

## Southwest North Carolina Ground Water and Surface Water Analyses (Ronald Stoessell, ronstoessell@gmail.com, 985-630-1613)

O<sub>2</sub> MW    Li MW    Na MW    NH<sub>4</sub>-N MW    K MW    Mg MW    Ca MW    Sr MW    SiO<sub>2</sub> MW    F MW    Br MW    Cl MW    NO<sub>3</sub>-N MW    NO<sub>2</sub>-N MW    PO<sub>4</sub>-P MW    SO<sub>4</sub> MW    HCO<sub>3</sub> MW  
 31.9988    6.9390    23.0    14.01    39.1020    24.3120    40.08    87.6200    60.0888    19.0000    79.9090    35.4530    14.0070    14.0070    30.9740    96.062    61.0172

### Ground Water (Wells) Listed South to North in Cherokee County

aq. in metamorphic rock western NC	William Appleton	Date	T in °C	pH	O <sub>2</sub> mg/l	Li mg/l	Na mg/l	NH <sub>4</sub> -N mg/l	K mg/l	Mg mg/l	Ca mg/l	Sr mg/l	SiO <sub>2</sub> mg/l	F mg/l	Br mg/l	Cl mg/l	NO <sub>3</sub> -N mg/l	NO <sub>2</sub> -N mg/l	PO <sub>4</sub> -P mg/l	SO <sub>4</sub> mg/l	Alk as mg/l HCO <sub>3</sub>	elec. bal.	tds, mg/l
Cherokee County, 247 Ranger Hill Rd biotite schist, metasilstone, quartzite E Pz Brasstown Fm	415 ft depth N 35.02974° W 84.12533° well drilled in 1986	9/12/2007	15.7	8.75	4.6	0.006	10.1	0.21	1.12	0.60	10.2	0.03	20.5	0.33	0.020	0.94	b.d.	b.d.	b.d.	6.10	58		108
aq. in metamorphic rock western NC	David Hughes	Date	T in °C	pH	O <sub>2</sub> mg/l	Li mg/l	Na mg/l	NH <sub>4</sub> -N mg/l	K mg/l	Mg mg/l	Ca mg/l	Sr mg/l	SiO <sub>2</sub> mg/l	F mg/l	Br mg/l	Cl mg/l	NO <sub>3</sub> -N mg/l	NO <sub>2</sub> -N mg/l	PO <sub>4</sub> -P mg/l	SO <sub>4</sub> mg/l	Alk as mg/l HCO <sub>3</sub>	elec. bal.	tds, mg/l
Cherokee County 8859 West Hwy 64 sericite schist with metagraywacke Pre C Dean Fm	300 ft depth N 35.03169° W 84.15266° well drilled in 1980s	9/12/2007	15.0	5.4	4.1	0.007	2.67	0.15	1.15	1.30	5.37	0.02	14.3	0.06	0.016	1.58	0.01	b.d.	b.d.	18.9	7.9		53
aq. in metamorphic rock western NC	Kenneth Philips	Date	T in °C	pH	O <sub>2</sub> mg/l	Li mg/l	Na mg/l	NH <sub>4</sub> -N mg/l	K mg/l	Mg mg/l	Ca mg/l	Sr mg/l	SiO <sub>2</sub> mg/l	F mg/l	Br mg/l	Cl mg/l	NO <sub>3</sub> -N mg/l	NO <sub>2</sub> -N mg/l	PO <sub>4</sub> -P mg/l	SO <sub>4</sub> mg/l	Alk as mg/l HCO <sub>3</sub>	elec. bal.	tds, mg/l
Cherokee County, 1093 Crisp Rd quartz sericite schist & phyllite & quartzite E Pz Mineral Bluff Fm	250 ft depth N 35.04155° W 84.03352° well drilled in 1994	8/12/2007	16.0	6.87	2.3	0.003	5.93	0.14	1.53	2.61	6.32	0.06	25.5	0.31	0.007	0.68	0.01	b.d.	b.d.	6.45	46		95
aq. in metamorphic rock western NC	William Stover	Date	T in °C	pH	O <sub>2</sub> mg/l	Li mg/l	Na mg/l	NH <sub>4</sub> -N mg/l	K mg/l	Mg mg/l	Ca mg/l	Sr mg/l	SiO <sub>2</sub> mg/l	F mg/l	Br mg/l	Cl mg/l	NO <sub>3</sub> -N mg/l	NO <sub>2</sub> -N mg/l	PO <sub>4</sub> -P mg/l	SO <sub>4</sub> mg/l	Alk as mg/l HCO <sub>3</sub>	elec. bal.	tds, mg/l
Cherokee County, 67 Chatto Loup staurolite garnet mica schist Pre C Hughes Fm	61 ft depth N 35.04203° W 84.22560° well drilled in 1988	8/04/2007	16.0	7.2	5.7	0.007	5.62	0.05	2.33	1.98	12.3	0.05	27.1	0.21	0.028	1.27	b.d.	b.d.	0.05	15.0	45		111
aq. in metamorphic rock western NC	Bill Johnson	Date	T in °C	pH	O <sub>2</sub> mg/l	Li mg/l	Na mg/l	NH <sub>4</sub> -N mg/l	K mg/l	Mg mg/l	Ca mg/l	Sr mg/l	SiO <sub>2</sub> mg/l	F mg/l	Br mg/l	Cl mg/l	NO <sub>3</sub> -N mg/l	NO <sub>2</sub> -N mg/l	PO <sub>4</sub> -P mg/l	SO <sub>4</sub> mg/l	Alk as mg/l HCO <sub>3</sub>	elec. bal.	tds, mg/l
Cherokee County, 236 Notquyta Rd layered argillite with quartzite E Pz Nantahala Fm	110 ft depth N 35.04314° W 84.12531° well drilled in 2001	8/19/2006	15.7	6.9	3.5	b.d.	5.14	0.15	1.28	2.74	16.0	b.d.	29.3	0.14	1.42	1.42	b.d.	b.d.	b.d.	10.0	62		128
aq. in metamorphic rock western NC	Ron Stoessell	Date	T in °C	pH	O <sub>2</sub> mg/l	Li mg/l	Na mg/l	NH <sub>4</sub> -N mg/l	K mg/l	Mg mg/l	Ca mg/l	Sr mg/l	SiO <sub>2</sub> mg/l	F mg/l	Br mg/l	Cl mg/l	NO <sub>3</sub> -N mg/l	NO <sub>2</sub> -N mg/l	PO <sub>4</sub> -P mg/l	SO <sub>4</sub> mg/l	Alk as mg/l HCO <sub>3</sub>	elec. bal.	tds, mg/l
Cherokee County, 121 Notquyta Rd layered argillite with quartzite E Pz Nantahala Fm	550 ft depth N 35.04710° W 84.12588° well drilled in 2006	8/19/2006	14.7	7.7	3.1	b.d.	8.45	b.d.	1.59	1.40	17.1	b.d.	25.0	0.10	b.d.	1.76	b.d.	b.d.	b.d.	11.9	72		140
aq. in metamorphic rock western NC	Fox Ridge	Date	T in °C	pH	O <sub>2</sub> mg/l	Li mg/l	Na mg/l	NH <sub>4</sub> -N mg/l	K mg/l	Mg mg/l	Ca mg/l	Sr mg/l	SiO <sub>2</sub> mg/l	F mg/l	Br mg/l	Cl mg/l	NO <sub>3</sub> -N mg/l	NO <sub>2</sub> -N mg/l	PO <sub>4</sub> -P mg/l	SO <sub>4</sub> mg/l	Alk as mg/l HCO <sub>3</sub>	elec. bal.	tds, mg/l
Cherokee County, Fox Ridge Subdiv. staurolite & garnet mica schist Pre C Hughes Gap Fm	580 ft depth N 35.07218° W 84.19547° well drilled in 2007	9/13/2007	15.6	8.03	1.5	0.005	9.80	0.12	1.61	0.98	22.10	0.06	20.4	0.79	0.011	1.78	b.d.	b.d.	b.d.	12.3	82		152
aq. in metamorphic rock western NC	Jack Wimpey	Date	T in °C	pH	O <sub>2</sub> mg/l	Li mg/l	Na mg/l	NH <sub>4</sub> -N mg/l	K mg/l	Mg mg/l	Ca mg/l	Sr mg/l	SiO <sub>2</sub> mg/l	F mg/l	Br mg/l	Cl mg/l	NO <sub>3</sub> -N mg/l	NO <sub>2</sub> -N mg/l	PO <sub>4</sub> -P mg/l	SO <sub>4</sub> mg/l	Alk as mg/l HCO <sub>3</sub>	elec. bal.	tds, mg/l
Cherokee County, 1000 Hwy 141 quartz sericite schist & phyllite & quartzite E Pz Mineral Bluff Fm	250 ft depth N 35.08211° W 83.95414° well drilled 1995	7/10/2007	15.8	5.67	6.7	0.003	1.82	0.23	0.44	1.73	4.62	0.02	11.9	0.04	0.014	1.57	0.54	b.d.	0.03	0.31	27		49
aq. in metamorphic rock western NC	Jack Wimpey	Date	T in °C	pH	O <sub>2</sub> mg/l	Li mg/l	Na mg/l	NH <sub>4</sub> -N mg/l	K mg/l	Mg mg/l	Ca mg/l	Sr mg/l	SiO <sub>2</sub> mg/l	F mg/l	Br mg/l	Cl mg/l	NO <sub>3</sub> -N mg/l	NO <sub>2</sub> -N mg/l	PO <sub>4</sub> -P mg/l	SO <sub>4</sub> mg/l	Alk as mg/l HCO <sub>3</sub>	elec. bal.	tds, mg/l
Cherokee County, 1000 Hwy 141 quartz sericite schist & phyllite & quartzite E Pz Mineral Bluff Fm	88 ft depth N 35.08228° W 83.95317° well drilled 1970s	7/10/2007	16.1	5.59	9.2	0.005	1.57	0.21	0.39	1.75	2.46	0.01	8.97	0.03	0.022	2.41	0.73	b.d.	b.d.	0.30	17		35
aq. in metamorphic rock western NC	Jack Wimpey	Date	T in °C	pH	O <sub>2</sub> mg/l	Li mg/l	Na mg/l	NH <sub>4</sub> -N mg/l	K mg/l	Mg mg/l	Ca mg/l	Sr mg/l	SiO <sub>2</sub> mg/l	F mg/l	Br mg/l	Cl mg/l	NO <sub>3</sub> -N mg/l	NO <sub>2</sub> -N mg/l	PO <sub>4</sub> -P mg/l	SO <sub>4</sub> mg/l	Alk as mg/l HCO <sub>3</sub>	elec. bal.	tds, mg/l
Cherokee County, 1015 Hwy 141 quartz sericite schist & phyllite & quartzite E Pz Mineral Bluff Fm	130 ft depth N 35.08394° W 83.94844° well drilled 1997	7/10/2007	16.3	6.19	8.4	0.002	2.43	0.21	0.61	1.05	7.37	0.09	15.5	0.05	0.015	1.73	0.49	b.d.	0.01	0.58	33		62
aq. in metamorphic rock western NC	Wallace Parker	Date	T in °C	pH	O <sub>2</sub> mg/l	Li mg/l	Na mg/l	NH <sub>4</sub> -N mg/l	K mg/l	Mg mg/l	Ca mg/l	Sr mg/l	SiO <sub>2</sub> mg/l	F mg/l	Br mg/l	Cl mg/l	NO <sub>3</sub> -N mg/l	NO <sub>2</sub> -N mg/l	PO <sub>4</sub> -P mg/l	SO <sub>4</sub> mg/l	Alk as mg/l HCO <sub>3</sub>	elec. bal.	tds, mg/l
Cherokee County, 2425 Upper Peachtree Rd biotite schist, metasilstone, quartzite E Pz Brasstown Fm	180 ft depth N 35.10129° W 83.91457° well drilled in 1976	9/1/2007	15.8	5.08	7.2	0.002	1.01	0.07	0.54	0.34	0.67	0.01	8.11	0.02	0.010	0.62	0.07	b.d.	b.d.	0.41	7.4		19
aq. in metamorphic rock western NC	William Rose	Date	T in °C	pH	O <sub>2</sub> mg/l	Li mg/l	Na mg/l	NH <sub>4</sub> -N mg/l	K mg/l	Mg mg/l	Ca mg/l	Sr mg/l	SiO <sub>2</sub> mg/l	F mg/l	Br mg/l	Cl mg/l	NO <sub>3</sub> -N mg/l	NO <sub>2</sub> -N mg/l	PO <sub>4</sub> -P mg/l	SO <sub>4</sub> mg/l	Alk as mg/l HCO <sub>3</sub>	elec. bal.	tds, mg/l
Cherokee County, 7559 Hwy 294 graphitic schist Pre C Wehuty Fm	145 ft depth N 35.10139° W 84.22174° well drilled in 2002	9/12/2007	15.2	7.36	1.5	0.005	4.36	0.12	1.67	1.17	9.94	0.04	25.4	0.14	0.009	0.78	b.d.	b.d.	b.d.	6.46	45		95
aq. in metamorphic rock western NC	Roger Salie	Date	T in °C	pH	O <sub>2</sub> mg/l	Li mg/l	Na mg/l	NH <sub>4</sub> -N mg/l	K mg/l	Mg mg/l	Ca mg/l	Sr mg/l	SiO <sub>2</sub> mg/l	F mg/l	Br mg/l	Cl mg/l	NO <sub>3</sub> -N mg/l	NO <sub>2</sub> -N mg/l	PO <sub>4</sub> -P mg/l	SO <sub>4</sub> mg/l	Alk as mg/l HCO <sub>3</sub>	elec. bal.	tds, mg/l
Cherokee County, 80 Alder Lane graphitic schist Pre C Wehuty Fm	206 ft depth N 35.11404° W 84.23805° well drilled in 1993	8/06/2007	15.6	7.79	0.7	0.006	5.70	0.08	1.68	1.67	22.5	0.09	20.2	0.17	0.011	0.80	b.d.	b.d.	b.d.	16.5	69		138
aq. in metamorphic rock western NC	Wallace Parker	Date	T in °C	pH	O <sub>2</sub> mg/l	Li mg/l	Na mg/l	NH <sub>4</sub> -N mg/l	K mg/l	Mg mg/l	Ca mg/l	Sr mg/l	SiO <sub>2</sub> mg/l	F mg/l	Br mg/l	Cl mg/l	NO <sub>3</sub> -N mg/l	NO <sub>2</sub> -N mg/l	PO <sub>4</sub> -P mg/l	SO <sub>4</sub> mg/l	Alk as mg/l HCO <sub>3</sub>	elec. bal.	tds, mg/l
Cherokee County, Stevens Hollow Rd metagraywacke & mica schist Pre C Hothouse Fm	250 ft depth N 35.11666° W 84.07240° well drilled in 2006	9/1/2007	15.9	6.39	5.3	0.008	7.29	0.08	2.78	2.91	3.71	0.05	35.5	0.20	0.009	0.55	b.d.	b.d.	b.d.	18.5	27		99

aq. in metamorphic rock western NC	Don Johnson	Date	T in °C	pH	O <sub>2</sub> mg/l	Li mg/l	Na mg/l	NH <sub>4</sub> -N mg/l	K mg/l	Mg mg/l	Ca mg/l	Sr mg/l	SiO <sub>2</sub> mg/l	F mg/l	Br mg/l	Cl mg/l	NO <sub>3</sub> -N mg/l	NO <sub>2</sub> -N mg/l	PO <sub>4</sub> -P mg/l	SO <sub>4</sub> mg/l	Alk as mg/l HCO <sub>3</sub>	elec. bal.	tds, mg/l
Cherokee County, 128 Flint Hill Rd	187 ft depth	9/3/2007	15.9	7.13	6.7	0.007	4.98	0.06	2.22	1.17	15.0	0.04	23.7	0.19	0.013	0.66	b.d.	b.d.	b.d.	9.020	56		113
<b>metagrawacke &amp; metaconglomerate</b>	N 35.16792° W 84.25578°	uS/cm		EH mv.	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	meq/l	
<b>Pre C Copper Hill Fm</b>	well drilled in 1996	104		212	0.208	0.0010	0.217	0.004	0.057	0.048	0.373	0.0005	0.394	0.010	0.00016	0.019	0.000	0.000	0.000	0.094	0.92	-0.02	
aq. in metamorphic rock western NC	Eddie Abraira	Date	T in °C	pH	O <sub>2</sub> mg/l	Li mg/l	Na mg/l	NH <sub>4</sub> -N mg/l	K mg/l	Mg mg/l	Ca mg/l	Sr mg/l	SiO <sub>2</sub> mg/l	F mg/l	Br mg/l	Cl mg/l	NO <sub>3</sub> -N mg/l	NO <sub>2</sub> -N mg/l	PO <sub>4</sub> -P mg/l	SO <sub>4</sub> mg/l	Alk as mg/l HCO <sub>3</sub>	elec. bal.	tds, mg/l
Cherokee County, 329 Running Deer Ln	310 ft depth	8/04/2007	20.1	6.72	8.1	0.004	12.5	0.02	1.44	0.61	34.2	0.15	16.3	1.51	0.009	0.85	0.03	b.d.	0.01	71.8	50		189
metagraywacke & mica schist	N 35.19285° W 84.01907°	uS/cm		EH mv.	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	meq/l	
<b>Pre C Hothouse Fm</b>	well drilled in 1988 Cl2 cont.?	156		386	0.254	0.0006	0.544	0.001	0.037	0.025	0.853	0.0017	0.272	0.079	0.00011	0.024	0.002	0.000	0.0005	0.747	0.82	-0.08	

**Surface Water (Springs, Streams, Lakes) Listed South to North in Cherokee County**

Hiwassee Lake	Hiwassee Lake	Date	T in °C	pH	O <sub>2</sub> mg/l	Li mg/l	Na mg/l	NH <sub>4</sub> -N mg/l	K mg/l	Mg mg/l	Ca mg/l	Sr mg/l	SiO <sub>2</sub> mg/l	F mg/l	Br mg/l	Cl mg/l	NO <sub>3</sub> -N mg/l	NO <sub>2</sub> -N mg/l	PO <sub>4</sub> -P mg/l	SO <sub>4</sub> mg/l	Alk as mg/l HCO <sub>3</sub>	elec. bal.	tds, mg/l
Cherokee County, Panther Top Rd, SR 1303	surface of lake	8/04/2007	30.0	7.31	7.9	b.d.	1.60	0.10	0.87	0.69	1.91	0.01	5.11	0.04	0.018	1.54	0.01	b.d.	b.d.	2.00	10.5		24
sericite schist with metagraywacke	N 35.07637° W 84.11311°	uS/cm		EH mv.	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	meq/l	
<b>Pre C Dean Fm</b>	near campground on lake inlet	27		332	0.246	0.000	0.070	0.007	0.022	0.028	0.048	0.0001	0.085	0.002	0.00023	0.043	0.000	0.000	0.000	0.021	0.17	-0.01	
sp. in metamorphic rock western NC	Jack Wimpey	Date	T in °C	pH	O <sub>2</sub> mg/l	Li mg/l	Na mg/l	NH <sub>4</sub> -N mg/l	K mg/l	Mg mg/l	Ca mg/l	Sr mg/l	SiO <sub>2</sub> mg/l	F mg/l	Br mg/l	Cl mg/l	NO <sub>3</sub> -N mg/l	NO <sub>2</sub> -N mg/l	PO <sub>4</sub> -P mg/l	SO <sub>4</sub> mg/l	Alk as mg/l HCO <sub>3</sub>	elec. bal.	tds, mg/l
Cherokee County, 1015 Hwy 141	out of springbox	7/10/07	15.0	5.09	8.2	0.002	1.28	0.17	0.17	0.48	0.67	0.01	9.06	0.03	0.013	1.24	0.01	b.d.	b.d.	0.85	9.1		23
quartz sericite schist & phyllite & quartzite	N 35.08356° W 83.94872°	uS/cm		EH mv.	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	meq/l	
<b>E Pz Brasstown Fm</b>	spring below house, feeds pond	16		449	0.255	0.0003	0.056	0.012	0.004	0.020	0.017	0.0001	0.151	0.002	0.00016	0.035	0.001	0.000	0.000	0.009	0.15	-0.06	
Peachtree Creek	Peachtree Creek	Date	T in °C	pH	O <sub>2</sub> mg/l	Li mg/l	Na mg/l	NH <sub>4</sub> -N mg/l	K mg/l	Mg mg/l	Ca mg/l	Sr mg/l	SiO <sub>2</sub> mg/l	F mg/l	Br mg/l	Cl mg/l	NO <sub>3</sub> -N mg/l	NO <sub>2</sub> -N mg/l	PO <sub>4</sub> -P mg/l	SO <sub>4</sub> mg/l	Alk as mg/l HCO <sub>3</sub>	elec. bal.	tds, mg/l
Cherokee County, near Upper Peachtree Rd	6 inch depth in creek	9/1/2007	15.8	6.11	9.0	0.001	1.97	0.06	0.75	0.58	1.31	0.01	11.1	0.03	0.009	1.10	0.14	b.d.	b.d.	1.62	9.5		28
biotite schist, metasilstone, quartzite	N 35.10147° W 83.91390°	uS/cm		EH mv.	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	meq/l	
<b>E Pz Brasstown Fm</b>	near Upper Peachtree	21		408	0.280	0.0001	0.086	0.004	0.019	0.024	0.033	0.0001	0.185	0.002	0.00011	0.031	0.010	0.000	0.000	0.017	0.16	-0.01	
springbox in metamorphic rock western NC	Ron Stoessell	Date	T in °C	pH	O <sub>2</sub> mg/l	Li mg/l	Na mg/l	NH <sub>4</sub> -N mg/l	K mg/l	Mg mg/l	Ca mg/l	Sr mg/l	SiO <sub>2</sub> mg/l	F mg/l	Br mg/l	Cl mg/l	NO <sub>3</sub> -N mg/l	NO <sub>2</sub> -N mg/l	PO <sub>4</sub> -P mg/l	SO <sub>4</sub> mg/l	Alk as mg/l HCO <sub>3</sub>	elec. bal.	tds, mg/l
Cherokee County, Hwy 294	out of springbox	6/24/2007	16.3	5.37	8.7	b.d.	1.27	0.12	0.46	0.38	0.48	b.d.	7.81	0.03	b.d.	0.81	0.01	b.d.	b.d.	1.58	6.4		19
graphitic schist	N 35.11150° W 84.23575°	uS/cm		EH mv.	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	meq/l	
<b>Pre C Wehuttu Fm</b>	in coppertail hollow	13		458	0.271	0.000	0.055	0.009	0.012	0.016	0.012	0.0000	0.130	0.0016	0.00000	0.023	0.001	0.000	0.0000	0.016	0.11	-0.03	
Thompson Creek	Thompson Creek	Date	T in °C	pH	O <sub>2</sub> mg/l	Li mg/l	Na mg/l	NH <sub>4</sub> -N mg/l	K mg/l	Mg mg/l	Ca mg/l	Sr mg/l	SiO <sub>2</sub> mg/l	F mg/l	Br mg/l	Cl mg/l	NO <sub>3</sub> -N mg/l	NO <sub>2</sub> -N mg/l	PO <sub>4</sub> -P mg/l	SO <sub>4</sub> mg/l	Alk as mg/l HCO <sub>3</sub>	elec. bal.	tds, mg/l
Cherokee County, near Hwy 294	4 inch depth in creek	6/24/2007	20.5	5.92	7.9	b.d.	1.77	0.10	0.76	0.70	1.61	b.d.	9.43	0.04	b.d.	1.58	0.19	b.d.	0.01	1.61	11		29
graphitic schist	N 35.11189° W 84.23408°	uS/cm		EH mv.	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	meq/l	
<b>Pre C Wehuttu Fm</b>	40' upstream of bridge	23		406	0.248	0.000	0.077	0.007	0.019	0.029	0.040	0.0000	0.157	0.0021	0.00000	0.044	0.014	0.000	0.0003	0.017	0.18	-0.04	
Spring in metamorphic rock western NC	Ron Stoessell	Date	T in °C	pH	O <sub>2</sub> mg/l	Li mg/l	Na mg/l	NH <sub>4</sub> -N mg/l	K mg/l	Mg mg/l	Ca mg/l	Sr mg/l	SiO <sub>2</sub> mg/l	F mg/l	Br mg/l	Cl mg/l	NO <sub>3</sub> -N mg/l	NO <sub>2</sub> -N mg/l	PO <sub>4</sub> -P mg/l	SO <sub>4</sub> mg/l	Alk as mg/l HCO <sub>3</sub>	elec. bal.	tds, mg/l
Cherokee County, into pond near Hwy 294	2 ft depth in pond	6/24/2007	19.7	5.31	3.9	b.d.	1.08	0.11	0.84	0.67	1.74	b.d.	7.55	0.03	b.d.	1.00	0.01	b.d.	0.01	1.54	12		26
graphitic schist	N 35.11231° W 84.23464°	uS/cm		EH mv.	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	meq/l	
<b>Pre C Wehuttu Fm</b>	northwest side of pond	21		456	0.122	0.000	0.047	0.008	0.021	0.028	0.043	0.0000	0.126	0.0016	0.00000	0.028	0.001	0.000	0.0002	0.016	0.20	-0.04	
Spring entering Thompson Creek	Ron Stoessell	Date	T in °C	pH	O <sub>2</sub> mg/l	Li mg/l	Na mg/l	NH <sub>4</sub> -N mg/l	K mg/l	Mg mg/l	Ca mg/l	Sr mg/l	SiO <sub>2</sub> mg/l	F mg/l	Br mg/l	Cl mg/l	NO <sub>3</sub> -N mg/l	NO <sub>2</sub> -N mg/l	PO <sub>4</sub> -P mg/l	SO <sub>4</sub> mg/l	Alk as mg/l HCO <sub>3</sub>	elec. bal.	tds, mg/l
Cherokee County, into Thompson Creek	2 inch depth in spring	6/24/2007	16.8	5.56	7.2	b.d.	1.03	0.08	0.60	0.48	0.74	b.d.	7.93	0.02	b.d.	0.80	0.03	b.d.	0.49	1.87	6.1		20
graphitic schist	N 35.11236° W 84.23464°	uS/cm		EH mv.	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	meq/l	
<b>Pre C Wehuttu Fm</b>	SW side of Creek	16		433	0.226	0.000	0.045	0.006	0.015	0.020	0.018	0.0000	0.132	0.0011	0.00000	0.023	0.002	0.000	0.0159	0.019	0.10	-0.04	
Shoal creek	Shoal Creek	Date	T in °C	pH	O <sub>2</sub> mg/l	Li mg/l	Na mg/l	NH <sub>4</sub> -N mg/l	K mg/l	Mg mg/l	Ca mg/l	Sr mg/l	SiO <sub>2</sub> mg/l	F mg/l	Br mg/l	Cl mg/l	NO <sub>3</sub> -N mg/l	NO <sub>2</sub> -N mg/l	PO <sub>4</sub> -P mg/l	SO <sub>4</sub> mg/l	Alk as mg/l HCO <sub>3</sub>	elec. bal.	tds, mg/l
Cherokee County, near 80 Alder Lane	6 inch depth in creek	39300.0	22.1	6.23	8.8	b.d.	1.46	0.11	0.86	0.45	0.99	b.d.	9.25	0.03	0.014	3.28	0.06	b.d.	b.d.	1.04	7.0		24
graphitic schist	N 35.11430° W 84.24136°	uS/cm		EH mv.	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	meq/l	
<b>Pre C Wehuttu Fm</b>	upstream of concrete bridge	20		390	0.273	0.000	0.064	0.008	0.022	0.019	0.025	0.0000	0.154	0.0016	0.00018	0.093	0.005	0.000	0.0000	0.011	0.11	-0.06	
sp. in metamorphic rock western NC	Don Johnson	Date	T in °C	pH	O <sub>2</sub> mg/l	Li mg/l	Na mg/l	NH <sub>4</sub> -N mg/l	K mg/l	Mg mg/l	Ca mg/l	Sr mg/l	SiO <sub>2</sub> mg/l	F mg/l	Br mg/l	Cl mg/l	NO <sub>3</sub> -N mg/l	NO <sub>2</sub> -N mg/l	PO <sub>4</sub> -P mg/l	SO <sub>4</sub> mg/l	Alk as mg/l HCO <sub>3</sub>	elec. bal.	tds, mg/l
Cherokee County, near River Hill Rd	1 ft depth in springbox	9/3/2007	18.5	6.52	4.9	0.004	1.30	0.06	2.80	1.85	32.2	0.06	14.4	0.07	0.018	0.76	0.08	b.d.	b.d.	5.21	108		166
<b>metagrawacke &amp; metaconglomerate</b>	N 35.1535° W 84.24512°	uS/cm		EH mv.	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	meq/l	
<b>Pre C Copper Hill Fm</b>	springbox near barn	173		356	0.152	0.0006	0.057	0.004	0.072	0.076	0.803	0.0007	0.240	0.0037	0.00023	0.021	0.006	0.000	0.0000	0.054	1.76	-0.01	
Appalachia Lake	Appalachia Lake	Date	T in °C	pH	O <sub>2</sub> mg/l	Li mg/l	Na mg/l	NH <sub>4</sub> -N mg/l	K mg/l	Mg mg/l	Ca mg/l	Sr mg/l	SiO <sub>2</sub> mg/l	F mg/l	Br mg/l	Cl mg/l	NO <sub>3</sub> -N mg/l	NO <sub>2</sub> -N mg/l	PO <sub>4</sub> -P mg/l	SO <sub>4</sub> mg/l	Alk as mg/l HCO <sub>3</sub>	elec. bal.	tds, mg/l
Cherokee County, near Flint Hill Rd	1 ft depth in lake	9/3/2007	23.7	6.79	8.9	b.d.	1.7	0.07	0.99	0.78	1.73	0.01	5.67	0.03	0.014	1.40	0.04	b.d.	b.d.	2.03	10.5		25
<b>metagrawacke &amp; metaconglomerate</b>	N 35.16850° W 84.25581°	uS/cm		EH mv.	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	mM	meq/l	
<b>Pre C Copper Hill Fm</b>	southern boundary of lake	25		327	0.278	0.000	0.075	0.005	0.025	0.032	0.043	0.0001	0.094	0.0016	0.00018	0.039	0.003	0.000	0.0000	0.021	0.17	0.00	
Hanging Dog Creek	Hanging Dog Creek	Date	T in °C	pH	O <sub>2</sub> mg/l	Li mg/l	Na mg/l	NH <sub>4</sub> -N mg/l	K mg/l	Mg mg/l	Ca mg/l	Sr mg/l	SiO <sub>2</sub> mg/l	F mg/l	Br mg/l	Cl mg/l	NO <sub>3</sub> -N mg/l	NO <sub>2</sub> -N mg/l	PO <sub>4</sub> -P mg/l	SO <sub>4</sub> mg/l	Alk as mg/l HCO <sub>3</sub>	elec. bal.	tds, mg/l
Cherokee Co., intersect of Running Deer Ln																							