Bouguer anomaly data were acquired using a Geometrics' G8000 gravimeter. The data were measured over a 30 day period, starting on May 15, 2019. The anomaly grid was produced with a horizontal grid spacing of 200 m and a vertical grid spacing of 100 m. The nominal aircraft altitude was 150 m above ground. The traverse lines were oriented N105°E with orthogonal control lines. The flight path was recovered following post-flight differential GPS data processing. The gravity grid was produced using a fast Fourier transform. Digital versions of this map are available for free download through GEOSCAN 2019. Recommended citation: Boulanger, O., Kiss, F. and Tschirhart, V., 2019. First Vertical Derivative of the Bouguer Gravity Anomaly: Athabasca Basin, Alberta and Saskatchewan, Parts of NTS 74-E, F, K and L; Gravity Gradient...