Table F-4. Chemical analyses of ground water from four major sources in the vicinity of SRP[a]

Source of water	Number of analyses	Range and median	pH	Constituents, mg/ℓ										
				Fe	Ca^{2+}	Mg^{2+}	$Na^{+}+K^{+}$	CO_3^{2-}	SO_4^{2-}	Cl^{-}	F^{-}	NO_3^{-}	Dissolved solids[b]	Hardness[c]
Tuscaloosa Formation	13	Maximum	6.9	0.77	1.4	0.9	6.7	17	4.8	4.0	0.1	8.8	28	7
		Minimum	4.4	0.00	0.3	0.0	0.9	0	0.5	0.8	0.00	0.0	14	2
		Median	5.4	0.16	0.9	0.5	2.1	3	1.4	2.2	0.0	0.6	19	5
Ellenton Formation	16	Maximum	6.8	4.1	8.7	1,3	4.2	23	27	6.0	0.2	0.9	54	30
		Minimum	4.4	0.10	3.9	0.4	1.5	4	7.4	1.5	0.0	0.0	36	10
		Median	5.9	1.1	6.4	1.0	2.7	12	11	2.1	0.1	0.0	41	19
Eocene[d] Limestone	15	Maximum	7.6	1.0	47	9.4	19	17.1	14	4.5	0.5	6.2	192	132
		Minimum	6.8	0.00	17	0.3	0.4	55	0.8	0.4	0.0	0.0	75	50
		Median	7.1	0.25	27	2.0	1.7	94	4.3	2.8	0.1	0.2	95	72
Eocene[d] Sand	9	Maximum	6.1	1.84	8.7	4.2	2.4	17	9.3	4.0	0.3	2.3	29	15
		Minimum	4.2	0.04	0.5	0.3	0.4	1	0.8	1.5	0.00	0	20	4
		Median	5.5	0.16	1.5	0.7	2.1	5.5	1.9	2.7	0.1	1.3	21	8

[a]Adapted from Siple (1967).
[b]Residue after evaporation at 180°C.
[c]As $CaCO_3$.
[d]McBean and Congaree Formations.

Table F-5. Analyses of ground water from coastal plain formations at Savannah River Plant[a]

Date sampled	Source of water: Well number[c]	Screen depth, ft	Formation	Properties[b]: Temp. °C[d]	pH[d]	Specific conductance, micromhos	Chemical constituents, mg/ℓ: Ca^{+2}	Mg^{+2}	K^{+}	Na^{+}	Fe	Si	Al	Mn	HCO_3^{-}	Cl^{-}	SO_4^{-2}	NO_3^{-}	PO_4^{-3}	F^{-}	TDS
12/16/66	HC1E	43 to 48	Barnwell Upper Zone	21.7	5.8	48	3.3	0.3	1.6	TR[c]	.52	6.8	TR	0.02	12	6.0	1.0	3.8	0.0	0.0	34
10/25/77	HC2F	74 to 79	Barnwell	23.0	5.04	NM	0.42	0.05	0.10	3.96	<0.2	3.9	<1	<0.02	NM	3.7	0.25	5.8	.32	.01	20
08/01/74	HC3F	55 to 60	Barnwell	NM	5.2	15	1.7	0.43	0.25	2.9	<0.1	2.9	NM	NM	4.0	3.3	1.0	0.78	NM	NM	15
10/18/77	HC6B	85 to 90	Barnwell	22.0	6.30	NM	3.72	0.03	1.91	2.20	<0.2	4.6	<1	<0.03	18.3	1.5	0.62	5.1	.01	0.01	30
07/25/74	HC3E	93 to 98	Barnwell	NM	5.7	18	5.4	0.25	0.54	2.5	<0.1	4.6	NM	NM	16.3	3.0	1.8	<0.0001	NM	NM	26
07/23/74	HC3D	121 to 126	McBean	NM	4.8	11	0.8	0.37	0.22	1.7	<0.1	5.5	NM	NM	2.1	3.0	1.0	<0.0001	NM	NM	14
04/28/66	HC2H	134 to 144	McBean Calcareous Zone	23.2	7.1	103	11	0.4	3.0	TR	0.02	12	0.1	0.00	45	4.1	5.8	0.2	0.78	0.01	66
11/23/77	HC6A	139 to 144	McBean	21.2	6.93	NM	13.8	0.02	0.64	2.57	<0.2	5.4	<1	<0.02	49.3	2.3	0.62	0.05	0.01	0.01	51
02/21/72	905-72G	110 to 160	McBean	NM	7.0	NM	7.0	9.2	0.90	12.5	0.012	0.60	NM	0.05	27.5	1.6	10.2	0.11	0.18	NM	56
07/19/74	HC3A	230 to 235	Congaree	NM	6.4	130	28	0.54	0.55	1.5	<0.1	9.4	NM	NM	72	2.8	2.2	0.001	NM	NM	81
01/19/78	FC2A	231 to 235	Congaree	19.6	6.15	NM	11.1	0.07	0.94	1.45	<0.2	10.7	<1	<0.03	42.7	3.92	10.5	0.05	0.12	0.01	61
02/21/72	905-31A	440 to 536	Tuscaloosa	NM	5.5	17	0.11	1.7	NM	1.75	0.01	0.56	NM	<0.05	5.4	0.8	2.3	2.3	0.06	NM	10
02/29/72	905-41D	335 to 490	Tuscaloosa	NM	6.6	NM	1.4	3.5	4.3	11.0	<0.05	0.6	NM	<0.05	9.9	0.59	15.0	15.0	0.3	NM	42
02/21/72	905-43H	660 to 850	Tuscaloosa	NM	4.3	54	0.82	1.52	1.15	1.82	0.14	0.9	NM	0.05	0.97	0.60	11.3	11.3	--	NM	22
02/21/72	905-67U	615 to 725	Tuscaloosa	NM	5.15	19	0.22	1.5	0.43	1.6	0.05	0.44	NM	0.05	0.97	0.71	3.5	3.5	--	NM	10

[a]Adapted from Du Pont (1983).
[b]NM = not measured; TR = trace.
[c]Figure F-13 shows well locations.
[d]Measured at well head.