

There are two wells, 91-A and -K, with screen interval between -73 feet (MSL) and -83 feet (MSL). These wells are believed to be supplied by the Yorktown-Eastover aquifer. The water quality data, shown in Table 3, indicate high levels of hardness, chloride (Cl), iron (Fe) and total dissolved solids (TDS), and slightly elevated levels of boron (B). Water with a hardness of 250 mg/L (as CaCO<sub>3</sub>) is usually considered as very hard. The levels of chloride, iron and TDS were above the secondary limits.

**Table 3 Yorktown-Eastover Aquifer Water Quality**

Parameter	Units	Secondary	91-A	91-K
		MCL		
pH	std. units	6.5-8.5	7.4	7.3
HCO <sub>3</sub> <sup>-</sup>	mg/L		331	
CO <sub>3</sub> <sup>2-</sup>	mg/L		0	
Alkalinity	mg/L as CaCO <sub>3</sub>		271	282
ANC	mg/L		291	276
Hardness	mg/L as CaCO <sub>3</sub>		250	240
Ca <sup>2+</sup>	mg/L		57.4	54.0
Mg <sup>2+</sup>	mg/L		26.3	26.0
Na <sup>+</sup>	mg/L		210	240
K <sup>+</sup>	mg/L		22.8	21.0
Cl <sup>-</sup>	mg/L	250	358	340
SO <sub>4</sub> <sup>2-</sup>	mg/L	250		20.0
SiO <sub>2</sub>	mg/L		42.4	36.0
Fe <sub>T</sub>	mg/L	0.30	5.00	1.00
Mn <sub>T</sub>	mg/L	0.05	0.05	0.012
Al <sub>T</sub>	mg/L	0.05 - 0.20	0.02	0.01
TDS	mg/L	500	1,070	905
Specific Conductance	μS/cm		1620	1620
B – Boron*	mg/L		0.47	0.32

\* Boron -WHO recommended limit of 0.50 mg/L.

The DEQ data set also include two wells which advance deeply into the Upper Potomac aquifer with a screen interval between -1,025 feet (MSL) and -1,088 feet (MSL). The water quality in this aquifer shows decreases in both hardness and iron. However, significantly higher levels of chlorides and TDS in the Upper Potomac make the Yorktown-Eastover aquifer more appealing as a community potable water supply.