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**Table D1-1  
Outlying Areas RCRA SWMUs and AOCs**

<b>LBNL Unit Number</b>		<b>Current Status</b>	<b>Status Approval Date</b>	<b>Module Section or RFI Report Where Unit is Described</b>
<b>Units Described in This Report</b>				<b>Module Section</b>
SWMU 13-02	B62 Waste Accumulation and Chemical Storage Area	NFA	7/5/1996 (DTSC, 1996b)	D3.1
AOC 08-01	B70A Diesel UST	NFA	5/4/1998 (COB, 1998)	D3.2
AOC 08-02	B70 Former Diesel UST	NFA	12/3/1996 (COB, 1996b)	D3.3
AOC 08-07	B70A Sanitary Sewer	NFA	9/28/1999 (DTSC, 1999b)	D3.4
AOC 11-01	B74 Former Diesel UST	NFA	4/9/1999 (COB, 1999)	D3.5
AOC 11-03	B83/83A Sanitary Sewers	NFA	8/25/1997 (DTSC, 1997)	D3.6
AOC 12-04	B50 Sanitary Sewer Dislocations	NFA	9/30/1998 (DTSC, 1998)	D3.7
AOC 13-01	B62 (Former) Hazardous Materials Storage Area	NFI	7/5/1996 (DTSC, 1996b)	D3.8
AOC 13-02	B62 Former Diesel UST	NFA	7/15/1997 (COB, 1997b)	D3.9
AOC 13-04	Possible Solvent Spills East of Building 62	NFA	8/25/1997 (DTSC, 1997)	D3.10
<b>Units Described in Prior Reports</b>				<b>Report</b>
SWMU 06-01	B88 Acid Dip Sink	NFA	4/6/1994 (DTSC, 1994a)	LBNL, 1992d
SWMU 06-02	B88 Former Waste Accumulation Area	NFA	7/5/96 (DTSC, 1996b)	LBNL, 1994I
SWMU 08-01	B70A Former Wastewater Storage Tanks	NFA	7/5/96 (DTSC, 1996b)	LBNL, 1995k
SWMU 08-02	B70 New and Inactive Waste Neutralization Units	NFA	4/6/1994 (DTSC, 1994a)	LBNL, 1994I
SWMU 08-03	B70 Temporary Waste Accumulation Area	NFA	4/6/1994 (DTSC, 1994a)	LBNL, 1992d
SWMU 11-01	B74 Temporary Waste Accumulation Area	NFA	4/6/1994 (DTSC, 1994a)	LBNL, 1992d
SWMU 12-01	B50 Former Residual Photographic Solution UST	NFA	7/29/1996 (COB, 1996a)	LBNL, 1992d
SWMU 13-01	B62 Machine Shop Acid Dip Sink	NFA	4/6/1994 (DTSC, 1994a)	LBNL, 1992d
SWMU 13-03	B62 Former Ion Exchange Column	NFA	4/6/1994 (DTSC, 1994a)	LBNL, 1994I
AOC 06-01	B88 Abandoned Diesel UST	NFA	7/29/1996 (COB, 1996a)	LBNL, 1992d
AOC 06-02	B88 Transformers	NFA	5/18/1995 (DTSC, 1995)	LBNL, 1992d
AOC 06-03	B88 Hydraulic Gate Unit	NFI	7/5/96 (DTSC, 1996b)	LBNL, 1994I
AOC 06-04	B88 Hazardous Materials Storage Area	NFA	7/5/96 (DTSC, 1996b)	LBNL, 1992d
AOC 08-03	B70A Transformer	NFA	5/18/1995 (DTSC, 1995)	LBNL, 1992d
AOC 08-04	B70 Transformer	NFA	5/18/1995 (DTSC, 1995)	LBNL, 1992d
AOC 08-05	B70 Hazardous Materials Storage Area	NFA	8/25/1997 (DTSC, 1997)	LBNL, 1995k
AOC 08-06	B58/70 Sanitary Sewer	NFI	9/30/1998 (DTSC, 1998)	LBNL, 1992d
AOC 11-02	B83 Diesel Above Ground Storage Tank	NFA	8/25/1997 (DTSC, 1997)	LBNL, 1992d
AOC 12-01	B50 Transformer	NFA	4/6/1994 (DTSC, 1994a)	LBNL, 1994I
AOC 12-02	B50A Transformer	NFA	4/6/1994 (DTSC, 1994a)	LBNL, 1995k
AOC 12-03	B50B Transformer	NFA	4/6/1994 (DTSC, 1994a)	LBNL, 1995k
AOC 13-03	B62 Transformer	NFA	4/6/1994 (DTSC, 1994a)	LBNL, 1992d
AOC 13-05	B66 Diesel UST #1	NFA	4/6/1994 (DTSC, 1994a)	LBNL, 1995k
AOC 13-06	B66 Aboveground Diesel Day Tank	NFA	4/6/1994 (DTSC, 1994a)	LBNL, 1992d
AOC 13-07	B66 Diesel UST #2	NFA	4/6/1994 (DTSC, 1994a)	LBNL, 1992d
AOC 13-08	Acid Sewer Lines West of B62	NFA	8/25/1997 (DTSC, 1997)	LBNL, 1992d
AOC 13-09	Sanitary Sewers South of B62	NFA	8/25/1997 (DTSC, 1997)	LBNL, 1992d

NFI = No Further Investigation Status. Unit will be included in the site wide risk assessment.

NFA = No Further Action Status. Unit has been approved for exclusion from any additional RCRA corrective action process requirements.

Note: Radiological SWMUs and AOCs are not included in this table.

**Table D3-1  
Soil Sampling Results  
Metals  
(Concentrations in mg/kg)**

				Sb	As	Ba	Be	Cd	Cr	CrVI	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Tl	V	Zn
<b>Maximum Background Concentrations</b>				5.5	19.1	323.6	1.0	2.7	99.6		22.2	69.4	16.1	0.4	7.4	119.8	5.6	1.8	7.6	74.3	106.1
<b>USEPA Region 9 PRGs</b>				31	0.39	5400	150	37	210	30	4700	2900	400	23	390	1600	390	390	6.3	550	23000
<b>California Modified PRGs</b>								9		0.2						150					
Sample ID	Depth (ft)	Date	Lab																		

**SWMU 13-2: Building 62**

BS62-92-18-3	3.0	Jun-92	C	1.8	4.9	110	<0.05	1.9	23		9.8	8.7	9.9	<0.05	<0.25	19	<0.5	<0.25	<2	16	37
BS62-92-18-8.5	8.5			<1	3.4	99	<0.05	1.9	7.6		11	13	9.9	<0.05	<0.25	27	<0.5	<0.25	<2	11	70
BS62-92-18-13.5	13.5			1.1	12.4	140	0.29	2.3	23		17	24	12	<0.05	<0.25	25	<0.5	<0.25	<2	17	87
BS62-92-18-18	18.0			<1	5.3	180	<0.05	2.6	39		7.5	11	10	<0.05	<0.25	37	<0.5	<0.25	<2	21	60
MW62-92-26-6	6	Sep-92	C	<1	13	120	0.38	<0.05	25		2.5	9.8	2.8	<0.05	<0.25	18	5.7	<0.25	90	14	39
MW62-92-26-11	11			<1	11	170	0.39	<0.05	21		5.2	27	8.4	<0.05	<0.25	23	2.5	<0.25	<2	17	140
MW62-92-26-21	21			<1	11	84	0.17	<0.05	23		4.6	30	2.6	<0.05	<0.25	26	0.9	<0.25	<2	16	60
MW62-92-26-30.5	30.5			1.3	21	53	0.11	<0.05	26		13	46	11	0.11	<0.25	28	<0.5	<0.25	<2	43	98
MW62-92-26-40.3	40.3			<1	26	39	0.16	<0.05	29		14	53	9.9	0.08	<0.25	31	<0.5	<0.25	<2	51	95
MW62-92-26-50.5	50.5			1.3	28	37	0.07	<0.05	27		17	41	12	0.09	<0.25	38	<0.5	<0.25	<2	38	90
SB62-95-11-5.7	5.7	Jul-95	EC																	<5	

**AOC 8-1: Building 70A Diesel Underground Storage Tank**

BS-MW70A-96-5-6	6	Apr-96	CLS	<5	3.0	110	<0.14	0.63	29		9.4	32	13	<0.05	<2.5	31	<0.5	<1	<4	36	75
BS-MW70A-96-5-15	15			<6	9.7	58	0.60	1.1	44		9.4	46	15	<0.05	<2.5	40	<0.5	<1	<4	52	110
BS-MW70A-96-6-4.5	4.5	Apr-96	CLS	<5	5.8	120	<0.14	0.84	29		11	36	14	<0.05	<2.5	36	<0.5	<1	<4	36	93
BS-MW70A-96-6-14.5	14.5			<5	17	53	0.66	2.0	48		14	49	27	<0.05	<2.5	61	<0.1	<1	<4	52	110
BS-MW70A-96-6-24.5	24.5			<5	15	54	0.47	1.2	31		7.7	38	16	<0.05	<2.5	33	<0.5	<1	<4	38	89
BS-MW70A-96-6-39.5	39.5			<5	17	60	<0.14	0.7	24		16	16	13	0.050	<2.5	32	<0.5	<1	<4	38	65

**AOC 8-7: Building 70A Sanitary Sewer System**

MW70A-96-13-8.2	8.2	Sep-96	EC	<10	14	178	<1	<1	40		15	44	12	<0.2	<5	34	2.4	<2	<10	48	92
MW70A-96-13-18	18			<10	18	170	<1	<1	33		13	45	14	<0.2	<5	39	2.2	<2	<10	43	103
MW70A-96-13-48	48			<10	18	32	<1	<1	17		<5	19	<5	<0.2	<5	8.7	1.1	<2	<10	20	42
MW70A-96-13-68	68			<10	14	138	<1	<1	64		16	61	14	<0.2	<5	67	2.5	<2	<10	59	105
MW70A-96-13-78	78			<20	12	75	<2	<2	68		15	63	15	<0.2	<10	67	3.4	<4	<20	65	122
MW70A-96-14-10	10	Sep-96	EC	<10	12	188	<1	<1	43		26	60	14	<0.2	<5	51	3.0	<2	<10	59	127
MW70A-96-14-20.5	20.5			<10	9.3	110	<1	<1	40		18	80	13	<0.2	<5	56	2.4	<2	<10	52	142

**Table D3-1**  
**Soil Sampling Results**  
**Metals**  
**(Concentrations in mg/kg)**

				Sb	As	Ba	Be	Cd	Cr	CrVI	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Tl	V	Zn
<b>Maximum Background Concentrations</b>				5.5	19.1	323.6	1.0	2.7	99.6		22.2	69.4	16.1	0.4	7.4	119.8	5.6	1.8	7.6	74.3	106.1
<b>USEPA Region 9 PRGs</b>				31	0.39	5400	150	37	210	30	4700	2900	400	23	390	1600	390	390	6.3	550	23000
<b>California Modified PRGs</b>								9		0.2						150					
Sample ID	Depth (ft)	Date	Lab																		
MW70A-96-14-30	30	Sep-96	EC	<10	10	179	<1	<1	44		18	44	9.2	<0.2	<5	52	2.6	<2	<10	59	109
MW70A-96-14-40	40			<10	8.9	137	<1	<1	44		19	49	10	<0.2	<5	57	2.6	<2	<10	53	109
SB70A-96-1-7	7	Oct-96	CLS	<0.9	<1	170	0.94	<1	36		18	48	10	0.54	<4	44	<1	<0.4	<1	52	100
SB70A-96-2-5	5			<0.9	4.1	120	0.85	<1	26		14	34	13	<0.2	<4	37	<1	<0.4	<1	39	80
SB70A-96-3-5.5	5.5			<0.9	2.1	150	0.73	<1	29		16	41	11	<0.2	<4	37	<1	<0.4	<1	43	97
SB70A-96-4-7	7			<0.9	2.1	130	0.91	<1	36		22	59	12	<0.2	<4	45	<1	<0.4	<1	51	120
SB70A-96-5-7	7			<0.9	1.7	83	0.84	<1	34		18	60	12	<0.2	<4	48	<1	<0.4	<1	49	120
SS-70ASWR-99-1-4.0	4	Sep-99	EC	<10	10	173	<1	<1	34		13	14	12	<0.2	<5	41	<1	<2	<10	50	88
SS-70ASWR-99-2-3.6	3.6			<10	9.5	181	<1	<1	40		46	46	13	<0.2	<5	45	<1	<2	<10	63	90

**AOC 11-1: Building 74 Former Diesel Underground Storage Tank**

SB74-92-13-6	6	Apr-92	C	1.5	<0.25	45	0.1	1.2	12		3.2	7.5	4.5	0.12	0.28	45	<0.5	<0.25	<2	7.8	26
SB74-92-13-16	16			<1	<0.25	39	0.23	1.4	11		3.5	11	3.5	0.1	<0.25	16	<0.5	<0.25	<2	5.4	24
SB74-92-13-25.5	25.5			<1	<0.25	38	0.08	3.3	11		3.7	21	4.3	0.39	<0.25	25	<0.5	<0.25	<2	9.0	29
SB74-92-13-33	33			<1	<0.25	49	0.26	1.4	12		3.6	17	3.9	0.4	0.26	21	0.63	<0.25	<2	5.5	24
SB74-92-13-40	40			<1	<0.25	1.7	0.06	0.69	4.1		1.7	6.6	2.3	0.07	0.38	6.2	<0.5	<0.25	<2	3.3	17
SB83-92-14-6	6	Mar-92	Q	<2	3	69	0.4	0.5	21		10	18	7	<0.2	<0.6	56	<2	<0.2	4	28	55
SB83-92-14-11	11			<2	1	87	0.4	<0.2	16		9	13	8	<0.2	<0.6	51	<2	<0.2	<2	8	42
SB83-92-14-16	16			<2	3	250	0.4	0.5	27		9.7	20	8	<0.2	<0.6	56	3	<0.2	8	13	75
SB83-92-14-20	20			<2	4	59	0.3	0.5	22		7.1	7	4	<0.2	<0.6	51	3	<0.2	5	11	32
SB83-92-14-30.5	30.5			<2	7	210	0.6	0.3	34		23	30	9	<0.2	<0.6	120	3	<0.2	5	8	84
SB83-92-14-40.5	40.5			<2	14	100	0.3	<0.2	9		4.6	3	6	<0.2	<0.6	21	3	<0.2	10	7	19
SB83-92-14-50	50			<2	4	120	0.4	0.3	14		5.4	16	7.0	<0.2	1.2	33	<2	<0.2	3	8	47
SB83-92-14-57	57			<2	3	92	0.3	0.3	10		4.5	6	6.0	<0.2	<0.6	34	3	<0.2	<3	6	41
SB74-94-06-10.5	10.5	Jul-94	EC	<5	0.76	105	<0.5	<0.5	19		5.6	19	3.4	<0.2	<2.5	22	<0.5	<1	<5	9.6	45
SB74-94-06-21.5	21.5			<5	9.6	135	<0.5	<0.5	18		10	34	5.4	<0.2	<2.5	46	<0.5	<1	<5	12	52
BS74-94-06-30	30			<5	4.1	75	<0.5	<0.5	19		4.8	23	<2.5	<0.2	<2.5	21	<0.5	<1	<5	15	35
BS74-94-06-40	40			<5	4.3	90	<0.5	<0.5	14		4.2	28	4	<0.2	<2.5	27	<0.5	<1	<5	9.8	53
BS74-94-07-5	5			<5	5.3	11	<0.5	<0.5	21		4.6	5	3.5	<0.2	<2.5	20	<0.5	<1	<5	17	18
BS74-94-07-15	15			<5	2.7	61	<0.5	0.52	15		4.2	12	3	<0.2	<2.5	16	<0.5	<1	<5	11	28
BS74-94-07-25	25			<5	4.1	95	<0.5	<0.5	14		5.4	13	4.4	<0.2	<2.5	30	<0.5	<1	<5	11	37
BS74-94-08-10.5	10.5			<5	6.8	111	0.54	0.84	40		9.7	32	7.7	<0.2	<2.5	48	0.62	<1	<5	20	94
BS74-94-08-20	20			<5	8.7	106	<0.5	<0.5	23		8.4	20	4.8	0.36	<2.5	42	<0.5	<1	<5	14	48

**Table D3-1**  
**Soil Sampling Results**  
**Metals**  
**(Concentrations in mg/kg)**

				Sb	As	Ba	Be	Cd	Cr	CrVI	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Tl	V	Zn
<b>Maximum Background Concentrations</b>				5.5	19.1	323.6	1.0	2.7	99.6		22.2	69.4	16.1	0.4	7.4	119.8	5.6	1.8	7.6	74.3	106.1
<b>USEPA Region 9 PRGs</b>				31	0.39	5400	150	37	210	30	4700	2900	400	23	390	1600	390	390	6.3	550	23000
<b>California Modified PRGs</b>								9		0.2						150					
Sample ID	Depth (ft)	Date	Lab																		
BS74-94-08-30	30	Jul-94	BC	<5	5.5	123	<0.5	<0.5	26		5.1	25	4.2	<0.2	3.8	31	<0.5	<1	<5	26	55
BS74-94-08-38	38			<5	3.2	75	<0.5	<0.5	17		3.6	6.2	3.2	<0.2	<2.5	19	<0.5	<1	<5	13	28
BS-SB74-97-1-11-31comp	11-31	Feb-97	BC	<5	7.9	114	<0.5	<0.5	40		9.8	18	3.5	<0.2	<2.5	64	<0.5	<1	<5	18	43

**AOC 12-4: Building 50 Sanitary Sewer Dislocations**

SS50W-07-8	8.0	May-92		<1	3.2	18	0.2	2.2	12		5.7	24	6.4	0.05	<0.25	14	<0.5	<0.25	<2	17	35
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**AOC 13-1: Building 62 Former Hazardous Materials Storage Area**

BS62-92-19-11.5	11.5	Jun-92	C	2.1	13.1	84	0.28	5.8	81		9.9	42	24	0.12	<0.25	27	<0.5	<0.25	<2	40	97
MW62-92-27-5.5	5.5	Sep-92	C	1.2	16	103	0.17	<0.05	19		6.3	11	6.1	<0.05	0.68	14	2.0	<0.25	<2	38	49
MW62-92-27-15.5	15.5			1.9	17	51	0.11	<0.05	32		11	60	12	0.08	<0.25	33	<0.5	<0.25	<2	40	130
MW62-92-27-25.5	25.5			1.8	18	320	0.57	<0.05	31		10	77	9.2	<0.05	<0.25	28	<0.5	<0.25	<2	47	130
MW62-92-27-35.5	35.5			<1	25	36	0.09	<0.05	26		16	45	12	0.07	<0.25	38	<0.5	<0.25	<2	34	93
MW62-92-27-45.5	45.5			1.2	18	41	0.15	<0.05	29		11	44	9.6	0.08	<0.25	37	<0.5	<0.25	<2	37	107
MW62-92-27-55.5	55.5			<1	24	53	0.23	<0.05	34		12	50	11	0.08	<0.25	37	<0.5	<0.25	<2	43	105
MW62-92-27-65	65			1.9	18	55	0.13	<0.05	32		9.3	53	8.9	0.06	<0.25	28	<0.5	<0.25	<2	45	107

**AOC 13-2: Building 62 Former Diesel UST**

MW62-95-16-10.3	10.3	Aug-95	BC	<5	8.0	195	0.69	<0.5	43		31	58	12	<0.2	<2.5	37	<0.5	1.1	8.9	57	114
MW62-95-16-20	20			<5	19	159	0.60	<0.5	39		14	40	14	<0.2	<2.5	32	<0.5	<1	6.9	52	99
MW62-95-16-30.5	30.5			<5	9.2	57	0.58	<0.5	38		19	54	13	<0.2	<2.5	53	0.59	1.1	8.0	47	107

**Table D3.1-1**  
**Soil Sampling Results (mg/kg)**  
**SWMU 13-2: Building 62**  
**Concentrations of Organic Constituents**  
**COPCs: Halogenated VOCs**

Sample ID	Depth (ft)	Date	Lab	VOCs
				PCE
			PRG	5.7
BS62-92-18-3.5	3.5	Jun-92	LBNL	<0.005
BS62-92-18-5	5			0.0106
BS62-92-18-9.5	9.5			<0.005
BS62-92-18-14.5	14.5			<0.005
BS62-92-18-19.5	19.5			0.0122
MW62-92-26-6	6	Sep-92	C	<0.005
MW62-92-26-11	11			<0.005
MW62-92-26-21	21			<0.005
MW62-92-26-30.5	30.5			<0.005
MW62-92-26-40.3	40.3			<0.005
MW62-92-26-50.5	50.5			<0.005

<

= Not analyzed

= Not detected above reporting limit (reporting limit shown)

C = Analysis by Chromalab

LBNL = Analysis by Lawrence Berkeley Lab

COPCs = Chemicals of Potential Concern

VOCs analyzed by EPA Method 8240, or 8260

**Table D3.2-1**  
**Soil Sampling Results (mg/kg)**  
**AOC 8-1: Building 70A Diesel Underground Storage Tank**  
**Concentrations of Organic Constituents**  
**COPCs: Halogenated VOCs, Fuel Hydrocarbons**

Sample ID	Depth (ft)	Date	PRG	Lab	VOCs	SVOCs	BTEX		TPH-Motor Oil	TPH-Diesel
							Toluene	Xylene		
							520	210		
BS-SB-70A-95-1-5.2	5.2	Aug-95	BC		ND	<0.005	<0.01		75	
BS-SB-70A-95-1-10.7	10.7				Bis(2-ethylhexyl)phthalate=0.4 Fluorene=0.5 Phenanthrene=0.2	<0.005	<0.01		550	
BS-SB-70A-95-1-20.4	20.4				ND	0.006	<0.01		<10	
BS-SB-70A-95-2-5.8	5.8				ND	<0.005	<0.01		<10	
BS-SB-70A-95-2-10.6	10.6				ND	<0.005	<0.01		13	
BS-SB-70A-95-3-15	15				ND	0.006	0.01		<10	
BS-SB-70A-95-3-20.6	20.6				ND	<0.005	<0.01		210	
BS-SB-70A-95-3-25.8	25.8				ND	0.005	<0.01		<10	
BS-MW70A-96-5-6	6	Apr-96	CLS	sec-butylbenzene=0.033				<100	720	
BS-MW70A-96-5-10	10							26	11	
BS-MW70A-96-5-15	15			ND				<20	9.0	
BS-MW70A-96-5-20	20							<2.0	<1.0	
BS-MW70A-96-6-4.5	4.5	Apr-96	CLS	ND				2.1	<1.0	
BS-MW70A-96-6-9.5	9.5							<2.0	<1.0	
BS-MW70A-96-6-14.5	14.5			ND				<2.0	2.2	
BS-MW70A-96-6-24.5	24.5			ND				<2.0	<1.0	
BS-MW70A-96-6-39.5	39.5			ND				<2.0	<1.0	

	= Not analyzed
	= Not detected above reporting limit (reporting limit shown)
ND	= Not detected above reporting limit (reporting limit varies with analyte)

**PRGs for Residential Soil for Detected Organic Analytes (mg/kg)**

sec-butylbenzene = 110  
 Bis(2-ethylhexyl)phthalate = 35  
 Fluorene = 2600

BC = Analysis by BC Laboratories  
 CLS = Analysis by California Laboratory Services  
 COPCs = Chemicals of Potential Concern  
 VOCs analyzed by EPA Method 8010, 8240, or 8260  
 BTEX analyzed by EPA Method 8020  
 TPH-Diesel analyzed by EPA Method 8015M  
 TPH-Motor Oil analyzed by EPA Method 8015M

AOC8-1 VOCs  
 7/31/00

**Table D3.3-1**  
**Soil Sampling Results (mg/kg)**  
**AOC 8-2: Building 70 Diesel Underground Storage Tank**  
**Concentrations of Organic Constituents**  
**COPCs: Fuel Hydrocarbons**

Sample ID	Depth (ft)	Date	Lab	TPH-Diesel
BS-SB-70-95-1-4.2	4.2	Jun-95	BC	<10
BS-SB-70-95-1-10	10			<10
BS-SB-70-95-1-22	22			<10
SS-70E-1-1.5	1.5	Jun-95	BC	<10
SS-70E-2-3.0	3			<10
SS-70E-3-2.0	2			<10
SS-70NE-96-1-5	5	Feb-96	BC	170
SS-70NE-96-2-4.5	4.5			120

 = Not detected above reporting limit (reporting limit shown)

BC = Analysis by BC Laboratories

COPCs = Chemicals of Potential Concern

TPH-Diesel analyzed by EPA Method 8015M

**Table D3.4-1**  
**Soil Sampling Results (mg/kg\*)**  
**AOC 8-7: Building 70A Sanitary Sewer System**  
**Concentrations of Organic Constituents**  
**COPCs: Halogenated VOCs**

Sample ID	Depth (ft)	Date	Lab	VOCs		pH
MW70A-96-13-8.2	8.2	Sep-96	BC	ND		
MW70A-96-13-18	18			ND		
MW70A-96-13-48	48			ND		
MW70A-96-13-68	68			ND		
MW70A-96-13-78	78			ND		
MW70A-96-14-10	10	Sep-96	BC	ND		
MW70A-96-14-20.5	20.5			ND		
MW70A-96-14-30	30			ND		
MW70A-96-14-40	40			ND		
SB70A-96-1-7	7	Oct-96	CLS	ND		7.5
SB70A-96-2-5	5			ND		7.5
SB70A-96-3-5.5	5.5			ND		7.4
SB70A-96-4-7	7			ND		7.4
SB70A-96-5-7	7			ND		7.7
SS-70ASWR-99-1-4.0	4	Sep-99	BC	ND		7.51
SS-70ASWR-99-2-3.6	3.6			ND		7.62

ND

= Not detected above reporting limit (reporting limit varies with analyte)

= Not analyzed

BC = Analysis by BC Laboratories

CLS= Analysis by California Laboratory Services

VOCs analyzed by EPA Method 8260

pH analyzed by EPA Method 9040

\*pH reported in standard units

**Table D3.5-1**  
**Soil Sampling Results (mg/kg)**  
**AOC 11-1: Building 74 Former Diesel Underground Storage Tank**  
**Concentrations of Organic Constituents**  
**COPCs: Halogenated VOCs, Fuel Hydrocarbons**

Sample ID	Depth (ft)	Date	Lab	VOCs	BTEX	Fuel Identification	TPH-Diesel	TPH-Gas	PAH
MW74-92-13-6	6	Apr-92	C	ND			<1	<1	
MW74-92-13-16	16			ND			9.0	<1	
MW74-92-13-25.5	25.5			ND			9.5	1.2	
MW74-92-13-33	33			ND			28	<1	
MW74-92-13-40	40			ND			60	<1	
MW83-92-14-6	6	Mar-92	Q	PCE=0.005			<1	<0.2	
MW83-92-14-11	11			ND			<1	<0.2	
MW83-92-14-16	16			ND			6	<0.2	
MW83-92-14-20	20			ND			280	<0.2	
MW83-92-14-25.5	25.5			ND			1300	270	
MW83-92-14-30.5	30.5			ND			87	0.4	
MW83-92-14-36	36			ND			800	280	
MW83-92-14-40.5	40.5			ND			2000	<0.2	
MW83-92-14-45.5	45.5			ND			230	1.0	
MW83-92-14-50	50			ND			510	160	
MW83-92-14-55	55			ND			110	0.4	
MW83-92-14-57	57			ND			3000	650	
SB-1	4.5			Mar-94	S	ND			<1
G-10	5						15		
	10.25						13		
	13	ND					720		
	15.5						1200		
	20.5						40		
	25						950		
30				1300					
MW74-94-7-5.1	5.1	Apr-94	BC	ND		ND			
MW74-94-7-15.5	15.5			ND		ND			
MW74-94-7-25.5	25.5			ND		Crude Oil=100			

**Table D3.5-1**  
**Soil Sampling Results (mg/kg)**  
**AOC 11-1: Building 74 Former Diesel Underground Storage Tank**  
**Concentrations of Organic Constituents**  
**COPCs: Halogenated VOCs, Fuel Hydrocarbons**

Sample ID	Depth (ft)	Date	Lab	VOCs	BTEX	Fuel Identification	TPH-Diesel	TPH-Gas	PAH
MW74-94-7-35.7	35.7	Apr-94	BC	ND		ND			
MW74-94-7-44.7	44.7			Crude Oil=78					
MW74-94-8-4.2	4.2	May-94	BC	ND		ND		<1	
MW74-94-8-10	10			ND		ND		<1	
MW74-94-8-13.8	13.8			ND		ND		<1	
MW74-94-8-19.5	19.5			ND		ND		<1	
MW74-94-8-29	29			ND		Crude/Waste Oil=130		<1	
SB74-94-01-1	1			Jun-94	BC		ND		<10
SB74-94-01-5	5		ND				<10		
SB74-94-01-10	10		ND				30		
SB74-94-01-15	15		ND				24		
SB74-94-01-20	20		ND				170		
SB74-94-01-25.5	25.5		ND				140		
SB74-94-01-30	30		ND				740		
SB74-94-01-35	35		ND				740		
SB74-94-01-40	40		ND				63		
SB74-94-02-5	5	Jul-94	BC			ND			12
SB74-94-02-10	10			ND			130		
SB74-94-02-15	15			ND			710		
SB74-94-02-20	20			ND			11		
SB74-94-02-30	30			ND			630		
SB74-94-02-40	40			ND			1100		
SB74-94-03-5	5			ND			<10		
SB74-94-03-10	10			ND			<10		
SB74-94-03-15	15			ND			100		
SB74-94-03-20	20			ND			160		
SB74-94-03-25	25	ND			15				
SB74-94-03-30	30	ND			13				

Table D3.5-1

## Soil Sampling Results (mg/kg)

## AOC 11-1: Building 74 Former Diesel Underground Storage Tank

## Concentrations of Organic Constituents

COPCs: Halogenated VOCs, Fuel Hydrocarbons

Sample ID	Depth (ft)	Date	Lab	VOCs	BTEX	Fuel Identification	TPH-Diesel	TPH-Gas	PAH
SB74-94-03-35	35	Jul-94	BC	ND			540		
SB74-94-03-40	40			ND			140		
SB74-94-04-5	5			ND			<10		
SB74-94-04-10	10			ND			200		
SB74-94-04-15	15			ND			220		
SB74-94-04-20	20			ND			110		
SB74-94-04-25	25			ND			740		
SB74-94-04-30	30			p-Isopropyltoluene=0.0052 Naphthalene=0.012 1,2,4-Trimethylbenzene=0.017			150		
SB74-94-04-35	35			ND			220		
SB74-94-04-40	40			ND			450		
SB74-94-05-6	6					ND	16		
SB74-94-05-10	10					ND	220		
SB74-94-05-16	16					ND	23		
SB74-94-05-20.5	20.5					ND	40		
SB74-94-05-23	23					ND	170		
SB74-94-05-30	30					ND	840		
SB74-94-05-35	35					ND	630		
SB74-94-05-40	40					ND	240		
SB74-94-05-45	45					ND	93		
SB74-94-05-50	50					ND	44		
SB74-94-06-5.5	5.5					ND	40		
SB74-94-06-10.5	10.5					ND	<10		
SB74-94-06-15.5	15.5					ND	<10		
SB74-94-06-21.5	21.5			ND	380				
SB74-94-06-30	30			ND	460				
SB74-94-06-35	35			ND	490				

**Table D3.5-1**  
**Soil Sampling Results (mg/kg)**  
**AOC 11-1: Building 74 Former Diesel Underground Storage Tank**  
**Concentrations of Organic Constituents**  
**COPCs: Halogenated VOCs, Fuel Hydrocarbons**

Sample ID	Depth (ft)	Date	Lab	VOCs	BTEX	Fuel Identification	TPH-Diesel	TPH-Gas	PAH
SB74-94-06-40	40	Jul-94	BC	ND			560		
SB74-94-06-45	45			1,2,4-Trimethylbenzene=0.043			1200		
SB74-94-07-5	5			ND			<10		
SB74-94-07-10	10			ND			240		
SB74-94-07-15	15			ND			190		
SB74-94-07-20	20			ND			19		
SB74-94-07-25	25			ND			610		
SB74-94-07-40	40			p-Isopropyltoluene=0.053 1,2,4-Trimethylbenzene=0.21			270		
SB74-94-08-5	5			ND			<10		
SB74-94-08-10.5	10.5			ND			<10		
SB74-94-08-15	15			ND			830		
SB74-94-08-20	20			ND			100		
SB74-94-08-25	25			ND			140		
SB74-94-08-30	30			sec-butylbenzene=0.064 p-Isopropyltoluene=0.075			2000		
SB74-94-08-35	35	ND			570				
SB74-94-08-38	38	ND			1700				
BS-SB74-94-09-3.6	3.6	Oct-94	BC				<10		
BS-SB74-94-09-4.7	4.7						<10		
BS-SB74-94-09-9.5	9.5						<10		
BS-SB74-94-09-14.7	14.7						86		
BS-SB74-94-09-19.7	19.7						35		
BS-SB74-94-09-29.5	29.5						250		
BS-SB74-94-09-34.5	34.5						170		
BS-SB74-94-09-44.5	44.5						290		
BS-SB74-94-11-4.9	4.9						<10		
BS-SB74-94-11-7.2	7.2						<10		

Table D3.5-1

Soil Sampling Results (mg/kg)

AOC 11-1: Building 74 Former Diesel Underground Storage Tank

Concentrations of Organic Constituents

COPCs: Halogenated VOCs, Fuel Hydrocarbons

Sample ID	Depth (ft)	Date	Lab	VOCs	BTEX	Fuel Identification	TPH-Diesel	TPH-Gas	PAH
B74-01		Nov-94	AEN	ND	<5		37		
B74-02				ND	<5		500		
B74-03				sec-butylbenzene=0.079 ethylbenzene=0.11 isopropylbenzene=0.068 p-isopropyltoluene=0.12 naphthalene=0.32 n-propylbenzene=0.17 toluene=0.046, xylenes=0.32 1,2,4-Trimethylbenzene=0.48 1,3,5-Trimethylbenzene=0.17	ethylbenzene=0.055 xylenes=0.46		3000		
B74-04				ND	<5		85		
BS-SB-74-95-9-12.7	12.7	May-95	BC	ND			28	<1	
BS-SB-74-95-9-18.8	18.8			ND			120	1.4	
BS-SB-74-95-9-23.8	23.8			ND			15	3.0	
BS-SB-74-95-9-28.9	28.9			ND†			21	6.3	
BS-SB-74-95-9-34.2	34.2			ND			<10	<1	
BS-SB-74-95-9-39.5	39.5			ND			11	<1	
BS-SB-74-95-9-44.5	44.5			ND			11	<1	
BS-SB-74-95-9-50.6	50.6			ND			55	<1	
SS-83NE-1-0.5	0.5			Jun-95	BC				<10
SS-83NE-1-1.5	1.5						<10		
BS-MW-74-95-6-4	4	Jul-95	BC				<10		
BS-MW-83-95-7-10.2	10.2	Jul-95	BC				<10		
BS-MW-83-95-7-40.3	40.3						630		
BS-MW-83-95-7-48	48						610		
BS-SB74-95-6-14	14	Aug-95	BC				1700		
BS-SB74-95-6-19	19						390		

**Table D3.5-1**  
**Soil Sampling Results (mg/kg)**  
**AOC 11-1: Building 74 Former Diesel Underground Storage Tank**  
**Concentrations of Organic Constituents**  
**COPCs: Halogenated VOCs, Fuel Hydrocarbons**

Sample ID	Depth (ft)	Date	Lab	VOCs	BTEX	Fuel Identification	TPH-Diesel	TPH-Gas	PAH	
BS-SB74-95-6-20Comp	20	Aug-95	BC							
BS-SB74-95-6-24	24							81		
BS-SB74-95-6-29	29							650		
BS-SB74-95-6-30Comp	30									
BS-SB74-95-6-34	34							1200		
BS-SB74-95-6-39	39							1800		
BS-SB74-95-6-41Comp	41									
BS-SB74-95-6-44.3	44.3							44		
BS-SB74-95-6-49	49							460		
BS-SB74-95-8-4.8	4.8					ND				
BS-SB74-95-8-10	10					ND				
BS-SB74-95-8-14.5	14.5								<10	<1
BS-SB74-95-8-19	19									
BS-SB74-95-8-19.7	19.7								<10	<1
BS-SB74-95-8-24	24								33	<1
BS-SB74-95-8-29	29								<10	<1
BS-SB74-95-8-29.5	29.5									
BS-SB74-95-8-34	34								<10	<1
BS-SB74-95-8-39	39						<10	<1		
BS-SB74-95-8-39.3	39.3									
BS-SB83-96-1-10.3	10.3	Oct-96	BC		ND	Motor Oil=7.8	<1			
BS-SB83-96-1-15.1	15.1				ND		15			
BS-SB83-96-1-20	20				Xylenes=0.016	Motor Oil=370	150			
BS-SB83-96-1-25	25				Xylenes=0.031	Motor Oil=290	280			
BS-SB74-97-1-11	11	Feb-97	BC		ND		4		ND	
BS-SB74-97-1-16	16				ND		6		Fluoranthene=0.054 Naphthalene=0.059 Phenanthrene=0.023	

**Table D3.5-1**  
**Soil Sampling Results (mg/kg)**  
**AOC 11-1: Building 74 Former Diesel Underground Storage Tank**  
**Concentrations of Organic Constituents**  
**COPCs: Halogenated VOCs, Fuel Hydrocarbons**

Sample ID	Depth (ft)	Date	Lab	VOCs	BTEX	Fuel Identification	TPH-Diesel	TPH-Gas	PAH
BS-SB74-97-1-21	21	Feb-97	BC		ND		160		ND
BS-SB74-97-1-26	26				Ethylbenzene=0.007		190		Benzo(a)anthracene=0.28
BS-SB74-97-1-31	31				Ethylbenzene=0.53 Total xylenes=0.075		32		Phenanthrene=0.48

  = Not analyzed  
< = Not detected above reporting limit (reporting limit shown)  
ND = Not detected above reporting limit (reporting limit varies with analyte)

† - Tentatively identified compounds detected: 1,2,4-trimethyl cyclo pentane, 1,2-dimethyl trans cyclo hexane, 1,1,3-trimethyl cyclo hexane, trans1,3-diethyl cyclo pentane, and 1,2,4,5-tetramethyl benzene

COPCs = Chemicals of Potential Concern

VOCs analyzed by EPA Method 8240, or 8260

BTEX analyzed by EPA Method 8020

Fuel Identification analyzed by EPA Method 8015M included: Light Naptha, Aviation Fuel, Stoddard/White Spirits, Heavy Naptha/Ligroin/Petroleum Benzine, Gasoline, JP4, JP5, JP6, JP8, Kerosene/Jet Fuel, Diesel, Crude/Waste Oil, Hydraulic Oil, and WD-40

TPH-Diesel analyzed by EPA Method 8015M

TPH-Gasoline analyzed by EPA Method 8015M

PAH analyzed by EPA Method 8310

**PRGs for Residential Soil for Detected Organic Analytes (mg/kg)**

1,2,4-trimethylbenzene=5.7	fluoranthene=2300	sec-butylbenzene=110
1,3,5-trimethylbenzene=21	isopropylbenzene=160	toluene=520
benzo(a)anthracene=0.62	n-propylbenzene=140	xylene=210
ethylbenzene=230	naphthalene=56	

AEN = Analysis by American Environmental Network

BC = Analysis by BC Laboratories

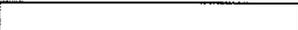
C = Analysis by Chromalab

Q = Analysis by Quanteq Laboratories

S = Analysis by Subsurface Consultants

**Table D3.6-1**  
**Soil Sampling Results (mg/kg)**  
**AOC 11-3: Building 83/83A Sanitary Sewers**  
**Concentrations of Organic Constituents**  
**COPCs: Halogenated VOCs, Fuel Hydrocarbons**

Sample ID	Depth (ft)	Date	Lab	VOCs	Total Hydrocarbons	TPH-Diesel	TPH-Gas
				POE			
			FRG	5.7			
SS74-1C		Nov-91	H	<0.0001	0.52		
MW83-92-14-6	6	Mar-92	Q	0.005		<1	<0.2
MW83-92-14-11	11			<0.005		<1	<0.2
MW83-92-14-16	16			<0.005		6	<0.2
MW83-92-14-20	20			<0.005		280	<0.2
MW83-92-14-25.5	25.5			<0.005		1300	270
MW83-92-14-30.5	30.5			<0.005		87	0.4
MW83-92-14-36	36			<0.005		800	280
MW83-92-14-40.5	40.5			<0.005		2000	<0.2
MW83-92-14-45.5	45.5			<0.005		230	1.0
MW83-92-14-50	50			<0.005		510	160
MW83-92-14-55	55			<0.005		110	0.4
MW83-92-14-57	57			<0.005		3000	650
BS-SB74-95-8-4.8	4.8			Aug-95	BC	<0.005	
BS-SB74-95-8-10	10	<0.005					
BS-SB74-95-8-14.5	14.5					<10	<1
BS-SB74-95-8-19	19						
BS-SB74-95-8-19.7	19.7					<10	<1
BS-SB74-95-8-24	24					33	<1
BS-SB74-95-8-29	29					<10	<1
BS-SB74-95-8-29.5	29.5						
BS-SB74-95-8-34	34					<10	<1
BS-SB74-95-8-39	39					<10	<1
BS-SB74-95-8-39.3	39.3						
BS-SB83-95-1-7.3	7.3	Aug-95	BC	<0.005		<10	<1
BS-SB83-95-1-10.8	10.8			<0.005		<10	<1
BS-SB83-95-1-16	16			<0.005		10	<1
BS-SB83-95-2-15.8	15.8			<0.005		25	<1
BS-SB83-95-3-7	7			<0.005		<10	<1
BS-SB83-95-3-9.8	9.8			<0.005		<10	<1
BS-SB83-95-3-14	14			<0.005		<10	<1
BS-SB83-95-4-6.6	6.6			<0.005		<10	<1
BS-SB83-95-4-9.5	9.5			<0.005		<10	<1

	= Not analyzed
	= Not detected above reporting limit (reporting limit shown)
	= Not detected above reporting limit (reporting limit varies with analyte)

COPCs = Chemicals of Potential Concern  
VOCs analyzed by EPA Method 8240, or 8260  
TPH-Diesel analyzed by EPA Method 8015M  
TPH-Gasoline analyzed by EPA Method 8015M

BC = Analysis by BC Laboratories  
H = Analysis by Hydro GeoChem  
Q = Analysis by Quanteq Laboratories

**Table D3.7-1**  
**Soil Sampling Results (mg/kg)**  
**AOC 12-4: Building 50 Sanitary Sewer Dislocations**  
**Concentrations of Organic Constituents**  
**COPCs: Halogenated VOCs, Fuel Hydrocarbons**

Sample ID	Depth (ft)	Date	Lab	VOCs					Total Hydrocarbons
				Ethylbenzene	Toluene	Isopropylbenzene	m&p-Xylenes	o-Xylene	
			PRG	230	520	160	210	210	
SS50A-1C		Nov-91	H	0.039	0.025	0.025	0.048	0.039	1.05
SS50B-1C				0.014	0.012	0.013	0.02	0.013	0.52

COPCs = Chemicals of Potential Concern

H = Analysis by Hydro GeoChem

**Table D3.8-1**  
**Soil Sampling Results (mg/kg)**  
**AOC 13-1: Building 62 Former Hazardous Materials Storage Area**  
**Concentrations of Organic Constituents**  
**COPCs: Halogenated VOCs**

Sample ID	Depth (ft)	Date	Lab	PRG						
				VOCs						
				PCE	Acetone	MEK	Freon-11	1,3,5-TMB	1,2,3-TCP	
				5.7	1600	7300	390	21	0.0014	
BS62-92-19-3	3	Jun-92	LBNL	<0.005	<0.1	<0.1	<0.002	0.0192		
BS62-92-19-5	5			<0.005	<0.1	<0.1	<0.002	<0.005		
BS62-92-19-10	10			<0.005	<0.1	<0.1	0.0051	<0.005	<b>0.0082</b>	
BS62-92-19-15	15			<0.005	<0.1	<0.1	0.0074	<0.005		
BS62-92-19-19.5	19.5			<0.005	<0.1	<0.1	0.0496	<0.005		
MW62-92-27-5.5	5.5	Sep-92	C	<0.005	<0.1	<0.1	<0.005			
MW62-92-27-15.5	15.5			<0.005	<0.1	<0.1	<0.005			
MW62-92-27-25.5	25.5			<0.005	<0.1	<0.1	<0.005			
MW62-92-27-35.5	35.5			<0.005	<0.1	<0.1	<0.005			
MW62-92-27-45.5	45.5			<0.005	0.54	0.17	<0.005			
MW62-92-27-55.5	55.5			<0.005	<0.1	<0.1	<0.005			
MW62-92-27-65	65			<0.005	<0.1	<0.1	<0.005			

	= Not analyzed
<	= Not detected above reporting limit (reporting limit shown)

C = Analysis by Chromalab  
LBNL = Analysis by Lawrence Berkeley Lab  
COPCs = Chemicals of Potential Concern  
VOCs analyzed by EPA Method 8240, or 8260

MEK = Methyl ethyl ketone  
1,3,5-TMB = 1,3,5-trimethylbenzene  
1,2,3-TCP = 1,2,3-trichloropropane

**Table D3.9-1**  
**Soil Sampling Results (mg/kg)**  
**AOC 13-2: Building 62 Former Diesel UST**  
**Concentrations of Organic Constituents**  
**COPCs: Halogenated VOCs, Fuel Hydrocarbons**

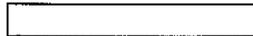
Sample ID	Depth (ft)	Date	Lab	BTEX	TPH-Diesel	TPH-Motor Oil	PAH
1	X 4.5	Aug-86			12,000		
2	X 4.5				18,000		
MW62-B1-10	X 10.0	Sep-86			3300		
MW62-B1-20	X 20.0				98		
MW62-B2-10	X 10.0				97		
MW62-B2-20	20.0				27		
TK62-1	X 8.0	Sep-87			1200		
TK62-2	X 8.0				2500		
TK62-3	X 8.0				1200		
TK62-4	X 8.0				950		
TK62-5A	20.6				4.5		
TK62-6A	21.5				190		
TK62-7A	X 10.0				500		
TK62-7B	X 15.0				55		
TK62-8B	X 10.0				210		
TK62-8C	20.0				31		
TK62-9A	X 16.0				290		
TK62-9B	20.2				30		
TK62-10A	X 15.0				320		
TK62-10B	20.0				450		
TK62-12C	X 15.5				120		
TK62-13A	X 8.0				9000		
TK62-14A	X 10.0				1300		
TK62-15A	X 10.0				<10		
TK62-15B	X 14.0				<10		
TK62-15C	X 20.0				<10		
TK62-15D	26.0				<10		
TK62-16A	X 9.0				<10		
TK62-16B	X 14.9			<10			
TK62-16C	25.0			<10			
TK62-17A	X 10.6			<10			
TK62-17B	X 16.0						
TK62-17C	X 20.0			<10			
TK62-17D	26.0			<10			
TK62-18A	X 10.8			<10			
TK62-18B	X 15.0			<10			
TK62-18C	20.6			<10			
TK62-19A	X 9.1			<10			
TK62-19B	X 20.0			<10			
TK62-19C	25.0			<10			
TK62-20A	X 21.0			<10			
TK62-20B	25.5			40			
TK62-21B	25.0			<10			
TK62-22B	25.6			21			

**Table D3.9-1 (Cont'd)**  
**Soil Sampling Results (mg/kg)**  
**AOC 13-2: Building 62 Former Diesel UST**  
**Concentrations of Organic Constituents**  
**COPCs: Halogenated VOCs, Fuel Hydrocarbons**

Sample ID	Depth (ft)	Date	Lab	BTEX	TPH-Diesel	TPH-Motor Oil	PAH
TK62-23A	X 20.0	Sep-87			<10		
TK62-23B	25.5				<10		
TK62-23B(dup)	25.5				23		
B-1	4.0				<10		
B-2	4.0				<10		
B-3	4.0				<10		
B-4	4.0				<10		
B-5	4.0	Aug-95	BC		<10		
B-6	3.8				<10		
B-7	4.0				<10		
MW62-95-16-5.6	5.6				<10		
MW62-95-16-10.3	10.3				ND	<10	
MW62-95-16-15.1	15.1					<10	
MW62-95-16-20	20.0				ND	<10	
MW62-95-16-25	25.0	Oct-96	CLS		<10		
MW62-95-16-30.5	30.5				ND	<10	
SB62-96-1-20	20.0				ND	<1	4.4
SB62-96-1-25	25.0				ND	11	8.8
SB62-96-2-20.1	20.1				ND	7.1	6.5
SB62-96-2-25	25.0				ND	<1	4.1
BS-SB62-97-1-21	21			Feb-97	BC	ND	6
BS-SB62-97-1-26	26	ND	1.7				ND
BS-SB62-97-2-21	21	ND	49				ND
BS-SB62-97-2-26	26	Toluene=0.006	5.1				ND

BC = Analysis by BC Laboratories  
 CLS = Analysis by California Laboratory Services  
 COPCs = Chemicals of Potential Concern  
 BTEX Analysis by EPA Method 8020  
 TPH diesel analyzed by EPA Method 8015 Modified  
 TPH motor oil analyzed by EPA Method 8015 Modified  
 PAHs = Polynuclear aromatic hydrocarbons analyzed by EPA Method 8310

**PRGs for Residential Soil for Detected Organic Analytes (mg/kg)**  
 Benzo(b)fluoranthene=0.62  
 Benzo(k)fluoranthene=0.62  
 Fluoranthene=2300  
 Ideno(1,2,3-cd)pyrene=0.62

 = Not analyzed  
 = Not detected above reporting limit (reporting limit shown)  
 = Not detected above reporting limit (reporting limit varies with analyte)

X = sample collected from soil that has been excavated

**Table D3.10-1**  
**Soil Sampling Results (mg/kg)**  
**AOC 13-4: Building 62 Possible Solvent Spills East of B62**  
**Concentrations of Organic Constituents**  
**COPCs: Halogenated VOCs, Fuel Hydrocarbons**

Sample ID	Depth (ft)	Date	Lab	VOCs	TPH-Diesel	TPH-Gas	pH
BS62-92-20A-3.5	3.5	Jun-92	C	ND	<1	<1	
BS62-92-20B-3.5	3.5			ND	<1	<1	
SS-62E-95-1-3	3	Aug-95	BC	ND			8.26
SS-62E-95-2-3	3			ND			8.02
SS-62E-95-3-3	3			ND			7.53
SS-62E-95-4-3	3			ND			7.91
SS-62E-95-5-3	3			ND			7.61

**ND** = Not detected above reporting limit (reporting limit varies with analyte)

COPCs = Chemicals of Potential Concern

BC = Analysis by BC Laboratories

C = Analysis by Chromalab

VOCs analyzed by EPA Method 8240, or 8260

TPH diesel analyzed by EPA Method 8015 Modified

TPH gasoline analyzed by EPA Method 8015 Modified

**Table D4.3-1A**  
**LBNL Groundwater Monitoring Well Results - Western Outlying Area**  
**Volatile Organic Compounds - EPA Method 8260**  
 (concentrations in µg/L)

Constituent	MCL	MWP-2																																				
		Nov-92	Mar-93	(D)	May-93	Aug-93	Nov-93	Mar-94	May-94	Sep-94	Nov-94*	Feb-95*	May-95*	Sep-95	Nov-95	Feb-96	May-96	Jul-96	Jul-96	Dec-96	Feb-97	May-97	Aug-97	Nov-97	Feb-98	May-98	Aug-98	Oct-98	Jan-99	Apr-99	Aug-99	Oct-99	Jan-00	May-00				
<b>Aromatic and Non-Halogenated Hydrocarbons</b>																																						
Benzene	1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
sec-Butylbenzene		<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
ter-Butylbenzene		<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Ethylbenzene	700	<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
p-Isopropyltoluene		<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Naphthalene		<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
n-Propylbenzene		<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Toluene	150	<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2,4-Trimethylbenzene		<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,3,5-Trimethylbenzene		<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Xylenes, total	1750	<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Total Aromatic Hydrocarbons																																						
<b>Halogenated Non-Aromatic Hydrocarbons</b>																																						
Chloroform	100	<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1-Dichloroethane	5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1-Dichloroethene	6	<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
cis-1,2-Dichloroethene	6	<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Methylene Chloride	5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Tetrachloroethane	5	<5	<1	1.1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	5.9	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1,1-Trichloroethane	200	<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Trichloroethene	5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Freon-113	1200	<0.8	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Total Halogenated Hydrocarbons			1.1															5.9																				
Total Concentration of VOCs			1.1															5.9																				

MCL = Maximum contaminant level for drinking water  
 All analyses by LBNL EML unless otherwise noted

< = Less than Quantitation Limit

(D) = Duplicate sample  
 \* = Analysis by BC Laboratories

**Table D4.3-1A (Cont'd)**  
**LBNL Groundwater Monitoring Well Results - Western Outlying Area**  
**Volatile Organic Compounds - EPA Method 8260**  
**(concentrations in µg/L)**

Constituent	MCL	88-92-4 (well is on annual sampling)																							
		Dec-92	Mar-93	Jun-93	Aug-93	Nov-93	Mar-94	Jun-94	Sep-94	Oct-94*	Dec-94*	(D)*	Feb-95*	Jun-95*	Aug-95	Nov-95	Mar-96	Jun-96	Aug-96	Dec-96	Mar-97	Aug-97	Feb-98	Aug-98	Jan-99
<b>Aromatic and Non-Halogenated Hydrocarbons</b>																									
Benzene	1	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene		<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1
ter-Butylbenzene		<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	700	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene		<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Naphthalene		<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2
n-Propylbenzene		<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1
Toluene	150	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene		<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene		<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	1750	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Aromatic Hydrocarbons																									
<b>Halogenated Non-Aromatic Hydrocarbons</b>																									
Chloroform	100	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	5	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	6	<5	1.8	1.9	1.2	<1	<1	<1	<1	<0.5	0.56	0.55	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	6	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene Chloride	5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	<5	<1	<1	<1	<1	<1	<1	6.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	200	<5	2.4	1.7	1.0	<1	<1	<1	<1	<0.5	0.53	0.54	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	5	<5	2.5	4.0	2.7	2.5	1.5	1.1	<1	1.2	1.93	2.0	1.1	0.73	1.0	1.3	<1	<1	<1	<1	<1	<1	<1	<1	<1
Freon-113	1200	<0.6	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Halogenated Hydrocarbons			6.7	7.6	4.9	2.5	1.5	1.1	6.5	1.2	3.02	3.09	1.1	0.73	1.0	1.3									
Total Concentration of VOCs			6.7	7.6	4.9	2.5	1.5	1.1	6.5	1.2	3.02	3.09	1.1	0.73	1.0	1.3									

MCL = Maximum contaminant level for drinking water  
All analyses by LBNL EML unless otherwise noted

<1 = Less than Quantitation Limit

\* = Analysis by BC Laboratories  
(D) = Duplicate sample

**Table D4.3-1A (Cont'd)**  
**LBNL Groundwater Monitoring Well Results - Western Outlying Area**  
**Volatile Organic Compounds - EPA Method 8260**  
**(concentrations in µg/L)**

Constituent	MCL	88-93-11A																											
		Apr-94	(D)	Apr-94	Sep-94	Dec-94	Mar-95	Jun-95*	Aug-95	Nov-95	Mar-96	Jun-96	Aug-96	Dec-96*	Mar-97	May-97	Aug-97	Nov-97	Feb-98	May-98*	Aug-98	Nov-98	Feb-99	May-99	Aug-99	Nov-99	Feb-00	May-00	
<b>Aromatic and Non-Halogenated Hydrocarbons</b>																													
Benzene	1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene		<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
ter-Butylbenzene		<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	700	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene		<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
Naphthalene		<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.5	<2	<2	<2	<2	<2	<0.5	<2	<2	<2	<2	<2	<2	<2	<2	<2
n-Propylbenzene		<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	150	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene		<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene		<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	1750	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Aromatic Hydrocarbons																													
<b>Halogenated Non-Aromatic Hydrocarbons</b>																													
Chloroform	100	2.0	1.7	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	5	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	6	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	6	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene Chloride	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	1.0	<1	1.7	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	200	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	5	18.9	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
Freon-113	1200	<1	<1	<1	<1	1.3	<0.5	<0.5	<5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Halogenated Hydrocarbons		21.9	1.7	1.7	1.3																								
Total Concentration of VOCs		21.9	1.7	1.7	1.3																								

MCL = Maximum contaminant level for drinking water  
 All analyses by LBNL EML unless otherwise noted

<1 = Less than Quantitation Limit

\* = Analysis by BC Laboratories  
 (D) = Duplicate sample

**Table D4.3-1A (Cont'd)**  
**LBNL Groundwater Monitoring Well Results - Western Outlying Area**  
**Volatile Organic Compounds - EPA Method 8260**  
**(concentrations in µg/L)**

Constituent	MCL	88-93-13 (well is on annual sampling)																	
		Mar-94	(D)*	Jun-94	Aug-94	Dec-94*	Feb-95*	Jun-95*	Sep-95	Nov-95	Mar-96	Jun-96	Aug-96	Dec-96*	Feb-97	May-97	Feb-98	Aug-98	Jan-99
<b>Aromatic and Non-Halogenated Hydrocarbons</b>																			
Benzene	1	<1	<0.5	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1
sec-Butylbenzene		<1	<0.5	<1	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<1	<0.5	<1	<1	<1	<1	<1
ter-Butylbenzene		<1	<0.5	<1	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<1	<0.5	<1	<1	<1	<1	<1
Ethylbenzene	700	<1	<0.5	<1	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<1	<0.5	<1	<1	<1	<1	<1
p-Isopropyltoluene		<1	<0.5	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1
Naphthalene		<1	<0.5	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<2	<0.5	<2	<2	<2	<2	<2
n-Propylbenzene		<1	<0.5	<1	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<1	<0.5	<1	<1	<1	<1	<1
Toluene	150	4.4	2.9	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene		<1	<0.5	<1	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<1	<0.5	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene		<1	<0.5	<1	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<1	<0.5	<1	<1	<1	<1	<1
Xylenes, total	1750	<1	<1.0	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<1	<2	<2	<2	<2	<2
Total Aromatic Hydrocarbons		4.4	2.9																
<b>Halogenated Non-Aromatic Hydrocarbons</b>																			
Chloroform	100	<1	<0.5	3.2	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1
1,1-Dichloroethane	5	<1	<0.5	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1
1,1-Dichloroethene	6	<1	<0.5	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	6	<1	<0.5	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1
Methylene Chloride	5	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	<1	<0.5	1.6	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	200	<1	<0.5	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1
Trichloroethene	5	<1	<0.5	2.0	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1
Freon-113	1200	<1	<0.5	7.1	<1	<0.5	<0.5	<0.5	<5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1
Total Halogenated Hydrocarbons				13.9															
Total Concentration of VOCs		4.4	2.9	13.9															

MCL = Maximum contaminant level for drinking water  
 All analyses by LBNL EML unless otherwise noted

< = Less than Quantitation Limit

\* = Analysis by BC Laboratories  
 (D) = Duplicate sample

**Table D4.3-1A (Cont'd)**  
**LBNL Groundwater Monitoring Well Results - Western Outlying Area**  
**Volatile Organic Compounds - EPA Method 8260**  
**(concentrations in µg/L)**

Constituent	MCL	88-96-4 (well is on annual sampling)														
		Jul-96	(D)*	Jul-96	Aug-96	Dec-96	Feb-97	May-97	Aug-97	Nov-97	Feb-98	May-98*	Aug-98	Nov-98	Jan-99	Apr-99
<b>Aromatic and Non-Halogenated Hydrocarbons</b>																
Benzene	1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
sec-Butylbenzene		<2	<0.5	<2	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
ter-Butylbenzene		<2	<0.5	<2	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Ethylbenzene	700	<2	<0.5	<2	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
p-Isopropyltoluene		<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Naphthalene		<1	<0.5	<1	<2	<2	<2	<2	<2	<2	<2	<0.5	<2	<2	<2	<2
n-Propylbenzene		<2	<0.5	<2	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Toluene	150	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
1,2,4-Trimethylbenzene		<2	<0.5	<2	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
1,3,5-Trimethylbenzene		<2	<0.5	<2	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Xylenes, total	1750	<2	<1.0	<2	<2	<2	<2	<2	<2	<2	<2	<1.0	<2	<2	<2	<2
Total Aromatic Hydrocarbons																
<b>Halogenated Non-Aromatic Hydrocarbons</b>																
Chloroform	100	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
1,1-Dichloroethane	5	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
1,1-Dichloroethene	6	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
cis-1,2-Dichloroethene	6	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Methylene Chloride	5	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Tetrachloroethene	5	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
1,1,1-Trichloroethane	200	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	1.1	<1
Trichloroethene	5	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Freon-113	1200	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Total Halogenated Hydrocarbons																1.1
Total Concentration of VOCs																1.1

MCL = Maximum contaminant level for drinking water  
 All analyses by LBNL EML unless otherwise noted

< = Less than Quantitation Limit

\* = Analysis by BC Laboratories  
 (D) = Duplicate sample

**Table D4.3-1A (Cont'd)**  
**LBNL Groundwater Monitoring Well Results - Western Outlying Area**  
**Volatile Organic Compounds - EPA Method 8260**  
**(concentrations in µg/L)**

Constituent	MCL	70-92-7 (well is on annual sampling)																							
		Dec-92	Mar-93	Jun-93	Aug-93	Oct-93	Mar-94	Jun-94	Aug-94	(D)	Dec-94*	Feb-95*	(D)†	Jun-95*	Sep-95	Dec-95	Mar-96	Jun-96	Jul-96	Dec-96	Mar-97	Aug-97	Feb-98	Aug-98	Jan-99
<b>Aromatic and Non-Halogenated Hydrocarbons</b>																									
Benzene	1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene		<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<0.5	<1	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1
ter-Butylbenzene		<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<0.5	<1	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1
Ethylbenzene	700	<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<0.5	<1	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene		<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Naphthalene		<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<0.5	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2
n-Propylbenzene		<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<0.5	<1	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1
Toluene	150	<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene		<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<0.5	<1	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene		<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<0.5	<1	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1
Xylenes, total	1750	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Aromatic Hydrocarbons																									
<b>Halogenated Non-Aromatic Hydrocarbons</b>																									
Chloroform	100	<5	<1	<1	<1	<1	<1	<1	1.5	1.1	<0.5	<0.5	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	6	<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	6	<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene Chloride	5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	<5	<1	<1	<1	<1	3.6	<1	2.9	2.8	<0.5	<0.5	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	200	<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Freon-113	1200	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Halogenated Hydrocarbons							3.6		4.4	3.9															
Total Concentration of VOCs							3.6		4.4	3.9															

MCL = Maximum contaminant level for drinking water  
 All analyses by LBNL EML unless otherwise noted

< = Less than Quantitation Limit  
 = Compound not included in analysis

(D) = Duplicate sample  
 \* = Analysis by BC Laboratories  
 † = Analysis by AEN

**Table D4.3-1A (Cont'd)**  
**LBNL Groundwater Monitoring Well Results - Western Outlying Area**  
**Volatile Organic Compounds - EPA Method 8260**  
 (concentrations in µg/L)

Constituent	MCL	70A-96-5 (well is on annual sampling)													
		May-96	(D)*	Jul-96	Dec-96	Feb-97	May-97	Aug-97	Nov-97	Feb-98	May-98*	Aug-98	Nov-98	Jan-99*	Apr-99
<b>Aromatic and Non-Halogenated Hydrocarbons</b>															
Benzene	1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
sec-Butylbenzene		<2	<0.5	<2	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
ter-Butylbenzene		<2	<0.5	<2	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
Ethylbenzene	700	<2	<0.5	<2	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
p-Isopropyltoluene		<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
Naphthalene		<1	<0.5	<1	<2	<2	<2	<2	<2	<2	<0.5	<2	<2	<0.5	<2
n-Propylbenzene		<2	<0.5	<2	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
Toluene	150	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
1,2,4-Trimethylbenzene		<2	<0.5	<2	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
1,3,5-Trimethylbenzene		<2	<0.5	<2	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
Xylenes, total	1750	<2	<1	<2	<2	<2	<2	<2	<2	<2	<1	<2	<2	<1	<2
Total Aromatic Hydrocarbons															
<b>Halogenated Non-Aromatic Hydrocarbons</b>															
Chloroform	100	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
1,1-Dichloroethane	5	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
1,1-Dichloroethene	6	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
cis-1,2-Dichloroethene	6	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
Methylene Chloride	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	1.0	0.82	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
1,1,1-Trichloroethane	200	<1	<0.5	<1	<1	<1	<1	<1	<1	1.2	0.92	<1	<1	<0.5	<1
Trichloroethene	5	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
Freon-12		<2	<0.5	<2	<2	<3	<3	<3	<3	<3	<0.5	<3	<3	0.60	<3
Freon-113	1200	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
Total Halogenated Hydrocarbon		1.0	0.82							1.2	0.92			0.60	
Total Concentration of VOCs		1.0	0.82							1.2	0.92			0.60	

MCL = Maximum contaminant level for drinking water  
 All analyses by LBNL EML unless otherwise noted

< = Less than Quantitation Limit  
 \* = Analysis by BC Laboratories

(D) = Duplicate sample

**Table D4.3-1A (Cont'd)**  
**LBNL Groundwater Monitoring Well Results - Western Outlying Area**  
**Volatile Organic Compounds - EPA Method 8260**  
**(concentrations in µg/L)**

Constituent	MCL	70A-96-6 (well is on annual sampling)													
		May-96†	(D)*	Jul-96	Dec-96	Feb-97	May-97	Aug-97	Nov-97	Feb-98	May-98*	Aug-98	Nov-98	Jan-99*	Apr-99
<b>Aromatic and Non-Halogenated Hydrocarbons</b>															
Benzene	1	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
sec-Butylbenzene		<5	<0.5	<2	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
ter-Butylbenzene		<5	<0.5	<2	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
Ethylbenzene	700	<5	<0.5	<2	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
p-Isopropyltoluene		<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
Naphthalene			<0.5	<1	<2	<2	<2	<2	<2	<2	<0.5	<2	<2	<0.5	<2
n-Propylbenzene		<5	<0.5	<2	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
Toluene	150	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
1,2,4-Trimethylbenzene		<5	<0.5	<2	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
1,3,5-Trimethylbenzene		<5	<0.5	<2	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
Xylenes, total	1750	<10	<1	<2	<2	<2	<2	<2	<2	<2	<1	<2	<2	<1	<2
Total Aromatic Hydrocarbons															
<b>Halogenated Non-Aromatic Hydrocarbons</b>															
Chloroform	100	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
1,1-Dichloroethane	5	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
1,1-Dichloroethene	6	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
cis-1,2-Dichloroethene	6	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
Methylene Chloride	5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
1,1,1-Trichloroethane	200	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
Trichloroethene	5	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
Freon-113	1200		<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<0.5	<1
Total Halogenated Hydrocarbons															
Total Concentration of VOCs															

MCL = Maximum contaminant level for drinking water  
 All analyses by LBNL EML unless otherwise noted

< = Less than Quantitation Limit  
  = Compound not included in analysis  
 † = Analysis by California Laboratory Services

(D) = Duplicate sample  
 \* = Analysis by BC Laboratories

**Table D4.3-1A (Cont'd)**  
**LBNL Groundwater Monitoring Well Results - Western Outlying Area**  
**Volatile Organic Compounds - EPA Method 8260**  
**(concentrations in µg/L)**

Constituent	MCL	70A-96-13 (well is on annual sampling)										
		Jan-97	(D)*	May-97	Aug-97	Nov-97	Feb-98	May-98*	Aug-98	Nov-98	Jan-99	Apr-99
<b>Aromatic and Non-Halogenated Hydrocarbons</b>												
Benzene	1	<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
sec-Butylbenzene		<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
ter-Butylbenzene		<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Ethylbenzene	700	<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
p-Isopropyltoluene		<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Naphthalene		<2	<0.5	<2	<2	<2	<2	<0.5	<2	<2	<2	<2
n-Propylbenzene		<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Toluene	150	<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
1,2,4-Trimethylbenzene		<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
1,3,5-Trimethylbenzene		<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Xylenes, total	1750	<2	<1	<2	<2	<2	<2	<1	<2	<2	<2	<2
Total Aromatic Hydrocarbons												
<b>Halogenated Non-Aromatic Hydrocarbons</b>												
Chloroform	100	<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
1,1-Dichloroethane	5	<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
1,1-Dichloroethene	6	<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
cis-1,2-Dichloroethene	6	<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Methylene Chloride	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
1,1,1-Trichloroethane	200	<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Trichloroethene	5	<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Freon-113	1200	<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Total Halogenated Hydrocarbons												
Total Concentration of VOCs												

MCL = Maximum contaminant level for drinking water  
 All analyses by LBNL EML unless otherwise noted

< = Less than Quantitation Limit

\* = Analysis by BC Laboratories  
 (D) = Duplicate sample

**Table D4.3-1A (Cont'd)**  
**LBNL Groundwater Monitoring Well Results - Western Outlying Area**  
**Volatile Organic Compounds - EPA Method 8260**  
**(concentrations in µg/L)**

Constituent	MCL	70A-96-14 (well is on annual sampling)										
		Jan-97	(D)*	May-97	Aug-97	Nov-97	Feb-98	May-98*	Aug-98	Nov-98	Jan-99	Apr-99
<b>Aromatic and Non-Halogenated Hydrocarbons</b>												
Benzene	1	<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
sec-Butylbenzene		<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
ter-Butylbenzene		<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Ethylbenzene	700	<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
p-Isopropyltoluene		<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Naphthalene		<2	<0.5	<2	<2	<2	<2	<0.5	<2	<2	<2	<2
n-Propylbenzene		<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Toluene	150	<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
1,2,4-Trimethylbenzene		<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
1,3,5-Trimethylbenzene		<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Xylenes, total	1750	<2	<1	<2	<2	<2	<2	<1	<2	<2	<2	<2
Total Aromatic Hydrocarbons												
<b>Halogenated Non-Aromatic Hydrocarbons</b>												
Chloroform	100	<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
1,1-Dichloroethane	5	<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
1,1-Dichloroethene	6	<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
cis-1,2-Dichloroethene	6	<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Methylene Chloride	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
1,1,1-Trichloroethane	200	<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Trichloroethene	5	<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Freon-113	1200	<1	<0.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Total Halogenated Hydrocarbons												
Total Concentration of VOCs												

MCL = Maximum contaminant level for drinking water  
All analyses by LBNL EML unless otherwise noted

< = Less than Quantitation Limit

\* = Analysis by BC Laboratories  
(D) = Duplicate sample

**Table D4.3-1A (Cont'd)**  
**LBNL Groundwater Monitoring Well Results - Western Outlying Area**  
**Volatile Organic Compounds - EPA Method 8260**  
**(concentrations in µg/L)**

Constituent	MCL	OW3-225																																			
		Dec-92	Jun-93	Aug-93	Nov-93	Mar-94	May-94	Aug-94	Dec-94*	(D)*	Feb-95*	May-95*	Sep-95	Nov-95	Feb-96	May-96	Jul-96	Nov-96	Feb-97*	Feb-97	Apr-97	Jul-97	Nov-97	Jan-98	May-98	Aug-98	Nov-98	Jan-99	Apr-99	Aug-99	Oct-99	Jan-00	May-00				
<b>Aromatic and Non-Halogenated Hydrocarbons</b>																																					
Benzene	1	<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1			
sec-Butylbenzene		<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<1	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1			
ter-Butylbenzene		<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<1	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1			
Ethylbenzene	700	<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<1	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1			
p-Isopropyltoluene		<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1			
Naphthalene		<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1			
n-Propylbenzene		<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<1	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
Toluene	150	<5	<1	<1	<1	<1	<1	201.0	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
1,2,4-Trimethylbenzene		<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<1	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
1,3,5-Trimethylbenzene		<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<1	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Xylenes, total	1750	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2		
Total Aromatic Hydrocarbons								201.0																													
<b>Halogenated Non-Aromatic Hydrocarbons</b>																																					
Chloroform	100	<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
1,1-Dichloroethane	5	<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
1,1-Dichloroethene	6	<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
cis-1,2-Dichloroethane	6	<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Methylene Chloride	5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Tetrachloroethene	5	<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1,1-Trichloroethane	200	<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Trichloroethene	5	<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Freon-113	1200	<0.8	<1	<1	<1	<1	<1	<1	0.51	0.57	<0.5	<0.5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Total Halogenated Hydrocarbons									0.51	0.57																											
Total Concentration of VOCs								201.0	0.51	0.57																											

MCL = Maximum contaminant level for drinking water  
 All analyses by LBNL EML unless otherwise noted

<1 = Less than Quantitation Limit  
 \* = Analysis by BC Laboratories

(D) = Duplicate sample  
 • = Detections are due to cross contamination during sampling

**Table D4.3-1B**  
**LBNL Groundwater Monitoring Well Results - Northeastern Outlying Area**  
**Volatile Organic Compounds - EPA Method 8260**  
**(concentrations in µg/L)**

Constituent	MCL	74-92-13 (well is on annual sampling)																		
		Dec-92	Mar-93	May-93	Aug-93	Oct-93	Mar-94	May-94	Aug-94	Dec-94*	Feb-95*	May-95*	Sep-95	Sep-96	Dec-96*	Mar-97	Aug-97	Mar-98	Aug-98	Jan-99*
<b>Aromatic and Non-Halogenated Hydrocarbons</b>																				
Benzene	1	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<1	<1	<1	<0.5
sec-Butylbenzene		<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<1	<1	<1	<0.5
ter-Butylbenzene		<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<1	<1	<1	<0.5
Ethylbenzene	700	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<1	<1	<1	<0.5
p-Isopropyltoluene		<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<1	<1	<1	<0.5
Naphthalene		<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<2	<0.5	<2	<2	<2	<2	<0.5
n-Propylbenzene		<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<1	<1	<1	<0.5
Toluene	150	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<1	<1	<1	<0.5
1,2,4-Trimethylbenzene		<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<1	<1	<1	<0.5
1,3,5-Trimethylbenzene		<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<1	<1	<1	<0.5
Xylenes, total	1750	<5	1.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<2	<2	<2	<2	<1
Total Aromatic Hydrocarbons			1.3																	
<b>Halogenated Non-Aromatic Hydrocarbons</b>																				
Chloroform	100	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<1	<1	<1	<0.5
1,1-Dichloroethane	5	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<1	<1	<1	<0.5
1,1-Dichloroethene	6	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<1	<1	<1	<0.5
cis-1,2-Dichloroethene	6	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<1	<1	<1	<0.5
Methylene Chloride	5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<1	<1	<1	<0.5
1,1,1-Trichloroethane	200	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<1	<1	<1	<0.5
Trichloroethene	5	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<1	<1	<1	<0.5
Freon-113	1200	<0.6	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<5	<1	<0.5	<1	<1	<1	<1	<0.5
Total Halogenated Hydrocarbons																				
Total Concentration of VOCs			1.3																	

MCL = Maximum contaminant level for drinking water  
 All analyses by LBNL EML unless otherwise noted

 = Less than Quantitation Limit

\* = Analysis by BC Laboratories

**Table D4.3-1B (Cont'd)**  
**LBNL Groundwater Monitoring Well Results - Northeastern Outlying Area**  
**Volatile Organic Compounds - EPA Method 8260**  
**(concentrations in µg/L)**

Constituent	MCL	83-92-14 (well is on annual sampling)																			
		Dec-92	Mar-93	May-93	Aug-93	Nov-93	Mar-94	Jun-94	Aug-94	Dec-94*	Mar-95*	Jun-95	Aug-95	Dec-95	Mar-96	Jun-96	Aug-96	Mar-97	Aug-97	Mar-98	Sep-98
<b>Aromatic and Non-Halogenated Hydrocarbons</b>																					
Benzene	1	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene		<5	1.4	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<2	<2	<2	<1	<1	<1	<1	<1
ter-Butylbenzene		<5	<1	1.8	2.9	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<2	<2	<2	<1	<1	<1	<1	<1
Ethylbenzene	700	<5	<1	<1	1.1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<2	<2	<2	<1	<1	<1	<1	<1
p-Isopropyltoluene		<5	<1	4.0	2.0	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Naphthalene		6.1	2.3	3.1	2.9	1.0	<1	2.1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2
n-Propylbenzene		<5	<1	<1	2.1	<1	<1	1.6	<1	<0.5	<0.5	<1	<1	<2	<2	<2	<1	<1	<1	<1	<1
Toluene	150	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene		5.9	2.1	1.8	3.5	<1	<1	1.2	<1	<0.5	<0.5	<1	<1	<2	<2	<2	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene		5.5	2.0	4.2	5.7	<1	<1	1.9	<1	<0.5	<0.5	<1	<1	<2	<2	<2	<1	<1	<1	<1	<1
Xylenes, total	1750	<5	2.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2
Total Aromatic Hydrocarbons		17.5	10.0	14.9	20.2	1.0		6.8													
<b>Halogenated Non-Aromatic Hydrocarbons</b>																					
Chloroform	100	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	5	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	6	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	6	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene Chloride	5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	<5	<1	<1	<1	4.1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	200	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	5	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Freon-113	1200	<0.6	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1
Total Halogenated Hydrocarbons					4.1																
Total Concentration of VOCs		17.5	10.0	14.9	20.2	5.1		6.8													

MCL = Maximum contaminant level for drinking water  
 All analyses by LBNL EML unless otherwise noted

< = Less than Quantitation Limit

\* = Analysis by BC Laboratories

**Table D4.3-1B (Cont'd)**  
**LBNL Groundwater Monitoring Well Results - Northeastern Outlying Area**  
**Volatile Organic Compounds - EPA Method 8260**  
 (concentrations in µg/L)

Constituent	MCL	74-94-7																										
		Jun-94*	(D)†	Aug-94	Dec-94*	Feb-95*	May-95*	Aug-95	Nov-95	Mar-96	Jun-96	Aug-96	Dec-96*	Feb-97	May-97	Aug-97	Nov-97	Feb-98	May-98*	Aug-98	Nov-98	Jan-99	Apr-99	Aug-99	Oct-99	Jan-00	May-00	
<b>Aromatic and Non-Halogenated Hydrocarbons</b>																												
Benzene	1	<0.5	<5	<1	<0.5	0.63	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene		<0.5	<5	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
ter-Butylbenzene		<0.5	<5	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	700	<0.5	<5	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene		<0.5	<5	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
Naphthalene		<0.5	<5	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<2	<0.5	<2	<2	<2	<2	<2	<0.5	<2	<2	<2	<2	<2	<2	<2	<2	<2
n-Propylbenzene		<0.5	<5	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	150	<0.5	<5	<1	<0.5	1.6	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene		<0.5	<5	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene		<0.5	<5	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	1750	<1.0	<10	<1	<1	1.0	<1	<1	<2	<2	<2	<2	<1	<2	<2	<2	<2	<2	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Aromatic Hydrocarbons					3.23																							
<b>Halogenated Non-Aromatic Hydrocarbons</b>																												
Chloroform	100	<0.5	<5	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	5	<0.5	<5	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	6	<0.5	<5	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	6	<0.5	<5	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	10	<0.5	<5	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene Chloride	5	<0.5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	<0.5	<5	<1	<0.5	0.87	<0.5	<1	<1	2.5	2.9	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	200	<0.5	<5	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	5	<0.5	<5	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
Freon-113	1200	<0.5		<1	<0.5	<0.5	<0.5	<5	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Halogenated Hydrocarbons					0.87				2.5	2.9																		
Total Concentration of VOCs					4.10				2.5	2.9																		

MCL = Maximum contaminant level for drinking water  
 All analyses by LBNL EML unless otherwise noted

< = Less than Quantitation Limit  
 = Compound not included in analysis

† = Analysis by AEN  
 \* = Analysis by BC Laboratories  
 (D) = Duplicate sample

**Table D4.3-1B (Cont'd)**  
**LBNL Groundwater Monitoring Well Results - Northeastern Outlying Area**  
**Volatile Organic Compounds - EPA Method 8260**  
**(concentrations in µg/L)**

Constituent	MCL	74-94-8																										
		Jun-94*	(D)†	Aug-94	Sep-94	Dec-94*	Feb-95*	May-95*	Sep-95	Nov-95	Mar-96	May-96	Aug-96	Dec-96	Mar-97	May-97	Aug-97	Nov-97	Feb-98	Jun-98	Aug-98	Nov-98	Jan-99*	May-99	Aug-99	Nov-99	Jan-00	May-00
<b>Aromatic and Non-Halogenated Hydrocarbons</b>																												
Benzene	1	<0.5	<5	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1
sec-Butylbenzene		<0.5	<5	<1	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1
ter-Butylbenzene		<0.5	<5	<1	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1
Ethylbenzene	700	<0.5	<5	<1	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1
p-Isopropyltoluene		<0.5	<5	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1
Naphthalene		<0.5	<5	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<0.5	<1	<1	<1	<1	<1
n-Propylbenzene		<0.5	<5	<1	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1
Toluene	150	<0.5	<5	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene		<0.5	<5	<1	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene		<0.5	<5	<1	<1	<0.5	<0.5	<0.5	<1	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1
Xylenes, total	1750	<1.0	<10	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<2	<2	<2	<2
Total Aromatic Hydrocarbons																												
<b>Halogenated Non-Aromatic Hydrocarbons</b>																												
Chloroform	100	<0.5	<5	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1
1,1-Dichloroethane	5	<0.5	<5	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1
1,1-Dichloroethene	6	<0.5	<5	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	6	<0.5	<5	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1
Methylene Chloride	5	<0.5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	<0.5	<5	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	200	<0.5	<5	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1
Trichloroethene	5	<0.5	<5	<1	<1	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1
Freon-113	1200	1.8		<1	<1	<0.5	<0.5	<0.5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1
Total Halogenated Hydrocarbons	1.8																											
Total Concentration of VOCs	1.8																											

MCL = Maximum contaminant level for drinking water  
 All analyses by LBNL EML unless otherwise noted

< = Less than Quantitation Limit  
 = Compound not included in analysis

† = Analysis by AEN  
 \* = Analysis by BC Laboratories  
 (D) = Duplicate sample

**Table D4.3-1B (Cont'd)**  
**LBNL Groundwater Monitoring Well Results - Northeastern Outlying Area**  
**Volatile Organic Compounds - EPA Method 8260**  
**(concentrations in µg/L)**

Constituent	MCL	74-95-6 (well is on annual sampling)										
		Aug-95	Aug-95†	(S)*	Aug-97	Nov-97	Mar-98	Jun-98	Aug-98	Nov-98	Feb-99	May-99
<b>Aromatic and Non-Halogenated Hydrocarbons</b>												
Benzene	1	<1	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene		<1	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1
ter-Butylbenzene		<1	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	700	<1	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene		<1	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1
Naphthalene		<1	<5	<0.5	<2	<2	<2	<2	<2	<2	<2	<2
n-Propylbenzene		<1	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	150	<1	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene		<1	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene		<1	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	1750	<1	<10	<1	<2	<2	<2	<2	<2	<2	<2	<2
Total Aromatic Hydrocarbons												
<b>Halogenated Non-Aromatic Hydrocarbons</b>												
Chloroform	100	<1	<5	<0.5	3.2	2.1	<1	<1	12.0	<1	3.6	<1
1,1-Dichloroethane	5	<1	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	6	<1	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	6	<1	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1
Methylene Chloride	5	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	<1	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	200	<1	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	5	<1	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1
Freon-113	1200	<5		<0.5	<1	<1	<1	<1	<1	<1	<1	<1
Total Halogenated Hydrocarbons					3.2	2.1			12.0		3.6	
Total Concentration of VOCs					3.2	2.1			12.0		3.6	

MCL = Maximum contaminant level for drinking water  
 All analyses by LBNL EML unless otherwise noted

< = Less than Quantitation Limit  
 = Compound not included in analysis

† = Analysis by AEN  
 \* = Analysis by BC Laboratories  
 (S) = Split sample

**Table D4.3-1B (Cont'd)**  
**LBLN Groundwater Monitoring Well Results - Northeastern Outlying Area**  
**Volatile Organic Compounds - EPA Method 8260**  
**(concentrations in µg/L)**

Constituent	MCL	83-95-7 (well is on annual sampling)											
		Aug-95	Aug-95†	(S)*	Dec-95	Mar-96	May-96	Aug-96	Dec-96	Feb-97	May-97	May-98*	Apr-99
<b>Aromatic and Non-Halogenated Hydrocarbons</b>													
Benzene	1	<1	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1
sec-Butylbenzene		<1	<5	<0.5	<2	<2	<2	<1	<1	<1	<1	<0.5	<1
ter-Butylbenzene		<1	<5	<0.5	<2	<2	<2	<1	<1	<1	<1	<0.5	<1
Ethylbenzene	700	<1	<5	<0.5	<2	<2	<2	<1	<1	<1	<1	<0.5	<1
p-Isopropyltoluene		<1	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1
Naphthalene		<1	<5	<0.5	<1	<1	<1	<2	<2	<2	<2	<0.5	<2
n-Propylbenzene		<1	<5	<0.5	<2	<2	<2	<1	<1	<1	<1	<0.5	<1
Toluene	150	<1	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1
1,2,4-Trimethylbenzene		<1	<5	<0.5	<2	<2	<2	<1	<1	<1	<1	<0.5	<1
1,3,5-Trimethylbenzene		<1	<5	<0.5	<2	<2	<2	<1	<1	<1	<1	<0.5	<1
Xylenes, total	1750	<1	<10	<1	<2	<2	<2	<2	<2	<2	<2	<1	<2
Total Aromatic Hydrocarbons													
<b>Halogenated Non-Aromatic Hydrocarbons</b>													
Chloroform	100	<1	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1
1,1-Dichloroethane	5	<1	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1
1,1-Dichloroethene	6	<1	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1
cis-1,2-Dichloroethene	6	<1	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1
Methylene Chloride	5	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	<1	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1
1,1,1-Trichloroethane	200	<1	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1
Trichloroethene	5	<1	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1
Freon-113	1200	<5		<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1
Total Halogenated Hydrocarbons													
Total Concentration of VOCs													

MCL = Maximum contaminant level for drinking water  
All analyses by LBNL EML unless otherwise noted

< = Less than Quantitation Limit  
  = Compound not included in analysis

† = Analysis by AEN  
\* = Analysis by BC Laboratories  
(S) = Split sample

**Table D4.3-1B (Cont'd)**  
**LBNL Groundwater Monitoring Well Results - Northeastern Outlying Area**  
**Volatile Organic Compounds - EPA Method 8260**  
**(concentrations in µg/L)**

Constituent	MCL	85-95-1 (well is on annual sampling)																	
		Aug-95	(D)*	(S)†	Dec-95*	Feb-96	(D)*	May-96	May-96	Aug-96	Nov-96	May-97	Aug-97	Nov-97	Feb-98	May-98*	Aug-98	Oct-98	Nov-99
<b>Aromatic and Non-Halogenated Hydrocarbons</b>																			
Benzene	1	<1	<0.5	<5	<0.5	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
sec-Butylbenzene		<1	<0.5	<5	<0.5	<2	<0.5	<2	<2	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
ter-Butylbenzene		<1	<0.5	<5	<0.5	<2	<0.5	<2	<2	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
Ethylbenzene	700	<1	<0.5	<5	<0.5	<2	<0.5	<2	<2	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
p-Isopropyltoluene		<1	<0.5	<5	<0.5	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
Naphthalene		<1	<0.5	<5	<0.5	<1	<0.5	<1	<1	<2	<2	<2	<2	<2	<2	<0.5	<2	<2	<2
n-Propylbenzene		<1	<0.5	<5	<0.5	<2	<0.5	<2	<2	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
Toluene	150	<1	<0.5	<5	<0.5	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
1,2,4-Trimethylbenzene		<1	<0.5	<5	<0.5	<2	<0.5	<2	<2	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
1,3,5-Trimethylbenzene		<1	<0.5	<5	<0.5	<2	<0.5	<2	<2	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
Xylenes, total	1750	<1	<1	<10	<1	<2	<1	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<2	<2
Total Aromatic Hydrocarbons																			
<b>Halogenated Non-Aromatic Hydrocarbons</b>																			
Chloroform	100	<1	<0.5	<5	<0.5	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	1.6	<1
1,1-Dichloroethane	5	<1	<0.5	<5	<0.5	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
1,1-Dichloroethene	6	<1	<0.5	<5	<0.5	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
cis-1,2-Dichloroethene	6	<1	<0.5	<5	<0.5	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
trans-1,2-Dichloroethene	10	<1	<0.5	<5	<0.5	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
Methylene Chloride	5	<1	<1	<20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	<1	<0.5	<5	<0.5	<1	<0.5	2.8	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
1,1,1-Trichloroethane	200	<1	<0.5	<5	<0.5	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
Trichloroethene	5	<1	<0.5	<5	<0.5	<1	<0.5	1.1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
Freon-113	1200	<5	<0.5	<5	<0.5	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
Total Halogenated Hydrocarbons								3.9											1.6
Total Concentration of VOCs								3.9											1.6

MCL = Maximum contaminant level for drinking water  
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< = Less than Quantitation Limit  
 (D) = Duplicate sample  
 (S) = Split sample

\* = Analysis by BC Laboratories  
 † = Analysis by American Environmental Network

**Table D4.3-1B (Cont'd)**  
**LBNL Groundwater Monitoring Well Results - Northeastern Outlying Area**  
**Volatile Organic Compounds - EPA Method 8260**  
**(concentrations in µg/L)**

Constituent	MCL	85-95-2														
		Aug-95	(D)*	(S)†	Jan-96*	Feb-96	May-96	Jul-96	Nov-96	May-97	Aug-97	Nov-97	Feb-98	May-98	Aug-98	Oct-98
<b>Aromatic and Non-Halogenated Hydrocarbons</b>																
Benzene	1	<1	<0.5	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene		<1	<0.5	<5	<0.5	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1
ter-Butylbenzene		<1	<0.5	<5	<0.5	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	700	<1	<0.5	<5	<0.5	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene		<1	<0.5	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Naphthalene		<1	<0.5	<5	<0.5	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2
n-Propylbenzene		<1	<0.5	<5	<0.5	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	150	<1	<0.5	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene		<1	<0.5	<5	<0.5	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene		<1	<0.5	<5	<0.5	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	1750	<1	<1	<10	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Aromatic Hydrocarbons																
<b>Halogenated Non-Aromatic Hydrocarbons</b>																
Chloroform	100	<1	<0.5	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	5	<1	<0.5	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	6	<1	<0.5	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	6	<1	<0.5	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene Chloride	5	<1	<1	<20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	<1	<0.5	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	200	<1	<0.5	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	5	<1	<0.5	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Freon-113	1200	<5	<0.5	<5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Halogenated Hydrocarbons																
Total Concentration of VOCs																

MCL = Maximum contaminant level for drinking water  
 All analyses by LBNL EML unless otherwise noted

< = Less than Quantitation Limit  
 (D) = Duplicate sample  
 (S) = Split sample

\* = Analysis by BC Laboratories  
 † = Analysis by American Environmental Network

**Table D4.3-1B (Cont'd)**  
**LBNL Groundwater Monitoring Well Results - Northeastern Outlying Area**  
**Volatile Organic Compounds - EPA Method 8260**  
**(concentrations in µg/L)**

Constituent	MCL	85-96-1											
		Jul-96	(D)*	Aug-96	Nov-96	Mar-97	May-97	Aug-97	Nov-97	Feb-98	May-98*	Aug-98	Oct-98
<b>Aromatic and Non-Halogenated Hydrocarbons</b>													
Benzene	1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1
sec-Butylbenzene		<2	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1
ter-Butylbenzene		<2	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1
Ethylbenzene	700	<2	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1
p-Isopropyltoluene		<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1
Naphthalene		<1	<0.5	<2	<2	<2	<2	<2	<2	<2	<0.5	<2	<2
n-Propylbenzene		<2	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1
Toluene	150	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1
1,2,4-Trimethylbenzene		<2	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1
1,3,5-Trimethylbenzene		<2	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1
Xylenes, total	1750	<2	<1	<2	<2	<2	<2	<2	<2	<2	<1	<2	<2
Total Aromatic Hydrocarbons													
<b>Halogenated Non-Aromatic Hydrocarbons</b>													
Chloroform	100	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1
1,1-Dichloroethane	5	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1
1,1-Dichloroethene	6	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1
cis-1,2-Dichloroethene	6	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1
Methylene Chloride	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	<1	0.76	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1
1,1,1-Trichloroethane	200	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1
Trichloroethene	5	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1
Freon-113	1200	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1
Total Halogenated Hydrocarbons			0.76										
Total Concentration of VOCs			0.76										

MCL = Maximum contaminant level for drinking water  
 All analyses by LBNL EML unless otherwise noted

< = Less than Quantitation Limit

\* = Analysis by BC Laboratories  
 (D) = Duplicate sample

**Table D4.3-1B (Cont'd)**  
**LBNL Groundwater Monitoring Well Results - Northeastern Outlying Area**  
**Volatile Organic Compounds - EPA Method 8260**  
**(concentrations in µg/L)**

Constituent	MCL	85-96-2 (well is on annual sampling)											
		Jul-96	(D)*	Nov-96	Mar-97	May-97	Aug-97	Nov-97	Feb-98	May-98*	Aug-98	Oct-98	Nov-99
<b>Aromatic and Non-Halogenated Hydrocarbons</b>													
Benzene	1	<1	<0.5	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
sec-Butylbenzene		<2	<0.5	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
ter-Butylbenzene		<2	<0.5	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
Ethylbenzene	700	<2	<0.5	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
p-Isopropyltoluene		<1	<0.5	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
Naphthalene		<1	<0.5	<2	<2	<2	<2	<2	<2	<0.5	<2	<2	<2
n-Propylbenzene		<2	<0.5	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
Toluene	150	<1	<0.5	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
1,2,4-Trimethylbenzene		<2	<0.5	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
1,3,5-Trimethylbenzene		<2	<0.5	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
Xylenes, total	1750	<2	<1	<2	<2	<2	<2	<2	<2	<1	<2	<2	<2
Total Aromatic Hydrocarbons													
<b>Halogenated Non-Aromatic Hydrocarbons</b>													
Chloroform	100	<1	<0.5	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
1,1-Dichloroethane	5	<1	<0.5	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
1,1-Dichloroethene	6	<1	<0.5	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
cis-1,2-Dichloroethene	6	<1	<0.5	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
Methylene Chloride	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	<1	<0.5	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
1,1,1-Trichloroethane	200	<1	<0.5	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
Trichloroethene	5	<1	<0.5	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
Freon-113	1200	<1	<0.5	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
Total Halogenated Hydrocarbons													
Total Concentration of VOCs													

MCL = Maximum contaminant level for drinking water  
 All analyses by LBNL EML unless otherwise noted

< = Less than Quantitation Limit  
 \* = Analysis by BC Laboratories

(D) = Duplicate sample

**Table D4.3-1C**  
**LBNL Groundwater Monitoring Well Results - Southeastern Outlying Area**  
**Volatile Organic Compounds - EPA Method 8260**  
**(concentrations in µg/L)**

Constituent	MCL	MW62-B1A (well is on annual sampling)																		
		Dec-92	Mar-93	May-93	Aug-93	Nov-93	Mar-94	May-94	Aug-94	Dec-94*	Feb-95*	Sep-95	Feb-96	Jul-96	Dec-96	Feb-97*	Feb-97	Aug-97	May-98*	Apr-99
<b>Aromatic and Non-Halogenated Hydrocarbons</b>																				
Benzene	1	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1
sec-Butylbenzene		<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<2	<2	<1	<1	<1	<1	<0.5	<1
ter-Butylbenzene		<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<2	<2	<1	<1	<1	<1	<0.5	<1
Ethylbenzene	700	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<2	<2	<1	<1	<1	<1	<0.5	<1
p-Isopropyltoluene		<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1
Naphthalene		<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<2	<2	<2	<2	<0.5	<2
n-Propylbenzene		<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<2	<2	<1	<1	<1	<1	<0.5	<1
Toluene	150	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1
1,2,4-Trimethylbenzene		<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<2	<2	<1	<1	<1	<1	<0.5	<1
1,3,5-Trimethylbenzene		<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<2	<2	<1	<1	<1	<1	<0.5	<1
Xylenes, total	1750	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<1	<2
Total Aromatic Hydrocarbons																				
<b>Halogenated Non-Aromatic Hydrocarbons</b>																				
Chloroform	100	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1
1,1-Dichloroethane	5	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	0.53	<1
1,1-Dichloroethene	6	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1
cis-1,2-Dichloroethene	6	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1
Methylene Chloride	5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	<5	<1	<1	<1	<1	2.7	<1	<1	<0.5	<0.5	<1	<1	<1	<1	16.3	<1	<1	<0.5	<1
1,1,1-Trichloroethane	200	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<0.5	<1
Trichloroethene	5	<5	<1	<1	<1	<1	1.2	<1	<1	<0.5	<0.5	<1	<1	<1	<1	8.5	<1	<1	<0.5	<1
Freon-113	1200	<0.6	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<1	<1	<1	<1	<1	<1	<0.5	<1
Total Halogenated Hydrocarbons							3.9									19.8			0.53	
Total Concentration of VOCs							3.9									19.8			0.53	

MCL = Maximum contaminant level for drinking water  
 All analyses by LBNL EML unless otherwise noted

- < = Less than Quantitation Limit
- \* = Analysis by BC Laboratories
- = Detections are due to cross contamination during sampling

**Table D4.3-1C (Cont'd)**  
**LBNL Groundwater Monitoring Well Results - Southeastern Outlying Area**  
**Volatile Organic Compounds - EPA Method 8260**  
**(concentrations in µg/L)**

Constituent	MCL	MW62-B2 (well is on annual sampling)																				
		Dec-92	Mar-93	May-93	Aug-93	Nov-93	Mar-94	May-94	Sep-94	Dec-94*	Feb-95*	(D)†	Sep-95	Feb-96*	Mar-96*	Jul-96	Dec-96	Feb-97	Aug-97	Mar-98	Aug-98	Jan-99*
<b>Aromatic and Non-Halogenated Hydrocarbons</b>																						
Benzene	1	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5
sec-Butylbenzene		<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<1	<2	<2	<2	<1	<1	<1	<1	<1	<0.5
ter-Butylbenzene		<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<1	<2	<2	<2	<1	<1	<1	<1	<1	<0.5
Ethylbenzene	700	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<1	<2	<2	<2	<1	<1	<1	<1	<1	<0.5
p-Isopropyltoluene		<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.93
Naphthalene		<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<1	<1	<1	<1	<2	<2	<2	<2	<2	<0.5
n-Propylbenzene		<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<1	<2	<2	<2	<1	<1	<1	<1	<1	<0.5
Toluene	150	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5
1,2,4-Trimethylbenzene		<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<1	<2	<2	<2	<1	<1	<1	<1	<1	<0.5
1,3,5-Trimethylbenzene		<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<1	<2	<2	<2	<1	<1	<1	<1	<1	<0.5
Xylenes, total	1750	<5	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<1
Total Aromatic Hydrocarbons																						0.93
<b>Halogenated Non-Aromatic Hydrocarbons</b>																						
Chloroform	100	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5
1,1-Dichloroethane	5	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5
1,1-Dichloroethene	6	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5
cis-1,2-Dichloroethene	6	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5
Methylene Chloride	5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<1	57.7	9.0	<1	<1	<1	<1	<1	<1	<0.5
1,1,1-Trichloroethane	200	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5
Trichloroethene	5	<5	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<1	17.2	1.1	<1	<1	<1	<1	<1	<1	<0.5
Freon-113	1200	<0.6	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5		<5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5
Total Halogenated Hydrocarbons														74.9	10.1							
Total Concentration of VOCs														74.9	10.1							0.93

MCL = Maximum contaminant level for drinking water  
 All analyses by LBNL EML unless otherwise noted

 = Less than Quantitation Limit  
 = Compound not included in analysis

\* = Analysis by BC Laboratories

† = Analysis by AEN

(D) = Duplicate sample

• = Detections are due to cross contamination during sampling

**Table D4.3-1C (Cont'd)**  
**LBNL Groundwater Monitoring Well Results - Southeastern Outlying Area**  
**Volatile Organic Compounds - EPA Method 8260**  
**(concentrations in µg/L)**

Constituent	MCL	62-92-26																								
		Oct-92 (D)†	Dec-92	Mar-93	Jun-93	Aug-93	Oct-93	Mar-94	Aug-94 (D)*	Feb-95*	Aug-95	Feb-96	Jul-96	Feb-97	Feb-97	May-97	Nov-97	May-98*	Jan-99*	Apr-99	Aug-99*	Aug-99	Oct-99	Jan-00	May-00	
<b>Aromatic and Non-Halogenated Hydrocarbons</b>																										
Benzene	1	<5	<2	<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1
sec-Butylbenzene		<5		<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<2	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1
ter-Butylbenzene		<5		<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<2	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1
Ethylbenzene	700	<5	<2	<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<2	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene		<5		<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1
Naphthalene		<5		<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<2	<2	<2	<2	<0.5	<0.5	<2	<2	<2	<2	<2	<2
n-Propylbenzene		<5		<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<2	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1
Toluene	150	<5	<2	<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene		<5		<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<2	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene		<5		<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<2	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1
Xylenes, total	1750	<5	<2	<5	<1	<1	<1	<1	<1	<1	<1.0	<1	<1	<2	<2	<2	<2	<2	<1	<1	<2	<2	<2	<2	<2	<2
Total Aromatic Hydrocarbons																										
<b>Halogenated Non-Aromatic Hydrocarbons</b>																										
Chloroform	100	<5	<2	<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	5.4	<1	<1	<1	<1
1,1-Dichloroethane	5	<5	<2	<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	6	<5	<2	<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	6	<5	<2	<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1
Methylene Chloride	5	<5	<2	<5	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	<5	<2	<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	1.1	23.2	5.2	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	200	<5	<2	<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1
Trichloroethene	5	<5	<2	<5	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	5.1	1.4	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1
Freon-113	1200	<1		<0.6	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<5	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1
Total Halogenated Hydrocarbons															1.1	28.3	6.6					5.4				
Total Concentration of VOCs															1.1	28.3	6.6					5.4				

MCL = Maximum contaminant level for drinking water  
 All analyses by LBNL EML unless otherwise noted  
 † = Analysis by Chromalab, EPA Method 8240

 = Less than Quantitation Limit  
 = Compound not included in analysis  
 \* = Detection is most likely due to cross contamination during sampling

\* = Analysis by BC Laboratories  
 (D) = Duplicate sample

**Table D4.3-1C (Cont'd)**  
**LBNL Groundwater Monitoring Well Results - Southeastern Outlying Area**  
**Volatile Organic Compounds - EPA Method 8260**  
**(concentrations in µg/L)**

Constituent	62-92-27																														
	MCL	Oct-92 (D)†	Dec-92	Mar-93	Jun-93	Aug-93	Nov-93	Mar-94	May-94	Aug-94	Dec-94*	Feb-95*	May-95*	Aug-95	Nov-95	Feb-96	May-96	Jul-96	Dec-96	Feb-97	Feb-97	May-97	Feb-98	Aug-98	Jan-99*	Aug-99	Oct-99	Jan-00	May-00		
<b>Aromatic and Non-Halogenated Hydrocarbons</b>																															
Benzene	1	<5	<2	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene		<5		<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ter-Butylbenzene		<5		<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	700	<5	<2	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene		<5		<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Naphthalene		<5		<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
n-Propylbenzene		<5		<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	150	<5	<2	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene		<5		<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene		<5		<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	1750	<5	<2	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Aromatic Hydrocarbons																															
<b>Halogenated Non-Aromatic Hydrocarbons</b>																															
Chloroform	100	<5	<2	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	5	<5	<2	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	6	<5	<2	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	6	<5	<2	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene Chloride	5	<5	<2	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.8	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	<5	<2	<5	<1	<1	<1	<1	5.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	11.2	7.7	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	200	<5	<2	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	5	<5	<2	<5	<1	<1	<1	<1	2.1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	2.7	2.1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Freon-113	1200	<1		<0.6	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Halogenated Hydrocarbons									7.4								1.8			13.9	9.8										
Total Concentration of VOCs									7.4								1.8			13.9	9.8										

MCL = Maximum contaminant level for drinking water  
 All analyses by LBNL EML unless otherwise noted

< = Less than Quantitation Limit  
 = Compound not included in analysis

† = Analysis by Chromalab, EPA Method 8240  
 \* = Analysis by BC Laboratories  
 (D) = Duplicate sample

**Table D4.3-1C (Cont'd)**  
**LBNL Groundwater Monitoring Well Results - Southeastern Outlying Area**  
**Volatile Organic Compounds - EPA Method 8260**  
**(concentrations in µg/L)**

Constituent	MCL	62-95-16 (well is on annual sampling)													
		Mar-96	Jun-96	Aug-96	Dec-96	Feb-97	May-97	Aug-97	Nov-97	Mar-98	May-98*	Aug-98	Nov-98	Jan-99	May-99
<b>Aromatic and Non-Halogenated Hydrocarbons</b>															
Benzene	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
sec-Butylbenzene		<2	<2	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
ter-Butylbenzene		<2	<2	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Ethylbenzene	700	<2	<2	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
p-Isopropyltoluene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Naphthalene		<1	<1	<2	<2	<2	<2	<2	<2	<2	<0.5	<2	<2	<2	<2
n-Propylbenzene		<2	<2	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Toluene	150	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
1,2,4-Trimethylbenzene		<2	<2	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
1,3,5-Trimethylbenzene		<2	<2	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Xylenes, total	1750	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<2	<2	<2
Total Aromatic Hydrocarbons															
<b>Halogenated Non-Aromatic Hydrocarbons</b>															
Chloroform	100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
1,1-Dichloroethane	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
1,1-Dichloroethene	6	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
cis-1,2-Dichloroethene	6	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Methylene Chloride	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
1,1,1-Trichloroethane	200	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Trichloroethene	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Freon-113	1200	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
Total Halogenated Hydrocarbons															
Total Concentration of VOCs															

MCL = Maximum contaminant level for drinking water  
 All analyses by LBNL EML unless otherwise noted

< = Less than Quantitation Limit  
 \* = Analysis by BC Laboratories

**Table D4.3-2**  
**LBNL Temporary Groundwater Sampling Points - Outlying Areas**  
**Volatile Organic Compounds - EPA Method 8260**  
(concentrations in µg/L)

Constituent	MCL	SB62-96-1	SB70A-95-1	SB70A-95-3	SB74-95-6	SB74-95-9
		Aug-98	Aug-95*	Aug-95*	Sep-95*	May-95*
<b>Aromatic and Non-Halogenated Hydrocarbons</b>						
Benzene	1	<1	<0.5	<0.5	0.91	<0.5
sec-Butylbenzene		<1	<0.5	<0.5	<0.5	<0.5
ter-Butylbenzene		<1	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	700	<1	<0.5	<0.5	<0.5	<0.5
p-Isopropyltoluene		<1	<0.5	<0.5	<0.5	<0.5
Naphthalene		<2	1.8	<0.5	<0.5	<0.5
n-Propylbenzene		<1	<0.5	<0.5	<0.5	<0.5
Toluene	150	<1	<0.5	<0.5	0.65	<0.5
1,2,4-Trimethylbenzene		<1	<0.5	<0.5	<0.5	<0.5
1,3,5-Trimethylbenzene		<1	<0.5	<0.5	<0.5	<0.5
Xylenes, total	1750	<2	<1	<1	<1	<1
Total Aromatic Hydrocarbons			1.8		1.56	
<b>Halogenated Non-Aromatic Hydrocarbons</b>						
Chloroform	100	<1	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	5	<1	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene	6	<1	<0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	6	<1	<0.5	<0.5	<0.5	<0.5
Methylene Chloride	5	<1	<1	<1	<1	<1
Tetrachloroethene	5	<1	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	200	<1	8.3	1.3	<0.5	<0.5
Trichloroethene	5	<1	<0.5	<0.5	<0.5	<0.5
Freon-12		<1	<0.5	<0.5	<0.5	4.5
Freon-113	1200	<1	<0.5	<0.5	<0.5	<0.5
Total Halogenated Hydrocarbons			8.3	1.3		4.5
Total Concentration of VOCs			10.1	1.3	1.6	4.5

MCL = Maximum contaminant level for drinking water  
All analyses by LBNL EML unless otherwise noted

< = Less than Quantitation Limit  
\* = Analysis by BC Laboratories

**Table D4.3-3**  
**LBNL Hydrauger Sampling - Outlying Areas**  
**Volatile Organic Compounds - EPA Method 8260**  
**(concentrations in µg/L)**

Constituent	MCL	54-01-03	54-01-04		54-01-05			54-01-06			54-01-07			54-01-08	
		Aug-98	Jan-93	Aug-98	Jan-93	Mar-94									
<b>Aromatic and Non-Halogenated Hydrocarbons</b>															
Benzene	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ter-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	700	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Naphthalene		<2	<1	<2	<1	<1	<2	<1	<1	<2	<1	<1	<2	12.1	<1
n-Propylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	150	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	1750	<2	<1	<2	<1	<1	<2	<1	<1	<2	<1	<1	<2	<1	<1
Total Aromatic Hydrocarbons														12.1	
<b>Halogenated Non-Aromatic Hydrocarbons</b>															
Chloroform	100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.4	<1
1,1-Dichloroethane	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	6	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	6	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene Chloride	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	200	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Freon-113	1200	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Halogenated Hydrocarbons													1.4		
Total Concentration of VOCs													1.4	12.1	

MCL = Maximum contaminant level for drinking water  
 All analyses by LBNL EML unless otherwise noted

☐ < ☐ = Less than Quantitation Limit

**Table D4.4-1**  
**Groundwater Monitoring Well Results - Outlying Areas**  
**Concentrations of Total Petroleum Hydrocarbons**  
**(Concentrations in µg/L)**

RFI Unit	Area	Well No.	Date	Lab	TPH-Diesel	TPH-Gasoline	TPH-FI
Western Outlying Area							
AOC 6-1	6	88-93-13	Jun-94	BC	510		
			Aug-94	BC	<200		
			Dec-94	BC			ND
			Feb-95	BC			ND
			Jun-95	BC	<200		
			Sep-95	BC	<200		
				AEN	<50 (D)		
			Nov-95	BC	<50		
					78 (S)		
			Mar-96	BC	<50		
					<200 (D)		
			Jun-96	BC	<50		
			Aug-96	BC	<50		
			Dec-96	BC	52		
			Feb-97	BC	<50		
			May-97	BC	<50		
			Aug-97	BC	<50		
<50 (D)							
Feb-98	BC	<50					
Aug-98	BC	<50					
Jan-99	BC	<50					
AOC 8-1	8	70A-96-5	May-96	CLS	<50		
				BC	<50 (D)		
			Jul-96	BC	<50		
			Dec-96	BC	<50		
			May-97	BC	61		
			Aug-97	BC	<50		
			Nov-97	BC	<50		
			May-98	BC	<50		
		70A-96-6	May-96	CLS	<50		
				BC	<50 (D)		
			Jul-96	BC	<50		
			Dec-96	BC	<50		
			May-97	BC	150		
			Aug-97	BC	<50		

**Table D4.4-1 (Cont'd)**  
**Groundwater Monitoring Well Results - Outlying Areas**  
**Concentrations of Total Petroleum Hydrocarbons**  
**(Concentrations in µg/L)**

RFI Unit	Area	Well No.	Date	Lab	TPH-Diesel	TPH-Gasoline	TPH-FI
AOC 8-1	8	70A-96-6	Nov-97	BC	<50		
			May-98	BC	<50		
			Aug-98	BC	<50		
			Nov-98	BC	<50		

Northeastern Outlying Area

AOC 11-1	11	74-92-13	Jul-92	C		<50	
			Aug-92	C	<50		
			May-93	C	<50	<50	
			Mar-94	BC			ND
			May-94	BC			300 (Diesel)
			Aug-94	BC	<200		
			Oct-94	BC			290 (Diesel)
			Feb-95	BC	290		
				AEN	400 (D) 400 (S)		
			May-95	BC	280		
			Sep-95	BC	<200		
			Nov-95	BC	66		
			Sep-96	BC	280		
			Dec-96	BC	280		
			Mar-97	BC	160		
			May-97	BC	200		
			Aug-97	BC	110		
			Mar-98	BC	150		
			Aug-98	BC	170		
Jan-99	BC	140					
Aug-99	BC	140					
AOC 11-1	11	83-92-14	Jul-92	C		140	
			Aug-92	C	<50		
			May-93	C	430	69	
			Mar-94	BC			350 (Diesel)
			Jun-94	BC			1200 (Diesel)
			Aug-94	BC	300		
			Dec-94	BC			440 (Diesel)
			Mar-95	BC			ND

**Table D4.4-1 (Cont'd)**  
**Groundwater Monitoring Well Results - Outlying Areas**  
**Concentrations of Total Petroleum Hydrocarbons**  
**(Concentrations in µg/L)**

RFI Unit	Area	Well No.	Date	Lab	TPH-Diesel	TPH-Gasoline	TPH-FI
AOC 11-1	11	83-92-14	Jun-95	BC	280	<50	
			Aug-95	BC	240	<50 <50 (S)	
			Dec-95	BC	330		
			Mar-96	BC	340 410 (S)		
			Jun-96	CLS	<50		
			Aug-96	BC	230		
			Mar-97	BC	85 75 (D)		
			Jun-97	BC	75		
			Aug-97	BC	<50 <50 (S)		
			Mar-98	BC	57		
			Sep-98	BC	59		
			Jan-99	BC	81		
			Aug-99	BC	53		
			74-94-7	Jun-94	BC	<200	
		Aug-95		BC	<200		
		Nov-95		BC	85		
		Mar-96		BC	110		
		Jun-96		BC	<50		
		Aug-96		BC	50		
		Dec-96		BC	130		
		Feb-97		BC	150		
		May-97		BC	<50		
		Aug-97		BC	<50		
		Nov-97		BC	<50		
		Feb-98		BC	<50		
		May-98		BC	<50		
		Aug-98		BC	140		
		Jan-99	BC	<50			
		Aug-99	BC	<50			
		Jan-00	BC	<200			
		74-94-8	Jun-94	BC	<200		
			Sep-95	BC	<200		
			Nov-95	BC	54		
			Mar-96	BC	<50		
			May-96	CLS	<50		

**Table D4.4-1 (Cont'd)**  
**Groundwater Monitoring Well Results - Outlying Areas**  
**Concentrations of Total Petroleum Hydrocarbons**  
**(Concentrations in µg/L)**

RFI Unit	Area	Well No.	Date	Lab	TPH-Diesel	TPH-Gasoline	TPH-FI
AOC 11-1	11	74-94-8	Aug-96	BC	<50		
			Dec-96	BC	<50		
			Mar-97	BC	<50		
			May-97	BC	<50		
			Aug-97	BC	<50		
			Nov-97	BC	<50		
			Feb-98	BC	70		
			Jun-98	BC	51*		
			Aug-98	BC	66		
			Jan-99	BC	71		
			Aug-99	BC	<50		
			Jan-00	BC	<200		
		74-95-6	Aug-95	BC	340		
				AEN	100		
			Aug-97	BC	170		
			Mar-98	BC	840		
			Aug-98	BC	110		
			Nov-98	BC	170		
			Feb-99	BC	92		
			Aug-99	BC	170		
		83-95-7	Aug-95	BC	530		
				AEN	200		
			Apr-96	CLS	<50		
			Aug-96	BC	72		
			Dec-96	BC	70		
			Feb-97	BC	120		
			Aug-97	BC	98		
			Mar-98	BC	130		
			Aug-98	BC	140		
			Jan-99	BC	110**		
	Aug-99	BC	130				
	11	85-95-1	Aug-95	BC	<200	<50	
			Dec-95	BC	<50	<50	
			Feb-96	BC	54	<50	
			May-96	CLS	<50		
				BC		<50	
Aug-96			BC	<50	<50		
May-97			BC	88	<50		

**Table D4.4-1 (Cont'd)**  
**Groundwater Monitoring Well Results - Outlying Areas**  
**Concentrations of Total Petroleum Hydrocarbons**  
**(Concentrations in µg/L)**

RFI Unit	Area	Well No.	Date	Lab	TPH-Diesel	TPH-Gasoline	TPH-FI
	11	85-95-1	Nov-97	BC	<50	<50 <50 (D)	
			May-98	BC	<50	<50	
			Aug-98	BC	70	<50	
			Oct-98	BC	51	<50	
			Nov-99	BC	72	<50	
		85-95-2	Aug-95	BC	<200	<50	
			Jan-96	BC	<50	<50	
			Feb-96	BC	<50	<50	
			May-96	CLS	<50		
			Jul-96	BC	<50	<50	
			May-97	BC	<50	<50	
			Nov-97	BC	<50	<50 <50 (S)	
			May-98	BC	<50	<50	
			Aug-98	BC	<50	<50	
			Oct-98	BC	64	<50	
		85-96-1	Jul-96	BC	<50	<50	
			Nov-96	BC	<50	<50	
			May-97	BC	<50	<50	
			Nov-97	BC	<50	<50	
			May-98	BC	<50	<50	
			Aug-98	BC	51	<50	
			Oct-98	BC	<50	<50	
		85-96-2	Jul-96	BC	<50	<50	
			Nov-96	BC	55	<50	
			Mar-97	BC	90		
			May-97	BC	<50	<50	
			Aug-97	BC	<50		
			Nov-97	BC	<50	<50	
			Feb-98	BC	<50		
			May-98	BC	<50	<50	
			Aug-98	BC	67 <50 (D)	<50	
			Oct-98	BC	<50	<50	
		Nov-99	BC	<50			

**Southeastern Outlying Area**

AOC 13-2	13	MW62-B1A	May-93	C	<50	<50	
			Mar-94	BC			<b>2000</b> (Crude Oil)

**Table D4.4-1 (Cont'd)**  
**Groundwater Monitoring Well Results - Outlying Areas**  
**Concentrations of Total Petroleum Hydrocarbons**  
**(Concentrations in µg/L)**

RFI Unit	Area	Well No.	Date	Lab	TPH-Diesel	TPH-Gasoline	TPH-FI
AOC 13-2	13	MW62-B1A	May-94	BC			ND
			Aug-94	BC	<200		
			Dec-94	BC			530 (Diesel)
			Feb-95	BC			230 (Diesel)
			Jun-95	BC	<200		
			Sep-95	BC	<200		
			Nov-95	BC	58		
			Feb-96	BC	160		
			May-96	CLS	<50		
				BC	480 (S)		
			Jul-96	BC	<50		
			Dec-96	BC	<50		
			Feb-97	BC	<200		
			May-97	BC	<50		
			Aug-97	BC	<50		
			Nov-97	BC	<50		
			May-98	BC	<50		
			Jan-99	BC	57**		
		Apr-99	BC	570			
		MW62-B2	May-93	C	<50	<50	
			Mar-94	BC			510 (Diesel)
			May-94	BC			470 (Diesel)
			Sep-94	BC	<200 <200 (D)		
			Dec-94	BC			940 (Diesel)
			Feb-95	BC			400 (Diesel)
			Jun-95	BC	<200		
			Sep-95	BC	<200		
				AEN	80 (S)		
			Nov-95	BC	83		
			Feb-96	BC	150		
			May-96	CLS	<50		
			Jul-96	BC	72		
Dec-96	BC		130				

**Table D4.4-1 (Cont'd)**  
**Groundwater Monitoring Well Results - Outlying Areas**  
**Concentrations of Total Petroleum Hydrocarbons**  
**(Concentrations in µg/L)**

RFI Unit	Area	Well No.	Date	Lab	TPH-Diesel	TPH-Gasoline	TPH-FI
AOC 13-2	13	MW62-B2	Feb-97	BC	52		
			May-97	BC	<50		
			Aug-97	BC	59		
			Nov-97	BC	<50		
			Mar-98	BC	<50		
			Jan-99	BC	53**		
			May-99	BC	<50		
		62-95-16	Mar-96	BC	<50		
			Jun-96	BC	<50		
				CLS	<50 (D)		
			Aug-96	BC	<50		
			Dec-96	BC	<50		
			Feb-97	BC	<50		
			May-97	BC	<50		
			Nov-97	BC	<50		
			Mar-98	BC	<50		
			May-98	BC	<50		
			Aug-98	BC	<50		
			Nov-98	BC	<50		
			Jan-99	BC	<50		
		May-99	BC	<50			
		Aug-99	BC	<50			
		62-92-27	Aug-94	BC	<200		
			Dec-94	BC			ND ND (D)
			Feb-95	BC			ND
			May-95	BC			ND
			Aug-95	BC			ND
			May-96	CLS	<50		
			Jul-96	BC	<50		
		Feb-97	BC	<50			

Temporary Groundwater Sampling Points

AOC 8-1	8	SB70A-95-1	Aug-95	BC	760	<50	
		SB70A-95-3	Aug-95	BC	<200	<50	
AOC 11-1	11	SB74-95-6	Sep-95	BC	800	66	
		SB74-95-9	May-95	BC	210	<50	

**Table D4.4-1 (Cont'd)**  
**Groundwater Monitoring Well Results - Outlying Areas**  
**Concentrations of Total Petroleum Hydrocarbons**  
**(Concentrations in µg/L)**

RFI Unit	Area	Well No.	Date	Lab	TPH-Diesel	TPH-Gasoline	TPH-FI
	13	SB62-96-1	Oct-96	CLS	<50		
			Nov-96	EC	66		

	= Not Sampled
<	= Constituent not detected above reporting limit
ND	= All target analytes not detected above reporting limit

\* - Method Blank contained 65 µg/L diesel.

\*\* - Method blank contained 110 µg/L in crude/waste oil range

Analysis for TPH-FI, included: Light Naptha, Aviation Fuel, Stoddard/White Spirits, Heavy Naptha/Ligroin/Petroleum Benzin, Gasoline, JP4, JP5, JP8, Kerosene/Jet Fuel, Diesel, Crude/Waste Oil, Hydraulic/Motor Oil, and WD-40

(D) = Duplicate sample

(S) = Split sample

**Table D4.4-2**  
**BTEX and PAH Results**  
**Temporary Groundwater Sampling Points - Outlying Areas**  
**(Concentrations in µg/L)**

Area	Location	Lab	Date	BTEX	PAH
13	SB62-96-1	BC	Oct-96	ND	-
			Nov-96		Anthracene=0.96 Benzo(a)anthracene=0.039 Benzo(a)pyrene=0.022 Benzo(b)fluoranthene=0.12 Benzo(ghi)perylene=0.017 Benzo(k)fluoranthene=0.0087 Fluoranthene=0.30 Ideno(1,2,3-cd)pyrene=0.014 Phenanthrene=0.39 Pyrene=0.21

**ND** = Not detected above reporting limit (reporting limit varies with analyte)

BC = Analysis by BC Laboratories

BTEX analyzed by EPA Method 602

PAH analyzed by EPA Method 8310

MCLs (National Primary Drinking Water Regulations) of detected chemicals:

Benzo(a)pyrene=0.2 µg/L

**Table D4.5-1**  
**Groundwater Monitoring Well Results - Outlying Areas**  
**Semi-Volatile Organic Compounds**  
**(Concentrations in µg/L)**

Area	Well No.	Lab	Date	8270
<b>Western Outlying Area</b>				
6	88-92-4	BC	Sep-94	ND
	88-93-11A	BC	Sep-94	Bis(2-ethylhexyl)phthalate = 12
	88-93-13	BC	Aug-94	Bis(2-ethylhexyl)phthalate = 8
8	MWP-2	BC	Sep-94	ND Bis(2-ethylhexyl)phthalate = 2
	70-92-7	BC	Aug-94	Bis(2-ethylhexyl)phthalate = 9
	OW3-225	BC	Aug-94	Bis(2-ethylhexyl)phthalate = 8
<b>Northeastern Outlying Area</b>				
11	74-92-13	BC	Aug-94	Bis(2-ethylhexyl)phthalate = 27
	83-92-14	BC	Aug-94	Bis(2-ethylhexyl)phthalate = 11
	74-94-7	BC	Aug-94	ND
	74-94-8	BC	Aug-94	Pentachlorophenol = 9
			Sep-94	ND
	85-95-1	BC	Aug-95	ND
			AEN	ND (S)
		BC	Dec-95	ND
		BC	Feb-96	ND
		CLS	May-96	Bis(2-ethylhexyl)phthalate = 9.5
		BC	Aug-96	ND
				ND (D)
		BC	Aug-98	ND
	Nov-99		ND	
	85-95-2	BC	Aug-95	ND
			AEN	ND (S)
		BC	Jan-96	Bis(2-ethylhexyl)phthalate = 8
		BC	Feb-96	ND
		BC	May-96	ND
		BC	Jul-96	ND
				ND (S)
		BC	Nov-97	ND
	Aug-98		Phenol = 7.4	
85-96-1	BC	Jul-96	ND	
		Nov-96	ND ND (D) ND (S)	
	BC	Nov-97	ND	
			ND (D)	

**Table D4.5-1 (Cont'd)**  
**Groundwater Monitoring Well Results - Outlying Areas**  
**Semi-Volatile Organic Compounds**  
**(Concentrations in µg/L)**

Area	Well No.	Lab	Date	8270
	85-96-1	BC	Aug-98	Phenol = 3.4
				ND
	85-96-2	BC	Oct-98	ND
		BC	Jul-96	ND
		BC	Nov-96	ND
		BC	Nov-97	Phenol = 11 Phenol = 14 (S)
		BC	Aug-98	ND
		BC	Oct-98	ND
		BC	Nov-99	ND

**Southeastern Outlying Area**

13	MW62-B1A	BC	Aug-94	ND
	MW62-B2	BC	Sep-94	ND
	62-92-26	BC	Aug-94	Bis(2-ethylhexyl)phthalate = 3
	62-92-27	BC	Aug-94	ND

**ND** = All target analytes not detected above reporting limit

AEN = Analysis by American Environmental Network

BC = Analysis by BC Laboratories

CLS = Analysis by California Laboratory Services

(D) = Duplicate sample

(S) = Split sample

**Table D4.6-1**  
**Polychlorinated Biphenyls (PCBs)**  
**Groundwater Monitoring Well Results - Outlying Areas**  
**(Concentrations in µg/L)**

Area	Well No.	Lab	Date	PCBs (8080)
Western Outlying Area				
6	88-93-13	BC	Apr-00	<0.2
Southeastern Outlying Area				
13	MW62-B1A	BC	Apr-00	<0.2
	MW62-B2	BC	Apr-00	<0.2

< = Not detected above reporting limit (reporting limit shown)

BC = Analysis by BC Laboratories

**Table D4.7-1**  
**CONCENTRATION OF METALS IN GROUNDWATER - Outlying Areas**  
(Concentrations in µg/L)

AREA	WELL NO.	LAB	DATE	Sb	As	Ba	Be	Cd	Cr	Cr6	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Tl	V	Zn
				MCL: 6	50	1000	4	5	50	NS	1000 (a)	15 (b)	2	NS	100	50	100 (a)	2	NS	5000 (a)	
<b>Western Outlying Area</b>																					
6	88-92-4	C	Apr-92	<20	<5	20	<1	<1	<10		<10	<5	<10	<1	<5	<20	<10	<5	<10	<10	<5
		LBNL	Dec-92	<2	<5.6	<6.5	<0.7	<6.6	7.2		<6.6	4.7	<6.2		<12.2	<8	<0.2	<0.9	<19	<6.7	<7.7
		LBNL	Jun-93	<10	<33.5	30	<4.5	<9	<7		<20.5	<5.5	<43.5	<0.1	<16.5	<61	<1	<12.5	<98.5	<24.5	<16.5
		BC	Mar-94	<100	<2	<10	<10	<10	<10		<50	<10	<50	<0.2	<50	<50	<2	<20	<100	<10	<10
	88-93-11A	BC	Jun-95	<4	<2	<10	<10	<5	<10		<10	<10	<5	<0.2	<10	<50	<2	<10	<5	<50	<50
		LBNL	Mar-96	<50	<2	<50	<5	<40	<50		<50	<50	<40	<0.2	<50	<50	<1	<50	<50	<50	<20
		CLS	Jun-96				<0.5	<5											<1		
	88-93-13	BC	Mar-94	<100	<2	30	<10	<10	<10		<50	<10	<50	<0.2	<50	<50	<10	<20	<100	<10	<10
		BC	Mar-94	<100	<2	30	<10	<10	<10		<50	<10	<50	<0.2	<50	<50	<10	<20	<100	<10	<10
		BC	Jun-95	<4	<2	<100	<10	<5	<10		<10	<10	<5	<0.2	<10	<50	<2	<10	<5	<50	<50
	88-93-13	LBNL	Mar-96	<50	2.5	<50	<5	<40	<50		<50	<50	<40	<0.2	<50	<50	<1	<50	<50	<50	<20
		CLS	Jun-96				<0.5	<5											<1		
	88-96-4	BC	Jul-96	<4	<2	<100	<10	<10	<10		<50	<10	<5	<0.2	<50	<50	<2	<10	<1	<10	<50
		LBNL	Jul-96	<4	<2	70	<4	<40	<50		<50	<50	<15	<0.2	<50	<50	<1	<50	<10	<50	<20
	8	MWP-2	Q	Feb-92	<20	<20	11	<1	<5	<10		<5	<40	<20	<0.3	20	<10	<4	<5	<100	<5
LBNL			Nov-92	14	<5.6	17	<0.7	<6.6	<0.4		<6.6	2.5	<6.2		<12.2	<8	<0.2	<0.9	<19	<6.7	<7.7
LBNL			Jun-93	<10	<33.5	30	<4.5	<9	<7		<20.5	<5.5	<43.5	<0.1	<16.5	<61	<1	<12.5	<98.5	<24.5	<16.5
BC			Mar-94	<100	<2	10	<10	<10	<10		<50	<10	<50	<0.2	<50	<50	<2	<20	<100	<10	<10
BC			May-95	<4	<2	<100	<10	<5	<10		<10	<10	<5	<0.2	<10	<50	2.4	<10	<5	<50	<50
LBNL			Feb-96	<50	<2	<50	<5	<40	<50		<50	<50	<40	<0.2	<50	<50	<1	<50	<50	<50	<20
CLS			May-96				<0.5	<5											<1		
70-92-7		Q	Mar-92	<20	4	28	<1	<5	<10		<5	<40	<20	<0.3	<10	10	<4	<5	<100	<5	61
		LBNL	Dec-92	<2	<5.6	<6.5	<0.7	<6.6	<0.4		<6.6	<0.2	<6.2		<12.2	<8	<0.2	<0.9	<19	<6.7	<7.7
		LBNL	Jun-93	<10	<33.5	<25.5	<4.5	<9	<7		<20.5	<5.5	<43.5	<0.1	<16.5	<61	<1	<12.5	<98.5	<24.5	<16.5
		BC	Mar-94	<100	<2	10	<10	<10	<10		<50	<10	<50	<0.2	<50	<50	<2	<20	<100	<10	<10
70A-96-5		BC	May-96	7	2.0	<100	<10	<10	<10		<50	<10	<5	<0.2	<50	<50	<2	<10	<1	<10	<50
		LBNL	May-96	9.1	2.2	<50	<5	<40	<50		<50	<50	<40	<0.2	<50	<50	<1	<50	<50	<50	<20
		LBNL	May-97	<4	<2	56	<4	<5	<5		<5	8.6	<5	<0.2	<50	<50	<2	<5	<1	<5	<20

**Table D4.7-1 (Cont'd)**  
**CONCENTRATION OF METALS IN GROUNDWATER - Outlying Areas**  
(Concentrations in µg/L)

AREA	WELL NO.	LAB	DATE	MCL:																	
				Sb 6	As 50	Ba 1000	Be 4	Cd 5	Cr 50	Cr6	Co NS	Cu 1000 (a)	Pb 15 (b)	Hg 2	Mo NS	Ni 100	Se 50	Ag 100 (a)	Tl 2	V NS	Zn 5000 (a)
8	70A-96-5	LBNL	May-98	<1																	
		LBNL	Apr-99	1.1																	
70A-96-6	BC	May-96	<4	3.6	<100	<10	<10	<10		<50	<10	<5	<0.2	<50	<50	<2	<10	<1	<10	<50	
		LBNL	May-96	4.1	3.0	<50	<5	<40	<50		<50	<50	<40	<0.2	<50	<50	<1	<50	<50	<50	<20
		LBNL	May-97	<4	2.5	<50	<4	<5	<5		<5	<5	<5	<0.2	57	<50	<2	<5	<1	<5	<20
		LBNL	May-98	<1																	
		LBNL	Apr-99	2.4																	
70A-96-13	BC	Jan-97	<4	5.6	<100	<10	<10	<10		<50	<10	<5	<0.2	<50	<50	<2	<10	<1	<10	<50	
		CLS	Jan-97	<5	<10	32	<0.5	<5	12		<50	<10	<5	<0.2	<50	<50	<2	<10	<1	<10	<20
		LBNL	May-97	<4	4.1	57	<4	<5	<5		<5	<5	<5	<0.2	<50	<50	<2	<5	<1	<5	<20
		LBNL	May-98	1.1	8.0	36.8	<1	<1	1.4		<1	1.0	<1	<0.2	5.3	1.5	8.9	<1	<1	1.7	<5
		LBNL	Apr-99	<1	32.6	<1	<1	<1	<1		<1	<1	<1	<0.2	2.7	1.9	<2	<1	<1	<1	<5
70A-96-14	BC	Jan-97	<4	8.3	<100	<10	<10	<10		<50	<10	<5	<0.2	<50	<50	<2	<10	<1	<10	<50	
		CLS	Jan-97	<5	<10	22	<0.5	<5	<10		<50	<10	<5	<0.2	<50	<50	<2	<10	<1	<10	<20
		LBNL	May-97	<4	5.2	50	<4	<5	<5		<5	<5	<5	<0.2	<50	<50	<2	<5	<1	<5	<20
		LBNL	May-98	<1	5.8	35.4	<1	<1	1.2		<1	<1	<1	<0.2	3.6	<1	10.6	<1	<1	1.4	<5
		LBNL	Apr-99	<1	4.5	48.6	<1	<1	<1		<1	1.9	<1	<0.2	3.1	3.1	<2	<1	<1	<1	5.3
OW3-225	LBNL	Dec-92	<2	<5.6	51	<0.7	<6.6	<0.4		<6.6	<0.2	<6.2		<12.2	<8	<2	<0.9	<19	<6.7	<7.7	
		BC	Mar-94	<100	<2	50	<10	<10	<10		<50	<10	<50	<0.2	<50	<50	<2	<20	<100	<10	<10
		BC	May-95	<4	<2	<100	<10	<5	<10		<10	<10	<5	<0.2	<10	<50	<2	<10	<5	<50	<50
		LBNL	Feb-96	<50	<2	<50	<5	<40	<50		<50	<50	<40	<0.2	<50	<50	<1	<50	<50	<50	<20
		CLS	May-96				<0.5	<5											<1		
		LBNL	Apr-97	<4	<2	70	<4	<5	<5		<5	<5	<5	<0.2	<50	<50	<2	<5	<1	<5	<20
		LBNL	May-98	<1	<2	49.4	<1	<1	3.6		<1	1.5	<1	<0.2	2.4	2.1	<2	<1	<1	1.1	<5
<b>Northeastern Outlying Area</b>																					
11	74-92-13	C	Apr-92	<20	<5	20	<1	<1	<10		<10	<5	<10	<1	<5	<20	<10	<5	<10	<10	<5
		LBNL	Dec-92	40	<5.6	50	<0.7	<6.6	4.3		<6.6	2.8	<6.2		<12.2	<8	<0.2	<0.9	<19	<6.7	148
		LBNL	May-93	<10	<33.5	65	<4.5	<9	<7		<20.5	<5.5	<43.5	<0.1	<16.5	<61	<1	<12.5	<98.5	<24.5	<16.5
		BC	Mar-94	<100	<2	140	<10	<10	<10		<50	<10	<50	<0.2	<50	<50	<2	<20	<100	<10	<10

**Table D4.7-1 (Cont'd)**  
**CONCENTRATION OF METALS IN GROUNDWATER - Outlying Areas**  
(Concentrations in µg/L)

				Sb	As	Ba	Be	Cd	Cr	Cr6	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Tl	V	Zn
MCL:				6	50	1000	4	5	50		NS	1000 (a)	15 (b)	2	NS	100	50	100 (a)	2	NS	5000 (a)
AREA	WELL NO.	LAB	DATE																		
11	83-92-14	C	Apr-92	<20	<5	90	<1	<1	<10		<10	<5	<10	<1	20	50	<10	<5	<10	<10	10
		LBNL	Dec-92	<2	<5.6	140	<0.7	<6.6	4.5		<6.6	<0.2	<6.2		<12.2	<8	<0.2	<0.9	<19	<6.7	<7.7
		LBNL	May-93	<10	<33.5	100	<4.5	<9	<7		<20.5	<5.5	<43.5	<0.1	<16.5	<61	<1	<12.5	<98.5	<24.5	<16.5
		BC	Mar-94	<100	6	50	<10	<10	<10		<50	<10	<50	<0.2	<50	<50	<20	<20	<100	<10	<10
74-94-7	AEN	Jun-94	<20	6	100	<2	<5	<10		<5	<10	<40	<0.2	30	<10	<4	<5	<100	<5	<10	
	BC	Jun-94	<100	4	130	<10	<10	<10		<50	<10	<50	<0.2	<50	<50	<2	<10	<100	<10	<10	
	BC	May-95	<4	3	<100	<10	<5	<10		<10	<10	<5	<0.2	12	<50	3.4	<10	<5	<50	<50	
	LBNL	Mar-96	<50	<2	<50	<5	<40	<50		<50	<50	<40	<0.2	<50	<50	<1	<50	<50	<50	<20	
	CLS	Jun-96				<0.5	<5												<1		
74-94-8	AEN	Jun-94	<20	47	310	<2	<5	<10		<5	<10	<40	<0.2	10	<10	<4	<5	<100	<5	50	
	BC	Jun-94	<100	36	40	<10	<10	<10		<50	<10	<50	<0.2	<50	<50	<2	<10	<100	10	<10	
	BC	May-95	<4	2.8	<100	<10	<5	<10		<10	<10	<5	<0.2	<10	<50	<2	<10	<5	<50	<10	
	LBNL	Mar-96	<50	2.1	<50	<5	<40	<50		<50	<50	<40	<0.2	<50	<50	<1	<50	<50	<50	<20	
	BC	May-96				<0.5	<5												<1		
	LBNL	May-97		10.7																	
	BC	Jun-98		2.6																	
LBNL	May-99		2.9																		
74-95-6	BC	Aug-95	<4	38	<100	<10	<5	<10		<10	<10	<5	<0.2	22	<50	<2	<10	<5	<50	<50	
	AEN	Aug-95	<20	30	50	<2	<5	<10		<5	<10	<40	<0.2	30	10	<4	<5	<50	<5	10	
	BC	Jun-98		<2																	
	LBNL	May-99		<2																	
83-95-7	BC	Aug-95	<4	23	150	<10	<5	<10		<10	<10	<5	<100	20	<50	<2	<10	<5	<50	<50	
	AEN	Aug-95	<20	29	140	<2	<5	20		9	<10	<40	<0.2	20	40	4	<5	<50	10	10	
	LBNL	Mar-96	<50	6.0	<50	<5	<40	<50		<50	<50	<40	<0.2	<50	<50	<1	<50	<50	<50	<20	
	CLS	May-96				<0.5	<5												<1		
	LBNL	May-97		<2																	
	LBNL	May-98		3.7																	
	LBNL	Apr-99		1.6																	

**Table D4.7-1 (Cont'd)**  
**CONCENTRATION OF METALS IN GROUNDWATER - Outlying Areas**  
(Concentrations in µg/L)

AREA	WELL NO.	LAB	DATE	MCL:	Sb	As	Ba	Be	Cd	Cr	Cr6	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Tl	V	Zn
				6	50	1000	4	5	50	NS	1000 (a)	15 (b)	2	NS	100	50	100 (a)	2	NS	5000 (a)		
<b>Southeastern Outlying Area</b>																						
13	MW62-B1A	LBNL	Dec-92	<2	<5.6	55	<0.7	<6.6	<0.4			<6.6	<0.2	<6.2		<12.2	<8	<0.2	<0.9	<19	<6.7	<7.7
		LBNL	May-93	<10	<33.5	60	<4.5	<9	<7			<20.5	<5.5	<43.5	<0.1	<16.5	<61	<1	<12.5	<98.5	<24.5	<16.5
		BC	Mar-94	<100	6	70	<10	<10	<10			<50	<10	<50	<0.2	<50	<50	<2	<20	<100	<10	<10
	MW62-B2	LBNL	Dec-92	<2	<5.6	42	<0.7	<6.6	<0.4			<6.6	<0.2	<6.2		<12.2	<8	1.6	<0.9	<19	<6.7	<7.7
		LBNL	May-93	<10	<33.5	32	<4.5	<9	<7			<20.5	<5.5	<43.5	<0.1	<16.5	<61	<1	<12.5	<98.5	<24.5	<16.5
		BC	Mar-94	<100	3	40	<10	<10	<10			<50	<10	<50	<0.2	<50	<50	<10	<20	<100	<10	<10
	62-92-26	C	Oct-92	<20	16	22	<1	<1	<10			<10	<5	<10	<1	7	<20	70	<5	280	<10	18
		LBNL	Oct-92	<150	<60	<70	<10	<70	<10			<70	<10	<60		<120	<60	4.8	<10	<190	<70	<10
		LBNL	Jun-93	<10	<33.5	45	<4.5	<9	<7			<20.5	<5.5	<43.5	<0.1	<16.5	<61	<1	<12.5	<98.5	<24.5	<16.5
		BC	Mar-94	<100	3	56	<10	<10	<10			<50	<10	<50	<0.2	<50	<50	<2	<20	<100	<10	<10
		BC	May-95	<4	<2	<100	<10	<5	<10			<10	<10	<5	<0.2	<10	<50	<2	<10	<5	<50	<50
		LBNL	Feb-96	<50	<2	<50	<5	<40	<50			<50	<50	<40	<0.2	<50	<50	<1	<50	<50	<50	<20
	62-92-27	C	Oct-92	<20	20	35	<1	<1	<10			<10	<5	<10	<1	<5	<20	100	<5	210	<10	20
		LBNL	Oct-92	<150	<60	<70	<10	<70	<10			<70	<10	<60		<120	<60	<0.2	<10	<190	<70	<10
		LBNL	Jun-93	<10	<33.5	32	<4.5	<9	<7			<20.5	<5.5	<43.5	<0.1	<16.5	<61	<1	<12.5	<98.5	<24.5	<16.5
		BC	Mar-94	<100	3	33	<10	<10	<10			<50	<10	<50	<0.2	<50	<50	<2	<20	<100	<10	<10
		BC	May-95	<4	<2	<100	<10	<5	<10			<10	<10	<5	<0.2	<10	<50	<2	<10	<5	<50	<50
		LBNL	Feb-96	<50	2.0	<50	<5	<40	<50			<50	<50	<40	<0.2	<50	<50	<1	<50	<50	<50	24
62-95-16	LBNL	Mar-96	<50	2.4	<50	<5	<40	<50			<50	<50	<40	<0.2	<50	<50	<1	<50	<50	<50	<20	
	CLS	Jun-96				<0.5	<5													<1		
	LBNL	May-97	<4	<2	<50	<4	<5	<5			<5	<5	<5	<0.2	<50	<50	6.9	<5	<1	<5	<20	

MCL: Maximum contaminant level for drinking water (determined by California DTSC)

(a): secondary MCL

(b): action level

NS: Not Specified

\* = Grab sample

<	= not detected
40	= concentration above MCL
	= not analyzed

AEN = Analysis by American Environmental Network

BC = Analysis by BC Analytical laboratory

C = Analysis by Chromalab

CLS = Analysis by California Laboratory Services

LBNL = Analysis by Lawrence Berkeley National Laboratory

Q = Analysis by Quanteq

**Table D4.8-1**  
**Surface Water Sampling Results - Outlying Areas**  
**Concentrations of Organic Constituents**  
**(concentrations in µg/L)**

Location	Date	Lab	VOCs	SVOCs	PCBs
			8260	625/8270	8080
North Fork Strawberry Creek	Feb-93	LBNL	ND		
	Feb-93*	LBNL	ND		
	Apr-93	LBNL	ND		
	Aug-93	LBNL	ND		
		C		ND ND (D)	
	Mar-94	LBNL	ND		
	Jul-94	LBNL	ND		
		BC	ND (D)	ND	
	Jan-95	BC	ND		
	May-95**	BC	1,1,1-TCA=0.95 1,1,1-TCA=0.91 (D)		
	Jul-95	LBNL	ND		
	Dec-95**	LBNL	ND		
	Jan-96	LBNL	ND		
	Apr-96#	LBNL	ND		
	Apr-97	LBNL	ND		
	Jan-98	LBNL	ND		
	Apr-98	LBNL	ND		
		BC		Diethyl phthalate=2.2	
	Jul-98	BC		ND	
	Apr-99	LBNL	ND		
Jul-99	BC			<0.2	
Jul-99**	BC			<0.2	
Jan-00	LBNL	ND			
Mar-00**	LBNL	ND			
Botanical Garden Creek	Aug-93	LBNL	ND	ND	
	Mar-94	LBNL	ND		
	Jul-94	LBNL	ND		
	Jan-95	BC	ND		
	Jul-95	LBNL	ND		
		BC	ND (D)		
	Jan-96	LBNL	ND		
		BC	ND (D)		
Apr-96	LBNL	ND (c)			
Cafeteria Creek	Mar-94	LBNL	ND		
	Jan-95	BC	ND		
	Jan-96	LBNL	ND		
	Apr-96#	LBNL	ND		
	Apr-97	LBNL	ND		
	Jan-98	LBNL	ND		
	Apr-99	LBNL	ND		
	Jan-00	LBNL	ND		
No Name Creek	Mar-94	LBNL	ND		
	Jul-94	BC	ND		
	Jan-95	BC	ND		
	Jul-95	LBNL	ND		
	Jan-96	LBNL	ND		
	Apr-96#	LBNL	ND		
	Apr-97	LBNL	ND		
	Jan-98	LBNL	ND		
	Apr-99	LBNL	ND		
Jan-00	LBNL	ND			

ND = Not detected above reporting limit (reporting limit varies with analyte)  
 = Not analyzed

# - All April 1996 creek samples missed holding times for 8260 analysis (D) = Duplicate sample  
 \* - Sample taken at UC Women's Faculty Club  
 \*\* - Sample taken at Erosion Control Basin

**Table D4.8-2**  
**Sediment Sampling Results - Outlying Areas**  
**Concentrations of Organic Constituents (mg/kg)**

Location	Sample ID	Date	Lab	VOCs	SVOCs	TPH-Diesel	TPH-Gas	PCBs
				8260	8270	3550	5030	8080
No. Fork Strawberry Creek	SSBC-1A/2A-0.4	Apr-93	Q	ND*	ND	49**	<0.2	
	SSBC-3A/4A-0.8			Toluene 0.013*	ND	<5**	<0.2	
	SS-NFStraw-96-1A-0	Aug-96	BC		ND			
	SS-NFStraw-96-2A-0				ND			
	SS-NFStraw-96-3A-0				ND			
	SS-NFStraw-96-4A-0				ND			
	SS-NFStraw-96-5A-0				ND			
	SS-Nfstraw-98-1-0.0	Jan-98	BC					<0.02
	SS-Nfstraw-98-2-0.0							<0.02
SS-Nfstraw-98-3-0.0							<0.02	
No Name Creek	SS-Noname-96-1A-0.0	Aug-96	BC		ND			
	SS-Noname-96-2A-0.0				ND			
	SS-Noname-98-1-0.0	Jan-98	BC					<0.02
	SS-Noname-98-2-0.0							<0.02
Banana Creek	SS-Banana-96-1A-0.0	Aug-96	BC		ND			
	SS-Banana-96-2A-0.0				ND			

BC = Analysis by BC Laboratories

Q = Analysis by Quanteq

\* = Analyzed by EPA Method 8240

\*\* = Oil detected

ND
<

= Not analyzed

= Not detected above reporting limit

= Not detected above reporting limit (reporting limit shown)

**Table D4.8-3  
Surface Water Sampling Results - Outlying Areas  
Concentrations of Metals (µg/L)**

			Sb	As	Ba	Be	Cd	Cr	Cr6	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Tl	V	Zn	
MCL:			6	50	1000	4	5	50		NS	1000 (a)	15 (b)	2	NS	100	50	100 (a)	2	NS	5000 (a)	
LOCATION	LAB	DATE																			
North Fork Strawberry Creek	C	Aug-93	<20	<5	96	<1	<1	<10		<10	<5	<10	<1	15	<20	<10	7	<10	<10	93	
			<20	<5	45	<1	<1	<10		<10	<5	<10	<1	<5	<20	<10	<5	<10	<5	<10	40
	BC	Jul-94	<100	<2	<100	<10	<5	<10		<10	<10	<5	<0.20	<10	<50	<2	<10	<5	<50	<50	
			<100	2	<100	<10	<5	<10		<10	<10	<5	<0.20	<10	<50	<2	<10	<5	<50	<50	
	BC	Jul-95	<4	<2	<100	<10	<5	<10		<10	<10	<5	<0.20	<10	<50	<2	<10	<5	<50	<50	
	BC	Jan-96	<4	2.4	<100	<10	<5	<10		<10	<10	<5	<0.20	<10	<50	<2	<10	<5	<50	<50	
	LBNL	Apr-96	<50	<2	<50	<5	<40	<50		<50	<50	<40	<0.20	<50	<50	<1	<50	<50	<50	<20	
	LBNL	Apr-97	<4	<2	104	<4	<5	<5		<5	<5	<5	<0.20	<50	<50	<2	<5	<1	<5	<20	
	LBNL	Jan-98	<1	<2	40.2	<1	<1	<5		<5	2.3	<1	<0.10	<5	<5	<2	<1	<1	4.3	8.8	
	LBNL	Apr-98	<1	<2	48.7	<1	<1	1.0		<1	1.9	2.9	<0.20	1.4	<1	5.2	<1	<1	5.1	6.9	
	LBNL	Apr-99	<1	4.2	76.9	<1	<1	8.6		<1	1.2	<1	<0.25	2.5	<1	4.5	<1	<1	15.9	9.3	
	Erosion Control Basin >	BC	Jul-99							4.2											
		BC	Jul-99							<2											
		LBNL	Jan-00	<1	<2	41.0	<1	<1	2.5		<1	4.6	<1	<0.10	1.6	1.5	<2	<1	<1	5.4	51.6
BC		Jan-00							<2												
No Name Creek	BC	Jul-94	<100	3.0	120	<10	<5	<10		<10	10	8	<0.20	<10	<50	<2	<10	<5	<50	<50	
	BC	Aug-95	<4	<2	<100	<10	<5	<10		<10	<10	<5	<0.20	<10	<50	<2	<10	<5	<50	<10	
	BC	Jan-96	<4	3.0	<100	<10	<10	<10		<50	<10	<5	<0.20	<50	<50	<2	<10	<5	<10	<50	
	LBNL	Apr-96	<50	2.9	<50	<5	<40	<50		<50	<50	<40	<0.20	<50	<50	<1	<50	<50	<50	<20	
	LBNL	Apr-97	<4	3.2	99	<4	<5	5.9		<5	<5	<5	<0.20	<50	<50	<2	<5	<1	<5	<20	
	LBNL	Jan-98	<1	3.4	51.2	<1	<1	<5		<5	4.2	<1	<0.10	<5	<5	12.3	<1	<1	4.2	<5	
	LBNL	Apr-99	<1	2.4	109	<1	<1	7.4		<1	1.1	<1	<0.25	1.2	1.8	5.0	<1	<1	6.1	<5	
	LBNL	Jan-00	<1	<2	80.1	<1	<1	<1		<1	<1	<1	<0.20	1.8	<1	<2	<1	<1	3.8	<5	

**Table D4.8-3 (Cont'd)**  
**Surface Water Sampling Results - Outlying Areas**  
**Concentrations of Metals (µg/L)**

			Sb	As	Ba	Be	Cd	Cr	Cr6	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Tl	V	Zn
MCL:			6	50	1000	4	5	50		NS	1000 (a)	15 (b)	2	NS	100	.50	100 (a)	2	NS	5000 (a)
LOCATION	LAB	DATE																		
Botanical Garden Creek	C	Aug-93	<20	<5	77	<1	<1	<10		<10	<5	<10	<1	<5	<20	<10	<5	<10	<10	6
	BC	Jul-94	<100	3	<100	<10	<5	<10		<10	<10	<5	<0.20	<10	<50	<2	<10	<5	<50	<50
	BC	Jul-95	<4	<2	<100	<10	<5	<10		<10	<10	<5	<0.20	<10	<50	<2	<10	<5	<50	<50
	BC	Jul-95	<4	<2	<100	<10	<5	<10		<10	<10	<5	<0.20	<10	<50	<2	<10	<5	<50	<50
	BC	Jan-96	<4	2.6	<100	<10	<10	<10		<50	10	<5	<0.20	<50	<50	<2	<10	<5	<10	51
	LBNL	Apr-96	<50	3.4	<50	<5	<40	<50		<50	<50	<40	<0.20	<50	<50	<1	<50	<50	<50	<20
	LBNL	Apr-97	<4	2.1	103	<4	<5	8.7		<5	<5	<5	<0.20	<50	<50	<2	<5	<1	<5	<20
	LBNL	Jan-98	<1	<2	29.6	<1	<1	<5		<5	3.9	<1	<0.10	<5	<5	3.4	<1	<1	3.7	8.5
	LBNL	Apr-99	<1	<2	82.7	<1	<1	7.8		<1	1.9	<1	<0.25	3.4	3.1	5.4	<1	<1	8.8	<5
LBNL	Jan-00	<1	<2	68.6	<1	<1	1.6		<1	1.3	<1	<0.20	2.9	<1	<2	<1	<1	3.8	<5	
Cafeteria Creek	BC	Jan-96	<4	<2	<100	<10	<10	<10		<50	<10	<5	<0.20	<50	<50	<2	<10	<5	<10	50
	LBNL	Apr-96	<50	<2	<50	<5	<40	<50		<50	<50	<40	<0.20	<50	<50	<1	<50	<50	<50	<20
	LBNL	Apr-97	<4	<2	121	<4	<5	6.3		<5	<5	<5	<0.20	<50	<50	<2	<5	<1	<5	<20
	LBNL	Jan-98	<1	<2	35.7	<1	<1	<5		<5	2.2	<1	<0.10	<5	<5	<2	<1	<1	1.1	7.6
	LBNL	Apr-99	<1	<2	89.3	<1	<1	7.4		<1	1.9	<1	<0.25	2.5	3.7	2.9	<1	<1	1.9	11.7
	LBNL	Jan-00	<1	<2	22.1	<1	<1	1.9		<1	3.5	<1	<0.20	1.1	<1	<2	<1	<1	<1	<1

MCL: Maximum contaminant level for drinking water (determined by California DTSC)

BC = Analysis by BC Laboratories

C = Analysis by Chromalab

LBNL: Analysis by Lawrence Berkeley National Laboratory

<	= Not detected above quantitation limit
	= Not analyzed

(a): secondary MCL

(b): action level

NS: Not Specified

Table D4.8-4  
Sediment Sampling Results - Outlying Areas  
Concentrations of Metals (mg/kg)

Location		Sample ID	Date	Lab	Sb	As	Ba	Be	Cd	Cr	Cr6	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Tl	V	Zn		
North Fork Strawberry Creek	BL	SSBC-1/2A-0.4	Apr-93	Q	<2	3	140	<0.2	0.6	59		8.9	47	180	0.3	0.6	32	<2	3.5	<3	28	160		
	BL	SSBC-3/4A-0.5/0.8	Apr-93	Q	<2	5	79	<0.2	0.6	45		11	40	53	0.6	<0.6	38	<2	<0.2	<3	35	160		
	ECB	SS-ERBAS-N-L-1-0	Jan-95	BC											<0.2									
	ECB	SS-ERBAS-N-U-1-0														<0.2								
	ECB	SS-ERBAS-S-U-1-0														<0.2								
	ECB	SS-ERBAS-S-L-1-0														<0.2								
	ECB	SS-ERBAS-S-U-2-0			Jul-95	BC	<5	2.6	334	<0.5	<0.5	36		6.8	28	17	<0.2	<2.5	26	<0.5	<1	5.4	31	130
	ECB	SS-ERBAS-S-U-3-0	<5	1.9			93	<0.5	0.57	42		6.5	38	73	<0.2	<2.5	29	<0.5	<1	<5	32	259		
	ECB	SS-ERBAS-S-U-4-0	<5	2.0			52	<0.5	0.5	33		8.0	55	45	0.22	<2.5	27	<0.5	<1	<5	29	182		
	ECB	SS-ERBAS-S-U-5-0	<5	2.5			47	<0.5	<0.5	79	<1	6.8	216	69	<0.2	<2.5	27	<0.5	<1	<5	32	314		
	No Name Creek	BL	SS-Nfstraw-96-1A-0	Aug-96	BC	<10	3.5	98	<1	<1	129		7.1	19	17	<0.2	15	105	1.0	<2	<10	37	109	
		BL	SS-Nfstraw-96-2A-0			<10	4.7	83	<1	1.2	43		8.7	30	49	<0.2	<5	27	1.6	<2	<10	53	108	
		BL	SS-Nfstraw-96-3A-0			<10	9.2	1300	<1	2.5	21		13	44	21	<0.2	<5	181	2.6	<2	<10	48	148	
		BL	SS-Nfstraw-96-4A-0			<10	4.1	78	<1	<1	31		6.1	18	20	<0.2	<5	20	1.1	<2	<10	37	115	
		BL	SS-Nfstraw-96-5A-0			<10	4.2	81	<1	<1	29		7.3	26	19	<0.2	<5	22	1.0	<2	<10	49	144	
ECB		SS-NFStraw-FL-99-1-0	Jul-99	BC								<0.1												
No Name Creek	SS-Noname-96-1A-0.0	Aug-96	BC	<10	9.3	212	<1	<1	36		13	66	19	<0.2	<5	43	2.4	<2	<10	51	78			
	SS-Noname-96-2A-0.0			<10	9.9	199	<1	<1	30		19	31	24	<0.2	<5	47	2.2	<2	<10	37	86			
Cafeteria Creek	SS-Cafe-96-1A-0.0	Aug-96	BC	<10	11	187	<1	1.4	68		19	45	35	<0.2	<5	46	1.5	<2	<10	54	235			
	SS-Cafe-96-2A-0.0	Jan-98	BC	<10	11	146	<1	13	53		15	54	29	<0.2	<5	41	1.7	<2	<10	49	186			
	SS-Cafe-98-1-0.0																							
	SS-Cafe-98-2-0.0																							
	SS-Cafe-98-3-0.0																							
SS-Cafe-98-4-0.0																								
Banana Creek	SS-Banana-96-1A-0.0	Aug-96	BC	<10	5.4	110	<1	<1	68		16	27	13	<0.2	<5	64	2.6	<2	<10	72	78			
	SS-Banana-96-2A-0.0			<10	3.9	74	<1	<1	38		14	27	12	<0.2	<5	52	2.2	<2	<10	44	86			

BL = Sample taken at LBNL Boundary Line  
ECB = Sample taken at Erosion Control Basin

< = Not detected above quantitation limit  
 = Not analyzed

BC = Analysis by BC Laboratories  
Q = Analysis by Quanteq