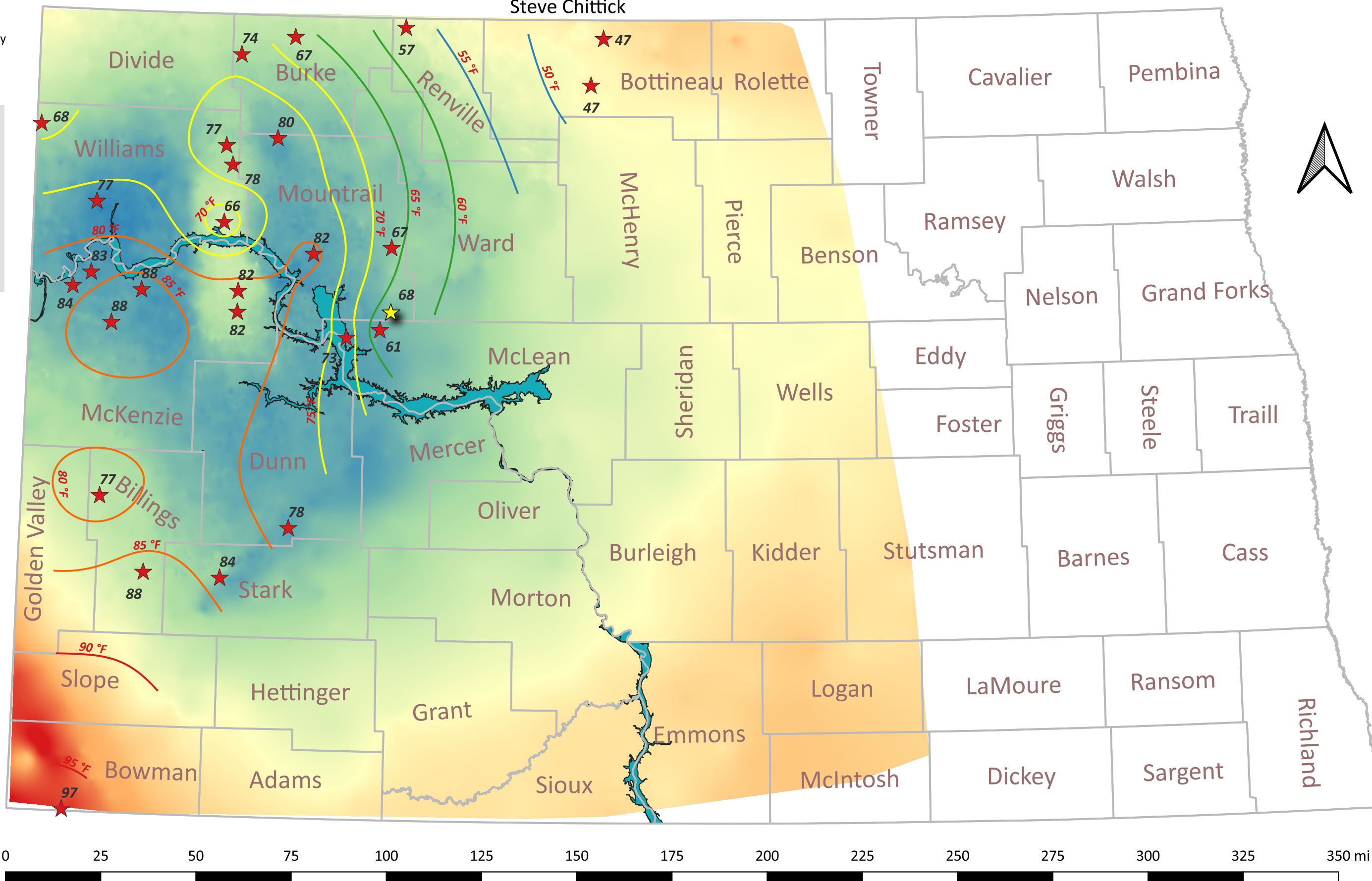
0 25 50 75 100 125 150 175 200 225 250 275 300 325 350 mi

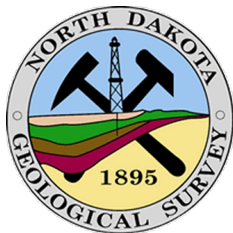
Pierre Formation Top Temperatures in °F

Williston Basin, North Dakota

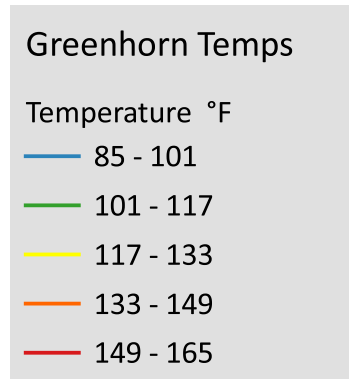
Steve Chittick

Edward C. Murphy, State Geologist
Nathan D. Anderson, Director Dept. of Mineral Resources



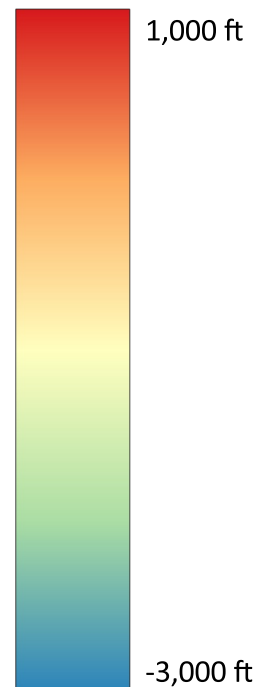


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Plate No. 4



- ★ Static Form. Temp.
- Missouri River
- ND Counties

Greenhorn Structure
TVDSS
1,000 ft

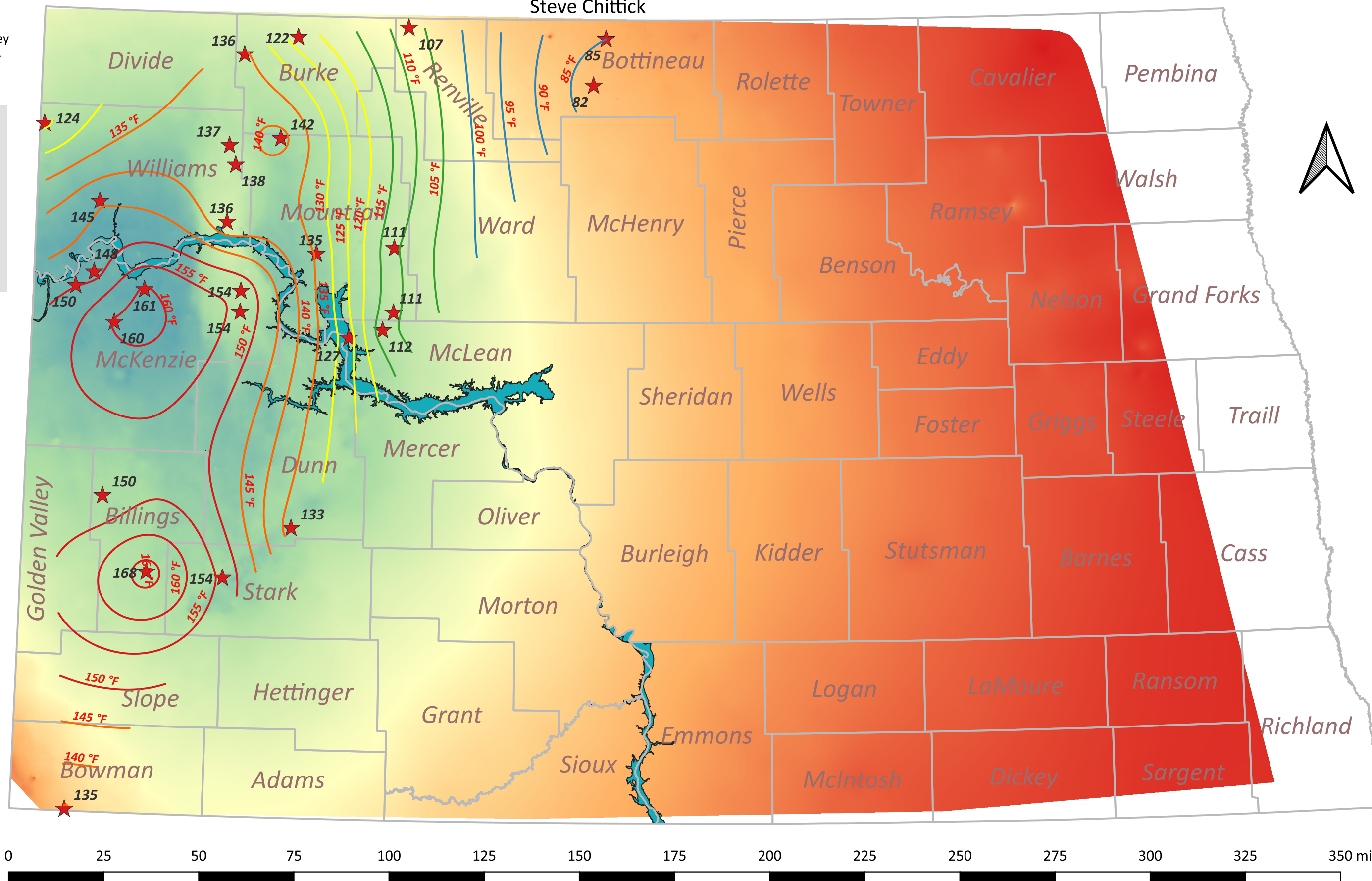


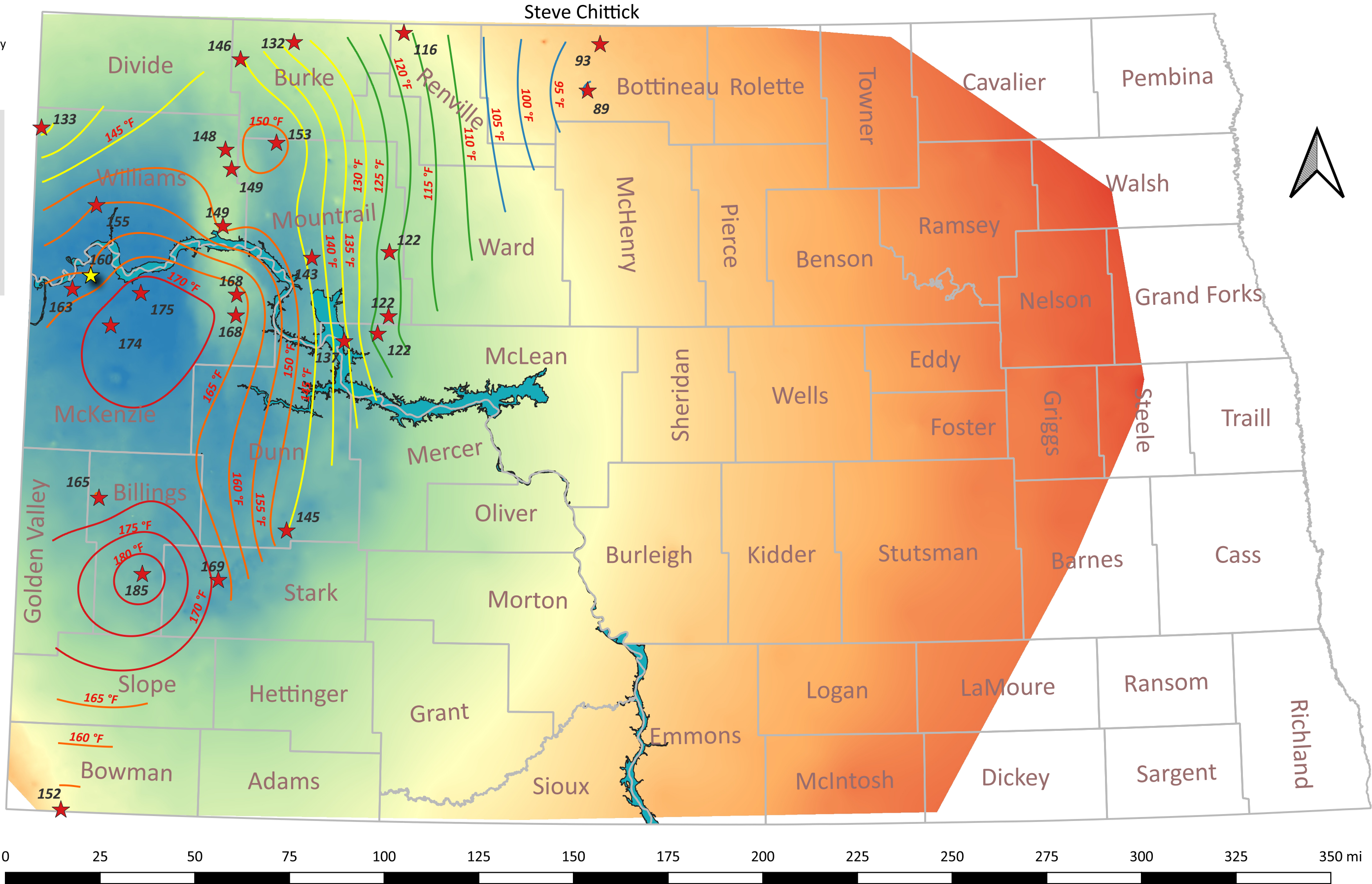
Greenhorn Formation Top Temperatures in °F

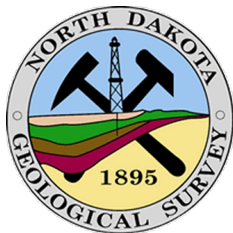
Williston Basin, North Dakota

Steve Chittick

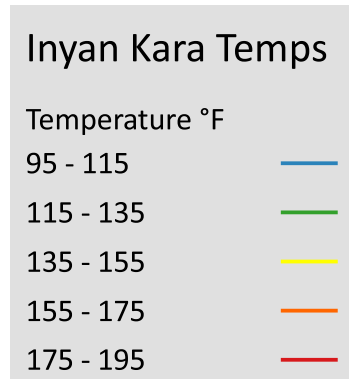
Edward C. Murphy, State Geologist
Nathan D. Anderson, Director Dept. of Mineral Resources





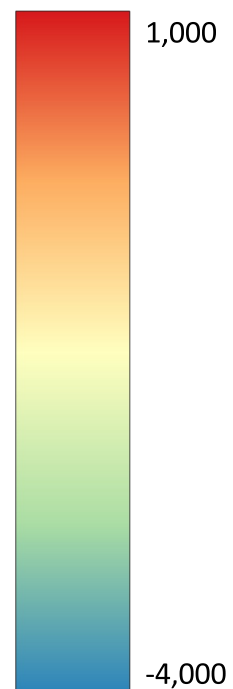


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Plate No. 6



- ★ Static Form. Temp.
- ☆ No Form. Temp.
- Missouri River
- ND Counties

Inyan Kara Structure
TVDSS

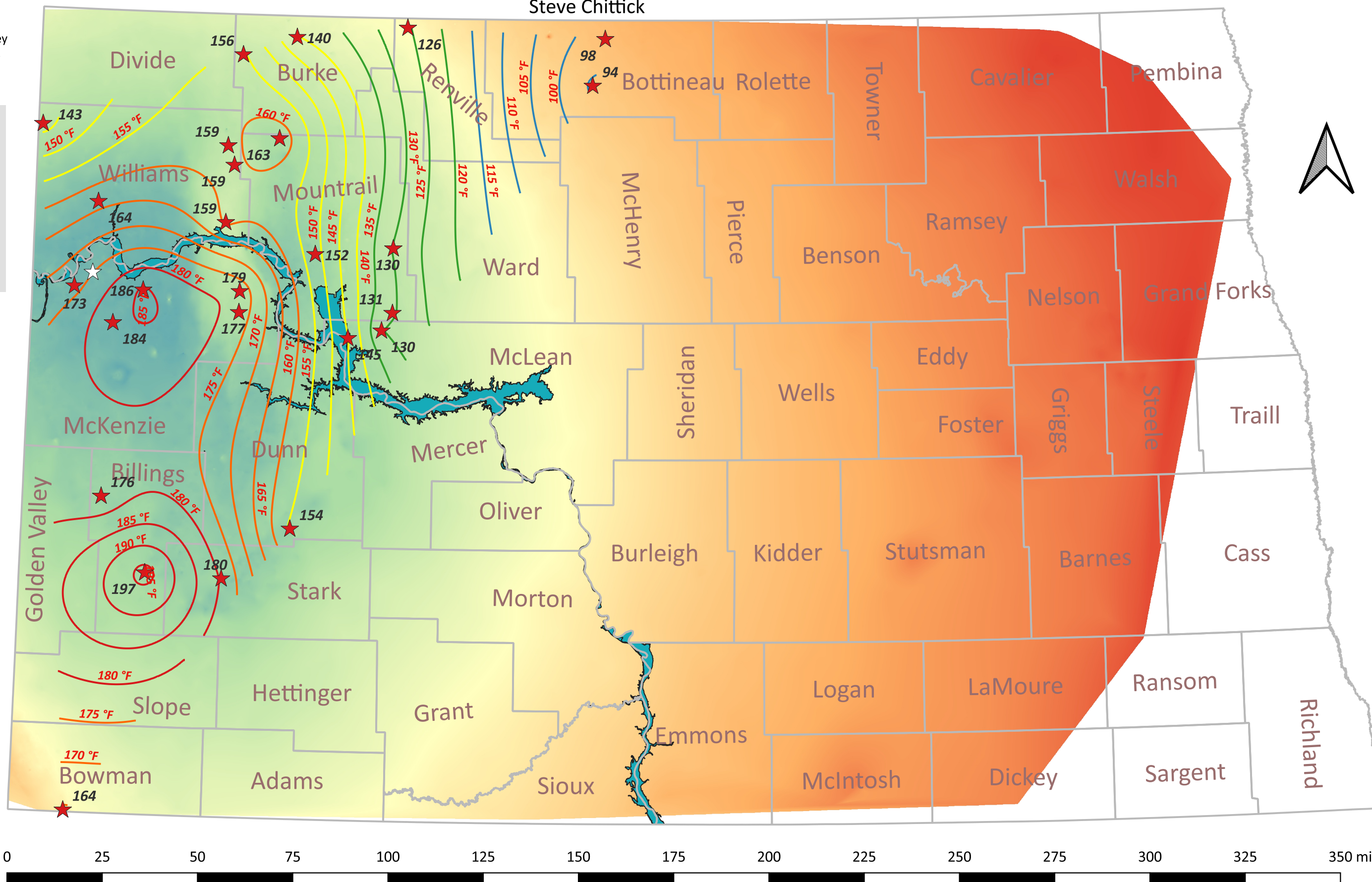


Inyan Kara Static Formation Top Temperatures in °F

Williston Basin, North Dakota

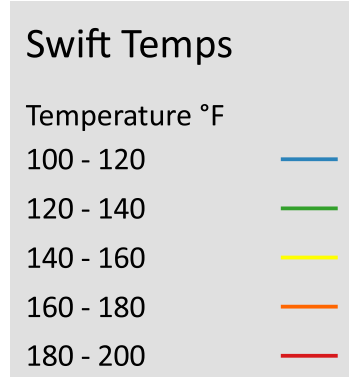
Steve Chittick

Edward C. Murphy, State Geologist
Nathan D. Anderson, Director Dept. of Mineral Resources

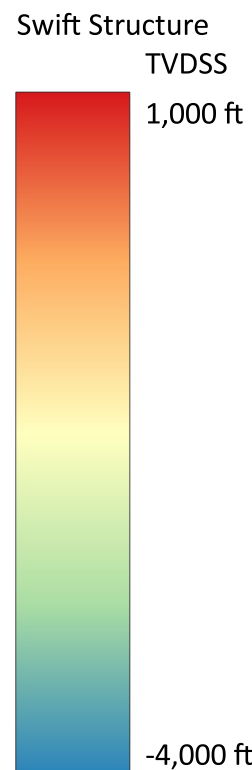




North Dakota Geological Survey
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Plate No. 7



- ★ Static Form. Temp
- ☆ No Form. Temp.
- Missouri River
- ND Counties

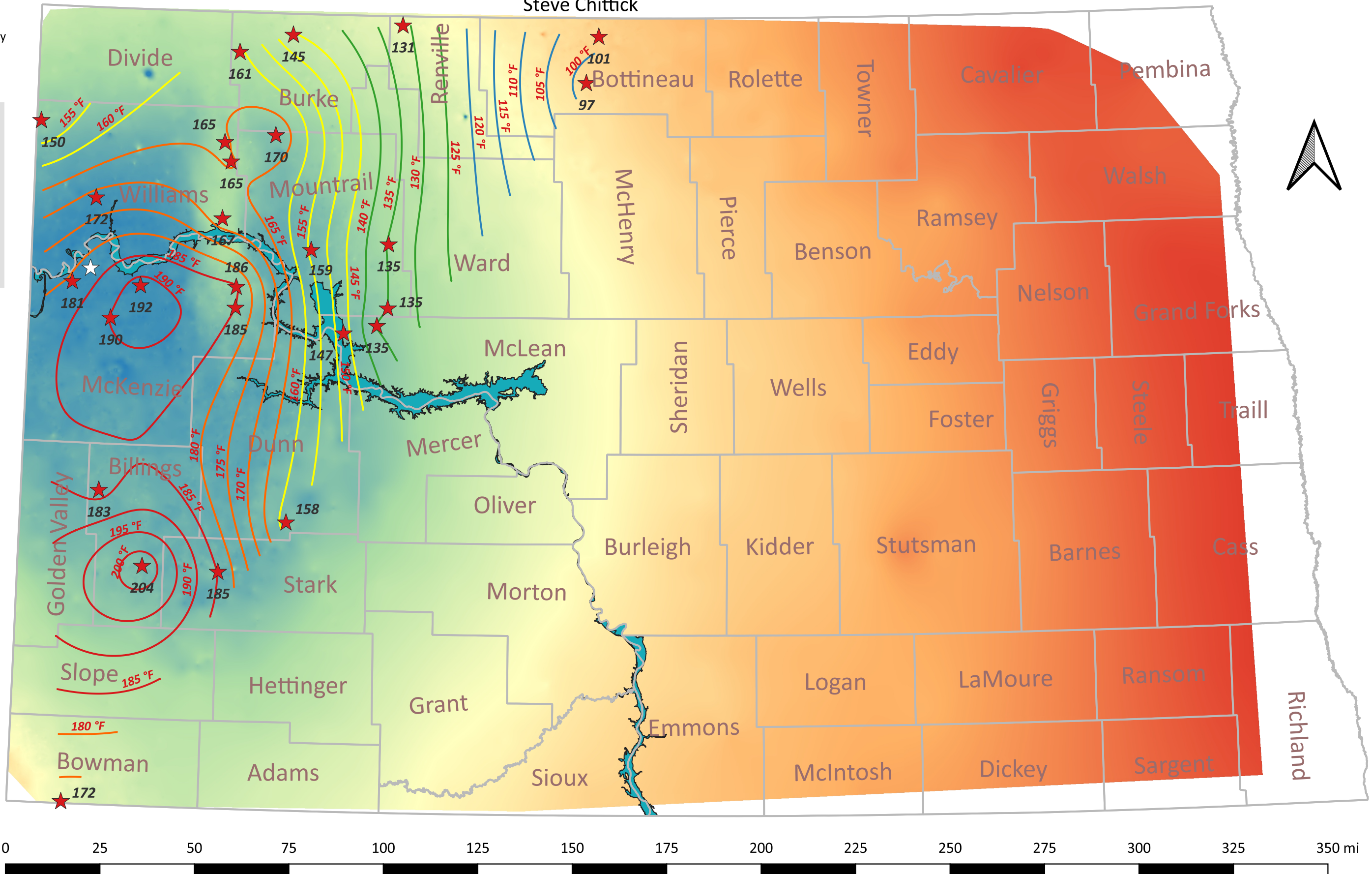


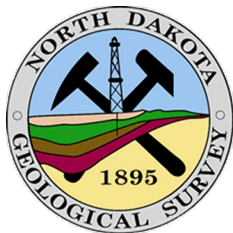
Swift Static Formation Top Temperatures in °F

Williston Basin, North Dakota

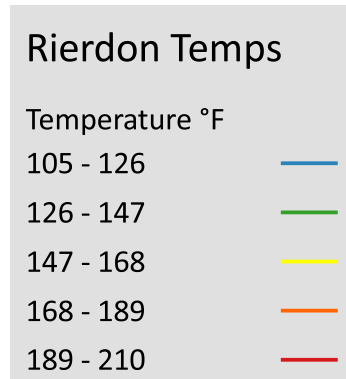
Steve Chittick

Edward C. Murphy, State Geologist
Nathan D. Anderson, Director Dept. of Mineral Resources



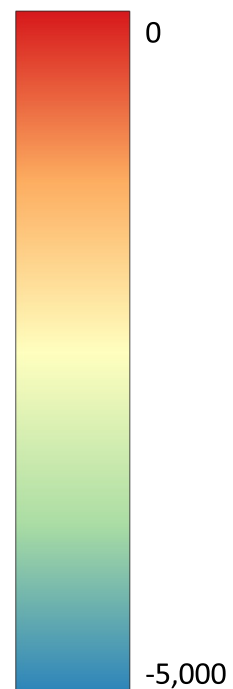


North Dakota Geological Survey
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Plate No. 8



- ★ Static Form. Temp.
- ☆ No Form. Temp.
- Missouri River
- ND Counties

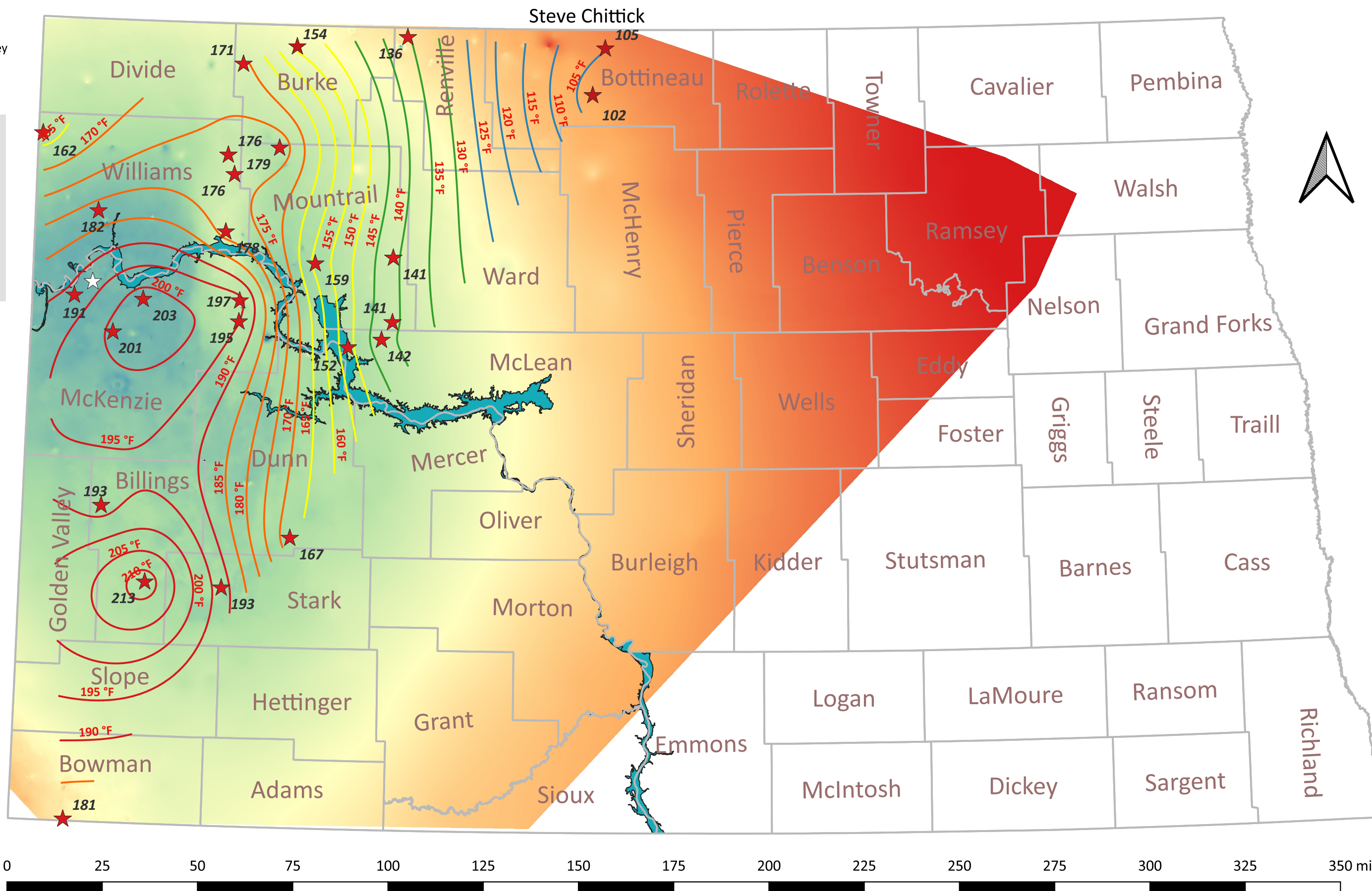
Rierdon Structure
Band 1

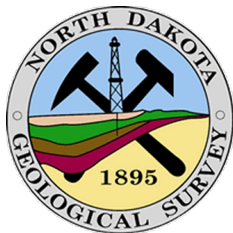


Rierdon Static Formation Top Temperatures in °F

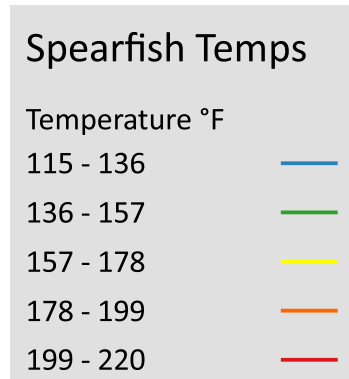
Williston Basin, North Dakota

Edward C. Murphy, State Geologist
Nathan D. Anderson, Director Dept. of Mineral Resources



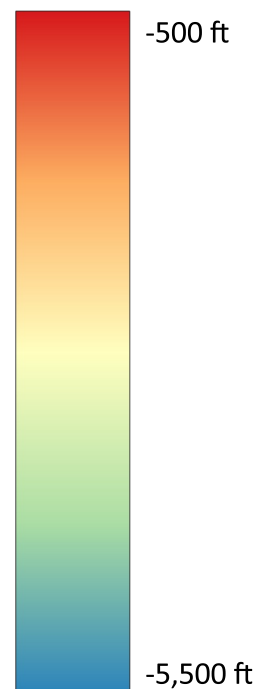


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- ★ Static Form. Temp.
- ☆ No Formation Temp
- ★ Proj. Form. Temp.
- Missouri River
- ND Counties

Spearfish Structure
TVDSS

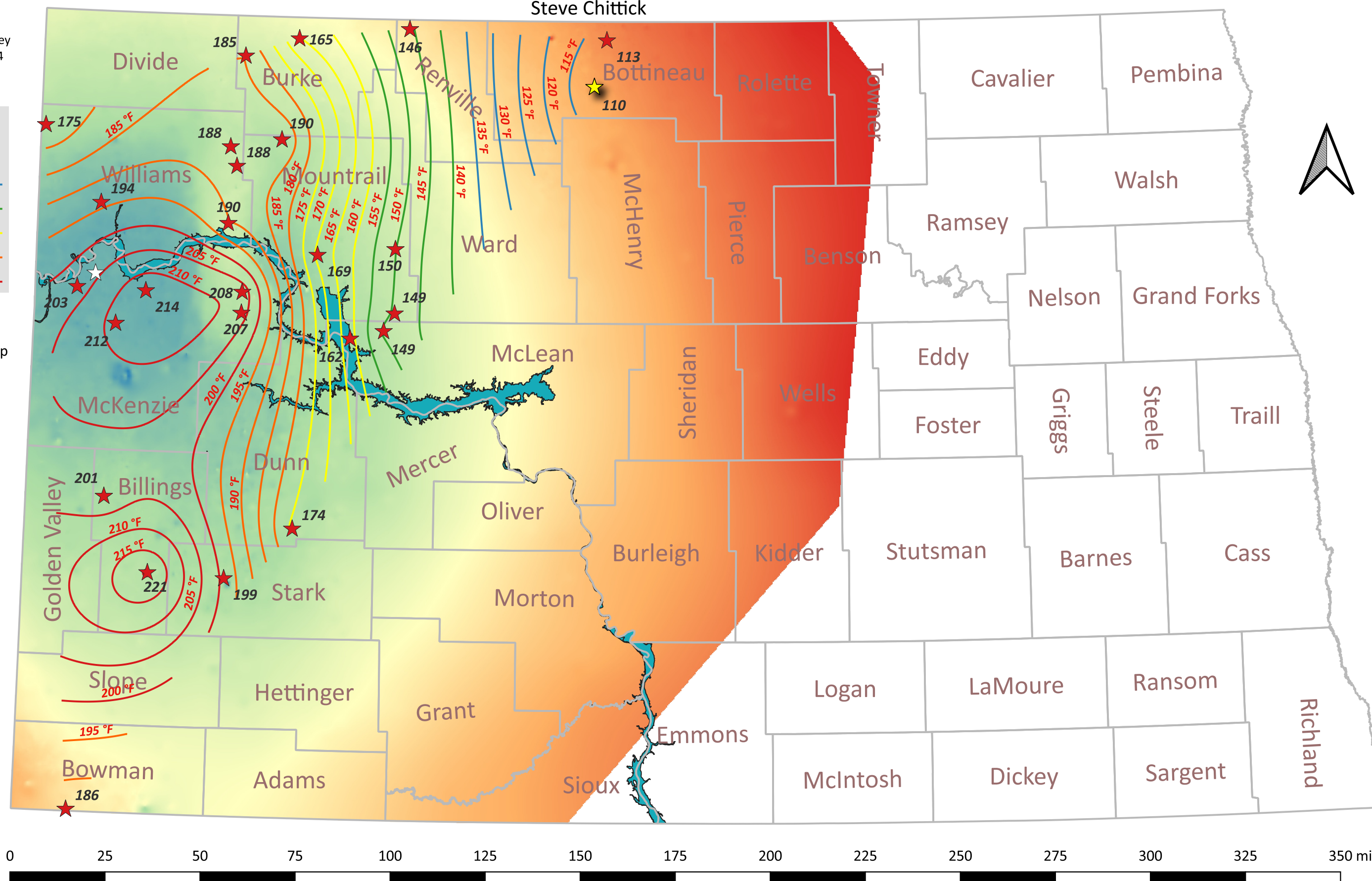


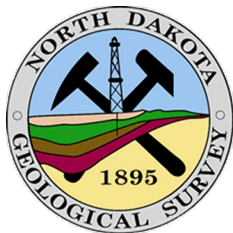
Spearfish Static Formation Top Temperatures in °F

Williston Basin, North Dakota

Steve Chittick

Edward C. Murphy, State Geologist
Nathan D. Anderson, Director Dept. of Mineral Resources





North Dakota Geological Survey
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Tyler Static Formation Top Temperatures in °F

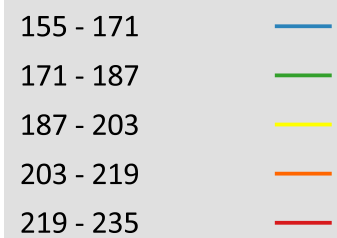
Williston Basin, North Dakota

Edward C. Murphy, State Geologist
Nathan D. Anderson, Director Dept. of Mineral Resources

Steve Chittick

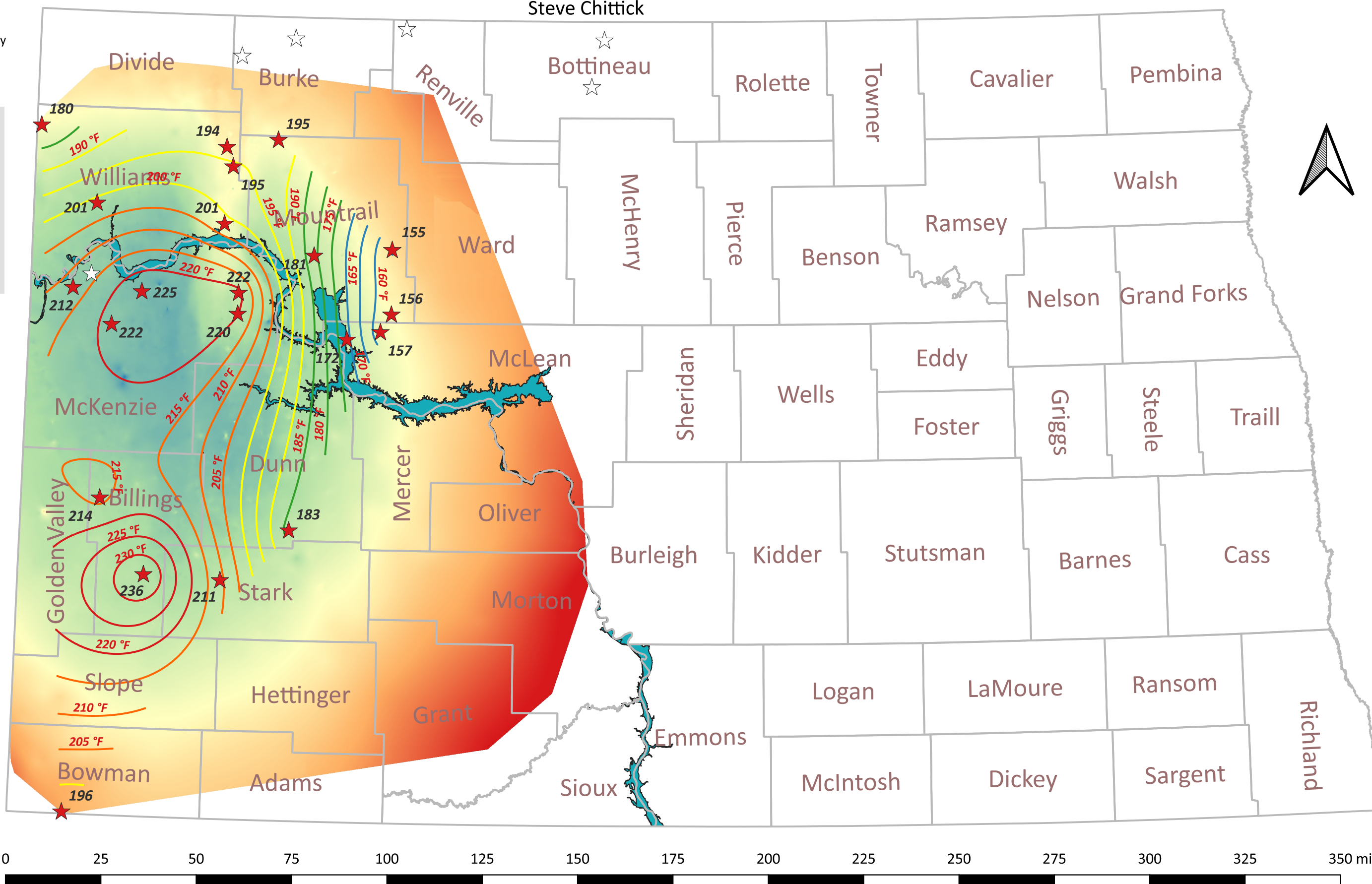
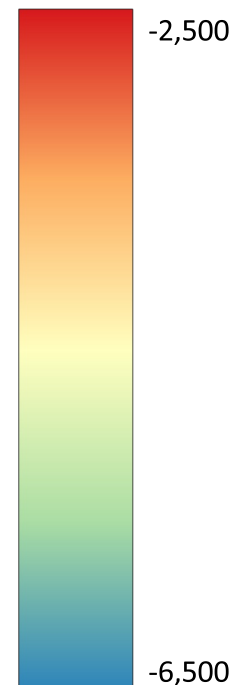
Tyler Temps

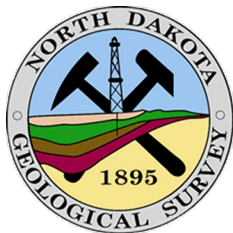
Temperature °F



- ★ Static Form. Temp.
- ☆ No Form. Temp.
- Missouri River
- ND Counties

Tyler Structure
TVDSS

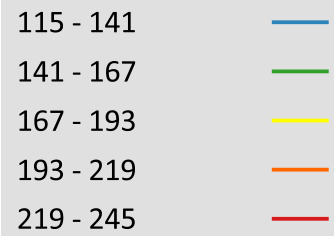




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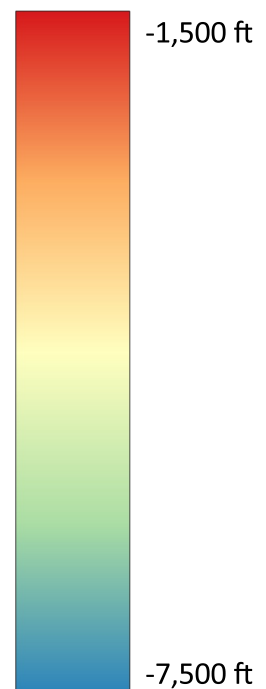
Madison Temps

Temperature °F



- ★ Static Form. Temp.
- ☆ No Form. Temp.
- ★ Proj. Temp
- Missouri River
- ND Counties

Madison Structure
TVDSS

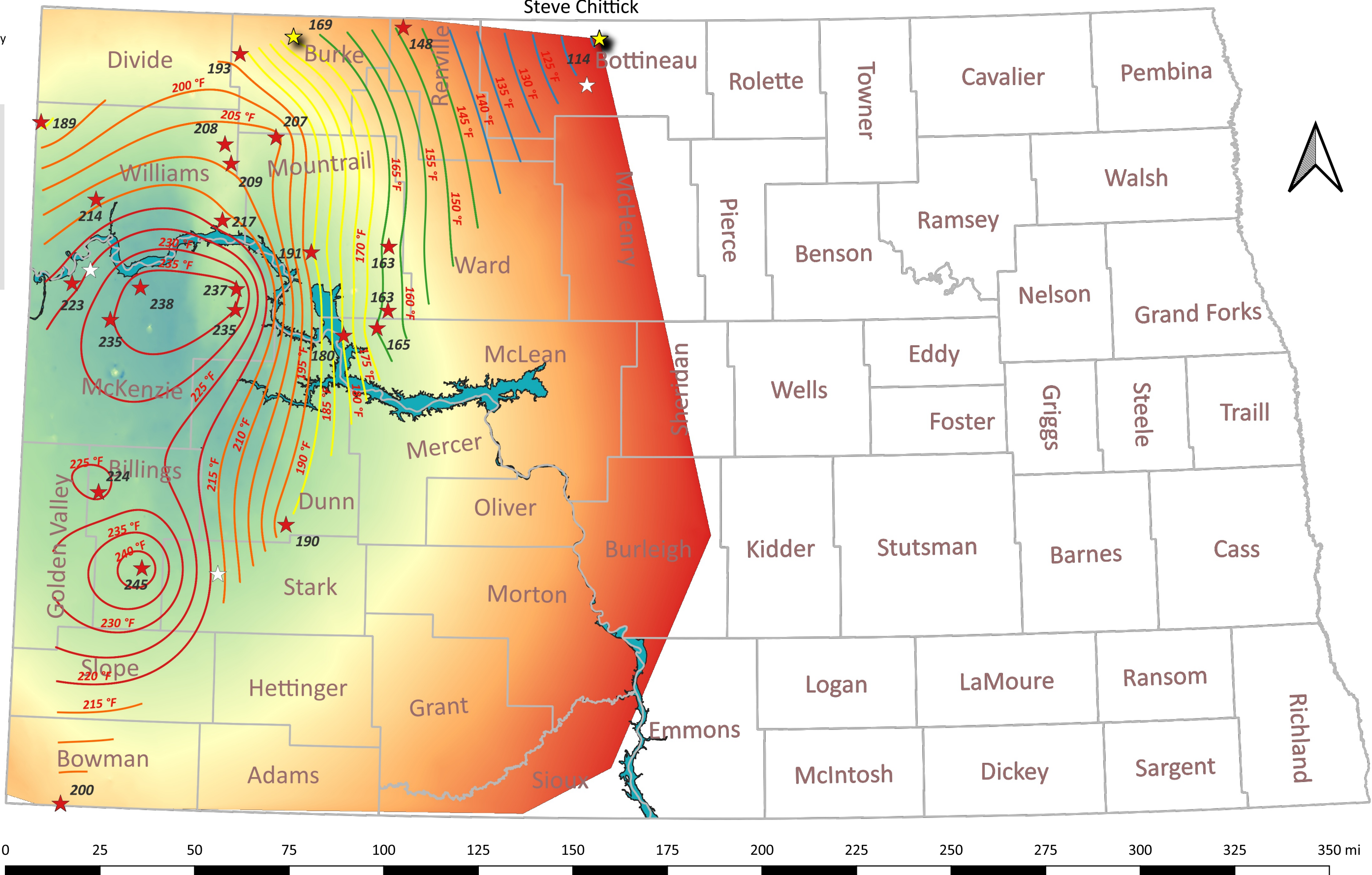


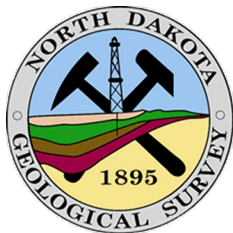
Madison Static Formation Top Temperatures in °F

Williston Basin, North Dakota

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Bakken Static Formation Top Temperatures in °F

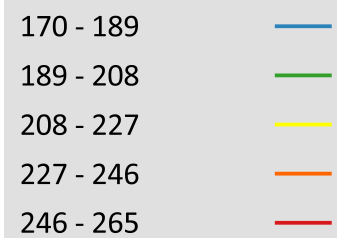
Williston Basin, North Dakota

Edward C. Murphy, State Geologist
Nathan D. Anderson, Director Dept. of Mineral Resources

Steve Chittick

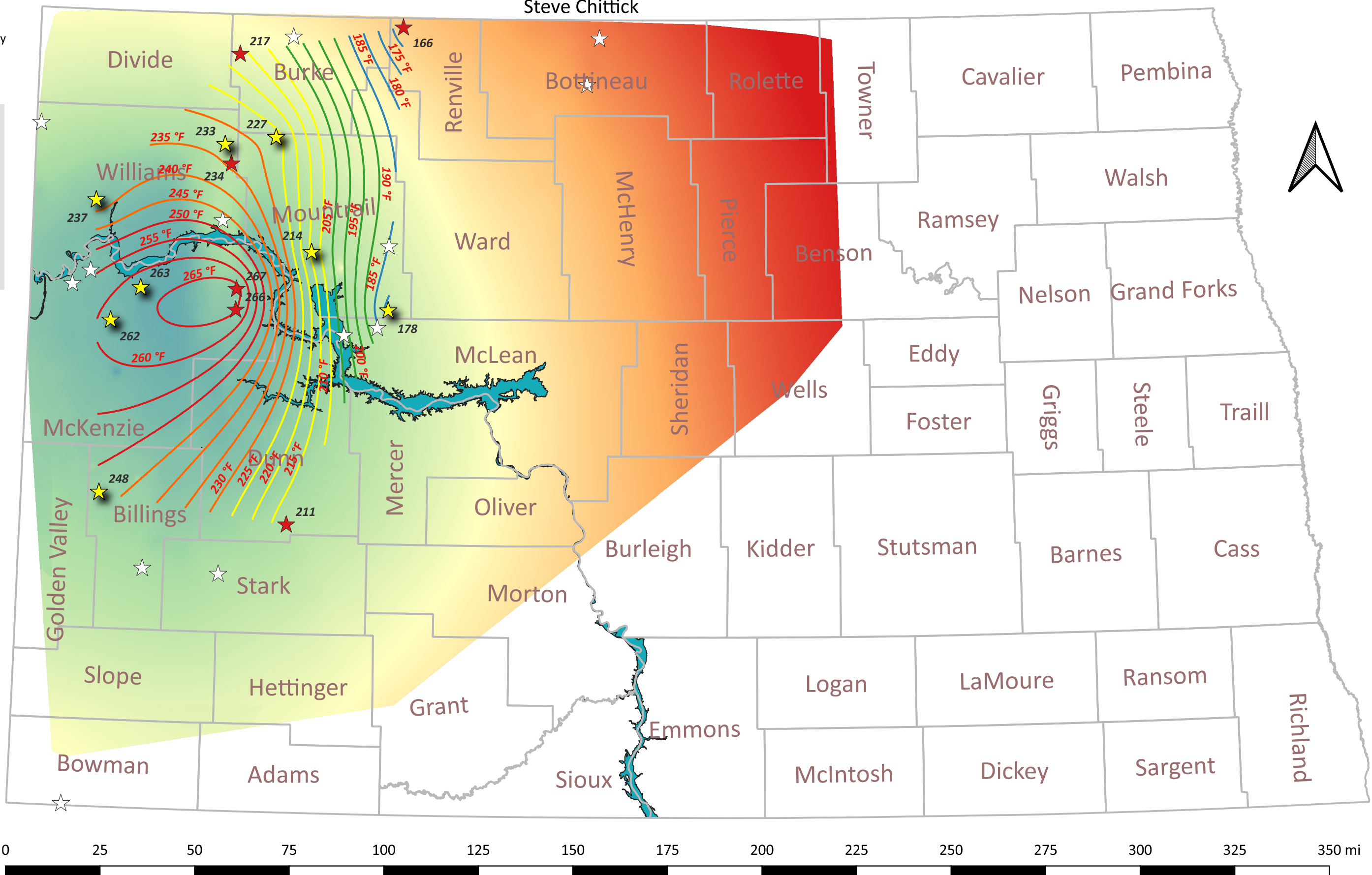
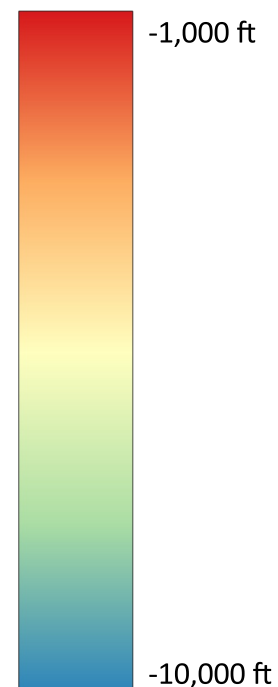
Bakken Temps

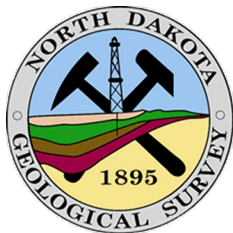
Temperature °F



- ★ Static Form. Temp.
- ☆ No Form. Temp.
- ★ Proj. Form. Temp.
- Missouri River
- ND Counties

Bakken Structure
TVDSS





North Dakota Geological Survey
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Plate No. 13

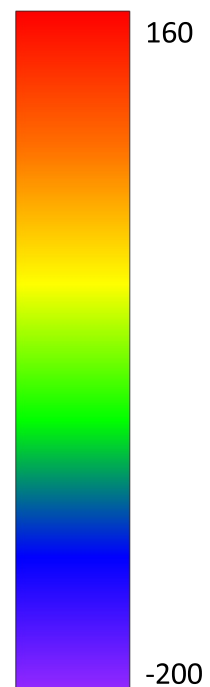
Madison Temps

Temperature °F



- ★ Static Form. Temp.
- ☆ No Form. Temp.
- ★ Proj. Form Temp.
- Missouri River
- Roosevelt Nat'l Park
- ND Counties

ND Aeromag
nT

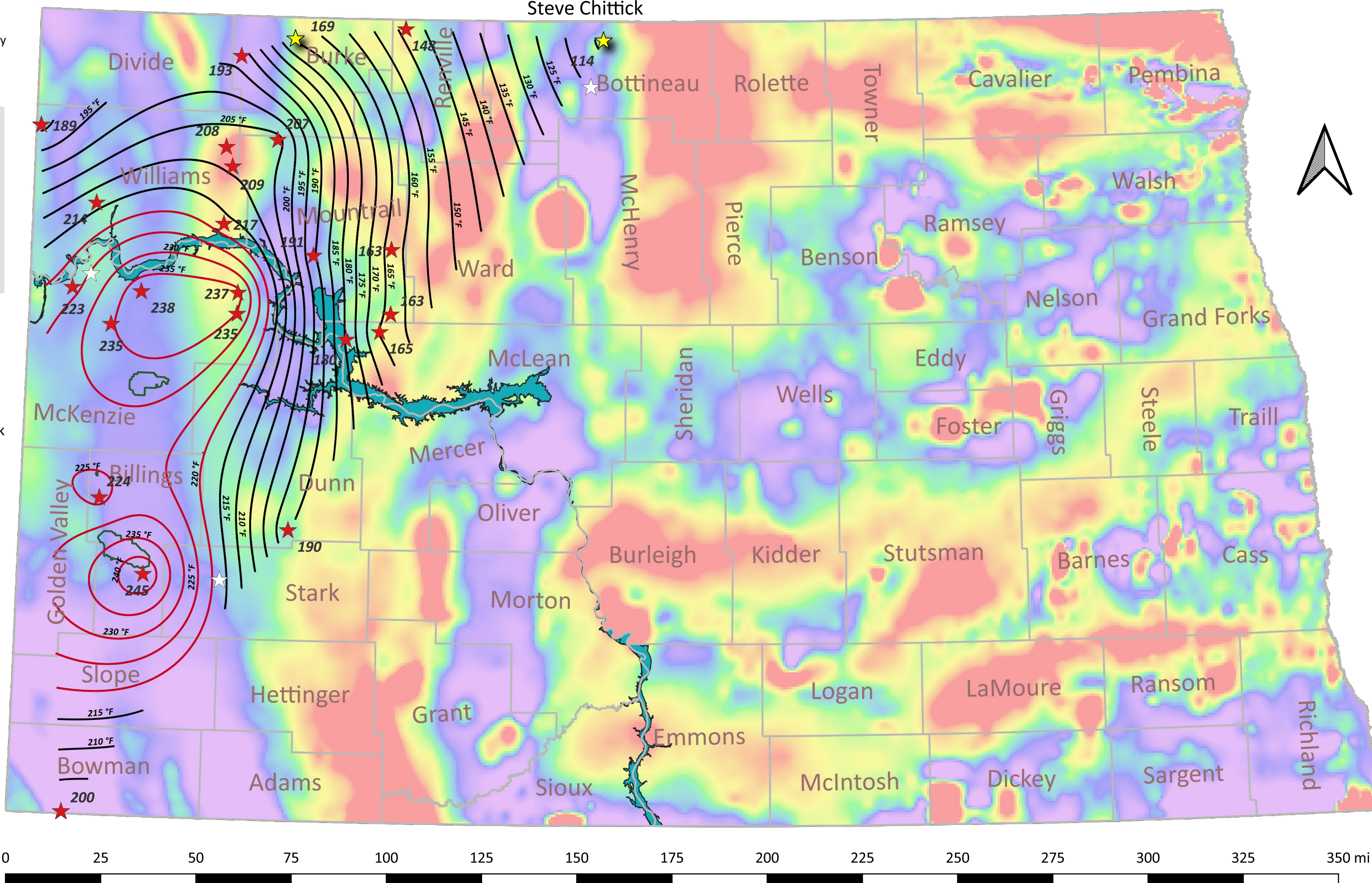


Madison Static Temperatures in °F on Aeromag

Williston Basin, North Dakota

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Nathan D. Anderson, Director Dept. of Mineral Resources

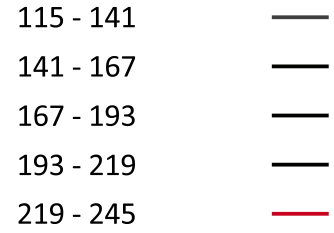




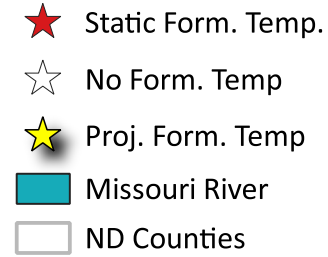
North Dakota Geological Survey
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Plate No. 14

Madison Temps

Temperature °F



Static Temp Well



Bouguer Anomaly
mGals



Madison Static Temperatures in °F on Bouguer Gravity

Williston Basin, North Dakota

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