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UNITED STATES GEOLOGICAL SURVEY

QUARTERLY REPORT FOR SILVER CREEK TAILINGS SITE INVESTIGATION

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CONTENTS

Page

Introductory matrerial..... 1

FIGURES

Figure 1. Map showing location surface-water monitoring sites.... 2
2. Map showing location ground-water monitoring sites..... 7
3. Map of the Prospector Square area, showing the approximate potentiometric surface, October 1987..... 15

TABLES

Table 1. Selected results of surface-water sampling on April 29, 1987..... 3
2. Selected results of surface-water sampling on July 9, 1987..... 5
3. Selected results of ground-water samplig from August 31 to September 3, 1987..... 8
4. Lithologic logs of monitoring wells..... 10
5. Selected monitoring well data..... 13
6. Water levels in monitoring wells..... 14

Unpublished Records
Subject to Revision

UNITED STATES GEOLOGICAL SURVEY

QUARTERLY REPORT FOR SILVER CREEK TAILINGS SITE INVESTIGATION

by

Jim Mason

This report is one of a series of quarterly reports to be prepared by the U.S. Geological Survey as part of a cooperative study with the Utah Division of Environmental Health. This report is a compilation of the results of data collected at the Silver Creek Tailings Site, Park City, Utah and analyzed by the Environmental Protection Agency, Utah Division of Environmental Health, and the U.S. Geological Survey between about April 1 and October 14, 1987. Most of the data is preliminary in nature, but provides a basis in determining the the extent of the problem. The types of data included in this report are results of drilling operations, including well completion data, descriptions of materials encountered, water levels, and site locations and results of laboratory analyses from surface- and ground-water samples. The report also includes a map showing the potentiometric surface of water in unconsolidated deposits measured on October 14, 1987.

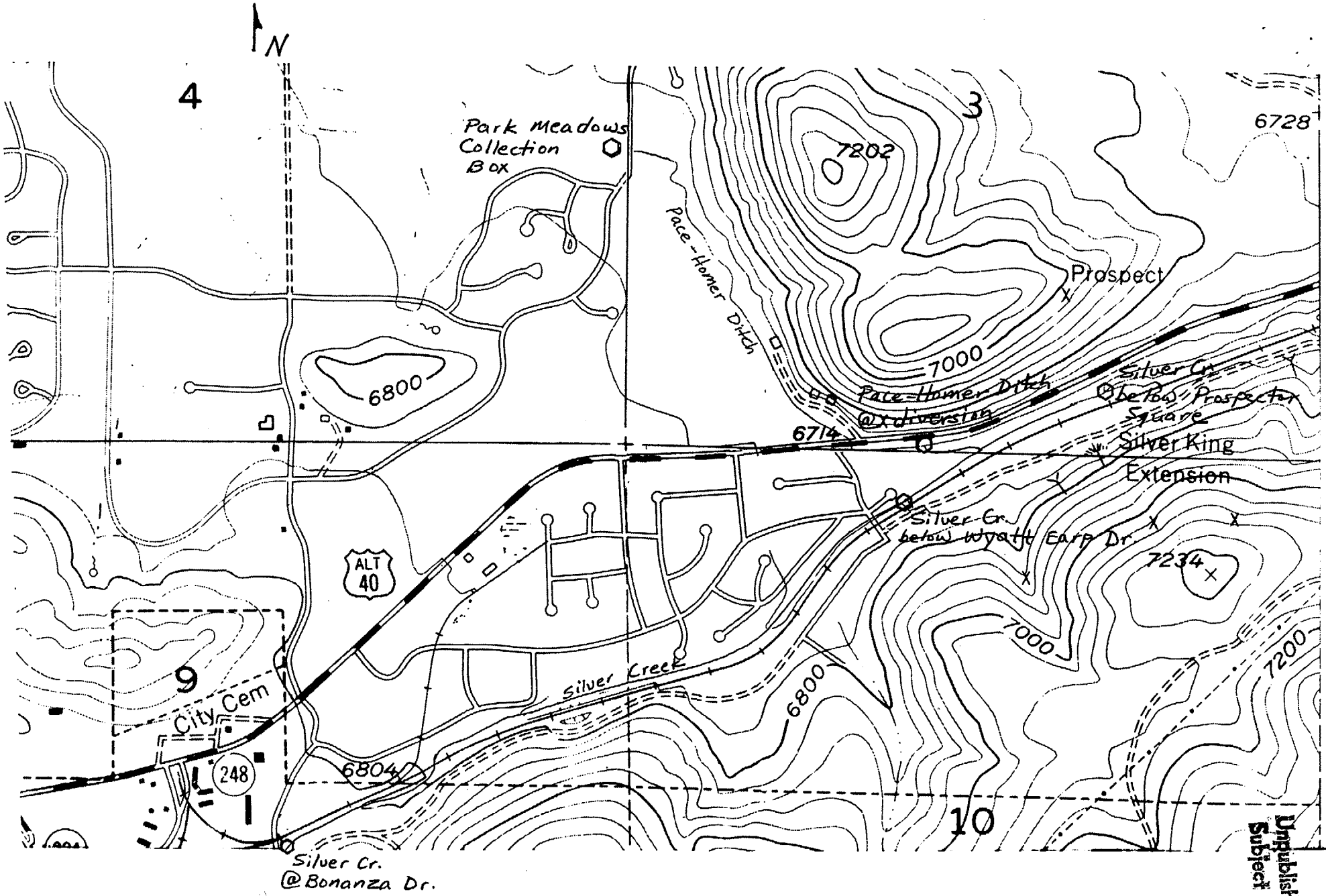

Figure 1. -- Location of surface-water monitoring sites.

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Table 1.--Selected results of surface water sampling on April 29,1987

	Silver Creek at Bonanza Drive Q = 0.76 ft³/sec pH = 8.6 K = 990			Silver Creek at Wyatt Earp Drive Q = 0.65 ft³/sec pH = 8.6 K = 1,080			Silver Creek below Prospector Square Q = 2.2 ft³/sec pH = 7.5 K - 990	
	USGS	State	EPA	USGS	State	EPA	State	EPA
				Dissolved (µg/L)				
Arsenic	5	5.5	<10	5	4.5	<10	5.5	<10
Lead	10	10	7	10	10	9	10	8
Iron	8	40	<60	4	<20	<60	<20	<60
Manganese	130	120	122	280	260	259	360	353
Mercury	.1	<.25	<.4	.1	.2	<.2	.25	<.2
Zinc	68	59	62	80	70	68	590	559
Cadmium	1	1	<4	2	2	<4	4	<4
Barium	83	74	<70	84	75	<70	41	<70
				Totals (µg/L)				
Arsenic	--	18	27	--	14	17	10	12
Lead	--	700	580	--	430	330	165	166
Iron	--	1,600	2,350	--	1,100	1,860	580	810
Manganese	--	290	*27	--	350	309	410	382
Mercury	--	0.75	<.2	--	.55	<.2	0.65	<.2
Zinc	--	870	871	--	560	525	780	755
Cadmium	--	5	<4	--	4	<4	6	<4
Barium	--	90	80	--	80	<70	44	<70
				Sediment (mg/kg)				
Arsenic	--	180	2,173	--	--	229	300	256
Lead	--	4,500	5,900	--	--	3,910	4,300	5,960
Iron	--	22,000	54,500	--	--	30,600	30,000	36,400
Manganese	--	1,400	*5,020	--	--	*1,430	1,300	*1,570
Mercury	--	2.5	16	--	--	24	5.5	8.5
Zinc	--	4,000	7,390	--	--	6,130	9,300	8,320
Cadmium	--	29	*43	--	--	*33	72	*45
Barium	--	180	*263	--	--	*200	37	*213

*Questionable value

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Table 1.--Selected results of surface water sampling on April 29,1987--Continued

	Park Meadows Collection Box Q = 0.08 ft³/sec pH = 8.0 K = 720		Pace Homer Ditch at diversion Q = 1.3 ft³/sec pH = 7.9 K = 830		Silver Creek Below Prospector Square Q = 2.2 ft³/sec pH = 7.5 K = 990	
	State	EPA	State	EPA	State	EPA
			Dissolved (µg/L)			
Arsenic	12.5	<10	5.5	<10	5.5	<10
Lead	<5	<5	5	*27	10	8
Iron	32	<60	580	110	<20	<60
Manganese	170	158	75	72	360	353
Mercury	0.2	<0.2	0.25	<0.2	0.25	<0.2
Zinc	33	32	52	63	590	559
Cadmium	<1	<4	<1	<4	4	<4
Barium	50	<70	23	<70	41	<70
			Totals (µg/L)			
Arsenic	10.5	10	7.5	<10	10	<10
Lead	<5	<5	30	*24	165	166
Iron	82	120	61	<60	580	810
Manganese	170	129	82	63	410	382
Mercury	.25	<.2	.75	<.2	.65	<.2
Zinc	31	29	62	73	780	755
Cadmium	<1	<4	<1	<4	6	<4
Barium	51	<70	25	<70	44	<70
			Sediment (mg/kg)			
Arsenic			190	159	300	256
Lead			3,600	3,786	4,300	5,960
Iron			25,000	24,500	30,000	36,400
Manganese			1,500	*1,430	1,300	*1,570
Mercury			7.0	1.1	5.5	8.5
Zinc			4,500	4,710	9,300	8,320
Cadmium			32	*23	72	*45
Barium			37	*77	210	*213

*Questionable value

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Table 2.--Selected results of surface water sampling on July 9, 1987

	Silver Creek at Bonanza Drive Q = 0.04 ft³/sec pH = 8.6 K = 925			Silver Creek at Wyatt Earp Drive Q = 0.002 ft³/sec pH = 8.0 K = 1,570			Silver Creek below Prospector Square Q = 0.24 ft³/sec pH = 7.4 K = 1,450	
	USGS	State	EPA	USGS	State	EPA	State	EPA
				Dissolved (μg/L)				
Arsenic	6	7	<10	2	3.2	<10	9.5	<10
Lead	10	20	<5	10	<5	<5	105	6.2
Iron	15	<20	29	4	<20	27	81	80
Manganese	12	11	18	*3	2900	2970	970	980
Mercury	.1	--	<.2	.1	--	<.2	--	<.2
Zinc	28	30	38	*3	3300	3500	2300	2380
Cadmium	1	<1	<4	13	17	17	7	6
Barium	61	51	49	73	62	60	49	46
				Totals (μg/L)				
Arsenic	6	7.5	<10	2	3.5	<10	16	12
Lead	21	20	42	18	<5	<5	105	161
Iron	150	120	192	90	72	94	79	759
Manganese	20	12	28	2400	2900	2860	1000	1050
Mercury	0.10	<0.2	<.2	0.10	<.2	<.4	<.2	.3
Zinc	50	57	77	3100	3300	3410	2500	2610
Cadmium	1	<1	<4	13	16	12	7	7.1
Barium	100	52	—	100	62	57	44	<70
				Sediment (mg/kg)				
Arsenic	--	58	—	--	46	--	58	--
Lead	--	3,200	—	--	960	--	7,700	--
Iron	--	23,000	—	--	24,000	--	32,000	--
Manganese	--	1,300	—	--	2,200	--	1,700	--
Mercury	--	3.6	—	--	2.2	--	6.5	--
Zinc	--	4,500	—	--	3,300	--	15,000	--
Cadmium	--	29	—	--	24	--	83	--
Barium	--	150	—	--	170	--	6.7	--

*Questionable value

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Table 2.--Selected results of surface water sampling on July 9, 1987--Continued

	Park Meadows Collection Box Q = 2.03 ft³/sec pH = 8.2 K = 825		Pace Homer Ditch at diversion Q = 2.5 ft³/sec pH = 8.2 K = 870		Silver Creek Below Prospector Square Q = 0.24 ft³/sec pH = 7.4 K = 1,450	
	State	EPA	State	EPA	State	EPA
			Dissolved (μg/L)			
Arsenic	18.5	17	12.5	11	9.5	<10
Lead	<5	<5	<5	<5	105	6.2
Iron	<20	<24	<20	29	81	80
Manganese	57	60	11	23	970	980
Mercury	--	<.2	--	<.2	--	<.2
Zinc	<15	16	26	24	2300	2380
Cadmium	<1	<4	<1	<4	7	6
Barium	22	22	30	29	49	46
			Totals (μg/L)			
Arsenic	19	18	13	12	16	12
Lead	<5	<5	<5	13	105	161
Iron	85	90	57	73	79	759
Manganese	83	86	33	31	2900	1050
Mercury	<.2	<.2	<.2	<.2	<.2	.3
Zinc	100	23	240	26	2500	2610
Cadmium	<1	<4	4	<4	7	7.1
Barium	23	22	31	30	47	46
			Sediment (mg/kg)			
Arsenic			220	--	370	--
Lead			4,600	--	7,700	--
Iron			22,000	--	32,000	--
Manganese			1,100	--	1,700	--
Mercury			16	--	6.5	--
Zinc			7,400	--	15,000	--
Cadmium			43	--	83	--
Barium			150	--	6.7	--

*Questionable value

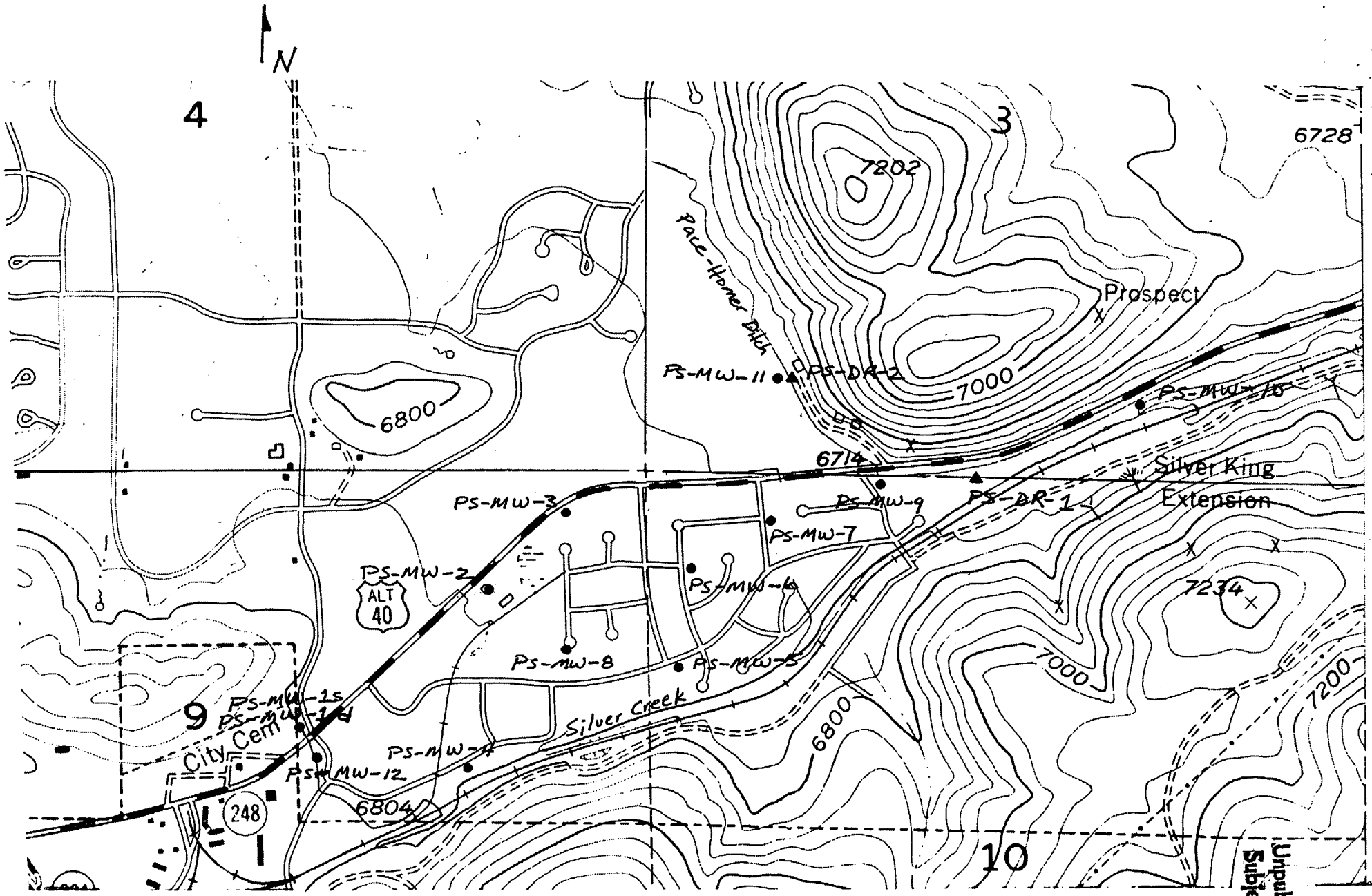

Figure 2.-- Location of ground-water monitoring sites.

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Table 3.--Selected results of ground-water sampling from August 31 to September 3, 1987

Dissolved Constituents (μg/l)

	PS-MW-1s pH = 6.8 K = 3,830			PS-MW-1d pH = 6.8 K = 1,840			PS-MW-12 pH = 7.8 K = 525		
	USGS	State	EPA	USGS	State	EPA	USGS	State	EPA
Arsenic	--	<1	<6	--	<1	<6	--	<1	<6
Lead	--	<5	<20	--	<5	<20	--	<5	*2.75
Iron	--	<20	<100	--	79	<100	--	670	<100
Manganese	--	94	99.1	--	430	434	--	43	39.4
Mercury	--	<.2	<.2	--	<.2	<.2	--	<.2	<.2
Zinc	--	25	22.5	--	19	<7	--	40	<7
Cadmium	--	<1	<4	--	19	<4	--	1	<4
Barium	--	96	100	--	89	91	--	52	53

	PS-MW-2 pH = 6.7 K = 1,740			PS-MW-4 pH = 6.4 K = 1,490			PS-MW-3 pH = 7.0 K = 1,730		
	USGS	State	EPA	USGS	State	EPA	USGS	State	EPA
Arsenic	--	<1	<6	--	<1	<6	--	<1	<6
Lead	--	<5	<2	--	<5	<2	--	<5	<20
Iron	--	95	<100	--	290	<100	--	<20	<100
Manganese	--	110	79.7	--	300	317	--	8	8.8
Mercury	--	<.2	<.2	--	<.2	<.2	--	<.2	<.2
Zinc	--	26	<7	--	1700	1940	--	<15	<7
Cadmium	--	1	<4	--	6	<4	--	<1	<4
Barium	--	53	47	--	27	*40	--	100	101

	PS-MW-5 pH = 6.5 K = 1,350			PS-MW-8 pH = 6.8 K = 1,470			PS-MW-6 pH = 6.5 K = 1,520		
	USGS	State	EPA	USGS	State	EPA	USGS	State	EPA
Arsenic	--	1.2	<6	--	<1	<6	--	<1	<6
Lead	--	<5	<2	--	<5	<2	--	<5	<2
Iron	--	380	<100	--	<20	<100	--	160	136
Manganese	--	120	126	--	420	441	--	440	8.8
Mercury	--	<.2	<.2	--	<.2	<.2	--	<.2	<.2
Zinc	--	2100	2460	--	2800	3210	--	1100	1210
Cadmium	--	39	7.1	--	29	17.9	--	35	5.9
Barium	--	38	42	--	23	*40	--	25	*40

* Questionable data

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Table 3.--Selected results of ground-water sampling from August 31 to September 3, 1987

	PS-MW-7 pH = 6.4 K = 1,570			PS-MW-9 pH = 7.2 K = 1,450			PS-MW-10 pH = 7.3 K = 1,120		
	USGS	State	EPA	USGS	State	EPA	USGS	State	EPA
Arsenic	--	1.5	<6	--	6.5	<6	--	28	23.2
Lead	--	<5	<2	--	<5	<20	--	<5	43.4
Iron	--	<20	<100	--	50	<100	--	<20	<100
Manganese	--	240	248	--	1200	1290	--	1100	1130
Mercury	--	<.2	<.2	--	<.2	<.2	--	<.2	<.2
Zinc	--	2000	2200	--	<15	7.7	--	1800	1950
Cadmium	--	15	8.1	--	<1	<4	--	7	8.6
Barium	--	21	*40	--	53	57	--	110	110

	PS-MW-11 pH = 6.6 K = 1,920			PS-DR-1 pH = 6.6 K = 1,610			PS-DR-2 pH = 6.8 K = 1,070		
	USGS	State	EPA	USGS	State	EPA	USGS	State	EPA
Arsenic	--	1.5	<6	--	13.5	7.6	--	4.5	<6
Lead	--	<5	<2	--	<5	<2	--	<5	<2
Iron	--	320	<100	--	860	750	--	5800	1860
Manganese	--	570	577	--	980	1050	--	560	575
Mercury	--	<.2	<.2	--	<.2	<.2	--	<.2	<.2
Zinc	--	18	9.9	--	3500	3980	--	450	116
Cadmium	--	3	<4	--	32	18.6	--	*845	<4
Barium	--	68	67	--	25	*40	--	50	50

* Questionable data

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Table 4.--Lithologic logs of monitoring wells

Location and Material	Thickness	Depth
PS-MW-1s (D-2-4)9bdd-1		
Alt. 6,791.87 feet.		
Fill, dark brown, soil mixed with sand and gravel.....	3	3
Clay, moderate brown, with interbedded sand and gravel, intermittent cobbles.....	10	13
Clay, silty, moderate brown, intermittent layers of gravel and cobbles.....	5	18
Cobbles, with interbedded clay and sand.....	1	19
Clay, moderate brown, interbedded with sand and gravel.....	5	24
Clay, moderate brown, interbedded sand and gravel, intermittent layers of cobbles.....	6	30
Gravel, with interbedded clay and sand.....	6	36
Clay, moderate brown, interbedded sand, intermittent thin layers of cobbles	3	39
Gravel, with interbedded clay and sand.....	8	47
PS-MW-1d (D-2-4)9bdd-2		
Alt. 6,791.06 feet.		
Lithology similar to PS-MW-1s for first 45 feet.		
Clay, moderate brown, interbedded sand, fine to coarse, minor amount of gravel, high plasticity.....	5	50
Clay, as above but low to medium plasticity.....	1	51
Sand, fine to coarse, with clay and gravel.....	3	54
Cobbles, with clay and sand...	1	55
Sand, fine to coarse, with interbedded clay and some gravel.....	7	62
Clay, moderate brown, with interbedded sand and numerous cobbles.....	7	69
Clay, moderate brown, with interbedded sand and some gravel, few cobbles.....	9	78
Clay, as above, high plasticity.....	5	83
Clay, as above, decreasing plasticity with increasing depth.....	2	85
Bedrock, silty shale, reddish brown.....	0.5	85.5
PS-MW-2 (D-2-4)9acc-2		
Alt. 6,758.44 feet.		
Fill, silt, sand, gravel, light brown.....	2.5	2.5
Silty sand, light brown, small amount of clay.....	2	4.5
Sandy clay, dark brown, intermittent gravel, 30 percent.....	2.5	7
Gravel, cobbles, up to 4 inches, 30 percent silty sand, moderate brown.....	3.5	10.5
Sand, gravel, moderate brown, intermittent cobble layers....	3.5	14
Clay, moderate brown, silt and sand present, intermittent cobble layers.....	7.5	21.5
Clay, silty, light to moderate brown, medium plasiticity, sand and gravel present, unsorted.....	9.5	31
Clay, moderate brown, medium plasticity, fine sand present.....	4	35
Gravel, coarse sand, angular...	1	36
Clay, moderate brown, with fine to medium sand, high plasticity, intermittent, thin cobble layers.....	8.5	44.5
PS-MW-3 (D-2-4)9aab-1		
Alt. 6,743.35 feet.		
Topsoil.....	1	1
Sand, light brown, medium grained, well sorted.....	2	3
Clay, moderate brown, minor amount of sand and gravel, low plasticity.....	3	6
Cobbles, with clay and sand, moderate brown.....	6	12
Clay, moderate brown, with fine sand, minor amount of cobbles.....	3	15
Clay, moderate brown, fine sand.....	1.5	16.5
Clay, moderate brown, with fine sand, intermittent gravel, rounded to angular....	9.5	26
Clay, moderate brown, with fine sand, medium to high plasticity, some gravel.....	9	35
Gravel, with clay and fine sand.....	1	36

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Table 4.--Lithologic logs of monitoring wells--Continued

Location and Material	Thickness	Depth
PS-MW-4 (D-2-4)9adc-1		
Alt. 6,773.42 feet.		
Sand, light brown, fine to coarse, well rounded, minor amount of gravel.....	0.5	0.5
Clay, dark brown, with minor amount of gravel, thin sand layer.....	4	4.5
Gravel, with sandy clay, medium plasticity, intermittent thin sand layers.....	5.5	10
Clay, red-brown, medium plasticity, with fine to medium sand, intermittent pebbles.....	3	13
Gravel, fine to coarse, angular, minor amount of fine sand.....	2	15
Clay, red-brown, with fine to medium sand and intermittent quartz pebbles.....	1	16
Gravel and cobbles, angular to subrounded, with minor amount of fine sand.....	3.5	19.5
Gravel and cobbles, with minor amount of clay, moderate brown, fine sand.....	1	20.5
Cobbles (minimal recovery).....	2.5	23
Clay, moderate brown, with fine sand and gravel.....	1.5	24.5
Cobbles (minimal recovery).....	1.5	26
Clay, moderate brown, with fine sand and gravel.....	5	31
Clay, moderate brown, in some layers, fine sand, intermittent cobble layers....	8	39
Clay, moderate brown, tight		
Sand, medium to coarse, poorly sorted, gravel present, interbedded clay.....	6	45
PS-MW-5 (D-2-4)10BCB-1		
Alt. 6,741.04 feet.		
Topsoil, silty sand, moderate brown.....	0.5	0.5
Sand, light tan, medium grained, well sorted.....	1	1.5
Sand, moderate brown, fine to medium grained, some gravel...	2.5	4
Clay, moderate brown, sand, fine to medium, gravel.....	0 5	4.5
Sand, light tan, medium to coarse.....	4.5	9
Sand, moderate brown, interbedded silty clay, some cobbles present.....	3.5	12.5
Clay, moderate brown, some silt, gravel in upper foot....	2.5	15
PS-MW-5 (D-2-4)10BCB-1--Continued		
Clay, moderate brown, with minor amount of interbedded coarse sand, intermittent thin gravel layers.....	9.5	24.5
Clay, moderate brown, with interbedded fine sand, intermittent gravel layers....	3.5	28
Clay, moderate brown, with fine to medium sand, high plasticity.....	5	33
PS-MW-6 (D-2-4)10bbc-1		
Alt. 6,731.48 feet.		
Topsoil, moderate to dark brown.....	1.5	1.5
Sand, moderate brown, silt, and gravel, poorly sorted, some cobbles.....	11.5	13
Clay, moderate brown, with interbedded fine sand and gravel.....	16	29
PS-MW-7 (D-2-4)10bba-1		
Alt. 6,722.46 feet.		
Topsoil, dark brown.....	0.5	0.5
Sand, silt, clay, moderate brown, with interbedded pebbles.....	5.5	6
Sand and gravel, light tan, unsorted.....	1	7
Sandy clay, moderate brown, interbedded gravel.....	2	9
Clay, sandy, moderate brown, numerous interbedded cobbles..	7	16
Clay, sandy, moderate brown, interbedded gravel and sand...	9.5	25.5
PS-MW-8 (D-2-4)9aac-3		
Alt. 6,751.41 feet.		
Topsoil, dark brown.....	0.5	0.5
Sand, silty, moderate brown, with minor amount of interbedded gravel.....	4	4.5
Clay, dark brown, with interbedded fine sand.....	0.5	5
Gravel, cobbles, some sand and silt.....	6.5	11.5
Clay, silty, moderate brown, minor amount of interbedded coarse sand, medium plasticity.....	2.5	14
Gravel.....	1	15
Clay, moderate brown, with interbedded sand and gravel...	1.5	16.5
Gravel, with sand and clay.....	0.5	17
Clay, silty, moderate brown....	1	18

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Table 4.--Lithologic logs of monitoring wells--Continued

Location and Material	Thickness	Depth
PS-MW-8 (D-2-4)9aac-3--Continued		
Gravel, with sand and clay.....	2	20
Sand, silty, moderate brown, some clay, low plasticity, interbedded gravel.....	10	30
Sand, coarse, gravel, minor amount of clay and fine sand..	10.5	40.5
PS-MW-9 (D-2-4)10bab-1		
Alt. 6,707.90 feet.		
Topsoil, dark brown.....	1	1
Gravel, with sand, coarse.....	0.5	1.5
Sand, light tan, fine grained, well sorted, mineralized.....	0.5	2
Clay, moderate brown, with interbedded sand, fine to medium.....	0.5	2.5
Sand, light tan, fine grained, well sorted, highly mineralized.....	1.5	4
Clay, dark brown, organic material present, low plasticity.....	2.5	6.5
Gravel, cobbles, with interbedded sandy clay.....	3	9.5
Gravel, interbedded sandy clay.....	2.5	12
Clay, moderate brown, interbedded fine sand and some gravel, high plasticity..	3	15
Clay, reddish brown, with fine sand and angular rock fragments.....	0.5	15.5
Bedrock, angular fragments, red silty shale, friable.....	1	16.5
PS-MW-10 (D-2-4)3dcd-1		
Alt. 6,680 feet.		
Sand, fine to coarse, some gravel.....	1	1
Soil, dark brown, organic material.....	0.5	1.5
Sand, fine to coarse, with silty sand lenses and gravel..	3.5	5
Gravel, fine to coarse, poorly sorted.....	1	6
Sand, fine to coarse, poorly sorted, with silty sand lenses and gravel.....	4	10
Gravel, fine to coarse, poorly sorted.....	1.5	11.5
Bedrock, shale, dark reddish brown, weathered, parts easily.....	1.5	13
PS-MW-11 (D-2-4)3ccd-1		
Alt. 6,711.19 feet.		
Fill, sand, silt, gravel, dry, loose.....	2	2
PS-MW-11 (D-2-4)3ccd-1--Continued		
Clay, dark brown to black, organic, low to medium plasticity.....	6	8
Clay, dark gray to black, with some interbedded gravel, medium to high plasticity.....	2	10
Sand, moderate brown, fine to medium grained, some gravel...	0.5	10.5
Sand, silty, with some gravel, reddish-orange color.....	5.5	16
Clay, dark gray, low plasticity.....	1	17
Gravel, with silt and sand.....	3	20
Sand, gravel, with some gray-green clay.....	1.5	21.5
PS-MW-12 (D-2-4)9acc-1		
Alt. 6,797.70 feet.		
Gravel, with silt and sand, moderate brown.....	2	2
Gravel, coarse, alternating with layers of sand and gravel.....	13	15
Gravel, cobbles, alternating with layers of interbeded clay, sand and gravel.....	10	25
Clay, fine sand, moderate brown, some interbedded gravel.....	3	28
Cobbles.....	1	29
Clay, fine sand, moderate brown, some interbedded gravel.....	23	52
Gravel, some sandy clay.....	2	54
Clay, sandy, moderate brown, with some interbedded gravel, medium plasticity.....	9.5	63.5
Clay, sand fine to coarse, moderate brown, some gravel, high plasticity.....	2.5	66
Cobbles, sandy clay, moderate brown.....	1	67
Clay, moderate brown, with interbedded sand and gravel, low plasticity.....	12	79
Clay, moderate brown, with interbedded sand and gravel, high plasticity.....	6	85
Cobbles, with interbedded clay, sand, and gravel, dense, moist.....	12	97
Gravel, sand, fine to coarse, some cobbles, intermittent thin sandy clay layers.....	17	114
Gravel, sand, fine to coarse, igneous and quartzite boulders.....	6	120
Bedrock, silty shale, reddish-brown, friable.....	5	125

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Table 5.--Selected monitoring well data

Well Number	Depth of Hole (feet)	Altitude of Land Surface (feet)	Screened Interval (feet)	Production Interval (feet)	Tailings Interval (feet
PS-MW-1s	47.0	6791.87	35.0-40.0	32.5-45.5	--
PS-MW-1d	85.5	6791.06	70.0-80.0	62.0-80.0	--
PS-MW-2	44.5	6758.44	33.0-38.0	29.0-44.5	--
PS-MW-3	36.0	6743.35	25.5-30.5	19.0-35.5	0.75-2.0
PS-MW-4	45.0	6773.42	34.0-39.0	17.0-45.0	--
PS-MW-5	33.0	6741.04	23.0-28.0	20.0-33.0	0.6-1.4 4.5-9.0
PS-MW-6	29.0	6731.48	19.0-24.0	14.0-29.0	--
PS-MW-7	25.5	6722.46	15.5-20.5	11.5-25.5	--
PS-MW-8	40.5	6751.41	28.5-33.5	19.5-40.0	--
PS-MW-9	16.5	6707.90	8.5-13.5	5.0-15.5	1.5-2.0 2.4-3.5
PS-MW-10	13.0	6680	6.0-11.0	4.9-11.5	--
PS-MW-11	21.5	6711.19	10.0-15.0	3.5-20.0	--
PS-MW-12	125	6797.70	110.0-120.0	98.5-120.0	--

Table 6.--Water levels in monitoring wells

Water levels: In feet below leveled reference point.

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PS-MW-1s	(D-2-4)9bdd-1			PS-MW-1d	(D-2-4)9bdd-2		
Aug 7, 1987	27.71	Sept 25, 1987	28.87	Aug 7, 1987	34.98	Sept 25, 1987	35.65
Aug 31, 1987	26.85	Oct 14, 1987	29.67	Aug 31, 1987	33.68	Oct 14, 1987	36.29
				Sept 9, 1987	34.30	More data available	
				at this site.			

PS-MW-2	(D-2-4)9acc-2	PS-MW-3	(D-2-4)9aab-1
Aug 7, 1987	30.39	Aug 7, 1987	22.34
Sept 1, 1987	29.97	Sept 3, 1987	22.45
Oct 14, 1987	31.65	Oct 14, 1987	23.35
PS-MW-4	(D-2-4)9adc-1	PS-MW-5	(D-2-4)10bcb-1
Aug 7, 1987	28.64	Aug 7, 1987	15.96
Sept 1, 1987	28.59	Sept 1, 1987	16.38
Oct 14, 1987	31.69	Oct 14, 1987	19.70
PS-MW-6	(D-2-4)10bbc-1	PS-MW-7	(D-2-4)10bba-1
Aug 7, 1987	13.31	Aug 7, 1987	10.69
Sept 2, 1987	13.44	Sept 2, 1987	10.77
Oct 14, 1987	14.71	Oct 14, 1987	10.89
PS-MW-8	(D-2-4)9aac-3	PS-MW-9	10bab-1
Aug 7, 1987	25.32	Aug 7, 1987	6.33
Sept 1, 1987	25.31	Sept 2, 1987	6.19
Oct 14, 1987	27.45	Oct 14, 1987	5.50
PS-MW-10	(D-2-4)3dcd-1	PS-MW-11	(D-2-4)3ccd-1
Aug 7, 1987	1.14	Sept 3, 1987	2.12
Sept 3, 1987	1.24	Oct 14, 1987	2.18
Oct 14, 1987	0.0		
PS-MW-12	(D-2-4)9acc-1		
Aug 31, 1987	38.95		
Oct 14, 1987	41.11		

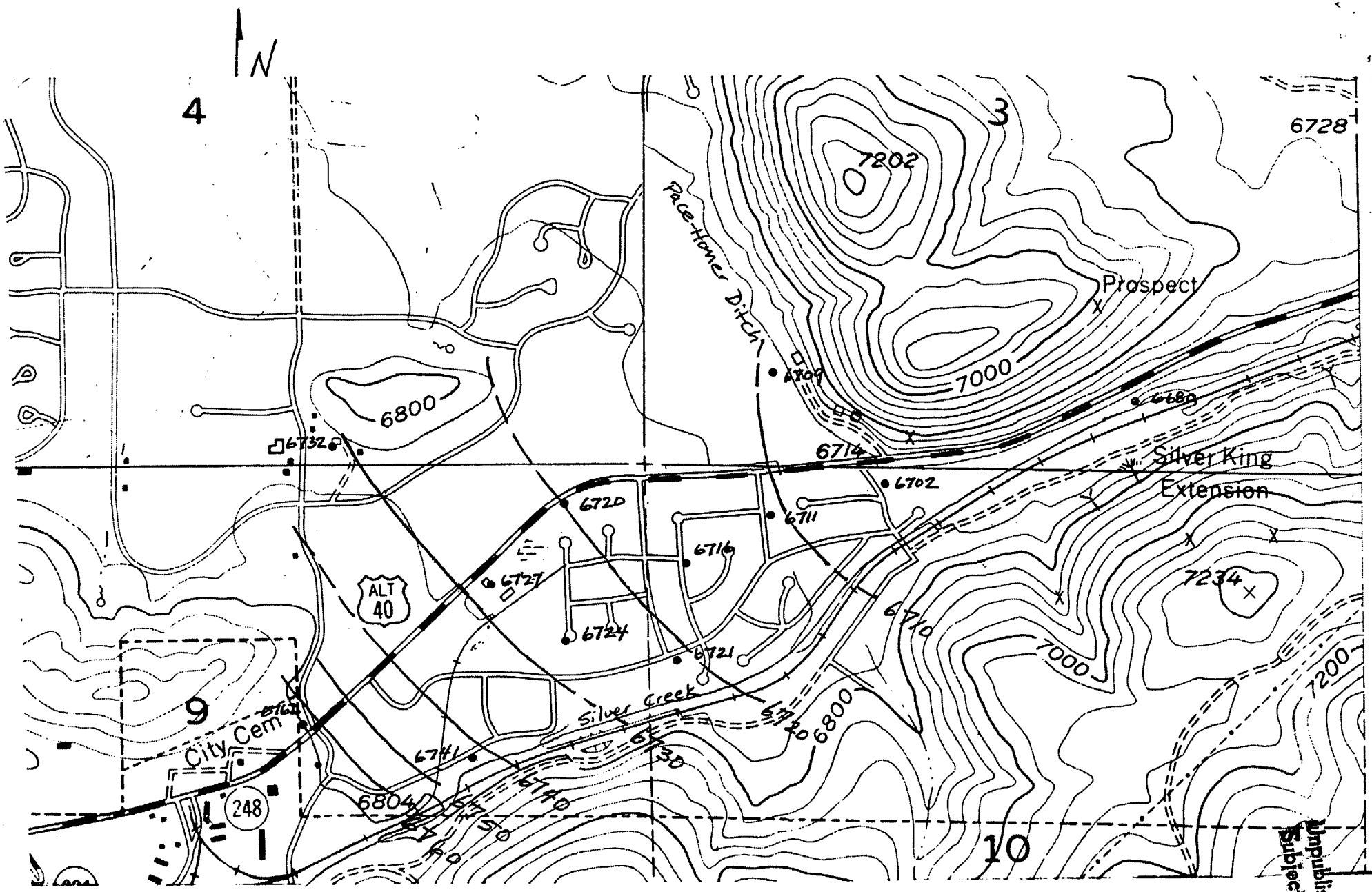

Figure 3.-- Map of the Prospector Square area, showing the approximate potentiometric surface, October 1987.

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