



United States Department of the Interior

U.S. GEOLOGICAL SURVEY

WATER RESOURCES DIVISION

Nevada District

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Ms. Dixon:

Enclosed you will find tables (Tables 1-7) of water-quality data collected May 6-15, 1997, by the US Geological Survey at eight selected well and spring sites near Yucca Mountain. These data were collected to characterize ground-water in the Yucca Mountain region with respect to drinking-water standards and to supplement the on-going radiochemical monitoring project for the Yucca Mountain Program.

These data were collected in accordance with technical procedure HP-225,R2, and were reviewed in accordance with procedure QMP-3.04, R9, Sections 5.1 and 5.2.

The data are tabulated as follows:

Table 1. Selected water-quality properties and major inorganic constituents in water samples, May, 1997

Table 2. Dissolved trace constituents in water samples, May, 1997

Table 3. Dissolved nitrogen and phosphorus species in water samples, May 1997

Table 4. Radiochemical constituents in water samples, May, 1997

Table 5. Organochlorine and organonitrogen compounds in water samples, May, 1997

Table 6. Volatile organic compounds in water samples, May, 1997

Table 7. Semi-volatile organic compounds in water samples, May, 1997

CC: RPC=18

A summary of determinations which equaled or exceeded existing and proposed U. S. Environmental Protection Agency (USEPA) public drinking-water standards is shown below. Standards are of two types: primary, health-based maximum contaminant levels (MCLs) and secondary, aesthetically based maximum contaminant levels (SMCLs). Information on drinking-water regulations and explanations of those regulations can be found in U.S. Environmental Protection Agency, 1996 (Drinking water regulations and health advisories: U.S. Environmental Protection Agency, Office of Water, Report EPA-822-R 96-001, 16p).

Site	Determination	MCL or SMCL	Measured concentration or activity
UE-25 c #3	Fluoride, dissolved	2.0 mg/l (SMCL)	2.1 mg/l
	Radon-222, total	300 pCi/l (proposed MCL)	763 pCi/l
J-13 WW	Fluoride, dissolved	2.0 mg/l (SMCL)	2.3 mg/l
	Radon-222, total	300 pCi/l (proposed MCL)	361 pCi/l
J-12 WW	Fluoride, dissolved	2.0 mg/l (SMCL)	2.1 mg/l
	Radon-222, total	300 pCi/l (proposed MCL)	406 pCi/l
NDOT Well	Radon-222, total	300 pCi/l (proposed MCL)	612 pCi/l
Cherry Patch Well	Sulfate, dissolved	250 mg/l (SMCL)	420 mg/l
	Solids, residue on evaporation at 180°C, dissolved	500 mg/l (SMCL)	1110 mg/l
	Uranium, natural, dissolved	20 ug/l (proposed MCL)	20 ug/l
	Radon-222, total	300 pCi/l (proposed MCL)	504 pCi/l
Gilgans South Well	Radon-222, total	300 pCi/l (proposed MCL)	600 pCi/l
Crystal Pool	Radon-222, total	300 pCi/l (proposed MCL)	447 pCi/l

The maximum-contaminant-level-goal for lead is 0.00 ug/L (the USEPA's maximum-contaminant-level-goal is that concentration which is protective of human health and allows for an adequate margin of safety). The lead concentration, based on a single sample in May, 1997 from well J-12 WW, was 1.3 ug/L. USEPA's adult lifetime health advisory (HA) for boron is 600 ug/L; the concentration for boron at the Cherry Patch Well was 1060 ug/L.

To verify that decontamination of equipment was adequate, an equipment blank was prepared prior to field sampling using inorganic blank water, pesticide free water, and volatile organic free water. Except for tritium, the analyses on the equipment blank indicates that all concentrations were at or near reporting limits. Tritium in the blank water had a concentration of 13 pci/L, which is probably the result of the blank water being prepared from "modern" inorganic blank water-water.

Please review the data tables and if you need any clarification or have any questions, please do not hesitate to call me at (702) 897-4014 or Dick La Camera at (702) 897-4013.

Sincerely,



Ken Covay

Hydrologist

KJC:kjc

Enclosure

cc

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Table 1. Selected water-quality properties and major inorganic constituents in water samples, May, 1997

STATION NUMBER	STATION NAME	DATE	TIME	SPE-CIFIC CONDUCTANCE (US/CM) (00095)	SPE-CIFIC CONDUCTANCE LAB (US/CM) (90095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)
364947116254501	UE-25c #3	05-13-97	1245	296	299	7.5
364828116234001	J -13 NW	05-14-97	1145	285	283	7.4
364554116232401	J -12 NW	05-15-97	1140	288	284	7.5
363835116234001	NDOT Well	05-09-97	1120	555	554	8.0
362929116085701	Cherry Patch Well	05-15-97	1700	1700	1670	7.3
362924116203001	Fairbanks Spring	05-06-97	1400	705	689	7.4
362835116264101	Gilgans South Well	05-08-97	1330	309	306	7.9
362502116192301	Crystal Pool	05-07-97	1245	737	723	7.4
360330115082401	Las Vegas Equipment Blank	05-05-97	1500	--	2	--

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DATE	PH WATER WHOLE LAB (STANDARD UNITS) (00403)	TEMPERATURE WATER (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARDNESS TOTAL (MG/L AS CaCO3) (00900)	HARDNESS NONCARB DISSOLV FLD. AS CaCO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKALINITY WATER TOT IT FIELD (MG/L AS CaCO3) (39086)
05-13-97	7.7	40.0	<1	0.15	3.5	31	0	12	0.30	53	1.9	110
05-14-97	7.2	31.0	<1	0.17	4.8	39	0	12	1.9	44	4.8	98
05-15-97	7.5	27.0	<1	0.10	5.2	45	0	14	2.2	40	4.6	96
05-09-97	8.0	26.0	<1	0.19	5.5	46	0	17	0.82	104	3.8	125
05-15-97	7.3	26.5	<1	0.12	3.4	330	52	72	37	225	9.4	282
05-06-97	7.4	27.0	<1	0.15	3.2	210	0	49	20	71	7.9	246
05-08-97	8.0	24.0	<1	0.11	5.9	55	0	19	2.1	42	7.2	103
05-07-97	7.4	30.5	3	0.11	3.7	200	0	47	20	71	8.4	254
05-05-97	5.3	--	<1	0.15	--	--	--	0.043	<0.01	<0.20	<0.10	--

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Table 1. Selected water-quality properties and major inorganic constituents in water samples, May, 1997--Continued

DATE	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	IODIDE, DIS- SOLVED (MG/L AS I) (71865)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)
05-13-97	113	134	20	6.6	2.1	0.16	0.007	53	218	220
05-14-97	101	120	18	7.0	2.3	0.053	--	61	217	219
05-15-97	99	117	22	7.0	2.1	0.055	--	58	222	217
05-09-97	131	152	110	13	1.8	0.11	--	45	385	379
05-15-97	291	344	420	100	1.6	0.55	--	25	1110	1070
05-06-97	250	300	80	21	1.8	0.13	--	23	408	422
05-08-97	105	126	28	7.2	1.6	0.049	--	77	256	254
05-07-97	240	310	88	23	1.8	0.14	--	27	433	440
05-05-97	1.9	--	<0.10	<0.10	<0.10	<0.010	--	0.037	1	--

Table 2. Dissolved trace constituents in water samples, May, 1997

STATION NUMBER	STATION NAME	DATE	TIME	ALUM- INUM- DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)
364947116254501	UE-25c #3	05-13-97	1245	4.9	<1.0
364828116234001	J -13 WW	05-14-97	1145	3.7	<1.0
364554116232401	J -12 WW	05-15-97	1140	3.4	<1.0
363835116234001	NDOT Well	05-09-97	1120	3.8	<1.0
362929116085701	Cherry Patch Well	05-15-97	1700	3.5	<1.0
362924116203001	Fairbanks Spring	05-06-97	1400	3.9	<1.0
362835116264101	Gilgans South Well	05-08-97	1330	2.1	<1.0
362502116192301	Crystal Pool	05-07-97	1245	3.3	<1.0
360330115082401	Las Vegas Equipment Blank	05-05-97	1500	2.0	<1.0

DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	CYANIDE DIS- SOLVED (MG/L AS CN) (00723)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)
05-13-97	8	1.4	<1.0	114	<1.0	2.6	<1.0	<1.0	<0.01	4.2	<1.0
05-14-97	11	1.2	<1.0	149	<1.0	2.6	<1.0	<1.0	<0.01	8.1	<1.0
05-15-97	9	1.9	<1.0	142	<1.0	2.9	<1.0	<1.0	<0.01	11	1.3
05-09-97	22	10	<1.0	288	<1.0	6.5	<1.0	<1.0	<0.01	6.4	<1.0
05-15-97	14	26	<1.0	1060	<1.0	6.0	<1.0	1.0	<0.01	5.8	<1.0
05-06-97	10	60	<1.0	340	<1.0	2.2	<1.0	1.0	<0.01	12	<1.0
05-08-97	11	2.2	<1.0	187	<1.0	4.3	<1.0	<1.0	<0.01	<3.0	<1.0
05-07-97	15	67	<1.0	375	<1.0	3.0	<1.0	<1.0	<0.01	14	<1.0
05-05-97	<1	<1.0	<1.0	4.9	<1.0	<1.0	<1.0	<1.0	<0.01	<3.0	<1.0

Table 2. Dissolved trace constituents in water samples, May, 1997--Continued

DATE	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	THAL- LIUM, DIS- SOLVED (UG/L AS TL) (01057)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
05-13-97	77	<1.0	<0.1	2.7	<1.0	<1	<1.0	47	<0.50	<1.0
05-14-97	--	2.2	<0.1	7.1	<1.0	<1	<1.0	41	<0.50	4.7
05-15-97	--	<1.0	<0.1	6.7	<1.0	<1	<1.0	44	<0.50	<1.0
05-09-97	--	<1.0	<0.1	7.0	<1.0	1	<1.0	102	<0.50	27
05-15-97	--	<1.0	<0.1	10	<1.0	19	<1.0	1530	<0.50	2.2
05-06-97	--	<1.0	<0.1	7.4	<1.0	<1	<1.0	857	<0.50	<1.0
05-08-97	--	<1.0	<0.1	3.2	<1.0	<1	<1.0	147	<0.50	1.6
05-07-97	--	<1.0	<0.1	7.8	<1.0	<1	<1.0	933	<0.50	<1.0
05-05-97	--	<1.0	0.1	<1.0	<1.0	<1	<1.0	<0.50	<0.50	<1.0

Table 3. Dissolved nitrogen and phosphorus species in water samples, May, 1997

STATION NUMBER	STATION NAME	DATE	TIME
364947116254501	UE-25c #3	05-13-97	1245
364828116234001	J -13 MW	05-14-97	1145
364554116232401	J -12 MW	05-15-97	1140
363835116234001	NDOT Well	05-09-97	1120
362929116085701	Cherry Patch Well	05-15-97	1700
362924116203001	Fairbanks Spring	05-06-97	1400
362835116264101	Gilgans South Well	05-08-97	1330
362502116192301	Crystal Pool	05-07-97	1245
360330115082401	Las Vegas Equipment Blank	05-05-97	1500

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
05-13-97	<0.015	<0.010	<0.20	1.10	<0.010	<0.010
05-14-97	<0.015	<0.010	<0.20	2.00	0.020	0.030
05-15-97	<0.015	<0.010	<0.20	2.05	0.021	0.029
05-09-97	<0.015	<0.010	<0.20	2.17	<0.010	<0.010
05-15-97	<0.015	<0.010	<0.20	0.333	0.023	<0.010
05-06-97	<0.015	<0.010	<0.20	<0.050	<0.010	<0.010
05-08-97	<0.015	<0.010	<0.20	1.68	<0.010	<0.010
05-07-97	<0.015	<0.010	<0.20	0.077	<0.010	<0.010
05-05-97	<0.015	<0.010	<0.20	<0.050	<0.010	<0.010

Table 4. Radiochemical constituents in water samples, May, 1997

STATION NUMBER	STATION NAME	DATE	TIME
364947116254501	UE-25c #3	05-13-97	1245
364828116234001	J -13 WW	05-14-97	1145
364554116232401	J -12 WW	05-15-97	1140
363835116234001	NDOT Well	05-09-97	1120
362929116085701	Cherry Patch Well	05-15-97	1700
362924116203001	Fairbanks Spring	05-06-97	1400
362835116264101	Gilgans South Well	05-08-97	1330
362502116192301	Crystal Pool	05-07-97	1245
360330115082401	Las Vegas Equipment Blank	05-05-97	1500

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DATE	ALPHA RADIO. WATER DISS AS TH-230 (PCI/L) (04126)	GROSS BETA, DIS- SOLVED AS (PCI/L) CS-137) (03515)	TRITIUM TOTAL (PCI/L) (07000)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L) (09511)	URANIUM NATURAL DIS- SOLVED (UG/L) AS U) (22703)	RADIUM 228 DIS- SOLVED (PCI/L) AS RA-228) (81366)	RADON 222 TOTAL (PCI/L) (82303)
05-13-97	<3.0	4.9	<0.3	0.04	<1.0	<1.0	763
05-14-97	<3.0	4.4	<0.3	0.03	<1.0	<1.0	361
05-15-97	<3.0	4.1	<0.3	0.03	<1.0	<1.0	406
05-09-97	<3.0	5.7	<0.3	0.04	2.6	<1.0	612
05-15-97	9.0	14	0.9	0.08	20	1.1	504
05-06-97	<3.0	16	<0.3	0.49	2.7	<1.0	279
05-08-97	<3.0	6.1	<0.3	0.03	<1.0	<1.0	600
05-07-97	<3.0	9.9	<0.3	0.52	3.1	<1.0	447
05-05-97	<3.0	<4.0	13	0.03	<1.0	<1.0	--

Table 5. Organochlorine and organonitrogen compounds in water samples, May, 1997

STATION NUMBER	STATION NAME	DATE	TIME	2,4-D-TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)
364947116254501	UE-25c #3	05-13-97	1245	<0.010	<0.010
364828116234001	J -13 NW	05-14-97	1145	<0.010	<0.010
364554116232401	J -12 NW	05-15-97	1140	<0.010	<0.010
363835116234001	NDOT Well	05-09-97	1120	<0.010	<0.010
362929116085701	Cherry Patch Well	05-15-97	1700	<0.010	<0.010
362924116203001	Fairbanks Spring	05-06-97	1400	<0.010	<0.010
362835116264101	Gilgans South Well	05-08-97	1330	<0.010	<0.010
362502116192301	Crystal Pool	05-07-97	1245	<0.010	<0.010
360330115082401	Las Vegas Equipment Blank	05-05-97	1500	<0.010	<0.010

DATE	SILVEX, TOTAL (UG/L) (39760)	2, 4-DP TOTAL (UG/L) (82183)	PER-THANE TOTAL (UG/L) (39034)	ENDO-SULFAN, I TOTAL (UG/L) (39388)	ALDRIN, TOTAL (UG/L) (39330)	CHLOR-DANE, TECH-NICAL TOTAL (UG/L) (39350)	P,P'-DDD UNFILT RECOVER (UG/L) (39360)	P,P'-DDE, UNFILT RECOVER (UG/L) (39365)	P,P'-DDT UNFILT RECOVER (UG/L) (39370)	DI-ELDRIN TOTAL (UG/L) (39380)	ENDRIN WATER UNFLTRD REC (UG/L) (39390)
05-13-97	<0.010	<0.010	<0.100	<0.010	<0.010	<0.100	<0.010	<0.010	<0.010	<0.010	<0.010
05-14-97	<0.010	<0.010	<0.100	<0.010	<0.010	<0.100	<0.010	<0.010	<0.010	<0.010	<0.010
05-15-97	<0.010	<0.010	<0.100	<0.010	<0.010	<0.100	<0.010	<0.010	<0.010	<0.010	<0.010
05-09-97	<0.010	<0.010	<0.100	<0.010	<0.010	<0.100	<0.010	<0.010	<0.010	<0.010	<0.010
05-15-97	<0.010	<0.010	<0.100	<0.010	<0.010	<0.100	<0.010	<0.010	<0.010	<0.010	<0.010
05-06-97	<0.010	<0.010	<0.100	<0.010	<0.010	<0.100	<0.010	<0.010	<0.010	<0.010	<0.010
05-08-97	<0.010	<0.010	<0.100	<0.010	<0.010	<0.100	<0.010	<0.010	<0.010	<0.010	<0.010
05-07-97	<0.010	<0.010	<0.100	<0.010	<0.010	<0.100	<0.010	<0.010	<0.010	<0.010	<0.010
05-05-97	<0.010	<0.010	<0.100	<0.010	<0.010	<0.100	<0.010	<0.010	<0.010	<0.010	<0.010

Table 5. Organochlorine and organonitrogen compounds in water samples, May, 1997--Continued

DATE	HEPTA- CHLOR, TOTAL (UG/L) (39410)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)	LINDANE TOTAL (UG/L) (39340)	TOX- APHENE, TOTAL (UG/L) (39400)	PCB, TOTAL (UG/L) (39516)	PCNS UNFILT RECOVER (UG/L) (39250)	METH- OXY- CHLOR, TOTAL (UG/L) (39480)	MIREX, TOTAL (UG/L) (39755)	PROME- TRYNE TOTAL (UG/L) (39057)	ATRA- ZINE WATER UNFLTRD REC (UG/L) (39630)	PROME- TONE TOTAL (UG/L) (39056)
05-13-97	<0.010	<0.010	<0.010	<1.00	<0.100	<0.100	<0.010	<0.010	<0.100	<0.100	<0.200
05-14-97	<0.010	<0.010	<0.010	<1.00	<0.100	<0.100	<0.010	<0.010	<0.100	<0.100	<0.200
05-15-97	<0.010	<0.010	<0.010	<1.00	<0.100	<0.100	<0.010	<0.010	<0.100	<0.100	<0.200
05-09-97	<0.010	<0.010	<0.010	<1.00	<0.100	<0.100	<0.010	<0.010	<0.100	<0.100	<0.200
05-15-97	<0.010	<0.010	<0.010	<1.00	<0.100	<0.100	<0.010	<0.010	<0.100	<0.100	<0.200
05-06-97	<0.010	<0.010	<0.010	<1.00	<0.100	<0.100	<0.010	<0.010	<0.100	<0.100	<0.200
05-08-97	<0.010	<0.010	<0.010	<1.00	<0.100	<0.100	<0.010	<0.010	<0.100	<0.100	<0.200
05-07-97	<0.010	<0.010	<0.010	<1.00	<0.100	<0.100	<0.010	<0.010	<0.100	<0.100	<0.200
05-05-97	<0.010	<0.010	<0.010	<1.00	<0.100	<0.100	<0.010	<0.010	<0.100	<0.100	<0.200

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DATE	SIMA- ZINE TOTAL (UG/L) (39055)	SIME- TRYNE TOTAL (UG/L) (39054)	PRO- PAZINE TOTAL (UG/L) (39024)	CYAN- AZINE TOTAL (UG/L) (81757)	AME- TRYNE TOTAL (UG/L) (82184)	ALA- CHLOR TOTAL RECOVER (UG/L) (77825)	TRI- FLURA- LIN TOTAL RECOVER (UG/L) (39030)	METRI- BUZIN WATER WHOLE TOT.REC (UG/L) (82611)	METOLA- CHLOR WATER WHOLE TOT.REC (UG/L) (82612)	TER- BACIL WATER WHOLE RECOV. (UG/L) (30311)	BROM- ACIL WATER WHLREC (UG/L) (30234)
05-13-97	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200	<0.200
05-14-97	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200	<0.200
05-15-97	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200	<0.200
05-09-97	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200	<0.200
05-15-97	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200	<0.200
05-06-97	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200	<0.200
05-08-97	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200	<0.200
05-07-97	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200	<0.200
05-05-97	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200	<0.200

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Table 5. Organochlorine and organonitrogen compounds in water samples, May, 1997--Continued

DATE	CARBOX- IN WATER WHOLE RECOV- ERABLE (UG/L) (30245)	DIPHEN- AMIDE WATER WHOLE RECOV- ERABLE (UG/L) (30255)	HEXAZI- NONE WATER WHOLE RECOV- ERABLE (UG/L) (30264)	VER- NOLATE WATER WHOLE RECOV. (UG/L) (30324)	BUTA- CHLOR WATER WHLREC (UG/L) (30235)	CYCLO- ATE WATER WHOLE RECOV- ERABLE (UG/L) (30254)	BUTYL- ATE WATER WHLREC (UG/L) (30236)	PROPA- CHLOR WATER WHOLE RECOV. (UG/L) (30295)	DEETHYL ATRA- ZINE, WATER, WHOLE, TOTAL (UG/L) (75981)	DE-ISO PROPYL ATRAZINE WATER, WHOLE, TOTAL (UG/L) (75980)
05-13-97	<0.200	<0.100	<0.200	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200
05-14-97	<0.200	<0.100	<0.200	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200
05-15-97	<0.200	<0.100	<0.200	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200
05-09-97	<0.200	<0.100	<0.200	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200
05-15-97	<0.200	<0.100	<0.200	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200
05-06-97	<0.200	<0.100	<0.200	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200
05-08-97	<0.200	<0.100	<0.200	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200
05-07-97	<0.200	<0.100	<0.200	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200
05-05-97	<0.200	<0.100	<0.200	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200

Table 6. Volatile organic compounds in water samples, May, 1997--Continued

DATE	METHYL- BROMIDE TOTAL (UG/L) (34413)	METHYL- ENE- CHLO- RIDE TOTAL (UG/L) (34423)	ETHANE, 1,1,2,2 TETRA- CHLORO- WAT UNF REC (UG/L) (34516)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	TOLUENE TOTAL (UG/L) (34010)	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506)	1,1,2- TRI- CHLORO- ETHANE TOTAL (UG/L) (34511)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	METHYL- CHLO- RIDE TOTAL (UG/L) (34418)	1,2- DIBROMO ETHANE WATER TOTAL (UG/L) (77651)
05-13-97	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<1.00	<3.00	<3.00
05-14-97	<6.00	<6.00	<6.00	<6.00	<6.00	<6.00	<6.00	<6.00	<6.00	<2.00	<6.00	<6.00
05-15-97	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<1.00	<3.00	<3.00
05-09-97	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<1.00	<3.00	<3.00
05-15-97	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<1.00	<3.00	<3.00
05-06-97	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<1.00	<3.00	<3.00
05-08-97	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<1.00	<3.00	<3.00
05-07-97	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<1.00	<3.00	<3.00
05-05-97	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<1.00	<3.00	<3.00

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DATE	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34699)	STYRENE TOTAL (UG/L) (77128)	XYLENE WATER UNFLTRD REC (UG/L) (81551)	DIBROMO PROPANE WATER TOT REC (UG/L) (82625)	BROMO- BENZENE WATER, WHOLE, TOTAL (UG/L) (81555)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)	METHANE BROMO- CHLORO- WAT UNFLTRD REC (UG/L) (77297)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093)
05-13-97	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00
05-14-97	<6.00	<6.00	<6.00	<6.00	<6.00	<6.00	<6.00	<6.00	<6.00	<6.00	<6.00	<6.00
05-15-97	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00
05-09-97	<5.00	<5.00	<5.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00
05-15-97	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00
05-06-97	<5.00	<5.00	<5.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00
05-08-97	<5.00	<5.00	<5.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00
05-07-97	<5.00	<5.00	<5.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00
05-05-97	<5.00	<5.00	<5.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00

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Table 7. Semi-volatile organic compounds in water samples, May, 1997

STATION NUMBER	STATION NAME	DATE	TIME	PARA-CHLORO-META-CRESOL TOTAL (UG/L) (34452)	2-CHLORO-PHENOL TOTAL (UG/L) (34586)	2,4-DI-CHLORO-PHENOL TOTAL (UG/L) (34601)
364947116254501	UE-25c #3	05-13-97	1245	<30.0	<5.00	<5.00
364828116234001	J -13 WW	05-14-97	1145	<30.0	<5.00	<5.00
364554116232401	J -12 WW	05-15-97	1140	<30.0	<5.00	<5.00
363835116234001	NDOT Well	05-09-97	1120	<30.0	<5.00	<5.00
362929116085701	Cherry Patch Well	05-15-97	1700	<30.0	<5.00	<5.00
362924116203001	Fairbanks Spring	05-06-97	1400	<30.0	<5.00	<5.00
362835116264101	Gilgans South Well	05-08-97	1330	<30.0	<5.00	<5.00
362502116192301	Crystal Pool	05-07-97	1245	<30.0	<5.00	<5.00
360330115082401	Las Vegas Equipment Blank	05-05-97	1500	<30.0	<5.00	<5.00

DATE	2,4,6-TRI-CHLORO-PHENOL TOTAL (UG/L) (34621)	2,4-DI-METHYL-PHENOL TOTAL (UG/L) (34606)	4,6-DINITRO-ORTHOCRESOL TOTAL (UG/L) (34657)	2,4-DI-NITRO-PHENOL TOTAL (UG/L) (34616)	2-NITRO-PHENOL TOTAL (UG/L) (34591)	4-NITRO-PHENOL TOTAL (UG/L) (34646)	PENTA-CHLORO-PHENOL TOTAL (UG/L) (39032)	PHENOL (C6H-5OH) TOTAL (UG/L) (34694)	ACE-NAPHTH-ENE TOTAL (UG/L) (34205)	ACE-NAPHTH-YLENE TOTAL (UG/L) (34200)	ANTHRA-CENE TOTAL (UG/L) (34220)
05-13-97	<20.0	<5.00	<30.0	<20.0	<5.00	<30.0	<30.0	<5.00	<5.00	<5.00	<5.00
05-14-97	<20.0	<5.00	<30.0	<20.0	<5.00	<30.0	<30.0	<5.00	<5.00	<5.00	<5.00
05-15-97	<20.0	<5.00	<30.0	<20.0	<5.00	<30.0	<30.0	<5.00	<5.00	<5.00	<5.00
05-09-97	<20.0	<5.00	<30.0	<20.0	<5.00	<30.0	<30.0	<5.00	<5.00	<5.00	<5.00
05-15-97	<20.0	<5.00	<30.0	<20.0	<5.00	<30.0	<30.0	<5.00	<5.00	<5.00	<5.00
05-06-97	<20.0	<5.00	<30.0	<20.0	<5.00	<30.0	<30.0	<5.00	<5.00	<5.00	<5.00
05-08-97	<20.0	<5.00	<30.0	<20.0	<5.00	<30.0	<30.0	<5.00	<5.00	<5.00	<5.00
05-07-97	<20.0	<5.00	<30.0	<20.0	<5.00	<30.0	<30.0	<5.00	<5.00	<5.00	<5.00
05-05-97	<20.0	<5.00	<30.0	<20.0	<5.00	<30.0	<30.0	<5.00	<5.00	<5.00	<5.00

Table 7. Semi-volatile organic compounds in water samples, May, 1997--Continued

DATE	BENZI-DINE TOTAL (UG/L) (39120)	BENZO A ANTHRACENE 1,2-BENZANTHRACENE TOTAL (UG/L) (34526)	BENZO B FLUORANTHENE TOTAL (UG/L) (34230)	BENZO K FLUORANTHENE TOTAL (UG/L) (34242)	BENZO-A-PYRENE TOTAL (UG/L) (34247)	BENZOGH I PERYLENE 1,12-BENZOPERYLENE TOTAL (UG/L) (34521)	N-BUTYL BENZYL PHTHALATE TOTAL (UG/L) (34292)	BIS (2-CHLOROETHOXY) METHANE TOTAL (UG/L) (34278)	BIS 2- CHLOROETHYL ETHER UNFLTRD RECOVER (UG/L) (34273)	BIS (2- CHLORO- ISO- PROPYL) ETHER TOTAL (UG/L) (34283)	4- BROMO- PHENYL ETHER TOTAL (UG/L) (34636)
05-13-97	<40.0	<10.0	<10.0	<10.0	<10.0	<10.0	<5.00	<5.00	<5.00	<5.00	<5.00
05-14-97	<40.0	<10.0	<10.0	<10.0	<10.0	<10.0	<5.00	<5.00	<5.00	<5.00	<5.00
05-15-97	<40.0	<10.0	<10.0	<10.0	<10.0	<10.0	<5.00	<5.00	<5.00	<5.00	<5.00
05-09-97	<40.0	<10.0	<10.0	<10.0	<10.0	<10.0	<5.00	<5.00	<5.00	<5.00	<5.00
05-15-97	<40.0	<10.0	<10.0	<10.0	<10.0	<10.0	<5.00	<5.00	<5.00	<5.00	<5.00
05-06-97	<40.0	<10.0	<10.0	<10.0	<10.0	<10.0	<5.00	<5.00	<5.00	<5.00	<5.00
05-08-97	<40.0	<10.0	<10.0	<10.0	<10.0	<10.0	<5.00	<5.00	<5.00	<5.00	<5.00
05-07-97	<40.0	<10.0	<10.0	<10.0	<10.0	<10.0	<5.00	<5.00	<5.00	<5.00	<5.00
05-05-97	<40.0	<10.0	<10.0	<10.0	<10.0	<10.0	<5.00	<5.00	<5.00	<5.00	<5.00

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DATE	2- CHLORO- NAPH- THALENE TOTAL (UG/L) (34581)	4- CHLORO- PHENYL ETHER TOTAL (UG/L) (34641)	CHRY- SENE TOTAL (UG/L) (34320)	1,2,5,6 -DIBENZ -ANTHRA- CENE TOTAL (UG/L) (34556)	DI-N- BUTYL PHTHAL- ATE TOTAL (UG/L) (39110)	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	3,3'- DI- CHLORO- BENZI- DINE TOTAL (UG/L) (34631)	DIETHYL PHTHAL- ATE TOTAL (UG/L) (34336)	DI- METHYL PHTHAL- ATE TOTAL (UG/L) (34341)
05-13-97	<5.00	<5.00	<10.0	<10.0	<5.00	<3.00	<3.00	<3.00	<20.0	<5.00	<5.00
05-14-97	<5.00	<5.00	<10.0	<10.0	<5.00	<6.00	<6.00	<6.00	<20.0	<5.00	<5.00
05-15-97	<5.00	<5.00	<10.0	<10.0	<5.00	<3.00	<3.00	<3.00	<20.0	<5.00	<5.00
05-09-97	<5.00	<5.00	<10.0	<10.0	<5.00	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00
05-15-97	<5.00	<5.00	<10.0	<10.0	<5.00	<3.00	<3.00	<3.00	<20.0	<5.00	<5.00
05-06-97	<5.00	<5.00	<10.0	<10.0	<5.00	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00
05-08-97	<5.00	<5.00	<10.0	<10.0	<5.00	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00
05-07-97	<5.00	<5.00	<10.0	<10.0	<5.00	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00
05-05-97	<5.00	<5.00	<10.0	<10.0	<5.00	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00

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Table 7. Semi-volatile organic compounds in water samples, May, 1997--Continued

DATE	2,4-DI-NITRO-TOLUENE (UG/L) (34611)	2,6-DI-NITRO-TOLUENE (UG/L) (34626)	DI-N-OCTYL PHTHALATE (UG/L) (34596)	BIS(2-ETHYLHEXYL) PHTHALATE (UG/L) (39100)	FLUOR-ENE (UG/L) (34381)	FLUOR-ANTHENE (UG/L) (34376)	HEXA-CHLORO-BENZENE (UG/L) (39700)	HEXA-CHLORO-BUT-ADIENE (UG/L) (39702)	CYCLOPE-NTADIEN-HEXA-CHLORO-UNFLTRD RECOVER (UG/L) (34386)	ETHANE-HEXA-CHLORO-WATER UNFLTRD RECOVER (UG/L) (34396)	INDENO (1,2,3-CD) PYRENE (UG/L) (34403)
05-13-97	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00	<5.00	<3.00	<20.0	<5.00	<10.0
05-14-97	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00	<5.00	<6.00	<20.0	<5.00	<10.0
05-15-97	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00	<5.00	<3.00	<20.0	<5.00	<10.0
05-09-97	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00	<5.00	<3.00	<20.0	<5.00	<10.0
05-15-97	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00	<5.00	<3.00	<20.0	<5.00	<10.0
05-06-97	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<5.00	<10.0
05-08-97	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<5.00	<10.0
05-07-97	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<5.00	<10.0
05-05-97	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<5.00	<10.0

DATE	ISO-PHORONE (UG/L) (34408)	NAPHTH-ALENE (UG/L) (34696)	BENZENE-NITRO-WATER UNFLTRD RECOVER (UG/L) (34447)	N-NITRO-METHY-LAMINE (UG/L) (34438)	N-NITRO-PHENY-LAMINE (UG/L) (34433)	N-NITRO-SODI-N-PROPYL-AMINE (UG/L) (34428)	PHENAN-THRENE (UG/L) (34461)	PYRENE (UG/L) (34469)	BENZENE 1,2,4-TRI-CHLORO-WAT UNF REC (UG/L) (34551)	1,2-DI-PHENYL-HYDRA-ZINE TOT.REC (UG/L) (82626)
05-13-97	<5.00	<3.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<3.00	<5.00
05-14-97	<5.00	<6.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<6.00	<5.00
05-15-97	<5.00	<3.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<3.00	<5.00
05-09-97	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<3.00	<5.00
05-15-97	<5.00	<3.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<3.00	<5.00
05-06-97	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
05-08-97	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
05-07-97	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
05-05-97	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00