Table 18.1-16 Water Quality Data on Brimhall Wash for Site N (Upstream) and Site M (Downstream) Between March 14, 1990 and January 8, 1995

Sample date	Alkalinity as CaCO3 (mg/L)	Bicarb as CaCO3 (mg/L)	Q	Boron, T (mg/L)	Q	Cation anion balance (CAB) %	Q	Cadmium, T (mg/L)	Calcium, D (mg/L)	Q	Chloride (mg/L)	Electrical conductivity (EC) (µs/cm)	Q	Fluoride (mg/L)	Hardness as CaCO3 (calc)	Q	Iron, D (mg/L)	Iron, T (mg/L)	Q
Site M																			
3/14/1990		156	<	5					188		39.4	718		1.2	774		173	234	
5/14/1990		133	<	5					411		4.04	1280		0.295	1040		0.11	0.65	
7/23/1990		461	<	5					400		10.4	27800		0.656	1390		1.15	10.1	
8/24/1990		190	<	5					316		20.3	2550		0.398	823		0.21	0.58	
9/29/1990		89	<	5					480		4.47	222		0.23	1203		2.39	3.69	
10/22/1990		88.9	<	5			<	0.005	18		4.6	359		0.33	53		1.76	1.8	<
11/19/1990		135	<	5			<	0.005	16.7		13.4	489		0.65	53		20.9	23	<
1/20/1991		530	<	5					550		82.2	7360		0.93	1000		0.72	0.72	
6/21/1991		1170	<	2.5					28.3		47.1	1540		0.3	2650		3.66	9.71	
1/1/1992		330	<	2.5					633		21.1	912	<	0.1	1700		580	582	
7/14/1992	494	494			<	0.84			35		10	571		0.6	100		0.53	420	
8/31/1992	146	146				4.52			13		10	798		1.5	37		0.94	1520	
1/1/1993A	266	262			<	0.47			42		13	2180		2	126	<	0.02	5.36	
1/1/1993B	116	116			<	3.15			60		13	418		0.9	146		0.16	716	
3/11/1993	140	140				3.85			9		11	732		0.9	31		12	171	
9/6/1993	216	216			<	2.14			28		8	1040		0.9	78		0.14	1210	
7/10/1994	135	135			<	1.59			22		7			1.5	51		0.06	163	
10/2/1994	210	210							53		21			0.4	153		2.74	4.49	
1/8/1995	172	172							3.5		4			0.6	10		0.25	520	
median	172	172		<5		<2.14		<0.005	42		11	855		0.65	146		0.94	23	
Site N																			
5/14/1990		277	<	5					26		13.2	1210		1.1	80		0.18	0.8	
6/19/1990		299	<	5					38.7		15.3	1440		0.848	115		0.28	1.72	
8/24/1990		518	<	5					238		4.96	1332		0.942	599		2.1	2.6	
10/22/1990		221	<	5			<	0.005	22.2		7.2	1120		0.89	68		0.49	1.11	<
1/20/1991		588	<	5					354		360	1256	<	0.2	2200		25.7	398	
6/21/1991		268	<	2.5					22.2		7.94	676		1.1	84		1.13	2.31	
8/20/1991		407	<	2.5					43.7		4.2				2200		7.26	410	
9/26/1991		363	<	2.5					38	<	0.5	1420		0.77	120		0.17	0.27	
1/1/1992		290	<	2.5					123		32.3	996		0.2	150		97.8	388	
7/14/1992	192	192				1.59			26		24	1510		2	73	<	0.02	2860	
8/31/1992	250	250			<	5.24			49		46	1460		1.7	143		0.43	2080	
1/1/1993	88	88				1.26			38		14	1050		1.2	111		0.22	255	
3/11/1993	165	165			<	0.42			20		16	985		1.1	58		0.15	276	
9/29/1993									1246		15	142	<	0.1	4370		730	4510	
7/10/1994	260	260			<	4.49			27		17			1.4	63		0.33	3060	
10/2/1994	950	950							29		8			1.3	85		0.11	7480	
1/8/1995	182	182							3.5		10			1	14		0.05	1000	
median	192	272.5		<5		1.59		<0.005	38		14	1210		1.05	111		0.33	388	

*Outlier
Q - Qualifier
BDL - Below Detection Limit
D - Dissolved
T - Total
mg/L - milligrams per liter
µs/cm - microsiemens per centimeter
su - standard units

Table 18.1-16 (Continued)

Sample date	Lead, T (mg/L)	Q	Magnesium D (mg/L)	Q	Manganese D (mg/L)	Manganese, T (mg/L)	Q	Mercury, D (mg/L)	Q	Mercury, T (mg/L)	Q	Nitrate nitrogen	Nitrate/Nitrite as N (mg/L)	Q	Nitrite as N (mg/L)	Q	Nitrogen, total Kjeldahl	pH (su)	Potassium, D (mg/L)
Site M																			
3/14/1990			74			4.45						3.08						7.89	154
5/14/1990			3.28			0.37						0.383						7.49	5.08
7/23/1990			95			13.8						0.484						7.99	19.1
8/24/1990			8.2			1.59						0.373						8.58	5.22
9/29/1990			1.1			0.05						0.355						7.87	3.8
10/22/1990	0.05		1.9			0.02			<	0.0005		0.6						7.96	3.29
11/19/1990	0.05		2.76			0.16				0.0006		0.66						8.18	15.9
1/20/1991			73.9			0.04						0.06						7.16	8.7
6/21/1991			4.25			0.07						0.31						7.29	11.3
1/1/1992			83.5			5.94						1.63						8.13	164
7/14/1992			3		0.38							0.05	0.13		0.08			7.7	4
8/31/1992			1		0.02							0.7	0.7	<	0.01			8.1	4
1/1/1993A			5	<	0.01		<	0.0001				1.36	1.36	<	0.01			8.4	1
1/1/1993B		<	1	<	0.01							3.54	3.59		0.05			7.8	1
3/11/1993			2		7							1.22	1.24		0.02			8.3	3
9/6/1993			2		0.01							1.92	1.98		0.06		9.4	8	4
7/10/1994		<	1	<	0.01							0.67	1.3		0.63		2.4	7.6	4
10/2/1994			5		1.04							0.04	0.04	<	0.01	<	0.1	7.5	6
1/8/1995			0.3									7.7	7.8		0.11		3.7	8.3	1.7
median	<0.05		3		0.015	0.265		0.0001		0.00055		0.66	1.3		0.05		3.05	7.96	4.00
Site N																			
5/14/1990			3.67			0.17						0.651						7.43	5.61
6/19/1990			4.57			1.4						0.289						7.21	4.94
8/24/1990			1.1			0.11						0.61						7.87	5.29
10/22/1990	0.05		3.03			0.1			<	0.0005		0.23						7.51	3.88
1/20/1991			172			5.05						1.83						7.57	17.6
6/21/1991			3.19			0.39					<	0.05						7.51	3.38
8/20/1991			6.7			7.21						0.39						7.98	0.81
9/26/1991			6.91			0.83					<	0.05						6.95	5
1/1/1992			44.5			2.97						0.11						7.98	4.72
7/14/1992			2	<	0.01							1.2	1.2	<	0.01			8.2	3
8/31/1992			5		0.08							0.25	0.31		0.06			8.1	5
1/1/1993			4	<	0.01							2.11	2.14		0.03			8.1	3
3/11/1993			2	<	0.01							1.81	1.81	<	0.01			8	3
9/29/1993			306		39							13498.4	13500		1.6			0.6*	90
7/10/1994		<	1	<	0.01							0.58	0.86		0.28		2.5	7.8	4
10/2/1994			3		0.42							0.02	0.02	<	0.01	<	0.1	8	3
1/8/1995			1.2									3.2	3.2				5.7	8.2	1.7
median	<0.05		3.67		<0.01	0.83				<0.005		0.58	1.505		0.03		2.5	7.93	4.00

*Outlier
Q - Qualifier
BDL - Below Detection Limit
D - Dissolved
T - Total
mg/L - milligrams per liter
µs/cm - microsiemens per centimeter

Table 18.1-16 (Continued)

Sample date	Sodium adsorption ratio (SAR)	Sodium adsorption ratio (SAR) Calc.	Selenium, D (mg/L)	Q	Selenium, T (mg/L)	Q	Silica	Sodium, D (mg/L)	Sulfate (mg/L)	Q	Total dissolved solids (TDS) (mg/L)	Total suspended solids (TSS) (mg/L)	Q	Vanadium, D (mg/L)	Q	Vanadium, T (mg/L)
Site M																
3/14/1990		18.30					71	1170	204		1980				<	0.5
5/14/1990		2.71				<	1	201	558		2500				<	0.05
7/23/1990		84.04					10.1	7200	18100		24600				<	0.5
8/24/1990		6.61					10.4	436	1091		1640				<	0.5
9/29/1990		0.93					26.2	74.2	108		360				<	0.5
10/22/1990		5.05		<	0.005	<	1	84.3	85		392				<	0.5
11/19/1990		8.30		<	0.005		3	139	166		404				<	0.5
1/20/1991		16.15					4.6	1520	3690		5760				<	0.1
6/21/1991		14.04					162	303	800		1350				<	0.5
1/1/1992		2.84					5050	286	757		2110					0.4
7/14/1992		8.41					13.5	193	29		480	61880	<	0.01		
8/31/1992		11.87					19.8	165	200		540	57660	<	0.01		
1/1/1993A		12.63	0.003				10.9	325	539		1062		<	0.01		
1/1/1993B		5.26					9.5	150	356		652	14400	<	0.01		
3/11/1993	12.63	12.49					141	159	191		456	45880		0.14		
9/6/1993		10.39					19.3	211	328		726	46200	<	0.01		
7/10/1994	13.57						16.2		393		744		<	0.01		
10/2/1994							19		490		924		<	0.01		
1/8/1995							8.4		140		370					
median	13.1	9.40	0.003		<0.005		13.5	206	356		744	46200		<0.01		<0.05
Site N																
5/14/1990		9.78					9.6	201	167		555				<	0.05
6/19/1990		15.07					13.3	372	135	<	720				<	0.05
8/24/1990		5.34					9.23	300	272		1000				<	0.5
10/22/1990		11.72		<	0.005		1.3	222	298		956				<	0.5
1/20/1991		1.89					5.3	173	3010		4381					0.38
6/21/1991		43.51					10.6	828	147		640				<	0.5
8/20/1991		21.40					38.2	575	1460		1010					1.87
9/26/1991		13.95					12.6	356	422		968				<	0.5
1/1/1992		3.54					16	180	1380		2150					0.26
7/14/1992		14.81					22.8	291	447		820	115800	<	0.01		
8/31/1992		9.94					18.7	273	494		1020	128420	<	0.01		
1/1/1993		11.75					14	285	587		960	11800	<	0.01		
3/11/1993	12.23	12.10					17.9	212	329		648	110120	<	0.01		
9/29/1993		2.96					311	450			2107		<	0.01		
7/10/1994	15.91						23.3		461		1050		<	0.01		
10/2/1994							16.1		140		520		<	0.01		
1/8/1995							13		220		440					
median	14.07	11.74			<0.005		14	288	375.5		960	112960		<0.01		<0.05

*Outlier
Q - Qualifier
BDL - Below Detection Limit
D - Dissolved
T - Total
mg/L - milligrams per liter
µs/cm - microsiemens per centimeter