

SRNL-L3200-2015-00008

Date: January 29, 2015

To: M. Layton
B. Lester

From: G. Flach

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Subject: **Nominal water table gradient in the vicinity of the H-Area Tank Farm**

Per your request, the following narrative provides the basis for a nominal water table gradient of 1% in the vicinity of the H-Area Tank Farm, a value that had been recently recommended by SRNL for near-field Performance Assessment analyses. Figure 1 reproduces a portion of Figure 23 from Jones et al. (2010, SRNL-STI-2010-00148), a water table contour map based on 4Q95 well water level data. The contour interval is 5 feet and Figure 1 is annotated with red bars corresponding to 500 ft based on the provided scale bar. Any location on the map where the distance between contour lines is 500 feet is an area where the gradient is 1% (5 ft contour interval / 500 ft separation distance). Several such instances are shown in Figure 1, including two locations in close proximity to the H-Area Tank Farm. Areas where the distance between contour lines is greater than 500 ft correspond to a gradient less than 1%. Inspection of Figure 1 indicates that the water table gradient in the H-Tank Farm is generally 1% or less.

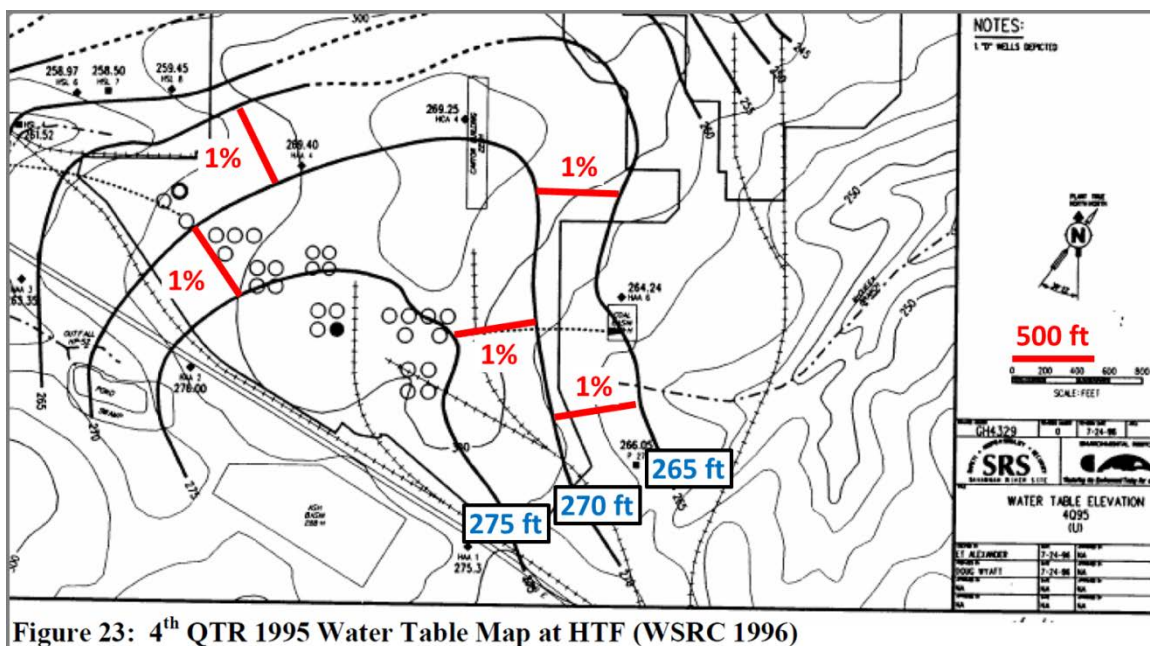


Figure 23: 4th QTR 1995 Water Table Map at HTF (WSRC 1996)

Figure 1. Water table contour map reproduced from SRNL-STI-2010-00148 with annotations.

References

Jones, W. E., M. R. Millings and B. H. Rambo. *Hydrogeologic Data Summary In Support Of The H-Area Tank Farm Performance Assessment*. SRNL-STI-2010-00148, Rev. 0. February 2010.