

Lower Richland County Private Well Sample Results
 Samples Collected September 10, 2018
 November 5, 2018

Analyte	Concentration in milligrams per liter (mg/L) ^a by SCDHEC Laboratory Sample Number						Drinking Water Standard (mg/L)		
	AE17800	AE17801	AE17803	AE17804	AE17805	AE17806	USEPA ^b		South Carolina ^c
							MCL	Public Health Goal	
Bacteriological									
Total Coliform	Present	Absent	Absent	Absent	Present/Present*	Present/Present*	Absence	Not Developed	Absence
<i>Escherichia coli</i>	Absent	Absent	Absent	Absent	Absent	Absent			
General Chemistry									
Alkalinity	<1.0	<1.0	1.5	1.7	<1.0	<1.0	Not Developed		
Calcium	1.1	0.19	0.39	0.27	0.38	0.50	Not Developed		
Chloride	3.2	1.3	3.4	3.4	7.6	6.1	250 (s) ^d	Not Developed	250 (s)
Hardness	7.3	1.0	1.8	1.8	2.4	2.5	Not Developed		
Nitrate/Nitrite	2.4	0.18	0.59	0.53	1.8	1.6	10	10	10
pH (SU) ^e	4.9	5.6	5.4	5.6	5.2	5.3	6.5 - 8.5 (s)	Not Developed	6.5 - 8.5 (s)
Radionuclides and Fluoride									
Gross alpha (pCi/L) ^f	2.63	<3.00	3.21	<3.00	3.41	2.12	15	zero	15
Gross beta (pCi/L)	3.11	2.67	5.09	<4.00	7.25	4.81	30 pCi/L for screening ^g		
Radium-226/-228 (pCi/L)	1.23/1.17	0.184/<1.00	<1.00/0.674	0.245/<1.00	0.949/1.79	0.446/0.813	4 mrem/yr ^f	zero	4 mrem/yr
Σ Radium-226/-228 (pCi/L)	2.40	<1.184	<1.674	<1.245	2.739	1.259	5	zero	5
Uranium (ug/L) ^h	0.162 (est) ^h	<0.200	<0.200	<0.200	<0.200	<0.200	0.030	zero	0.030
Uranium-234 (ug/L)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	Not Developed		
Uranium-235 (ug/L)	<0.070	<0.070	<0.070	<0.070	<0.070	<0.070			
Uranium-236 (ug/L)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050			
Uranium-238 (ug/L)	0.159 (est)	<0.200	<0.200	<0.200	<0.200	<0.200			
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	4.0/2.0 (s)	4.0	4.0/2.0 (s)
Metals									
Antimony	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.006	0.006	0.006
Arsenic	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.010	0	0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.004	0.004	0.004
Cadmium	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.005	0.005	0.005
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.1	0.1	0.1
Copper	0.074	0.17	0.017	0.051	<0.010	0.023	1.3 (AL) ^f /1.0 (s)	1.3	1 (s)
Iron	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.3 (s)	Not Developed	0.3 (s)
Lead	0.0037	<0.0020	0.0053	0.0028	<0.0020	0.0068	0.015 (AL)	zero	0.015 (AL)
Magnesium	1.1	0.14	0.19	0.28	0.36	0.30	Not Developed		
Manganese	0.027	<0.010	<0.010	<0.010	<0.010	0.015	0.05 (s)	Not Developed	0.05 (s)
Nickel	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	Not Developed		
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.05	0.05	0.05
Silver	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	0.1 (s)	Not Developed	0.1 (s)
Thallium	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.002	0.0005	0.002
Zinc	0.025	0.028	<0.010	0.032	<0.010	0.023	5 (s)	Not Developed	5 (s)
Volatile Organic Compounds									
-	None of the 54 analytes in this suite detected [all <0.00050 mg/L except xylene (<0.00100 mg/L)]						Analyte-Specific	-	Analyte-Specific

- a. milligrams per liter (mg/L), or parts per million, except as noted otherwise; ug/L = micrograms per liter, or parts per billion
- b. United States Environmental Protection Agency, Maximum Contaminant Level (MCL) from National Primary Drinking Water Regulations per 40 CFR 141
- c. State Primary Drinking Water Regulation, R.61-58; effective April 25, 2008
- d. (s) = secondary drinking water standard; AL = action level
- e. SU = Standard Unit
- f. pCi/L = picocuries per liter; mrem/yr = millirems per year
- g. USEPA screening value for pCi/L so as not to exceed 4 mrem/yr (EPA 815-R-02-001; February 2002)
- h. est = estimated value; greater than the Detection Limit but less than the Reporting Limit

Other Notes:

- (*) Original sample/re-sample
- < indicates less than the value which follows
- Σ indicates the sum of Radium-226 and Radium-228
- all analyses except radionuclides were performed by SCDHEC labs; radionuclide analyses performed by G.E.L. Labs, SC Certification No. 10120002 (radiochemistry)

Volatile Organic Compound (VOC) Parameters in Lower Richland County Private Well Testing

Benzene	1,1-Dichloroethane	n-Propylbenzene
Bromobenzene	1,2-Dichloroethane	Styrene
Bromochloromethane	cis-1,2-Dichloroethene	1,1,1,2-Tetrachloroethane
Bromomethane	trans-1,2-Dichloroethene	1,1,2,2-Tetrachloroethane
n-Butylbenzene	1,1-Dichloroethylene	Tetrachloroethene
sec-Butylbenzene	1,2-Dichloropropane	Toluene
tert-Butylbenzene	1,3-Dichloropropane	1,2,3-Trichlorobenzene
Carbon tetrachloride	2,2-Dichloropropane	1,2,4-Trichlorobenzene
Chlorobenzene	1,1-Dichloropropene	1,1,1-Trichloroethane
Chloroethane	cis-1,3-Dichloropropene	1,1,2-Trichloroethane
Chloromethane	trans-1,3-Dichloropropene	Trichloroethylene
2-Chlorotoluene	Ethylbenzene	Trichlorofluoromethane
4-Chlorotoluene	Hexachlorobutadiene	1,2,4-Trimethylbenzene
Dibromomethane	Isopropylbenzene	1,3,5-Trimethylbenzene
Dichlorodifluoromethane	p-Isopropyltoluene	1,2,3-Trichloropropane
1,2-Dichlorobenzene	Methyl tert-butyl ether	o-Xylenes
1,3-Dichlorobenzene	Methylene chloride	m,p-Xylenes
1,4-Dichlorobenzene	Naphthalene	Vinyl chloride