UNITED STATES DEPARTMENT OF THE INTERIOR
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Chemical analyses including gold for 373 rock and stream-sediment samples from the Richfield 1° x 2° quadrangle, Utah

by

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INTRODUCTION

The Richfield 1° x 2° quadrangle (fig. 1) in west-central Utah covers the eastern part of the Pioche-Marysvale igneous and mineral belt that extends from the vicinity of Pioche in southeastern Nevada, east-northeastward for 250 km into central Utah. The western two-thirds of the Richfield quadrangle is in the Basin and Range Province; the eastern third is in the High Plateaus of Utah subprovince of the Colorado Plateau.

Bedrock in the northern part of the Richfield quadrangle consists predominantly of Paleozoic sedimentary strata that were thrust eastward during the Sevier orogeny in Cretaceous time onto an autochthon of Mesozoic sedimentary rocks in the eastern part of the quadrangle. The southern part of the quadrangle is largely underlain by Oligocene and younger volcanic rocks and related intrusions. Extensional tectonism in late Cenozoic time broke the bedrock terrane into a series of north-trending fault blocks; the uplifted mountain areas were deeply eroded and the resulting debris were deposited in the adjacent basins. Most of the mineral deposits in the Richfield 1° x 2° quadrangle were formed during igneous activity in middle and late Cenozoic time (Steven and Morris, 1984).

A regional geochemical survey was conducted during the summers of 1978 and 1979. Sampling was designed to define broad geochemical patterns and trends which can be used, along with geologic and geophysical data, to assess the mineral resource potential of the quadrangle. This report is a follow-up based on work done earlier in 1978 and 1979.

In the summer of 1988, 373 rock and stream-sediment samples were collected from geochemically anomalous areas based on the earlier regional survey and analyzed for 34 elements by emission spectrography and for As, Bi, Cd, Sb, Zn by inductively coupled plasma atomic emission spectrophotometry (ICP-AES), and Au by atomic-absorption spectrophotometry.

SAMPLE COLLECTION AND PREPARATION

Samples were collected in June and September of 1988 at 373 sites, of these, 181 were rock samples, and 192 stream-sediment samples. Rock samples were prepared by crushing and then pulverized to minus 0.15 mm with ceramic plates. Stream-sediment samples were dried and sieved to minus-80 mesh (0.177 mm) and pulverized to approximately minus-140 mesh (0.105) in a vertical grinder having ceramic plates.

ANALYTICAL PROCEDURES

The elements analyzed and their detection limits and minimum, maximum values are listed in tables 1a and 1b. Each sample was analyzed for 34 element using a semiquantitative, direct-current arc emission spectrographic method (Grimes and Marranzino, 1968.) Spectrographic results were obtained by visual comparison of spectra derived from the sample against spectra obtained from standards made from pure oxides and carbonates. Standard concentrations are geometrically spaced over any given order of magnitude of concentration as follows: 100, 50, 20, 10, and so forth. Samples whose concentrations are estimated to fall

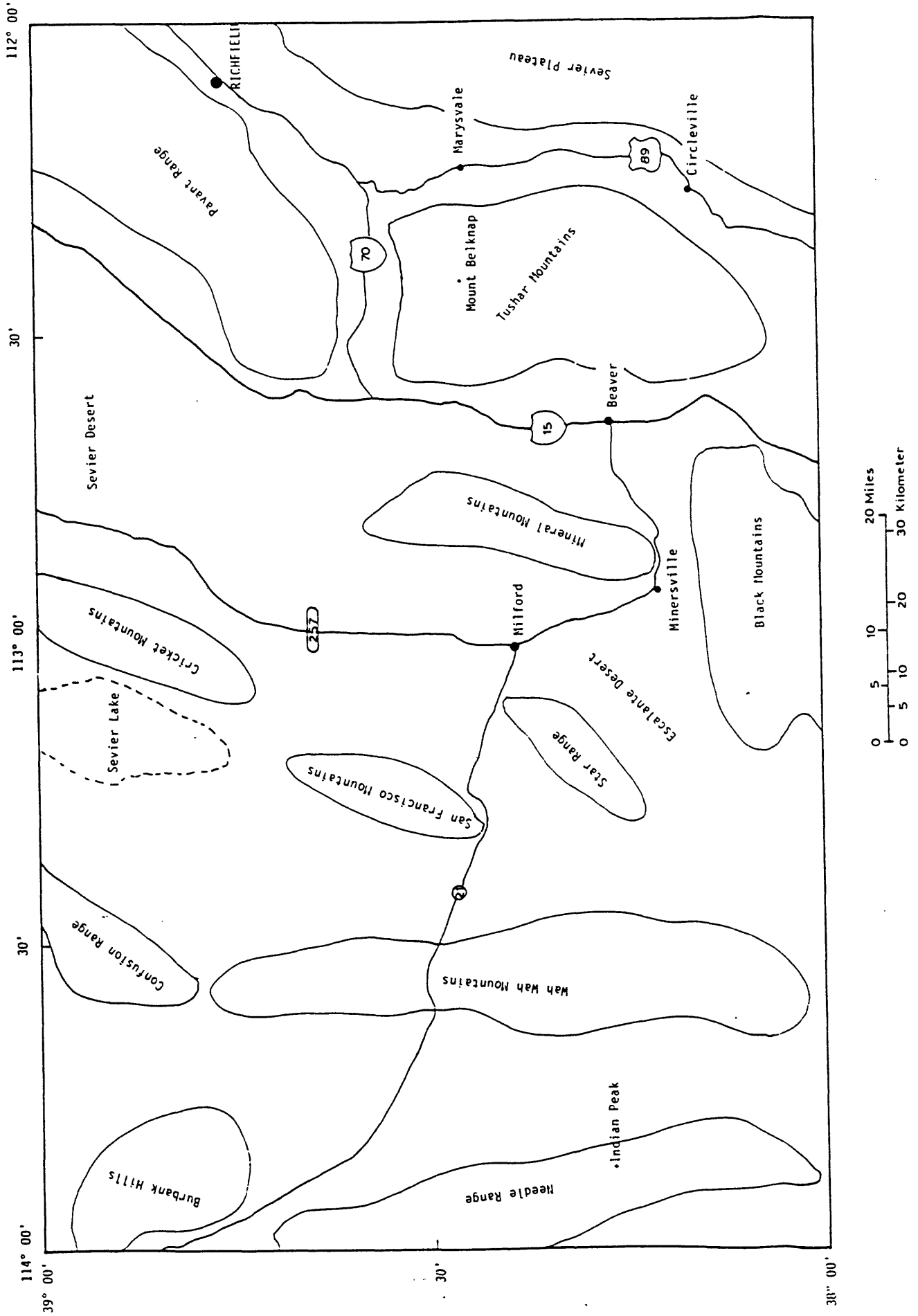

Figure 1.--Location of towns, roads, and major geographic features in the Richfield quadrangle.

between those values are assigned values of 70, 30, 15, and so forth. The precision of the analytical method is approximately plus or minus one reporting interval at the 83 percent confidence level and plus or minus two reporting intervals at the 96 percent confidence level (Motooka and Grimes, 1976.)

In addition, gold and antimony, arsenic, bismuth, cadmium, and zinc were determined in each sample using atomic-absorption spectrophotometry and inductively coupled plasma-atomic emission spectrometry (ICP-AES) respectively. A brief description of these procedures follows:

Gold--A 10-gram sample is roasted for 1 hour at 700 °C, gold is then digested with concentrated hydrobromic acid -0.5 percent bromine solution and extracted with MIBK (methyl isobutyl ketone. Electrothermal atomic-absorption spectrophotometry is used to determine gold to 1 ppb (O'Leary and Meier, 1986.)

Antimony, arsenic, bismuth, cadmium, and zinc--The metals of interest are solubilized from a 0.15-gram sample with hydrochloric-hydrogen peroxide solution and determined by ICP-AES. Limits of detection are antimony 2 ppm, arsenic 5 ppm, bismuth 2 ppm, cadmium 0.1 ppm, and zinc 2 ppm (Crock and others, 1987).

The results of these analyses with the sample sites and latitude and longitude are shown in tables 2 and 3. A MF map will be published at a latter date.

REFERENCES CITED

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Grimes, D.J., and Marranzino, A.P., 1968, Direct-current arc and alternating-current spark emission spectrographic field methods for the semiquantitative analysis of geologic materials: U.S. Geological Survey Circular 591, 6 p.

Motooka, J.M., and Grimes, D.J., 1976, Analytical precision of one-sixth order semiquantitative spectrographic analyses: U.S. Geological Survey Circular 738, 25 p.

O'Leary, R.M., and Meier, A.L., 1986, Analytical methods used in geochemical exploration, 1984: U.S. Geological Survey Circular 948, 48 p.

Steven, T.A., and Morris, H.T., 1984, Mineral resource potential of the Richfield 1° x 2° quadrangle, west-central Utah: U.S. Geological Survey Open-File Report 84-521, 53 p.

Table 1a. Detection limits and minimum, maximum values for 181 rock analyses [Spectrographic data]

Element	No. of samples above detection limit	Detection limits	Minimum value	Maximum value
		percent	percent	percent
Calcium (Ca)	160	.05	<.05	>20
Iron (Fe)	171	0.05	<.05	>20
Magnesium (Mg)	180	.02	<.02	10
Sodium (Na)	81	0.2	<.2	5
Phosphorus (P)	15	0.2	<.2	.5
Titanium (Ti)	159	.002	<.002	>1
		ppm	ppm	ppm
Silver (Ag)	34	0.5	<.5	100
Arsenic (As)	23	200	<200	7,000
Boron (B)	90	10	<10	50
Barium (Ba)	169	20	<20	>2,000
Beryllium (Be)	111	1	<1	30
Bismuth (Bi)	0	10	--	--
Cadmium (Cd)	0	20	--	--
Cobalt (Co)	47	10	<10	70
Chromium (Cr)	96	10	<10	3,000
Copper (Cu)	133	5	<5	500
Gallium (Ga)	99	5	<5	70
Germanium (Ge)	4	10	<10	100
Lanthanum (La)	29	50	<50	150
Manganese (Mn)	179	10	<10	>5,000
Molybdenum (Mo)	41	5	<5	300
Niobium (Nb)	20	20	<20	70
Nickel (Ni)	60	5	<5	150
Lead (Pb)	128	10	<10	1,500
Antimony (Sb)	14	100	<100	3,000
Scandium (Sc)	62	5	<5	20
Tin (Sn)	3	10	<10	15
Strontium (Sr)	96	100	<100	>5,000
Thorium (Th)	0	100	--	--
Vanadium (V)	164	10	<10	300
Tungsten (W)	6	20	<20	2,000
Yttrium (Y)	95	10	<10	150
Zinc (Zn)	1	200	<200	300
Zirconium (Zr)	144	10	<10	700
		[Atomic absorption and ICP-AES data]		
Gold (Au)	65	1 ppb	<1 ppb	1,250 ppb
Arsenic (As)	92	5 ppm	<5 ppm	5,940 ppm
Bismuth (Bi)	3	2	<2	6
Cadmium (Cd)	87	.1	<.1	10.4
Antimony (Sb)	47	2	<2	2,700
Zinc (Zn)	137	2	<2	214

Table 1b. Detection limits and minimum, maximum values for 192 stream-sediment analyses [Spectrographic data]

Element	No. of samples above detection limit	Detection limits	Minimum value	Maximum value
		percent	percent	percent
Calcium (Ca)	191	.05	.2	>20
Iron (Fe)	192	0.05	1	15
Magnesium (Mg)	192	.02	.5	7
Sodium (Na)	192	0.2	.5	5
Phosphorus (P)	2	0.2	<.2	.2
Titanium (Ti)	189	.002	.007	>1
		ppm		
Silver (Ag)	7	.05	<.5	3
Arsenic (As)	0	200	---	--
Boron (B)	166	10	<10	50
Barium (Ba)	192	20	150	1,500
Beryllium (Be)	125	1	<1	7
Bismuth (Bi)	0	10	--	--
Cadmium (Cd)	0	20	--	--
Cobalt (Co)	160	10	<10	70
Chromium (Cr)	192	10	20	300
Copper (Cu)	192	5	10	50
Gallium (Ga)	192	5	10	50
Germanium (Ge)	0	10	--	--
Lanthanum (La)	42	50	<50	70
Manganese (Mn)	192	10	300	1,500
Molybdenum (Mo)	2	5	<5	7
Niobium (Nb)	14	20	<20	30
Nickel (Ni)	185	5	<5	100
Lead (Pb)	192	10	20	300
Antimony (Sb)	0	100	--	--
Scandium (Sc)	186	5	<5	20
Tin (Sn)	3	10	<10	50
Strontium (Sr)	188	100	<100	1,000
Thorium (Th)	0	100	--	--
Vanadium (V)	192	10	30	700
Tungsten (W)	0	20	--	--
Yttrium (Y)	192	10	10	100
Zinc (Zn)	1	200	<200	200
Zirconium (Zr)	191	10	70	>1,000
		[Atomic absorption and ICP-AES data]		
Gold (Au)	50	1 ppb	<1 ppb	700 ppb
Arsenic (As)	103	5 ppm	<5 ppm	130 ppm
Bismuth (Bi)	0	2	--	--
Cadmium (Cd)	190	.1	<.1	3.3
Antimony (Sb)	11	2	<2	11
Zinc (Zn)	192	2	9	390

TABLE 2. CHEMICAL ANALYSES FOR 181 ROCK SAMPLES,RICHFIELD QUADRANGLE, UTAH

[N, not detected; <, detected but below the limit of determination shown; >, determined to be greater than the value shown.]

Sample	LATITUDE	LONGITUD	AU PPB	CA %-S	FE %-S	MG %-S	NA %-S	P %-S	TI %-S
BR 016	38 58 57	113 23 47	1	7	.05	2	N	N	N
BR 017	38 58 57	113 23 47	<1	15	<.05	7	N	N	.002
BR 018	38 58 58	113 23 47	<1	3	<.05	1.5	N	N	N
BR 019	38 58 55	113 23 47	<1	>20	<.05	5	<.2	N	N
BR 020	38 58 55	113 23 48	<1	2	.1	1	N	N	.002
BR 021	38 58 56	113 23 51	<1	7	.1	5	N	N	<.002
BR 022	38 58 56	113 23 51	<1	5	.2	3	N	N	.003
BR 027	38 58 55	113 24 38	<1	20	<.05	7	N	N	N
BR 028	38 58 51	113 24 41	<1	15	<.05	7	N	N	<.002
BR 029	38 58 53	113 24 43	<1	1.5	.05	1	N	N	.002
BR 030	38 58 54	113 24 43	<1	1.5	.05	.7	N	N	.003
BR 031	38 59 43	113 39 20	4	20	.2	.7	N	N	.015
BR 038	38 49 50	113 19 36	<1	3	.15	.07	N	<.2	.007
BR 039	38 49 53	113 19 32	<1	>20	.1	1	N	N	.007
BR 040	38 49 57	113 19 30	<1	20	.15	1	N	N	.02
BR 041	38 49 57	113 19 30	<1	2	.15	.07	N	.2	.003
BR 042	38 50 0	113 19 33	<1	>20	.7	1	N	N	.03
BR 045	38 49 57	113 19 18	<1	10	.7	.5	.5	<.2	.07
BR 046	38 49 57	113 19 18	<1	20	.1	.7	<.2	N	.05
BR 050	38 17 44	113 18 15	2	.5	.3	.07	N	<.2	.05
BR 051	38 17 47	113 18 14	5	3	.3	.07	N	N	.1
BR 052	38 17 54	113 18 17	<1	2	.15	.1	N	<.2	.015
BR 053	38 18 25	113 15 30	<1	.3	.15	.02	N	N	.015
BR 054	38 18 18	113 15 22	<1	1	.3	.07	N	N	.02
BR 055	38 18 15	113 15 28	1	5	.15	5	N	N	.01
BR 056	38 18 6	113 15 33	<1	10	.15	7	N	N	<.002
BR 057	38 18 8	113 15 30	3	5	.3	3	N	N	.07
BR 058	38 18 17	113 15 47	50	.3	.5	.05	N	N	.5
BR 059	38 14 2	112 5 30	90	.05	.5	.03	N	N	.03
BR 060	38 13 57	112 5 28	90	.15	1.5	.2	1.5	<.2	.5
BR 061	38 14 8	112 5 27	4	.3	2	.05	.2	N	.05
BR 062	38 14 5	112 5 42	270	.1	2	.07	N	N	.02
BR 063	38 14 5	112 5 42	580	.07	3	.15	N	<.2	.07
BR 064	38 14 5	112 5 42	400	.07	1.5	.1	N	<.2	.07
BR 065	38 11 58	112 4 20	17	.07	1.5	.07	N	<.2	.1
BR 066	38 11 58	112 4 20	5	.1	1	.07	N	N	.07
BR 078	38 44 58	112 46 20	<1	15	2	.5	3	N	.1
BR 079	38 45 2	112 46 22	<1	15	3	.7	2	N	.07
BR 084	38 10 24	113 12 11	<1	>20	.15	.7	.3	N	.01
BR 090	38 36 1	113 48 21	<1	20	<.05	10	N	N	<.002
BR 091	38 36 1	113 48 25	<1	10	.2	.15	N	N	.007
BR 092	38 36 0	113 48 28	<1	5	.7	.15	N	N	.02
BR 093	38 36 2	113 48 30	<1	20	.2	7	N	N	.005
BR 094	38 36 2	113 48 30	<1	15	.15	7	N	N	.003
BR 095	38 36 2	113 48 30	<1	10	.7	5	N	<.2	.02
BR 096	38 37 3	113 48 26	<1	15	.1	10	N	N	.002
BR 097	38 37 4	113 48 27	<1	20	.07	7	N	N	<.002
BR 098	38 37 2	113 48 24	<1	20	.2	7	N	N	<.002
BR 099	38 36 56	113 48 24	<1	10	.07	7	N	N	<.002
BR 102	38 38 12	113 49 24	<1	>20	<.05	7	N	N	<.002
BR 103	38 38 10	113 49 26	<1	20	.1	7	N	N	.01
BR 104	38 38 4	113 49 1	<1	>20	1	10	N	N	<.002
BR 105	38 38 6	113 49 1	<1	15	<.05	7	N	N	N
BR 141	38 41 46	113 26 24	<1	10	.2	10	N	N	.002
BR 154	38 43 45	113 57 45	<1	10	.2	2	N	N	.05
BR 307	38 11 28	113 53 4	520	.07	.1	.15	N	N	.15
BR 308	38 11 27	113 53 3	5	.15	.7	.2	N	N	.1
BR 309	38 11 27	113 53 1	<1	1	3	.7	2	<.2	.3
BR 310	38 11 27	113 52 59	<1	5	.5	.15	N	N	.07
BR 311	38 11 27	113 53 1	<1	.07	.5	.15	N	N	.07

TABLE 2. CHEMICAL ANALYSES FOR 181 ROCK SAMPLES,RICHFIELD QUADRANGLE, UTAH--Continued

Sample	AG PPM-S	AS PPM-S	B PPM-S	BA PPM-S	BE PPM-S	BI PPM-S	CD PPM-S	CO PPM-S
BR 016	N	N	<10	100	N	N	N	N
BR 017	N	N	10	50	N	N	N	N
BR 018	N	N	15	50	N	N	N	N
BR 019	N	N	<10	150	N	N	N	N
BR 020	N	N	15	200	N	N	N	N
BR 021	N	N	10	<20	N	N	N	N
BR 022	N	N	10	150	N	N	N	N
BR 027	N	N	10	20	N	N	N	N
BR 028	N	N	N	<20	N	N	N	N
BR 029	N	N	<10	50	N	N	N	N
BR 030	N	N	N	50	N	N	N	N
BR 031	1	N	15	20	N	N	N	N
BR 038	N	N	10	50	N	N	N	N
BR 039	N	N	N	70	N	N	N	N
BR 040	N	N	N	100	N	N	N	N
BR 041	N	N	<10	150	N	N	N	N
BR 042	N	N	<10	150	N	N	N	N
BR 045	N	N	10	300	N	N	N	N
BR 046	N	N	<10	100	N	N	N	N
BR 050	2	N	<10	150	<1	N	N	N
BR 051	<.5	N	N	70	<1	N	N	N
BR 052	N	N	20	50	N	N	N	N
BR 053	1	N	<10	70	N	N	N	N
BR 054	2	N	<10	700	N	N	N	N
BR 055	N	N	15	50	N	N	N	N
BR 056	N	N	N	N	N	N	N	N
BR 057	.7	N	<10	20	N	N	N	N
BR 058	1.5	200	N	100	N	N	N	N
BR 059	<.5	N	15	200	3	N	N	N
BR 060	N	N	15	700	<1	N	N	N
BR 061	N	1,000	15	1,500	7	N	N	N
BR 062	<.5	N	<10	300	1.5	N	N	N
BR 063	2	700	<10	100	<1	N	N	N
BR 064	.5	N	<10	100	1.5	N	N	N
BR 065	N	N	<10	500	2	N	N	N
BR 066	N	N	<10	150	2	N	N	N
BR 078	N	N	10	200	2	N	N	N
BR 079	N	N	10	100	3	N	N	N
BR 084	N	N	20	1,000	10	N	N	N
BR 090	N	N	15	<20	<1	N	N	N
BR 091	N	N	<10	20	<1	N	N	N
BR 092	N	N	<10	30	<1	N	N	N
BR 093	N	N	20	300	N	N	N	N
BR 094	N	N	N	N	<1	N	N	N
BR 095	N	N	30	150	<1	N	N	N
BR 096	N	N	20	30	N	N	N	N
BR 097	1.5	N	10	20	N	N	N	N
BR 098	N	N	10	20	N	N	N	N
BR 099	N	N	15	30	N	N	N	N
BR 102	N	N	10	30	N	N	N	N
BR 103	N	N	<10	70	N	N	N	N
BR 104	N	N	<10	150	N	N	N	N
BR 105	N	N	N	N	N	N	N	N
BR 141	N	N	N	N	N	N	N	N
BR 154	N	N	20	70	N	N	N	N
BR 307	5	N	<10	150	1.5	N	N	N
BR 308	N	N	<10	150	5	N	N	N
BR 309	N	N	N	1,000	2	N	N	10
BR 310	N	N	<10	200	3	N	N	N
BR 311	N	N	N	150	3	N	N	N

TABLE 2. CHEMICAL ANALYSES FOR 181 ROCK SAMPLES,RICHFIELD QUADRANGLE, UTAH--Continued

Sample	CR PPM-S	CU PPM-S	GA PPM-S	GE PPM-S	LA PPM-S	MN PPM-S	MO PPM-S	NB PPM-S
BR 016	<10	<5	N	N	N	200	N	N
BR 017	N	10	N	N	N	15	N	N
BR 018	N	<5	N	N	N	20	N	N
BR 019	N	5	N	N	N	15	N	N
BR 020	<10	<5	N	N	N	100	N	N
BR 021	N	<5	N	N	N	30	N	N
BR 022	N	<5	N	N	N	200	N	N
BR 027	N	<5	N	N	N	30	N	N
BR 028	N	5	N	N	N	150	N	N
BR 029	<10	N	N	N	N	30	N	N
BR 030	N	<5	N	N	N	30	N	N
BR 031	10	<5	N	N	N	50	N	N
BR 038	N	<5	N	N	N	30	N	N
BR 039	N	<5	N	N	N	30	N	N
BR 040	<10	5	N	N	N	150	N	N
BR 041	<10	<5	N	N	N	500	N	N
BR 042	50	5	<5	N	N	70	N	N
BR 045	15	5	<5	N	N	500	N	N
BR 046	10	7	<5	N	N	700	<5	N
BR 050	15	5	N	N	N	150	N	N
BR 051	50	5	N	N	<50	100	N	N
BR 052	15	<5	N	N	N	150	N	N
BR 053	15	<5	N	N	N	100	N	N
BR 054	30	7	<5	N	N	300	N	N
BR 055	15	<5	N	N	N	150	N	N
BR 056	10	N	N	N	N	150	N	N
BR 057	30	5	N	N	N	300	N	N
BR 058	150	10	5	N	<50	10	N	N
BR 059	N	<5	10	N	N	20	N	N
BR 060	<10	20	30	N	<50	200	N	<20
BR 061	N	30	<5	N	N	>5,000	5	N
BR 062	N	5	7	N	N	150	N	N
BR 063	N	10	10	N	N	15	50	N
BR 064	<10	5	<5	N	N	30	N	N
BR 065	<10	50	10	N	N	150	N	N
BR 066	<10	7	7	N	N	50	100	N
BR 078	15	5	50	N	N	2,000	10	<20
BR 079	<10	5	20	N	N	700	7	<20
BR 084	N	<5	10	N	N	150	N	N
BR 090	N	<5	N	N	N	150	N	N
BR 091	10	7	N	N	N	200	N	N
BR 092	<10	<5	N	N	N	20	N	N
BR 093	<10	7	N	N	N	500	N	N
BR 094	<10	<5	N	N	N	150	N	N
BR 095	<10	15	N	N	N	300	N	N
BR 096	N	<5	N	N	N	100	N	N
BR 097	N	7	N	N	N	150	N	N
BR 098	<10	<5	N	N	N	200	N	N
BR 099	N	15	N	N	N	70	N	N
BR 102	N	7	N	N	N	150	N	N
BR 103	<10	20	N	N	N	150	N	N
BR 104	<10	15	N	N	N	200	N	N
BR 105	N	<5	N	N	N	100	N	N
BR 141	N	<5	N	N	N	50	N	N
BR 154	50	<5	N	N	N	70	N	N
BR 307	10	7	7	N	<50	100	150	N
BR 308	<10	7	<5	N	N	150	N	N
BR 309	10	15	20	N	50	700	N	<20
BR 310	10	10	<5	N	N	300	N	N
BR 311	<10	5	<5	N	N	100	N	N

TABLE 2. CHEMICAL ANALYSES FOR 181 ROCK SAMPLES,RICHFIELD QUADRANGLE, UTAH--Continued

Sample	NI PPM-S	PB PPM-S	SB PPM-S	SC PPM-S	SN PPM-S	SR PPM-S	TH PPM-S	V PPM-S	W PPM-S
BR 016	N	10	N	N	N	N	N	<10	N
BR 017	N	N	N	N	N	500	N	<10	N
BR 018	N	N	N	N	N	N	N	<10	N
BR 019	N	30	N	N	N	1,500	N	<10	N
BR 020	<5	N	N	N	N	N	N	10	N
BR 021	N	N	N	N	N	N	N	<10	N
BR 022	<5	10	N	N	N	N	N	15	N
BR 027	N	N	N	N	N	N	N	N	N
BR 028	N	<10	N	N	N	N	N	<10	N
BR 029	N	<10	N	N	N	N	N	<10	N
BR 030	N	N	N	N	N	N	N	10	N
BR 031	N	<10	N	N	N	300	N	15	N
BR 038	N	<10	N	N	N	N	N	15	N
BR 039	N	<10	N	N	N	500	N	15	N
BR 040	N	<10	N	N	N	500	N	20	N
BR 041	N	<10	N	N	N	N	N	15	N
BR 042	N	30	N	N	N	500	N	30	N
BR 045	<5	15	N	<5	N	300	N	30	N
BR 046	<5	15	N	N	N	500	N	20	N
BR 050	<5	<10	N	N	N	N	N	20	N
BR 051	5	<10	N	N	N	N	N	15	N
BR 052	5	N	N	N	N	N	N	15	N
BR 053	<5	N	N	N	N	N	N	15	N
BR 054	<5	15	N	N	N	N	N	15	N
BR 055	<5	N	N	N	N	N	N	15	N
BR 056	<5	N	N	N	N	N	N	15	N
BR 057	10	<10	N	N	N	N	N	30	N
BR 058	N	10	N	7	N	N	N	150	N
BR 059	N	15	100	N	N	N	N	50	N
BR 060	N	50	N	7	N	200	N	70	N
BR 061	<5	10	100	<5	N	200	N	70	N
BR 062	N	10	<100	N	N	<100	N	150	N
BR 063	<5	10	<100	<5	N	N	N	300	N
BR 064	<5	10	<100	N	N	N	N	150	N
BR 065	<5	15	150	<5	N	200	N	100	N
BR 066	<5	<10	150	N	N	200	N	150	N
BR 078	<5	50	N	<5	N	300	N	20	N
BR 079	<5	30	N	N	N	300	N	20	N
BR 084	N	10	N	N	N	700	N	15	N
BR 090	N	<10	N	<5	N	<100	N	N	N
BR 091	N	10	N	N	N	N	N	15	N
BR 092	<5	<10	N	N	N	N	N	20	N
BR 093	N	30	N	N	N	200	N	15	N
BR 094	<5	N	N	N	N	N	N	15	N
BR 095	5	15	N	N	N	N	N	15	N
BR 096	N	N	N	N	N	N	N	10	N
BR 097	N	N	N	N	N	N	N	15	N
BR 098	<5	<10	N	N	N	N	N	15	N
BR 099	N	<10	N	N	N	<100	N	15	N
BR 102	N	<10	N	N	N	N	N	15	N
BR 103	N	<10	N	N	N	N	N	20	N
BR 104	N	50	N	N	N	N	N	10	N
BR 105	N	<10	N	N	N	N	N	10	N
BR 141	N	10	N	N	N	N	N	10	N
BR 154	<5	<10	N	N	N	N	N	20	N
BR 307	N	20	N	5	N	200	N	200	N
BR 308	5	10	N	N	N	N	N	50	N
BR 309	<5	50	N	7	N	300	N	70	N
BR 310	<5	<10	N	N	N	N	N	50	N
BR 311	<5	<10	N	N	N	N	N	50	N

TABLE 2. CHEMICAL ANALYSES FOR 181 ROCK SAMPLES,RICHFIELD QUADRANGLE, UTAH--Continued

Sample	Y PPM-S	ZN PPM-S	ZR PPM-S	As/P PPM	Bi/P PPM	Cd/P PPM	Sb/P PPM	Zn/P PPM
BR 016	N	N	N	<5	<2	<.1	<2	<2
BR 017	N	N	<10	<5	<2	<.1	<2	<2
BR 018	N	N	N	<5	<2	<.1	<2	<2
BR 019	N	N	N	6	<2	<.1	<2	<2
BR 020	N	N	<10	<5	<2	<.1	<2	<2
BR 021	N	N	N	<5	<2	<.1	<2	<2
BR 022	N	N	N	<5	<2	.1	<2	<2
BR 027	N	N	N	<5	<2	<.1	<2	<2
BR 028	N	N	N	<5	<2	<.1	<2	<2
BR 029	N	N	N	<5	<2	<.1	<2	<2
BR 030	N	N	N	<5	<2	<.1	<2	<2
BR 031	N	N	<10	7	<2	2.2	10	46
BR 038	N	N	15	<5	<2	<.1	<2	<2
BR 039	N	N	15	5	<2	<.1	<2	<2
BR 040	<10	N	30	10	<2	<.1	<2	<2
BR 041	N	N	15	<5	<2	<.1	<2	3
BR 042	N	N	20	18	<2	.2	<2	3
BR 045	15	N	100	6	<2	.1	<2	5
BR 046	<10	N	50	<5	<2	.2	<2	3
BR 050	N	N	70	8	<2	.1	3	8
BR 051	<10	N	200	15	<2	.3	<2	19
BR 052	N	N	70	<5	<2	<.1	<2	6
BR 053	<10	N	N	<5	<2	<.1	<2	5
BR 054	N	N	N	8	<2	<.1	<2	12
BR 055	N	N	N	<5	<2	<.1	<2	4
BR 056	N	N	N	<5	<2	.1	<2	12
BR 057	10	N	50	11	<2	.2	<2	24
BR 058	15	N	150	220	<2	<.1	3	5
BR 059	N	N	15	34	<2	.5	<2	24
BR 060	20	N	300	24	<2	<.1	4	29
BR 061	15	N	50	610	<2	.2	76	12
BR 062	N	N	15	120	<2	.2	2	46
BR 063	N	N	30	490	<2	.3	5	69
BR 064	N	N	20	72	<2	<.1	4	25
BR 065	N	N	50	89	<2	<.1	<2	5
BR 066	N	N	20	50	<2	<.1	<2	<2
BR 078	100	N	150	31	<2	.3	<2	43
BR 079	30	N	100	99	<2	.3	<2	20
BR 084	<10	N	15	47	<2	<.1	<2	<2
BR 090	N	N	N	<5	<2	<.1	<2	<2
BR 091	N	N	30	5	<2	<.1	<2	<2
BR 092	N	N	50	20	<2	<.1	<2	4
BR 093	N	N	10	10	<2	<.1	<2	<2
BR 094	N	N	10	<5	<2	<.1	<2	<2
BR 095	N	N	15	<5	<2	<.1	<2	<2
BR 096	N	N	<10	9	<2	<.1	<2	<2
BR 097	N	N	<10	11	<2	<.1	<2	<2
BR 098	N	N	N	<5	<2	<.1	<2	<2
BR 099	N	N	<10	<5	<2	<.1	<2	<2
BR 102	N	N	<10	<5	<2	<.1	<2	<2
BR 103	N	N	10	27	<2	<.1	<2	<2
BR 104	N	N	<10	44	<2	.3	4	<2
BR 105	N	N	<10	<5	<2	<.1	<2	<2
BR 141	N	N	N	<5	<2	<.1	<2	<2
BR 154	10	N	70	<5	<2	.2	<2	7
BR 307	10	N	50	89	<2	<.1	<2	<2
BR 308	N	N	30	<5	<2	<.1	<2	8
BR 309	20	N	300	<5	<2	.2	<2	40
BR 310	<10	N	30	7	<2	<.1	<2	7
BR 311	N	N	30	<5	<2	<.1	<2	5

TABLE 2. CHEMICAL ANALYSES FOR 181 ROCK SAMPLES,RICHFIELD QUADRANGLE, UTAH--Continued

Sample	LATITUDE	LONGITUD	AU PPB	CA %-S	FE %-S	MG %-S	NA %-S	P %-S	TI %-S
BR 312	38 11 29	113 53 0	3	10	.7	.15	N	N	.07
BR 313	38 11 32	113 52 57	<1	.3	5	1	3	<.2	.3
BR 314	38 11 34	113 52 55	28	20	.5	.15	N	N	.002
BR 315	38 11 16	113 53 8	1	.2	1	.5	N	N	.07
BR 316	38 11 17	113 53 10	80	3	1	.5	N	N	.15
BR 317	38 11 17	113 53 12	<1	.1	1	.3	N	N	.07
BR 318	38 11 18	113 53 13	<1	2	3	.7	1.5	<.2	.3
BR 319	38 11 15	113 53 1	<1	.15	2	.5	1	N	.15
BR 320	38 11 15	113 53 2	<1	.2	3	.7	2	N	.2
BR 321	38 11 15	113 53 8	3	.7	1	.15	N	N	.07
BR 322	38 11 15	113 53 8	4	20	.07	.05	<.2	N	<.002
BR 323	38 11 14	113 53 10	44	2	.7	.2	N	N	.07
BR 325	38 9 39	113 47 21	37	.15	.3	.2	N	N	.03
BR 326	38 9 39	113 47 21	4	.1	2	.7	.5	N	.2
BR 327	38 9 35	113 47 28	<1	.07	1.5	.7	N	N	.07
BR 328	38 9 33	113 47 29	75	.07	1	.15	N	N	.15
BR 329	38 9 26	113 47 38	4	.05	.2	.07	N	N	.02
BR 330	38 9 26	113 47 38	2	.07	.5	.07	N	N	.05
BR 331	38 9 11	113 47 37	7	.15	1	.3	.2	N	.05
BR 332	38 10 37	113 47 35	6	.15	.5	.15	N	N	.02
BR 333	38 10 37	113 47 35	47	.15	1.5	.3	N	N	.15
BR 334	38 14 0	113 26 22	7	7	2	1.5	.5	N	.05
BR 335	38 14 0	113 26 22	160	.1	20	.2	N	N	.02
BR 336	38 14 0	113 26 22	320	.07	1.5	.1	N	N	.02
BR 337	38 13 44	113 26 46	<1	.3	2	1	.5	N	.07
BR 338	38 13 44	113 26 46	<1	.1	.7	.7	.2	N	.1
BR 339	38 13 35	113 26 50	1	.3	.3	.07	N	N	.015
BR 340	38 13 55	113 26 25	<1	>20	.7	.7	N	N	.015
BR 341	38 13 55	113 26 25	1	3	3	.7	3	N	.3
BR342	38 13 59	113 26 20	340	.07	20	.1	<.2	N	.02
BR343	38 11 36	112 4 25	1,250	.15	2	.1	N	N	.07
BR344	38 9 53	112 3 7	4	.1	3	.1	N	N	.2
BR345	38 9 58	112 3 14	6	.1	1	.03	N	N	.05
BR346	38 9 51	112 3 25	<1	.05	.5	.15	<.2	N	.15
BR347	38 9 51	112 3 25	<1	<.05	10	.1	2	N	.015
BR348	38 9 56	112 3 23	<1	.15	1.5	.3	3	N	.07
BR349	38 9 54	112 3 24	<1	.2	1	.15	3	N	.07
BR350	38 9 59	112 3 15	19	.3	1.5	.07	N	N	.15
BR351	38 9 59	112 3 15	6	.15	1	.03	N	N	.07
BR362	38 10 37	113 47 35	250	.15	1	.07	N	N	.05
BR401	38 19 39	112 13 51	70	10	.7	.15	N	N	.1
BR402	38 19 41	112 13 50	80	.3	.7	.1	N	N	.07
BR403	38 19 41	112 13 50	110	.2	1.5	.15	N	N	.15
BR412	38 22 13	112 15 27	14	.1	.3	.07	N	N	.07
BR413	38 22 12	112 15 24	14	.07	7	.07	N	N	.03
BR414	38 22 10	112 15 33	80	.015	1	.2	N	N	.07
BR415	38 22 10	112 15 33	3	20	1	1	<.2	N	.1
BR416	38 22 8	112 15 35	60	.2	1	.7	<.2	N	.3
BR417	38 22 8	112 15 38	18	.07	.7	.1	N	<.2	.07
BR418	38 22 9	112 15 36	7	<.05	.15	.07	N	N	.05
BR419	38 22 9	112 15 36	23	.15	.3	.15	N	N	.1
BR420	38 22 9	112 15 36	11	<.05	.05	.02	N	<.2	.002
BR425	38 22 11	112 15 28	1	.05	15	.07	N	N	.015
BR441	38 20 19	112 13 52	16	.3	1	.03	N	N	<.002
BR442	38 20 43	112 14 3	290	.1	.7	.05	N	N	.05
BR453	38 5 47	112 34 6	1	1.5	5	2	.5	N	.3
BR454	38 5 45	112 34 1	<1	3	7	1.5	2	<.2	.5
BR455	38 5 42	112 33 58	1	3	5	1.5	1	<.2	.5
BR458	38 38 23	112 5 55	<1	.5	>20	.07	<.2	N	.003
BR460	38 38 23	112 5 55	<1	15	>20	.15	1	N	.002

TABLE 2. CHEMICAL ANALYSES FOR 181 ROCK SAMPLES,RICHFIELD QUADRANGLE, UTAH--Continued

Sample	AG PPM-S	AS PPM-S	B PPM-S	BA PPM-S	BE PPM-S	BI PPM-S	CD PPM-S	CO PPM-S
BR 312	N	N	N	300	7	N	N	N
BR 313	N	N	10	1,000	1.5	N	N	20
BR 314	N	N	N	300	15	N	N	N
BR 315	N	N	N	300	3	N	N	N
BR 316	1.5	N	N	1,500	15	N	N	N
BR 317	<.5	N	N	300	2	N	N	N
BR 318	N	N	N	1,500	1.5	N	N	15
BR 319	N	N	<10	700	3	N	N	<10
BR 320	N	N	10	1,000	2	N	N	15
BR 321	.7	N	<10	300	3	N	N	N
BR 322	1	N	N	150	5	N	N	N
BR 323	<.5	N	N	700	15	N	N	N
BR 325	3	N	N	500	1.5	N	N	N
BR 326	1.5	N	<10	700	1	N	N	15
BR 327	N	N	N	500	1.5	N	N	N
BR 328	5	N	<10	700	2	N	N	N
BR 329	5	N	<10	100	2	N	N	N
BR 330	3	N	<10	100	1.5	N	N	N
BR 331	2	N	10	200	2	N	N	N
BR 332	10	N	<10	200	3	N	N	N
BR 333	5	N	<10	300	20	N	N	<10
BR 334	1	N	10	700	1.5	N	N	N
BR 335	N	5,000	15	700	3	N	N	10
BR 336	3	1,500	<10	1,000	N	N	N	N
BR 337	N	N	30	200	3	N	N	N
BR 338	N	N	20	200	3	N	N	N
BR 339	1.5	N	<10	70	1	N	N	N
BR 340	N	N	N	30	<1	N	N	N
BR 341	N	N	N	1,500	1.5	N	N	15
BR342	5	3,000	N	1,000	2	N	N	20
BR343	3	700	<10	100	2	N	N	N
BR344	N	N	<10	500	<1	N	N	20
BR345	N	N	10	500	5	N	N	N
BR346	N	N	<10	N	<1	N	N	N
BR347	N	N	N	500	1.5	N	N	N
BR348	1.5	N	10	150	2	N	N	N
BR349	N	N	15	200	5	N	N	N
BR350	N	<200	10	300	3	N	N	N
BR351	N	N	<10	300	3	N	N	N
BR362	<.5	300	10	300	<1	N	N	N
BR401	<.5	200	<10	150	1.5	N	N	N
BR402	1.5	<200	10	700	5	N	N	N
BR403	3	300	10	2,000	1.5	N	N	N
BR412	<.5	N	<10	300	1.5	N	N	N
BR413	N	N	10	500	1	N	N	N
BR414	7	300	50	>5,000	1	N	N	N
BR415	N	N	30	700	1	N	N	N
BR416	5	N	30	1,000	1.5	N	N	N
BR417	<.5	N	10	700	1.5	N	N	N
BR418	N	N	N	150	1	N	N	N
BR419	<.5	N	N	200	<1	N	N	N
BR420	7	N	20	300	2	N	N	N
BR425	N	N	N	300	3	N	N	<10
BR441	N	N	N	50	3	N	N	N
BR442	100	200	N	2,000	2	N	N	N
BR453	<.5	N	N	700	<1	N	N	30
BR454	N	N	15	700	<1	N	N	20
BR455	N	N	N	700	1.5	N	N	15
BR458	N	7,000	15	500	30	N	N	N
BR460	N	7,000	50	700	30	N	N	N

TABLE 2. CHEMICAL ANALYSES FOR 181 ROCK SAMPLES,RICHFIELD QUADRANGLE, UTAH--Continued

Sample	CR PPM-S	CU PPM-S	GA PPM-S	GE PPM-S	LA PPM-S	MN PPM-S	MO PPM-S	NB PPM-S
BR 312	10	7	<5	N	N	300	N	N
BR 313	100	30	30	N	<50	300	N	<20
BR 314	10	7	N	N	N	1,000	N	N
BR 315	10	10	5	N	<50	100	N	N
BR 316	20	20	10	N	<50	200	N	N
BR 317	15	20	<5	N	<50	100	20	N
BR 318	50	30	30	N	50	700	N	<20
BR 319	15	20	15	N	<50	200	N	N
BR 320	50	30	20	N	<50	500	N	<20
BR 321	15	10	5	N	N	30	15	N
BR 322	N	5	N	N	N	20	N	N
BR 323	<10	7	10	N	N	150	20	N
BR 325	<10	5	<5	N	N	100	N	N
BR 326	50	10	10	N	<50	300	7	<20
BR 327	15	10	5	N	N	300	N	N
BR 328	15	15	5	N	N	300	N	N
BR 329	<10	7	N	N	N	150	15	N
BR 330	<10	20	<5	N	N	150	N	N
BR 331	30	7	5	N	<50	300	N	N
BR 332	<10	7	<5	N	N	500	N	N
BR 333	20	30	<5	N	N	500	<5	N
BR 334	<10	7	10	N	<50	1,000	N	N
BR 335	10	50	15	N	N	1,000	30	N
BR 336	<10	7	N	N	N	150	10	N
BR 337	N	5	50	N	50	100	N	<20
BR 338	<10	<5	15	N	50	30	N	<20
BR 339	<10	<5	N	N	N	20	5	N
BR 340	15	5	N	N	N	700	N	N
BR 341	30	15	30	N	<50	1,000	N	<20
BR342	70	50	20	N	N	700	300	N
BR343	<10	30	5	N	N	100	N	N
BR344	10	100	10	N	<50	1,500	N	N
BR345	<10	10	<5	N	N	150	N	N
BR346	<10	<5	50	N	50	10	<5	70
BR347	20	50	30	N	<50	500	20	<20
BR348	N	7	30	N	<50	150	N	30
BR349	<10	N	50	N	<50	1,000	10	30
BR350	<10	30	5	N	N	150	N	N
BR351	<10	10	5	N	N	150	<5	N
BR362	10	7	N	N	N	100	30	N
BR401	100	15	5	N	<50	500	N	N
BR402	70	15	<5	N	<50	300	N	N
BR403	100	20	<5	N	N	150	15	N
BR412	50	<5	N	N	N	300	N	N
BR413	50	20	5	N	N	150	20	N
BR414	3,000	50	<5	N	N	100	7	N
BR415	100	70	10	N	50	1,500	N	N
BR416	100	15	15	N	50	150	7	N
BR417	50	7	<5	N	N	300	<5	N
BR418	30	<5	N	N	N	100	N	N
BR419	20	7	<5	N	N	150	N	N
BR420	300	30	N	N	N	50	<5	N
BR425	30	30	10	N	N	150	30	N
BR441	10	30	<5	N	N	20	7	N
BR442	70	500	N	N	N	200	70	N
BR453	70	30	15	N	<50	700	N	N
BR454	15	20	30	N	<50	500	N	N
BR455	20	30	20	N	<50	1,000	N	N
BR458	N	<5	50	70	N	700	N	N
BR460	N	<5	50	100	N	1,000	N	N

TABLE 2. CHEMICAL ANALYSES FOR 181 ROCK SAMPLES,RICHFIELD QUADRANGLE, UTAH--Continued

Sample	NI PPM-S	PB PPM-S	SB PPM-S	SC PPM-S	SN PPM-S	SR PPM-S	TH PPM-S	V PPM-S	W PPM-S
BR 312	5	<10	N	N	N	700	N	50	N
BR 313	30	50	N	15	N	300	N	150	N
BR 314	N	<10	N	N	N	2,000	N	<10	N
BR 315	5	<10	N	N	N	N	N	70	N
BR 316	7	20	N	<5	N	N	N	70	N
BR 317	<5	<10	N	<5	N	N	N	50	N
BR 318	15	30	N	10	N	300	N	100	N
BR 319	5	20	N	5	N	N	N	70	N
BR 320	10	20	N	10	N	200	N	100	N
BR 321	<5	15	N	<5	N	N	N	70	N
BR 322	7	<10	N	N	N	300	N	<10	N
BR 323	N	20	N	<5	N	200	N	100	N
BR 325	N	15	N	N	N	<100	N	15	N
BR 326	7	20	N	7	N	150	N	100	N
BR 327	<5	15	N	<5	N	<100	N	50	N
BR 328	5	30	N	<5	N	100	N	30	N
BR 329	<5	20	N	N	N	N	N	15	N
BR 330	<5	15	N	N	N	N	N	30	N
BR 331	<5	15	N	N	N	N	N	50	N
BR 332	5	20	N	N	N	N	N	20	N
BR 333	<5	20	N	5	N	<100	N	70	N
BR 334	N	30	N	<5	N	N	N	50	N
BR 335	10	20	N	5	N	<100	N	200	N
BR 336	N	10	N	N	N	<100	N	70	N
BR 337	5	30	N	5	N	N	N	50	N
BR 338	<5	30	N	<5	N	N	N	30	N
BR 339	<5	<10	N	N	N	N	N	15	N
BR 340	<5	30	N	N	N	300	N	30	N
BR 341	5	30	N	10	N	300	N	150	N
BR342	30	20	N	5	N	200	N	200	N
BR343	<5	20	150	7	N	150	N	200	N
BR344	<5	15	N	7	N	200	N	150	N
BR345	<5	10	300	N	N	150	N	100	N
BR346	<5	30	N	10	N	N	N	150	N
BR347	N	1,500	N	<5	N	150	N	50	N
BR348	N	50	N	<5	N	N	N	10	N
BR349	<5	50	N	<5	N	N	N	N	N
BR350	<5	<10	300	5	N	300	N	150	N
BR351	<5	N	300	N	N	300	N	150	N
BR362	<5	10	N	N	N	N	N	70	N
BR401	20	<10	N	<5	N	500	N	150	N
BR402	7	10	100	N	N	150	N	100	N
BR403	10	20	<100	<5	N	200	N	300	N
BR412	<5	<10	N	N	N	N	N	15	N
BR413	5	10	N	N	N	N	N	20	N
BR414	<5	10	N	<5	N	300	N	300	N
BR415	5	50	N	7	N	500	N	70	N
BR416	<5	15	N	7	N	N	N	100	N
BR417	<5	10	N	N	N	N	N	20	N
BR418	N	<10	N	N	N	N	N	15	N
BR419	N	10	N	<5	N	N	N	20	N
BR420	<5	N	N	N	N	N	N	150	N
BR425	20	30	N	N	N	N	N	30	N
BR441	N	<10	500	N	N	N	N	30	N
BR442	<5	70	1,500	N	N	<100	N	30	N
BR453	10	20	N	20	N	300	N	200	N
BR454	7	20	N	20	N	500	N	200	N
BR455	<5	20	N	15	N	500	N	200	N
BR458	N	<10	3,000	N	N	N	N	<10	2,000
BR460	N	15	2,000	N	N	500	N	10	500

TABLE 2. CHEMICAL ANALYSES FOR 181 ROCK SAMPLES,RICHFIELD QUADRANGLE, UTAH--Continued

Sample	Y PPM-S	ZN PPM-S	ZR PPM-S	As/P PPM	Bi/P PPM	Cd/P PPM	Sb/P PPM	Zn/P PPM
BR 312	N	N	50	5	<2	.1	<2	4
BR 313	20	N	100	<5	<2	.3	<2	44
BR 314	<10	N	N	<5	<2	<.1	<2	<2
BR 315	N	N	30	5	<2	<.1	<2	9
BR 316	<10	N	70	6	<2	.2	<2	19
BR 317	N	N	70	7	<2	.1	<2	9
BR 318	20	N	200	<5	5	.8	6	34
BR 319	N	N	100	<5	<2	<.1	<2	14
BR 320	15	N	100	<5	<2	.3	<2	41
BR 321	15	N	100	7	<2	.1	<2	12
BR 322	100	N	N	7	<2	<.1	<2	5
BR 323	<10	N	30	<5	<2	<.1	<2	6
BR 325	N	N	15	<5	<2	<.1	<2	5
BR 326	15	N	150	12	<2	.4	<2	29
BR 327	N	N	30	<5	<2	.1	<2	24
BR 328	N	N	30	7	<2	.1	<2	6
BR 329	N	N	15	<5	<2	<.1	<2	2
BR 330	N	N	30	8	<2	<.1	<2	7
BR 331	<10	N	15	7	<2	.1	<2	10
BR 332	N	N	<10	<5	<2	.4	<2	6
BR 333	15	N	70	21	<2	.4	<2	18
BR 334	15	N	100	140	<2	.3	4	3
BR 335	15	<200	20	3,100	6	3.4	19	140
BR 336	20	N	30	1,000	<2	.2	23	5
BR 337	20	N	100	6	<2	<.1	<2	<2
BR 338	15	N	100	<5	<2	<.1	<2	10
BR 339	N	N	<10	17	<2	<.1	<2	<2
BR 340	10	N	30	<5	<2	.4	<2	8
BR 341	20	N	200	<5	<2	.5	<2	26
BR342	15	N	10	2,400	<2	4.9	2	41
BR343	N	N	50	440	<2	.3	5	6
BR344	20	N	100	54	<2	2.5	21	92
BR345	N	N	15	31	<2	<.1	5	2
BR346	30	N	300	6	<2	.1	<2	4
BR347	15	<200	30	180	<2	4.8	<2	190
BR348	20	N	100	24	<2	.1	<2	26
BR349	30	N	100	<5	<2	<.1	<2	3
BR350	<10	N	50	76	<2	.2	7	2
BR351	N	N	20	40	<2	<.1	7	<2
BR362	N	N	30	240	<2	.2	12	<2
BR401	<10	N	50	175	<2	<.1	<2	2
BR402	N	N	20	140	<2	<.1	2	3
BR403	N	N	50	368	<2	.1	2	3
BR412	30	N	30	22	<2	<.1	<2	4
BR413	<10	N	50	19	<2	.2	4	16
BR414	20	N	300	278	<2	<.1	43	3
BR415	50	N	70	6	<2	.3	2	7
BR416	20	N	150	63	<2	<.1	10	<2
BR417	<10	N	70	39	<2	<.1	4	6
BR418	N	N	150	6	<2	<.1	<2	<2
BR419	<10	N	300	47	<2	<.1	<2	<2
BR420	N	N	70	10	<2	<.1	33	<2
BR425	10	300	15	56	2	2	7	214
BR441	N	N	N	38	<2	<.1	536	7
BR442	<10	N	10	153	<2	.2	1,120	60
BR453	20	N	70	<5	<2	.7	62	75
BR454	30	N	150	<5	<2	.3	29	77
BR455	30	N	200	<5	<2	.6	19	83
BR458	30	N	N	5,940	<2	10.4	2,700	<2
BR460	20	N	N	4,430	<2	8.8	1,840	5

TABLE 2. CHEMICAL ANALYSES FOR 181 ROCK SAMPLES,RICHFIELD QUADRANGLE, UTAH--Continued

Sample	LATITUDE	LONGITUD	AU PPB	CA	%-S	FE	%-S	MG	%-S	NA	%-S	P	%-S	TI	%-S
BR461	38 38 23	112 5 55	1	>20		1.5		.2		.7		N		<.002	
BR462	38 38 23	112 5 55	<1	>20		7		.3		1		N		.015	
BR463	38 38 23	112 5 55	<1	>20		1.5		.5		1		N		<.002	
BR465	38 38 2	112 6 27	<1	>20		2		.3		.2		N		.007	
BR466	38 38 2	112 6 27	<1	>20		3		.3		.5		N		.005	
BR467	38 38 2	112 6 27	<1	>20		2		.7		.7		N		.01	
BR468	38 38 2	112 6 27	<1	>20		3		.5		1.5		N		.015	
BR470	38 36 50	112 12 3	1	>20		1.5		.7		1		N		.01	
BR471	38 33 33	112 7 58	<1	>20		5		.7		N		N		.01	
BR472	38 33 33	112 7 58	<1	>20		2		.7		N		N		.01	
BR473	38 33 33	112 7 58	5	.2		.5		.07		N		N		.2	
BR 001	38 15 7	112 12 7	<1	3		7		3		3		.5		>1	
BR 002	38 15 8	112 12 6	<1	5		10		3		3		.5		>1	
BR 003	38 15 54	112 34 52	<1	3		7		3		2		.5		>1	
BR 004	38 15 53	112 34 52	<1	3		10		3		3		.5		>1	
BR 005	38 28 24	112 40 5	<1	.3		1.5		.15		3		<.2		.3	
BR 006	38 28 24	112 40 7	<1	<.05		.2		<.02		N		<.2		.3	
BR 007	38 37 30	112 40 25	<1	3		10		3		2		.2		1	
BR 008	38 37 30	112 40 25	<1	3		7		3		2		.2		1	
BR 048	38 42 56	112 57 25	<1	5		10		5		2		<.2		1	
BR 049	38 42 56	112 57 25	<1	7		10		5		2		N		1	
BR 067	38 32 24	112 41 24	<1	3		7		1.5		2		<.2		.7	
BR 068	38 29 27	112 48 48	<1	.3		1.5		.15		5		N		.15	
BR 069	38 29 27	112 48 48	<1	.3		1		.07		3		N		.15	
BR 070	38 44 8	112 46 26	<1	.3		1.5		.07		2		N		.07	
BR 071	38 44 8	112 46 26	<1	.3		1.5		.07		3		N		.1	
BR 072	38 44 7	112 46 28	<1	3		3		1.5		2		.2		.5	
BR 073	38 44 7	112 46 28	<1	3		5		1.5		2		.2		.7	
BR 082	38 5 46	113 14 40	<1	2		7		1.5		2		.3		1	
BR 083	38 5 46	113 14 40	<1	2		7		1		2		.3		1	
BR 085	38 18 53	113 26 20	<1	3		7		1.5		2		.2		1	
BR 086	38 18 53	113 26 20	<1	3		7		1.5		2		.3		1	
BR 087	38 22 24	113 29 55	<1	.7		3		.5		3		<.2		.7	
BR 088	38 22 25	113 29 54	<1	3		5		2		2		<.2		1	
BR 089	38 22 25	113 29 54	<1	3		7		2		3		<.2		1	
BR 100	38 36 3	113 48 43	<1	2		5		1.5		2		<.2		.5	
BR 101	38 36 3	113 48 41	<1	1.5		3		1		2		<.2		.5	
BR 106	38 10 47	113 34 0	<1	2		5		1		2		<.2		.7	
BR 107	38 13 10	113 37 15	<1	.3		1.5		.05		2		N		.05	
BR 108	38 12 52	113 33 51	<1	.2		.7		.05		3		N		.07	
BR 109	38 11 54	113 38 3	<1	1		2		.7		2		<.2		.5	
BR 110	38 7 32	113 38 27	<1	.15		1		.15		2		N		.07	
BR 111	38 7 7	113 37 55	<1	3		7		2		3		.2		1	
BR 112	38 7 10	113 37 35	<1	1.5		5		.7		2		<.2		.5	
BR 113	38 7 10	113 37 37	<1	1.5		5		.7		2		.2		.5	
BR 114	38 6 48	113 38 23	<1	.5		1		.07		2		<.2		.07	
BR 115	38 1 39	113 36 26	<1	2		3		.7		3		<.2		1	
BR 139	38 25 37	113 51 13	<1	1.5		2		.7		2		N		.5	
BR 140	38 25 42	113 51 19	<1	2		3		.7		2		N		.5	
BR 142	38 46 26	113 32 48	<1	2		5		1.5		2		<.2		.5	
BR 143	38 47 25	113 35 44	<1	3		.7		1.5		2		N		.07	
BR 145	38 47 27	113 35 47	<1	5		1.5		1.5		3		N		.1	
BR 146	38 34 4	113 50 24	<1	1.5		3		.7		2		N		.3	
BR 147	38 33 58	113 50 36	<1	2		3		.7		2		N		.3	
BR 148	38 33 46	113 51 0	<1	1.5		3		.7		2		N		.3	
BR 149	38 33 26	113 51 28	<1	3		5		1		3		<.2		.5	
BR 150	38 33 28	113 51 36	<1	5		3		.7		1.5		<.2		.3	
BR 151	38 33 32	113 51 44	<1	1		3		.7		2		N		.5	
BR 152	38 33 10	113 51 37	<1	2		3		1		3		<.2		.5	
BR 153	38 33 36	113 51 18	2	1.5		3		.7		2		N		.5	
BR 176	38 32 24	112 41 23	<1	3		3		1.5		2		<.2		.5	

TABLE 2. CHEMICAL ANALYSES FOR 181 ROCK SAMPLES,RICHFIELD QUADRANGLE, UTAH--Continued

Sample	AG PPM-S	AS PPM-S	B PPM-S	BA PPM-S	BE PPM-S	BI PPM-S	CD PPM-S	CO PPM-S
BR461	N	700	<10	150	2	N	N	N
BR462	N	1,000	N	100	10	N	N	N
BR463	N	300	<10	70	2	N	N	N
BR465	N	2,000	<10	700	7	N	N	10
BR466	N	3,000	15	700	7	N	N	20
BR467	N	7,000	10	100	7	N	N	N
BR468	N	7,000	30	150	7	N	N	N
BR470	N	700	15	300	7	N	N	N
BR471	N	200	N	700	10	N	N	N
BR472	N	N	N	150	10	N	N	N
BR473	1	N	15	150	3	N	N	N
BR 001	N	N	10	1,000	1	N	N	30
BR 002	N	N	10	1,500	1	N	N	50
BR 003	N	N	10	1,500	1	N	N	70
BR 004	N	N	10	1,500	1.5	N	N	70
BR 005	N	N	30	300	3	N	N	N
BR 006	N	N	15	200	<1	N	N	N
BR 007	N	N	<10	1,000	<1	N	N	50
BR 008	N	N	<10	1,000	<1	N	N	50
BR 048	N	N	<10	300	N	N	N	70
BR 049	N	N	<10	300	<1	N	N	70
BR 067	N	N	<10	1,000	<1	N	N	20
BR 068	N	N	15	150	3	N	N	N
BR 069	N	N	15	150	3	N	N	N
BR 070	N	N	<10	70	3	N	N	N
BR 071	N	N	<10	70	3	N	N	N
BR 072	N	N	N	1,000	<1	N	N	15
BR 073	N	N	<10	1,000	<1	N	N	30
BR 082	N	N	10	1,000	1	N	N	20
BR 083	N	N	10	1,500	1	N	N	15
BR 085	N	N	<10	1,500	<1	N	N	50
BR 086	N	N	N	1,000	1	N	N	30
BR 087	N	N	15	1,000	1	N	N	<10
BR 088	N	N	10	700	<1	N	N	30
BR 089	N	N	10	700	<1	N	N	30
BR 100	N	N	15	500	1	N	N	20
BR 101	N	N	15	700	1.5	N	N	15
BR 106	N	N	10	1,000	1	N	N	15
BR 107	N	N	15	N	5	N	N	N
BR 108	N	N	10	<20	7	N	N	N
BR 109	N	N	10	300	3	N	N	10
BR 110	N	N	20	N	5	N	N	N
BR 111	N	N	15	1,000	1	N	N	50
BR 112	N	N	10	700	1.5	N	N	15
BR 113	N	N	10	700	1.5	N	N	10
BR 114	N	N	15	20	5	N	N	N
BR 115	N	N	<10	1,000	1.5	N	N	<10
BR 139	N	N	<10	1,000	1	N	N	<10
BR 140	N	N	10	1,500	1.5	N	N	N
BR 142	N	N	15	500	<1	N	N	20
BR 143	N	N	15	500	2	N	N	N
BR 145	N	N	15	700	2	N	N	N
BR 146	N	N	20	700	1	N	N	15
BR 147	N	N	15	700	1	N	N	15
BR 148	<.5	N	15	700	1.5	N	N	15
BR 149	N	N	15	1,500	1	N	N	20
BR 150	N	N	20	700	<1	N	N	15
BR 151	N	N	15	1,500	1	N	N	<10
BR 152	N	N	30	1,000	<1	N	N	20
BR 153	N	N	20	700	<1	N	N	20
BR 176	N	N	<10	1,000	<1	N	N	20

TABLE 2. CHEMICAL ANALYSES FOR 181 ROCK SAMPLES,RICHFIELD QUADRANGLE, UTAH--Continued

Sample	CR PPM-S	CU PPM-S	GA PPM-S	GE PPM-S	LA PPM-S	MN PPM-S	MO PPM-S	NB PPM-S
BR461	<10	N	N	N	N	300	N	N
BR462	<10	<5	10	10	N	1,000	N	N
BR463	<10	N	N	N	N	1,000	N	N
BR465	30	N	N	<10	N	>5,000	5	N
BR466	70	<5	N	<10	N	5,000	N	N
BR467	<10	7	N	N	N	1,000	N	N
BR468	10	5	<5	10	N	700	N	N
BR470	<10	5	N	N	N	2,000	N	N
BR471	<10	7	<5	N	N	1,500	10	N
BR472	<10	<5	N	N	N	1,000	15	N
BR473	70	5	<5	N	N	300	7	N
BR 001	150	50	50	N	50	1,000	N	<20
BR 002	150	70	50	N	50	1,000	N	<20
BR 003	300	70	30	N	70	700	N	<20
BR 004	300	100	30	N	70	1,000	N	<20
BR 005	N	15	50	N	50	700	7	30
BR 006	<10	7	20	N	50	20	N	30
BR 007	30	30	30	N	<50	1,000	N	<20
BR 008	30	30	30	N	<50	1,000	N	<20
BR 048	200	70	30	N	N	1,000	N	N
BR 049	200	70	30	N	N	1,000	N	N
BR 067	150	30	30	N	50	700	N	<20
BR 068	<10	5	70	N	<50	700	10	30
BR 069	<10	7	50	N	<50	700	10	30
BR 070	<10	<5	30	N	<50	300	10	20
BR 071	<10	<5	50	N	<50	200	15	20
BR 072	50	30	30	N	<50	700	N	<20
BR 073	70	50	50	N	<50	700	N	<20
BR 082	<10	7	30	N	50	1,000	N	20
BR 083	<10	10	30	N	<50	1,000	N	20
BR 085	100	50	50	N	<50	1,000	N	<20
BR 086	70	30	30	N	<50	1,000	N	<20
BR 087	N	15	30	N	100	700	5	20
BR 088	200	50	30	N	50	1,000	N	<20
BR 089	200	50	50	N	50	1,000	<5	<20
BR 100	50	30	30	N	50	700	N	<20
BR 101	50	20	30	N	<50	700	<5	<20
BR 106	20	30	30	N	50	700	N	<20
BR 107	<10	<5	30	N	<50	1,000	5	50
BR 108	N	<5	50	N	<50	1,500	5	70
BR 109	50	10	30	N	50	700	N	30
BR 110	N	<5	50	N	<50	1,000	7	70
BR 111	300	30	30	N	50	700	N	20
BR 112	20	30	30	N	50	200	N	<20
BR 113	20	30	30	N	<50	500	N	<20
BR 114	<10	15	50	N	<50	1,000	7	70
BR 115	N	10	30	N	150	700	5	20
BR 139	10	<5	30	N	50	700	N	<20
BR 140	N	20	30	N	50	1,000	N	<20
BR 142	50	30	30	N	<50	1,000	N	<20
BR 143	N	<5	20	N	<50	700	N	N
BR 145	N	<5	30	N	<50	1,000	N	<20
BR 146	10	10	30	N	<50	500	N	<20
BR 147	50	15	30	N	<50	500	N	<20
BR 148	20	15	30	N	<50	700	N	<20
BR 149	100	20	50	N	50	700	N	<20
BR 150	100	20	20	N	<50	1,500	N	N
BR 151	10	7	30	N	70	200	N	20
BR 152	70	30	30	N	50	700	5	<20
BR 153	20	20	30	N	<50	300	<5	<20
BR 176	150	30	20	N	<50	700	N	<20

TABLE 2. CHEMICAL ANALYSES FOR 181 ROCK SAMPLES,RICHFIELD QUADRANGLE, UTAH--Continued

Sample	NI PPM-S	PB PPM-S	SB PPM-S	SC PPM-S	SN PPM-S	SR PPM-S	TH PPM-S	V PPM-S	W PPM-S
BR461	N	<10	N	N	N	>5,000	N	<10	N
BR462	N	10	500	N	N	300	N	15	50
BR463	N	N	N	N	N	500	N	N	N
BR465	5	N	N	N	N	1,000	N	15	30
BR466	<5	N	N	N	N	1,000	N	10	N
BR467	<5	15	N	N	N	1,500	N	15	N
BR468	<5	15	N	N	N	1,000	N	15	N
BR470	N	<10	N	N	N	5,000	N	15	N
BR471	<5	10	N	N	N	700	N	20	50
BR472	N	10	N	N	N	1,000	N	10	30
BR473	<5	20	N	N	N	N	N	30	N
BR 001	50	30	N	15	N	1,000	N	150	N
BR 002	70	30	N	15	N	1,000	N	150	N
BR 003	150	30	N	20	N	1,000	N	150	N
BR 004	150	30	N	20	N	1,500	N	150	N
BR 005	<5	70	N	<5	N	150	N	50	N
BR 006	N	50	N	<5	N	200	N	50	N
BR 007	30	30	N	15	N	500	N	150	N
BR 008	50	30	N	20	N	500	N	150	N
BR 048	150	15	N	20	N	500	N	150	N
BR 049	150	20	N	20	N	300	N	150	N
BR 067	30	30	N	15	N	500	N	150	N
BR 068	<5	100	N	<5	N	N	N	10	N
BR 069	<5	70	N	<5	N	N	N	10	N
BR 070	<5	70	N	N	N	N	N	15	N
BR 071	N	70	N	N	N	N	N	15	N
BR 072	30	30	N	15	N	500	N	100	N
BR 073	30	30	N	15	N	500	N	150	N
BR 082	N	30	N	15	N	500	N	100	N
BR 083	N	30	N	15	N	500	N	100	N
BR 085	70	30	N	20	N	700	N	150	N
BR 086	50	30	N	15	N	700	N	150	N
BR 087	N	50	N	10	N	300	N	70	N
BR 088	70	30	N	20	N	500	N	150	N
BR 089	50	30	N	20	N	700	N	150	N
BR 100	20	50	N	15	N	500	N	150	N
BR 101	10	50	N	15	N	500	N	150	N
BR 106	7	50	N	10	N	700	N	150	N
BR 107	<5	70	N	N	15	N	N	<10	N
BR 108	<5	70	N	N	N	N	N	<10	N
BR 109	30	30	N	5	N	200	N	70	N
BR 110	<5	70	N	N	10	N	N	50	N
BR 111	150	30	N	15	N	500	N	150	N
BR 112	10	30	N	10	N	500	N	150	N
BR 113	5	30	N	7	N	500	N	150	N
BR 114	<5	70	N	N	15	N	N	30	N
BR 115	N	70	N	7	N	500	N	70	N
BR 139	<5	50	N	7	N	500	N	70	N
BR 140	<5	50	N	7	N	500	N	70	N
BR 142	10	50	N	10	N	500	N	150	N
BR 143	<5	50	N	<5	N	300	N	15	N
BR 145	<5	70	N	7	N	300	N	15	N
BR 146	5	50	N	7	N	300	N	150	N
BR 147	15	50	N	15	N	500	N	150	N
BR 148	7	50	N	15	N	300	N	150	N
BR 149	50	30	N	20	N	700	N	100	N
BR 150	20	30	N	15	N	500	N	150	N
BR 151	N	50	N	15	N	200	N	70	N
BR 152	20	50	N	15	N	500	N	100	N
BR 153	10	30	N	15	N	500	N	150	N
BR 176	50	30	N	15	N	500	N	100	N

TABLE 2. CHEMICAL ANALYSES FOR 181 ROCK SAMPLES,RICHFIELD QUADRANGLE, UTAH--Continued

Sample	Y PPM-S	ZN PPM-S	ZR PPM-S	As/P PPM	Bi/P PPM	Cd/P PPM	Sb/P PPM	Zn/P PPM
BR461	N	N	N	874	<2	.5	55	2
BR462	20	N	N	856	<2	1.4	189	2
BR463	N	N	N	351	<2	.4	48	<2
BR465	15	N	N	4,040	<2	1	53	18
BR466	10	N	N	1,360	<2	.4	20	14
BR467	<10	N	10	1,460	<2	.4	10	14
BR468	<10	N	10	2,310	<2	.8	26	13
BR470	10	N	10	579	<2	.2	14	10
BR471	30	N	15	229	<2	.7	8	4
BR472	15	N	20	102	<2	.4	7	6
BR473	<10	N	500	15	<2	<.1	3	<2
BR 001	30	N	200	<5	<2	.2	<2	100
BR 002	30	<200	300	<5	<2	.3	<2	100
BR 003	30	<200	500	<5	<2	.3	<2	78
BR 004	30	<200	500	<5	<2	.3	<2	77
BR 005	30	N	300	<5	<2	<.1	<2	24
BR 006	<10	N	300	<5	<2	<.1	<2	<2
BR 007	30	N	300	<5	<2	.2	<2	47
BR 008	50	N	200	<5	<2	.3	<2	57
BR 048	30	N	150	7	<2	.5	<2	54
BR 049	30	N	150	<5	<2	.4	<2	54
BR 067	30	N	300	<5	<2	<.1	<2	23
BR 068	20	N	150	<5	<2	<.1	<2	3
BR 069	20	N	150	<5	<2	<.1	<2	2
BR 070	20	N	150	<5	<2	<.1	<2	10
BR 071	20	N	700	<5	<2	<.1	<2	11
BR 072	30	N	150	10	<2	<.1	<2	48
BR 073	30	N	200	<5	<2	.1	<2	57
BR 082	50	N	300	8	<2	.4	<2	92
BR 083	50	N	300	6	<2	.3	<2	90
BR 085	30	<200	300	<5	<2	.5	<2	68
BR 086	30	<200	200	<5	<2	.2	<2	74
BR 087	30	N	700	<5	<2	<.1	<2	53
BR 088	30	N	200	<5	<2	<.1	<2	29
BR 089	30	N	200	<5	<2	<.1	<2	40
BR 100	20	N	100	<5	<2	<.1	<2	33
BR 101	20	N	100	<5	<2	<.1	<2	32
BR 106	20	N	150	<5	<2	.2	<2	50
BR 107	150	N	200	<5	<2	<.1	<2	32
BR 108	50	N	150	<5	<2	<.1	<2	59
BR 109	50	N	200	<5	<2	<.1	<2	37
BR 110	100	N	300	26	<2	<.1	<2	31
BR 111	50	N	300	<5	<2	.3	<2	72
BR 112	20	N	200	<5	<2	<.1	<2	47
BR 113	20	N	150	<5	<2	<.1	<2	36
BR 114	150	N	200	<5	<2	<.1	<2	27
BR 115	30	N	500	<5	<2	<.1	<2	55
BR 139	15	N	200	<5	<2	<.1	<2	48
BR 140	20	N	200	<5	<2	<.1	<2	30
BR 142	15	N	200	<5	<2	.1	<2	27
BR 143	20	N	50	<5	<2	<.1	<2	19
BR 145	20	N	70	<5	<2	<.1	<2	21
BR 146	20	N	150	5	<2	.2	<2	26
BR 147	20	N	200	9	<2	.3	<2	32
BR 148	15	N	100	<5	<2	.3	<2	28
BR 149	30	N	300	<5	<2	.3	<2	25
BR 150	20	N	150	<5	<2	.3	<2	31
BR 151	30	N	500	<5	<2	<.1	<2	23
BR 152	30	N	150	<5	<2	<.1	<2	23
BR 153	20	N	200	<5	<2	.1	<2	38
BR 176	30	N	300	<5	<2	.1	<2	22

TABLE 3. CHEMICAL ANALYSES FOR 192 STREAM-SEDIMENT SAMPLES, RICHFIELD QUADRANGLE, UTAH

[N, not detected; <, detected but below the limit of determination shown; >, determined to be greater than the value shown.]

Sample	LATITUDE	LONGITUD	AU PPB	CA %-S	FE %-S	MG %-S	NA %-S	P %-S	TI %-S
JS001	38 11 35	113 50 3	<1	1.5	5	.7	2	N	.5
JS002	38 11 34	113 50 0	<1	1.5	5	.7	2	N	.5
JS003	38 10 5	113 49 32	<1	1	5	.7	1.5	<.2	.7
JS004	38 10 18	113 49 22	<1	.7	5	.7	3	<.2	.5
JS005	38 13 43	113 49 18	<1	.7	7	.7	2	N	.5
JS006	38 13 33	113 48 58	<1	1	3	.5	1.5	<.2	.3
JS007	38 13 2	113 49 9	<1	.7	5	.7	1	N	.5
JS009	38 12 57	113 49 36	<1	1.5	5	.7	3	N	.5
JS010	38 12 53	113 50 17	<1	1	5	.7	2	N	.5
JS011	38 12 56	113 50 18	1	.7	10	.7	1.5	N	.5
JS012	38 11 34	113 53 55	<1	.5	7	.7	3	<.2	.5
JS013	38 11 18	113 53 10	440	.7	10	.7	1.5	N	.5
JS014	38 11 32	113 53 3	4	.7	3	.7	2	N	.3
JS015	38 11 45	113 53 32	1	.7	10	.7	2	N	1
JS016	38 11 50	113 53 15	3	1	10	1	2	N	.7
JS017	38 20 59	113 49 44	1	2	5	.7	2	N	.5
JS018	38 22 28	113 50 9	1	2	5	.7	3	N	.3
JS019	38 23 12	113 49 43	1	2	3	.7	1.5	<.2	.3
JS020	38 23 47	113 49 53	5	5	5	1	2	N	.3
JS021	38 24 18	113 50 11	<1	3	5	.7	3	N	.5
JS022	38 24 44	113 51 1	<1	7	5	1.5	2	N	.5
JS023	38 25 10	113 50 48	<1	15	3	1	1.5	N	.3
JS024	38 25 33	113 50 34	<1	2	7	1	2	N	.5
JS025	38 27 9	113 50 57	<1	3	2	.7	1.5	N	.3
JS026	38 27 11	113 50 57	<1	3	7	1.5	2	N	.7
JS027	38 28 16	113 50 22	<1	7	3	2	2	N	.7
JS028	38 29 20	113 50 9	2	3	7	2	2	N	1
JS029	38 26 18	113 50 40	<1	2	5	1	1.5	<.2	.7
JS030	38 25 31	113 51 51	<1	15	3	1	1	N	.3
JS031	38 21 41	113 50 42	<1	10	5	1	2	N	.5
JS032	38 21 37	113 51 1	<1	2	10	1	2	N	.7
JS033	38 7 39	113 47 45	1	3	3	1.5	2	N	.5
JS034	38 7 2	113 46 47	<1	1	5	.7	1	<.2	.7
JS035	38 6 32	113 47 4	<1	1	7	.7	3	N	.7
JS036	38 7 31	113 48 39	3	1.5	5	1	2	N	.5
JS037	38 6 3	113 49 29	1	5	2	2	1.5	N	.2
JS038	38 5 23	113 49 23	<1	.7	7	1	2	N	.7
JS039	38 5 20	113 49 25	1	.7	15	.7	1.5	N	1
JS040	38 3 18	113 49 42	2	2	5	1	2	N	.7
JS041	38 3 16	113 49 41	<1	2	7	1	2	N	1
JS042	38 2 48	113 50 47	<1	1.5	5	1.5	1.5	<.2	.5
JS043	38 6 13	113 49 55	<1	2	5	2	2	N	.5
JS044	38 8 15	113 52 51	<1	1	5	1	2	N	.5
JS045	38 8 56	113 52 18	<1	5	5	1	3	N	.7
JS046	38 10 8	113 52 29	<1	1.5	3	1	2	N	.3
JS047	38 9 39	113 52 11	<1	1.5	3	1	2	<.2	.5
JS048	38 9 20	113 52 5	<1	1.5	3	1	1.5	N	.5
JS049	38 3 47	113 38 33	<1	1	3	1	2	N	.3
JS050	38 1 44	113 39 38	<1	.7	7	.7	1.5	N	.7
JS051	38 1 50	113 40 2	<1	7	3	1.5	2	N	.5
JS052	38 1 58	113 40 37	<1	.3	3	.7	1.5	<.2	.3
JS053	38 2 17	113 41 0	<1	.7	5	1	1	<.2	.7
JS054	38 1 57	113 42 30	<1	.7	3	.7	1.5	N	.5
JS055	38 0 42	113 34 17	<1	.7	3	1	1.5	N	.5
JS056	38 0 42	113 34 2	<1	1	5	1	1.5	N	.5
JS057	38 6 5	113 31 16	<1	7	5	3	1.5	N	.5
JS058	38 6 43	113 30 18	<1	5	7	1.5	1	N	.7
JS059	38 7 28	113 31 46	<1	20	2	5	1.5	N	.15
JS060	38 7 23	113 31 53	<1	20	2	5	1.5	N	.15
JS061	38 6 28	113 32 45	<1	>20	2	5	1.5	N	.15

TABLE 3. CHEMICAL ANALYSES FOR 192 STREAM-SEDIMENT SAMPLES, RICHFIELD QUADRANGLE, UTAH--Continued

Sample	AG PPM-S	AS PPM-S	B PPM-S	BA PPM-S	BE PPM-S	BI PPM-S	CD PPM-S	CO PPM-S
JS001	N	N	10	500	1	N	N	20
JS002	N	N	10	500	1.5	N	N	20
JS003	N	N	10	500	1	N	N	20
JS004	N	N	10	700	1.5	N	N	20
JS005	N	N	10	700	1	N	N	30
JS006	N	N	15	700	1.5	N	N	15
JS007	N	N	15	700	1	N	N	20
JS009	N	N	10	700	<1	N	N	15
JS010	N	N	10	700	<1	N	N	20
JS011	N	N	<10	700	<1	N	N	20
JS012	N	N	10	700	<1	N	N	20
JS013	N	N	<10	1,000	<1	N	N	20
JS014	N	N	10	700	1	N	N	15
JS015	N	N	N	500	<1	N	N	30
JS016	N	N	N	500	<1	N	N	50
JS017	N	N	15	700	1	N	N	20
JS018	N	N	15	1,000	1	N	N	20
JS019	N	N	15	1,000	1	N	N	15
JS020	N	N	10	700	1	N	N	20
JS021	N	N	10	700	<1	N	N	20
JS022	N	N	20	700	1	N	N	20
JS023	N	N	30	500	1	N	N	15
JS024	N	N	15	500	<1	N	N	20
JS025	N	N	30	500	1	N	N	<10
JS026	N	N	20	500	<1	N	N	30
JS027	N	N	20	700	<1	N	N	10
JS028	N	N	10	700	<1	N	N	30
JS029	N	N	<10	500	<1	N	N	20
JS030	N	N	50	300	<1	N	N	15
JS031	N	N	20	700	<1	N	N	20
JS032	N	N	10	700	<1	N	N	50
JS033	N	N	20	700	1	N	N	15
JS034	N	N	20	700	<1	N	N	15
JS035	N	N	N	700	<1	N	N	20
JS036	N	N	15	700	1.5	N	N	15
JS037	N	N	30	500	1.5	N	N	10
JS038	N	N	10	700	<1	N	N	20
JS039	N	N	N	300	<1	N	N	30
JS040	N	N	15	700	1	N	N	30
JS041	N	N	15	700	<1	N	N	30
JS042	N	N	15	700	1	N	N	15
JS043	N	N	15	700	1	N	N	15
JS044	N	N	15	500	1.5	N	N	20
JS045	3	N	10	700	<1	N	N	15
JS046	N	N	10	500	1	N	N	10
JS047	N	N	15	500	1.5	N	N	20
JS048	N	N	<10	500	1.5	N	N	15
JS049	N	N	20	700	2	N	N	<10
JS050	N	N	10	700	1	N	N	20
JS051	N	N	10	700	1.5	N	N	15
JS052	N	N	10	700	1.5	N	N	10
JS053	N	N	10	700	1	N	N	15
JS054	N	N	15	500	2	N	N	10
JS055	N	N	20	700	1.5	N	N	15
JS056	N	N	20	700	1.5	N	N	15
JS057	N	N	20	700	1.5	N	N	15
JS058	N	N	10	700	<1	N	N	20
JS059	N	N	15	200	<1	N	N	<10
JS060	N	N	15	150	<1	N	N	N
JS061	N	N	15	300	<1	N	N	N

TABLE 3. CHEMICAL ANALYSES FOR 192 STREAM-SEDIMENT SAMPLES, RICHFIELD QUADRANGLE, UTAH--Continued

Sample	CR PPM-S	CU PPM-S	GA PPM-S	GE PPM-S	LA PPM-S	MN PPM-S	MO PPM-S	NB PPM-S
JS001	100	30	50	N	<50	700	N	<20
JS002	100	30	50	N	<50	700	N	20
JS003	100	20	30	N	<50	700	N	<20
JS004	150	30	50	N	50	700	N	20
JS005	70	20	50	N	50	700	N	<20
JS006	50	15	20	N	<50	1,000	N	<20
JS007	100	30	30	N	50	700	N	<20
JS009	150	20	30	N	<50	700	N	<20
JS010	100	30	20	N	<50	700	N	<20
JS011	200	30	30	N	<50	700	N	<20
JS012	150	30	30	N	50	700	N	<20
JS013	200	30	30	N	50	700	N	<20
JS014	100	30	30	N	<50	700	N	<20
JS015	150	30	20	N	50	1,000	N	<20
JS016	300	30	30	N	50	700	N	<20
JS017	100	20	30	N	<50	700	N	<20
JS018	70	20	50	N	50	700	N	<20
JS019	50	15	20	N	50	700	N	<20
JS020	100	15	50	N	70	700	N	<20
JS021	100	15	30	N	70	700	N	<20
JS022	100	30	30	N	50	700	N	<20
JS023	100	20	20	N	50	700	N	<20
JS024	100	20	30	N	70	1,000	N	<20
JS025	70	15	10	N	<50	500	N	<20
JS026	150	30	30	N	<50	700	N	<20
JS027	50	10	30	N	<50	700	N	<20
JS028	150	30	50	N	<50	1,000	N	<20
JS029	150	20	20	N	<50	700	N	<20
JS030	150	30	30	N	<50	700	N	<20
JS031	100	20	30	N	50	1,000	N	<20
JS032	150	30	50	N	50	1,000	N	<20
JS033	70	20	30	N	<50	700	7	<20
JS034	100	20	30	N	50	700	N	<20
JS035	150	20	50	N	<50	700	N	<20
JS036	100	30	50	N	50	700	5	<20
JS037	70	20	20	N	<50	700	N	<20
JS038	150	20	30	N	<50	700	N	<20
JS039	150	30	30	N	50	700	N	<20
JS040	150	30	30	N	<50	1,000	N	<20
JS041	200	50	30	N	50	1,000	N	<20
JS042	70	30	30	N	<50	700	N	<20
JS043	30	30	50	N	<50	700	N	<20
JS044	50	30	50	N	<50	700	N	<20
JS045	100	20	50	N	<50	700	N	<20
JS046	70	30	30	N	<50	700	N	N
JS047	30	30	30	N	<50	700	N	<20
JS048	70	30	20	N	<50	700	N	<20
JS049	50	30	30	N	<50	700	N	<20
JS050	70	30	50	N	50	1,000	N	<20
JS051	50	30	50	N	<50	1,000	N	N
JS052	50	20	20	N	<50	1,000	N	<20
JS053	50	30	20	N	<50	1,000	N	<20
JS054	50	20	30	N	<50	1,000	N	<20
JS055	50	30	30	N	<50	700	N	<20
JS056	50	30	30	N	<50	700	N	<20
JS057	50	30	30	N	<50	700	N	N
JS058	70	20	30	N	50	700	N	<20
JS059	50	10	15	N	<50	700	N	N
JS060	30	15	15	N	<50	500	N	N
JS061	50	10	15	N	<50	700	N	N

TABLE 3. CHEMICAL ANALYSES FOR 192 STREAM-SEDIMENT SAMPLES, RICHFIELD QUADRANGLE, UTAH--Continued

Sample	NI PPM-S	PB PPM-S	SB PPM-S	SC PPM-S	SN PPM-S	SR PPM-S	TH PPM-S	V PPM-S	W PPM-S
JS001	30	50	N	15	N	500	N	200	N
JS002	20	50	N	15	N	500	N	200	N
JS003	20	30	N	15	N	300	N	150	N
JS004	20	50	N	15	N	500	N	200	N
JS005	30	50	N	10	N	500	N	200	N
JS006	10	50	N	7	N	300	N	100	N
JS007	30	30	N	15	N	300	N	150	N
JS009	20	50	N	10	N	300	N	200	N
JS010	30	30	N	15	N	300	N	200	N
JS011	30	50	N	15	N	300	N	300	N
JS012	30	50	N	10	N	300	N	200	N
JS013	50	70	N	15	N	300	N	300	N
JS014	15	50	N	10	N	300	N	150	N
JS015	50	50	N	10	N	500	N	300	N
JS016	70	30	N	15	N	500	N	500	N
JS017	10	50	N	10	N	500	N	150	N
JS018	15	50	N	10	N	500	N	150	N
JS019	15	50	N	7	N	300	N	100	N
JS020	15	50	N	10	N	500	N	150	N
JS021	20	30	N	10	N	500	N	150	N
JS022	20	30	N	10	N	500	N	150	N
JS023	20	30	N	7	N	500	N	150	N
JS024	15	30	N	10	N	300	N	200	N
JS025	7	30	N	5	N	300	N	100	N
JS026	30	50	N	10	N	300	N	300	N
JS027	N	50	N	7	N	300	N	150	N
JS028	30	50	N	10	N	300	N	300	N
JS029	30	30	N	10	N	300	N	200	N
JS030	30	30	N	7	N	300	N	150	N
JS031	20	50	N	7	N	500	N	200	N
JS032	30	50	N	10	N	500	N	500	N
JS033	15	50	N	10	N	300	N	150	N
JS034	15	50	N	10	N	300	N	150	N
JS035	15	70	N	10	N	300	N	300	N
JS036	15	300	N	10	N	300	N	150	N
JS037	15	30	N	7	N	200	N	70	N
JS038	10	50	N	10	N	300	N	200	N
JS039	15	50	N	10	N	300	N	300	N
JS040	30	50	N	10	N	500	N	200	N
JS041	50	50	N	15	N	500	N	200	N
JS042	20	30	N	10	N	300	N	150	N
JS043	20	70	N	10	N	300	N	150	N
JS044	20	70	N	10	N	300	N	200	N
JS045	20	70	N	15	N	300	N	200	N
JS046	15	50	N	7	N	300	N	150	N
JS047	20	50	N	10	N	300	N	200	N
JS048	5	50	N	7	N	300	N	200	N
JS049	10	70	N	7	<10	300	N	70	N
JS050	30	50	N	7	N	300	N	200	N
JS051	15	70	N	10	N	300	N	150	N
JS052	10	50	N	5	N	300	N	70	N
JS053	10	50	N	7	N	300	N	150	N
JS054	10	50	N	7	N	300	N	100	N
JS055	20	50	N	7	N	300	N	100	N
JS056	20	50	N	7	N	300	N	150	N
JS057	15	50	N	7	N	300	N	150	N
JS058	15	70	N	7	N	300	N	300	N
JS059	7	50	N	<5	N	300	N	30	N
JS060	7	50	N	<5	N	300	N	50	N
JS061	5	50	N	5	N	300	N	50	N

TABLE 3. CHEMICAL ANALYSES FOR 192 STREAM-SEDIMENT SAMPLES, RICHFIELD QUADRANGLE, UTAH--Continued

Sample	Y PPM-S	ZN PPM-S	ZR PPM-S	As/P PPM	Bi/P PPM	Cd/P PPM	Sb/P PPM	Zn/P PPM
JS001	20	N	700	<5	<2	<.1	<2	53
JS002	30	N	300	<5	<2	.2	<2	51
JS003	30	N	500	<5	<2	.6	<2	63
JS004	30	N	500	<5	<2	.6	<2	58
JS005	20	N	700	<5	<2	.9	<2	64
JS006	20	N	300	<5	<2	.4	<2	49
JS007	20	N	700	<5	<2	.9	<2	71
JS009	20	N	1,000	<5	<2	.8	<2	51
JS010	20	N	300	<5	<2	.7	<2	43
JS011	30	N	>1,000	5	<2	1.4	<2	62
JS012	30	N	700	<5	<2	1.1	<2	66
JS013	30	N	1,000	<5	<2	1.9	<2	64
JS014	20	N	300	<5	<2	.4	<2	54
JS015	20	N	300	<5	<2	2.7	<2	130
JS016	30	<200	700	<5	<2	2.4	<2	100
JS017	20	N	300	<5	<2	.9	<2	64
JS018	20	N	300	<5	<2	.6	<2	95
JS019	20	N	300	<5	<2	.8	<2	88
JS020	30	N	300	<5	<2	.6	<2	70
JS021	30	N	300	<5	<2	1.1	<2	91
JS022	20	N	150	<5	<2	.8	<2	58
JS023	20	N	300	<5	<2	.6	<2	48
JS024	20	N	700	<5	<2	.7	<2	86
JS025	15	N	200	<5	<2	.3	<2	36
JS026	20	N	300	<5	<2	1.1	<2	66
JS027	20	N	700	<5	<2	.6	<2	43
JS028	20	N	700	<5	<2	1.5	<2	45
JS029	20	N	300	<5	<2	1	<2	73
JS030	15	N	200	<5	<2	.5	<2	37
JS031	20	N	200	8	<2	.9	<2	59
JS032	30	<200	500	<5	<2	1.8	<2	100
JS033	20	N	300	13	<2	.5	<2	87
JS034	30	N	500	8	<2	.5	<2	45
JS035	20	N	300	<5	<2	2.9	<2	74
JS036	20	<200	500	11	<2	1.7	<2	390
JS037	15	N	150	<5	<2	.5	<2	46
JS038	20	N	300	<5	<2	1.2	<2	52
JS039	30	<200	1,000	<5	<2	3.3	<2	75
JS040	20	N	300	<5	<2	1.3	<2	97
JS041	20	N	500	<5	<2	.8	<2	62
JS042	15	N	300	<5	<2	.2	<2	67
JS043	20	N	500	13	<2	.3	<2	52
JS044	20	N	500	<5	<2	.3	<2	50
JS045	20	N	500	6	<2	.7	<2	52
JS046	15	N	300	<5	<2	.6	<2	49
JS047	20	N	500	<5	<2	.4	<2	52
JS048	20	N	500	<5	<2	.8	<2	66
JS049	20	N	300	<5	<2	.4	<2	59
JS050	20	N	1,000	<5	<2	1.3	<2	95
JS051	20	N	300	10	<2	.6	<2	58
JS052	15	N	150	<5	<2	.4	<2	47
JS053	20	N	500	<5	<2	.9	<2	68
JS054	30	N	500	<5	<2	.3	<2	49
JS055	20	N	500	<5	<2	.4	<2	52
JS056	20	N	300	<5	<2	.5	<2	56
JS057	20	N	200	<5	<2	.7	<2	44
JS058	20	<200	1,000	<5	<2	2.8	<2	180
JS059	15	N	100	11	<2	.3	<2	16
JS060	15	N	300	11	<2	.3	<2	19
JS061	20	N	100	12	<2	.4	<2	18

TABLE 3. CHEMICAL ANALYSES FOR 192 STREAM-SEDIMENT SAMPLES, RICHFIELD QUADRANGLE, UTAH--Continued

Sample	LATITUDE	LONGITUD	AU PPB	CA	%-S	FE	%-S	MG	%-S	NA	%-S	P	%-S	TI	%-S
JS062	38 6 23	113 32 33	<1	10		3		2		1		N			.15
JS063	38 10 28	113 31 37	<1	20		1.5		5		1		N			.1
JS064	38 10 42	113 30 46	<1	2		3		1.5		2		<.2			.3
JS065	38 9 44	113 33 49	<1	3		7		1.5		1		N			.5
JS066	38 8 49	113 33 38	<1	7		5		2		1.5		N			.3
JS067	38 7 58	113 33 36	<1	15		2		3		1.5		N			.15
JS068	38 5 16	113 34 30	<1	10		3		2		2		N			.2
JS069	38 6 16	113 34 29	<1	.7		3		.7		2		<.2			.3
JS070	38 10 46	113 33 44	<1	1.5		3		.7		2		<.2			.3
JS071	38 11 8	113 34 41	<1	.7		2		.7		2		N			.3
JS072	38 12 16	113 34 28	<1	7		3		3		3		N			.3
JS073	38 12 56	113 34 41	<1	10		1		5		1		N			.07
JS074	38 13 5	113 35 29	<1	15		1.5		5		1		N			.15
JS075	38 18 47	113 14 18	1	3		5		1.5		2		<.2			.5
JS076	38 18 34	113 15 40	<1	3		3		1.5		1.5		N			.3
JS077	38 18 6	113 16 4	<1	10		3		3		1.5		N			.2
JS078	38 17 14	113 16 5	<1	3		7		1.5		1.5		<.2			.5
JS079	38 17 6	113 15 42	<1	3		5		1.5		1.5		N			.3
JS080	38 17 34	113 15 16	<1	2		7		1.5		1.5		N			.7
JS081	38 18 4	113 15 13	<1	7		7		2		1.5		<.2			.5
JS082	38 18 5	113 15 16	<1	7		5		2		1		<.2			.5
JS083	38 17 47	113 15 24	1	2		5		1		1		<.2			.5
JS084	38 18 16	113 14 13	1	5		5		1.5		1		<.2			.5
JS085	38 17 20	113 16 23	1	2		5		.7		1.5		N			.5
JS086	38 16 48	113 17 14	<1	3		3		1		1.5		<.2			.3
JS087	38 17 43	113 17 42	1	3		5		1		1		<.2			.5
JS088	38 17 41	113 17 45	1	7		5		1		.7		N			.5
JS089	38 17 22	113 18 0	1	5		3		1.5		1.5		N			.5
JS090	38 10 56	113 32 16	<1	2		3		1		1.5		<.2			.5
JS091	38 12 3	113 31 2	1	1.5		5		1.5		1.5		<.2			.5
JS092	38 12 54	113 31 49	<1	3		5		1		1		<.2			.5
JS093	38 13 24	113 32 0	<1	15		2		5		1.5		N			.2
JS094	38 13 24	113 32 6	<1	3		5		1.5		2		<.2			.5
JS095	38 13 52	113 32 42	<1	20		2		7		1		N			.15
JS096	38 30 58	113 32 57	<1	15		10		2		1		N			.7
JS097	38 31 1	113 32 35	<1	7		5		2		.7		N			.5
JS098	38 30 18	113 31 57	<1	7		5		2		2		<.2			.5
JS099	38 14 46	113 30 57	<1	3		5		1.5		1		N			.5
JS100	38 13 15	113 30 19	<1	7		5		3		1.5		N			.3
JS101	38 17 36	113 30 11	<1	15		3		5		1.5		N			.3
JS102	38 18 38	113 30 32	<1	10		1.5		5		1.5		N			.15
JS103	38 18 38	113 31 7	<1	15		2		7		1.5		N			.15
JS104	38 18 2	113 32 14	<1	15		3		5		1		N			.3
JS105	38 17 17	113 35 24	<1	.7		3		.7		1.5		N			.5
JS106	38 16 57	113 35 37	<1	.7		3		.7		2		N			.5
JS107	38 16 33	113 35 59	<1	5		3		2		1		<.2			.3
JS108	38 16 0	113 36 28	<1	10		3		5		1.5		N			.2
JS109	38 16 3	113 36 40	<1	2		3		1.5		1.5		N			.5
JS110	38 15 55	113 36 43	<1	10		3		2		1		N			.3
JS111	38 15 59	113 36 58	<1	.7		3		.7		1		<.2			.5
JS112	38 14 18	113 35 2	<1	20		3		5		1.5		N			.2
JS113	38 13 53	113 35 47	<1	15		2		7		1.5		N			.15
JS114	38 14 18	113 36 14	<1	20		2		7		1.5		N			.15
JS115	38 14 19	113 38 2	<1	20		1.5		7		1.5		N			.15
JS116	38 16 17	113 39 4	<1	.7		3		1		1.5		N			.5
JS117	38 16 49	113 39 6	<1	.7		3		.7		1.5		<.2			.5
JS118	38 17 44	113 39 32	<1	.7		3		1		1.5		N			.7
JS119	38 17 42	113 39 30	<1	.5		2		.5		1.5		<.2			.3
JS120	38 18 11	113 39 37	<1	.3		3		.7		1.5		<.2			.5
BS023	38 58 51	113 23 57	<1	15		1.5		5		1.5		N			.1

TABLE 3. CHEMICAL ANALYSES FOR 192 STREAM-SEDIMENT SAMPLES, RICHFIELD QUADRANGLE, UTAH--Continued

Sample	AG PPM-S	AS PPM-S	B PPM-S	BA PPM-S	BE PPM-S	BI PPM-S	CD PPM-S	CO PPM-S
JS062	N	N	15	500	1.5	N	N	N
JS063	N	N	15	200	1	N	N	N
JS064	N	N	<10	500	1	N	N	15
JS065	N	N	10	700	1.5	N	N	20
JS066	N	N	10	500	1.5	N	N	10
JS067	N	N	20	500	1.5	N	N	<10
JS068	N	N	<10	700	1.5	N	N	<10
JS069	N	N	15	500	2	N	N	15
JS070	N	N	20	700	1.5	N	N	10
JS071	N	N	20	500	3	N	N	<10
JS072	N	N	15	700	1	N	N	15
JS073	N	N	15	300	1.5	N	N	N
JS074	N	N	15	300	2	N	N	N
JS075	N	N	10	1,000	<1	N	N	20
JS076	N	N	20	500	1.5	N	N	15
JS077	N	N	15	500	1.5	N	N	10
JS078	N	N	10	700	<1	N	N	20
JS079	N	N	10	700	<1	N	N	20
JS080	N	N	<10	700	<1	N	N	30
JS081	N	N	10	700	<1	N	N	20
JS082	N	N	15	700	<1	N	N	15
JS083	N	N	15	700	<1	N	N	15
JS084	N	N	10	1,000	<1	N	N	15
JS085	N	N	10	500	1.5	N	N	15
JS086	N	N	15	700	1	N	N	15
JS087	N	N	15	700	1	N	N	15
JS088	N	N	20	500	1	N	N	15
JS089	N	N	20	700	1	N	N	15
JS090	N	N	15	1,000	1.5	N	N	15
JS091	N	N	15	700	1.5	N	N	20
JS092	N	N	15	1,000	1	N	N	15
JS093	N	N	15	500	<1	N	N	<10
JS094	N	N	N	700	<1	N	N	15
JS095	N	N	20	200	<1	N	N	<10
JS096	N	N	N	1,000	<1	N	N	20
JS097	N	N	15	700	<1	N	N	20
JS098	N	N	10	700	1	N	N	15
JS099	N	N	10	700	1	N	N	20
JS100	N	N	10	500	1	N	N	20
JS101	N	N	20	300	1	N	N	15
JS102	N	N	20	300	<1	N	N	<10
JS103	N	N	15	300	<1	N	N	<10
JS104	N	N	20	500	<1	N	N	10
JS105	N	N	30	700	1.5	N	N	15
JS106	N	N	20	700	1	N	N	10
JS107	.5	N	30	500	1.5	N	N	10
JS108	N	N	30	500	1	N	N	15
JS109	N	N	30	700	1	N	N	15
JS110	N	N	30	500	<1	N	N	15
JS111	N	N	20	500	1	N	N	10
JS112	N	N	15	500	1	N	N	10
JS113	N	N	20	300	<1	N	N	10
JS114	N	N	20	300	<1	N	N	10
JS115	N	N	20	300	<1	N	N	<10
JS116	N	N	30	700	1	N	N	15
JS117	N	N	20	700	1	N	N	15
JS118	N	N	20	700	1	N	N	10
JS119	N	N	15	700	1	N	N	<10
JS120	N	N	20	700	1	N	N	15
BS023	N	N	30	300	1	N	N	<10

TABLE 3. CHEMICAL ANALYSES FOR 192 STREAM-SEDIMENT SAMPLES, RICHFIELD QUADRANGLE, UTAH--Continued

Sample	CR PPM-S	CU PPM-S	GA PPM-S	GE PPM-S	LA PPM-S	MN PPM-S	MO PPM-S	NB PPM-S
JS062	50	10	15	N	<50	700	N	N
JS063	30	15	15	N	<50	700	N	N
JS064	100	10	20	N	50	700	N	<20
JS065	100	30	20	N	50	1,000	<5	N
JS066	100	20	20	N	<50	700	N	N
JS067	50	20	20	N	<50	700	N	N
JS068	70	10	20	N	<50	700	N	N
JS069	50	20	30	N	<50	1,000	N	20
JS070	50	20	30	N	<50	700	N	<20
JS071	30	20	30	N	<50	1,000	N	30
JS072	150	30	30	N	<50	700	N	<20
JS073	30	15	10	N	<50	700	N	N
JS074	20	15	15	N	<50	700	N	N
JS075	100	30	50	N	<50	700	N	N
JS076	100	30	30	N	<50	1,000	N	N
JS077	70	20	30	N	50	700	N	<20
JS078	150	30	30	N	<50	700	N	<20
JS079	150	30	20	N	<50	700	N	<20
JS080	300	50	30	N	<50	1,000	N	<20
JS081	200	30	30	N	<50	1,000	N	<20
JS082	150	20	20	N	<50	1,000	N	<20
JS083	100	30	15	N	<50	1,000	N	<20
JS084	100	30	20	N	<50	1,000	N	<20
JS085	70	20	20	N	<50	700	N	<20
JS086	70	30	20	N	<50	700	N	<20
JS087	150	30	20	N	<50	700	N	<20
JS088	100	30	15	N	<50	700	N	<20
JS089	100	30	20	N	<50	1,000	N	<20
JS090	50	20	20	N	<50	700	N	<20
JS091	30	30	30	N	<50	700	N	<20
JS092	100	20	20	N	<50	700	N	<20
JS093	50	20	20	N	<50	700	N	N
JS094	70	20	30	N	<50	1,000	N	N
JS095	50	20	10	N	<50	700	N	N
JS096	150	30	30	N	70	700	N	<20
JS097	70	30	20	N	<50	700	N	N
JS098	70	30	30	N	<50	700	N	<20
JS099	50	30	30	N	50	1,000	N	<20
JS100	70	30	20	N	<50	700	N	<20
JS101	70	30	20	N	<50	700	N	N
JS102	50	20	15	N	N	500	N	N
JS103	70	20	15	N	N	700	N	N
JS104	50	15	15	N	<50	700	N	<20
JS105	70	30	20	N	<50	1,000	N	<20
JS106	70	30	20	N	<50	1,000	N	<20
JS107	100	30	15	N	<50	700	<5	<20
JS108	70	20	20	N	<50	700	<5	N
JS109	70	30	20	N	<50	700	N	<20
JS110	100	30	20	N	<50	700	N	N
JS111	70	30	15	N	<50	700	N	<20
JS112	70	15	30	N	<50	1,000	<5	20
JS113	70	20	15	N	N	500	<5	N
JS114	100	20	15	N	<50	700	N	N
JS115	70	15	15	N	<50	500	N	N
JS116	70	50	30	N	<50	700	N	<20
JS117	70	30	20	N	<50	700	N	<20
JS118	150	20	20	N	<50	700	N	20
JS119	50	15	15	N	<50	300	N	<20
JS120	100	30	20	N	<50	700	N	<20
BS023	70	15	10	N	<50	300	<5	N

TABLE 3. CHEMICAL ANALYSES FOR 192 STREAM-SEDIMENT SAMPLES, RICHFIELD QUADRANGLE, UTAH--Continued

Sample	NI PPM-S	PB PPM-S	SB PPM-S	SC PPM-S	SN PPM-S	SR PPM-S	TH PPM-S	V PPM-S	W PPM-S
JS062	<5	50	N	7	N	300	N	100	N
JS063	5	30	N	5	N	300	N	70	N
JS064	<5	50	N	7	N	300	N	100	N
JS065	50	50	N	15	N	300	N	150	N
JS066	15	50	N	7	N	200	N	150	N
JS067	10	50	N	7	N	300	N	70	N
JS068	5	50	N	7	N	300	N	100	N
JS069	10	50	N	7	N	300	N	100	N
JS070	10	50	N	7	N	500	N	100	N
JS071	7	70	N	7	N	300	N	100	N
JS072	15	50	N	10	N	500	N	100	N
JS073	<5	50	N	<5	N	150	N	70	N
JS074	5	50	N	5	N	100	N	70	N
JS075	30	50	N	15	N	300	N	150	N
JS076	20	70	N	7	N	300	N	150	N
JS077	10	50	N	7	N	300	N	150	N
JS078	20	50	N	7	N	500	N	200	N
JS079	30	50	N	10	N	300	N	150	N
JS080	50	50	N	10	N	300	N	300	N
JS081	30	50	N	7	N	500	N	200	N
JS082	30	50	N	7	N	200	N	150	N
JS083	20	50	N	7	N	300	N	200	N
JS084	20	50	N	10	N	300	N	200	N
JS085	10	30	N	7	N	300	N	200	N
JS086	15	50	N	7	N	500	N	150	N
JS087	15	50	N	7	N	300	N	200	N
JS088	20	30	N	10	N	300	N	200	N
JS089	15	50	N	7	N	300	N	150	N
JS090	10	50	N	7	N	500	N	150	N
JS091	20	50	N	10	N	300	N	150	N
JS092	10	50	N	7	N	300	N	200	N
JS093	7	50	N	5	N	200	N	70	N
JS094	7	50	N	7	N	300	N	150	N
JS095	10	30	N	<5	N	200	N	70	N
JS096	20	50	N	7	N	300	N	300	N
JS097	15	50	N	7	N	200	N	150	N
JS098	20	50	N	7	N	300	N	150	N
JS099	20	50	N	10	N	300	N	150	N
JS100	20	50	N	7	N	300	N	150	N
JS101	20	50	N	5	N	200	N	100	N
JS102	7	30	N	5	N	150	N	30	N
JS103	7	30	N	<5	N	150	N	50	N
JS104	10	50	N	5	N	200	N	70	N
JS105	10	70	N	7	N	300	N	100	N
JS106	15	50	N	7	N	300	N	70	N
JS107	30	30	N	7	N	300	N	100	N
JS108	20	50	N	7	N	200	N	70	N
JS109	30	50	N	10	N	300	N	100	N
JS110	30	50	N	7	N	200	N	70	N
JS111	20	30	N	7	N	200	N	100	N
JS112	15	50	N	10	N	300	N	100	N
JS113	15	50	N	5	N	100	N	50	N
JS114	15	30	N	5	N	100	N	50	N
JS115	10	50	N	5	N	100	N	50	N
JS116	20	50	N	10	N	200	N	70	N
JS117	30	70	N	10	N	300	N	100	N
JS118	50	50	N	7	N	200	N	100	N
JS119	15	50	N	7	N	150	N	70	N
JS120	30	50	N	7	N	200	N	100	N
BS023	5	20	N	7	N	300	N	70	N

TABLE 3. CHEMICAL ANALYSES FOR 192 STREAM-SEDIMENT SAMPLES, RICHFIELD QUADRANGLE, UTAH--Continued

Sample	Y PPM-S	ZN PPM-S	ZR PPM-S	As/P PPM	Bi/P PPM	Cd/P PPM	Sb/P PPM	Zn/P PPM
JS062	15	N	200	8	<2	.5	<2	27
JS063	15	N	100	13	<2	.4	<2	17
JS064	20	N	200	7	<2	.6	<2	41
JS065	30	<200	500	32	<2	1.3	<2	80
JS066	15	N	200	26	<2	1.2	<2	54
JS067	20	N	150	8	<2	.4	<2	35
JS068	15	N	200	6	<2	1.1	<2	40
JS069	20	N	300	8	<2	.9	<2	38
JS070	20	N	200	<5	<2	.5	<2	57
JS071	20	N	300	<5	<2	.3	<2	51
JS072	20	N	500	<5	<2	.4	<2	66
JS073	15	N	100	<5	<2	.5	<2	43
JS074	15	N	70	<5	<2	.4	<2	27
JS075	20	N	300	52	<2	.8	<2	48
JS076	20	<200	150	11	<2	1.1	<2	82
JS077	20	N	150	8	<2	.4	<2	40
JS078	20	N	500	<5	<2	1.6	<2	59
JS079	20	N	150	9	<2	.9	<2	75
JS080	30	200	200	8	<2	2.6	<2	230
JS081	20	N	300	<5	<2	1.6	<2	56
JS082	20	N	500	16	<2	.4	<2	42
JS083	15	N	500	13	<2	.9	<2	56
JS084	20	N	200	13	<2	.7	<2	55
JS085	20	N	700	11	<2	1	<2	80
JS086	20	N	150	<5	<2	.4	<2	37
JS087	20	N	300	6	<2	1.2	<2	50
JS088	20	N	500	31	<2	.8	<2	47
JS089	20	N	200	9	<2	.7	<2	49
JS090	20	N	200	6	<2	.4	<2	41
JS091	20	N	300	13	<2	.6	<2	55
JS092	20	N	500	<5	<2	.9	<2	42
JS093	20	N	200	7	<2	.4	<2	29
JS094	20	N	300	<5	<2	.8	<2	47
JS095	15	N	150	11	<2	.4	<2	23
JS096	20	N	1,000	8	<2	2.2	<2	48
JS097	20	N	700	11	<2	1	<2	41
JS098	20	N	300	52	<2	.7	<2	56
JS099	20	N	500	7	<2	.6	<2	64
JS100	20	N	300	7	<2	.8	<2	40
JS101	20	N	150	15	<2	.5	<2	30
JS102	15	N	100	11	<2	.3	<2	22
JS103	15	N	100	12	<2	.3	<2	23
JS104	20	N	150	15	<2	.7	<2	39
JS105	20	N	700	<5	<2	.3	<2	43
JS106	30	N	500	<5	<2	.4	<2	43
JS107	20	N	700	8	<2	.6	<2	73
JS108	15	N	200	9	<2	.4	<2	30
JS109	30	N	700	7	<2	.6	<2	53
JS110	20	N	300	18	<2	.4	<2	34
JS111	30	N	1,000	7	<2	.3	<2	37
JS112	30	N	150	17	<2	.5	<2	37
JS113	15	N	150	9	<2	.3	<2	20
JS114	15	N	70	7	<2	.3	<2	20
JS115	15	N	100	6	<2	.3	<2	21
JS116	20	N	500	6	<2	.6	<2	61
JS117	20	N	700	<5	<2	.4	<2	48
JS118	30	N	700	5	<2	.3	<2	33
JS119	20	N	700	<5	<2	.2	<2	29
JS120	30	N	500	<5	<2	.5	<2	60
BS023	15	N	70	<5	<2	.3	<2	9

TABLE 3. CHEMICAL ANALYSES FOR 192 STREAM-SEDIMENT SAMPLES, RICHFIELD QUADRANGLE, UTAH--Continued

Sample	LATITUDE	LONGITUD	AU PPB	CA	%-S	FE	%-S	MG	%-S	NA	%-S	P	%-S	TI	%-S
BS025	38 58 44	113 24 36	<1	15		1.5		5		2		N			.15
BS026	38 58 45	113 24 41	<1	20		1.5		7		2		N			.1
BS032	38 58 43	113 24 43	<1	15		2		7		2		<.2			.1
BS033	38 58 58	113 23 37	<1	15		2		5		1.5		N			.15
BS034	38 59 40	113 39 17	<1	15		2		3		2		N			.15
BS035	38 59 42	113 39 15	9	15		1.5		3		1.5		N			.15
BS036	38 59 27	113 39 16	<1	15		1.5		7		2		N			.1
BS037	39 0 13	113 38 17	<1	15		2		2		2		N			.15
BS043	38 50 3	113 19 32	<1	15		3		1.5		1.5		N			.3
BS044	38 50 6	113 19 24	<1	15		3		1.5		1.5		N			.3
BS047	38 49 37	113 19 42	<1	15		7		2		1.5		N			.5
BS074	38 44 2	112 46 30	<1	2		3		.7		1.5		<.2			.3
BS075	38 44 25	112 45 53	<1	1.5		3		.7		2		<.2			.3
BS076	38 42 35	112 43 10	1	5		3		1		1		N			.5
BS077	38 45 1	112 46 20	<1	3		5		1		3		N			.2
BS080	38 45 6	112 46 22	1	3		2		1		3		N			.2
BS081	38 22 27	112 56 33	<1	1.5		5		.7		1.5		N			.7
JS 186	38 11 18	113 53 10	700	1.5		7		.7		1		N			.5
JS 187	38 11 16	113 53 4	<1	1.5		3		.7		2		N			.5
JS 188	38 11 15	113 53 4	21	1.5		5		1		2		N			.3
JS 190	38 10 47	113 47 3	<1	.5		3		.7		2		N			.5
JS 191	38 10 48	113 47 50	<1	.7		3		1		3		<.2			.5
JS 192	38 10 29	113 48 10	<1	.3		3		.7		3		N			.5
JS 193	38 10 32	113 47 44	<1	.3		3		.7		2		N			.5
JS 194	38 10 5	113 47 19	<1	.7		3		.7		5		N			.3
JS 195	38 9 49	113 47 11	10	.3		5		.7		2		N			.5
JS 196	38 9 43	113 47 14	<1	.3		3		.7		3		N			.3
JS 197	38 9 15	113 47 12	<1	5		3		1		5		N			.3
JS 198	38 9 0	113 47 47	<1	1		5		1		3		N			.3
JS 199	38 8 58	113 47 42	<1	.2		3		.7		3		N			.5
JS 200	38 10 18	113 47 3	7	.5		3		1		2		N			.3
JS 201	38 10 26	113 47 3	<1	.5		3		1		3		N			.3
JS 202	38 10 37	113 46 58	<1	.5		3		1		2		N			.3
JS 203	38 20 43	113 49 47	<1	1		5		1		2		N			.5
JS 204	38 20 3	113 47 8	<1	2		5		1		3		N			.5
JS 205	38 23 48	113 49 53	<1	3		2		1		3		N			.3
JS 206	38 23 41	113 50 15	<1	2		3		1		3		N			.5
JS 207	38 23 43	113 50 18	<1	2		5		.7		2		N			.5
JS 214	38 14 29	112 9 58	<1	5		7		1		2		N			.7
JS 215	38 14 26	112 9 59	<1	3		7		1		1.5		N			.7
JS 216	38 11 43	112 5 55	1	3		7		1		2		N			.5
JS 217	38 11 2	112 4 47	2	3		7		1		3		N			.7
JS 218	38 11 54	112 4 21	<1	3		7		.7		2		N			.5
JS 219	38 11 20	112 2 28	<1	3		7		1		3		N			.5
JS 220	38 9 54	112 3 15	<1	3		7		1		1.5		N			.5
JS 221	38 9 56	112 3 35	<1	3		10		1.5		2		N			.7
JS 222	38 9 44	112 2 30	<1	3		5		1		2		N			.3
BS404	38 19 40	112 13 45	16	3		5		2		1.5		<.2			.5
BS405	38 19 40	112 13 45	12	5		7		2		2		<.2			.7
BS406	38 19 37	112 13 36	2	3		7		2		2		<.2			.7
BS407	38 19 37	112 13 36	1	5		7		2		1		<.2			.5
BS408	38 19 38	112 13 38	18	3		5		2		2		<.2			.7
BS409	38 19 38	112 13 38	10	5		7		2		2		<.2			.7
BS421	38 22 9	112 15 31	90	.7		3		1.5		.7		N			.5
BS422	38 22 9	112 15 31	92	1		3		1.5		.7		<.2			.5
BS423	38 22 11	112 15 31	15	.7		3		1		.7		<.2			.5
BS424	38 22 11	112 15 31	22	.7		3		1		.7		N			.5
BS426	38 16 0	112 15 38	1	5		7		2		1.5		<.2			.7
BS427	38 16 0	112 15 38	1	7		7		2		3		N			1
BS428	38 23 23	112 16 22	17	3		5		1.5		.5		<.2			.5

TABLE 3. CHEMICAL ANALYSES FOR 192 STREAM-SEDIMENT SAMPLES, RICHFIELD QUADRANGLE, UTAH--Continued

Sample	AG PPM-S	AS PPM-S	B PPM-S	BA PPM-S	BE PPM-S	BI PPM-S	CD PPM-S	CO PPM-S
BS025	N	N	30	500	1.5	N	N	<10
BS026	N	N	30	500	1	N	N	<10
BS032	N	N	30	500	1.5	N	N	<10
BS033	N	N	30	700	1	N	N	10
BS034	N	N	30	300	1	N	N	<10
BS035	N	N	30	1,000	1.5	N	N	<10
BS036	N	N	30	300	<1	N	N	<10
BS037	N	N	30	700	1.5	N	N	<10
BS043	N	N	30	500	1	N	N	<10
BS044	N	N	30	500	1	N	N	10
BS047	N	N	20	500	<1	N	N	15
BS074	N	N	30	300	2	N	N	<10
BS075	N	N	30	500	1.5	N	N	10
BS076	N	N	30	500	1.5	N	N	15
BS077	N	<200	50	500	7	N	N	<10
BS080	N	N	30	300	2	N	N	N
BS081	N	N	20	300	1.5	N	N	<10
JS 186	N	N	10	1,500	1	N	N	15
JS 187	N	N	15	700	1	N	N	15
JS 188	N	N	15	700	<1	N	N	15
JS 190	N	N	20	700	1.5	N	N	20
JS 191	N	N	15	700	1	N	N	20
JS 192	N	N	15	700	1.5	N	N	15
JS 193	N	N	15	700	1.5	N	N	20
JS 194	N	N	20	700	1.5	N	N	15
JS 195	N	N	15	1,000	1.5	N	N	15
JS 196	N	N	20	700	1.5	N	N	10
JS 197	N	N	20	1,000	1.5	N	N	10
JS 198	N	N	15	700	1.5	N	N	15
JS 199	N	N	20	700	1	N	N	15
JS 200	N	N	20	700	1.5	N	N	15
JS 201	N	N	20	700	1.5	N	N	15
JS 202	N	N	20	700	1.5	N	N	15
JS 203	N	N	20	1,000	1	N	N	20
JS 204	N	N	<10	1,000	1	N	N	30
JS 205	N	N	15	700	1.5	N	N	10
JS 206	N	N	20	700	1.5	N	N	15
JS 207	N	N	15	1,000	1.5	N	N	15
JS 214	N	N	N	700	<1	N	N	30
JS 215	N	N	N	1,000	<1	N	N	30
JS 216	N	N	<10	1,000	<1	N	N	30
JS 217	N	N	<10	1,000	<1	N	N	30
JS 218	N	N	N	1,000	<1	N	N	20
JS 219	N	N	<10	1,000	<1	N	N	50
JS 220	N	N	10	1,000	<1	N	N	20
JS 221	N	N	N	700	<1	N	N	30
JS 222	N	N	<10	1,000	<1	N	N	20
BS404	N	N	10	700	1	N	N	20
BS405	N	N	20	700	1	N	N	20
BS406	N	N	20	500	1.5	N	N	20
BS407	N	N	20	700	1	N	N	20
BS408	N	N	20	700	1.5	N	N	20
BS409	N	N	10	1,000	1	N	N	20
BS421	1	N	50	700	2	N	N	<10
BS422	3	<200	50	1,500	2	N	N	10
BS423	<.5	N	50	700	2	N	N	10
BS424	<.5	N	50	700	2	N	N	10
BS426	N	N	10	700	1	N	N	20
BS427	N	N	10	1,000	<1	N	N	30
BS428	<.5	N	50	700	1.5	N	N	15

TABLE 3. CHEMICAL ANALYSES FOR 192 STREAM-SEDIMENT SAMPLES, RICHFIELD QUADRANGLE, UTAH--Continued

Sample	CR PPM-S	CU PPM-S	GA PPM-S	GE PPM-S	LA PPM-S	MN PPM-S	MO PPM-S	NB PPM-S
BS025	70	30	20	N	<50	300	N	N
BS026	100	20	15	N	<50	300	<5	N
BS032	100	20	15	N	<50	500	N	N
BS033	100	20	20	N	50	500	N	N
BS034	70	30	20	N	<50	300	N	<20
BS035	70	20	20	N	<50	300	N	N
BS036	50	20	15	N	<50	300	N	N
BS037	70	20	20	N	<50	700	N	<20
BS043	70	20	20	N	<50	1,000	N	N
BS044	70	20	15	N	<50	1,000	N	N
BS047	100	20	20	N	<50	1,000	N	<20
BS074	50	15	15	N	<50	700	N	<20
BS075	70	20	20	N	<50	700	N	<20
BS076	70	20	10	N	<50	1,000	N	<20
BS077	50	15	50	N	<50	1,500	<5	<20
BS080	30	20	20	N	<50	700	N	N
BS081	70	30	20	N	70	700	N	20
JS 186	200	30	20	N	<50	500	N	<20
JS 187	100	20	30	N	<50	700	N	<20
JS 188	150	20	30	N	<50	700	N	N
JS 190	100	20	30	N	<50	700	N	20
JS 191	100	30	50	N	50	700	N	<20
JS 192	70	20	50	N	<50	700	N	20
JS 193	100	20	30	N	<50	700	N	<20
JS 194	100	20	50	N	50	700	N	<20
JS 195	150	20	50	N	<50	700	N	<20
JS 196	100	20	20	N	<50	500	N	<20
JS 197	70	30	50	N	<50	700	N	<20
JS 198	100	30	50	N	50	700	N	<20
JS 199	100	30	30	N	<50	700	N	<20
JS 200	100	30	30	N	50	700	N	<20
JS 201	100	30	30	N	<50	700	N	<20
JS 202	100	30	30	N	50	700	N	20
JS 203	100	20	50	N	<50	700	N	20
JS 204	100	20	50	N	50	700	N	<20
JS 205	30	15	30	N	50	500	N	<20
JS 206	100	20	50	N	50	700	N	<20
JS 207	70	20	30	N	70	700	N	20
JS 214	150	30	20	N	<50	1,000	N	<20
JS 215	100	30	20	N	<50	1,000	N	<20
JS 216	100	30	20	N	<50	1,000	N	<20
JS 217	150	30	30	N	50	1,000	N	<20
JS 218	100	30	20	N	<50	1,000	N	<20
JS 219	150	30	30	N	<50	1,000	N	<20
JS 220	20	20	20	N	<50	1,000	N	<20
JS 221	30	30	30	N	<50	1,000	N	<20
JS 222	20	20	20	N	<50	700	N	<20
BS404	200	50	30	N	<50	1,000	N	N
BS405	200	50	30	N	<50	1,000	N	<20
BS406	300	50	30	N	<50	700	N	<20
BS407	200	30	15	N	<50	1,000	N	<20
BS408	150	50	30	N	<50	1,000	N	<20
BS409	200	50	30	N	50	1,000	N	<20
BS421	150	30	15	N	<50	500	N	<20
BS422	200	50	30	N	<50	700	N	<20
BS423	70	30	10	N	<50	700	N	N
BS424	70	30	15	N	<50	700	N	<20
BS426	150	30	20	N	<50	1,000	N	N
BS427	300	50	50	N	<50	1,000	N	N
BS428	70	30	15	N	<50	1,000	N	N

TABLE 3. CHEMICAL ANALYSES FOR 192 STREAM-SEDIMENT SAMPLES, RICHFIELD QUADRANGLE, UTAH--Continued

Sample	NI PPM-S	PB PPM-S	SB PPM-S	SC PPM-S	SN PPM-S	SR PPM-S	TH PPM-S	V PPM-S	W PPM-S
BS025	7	50	N	7	N	300	N	70	N
BS026	7	30	N	5	N	300	N	50	N
BS032	7	30	N	7	N	300	N	70	N
BS033	10	30	N	7	N	500	N	100	N
BS034	15	30	N	7	N	300	N	100	N
BS035	7	30	N	7	N	300	N	70	N
BS036	7	30	N	<5	N	200	N	70	N
BS037	10	30	N	7	N	300	N	70	N
BS043	10	50	N	5	N	500	N	100	N
BS044	15	50	N	5	N	500	N	100	N
BS047	20	30	N	7	N	500	N	200	N
BS074	5	30	N	5	50	200	N	70	N
BS075	15	50	N	5	N	200	N	70	N
BS076	30	30	N	7	N	300	N	100	N
BS077	5	50	N	5	N	200	N	70	N
BS080	<5	50	N	5	N	200	N	70	N
BS081	5	30	N	7	<10	300	N	150	N
JS 186	20	50	N	10	N	300	N	200	N
JS 187	15	70	N	10	N	300	N	150	N
JS 188	30	70	N	10	N	300	N	150	N
JS 190	20	30	N	7	N	300	N	150	N
JS 191	30	50	N	10	N	300	N	150	N
JS 192	15	50	N	7	N	300	N	150	N
JS 193	20	50	N	10	N	300	N	150	N
JS 194	15	50	N	10	N	300	N	150	N
JS 195	15	50	N	10	N	300	N	150	N
JS 196	7	30	N	7	N	200	N	100	N
JS 197	10	50	N	7	N	300	N	100	N
JS 198	15	50	N	10	N	300	N	150	N
JS 199	10	30	N	7	N	200	N	100	N
JS 200	15	30	N	10	N	300	N	150	N
JS 201	10	50	N	7	N	300	N	150	N
JS 202	10	50	N	10	N	300	N	150	N
JS 203	15	50	N	10	N	300	N	150	N
JS 204	20	50	N	10	N	300	N	200	N
JS 205	<5	50	N	7	N	300	N	100	N
JS 206	10	50	N	10	N	300	N	150	N
JS 207	10	50	N	10	N	300	N	150	N
JS 214	20	30	N	10	N	500	N	200	N
JS 215	15	30	N	15	N	500	N	200	N
JS 216	15	30	N	15	N	500	N	200	N
JS 217	20	50	N	10	N	500	N	200	N
JS 218	15	30	N	7	N	500	N	200	N
JS 219	50	30	N	10	N	500	N	200	N
JS 220	5	30	N	10	N	500	N	150	N
JS 221	7	30	N	10	N	500	N	200	N
JS 222	<5	20	N	7	N	500	N	150	N
BS404	70	50	N	15	N	300	N	150	N
BS405	70	50	N	15	N	300	N	150	N
BS406	100	50	N	15	N	500	N	150	N
BS407	100	20	N	15	N	500	N	200	N
BS408	50	50	N	10	N	500	N	150	N
BS409	50	50	N	15	N	500	N	200	N
BS421	15	30	N	7	N	N	N	150	N
BS422	15	30	N	7	N	<100	N	300	N
BS423	15	30	N	7	N	<100	N	150	N
BS424	20	30	N	7	N	<100	N	150	N
BS426	70	30	N	15	N	700	N	300	N
BS427	70	30	N	20	N	1,000	N	300	N
BS428	30	50	N	10	N	200	N	200	N

TABLE 3. CHEMICAL ANALYSES FOR 192 STREAM-SEDIMENT SAMPLES, RICHFIELD QUADRANGLE, UTAH--Continued

Sample	Y PPM-S	ZN PPM-S	ZR PPM-S	As/P PPM	Bi/P PPM	Cd/P PPM	Sb/P PPM	Zn/P PPM
BS025	15	N	70	<5	<2	.3	<2	21
BS026	15	N	100	<5	<2	.3	<2	9
BS032	20	N	100	<5	<2	.4	<2	20
BS033	30	N	150	<5	<2	.4	<2	25
BS034	15	N	300	<5	<2	.4	<2	25
BS035	15	N	100	6	<2	.6	<2	47
BS036	10	N	70	5	<2	.3	<2	14
BS037	15	N	200	<5	<2	.4	<2	30
BS043	20	N	150	10	<2	.4	<2	33
BS044	15	N	150	7	<2	.3	<2	29
BS047	20	<200	200	5	<2	.7	<2	40
BS074	20	N	300	6	<2	.3	<2	30
BS075	20	N	200	<5	<2	.3	<2	36
BS076	20	N	200	<5	<2	.3	<2	42
BS077	100	N	150	130	<2	.5	<2	210
BS080	20	N	150	14	<2	.3	<2	33
BS081	50	N	1,000	<5	<2	.4	<2	32
JS 186	20	<200	700	9	<2	1.5	<2	60
JS 187	20	N	300	9	<2	.8	<2	85
JS 188	20	N	300	7	<2	.9	<2	62
JS 190	20	N	500	9	<2	.7	<2	57
JS 191	20	N	500	6	<2	.5	<2	53
JS 192	20	N	300	8	<2	.3	<2	48
JS 193	20	N	500	12	<2	.6	<2	74
JS 194	20	N	500	10	<2	.4	<2	51
JS 195	20	N	1,000	13	<2	.8	<2	57
JS 196	20	N	300	7	<2	.4	<2	55
JS 197	20	N	300	14	<2	.4	<2	53
JS 198	20	N	700	10	<2	.5	<2	55
JS 199	15	N	200	10	<2	.4	<2	59
JS 200	20	N	300	10	<2	.3	<2	57
JS 201	20	N	300	10	<2	.5	<2	60
JS 202	20	N	300	10	<2	.3	<2	63
JS 203	20	N	300	9	<2	.6	<2	60
JS 204	30	N	200	11	<2	.9	<2	82
JS 205	15	N	300	6	<2	.4	<2	50
JS 206	20	N	150	<5	<2	.3	<2	64
JS 207	20	N	200	<5	<2	.2	<2	76
JS 214	30	<200	150	27	<2	1.7	<2	170
JS 215	20	N	100	13	<2	1.2	<2	130
JS 216	30	N	150	12	<2	1	2	110
JS 217	30	N	200	18	<2	2.2	7	110
JS 218	20	N	150	31	<2	1.5	5	160
JS 219	20	N	150	49	<2	1.4	6	160
JS 220	20	<200	150	18	<2	1	<2	110
JS 221	20	<200	200	14	<2	1.8	<2	170
JS 222	20	N	150	38	<2	1	11	97
BS404	20	N	200	17	<2	.3	4	51
BS405	30	N	200	14	<2	.3	<2	54
BS406	20	N	200	5	<2	.3	<2	70
BS407	20	N	200	6	<2	.3	<2	68
BS408	20	N	300	14	<2	.4	<2	53
BS409	30	N	200	15	<2	.5	<2	57
BS421	20	N	200	117	<2	.1	3	20
BS422	30	N	500	128	<2	.1	4	18
BS423	20	N	300	32	<2	.1	4	26
BS424	30	N	300	34	<2	<.1	<2	30
BS426	30	N	150	<5	<2	.4	<2	78
BS427	30	N	200	<5	<2	.4	<2	80
BS428	20	N	500	14	<2	.4	3	68

TABLE 3. CHEMICAL ANALYSES FOR 192 STREAM-SEDIMENT SAMPLES, RICHFIELD QUADRANGLE, UTAH--Continued

Sample	LATITUDE	LONGITUD	AU PPB	CA	%-S	FE	%-S	MG	%-S	NA	%-S	P	%-S	TI	%-S
BS429	38 23 23	112 16 22	95	7		5		2		.7		<.2		.7	
BS443	38 8 48	112 35 6	1	3		7		1		.7		N		1	
BS444	38 8 47	112 35 1	<1	1.5		10		1		1.5		N		>1	
BS445	38 8 47	112 35 1	<1	1.5		10		1.5		1.5		N		>1	
BS448	38 8 46	112 34 52	<1	1.5		10		1		1		N		>1	
BS449	38 8 50	112 35 4	1	2		7		1		1		N		1	
BS450	38 5 45	112 34 4	<1	2		7		1		.7		N		1	
BS451	38 5 46	112 34 3	<1	2		10		1.5		1		<.2		1	
BS456	38 5 37	112 33 48	<1	3		7		1.5		1.5		N		.7	
BS457	38 5 37	112 33 48	<1	3		7		1.5		1		N		1	
BS474	38 28 50	112 23 23	600	.7		5		1		2		.2		.7	
BS475	38 28 50	112 23 23	130	.7		5		1.5		3		.2		1	

TABLE 3. CHEMICAL ANALYSES FOR 192 STREAM-SEDIMENT SAMPLES, RICHFIELD QUADRANGLE, UTAH--Continued

Sample	AG PPM-S	AS PPM-S	B PPM-S	BA PPM-S	BE PPM-S	BI PPM-S	CD PPM-S	CO PPM-S
BS429	.7	N	50	700	1.5	N	N	20
BS443	N	N	20	500	<1	N	N	20
BS444	N	N	20	500	<1	N	N	70
BS445	N	N	10	700	<1	N	N	50
BS448	N	N	15	500	<1	N	N	50
BS449	N	N	15	500	<1	N	N	30
BS450	N	N	N	500	1.5	N	N	30
BS451	N	N	N	500	<1	N	N	30
BS456	N	N	<10	700	<1	N	N	30
BS457	N	N	<10	500	<1	N	N	50
BS474	1.5	N	20	1,000	7	N	N	15
BS475	.7	N	15	1,000	7	N	N	15

TABLE 3. CHEMICAL ANALYSES FOR 192 STREAM-SEDIMENT SAMPLES, RICHFIELD QUADRANGLE, UTAH--Continued

Sample	CR PPM-S	CU PPM-S	GA PPM-S	GE PPM-S	LA PPM-S	MN PPM-S	MO PPM-S	NB PPM-S
BS429	100	30	30	N	<50	1,500	N	<20
BS443	70	30	20	N	<50	700	N	N
BS444	200	30	30	N	<50	1,500	N	N
BS445	200	30	30	N	N	1,500	N	N
BS448	150	30	30	N	<50	1,500	N	<20
BS449	150	30	20	N	<50	1,500	N	N
BS450	150	30	20	N	<50	1,500	N	N
BS451	70	30	20	N	N	1,500	N	N
BS456	150	30	30	N	N	1,500	N	N
BS457	150	30	30	N	N	1,500	N	N
BS474	70	30	30	N	50	1,000	N	20
BS475	70	30	50	N	50	1,500	N	20

TABLE 3. CHEMICAL ANALYSES FOR 192 STREAM-SEDIMENT SAMPLES, RICHFIELD QUADRANGLE, UTAH--Continued

Sample	NI PPM-S	PB PPM-S	SB PPM-S	SC PPM-S	SN PPM-S	SR PPM-S	TH PPM-S	V PPM-S	W PPM-S
BS429	30	70	N	15	N	300	N	200	N
BS443	15	30	N	15	N	300	N	500	N
BS444	30	30	N	20	N	300	N	700	N
BS445	30	50	N	20	N	300	N	700	N
BS448	30	30	N	20	N	300	N	700	N
BS449	15	30	N	15	N	300	N	500	N
BS450	15	30	N	15	N	500	N	700	N
BS451	15	30	N	15	N	500	N	500	N
BS456	15	30	N	20	N	500	N	300	N
BS457	20	30	N	20	N	500	N	500	N
BS474	10	70	N	7	10	300	N	100	N
BS475	10	70	N	10	10	300	N	150	N

TABLE 3. CHEMICAL ANALYSES FOR 192 STREAM-SEDIMENT SAMPLES, RICHFIELD QUADRANGLE, UTAH--Continued

Sample	Y PPM-S	ZN PPM-S	ZR PPM-S	As/P PPM	Bi/P PPM	Cd/P PPM	Sb/P PPM	Zn/P PPM
BS429	30	N	300	14	<2	.4	2	63
BS443	30	<200	200	<5	<2	1	<2	98
BS444	30	N	300	<5	<2	1.7	<2	152
BS445	30	N	300	<5	<2	1.5	<2	139
BS448	30	N	300	<5	<2	1.2	<2	120
BS449	20	N	150	<5	<2	1.2	<2	115
BS450	20	N	70	<5	<2	1.5	<2	120
BS451	20	N	70	<5	<2	1.2	<2	103
BS456	20	N	70	<5	<2	1	<2	86
BS457	20	N	150	<5	<2	.8	<2	87
BS474	30	N	500	<5	<2	.3	<2	66
BS475	30	N	300	<5	<2	.4	<2	61