

A comparison of Standard Reference Water Sample results from the Albany, Atlanta, and Salt Lake City Laboratories.

July to December 1974

Mean concentration^{1/}

Standard deviation

Constituent	SRWS	Alb	Atl	SLC	C.L. Mean	SRWS	Alb	Atl	SLC	C.L. Mean
Al	96 229 243 400 610	72 204 242 458 631	83 200 240 414 617	52 193 208 409 563	72 198 233 419 601	40 51 72 52 70	13 11 30 79 31	35 27 31 37 76	13 10 32 43 47	24 18 33 47 64
As	9.8 29 45.8 54 58.1 136	11.8 2/ 2/ 45.6 49.1 140	9.9 27.4 41.4 54.5 53.5 120	12.0 32.9 52.7 48.2 55.0 155	11.1 30.4 50.3 50.1 52.7 146	4.1 7 14.1 16 15.6 12	2.3 2/ 2/ 9.6 8.6 2/	4.0 3.6 14.4 8.7 5.3 11	2.3 4.2 6.5 10.7 5.8 20	3.2 4.8 9.7 10.1 6.7 24
B	20 90 258 454	38 190 298 520	24 92 243 418	22 102 256 472	25 106 255 465	19 46 74 90	16 2/ 43 2/	17 9 8 58	14 17 33 39	16 29 31 49
Ba	561	500	2/	485	489	114	0	2/	80	68
Be	27	30	31	21	26	5	2/	9	6	9
Br	.235 .403	2/ 2/	2/ 2/	.38 .12	.38 .12	.184 .427	2/ 2/	2/ 2/	.08 .06	.08 .06
Ca	3.87 13.2 26.3 43.5 61.7 84.6	3.75 13.1 25.7 42.4 60.2 82.4	4.42 13.0 26.3 43.8 62.6 85.1	3.53 12.9 25.8 42.2 60.9 81.9	3.71 13.0 25.9 42.5 61.4 82.8	.24 .7 1.0 2.3 2.8 2.8	.38 .7 .7 1.5 1.9 2.4	.61 .7 1.3 1.9 1.5 2.0	.22 .4 .6 1.2 1.3 2.6	.44 .6 .9 1.5 1.8 2.7

Mean concentration^{1/}

Standard deviation

Constituent	SRWS	Alb	Atl	SLC	C.L. Mean	SRWS	Alb	Atl	SLC	C.L. Mean
Cd	3.6	3.4	4.0	2.9	3.6	1.1	.5	1.1	.6	1.0
	6.4	6.0	5.0	5.7	5.5	2.0	.0	1.8	.8	1.3
	8.0	8.2	8.8	8.0	8.5	.7	.7	2.1	<u>2/</u>	1.4
	9.9	8.9	10.2	8.7	9.3	2.2	.7	2.1	.7	1.5
	11.9	12.4	13.6	12.0	12.7	4.7	1.0	1.6	3.0	2.1
Cl	1.44	1.35	1.44	1.57	1.48	.53	.24	.36	.24	.28
	22.9	22.4	22.4	22.7	22.5	2.2	.5	.8	.9	.8
	26.2	25.8	25.5	25.9	25.7	.8	.6	.7	1.0	.8
	72.2	72.1	72.1	72.5	72.3	2.3	2.5	1.1	1.2	1.7
	95.4	95.7	95.2	95.1	95.2	3.1	.9	1.7	1.7	1.5
	213	212	219	213	214	7	6	4	6	6
CO ₃	31.6	16.8	31.3	34.8	29.5	8.0	11.0	8.8	8.9	11.7
Co	6.0	5.5	5.9	4.8	5.4	1.1	<u>2/</u>	1.6	1.0	1.3
	7.9	7.2	6.6	6.8	6.9	1.4	.4	1.8	2.1	1.5
Cr	8.5	8	10	0	4	2.7	5	<u>2/</u>	0	5
	11	10	8	0	6	11	5	<u>5</u>	0	.6
	19	20	22	11	17	14	0	8	12	10
	21.2	19	<u>2/</u>	3	15	3.8	4	<u>2/</u>	<u>2/</u>	8
	45	50	41	39	42	24	7	15	12	13
Cu	27	22	27	32	26	7	7	2	10	7
	101	98	108	101	104	9	5	10	11	10
	145	140	131	142	135	38	7	23	13	19
	240	250	233	248	243	32	9	16	10	14
	591	614	590	621	607	59	15	45	47	40
DSRD 180	361.5	368.6	382.8	360.9	367.3	11.3	16.7	18.7	6.1	15.0
	560.1	564.0	560.8	558.9	560.5	11.8	8.7	9.6	6.0	7.8

Mean concentration^{1/}

Standard deviation

Constituent	SRWS	Alb	Atl	SLC	C.I. Mean	SRWS	Alb	Atl	SLC	C.L. Mean
F	.65 .93 1.00 1.03 1.04 3.75	.70 1.01 1.03 1.01 1.11 3.77	.64 .99 1.09 1.07 1.07 3.76	.63 .99 .98 1.03 1.02 3.63	.65 1.00 1.02 1.03 1.06 3.68	.08 .13 .11 .09 .09 .30	.07 .03 .05 .05 .08 .24	.08 .11 .06 .07 .09 .28	.07 .04 .08 .09 .07 .30	.08 .07 .07 .08 .09 .29
Fe	115 454 498 831 1008	143 443 474 870 1040	113 421 465 804 979	118 400 449 836 973	121 426 462 830 987	32 28 29 97 106	17 29 23 51 55	11 19 23 24 19	19 2/ 26 74 42	19 28 25 55 40
HCO ₃	31.6 44.4 46.7 74.6 101.7 330.3	30.5 42.4 45.3 72.0 102.1 343.6	32.2 44.4 48.1 75.5 104.9 346.8	32.0 44.9 47.6 75.5 103.0 312.7	31.6 44.2 47.3 74.4 103.0 328.9	2.2 1.8 2.7 2.8 7.3 15.6	1.8 1.4 1.7 1.8 3.3 18.2	1.5 .5 1.0 1.3 1.3 10.7	1.0 1.0 .7 1.3 2.8 11.9	1.5 1.5 1.5 2.2 2.9 21.1
Hg	.42 3.32 3.51 6.19	.50 2.48 3.61 6.15	.35 3.08 3.47 5.66	.40 3.23 3.70 6.69	.38 3.03 3.58 6.07	.09 .86 .49 2.25	2/ .22 .52 .45	.14 .47 .25 .61	.14 .26 .18 .57	.14 .45 .38 .71
I	.0180 .0243	2/ 2/	.03 .04	.026 .042	.026 .042	.0200 .0274	2/ 2/	2/ 2/	.006 .014	.006 .013
K	.86 2.14 2.55 7.03 16.5 26.6	.90 2.26 2.45 7.30 16.5 24.4	.90 2.25 2.58 7.11 15.9 26.4	.74 1.90 2.42 6.14 14.4 22.8	.83 2.10 2.47 6.76 15.3 23.8	.15 .26 .39 .53 1.7 3.3	.15 .20 .26 .55 1.0 1.6	.08 .10 .04 .25 1.5 .8	.15 .23 .27 .64 1.5 2.6	.15 .26 .23 .72 1.7 2.5

Mean concentration^{1/}

Standard deviation

Constituent	SRWS	Alb	Atl	SLC	C.L. Mean	SRWS	Alb	Atl	SLC	C.L. Mean
Mg	.46 2.48 7.92 8.28 11.9 22.2	.48 2.39 7.89 8.44 11.9 21.7	.48 2.40 7.80 8.42 12.1 22.2	.55 2.39 7.82 8.40 12.2 22.2	.52 2.39 7.84 8.42 12.1 22.1	.12 .51 .70 .61 .9 1.6	.13 .20 .37 .50 .4 .8	.11 .19 .44 .41 .6 .8	.26 .38 .48 .35 .6 1.0	.21 .29 .43 .41 .6 .9
Mn	35 63 66 110 115	50 66 62 112 118	36 49 70 105 103	33 48 65 118 127	37 56 67 111 114	13 9 17 17 15	8 11 10 15 8	12 11 9 12 7	7 10 11 19 23	11 13 10 15 17
Mo	3.0 9.5 18.1	<u>2/</u> <u>2/</u> 17.5	4.2 9.5 18.9	2.9 9.4 19.2	3.3 9.4 18.9	.7 1.5 1.3	<u>2/</u> <u>2/</u> <u>2/</u>	.8 1.6 2.1	.5 1.0 1.1	.8 1.3 1.7
Na	3.36 15.4 20.7 43.5 79.4 223	3.33 15.7 20.9 44.8 78.2 222	3.43 15.8 20.9 44.3 80.0 223	3.43 15.7 20.7 43.7 80.9 220	3.39 15.7 20.8 44.2 80.0 221	.28 .9 .6 1.7 2.9 9	.26 .5 .8 1.2 2.6 7	.14 .4 .3 .5 1.6 8	.22 .7 .5 .9 1.5 3	.20 .5 .6 1.1 2.1 5
Ni	<u>3/</u> 5.5 10.9 23.2	4.4 5.2 12.8 22.7	6.0 3.8 13.3 17.8	4.0 4.0 10.0 26.0	4.9 4.2 12.1 22.3	<u>3/</u> 2.0 1.9 5.2	.5 1.5 2.7 2.9	3.1 2.4 2.5 3.7	2.2 2.5 1.4 6.2	2.5 2.2 2.6 5.5

Mean concentration^{1/}

Standard deviation

Constituent	SRWS	Alb	Atl	SLC	C.L. Mean	SRWS	Alb	Atl	SLC	C.L. Mean
NO ₂ + NO ₃ - N	.12	.20	.20	<u>2/</u>	.20	.07	.03	.04	<u>2/</u>	.04
	.23	.18	.19	.19	.19	.14	.02	.01	.06	.04
	2.93	2.88	2.98	2.89	2.92	.87	.04	.04	.09	.08
	5.83	5.85	6.13	5.83	5.91	.56	.46	.38	.36	.40
	8.32	8.49	8.77	8.13	8.35	.84	.27	.16	.61	.53
	12.1	11.9	11.9	11.8	11.9	1.3	.3	.3	.5	.4
PO ₄ - P	.809	.840	.802	.841	.827	.068	.030	.028	.051	.043
Pb	8.8	7.0	9.4	7.4	8.1	3.1	1.0	2.7	1.3	2.1
	11.6	11.1	10.3	9.8	10.6	1.3	1.6	3.1	1.5	2.2
	16.7	13.6	15.8	15.0	15.2	9.0	.9	4.9	2.2	3.8
	27.2	23.2	25.2	23.7	24.1	12.0	.9	7.2	3.7	4.8
	70.0	71.3	74.7	73.8	73.5	18.7	1.9	17.4	20.4	15.9
pH	7.60	7.60	7.76	8.07	7.82	.23	.19	.09	.14	.24
	7.69	7.88	7.91	7.96	7.92	.18	.08	.13	.13	.12
	7.71	7.76	7.90	7.94	7.88	.16	.22	.12	.20	.20
	8.11	8.12	8.19	8.19	8.17	.15	.12	.05	.12	.10
	8.17	8.25	8.28	8.35	8.30	.25	.18	.19	.11	.15
	8.79	8.80	8.86	8.86	8.84	.12	.14	.11	.05	.10
Se	10.5	12.7	9.8	11.0	10.5	1.7	<u>2/</u>	1.9	1.9	2.1
	20.1	24	20.7	22.4	21.3	3.1	<u>2/</u>	2.9	4.5	3.1
	69.2	78	68.4	72.3	70.1	8.3	<u>2/</u>	4.0	7.8	5.9

Constituent	Mean concentration ^{1/}					Standard deviation				
	SRWS	Alb	Atl	SLC	C.L Mean	SRWS	Alb	Atl	SLC	C.L Mean
SiO ₂	4.53	4.51	4.71	4.84	4.72	.64	.17	.18	.28	.26
	5.70	5.53	5.81	5.88	5.76	.95	.17	.14	.35	.30
	6.89	6.68	6.98	7.31	7.02	.45	.18	.18	.28	.35
	9.16	8.75	9.40	9.56	9.31	1.2	.14	.26	.36	.46
	22.8	22.1	23.6	23.5	23.2	1.7	.6	.7	.7	.9
	37.0	36.1	38.0	38.3	37.5	1.3	1.1	1.0	1.0	1.5
SO ₄	20.5	20.0	21.1	21.0	20.7	2.1	1.0	.8	1.5	1.3
	22.9	21.6	22.9	22.6	22.3	4.3	2.5	.8	1.3	1.8
	46.8	45.4	48.5	46.6	46.8	2.3	2.3	1.0	1.8	2.1
	59.6	58.8	57.9	57.1	57.8	4.0	2.2	3.1	2.5	2.7
	106	106	103	102	103	7	6	5	5	5
	142	141	135	134	136	10	5	5	5	6
sp cond	112.0	112.6	110.1	112.3	111.8	4.1	2.8	1.7	.9	2.1
	310.4	310.6	308.5	313.2	311.2	4.6	6.4	4.6	3.7	5.1
	556.4	536.9	550.4	557.5	550.9	18.6	13.8	6.0	2.6	10.4
	559.4	554.7	553.2	565.4	559.7	10.7	5.6	6.3	4.1	7.6
	848.9	832.4	829.1	844.0	837.2	12.9	11.9	10.4	7.2	11.4
	1188	1178	1203	1206	1198	12	23	17	8	19
Sr	70	80	60	62	63	9	<u>2/</u>	24	15	16
	76	70	88	64	72	27	<u>2/</u>	16	13	18
	75	69	72	60	67	29	11	17	13	15
	181	170	199	170	176	75	8	31	15	22
	185	160	184	164	174	27	<u>2/</u>	22	15	21
	236	230	248	240	243	21	<u>2/</u>	28	17	22
	727	<u>2/</u>	735	752	746	45	<u>2/</u>	33	34	34
V	1.24	<u>2/</u>	3.00	1.25	1.37	.37	<u>2/</u>	<u>2/</u>	.20	.49
	6.96	<u>2/</u>	<u>2/</u>	7.28	7.28	.65	<u>2/</u>	<u>2/</u>	.40	.40
	7.31	<u>2/</u>	<u>2/</u>	7.72	7.72	.36	<u>2/</u>	<u>2/</u>	.22	.22

<u>Constituent</u>	Mean concentration ^{1/}					Standard deviation				C.L. <u>Mean</u>
	<u>SRWS</u>	<u>Alb</u>	<u>At1</u>	<u>SLC</u>	<u>C.L. Mean</u>	<u>SRWS</u>	<u>Alb</u>	<u>At1</u>	<u>SLC</u>	
Zn	42	40	43	50	44	8	0	12	15	12
	192	200	184	170	182	29	19	18	17	20
	259	254	263	240	254	29	13	13	27	18
	522	519	550	531	535	34	14	33	52	39
	549	559	570	571	567	29	30	28	30	29

1/ Concentration units are consistent with USGS policy.

2/ Insufficient data.

3/ SRWS values not established.

Summary of Standard Reference Water Sample results analyzed by the Albany Central Laboratory

July to December 1974

Constituent	No. of det'n	rejected (> 1.5 s.d.)	Range ^{1/}	Mean concentration		Standard deviation	
				SRWS	Alb	SRWS	Alb
Al	8	0	50 - 90	96	72	40	13
	5	0	190 - 230	229	204	51	11
	10	10	200 - 400	243	242	72	30
	4	50	360 - 540	400	458	52	79
	8	12	0 - 660	610	631	70	31
As	5	0	8 - 14	9.8	9.9	4.1	2.3
	9	11	30 - 60	54	45.6	16	9.6
	10	0	35 - 60	58.1	49.1	15.6	8.6
	1	0	140	136	140	12	- 2/
B	5	0	10 - 50	20	38	19	16
	3	100	180 - 200	90	190	46	- 2/
	4	0	250 - 350	258	298	74	43
	2	0	490 - 550	454	520	90	- 2/
Ba	5	0	500	561	500	114	0
Be	1	0	30	27	30	5	- 2/
Ca	13	8	3.0 - 4.5	3.87	3.75	.24	.38
	16	0	12 - 14	13.2	13.1	.7	.7
	16	0	23 - 27	26.3	25.7	1.0	.7
	17	12	37 - 45	43.5	42.4	2.3	1.5
	9	11	57 - 63	61.7	60.2	2.8	1.9
	12	8	79 - 88	84.6	82.4	2.8	2.4

Constituent	No. of det'n	rejected (>1.5 s.d.)	Range ^{1/}	Mean concentration		Standard deviation	
				SRWS	Alb	SRWS	Alb
Cd	5	0	3 - 4	3.6	3.4	1.1	.5
	5	0	6	6.4	6.0	2.0	0
	8	0	7 - 9	8.0	8.2	.7	.7
	10	0	7 - 10	9.9	8.9	2.2	.7
	9	0	11 - 14	11.9	12.4	4.7	1.0
Cl	16	6	0.9 - 2.3	1.44	1.35	.53	.24
	12	8	4.3 - 23	22.9	22.4	2.2	.5
	16	0	25 - 27	26.2	25.8	.8	.6
	17	12	67 - 76	72.2	72.1	2.3	2.5
	9	0	94 - 97	95.4	95.7	3.1	.9
	13	15	190 - 220	213	212	7	6
CO ₃	11	27	0 - 31	31.6	16.8	8.0	11.0
Co	2	0	5 - 6	6.0	5.5	1.1	- 2/
	5	0	7 - 8	7.9	7.2	1.4	.4
Cr	4	0	0 - 10	8.5	8	2.7	5
	10	0	0 - 20	11	10	11	5
	8	0	20	19	20	14	0
	8	0	10 - 20	21.2	19	3.8	4
	5	0	40 - 60	45	50	24	7
Cu	8	0	20 - 40	27	22	7	7
	4	0	90 - 100	101	98	9	5
	5	0	130 - 150	145	140	38	7
	9	0	240 - 270	240	250	32	9
	10	0	590 - 640	591	614	59	15

Constituent	No. of det'n	d rejected (>1.5 s.d.)	Range ^{1/}	Mean concentration		Standard deviation	
				SRWS	Alb	SRWS	Alb
DSRD 180	17	53	306 - 392	361.5	368.6	11.3	16.7
	9	11	555 - 581	560.1	564.0	11.8	8.7
F	16	6	.1 - .8	.65	.70	.08	.07
	9	0	1.0 - 1.1	.93	1.01	.13	.03
	12	0	1.0 - 1.1	1.00	1.03	.11	.05
	16	0	.9 - 1.1	1.03	1.01	.09	.05
	17	29	1.0 - 1.3	1.04	1.11	.09	.08
	13	31	1.1 - 4.1	3.75	3.77	.30	.24
Fe	7	43	130 - 330	115	143	32	17
	8	25	390 - 610	454	443	28	29
	5	0	450 - 500	498	474	29	23
	10	10	800 - 980	831	870	97	51
	5	0	1000 - 1100	1008	1040	106	55
HCO ₃	16	12	27 - 33	31.6	30.5	2.2	1.8
	13	8	36 - 45	44.4	42.4	1.8	1.4
	9	0	43 - 48	46.7	45.3	2.7	1.7
	16	0	69 - 75	74.6	72.0	2.8	1.8
	17	6	99 - 111	101.7	102.1	7.3	3.3
	11	27	320 - 372	330.3	343.6	15.6	18.2
Hg	2	0	0.5	.42	.50	.09	- 2/
	5	20	2.2 - 2.8	3.32	2.48	.86	.22
	9	0	2.8 - 4.3	3.51	3.61	.49	.52
	10	20	0 - 7.0	6.19	6.15	2.25	.45
K	16	25	.4 - 1.2	.86	.90	.15	.15
	16	0	1.9 - 2.6	2.14	2.26	.26	.20
	12	8	2.0 - 3.0	2.55	2.45	.39	.26
	9	0	6.4 - 8.2	7.03	7.30	.53	.55
	17	6	14 - 23	16.5	16.5	1.7	1.0
	13	8	21 - 26	26.6	24.4	3.3	1.6

Constituent	No. of det'n	rejected (>1.5 s.d.)	Range ^{1/}	Mean concentration		Standard deviation	
				SRWS	Alb	SRWS	Alb
Mg	13	0	0.2 - 0.8	0.46	0.48	0.12	0.13
	16	0	1.9 - 2.7	2.48	2.39	.51	.20
	17	0	7.2 - 8.4	7.92	7.89	.70	.37
	16	6	7.5 - 9.4	8.28	8.44	.61	.50
	9	11	9.8 - 12	11.9	11.9	.9	.4
	12	17	16 - 23	22.2	21.7	1.6	.8
Mn	5	80	0 - 60	35	50	13	8
	8	0	50 - 80	63	66	9	11
	7	14	20 - 80	66	62	17	10
	10	10	90 - 140	110	112	17	15
	5	0	110 - 130	115	118	15	8
Mo	2	0	16 - 19	18.1	17.5	1.3	- 2/
Na	16	6	2.8 - 3.7	3.36	3.33	.28	.26
	9	0	15 - 16	15.4	15.7	.9	.5
	16	6	19 - 22	20.7	20.9	.6	.8
	17	6	43 - 47	43.5	44.8	1.7	1.2
	12	0	75 - 84	79.4	78.2	2.9	2.6
	13	15	210 - 230	223	222	9	7
Ni	9	0	4 - 5	- 3/	4.4	- 3/	.5
	4	0	3 - 6	5.5	5.2	2.0	1.5
	8	25	10 - 16	10.9	12.8	1.9	2.7
	9	0	20 - 28	23.2	22.7	5.2	2.9
NO ₂ + NO ₃ - N	16	0	.17 - .30	.12	.20	.07	.03
	16	6	.16 - .56	.23	.18	.14	.02
	9	0	2.8 - 2.9	2.93	2.88	.87	.04
	12	0	5.1 - 6.7	5.83	5.85	.56	.46
	13	0	8.1 - 9.0	8.32	8.49	.84	.27
	17	0	11 - 12	12.1	11.9	1.3	.3

Constituent	No. of det'n	α rejected (>1.5 s.d.)	Range ^{1/}	Mean concentration		Standard deviation	
				SRWS	Alb	SRWS	Alb
PO ₄ - P	9	0	0.79 - 0.88	0.809	0.840	0.068	0.03
pH	7	14	7.0 - 7.8	7.60	7.60	.23	.19
	6	17	7.3 - 8.0	7.69	7.88	.18	.08
	7	14	7.4 - 8.1	7.71	7.76	.16	.22
	6	0	8.0 - 8.3	8.11	8.12	.15	.12
	8	12	8.0 - 8.5	8.17	8.25	.25	.18
	8	38	8.6 - 9.0	8.79	8.80	.12	.14
Pb	5	0	6 - 8	8.8	7.0	3.1	1.0
	8	0	8 - 13	11.6	11.1	1.3	1.6
	5	0	13 - 15	16.7	13.6	9.0	.9
	10	0	22 - 25	27.2	23.2	12.0	.9
	9	0	70 - 76	70.0	71.3	18.7	1.9
Se	3	0	10 - 14	10.5	12.7	1.7	- 2/
	1	0	24	20.1	24	3.1	- 2/
	1	0	78	69.2	78	8.3	- 2/
SiO ₂	9	0	4.1 - 4.7	4.53	4.51	.64	.17
	16	0	5.6 - 5.9	5.70	5.53	.95	.17
	16	0	6.4 - 7.0	6.89	6.68	.45	.18
	13	0	8.5 - 9.0	9.16	8.75	1.2	.14
	12	17	5.9 - 26	22.8	22.1	1.7	.6
	17	0	34 - 39	37.0	36.1	1.3	1.1
SO ₄	16	0	18 - 21	20.5	20.0	2.1	1.0
	17	18	13 - 24	22.9	21.6	4.3	2.5
	16	0	41 - 49	46.8	45.4	2.3	2.3
	9	0	54 - 62	59.6	58.8	4.0	2.2
	12	17	96 - 110	106	106	7	6
	13	15	120 - 150	142	141	10	5

Constituent	No. of det'n	rejected (>1.5 s.d.)	Range ^{1/}	Mean concentration		Standard deviation	
				SRWS	Alb	SRWS	Alb
sp cond	16	0	106 - 118	112.0	112.6	4.1	2.8
	16	6	303 - 360	310.4	310.6	4.6	6.4
	9	44	515 - 566	556.4	536.9	18.6	13.8
	17	6	545 - 589	559.4	554.7	10.7	5.6
	12	33	739 - 853	848.9	832.4	12.9	11.9
	13	38	1120 - 1220	1188	1178	12	23
Sr	1	0	80	70	80	9	- 2/
	7	0	50 - 80	75	69	29	11
	2	0	70	76	70	27	- 2/
	4	0	160 - 180	181	170	75	8
	1	0	160	185	160	27	- 2/
	1	0	230	236	230	21	- 2/
Zn	5	0	40	42	40	8	0
	5	0	180 - 230	192	200	29	19
	8	12	240 - 340	259	254	29	13
	9	0	500 - 540	522	519	34	14
	10	0	510 - 600	549	559	29	30

1/ Concentration units are not included but are consistent with USGS policy.

2/ Standard deviations were not calculated because of insufficient data.

3/ SRWS values not established.

Summary of Standard Reference Water Sample results analyzed by the Atlanta Central Laboratory

July to December 1974

Constituent	No. of det'n	rejected (>1.5 s.d.)	Range ^{1/}	Mean concentration		Standard deviation	
				SRWS	Atl	SRWS	Atl
Al	6	0	50 - 140	96	83	40	35
	7	0	160 - 230	229	200	51	27
	16	6	160 - 290	243	240	72	31
	16	0	320 - 460	400	414	52	37
	14	21	500 - 1200	610	617	70	76
As	10	10	0 - 16	9.8	9.9	4.1	4.0
	16	12	0 - 35	29	27.4	7	3.6
	7	14	15 - 57	45.8	41.4	14.1	14.4
	15	0	48 - 69	54	54.5	16	8.7
	16	6	2 - 62	58.1	53.5	15.6	5.3
	9	0	110 - 140	136	120	12	11
B	13	0	0 - 50	20	24	19	17
	12	8	80 - 230	90	92	46	9
	15	0	230 - 250	258	243	74	8
	6	0	370 - 530	454	418	90	58
Be	7	43	20 - 40	27	31	5	9
Ca	7	29	3.1 - 5.2	3.87	4.42	.24	.61
	15	13	11 - 15	13.2	13.0	.7	.7
	14	7	24 - 28	26.3	26.3	1.0	1.3
	9	11	40 - 48	43.5	43.8	2.3	1.9
	16	6	61 - 66	61.7	62.6	2.8	1.5
	12	0	82 - 87	84.6	85.1	2.8	2.0
Cd	17	12	0 - 5	3.6	4.0	1.1	1.1
	10	40	1 - 8	6.4	5.0	2.0	1.8
	6	17	6 - 12	8.0	8.8	.7	2.1
	13	23	3 - 13	9.9	10.2	2.2	2.1
	14	7	0 - 17	11.9	13.6	4.7	1.6

Constituent	No. of det'n	rejected (>1.5 s.d.)	Range ^{1/}	Mean concentration		Standard deviation	
				SRWS	Atl	SRWS	Atl
Cl	15	20	0.7 - 3.5	1.44	1.44	0.53	0.36
	13	0	21 - 24	22.9	22.4	2.2	.8
	15	0	24 - 26	26.2	25.5	.8	.7
	9	0	71 - 74	72.2	72.1	2.3	1.1
	16	0	91 - 98	95.4	95.2	3.1	1.7
	7	0	210 - 220	213	219	7	4
CO ₃	13	8	22 - 51	31.6	31.3	8.0	8.8
Co	10	20	4 - 10	6.0	5.9	1.1	1.6
	6	33	4 - 11	7.9	6.6	1.4	1.8
Cr	1	0	10	8.5	10	2.7	- 2/
	18	0	0 - 20	11	8	11	5
	13	8	0 - 30	19	22	14	8
	11	0	20 - 70	45	41	24	15
Cu	6	0	24 - 29	27	27	7	2
	9	0	100 - 120	101	108	9	10
	15	27	70 - 170	145	131	38	23
	13	15	25 - 330	240	233	32	16
	12	0	510 - 650	591	590	59	45
DSRD 180	9	67	356 - 406	361.5	382.8	11.3	18.7
	13	15	544 - 608	560.1	560.8	11.8	9.6
F	15	7	0 - .8	.65	.64	.08	.08
	16	12	.8 - 1.4	.93	.99	.13	.11
	13	8	.7 - 1.2	1.00	1.09	.11	.06
	15	7	.8 - 1.2	1.03	1.07	.09	.07
	9	11	.9 - 1.2	1.04	1.07	.09	.09
	7	0	3.3 - 4.1	3.75	3.76	.30	.28

Constituent	No. of det'n	rejected (>1.5 s.d.)	Range ^{1/}	Mean concentration		Standard deviation	
				SRWS	Atl	SRWS	Atl
Fe	16	19	40 - 130	115	113	32	11
	7	0	390 - 450	454	421	28	19
	10	0	430 - 490	498	465	29	23
	18	6	600 - 840	831	804	97	24
	18	0	940 - 1000	1008	979	106	19
HCO ₃	15	6	30 - 36	31.6	32.2	2.2	1.5
	7	0	44 - 45	44.4	44.4	1.8	.5
	16	0	47 - 50	46.7	48.1	2.7	1.0
	15	0	74 - 79	74.6	75.5	2.8	1.3
	9	0	103 - 106	101.7	104.9	7.3	1.3
	13	23	322 - 385	330.3	346.8	15.6	10.7
Hg	10	10	0 - .5	.42	.35	.09	.38
	18	6	2.1 - 4.0	3.32	3.08	.86	3.03
	7	0	3.1 - 3.8	3.51	3.47	.49	3.58
	17	6	4.5 - 6.9	6.19	5.66	2.25	6.07
I	1	0	.03	.0180	.03	.0200	- 2/
	1	0	.04	.0243	.04	.0274	- 2/
K	15	0	.7 - 1.0	.86	.90	.15	.08
	15	0	2.1 - 2.5	2.14	2.25	.26	.10
	13	8	2.5 - 4.0	2.55	2.58	.39	.04
	16	0	7.0 - 7.9	7.03	7.11	.53	.25
	9	11	13 - 19	16.5	15.9	1.7	1.5
	7	0	26 - 28	26.6	26.4	3.3	.8
Mg	7	0	.4 - .7	.46	.48	.12	.11
	14	0	2.2 - 3.0	2.48	2.40	.51	.19
	9	11	6.9 - 8.4	7.92	7.80	.70	.44
	14	0	6.7 - 8.9	8.28	8.42	.61	.41
	16	0	11 - 13	11.9	12.1	.9	.6
	12	0	21 - 23	22.2	22.2	1.6	.8

Constituent	No. of det'n	rejected (>1.5 s.d.)	Range ^{1/}	Mean concentration		Standard deviation	
				SRWS	Atl	SRWS	Atl
Mn	18	39	20 - 50	35	36	13	12
	7	43	40 - 70	63	49	9	11
	16	0	50 - 80	66	70	17	9
	17	0	80 - 140	110	105	17	12
	10	0	90 - 110	115	103	15	7
Mo	6	33	3 - 5	3.0	4.2	.7	.8
	11	0	7 - 12	9.5	9.5	1.5	1.6
	9	44	16 - 21	18.1	18.9	1.3	2.1
Na	15	0	3.3 - 3.8	3.36	3.43	.28	.14
	16	6	15 - 19	15.4	15.8	.9	.4
	15	0	20 - 21	20.7	20.9	.6	.3
	9	0	44 - 45	43.5	44.3	1.7	.5
	13	8	79 - 85	79.4	80.0	2.9	1.6
	7	29	190 - 240	223	223	9	8
Ni	13	-	2 - 15	- 3/	6.0	- 3/	3.1
	9	44	0 - 110	5.5	3.8	2.0	2.4
	4	50	6 - 16	10.9	13.3	1.9	2.5
	9	11	10 - 29	23.2	17.8	5.2	3.7
NO ₂ + NO ₃ - N	15	7	.17 - .35	.12	.20	.07	.04
	15	0	.17 - .20	.23	.19	.14	.01
	16	0	2.9 - 3.0	2.93	2.98	.87	.04
	12	8	4.0 - 6.6	5.83	6.13	.56	.38
	7	0	8.7 - 9.1	8.32	8.77	.84	.16
	9	0	11 - 12	12.1	11.9	1.3	.3
PO ₄ - P	13	0	.75 - .84	.809	.802	.068	.028

Constituent	No. of det'n	rejected (>1.5 s.d.)	Range ^{1/}	Mean concentration		Standard deviation	
				SRWS	Atl	SRWS	Atl
pH	8	0	7.6 - 7.9	7.60	7.76	0.23	0.09
	14	21	7.8 - 8.1	7.69	7.91	.18	.13
	5	0	7.7 - 8.0	7.71	7.90	.16	.12
	11	0	8.1 - 8.3	8.11	8.19	.15	.05
	4	0	8.0 - 8.4	8.17	8.28	.25	.19
	8	25	8.7 - 9.0	8.79	8.86	.12	.11
Pb	10	20	5 - 22	8.8	9.4	3.1	2.7
	6	0	7 - 16	11.6	10.3	1.3	3.1
	17	6	8 - 39	16.7	15.8	9.0	4.9
	13	15	10 - 47	27.2	25.2	12.0	7.2
	14	14	43 - 100	70.0	74.7	18.7	17.4
Se	18	0	6 - 14	10.5	9.8	1.7	1.9
	18	17	11 - 25	20.1	20.7	3.1	2.9
	14	7	34 - 75	69.2	68.4	8.3	4.0
SiO ₂	16	0	4.2 - 5.0	4.53	4.71	.64	.18
	15	0	5.5 - 6.0	5.70	5.81	.95	.14
	15	0	6.8 - 7.1	6.89	6.98	.45	.18
	7	0	9.1 - 9.8	9.16	9.40	1.2	.26
	13	0	22 - 24	22.8	23.6	1.7	.7
	9	0	36 - 39	37.0	38.0	1.3	1.0
SO ₄	15	0	20 - 23	20.5	21.1	2.1	.8
	9	0	22 - 24	22.9	22.9	4.3	.8
	15	0	47 - 50	46.8	48.5	2.3	1.0
	16	6	53 - 64	59.6	57.9	4.0	3.1
	13	8	98 - 110	106	103	7	5
	7	28	130 - 150	142	135	10	5

Constituent	No. of det'n	rejected (>1.5 s.d.)	Range ^{1/}	Mean concentration		Standard deviation	
				SRWS	Atl	SRWS	Atl
sp cond	16	0	107 - 113	112.0	110.1	4.1	1.7
	15	7	302 - 360	310.4	308.5	4.6	4.6
	15	7	531 - 556	556.4	550.4	18.6	6.0
	9	0	545 - 564	559.4	553.2	10.7	6.3
	13	23	808 - 867	848.9	829.1	12.9	10.4
	7	14	1190 - 1240	1188	1203	12	17
Sr	7	0	30 - 100	70	60	9	24
	16	19	40 - 130	75	72	29	17
	14	36	30 - 190	76	88	27	16
	9	22	110 - 250	181	199	75	31
	16	6	150 - 250	185	184	27	22
	15	7	200 - 300	236	248	21	28
	12	8	680 - 1000	727	735	45	33
V	1	100	3.0	1.24	3.0	.37	- ^{2/}
Zn	10	20	30 - 60	42	43	8	12
	13	15	80 - 300	192	184	29	18
	7	0	240 - 280	259	263	29	13
	15	13	9 - 630	522	550	34	33
	16	12	300 - 740	549	570	29	28

^{1/} Concentration units are consistent with USGS policy.

^{2/} Standard deviations were not calculated because of insufficient data.

^{3/} SRWS values not established.

Summary of Standard Reference Water Sample results analyzed by the Salt Lake City Central Laboratory

July to December 1974

Constituent	No. of det'n	rejected (>1.5 s.d.)	Range ^{1/}	Mean concentration		Standard deviation	
				SRWS	SLC	SRWS	SLC
Al	4	0	40 - 70	96	52	40	13
	7	0	180 - 200	229	193	51	10
	10	30	0 - 580	243	208	72	32
	9	0	360 - 470	400	409	52	43
	13	23	250 - 740	610	563	70	47
As	9	0	8 - 15	9.8	12.0	4.1	2.3
	18	6	6 - 41	29	32.9	7	4.2
	26	0	39 - 65	45.8	52.7	14.1	6.5
	14	21	28 - 100	54	48.2	16	10.7
	10	0	45 - 63	58.1	55.0	15.6	5.8
	25	4	130 - 220	136	155	12	20
B	23	9	0 - 370	20	22	19	14
	22	0	60 - 120	90	102	46	17
	17	6	160 - 640	258	256	74	33
	26	4	200 - 610	454	472	90	39
Ba	14	7	20 - 600	561	485	114	80
Be	9	11	10 - 30	27	21	5	6
Br	26	0	.1 - .5	.235	.38	.184	.08
	23	4	.04 - 1.1	.403	.12	.427	.06
Ca	26	4	3.0 - 3.9	3.87	3.53	.24	.22
	24	0	12 - 14	13.2	12.9	.7	.4
	24	0	25 - 27	26.3	25.8	1.0	.6
	24	8	39 - 44	43.5	42.2	2.3	1.2
	18	0	59 - 63	61.7	60.9	2.8	1.3
	22	11	76 - 87	84.6	81.9	2.8	2.6

Constituent	No. of det'n	rejected (>1.5 s.d.)	Range ^{1/}	Mean concentration		Standard deviation	
				SRWS	SLC	SRWS	SLC
Cd	9	0	2 - 4	3.6	2.9	1.1	0.6
	7	0	5 - 7	6.4	5.7	2.0	.8
	1	0	8	8.0	8.0	.7	- 2/
	10	10	2 - 9	9.9	8.7	2.2	.7
	14	29	6 - 25	11.9	12.0	4.7	3.0
Cl	24	0	1.1 - 2.0	1.44	1.57	.53	.24
	22	9	2.7 - 24	22.9	22.7	2.2	.9
	24	0	24 - 28	26.2	25.9	.8	1.0
	24	0	71 - 76	72.2	72.5	2.3	1.2
	18	0	92 - 98	95.4	95.1	3.1	1.7
	26	4	200 - 220	213	213	7	6
CO ₃	22	9	14 - 50	31.6	34.8	8.0	8.9
Co	7	14	0 - 6	6.0	4.8	1.1	1.0
	4	50	5 - 9	7.9	6.8	1.4	2.1
Cr	5	0	0	8.5	0	2.7	0
	10		0	11	0	11	0
	14	50	0 - 40	19	11	14	12
	4	50	0 - 30	21.2	3	3.8	- 2/
	9	0	10 - 50	45	39	24	12
Cu	4	0	23 - 45	27	32	7	10
	7	0	90 - 120	101	101	9	11
	9	0	120 - 160	145	142	38	13
	13	0	230 - 270	240	248	32	10
	10	10	560 - 730	591	621	59	47
DSRD 180	25	4	347 - 372	361.5	360.9	11.3	6.1
	22	0	545 - 568	560.1	558.9	11.8	6.0

Constituent	No. of det'n	rejected (>1.5 s.d.)	Range ^{1/}	Mean concentration		Standard deviation	
				SRWS	SLC	SRWS	SLC
F	24	4	0.2 - 0.8	0.65	0.63	0.08	0.07
	18	0	.9 - 1.1	.93	.99	.13	.04
	22	0	.8 - 1.2	1.00	.98	.11	.08
	24	8	.1 - 1.1	1.03	1.03	.09	.09
	24	8	.8 - 1.3	1.04	1.02	.09	.07
	26	31	3.2 - 5.7	3.75	3.63	.30	.30
Fe	13	31	90 - 200	115	118	32	19
	4	50	380 - 530	454	400	28	- 2/
	7	29	420 - 490	498	449	29	26
	10	20	740 - 960	831	836	97	74
	9	11	870 - 1000	1008	973	106	42
HCO ₃	24	0	30 - 34	31.6	32.0	2.2	1.0
	26	0	44 - 47	44.4	44.9	1.8	1.0
	18	0	47 - 49	46.7	47.6	2.7	.7
	24	0	75 - 80	74.6	75.5	2.8	1.3
	25	4	100 - 107	101.7	103.0	7.3	2.8
	22	23	283 - 332	330.3	312.7	15.6	11.9
Hg	7	0	.3 - .7	.42	.40	.09	.14
	9	0	2.7 - 3.6	3.32	3.23	.86	.26
	4	0	3.5 - 3.9	3.51	3.70	.49	.18
	10	0	5.5 - 7.4	6.19	6.69	2.25	.57
I	23	0	.01 - .03	.0180	.026	.0200	.006
	25	4	0 - .08	.0243	.042	.0274	.014
K	24	42	.2 - 1.0	.86	.74	.15	.15
	24	25	1.5 - 2.3	2.14	1.90	.26	.23
	22	18	2.0 - 3.3	2.55	2.42	.39	.27
	17	35	4.8 - 7.2	7.03	6.14	.53	.64
	24	21	11 - 17	16.5	14.4	1.7	1.5
	26	31	18 - 28	26.6	22.8	3.3	2.6

Constituent	No. of det'n	rejected (>1.5 s.d.)	Range ^{1/}	Mean concentration		Standard deviation	
				SRWS	SLC	SRWS	SLC
Mg	26	12	0.1 - 1.4	0.46	0.55	0.12	0.26
	24	17	1.6 - 3.9	2.48	2.39	.51	.38
	24	0	7.1 - 8.4	7.92	7.82	.70	.48
	24	0	7.4 - 9.1	8.28	8.40	.61	.35
	18	0	11 - 13	11.9	12.2	.9	.6
	22	0	21 - 24	22.2	22.2	1.6	1.0
Mn	9	11	20 - 40	35	33	13	7
	4	50	40 - 60	63	48	9	10
	14	7	2 - 80	66	65	17	11
	10	20	80 - 150	110	118	17	19
	7	14	90 - 160	115	127	15	23
Mo	13	8	2 - 5	3.0	2.9	.7	.5
	9	0	8 - 11	9.5	9.4	1.5	1.0
	10	10	17 - 21	18.1	19.2	1.3	1.1
Na	24	12	2.4 - 4.0	3.36	3.43	.28	.22
	18	17	13 - 17	15.4	15.7	.9	.7
	24	4	19 - 22	20.7	20.7	.6	.5
	24	4	42 - 49	43.5	43.7	1.7	.9
	22	0	78 - 84	79.4	80.9	2.9	1.5
	26	0	210 - 230	223	220	9	3
Ni	13	0	2 - 5	- 3/	4.0	- 3/	2.2
	6	50	1 - 11	5.5	4.0	2.0	2.5
	4	0	8 - 11	10.9	10.0	1.9	1.4
	10	30	11 - 35	23.2	26.0	5.2	6.2

Constituent	No. of det'n	rejected (>1.5 s.d.)	Range ^{1/}	Mean concentration		Standard deviation	
				SRWS	SLC	SRWS	SLC
NO ₂ + NO ₃ - N	23	0	0.02 - 0.36	0.23	0.19	0.14	0.06
	18	0	2.8 - 3.2	2.93	2.89	.87	.09
	22	0	5.1 - 6.4	5.83	5.83	.56	.36
	26	8	4.9 - 11	8.32	8.13	.84	.61
	24	4	9.1 - 13	12.1	11.8	1.3	.5
PO ₄ - P	19	26	.01 - .93	.809	.841	.068	.051
pH	9	89	7.1 - 8.2	7.60	8.07	.23	.14
	11	45	7.1 - 8.1	7.69	7.96	.18	.13
	13	31	7.3 - 8.2	7.71	7.94	.16	.20
	12	17	7.6 - 8.4	8.11	8.19	.15	.12
	13	15	7.9 - 8.5	8.17	8.35	.25	.11
	11	0	8.8 - 8.9	8.79	8.86	.12	.05
Pb	7	0	5 - 9	8.8	7.4	3.1	1.3
	4	0	8 - 11	11.6	9.8	1.3	1.5
	9	0	11 - 19	16.7	15.0	9.0	2.2
	10	0	16 - 29	27.2	23.7	12.0	3.7
	13	23	31 - 98	70.0	73.8	18.7	20.4
Se	8	0	6 - 14	10.5	11.0	1.7	1.9
	10	60	1 - 54	20.1	22.4	3.1	4.5
	13	62	10 - 94	69.2	72.3	8.3	7.8
SiO ₂	18	0	4.6 - 5.4	4.53	4.84	.64	.28
	24	4	4.5 - 6.3	5.70	5.88	.95	.35
	24	17	6.9 - 12	6.89	7.31	.45	.28

Constituent	No. of det'n	ϕ rejected (>1.5 s.d.)	Range ^{1/}	Mean concentration		Standard deviation	
				SRWS	SLC	SRWS	SLC
SiO ₂ (cont.)	26	4	9.0 - 11	9.16	9.56	1.2	0.36
	22	0	22 - 24	22.8	23.5	1.7	.9
	24	4	37 - 41	37.0	38.3	1.3	1.5
SO ₄	24	0	19 - 25	20.5	21.0	2.1	1.3
	24	0	20 - 25	22.9	22.6	4.3	1.8
	24	0	43 - 50	46.8	46.6	2.3	2.1
	18	11	53 - 68	59.6	57.1	4.0	2.7
	22	18	47 - 120	106	102	7	5
	26	58	120 - 150	142	134	10	6
sp cond	24	0	111 - 114	112.0	112.3	4.1	2.1
	24	0	300 - 318	310.4	313.2	4.6	5.1
	18	0	552 - 562	556.4	557.5	18.6	10.4
	25	8	268 - 576	559.4	565.4	10.7	7.6
	22	0	837 - 854	848.9	844.0	12.9	11.4
	26	0	1190 - 1220	1188	1206	12	19
Sr	26	4	30 - 170	70	62	9	15
	14	14	30 - 120	75	64	29	13
	22	0	40 - 80	76	60	27	13
	25	4	140 - 1400	181	170	75	15
	18	6	140 - 1700	185	164	27	15
	24	4	150 - 280	236	240	21	17
	22	0	670 - 810	727	752	45	34
V	14	0	1.0 - 1.6	1.24	1.25	.37	.20
	8	12	6.6 - 9.2	6.96	7.28	.65	.40
	9	67	7.5 - 14	7.31	7.72	.36	.22

Constituent	No. of det'n	⁴ rejected (>1.5 s.d.)	Range ^{1/}		Mean concentration		Standard deviation	
					SRWS	SLC	SRWS	SLC
Zn	7	57	20	- 70	42	50	8	15
	9	33	150	- 310	192	170	29	17
	4	25	200	- 260	259	240	29	27
	14	7	440	- 650	522	531	34	52
	10	10	530	- 1500	549	571	29	30

1/ Concentration units are consistent with USGS policy.

2/ Standard deviations were not calculated because of insufficient data.

3/ SRWS values not established.