The best values to use in BRAGFLO for Culebra PRESSURE and Magenta PRESSURE in an intrusion borehole over the center of the WIPP panels are 9.141E5 Pa and 9.465E5 Pa, respectively. These values were derived as follows:

Well C-2737 is a Culebra-Magenta dual-completion well located over the center of the WIPP waste panels. In December 2002, Culebra and Magenta water levels in C-2737 were at elevations of 3016.91 and 3141.61 ft above mean sea level (amsl), respectively (Travis, 2002). The ground surface elevation at C-2737 is 3397.14 ft amsl (Powers, 2002). The Culebra lies from 675 to 698 ft below ground surface (bgs) at C-2737, and the Magenta lies from 561 to 584.3 ft bgs (Powers, 2002). Therefore, the Culebra water level was 306.27 ft above the center of the Culebra (3016.91-(3397.14-((675+698)/2))), and the Magenta water level was 317.12 ft above the center of the Magenta (3141.61-(3397.14-((561+584.3)/2))). Converting to Pascals (# ft x 0.3048 m/ft x 1000 kg/m³ (density of water) x 9.792 m/s² (acceleration of gravity at WIPP; Barrows et al., 1983, p. 30)), 306.27 ft of water equals 9.141 x 10⁵ Pa. Similarly, 317.12 ft of water equals 9.465 x 10⁵ Pa.

References:

