

Frequently-Detected Contaminants in Sediments

North Slough, Bybee Lake, Smith Lake (1993-2002)

Notes

Sort Order: Parameter / Sampling Station / Sample Date

All stations sampled annually since 1993, with the exception of mid-North Slough, which was added in 1996

Smith Lake not sampled in 2001 due to lack of standing water

Sample method is surface grab from biologically-active layer

Analytical limit is method-reporting limit

Result not present in spreadsheet indicates contaminant not detected above method reporting limit (see "Analytical Results for Sediment Quality Parameters" for non-detects)

Arsenic
Chromium
Copper
Lead
Nickel
Zinc

} ALL
METALS

Frequently detected *
contaminants
Arbitrary choices by Paul J.

Residential values - DEQ -
OAR 346-122-0010
Appendix 1

* 1) consistent
2) recent

Res - exceed
ECO - FW TEL = 5.9
- soil - OK

Res - OK
ECO - n/a

Res - OK
ECO - FW - OK
- soil - n/a

*

Contaminant	Station	Date	mg/kg
Arsenic	Bybee L.	6/28/94	8
Arsenic	Bybee L.	8/8/95	6.5
Arsenic	Bybee L.	9/5/96	4.9
Arsenic	Bybee L.	5/28/97	6.4
Arsenic	Bybee L.	6/15/98	6.12
Arsenic	Bybee L.	6/15/99	5.29
Arsenic	Bybee L.	6/20/00	7.98
Arsenic	Bybee L.	6/21/01	9.78
Arsenic	Bybee L.	6/11/02	6.25
Arsenic	E. N. Slough	10/22/93	9.4
Arsenic	E. N. Slough	6/28/94	6.4
Arsenic	E. N. Slough	8/8/95	6
Arsenic	E. N. Slough	9/5/96	4
Arsenic	E. N. Slough	5/28/97	5.2
Arsenic	E. N. Slough	6/15/98	4.73
Arsenic	E. N. Slough	6/15/99	5.52
Arsenic	E. N. Slough	6/20/00	4.34
Arsenic	E. N. Slough	6/21/01	7.3
Arsenic	E. N. Slough	6/11/02	5.57
Arsenic	mid-N. Slough	9/5/96	4.5
Arsenic	mid-N. Slough	5/28/97	1.9
Arsenic	mid-N. Slough	6/15/98	3.78
Arsenic	mid-N. Slough	6/15/99	3.73
Arsenic	mid-N. Slough	6/20/00	6.11
Arsenic	mid-N. Slough	6/21/01	4.93
Arsenic	mid-N. Slough	6/11/02	4.31
Arsenic	Smith L.	6/28/94	8
Arsenic	Smith L.	8/8/95	9.2
Arsenic	Smith L.	9/5/96	6.9
Arsenic	Smith L.	5/28/97	7.2
Arsenic	Smith L.	6/15/98	7.35
Arsenic	Smith L.	6/15/99	10.1
Arsenic	Smith L.	6/20/00	7.49
Arsenic	Smith L.	6/11/02	8.52
Arsenic	W. N. Slough	10/22/93	14
Arsenic	W. N. Slough	6/28/94	5.5
Arsenic	W. N. Slough	8/8/95	5.4
Arsenic	W. N. Slough	9/5/96	5.4
Arsenic	W. N. Slough	5/28/97	5.9
Arsenic	W. N. Slough	6/15/98	7.07
Arsenic	W. N. Slough	6/15/99	5.95
Arsenic	W. N. Slough	6/20/00	5.85
Arsenic	W. N. Slough	6/21/01	6.49
Arsenic	W. N. Slough	6/11/02	5.23
Barium	Bybee L.	6/15/99	161
Barium	Bybee L.	6/20/00	191
Barium	Bybee L.	6/21/01	234
Barium	Bybee L.	6/11/02	208
Barium	E. N. Slough	6/15/99	149
Barium	E. N. Slough	6/20/00	128
Barium	E. N. Slough	6/21/01	206
Barium	E. N. Slough	6/11/02	198
Barium	mid-N. Slough	6/15/99	107
Barium	mid-N. Slough	6/20/00	165
Barium	mid-N. Slough	6/21/01	175
Barium	mid-N. Slough	6/11/02	166
Barium	Smith L.	6/15/99	209
Barium	Smith L.	6/20/00	155
Barium	Smith L.	6/11/02	208
Barium	W. N. Slough	6/15/99	154
Barium	W. N. Slough	6/20/00	159
Barium	W. N. Slough	6/21/01	177
Barium	W. N. Slough	6/11/02	189
Benzo(a)anthracene	Bybee L.	6/15/98	0.0505
Benzo(a)anthracene	Bybee L.	6/20/00	0.0835
Benzo(a)anthracene	Bybee L.	6/11/02	0.0459
Benzo(a)anthracene	E. N. Slough	6/15/98	0.0689
Benzo(a)anthracene	E. N. Slough	6/15/99	0.0469
Benzo(a)anthracene	E. N. Slough	6/20/00	0.0515
Benzo(a)anthracene	E. N. Slough	6/21/01	0.0405

Contaminant	Station	Date	mg/kg
Benzo(a)anthracene	mid-N. Slough	6/15/98	0.0761
Benzo(a)anthracene	mid-N. Slough	6/15/99	0.0688
Benzo(a)anthracene	mid-N. Slough	6/20/00	0.0877
Benzo(a)anthracene	mid-N. Slough	6/21/01	0.0773
Benzo(a)anthracene	Smith L.	6/15/98	0.0807
Benzo(a)anthracene	W. N. Slough	6/15/98	3.52
Benzo(a)anthracene	W. N. Slough	6/15/99	0.568
Benzo(a)anthracene	W. N. Slough	6/20/00	0.191
Benzo(a)anthracene	W. N. Slough	6/21/01	0.105
Benzo(a)anthracene	W. N. Slough	6/11/02	0.0839
Benzo(a)pyrene	Bybee L.	6/15/98	0.0714
Benzo(a)pyrene	Bybee L.	6/20/00	0.127
Benzo(a)pyrene	Bybee L.	6/21/01	0.118
Benzo(a)pyrene	Bybee L.	6/11/02	0.0755
Benzo(a)pyrene	E. N. Slough	6/15/98	0.0525
Benzo(a)pyrene	E. N. Slough	6/15/99	0.0419
Benzo(a)pyrene	E. N. Slough	6/20/00	0.0559
Benzo(a)pyrene	E. N. Slough	6/21/01	0.0627
Benzo(a)pyrene	E. N. Slough	6/11/02	0.0472
Benzo(a)pyrene	mid-N. Slough	6/15/98	0.0578
Benzo(a)pyrene	mid-N. Slough	6/15/99	0.0805
Benzo(a)pyrene	mid-N. Slough	6/20/00	0.101
Benzo(a)pyrene	mid-N. Slough	6/21/01	0.0825
Benzo(a)pyrene	mid-N. Slough	6/11/02	0.0338
Benzo(a)pyrene	Smith L.	6/15/98	0.0997
Benzo(a)pyrene	Smith L.	6/20/00	0.143
Benzo(a)pyrene	Smith L.	6/11/02	0.0513
Benzo(a)pyrene	W. N. Slough	6/15/98	1.5
Benzo(a)pyrene	W. N. Slough	6/15/99	0.411
Benzo(a)pyrene	W. N. Slough	6/20/00	0.229
Benzo(a)pyrene	W. N. Slough	6/21/01	0.156
Benzo(a)pyrene	W. N. Slough	6/11/02	0.0871
Benzo(b)fluoranthene	Bybee L.	6/15/98	0.0605
Benzo(b)fluoranthene	Bybee L.	6/20/00	0.11
Benzo(b)fluoranthene	Bybee L.	6/21/01	0.112
Benzo(b)fluoranthene	Bybee L.	6/11/02	0.0696
Benzo(b)fluoranthene	E. N. Slough	6/15/98	0.0538
Benzo(b)fluoranthene	E. N. Slough	6/15/99	0.0537
Benzo(b)fluoranthene	E. N. Slough	6/20/00	0.0576
Benzo(b)fluoranthene	E. N. Slough	6/21/01	0.0656
Benzo(b)fluoranthene	E. N. Slough	6/11/02	0.0479
Benzo(b)fluoranthene	mid-N. Slough	6/15/98	0.0545
Benzo(b)fluoranthene	mid-N. Slough	6/15/99	0.0647
Benzo(b)fluoranthene	mid-N. Slough	6/20/00	0.114
Benzo(b)fluoranthene	mid-N. Slough	6/21/01	0.11
Benzo(b)fluoranthene	mid-N. Slough	6/11/02	0.0383
Benzo(b)fluoranthene	Smith L.	6/15/98	0.104
Benzo(b)fluoranthene	Smith L.	6/20/00	0.156
Benzo(b)fluoranthene	Smith L.	6/11/02	0.0424
Benzo(b)fluoranthene	W. N. Slough	6/15/98	1.57
Benzo(b)fluoranthene	W. N. Slough	6/15/99	0.406
Benzo(b)fluoranthene	W. N. Slough	6/20/00	0.225
Benzo(b)fluoranthene	W. N. Slough	6/21/01	0.171
Benzo(b)fluoranthene	W. N. Slough	6/11/02	0.0933
Benzo(g,h,i)perylene	Bybee L.	6/15/98	0.0685
Benzo(g,h,i)perylene	Bybee L.	6/20/00	0.132
Benzo(g,h,i)perylene	Bybee L.	6/21/01	0.0892
Benzo(g,h,i)perylene	Bybee L.	6/11/02	0.0958
Benzo(g,h,i)perylene	E. N. Slough	6/15/98	0.0308
Benzo(g,h,i)perylene	E. N. Slough	6/20/00	0.0445
Benzo(g,h,i)perylene	E. N. Slough	6/21/01	0.0463
Benzo(g,h,i)perylene	E. N. Slough	6/11/02	0.0541
Benzo(g,h,i)perylene	mid-N. Slough	6/15/98	0.0414
Benzo(g,h,i)perylene	mid-N. Slough	6/15/99	0.0515
Benzo(g,h,i)perylene	mid-N. Slough	6/20/00	0.088
Benzo(g,h,i)perylene	mid-N. Slough	6/21/01	0.064
Benzo(g,h,i)perylene	mid-N. Slough	6/11/02	0.0369
Benzo(g,h,i)perylene	Smith L.	6/15/98	0.118
Benzo(g,h,i)perylene	Smith L.	6/20/00	0.136
Benzo(g,h,i)perylene	Smith L.	6/11/02	0.0623

Res - OK
 Eco - FW - OK
 -soil - OK

Res - OK
 Eco - n/a

Res - n/a
 Eco - n/a

Contaminant	Station	Date	mg/kg
Benzo(g,h,i)perylene	W. N. Slough	6/15/98	0.673
Benzo(g,h,i)perylene	W. N. Slough	6/20/00	0.222
Benzo(g,h,i)perylene	W. N. Slough	6/21/01	0.102
Benzo(g,h,i)perylene	W. N. Slough	6/11/02	0.0782
Benzo(k)fluoranthene	Bybee L.	6/15/98	0.0414
Benzo(k)fluoranthene	Bybee L.	6/20/00	0.0828
Benzo(k)fluoranthene	Bybee L.	6/21/01	0.14
Benzo(k)fluoranthene	Bybee L.	6/11/02	0.0528
Benzo(k)fluoranthene	E. N. Slough	6/15/98	0.0406
Benzo(k)fluoranthene	E. N. Slough	6/15/99	0.0402
Benzo(k)fluoranthene	E. N. Slough	6/20/00	0.0464
Benzo(k)fluoranthene	E. N. Slough	6/21/01	0.0526
Benzo(k)fluoranthene	mid-N. Slough	6/15/98	0.0336
Benzo(k)fluoranthene	mid-N. Slough	6/15/99	0.0595
Benzo(k)fluoranthene	mid-N. Slough	6/20/00	0.0812
Benzo(k)fluoranthene	mid-N. Slough	6/21/01	0.0722
Benzo(k)fluoranthene	Smith L.	6/11/02	0.0427
Benzo(k)fluoranthene	W. N. Slough	6/15/98	1.32
Benzo(k)fluoranthene	W. N. Slough	6/15/99	0.333
Benzo(k)fluoranthene	W. N. Slough	6/20/00	0.193
Benzo(k)fluoranthene	W. N. Slough	6/21/01	0.154
Benzo(k)fluoranthene	W. N. Slough	6/11/02	0.0894
Beryllium	Bybee L.	6/11/02	0.819
Beryllium	mid-N. Slough	6/11/02	0.629
Cadmium	Bybee L.	6/21/01	1.57
Cadmium	Bybee L.	6/11/02	0.966
Cadmium	Smith L.	6/11/02	1.16
Chromium	Bybee L.	6/15/99	27.7
Chromium	Bybee L.	6/20/00	36.2
Chromium	Bybee L.	6/21/01	41.5
Chromium	Bybee L.	6/11/02	37.5
Chromium	E. N. Slough	6/15/99	22.9
Chromium	E. N. Slough	6/20/00	19.6
Chromium	E. N. Slough	6/21/01	34.6
Chromium	E. N. Slough	6/11/02	36.3
Chromium	mid-N. Slough	6/15/99	20.5
Chromium	mid-N. Slough	6/20/00	30.8
Chromium	mid-N. Slough	6/21/01	33.9
Chromium	mid-N. Slough	6/11/02	32.6
Chromium	Smith L.	6/15/99	37.4
Chromium	Smith L.	6/20/00	25.9
Chromium	Smith L.	6/11/02	35.8
Chromium	W. N. Slough	6/15/99	35.2
Chromium	W. N. Slough	6/20/00	40.9
Chromium	W. N. Slough	6/21/01	42.2
Chromium	W. N. Slough	6/11/02	45.8
Chrysene	Bybee L.	6/15/98	0.0748
Chrysene	Bybee L.	6/20/00	0.0944
Chrysene	Bybee L.	6/21/01	0.0966
Chrysene	Bybee L.	6/11/02	0.0607
Chrysene	E. N. Slough	6/15/98	0.0977
Chrysene	E. N. Slough	6/15/99	0.0682
Chrysene	E. N. Slough	6/20/00	0.0529
Chrysene	E. N. Slough	6/21/01	0.0585
Chrysene	E. N. Slough	6/11/02	0.0458
Chrysene	mid-N. Slough	6/15/98	0.0857
Chrysene	mid-N. Slough	6/15/99	0.0862
Chrysene	mid-N. Slough	6/20/00	0.0981
Chrysene	mid-N. Slough	6/21/01	0.0972
Chrysene	mid-N. Slough	6/11/02	0.0338
Chrysene	Smith L.	6/15/98	0.137
Chrysene	Smith L.	6/20/00	0.134
Chrysene	Smith L.	6/11/02	0.0458
Chrysene	W. N. Slough	6/15/98	2.84
Chrysene	W. N. Slough	6/15/99	0.717
Chrysene	W. N. Slough	6/20/00	0.232
Chrysene	W. N. Slough	6/21/01	0.158
Chrysene	W. N. Slough	6/11/02	0.102
Cobalt	Bybee L.	6/15/99	11.9
Cobalt	Bybee L.	6/20/00	15.7

Res-OK
Eco - w/a

Res-OK
Eco - FW = 37.3
- soil = 1 (plants),
0.4 (inverts),
30 (mammals)

Res-OK
Eco - FW - OK
- soil - w/a

Contaminant	Station	Date	mg/kg
Cobalt	Bybee L.	6/21/01	19.2
Cobalt	Bybee L.	6/11/02	15.7
Cobalt	E. N. Slough	6/15/99	12.8
Cobalt	E. N. Slough	6/20/00	9.98
Cobalt	E. N. Slough	6/21/01	16.1
Cobalt	E. N. Slough	6/11/02	14.2
Cobalt	mid-N. Slough	6/15/99	9.21
Cobalt	mid-N. Slough	6/20/00	13.1
Cobalt	mid-N. Slough	6/21/01	14.5
Cobalt	mid-N. Slough	6/11/02	12.8
Cobalt	Smith L.	6/15/99	16.3
Cobalt	Smith L.	6/20/00	12.5
Cobalt	Smith L.	6/11/02	17.5
Cobalt	W. N. Slough	6/15/99	12.7
Cobalt	W. N. Slough	6/20/00	12.6
Cobalt	W. N. Slough	6/21/01	14.6
Cobalt	W. N. Slough	6/11/02	13.5
Copper	Bybee L.	6/15/99	37.7
Copper	Bybee L.	6/20/00	47.2
Copper	Bybee L.	6/21/01	61.1
Copper	Bybee L.	6/11/02	47.2
Copper	E. N. Slough	6/15/99	25.3
Copper	E. N. Slough	6/20/00	22.7
Copper	E. N. Slough	6/21/01	42.9
Copper	E. N. Slough	6/11/02	42.8
Copper	mid-N. Slough	6/15/99	25.4
Copper	mid-N. Slough	6/20/00	38.2
Copper	mid-N. Slough	6/21/01	35.9
Copper	mid-N. Slough	6/11/02	37
Copper	Smith L.	6/15/99	52.9
Copper	Smith L.	6/20/00	40.6
Copper	Smith L.	6/11/02	54.3
Copper	W. N. Slough	6/15/99	37.9
Copper	W. N. Slough	6/20/00	42.9
Copper	W. N. Slough	6/21/01	43.8
Copper	W. N. Slough	6/11/02	47.5
Fluoranthene	Bybee L.	6/28/94	0.062
Fluoranthene	Bybee L.	6/15/98	0.119
Fluoranthene	Bybee L.	6/20/00	0.133
Fluoranthene	Bybee L.	6/21/01	0.116
Fluoranthene	Bybee L.	6/11/02	0.0749
Fluoranthene	E. N. Slough	6/28/94	0.052
Fluoranthene	E. N. Slough	5/28/97	0.17
Fluoranthene	E. N. Slough	6/15/98	0.081
Fluoranthene	E. N. Slough	6/15/99	0.0874
Fluoranthene	E. N. Slough	6/20/00	0.0622
Fluoranthene	E. N. Slough	6/21/01	0.0619
Fluoranthene	E. N. Slough	6/11/02	0.058
Fluoranthene	mid-N. Slough	5/28/97	0.092
Fluoranthene	mid-N. Slough	6/15/98	0.0998
Fluoranthene	mid-N. Slough	6/15/99	0.0632
Fluoranthene	mid-N. Slough	6/20/00	0.132
Fluoranthene	mid-N. Slough	6/21/01	0.0739
Fluoranthene	mid-N. Slough	6/11/02	0.0394
Fluoranthene	Smith L.	6/28/94	0.047
Fluoranthene	Smith L.	6/15/98	0.181
Fluoranthene	Smith L.	6/20/00	0.206
Fluoranthene	Smith L.	6/11/02	0.0582
Fluoranthene	W. N. Slough	6/28/94	0.15
Fluoranthene	W. N. Slough	5/28/97	0.13
Fluoranthene	W. N. Slough	6/15/98	10.6
Fluoranthene	W. N. Slough	6/15/99	1.22
Fluoranthene	W. N. Slough	6/20/00	0.348
Fluoranthene	W. N. Slough	6/21/01	0.186
Fluoranthene	W. N. Slough	6/11/02	0.143
Indeno(1,2,3-cd)pyrene	Bybee L.	6/15/98	0.0653
Indeno(1,2,3-cd)pyrene	Bybee L.	6/20/00	0.101
Indeno(1,2,3-cd)pyrene	Bybee L.	6/11/02	0.0712
Indeno(1,2,3-cd)pyrene	E. N. Slough	6/15/98	0.0342
Indeno(1,2,3-cd)pyrene	E. N. Slough	6/20/00	0.0378

Res - n/a
Eco - n/a

Res - OK
Eco - FW - TEL = 35.7
- soils - close
(50 - inverts)

Res - OK
Eco - FW - OK
- soils - n/a

Contaminant	Station	Date	mg/kg
Indeno(1,2,3-cd)pyrene	E. N. Slough	6/21/01	0.0392
Indeno(1,2,3-cd)pyrene	E. N. Slough	6/11/02	0.0428
Indeno(1,2,3-cd)pyrene	mid-N. Slough	6/15/98	0.0497
Indeno(1,2,3-cd)pyrene	mid-N. Slough	6/15/99	0.047
Indeno(1,2,3-cd)pyrene	mid-N. Slough	6/20/00	0.0767
Indeno(1,2,3-cd)pyrene	Smith L.	6/15/98	0.103
Indeno(1,2,3-cd)pyrene	Smith L.	6/20/00	0.111
Indeno(1,2,3-cd)pyrene	Smith L.	6/11/02	0.0427
Indeno(1,2,3-cd)pyrene	W. N. Slough	6/15/98	0.862
Indeno(1,2,3-cd)pyrene	W. N. Slough	6/20/00	0.177
Indeno(1,2,3-cd)pyrene	W. N. Slough	6/21/01	0.0909
Indeno(1,2,3-cd)pyrene	W. N. Slough	6/11/02	0.0672
Lead	Bybee L.	6/15/99	34.1
Lead	Bybee L.	6/20/00	42.9
Lead	Bybee L.	6/21/01	52.9
Lead	Bybee L.	6/11/02	43.6
Lead	E. N. Slough	6/15/99	15.2
Lead	E. N. Slough	6/20/00	15.6
Lead	E. N. Slough	6/21/01	30.8
Lead	E. N. Slough	6/11/02	31.3
Lead	mid-N. Slough	6/15/99	13.2
Lead	mid-N. Slough	6/20/00	26.7
Lead	mid-N. Slough	6/21/01	25
Lead	mid-N. Slough	6/11/02	24.6
Lead	Smith L.	6/15/99	50.4
Lead	Smith L.	6/20/00	44.1
Lead	Smith L.	6/11/02	55.2
Lead	W. N. Slough	6/15/99	26
Lead	W. N. Slough	6/20/00	37.6
Lead	W. N. Slough	6/21/01	36.4
Lead	W. N. Slough	6/11/02	37.1
Nickel	Bybee L.	6/15/99	20.4
Nickel	Bybee L.	6/20/00	28.6
Nickel	Bybee L.	6/21/01	33
Nickel	Bybee L.	6/11/02	28.1
Nickel	E. N. Slough	6/15/99	19.9
Nickel	E. N. Slough	6/20/00	16.3
Nickel	E. N. Slough	6/21/01	28.4
Nickel	E. N. Slough	6/11/02	27.2
Nickel	mid-N. Slough	6/15/99	16.6
Nickel	mid-N. Slough	6/20/00	23.9
Nickel	mid-N. Slough	6/21/01	28.3
Nickel	mid-N. Slough	6/11/02	23.5
Nickel	Smith L.	6/15/99	32.6
Nickel	Smith L.	6/20/00	23
Nickel	Smith L.	6/11/02	31.8
Nickel	W. N. Slough	6/15/99	24.5
Nickel	W. N. Slough	6/20/00	25.5
Nickel	W. N. Slough	6/21/01	26.7
Nickel	W. N. Slough	6/11/02	27.7
Pyrene	Bybee L.	6/15/98	0.107
Pyrene	Bybee L.	6/20/00	0.144
Pyrene	Bybee L.	6/21/01	0.156
Pyrene	Bybee L.	6/11/02	0.0895
Pyrene	E. N. Slough	6/15/98	0.0697
Pyrene	E. N. Slough	6/15/99	0.0729
Pyrene	E. N. Slough	6/20/00	0.0578
Pyrene	E. N. Slough	6/21/01	0.078
Pyrene	E. N. Slough	6/11/02	0.0528
Pyrene	mid-N. Slough	6/15/98	0.104
Pyrene	mid-N. Slough	6/15/99	0.0674
Pyrene	mid-N. Slough	6/20/00	0.129
Pyrene	mid-N. Slough	6/21/01	0.0964
Pyrene	mid-N. Slough	6/11/02	0.0392
Pyrene	Smith L.	6/15/98	0.199
Pyrene	Smith L.	6/20/00	0.175
Pyrene	Smith L.	6/11/02	0.0711
Pyrene	W. N. Slough	6/15/98	6.97
Pyrene	W. N. Slough	6/15/99	0.951
Pyrene	W. N. Slough	6/20/00	0.358

Res - OK
Eco - n/a

Res - OK
Eco - FW TEL = 35
-soils - OK

Res - OK
Eco - FW TEL = 18
-soils - OK

Res - OK
Eco - FW - OK
-soils - n/a

Contaminant	Station	Date	mg/kg
Pyrene	W. N. Slough	6/21/01	0.246
Pyrene	W. N. Slough	6/11/02	0.129
Selenium	Bybee L.	6/21/01	1.6
Vanadium	Bybee L.	6/15/99	61.4
Vanadium	Bybee L.	6/20/00	89.8
Vanadium	Bybee L.	6/21/01	105
Vanadium	Bybee L.	6/11/02	91.7
Vanadium	E. N. Slough	6/15/99	59.5
Vanadium	E. N. Slough	6/20/00	53
Vanadium	E. N. Slough	6/21/01	92
Vanadium	E. N. Slough	6/11/02	88
Vanadium	mid-N. Slough	6/15/99	51.8
Vanadium	mid-N. Slough	6/20/00	81.3
Vanadium	mid-N. Slough	6/21/01	87.4
Vanadium	mid-N. Slough	6/11/02	78
Vanadium	Smith L.	6/15/99	85.7
Vanadium	Smith L.	6/20/00	68.6
Vanadium	Smith L.	6/11/02	91.6
Vanadium	W. N. Slough	6/15/99	75.7
Vanadium	W. N. Slough	6/20/00	82.4
Vanadium	W. N. Slough	6/21/01	82.8
Vanadium	W. N. Slough	6/11/02	87.8
Zinc	Bybee L.	6/28/94	170
Zinc	Bybee L.	8/8/95	159
Zinc	Bybee L.	9/5/96	156
Zinc	Bybee L.	5/28/97	180
Zinc	Bybee L.	6/15/98	188
Zinc	Bybee L.	6/15/99	156
Zinc	Bybee L.	6/20/00	200
Zinc	Bybee L.	6/21/01	256
Zinc	Bybee L.	6/11/02	199
Zinc	E. N. Slough	10/22/93	130
Zinc	E. N. Slough	6/28/94	170
Zinc	E. N. Slough	8/8/95	172
Zinc	E. N. Slough	9/5/96	140
Zinc	E. N. Slough	5/28/97	130
Zinc	E. N. Slough	6/15/98	127
Zinc	E. N. Slough	6/15/99	150
Zinc	E. N. Slough	6/20/00	119
Zinc	E. N. Slough	6/21/01	185
Zinc	E. N. Slough	6/11/02	173
Zinc	mid-N. Slough	9/5/96	160
Zinc	mid-N. Slough	5/28/97	93
Zinc	mid-N. Slough	6/15/98	101
Zinc	mid-N. Slough	6/15/99	89.5
Zinc	mid-N. Slough	6/20/00	143
Zinc	mid-N. Slough	6/21/01	148
Zinc	mid-N. Slough	6/11/02	139
Zinc	Smith L.	6/28/94	180
Zinc	Smith L.	8/8/95	168
Zinc	Smith L.	9/5/96	207
Zinc	Smith L.	5/28/97	190
Zinc	Smith L.	6/15/98	188
Zinc	Smith L.	6/15/99	223
Zinc	Smith L.	6/20/00	170
Zinc	Smith L.	6/11/02	216
Zinc	W. N. Slough	10/22/93	200
Zinc	W. N. Slough	6/28/94	170
Zinc	W. N. Slough	8/8/95	165
Zinc	W. N. Slough	9/5/96	210
Zinc	W. N. Slough	5/28/97	170
Zinc	W. N. Slough	6/15/98	177
Zinc	W. N. Slough	6/15/99	143
Zinc	W. N. Slough	6/20/00	181
Zinc	W. N. Slough	6/21/01	200
Zinc	W. N. Slough	6/11/02	198

Res - n/a
Eco - n/a

Res - n/a
Eco - FW TEL = 123
- soils - Plants = 50