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ANALYTICAL AND STATISTICAL RESULTS FOR 486 WATER SAMPLES
FROM THE 1° X 2° RICHFIELD QUADRANGLE, UTAH

by

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INTRODUCTION

A regional hydrogeochemical survey was conducted in the Richfield 1° x 2° quadrangle during the summer of 1978. Samples from 142 stream waters and 344 ground waters, springs, and wells, were collected and analyzed for calcium, magnesium, sodium, potassium, lithium, silica, alkalinity, sulfate, chloride, fluoride, zinc, copper, molybdenum, arsenic, and uranium. Specific conductance, pH, and temperatures also were measured. The Richfield 1° x 2° quadrangle is in west-central Utah, latitude 38° to 39° west, and longitude 112° to 114° north. The sample analyses and some statistical data for these analyses are presented in this report.

SAMPLE COLLECTION TECHNIQUES

Water samples were collected in acid-rinsed polyethylene bottles. At each locality, a 60-mL sample was collected and filtered through a 0.45- μ m filter and acidified with reagent-grade concentrated nitric acid to pH <2. An untreated 0.5-L sample was also taken

ANALYTICAL TECHNIQUES

Water temperature was measured at the sample site. The pH of the sample was measured on the day of collection. The remaining analyses were determined at U.S. Geological Survey laboratories in Denver, Colorado.

Calcium, magnesium, sodium, potassium, lithium, zinc, copper, molybdenum, arsenic, and uranium were determined using the 0.45- μ m filtered and acidified sample. Alkalinity, as bicarbonate, sulfate, chloride, fluoride, silica, and specific conductance were determined using the untreated sample. The analytical methods used for the analysis of each constituent are shown in table 1.

Table 1.--Analytical methods used for water analyses, Richfield 2° quadrangle, Utah

Constituent	Method	Reference
Alkalinity-----	Gran's plot potentiometric titration-----	Orion Research, Inc. (1975).
Sulfate-----	Ion chromatography-----	Smee and Hall (1978).
Chloride-----	---do-----	Do.
Fluoride-----	---do-----	Do.
Calcium-----	Flame atomic absorption spectrophotometry-----	Perkin-Elmer Corp. (1976).
Magnesium-----	---do-----	Do.
Sodium-----	---do-----	Do.
Potassium-----	---do-----	Do.
Lithium-----	---do-----	Do.
Silica-----	Colorimetric, molybdate blue-----	Brown, Skougstad, and Fishman (1970, p. 138-140).
Copper-----	Flameless atomic absorption spectrophotometry-----	Perkin-Elmer Corp. (1977).
Zinc-----	---do-----	Do.
Molybdenum-----	---do-----	Miller and Ficklin (1976).
Arsenic-----	---do-----	Aruscavage (1977).
Uranium-----	Fluorimetric-----	McHugh (1979).
Specific conductance-----	Conductivity bridge-----	Brown, Skougstad, and Fishman (1970, p. 28-29).

RESULTS

Analytical data for each sample locality, as well as the locality's latitude and longitude, in degrees, minutes, and seconds are shown in table 2.

The letters, SW or GW, in the sample identifications in table 2 denote whether the sample is stream water or ground water.

Table 3 is a summary of the chemical analyses in table 2, and shows each constituent with its minimum and maximum values, mean, geometric mean, standard deviation, and geometric deviation.

Correlation coefficients of the logarithm (base 10) of concentrations of ions are shown in table 4.

Ionic solutions, theoretically, are electrically neutral. Therefore, accuracy of analyses can be checked by comparing the sums of the charges for cations against anions.

The results of the charge balance of the cations and anions for the 486 samples in this report are, except for nine samples, within 10 percent of each other. Most of the nine samples are less than 20 percent, the maximum being 25 percent.

Eleven samples were collected during subsequent summers, and were analyzed again in duplicate. Table 5 shows the relative standard deviation obtained for these eleven samples by constituents.

TABLE 2.--WATER ANALYSES FROM THE RICHFIELD 2 DEGREE QUADRANGLE, UTAH

Sample	LATITUDE	LONGITUDE	CA(mg/L)	MG(mg/L)	NA(mg/L)	K(mg/L)	LI(ug/L)	SI02(mg/L)	ALK(mg/L)	S04(mg/L)	CL(mg/L)
00026W31	38 26 3	113 16 53	150.0	45.0	75	<1.0	60	31	200.0	57.0	290.00
00036W22	38 51 56	113 59 34	70.0	33.0	3	2.0	30	12	200.0	160.0	24.00
00166W24	38 35 37	113 15 55	43.0	11.0	25	1.0	15	24	150.0	20.0	78.00
00315W33	38 1 14	113 59 47	9.0	1.0	4	2.0	3	28	23.0	6.1	4.80
00325W33	38 1 10	113 59 2	12.0	3.0	6	2.0	5	32	42.0	6.6	8.30
00335W33	38 2 30	113 59 45	45.0	9.0	5	<1.0	3	32	150.0	15.0	25.00
00345W33	38 0 16	113 49 17	68.0	20.0	16	1.0	10	19.0	290.0	19.0	36.00
00355W33	38 3 14	113 47 7	68.0	12.0	8	2.0	11	56	130.0	140.0	21.00
00495W33	38 6 47	113 52 37	78.0	24.0	25	<1.0	8	26	230.0	54.0	93.00
00505W33	38 9 21	113 53 50	75.0	18.0	20	1.0	10	24	220.0	57.0	53.00
00545W33	38 13 2	113 53 11	83.0	26.0	38	1.0	5	28	320.0	54.0	120.00
00555W33	38 13 47	113 50 50	63.0	11.0	5	1.0	7	22	200.0	12.0	33.00
00595W32	38 21 48	113 55 54	110.0	45.0	190	3.0	17	54	440.0	100.0	250.00
00726W42	38 16 49	112 55 38	78.0	32.0	10	3.0	20	30	200.0	70.0	130.00
01256W23	38 34 52	113 57 23	94.0	36.0	26	<1.0	19	12	250.0	170.0	59.00
01306W23	38 32 14	113 58 3	73.0	27.0	5	<1.0	7	10	240.0	89.0	15.00
01336W23	38 32 52	113 51 28	68.0	15.0	48	6.0	40	64	220.0	25.0	250.00
01386W23	38 31 22	113 54 43	98.0	20.0	23	2.0	10	48	350.0	27.0	94.00
01406W23	38 31 7	113 56 25	60.0	15.0	5	2.0	6	56	260.0	3.9	18.00
01416W23	38 31 7	113 56 11	68.0	14.0	5	2.0	6	48	230.0	5.7	25.00
01446W23	38 32 32	113 59 8	93.0	46.0	10	<1.0	13	14	360.0	75.0	32.00
01516W23	38 44 5	113 46 20	73.0	42.0	65	2.0	21	14	260.0	100.0	340.00
01546W23	38 31 53	113 51 23	100.0	27.0	33	2.0	35	62	320.0	23.0	91.00
01656W23	38 35 38	113 45 8	20.0	8.0	23	5.0	70	52	130.0	7.2	29.00
01676W33	38 2 33	113 37 20	390.0	87.0	90	2.0	80	40	210.0	900.0	290.00
01686W33	38 2 2	113 35 55	48.0	10.0	33	3.0	28	34	180.0	26.0	52.00
01746W33	38 2 16	113 32 22	140.0	29.0	95	1.0	180	40	250.0	49.0	330.00
01806W33	38 3 56	113 33 4	190.0	69.0	340	19.0	290	60	320.0	140.0	1,510.00
01826W33	38 2 9	113 31 5	100.0	23.0	50	<1.0	22	58	410.0	28.0	140.00
01836W33	38 3 59	113 30 37	110.0	24.0	58	2.0	21	58	410.0	25.0	140.00
02326W12	38 59 42	112 55 34	80.0	32.0	120	2.0	60	18	330.0	52.0	1,000.00
02386W12	38 46 11	112 49 52	90.0	21.0	220	8.0	130	64	140.0	98.0	830.00
02406W12	38 46 13	112 52 15	63.0	20.0	100	6.0	70	52	200.0	59.0	350.00
02416W12	38 45 43	112 52 9	53.0	17.0	130	3.0	60	42	160.0	38.0	280.00
02426W13	38 42 17	112 57 8	43.0	14.0	35	5.0	50	54	130.0	35.0	110.00
02466W13	38 39 18	112 52 12	45.0	14.0	35	5.0	34	50	140.0	33.0	120.00
02506W13	38 43 22	112 46 22	23.0	14.0	58	9.0	120	90	190.0	40.0	66.00
02516W13	38 36 18	112 53 37	160.0	62.0	150	15.0	720	80	260.0	8.2	510.00
02526W13	38 36 7	112 52 45	58.0	24.0	70	6.0	90	48	190.0	42.0	110.00
02536W13	38 36 32	112 56 35	50.0	17.0	33	8.0	80	76	170.0	40.0	48.00
02546W13	38 30 17	113 0 0	95.0	82.0	370	10.0	3,600	30	280.0	6.0	14070.00
02636W13	38 30 27	112 51 8	120.0	25.0	1,620	260.0	21,000	46	300.0	7.8	3,640.00
02956W31	38 19 36	113 12 49	95.0	24.0	78	2.0	70	34	260.0	32.0	180.00
02966W31	38 20 22	113 13 11	150.0	55.0	120	1.0	100	54	470.0	25.0	270.00
03006W31	38 17 58	113 12 28	130.0	32.0	95	2.0	50	32	260.0	47.0	290.00

TABLE 2--WATER ANALYSES FROM THE RICHFIELD 2 DEGREE QUADRANGLE, UTAH--CONTINUED

Sample	F (mg/L)	ZN (ug/L)	CU (ug/L)	MO (ug/L)	AS (ug/L)	U (ug/L)	SP COND. (umhos/cm)	pH	TEMP. (C)
0072GW31	.20	2.9	2.1	3.3	5.4	2.7	1,480	7.40	17.0
0073GW22	1.50	2.6	.6	7.6	.5	2.3	650	7.55	14.5
0016GW24	.22	3.3	1.5	1.9	.5	.5	410	7.50	13.0
0031SW33	.16	2.0	1.3	1.2	4.5	.6	86	6.85	6.5
0032SW33	.31	1.4	1.4	1.0	.5	.5	141	7.50	5.5
0033SW33	.18	2.4	1.3	1.8	.5	.6	320	8.10	13.5
0034SW33	.22	2.4	1.0	1.3	4.7	2.0	540	7.90	11.0
0035SW33	.71	2.4	1.3	1.9	.5	1.1	515	7.40	15.0
0049SW33	.28	1.0	1.2	3.8	.5	5.4	600	8.05	5.0
0050SW33	.36	1.0	1.6	5.0	.5	6.8	550	8.30	6.0
0054SW33	.61	.9	1.5	3.8	.5	16.0	750	7.90	14.5
0055SW33	.49	.7	1.1	1.7	.5	1.8	597	8.40	15.0
0056SW22	1.70	1.2	3.3	8.0	31.0	17.0	1,750	8.20	19.5
0072GW42	.46	8.8	.6	8.6	4.9	8.6	715	8.25	12.0
0125GW23	2.50	4.6	1.3	2.0	.5	1.9	1,105	7.79	10.5
0130GW23	.21	1.6	1.4	1.9	.5	1.1	610	8.10	11.0
0133GW23	.15	2.5	1.3	<1.0	4.9	10.2	720	7.45	10.5
0138GW23	.12	2.3	1.0	1.2	2.3	5.0	745	7.45	11.5
0140GW23	.12	2.4	1.0	<1.0	1.3	1.5	455	7.50	11.0
0141GW23	.39	2.6	1.1	<1.0	2.3	2.4	362	7.60	14.0
0144GW23	.10	2.9	1.5	3.0	.5	1.5	780	7.65	10.5
0151GW23	.09	20.0	.6	<1.0	.5	1.2	990	7.90	16.0
0154GW23	.14	3.2	1.3	<1.0	3.8	7.3	880	7.40	12.0
0165GW23	1.10	29.0	6.8	1.4	35.0	4.3	275	8.10	16.5
0167GW33	1.40	1.9	13.0	10.0	1.9	6.5	2,700	7.30	15.5
0168GW33	3.50	1.2	.8	<1.0	1.9	1.4	455	7.40	19.0
0174GW33	10.00	4.9	3.6	1.0	12.0	4.9	1,280	7.05	15.5
0180GW33	.91	3.0	14.0	6.6	20.0	7.6	2,950	7.70	23.0
0182GW33	.35	3.4	1.8	<1.0	8.1	6.0	870	7.35	18.5
0183GW33	.35	2.2	1.0	1.6	11.0	6.0	885	7.55	16.5
0232GW12	.30	9.3	1.5	1.5	1.2	7.0	1,290	7.35	16.0
0238GW12	2.80	2.5	3.6	8.8	12.0	5.8	1,600	7.40	20.5
0240GW12	3.60	2.0	1.0	4.6	24.0	2.0	900	7.95	18.0
0241GW12	3.30	2.6	.6	2.2	16.0	.8	720	7.75	23.5
0242GW13	.53	13.0	4.1	2.8	15.0	2.3	470	7.85	13.5
0246GW13	.46	4.5	1.3	2.4	8.7	2.0	485	7.35	15.0
0250GW13	5.40	3.3	4.6	4.2	65.0	1.8	510	9.30	15.0
0251GW13	1.70	2.3	5.5	5.3	260.0	1.9	2,100	7.15	17.0
0252GW13	.46	40.0	1.1	8.3	65.0	2.3	740	7.65	19.5
0253GW13	5.00	20.0	1.4	3.8	190.0	<.2	530	7.85	19.0
0254GW13	.38	51.0	1.5	7.7	11.0	<.2	3,200	7.60	19.0
0263GW13	2.50	24.0	13.0	3.0	740.0	<.2	10,000	6.05	24.0
0295GW31	.17	9.1	.5	<1.0	2.8	7.2	920	7.55	15.5
0296GW31	3.40	3.7	1.8	1.5	11.0	4.1	1,460	7.45	13.0
0300GW31	2.00	10.2	1.6	1.6	7.9	13.0	1,000	7.89	18.0

Table 2--WATER ANALYSES FROM THE RICHHFIELD 2 DEGREE QUADRANGLE, UTAH--continued

Sample	LATITUDE	LONGITUDE	CA(mg/L)	MG(mg/L)	NA(mg/L)	K(mg/L)	LI(ug/L)	SI02(mg/L)	ALK(mg/L)	SO4(mg/L)	CL(mg/L)
0301GW31	38 22 39	113 20 53	60.0	20.0	48	3.0	35	120	140.0	29.0	140.00
0304GW34	38 10 59	113 27 25	120.0	40.0	45	4.0	26	38	170.0	220.0	150.00
0307GW34	38 12 53	113 28 5	130.0	32.0	78	3.0	31	34	190.0	130.0	260.00
0312GW33	38 12 43	113 31 27	230.0	120.0	230	3.0	60	20	270.0	880.0	420.00
0318GW33	38 12 23	113 34 2	130.0	27.0	110	2.0	50	52	310.0	25.0	240.00
0321GW33	38 10 43	113 32 13	310.0	96.0	190	5.0	90	16	190.0	220.0	880.00
0322GW34	38 7 23	113 25 48	90.0	20.0	48	1.0	18	48	270.0	33.0	70.00
0325GW34	38 7 12	113 29 13	130.0	46.0	87	1.2	37	50	340.0	100.0	150.00
0328GW33	38 7 12	113 37 55	500.0	96.0	160	9.3	70	48	320.0	190.0	1,130.00
0367SW34	38 5 35	113 29 46	110.0	25.0	130	<1.0	34	56	331.0	48.0	240.00
0377SW32	38 19 43	113 38 22	9.0	2.0	3	<1.0	4	14	19.0	4.4	8.30
0378SW32	38 17 40	113 38 36	9.0	5.0	5	<1.0	4	16	40.0	7.9	9.90
0381GW32	38 18 26	113 54 59	48.0	13.0	20	<1.0	7	40	230.0	15.0	3.50
0386GW32	38 20 25	113 37 14	19.0	6.0	5	<1.0	5	14	74.0	6.7	13.00
0388GW32	38 21 33	113 36 23	65.0	7.0	5	<1.0	7	10	215.0	4.9	4.30
0389GW32	38 20 15	113 36 40	78.0	13.0	8	<1.0	4	10	271.0	5.2	5.70
0390SW32	38 20 1	113 36 10	35.0	12.0	6	<1.0	2	8	167.0	6.2	8.60
0435GW32	38 19 53	113 33 43	70.0	19.0	18	<1.0	9	14	262.0	27.0	39.00
0438SW32	38 18 22	113 34 25	58.0	8.0	3	2.0	4	20	189.0	12.0	13.00
0439GW32	38 18 42	113 36 21	80.0	11.0	6	<1.0	3	8	233.0	8.7	7.50
0440GW31	38 18 47	113 29 27	130.0	44.0	90	1.0	20	24	157.0	130.0	280.00
0441SW32	38 17 45	113 39 35	45.0	9.0	13	2.0	4	20	124.0	24.0	39.00
0443GW33	38 3 45	113 38 42	70.0	14.0	20	5.0	31	42	178.0	39.0	45.00
0445GW33	38 1 44	113 39 58	250.0	44.0	48	2.0	60	30	183.0	620.0	170.00
0447GW33	39 2 5	113 40 8	360.0	49.0	70	2.0	80	28	201.0	880.0	180.00
0451GW33	38 3 42	113 43 13	65.0	14.0	23	5.0	18	40	172.0	27.0	81.00
0454GW33	38 5 57	113 44 55	33.0	7.0	13	2.0	8	36	77.0	14.0	25.00
0455GW33	38 5 50	113 44 54	30.0	7.0	13	3.0	10	40	73.0	17.0	29.00
0460GW33	38 0 4	113 47 15	100.0	28.0	33	9.0	30	74	316.0	34.0	77.00
0463GW32	38 17 15	113 35 52	5.0	5.0	5	<1.0	4	14	45.0	8.1	12.00
0470GW32	38 17 35	113 32 48	10.0	29.0	13	<1.0	20	10	263.0	27.0	49.00
0473GW32	38 15 23	113 31 58	160.0	48.0	45	2.0	20	18	147.0	420.0	79.00
0477GW34	38 14 50	113 26 25	140.0	49.0	105	1.0	90	38	250.0	48.0	300.00
0481GW33	38 12 17	113 47 43	300.0	93.0	230	5.0	60	58	281.0	320.0	1,000.00
0482SW33	38 11 35	113 50 6	58.0	7.0	5	<1.0	<2	12	112.0	75.0	7.00
0483SW33	38 13 0	113 50 27	63.0	11.0	10	<1.0	3	16	178.0	18.0	24.00
0484SW33	38 12 54	113 50 17	38.0	10.0	8	<1.0	<2	14	154.0	11.0	13.00
0486SW33	38 10 18	113 49 21	60.0	8.0	15	1.0	3	20	132.0	21.0	71.00
0489SW33	38 10 6	113 49 47	23.0	5.0	8	<1.0	<2	18	83.0	7.5	7.70
0490GW33	38 10 3	113 50 15	60.0	11.0	10	<1.0	5	10	191.0	12.0	7.50
0490SW33	38 10 6	113 49 25	58.0	8.0	10	1.0	5	18	143.0	12.0	33.00
0491GW33	38 8 31	113 49 37	45.0	8.0	8	<1.0	5	8	173.0	13.0	7.00
0492GW33	38 9 2	113 49 51	39.0	7.0	5	<1.0	5	10	125.0	6.70	6.70
0494GW33	38 7 48	113 48 2	88.0	21.0	25	1.0	20	16	260.0	94.0	29.00
0495SW33	38 7 43	113 47 49	65.0	12.0	15	2.0	5	12	141.0	19.0	18.00

Table 2.---WATER ANALYSES FROM THE RICHFIELD 2 DEGREE QUADRANGLE, UTAH---continued

Sample	F(mg/L)	ZN(ug/L)	CU(ug/L)	MO(ug/L)	AS(ug/L)	U(ug/L)	SP.COND. (µmhos/cm)	pH	TEMP.(C)
0301GW31	.40	5.0	1.2	2.2	9.5	1.6	680	7.65	15.0
0304GW34	1.50	50.0	2.7	2.3	4.0	3.8	1,160	7.60	15.0
0307GW34	.34	83.0	1.5	2.6	.9	3.6	1,150	7.50	16.0
0312GW33	13.00	3.8	5.1	9.2	1.6	4.6	3,300	8.05	16.0
0319GW33	2.50	5.3	1.6	2.0	4.8	34.0	1,080	7.35	14.0
0321GW33	.70	2.5	2.5	5.4	7.5	8.2	3,650	7.85	18.0
0322GW34	.17	13.0	4.4	1.7	8.5	3.8	775	7.40	16.5
0325GW34	1.00	12.0	.9	1.4	5.3	8.6	1,220	7.30	10.0
0338GW33	.21	4.8	3.6	5.3	10.0	38.0	4,200	7.20	13.5
0367SW34	.42	3.9	1.2	1.1	14.2	7.7	930	7.90	8.0
0377SW32	1.50	4.1	1.6	<1.0	1.4	<.2	88	7.70	7.5
0378SW32	.15	4.0	1.9	<1.0	1.3	<.2	125	7.80	8.0
0381GW32	.49	2.3	1.2	1.1	4.2	5.0	460	7.50	9.5
0386GW32	.13	6.4	.6	<1.0	1.4	<.2	176	7.90	8.0
0388GW32	.13	3.1	5.0	<1.0	.5	<.2	365	7.05	7.5
0389GW32	.10	1.3	.5	<1.0	.6	.7	460	7.75	11.5
0390SW32	.13	1.6	.6	<1.0	.8	.5	460	7.80	9.5
0435GW32	.21	1.9	.5	<1.0	.5	1.0	600	7.60	9.5
0438SW32	.20	1.9	.4	<1.0	1.0	1.0	380	8.15	17.0
0439GW32	.07	2.1	.6	<1.0	.6	.4	520	7.30	8.0
0440GW31	.11	2.5	1.5	<1.0	3.5	3.6	1,400	7.50	14.0
0441SW32	.08	7.5	.6	<1.0	1.6	<.2	270	7.40	11.0
0443GW33	2.50	6.8	.6	4.8	2.9	2.7	595	7.75	13.0
0445GW33	.70	23.0	2.5	4.3	.8	1.4	1,680	7.10	12.0
0447GW33	.70	14.0	3.9	5.4	2.6	4.1	2,150	7.50	11.0
0451GW33	2.10	4.0	.7	2.2	2.0	10.0	630	6.95	11.5
0454GW33	2.10	4.7	1.2	<1.0	1.1	1.3	249	7.30	10.0
0455GW33	2.50	4.8	1.5	3.8	1.2	1.7	248	7.45	10.0
0460GW33	.25	3.7	1.2	3.3	8.5	7.6	880	7.90	15.0
0463GW32	.05	3.9	1.6	<1.0	1.9	<.2	130	7.10	8.5
0470GW32	.29	6.2	.6	<1.0	2.3	.8	650	7.50	11.0
0473GW32	.68	8.5	2.1	2.0	1.2	1.6	1,340	7.35	10.5
0477GW34	1.60	10.0	1.3	1.2	3.1	12.0	1,525	7.10	12.5
0481GW33	5.00	7.7	1.5	9.9	9.5	4.4	3,900	7.50	14.0
0482SW33	.10	2.9	.6	<1.0	.2	.8	224	8.30	11.0
0483SW33	.34	2.0	.7	2.4	.4	3.1	370	8.40	19.0
0484SW33	.23	2.5	.7	<1.0	.3	1.4	306	8.40	13.0
0486SW33	.94	4.2	.6	<1.0	.8	1.9	355	7.80	13.0
0488SW33	.60	2.5	.7	<1.0	.3	.7	194	7.80	14.0
0489GW33	.73	5.0	.7	1.3	.2	3.8	345	7.55	19.0
0490SW33	.31	5.0	1.1	<1.0	.2	.6	325	8.40	21.5
0491GW33	.10	7.5	1.0	2.5	.2	2.7	330	7.40	9.0
0492GW33	.10	2.3	.4	2.4	.4	2.6	272	7.65	9.0
0494GW33	.34	8.7	1.2	2.8	1.1	3.2	770	7.80	12.0
0495SW33	.23	2.5	.8	1.2	1.7	1.1	680	8.50	25.0

Table 2.- WATER ANALYSES FROM THE RICHFIELD 2 DEGREE QUADRANGLE, UTAH--continued

Sample	LATITUDE	LONGITUDE	CA(mg/L)	MG(mg/L)	NA(mg/L)	K(mg/L)	LI(ug/L)	SI02(mg/L)	ALK(mg/L)	SO4(mg/L)	CL(mg/L)
0497GW32	38 5 45	113 47 26	98.0	21.0	18	<1.0	30	30	187.0	270.0	2.20
0501GW33	38 14 22	113 49 27	70.0	14.0	30	<1.0	8	40	322.0	22.0	45.00
0503SW33	38 11 55	113 53 8	63.0	14.0	15	<1.0	<2	16	195.0	21.0	25.00
0504SW33	38 11 16	113 53 3	58.0	9.0	13	<1.0	2	14	190.0	13.0	17.00
0506SW33	38 14 7	113 53 14	53.0	13.0	13	<1.0	2	20	232.0	15.0	13.00
0507GW33	38 14 6	113 53 18	53.0	13.0	15	<1.0	<2	18	226.0	17.0	13.00
0509GW42	38 24 16	112 48 12	13.0	3.0	8	1.0	4	16	44.0	11.0	15.00
0510GW33	38 1 3	113 50 57	68.0	16.0	20	1.0	20	48	272.0	16.0	44.00
0512GW33	38 0 55	113 57 59	35.0	7.0	8	2.0	10	28	141.0	4.4	8.50
0513GW33	38 2 38	113 57 56	19.0	4.0	8	<1.0	5	28	58.0	6.5	14.00
0515GW33	38 7 49	113 50 57	53.0	8.0	8	<1.0	8	20	165.0	18.0	13.00
0516SW33	38 7 45	113 52 17	53.0	10.0	18	<1.0	4	26	207.0	19.0	22.00
0517SW33	38 9 2	113 52 7	50.0	7.0	8	<1.0	4	16	167.0	11.0	8.50
0518SW33	38 8 49	113 52 38	63.0	10.0	13	<1.0	5	20	206.0	22.0	13.00
0519GW33	38 9 55	113 52 1	48.0	6.0	8	<1.0	6	22	192.0	5.8	4.20
0520GW33	38 11 17	113 51 55	40.0	5.0	5	<1.0	3	16	151.0	18.0	11.00
0521GW32	38 15 28	113 53 6	47.0	8.0	13	<1.0	2	20	180.0	10.0	11.00
0522GW32	38 16 0	113 53 29	45.0	11.0	18	<1.0	5	44	225.0	10.0	18.00
0523SW32	38 15 55	113 53 24	33.0	7.0	10	<1.0	3	34	131.0	8.9	14.00
0524GW32	38 16 52	113 52 16	35.0	5.0	10	<1.0	<2	36	127.0	5.3	10.00
0525SW32	38 16 30	113 55 12	50.0	10.0	15	1.0	3	32	212.0	11.0	26.00
0526SW32	38 17 5	113 54 34	65.0	8.0	15	<1.0	6	30	188.0	12.0	23.00
0527GW32	38 17 41	113 53 41	48.0	6.0	13	<1.0	5	30	188.0	15.0	17.00
0532GW32	38 18 34	113 55 27	70.0	12.0	23	<1.0	5	44	173.0	22.0	44.00
0533SW32	38 19 18	113 51 4	53.0	11.0	23	<1.0	8	58	230.0	27.0	26.00
0535GW32	38 20 6	113 52 15	50.0	11.0	25	<1.0	6	44	224.0	9.9	25.00
0536GW32	38 19 54	113 52 34	73.0	10.0	38	<1.0	10	46	319.0	10.0	43.00
0537GW32	38 18 38	113 52 42	20.0	3.0	13	1.0	3	42	100.0	4.3	5.80
0547SW42	38 22 32	112 47 17	18.0	3.0	8	1.0	4	20	51.0	10.0	10.00
0548SW42	38 21 53	112 47 32	18.0	4.0	10	1.0	10	22	70.0	4.8	9.10
0569SW42	38 18 42	112 50 29	28.0	6.0	10	1.0	9	22	108.0	7.9	14.00
0570GW42	38 17 58	112 50 2	95.0	51.0	30	1.0	20	20	311.0	140.0	55.00
0577GW34	38 4 14	113 25 35	48.0	24.0	68	6.0	60	26	117.0	6.5	220.00
0580GW34	38 3 49	113 27 25	73.0	10.0	38	<1.0	40	38	189.0	19.0	75.00
0581GW34	38 1 12	113 27 17	48.0	15.0	190	6.0	110	42	179.0	130.0	260.00
0583GW33	38 13 8	113 40 15	18.0	4.0	10	<1.0	4	16	55.0	14.0	12.00
0584GW32	38 17 0	113 38 30	18.0	4.0	10	<1.0	4	16	57.0	7.5	8.80
0586SW32	38 14 49	113 50 54	38.0	9.0	15	<1.0	<2	22	185.0	8.6	17.00
0587GW42	38 20 38	112 47 27	58.0	8.0	30	1.0	26	24	195.0	31.0	65.00
0590GW42	38 22 19	112 49 57	13.0	3.0	8	1.0	4	20	41.0	6.5	8.00
0669GW24	38 40 42	113 18 17	45.0	35.0	296	14.0	140	36	146.0	140.0	596.00
0691GW23	38 32 13	113 41 24	30.0	13.0	15	1.0	5	12	157.0	9.5	30.00
0739GW32	38 25 48	113 50 37	30.0	13.0	15	1.0	5	12	157.0	9.5	31.00
0741GW32	38 25 33	113 51 33	48.0	28.0	28	1.0	11	14	172.0	15.0	58.00
0743GW32	38 24 44	113 50 10	80.0	39.0	58	<1.0	12	44	150.0	75.0	210.00

Table 2.-- WATER ANALYSES FROM THE RICHFIELD 2 DEGREE QUADRANGLE, UTAH--continued

Sample	F (mg/L)	ZN (ug/L)	CU (ug/L)	MO (ug/L)	AS (ug/L)	U (ug/L)	SP. COND. (umhos/cm)	pH	TEMP. (C)
0497GW33	1.20	23.0	1.5	3.4	2	<.2	820	7.10	11.0
0501GW33	.20	7.6	1.3	3.0	11.4	2.7	630	7.30	11.5
0503GW33	.39	2.8	1.1	4.2	.2	4.2	422	8.40	12.0
0504GW33	.16	2.1	.5	1.5	.5	2.6	389	8.30	15.0
0506SW33	.09	1.6	.2	1.7	1.0	3.6	441	8.05	10.0
0507GW33	.09	2.6	.7	3.1	1.4	3.6	450	7.55	9.0
0509GW42	.10	5.0	.8	<1.0	.3	.3	141	6.80	7.0
0510GW33	.16	8.8	1.0	1.3	7.7	3.2	580	7.45	9.0
0512GW33	.09	2.89	3.6	<1.0	.9	1.8	280	7.85	14.0
0513GW33	.16	33.0	1.0	<1.0	2.1	.7	180	7.35	16.5
0515GW33	.13	3.2	.5	3.7	.7	3.5	375	8.05	11.0
0516SW33	.19	3.0	.6	1.5	1.2	2.4	440	8.25	12.0
0517SW33	.39	2.4	1.0	1.1	.3	.9	350	8.05	12.0
0518SW33	.29	2.6	1.2	3.7	.3	3.0	435	8.20	14.5
0519GW33	.22	3.6	.7	4.0	.3	2.5	332	7.80	10.5
0520GW33	.07	2.4	.3	2.0	.8	3.6	270	8.15	9.5
0521GW32	.06	2.9	.8	1.6	.4	1.8	360	7.30	7.0
0522GW32	.11	3.5	.5	<1.0	1.7	1.9	405	7.65	10.0
0523SW32	.11	2.6	.6	<1.0	1.3	1.5	268	8.15	15.0
0524GW32	.12	3.6	.5	<1.0	1.0	1.2	252	7.55	8.5
0525SW32	.13	2.0	.5	<1.0	1.9	2.0	435	8.45	20.0
0526SW32	.19	1.9	.5	<1.0	3.0	1.8	430	8.30	20.0
0527GW32	.18	2.5	.6	<1.0	1.9	2.2	375	7.35	12.5
0532GW32	.26	2.3	.7	<1.0	3.7	5.4	580	7.45	9.0
0533SW32	.15	3.3	1.3	1.0	5.3	1.8	585	8.05	16.5
0535GW32	.11	3.9	.5	<1.0	2.0	2.2	465	7.50	9.5
0536GW32	.23	2.6	.5	<1.0	4.8	5.2	635	7.70	12.0
0537GW32	.08	3.3	1.6	1.3	1.9	<.2	210	7.40	13.0
0547SW42	.23	2.9	1.0	<1.0	.4	.5	130	7.90	10.5
0548SW42	.43	1.5	1.9	<1.0	.3	1.0	169	6.90	7.5
0569SW42	1.10	3.3	<1.0	3.9	.3	8.4	260	8.10	19.0
0570GW42	.76	3.3	1.1	7.1	1.0	2.9	1,040	7.55	12.0
0577GW34	.27	2.6	2.8	2.3	7.4	4.9	850	8.90	16.5
0580GW34	.19	4.3	.6	<1.0	3.4	5.2	655	7.15	19.5
0581GW34	1.00	4.6	3.4	2.4	36.0	3.5	1,260	8.10	16.5
0583GW33	.07	3.1	2.4	<1.0	4.4	<.2	165	7.30	18.0
0584GW32	.12	1.9	1.3	2.5	4.3	<.2	170	7.25	11.0
0586SW32	.27	15.0	.8	1.9	1.0	2.0	358	8.20	14.0
0587GW42	1.80	3.9	1.3	94.0	1.5	740.0	540	7.10	12.5
0590GW42	.11	2.5	1.0	1.3	.4	<.2	120	7.65	9.5
0669GW24	.39	40.0	3.1	45.0	21.0	1.5	2,400	8.05	15.0
0691GW23	.12	3.9	1.6	1.2	2.8	.3	365	7.75	18.0
0739GW32	.10	1.8	2.7	1.5	2.7	.2	369	7.75	12.0
0741GW32	.29	4.7	1.1	1.6	4.9	2.9	592	7.55	21.0
0743GW32	.39	4.7	<1.0	3.0	5.6	8.4	880	7.40	12.0

Table 2.--WATER ANALYSES FROM THE RICHFIELD 2 DEGREE QUADRANGLE, UTAH--continued

Sample	LATITUDE	LONGITUDE	CA(mg/L)	MG(mg/L)	NA(mg/L)	K(mg/L)	LI(ug/L)	SI02(mg/L)	ALK(mg/L)	S04(mg/L)	CL(mg/L)
0753GW32	38 23 38	113 57 45	103.0	18.0	28	1.0	12	46	267.0	14.0	77.00
0755GW32	38 28 6	113 58 44	67.0	19.0	15	<1.0	4	42	293.0	9.0	20.00
0764GW32	38 29 45	113 56 41	60.0	17.0	15	2.0	5	42	254.0	10.0	18.00
0767GW32	38 16 48	113 49 15	95.0	16.0	35	1.0	9	32	344.0	67.0	38.00
0769SW32	38 15 52	113 51 1	53.0	8.0	15	<1.0	<2	18	184.0	11.0	22.00
0770GW32	38 16 33	113 52 6	33.0	5.0	10	<1.0	4	22	117.0	4.4	7.50
0773GW32	38 20 23	113 50 22	50.0	4.0	55	2.0	15	28	235.0	8.6	64.00
0775GW32	38 22 5	113 52 5	65.0	13.0	18	2.0	10	42	206.0	12.0	66.00
0777GW32	38 20 52	113 54 16	110.0	21.0	43	<1.0	15	48	343.0	36.0	79.00
0779GW32	38 19 29	113 53 27	45.0	5.0	20	1.0	7	36	166.0	12.0	19.00
0782GW32	38 19 52	113 55 43	75.0	6.0	25	1.0	15	20	265.0	10.0	35.00
0786GW31	38 20 22	113 18 33	78.0	20.0	45	7.0	36	36	173.0	17.0	150.00
0794GW31	38 19 2	113 16 52	380.0	104.0	105	8.0	220	12	240.0	856.0	250.00
0795GW31	38 29 12	113 29 50	65.0	34.0	23	2.0	12	8	286.0	22.0	53.00
0796GW31	38 29 2	113 29 50	63.0	30.0	18	1.0	10	6	254.0	7.2	31.00
0801GW24	38 30 51	113 16 34	14.0	3.0	10	<1.0	5	10	43.0	9.4	11.00
0803GW32	38 23 45	113 30 59	110.0	37.0	33	1.0	19	38	275.0	31.0	150.00
0805GW32	38 24 3	113 30 9	160.0	67.0	100	1.0	32	36	306.0	120.0	420.00
0806SW24	38 32 26	113 15 51	20.0	4.0	10	1.0	8	16	59.0	6.6	18.00
0807GW24	38 31 12	113 15 20	100.0	25.0	65	2.0	15	26	254.0	52.0	130.00
0808GW24	38 31 38	113 13 54	83.0	20.0	55	<1.0	22	18	225.0	34.0	130.00
0812GW24	38 30 58	113 6 57	63.0	12.0	60	6.0	20	10	202.0	26.0	100.00
0814GW24	38 31 28	113 6 12	55.0	16.0	60	8.0	15	22	176.0	41.0	150.00
0816GW24	38 35 26	113 1 37	130.0	<1.0	1,590	41.0	1,000	44	420.0	1,320.0	1,770.00
0818GW24	38 33 59	113 11 17	120.0	47.0	70.	3.0	70	28	195.0	55.0	320.00
0821GW24	38 35 33	113 10 56	120.0	25.0	93	7.0	60	30	109.0	83.0	310.00
0829GW24	38 35 15	113 13 19	70.0	11.0	88	15.0	40	24	251.0	34.0	180.00
0831GW34	38 7 37	113 0 12	63.0	10.0	28	5.0	14	32	183.0	19.0	91.00
0833GW34	38 10 42	113 4 10	13.0	2.0	65	2.0	14	36	82.0	28.0	36.00
0839GW34	38 10 24	113 12 11	70.0	10.0	390	54.0	1,500	72	324.0	260.0	190.00
0841GW34	38 6 13	113 13 24	80.0	28.0	141	6.0	60	52	165.0	190.0	150.00
0846GW34	38 4 40	113 5 13	25.0	6.0	40	5.0	18	52	155.0	8.9	11.00
0857GW34	38 4 16	113 14 31	85.0	29.0	78	7.0	50	58	153.0	180.0	110.00
0858GW34	38 1 32	113 16 24	83.0	46.0	50	6.0	30	32	256.0	294.0	55.00
0859GW34	38 3 23	113 19 31	75.0	70.0	85	7.0	60	42	233.0	322.0	68.00
0860GW34	38 1 27	113 21 54	60.0	65.0	85	6.0	90	38	212.0	246.0	102.00
0861GW34	38 5 58	113 17 19	170.0	190.0	320	9.0	110	46	230.0	878.0	350.00
0862GW34	38 10 38	113 15 30	85.0	47.0	100	8.0	90	44	176.0	75.0	250.00
0863GW34	38 10 13	113 21 12	110.0	42.0	73	5.0	70	16	188.0	160.0	184.00
0864GW34	38 13 2	112 54 14	110.0	20.0	178	15.0	200	32	221.0	400.0	83.00
0868GW43	38 9 21	112 54 4	73.0	12.0	48	4.0	21	28	295.0	22.0	81.00
0873GW43	38 10 27	112 50 13	50.0	17.0	30	4.0	25	26	195.0	19.0	58.00
0875GW43	38 13 2	112 50 8	38.0	12.0	38	5.0	14	36	191.0	40.0	43.00
0886GW43	38 1 31	112 50 5	65.0	15.0	15	4.0	3	38	238.0	8.3	22.00
0887GW43	38 0 37	112 52 8	90.0	21.0	33	<1.0	3	38	205.0	23.0	35.00

Table 2.---WATER ANALYSES FROM THE RICHFIELD 2 DEGREE QUADRANGLE, UTAH---continued

Sample	F (mg/L)	ZN (ug/L)	CU (ug/L)	MO (ug/L)	AS (ug/L)	U (ug/L)	SP COND. (umhos/cm)	pH	TEMP. (C)
0753GW32	.10	1.7	<1.0	1.3	1.6	1.8	785	7.65	21.0
0755GW32	.07	65.0	<1.0	<1.0	1.9	1.5	500	7.10	18.0
0764GW32	.15	2.2	3.3	<1.0	2.3	1.8	460	7.75	13.0
0767GW32	.15	3.1	.7	2.3	2.6	16.0	724	7.05	10.0
0769SW32	.15	1.2	<1.0	<1.0	.6	1.6	386	8.30	10.5
0770GW32	.09	3.0	<1.0	<1.0	1.2	1.5	245	7.50	9.0
0773GW32	.13	2.2	.6	1.0	6.3	14.0	495	7.40	10.5
0775GW32	.08	1.8	.4	<1.0	1.9	5.1	531	7.60	13.5
0777GW32	.24	1.6	1.0	2.1	6.4	4.0	860	7.40	17.0
0779GW32	.33	1.2	2.1	<1.0	3.3	3.1	355	7.75	11.0
0782GW32	.14	4.7	1.0	<1.0	4.3	5.4	520	7.75	13.0
0786GW31	.15	16.0	3.2	1.6	6.1	2.9	805	7.55	13.5
0793GW31	.67	3.1	4.8	12.0	7.6	<2	2,650	7.60	16.5
0795GW31	.10	2.8	2.0	3.8	2.2	1.6	650	7.75	9.5
0796GW31	.13	1.6	.8	<1.0	2.0	.2	550	7.90	19.5
0801GW24	.06	2.3	2.0	<1.0	.5	<2	141	7.45	5.5
0803GW32	.13	2.5	1.5	1.2	3.5	5.7	890	7.50	14.0
0805GW32	.50	1.9	2.2	2.5	6.1	4.2	1,780	7.80	14.0
0806SW24	.13	1.3	2.4	<1.0	1.3	<2	189	7.90	20.0
0807GW24	.18	2.0	7.2	<1.0	2.9	3.7	940	7.80	20.0
0809GW24	.26	1.3	2.0	1.9	3.5	3.6	815	7.40	16.5
0812GW24	.25	2.2	3.9	2.8	2.7	11.0	690	7.85	13.5
0814GW24	.55	1.3	1.5	4.4	4.2	5.7	720	7.70	16.5
0816GW24	3.10	28.0	19.0	7.4	240.0	22.0	7,700	7.75	14.0
0818GW24	.66	16.0	1.6	1.2	5.5	2.3	1,360	8.15	18.5
0821GW24	.50	72.0	.6	1.3	8.4	3.8	1,240	7.65	16.5
0829GW24	.20	71.0	2.6	1.6	5.5	13.0	850	7.10	14.5
0831GW34	.22	28.0	1.3	1.7	5.4	1.1	540	6.50	12.0
0833GW34	1.00	20.0	4.4	1.7	17.0	.4	340	8.70	18.0
0839GW34	4.70	1.7	9.5	<1.0	97.0	<2	2,200	7.55	66.0
0841GW34	.20	130.0	5.2	1.6	6.4	5.1	1,280	7.90	14.5
0846GW34	.34	170.0	5.5	2.0	9.9	2.6	355	8.05	20.0
0857GW34	.26	47.0	4.3	1.7	6.0	3.5	1,020	7.90	20.0
0858GW34	.37	109.0	2.4	1.8	5.5	2.3	950	7.60	16.5
0859GW34	.41	51.0	3.7	2.5	8.1	3.9	1,220	7.70	16.5
0861GW34	.95	55.0	3.0	7.5	20.0	5.7	1,180	7.70	12.0
0861GW34	.67	40.0	7.2	8.0	6.4	4.8	3,200	7.40	15.5
0862GW34	.36	44.0	6.8	4.5	10.0	4.4	1,320	7.65	18.0
0863GW34	.50	580.0	15.0	7.9	1.8	1.5	1,350	7.75	24.0
0864GW34	2.60	5.8	4.5	1.1	22.0	.3	1,430	7.65	33.5
0868GW43	.24	1.9	.7	1.3	6.6	2.3	680	7.30	15.5
0873GW43	.31	1.7	.8	2.0	5.3	1.0	539	6.90	11.0
0875GW43	1.00	1.4	1.0	3.5	4.5	7.6	655	7.85	11.5
0896GW43	.10	2.4	.5	<1.0	2.2	1.4	300	7.40	13.5
0897GW43	.24	5.5	.7	<1.0	5.0	2.0	1,120	7.30	13.5

Table 2.-- WATER ANALYSES FROM THE RICHFIELD 2 DEGREE QUADRANGLE, UTAH--continued

Sample	LATITUDE	LONGITUDE	CA(mg/L)	MG(mg/L)	NA(mg/L)	K(mg/L)	LI(ug/L)	SI02(mg/L)	ALK(mg/L)	SO4(mg/L)	CL(mg/L)
0898GW43	38 4 12	112 48 33	73.0	21.0	20	5.0	<2	36	346.0	16.0	29.00
0899GW43	38 6 13	112 48 3	43.0	11.0	10	<1.0	<2	32	151.0	17.0	15.00
1052SW14	38 40 52	112 2 16	75.0	12.0	13	1.0	<2	40	298.0	6.0	11.00
1054SW14	38 40 49	112 2 47	20.0	4.0	5	2.0	2	26	84.0	3.1	3.70
1057SW14	38 34 13	112 5 10	33.0	6.0	5	<1.0	<2	24	116.0	7.5	4.50
1058SW14	38 34 39	112 4 59	30.0	3.0	5	1.0	5	20	98.0	9.5	2.50
1060GW14	38 38 17	112 2 47	35.0	7.0	8	2.0	<2	36	138.0	3.8	18.00
1063GW14	38 38 16	112 5 57	303.0	30.0	740	9.9	820	48	301.0	780.0	810.00
1064GW14	38 33 32	112 5 0	30.0	6.0	5	<1.0	<2	42	119.0	5.7	5.70
1065GW14	38 31 51	112 3 28	15.0	2.0	5	<1.0	<2	26	53.0	3.5	2.70
1066SW14	38 30 30	112 1 58	5.0	1.3	3	<1.0	2	18	28.0	2.5	2.00
1067GW14	38 31 55	112 1 52	10.0	3.2	5	1.0	3	24	58.0	3.0	4.20
1068SW14	38 30 21	112 0 15	15.0	2.0	3	1.0	<2	24	52.0	1.8	3.30
1082GW42	38 24 44	112 46 34	48.0	8.0	15	3.0	5	14	169.0	12.0	19.00
1084SW44	38 1 36	112 14 5	23.0	3.0	8	<1.0	<2	22	89.0	2.7	1.20
1088SW44	38 0 18	112 11 52	9.0	2.0	3	1.0	<2	24	48.0	2.3	1.30
1094GW44	38 0 14	112 6 53	28.0	6.0	5	2.0	<2	42	110.0	6.9	6.60
1098GW44	38 4 56	112 0 16	28.0	4.0	8	2.0	2	42	117.0	3.1	5.30
1101GW43	38 1 30	112 43 6	33.0	7.0	15	4.3	6	46	140.0	8.0	18.00
1102GW42	38 7 5	112 38 2	30.0	6.0	8	4.0	6	40	137.0	17.0	8.30
1103GW43	38 14 21	112 39 47	48.0	11.0	23	4.0	10	44	211.0	26.0	26.00
1104GW42	38 17 40	112 36 43	43.0	8.0	13	2.0	9	26	161.0	46.0	26.00
1105GW42	38 22 15	112 38 23	25.0	4.0	5	1.0	8	26	65.0	10.0	13.00
1106GW42	38 29 29	112 36 47	50.0	10.0	18	5.0	21	48	167.0	40.0	53.00
1107GW13	38 36 8	112 34 50	83.0	16.0	23	3.0	19	34	199.0	36.0	89.00
1108GW13	38 44 29	112 34 16	540.0	95.0	1,000	170.0	4,600	20	494.0	150.0	2,470.00
1109GW11	38 55 46	112 22 23	90.0	11.0	13	4.0	100	18	277.0	74.0	75.00
1112GW43	38 0 51	112 35 59	40.0	8.0	20	2.0	<2	28	226.0	10.0	4.10
1113GW43	38 1 51	112 30 22	35.0	8.0	10	2.0	<2	38	182.0	8.0	9.00
1114GW44	38 2 29	112 21 19	50.0	80.0	188	43.0	80	180	1,530.0	4.0	192.00
1115GW44	38 12 32	112 12 46	38.0	8.0	25	4.0	10	48	102.0	90.0	12.00
1116GW41	38 24 17	112 14 46	41.0	13.0	3	<1.0	5	6	170.0	42.0	.60
1117GW14	38 30 10	112 15 28	20.0	5.0	5	.5	4	16	61.0	14.0	7.70
1118GW14	38 41 19	112 7 18	75.0	27.0	23	3.0	15	28	230.0	72.0	23.00
1120GW31	38 22 3	113 3 12	88.0	20.0	68	6.0	22	36	224.0	120.0	140.00
1121GW34	38 13 21	113 10 0	30.0	16.0	88	5.0	70	20	139.0	130.0	74.00
1126GW34	38 13 18	113 17 13	20.0	5.0	93	2.0	70	12	162.0	85.0	23.00
1127GW34	38 9 46	113 18 45	81.0	125.0	83	8.0	130	38	164.0	210.0	290.00
1301GW43	38 0 34	112 44 37	28.0	6.0	20	5.0	4	56	123.0	5.6	15.00
1329GW42	38 15 56	112 53 22	128.0	46.0	23	3.0	17	22	195.0	250.0	54.00
1331GW42	38 17 22	112 53 50	125.0	58.0	43	2.0	25	20	388.0	160.0	39.00
1333GW42	38 16 39	112 54 53	68.0	27.0	18	3.0	12	20	245.0	61.0	50.00
1334GW42	38 16 19	112 55 46	65.0	33.0	20	3.0	11	16	233.0	91.0	50.00
1335GW42	38 16 34	112 52 5	123.0	43.0	30	1.0	18	10	312.0	120.0	47.00
1337GW42	38 17 15	112 51 43	110.0	22.0	15	2.0	8	12	335.0	18.0	34.00

Table 2.--WATER ANALYSES FROM THE RICHFIELD 2 DEGREE QUADRANGLE, UTAH--continued

Sample	F (mg/L)	ZN (ug/L)	CU (ug/L)	MO (ug/L)	AS (ug/L)	U (ug/L)	SP. COND. (umhos/cm)	pH	TEMP. (C)
0898GW43	.28	1.5	1.1	<1.0	3.2	1.8	602	8.10	20.0
0899GW43	.22	1.4	1.8	<1.0	4.0	.3	350	8.25	18.0
1052SW14	.21	3.4	<1.0	<1.0	6.2	5.5	492	7.85	13.5
1054SW14	.23	2.1	2.5	<1.0	3.3	.8	168	8.30	16.0
1057SW14	.08	6.4	1.5	1.0	2.0	1.5	235	7.95	13.5
1058SW14	.20	3.1	1.2	3.0	3.1	3.3	205	8.00	11.5
1060GW14	.24	4.9	1.1	<1.0	2.3	2.6	281	8.05	13.0
1063GW14	2.10	19.0	6.5	6.6	240.0	<2	4,200	7.25	82.0
1064GW14	.29	1.9	.9	<1.0	1.3	.5	243	8.05	12.0
1065GW14	.15	4.4	1.7	<1.0	.7	<2	112	7.40	7.0
1066SW14	.01	2.4	1.2	<1.0	1.0	.2	166	8.15	12.0
1067GW14	.13	5.0	1.3	<1.0	1.2	<2	136	6.85	12.0
1068SW14	.12	2.3	1.6	<1.0	1.5	<2	101	7.95	12.0
1082GW42	.24	50.0	2.4	1.2	.7	3.9	369	8.14	23.0
1084SW44	.09	1.5	1.0	<1.0	1.7	<2	162	7.82	8.0
1088SW44	.06	1.5	<1.0	<1.0	1.0	<2	84	7.55	10.0
1094GW44	.16	1.9	1.6	<1.0	1.7	.4	215	7.66	20.0
1098GW44	.15	1.6	1.4	<1.0	2.5	.3	225	7.74	20.0
1101GW43	.26	5.4	3.1	1.4	4.0	1.5	348	7.92	16.0
1102GW42	.48	568.0	5.1	<1.0	2.9	.4	300	7.68	18.0
1103GW43	.17	5.6	3.8	<1.0	4.1	4.6	510	8.00	12.0
1104GW42	.90	7.1	6.0	2.0	.5	13.4	430	7.69	14.0
1105GW42	.46	4.6	1.2	1.3	2.6	2.0	195	7.96	16.0
1106GW42	.36	514.0	3.7	1.1	3.5	3.9	545	7.75	20.0
1107GW13	1.00	112.0	2.7	<1.0	2.5	1.7	800	7.56	15.0
1108GW13	3.70	93.0	22.0	7.0	9.9	.3	8,000	8.17	17.0
1109GW11	.37	40.0	2.1	<1.0	1.1	.7	1,325	7.72	14.0
1112GW43	.28	118.0	3.8	<1.0	.5	.9	390	7.95	12.0
1113GW43	.14	6.3	.9	<1.0	.5	.5	334	7.87	13.0
1114GW44	.31	23.0	4.7	<1.0	14.0	1.5	2,350	7.19	20.0
1115GW44	.44	64.0	1.6	1.3	7.2	1.5	450	7.53	14.0
1116GW41	.34	224.0	2.5	<1.0	1.1	.4	355	8.05	14.0
1117GW14	.64	2,105.0	8.1	1.0	.5	.2	178	7.52	14.0
1118GW14	.36	26.0	2.0	<1.0	1.2	5.3	880	7.65	12.0
1120GW31	.40	8.2	5.0	2.2	5.9	22.8	995	7.78	17.0
1121GW34	.07	72.0	5.4	1.9	4.3	.7	705	7.89	15.0
1126GW34	.50	87.0	17.0	6.1	.5	1.9	540	7.76	18.0
1127GW34	1.20	17.0	8.4	6.0	11.0	2.6	1,750	8.13	18.0
1301GW43	.28	2.7	1.2	1.0	6.5	.8	269	7.35	11.5
1329GW42	.98	43.0	3.0	4.5	4.1	6.1	980	7.95	12.5
1331GW42	.06	2.7	1.2	1.7	2.5	.6	1,120	7.55	14.0
1335GW42	.21	35.0	<1.0	10.8	3.6	15.0	620	7.05	12.5
1336GW42	.45	1.7	1.4	8.1	2.5	10.0	650	8.25	11.5
1339GW42	.25	4.7	1.6	3.1	.9	.9	550	7.45	12.0
1337GW42	.10	2.3	1.0	<1.0	5.0	.2	50	7.45	11.5

Table 2.--WATER ANALYSES FROM THE RICHFIELD 2 DEGREE QUADRANGLE, UTAH--continued

Sample	LATITUDE	LONGITUDE	CA(mg/L)	MG(mg/L)	NA(mg/L)	K(mg/L)	LI(ug/L)	SI02(mg/L)	ALK(mg/L)	SO4(mg/L)	CL(mg/L)
1339GW42	38 20 38	112 53 21	75.0	19.0	20	2.0	5	16	263.0	13.0	21.00
1342GW42	38 25 35	112 50 34	50.0	9.0	33	4.0	30	30	201.0	16.0	41.00
1349GW42	38 29 30	112 45 13	58.0	10.0	30	4.0	30	30	231.0	15.0	38.00
1354GW42	38 28 10	112 47 2	28.0	5.0	15	7.0	10	30	131.0	6.6	16.00
1356GW42	38 28 6	112 42 13	18.0	4.0	5	1.0	6	14	55.0	4.2	16.00
1360GW42	38 28 50	112 44 58	50.0	9.0	38	8.0	20	44	231.0	10.0	41.00
1361GW42	38 28 32	112 42 44	43.0	8.0	13	3.0	11	18	162.0	16.0	16.00
1368GW42	38 28 22	112 40 1	40.0	6.0	10	2.0	5	22	82.0	9.1	57.00
1369GW42	38 29 1	112 41 47	93.0	19.0	33	1.0	25	14	391.0	20.0	65.00
1372GW42	38 29 41	112 40 6	100.0	14.0	23	1.0	14	32	277.0	17.0	95.00
1381GW42	38 21 13	112 59 43	120.0	45.0	48	4.0	31	30	140.0	160.0	280.00
1382GW42	38 19 1	112 59 27	125.0	33.0	33	5.0	24	30	161.0	110.0	212.00
1383GW42	38 16 49	112 59 28	83.0	14.0	28	5.0	15	30	245.0	60.0	62.00
1413GW42	38 21 47	112 31 17	58.0	7.0	8	2.0	10	14	178.0	25.0	6.40
1416SW42	38 22 51	112 31 43	23.0	4.0	8	1.0	4	40	61.0	230.0	16.00
1417SW42	38 22 50	112 31 47	68.0	26.0	13	2.0	12	28	230.0	100.0	18.00
1420SW42	38 22 34	112 33 48	125.0	57.0	49	1.0	12	22	256.0	220.0	84.00
1421GW42	38 22 33	112 33 44	145.0	68.0	65	2.0	15	26	468.0	370.0	94.00
1423GW42	38 24 6	112 32 52	60.0	12.0	20	3.0	6	28	114.0	43.0	100.00
1424SW42	38 25 46	112 32 31	53.0	13.0	13	3.0	7	14	105.0	78.0	13.00
1425SW42	38 25 26	112 31 24	15.0	2.0	5	1.0	4	28	38.0	8.9	12.00
1427SW42	38 27 9	112 30 43	8.0	1.0	5	<1.0	2	24	27.0	3.9	4.80
1431SW42	38 27 5	112 34 16	73.0	16.0	23	2.0	3	20	286.0	35.0	13.00
1432GW42	38 28 13	112 35 29	95.0	19.0	20	<1.0	10	48	402.0	12.0	38.00
1433SW42	38 28 16	112 34 26	73.0	14.0	28	1.0	5	42	290.0	15.0	49.00
1434GW42	38 28 47	112 33 2	50.0	9.0	13	<1.0	5	36	216.0	3.3	5.90
1437SW13	38 30 2	112 33 1	63.0	15.0	15	<1.0	12	46	280.0	8.3	35.00
1438GW13	38 31 43	112 33 50	113.0	24.0	48	<1.0	27	42	366.0	31.0	92.00
1440GW13	38 31 33	112 36 0	108.0	34.0	55	2.0	36	64	385.0	56.0	180.00
1442GW13	38 33 38	112 33 13	65.0	13.0	65	3.0	22	68	295.0	6.2	43.00
1443GW13	38 33 55	112 32 52	53.0	12.0	20	1.0	19	34	174.0	14.0	67.00
1450SW41	38 19 18	112 21 41	25.0	4.0	3	<1.0	<2	14	83.0	3.1	.80
1452SW41	38 19 20	112 21 6	25.0	3.0	3	<1.0	2	12	74.0	5.0	18.00
1454GW43	38 14 31	112 41 15	38.0	11.0	40	6.0	22	68	150.0	30.0	51.00
1455GW43	38 13 14	112 40 17	25.0	4.0	33	5.0	10	72	123.0	15.0	16.00
1463GW13	38 38 13	112 36 33	63.0	10.0	23	6.0	20	50	181.0	22.0	28.00
1469SW41	38 17 32	112 26 55	10.0	2.0	3	2.0	<2	34	47.0	3.3	2.10
1470SW41	38 18 1	112 26 57	6.0	1.0	3	1.0	2	30	21.0	3.1	1.10
1471SW41	38 18 7	112 28 5	7.0	1.0	3	1.0	<2	34	24.0	3.3	1.90
1472GW41	38 18 19	112 29 2	6.0	1.0	3	2.0	2	40	27.0	3.3	1.10
1475GW41	38 17 15	112 25 13	40.0	5.0	3	2.0	2	48	130.0	1.9	1.90
1477SW41	38 18 9	112 23 8	10.0	1.0	3	1.0	<2	30	35.0	3.0	.81
1481GW41	38 17 35	112 23 59	14.0	2.0	3	2.0	<2	40	61.0	1.9	.90
1482SW41	38 19 42	112 26 1	6.0	<1.0	3	<1.0	2	28	21.0	1.8	1.10
1484GW43	38 3 41	112 43 6	35.0	6.0	28	5.0	6	58	20.0	.8	28.00

Table 2.-- WATER ANALYSES FROM THE RICHFIELD 2 DEGREE QUADRANGLE, UTAH--continued

Sample	F (mg/L)	ZN (ug/L)	CU (ug/L)	MO (ug/L)	AS (ug/L)	U (ug/L)	SP. COND. (umhos/cm)	pH	TEMP. (C)
1339GW42	1.30	2.4	1.2	3.7	.3	7.6	584	7.50	10.5
1342GW42	.80	2.7	1.7	3.7	2.3	6.4	465	7.20	13.5
1349GW42	.79	3.9	1.7	1.7	1.1	46.9	460	7.60	10.0
1354GW42	.25	6.3	1.4	1.0	1.2	.5	270	7.20	11.0
1356GW42	.15	3.0	1.5	1.1	2.1	.2	125	7.20	15.0
1360GW42	.41	3.1	1.1	<1.0	2.0	3.8	500	7.35	9.0
1361GW42	.24	2.9	1.1	2.0	.4	7.8	355	8.00	11.5
1368GW42	.10	4.4	1.5	<1.0	1.0	.4	320	7.70	7.0
1369GW42	.14	2.4	2.3	2.5	.9	11.2	680	7.95	11.5
1372GW42	.20	4.4	1.6	<1.0	1.8	1.6	710	7.60	17.5
1381GW42	.45	4.4	3.8	2.4	5.5	3.5	1,160	8.00	18.0
1382GW42	.25	4.0	1.5	1.2	3.6	4.2	1,080	8.25	14.5
1383GW42	.30	24.0	3.0	1.1	3.1	12.0	630	7.80	13.0
1413GW42	.46	4.5	<1.0	1.0	.3	12.4	360	7.00	7.0
1416SW42	.16	1.9	<1.0	<1.0	.6	1.0	174	8.05	12.0
1417SW42	.33	2.3	<1.0	<1.0	.8	3.1	580	8.20	14.0
1420SW42	.74	1.5	1.3	<1.0	1.0	4.9	1,050	8.20	14.0
1421GW42	.34	3.5	1.7	10.2	4.7	3.8	1,380	7.60	17.5
1423GW42	.50	7.0	<1.0	<1.0	.3	.4	530	6.90	8.5
1424SW42	4.10	12.0	1.7	<1.0	.7	100.0	430	8.00	14.0
1425SW42	.09	2.3	<1.0	<1.0	.5	.2	105	7.65	11.5
1427SW42	.19	2.2	<1.0	<1.0	.5	<.2	68	7.80	10.5
1431SW42	.22	3.0	1.0	<1.0	.2	1.1	575	8.35	17.5
1432GW42	.10	320.0	2.6	<1.0	1.1	3.2	650	7.05	19.0
1433SW42	.14	1.8	5.2	<1.0	1.6	2.4	555	8.40	16.0
1434GW42	.10	5.7	1.0	<1.0	.9	.3	340	7.30	10.0
1437SW13	.27	2.0	1.7	<1.0	2.8	4.5	505	8.40	19.5
1438GW13	.28	5.8	<1.0	<1.0	4.9	4.1	850	7.40	12.5
1440GW13	<.05	3.7	1.0	1.3	4.6	6.1	939	7.75	17.5
1442GW13	.23	3.2	1.4	<1.0	5.7	1.0	680	7.85	17.5
1443GW13	.18	2.5	<1.0	<1.0	.8	1.9	425	7.35	16.0
1450SW41	.04	2.3	1.3	<1.0	.3	<.2	144	7.95	6.5
1452SW41	.06	1.9	<1.0	<1.0	.4	<.2	127	7.90	6.5
1454GW43	.32	2.6	<1.0	<1.0	5.5	4.4	455	7.80	11.5
1455GW43	.25	4.8	<1.0	<1.0	5.0	2.6	271	8.05	18.5
1463GW13	.13	1,300.0	1.0	<1.0	4.4	1.9	483	7.80	20.0
1469SW41	.06	3.9	<1.0	<1.0	1.5	1.3	87	7.65	9.5
1470SW41	.05	2.7	1.3	<1.0	.6	<.2	49	7.60	9.0
1471SW41	.05	2.9	<1.0	<1.0	.7	<.2	59	7.50	12.5
1472GW41	.06	3.9	1.2	<1.0	.8	.2	58	6.35	4.0
1475GW41	.09	6.5	<1.0	<1.0	1.3	.3	220	7.30	15.0
1477SW41	.05	1.8	<1.0	<1.0	.4	<.2	79	7.65	8.5
1481GW41	.07	2.2	<1.0	<1.0	.6	.2	101	7.10	3.5
1482SW41	.20	1.8	1.6	<1.0	.5	<.2	10	7.45	15.0
1484GW43	.32	220.0	1.8	<1.0	1.5	<.2	3	7.70	24.0

Table 2.--WATER ANALYSES FROM THE RICHFIELD 2 DEGREE QUADRANGLE, UTAH--continued

Sample	LATITUDE	LONGITUDE	CA(mg/L)	MG(mg/L)	NA(mg/L)	K(mg/L)	LI(ug/L)	SI02(mg/L)	ALK(mg/L)	SO4(mg/L)	CL(mg/L)
1502GW43	38 2 18	112 42 11	43.0	8.0	5	4.0	3	50	134.0	7.5	27.00
1503GW43	38 1 5	112 42 17	30.0	7.0	18	4.0	3	50	131.0	4.5	15.00
1504GW43	38 2 22	112 42 57	46.0	8.0	15	4.0	2	50	142.0	8.1	26.00
1507GW42	38 19 32	112 31 54	28.0	8.0	23	<1.0	<2	24	159.0	7.2	18.00
1520SW42	38 21 36	112 31 43	93.0	11.0	20	5.0	30	26	295.0	54.0	13.00
1523SW41	38 22 54	112 29 37	10.0	1.0	3	<1.0	2	14	39.0	4.2	2.30
1530GW42	38 23 33	112 30 26	4.0	<1.0	3	<1.0	<2	20	3.0	7.5	1.00
1534SW41	38 23 59	112 29 3	4.0	<1.0	4	<1.0	2	22	14.0	7.5	1.60
1538GW41	38 25 24	112 29 12	8.0	1.0	5	<1.0	5	24	33.0	2.5	2.20
1542GW41	38 25 7	112 29 40	8.0	1.0	6	<1.0	7	20	27.0	5.8	2.70
1546GW41	38 25 43	112 28 39	9.0	1.0	8	<1.0	10	18	34.0	6.3	2.50
1550SW41	38 25 48	112 28 17	7.0	1.0	3	<1.0	2	24	27.0	1.7	1.90
1557SW42	38 25 42	112 30 55	6.0	1.0	3	<1.0	2	14	23.0	1.7	2.20
1560GW42	38 26 42	112 31 8	8.0	1.0	3	1.0	3	22	28.0	2.5	3.20
1562SW42	38 25 38	112 32 34	13.0	4.0	8	2.0	5	30	55.0	7.1	12.00
1571SW42	38 27 27	112 32 22	25.0	4.0	5	1.0	4	24	100.0	4.6	5.00
1574GW42	38 27 55	112 34 46	95.0	21.0	18	1.0	12	48	418.0	6.2	39.00
1576SW41	38 21 23	112 22 54	13.0	2.0	3	<1.0	<2	6	42.0	1.7	.46
1577GW41	38 22 31	112 23 46	10.0	2.0	5	<1.0	2	14	54.0	1.8	.21
1578GW41	38 22 54	112 24 3	6.3	2.8	3	<1.0	<2	8	45.0	1.3	.03
1579GW41	38 23 52	112 23 39	33.0	3.0	3	<1.0	5	10	34.0	54.0	1.20
1580SW41	38 23 26	112 23 2	6.5	<1.0	3	<1.0	<2	4	31.0	3.1	.32
1581GW41	38 25 16	112 24 8	5.0	<1.0	1	<1.0	<2	4	2.4	8.1	1.20
1582SW41	38 25 28	112 23 56	2.0	<1.0	3	<1.0	<2	8	1.2	11.0	1.30
1583SW41	38 25 6	112 23 14	10.0	1.0	3	<1.0	<2	8	14.0	11.0	3.30
1584SW41	38 24 54	112 23 22	2.0	<1.0	2	<1.0	<2	10	1.0	8.3	.31
1585SW41	38 24 52	112 23 20	18.0	1.0	2	<1.0	<2	4	30.0	22.0	.53
1589GW41	38 26 34	112 22 35	29.0	1.0	3	<1.0	5	4	84.0	5.0	1.20
1590SW41	38 26 2	112 22 25	33.0	2.0	3	<1.0	3	4	68.0	26.0	1.60
1591SW41	38 25 46	112 22 42	15.0	1.0	3	<1.0	2	2	43.0	6.4	1.50
1597GW41	38 28 0	112 21 51	13.0	1.0	3	<1.0	3	12	43.0	9.4	4.60
1599GW41	38 29 13	112 19 56	28.0	4.0	15	1.0	8	24	101.0	13.0	36.00
1603GW43	38 5 50	112 45 15	38.0	5.0	8	7.0	<2	38	140.0	6.6	9.40
1607GW43	38 14 44	112 52 30	285.0	100.0	85	3.0	40	20	255.0	950.0	140.00
1608GW43	38 8 17	112 51 44	55.0	7.0	20	3.0	13	36	199.0	9.0	33.00
1609GW34	38 14 10	113 21 35	28.0	7.0	35	2.0	29	20	129.0	13.0	38.00
1610GW34	38 6 41	113 20 47	70.0	27.0	55	5.0	28	38	167.0	154.0	70.00
1616GW11	38 56 52	112 8 8	58.0	12.0	3	<1.0	<2	2	234.0	1.6	4.90
1617GW11	38 53 20	112 9 48	78.0	12.0	13	3.0	14	6	335.0	1.3	5.10
1620SW11	38 52 50	112 8 34	53.0	18.0	8	3.0	15	8	280.0	6.3	26.00
1621SW11	38 52 37	112 8 40	65.0	20.0	8	2.0	15	8	283.0	24.0	26.00
1623GW11	38 56 31	112 10 57	78.0	14.0	3	<1.0	<2	4	288.0	2.0	5.30
1625GW11	38 59 32	112 9 8	68.0	11.0	3	<1.0	<2	4	264.0	1.8	4.60
1626GW11	38 55 38	112 12 34	58.0	8.0	10	<1.0	5	8	238.0	9.0	19.00
1628GW11	38 55 15	112 12 46	55.0	16.0	5	<1.0	4	6	200.0	3.9	7.30

Table 2.--WATER ANALYSES FROM THE RICHFIELD 2 DEGREE QUADRANGLE, UTAH--continued

Sample	F (mg/L)	ZN (ug/L)	CU (ug/L)	MO (ug/L)	AS (ug/L)	U (ug/L)	SP. COND. (umhos/cm)	pH	TEMP. (C)
1502GW43	.19	20.0	1.6	1.5	2.8	.7	340	8.10	18.5
1503GW43	.20	5.1	<1.0	1.3	3.7	.6	260	8.00	16.0
1504GW43	.31	3.3	1.7	1.2	2.8	.4	345	7.95	17.0
1507GW42	.26	2.6	<1.0	1.0	3.7	2.9	274	7.95	16.0
1520SW42	.76	2.5	4.7	6.8	6.1	14.0	565	8.20	13.0
1523SW41	.38	2.3	.4	1.0	.4	1.0	79	8.23	11.0
1530GW42	1.50	17.0	.3	<1.0	.4	.8	43	5.85	10.0
1534SW41	1.10	14.0	.3	<1.0	.4	.5	43	6.45	12.5
1538GW41	.34	3.4	.3	<1.0	.3	.6	74	6.30	7.0
1542GW41	.48	3.0	.4	<1.0	.4	.7	78	6.40	14.0
1546GW41	.83	4.4	.8	1.1	.7	.6	91	6.95	15.0
1550SW41	.52	3.8	.8	<1.0	.2	<.2	62	6.60	6.5
1557SW42	.14	3.2	1.2	1.1	.4	<.2	52	7.45	17.0
1560GW42	.19	3.3	1.2	<1.0	.4	.5	70	7.00	6.0
1562SW42	.12	3.3	1.8	1.0	.8	.4	173	7.85	15.0
1571SW42	.10	1.8	1.8	<1.0	1.1	.5	195	8.20	13.0
1574GW42	.10	400.0	3.3	<1.0	1.4	2.8	720	6.90	19.0
1576SW41	.09	2.4	<1.0	<1.0	.7	<.2	815	7.60	17.5
1577GW41	.09	2.6	<1.0	<1.0	.8	.3	98	7.70	2.5
1578GW41	.32	2.6	1.0	<1.0	.8	.2	96	7.85	1.0
1579GW41	.49	4.0	<1.0	<1.0	.2	.3	225	7.40	3.0
1580SW41	.03	2.2	<1.0	<1.0	.9	.2	73	7.60	8.0
1581GW41	.51	3.5	<1.0	--	--	1.1	31	6.75	1.0
1582SW41	.66	11.0	1.3	<1.0	.3	.6	37	6.40	9.5
1583SW41	.77	4.3	1.3	<1.0	.1	.2	70	6.95	8.0
1584SW41	.86	60.0	3.3	<1.0	.6	.4	40	6.30	9.0
1585SW41	.17	1.9	<1.0	--	--	<.2	104	7.60	8.5
1589GW41	.17	20.0	2.0	1.4	1.5	4.7	177	7.80	6.0
1590SW41	.23	1.8	1.3	<1.0	.5	.3	215	8.00	9.5
1591SW41	.19	2.7	1.8	<1.0	.6	.2	97	8.00	5.0
1597GW41	.67	2.7	1.7	<1.0	.7	.2	95	6.85	5.5
1599GW41	.51	3.0	1.9	<1.0	1.0	2.6	265	7.30	9.5
1603GW43	.18	6.5	6.0	1.0	1.9	<.2	275	6.95	16.5
1607GW43	.22	2.0	3.8	4.4	1.4	2.6	2,150	7.30	12.0
1608GW43	.10	1.1	.6	<1.0	7.1	.5	430	7.55	16.0
1609GW34	.38	150.0	4.2	3.1	7.2	.7	360	8.30	19.0
1610GW34	.47	81.0	2.1	6.7	6.7	2.1	835	7.65	13.5
1616GW11	.06	3.5	1.3	<1.0	.3	.2	295	7.90	8.0
1617GW11	.10	5.1	5.1	<1.0	1.1	<.2	580	7.85	11.0
1620SW11	.11	2.3	2.0	<1.0	1.2	.3	475	7.85	18.0
1621SW11	.12	2.1	3.3	<1.0	1.1	.2	485	8.05	18.0
1623GW11	.05	3.2	1.3	<1.0	.3	.2	490	7.60	5.5
1625GW11	.06	130.0	1.5	<1.0	.5	<.2	411	7.60	13.5
1626GW11	.11	2.3	1.5	<1.0	.5	<.2	429	7.35	12.0
1628GW11	.07	2.0	5.5	<1.0	.9	.2	440	7.45	9.0

Table 2.--WATER ANALYSES FROM THE RICHFIELD 2 DEGREE QUADRANGLE, UTAH--continued

Sample	LATITUDE	LONGITUDE	CA(mg/L)	MG(mg/L)	NA(mg/L)	K(mg/L)	LI(ug/L)	SI02(mg/L)	ALK(mq/L)	SO4(mg/L)	CL(mg/L)
1630GW11	38 55 46	112 14 3	38.0	11.0	5	<1.0	3	6	173.0	4.7	8.10
1631GW11	38 58 27	112 14 15	30.0	6.0	8	<1.0	5	12	132.0	5.6	13.00
1641GW11	38 45 53	112 0 46	48.0	16.0	28	3.0	20	36	158.0	90.0	150.00
1649GW11	38 50 12	112 13 43	60.0	9.0	3	<1.0	<2	4	260.0	1.9	4.80
1650GW11	38 51 35	112 13 11	60.0	10.0	3	<1.0	<2	4	231.0	1.3	4.30
1651GW11	38 49 13	112 16 7	70.0	6.0	3	<1.0	<2	4	255.0	1.7	4.90
1652GW11	38 47 35	112 16 42	98.0	12.0	3	<1.0	<2	6	374.0	2.7	5.30
1656GW14	38 42 22	112 12 37	37.0	20.0	20	4.0	18	42	249.0	14.0	83.00
1658GW14	38 43 44	112 12 32	95.0	20.0	38	6.0	22	42	292.0	16.0	120.00
1659GW14	38 44 5	112 13 29	160.0	66.0	80	3.0	90	34	418.0	260.0	170.00
1665GW14	38 43 18	112 8 59	490.0	210.0	440	22.0	490	24	283.0	3,030.0	170.00
1669GW14	38 34 0	112 7 48	45.0	9.0	15	1.0	7	24	155.0	62.0	5.90
1668GW14	38 40 7	112 16 17	38.0	4.0	80	2.0	10	22	119.0	152.0	33.00
1692GW14	38 42 57	112 16 33	95.0	72.0	58	3.0	80	14	413.0	58.0	200.00
1700GW14	38 41 33	112 17 33	83.0	38.0	38	2.0	30	24	415.0	19.0	100.00
1701GW14	38 36 30	112 27 20	30.0	5.0	10	<1.0	6	22	86.0	12.0	34.00
1703SW14	38 39 42	112 25 24	93.0	24.0	30	7.0	20	46	382.0	7.3	46.00
1704GW14	38 39 42	112 24 44	55.0	12.0	18	2.0	15	46	186.0	8.9	74.00
1712GW14	38 39 34	112 27 57	40.0	9.0	15	2.0	6	44	174.0	8.9	40.00
1716GW14	38 41 27	112 27 48	60.0	14.0	30	2.0	14	28	220.0	26.0	84.00
1736GW14	38 32 39	112 24 30	90.0	9.0	33	5.0	24	64	202.0	28.0	130.00
1744GW14	38 31 20	112 19 8	58.0	8.0	18	3.0	17	30	168.0	7.7	35.00
1748GW41	38 18 53	112 14 8	78.0	30.0	30	1.0	32	24	331.0	71.0	89.00
1751GW41	38 20 53	112 5 19	25.0	3.0	28	<1.0	6	28	133.0	16.0	15.00
1755SW41	38 29 30	112 27 16	20.0	3.0	10	<1.0	8	32	75.0	3.8	8.90
1758SW41	38 28 0	112 27 7	8.0	1.0	5	1.0	5	22	22.0	8.6	3.10
1759GW41	38 29 34	112 25 57	63.0	11.0	10	2.0	7	14	179.0	48.0	12.00
1768SW44	38 11 55	112 13 38	50.0	8.0	25	5.0	7	52	172.0	48.0	7.50
1782GW41	38 24 57	112 2 23	33.0	5.0	5	1.0	3	40	109.0	3.5	5.00
1787GW41	38 25 14	112 1 16	20.0	4.0	3	2.0	<2	36	67.0	5.0	3.40
1788GW41	38 26 55	112 1 48	20.0	6.0	3	<1.0	8	36	80.0	3.9	3.80
1791GW41	38 29 50	112 3 29	7.0	1.0	3	<1.0	2	24	19.0	5.0	2.70
1802GW43	38 14 6	112 34 13	58.0	12.0	8	4.0	9	56	213.0	9.5	17.00
1807GW43	38 10 16	112 34 18	43.0	6.0	8	4.0	5	58	141.0	2.7	6.70
1811GW43	38 6 15	112 31 8	43.0	7.0	5	5.0	3	52	154.0	2.8	6.20
1816GW43	38 9 9	112 31 12	40.0	6.0	5	4.0	5	56	142.0	6.5	8.00
1821GW43	38 3 38	112 38 11	90.0	33.0	28	4.0	3	52	397.0	27.0	88.00
1828GW43	38 3 58	112 33 27	45.0	7.0	10	3.0	5	48	167.0	1.2	9.50
1837GW44	38 3 47	112 29 34	35.0	7.0	5	4.0	<2	40	104.0	7.2	35.00
1850GW43	38 1 18	112 34 24	50.0	7.0	13	1.0	8	32	195.0	2.8	14.00
1853GW43	38 2 36	112 32 44	70.0	13.0	20	8.0	12	38	295.0	5.5	16.00
1857GW44	38 14 9	112 27 25	4.3	3.0	3	3.0	<2	36	33.0	2.9	.47
1858SW44	38 13 33	112 25 53	4.5	2.4	3	3.0	2	34	27.0	12.0	1.60
1859SW44	38 13 23	112 26 10	8.0	2.0	3	2.0	<2	30	26.0	7.2	.94
1860SW44	38 13 20	112 26 14	7.0	2.0	3	2.0	<2	30	27.0	7.4	2.30

Table 2.---WATER ANALYSES FROM THE RICHFIELD 2 DEGREE QUADRANGLE, UTAH---continued

Sample	F(mg/L)	ZN(ug/L)	CU(ug/L)	MO(ug/L)	AS(ug/L)	U(ug/L)	SP.COND. (umhos/cm)	pH	TEMP.(C)
1630GW11	.05	2.0	1.4	<1.0	.7	<.2	320	7.55	10.0
1631GW11	.07	3.6	1.1	<1.0	.4	<.2	270	7.05	16.5
1641GW11	.45	2.3	1.0	<1.0	8.8	3.6	580	7.50	15.5
1649GW11	.08	3.5	2.0	<1.0	.8	<.2	410	7.45	5.5
1650GW11	.04	2.2	1.6	1.0	.3	<.2	368	7.75	5.5
1651GW11	.06	2.4	1.2	<1.0	1.0	<.2	410	7.15	11.0
1652GW11	.06	30.0	1.1	<1.0	.8	<.2	598	7.35	11.0
1656GW14	.09	2.1	<1.0	1.3	2.7	2.3	641	7.45	11.5
1658GW14	.16	50.0	1.3	1.2	4.6	7.1	810	8.25	21.0
1659GW14	.61	840.0	2.4	5.7	4.4	4.7	1,555	6.95	11.0
1665GW14	.76	4.8	10.0	105.0	2.6	8.7	4,830	7.85	21.0
1669GW14	2.00	3.9	4.7	29.0	6.9	1.6	410	8.35	18.0
1688GW14	.55	2.6	3.3	<1.0	3.1	1.5	600	7.10	15.5
1692GW14	.35	2.4	2.4	3.2	3.4	3.7	1,270	7.60	9.0
1700GW14	.28	2.0	3.0	1.1	4.0	2.8	840	7.20	6.5
1701GW14	.13	11.0	2.4	<1.0	.8	.3	248	7.20	12.0
1703SW14	.39	16.0	3.6	2.4	9.2	.6	695	7.30	18.0
1704GW14	.20	3.9	2.5	<1.0	1.9	2.2	480	7.30	12.0
1712GW14	.17	5.9	1.8	<1.0	1.7	1.0	370	6.52	12.0
1716GW14	.22	2.3	1.0	1.6	2.7	2.5	560	8.70	22.0
1736GW14	.32	3.6	2.4	1.5	4.1	9.2	730	7.15	13.0
1744GW14	.24	50.0	1.0	1.2	2.5	1.7	445	8.00	10.0
1748GW41	.17	1.8	1.0	<1.0	4.6	6.1	760	7.85	16.0
1751GW41	.61	6.9	<1.0	<1.0	5.1	3.1	265	8.20	22.0
1755SW41	.62	3.1	<1.0	1.0	1.3	1.6	145	7.70	10.0
1758SW41	.47	7.0	1.6	<1.0	1.2	<.2	84	7.40	11.0
1759GW41	.19	2.0	1.0	1.5	1.3	3.4	450	8.10	12.0
1768SW44	.26	3.0	1.3	<1.0	3.5	1.6	430	8.10	13.0
1782GW41	.14	3.4	<1.0	<1.0	2.0	.9	213	7.85	10.0
1787GW41	.12	8.4	2.2	<1.0	1.5	<.2	132	7.40	9.0
1788GW41	.12	3.5	2.1	<1.0	2.7	<.2	144	7.25	13.0
1791GW41	.07	3.9	2.1	<1.0	2.0	.2	54	7.35	9.0
1802GW43	.18	3.9	2.4	2.1	3.6	1.5	400	7.85	10.5
1807GW43	.17	30.0	1.9	1.3	2.5	.5	258	7.95	18.5
1811GW43	.30	2.5	1.9	<1.0	2.2	.7	270	7.80	16.0
1816GW43	.42	190.0	2.1	<1.0	2.6	.5	249	8.70	18.5
1821GW43	.25	11.0	1.4	1.4	.6	1.2	880	6.95	15.5
1826GW43	.13	4.3	1.7	<1.0	2.6	.8	300	7.50	12.0
1837GW44	.10	180.0	1.2	1.6	1.1	<.2	220	6.75	13.5
1850GW43	.26	100.0	1.8	<1.0	3.5	1.3	355	6.85	9.0
1853GW43	.22	13.0	4.2	1.6	3.1	1.8	475	7.90	16.0
1857GW44	.07	5.2	1.6	<1.0	.7	<.2	77	6.75	4.0
1858SW44	.16	6.4	3.6	<1.0	17.4	<.2	86	7.70	15.5
1859SW44	.14	1.6	1.9	<1.0	.3	<.2	63	7.70	15.0
1860SW44	.33	2.6	2.1	<1.0	.1	<.2	5	7.70	15.0

Table 2.-- WATER ANALYSES FROM THE RICHFIELD 2 DEGREE QUADRANGLE, UTAH--continued

Sample	LATITUDE	LONGITUDE	CA (mg/L)	MG (mg/L)	NA (mg/L)	K (mg/L)	LI (ug/L)	SI02 (mg/L)	ALK (mg/L)	S04 (mg/L)	CL (mg/L)
1861SW44	38 13 23	112 26 5	9.0	2.0	3	3.0	<2	28	42.0	1.9	.56
1862SW44	38 12 17	112 25 41	7.0	3.0	3	2.0	3	34	38.0	1.5	.18
1863SW44	38 12 14	112 25 44	6.0	2.0	3	2.0	<2	32	25.0	4.5	.85
1864SW44	38 13 24	112 23 46	8.0	2.0	3	2.0	<2	28	36.0	1.7	.50
1865GW44	38 13 55	112 23 29	10.0	2.0	3	2.0	<2	30	40.0	1.0	.90
1866SW44	38 14 0	112 23 8	9.0	2.9	3	1.0	<2	30	40.0	1.5	.16
1876GW12	38 48 29	112 31 27	385.0	99.0	660	75.0	2,000	44	410.0	880.0	1,440.00
1877GW12	38 48 45	112 30 18	265.0	65.0	560	63.0	1,700	46	378.0	370.0	1,100.00
1878GW12	38 47 43	112 30 2	185.0	50.0	2,210	19.0	1,100	46	96.0	530.0	4,080.00
1886GW12	38 46 3	112 34 44	230.0	130.0	1,280	130.0	4,400	12	326.0	670.0	2,430.00
1887GW12	38 49 0	112 31 24	395.0	110.0	790	68.0	2,200	40	405.0	640.0	1,630.00
1888GW12	38 51 52	112 30 9	525.0	95.0	980	140.0	3,400	52	441.0	310.0	2,450.00
1899GW11	38 50 53	112 25 23	95.0	23.0	120	5.0	100	18	248.0	78.0	160.00
1890GW12	38 47 42	112 33 5	365.0	260.0	647	73.0	1,600	38	229.0	573.0	1,910.00
1892GW12	38 55 43	112 30 18	255.0	96.0	310	25.0	640	42	261.0	240.0	880.00
1894GW12	38 56 34	112 32 21	410.0	200.0	823	83.0	2,600	38	263.0	88.0	2,000.00
1895GW12	38 58 40	112 35 11	35.0	14.0	440	5.0	210	22	305.0	290.0	370.00
1896GW12	38 56 55	112 36 25	40.0	27.0	430	10.0	240	42	320.0	270.0	540.00
2110GW44	38 6 38	112 10 41	28.0	4.0	8	1.0	3	50	102.0	1.9	3.20
2116GW44	38 6 53	112 6 13	33.0	4.0	8	2.0	2	50	120.0	1.5	4.50
2119GW44	38 7 37	112 19 18	35.0	8.0	13	3.0	4	44	146.0	4.2	6.10
2121SW44	38 14 50	112 21 43	12.0	3.0	3	2.0	<2	40	51.0	1.5	.30
2123GW41	38 16 49	112 0 7	28.0	6.0	8	3.0	4	54	129.0	3.6	11.00
2124SW41	38 16 38	112 0 26	38.0	10.0	15	3.0	7	56	172.0	10.0	23.00
2125GW41	38 17 17	112 2 29	28.0	5.0	15	2.0	3	56	116.0	2.3	10.00
2126GW41	38 16 57	112 3 28	18.0	5.0	8	3.0	2	60	94.0	3.5	9.50
2134SW14	38 37 49	112 17 5	31.0	6.0	10	2.0	7	40	117.0	3.3	19.00
2144SW14	38 32 21	112 28 57	27.0	6.0	13	2.0	7	32	101.0	3.3	37.00
2145SW14	38 30 50	112 27 32	8.0	2.0	5	<1.0	2	28	30.0	2.3	5.30
2146SW14	38 30 59	112 21 36	7.0	2.0	3	<1.0	2	28	30.0	2.9	4.60
2148SW14	38 35 25	112 21 35	52.0	11.0	15	4.0	15	66	230.0	1.9	41.00
2157SW44	38 9 59	112 28 24	11.0	3.0	5	2.0	<2	28	10.0	41.0	2.60
2159GW44	38 11 17	112 26 29	7.0	2.0	3	<1.0	2	26	29.0	2.4	2.20
2161GW44	38 10 17	112 5 25	53.0	24.0	23	1.0	25	50	263.0	5.4	20.00
2162GW44	38 9 33	112 4 17	10.0	3.0	55	<1.0	18	26	122.0	7.6	29.00
2301SW41	38 28 41	112 20 36	7.3	2.1	5	1.0	5	26	33.0	5.4	7.00
2302SW41	38 28 30	112 20 49	6.0	1.7	8	<1.0	6	30	40.0	5.5	4.60
2304GW41	38 28 28	112 20 52	100.0	12.0	13	1.0	18	16	257.0	104.0	13.00
2305SW41	38 27 50	112 22 28	10.0	2.0	5	<1.0	2	12	41.0	4.9	2.60
2306SW41	38 27 39	112 22 29	8.0	2.0	3	<1.0	2	12	29.0	2.7	2.00
2307SW41	38 27 37	112 22 19	7.0	2.0	3	<1.0	<2	12	31.0	2.1	1.80
2308GW41	38 26 35	112 15 15	35.0	5.0	33	<1.0	14	28	127.0	84.0	6.30
2310GW41	38 25 27	112 17 57	150.0	14.0	13	1.0	22	20	355.0	200.0	8.90
2311SW41	38 26 23	112 18 44	58.0	6.0	5	1.0	5	10	208.0	18.0	6.50
2312GW41	38 26 19	112 18 42	85.0	9.0	8	2.0	20	14	17.0	140.0	4.00

Table 2.-- WATER ANALYSES FROM THE RICHFIELD 2 DEGREE QUADRANGLE, UTAH--continued

Sample	F (mg/L)	ZN (ug/L)	CU (ug/L)	MO (ug/L)	AS (ug/L)	U (ug/L)	SP COND. (umhos/cm)	pH	TEMP. (C)
1861SW44	.04	1.2	2.5	<1.0	3.1	<.2	76	7.90	16.0
1862SW44	.08	13.0	7.9	<1.0	59.0	<.2	71	7.50	6.0
1863SW44	.08	2.2	2.2	<1.0	.2	<.2	65	7.70	8.0
1864SW44	.02	1.7	1.3	<1.0	.1	<.2	66	7.70	5.5
1865GW44	.08	2.0	1.4	<1.0	.1	<.2	78	6.90	4.0
1866SW44	.07	1.6	1.8	<1.0	.5	<.2	80	7.80	8.0
1876GW12	1.10	9.1	5.2	8.4	10.9	.6	5,400	6.90	15.0
1877GW12	1.00	17.0	3.9	6.1	15.0	1.5	4,100	6.90	15.0
1878GW12	6.60	20.0	12.0	50.0	17.7	1.1	10,100	8.80	25.0
1886GW12	.70	45.0	14.0	4.7	3.8	3.0	7,750	7.60	21.0
1887GW12	2.20	7.9	7.0	8.0	9.6	1.0	5,850	6.80	14.0
1888GW12	3.00	14.0	7.8	10.0	11.0	.4	7,000	6.60	29.0
1889GW11	.14	2.9	1.7	1.1	2.5	.9	960	7.40	13.5
1890GW12	1.00	7.2	3.7	7.5	6.7	.4	6,250	7.00	14.0
1892GW12	.70	8.4	8.8	4.3	11.1	.3	3,300	7.10	16.0
1894GW12	1.60	120.0	9.0	8.2	5.7	.5	6,400	7.60	19.5
1895GW12	2.10	1.5	6.9	5.0	4.8	<.2	2,180	8.10	14.0
1896GW12	1.60	8.6	6.8	1.7	58.0	<.2	2,440	7.90	13.0
2110GW44	.15	2.5	1.0	<1.0	2.5	.3	190	7.82	12.0
22116GW44	.20	1.0	<1.0	<1.0	2.3	2.9	225	7.66	13.0
2119GW44	.16	3.3	<1.0	<1.0	2.7	.6	275	7.65	14.0
2121SW44	.09	2.4	<1.0	<1.0	1.1	<.2	105	7.70	11.5
2123GW41	.17	1.7	<1.0	<1.0	2.7	.4	250	7.45	15.0
2124SW41	.22	1.0	1.4	<1.0	2.5	.6	340	8.10	14.5
2125GW41	.17	1.4	<1.0	<1.0	2.3	.4	223	8.70	19.0
2126GW41	.18	1.2	1.0	<1.0	2.0	<.2	185	7.85	9.5
2134SW14	.09	1.3	.4	<1.0	1.7	.6	258	8.10	11.0
2144SW14	.21	1.1	1.4	<1.0	2.6	.5	255	8.30	21.0
2145SW14	.55	1.5	.5	<1.0	1.5	<.2	88	7.80	12.0
2145SW14	.15	1.4	.4	<1.0	1.7	<.2	68	8.00	10.5
2148SW14	.23	1.8	1.9	<1.0	3.4	.5	430	8.10	15.5
2157SW44	.44	1.8	1.4	<1.0	1.2	<.2	115	7.45	15.0
2159GW44	.12	2.5	2.3	1.5	1.4	<.2	61	6.40	16.0
2161GW44	.33	2.1	2.9	1.0	13.2	.9	455	8.10	15.0
2162GW44	1.20	1.2	1.3	1.9	165.0	.7	295	8.30	15.5
2301SW41	.21	1.4	1.0	<1.0	1.2	<.2	105	7.65	13.5
2302SW41	.18	1.4	<1.0	<1.0	1.5	.6	102	7.75	11.0
2304GW41	1.70	2.8	<1.0	3.4	.2	2.2	640	7.10	8.5
2305SW41	.60	1.7	1.1	1.7	.7	.8	93	7.85	10.0
2306SW41	.44	1.6	1.1	<1.0	.8	<.2	67	7.85	7.0
2307SW41	.33	2.0	<1.0	<1.0	.7	<.2	68	7.25	6.0
2308GW41	.74	3.4	1.0	5.6	11.3	1.1	400	7.55	14.5
2310GW41	1.40	11.0	1.3	29.0	2.1	1.7	850	7.25	11.0
2311SW41	.26	2.8	1.0	<1.0	2.0	1.5	150	8.15	10.0
2312GW41	1.80	8.2	<1.0	47.5	1.8	.6	100	7.70	22.0

Table 2.--- WATER ANALYSES FROM THE RICHFIELD 2 DEGREE QUADRANGLE, UTAH---continued

Sample	LATITUDE	LONGITUDE	CA(mg/L)	MG(mg/L)	NA(mg/L)	K(mg/L)	LI(ug/L)	SiO2(mg/L)	ALK(mg/L)	SO4(mg/L)	CL(mg/L)
2313SW41	38 24 58	112 18 37	73.0	9.0	5	2.0	13	8	89.0	150.0	1.90
2327SW41	38 23 40	112 19 12	22.0	3.0	3	<1.0	2	6	37.0	33.0	1.20
2328GW41	38 23 32	112 20 44	63.0	8.0	5	<1.0	15	8	98.0	120.0	2.00
2331GW41	38 21 42	112 17 40	23.0	7.0	3	1.0	15	10	50.0	36.0	2.50
2332SW41	38 21 5	112 19 37	50.0	8.0	3	1.0	5	10	108.0	64.0	2.60
2335GW41	38 22 3	112 15 9	85.0	19.0	5	2.0	12	12	143.0	190.0	10.00
2338GW41	38 16 12	112 18 39	35.0	8.0	8	<1.0	2	32	142.0	3.2	2.10
2341GW41	38 18 59	112 17 21	50.0	20.0	5	<1.0	2	36	246.0	5.3	6.40
2342GW44	38 13 54	112 20 0	9.0	3.0	3	2.0	<2	38	41.0	.9	.47
2344GW41	38 17 14	112 21 26	7.0	1.0	3	1.0	<2	22	27.0	2.2	.32
2347SW42	38 20 26	112 31 19	68.0	23.0	10	2.0	9	46	284.0	17.0	17.00
2354SW41	38 21 17	112 27 58	88.0	26.0	10	2.0	14	16	235.0	140.0	4.80
2355SW41	38 21 4	112 27 6	28.0	6.0	5	<1.0	3	22	92.0	10.0	1.80
2356SW41	38 21 3	112 27 7	48.0	9.0	8	<1.0	<2	12	174.0	10.0	2.20
2359GW44	38 0 46	112 18 35	5.0	1.0	23	<1.0	<2	26	61.0	11.0	3.80
2362GW44	38 3 15	112 21 38	43.0	11.0	13	4.0	4	54	190.0	5.3	13.00
2374GW44	38 0 15	112 15 8	18.0	4.0	3	<1.0	<2	32	73.0	2.8	1.40
2375SW42	38 29 20	112 32 7	53.0	9.0	8	<1.0	7	36	203.0	3.8	5.00
2377SW42	38 28 2	112 31 43	20.0	4.0	6	<1.0	5	24	77.0	2.2	2.50
2378SW42	38 27 59	112 31 43	9.0	2.0	3	<1.0	2	20	33.0	2.6	2.70
2383SW41	38 28 45	112 28 15	9.0	1.0	8	1.0	5	30	36.0	1.9	3.50
2384SW41	38 28 40	112 28 21	8.0	1.0	3	2.0	4	32	27.0	1.9	2.90
2386SW41	38 27 58	112 28 11	6.0	<1.0	3	<1.0	2	18	23.0	2.5	1.80
2387SW41	38 28 2	112 25 18	13.0	2.0	3	<1.0	4	10	54.0	3.5	2.60
2389SW41	38 23 27	112 25 29	7.0	<1.0	<1	<1.0	<2	12	24.0	1.4	.15
2390SW41	38 22 54	112 26 39	7.0	1.0	3	<1.0	<2	16	11.0	12.0	.90
2391SW41	38 24 28	112 24 51	4.0	<1.0	3	<1.0	<2	18	3.6	12.0	1.40
2392SW41	38 26 29	112 26 36	5.0	<1.0	3	<1.0	<2	16	12.0	1.7	.80
2393SW41	38 27 5	112 22 40	9.0	<1.0	2	<1.0	<2	10	25.0	2.0	.50
2402GW41	38 15 49	112 5 22	38.0	8.0	10	1.0	11	56	180.0	4.1	8.60
2407GW11	38 50 55	112 17 8	6.0	1.0	5	<1.0	<2	6	23.0	5.3	7.60
2414GW11	38 49 33	112 18 33	10.0	2.0	3	<1.0	<2	8	34.0	4.4	9.80
2420GW11	38 46 27	112 19 19	70.0	24.0	13	2.0	10	12	350.0	11.0	16.00
2424SW14	38 32 22	112 20 22	13.0	8.0	63	3.0	20	40	126.0	8.9	51.00
2430SW14	38 32 43	112 2 0	9.0	3.0	3	<1.0	3	26	42.0	3.2	3.90
2432SW14	38 30 26	112 4 37	46.0	8.0	5	<1.0	4	30	171.0	6.7	3.50
2435SW41	38 27 1	112 27 20	5.0	4.0	3	<1.0	<2	24	24.0	5.0	3.00
2436SW41	38 24 27	112 21 6	40.0	3.0	3	<1.0	<2	8	109.0	32.0	1.70
2437SW41	38 23 41	112 22 1	18.0	1.0	2	<1.0	<2	6	49.0	13.0	.34
2438SW41	38 21 41	112 21 6	17.0	1.0	2	<1.0	2	6	42.0	17.0	.07
2439SW41	38 19 28	112 19 32	28.0	9.0	3	<1.0	<2	16	106.0	6.2	.42
2444SW41	38 17 58	112 20 19	18.0	5.0	3	<1.0	<2	24	87.0	2.3	1.00
2458GW44	38 4 18	112 7 9	18.0	7.0	5	2.0	<2	44	76.0	4.6	3.30
2460GW44	38 4 18	112 10 2	11.0	3.0	3	<1.0	<2	38	55.0	5.4	1.60
2461GW44	38 3 29	112 9 6	9.0	3.0	3	4.0	<2	52	44.0	3.5	2.30

Table 2.--WATER ANALYSES FROM THE RICHFIELD 2 DEGREE QUADRANGLE, UTAH--continued

Sample	F (mg/L)	ZN (ug/L)	CU (ug/L)	MO (ug/L)	AS (ug/L)	U (ug/L)	SP COND. (umhos/cm)	pH	TEMP. (C)
2313SW41	.80	4.0	1.3	8.3	1.6	.2	433	7.95	11.0
2327SW41	.10	4.0	1.4	<1.0	.9	<.2	158	7.50	7.0
2328GW41	.50	3.0	1.5	1.1	1.3	.6	395	7.40	3.5
2331GW41	.38	60.0	1.3	<1.0	1.4	<.2	182	7.30	7.5
2332SW41	.14	4.0	3.6	<1.0	1.2	.3	310	7.70	10.5
2335GW41	.77	1.8	6.9	16.0	1.5	.9	545	7.50	14.5
2338GW41	.20	24.0	1.4	<1.0	3.5	1.7	240	7.67	10.0
2341GW41	.13	1.5	1.4	<1.0	1.7	.6	390	8.22	8.0
2342GW44	.08	1.4	<1.0	<1.0	1.5	4.8	84	7.60	5.5
2344GW41	.04	3.1	.1	<1.0	1.5	<.2	59	7.11	4.5
2347SW42	.22	<.5	2.7	2.1	2.6	4.7	520	8.30	10.5
2354SW41	.76	.5	4.5	7.7	2.5	29.2	62	8.10	15.5
2355SW41	.13	<.5	1.0	<1.0	1.1	.4	180	8.20	12.0
2356SW41	.13	<.5	2.3	<1.0	1.6	1.3	310	8.20	12.5
2359GW44	.38	2.2	.2	1.6	2.4	.6	145	8.35	21.0
2362GW44	.16	3.5	.7	<1.0	3.9	2.4	335	7.75	13.5
2374GW44	.08	4.5	.3	<1.0	1.2	<.2	145	7.20	5.0
2375SW42	.13	<.5	.6	<1.0	1.6	3.9	335	8.20	4.0
2377SW42	.13	<.5	1.5	<1.0	1.2	.4	160	7.75	7.0
2378SW42	.03	<.5	.3	<1.0	1.1	<.2	93	7.80	6.0
2383SW41	.26	20.0	.2	<1.0	1.2	.3	86	7.80	10.0
2384SW41	.22	.5	.1	<1.0	1.2	.2	80	7.80	10.0
2386SW41	.17	<.5	.3	<1.0	1.1	<.2	59	7.80	14.0
2387SW41	.18	<.5	.3	<1.0	.9	.5	108	7.90	14.0
2389SW41	.04	<.5	.7	<1.0	.8	.5	49	8.05	13.0
2390SW41	.47	1.6	.4	<1.0	1.0	<.2	70	7.65	17.0
2391SW41	.39	3.9	<.1	<1.0	1.0	.4	39	8.15	14.0
2392SW41	1.80	.6	.1	1.3	.8	1.0	45	7.80	14.0
2393SW41	.26	<.5	.2	<1.0	1.0	.3	63	7.90	13.0
2402GW41	.19	50.0	1.3	<1.0	3.0	1.0	322	7.30	12.5
2407GW11	.03	1.3	2.1	<1.0	1.1	<.2	69	6.10	4.5
2414GW11	.05	.5	1.3	<1.0	.9	<.2	110	6.20	6.5
2420GW11	.10	1.0	1.6	<1.0	1.0	<.2	620	7.55	9.5
2424SW14	1.00	2.5	.8	<1.0	3.7	2.7	340	7.93	12.5
2430SW14	.25	1.3	.6	<1.0	1.8	.4	84	7.65	5.0
2432SW14	.13	.9	1.2	<1.0	1.9	2.2	290	8.20	4.0
2435SW41	.45	3.0	.5	<1.0	.5	.3	67	7.05	7.0
2436SW41	.23	1.0	3.5	1.3	1.3	<.2	245	8.45	13.0
2437SW41	<.01	.7	.7	<1.0	.7	<.2	115	8.25	5.5
2438SW41	.16	1.2	.5	<1.0	2.1	.2	109	8.20	5.5
2439SW41	.10	1.5	2.6	1.0	.8	<.2	190	8.20	5.0
2444SW41	.07	.6	1.1	<1.0	.3	<.2	146	8.10	6.5
2458GW44	.14	7.4	.5	<1.0	1.1	<.2	38	6.45	11.5
2460GW44	.04	210.0	.6	<1.0	.6	<.2	97	6.25	8.5
2461GW44	.10	6.7	1.0	<1.0	.9	<.2	91	6.55	11.0

Table 2.--WATER ANALYSES FROM THE RICHFIELD 2 DEGREE QUADRANGLE, UTAH--continued

Sample	LATITUDE	LONGITUDE	CA(mg/L)	MG(mg/L)	NA(mg/L)	K(mg/L)	LI(ug/L)	SI02(mg/L)	ALK(mg/L)	SO4(mg/L)	CL(mg/L)
2462GW44	38 2 17	112 11 7	12.0	3.0	3	<1.0	<2	36	55.0	3.1	1.90
2463GW44	38 1 23	112 12 13	12.0	4.0	3	1.0	<2	38	57.0	3.7	1.10
2465GW44	38 5 26	112 11 55	47.0	9.0	8	<1.0	4	38	224.0	5.7	4.00
2618SW11	38 54 37	112 10 32	50.0	22.0	3	<1.0	5	8	245.0	3.2	5.40
2626SW11	38 58 38	112 7 57	50.0	13.0	3	<1.0	<2	6	228.0	1.5	3.80
2627SW11	38 57 16	112 14 48	18.0	3.0	8	1.0	4	18	52.0	6.6	18.00
2628SW11	38 58 3	112 11 45	40.0	8.0	3	<1.0	<2	8	163.0	3.1	16.00
2632GW14	38 40 4	112 19 30	18.0	4.0	10	2.0	5	42	89.0	3.5	18.00
2635GW14	38 40 58	112 22 19	28.0	6.0	13	3.0	6	46	123.0	7.3	19.00
2637GW14	38 38 51	112 21 32	18.0	7.0	10	3.0	5	38	79.0	4.8	14.00
2802GW11	38 58 22	112 26 48	85.0	30.0	55	7.0	150	16	294.0	85.0	83.00
2804GW11	38 55 57	112 25 30	55.0	13.0	18	4.0	50	14	233.0	15.0	44.00
2805GW11	38 45 30	112 26 19	70.0	27.0	18	1.0	14	14	311.0	25.0	49.00
2809GW11	38 45 14	112 21 48	68.0	21.0	10	1.0	9	12	312.0	16.0	30.00
2813GW11	38 48 17	112 22 58	70.0	19.0	50	2.0	27	20	292.0	67.0	75.00
2816GW11	38 51 42	112 23 3	53.0	9.0	5	<1.0	3	12	194.0	4.7	12.00
2818GW11	38 57 43	112 15 45	90.0	36.0	30	1.0	24	26	353.0	92.0	46.00
2821GW11	38 55 17	112 15 37	50.0	16.0	8	<1.0	3	14	240.0	5.2	16.00
2823GW11	38 54 55	112 17 17	68.0	24.0	23	1.0	21	24	198.0	30.0	60.00
2825GW11	38 54 21	112 19 19	48.0	10.0	18	2.0	7	14	170.0	9.6	68.00
2826GW43	38 0 34	112 30 31	55.0	15.0	15	6.0	6	40	294.0	1.0	28.00
2827GW44	38 0 7	112 28 38	75.0	12.0	10	3.0	2	44	333.0	6.5	10.00
2831SW41	38 28 56	112 23 27	9.8	1.4	3	<1.0	<2	10	47.0	3.4	2.60
2833SW41	38 28 37	112 24 6	1.3	1.0	5	<1.0	<2	14	15.0	1.6	1.90
2834SW41	38 28 34	112 24 9	4.5	2.0	3	<1.0	<2	8	29.0	5.8	7.30
2835GW41	38 28 29	112 24 10	4.3	15.0	20	1.0	<2	8	25.0	1.0	1.50
2838SW41	38 29 0	112 25 44	43.0	12.0	8	2.0	8	12	160.0	50.0	9.70
2840GW41	38 28 3	112 9 10	88.0	15.0	20	1.0	14	34	175.0	212.0	11.00
2842GW41	38 29 18	112 8 21	35.0	8.0	8	<1.0	5	40	140.0	18.0	9.80
2848GW41	38 23 44	112 8 36	70.0	21.0	33	2.0	18	66	337.0	27.0	55.00
2850GW41	38 25 16	112 13 4	48.0	12.0	80	1.0	11	18	224.0	160.0	21.00
2852GW41	38 21 26	112 2 32	18.0	4.0	5	2.0	2	52	82.0	2.1	5.10
2851GW44	38 11 28	112 9 6	23.0	2.0	23	2.0	6	54	122.0	3.6	8.20
2866GW44	38 13 16	112 17 47	28.0	9.0	10	7.0	2	56	183.0	2.4	3.10
2871GW44	38 12 7	112 21 19	10.0	3.0	5	3.0	<2	42	64.0	1.4	1.60
2885GW44	38 12 57	112 2 9	20.0	3.0	8	2.0	4	50	85.0	2.9	7.60

Table 2.-- WATER ANALYSES FROM THE RICHFIELD 2 DEGREE QUADRANGLE, UTAH--continued

Sample	F (mg/l.)	ZN (ug/L)	CU (ug/L)	MO (ug/L)	AS (ug/L)	U (ug/L)	SP. COND. (umhos/cm)	pH	TEMP. (C)
2462GW44	.04	4.4	.5	<1.0	.5	<.2	113	6.60	6.0
2463GW44	.06	5.2	.9	<1.0	.9	<.2	111	6.80	6.5
2465GW44	.17	3.6	1.5	<1.0	1.5	1.8	370	7.65	8.5
2618SW11	.10	<.5	1.0	<1.0	1.0	.5	420	8.25	13.5
2626SW11	.10	.9	.5	<1.0	1.1	<.2	385	8.15	13.0
2627SW11	.17	.9	.7	<1.0	1.5	<.2	173	8.35	23.0
2628SW11	.04	1.0	1.0	<1.0	1.0	<.2	280	8.35	9.0
2632GW14	.11	5.1	1.5	<1.0	2.0	<.2	205	6.95	9.0
2635GW14	.18	2.3	.8	<1.0	2.0	.4	279	7.10	12.0
2637GW14	.14	4.6	.9	<1.0	1.5	<.2	198	7.20	18.0
2802GW11	.10	2.6	1.2	<1.0	1.5	.7	855	8.20	16.0
2804GW11	.27	5.6	1.9	<1.0	1.0	<.2	450	7.70	14.0
2805GW11	.11	3.1	1.2	<1.0	2.6	.3	650	7.30	11.0
2809GW11	.07	50.0	4.6	<1.0	1.5	.4	545	7.30	16.0
2813GW11	.35	5.7	1.1	1.2	3.2	1.5	730	7.50	14.5
2816GW11	.12	99.0	5.7	<1.0	.1	.2	350	7.30	20.0
2818GW11	.24	2.9	6.5	1.8	2.8	1.0	860	7.20	13.0
2821GW11	.07	2.4	2.9	<1.0	.6	.4	405	8.00	11.0
2823GW11	.19	3.3	1.8	<1.0	2.9	.8	630	7.30	16.0
2825GW11	.13	1.2	3.4	<1.0	1.8	<.2	425	7.70	21.0
2826GW43	.21	3.9	2.1	<1.0	2.0	.7	530	7.80	12.5
2827GW44	.17	7.7	1.7	<1.0	1.7	1.6	575	7.20	10.0
2831SW41	.27	3.9	1.5	<1.0	.7	.3	115	7.79	8.5
2833SW41	.44	2.5	1.4	<1.0	1.1	.2	40	7.30	4.0
2834SW41	.21	2.5	3.6	<1.0	.6	.7	66	8.00	7.0
2835GW41	.17	<.5	2.5	27.0	.2	.8	60	7.40	1.0
2838SW41	1.10	2.5	2.5	3.6	.8	.6	385	8.10	11.5
2840GW41	2.30	.5	5.2	27.0	2.0	9.2	660	7.35	14.0
2842GW41	.31	8.2	2.3	<1.0	2.5	1.8	295	7.10	9.0
2848GW41	.65	3.2	2.9	2.0	15.2	7.6	640	7.50	13.0
2850GW41	.32	1.8	6.0	1.3	3.8	2.4	710	8.25	13.0
2852GW41	.12	5.5	2.3	<1.0	1.4	<.2	162	7.85	9.0
2861GW44	.27	3.0	2.4	<1.0	4.7	.7	225	8.00	13.0
2866GW44	.27	5.2	2.7	<1.0	6.7	.7	275	7.50	13.0
2871GW44	.17	1.6	1.0	<1.0	.9	<.2	100	7.80	6.5
2885GW44	.18	8.6	1.4	<1.0	2.4	.3	180	8.05	15.0

Table 3.--Summary of chemical analyses of 486 water samples from the Richfield 2° quadrangle, Utah

[Values qualified with < were replaced with seven-tenths of the qualified value in the determination of means, etc.]

Variable	Minimum	Maximum	Mean	Geometric Mean	Standard Deviation	Geometric Deviation
Ca (mg/L)	1.3	540.	63.7	39.8	73.4	2.78
Mg (mg/L)	<1.0	260.	18.0	8.99	27.6	3.34
Na (mg/L)	<1.0	2210.	58.1	15.4	188.	4.00
K (mg/L)	<1.0	260.	4.87	1.76	18.3	2.87
Li (µg/L)	<2.0	21000.	128.	8.84	1042.	5.19
SiO ₂ (mg/L)	2.0	180.	30.1	24.8	18.0	1.96
Alkalinity (mg/L)	1.0	1530.	176.	130.	123.	2.53
SO ₄ (mg/L)	0.80	3030.	67.9	15.9	201.	4.82
Cl (mg/L)	0.03	4080.	120.	18.4	385.	7.03
F (mg/L)	<0.05	13.	0.542	0.261	1.07	3.00
Zn (µg/L)	<0.50	2890.	31.9	4.64	184.	4.19
Cu (µg/L)	<0.10	22.	2.13	1.43	2.51	2.34
Mo (µg/L)	<1.0	105.	2.73	1.32	7.86	2.49
As (µg/L)	0.10	740.	7.65	1.93	40.7	3.63
U (µg/L)	<0.20	740.	4.25	0.980	34.0	4.40
Sp. Cond. µmhos/cm	31.0	10100.	711.	379.	1196.	2.92
pH	5.85	9.30	7.64	--	0.479	--
Temp. (°C)	1.0	82.	13.2	12.1	6.07	1.57

Table 4.--Matrix of correlation coefficients of the log-transformed data

[The values below the diagonal are the numbers of unqualified pairs of analyses used to obtain the correlation coefficient;

	Ca	Mg	Na	K	Li	SiO ₂	Alk.	SO ₄	Cl	F	Zn	Cu	Mo	As	U	Sp. Cond.	pH	Temp.
Ca	1.0	.89	.72	.45	.68	.20	.86	.69	.77	.34	.22	.39	.48	.38	.54	.92	.12	.43
Mg	473	1.0	.74	.48	.70	.24	.81	.68	.79	.34	.23	.43	.51	.41	.50	.89	.10	.39
Na	485	473	1.0	.69	.89	.42	.62	.71	.90	.55	.28	.50	.55	.65	.50	.88	.03	.50
K	323	323	323	1.0	.72	.45	.35	.44	.60	.41	.33	.52	.41	.57	.18	.60	-.04	.41
Li	400	400	400	323	1.0	.32	.53	.71	.83	.58	.32	.54	.57	.63	.38	.83	-.04	.45
SiO ₂	486	473	485	323	400	1.0	.25	.12	.38	.25	.18	.12	.07	.50	.31	.26	-.04	.35
Alk.	486	473	485	323	400	486	1.0	.45	.66	.16	.16	.32	.30	.37	.50	.82	.21	.41
SO ₄	486	473	485	323	400	486	486	1.0	.68	.56	.24	.43	.64	.38	.48	.74	.05	.37
Cl	486	473	485	323	400	486	486	486	1.0	.47	.26	.43	.48	.56	.52	.87	.02	.53
F	484	473	484	323	400	484	484	484	484	1.0	.19	.31	.54	.40	.38	.44	.00	.33
Zn	474	473	474	323	400	474	474	474	474	474	1.0	.36	.15	.20	.11	.29	-.18	.26
Cu	438	438	438	323	400	438	438	438	438	438	438	1.0	.39	.39	.10	.49	.01	.27
Mo	226	226	226	226	226	226	226	226	226	226	226	226	1.0	.34	.41	.54	.05	.20
As	484	473	484	323	400	484	484	484	484	484	474	438	226	1.0	.28	.54	.07	.42
U	387	387	387	323	387	387	387	387	387	387	387	387	226	387	1.0	.51	.15	.22
Sp. cond.	486	473	485	323	400	486	486	486	486	484	474	438	226	484	387	1.0	.09	.49
pH	486	473	485	323	400	486	486	486	486	484	474	438	226	484	387	486	1.0	.23
Temp.	486	473	485	323	400	486	486	486	486	484	474	438	226	484	387	486	486	1.0

Table 5.--Relative standard deviations obtained from 11 water samples by constituents

Constituents	Relative standard deviation
pH	1.4 percent
Na	4.0 percent
Conductance	4.4 percent
K	4.9 percent
SiO ₂	5.2 percent
Ca	6.2 percent
Mg	6.4 percent
Li	6.4 percent
Cl	7.3 percent
SO ₄	7.5 percent
Temperature	8.5 percent
Alkalinity	9.6 percent
U	9.8 percent
F	10.5 percent
Mo	15.0 percent
As	24.8 percent
Zn	27.1 percent
Cu	33.4 percent

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