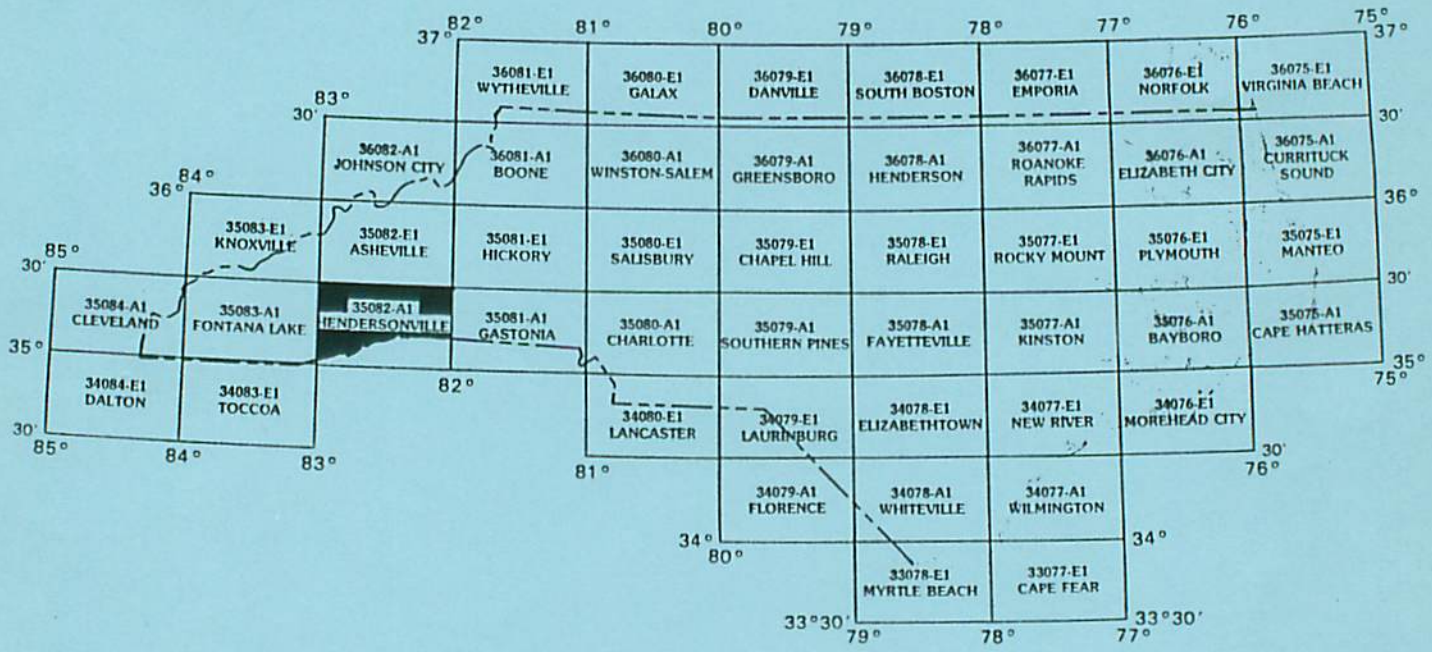
Listing of Concentrations of Variables of Stream Sediment, Stream Water, and Groundwater for the Hendersonville 30 x 60 - Minute Quadrangle -NURE Database

by
Robert H. Carpenter and Jeffrey C. Reid



NORTH CAROLINA GEOLOGICAL SURVEY
OPEN-FILE REPORT 93-8

State of North Carolina
James B. Hunt, Jr., Governor

Department of Environment, Health and Natural Resources
Jonathan B. Howes, Secretary
Division of Land Resources
Charles H. Gardner,
Director and State Geologist

July, 1993

GEOLOGICAL SURVEY SECTION

The Geological Survey Section examines, surveys and maps the geology, mineral resources, and topography of the State to encourage the wise conservation and use of these resources by industry, commerce, agriculture and government agencies for the general welfare of the citizens of North Carolina.

The Section conducts basic and applied research projects in environmental geology, mineral resources exploration and systematic geologic mapping. Services include identifying rock and mineral samples submitted by citizens and providing consulting services and specially prepared reports to agencies that need geological information.

The geological Survey section publishes Bulletins, Economic Papers, Information Circulars, Educational Series, Geologic Maps and Special Publications. For a list of publications or more information about the Section contact the Geological Survey Section, Division of Land Resources, at Post Office Box 27687, Raleigh, North Carolina 27611-7687.

Jeffrey C. Reid
Chief Geologist

Listing of Concentrations of Variables of Stream Sediment, Stream Water, and Groundwater for the Hendersonville 30 x 60 - Minute Quadrangle -NURE Database

by
Robert H. Carpenter and Jeffrey C. Reid

INTRODUCTION

This report is a compilation of geochemical data for stream sediment and groundwater for the Hendersonville 30 x 60 - minute quadrangle (Figure 1). Maps and tables were prepared from statewide data obtained by the Savannah River Laboratory under sponsorship of the U.S. Dept. of Energy in its National Uranium Resources Evaluation (NURE) program (Sargent and others, 1982). Sampling and analysis were performed during the period 1976 - 1980.

Because of the large size of the database, the North Carolina Geological Survey is presenting the database in both statewide and 30 x 60 - minute quadrangle formats. Statewide formats currently available include atlases of stream sediment and hydrogeochemical data which contain maps showing quartile distribution of concentrations of variables (Reid, 1991; Reid, 1993). Reid and Carpenter (1993a, 1993b) present listings of concentrations of variables which equal or exceed the 90th percentile (and pH and conductivity below the 10th percentile) for stream sediment and groundwater-stream water.

This open-file report is part of a series of reports that present sample-location maps and listings of analyses of all variables in all of the 30 x 60 - minute quadrangles that comprise the state of North Carolina. Subsequent reports will review the NURE data for individual 30 x 60 - minute quadrangles. These reviews will contain the following: 1) maps showing concentrations of all the variables in up to eight class intervals; 2) geologic review of the quadrangle and discussion of relationship of geochemical variables to rock units and structural features; 3) review of mineral resources and discussion of relationship of geochemical variables to mineral occurrences; and 4) discussion of outliers that may relate to anthropogenic contamination.

In this report, site-location maps use state boundaries, county boundaries and 7-1/2 - minute quadrangle boundaries as references to site-locations. The North Carolina Index to Topographic and Other Map Coverage, prepared by the U.S. Geological Survey, is a useful reference document. The List of Publications of the North Carolina Geological Survey indicates areas within the state for which some geologic and geophysical maps, and reports, are available.

Listings in this report are in the same basic format as those presented in microfiche by Sargent

and others (1982). Column 1 lists the laboratory numbers applied to each analyzed sample. Column 2 lists site identification codes. The first two characters are the codes for the county name. The next three digits are sample numbers. They are listed sequentially for each county in the order they were collected. The next two columns list the latitude and longitude of the sampling sites in decimal degree format. The remaining columns are data columns and analyses are given in parts per million (stream sediment) and parts per billion (groundwater). In these columns, a minus (-) sign indicates that a value is below the detection limit. If background is high, and an accurate estimate of minimum detection limit could not be made, a period (.) indicates that the element was not detected and that the detection limit is unusually high. Missing data are denoted by the letter "M". For gold, analyses are listed only for those samples in which gold was detected. For arsenic, a value of 0 is assigned for samples in which arsenic was analyzed, but not detected.

For stream sediment, two listings are presented. The first listing is for elements analyzed by neutron activation as well as field measurements for pH and conductivity of stream water. Variables included in this listing are pH, conductivity, uranium (U), thorium (Th), hafnium (Hf), cerium (Ce), iron (Fe), manganese (Mn), sodium (Na), scandium (Sc), titanium (Ti), vanadium (V), aluminum (Al), dysprosium (Dy), europium (Eu), lanthanum (La), samarium (Sm), ytterbium (Yb), and lutetium (Lu). The second listing is for supplemental elements analyzed by a variety of techniques. These include extractable uranium (Ux), silver (Ag), arsenic (As), barium (Ba), beryllium (Be), calcium (Ca), cobalt (Co), chromium (Cr), copper (Cu), potassium (K), lithium (Li), magnesium (Mg), molybdenum (Mo), niobium (Nb), nickel (Ni), phosphorous (P), lead (Pb), selenium (Se), tin (Sn), strontium (Sr), tungsten (W), yttrium (Y), and zinc (Zn). Stream sediment analyses are for the minus 100 mesh fraction (< 149 microns) unless otherwise noted.

Groundwater, normally samples of water from wells, was also analyzed by neutron activation. Field measurements were made of pH and conductivity. Variables included in listings of groundwater analyses include pH, conductivity, uranium (U), bromine (Br), chlorine (Cl), fluorine (F), magnesium (Mg), manganese (Mn), sodium (Na), vanadium (V), uranium/conductivity, aluminum (Al), and dysprosium (Dy). Stream water was also analyzed for these variables at 295 sites in North Carolina. Listings for stream water are included for areas in which these sites are located.

Although the data was acquired with considerable attention to quality control, some errors exist. These include uncertainties of sample locations due to the use of county road maps as base maps for field use and digitizing sampling sites. Malfunction of field equipment used in measurement of pH and conductivity has also been recognized in some areas. Some of the analyses are also in error. Some of these errors are apparent when concentrations show systematic "breaks" at county boundaries. This suggests that conditions of analysis for different batches of samples were not uniform. In general, analyses of stream sediment by neutron activation are more reliable than analyses of sediment by other supplemental methods.

For a number of counties, supplemental analyses were not made. Thus elements of interest for mineral exploration and environmental geochemistry are lacking for large areas.

REFERENCES

Reid, Jeffrey C., 1991 (revised 1993), A geochemical atlas of North Carolina: North Carolina Geological Survey, Bulletin 93, text plus 45 plates.

Reid, Jeffrey C., 1993, A hydrogeochemical atlas of North Carolina: North Carolina Geological Survey, Bulletin 94, text plus 26 plates.

Reid, Jeffrey C., and Carpenter, Robert H.,1993a, Listings of concentrations (stream sediments) of variables which equal or exceed the 90th percentile, and pH and conductivity below the 10th percentile in the North Carolina portion of the NURE database: North Carolina Geological Survey, Open-File Report 93-1, introductory text plus 178 pages of data.

Reid, Jeffrey C., and Carpenter, Robert H., 1993b, Listing of concentrations (groundwater and stream water) of variables which equal or exceed the 90th percentile, and pH and conductivity below the 10th percentile in the North Carolina portion of the NURE data base: North Carolina Geological Survey, Open-File Report 93-2, introductory text plus 162 pages of data.

Sargent, K.A., Cook, J.R., and Fay, W.M., 1982, Data report: North and South Carolina, National Uranium Resource Evaluation Program, Hydrochemical and stream sediment reconnaissance: E.I. du Pont de Nemours & Co., Savannah River Laboratory, Aiken, S.C., under contract to the U.S. Dept of Energy, contract DE-AC09-76SR000001 (DPST-81-146-22; GBJX-102), 45 p. plus microfiche.

CONTENTS

COUNTY CODES

Code	County
BN	Buncombe
HE	Henderson
HY	Haywood
JA	Jackson
PO	Polk
RU	Rutherford
TR	Transylvania

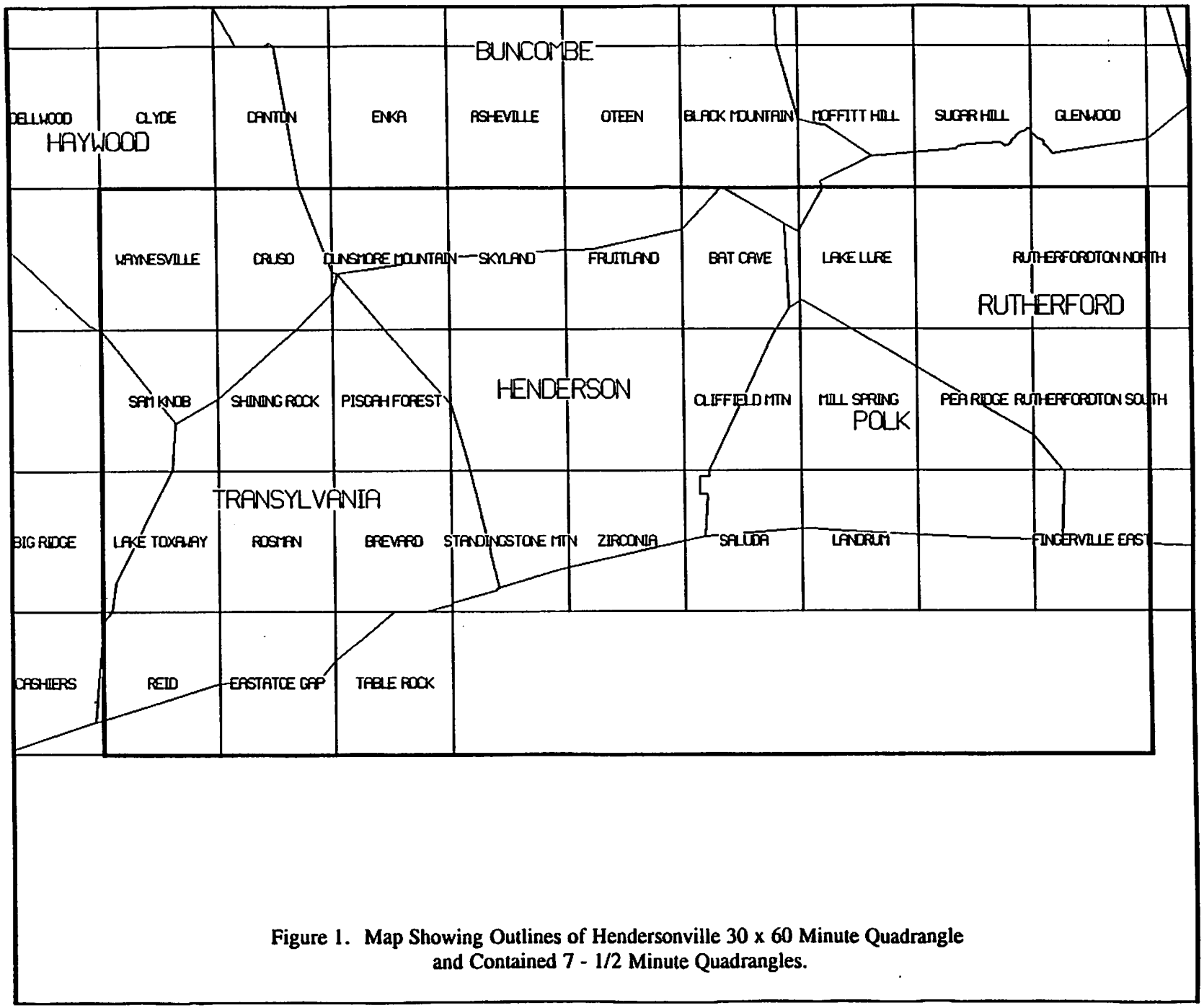


Figure 1. Map Showing Outlines of Hendersonville 30 x 60 Minute Quadrangle and Contained 7 - 1/2 Minute Quadrangles.

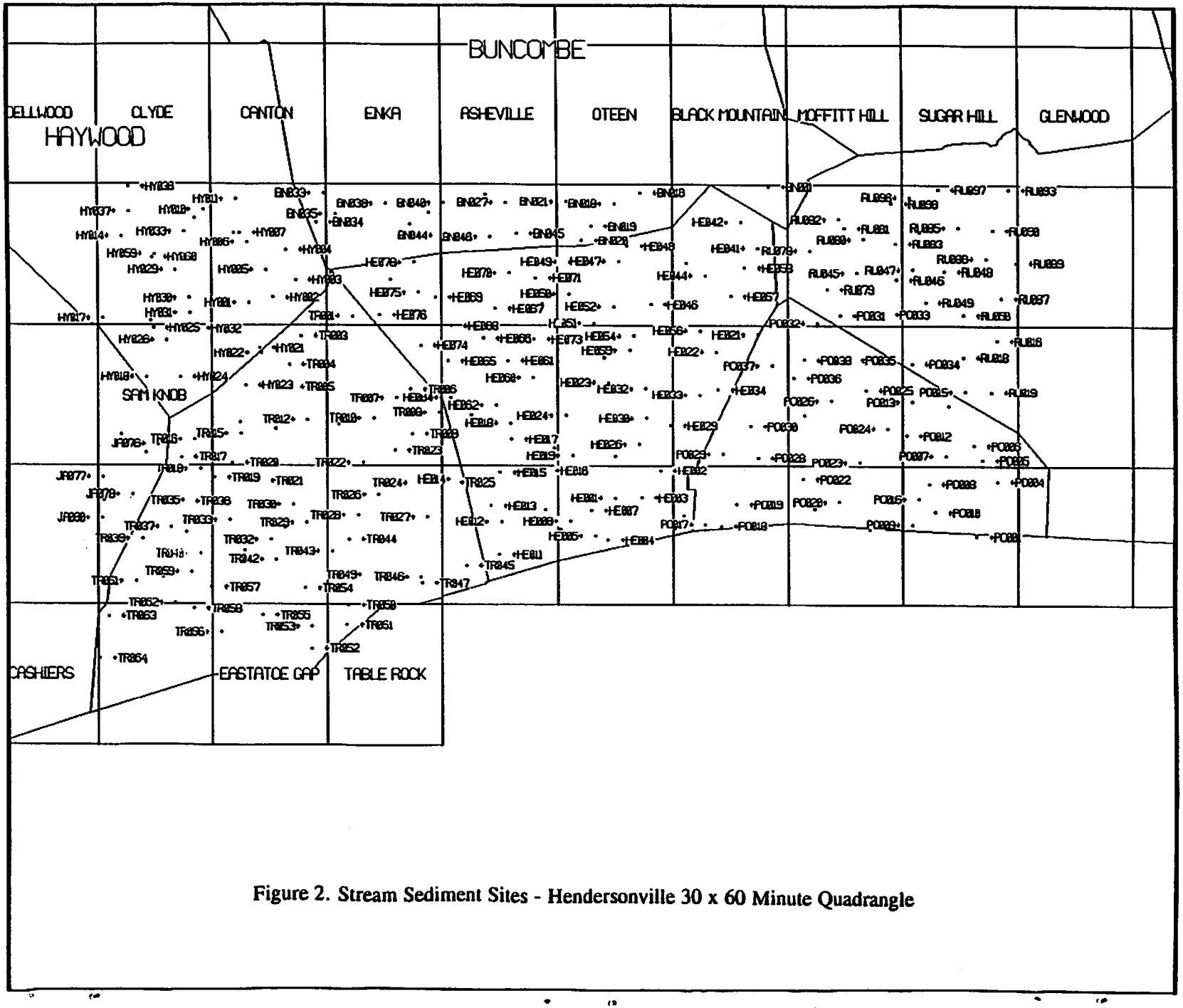


Figure 2. Stream Sediment Sites - Hendersonville 30 x 60 Minute Quadrangle

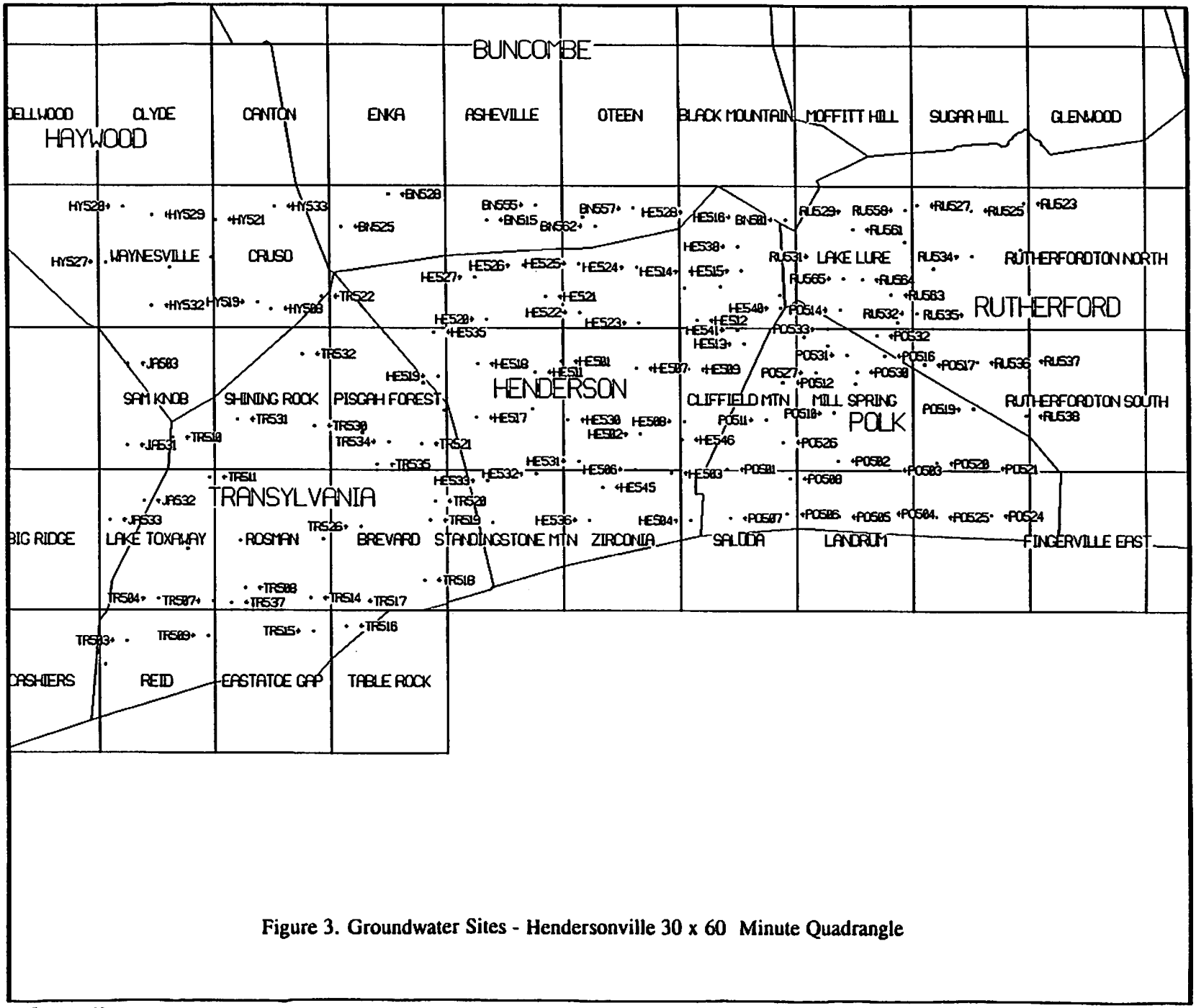


Figure 3. Groundwater Sites - Hendersonville 30 x 60 Minute Quadrangle

HENDERSON 100K SHEET-STREAM SEDIMENT

Lab #	County ID	Lat	Long	pH	Cond um/cm	U ppm	Th ppm	Hf ppm	Al ppm	Ce ppm	Fe ppm	Mn ppm	Na ppm	Sc ppm	Ti ppm	V ppm	Dy ppm	Eu ppm	La ppm	Sm ppm	Yb ppm	Lu ppm	Au ppm
597	BN001	35.4983	82.2706	7.6	27	3.8	15	67	69500	143	41200	560	11000	28.1	4900	60	5.5	4.7	60	9	6.8	1.2	
612	BN016	35.4927	82.4099	7.3	36	5.7	4	58	52300	59	15900	370	9500	11.5	2700	30	M	-1.1	24	4	5.2	0.4	
614	BN018	35.4830	82.4381	7.4	39	4.2	5	42	36600	64	24100	430	3100	7.4	M	40	M	4.4	36	7	3.5	1.1	
615	BN019	35.4629	82.4634	7.7	40	8.2	42	85	39800	287	32900	1350	6400	12.0	9800	80	16.2	2.8	131	20	11.9	1.7	
616	BN020	35.4504	82.4740	7.4	38	3.7	6	35	44500	64	15800	430	6900	8.0	4200	40	3.1	-1.0	25	5	M	0.6	
617	BN021	35.4849	82.4906	7.6	40	5.9	51	152	48100	344	63600	860	5000	24.4	11400	60	M	2.4	145	26	16.7	2.4	
623	BN027	35.4839	82.5552	7.5	14	4.0	13	51	52200	162	31900	670	4100	10.9	10100	60	19.1	M	60	16	14.8	0.8	
629	BN033	35.4917	82.7523	7.4	21	3.4	15	20	45000	92	22000	500	4300	6.8	5200	50	25.9	-1.0	56	5	2.1	0.3	
630	BN034	35.4660	82.7608	7.4	19	9.8	59	89	38300	421	30200	1260	4800	10.1	15100	50	52.5	2.0	162	25	M	0.8	
631	BN035	35.4734	82.7400	7.4	13	4.7	30	25	62800	177	39400	960	6100	10.8	5700	60	51.9	4.8	89	15	4.6	0.5	
632	BN036	35.4845	82.7249	7.3	16	12.9	74	91	33700	458	29200	1030	2800	8.5	12200	40	34.3	M	246	57	M	1.2	
634	BN038	35.4827	82.6856	7.3	13	10.6	123	191	42600	592	54500	840	4300	17.0	10500	50	62.9	M	299	33	7.9	1.9	
636	BN040	35.4833	82.6228	7.2	20	6.4	30	81	31300	150	25500	660	2600	8.5	11000	50	43.4	-1.3	82	24	M	0.7	
637	BN041	35.4751	82.6388	7.4	12	4.7	19	50	44100	159	33800	610	3800	9.4	8500	60	55.5	M	59	17	M	-0.5	
638	BN042	35.4646	82.6600	7.3	10	2.9	15	29	60100	99	28400	970	13400	10.0	8500	70	59.2	1.7	48	9	2.6	0.6	
639	BN043	35.4906	82.5769	7.2	31	7.9	15	115	43100	110	28500	600	2600	11.0	7000	60	35.3	-1.0	55	9	5.4	1.0	
640	BN044	35.4545	82.6205	7.2	12	6.0	12	91	54300	111	28300	790	4900	10.2	14300	70	51.4	-1.1	30	8	5.6	1.0	
641	BN045	35.4564	82.5439	7.2	24	10.1	83	194	44300	604	125400	1400	1800	17.0	10700	110	26.8	7.1	267	36	22.7	4.2	
642	BN046	35.4531	82.5719	7.4	24	3.0	8	32	54100	58	30100	500	3200	11.0	6500	60	16.4	3.2	30	10	5.2	0.7	
2716	HE001	35.2207	82.4381	6.9	23	7.7	17	39	198200	91	27800	1720	14600	13.8	9600	130	34.6	-1.0	49	8	12.9	2.3	
2717	HE002	35.2456	82.3887	6.8	20	5.7	14	17	85100	126	21900	700	13800	11.9	3400	50	10.2	3.9	52	9	1.8	0.6	
2718	HE003	35.2211	82.4096	7.3	20	11.4	43	26	47100	273	21000	550	7700	7.1	3400	60	17.6	1.2	116	17	6.7	1.0	
2719	HE004	35.1828	82.4462	6.7	28	17.8	38	118	46700	219	13000	400	4200	11.4	2200	30	19.6	-1.5	92	26	14.8	2.7	
2720	HE005	35.1865	82.4597	6.8	21	13.1	126	62	56200	678	28500	910	9200	15.5	1800	20	25.7	5.2	330	37	27.9	4.6	
2721	HE006	35.1921	82.4977	7.0	14	8.1	20	25	153800	99	15800	2260	28700	8.3	13300	130	18.8	2.0	45	5	3.9	1.1	
2722	HE007	35.2094	82.4642	6.7	18	6.8	14	23	66400	52	19100	460	9200	8.6	M	60	65.8	1.0	25	3	2.8	0.6	
2723	HE008	35.1998	82.4865	7.2	19	7.0	13	25	50300	68	38900	3050	35500	17.3	13200	330	45.3	2.0	38	4	7.0	1.0	
2724	HE009	35.2104	82.5137	7.2	19	2.2	10	6	64400	64	37800	980	15800	18.4	5500	160	M	1.5	20	3	3.2	0.6	
2725	HE010	35.2007	82.5175	7.3	16	4.4	12	24	51400	65	21100	960	10200	16.7	2200	70	6.8	2.1	33	4	4.1	0.8	
2726	HE011	35.1694	82.5632	7.2	10	10.5	19	11	61600	39	16500	2220	M	9.6	M	80	M	-1.0	19	2	4.1	0.8	
2727	HE012	35.1992	82.5609	6.1	15	17.5	35	25	69500	36	12000	990	19800	5.5	6000	30	M	2.5	27	2	6.3	1.2	
2728	HE013	35.2134	82.5723	6.7	10	13.9	20	17	66900	45	8100	450	11400	4.5	2000	10	M	0.5	8	1	1.6	0.8	
2729	HE014	35.2373	82.6023	6.9	19	11.7	13	72	45300	25	12500	420	7200	6.5	3200	30	5.2	-1.0	14	2	5.0	1.2	
2730	HE015	35.2437	82.5622	7.1	20	9.1	12	64	73500	41	12900	600	11200	6.6	4400	30	M	0.7	22	3	3.9	1.0	

HENDERSON 100K SHEET-STREAM SEDIMENT

Lab #	County ID	Lat	Long	pH	Cond um/cm	U ppm	Th ppm	Hf ppm	Al ppm	Ce ppm	Fe ppm	Mn ppm	Na ppm	Sc ppm	Ti ppm	V ppm	Dy ppm	Eu ppm	La ppm	Sm ppm	Yb ppm	Lu ppm	Au ppm
2731	HE016	35.2454	82.5166	6.9	28	23.5	33	214	59400	73	27100	650	9900	15.8	3900	30	M	-1.3	40	4	25.6	5.0	
2732	HE017	35.2739	82.5496	7.1	16	6.5	9	41	56800	40	19600	290	9200	8.2	M	30	M	1.1	19	2	4.2	0.7	
2733	HE018	35.2883	82.5503	6.9	18	7.1	6	27	67300	33	11200	270	8500	5.9	3300	20	M	-1.0	16	2	1.8	0.3	
2734	HE019	35.2592	82.4844	6.9	22	9.9	13	67	167600	28	10600	910	40400	8.6	8800	60	M	1.0	17	2	2.6	0.5	
2735	HE020	35.2661	82.5042	7.1	16	7.6	10	63	47200	26	14900	380	4800	6.2	3700	20	4.8	-1.9	18	2	5.3	0.9	0.059
2736	HE021	35.3673	82.2823	6.8	21	2.8	11	17	45700	86	64600	1770	9300	17.5	12100	210	8.7	1.1	30	5	4.7	0.7	
2737	HE022	35.3522	82.3273	7.2	29	4.1	7	10	41600	35	30100	2140	22400	11.4	15900	240	24.7	-1.0	16	3	4.5	0.5	
2738	HE023	35.3250	82.4453	6.8	30	7.3	10	50	47000	25	11800	290	7000	6.5	2600	20	5.4	-1.0	13	2	4.5	0.6	
2739	HE024	35.2951	82.4914	7.3	22	24.1	24	182	44600	46	13100	660	7300	7.0	5800	30	8.0	-1.0	M	4	14.0	2.6	
2740	HE025	35.2587	82.4386	6.8	19	7.8	32	37	83100	127	12000	510	16400	8.2	3100	40	18.2	1.8	59	16	12.1	1.4	
2741	HE026	35.2695	82.4120	6.6	28	11.2	66	74	30000	380	30700	280	2300	11.6	3500	40	29.3	-1.8	168	25	46.7	5.9	
2742	HE027	35.2050	82.3637	7.2	21	6.8	30	30	59700	147	22100	500	5100	9.9	3400	60	8.8	-1.4	69	8	3.0	0.7	
2743	HE028	35.1932	82.3734	7.0	20	3.9	10	19	75300	50	23100	540	7500	10.8	3700	70	16.5	-1.0	27	5	5.8	1.1	
2744	HE029	35.2863	82.3778	7.1	32	25.6	25	429	47100	44	15300	290	5400	12.9	2600	40	7.2	2.3	25	3	19.3	3.0	
2745	HE030	35.2928	82.4042	6.9	47	14.9	56	326	47600	155	19300	200	4200	12.4	2600	30	11.3	1.5	117	9	27.8	5.1	
2746	HE031	35.2540	82.3475	7.3	20	8.6	16	68	79000	79	19100	540	10700	10.9	4800	50	8.4	-1.0	42	5	4.2	0.9	
2747	HE032	35.3194	82.4046	7.2	46	4.6	6	28	50100	22	10300	190	4600	4.5	1800	20	M	-1.0	13	1	1.8	0.4	
2748	HE033	35.3139	82.3455	7.6	30	14.9	47	91	46300	228	48600	1220	9500	16.3	9700	130	17.5	5.5	103	24	16.7	2.5	
2749	HE034	35.3186	82.3254	7.6	18	3.9	21	16	40300	139	72300	830	7100	23.9	6000	110	6.6	2.3	59	9	7.5	1.5	
2750	HE041	35.4434	82.2827	7.5	21	5.5	8	31	44700	28	9000	300	8600	6.3	1900	20	2.7	M	12	2	M	0.6	
2751	HE042	35.4668	82.3003	7.3	15	4.1	5	18	66600	31	17600	460	14200	8.5	3100	30	M	1.1	19	4	M	0.2	
2752	HE043	35.4683	82.3345	7.1	21	5.6	7	62	53500	31	16100	350	9100	12.4	2800	30	4.6	2.0	25	6	2.6	0.6	
2753	HE044	35.4191	82.3396	7.1	20	8.7	33	132	37000	130	23200	430	6000	14.3	3900	20	M	-1.7	68	8	10.9	2.2	
2754	HE045	35.4302	82.3598	7.1	19	8.4	16	122	55400	64	21300	610	10300	17.9	6100	60	7.9	-1.0	35	5	10.0	1.2	
2755	HE046	35.3938	82.3988	7.0	19	10.9	8	129	57800	30	8800	510	15700	7.8	8500	70	M	M	21	3	7.0	1.0	0.064
2756	HE047	35.4317	82.4339	7.0	44	8.3	12	122	54300	59	19400	330	8800	13.8	2100	30	5.5	3.3	32	6	6.7	1.1	
2757	HE048	35.4453	82.4244	7.2	23	8.0	17	198	55800	120	33000	430	10200	32.3	3700	40	5.0	-1.0	58	8	12.5	2.1	
2758	HE049	35.4309	82.4865	7.1	39	6.9	11	57	40400	76	19400	590	6400	8.8	5500	40	7.1	2.5	38	5	5.0	0.8	
2759	HE050	35.4030	82.4880	7.1	30	11.9	10	258	57800	86	18500	500	6000	20.9	3300	60	11.7	3.8	49	18	13.0	2.0	
2760	HE051	35.3770	82.4604	7.1	29	10.4	12	85	47700	36	14900	290	7400	9.2	2800	30	5.9	3.5	23	3	4.8	1.0	
2761	HE052	35.3919	82.4395	7.2	19	4.5	11	96	49400	28	11300	170	7600	13.8	1600	20	2.5	0.9	28	4	7.6	1.1	
2762	HE053	35.3466	82.4500	6.9	38	16.3	41	401	29500	121	25100	560	4000	20.5	4400	30	9.6	3.3	74	11	22.9	4.2	
2763	HE054	35.3656	82.4176	6.9	34	39.6	69	363	39800	192	15000	1230	7300	11.7	8400	50	31.1	1.9	93	24	22.9	4.8	
2764	HE055	35.3725	82.3790	6.9	23	9.0	13	76	46300	57	9400	330	5200	4.5	2700	20	9.3	-1.0	30	6	9.2	0.8	

HENDERSON 100K SHEET-STREAM SEDIMENT

Lab #	County ID	Lat	Long	pH	Cond um/cm	U ppm	Th ppm	Hf ppm	Al ppm	Ce ppm	Fe ppm	Mn ppm	Na ppm	Sc ppm	Ti ppm	V ppm	Dy ppm	Eu ppm	La ppm	Sm ppm	Yb ppm	Lu ppm	Au ppm
2765	HE056	35.3707	82.3448	6.9	50	4.3	8	21	43200	35	12100	320	7800	6.0	2300	40	3.1	-1.0	15	2	3.8	0.4	
2766	HE057	35.4009	82.3117	7.4	35	4.4	12	25	54200	42	28600	820	200	12.4	5100	90	7.1	1.8	21	3	M	0.8	
2767	HE058	35.4259	82.2964	7.4	32	28.1	107	694	41500	209	90000	1140	8400	28.1	7800	110	15.0	1.9	117	13	34.6	7.0	
2768	HE059	35.3533	82.4224	7.1	36	12.9	10	119	41000	11	14400	440	3800	6.0	4400	30	3.1	-1.0	15	2	7.6	1.5	
2769	HE060	35.3291	82.5260	7.4	42	18.6	11	306	49000	37	9400	390	5800	9.1	3500	20	6.0	0.9	30	5	11.2	2.4	
2770	HE061	35.3441	82.5533	7.3	43	9.2	12	136	52500	29	11300	280	6100	9.5	2700	20	7.7	1.9	27	3	4.9	1.6	
2771	HE062	35.3042	82.5661	7.2	20	6.2	9	263	52400	93	19000	250	6100	24.5	M	20	M	4.6	53	7	14.1	1.8	
2772	HE063	35.2953	82.5926	6.7	19	17.2	22	400	60200	97	22100	360	5400	19.8	3000	40	9.0	2.4	55	7	19.1	3.0	
2773	HE064	35.3111	82.6155	6.6	22	4.0	6	27	52000	38	17200	470	3800	6.8	6600	50	6.6	-1.0	20	2	M	0.4	
2774	HE065	35.3436	82.6178	7.0	20	15.5	37	274	32600	189	24500	830	1700	6.6	13700	30	15.8	1.8	97	23	12.4	2.2	
2775	HE066	35.3636	82.5796	7.2	23	21.3	75	636	21000	377	49700	1060	1200	11.0	16100	30	12.4	3.4	214	19	32.9	5.6	
2776	HE067	35.3899	82.5668	7.2	12	13.0	48	193	25500	268	47800	1410	2600	10.4	13400	70	22.2	3.7	131	22	10.3	2.1	
2777	HE068	35.3744	82.6147	6.9	10	10.5	29	130	31600	187	29100	1150	5200	9.2	9300	60	12.2	1.4	87	12	6.9	1.3	
2778	HE069	35.3999	82.6317	6.8	15	29.3	42	608	33900	209	45500	1290	M	14.7	13200	50	M	3.7	106	14	16.2	4.2	
2779	HE070	35.4211	82.5515	6.7	28	3.0	12	46	37600	87	37100	400	2300	14.8	4700	50	3.4	3.4	51	9	8.7	0.9	
2780	HE071	35.4168	82.5235	7.0	38	16.7	33	286	36600	193	25100	1050	4700	13.7	11300	60	13.7	1.9	93	13	9.6	2.3	
2781	HE072	35.3940	82.5166	6.6	40	5.1	9	40	53900	37	14000	230	7300	7.9	2400	30	4.0	4.2	22	2	M	0.5	
2782	HE073	35.3630	82.5254	6.8	48	26.1	30	995	46000	139	30100	590	5500	30.2	4200	30	14.0	3.6	84	13	40.9	7.9	
2783	HE074	35.3573	82.6483	6.7	8	4.3	7	48	28800	62	21200	430	1700	5.0	4700	40	7.5	-1.0	25	4	6.8	0.7	
2784	HE075	35.4039	82.6504	6.9	10	7.6	32	110	51000	205	40600	1200	5400	14.3	11400	60	8.8	1.9	89	15	7.3	1.1	
2785	HE076	35.3844	82.6929	6.7	10	5.6	15	105	14800	-20	26300	220	1700	10.9	2200	10	2.3	1.3	36	6	4.8	1.6	
2786	HE077	35.4149	82.6810	6.7	9	3.4	5	39	22100	59	25100	220	2700	6.2	1800	20	1.3	-1.0	31	1	5.6	0.5	0.057
2787	HE078	35.4303	82.6555	6.7	10	7.8	38	122	38900	162	42500	1140	4900	15.1	13900	50	9.0	-1.0	110	18	7.3	1.2	
2970	HY001	35.3947	82.8341	7.1	11	9.5	87	107	64300	464	56200	2750	12900	24.7	14600	80	14.6	4.8	233	37	16.7	1.6	
2971	HY002	35.3994	82.8080	6.8	10	8.8	112	203	57300	635	132700	3120	9700	55.7	12600	70	21.8	4.5	262	32	25.4	4.1	
2972	HY003	35.4148	82.7832	6.9	10	4.9	32	38	65200	154	43700	1570	12300	15.7	6600	70	7.9	-1.4	74	7	6.2	0.9	
2973	HY004	35.4411	82.7935	7.1	21	3.3	19	40	46800	90	42600	990	4400	13.6	16200	110	M	-1.0	51	7	3.3	0.6	
2974	HY005	35.4236	82.8157	6.8	12	3.2	23	25	68800	154	52000	1580	9300	18.6	7900	80	11.4	6.2	81	14	3.7	0.8	0.068
2975	HY006	35.4482	82.8362	6.7	13	3.8	46	38	76400	331	84700	1590	7200	28.4	6200	60	11.9	3.7	155	21	11.2	1.5	
2976	HY007	35.4565	82.8438	6.8	14	1.7	10	10	61200	64	28300	770	12800	11.8	4600	80	M	1.8	33	4	3.1	0.5	
2977	HY008	35.4565	82.8506	6.3	41	2.0	10	17	53800	81	26800	940	10100	15.2	8200	60	12.8	M	38	7	4.1	0.4	
2978	HY009	35.4487	82.8740	7.1	18	4.1	20	34	60400	136	45800	1050	7200	13.6	8900	70	13.7	3.4	70	10	M	0.6	
2979	HY010	35.4769	82.8832	6.9	16	2.5	41	45	62100	233	82000	1130	10500	33.0	6800	80	15.2	5.9	119	15	8.4	1.5	
2980	HY011	35.4864	82.8474	7.4	48	3.0	14	41	53300	94	34100	950	7100	21.4	12200	100	20.7	2.4	47	10	4.6	0.8	

HENDERSON 100K SHEET-STREAM SEDIMENT

Lab #	County ID	Lat	Long	pH	Cond um/cm	U ppm	Th ppm	Hf ppm	Al ppm	Ce ppm	Fe ppm	Mn ppm	Na ppm	Sc ppm	Ti ppm	V ppm	Dy ppm	Eu ppm	La ppm	Sm ppm	Yb ppm	Lu ppm	Au ppm
2983	HY014	35.4536	82.9734	6.7	3	9.6	104	110	79400	708	85100	1260	7000	28.4	17600	120	20.9	6.7	337	43	14.3	1.4	
2986	HY017	35.3810	82.9941	6.4	2	4.7	29	22	99800	242	59500	1570	9700	17.0	13100	140	16.9	3.5	138	19	7.5	1.0	
2987	HY018	35.3295	82.9464	6.5	3	4.7	25	55	77100	221	95600	920	15500	29.3	6700	90	8.9	2.5	73	12	14.9	1.4	
2990	HY021	35.3549	82.8228	6.6	8	8.9	43	100	74400	243	58500	1920	13600	23.2	9900	90	70.6	2.0	109	17	14.7	2.0	
2991	HY022	35.3505	82.8203	6.5	12	5.6	22	69	72000	149	48300	2030	15400	19.4	12700	90	70.1	-1.1	63	11	10.6	1.3	
2992	HY023	35.3221	82.8380	6.3	8	5.8	27	65	67200	152	38800	1220	11500	14.4	9400	80	51.0	M	68	12	7.5	1.0	
2993	HY024	35.3295	82.9090	6.3	9	2.7	32	29	84800	290	105100	830	16700	32.9	7800	100	66.0	5.3	113	18	10.7	1.3	
2994	HY025	35.3724	82.9390	6.4	11	10.2	65	119	70300	380	102900	3490	10900	23.5	25600	150	27.5	M	182	32	19.8	2.5	
2995	HY026	35.3619	82.9246	6.6	10	3.2	15	41	57600	76	27500	1170	14000	9.6	6400	60	61.5	-1.2	35	7	5.1	1.1	
2996	HY027	35.3789	82.9424	6.5	12	4.3	43	100	41500	224	66900	750	4300	18.9	9500	60	47.4	5.2	116	17	16.1	2.2	
2997	HY028	35.3969	82.9397	6.7	16	4.1	20	40	62900	136	49000	1340	6600	15.0	16900	110	69.3	1.4	57	6	10.2	0.9	
2998	HY029	35.4236	82.9142	6.6	12	8.0	43	114	50900	275	48600	1880	7900	15.3	17400	60	58.7	M	131	19	10.6	1.2	
2999	HY030	35.3988	82.8991	6.5	14	6.3	78	173	48300	454	92100	1410	15000	32.4	M	40	M	3.5	M	M	M	2.4	0.643
3000	HY031	35.3859	82.8984	6.5	9	5.0	21	52	M	132	40900	M	M	12.4	2900	M	M	-1.0	M	4	M	0.9	
3001	HY032	35.3718	82.8938	6.6	10	7.2	50	82	49800	216	48100	1660	10900	17.5	12300	60	12.6	M	M	M	M	1.9	
3002	HY033	35.4577	82.9044	6.5	17	7.6	42	90	M	253	69300	1420	8000	19.6	M	M	57.1	M	252	18	M	1.6	
3003	HY034	35.4695	82.8924	6.3	158	2.8	16	25	M	149	41800	810	10500	14.7	M	M	64.0	3.1	57	8	7.0	0.8	
3005	HY036	35.4972	82.9656	7.2	46	4.0	30	69	61900	185	60300	1430	9100	21.2	20600	130	16.4	M	M	28	M	-0.9	
3006	HY037	35.4755	82.9656	7.2	35	2.4	18	35	62600	126	44100	1420	8500	19.4	12000	110	M	2.9	M	22	M	-0.3	
3028	HY059	35.4376	82.9374	6.9	13	14.5	74	80	M	736	37800	2540	8500	16.6	10500	80	M	M	338	50	14.7	2.0	
3029	HY060	35.4345	82.9408	6.9	15	9.2	52	50	117500	418	56000	3230	8800	24.6	12400	70	32.9	4.1	666	65	M	1.6	
3265	JA074	35.2775	82.9747	7.0	12	2.2	7	20	65000	57	30600	730	10600	10.9	6100	70	11.5	1.3	26	6	3.9	0.4	
3266	JA075	35.2618	82.9480	6.9	10	3.2	29	53	79900	228	87100	880	14000	27.1	8300	80	12.5	-1.2	95	14	8.1	1.4	
3267	JA076	35.2692	82.9344	6.0	12	4.9	20	34	84900	109	31300	480	6500	12.4	10900	100	13.4	2.9	56	9	5.9	0.8	
3268	JA077	35.2390	82.9942	6.8	13	6.3	4	42	62100	27	14500	550	20500	6.7	2200	40	7.6	1.1	13	2	6.0	0.6	
3269	JA078	35.2234	82.9623	6.8	10	6.8	9	87	56000	82	74800	1600	8300	20.3	23300	280	M	2.1	27	6	8.8	1.2	
3270	JA079	35.2182	82.9937	6.8	12	7.0	30	85	64000	156	58900	1320	13700	14.9	17100	130	13.5	3.6	65	14	12.7	2.0	
3271	JA080	35.2021	82.9951	6.6	9	4.9	18	26	59000	105	15800	500	20800	5.3	4500	40	10.7	1.4	49	7	6.7	1.2	
4734	PO001	35.1866	82.0446	7.4	28	87.0	504	435	32600	2766	53500	2420	1400	17.3	47200	190	118.2	23.0	1259	309	50.7	6.2	
4737	PO004	35.2360	82.0219	7.3	31	19.1	153	47	20400	619	24800	590	500	5.5	10300	40	21.5	14.0	399	68	14.5	1.9	
4738	PO005	35.2558	82.0381	7.5	31	96.5	564	385	30300	2433	167200	7710	5100	41.8	M	860	388.0	16.4	1224	347	99.5	15.3	
4739	PO006	35.2688	82.0474	7.3	45	5.6	30	42	13000	153	37200	260	2000	21.5	2400	40	4.8	3.5	90	15	10.3	1.1	
4740	PO007	35.2595	82.0776	7.2	26	14.6	84	27	9000	460	21100	180	1000	7.3	2400	20	36.1	1.3	175	57	22.7	3.2	
4741	PO008	35.2338	82.0957	7.0	30	6.5	20	43	33800	82	30000	750	1300	24.4	2900	60	9.1	4.4	62	11	6.2	1.6	

HENDERSON 100K SHEET-STREAM SEDIMENT

Lab #	County ID	Lat	Long	pH	Cond um/cm	U ppm	Th ppm	Hf ppm	Al ppm	Ce ppm	Fe ppm	Mn ppm	Na ppm	Sc ppm	Ti ppm	V ppm	Dy ppm	Eu ppm	La ppm	Sm ppm	Yb ppm	Lu ppm	Au ppm
4742	P0009	35.1972	82.1139	7.1	31	29.2	131	149	25600	614	45800	1830	1600	16.1	18900	200	62.6	4.6	286	77	26.1	3.5	
4743	P0010	35.2084	82.0888	7.2	31	2.1	11	9	19100	43	19900	420	2600	10.8	3800	50	4.3	0.7	37	5	2.4	-0.2	
4744	P0011	35.1928	82.1609	7.1	35	17.0	100	47	20500	496	22200	530	2800	7.5	7000	80	59.6	8.8	233	64	27.3	3.8	
4745	P0012	35.2776	82.1206	7.1	51	5.3	22	39	19300	174	40500	420	3800	15.4	3800	60	4.5	5.5	82	14	7.3	1.2	
4746	P0013	35.3075	82.1144	7.0	31	8.7	19	98	15800	113	42500	330	2200	18.9	3100	50	7.2	1.3	48	15	9.4	1.6	
4747	P0014	35.3045	82.0749	7.2	36	6.0	29	71	15200	87	62900	330	2200	16.0	3900	70	4.3	-1.0	67	16	8.0	2.2	
4748	P0015	35.3171	82.0566	7.2	13	6.3	15	32	41500	102	11900	480	7900	6.3	3800	50	13.4	-1.2	48	10	4.9	0.8	
4749	P0016	35.2202	82.1073	7.1	45	5.9	32	36	10800	108	34500	230	700	18.8	1700	40	3.5	-1.0	69	8	7.9	1.1	
4750	P0017	35.1972	82.3397	6.4	23	10.8	10	158	24400	50	29300	180	3000	13.9	2300	50	1.9	-1.0	31	7	6.3	1.1	
4751	P0018	35.1956	82.3222	6.7	20	9.1	44	57	18500	231	29200	180	3100	15.4	1100	30	9.7	11.6	135	28	17.4	2.3	
4752	P0019	35.2150	82.3055	7.2	26	8.9	26	77	54100	132	29400	710	10200	20.7	4800	110	8.9	1.8	75	16	9.0	1.2	
4753	P0020	35.2173	82.1941	7.2	35	4.6	32	32	80000	105	58900	1000	12000	29.0	4000	140	3.4	2.9	64	12	4.0	0.9	
4754	P0021	35.2109	82.2216	7.2	46	4.0	12	26	63300	92	27900	1010	14800	29.9	4000	150	3.9	1.1	30	9	M	0.8	
4755	P0022	35.2377	82.2334	7.5	43	5.2	25	28	67400	123	49700	1040	17400	23.1	3600	140	5.2	2.8	64	10	10.2	1.5	0.214
4756	P0023	35.2533	82.1717	7.1	41	2.8	-2	28	57700	26	53500	1850	14600	25.5	18100	250	6.4	-1.0	21	8	4.9	0.3	
4757	P0024	35.2838	82.1408	7.1	45	18.1	61	263	41900	307	110000	2700	5500	33.8	34400	380	38.3	7.7	146	32	22.8	3.0	0.091
4758	P0025	35.3185	82.1645	7.0	32	4.7	14	37	46100	68	27300	370	4000	9.7	3500	70	1.9	1.7	36	5	2.6	0.5	
4759	P0026	35.3084	82.2025	7.0	33	17.5	50	226	44900	125	73800	1310	6100	34.5	9500	170	5.3	1.5	71	19	7.8	1.6	
4760	P0027	35.2953	82.2323	7.2	29	4.1	8	17	76300	63	31300	820	14400	17.7	4400	120	2.6	-1.0	33	8	4.2	0.4	
4761	P0028	35.2575	82.2827	7.2	27	2.6	7	13	24500	41	37000	260	3600	20.8	1300	40	3.2	1.3	23	5	5.2	-0.2	
4762	P0029	35.2607	82.3199	7.2	22	5.7	12	35	22700	76	15800	190	5900	11.3	1000	20	4.0	2.0	28	8	3.2	0.8	
4763	P0030	35.2858	82.2908	7.1	20	2.7	3	6	20100	52	18800	170	5700	6.8	900	20	M	0.9	34	7	M	0.8	
4764	P0031	35.3844	82.1927	7.4	33	9.2	21	59	16300	128	16200	190	2100	11.3	1400	10	5.7	1.3	70	12	8.2	1.1	
4765	P0032	35.3773	82.2177	6.1	39	21.3	26	247	21500	122	58400	750	800	12.7	6600	30	2.9	2.9	78	10	13.1	2.1	
4766	P0033	35.3857	82.1461	7.0	23	19.6	72	125	29900	477	22400	830	4300	6.5	8600	60	48.5	3.9	240	53	24.7	3.0	
4767	P0034	35.3419	82.1139	7.1	22	5.6	23	21	22400	124	33700	170	3600	9.9	1000	30	3.2	-1.0	78	16	7.6	1.0	
4768	P0035	35.3452	82.1837	7.1	35	37.8	117	192	40600	647	30800	1870	7700	10.4	12600	140	93.0	4.8	318	80	50.0	7.4	
4769	P0036	35.3291	82.2433	7.0	23	2.7	10	7	22300	-20	12100	190	6500	7.0	1100	20	3.2	1.3	34	28	6.6	-0.2	
4770	P0037	35.3400	82.2674	6.9	18	3.0	6	7	37700	41	21900	590	7600	13.0	3000	80	7.1	-1.0	22	4	2.6	0.4	
4771	P0038	35.3450	82.2323	6.9	26	1.8	9	5	25300	-20	9700	160	6200	5.0	400	10	2.4	1.3	25	3	2.6	-0.2	
5248	RU016	35.3622	82.0223	7.0	35	4.1	13	30	12100	64	18200	130	1200	10.0	1200	20	1.9	-1.0	42	10	4.6	0.8	
5250	RU018	35.3478	82.0586	7.4	18	16.2	179	178	15200	1052	36500	170	1100	15.6	1600	30	18.9	10.1	563	108	26.5	3.0	0.133
5251	RU019	35.3170	82.0285	7.2	25	7.8	8	155	25000	M	28900	280	1700	14.7	1100	50	4.1	1.1	16	M	4.3	0.9	
5277	RU045	35.4217	82.1746	7.0	25	6.9	11	48	75900	62	21000	560	10700	7.8	4300	40	2.7	-1.0	44	8	4.0	0.5	

HENDERSON 100K SHEET-STREAM SEDIMENT

Lab #	County ID	Lat	Long	pH	Cond um/cm	U ppm	Th ppm	Hf ppm	Al ppm	Ce ppm	Fe ppm	Mn ppm	Na ppm	Sc ppm	Ti ppm	V ppm	Dy ppm	Eu ppm	La ppm	Sm ppm	Yb ppm	Lu ppm	Au ppm
5278	RU046	35.4157	82.1310	7.1	29	4.7	16	13	58200	146	53100	860	14100	16.9	6100	120	9.4	1.3	72	15	7.2	1.3	
5279	RU047	35.4244	82.1131	7.4	29	11.2	9	160	17400	93	24400	220	3400	8.9	2000	30	6.0	2.0	56	15	12.3	2.1	
5280	RU048	35.4233	82.0789	7.3	32	7.3	63	23	14800	319	26900	160	2600	13.3	700	30	7.3	2.6	141	M	13.1	1.6	
5281	RU049	35.3963	82.0992	7.0	29	4.9	10	38	77400	48	17200	500	19000	6.7	2100	50	3.8	4.4	30	6	4.8	0.7	
5282	RU050	35.3849	82.0582	7.0	48	34.9	184	257	45100	1117	31500	630	3500	13.5	8100	80	90.4	16.4	628	135	45.9	6.2	0.183
5283	RU051	35.4415	82.2531	7.1	30	8.2	12	64	54900	52	17200	390	21500	7.5	2900	50	M	-1.0	27	7	6.1	0.7	0.080
5310	RU078	35.4411	82.2259	6.6	20	3.7	13	17	68900	58	17100	280	19400	5.9	1600	30	M	-1.0	8	4	M	0.5	
5311	RU079	35.4072	82.2068	6.7	28	5.3	11	17	73600	71	21400	380	11500	8.5	4400	70	1.0	1.3	24	6	M	0.6	
5312	RU080	35.4516	82.1672	6.9	28	10.4	22	91	55200	82	15100	540	12800	9.1	3800	60	10.5	1.8	60	M	13.5	1.7	
5313	RU081	35.4615	82.1878	6.9	21	12.7	14	100	46600	129	27000	350	6500	8.6	1900	20	3.3	2.2	60	12	4.6	1.0	0.050
5314	RU082	35.4693	82.1942	7.0	21	4.4	-2	32	76600	25	17000	300	20200	6.5	2300	20	M	1.1	21	3	4.6	0.5	
5315	RU083	35.4479	82.1321	6.9	33	6.3	13	24	47600	63	20700	360	M	7.8	M	60	5.0	-1.0	36	7	5.2	1.2	
5316	RU084	35.4581	82.1059	7.0	28	7.2	19	83	57200	102	16600	160	12100	12.2	2300	30	4.1	-1.0	65	9	6.4	0.9	
5317	RU085	35.4623	82.0638	7.0	32	4.8	19	14	22400	116	26400	360	6300	13.9	2400	50	7.2	2.0	51	15	2.8	0.7	
5318	RU086	35.4346	82.0342	6.9	23	8.0	56	14	30800	197	52100	180	2000	15.0	2600	50	7.7	11.2	118	24	14.3	2.0	
5319	RU087	35.3999	82.0175	6.9	47	6.0	14	56	69700	46	28200	800	5600	18.0	6000	120	2.7	1.1	25	6	2.1	1.0	
5321	RU089	35.4310	82.0015	7.0	27	7.9	33	40	58800	224	29700	490	2900	8.3	5900	90	12.9	2.4	127	29	7.7	1.7	0.119
5322	RU090	35.4600	82.0271	6.8	32	5.6	30	16	13900	205	34600	200	3400	12.2	2100	30	6.1	3.3	107	18	8.2	1.2	
5325	RU093	35.4960	82.0096	7.1	70	3.0	11	5	24400	83	46300	370	9200	14.1	2500	70	7.9	-1.0	25	8	5.0	0.8	
5328	RU096	35.4890	82.1166	7.1	27	3.9	5	32	54000	59	27400	200	8700	11.7	M	30	M	-1.0	27	2	5.3	0.4	
5329	RU097	35.4962	82.0855	6.9	30	5.7	7	74	63400	68	17200	250	5200	6.7	M	30	3.3	1.3	38	9	4.8	0.6	
5330	RU098	35.4835	82.1367	6.7	32	5.6	15	25	24800	32	19100	220	5800	12.1	1600	50	2.6	2.0	26	3	5.5	1.7	
5836	TR001	35.3832	82.7216	7.3	16	3.0	16	18	80000	144	22100	610	26400	6.5	3000	30	M	-1.0	54	10	2.4	-0.2	
5837	TR002	35.3819	82.7442	7.0	15	7.1	26	40	27100	207	41600	360	4600	13.8	2500	30	4.8	1.3	103	23	5.7	0.8	
5838	TR003	35.3655	82.7773	7.2	19	4.3	22	47	22900	140	47600	240	4200	17.6	1900	40	1.7	2.0	87	15	4.4	0.8	
5839	TR004	35.3405	82.7904	7.0	18	3.2	8	32	67700	54	27600	740	19100	11.5	8700	80	2.7	-1.0	28	8	M	0.6	
5840	TR005	35.3207	82.7920	7.1	18	3.1	9	37	65300	57	33300	780	13200	10.3	7800	100	M	-1.0	45	7	4.2	0.6	
5841	TR006	35.3188	82.6596	7.2	20	3.5	5	37	18400	31	8700	120	1700	2.2	2200	10	1.7	-1.0	23	4	M	-0.2	
5842	TR007	35.3106	82.6748	7.0	14	4.8	8	62	15100	36	27400	120	700	6.0	1200	10	4.8	3.1	37	5	6.5	0.7	
5843	TR008	35.2977	82.6284	7.1	29	8.9	8	112	21900	57	15900	150	2500	10.3	1500	20	2.7	1.8	26	6	5.1	1.1	
5844	TR009	35.2785	82.6576	6.9	25	11.6	30	131	69500	91	23200	740	7000	12.8	7500	60	8.5	1.1	75	7	6.7	2.0	
5845	TR010	35.2925	82.6996	6.8	16	5.4	6	80	37800	62	20600	460	4400	5.6	4600	50	5.7	1.5	28	5	8.1	0.7	
5846	TR011	35.2875	82.7372	7.1	20	5.1	8	79	53200	36	30100	760	9400	13.1	10400	80	3.3	2.4	35	5	5.5	1.4	
5847	TR012	35.2913	82.7709	7.0	20	5.1	14	71	62200	80	39100	1010	12900	10.4	9400	100	6.2	0.6	41	11	6.8	1.1	0.064

HENDERSON 100K SHEET-STREAM SEDIMENT

Lab #	County ID	Lat	Long	pH	Cond um/cm	U ppm	Th ppm	Hf ppm	Al ppm	Ce ppm	Fe ppm	Mn ppm	Na ppm	Sc ppm	Ti ppm	V ppm	Dy ppm	Eu ppm	La ppm	Sm ppm	Yb ppm	Lu ppm	Au ppm
5848	TR013	35.2829	82.8053	7.1	19	3.4	8	30	66600	39	28700	450	24500	7.3	3900	50	3.2	2.2	36	4	4.0	0.9	
5849	TR014	35.2887	82.8438	7.4	21	2.6	-1	19	55600	73	36800	850	11500	12.0	6500	130	2.7	-1.0	27	8	2.9	0.5	0.124
5850	TR015	35.2785	82.8434	6.9	17	4.4	17	26	84900	110	61400	950	16600	16.5	6800	120	5.0	1.7	88	19	5.0	0.7	
5851	TR016	35.2733	82.8934	7.2	16	5.7	19	61	20000	120	31900	270	5200	8.3	2700	30	3.9	1.5	49	12	3.8	0.9	
5852	TR017	35.2573	82.9080	7.0	15	6.2	31	45	76400	167	46000	820	14000	12.9	7500	80	4.6	1.8	112	21	7.3	1.7	0.134
5853	TR018	35.2466	82.8876	6.8	16	8.7	34	71	26700	227	51400	490	6000	10.3	4300	50	5.2	1.5	110	26	6.2	1.2	
5854	TR019	35.2384	82.8722	7.2	20	4.4	15	31	73100	84	50000	600	10900	10.1	7800	100	3.6	-1.0	60	9	4.4	1.0	
5855	TR020	35.2523	82.8528	7.0	20	4.2	10	30	82600	41	24700	450	12800	6.4	5100	80	M	-1.0	25	5	1.7	0.3	
5856	TR021	35.2357	82.8248	7.1	11	4.2	4	46	65700	28	24300	420	13700	7.1	4800	50	M	M	21	4	4.2	0.4	
5857	TR022	35.2525	82.7108	6.9	26	5.9	10	99	34900	37	19300	470	1600	7.6	6600	50	7.9	M	31	4	6.8	0.9	
5858	TR023	35.2635	82.6770	7.0	38	13.3	56	78	M	388	224600	1510	6800	98.2	22600	410	1.1	7.9	138	20	16.1	2.7	
5859	TR024	35.2339	82.6498	7.0	23	17.1	35	289	50600	25	12100	360	6800	9.3	2600	30	12.2	-1.1	16	2	12.7	2.0	
5860	TR025	35.2344	82.6193	7.6	25	7.2	17	61	41600	38	11300	310	5900	7.0	2600	30	4.4	-1.4	21	2	6.2	0.9	
5861	TR026	35.2232	82.6943	7.8	21	5.2	16	55	53700	59	29000	300	6600	16.7	2300	30	M	1.3	46	6	M	0.8	
5862	TR027	35.2032	82.6417	7.3	15	6.8	11	34	49100	27	15800	420	8500	8.2	2500	40	2.3	-1.0	17	2	5.4	0.7	
5863	TR028	35.2048	82.7161	7.2	20	7.1	7	62	57200	28	11600	340	11100	7.0	2800	20	M	-1.0	17	2	4.4	0.6	
5864	TR029	35.1982	82.7718	6.5	44	6.5	21	110	55000	119	13600	320	2300	14.4	4200	50	7.5	2.6	52	7	3.3	1.3	
5865	TR030	35.2144	82.7869	6.5	15	2.8	8	61	47500	104	66300	610	7000	19.8	4900	70	5.6	-1.0	53	8	5.5	1.1	
5866	TR031	35.1937	82.7959	6.6	16	3.6	5	32	35200	55	29300	500	2400	7.4	4500	50	7.8	1.1	23	4	7.3	0.9	
5867	TR032	35.1827	82.8110	6.6	15	3.9	3	47	33500	27	24900	480	2400	6.6	5300	50	6.3	0.9	15	5	M	0.6	
5868	TR033	35.2003	82.8557	7.1	16	4.0	9	33	43000	80	17000	430	5900	4.4	3600	40	7.1	2.7	30	6	6.9	1.0	
5869	TR034	35.2038	82.8706	7.3	19	3.5	13	50	50900	97	26900	300	8400	8.6	3700	20	3.0	2.6	44	6	3.7	0.8	
5870	TR035	35.2181	82.8908	6.8	18	5.0	18	41	67100	78	26600	550	9600	10.9	7700	80	4.8	1.0	37	4	3.7	0.6	
5871	TR036	35.2170	82.9066	7.0	19	5.7	9	74	58100	58	40800	940	9600	12.6	16000	150	M	1.5	24	4	6.1	0.9	
5872	TR037	35.1942	82.9199	6.7	17	5.2	14	51	71100	54	24700	420	12100	7.8	5200	50	M	3.0	33	5	5.8	0.5	
5873	TR038	35.1895	82.9030	6.9	20	3.9	18	37	52300	82	34700	320	8000	11.2	3700	30	2.2	-1.5	43	6	10.1	1.1	
5874	TR039	35.1834	82.9516	7.1	15	4.6	13	23	86800	37	20200	520	19600	7.3	5200	60	4.3	1.2	24	3	5.3	0.9	
5875	TR040	35.1697	82.8871	6.8	20	5.1	9	53	39900	80	24400	470	3200	12.3	8100	80	8.0	-1.0	39	6	M	0.7	
5876	TR041	35.1723	82.8395	7.1	15	4.5	9	56	41000	62	48200	720	2800	9.8	8200	70	M	3.6	30	8	7.2	1.1	
5877	TR042	35.1646	82.8051	6.6	22	4.2	16	105	36700	100	29700	350	2300	13.4	4100	40	6.1	2.1	42	7	8.5	1.6	
5878	TR043	35.1722	82.7443	7.2	20	5.9	13	42	60100	48	15800	490	9000	11.2	3100	30	M	1.3	25	3	3.9	0.5	
5879	TR044	35.1832	82.7266	7.1	22	5.6	11	51	65400	108	M	390	8200	10.6	2500	30	4.9	6.4	M	5	M	-1.5	
5880	TR045	35.1595	82.5986	7.2	19	4.3	9	18	42500	92	22100	570	6100	14.3	3000	70	6.9	-1.3	31	5	3.9	0.7	
5881	TR046	35.1492	82.6484	6.9	15	16.2	32	42	122800	89	35400	600	22000	29.9	4500	90	8.0	M	51	5	4.0	0.4	

HENDERSONVILLE 100K SHEET - GROUNDWATER

Lab #	County ID	Lat	Long	pH	Cond um/cm	U ppb	Br ppb	Cl ppb	F ppb	Mg ppb	Mn ppb	Na ppb	V ppb	U/cond x 1000	Al ppb	Dy ppb
525	BN501	35.4704	82.2610	6.4	20	-0.002	73	9900	49	.	5	2630	-0.1	0.0	33	-0.001
539	BN515	35.4697	82.5807	7.2	100	0.036	25	9500	266	.	47	6980	-0.1	0.3	26	-0.001
549	BN525	35.4640	82.7369	6.1	70	0.004	.	5300	.	.	.	1650	-0.1	0.0	11	-0.001
552	BN528	35.4923	82.6869	6.4	20	-0.002	44	7600	53	.	.	2580	-0.1	0.0	35	-0.001
579	BN555	35.4832	82.5278	7.2	120	0.059	.	9200	593	.	158	12380	-0.1	0.4	65	-0.001
580	BN556	35.4722	82.4787	6.2	20	0.010	.	9400	55	10960	.	4360	-0.1	0.5	49	-0.001
581	BN557	35.4803	82.4243	6.3	60	-0.002	61	12100	55	.	89	8770	-0.1	0.0	48	0.120
586	BN562	35.4646	82.4654	7.7	130	0.119	43	6800	140	.	70	5040	-0.1	0.9	90	-0.001
2502	HE501	35.3461	82.5022	7.3	35	-0.002	82	8800	121	.	86	8270	0.6	0.0	84	-0.001
2503	HE502	35.2819	82.4182	6.7	40	0.065	35	9100	.	.	86	5710	1.0	1.6	53	-0.001
2504	HE503	35.2472	82.3854	6.8	20	-0.002	58	8900	89	.	16	4200	2.2	0.0	55	-0.001
2505	HE504	35.2049	82.3643	6.6	50	-0.002	43	9400	54	.	19	4710	1.5	0.0	94	-0.001
2506	HE505	35.2097	82.4016	6.1	20	-0.002	84	8900	25	.	14	1720	0.3	0.0	81	-0.001
2507	HE506	35.2507	82.4240	6.6	20	0.047	69	9400	14	.	17	2230	-0.1	2.3	68	-0.001
2508	HE507	35.3400	82.4221	6.4	40	-0.002	31	6000	52	.	26	3940	0.3	0.0	66	0.110
2509	HE508	35.2935	82.3708	5.9	70	-0.002	.	12300	.	.	39	3660	-0.1	0.0	90	-0.001
2510	HE509	35.3394	82.3660	6.3	140	0.930	112	13500	64	5470	.	9920	1.3	6.6	74	0.130
2511	HE510	35.3828	82.3099	6.1	20	-0.002	50	9300	.	.	28	2490	-0.1	0.0	70	-0.001
2512	HE511	35.3369	82.5300	6.9	80	0.046	50	9600	166	.	25	6980	-0.1	0.5	86	-0.001
2513	HE512	35.3819	82.3564	6.2	50	-0.002	.	20700	.	.	28	6970	-0.1	0.0	62	0.140
2514	HE513	35.3613	82.3058	6.8	30	-0.002	43	8500	15	.	35	2470	0.2	0.0	93	-0.001
2515	HE514	35.4246	82.3632	6.7	50	0.080	50	10200	80	.	28	6800	1.5	1.6	41	-0.001
2516	HE515	35.4252	82.3083	6.5	30	-0.002	55	8800	45	.	23	3940	1.7	0.0	63	-0.001
2517	HE516	35.4727	82.3060	7.1	30	0.057	35	9000	39	.	19	4630	2.6	1.9	90	-0.001
2518	HE517	35.2965	82.5929	6.8	60	0.216	56	10900	567	.	178	8280	1.0	3.6	56	-0.001
2519	HE518	35.3436	82.5913	6.9	10	0.009	38	6900	27	.	20	2070	-0.1	0.9	80	-0.001
2520	HE519	35.3330	82.6347	6.4	45	0.011	44	9400	72	.	68	5460	-0.1	0.2	61	-0.001
2521	HE520	35.3829	82.5814	6.0	30	-0.002	81	10700	.	.	65	2560	-0.1	0.0	50	-0.001
2522	HE521	35.4025	82.5184	6.3	40	0.014	49	9100	.	.	41	2870	-0.1	0.3	46	-0.001
2523	HE522	35.3891	82.4820	6.2	45	0.027	51	8000	64	.	28	5260	0.4	0.6	52	-0.001
2524	HE523	35.3799	82.4189	6.1	60	-0.002	38	12100	.	.	50	3750	-0.1	0.0	67	-0.001
2525	HE524	35.4283	82.4215	6.2	40	0.019	55	10400	133	.	26	6770	1.0	0.4	79	-0.001
2526	HE525	35.4317	82.4830	6.3	85	-0.002	97	20200	158	.	120	13160	-0.1	0.0	91	-0.001
2527	HE526	35.4296	82.5421	6.2	20	-0.002	33	10000	.	.	38	2840	0.2	0.0	71	-0.001

HENDERSONVILLE 100K SHEET - GROUNDWATER

Lab #	County ID	Lat	Long	pH	Cond um/cm	U ppb	Br ppb	Cl ppb	F ppb	Mg ppb	Mn ppb	Na ppb	V ppb	U/cond x 1000	Al ppb	Dy ppb
2528	HE527	35.4193	82.5942	6.4	20	-0.002	59	8500	52	.	30	2840	-0.1	0.0	68	-0.001
2529	HE528	35.4769	82.3577	6.3	30	-0.002	61	8900	.	.	19	3110	-0.1	0.0	71	-0.001
2530	HE529	35.3039	82.5325	6.8	30	-0.002	53	10400	114	.	26	3310	-0.1	0.0	85	-0.001
2531	HE530	35.2945	82.4955	6.9	140	0.006	45	12700	.	13190	.	2660	-0.1	0.0	68	0.090
2532	HE531	35.2581	82.4845	6.1	60	0.003	72	15100	.	.	30	6200	-0.1	0.0	61	-0.001
2533	HE532	35.2468	82.5291	6.8	30	0.008	48	9700	126	.	29	6960	2.0	0.2	53	-0.001
2534	HE533	35.2400	82.5814	6.9	50	0.664	.	8400	239	.	26	6800	1.1	13.2	53	-0.001
2535	HE534	35.2027	82.5757	6.8	10	0.040	59	9900	41	.	27	3550	0.7	4.0	260	-0.001
2536	HE535	35.3712	82.6388	6.7	10	0.029	.	M	.	M	.	M	-0.1	2.9	.	-0.001
2537	HE536	35.2052	82.4729	6.8	15	-0.002	62	10000	16	.	29	3370	-0.1	-0.1	123	-0.001
2538	HE537	35.4102	82.3699	6.3	60	0.074	.	7000	39	.	78	7510	1.9	1.2	74	-0.001
2539	HE538	35.4470	82.3123	5.9	30	-0.002	61	6700	40	.	70	4670	0.4	0.0	70	-0.001
2540	HE539	35.4118	82.3310	5.6	60	-0.002	62	10500	33	.	106	4940	-0.1	0.0	56	-0.001
2541	HE540	35.3929	82.2658	5.7	45	0.206	74	10100	.	.	80	4910	0.2	4.5	65	-0.001
2542	HE541	35.3736	82.3134	7.6	110	25.590	113	7300	119	3810	.	4560	0.7	232.6	29	-0.001
2543	HE542	35.4043	82.2674	6.0	40	0.008	21	3000	.	1110	.	1020	-0.1	0.2	36	-0.001
2544	HE543	35.1843	82.4704	6.6	15	-0.002	71	8900	.	.	8	3340	0.4	-0.1	236	-0.001
2545	HE544	35.2015	82.5144	6.0	15	0.008	29	3900	.	.	10	1050	-0.1	0.5	46	-0.001
2546	HE545	35.2346	82.4589	5.7	25	-0.002	68	9100	19	.	47	3360	0.4	0.0	113	-0.001
2547	HE546	35.2772	82.3736	6.5	120	0.021	.	7600	.	.	8	3850	-0.1	0.1	29	-0.001
2548	HE547	35.2959	82.3271	7.6	95	0.018	.	3900	.	.	12	1680	-0.1	0.1	31	-0.001
2729	HY508	35.3918	82.8123	7.0	30	-0.002	46	9600	56	.	23	1480	0.5	0.0	175	-0.001
2740	HY519	35.3977	82.8272	6.9	20	0.001	73	9100	20	.	25	2040	-0.1	0.0	74	-0.001
2741	HY520	35.4322	82.8132	7.5	80	-0.002	63	10300	193	.	76	4700	0.5	0.0	59	-0.001
2742	HY521	35.4698	82.8720	6.7	50	-0.002	38	10200	21	.	44	1850	-0.1	0.0	62	-0.001
2748	HY527	35.4322	82.9920	6.6	30	0.022	33	8300	36	.	45	1860	-0.1	0.7	33	-0.001
2749	HY528	35.4814	82.9729	6.9	80	-0.002	53	12800	63	.	66	5240	2.4	0.0	40	-0.001
2750	HY529	35.4741	82.9411	6.9	40	-0.002	37	8500	37	.	40	3310	0.6	0.0	66	-0.001
2751	HY530	35.4368	82.8770	6.6	30	-0.002	51	9200	.	.	39	2860	0.3	0.0	53	-0.001
2752	HY531	35.4280	82.9226	6.4	15	0.048	49	7100	18	.	35	1450	-0.1	3.2	48	-0.001
2753	HY532	35.3945	82.9418	6.7	25	-0.002	48	7600	.	.	40	2630	-0.1	0.0	71	-0.001
2754	HY533	35.4817	82.8083	6.8	20	-0.002	56	8400	23	.	32	1800	-0.1	0.0	98	-0.001
2823	JA503	35.3436	82.9679	6.4	12	-0.002	.	8200	44	.	63	1740	-0.1	-0.1	151	-0.001
2851	JA531	35.2715	82.9690	5.5	12	0.060	.	M	.	450	.	M	-0.1	5.0	.	-0.001

HENDERSONVILLE 100K SHEET - GROUNDWATER

Lab #	County ID	Lat	Long	pH	Cond um/cm	U ppb	Br ppb	Cl ppb	F ppb	Mg ppb	Mn ppb	Na ppb	V ppb	U/cond x 1000	Al ppb	Dy ppb
2852	JA532	35.2217	82.9516	6.1	12	0.042	13	2900	21	.	3	M	0.2	3.5	13	-0.001
2853	JA533	35.2046	82.9884	6.4	17	0.026	7	3200	.	.	.	910	-0.1	1.5	16	-0.001
4139	PO501	35.2510	82.3247	5.9	12	0.021	.	M	.	M	5	M	-0.1	1.7	21	-0.001
4140	PO502	35.2588	82.2059	6.5	79	0.037	.	9000	.	4640	.	3420	0.5	0.4	75	-0.001
4141	PO503	35.2506	82.1498	6.4	26	0.037	23	5000	.	890	6	1690	-0.1	1.4	61	-0.001
4142	PO504	35.2116	82.1569	6.0	16	0.033	6	4900	.	640	.	2140	-0.1	2.0	26	-0.001
4143	PO505	35.2086	82.2053	6.0	18	0.031	10	5000	13	800	.	1280	0.1	1.7	31	-0.001
4144	PO506	35.2108	82.2605	7.1	21	0.035	.	4900	39	1360	.	2750	0.2	1.6	38	-0.001
4145	PO507	35.2069	82.3215	6.8	14	0.041	21	3600	35	180	1	2120	0.7	2.9	19	-0.001
4146	PO508	35.2426	82.2573	6.9	139	0.396	50	5900	.	.	86	6700	0.5	2.8	33	0.120
4147	PO509	35.2993	82.1567	7.2	81	0.152	13	4700	53	4160	.	5090	5.2	1.8	29	-0.001
4148	PO510	35.3009	82.2101	7.4	60	0.045	24	4400	.	3940	.	720	0.2	0.7	25	-0.001
4149	PO511	35.2947	82.2828	7.2	10	0.031	18	2500	.	390	10	1290	0.2	3.1	79	-0.001
4150	PO512	35.3279	82.2644	7.0	90	0.075	14	2200	39	1280	36	7010	0.4	0.8	23	-0.001
4151	PO513	35.3597	82.2172	7.5	70	0.039	.	4600	8	1750	2	1750	0.4	0.5	21	-0.001
4152	PO514	35.3917	82.2032	6.6	20	0.026	12	3100	17	660	5	3120	0.5	1.3	48	-0.001
4153	PO515	35.3808	82.1411	7.1	83	0.052	12	2600	27	7550	11	2300	0.4	0.6	22	-0.001
4154	PO516	35.3515	82.1553	6.4	22	0.024	.	5800	.	750	14	1550	-0.1	1.0	24	-0.001
4155	PO517	35.3437	82.1125	6.6	45	0.072	35	7400	.	960	8	3780	0.2	1.6	25	-0.001
4156	PO518	35.3064	82.1014	6.8	42	0.043	9	2500	.	2420	.	3510	1.3	1.0	25	-0.001
4157	PO519	35.3048	82.0603	6.5	63	0.034	.	5800	.	3210	12	3700	0.3	0.5	20	-0.001
4158	PO520	35.2568	82.0996	6.3	20	0.030	36	5000	.	790	14	1330	-0.1	1.5	26	0.060
4159	PO521	35.2524	82.0446	6.2	23	0.021	29	4700	.	380	3	890	0.1	0.9	27	-0.001
4162	PO524	35.2098	82.0414	6.3	27	0.031	18	5100	.	630	11	1070	-0.1	1.1	28	0.060
4163	PO525	35.2085	82.1010	6.5	90	0.028	.	8400	.	6400	.	6850	0.2	0.3	33	0.090
4164	PO526	35.2751	82.2641	6.0	35	0.002	131	7800	17	.	55	3590	-0.1	0.0	58	-0.001
4165	PO527	35.3368	82.2297	6.9	241	0.165	76	12600	30	20280	.	6950	0.4	0.6	63	-0.001
4166	PO528	35.3123	82.2235	6.2	57	-0.002	87	13100	.	.	86	3930	-0.1	0.0	57	-0.001
4167	PO529	35.3270	82.1868	6.3	61	-0.002	53	9000	28	.	74	5510	0.8	0.0	64	-0.001
4168	PO530	35.3374	82.1853	6.3	22	-0.002	45	7900	26	.	81	3320	-0.1	0.0	65	-0.001
4169	PO531	35.3522	82.1964	6.2	29	-0.002	58	7500	.	.	64	2610	0.4	0.0	68	-0.001
4170	PO532	35.3687	82.1641	5.9	41	0.002	72	7900	.	.	70	4590	-0.1	0.0	73	-0.001
4171	PO533	35.3746	82.2171	5.8	37	-0.002	.	12500	.	.	79	4460	-0.1	0.0	75	0.140
4172	PO534	35.3926	82.2414	5.8	36	-0.002	60	8000	55	.	58	5320	0.5	0.0	158	-0.001

HENDERSONVILLE 100K SHEET - GROUNDWATER

Lab #	County ID	Lat	Long	pH	Cond um/cm	U ppb	Br ppb	Cl ppb	F ppb	Mg ppb	Mn ppb	Na ppb	V ppb	U/cond x 1000	Al ppb	Dy ppb
4173	PO535	35.3674	82.2423	6.0	25	-0.002	61	8300	42	.	84	3840	0.4	0.0	90	-0.001
4610	RU521	35.3957	82.0035	6.7	51	0.041	19	4900	11	3630	.	2720	1.2	0.8	31	-0.001
4611	RU522	35.4449	82.0090	8.6	70	0.031	.	4400	28	4000	.	1680	0.4	0.4	27	-0.001
4612	RU523	35.4855	82.0056	7.0	20	0.029	13	4300	.	700	27	470	-0.1	1.4	25	-0.001
4614	RU525	35.4794	82.0619	6.8	41	0.057	32	4500	29	1910	.	3260	0.2	1.3	31	-0.001
4616	RU527	35.4836	82.1194	6.3	19	0.028	28	5500	.	560	9	1450	0.2	1.4	111	-0.001
4618	RU529	35.4783	82.1886	7.8	77	4.261	.	2500	477	2370	.	5110	2.0	55.3	25	-0.001
4619	RU530	35.4423	82.1737	6.7	25	0.033	19	4700	.	770	30	1730	0.1	1.3	29	-0.001
4620	RU531	35.4383	82.2234	7.0	75	1.497	.	5300	280	2910	9	5910	0.4	19.9	26	-0.001
4621	RU532	35.3888	82.1206	6.7	32	0.038	.	4900	21	1780	78	2350	-0.1	1.1	31	-0.001
4622	RU533	35.4279	82.1023	7.6	84	0.068	9	4800	.	4410	.	2630	0.2	0.8	30	-0.001
4623	RU534	35.4386	82.0614	6.6	42	0.141	24	5200	.	.	5	3970	0.4	3.3	25	-0.001
4624	RU535	35.3879	82.0564	6.1	40	0.030	15	7600	.	.	25	3890	-0.1	0.7	80	-0.001
4625	RU536	35.3458	82.0559	7.3	75	2.137	27	4100	31	2620	5	5490	1.5	28.4	26	-0.001
4626	RU537	35.3474	82.0026	6.3	14	0.027	22	5000	.	.	12	M	-0.1	1.9	22	-0.001
4627	RU538	35.2989	82.0039	5.6	115	0.041	.	25700	.	4730	90	12190	0.3	0.3	78	0.340
4647	RU558	35.4794	82.1320	6.1	48	-0.002	67	10100	34	.	73	5390	0.7	0.0	68	-0.001
4650	RU561	35.4622	82.1892	6.9	95	0.871	.	7300	1384	.	60	9350	0.5	9.1	61	-0.001
4651	RU562	35.4512	82.1329	7.1	140	0.036	103	11700	28	.	106	3880	0.5	0.2	115	-0.001
4652	RU563	35.4048	82.1480	6.0	81	0.020	73	22500	.	.	90	8420	0.2	0.2	69	-0.001
4653	RU564	35.4181	82.1791	6.9	49	0.074	59	7600	290	.	69	6750	1.3	1.5	75	-0.001
4654	RU565	35.4190	82.1992	7.1	51	0.044	.	5700	79	.	14	3410	3.2	0.8	41	-0.001
5119	TR501	35.0768	82.9933	5.5	20	0.025	10	3600	.	.	11	1220	0.1	1.2	23	-0.001
5121	TR503	35.0977	82.9700	6.0	13	0.040	12	3500	.	.	24	630	-0.1	3.0	19	-0.001
5122	TR504	35.1350	82.9362	6.4	49	0.030	19	3900	.	280	16	3350	-0.1	0.6	18	0.030
5123	TR505	35.1819	82.9357	6.4	10	0.014	.	2400	.	270	2	920	-0.1	1.4	9	0.020
5124	TR506	35.1791	82.9033	6.1	14	0.028	.	M	.	M	3	M	-0.1	2.0	18	-0.001
5125	TR507	35.1329	82.8766	6.7	11	0.025	17	3600	.	670	6	410	-0.1	2.2	11	-0.001
5126	TR508	35.1443	82.8415	6.7	14	0.025	.	3600	.	.	3	310	-0.1	1.7	17	-0.001
5127	TR509	35.1022	82.8823	6.6	23	0.018	13	3400	30	.	.	1500	-0.1	0.7	26	-0.001
5128	TR510	35.2782	82.9196	6.6	7	0.017	4	2800	.	.	4	M	-0.1	2.4	58	-0.001
5129	TR511	35.2429	82.8798	7.0	13	0.019	.	3200	25	.	1	860	-0.1	1.4	18	0.900
5130	TR512	35.2265	82.8538	7.0	8	0.026	.	7200	13	.	36	1370	0.2	3.2	73	-0.001
5131	TR513	35.1862	82.8464	6.7	12	-0.002	.	7600	61	.	37	2220	-0.1	-0.1	103	-0.001

HENDERSONVILLE 100K SHEET - GROUNDWATER

Lab #	County ID	Lat	Long	pH	Cond um/cm	U ppb	Br ppb	Cl ppb	F ppb	Mg ppb	Mn ppb	Na ppb	V ppb	U/cond x 1000	Al ppb	Dy ppb
5132	TR514	35.1356	82.7713	6.6	36	-0.002	.	8500	67	.	45	4590	-0.1	0.0	111	0.170
5133	TR515	35.1064	82.7688	6.9	14	-0.002	.	7300	.	.	38	2140	0.3	-0.1	107	-0.001
5134	TR516	35.1109	82.7331	6.6	15	-0.002	14	7000	28	.	45	2260	-0.1	-0.1	56	-0.001
5135	TR517	35.1332	82.7239	6.7	28	0.061	.	6500	63	.	41	4530	0.9	2.1	59	-0.001
5136	TR518	35.1515	82.6500	5.8	33	0.029	.	9700	.	.	78	5580	-0.1	0.8	49	-0.001
5137	TR519	35.2048	82.6432	6.5	21	0.037	.	7700	26	.	43	4330	0.5	1.7	52	-0.001
5138	TR520	35.2222	82.6384	8.2	145	130.300	.	6100	920	.	52	8620	-0.1	898.6	60	-0.001
5139	TR521	35.2730	82.6527	6.7	59	0.618	23	8400	136	.	80	6730	-0.1	10.4	38	-0.001
5140	TR522	35.4027	82.7586	6.9	22	0.057	.	6700	13	.	50	1490	-0.1	2.5	45	0.050
5141	TR523	35.3178	82.8597	5.8	10	0.188	.	7900	.	.	42	1320	-0.1	18.8	122	-0.001
5142	TR524	35.3271	82.6502	5.9	48	0.049	22	13000	76	.	79	4830	-0.1	1.0	56	-0.001
5143	TR525	35.2264	82.7287	6.7	50	0.126	16	8100	167	.	48	8840	2.6	2.5	46	-0.001
5144	TR526	35.1988	82.7176	6.9	43	-0.002	8	8800	255	.	50	8220	0.7	0.0	63	-0.001
5145	TR527	35.1877	82.7575	6.0	99	0.011	.	10400	38	.	72	8390	-0.1	0.1	66	-0.001
5146	TR528	35.2199	82.7582	6.6	19	0.004	20	8700	.	.	56	3210	-0.1	0.2	48	-0.001
5147	TR529	35.2825	82.7154	6.8	49	0.039	.	9100	.	.	106	2720	-0.1	0.8	61	-0.001
5148	TR530	35.2891	82.7665	7.8	87	0.641	.	8400	326	.	45	7980	2.0	7.3	63	-0.001
5149	TR531	35.2946	82.8491	7.4	28	0.022	.	7500	27	.	64	2570	0.4	0.7	62	-0.001
5150	TR532	35.3522	82.7789	7.2	42	0.136	.	6900	55	.	52	6970	0.3	3.2	59	-0.001
5151	TR533	35.3030	82.6281	6.5	61	-0.002	62	10500	89	.	50	8650	0.4	0.0	133	-0.001
5152	TR534	35.2751	82.6874	6.4	32	-0.002	70	8500	38	.	83	4090	0.5	0.0	139	-0.001
5153	TR535	35.2549	82.7001	6.3	152	0.024	49	14000	100	.	78	12540	-0.1	0.1	111	-0.001
5154	TR536	35.1831	82.7985	5.7	30	-0.002	48	8500	21	.	93	4050	-0.1	0.0	109	0.080
5155	TR537	35.1316	82.8563	7.0	17	-0.002	57	5800	.	.	52	2760	-0.1	-0.1	170	-0.001