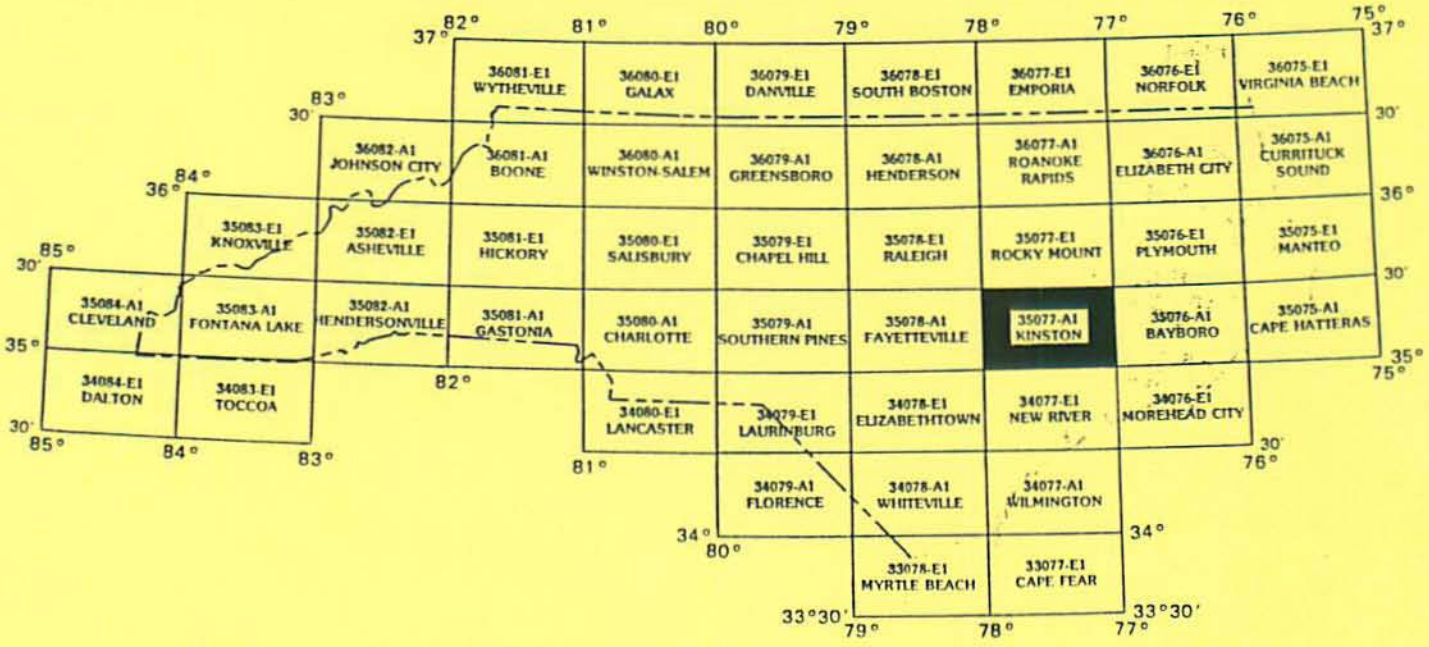
Listing of Concentrations of Variables of Stream Sediment, Stream Water, and Groundwater for the Kinston 30 x 60 - Minute Quadrangle -NURE Database

by
Robert H. Carpenter and Jeffrey C. Reid



NORTH CAROLINA GEOLOGICAL SURVEY
OPEN-FILE REPORT 93-27

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.

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Jeffrey C. Reid
Chief Geologist

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INTRODUCTION

This report is a compilation of geochemical data for stream sediment and groundwater for the Kinston 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
BE	Beaufort
CN	Craven
DU	Duplin
GE	Greene
JN	Jones
LN	Lenoir
PI	Pitt
WY	Wayne

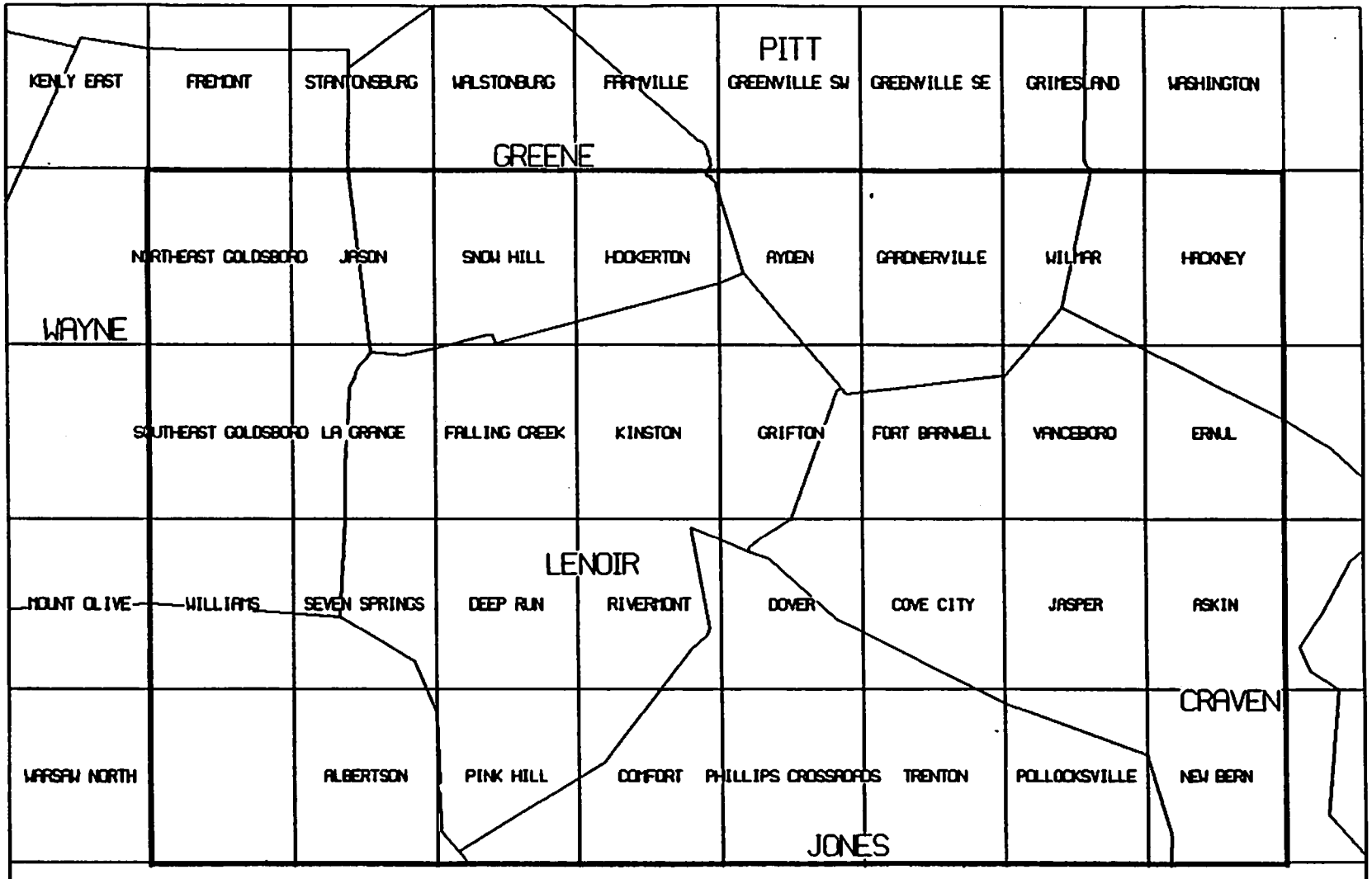

Figure 1. Map Showing Outlines of Kinston 30 x 60 Minute - Quadrangle and Contained 7 - 1/2 Minute Quadrangles.

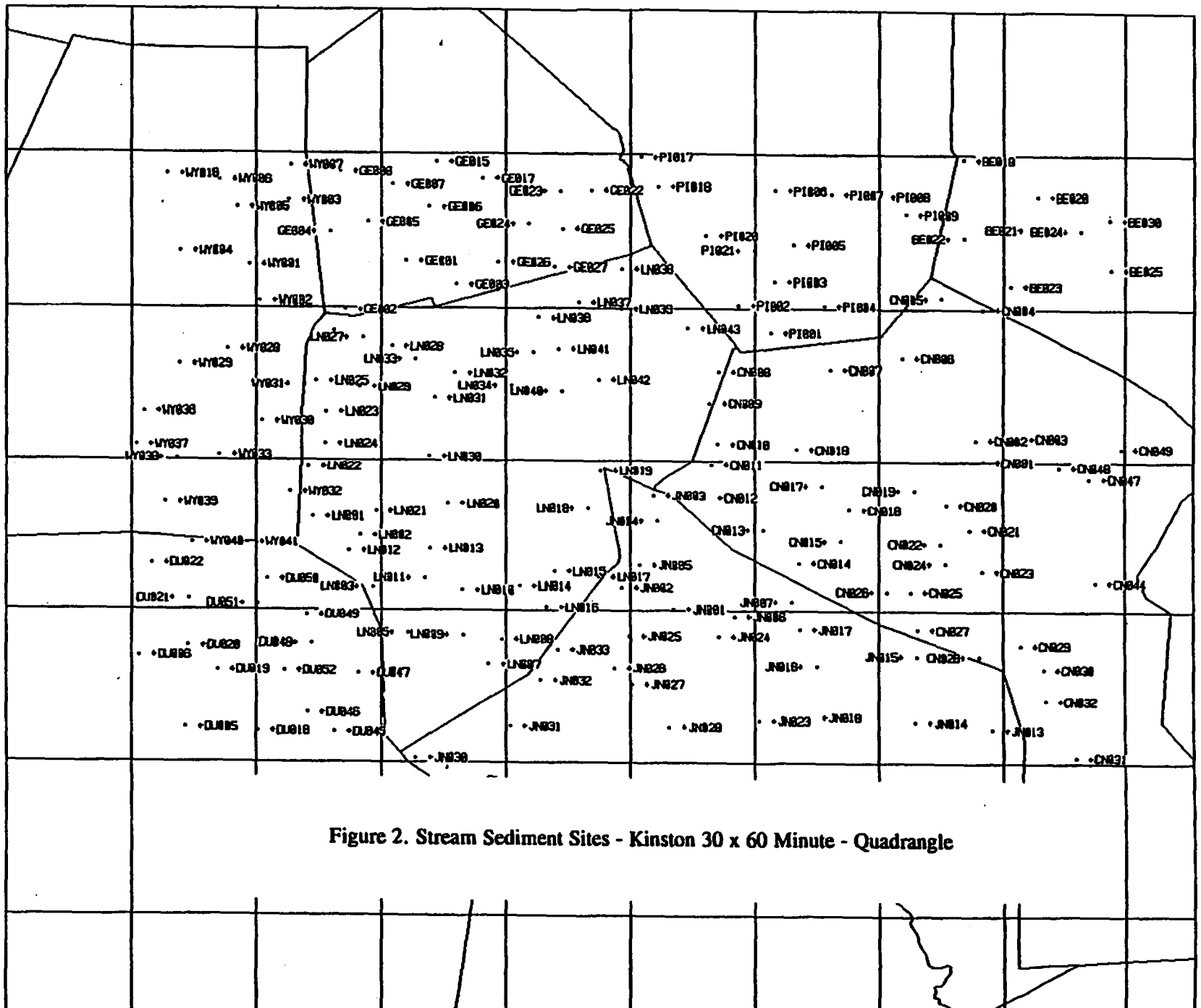

Figure 2. Stream Sediment Sites - Kinston 30 x 60 Minute - Quadrangle

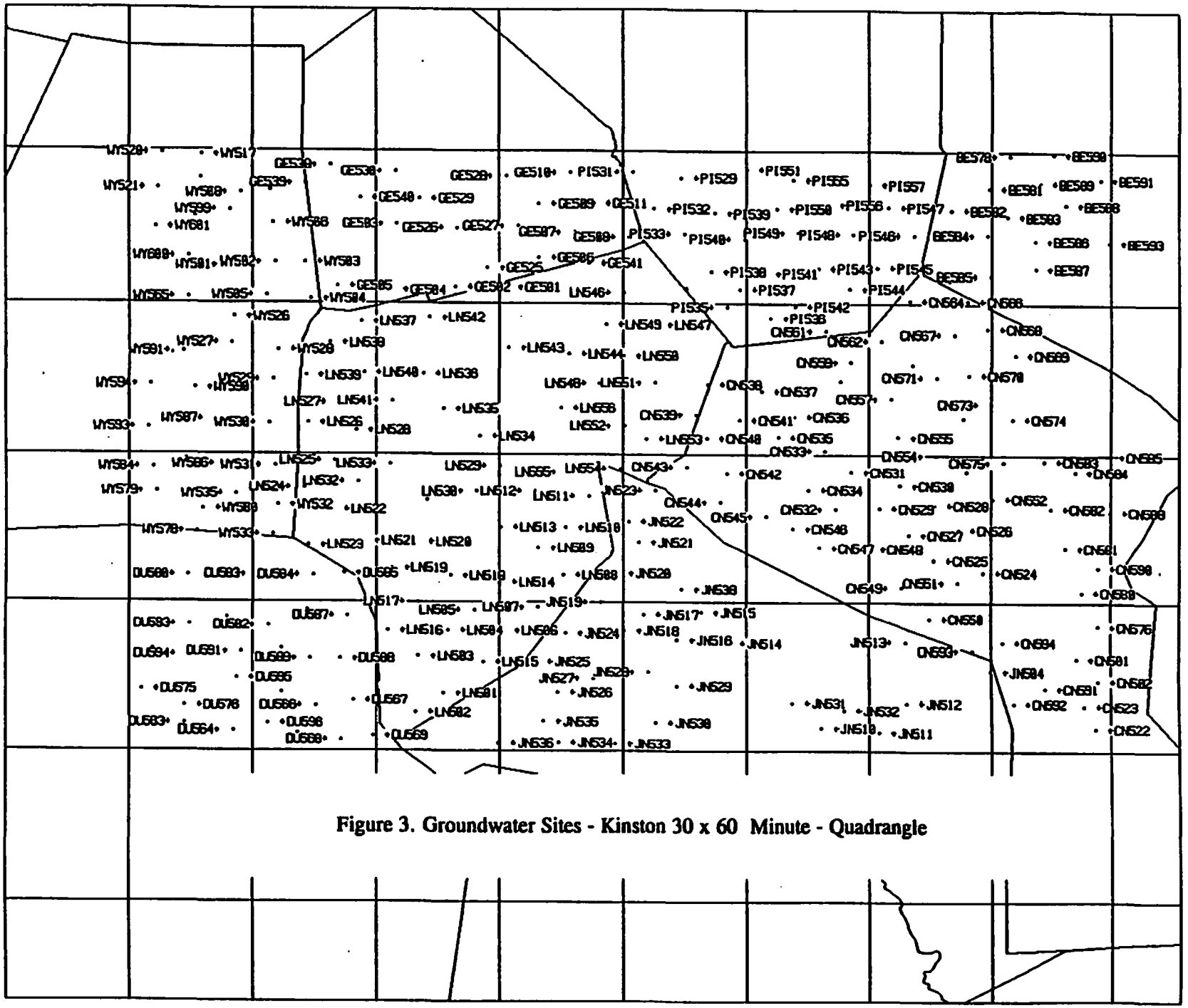

Figure 3. Groundwater Sites - Kinston 30 x 60 Minute - Quadrangle

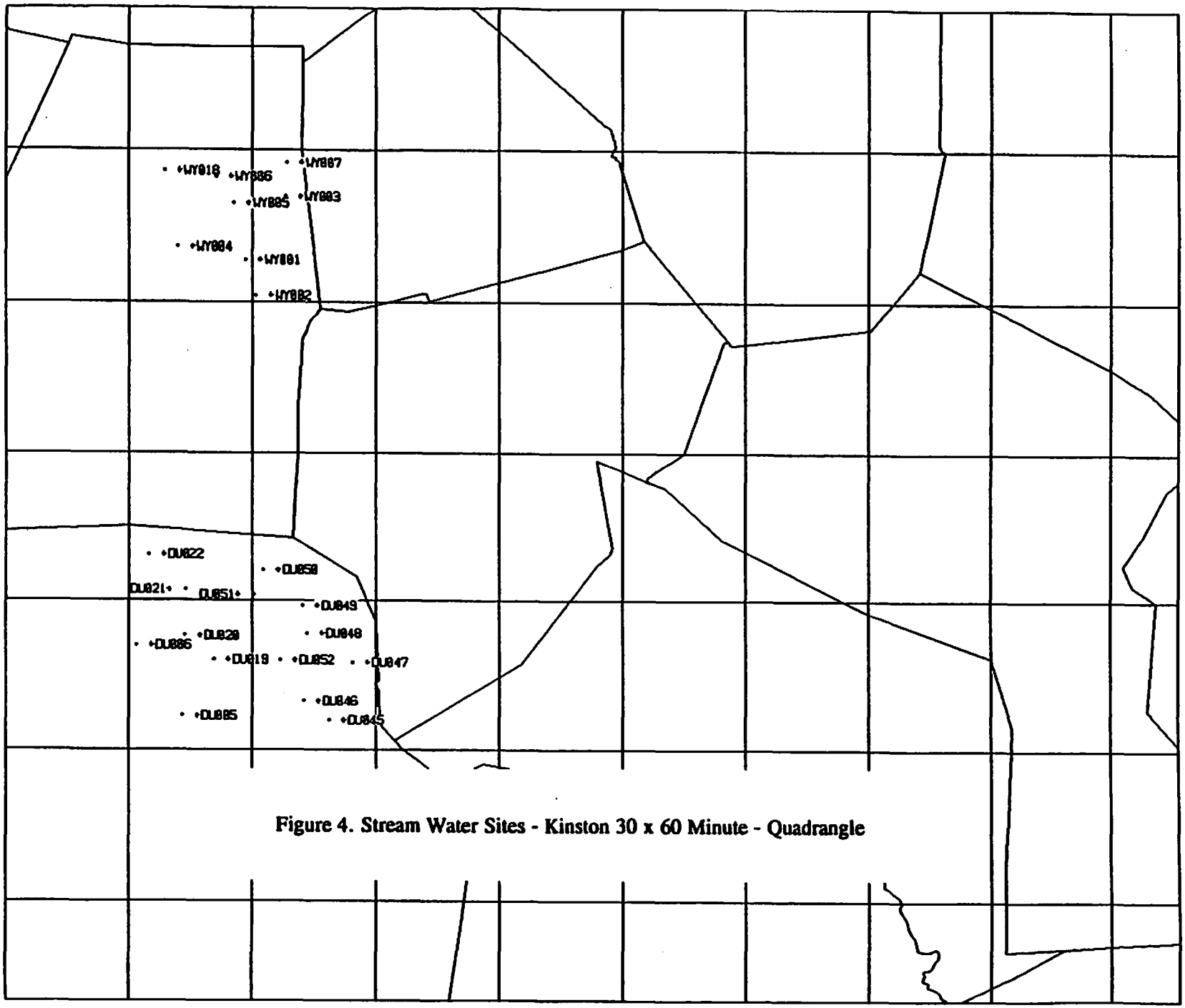

Figure 4. Stream Water Sites - Kinston 30 x 60 Minute - Quadrangle

KINSTON 100K QUADRANGLE - 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
392	BE018	35.4965	77.1656	4.6	45	3.4	7	7	46400	41	16400	70	500	5.8	8000	80	0.2	0.7	25	2	N	0.2	
394	BE020	35.4671	77.0898	6.4	85	1.8	8	26	14900	36	12600	230	2100	1.9	7300	20	2.3	-1.0	10	3	N	0.3	
395	BE021	35.4405	77.0912	4.8	45	2.9	11	14	33300	47	14200	120	1900	2.8	8800	50	4.2	-1.0	17	3	N	N	
396	BE022	35.4330	77.1646	4.3	47	3.8	8	9	47100	41	11300	60	400	6.2	7000	70	5.0	N	23	4	2.8	0.3	
397	BE023	35.3942	77.1173	4.8	48	1.0	5	10	13900	14	11700	100	2600	3.1	4100	20	N	-1.0	8	1	N	N	
398	BE024	35.4396	77.0452	6.9	185	3.0	9	10	42800	50	17000	120	2800	7.0	6100	60	5.3	-1.0	26	4	N	0.4	
399	BE025	35.4077	77.0147	6.9	400	3.4	8	10	52600	82	23300	90	2700	8.4	5400	70	6.1	1.9	36	7	N	N	
404	BE030	35.4483	77.0163	5.6	40	3.5	13	14	51700	71	23900	110	2300	5.3	7000	70	4.2	2.0	29	4	2.6	0.4	
1265	CN001	35.2503	77.1451	5.7	73	10.2	91	157	19500	287	18300	560	2200	4.3	16900	50	10.5	-1.9	167	18	8.1	1.2	
1266	CN002	35.2681	77.1523	5.5	56	8.7	63	157	17400	209	16600	630	1800	3.6	19100	50	2.3	1.9	117	16	8.8	1.3	
1267	CN003	35.2699	77.1107	6.3	91	2.9	15	46	7700	67	8500	150	1700	1.5	4500	10	2.3	-1.1	34	5	N	0.4	
1268	CN004	35.3752	77.1456	6.2	89	3.3	10	7	53700	54	16000	70	900	6.9	6600	70	N	-1.0	26	3	1.7	0.3	
1269	CN005	35.3837	77.1871	4.6	41	3.3	19	67	7500	67	14400	420	500	2.9	15400	40	5.8	-1.0	32	1	3.6	0.5	
1270	CN006	35.3358	77.2267	4.2	32	4.4	31	59	13900	109	12900	240	2100	0.8	7900	20	2.7	-1.5	65	10	4.7	0.6	
1271	CN007	35.3259	77.2995	5.9	101	10.9	65	125	18000	256	15400	540	2500	4.1	14400	40	11.0	2.3	143	21	7.8	1.3	
1272	CN008	35.3240	77.4119	5.9	43	4.2	25	49	11300	97	6200	210	1400	1.0	7400	20	N	-1.0	57	7	4.3	0.5	
1273	CN009	35.2978	77.4209	6.0	61	8.4	40	110	13300	157	12900	620	1300	6.4	21900	60	0.3	-1.0	83	10	8.5	1.4	
1274	CN010	35.2641	77.4124	5.9	46	1.7	5	25	6300	24	-5000	110	500	1.2	4900	10	1.8	2.1	14	2	2.4	0.3	
1275	CN011	35.2472	77.4188	6.3	121	6.9	37	103	16500	150	15900	380	300	3.5	17100	60	8.7	4.6	86	11	2.9	0.7	
1276	CN012	35.2194	77.4248	6.0	65	10.6	78	193	22100	226	25900	650	400	6.0	24000	80	7.2	-1.1	134	3	9.9	1.8	
1277	CN013	35.1924	77.3665	5.1	68	7.0	31	187	10800	97	21000	700	400	3.7	29100	80	2.9	-1.2	57	8	6.2	1.1	
1278	CN014	35.1649	77.3306	6.3	151	7.1	37	148	10300	164	18100	480	900	3.5	18300	50	5.2	-1.5	79	13	6.0	1.3	
1279	CN015	35.1833	77.2887	6.3	50	1.5	9	13	9000	23	10500	90	600	1.0	4100	20	0.9	-1.0	14	2	2.1	0.3	
1280	CN016	35.2094	77.2801	6.1	52	1.7	7	24	9600	27	7200	120	2000	4.2	4100	20	1.6	-1.0	17	3	1.1	0.2	
1281	CN017	35.2294	77.3078	4.8	66	2.8	17	45	9000	51	17100	260	500	2.8	9600	30	1.4	2.7	32	5	3.0	0.5	0.023
1282	CN018	35.2599	77.3329	5.6	61	4.6	18	87	17000	77	23400	660	1600	2.5	19600	50	N	-1.0	41	1	4.5	0.6	
1283	CN019	35.2257	77.2149	5.8	61	1.3	6	14	16500	26	8000	120	1500	0.7	4700	20	N	N	10	2	N	0.1	
1284	CN020	35.2137	77.1827	6.3	87	3.1	11	54	11600	44	16100	260	1100	3.5	9300	30	N	1.1	23	5	3.1	0.4	
1285	CN021	35.1931	77.1587	5.2	50	1.5	6	18	8600	33	7600	160	1600	1.6	5200	20	1.2	-1.0	14	2	N	0.2	
1286	CN022	35.1814	77.1882	5.8	42	10.3	34	289	9900	156	38200	1120	600	6.4	37900	90	1.4	-1.0	80	10	8.5	1.9	
1287	CN023	35.1583	77.1460	5.8	71	2.6	5	44	8700	38	12000	240	1800	3.0	6400	20	2.4	-1.0	22	3	1.9	0.2	
1288	CN024	35.1646	77.1831	6.4	69	1.8	10	30	8300	57	7100	200	1000	1.2	6600	20	0.3	-1.2	19	4	N	0.2	
1289	CN025	35.1414	77.2182	6.1	50	2.5	13	54	9900	49	14100	230	700	2.2	8700	30	1.4	-1.0	25	1	2.0	0.4	
1290	CN026	35.1413	77.2412	4.4	85	2.9	10	48	4700	51	11400	220	700	2.0	7200	20	2.1	1.2	29	4	2.8	0.4	
1291	CN027	35.1099	77.2113	4.4	31	1.6	9	27	12100	43	12400	160	2500	1.2	5500	20	2.4	-1.0	15	3	N	0.2	
1292	CN028	35.0878	77.1493	6.4	111	4.8	25	122	9800	103	14600	480	1000	2.6	16400	40	4.7	-1.0	51	9	4.9	0.8	
1293	CN029	35.0972	77.1071	6.5	70	1.6	5	28	9400	10	14500	420	700	2.1	16200	40	2.2	-1.0	11	2	0.5	0.4	
1294	CN030	35.0779	77.0833	6.6	91	8.3	30	227	9400	103	30200	1030	500	6.4	38100	100	3.3	-1.0	60	8	6.7	1.2	

KINSTON 100K QUADRANGLE - 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
1295	CN031	35.0051	77.0506	4.3	39	2.9	14	63	9300	42	14700	420	1300	2.4	13700	40	3.0	-1.0	31	6	N	0.6	
1296	CN032	35.0520	77.0806	4.3	44	1.1	4	13	9800	15	11800	280	800	3.0	9900	30	2.5	-1.0	11	N	1.6	0.2	
1308	CN044	35.1493	77.0303	4.7	53	5.5	26	74	14900	104	15400	580	1700	4.3	18600	60	N	1.3	56	7	4.8	0.7	
1311	CN047	35.2361	77.0363	4.4	51	1.7	5	21	16200	37	9600	140	4200	2.3	4700	10	N	-1.0	16	3	N	0.2	
1312	CN048	35.2460	77.0668	5.8	61	0.8	3	10	12900	29	14000	150	2800	1.1	4800	20	1.1	N	7	2	1.3	N	
1313	CN049	35.2612	77.0039	4.9	52	1.7	4	17	20700	28	10100	110	3800	2.9	4300	20	3.5	-1.0	16	3	2.9	N	
1878	DU005	35.0283	77.9457	6.6	60	4.8	16	94	7600	74	8300	170	100	2.5	9800	30	3.8	-1.0	36	5	2.8	0.6	
1879	DU006	35.0875	77.9923	6.6	50	6.7	26	150	9400	107	13000	360	300	4.1	9600	40	N	N	48	7	5.2	1.0	
1891	DU018	35.0255	77.8735	N	N	3.5	10	68	7900	56	7600	200	200	2.2	10600	30	1.9	-1.0	22	5	3.0	0.5	
1892	DU019	35.0758	77.9140	6.5	60	11.8	43	230	7900	185	9800	300	200	3.9	12700	40	9.5	N	99	15	6.6	1.3	
1893	DU020	35.0954	77.9431	5.2	40	2.8	6	24	10100	36	6400	90	200	2.2	5300	20	13.5	-1.0	18	3	1.8	0.2	
1894	DU021	35.1342	77.9426	5.2	70	2.9	3	5	25900	21	6000	70	400	3.1	4900	30	4.8	0.9	14	1	2.6	0.3	
1895	DU022	35.1636	77.9798	5.1	65	4.2	21	66	8500	63	13400	190	200	4.2	10500	30	2.2	-1.0	32	5	4.9	0.6	
1918	DU045	35.0250	77.7970	4.7	45	7.1	29	160	6700	111	12800	340	300	1.7	17800	40	3.5	N	58	10	6.5	1.2	
1919	DU046	35.0407	77.8236	9.3	205	8.2	30	187	6700	118	14600	320	500	3.2	15400	40	7.1	-1.0	66	2	6.6	1.1	
1920	DU047	35.0735	77.7731	6.9	42	1.7	5	29	2900	30	7500	N	N	1.9	8200	20	0.4	-1.0	14	2	1.9	0.3	
1921	DU048	35.0977	77.8198	6.8	72	2.4	7	20	14200	42	10400	150	400	3.0	6500	30	3.2	-1.0	22	5	2.6	0.4	
1922	DU049	35.1213	77.8243	6.7	62	4.3	9	31	N	65	9200	N	N	2.8	38900	30	N	-1.0	37	7	1.7	0.4	
1923	DU050	35.1507	77.8640	5.8	40	1.8	5	24	6600	28	7200	100	100	0.7	5600	20	N	N	15	2	1.6	0.3	
1924	DU051	35.1302	77.8728	5.9	30	3.6	14	52	1900	74	10800	N	N	2.3	9100	30	N	-1.0	30	5	2.7	0.6	
1925	DU052	35.0754	77.8472	5.4	92	3.1	8	52	8800	31	7800	330	100	2.4	15500	40	1.3	-1.0	17	3	2.3	0.3	
2302	GE001	35.4130	77.7240	5.7	70	2.7	12	48	4700	57	13500	310	100	2.5	13400	40	3.0	N	24	6	N	0.3	
2303	GE002	35.3735	77.7860	5.3	120	3.0	10	51	5900	67	13100	320	100	2.3	13100	40	3.5	-1.0	119	4	N	0.4	
2304	GE003	35.3943	77.6744	4.5	50	1.2	5	22	2600	12	5700	180	100	1.4	8100	20	N	N	10	2	N	0.1	
2305	GE004	35.4364	77.8005	5.8	60	3.1	7	21	15900	37	7200	60	200	3.0	6000	30	3.0	N	40	2	4.0	0.4	
2306	GE005	35.4447	77.7634	6.0	70	2.6	5	20	18300	26	7800	90	200	4.0	6200	30	3.3	-1.0	35	3	7.5	0.3	
2307	GE006	35.4571	77.7010	5.6	60	3.8	13	66	6400	67	15300	290	200	3.5	11900	30	4.8	1.0	28	5	6.3	1.0	0.043
2308	GE007	35.4752	77.7376	5.6	50	2.4	7	27	11900	35	11300	140	200	3.2	6300	30	1.1	-1.0	24	3	N	N	
2309	GE008	35.4854	77.7903	5.8	50	4.8	37	68	9500	121	15000	370	500	1.3	13700	30	N	N	61	11	3.7	0.7	
2316	GE015	35.4934	77.6938	6.0	70	2.1	5	33	7200	-20	6700	150	300	1.8	6400	20	N	-1.0	N	1	N	N	
2318	GE017	35.4801	77.6481	5.8	90	4.3	18	88	5900	59	16400	350	200	3.3	13300	30	4.7	0.7	36	4	4.1	0.6	
2323	GE022	35.4707	77.5389	4.8	50	2.8	8	59	6300	32	9300	290	100	1.4	11600	30	1.6	-1.0	38	3	N	0.5	
2324	GE023	35.4698	77.5698	6.3	100	3.4	13	20	21800	30	15400	120	300	3.5	7500	40	4.5	-1.0	33	3	6.4	N	
2325	GE024	35.4434	77.6019	5.6	120	12.2	67	312	20100	257	24100	850	500	7.9	30500	70	10.7	1.5	119	18	16.7	1.7	
2326	GE025	35.4397	77.5678	6.3	80	2.9	10	22	19000	43	15700	N	N	3.3	N	N	0.2	N	17	N	3.3	0.3	
2327	GE026	35.4121	77.6325	5.2	70	4.4	13	53	22500	66	16500	260	500	3.7	14200	50	4.0	0.8	27	4	4.4	0.6	
2328	GE027	35.4083	77.5756	5.9	85	3.9	9	18	24000	51	14600	120	400	2.8	8200	50	3.8	-1.0	23	3	N	0.7	
3276	JN001	35.1268	77.4565	5.9	45	2.5	6	56	3600	19	9800	140	100	1.0	6900	20	1.6	-1.0	13	3	2.1	0.3	

KINSTON 100K QUADRANGLE - STREAM SEDIMENT

Lab #	County ID	Lat	Long	pH	Cond	U	Th	Hf	Al	Ce	Fe	Mn	Na	Sc	Ti	V	Dy	Eu	La	Sm	Yb	Lu	Au
					um/cm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
3277	JN002	35.1443	77.5086	6.1	70	6.5	29	108	12200	102	16700	560	600	2.6	21700	60	M	-1.0	54	1	3.0	0.8	
3278	JN003	35.2210	77.4763	6.4	80	4.6	14	65	14900	56	14500	290	500	5.4	11200	40	6.0	-1.0	35	5	4.7	0.3	
3279	JN004	35.1998	77.4725	5.6	35	3.0	14	30	14200	41	11400	130	300	3.7	7200	30	2.2	-1.0	21	3	3.9	0.3	
3280	JN005	35.1628	77.4904	6.6	100	3.4	11	54	10900	69	13500	280	300	2.4	10200	40	1.8	M	32	6	M	0.5	
3281	JN006	35.1207	77.3961	6.3	40	6.5	23	149	9400	94	21000	320	200	2.9	14000	40	5.1	-1.3	55	11	4.8	1.1	
3282	JN007	35.1329	77.3383	5.5	30	3.9	18	46	M	69	14100	230	600	4.7	11800	60	2.4	-1.0	42	1	4.2	0.4	
3288	JN013	35.0275	77.1357	5.7	40	2.5	9	32	16900	58	10300	320	1600	3.7	8100	30	2.6	2.0	22	3	M	0.3	
3289	JN014	35.0339	77.2135	5.6	25	2.0	10	23	16500	46	10200	100	600	2.5	5200	30	1.6	-1.0	18	3	M	0.2	
3290	JN015	35.0882	77.2118	4.6	25	1.5	5	21	11000	35	12200	120	1000	1.3	5100	20	1.4	-1.0	12	2	M	M	
3291	JN016	35.0799	77.3130	6.2	40	2.2	8	37	4800	35	5900	160	400	1.5	6300	20	1.2	-1.0	20	4	M	0.5	
3292	JN017	35.1100	77.3300	6.1	45	3.3	6	55	6700	32	8900	260	100	2.4	11700	30	2.0	M	18	2	5.2	0.3	
3293	JN018	35.0379	77.3199	6.2	40	3.5	11	65	7700	45	10100	270	300	1.6	10800	30	2.4	-1.0	22	4	3.9	0.6	
3298	JN023	35.0347	77.3712	4.4	25	2.5	5	46	5300	22	6000	120	400	1.7	5300	10	1.8	-1.0	17	2	M	0.2	
3299	JN024	35.1042	77.4120	5.5	40	3.1	16	55	6200	36	11100	200	300	1.9	9200	30	2.9	-1.0	21	5	1.9	0.4	
3300	JN025	35.1042	77.5012	6.5	135	6.5	17	156	8100	57	15700	300	200	1.5	12100	40	4.2	-1.0	33	2	5.9	0.9	
3301	JN026	35.0779	77.5161	6.1	65	2.4	12	39	6000	56	7700	130	200	1.8	5400	20	1.9	2.5	20	3	4.4	0.3	
3302	JN027	35.0647	77.4979	6.7	40	3.1	14	66	7700	45	13100	230	100	2.0	8700	20	2.0	-1.0	30	5	M	0.5	
3303	JN028	35.0294	77.4608	4.2	43	4.7	22	87	16100	82	18400	170	900	2.1	9800	40	2.9	0.9	39	6	5.5	0.7	
3305	JN030	35.0036	77.7153	5.5	62	2.6	5	18	15000	39	8700	100	900	1.9	4800	30	2.4	-1.0	20	2	2.5	0.3	
3306	JN031	35.0298	77.6212	5.4	41	3.4	13	50	8800	51	6400	150	500	2.0	7100	20	2.8	1.2	29	4	2.8	0.6	
3307	JN032	35.0679	77.5904	5.6	48	3.4	14	36	16900	59	11500	140	1300	1.6	5400	20	2.0	-1.0	30	4	5.2	0.4	
3308	JN033	35.0928	77.5729	4.6	41	1.6	6	20	7200	47	10300	150	400	1.5	7500	20	1.6	-1.0	14	2	M	0.3	
3553	LN001	35.2029	77.8183	6.0	50	2.0	9	21	6000	43	5500	140	300	1.5	6700	20	2.8	0.6	18	6	1.9	0.3	
3554	LN002	35.1875	77.7710	6.0	50	2.8	5	27	7700	33	6000	110	100	2.1	6100	20	3.0	0.4	13	4	1.5	0.3	
3555	LN003	35.1443	77.7581	4.8	50	1.2	2	11	6100	18	-5000	90	100	1.5	5200	20	1.2	0.4	8	2	0.8	0.1	
3557	LN005	35.1065	77.7225	6.4	80	3.2	22	46	12600	95	13000	200	200	3.1	11400	40	4.7	1.2	42	7	3.7	0.7	
3559	LN007	35.0807	77.6427	6.1	70	2.6	6	19	16100	36	8500	90	200	2.4	5600	30	2.3	0.5	16	3	1.9	0.3	
3560	LN008	35.1014	77.6295	5.3	40	2.0	7	23	8900	36	6000	180	300	1.4	9600	30	2.9	0.7	16	5	2.6	0.3	
3561	LN009	35.1048	77.6678	5.5	60	2.3	6	17	19100	33	8100	70	100	1.7	5400	40	1.8	0.3	15	3	1.9	0.2	
3562	LN010	35.1420	77.6683	5.5	50	2.0	8	20	16700	32	5900	90	300	2.6	5300	30	1.6	0.4	16	3	0.8	0.3	
3563	LN011	35.1519	77.7056	5.1	40	3.1	15	31	11900	72	8500	150	400	2.5	9000	40	4.1	1.2	37	7	3.5	0.6	0.042
3564	LN012	35.1743	77.7825	4.7	30	1.7	8	32	3600	37	6400	140	100	1.1	7600	20	1.6	0.4	20	3	1.9	0.3	
3565	LN013	35.1761	77.7003	4.8	50	3.9	14	68	6500	57	6200	210	200	1.9	13300	40	4.6	0.3	27	9	4.6	0.6	
3566	LN014	35.1454	77.6111	4.3	50	1.5	5	21	6300	22	6700	120	100	1.1	6300	20	1.0	M	10	2	1.8	0.2	
3567	LN015	35.1578	77.5762	4.9	40	4.5	18	70	7600	86	7500	330	500	2.0	15400	50	6.2	0.5	40	13	4.9	0.7	
3568	LN016	35.1280	77.5841	4.3	50	3.3	7	16	22300	44	10600	140	700	2.9	7600	40	2.3	0.9	22	5	1.9	0.3	
3569	LN017	35.1533	77.5321	5.8	70	3.1	9	46	4900	46	5100	190	200	1.5	9500	30	1.5	-1.0	24	3	1.1	0.5	
3570	LN018	35.2103	77.5423	6.7	130	3.1	13	37	8400	55	7100	250	300	2.3	11000	40	4.1	-1.0	41	3	2.1	0.3	

KINSTON 100K QUADRANGLE - 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
3571	LN019	35.2417	77.5294	6.1	70	5.9	37	94	9700	174	18600	360	700	2.3	14200	30	2.7	-1.0	82	10	7.9	1.1	
3572	LN020	35.2138	77.6828	6.6	75	4.9	42	68	10500	169	11500	230	500	1.0	9700	20	1.2	1.2	72	9	3.6	0.8	
3573	LN021	35.2075	77.7550	5.3	50	1.6	5	22	6200	33	7700	90	100	1.2	5400	20	1.1	-1.0	15	3	1.6	0.2	
3574	LN022	35.2445	77.8220	4.9	85	2.7	13	21	22100	53	6600	130	2700	1.7	3500	20	M	-1.0	23	M	2.9	0.3	
3575	LN023	35.2900	77.8042	5.7	60	6.0	29	138	9000	96	7000	360	200	2.4	13300	40	4.5	-1.0	57	6	6.1	0.7	
3576	LN024	35.2635	77.8056	4.4	40	2.5	6	9	28500	36	6800	60	800	3.5	5100	60	3.5	-1.0	20	4	M	0.3	
3577	LN025	35.3156	77.8146	5.8	70	2.3	10	42	6600	41	8400	160	200	2.1	6200	20	1.5	-1.0	19	3	2.0	0.4	
3578	LN026	35.3562	77.7970	4.5	150	4.0	10	18	25700	53	13400	110	500	4.1	8500	50	4.0	-1.0	24	3	4.3	0.7	
3579	LN027	35.3507	77.7686	4.8	50	2.3	8	28	11700	22	7200	70	200	1.7	4300	20	1.4	-1.0	15	3	1.0	0.2	
3580	LN028	35.3438	77.7389	5.7	60	2.3	8	32	9500	37	9200	210	200	1.0	9800	40	M	0.7	20	3	M	0.3	
3581	LN029	35.3106	77.7716	6.0	80	2.6	10	23	12100	41	9100	120	300	1.3	6400	20	3.2	-1.0	21	3	1.8	0.4	0.501
3582	LN030	35.2532	77.7010	4.9	80	3.2	5	10	26700	31	8200	70	1100	4.1	3500	30	2.6	-1.0	19	3	2.4	0.3	
3583	LN031	35.3014	77.6958	5.9	65	4.8	20	94	6300	81	13100	250	100	1.3	11600	30	5.0	-1.1	48	5	3.9	0.4	
3584	LN032	35.3223	77.6757	4.7	80	6.4	19	88	5300	86	11400	230	200	2.5	10400	30	5.4	-1.0	45	6	3.0	0.5	
3585	LN033	35.3333	77.7147	5.6	40	2.9	6	13	24200	40	13000	80	300	3.3	5500	40	3.9	M	23	4	2.1	0.3	
3586	LN034	35.3119	77.6196	5.8	70	1.6	4	37	4600	-43	-5000	130	100	2.1	7600	20	M	-1.0	11	2	M	M	
3587	LN035	35.3390	77.5974	5.2	70	3.1	11	55	6900	50	12100	230	100	1.9	11900	40	2.3	-1.0	28	4	2.5	0.5	0.019
3588	LN036	35.3671	77.5917	4.6	70	3.0	9	37	9500	36	9300	130	200	1.7	6400	20	0.9	-1.0	21	3	1.7	0.4	
3589	LN037	35.3801	77.5517	5.6	70	4.4	14	81	6300	73	13900	310	200	2.5	11700	30	3.9	1.8	35	5	3.0	0.7	
3590	LN038	35.4070	77.5083	5.7	90	2.4	7	27	14500	27	8900	130	400	1.8	6300	20	1.8	-1.0	21	3	M	0.3	
3591	LN039	35.3749	77.5093	5.8	70	2.9	9	21	16200	39	11800	140	400	2.8	7000	40	4.9	-1.0	21	M	2.3	0.5	
3592	LN040	35.3075	77.5684	5.9	80	2.9	8	24	19600	50	16400	140	500	3.6	8000	40	3.5	1.2	25	4	3.1	0.3	
3593	LN041	35.3420	77.5718	5.7	80	3.5	11	49	7000	66	10400	220	200	1.5	10800	30	2.2	-1.0	29	5	2.0	0.5	
3594	LN042	35.3171	77.5314	6.0	70	5.8	19	78	18300	103	14200	300	700	1.9	11900	50	5.0	M	58	8	2.6	0.7	
3595	LN043	35.3588	77.4422	6.0	90	4.3	14	56	26200	81	20400	270	700	4.6	9600	40	2.8	1.1	41	6	2.9	0.8	
4604	PI001	35.3555	77.3593	5.7	115	3.9	29	44	17400	106	12600	230	2100	2.8	7100	30	3.0	1.2	50	3	M	0.5	
4605	PI002	35.3779	77.3923	5.9	131	3.8	14	24	27300	60	17400	180	1300	3.1	7800	50	0.3	-1.0	33	3	3.5	0.5	
4606	PI003	35.3972	77.3557	5.1	62	2.9	22	37	15400	72	10400	230	1100	2.3	9300	30	3.3	M	30	5	M	0.3	
4607	PI004	35.3777	77.3055	6.8	205	15.3	69	182	12500	243	18700	610	1400	6.6	19500	50	7.3	-1.0	130	18	8.1	1.4	
4608	PI005	35.4271	77.3365	5.5	58	3.5	11	13	41100	86	18800	100	800	6.8	7900	60	0.5	-1.0	34	5	3.4	0.7	0.021
4609	PI006	35.4711	77.3550	5.9	86	3.2	8	18	23400	69	17200	130	500	3.6	6000	40	2.9	M	29	3	2.9	0.2	
4610	PI007	35.4682	77.2986	6.0	80	2.5	7	22	11600	35	8900	140	300	2.6	6300	30	1.4	-1.0	33	1	M	0.3	
4611	PI008	35.4668	77.2509	5.9	45	3.4	10	14	35200	50	14500	120	800	3.3	7600	60	3.1	0.7	24	3	2.9	0.2	
4612	PI009	35.4522	77.2233	4.9	29	3.1	10	12	38700	61	16100	90	1700	6.0	6900	60	4.7	1.4	33	4	2.3	0.4	
4620	PI017	35.4980	77.4892	6.0	54	3.5	6	37	15300	78	15300	190	300	3.4	7700	30	4.5	M	23	4	M	0.4	
4621	PI018	35.4740	77.4717	5.6	68	10.4	38	188	7100	163	34000	1330	400	6.0	43800	90	4.2	-1.0	84	10	10.1	1.1	
4623	PI020	35.4344	77.4241	4.7	176	3.8	15	81	11300	72	13400	540	200	3.7	22300	60	0.4	M	36	5	4.4	0.3	
4624	PI021	35.4222	77.3764	4.9	58	3.8	11	9	56500	51	28200	70	600	7.6	7700	90	0.3	-1.0	24	3	M	M	

KINSTON 100K QUADRANGLE - STREAM SEDIMENT

Lab #	County ID	Lat	Long	pH	Cond	U	Th	Hf	Al	Ce	Fe	Mn	Na	Sc	Ti	V	Dy	Eu	La	Sm	Yb	Lu	Au
					um/cm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
6577	WY001	35.4098	77.8819	7.0	206	15.6	74	263	9500	312	38900	1220	500	5.2	43000	110	10.3	-1.6	167	24	9.5	2.4	
6578	WY002	35.3807	77.8712	6.8	90	17.8	142	306	11600	489	31700	1210	300	5.6	43400	110	22.3	N	249	38	14.1	2.4	
6579	WY003	35.4620	77.8418	6.7	80	3.4	15	34	10100	53	12600	250	300	2.3	8200	30	4.0	0.8	33	4	2.0	0.5	
6580	WY004	35.4204	77.9509	6.7	60	3.2	11	14	25000	45	11100	80	400	4.9	5100	30	2.7	-1.0	21	2	3.1	0.6	
6581	WY005	35.4565	77.8937	6.3	70	4.2	12	17	N	61	19500	160	400	5.8	9500	70	5.5	-1.0	26	4	4.3	0.6	
6582	WY006	35.4783	77.9111	6.6	60	2.9	14	28	12900	43	10200	110	300	3.7	5600	20	2.8	-1.0	21	3	3.5	0.4	
6583	WY007	35.4900	77.8404	5.7	45	2.0	6	22	13900	40	8700	100	500	1.9	5100	20	1.3	-1.0	15	2	1.7	0.5	
6594	WY018	35.4829	77.9637	6.8	110	3.0	8	29	10800	29	11900	80	200	1.6	4400	20	2.3	-1.0	16	3	4.9	0.4	
6604	WY028	35.3413	77.9033	7.5	90	8.8	65	110	18300	188	20700	520	700	4.0	20700	60	8.0	-1.0	114	13	4.7	1.1	
6605	WY029	35.3292	77.9516	6.8	85	9.2	75	121	9700	274	17400	370	500	4.5	12500	30	9.2	2.2	146	16	6.3	1.3	
6606	WY030	35.2822	77.8686	5.5	40	7.4	39	126	8600	133	13400	430	300	2.5	14900	40	6.2	-1.3	71	2	6.3	0.9	
6607	WY031	35.3123	77.8270	5.1	50	3.2	8	14	18000	56	13300	60	300	2.3	3100	40	1.7	-1.0	30	4	1.8	0.5	
6608	WY032	35.2234	77.8413	5.2	40	12.0	41	248	5800	149	8000	300	100	3.7	14100	40	7.9	-1.0	87	9	9.4	1.4	
6609	WY033	35.2542	77.9118	N	N	4.1	17	44	23600	77	12800	N	N	3.8	29500	40	0.6	-1.0	42	5	2.8	0.4	
6612	WY036	35.2900	77.9876	6.3	35	2.6	8	23	10200	33	7700	180	600	2.7	8100	30	6.1	0.7	19	3	2.1	0.3	
6613	WY037	35.2622	77.9955	5.6	20	22.9	71	580	31800	212	77700	2960	500	9.5	99600	230	0.2	1.3	129	14	17.7	4.4	
6614	WY038	35.2513	77.9543	6.0	35	14.5	57	353	14600	209	28500	960	400	6.4	34900	80	8.6	-1.4	124	16	12.4	2.1	
6615	WY039	35.2143	77.9660	N	N	3.3	8	54	12000	42	9100	N	N	2.8	14900	30	N	-1.0	20	3	2.8	0.5	
6616	WY040	35.1808	77.9396	5.7	30	4.7	20	94	6600	71	13700	270	200	2.2	10400	20	3.8	-1.0	40	5	2.4	0.4	
6617	WY041	35.1809	77.8842	5.7	30	3.1	15	71	6000	36	12800	270	100	2.0	11900	30	1.6	-1.0	21	1	2.4	0.4	

KINSTON 100K QUADRANGLE - SUPPLEMENTAL STREAM SEDIMENT

Lab #	County ID	Lat	Long	Ux ppm	Ag ppm	As ppm	Ba ppm	Be ppm	Ca ppm	Co ppm	Cr ppm	Cu ppm	K ppm	Li ppm	Mg ppm	Mo ppm	Nb ppm	Ni ppm	P ppm	Pb ppm	Se ppm	Sn ppm	Sr ppm	W ppm	Y ppm	Zn ppm

KINSTON 100K QUADRANGLE - SUPPLEMENTAL STREAM SEDIMENT

Lab #	County ID	Lat	Long	Ux ppm	Ag ppm	As ppm	Ba ppm	Be ppm	Ca ppm	Co ppm	Cr ppm	Cu ppm	K ppm	Li ppm	Mg ppm	Mo ppm	Nb ppm	Ni ppm	P ppm	Pb ppm	Se ppm	Sn ppm	Sr ppm	W ppm	Y ppm	Zn ppm
1269	DU005	35.0283	77.9457	0.6	0.2	4	5	-0.5	-100	7	17	2	-1000	7	300	3	45	-5	600	-10	-1	5	.	2	5	-5
1270	DU006	35.0875	77.9923	1.4	0.3	2	15	-0.5	-100	5	24	2	1000	7	350	2	25	5	600	-10	-1	-5	.	-2	10	-5
1282	DU018	35.0255	77.8735	0.3	0.2	3	12	-0.5	-100	5	15	-2	-1000	6	650	-2	30	-5	700	-10	2	5	.	-2	-5	-5
1283	DU019	35.0758	77.9140	0.9	0.4	3	-5	0.5	-100	7	24	2	-1000	5	300	2	20	-5	700	-10	-1	-5	.	-2	-5	10
1284	DU020	35.0954	77.9431	3.2	0.3	3	10	0.5	100	10	9	2	1000	8	550	3	15	-5	600	15	1	5	.	-2	5	7
1285	DU021	35.1342	77.9426	2.3	0.6	3	-5	1	100	15	6	15	1000	15	2900	-2	10	5	1000	30	-1	-5	.	2	-5	42
1286	DU022	35.1636	77.9798	1.3	0.3	3	10	-0.5	-100	5	21	2	-1000	7	650	-2	25	-5	500	-10	-1	-5	.	-2	-5	5
1309	DU045	35.0250	77.7970	1.1	0.4	2	10	-0.5	-100	7	24	-2	-1000	6	450	-2	40	-5	700	-10	-1	-5	.	-2	-5	-5
1310	DU046	35.0407	77.8236	1.7	0.2	2	5	-0.5	-100	5	25	2	-1000	6	850	-2	35	-5	800	-10	1	-5	.	2	-5	-5
1311	DU047	35.0735	77.7731	1.0	0.3	2	5	-0.5	-100	7	13	2	-1000	5	200	-2	30	-5	500	-10	1	-5	.	-2	-5	-5
1312	DU048	35.0977	77.8198	2.3	0.3	3	7	0.5	300	7	7	6	1000	9	900	2	20	-5	1000	12	1	5	.	-2	10	12
1313	DU049	35.1213	77.8243	3.7	0.4	1	7	0.5	600	10	9	4	1000	10	1650	2	10	-5	1500	15	-1	-5	.	-2	-5	12
1314	DU050	35.1507	77.8640	1.0	0.4	1	5	-0.5	-100	5	11	-2	1000	7	600	3	15	-5	400	-10	1	5	.	2	10	-5
1315	DU051	35.1302	77.8728	1.6	0.3	2	5	0.5	-100	5	10	2	-1000	8	800	3	25	-5	500	-10	-1	-5	.	2	5	-5
1316	DU052	35.0754	77.8472	1.0	0.2	2	7	-0.5	-100	7	17	2	-1000	7	300	-2	50	-5	900	-10	1	15	.	-2	-5	-5

KINSTON 100K QUADRANGLE - SUPPLEMENTAL STREAM SEDIMENT

Lab #	County	Lat	Long	Ux	Ag	As	Ba	Be	Ca	Co	Cr	Cu	K	Li	Mg	Mo	Nb	Ni	P	Pb	Se	Sn	Sr	W	Y	Zn
ID				ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

KINSTON 100K QUADRANGLE - SUPPLEMENTAL STREAM SEDIMENT

Lab #	County ID	Lat	Long	Ux ppm	Ag ppm	As ppm	Ba ppm	Be ppm	Ca ppm	Co ppm	Cr ppm	Cu ppm	K ppm	Li ppm	Mg ppm	Mo ppm	Nb ppm	Ni ppm	P ppm	Pb ppm	Se ppm	Sn ppm	Sr ppm	W ppm	Y ppm	Zn ppm

KINSTON 100K QUADRANGLE - SUPPLEMENTAL STREAM SEDIMENT

Lab #	County ID	Lat	Long	Ux ppm	Ag ppm	As ppm	Ba ppm	Be ppm	Ca ppm	Co ppm	Cr ppm	Cu ppm	K ppm	Li ppm	Mg ppm	Mo ppm	Nb ppm	Ni ppm	P ppm	Pb ppm	Se ppm	Sn ppm	Sr ppm	W ppm	Y ppm	Zn ppm
4510	WY001	35.4098	77.8819	-0.1	0.1	2	15	0.5	100	-5	19	2	1000	10	500	-2	15	-5	700	-10	4	5	.	-2	5	5
4511	WY002	35.3807	77.8712	-0.1	-0.1		5	0.5	-100	-5	14	3	1000	9	1250	-2	15	-5	1000	10	5	-5	.	-2	5	5
4512	WY003	35.4620	77.8418	-0.1	-0.1	6	-5	0.5	100	-5	6	4	2000	9	1000	-2	5	-5	900	-10	7	-5	.	-2	15	10
4513	WY004	35.4204	77.9509	-0.1	0.1	2	17	1	100	-5	8	5	3000	17	1700	-2	-5	5	1000	-10	6	-5	.	-2	5	12
4514	WY005	35.4565	77.8937	0.1	0.2	5	7	1.5	100	5	11	7	2000	20	1250	-2	10	5	1500	27	4	10	.	-2	5	35
4515	WY006	35.4783	77.9111	-0.1	-0.1	2	17	0.5	-100	7	6	2	3000	9	700	-2	5	-5	600	-10	1	-5	.	-2	-5	10
4516	WY007	35.4900	77.8404	-0.1	-0.1	2	10	-0.5	-100	-5	13	2	1000	7	750	-2	10	-5	700	-10	4	-5	.	-2	5	7
4527	WY018	35.4829	77.9637	-0.1	0.1	2	5	1	100	-5	14	2	2000	9	650	2	10	-5	800	-10	2	-5	.	-2	10	7
4537	WY028	35.3413	77.9033	-0.1	0.6		17	2	200	14	18	14	12000	-5	2400	.	.	14	700	56		.	.	.	.	25
4538	WY029	35.3292	77.9516	-0.1	0.3	2	10	0.5	100	-5	17	3	5000	8	750	-2	15	-5	700	15	3	-5	.	-2	-5	7
4539	WY030	35.2822	77.8686	0.1	0.1		7	0.5	-100	5	50	3	2000	7	400	6	21	-5	700	15	2	-5	.	-2	6	5
4540	WY031	35.3123	77.8270	0.5	0.2	3	10	1	-100	-5	6	17	3000	11	1200	-2	5	12	2000	35	2	-5	.	-2	-5	55
4541	WY032	35.2234	77.8413	0.1	-0.1	1	12	0.5	-100	-5	41	2	2000	6	550	-2	15	-5	700	-10	2	-5	.	-2	-5	-5
4542	WY033	35.2542	77.9118	-0.1	-0.1	1	12	1	100	-5	17	5	6000	12	1800	3	5	-5	1000	12	2	-5	.	-2	-5	22
4545	WY036	35.2900	77.9876	0.1	-0.1	2	12	1	-100	-5	12	4	4000	12	950	-2	5	-5	700	10	-1	-5	.	-2	-5	12
4546	WY037	35.2622	77.9955	0.1	-0.1	1	12	1	100	-5	74	2	4000	16	1200	-2	20	-5	700	35	2	-5	.	-2	-5	5
4547	WY038	35.2513	77.9543	0.1	-0.1	2	12	1	-100	-5	35	2	4000	10	1000	-2	10	-5	700	-10	-1	-5	.	-2	-5	5
4548	WY039	35.2143	77.9660	-0.1	-0.1	3	12	0.5	-100	5	19	5	1000	11	500	-2	15	5	600	15	-1	-5	.	-2	-5	7
4549	WY040	35.1808	77.9396	-0.1	-0.1	2	17	0.5	-100	-5	27	2	2000	8	500	-2	10	-5	800	-10	-1	10	.	-2	-5	5
4550	WY041	35.1809	77.8842	-0.1	-0.1	2	12	1	-100	5	28	2	1000	7	300	-2	15	-5	700	-10	1	-5	.	-2	-5	-5

KINSTON 100K QUADRANGLE - 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
298	BE578	35.4975	77.1058	7.5	270	-0.002	.	3900	177	1250	86	14060	-0.1	0.0	39	-0.001
301	BE581	35.4705	77.1274	7.3	340	0.011	35	5400	98	.	86	15440	-0.1	0.0	163	-0.001
302	BE582	35.4528	77.1660	7.0	420	-0.002	31	7000	55	.	107	15770	-0.1	0.0	115	-0.001
303	BE583	35.4473	77.1090	7.2	305	0.008	.	4400	61	.	103	16630	-0.1	0.0	138	-0.001
304	BE584	35.4323	77.1292	7.2	385	0.005	.	4200	152	1430	154	16320	-0.1	0.0	113	-0.001
305	BE585	35.3985	77.1257	6.8	230	-0.002	.	4800	143	.	84	18990	-0.1	0.0	92	-0.001
306	BE586	35.4275	77.0796	7.3	305	-0.002	.	5000	297	2540	107	16460	-0.1	0.0	93	-0.001
307	BE587	35.4046	77.0791	7.4	360	0.008	.	4500	274	9780	83	16680	-0.1	0.0	84	-0.001
308	BE588	35.4570	77.0476	7.2	360	0.002	.	6600	181	1650	92	16930	-0.1	0.0	49	-0.001
309	BE589	35.4748	77.0743	7.2	360	0.013	.	5900	124	.	141	16090	0.8	0.0	82	-0.001
310	BE590	35.4988	77.0606	7.2	290	-0.002	.	4900	89	1670	123	15010	0.8	0.0	97	-0.001
311	BE591	35.4779	77.0116	7.2	410	-0.002	.	6100	199	1880	180	17430	-0.1	0.0	131	-0.001
313	BE593	35.4261	77.0023	7.0	420	0.002	30	7200	116	.	121	18610	-0.1	0.0	127	-0.001
1165	CN501	35.0780	77.0361	8.0	340	0.042	42	7900	136	.	24	74300	-0.1	0.1	105	-0.001
1166	CN502	35.0599	77.0134	7.0	500	-0.002	92	40100	83	7310	209	39680	1.5	0.0	115	-0.001
1186	CN522	35.0194	77.0162	7.6	450	0.030	.	6400	197	1950	43	91770	-0.1	0.0	103	-0.001
1187	CN523	35.0383	77.0282	7.4	460	0.149	31	10200	85	3330	94	21330	-0.1	0.3	81	-0.001
1188	CN524	35.1510	77.1331	7.2	410	0.010	34	7200	31	1330	69	15070	-0.1	0.0	133	-0.001
1189	CN525	35.1613	77.1837	7.4	425	0.209	.	10700	.	1330	49	19290	-0.1	0.4	143	-0.001
1190	CN526	35.1872	77.1588	7.2	68	-0.002	45	8600	.	.	60	16540	-0.1	0.0	130	-0.001
1191	CN527	35.1825	77.2095	6.9	340	-0.002	.	6600	27	.	60	14390	-0.1	0.0	126	-0.001
1192	CN528	35.2078	77.1830	7.1	390	0.005	.	6300	93	.	62	13760	-0.1	0.0	98	-0.001
1193	CN529	35.2051	77.2393	7.2	238	0.027	.	8100	124	.	64	15390	0.8	0.1	183	-0.001
1194	CN530	35.2241	77.2186	7.6	310	0.011	.	4600	90	.	33	61180	-0.1	0.0	171	-0.001
1195	CN531	35.2352	77.2678	7.3	309	0.028	.	5200	46	.	87	15500	-0.1	0.0	329	0.010
1196	CN532	35.2041	77.2841	7.4	305	0.004	.	7400	.	.	38	13600	-0.1	0.0	101	-0.001
1197	CN533	35.2533	77.2948	7.7	215	0.019	.	6600	110	2490	68	12950	-0.1	0.0	124	-0.001
1198	CN534	35.2202	77.3116	7.5	410	0.007	.	9800	149	.	55	16370	-0.1	0.0	79	-0.001
1199	CN535	35.2647	77.3424	7.6	311	0.018	.	5000	124	.	55	13500	-0.1	0.0	136	-0.001
1200	CN536	35.2819	77.3262	8.0	310	-0.002	34	7800	118	1250	55	14910	0.5	0.0	136	-0.001
1201	CN537	35.3031	77.3590	7.7	358	0.098	.	19700	28	1640	73	12970	-0.1	0.2	75	-0.001
1202	CN538	35.3088	77.4147	7.8	108	0.037	.	12800	.	.	75	19600	-0.1	0.3	136	-0.001
1203	CN539	35.2828	77.4260	6.7	170	0.053	.	23700	.	.	60	20740	-0.1	0.3	135	-0.001
1204	CN540	35.2637	77.4153	7.2	320	0.020	.	5100	59	.	64	12890	-0.1	0.0	111	-0.001
1205	CN541	35.2789	77.3823	7.6	240	0.042	.	8500	23	1160	52	14440	-0.1	0.1	161	-0.001
1206	CN542	35.2342	77.3950	7.5	311	-0.002	.	6000	182	.	80	13010	-0.1	0.0	94	-0.001
1207	CN543	35.2396	77.4353	7.8	370	0.009	.	7800	76	3110	80	14090	-0.1	0.0	66	-0.001
1208	CN544	35.2094	77.4017	7.2	39	0.014	.	5900	.	.	56	12990	2.5	0.3	427	-0.001

KINSTON 100K QUADRANGLE - 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
1209	CN545	35.1976	77.3553	6.9	430	0.016	.	4900	147	.	87	14040	-0.1	0.0	63	-0.001
1210	CN546	35.1875	77.3278	7.5	330	0.006	.	4700	73	1230	70	12990	-0.1	0.0	72	-0.001
1211	CN547	35.1713	77.3006	6.4	190	0.461	.	6100	.	6130	117	15250	2.3	2.4	2967	0.040
1212	CN548	35.1707	77.2509	6.7	490	0.008	.	4800	33	.	73	12710	0.6	0.0	191	-0.001
1213	CN549	35.1381	77.2172	7.1	370	0.025	33	4800	44	.	59	13210	-0.1	0.0	169	-0.001
1214	CN550	35.1122	77.1881	7.2	443	-0.002	.	4500	42	4330	69	13110	-0.1	0.0	174	-0.001
1215	CN551	35.1425	77.1597	7.4	400	0.026	.	8000	20	.	87	15690	-0.1	0.0	148	-0.001
1216	CN552	35.2133	77.1229	8.2	300	0.112	66	6600	26	.	59	13880	-0.1	0.3	181	-0.001
1217	CN553	35.2359	77.1499	7.7	425	0.016	.	5700	41	1830	93	13500	0.3	0.0	81	-0.001
1218	CN554	35.2495	77.1812	7.3	55	0.032	.	7000	.	.	74	13840	1.1	0.5	818	-0.001
1219	CN555	35.2649	77.2200	6.6	28	0.029	.	4700	.	.	52	11850	-0.1	1.0	297	-0.001
1220	CN556	35.2942	77.2602	6.2	90	0.022	4957	M	3239	M	.		-0.1	0.2	13000	-0.001
1221	CN557	35.2968	77.2273	5.7	30	0.030	26	5200	.	.	71	13180	0.7	1.0	1114	-0.001
1222	CN558	35.3116	77.2791	6.7	248	0.013	.	5700	54	.	69	13140	-0.1	0.0	178	-0.001
1223	CN559	35.3271	77.2684	7.2	360	-0.002	.	5700	31	.	107	13790	-0.1	0.0	145	-0.001
1224	CN560	35.3519	77.3188	7.6	250	0.012	.	6100	49	.	65	14670	-0.1	0.0	188	-0.001
1225	CN561	35.3526	77.2943	7.8	250	0.306	12	14400	.	870	56	15540	0.3	1.2	141	-0.001
1226	CN562	35.3447	77.2370	8.4	840	0.129	163	56500	782	14290	85	228600	-0.1	0.1	294	-0.001
1227	CN563	35.3250	77.2063	7.9	366	-0.002	.	5500	139	3150	128	18780	-0.1	0.0	132	-0.001
1228	CN564	35.3779	77.2089	7.7	340	0.009	.	6100	68	1810	76	15240	-0.1	0.0	150	-0.001
1229	CN565	35.3941	77.1675	8.0	421	0.001	.	4300	694	10870	48	38210	-0.1	0.0	121	-0.001
1230	CN566	35.3779	77.1490	7.6	70	0.033	.	4600	444	.	57	17430	-0.1	0.4	135	-0.001
1231	CN567	35.3504	77.1631	6.4	55	0.023	.	8300	23	.	73	16110	-0.1	0.4	130	0.020
1232	CN568	35.3551	77.1289	6.9	310	0.007	.	5200	81	.	131	15880	-0.1	0.0	174	-0.001
1233	CN569	35.3335	77.1006	7.2	470	-0.002	.	5400	55	5850	149	21310	-0.1	0.0	165	-0.001
1234	CN570	35.3170	77.1474	7.0	80	-0.002	.	9600	.	.	86	17950	-0.1	0.0	174	-0.001
1235	CN571	35.3149	77.1809	7.4	459	-0.002	.	4800	142	.	46	85580	-0.1	0.0	180	0.020
1236	CN572	35.2808	77.1532	7.5	250	0.013	.	4700	121	3460	82	15940	0.3	0.0	177	-0.001
1237	CN573	35.2930	77.1246	7.7	490	-0.002	38	7900	65	14770	216	19210	-0.1	0.0	183	-0.001
1238	CN574	35.2806	77.1028	7.7	388	0.013	30	10200	69	3370	82	18490	-0.1	0.0	166	-0.001
1239	CN575	35.2441	77.1121	7.4	210	0.011	.	4900	14	3420	74	14990	0.6	0.0	179	-0.001
1240	CN576	35.1056	77.0135	7.2	458	0.012	.	35500	56	13420	130	22250	-0.1	0.0	151	-0.001
1244	CN580	35.1346	77.0308	7.6	440	0.024	.	6600	208	9900	111	32760	-0.1	0.0	163	-0.001
1245	CN581	35.1714	77.0474	7.6	420	-0.002	.	6500	69	.	96	15950	-0.1	0.0	156	-0.001
1246	CN582	35.2051	77.0627	7.5	470	0.013	41	5100	126	.	251	21540	-0.1	0.0	143	-0.001
1247	CN583	35.2451	77.0694	7.7	360	-0.002	50	6900	54	2080	62	18460	-0.1	0.0	138	-0.001
1248	CN584	35.2359	77.0379	7.5	390	0.008	.	5600	92	5930	96	16490	-0.1	0.0	149	-0.001
1249	CN585	35.2498	77.0038	7.5	432	0.014	60	5800	124	6720	133	20230	-0.1	0.0	97	-0.001

KINSTON 100K QUADRANGLE - 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
1252	CN588	35.2024	77.0010	7.9	290	-0.002	24	3600	102	4300	175	16270	-0.1	0.0	166	-0.001
1254	CN590	35.1552	77.0137	7.3	470	0.014	29	6900	85	5500	122	16570	-0.1	0.0	146	-0.001
1255	CN591	35.0533	77.0686	7.6	257	0.003	15	4600	72	.	41	14330	-0.1	0.0	146	0.010
1256	CN592	35.0405	77.1021	7.6	310	0.031	29	4500	74	1560	39	14880	1.2	0.1	152	-0.001
1257	CN593	35.0849	77.1446	7.9	310	-0.002	.	3200	84	2790	28	34200	-0.1	0.0	146	-0.001
1258	CN594	35.0924	77.1130	7.6	340	0.110	42	4900	73	2380	47	15380	-0.1	0.3	138	-0.001
1744	DU563	35.0230	77.9443	6.5	191	-0.002	15	4300	42	.	50	3190	-0.1	0.0	44	-0.001
1745	DU564	35.0164	77.8948	5.5	40	-0.002	17	4900	.	.	30	4030	-0.1	0.0	40	-0.001
1746	DU565	35.0491	77.8463	4.8	170	0.023	125	9300	.	.	39	8750	-0.1	0.1	271	-0.001
1747	DU566	35.0375	77.8115	7.3	308	0.007	12	4400	92	.	60	5550	-0.1	0.0	47	-0.001
1748	DU567	35.0423	77.7735	7.8	238	-0.002	25	4300	70	.	49	5470	-0.1	0.0	42	-0.001
1749	DU568	35.0092	77.7858	4.8	540	0.046	.	25900	.	.	141	18190	-0.1	0.0	719	-0.001
1750	DU569	35.0125	77.7532	4.8	35	-0.002	.	5900	.	.	43	2700	-0.1	0.0	262	0.080
1755	DU574	35.0257	77.9764	6.3	60	0.008	.	8400	18	.	82	11780	-0.1	0.1	120	-0.001
1756	DU575	35.0513	77.9876	7.8	220	0.002	9	6500	37	.	91	11910	-0.1	0.0	125	-0.001
1757	DU576	35.0375	77.9441	4.4	40	0.008	38	M	.	M	80		-0.1	0.2	.	-0.001
1758	DU577	35.0855	77.9762	5.0	50	0.007	46	7900	.	.	89	11930	-0.1	0.1	261	-0.001
1759	DU578	35.1080	77.9688	4.5	60	0.095	53	9700	41	2450	97	12930	-0.1	1.5	471	17.650
1760	DU579	35.1498	77.9730	4.6	52	0.032	48	8300	.	4390	77	12650	-0.1	0.6	415	-0.001
1761	DU580	35.1475	77.9406	5.2	80	0.011	97	7900	.	.	92	13590	-0.1	0.1	221	-0.001
1762	DU581	35.1446	77.9001	4.2	325	0.324	.	16900	72	3900	242	14610	1.3	1.0	3356	-0.001
1763	DU582	35.1051	77.8589	5.1	25	-0.002	33	9200	16	.	78	11970	-0.1	0.0	180	-0.001
1764	DU583	35.1480	77.8684	5.0	90	0.015	83	15500	19	.	88	15540	-0.1	0.1	325	-0.001
1765	DU584	35.1476	77.8142	6.1	122	0.008	23	11400	25	3090	123	12330	-0.1	0.0	206	-0.001
1766	DU585	35.1492	77.7830	5.3	63	0.027	.	9400	.	1830	79	13540	-0.1	0.4	206	-0.001
1767	DU586	35.1182	77.8200	5.2	180	0.052	41	17100	33	1890	94	18100	-0.1	0.2	304	-0.001
1768	DU587	35.1136	77.7789	4.4	218	0.109	.	17200	.	.	194	16820	-0.1	0.5	807	-0.001
1769	DU588	35.0774	77.7867	5.4	148	0.015	50	12000	16	3160	114	12040	-0.1	0.1	224	21.130
1770	DU589	35.0774	77.8170	4.4	196	0.188	182	48200	.	.	81	26270	-0.1	0.9	291	-0.001
1771	DU590	35.0857	77.8464	5.7	142	0.032	340	14500	20	.	92	15600	-0.1	0.2	165	-0.001
1772	DU591	35.0830	77.8866	4.2	135	0.055	.	11700	19	5440	88	13790	-0.1	0.4	746	-0.001
1773	DU592	35.1124	77.9008	4.5	71	0.003	112	8900	.	.	80	13160	-0.1	0.0	347	-0.001
1774	DU593	35.1060	77.9392	4.6	140	0.320	.	9300	54	1940	125	12820	-0.1	2.2	960	-0.001
1775	DU594	35.0804	77.9395	5.3	110	0.076	597	15700	.	.	75	17130	-0.1	0.6	254	-0.001
1776	DU595	35.0611	77.8912	5.3	50	-0.002	18	5800	.	.	30	3700	-0.1	0.0	44	-0.001
1777	DU596	35.0231	77.8599	7.3	290	-0.002	9	5300	87	.	81	3120	-0.1	0.0	29	-0.001
1779	DU598	35.0143	77.8300	7.7	340	-0.002	.	4300	47	.	79	4400	-0.1	0.0	26	-0.001
2110	GE501	35.3880	77.6185	5.3	60	0.084	46	6800	.	2160	41	13270	-0.1	1.4	160	-0.001

KINSTON 100K QUADRANGLE - 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
2111	GE502	35.3882	77.6693	5.9	40	-0.002	26	3700	.	.	45	11650	-0.1	0.0	138	-0.001
2112	GE503	35.4400	77.7282	6.2	240	0.102	25	14500	18	7260	85	20870	-0.1	0.4	236	-0.001
2113	GE504	35.3858	77.7344	6.3	50	-0.002	16	2700	.	.	62	13050	-0.1	0.0	91	-0.001
2114	GE505	35.3890	77.7891	6.2	70	0.002	.	4300	142	.	52	12730	-0.1	0.0	58	-0.001
2115	GE506	35.4127	77.5852	5.0	220	-0.002	39	23700	35	3520	76	22990	-0.1	0.0	1639	0.310
2116	GE507	35.4336	77.5489	4.9	140	0.056	.	11300	40	2110	83	13440	0.5	0.4	713	0.040
2117	GE508	35.4297	77.4938	7.0	270	0.018	22	3700	86	.	90	13940	-0.1	0.0	176	-0.001
2118	GE509	35.4569	77.5850	6.5	90	-0.002	.	3000	240	.	58	12650	-0.1	0.0	154	-0.001
2119	GE510	35.4823	77.5531	6.5	90	0.007	.	7200	200	1170	57	13320	-0.1	0.0	171	-0.001
2120	GE511	35.4573	77.5299	4.7	330	0.131	.	52500	.	3890	48	36490	-0.1	0.4	1261	-0.001
2133	GE525	35.4039	77.6370	5.6	130	0.064	24	12200	54	.	59	16930	-0.1	0.4	496	-0.001
2134	GE526	35.4368	77.6673	8.2	410	-0.002	.	14500	282	3390	44	62450	-0.1	0.0	73	-0.001
2135	GE527	35.4384	77.6057	6.9	100	0.029	.	4700	221	.	51	18730	-0.1	0.2	71	-0.001
2136	GE528	35.4794	77.6177	6.9	200	0.005	25	4200	518	1420	120	14130	-0.1	0.0	111	-0.001
2137	GE529	35.4611	77.7059	6.4	150	0.028	139	15900	53	3000	66	17150	-0.1	0.1	226	-0.001
2138	GE530	35.4832	77.7296	6.9	120	0.001	.	7300	159	1700	69	20000	-0.1	0.0	132	-0.001
2146	GE538	35.4882	77.7962	4.7	60	0.016	17	7000	.	.	55	9480	-0.1	0.2	654	-0.001
2147	GE539	35.4732	77.8215	4.7	80	0.075	12	8800	.	.	41	11910	-0.1	0.9	279	-0.001
2148	GE540	35.4615	77.7661	5.0	60	0.022	27	8000	.	.	38	12670	-0.1	0.3	169	-0.001
2149	GE541	35.4082	77.5345	5.0	180	0.032	169	8100	99	2420	110	12450	-0.1	0.1	912	-0.001
2872	JN504	35.0676	77.1256	7.5	380	0.008	.	5900	121	.	56	16410	0.6	0.0	123	-0.001
2878	JN510	35.0192	77.2991	5.0	100	0.014	.	9600	583	.	28	18270	0.4	0.1	248	-0.001
2879	JN511	35.0160	77.2401	7.3	180	-0.002	25	5500	59	.	34	15510	0.4	0.0	174	-0.001
2880	JN512	35.0405	77.2118	7.2	430	0.104	26	8400	67	.	55	18230	0.9	0.2	143	0.010
2881	JN513	35.0924	77.2130	7.2	440	0.020	.	7900	108	1880	65	19060	-0.1	0.0	181	-0.001
2882	JN514	35.0909	77.3944	7.8	300	0.010	46	5600	129	.	55	16620	-0.1	0.0	84	-0.001
2883	JN515	35.1169	77.4212	7.7	270	-0.002	20	6900	51	.	37	15000	-0.1	0.0	121	-0.001
2884	JN516	35.0933	77.4456	7.6	300	-0.002	.	9300	113	.	31	16250	0.4	0.0	193	-0.001
2885	JN517	35.1150	77.4789	8.1	300	0.008	.	3300	151	7170	24	43600	-0.1	0.0	158	-0.001
2886	JN518	35.1010	77.4986	7.8	380	-0.002	.	12800	78	.	33	24660	0.7	0.0	193	-0.001
2887	JN519	35.1255	77.5226	7.9	330	0.038	.	3400	108	10120	41	28480	-0.1	0.1	168	-0.001
2888	JN520	35.1494	77.5069	7.9	380	0.011	206	3600	100	11790	39	28510	-0.1	0.0	165	-0.001
2889	JN521	35.1757	77.4840	8.9	420	0.027	.	3600	274	.	34	82850	-0.1	0.0	152	-0.001
2890	JN522	35.1932	77.4942	8.0	350	-0.002	31	5600	47	.	56	16750	-0.1	0.0	137	-0.001
2891	JN523	35.2196	77.4666	7.8	310	0.028	19	4900	60	2660	63	17070	-0.1	0.0	174	-0.001
2892	JN524	35.0987	77.5586	7.6	560	-0.002	.	12100	213	19050	153	39140	-0.1	0.0	259	-0.001
2893	JN525	35.0750	77.5894	5.0	560	0.090	.	71200	.	.	82	65940	1.0	0.1	464	0.050
2894	JN526	35.0494	77.5664	6.4	370	0.011	.	5100	64	6560	85	18010	-0.1	0.0	142	-0.001

KINSTON 100K QUADRANGLE - GROUNDWATER

Lab #	County ID	Lat	Long	pH	Cond us/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
2895	JN527	35.0613	77.5303	7.2	70	0.020	34	6400	.	.	38	15280	-0.1	0.2	340	-0.001
2896	JN528	35.0663	77.4747	6.9	460	0.007	.	13500	88	.	41	17150	-0.1	0.0	224	-0.001
2897	JN529	35.0551	77.4460	7.4	380	0.002	35	8900	109	.	46	21160	0.4	0.0	141	-0.001
2898	JN530	35.0237	77.4669	7.9	300	-0.002	40	2800	240	7210	23	30980	-0.1	0.0	50	-0.001
2899	JN531	35.0403	77.3285	8.1	290	0.008	.	6400	253	1530	53	15940	-0.1	0.0	175	-0.001
2900	JN532	35.0342	77.2755	7.9	260	0.001	17	6500	90	.	48	16990	-0.1	0.0	168	-0.001
2901	JN533	35.0060	77.5081	7.6	560	0.774	268	16100	.	.	64	34840	0.7	1.3	345	-0.001
2902	JN534	35.0072	77.5660	7.3	560	0.009	28	9600	63	12960	41	35600	-0.1	0.0	472	-0.001
2903	JN535	35.0247	77.5808	8.1	260	0.020	.	3800	97	3110	19	18900	-0.1	0.0	181	-0.001
2904	JN536	35.0066	77.6264	8.9	260	-0.002	191	3400	320	.	23	76670	-0.1	0.0	153	-0.001
2906	JN538	35.1362	77.4413	8.0	300	0.009	.	12000	69	.	53	15490	-0.1	0.0	224	-0.001
3041	LN501	35.0483	77.6818	7.6	360	0.003	.	5400	35	.	62	16350	-0.1	0.0	179	-0.001
3042	LN502	35.0320	77.7096	6.6	40	0.002	.	3600	.	.	40	15130	-0.1	0.0	510	-0.001
3043	LN503	35.0795	77.7069	6.5	90	0.017	.	7300	.	.	55	19600	-0.1	0.1	177	-0.001
3044	LN504	35.1013	77.6768	6.7	160	0.040	19	13900	.	4390	62	20240	-0.1	0.2	451	-0.001
3045	LN505	35.1187	77.6499	6.5	300	0.003	.	4700	51	2690	92	17600	-0.1	0.0	177	-0.001
3046	LN506	35.1008	77.6218	5.7	70	0.024	.	4600	25	1300	54	15830	-0.1	0.3	299	-0.001
3047	LN507	35.1210	77.5860	6.6	270	0.005	.	3600	105	5260	40	19000	-0.1	0.0	220	-0.001
3048	LN508	35.1482	77.5611	6.9	160	-0.002	.	4800	151	1170	48	16970	-0.1	0.0	193	-0.001
3049	LN509	35.1709	77.5859	7.1	300	0.011	.	3400	98	4590	35	18880	-0.1	0.0	204	-0.001
3050	LN510	35.1880	77.5581	7.6	550	-0.002	.	6600	227	24000	95	46580	-0.1	0.0	389	-0.001
3051	LN511	35.2146	77.5349	8.5	270	0.011	.	2900	214	2660	45	45070	-0.1	0.0	154	-0.001
3052	LN512	35.2188	77.5887	6.6	280	0.014	147	10900	16	.	83	20980	-0.1	0.0	215	-0.001
3053	LN513	35.1883	77.6237	7.4	290	0.008	14	3400	121	3780	31	17680	-0.1	0.0	187	-0.001
3054	LN514	35.1420	77.6250	6.8	50	-0.002	.	4800	239	.	26	16420	-0.1	0.0	180	-0.001
3055	LN515	35.0749	77.6414	7.5	260	0.008	.	3700	129	1140	45	17920	-0.1	0.0	90	-0.001
3056	LN516	35.1009	77.7376	5.6	80	0.041	30	6600	.	1580	46	18370	-0.1	0.5	150	-0.001
3057	LN517	35.1255	77.7069	4.5	130	0.212	63	9700	29	3250	65	21170	-0.1	1.6	875	-0.001
3058	LN518	35.1472	77.6745	4.5	210	0.121	25	30200	.	2480	45	29400	-0.1	0.5	824	0.280
3059	LN519	35.1534	77.7335	6.9	250	0.361	27	6900	30	1940	56	18810	-0.1	1.4	389	0.050
3060	LN520	35.1758	77.7089	5.3	110	-0.002	.	3800	67	.	42	16020	-0.1	0.0	228	-0.001
3061	LN521	35.1763	77.7638	6.5	90	0.051	11	4900	20	.	79	16780	-0.1	0.5	174	-0.001
3062	LN522	35.2028	77.7951	5.9	20	-0.002	.	3400	.	.	37	15610	0.5	0.0	157	-0.001
3063	LN523	35.1729	77.8190	5.6	80	0.030	.	10400	.	.	42	18710	-0.1	0.3	232	-0.001
3064	LN524	35.2217	77.8232	5.7	50	0.005	.	4700	49	.	58	16710	0.3	0.1	171	-0.001
3065	LN525	35.2446	77.7921	5.7	260	0.054	.	40200	.	3350	96	35890	-0.1	0.2	167	-0.001
3066	LN526	35.2759	77.8192	4.7	120	0.023	.	4100	31	.	59	15990	-0.1	0.1	590	0.040
3067	LN527	35.2927	77.7870	4.7	150	0.046	31	6000	31	3980	73	18250	-0.1	0.3	848	0.050

KINSTON 100K QUADRANGLE - GROUNDWATER

Lab #	County ID	Lat	Long	pH	Cond us/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
3068	LN528	35.2697	77.7703	5.7	50	0.006	.	4000	222	.	51	16050	-0.1	0.1	189	-0.001
3069	LN529	35.2404	77.6241	7.7	240	-0.002	.	3500	132	5370	29	20050	-0.1	0.0	173	-0.001
3070	LN530	35.2184	77.6478	7.5	180	0.042	.	3600	99	1300	47	18640	-0.1	0.2	181	0.010
3071	LN531	35.2112	77.6983	7.8	180	0.023	.	3600	60	3650	74	23140	0.3	0.1	202	-0.001
3072	LN532	35.2266	77.7685	6.1	180	0.009	.	9100	.	.	74	19140	-0.1	0.0	202	-0.001
3073	LN533	35.2418	77.7354	5.2	200	0.012	21	11800	.	2790	47	15880	0.8	0.0	290	-0.001
3074	LN534	35.2651	77.6446	8.0	200	-0.002	19	4700	130	4360	55	30540	-0.1	0.0	191	0.020
3075	LN535	35.2876	77.6814	7.1	220	0.018	.	3800	93	3700	91	20590	-0.1	0.0	178	-0.001
3076	LN536	35.3171	77.7016	5.3	80	-0.002	51	5200	.	.	37	17490	-0.1	0.0	210	-0.001
3077	LN537	35.3596	77.7652	4.8	270	0.319	43	8800	18	2040	47	17220	-0.1	1.1	570	0.140
3078	LN538	35.3422	77.7967	5.2	270	0.154	.	25400	.	2720	95	23830	-0.1	0.5	994	0.130
3079	LN539	35.3152	77.8209	4.8	80	0.066	53	5400	28	3640	77	16440	-0.1	0.8	713	0.070
3080	LN540	35.3178	77.7616	4.7	80	0.076	.	6300	.	2270	45	18920	-0.1	0.9	850	0.080
3081	LN541	35.2944	77.7328	4.7	100	0.053	.	9600	.	1600	55	18830	-0.1	0.5	615	0.020
3082	LN542	35.3631	77.6954	6.5	180	-0.002	19	4400	136	.	49	16760	-0.1	0.0	175	-0.001
3083	LN543	35.3382	77.6158	6.9	180	-0.002	.	4800	120	.	70	17180	-0.1	0.0	190	-0.001
3084	LN544	35.3337	77.5545	6.9	570	0.117	1787	18300	387	13780	220	33380	1.4	0.2	386	-0.001
3085	LN546	35.3842	77.4986	5.7	100	0.041	.	11800	.	1790	46	22920	-0.1	0.4	789	-0.001
3086	LN547	35.3576	77.4673	7.0	250	0.020	.	3900	206	1690	55	18330	-0.1	0.0	248	-0.001
3087	LN548	35.3096	77.5232	7.2	350	-0.002	.	3900	158	3710	89	22920	-0.1	0.0	166	-0.001
3088	LN549	35.3577	77.5168	5.9	240	0.081	396	24400	50	.	69	32270	1.5	0.3	996	-0.001
3089	LN550	35.3320	77.4993	5.5	240	0.203	.	34700	.	3520	53	33460	-0.1	0.8	353	-0.001
3090	LN551	35.3097	77.4669	5.4	260	0.038	37	7200	28	1700	50	21300	0.7	0.1	546	0.010
3091	LN552	35.2740	77.4982	7.6	370	0.021	.	3900	300	2950	.	50240	-0.1	0.0	169	-0.001
3092	LN553	35.2632	77.4758	5.1	240	0.049	52	21100	.	.	48	26530	-0.1	0.2	135	-0.001
3093	LN554	35.2382	77.5028	7.5	380	0.005	.	4000	105	10280	33	31000	-0.1	0.0	153	-0.001
3094	LN555	35.2350	77.5540	5.9	100	0.029	.	8800	51	.	78	19670	-0.1	0.2	181	-0.001
3095	LN556	35.2886	77.5628	7.5	360	0.082	2436	22000	.	.	27	37760	-0.1	0.2	243	-0.001
3096	LN557	35.2713	77.5405	7.5	260	0.013	51	4300	170	7990	45	18260	-0.1	0.0	215	-0.001
4022	PI529	35.4783	77.4413	6.6	47	0.014	73	7000	.	.	46	16520	-0.1	0.3	154	-0.001
4024	PI531	35.4831	77.4895	8.2	378	0.007	67	11400	687	4700	47	75360	-0.1	0.0	163	-0.001
4025	PI532	35.4531	77.4682	6.1	91	0.021	112	11700	.	.	55	19870	-0.1	0.2	320	-0.001
4026	PI533	35.4326	77.4376	4.9	73	-0.002	124	9700	.	.	71	16110	-0.1	0.0	1260	0.040
4027	PI534	35.3874	77.4365	6.7	258	0.125	73	7400	177	3300	75	17750	-0.1	0.4	184	-0.001
4028	PI535	35.3724	77.3950	5.5	112	0.058	45	10900	120	.	111	14940	-0.1	0.5	1712	-0.001
4029	PI536	35.3631	77.3504	5.7	76	0.066	43	8000	.	.	40	15500	3.0	0.8	344	-0.001
4030	PI537	35.3870	77.3819	5.8	157	0.059	55	17400	.	.	55	15610	3.6	0.3	242	-0.001
4031	PI538	35.4012	77.4110	4.2	500	-0.002	.	71600	.	.	121	83920	-0.1	0.0	4644	0.360

KINSTON 100K QUADRANGLE - GROUNDWATER

Lab #	County ID	Lat	Long	pH	Cond us/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
4032	PI539	35.4494	77.4073	6.3	180	0.051	48	6700	207	.	22	26330	0.4	0.2	95	-0.001
4033	PI540	35.4284	77.3773	7.1	252	0.131	58	7800	82	.	50	16260	-0.1	0.5	146	-0.001
4034	PI541	35.3999	77.3576	7.5	370	0.042	51	9100	664	6160	.	57840	-0.1	0.1	122	-0.001
4035	PI542	35.3731	77.3256	8.5	390	0.021	132	15000	816	.	28	74750	0.9	0.0	97	-0.001
4036	PI543	35.4041	77.3020	8.4	450	0.049	75	14000	1455	3090	24	90480	0.6	0.1	166	-0.001
4037	PI544	35.3873	77.2693	8.5	500	0.035	.	22700	2688	.	69	151920	-0.1	0.0	275	-0.001
4038	PI545	35.4049	77.2412	7.7	300	0.043	72	7000	165	2170	57	19660	-0.1	0.1	107	-0.001
4039	PI546	35.4317	77.2045	6.7	166	0.143	40	34000	.	.	43	29380	-0.1	0.8	119	0.010
4040	PI547	35.4547	77.2305	7.4	490	0.040	57	7400	245	.	46	46610	-0.1	0.0	92	-0.001
4041	PI548	35.4326	77.2658	7.2	261	-0.002	.	19700	34	.	65	22620	1.7	0.0	158	-0.001
4042	PI549	35.4336	77.3223	6.7	278	0.076	61	21900	.	3340	114	20910	-0.1	0.2	122	-0.001
4043	PI550	35.4531	77.3439	7.0	370	0.095	68	10200	491	6770	78	34600	-0.1	0.2	172	-0.001
4044	PI551	35.4851	77.3748	6.5	87	0.030	57	11000	58	1360	43	18780	-0.1	0.3	322	0.030
4048	PI555	35.4767	77.3271	7.9	320	0.001	34	6400	441	3410	40	24680	-0.1	0.0	175	0.030
4049	PI556	35.4566	77.2921	8.2	380	0.009	61	7200	1288	3080	47	63410	-0.1	0.0	144	-0.001
4050	PI557	35.4729	77.2495	7.6	450	-0.002	.	7300	309	10510	69	31870	-0.1	0.0	147	-0.001
5597	WY501	35.4053	77.8975	4.3	70	0.149	75	20600	68	.	76	7260	-0.1	2.1	726	-0.001
5598	WY502	35.4079	77.8524	4.7	45	0.122	.	14400	37	.	51	6820	-0.1	2.7	140	-0.001
5599	WY503	35.4085	77.8224	4.6	151	0.172	156	29500	159	.	111	12480	-0.1	1.1	827	-0.001
5600	WY504	35.3784	77.8162	4.8	72	0.034	14	10600	42	.	101	4860	1.0	0.4	202	-0.001
5601	WY505	35.3815	77.8607	5.3	51	0.031	398	12000	520	.	79	3900	-0.1	0.6	103	-0.001
5602	WY506	35.4408	77.8546	5.7	70	-0.002	47	12400	923	.	81	4280	-0.1	0.0	162	-0.001
5603	WY507	35.4680	77.8567	6.5	282	0.016	.	55600	.	.	71	19810	0.7	0.0	286	-0.001
5604	WY508	35.4653	77.8867	5.9	96	-0.002	10	11700	646	.	116	6430	-0.1	0.0	44	-0.001
5613	WY517	35.4966	77.9267	5.1	108	0.057	.	18000	28	1990	29	10730	-0.1	0.5	138	-0.001
5616	WY520	35.4981	77.9663	5.0	110	0.387	35	15300	75	.	.	9350	-0.1	3.5	716	1.810
5617	WY521	35.4690	77.9702	5.3	165	0.189	30	19400	104	2390	.	8330	0.5	1.1	472	0.540
5618	WY522	35.4777	77.9272	5.2	88	0.089	.	40900	62	.	.	26220	-0.1	1.0	164	-0.001
5619	WY523	35.4460	77.9336	5.4	48	0.006	22	11100	84	.	33	5910	-0.1	0.1	44	-0.001
5622	WY526	35.3636	77.8936	4.8	50	0.079	429	13900	.	.	.	6930	4.8	1.5	205	-0.001
5623	WY527	35.3419	77.8963	5.2	140	0.046	.	13200	.	4480	64	6630	-0.1	0.3	190	-0.001
5624	WY528	35.3365	77.8494	5.2	98	0.027	.	13600	.	920	116	4750	-0.1	0.2	138	-0.001
5625	WY529	35.3121	77.8539	4.7	78	0.215	.	10200	.	2020	36	6530	-0.1	2.7	524	-0.001
5626	WY530	35.2757	77.8583	4.8	108	0.047	.	9700	.	.	57	4550	1.3	0.4	625	-0.001
5627	WY531	35.2401	77.8524	5.1	72	0.084	.	8900	.	.	30	6570	4.4	1.1	188	-0.001
5628	WY532	35.2066	77.8498	4.9	91	0.072	38	9400	.	3300	.	5230	-0.1	0.7	372	-0.001
5629	WY533	35.1822	77.8542	5.4	68	0.025	12	14600	.	.	.	9890	-0.1	0.3	72	-0.001
5630	WY534	35.1848	77.8954	5.3	30	0.075	21	8800	.	.	.	5310	-0.1	2.5	40	-0.001

KINSTON 100K QUADRANGLE - 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
5631	WY535	35.2160	77.8920	4.9	32	0.034	13	7200	26	.	20	4410	-0.1	1.0	65	-0.001
5661	WY565	35.3801	77.9404	5.7	71	0.026	12	8600	97	2370	31	5730	-0.1	0.3	69	-0.001
5673	WY577	35.1854	77.9753	4.7	40	0.069	18	8600	.	2330	22	4390	0.3	1.7	135	-0.001
5674	WY578	35.1846	77.9314	5.7	65	0.056	809	9100	.	850	.	6460	-0.1	0.8	30	-0.001
5675	WY579	35.2178	77.9723	5.3	19	0.017	272	6300	.	.	6	3910	-0.1	0.8	29	-0.001
5676	WY580	35.2037	77.9255	4.8	20	0.045	34	9200	.	.	.	5110	-0.1	2.2	132	-0.001
5680	WY584	35.2388	77.9757	4.6	18	0.035	.	7000	27	.	.	4500	-0.1	1.9	47	-0.001
5681	WY585	35.2457	77.9430	5.1	15	0.051	.	7600	.	.	8	4090	-0.1	3.4	58	-0.001
5682	WY586	35.2411	77.9010	4.1	40	0.129	15	6800	.	1090	7	4260	-0.1	3.2	408	-0.001
5683	WY587	35.2790	77.9119	5.8	77	0.030	.	10400	34	.	30	7620	-0.1	0.3	19	-0.001
5684	WY588	35.2755	77.9284	5.0	100	0.174	.	16900	12	2120	41	7260	-0.1	1.7	122	-0.001
5685	WY589	35.3087	77.8966	5.4	29	0.038	31	7900	15	.	7	4800	-0.1	1.3	21	-0.001
5686	WY590	35.3050	77.9337	5.9	72	0.034	12	8900	105	.	58	6890	-0.1	0.4	20	-0.001
5687	WY591	35.3351	77.9455	7.6	280	0.029	.	20200	184	7340	.	26710	-0.1	0.1	26	-0.001
5688	WY592	35.3333	77.9568	6.8	125	0.024	22	7900	148	.	43	8720	-0.1	0.1	20	-0.001
5689	WY593	35.2720	77.9806	5.4	15	0.021	19	7100	14	670	.	3510	-0.1	1.4	27	-0.001
5690	WY594	35.3076	77.9780	5.7	100	0.092	50	8900	120	2020	81	5480	2.6	0.9	45	0.160
5695	WY599	35.4512	77.8980	6.3	148	0.026	.	22700	80	.	77	11770	-0.1	0.1	19	-0.001
5696	WY600	35.4130	77.9402	5.8	67	0.019	13	10700	548	.	16	5430	4.9	0.2	69	-0.001
5697	WY601	35.4373	77.9732	4.2	148	0.477	156	21200	87	.	.	10330	1.2	3.2	1479	1.280
5706	WY610	35.4128	77.9676	5.9	125	0.156	.	12200	17	2510	.	8850	0.5	1.2	34	-0.001

KINSTON 100K QUADRANGLE - STREAM WATER

Lab #	County ID	Lat	Long	pH	Cond um/cm	U ppb	Al ppb	Br ppb	Cl ppb	Dy ppb	F ppb	Mg ppb	Mn ppb	Na ppb	V ppb	U/cond x 1000
278	WY007	35.4900	77.8404	5.7	45	0.029	206	.	10500	-0.001	43	.	46	11590	0.9	0.64
288	WY018	35.4829	77.9637	6.8	110	0.059	189	.	13800	-0.001	128	.	55	14210	1.8	0.54
277	WY006	35.4783	77.9111	6.6	60	0.052	222	16	11400	-0.001	56	.	40	11520	0.9	0.87
274	WY003	35.4620	77.8418	6.7	80	0.041	13	.	1500	-0.001	.	.	.	2740	-0.1	0.51
276	WY005	35.4565	77.8937	6.3	70	0.015	199	26	12700	-0.001	89	.	50	11810	-0.1	0.21
275	WY004	35.4204	77.9509	6.7	60	0.041	181	.	13400	-0.001	118	.	61	11970	-0.1	0.68
272	WY001	35.4098	77.8819	7.0	206	0.142	339	79	12000	-0.001	270	1850	152	10760	-0.1	0.69
273	WY002	35.3807	77.8712	6.8	90	0.042	132	19	10000	-0.001	99	.	50	10800	0.8	0.47
68	DU022	35.1636	77.9798	5.1	65	0.058	255	44	12100	-0.001	57	2660	45	5540	1.9	0.89
96	DU050	35.1507	77.8640	5.8	40	0.054	112	42	10300	-0.001	43	.	.	4400	1.1	1.35
67	DU021	35.1342	77.9426	5.2	70	0.049	297	54	15900	-0.001	46	3020	.	6930	1.5	0.70
97	DU051	35.1302	77.8728	5.9	30	0.030	115	56	9500	-0.001	27	.	.	4860	-0.1	1.00
95	DU049	35.1213	77.8243	6.7	62	0.040	77	39	9500	-0.001	38	2550	.	4440	0.4	0.65
94	DU048	35.0977	77.8198	6.8	72	0.025	51	63	12400	-0.001	.	1220	.	5050	-0.1	0.35
66	DU020	35.0954	77.9431	5.2	40	0.042	112	69	9100	-0.001	44	.	20	4630	0.8	1.05
53	DU006	35.0875	77.9923	6.6	50	0.056	109	74	10000	-0.001	28	1540	.	5010	-0.1	1.12
65	DU019	35.0758	77.9140	6.5	60	0.032	97	91	10500	-0.001	43	1470	16	5180	1.0	0.53
98	DU052	35.0754	77.8472	5.4	92	0.112	153	27	12100	-0.001	.	.	34	5690	0.5	1.22
93	DU047	35.0735	77.7731	6.9	42	0.056	69	62	11000	-0.001	.	.	.	4580	0.7	1.33
92	DU046	35.0407	77.8236	9.3	205	0.084	102	.	13000	-0.001	161	2510	.	6000	0.6	0.41
52	DU005	35.0283	77.9457	6.6	60	0.046	93	79	8500	-0.001	75	.	14	4140	0.8	0.77
91	DU045	35.0250	77.7970	4.7	45	0.064	163	.	9300	-0.001	.	.	12	3980	0.7	1.42