

**This project is a culmination of the North Dakota Geological Survey's efforts to log abandoned wells with static temperature conditions.**

27 wells have static temperature data from western North Dakota (see Plate No. 1).

Logs in the LAS directory with curves GWTEMP\_S have been depth shifted to logs run previously with a gamma ray (GR) reference curve. The GGR curve which is the gamma ray curve run with the temperature log , GWTEMP, was depth shifted to the reference GR. This depth shift was applied to the GWTEMP and GGR curves. The shifted curves are renamed GWTEMP\_S and GGR\_S respectively. Wells with GWTEMP\_S and GGR\_S curves that have been depth shifted are: NIDC Nos. 1140, 2139, 3090, 8005, 8706, 9653, 10103, 10278, 12363, 13132, 13666, 15137, 15593, 15785, 16160, 16182, 16376, 17014, 17043, 17230, and 17317. So, 21 of the 27 wells were depth shifted. Wells 12280, 24779, 25372, and 29567 had no GGR curve to correlate to the reference GR and thus were not depth shifted (depth shifts can be estimated by correlating known temperature break that correlate to formation contacts). Wells 13725 and 16945 appear to have been previously depth shifted as the GGR curve is on depth with the reference GR.

All wells with a GGR curve were logged with the tool owned by the North Dakota Geological Survey and methodology as specified in McDonald (2015). Wells 12280, 24779, and 29567 without the GGR curve were logged with a tool rented from the wellsite service provider.