



**Barton Springs  
Edwards Aquifer**  
CONSERVATION DISTRICT

November 20, 2019

NAME  
ADDRESS LINE 1  
ADDRESS LINE 2

Dear NAME,

Thank you for participating in the 2019 Fall Neighborhood Site Visits! This letter documents results from the analysis performed on the day of your well visit and provides links to water-quality references, treatment options and useful information. The BSEACD provided a free well visit, a water-level measurement (if possible), and screening for nitrates, pH (acidity), and total dissolved solids (TDS, “saltiness”). Special thanks goes to the Hays Trinity Groundwater District for collaborating—especially in the Saddleridge neighborhood.

### Water-level measurements

First, we estimated water levels with a hand-held sonic meter, then when possible, we verified the measurement with an eline. We were able to take eline measurements at 38 of the 46 wells visited. In the coming weeks, we’ll convert the depth-to-water measurements to water-level elevations and compare them to readings from monitor wells. This Neighborhood Site Visit water level snapshot will help us ensure that our monitoring network is representative of water levels in the neighborhoods and enhance that network where there are data gaps. These data will be useful as we track long-term water level changes due to drought and wet periods. Please note: the water levels in the table below are not corrected for surface elevation; they’re just meant to provide a summary of what was measured.

	Falconwood Summer Mt. Ranch Hugo area	Hilliard area	Saddleridge area	Total
<b>Sites Visited</b>	17	13	16	<b>46</b>
<b>Eline measurements</b>	12	12	14	<b>38</b>
<b>Minimum depth-to-water</b>	203 ft	161 ft	377 ft	--
<b>Maximum depth-to-water</b>	413 ft	283 ft	528 ft	--

Both the BSEACD and HTGCD maintain robust monitor well networks. The following links may be of interest:

- BSEACD Monitor Wells page: [www.bseacd.org/aquifer-science/aquifer-data/](http://www.bseacd.org/aquifer-science/aquifer-data/)

- HTGCD Monitor Wells page: [www.haysgroundwater.com/monitored-wells-data](http://www.haysgroundwater.com/monitored-wells-data)

Newest monitor site with frequent web updates:

- Needmore Index Well page: [www.bseacd.org/aquifer-science/aquifer-data/needmoreindexwell/](http://www.bseacd.org/aquifer-science/aquifer-data/needmoreindexwell/)

### Water-quality measurements

Staff used nitrate/nitrite test strips to screen for a surface water contaminant. The EPA sets primary standards for contaminant levels in drinking water that can endanger human health. High levels of nitrates can indicate contamination by fertilizer, septic systems, or livestock or wildlife feces. Some of the water samples analyzed did contain detectable but low levels of nitrate, but all were below the maximum concentration of 10 parts per million (ppm) deemed acceptable for drinking water by the EPA. All nitrite results were below the EPA standard of 1 ppm.

If you ever notice a change in color, taste, or smell, you should have your well water analyzed by an accredited lab.

Additionally, staff used a Horiba multiparameter probe to measure basic water-chemistry such as pH, conductivity, and total dissolved solids (TDS). PH is a measure of how acidic or basic a liquid is. Traditionally, in limestone-dominated aquifers, pH is buffered close to neutral (7). Conductivity is a measure of how easily electricity can pass through a sample; the more dissolved particles in the water, the higher the conductivity. As water is stored underground, it dissolves particles from its host rocks. How long the water has been underground and how easily the host rock is dissolved influences the conductivity readings. Conductivity can be used to estimate Total Dissolved Solids (TDS). The EPA sets Secondary Standards for contaminants that affect the aesthetic quality (taste, odor, clarity) of drinking water. The EPA Secondary Standard for TDS in drinking water is 500 mg/L or less. Generally, water over 1,000 mg/L is considered brackish or salty. Trinity wells frequently exceed this secondary standard.

	<b>Falconwood Summer Mt. Ranch</b>	<b>Hilliard</b>	<b>Saddleridge</b>	<i>EPA Standard</i>
<b>Nitrate (ppm)</b>	0 - 0.5	0 - 1	0 - 0.5	<i>Below 10</i>
<b>Nitrite (ppm)</b>	0 - 0.15	0 - 0.15	0	<i>Below 1</i>
<b>pH</b>	6.7 - 7.47	6.84 - 7.34	6.55 - 7.53	--
<b>Conductivity (mS/cm)</b>	538 - 2,520	469 - 1,700	605 - 2,230	--
<b>TDS (mg/L)</b>	344 - 1,610	322 - 1,090	372 - 1,420	<i>Secondary standard (aesthetics)</i>

[continued on next page]

Below is a summary of the **2019 Neighborhood Site Visit results** for the well at:

**ADDRESS LINE 1**

**ADDRESS LINE 2**

	<b>Result</b>	Drinking Water Standards & References
E-line Water Level Measurement (ft.)	#	<b>Depth-to-water note: (ANY NOTES FOR FUTURE REFERENCE)</b>
Sonic Meter Water Level Estimate (ft.)	#	
Total Nitrate (ppm)	#	<i>EPA: Should be less than 10 ppm</i>
Nitrite (ppm)	#	<i>EPA: Should be less than 1 ppm</i>
Total Dissolved Solids (ppm)	#	<i>TWON Reference values: Good for plants: less than 525 ppm Permissible for plants: 525-1,400 ppm</i>
pH	#	<i>No EPA standard (not considered a contaminant)</i>

ppm: parts per million; EPA: Environmental Protection Agency; TWON: Texas Well Owner Network

It is our hope that you found this year's Neighborhood Site Visits a useful program in ensuring your well remains a safe source for water. An overview of initial results, discussion of the Trinity Aquifer in Hays County, how to access monitor site information, and well owner tips and tricks will be presented at area libraries. A summary of all Neighborhood Site Visit wells from this year is shown on the following page.

Each year (typically in the spring) we offer a free Well Water Checkup, which provides the same water-quality screening as the well visit plus a bacteria test (provided funding allows). The District and other groundwater agencies recommend private wells be tested annually to ensure the water remains safe for use. As a private water system owner, you are responsible for making sure your water is safe for use.

To stay up-to-date with District programs, we've added you to our monthly eNews list. Additional well owner resources and links (including upcoming programs, presentation info, Well Owner Guide and links to Texas Agrilife Fact Sheets) can be found on our well owners education page: <http://www.bseacd.org/education/well-owners/>

On behalf of all the staff,  
Best regards,



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# 2019 Neighborhood Site Visits

