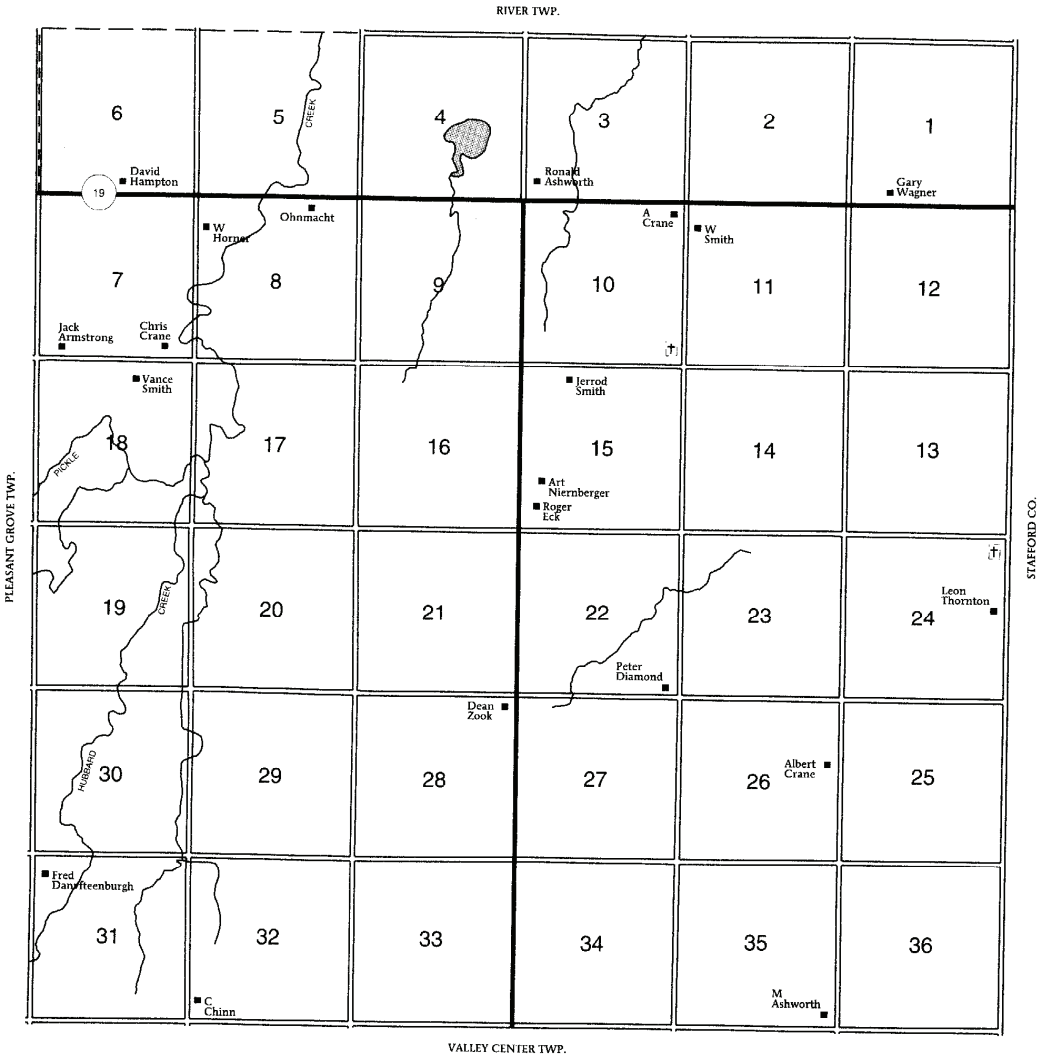T-22-S LOGAN DIRECTORY R-15-W