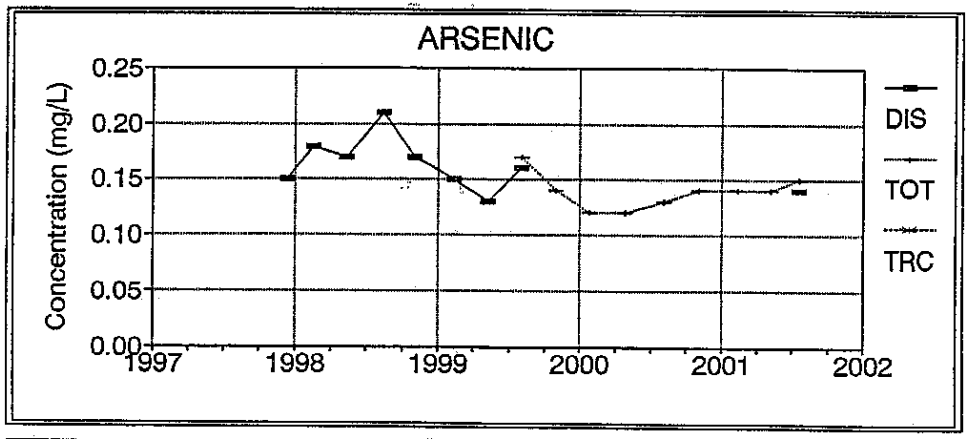
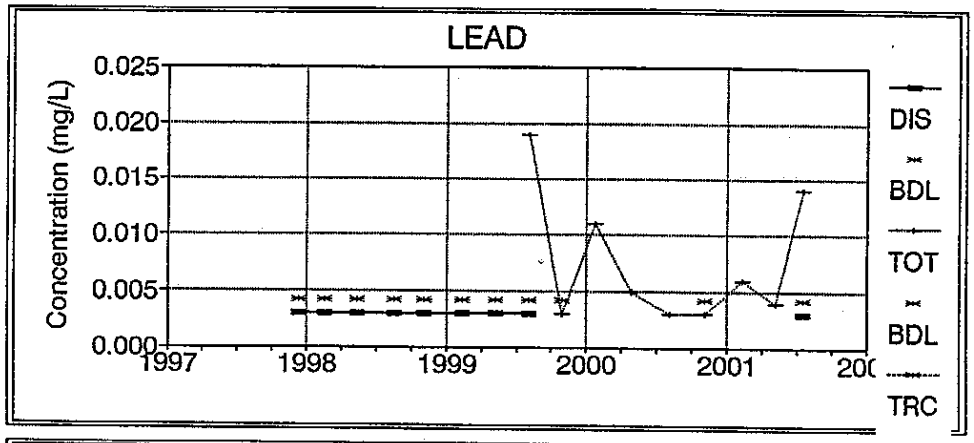
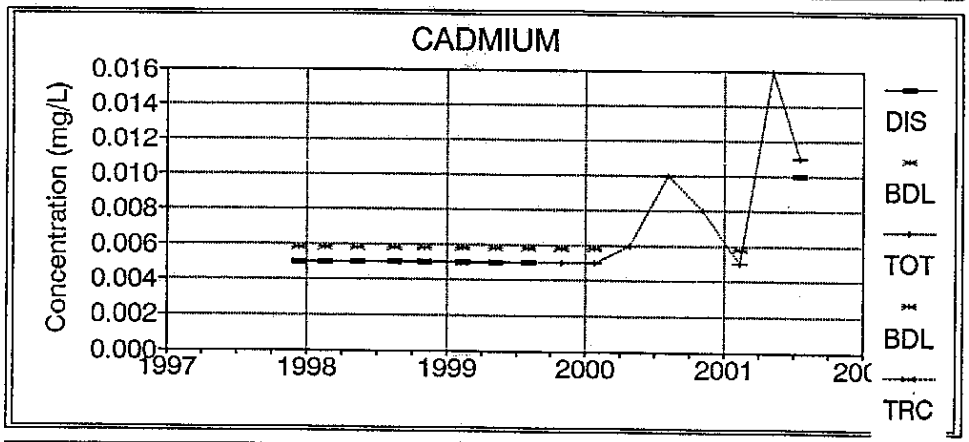
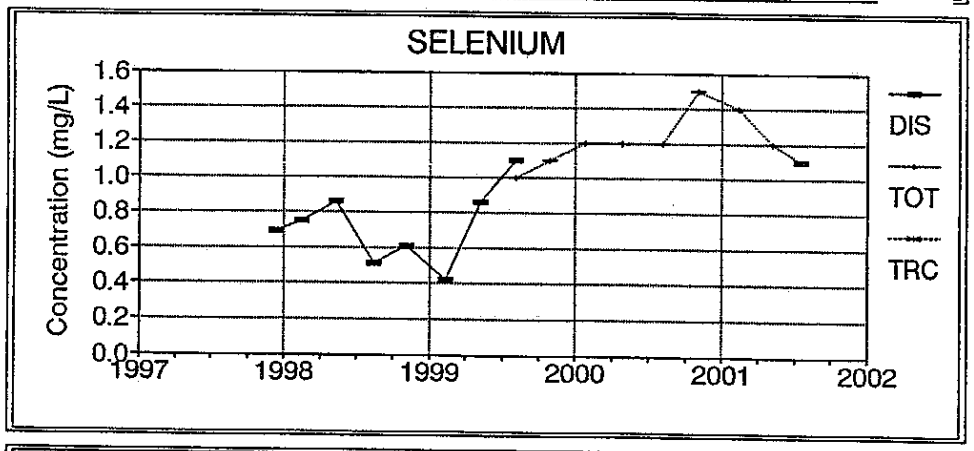
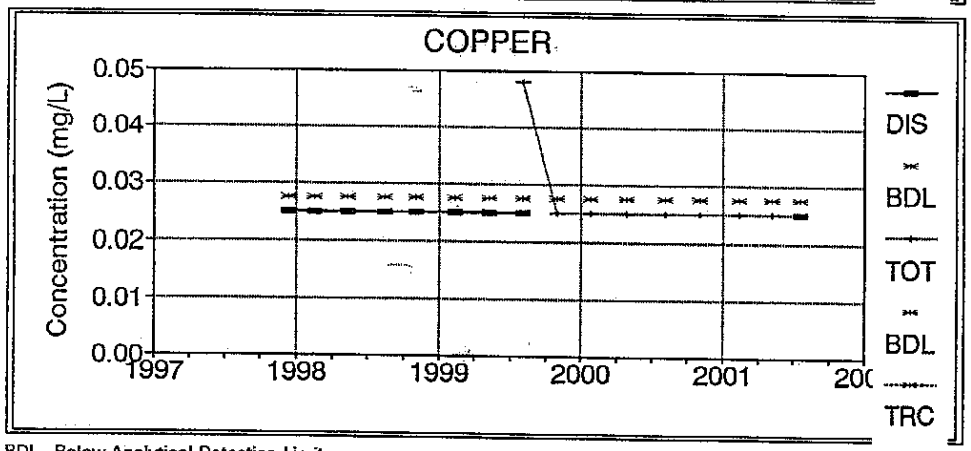
EP-9

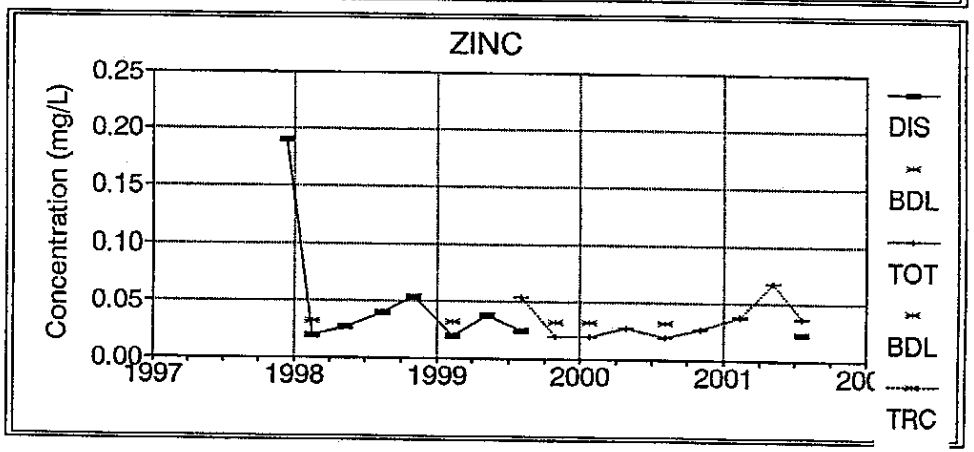






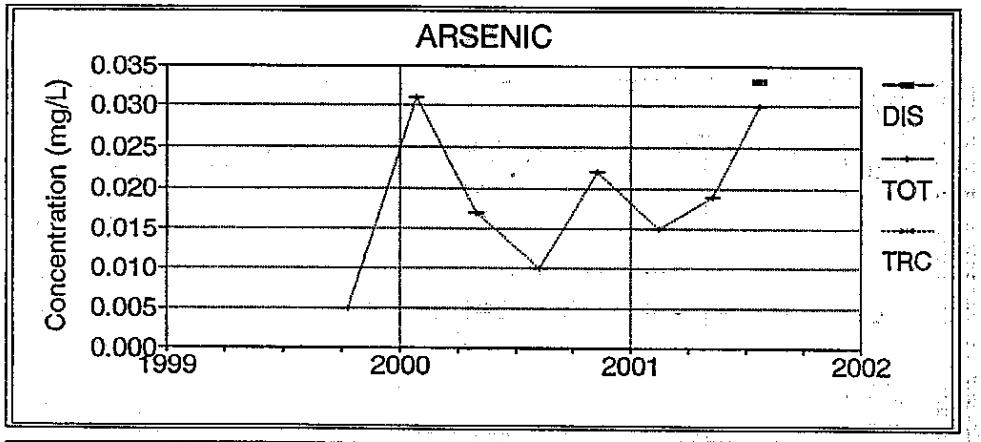


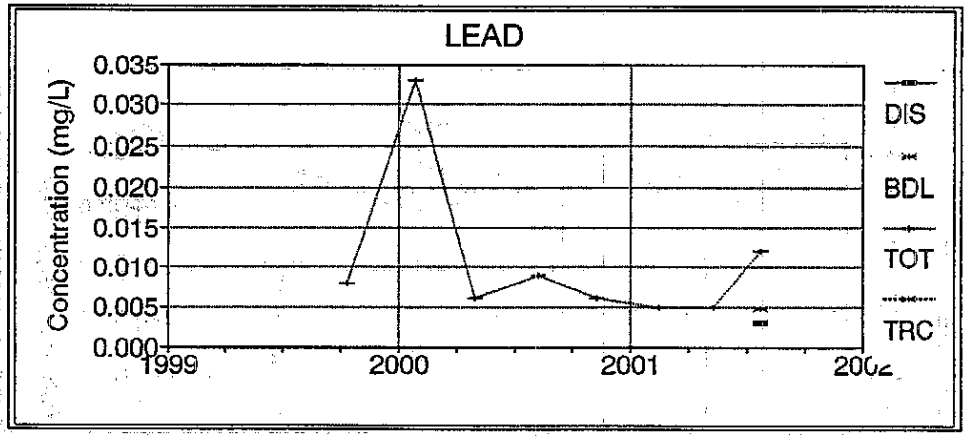


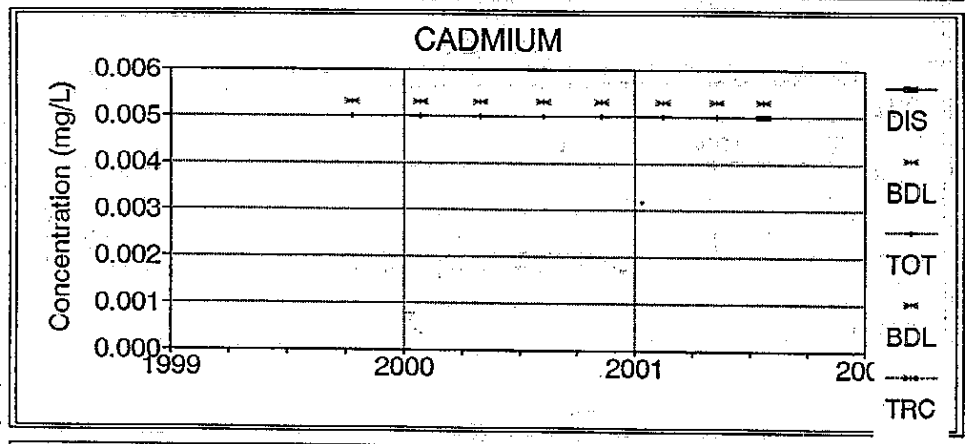


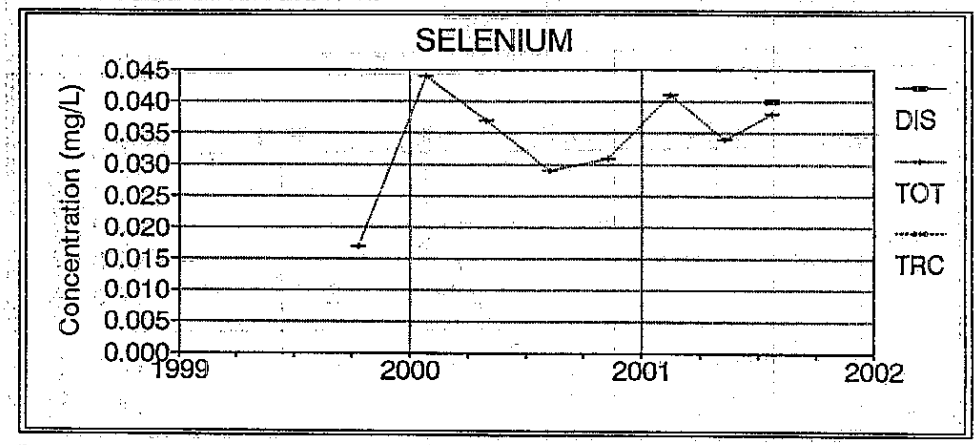
BDL - Below Analytical Detection Limit

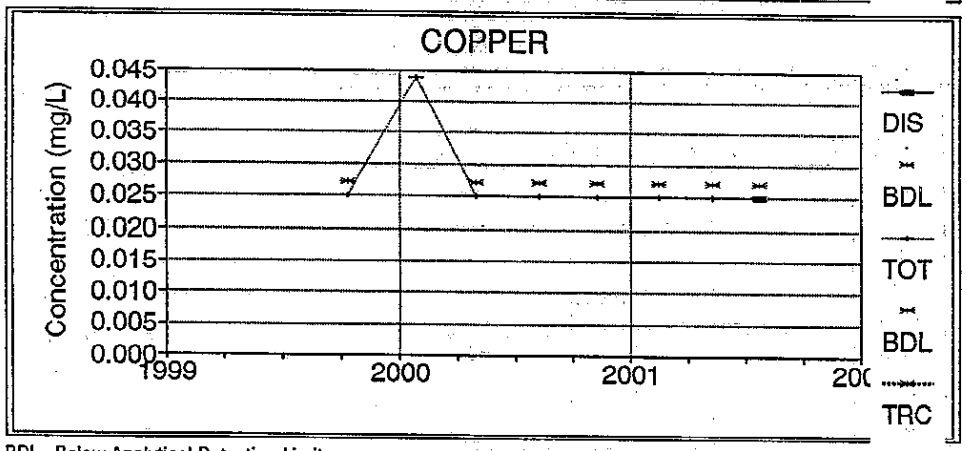
EP-93

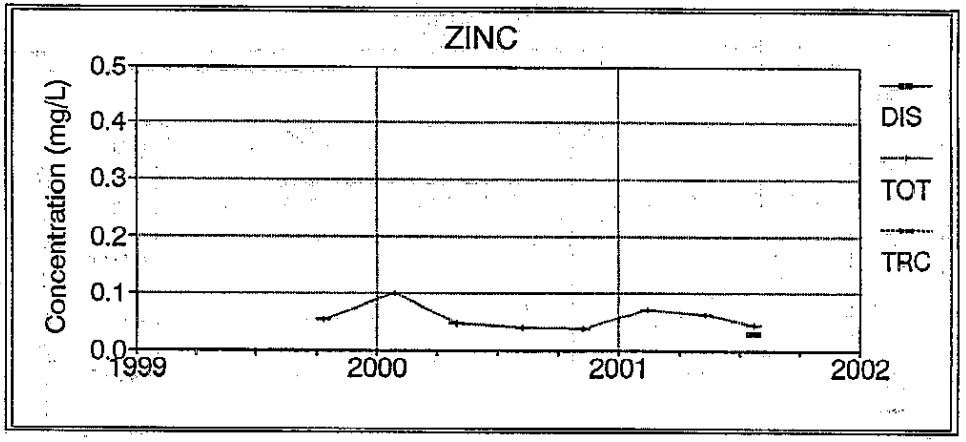






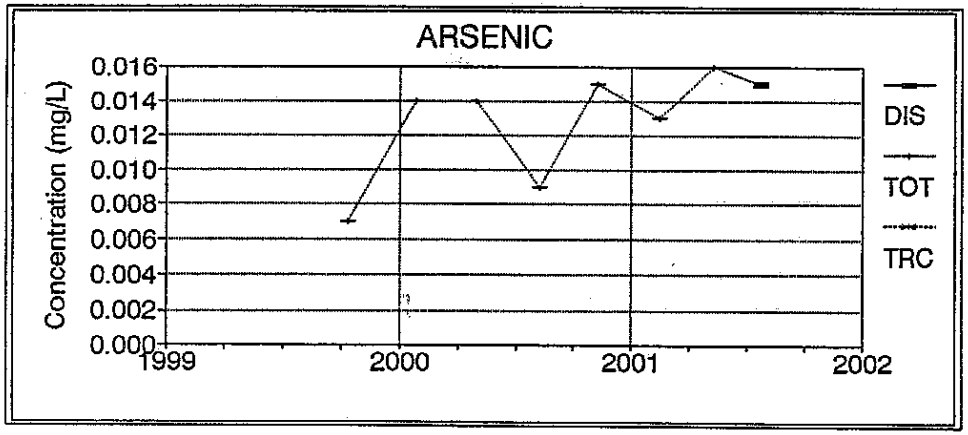


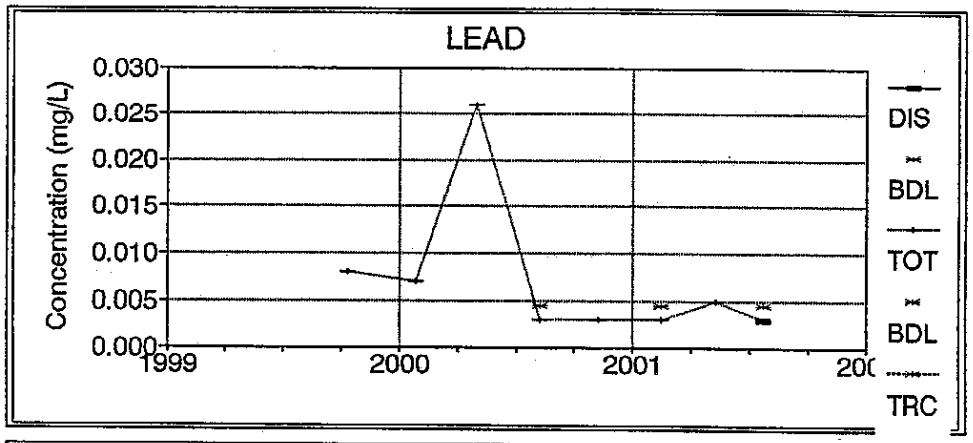


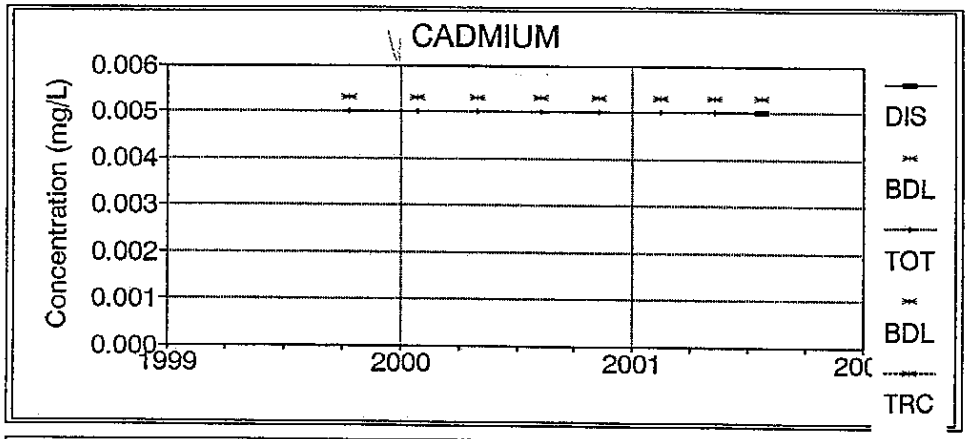


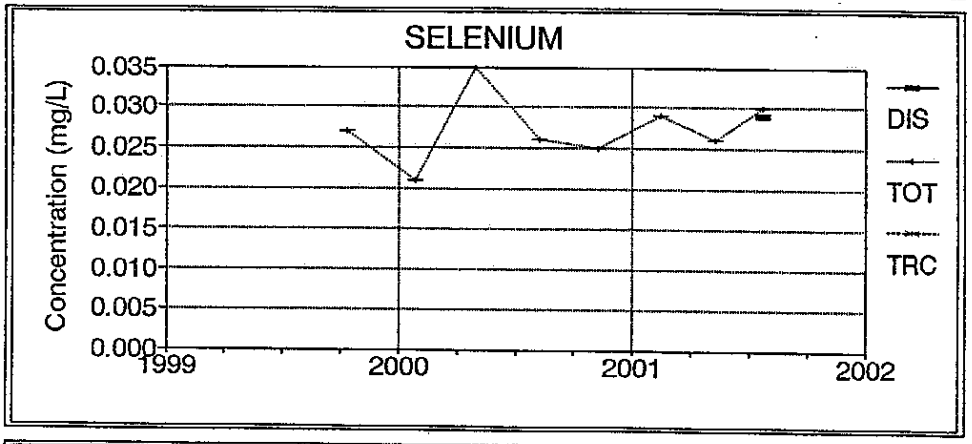
BDL - Below Analytical Detection Limit

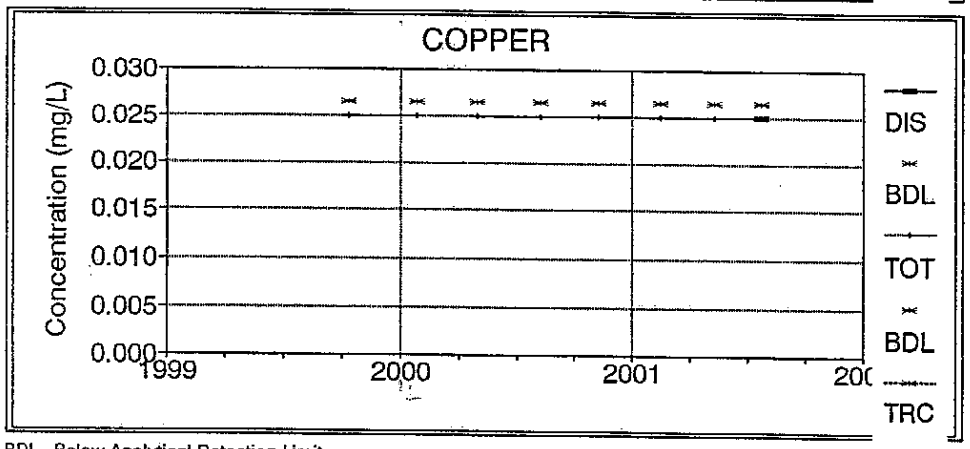
EP-

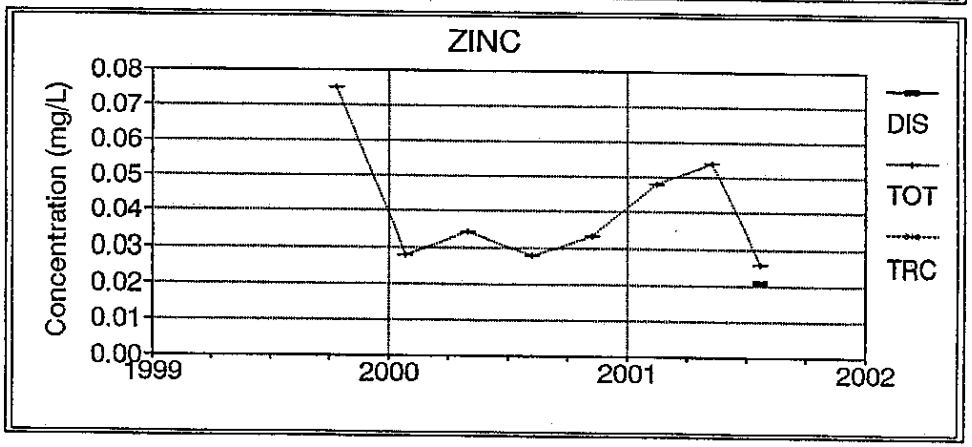






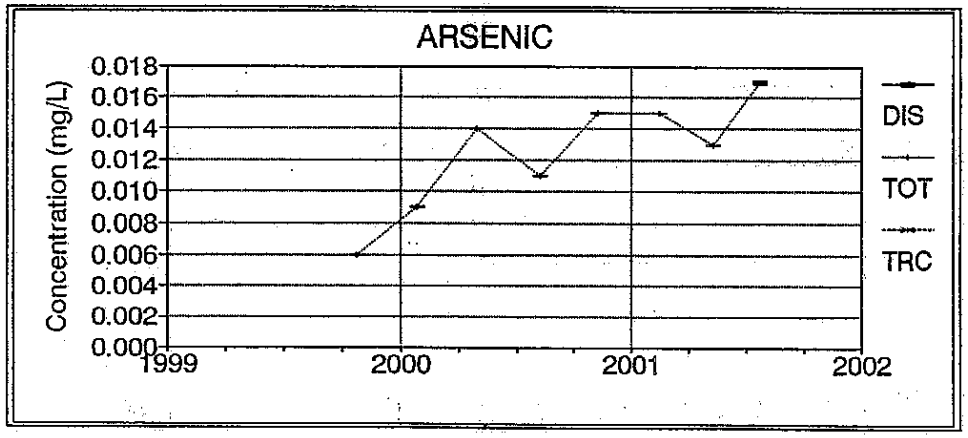


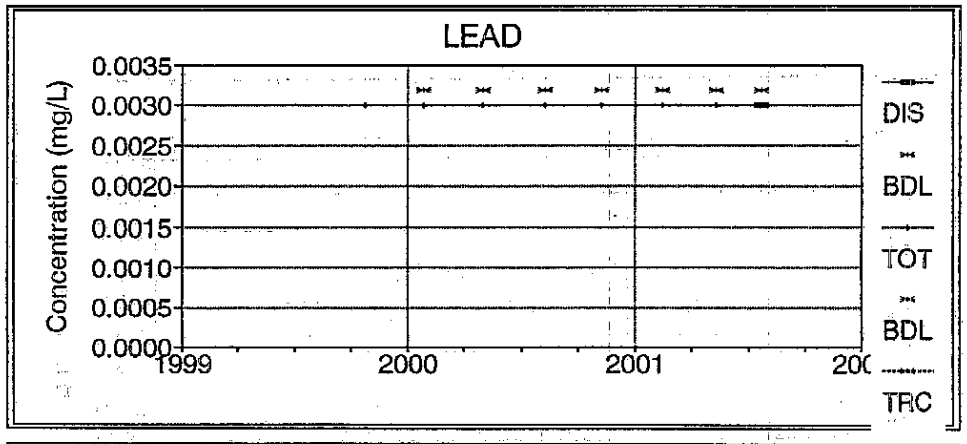


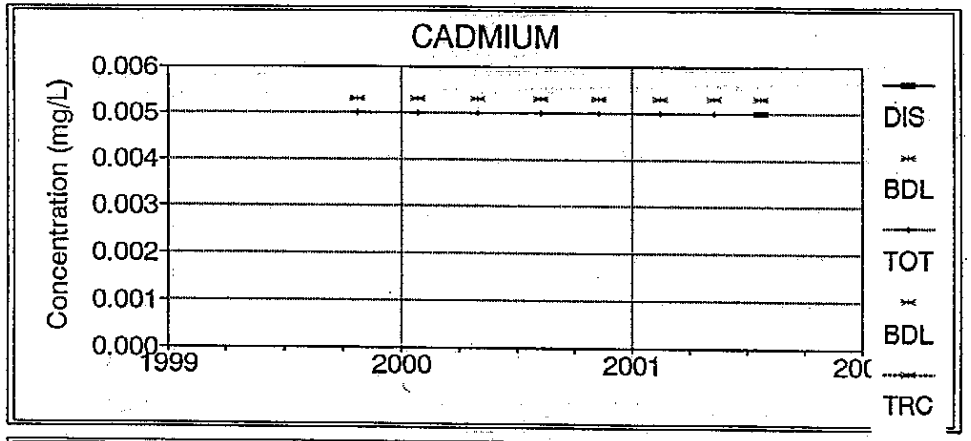


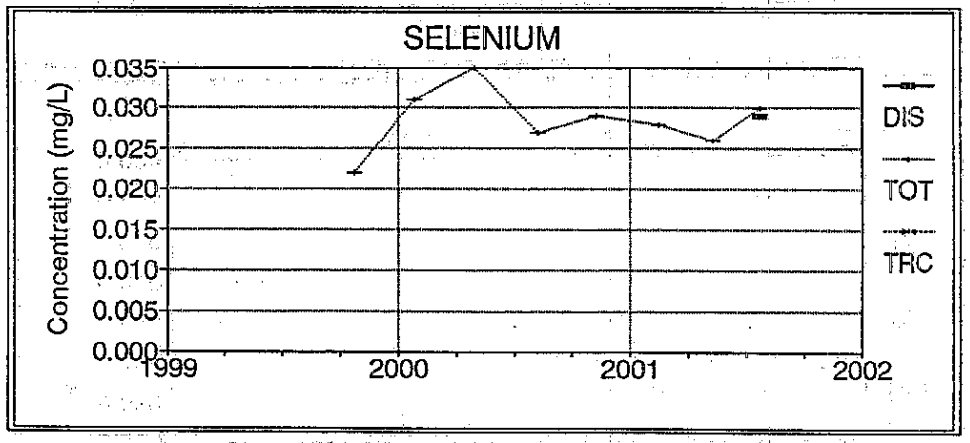
BDL - Below Analytical Detection Limit

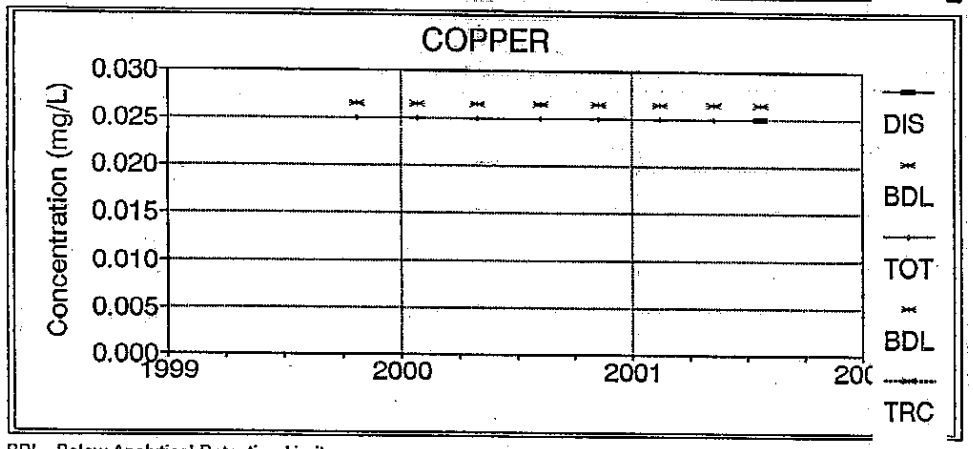
EP-95

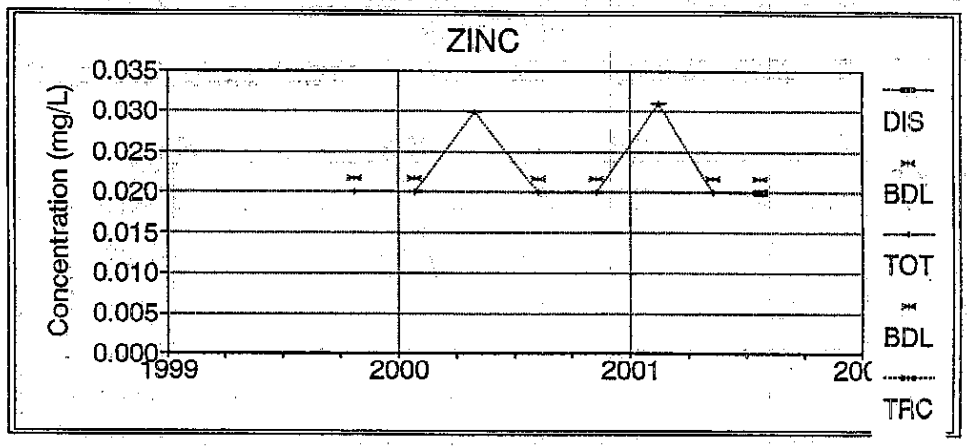






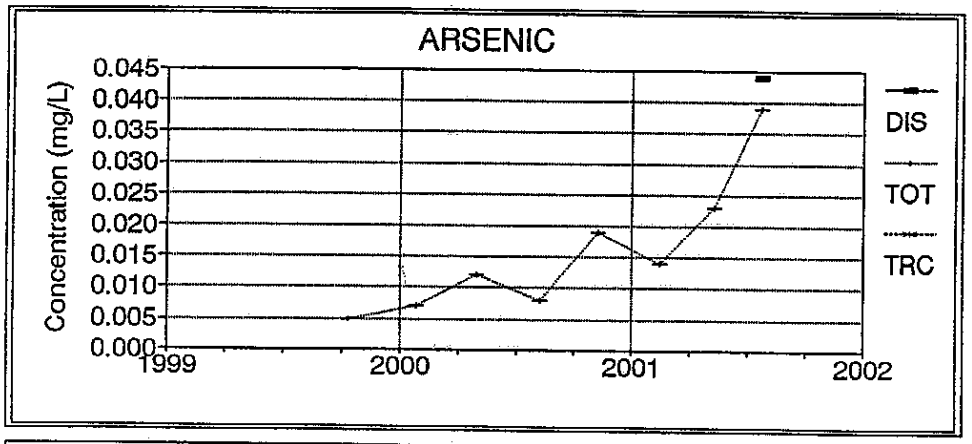


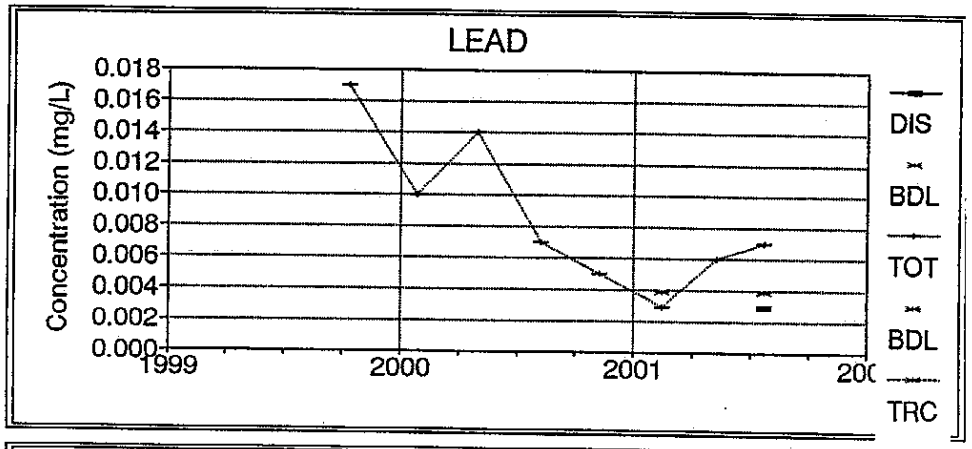


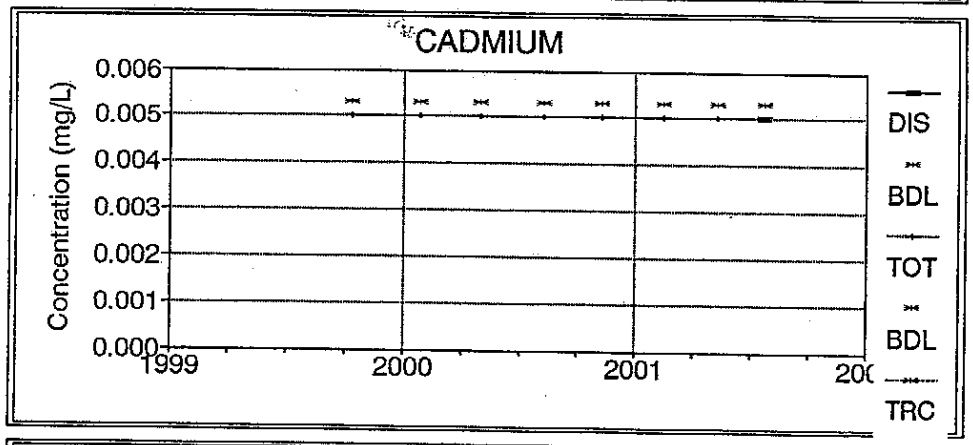


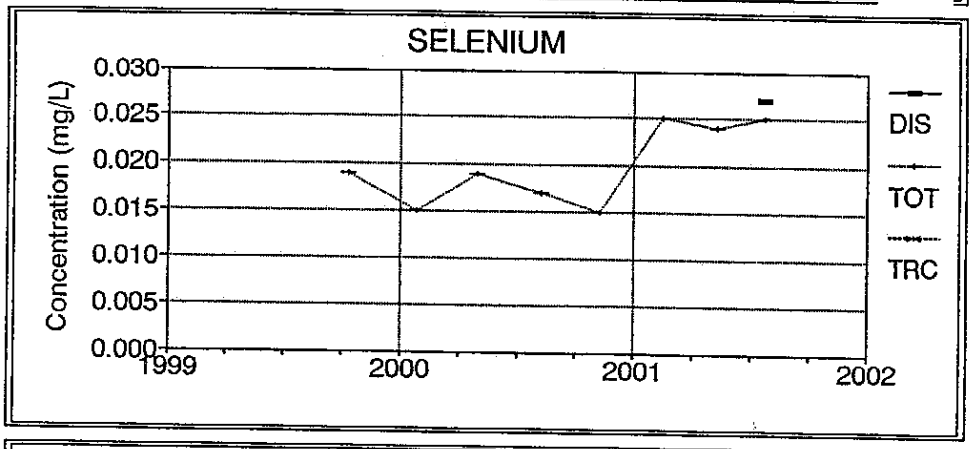
BDL - Below Analytical Detection Limit

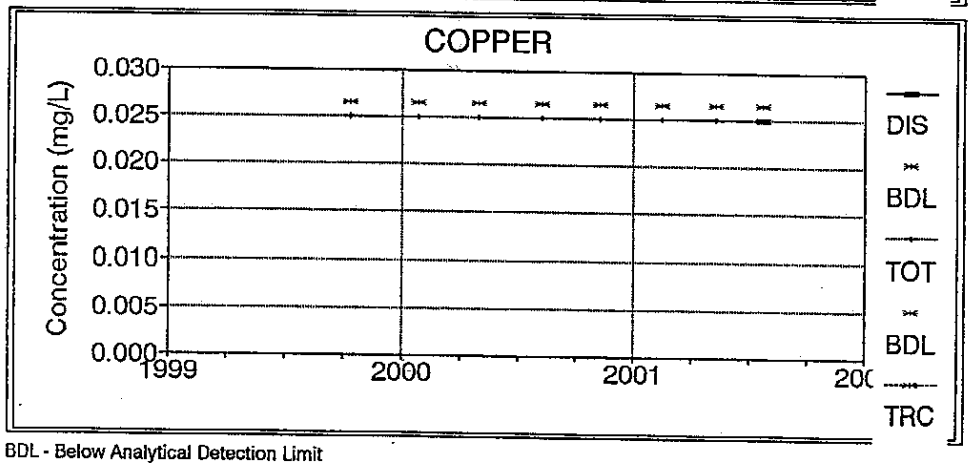
EP

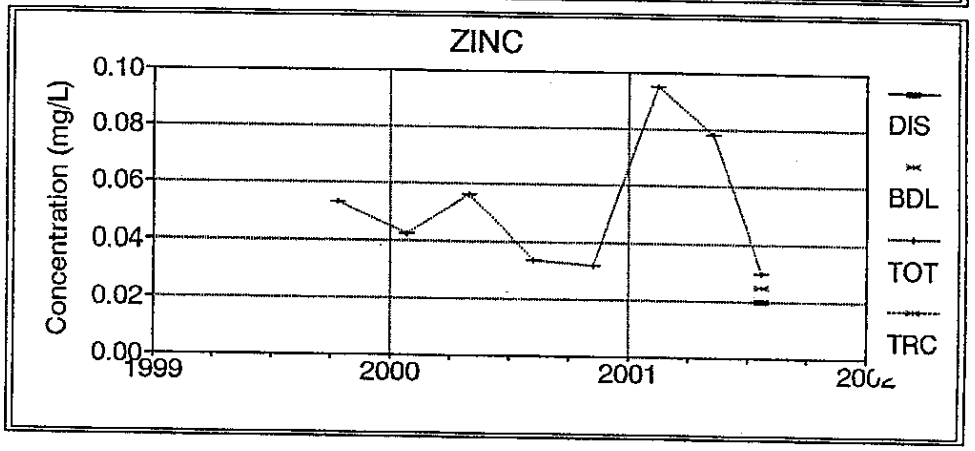






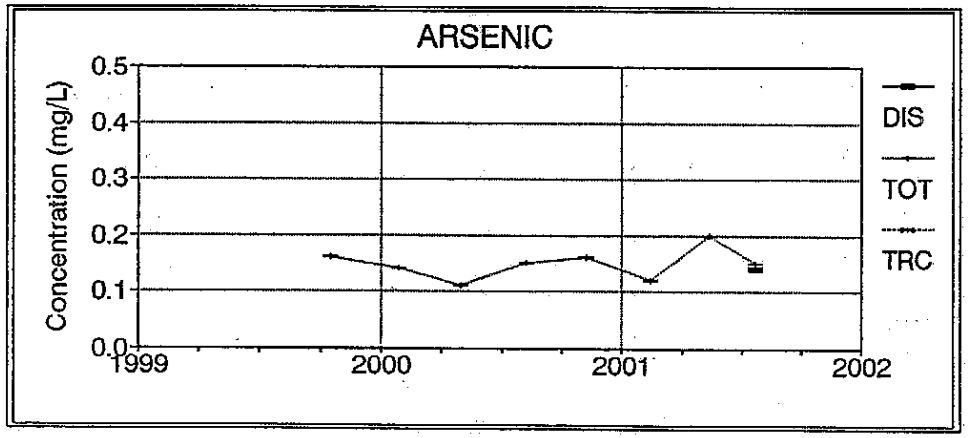


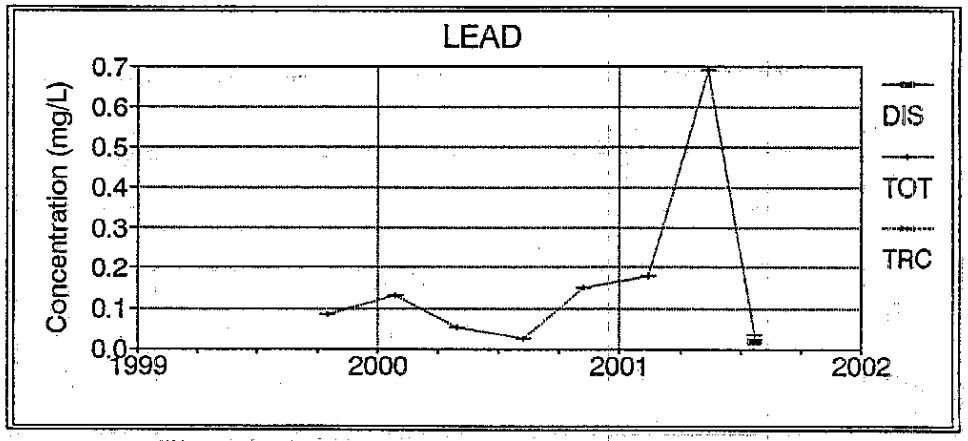


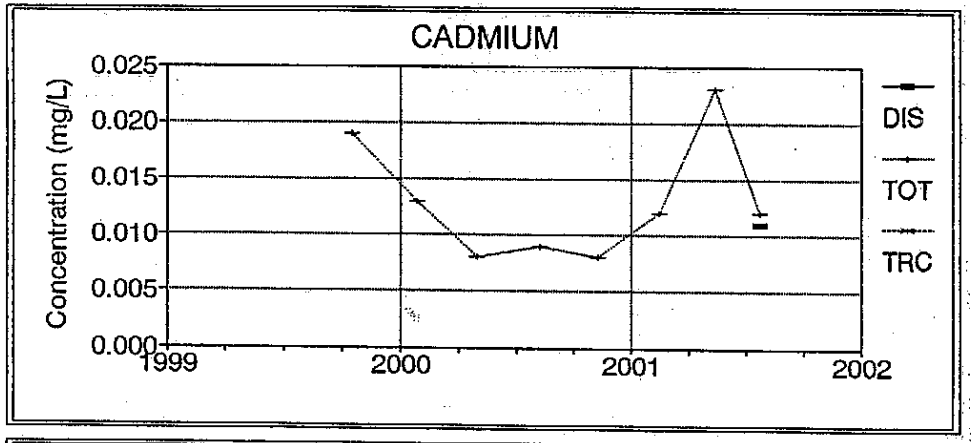


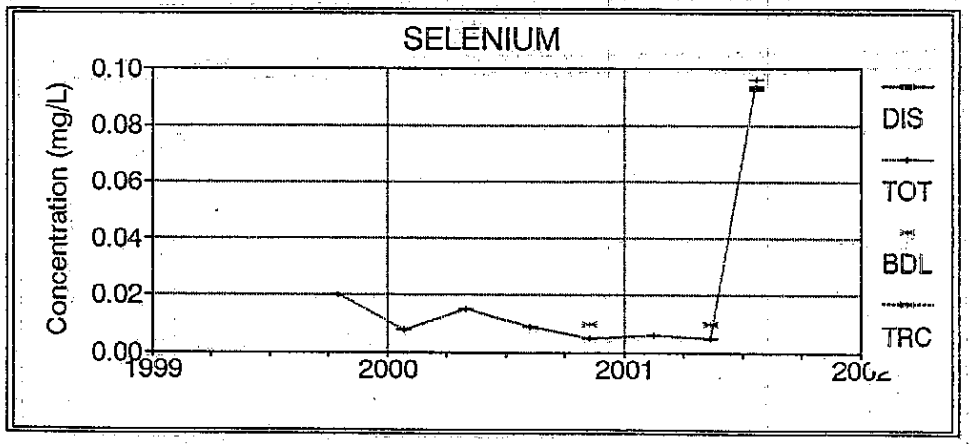
BDL - Below Analytical Detection Limit

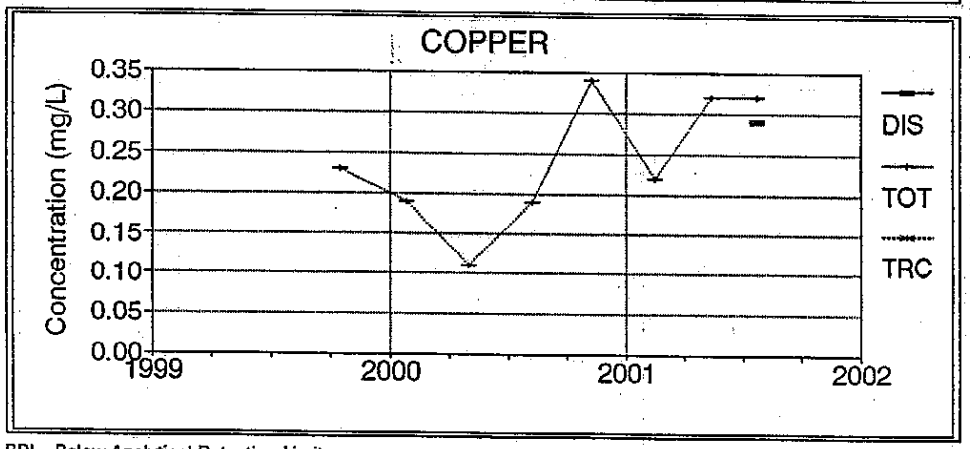
EP-97

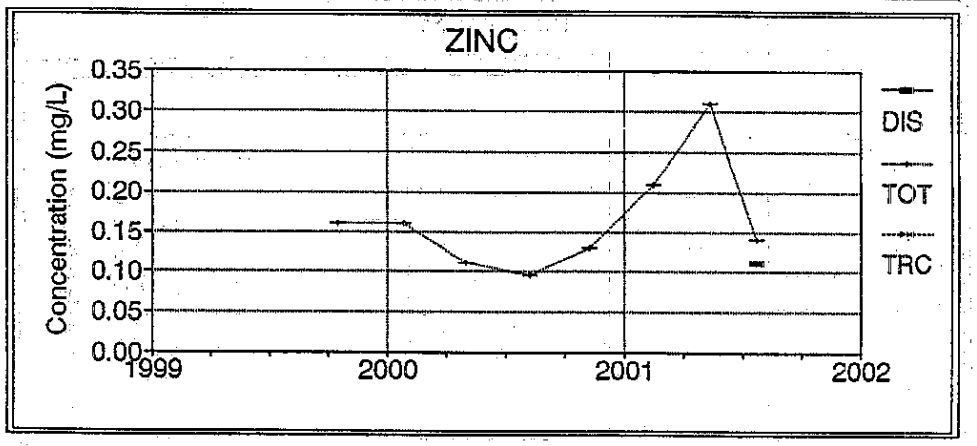






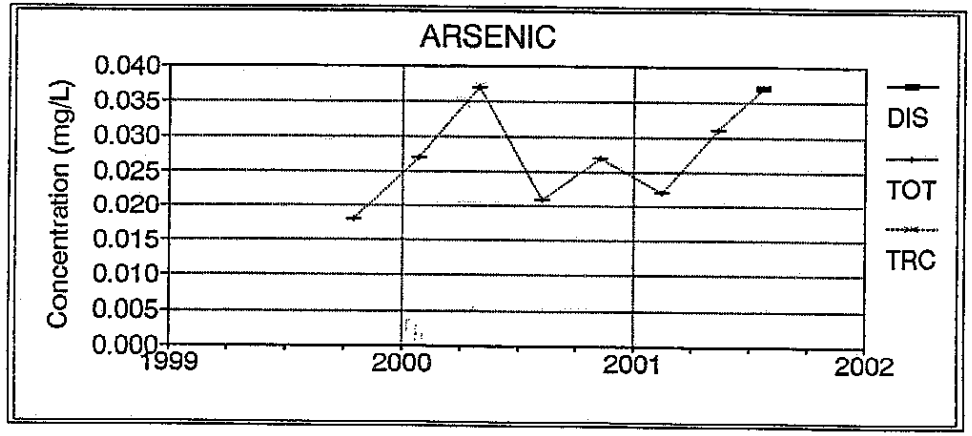


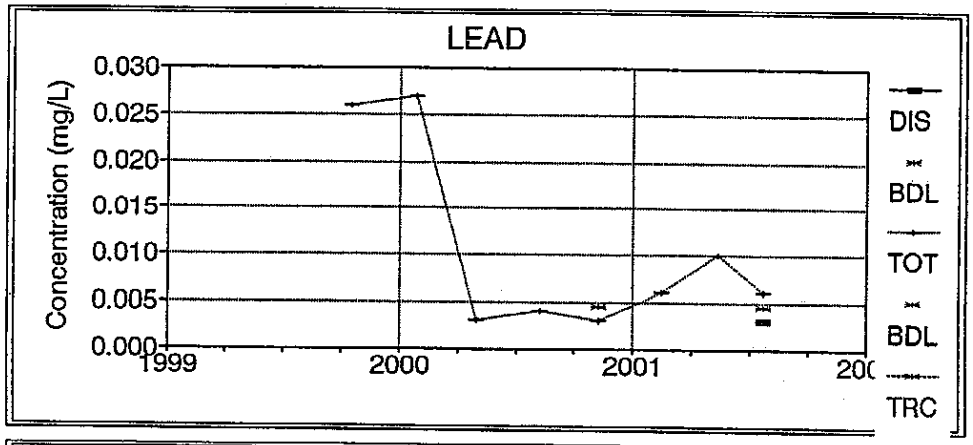


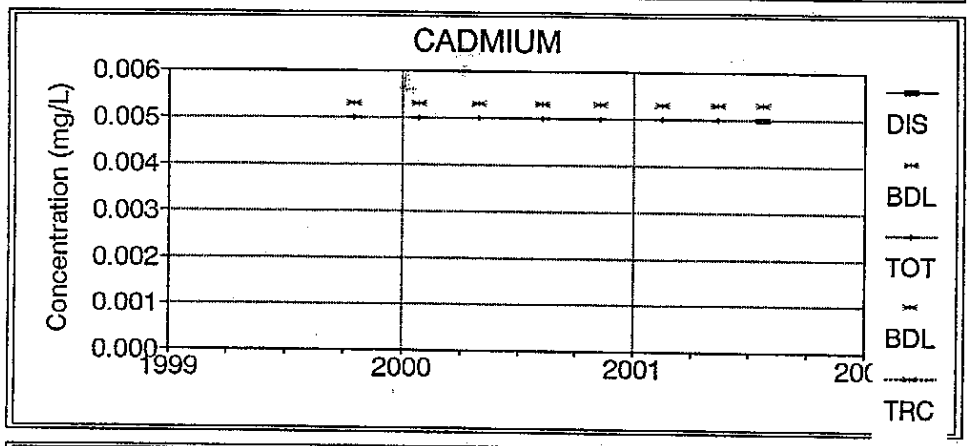


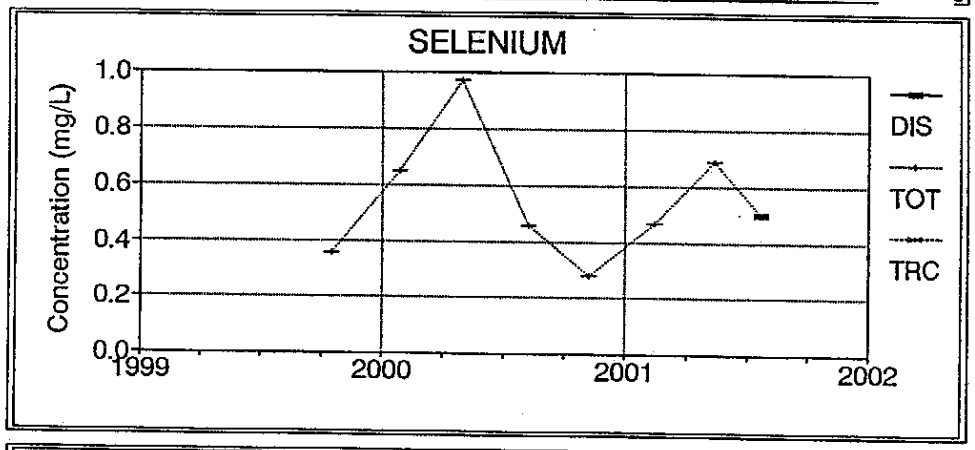
BDL - Below Analytical Detection Limit

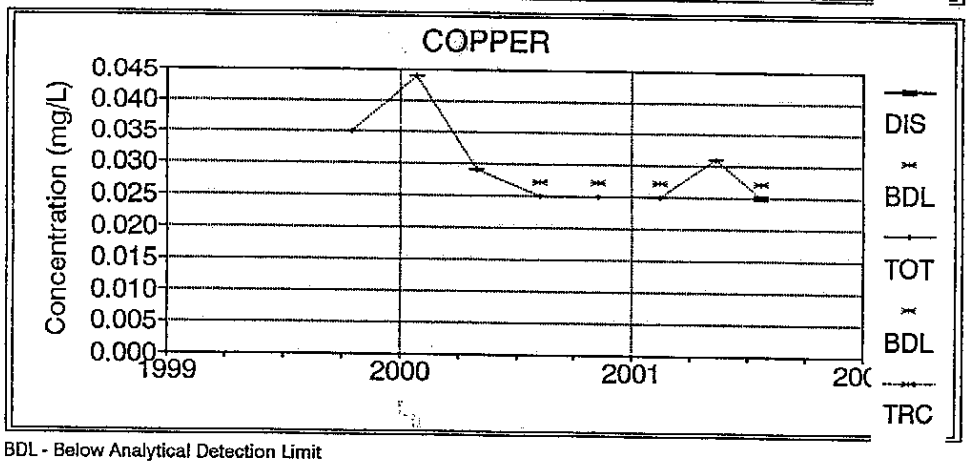
EP-9

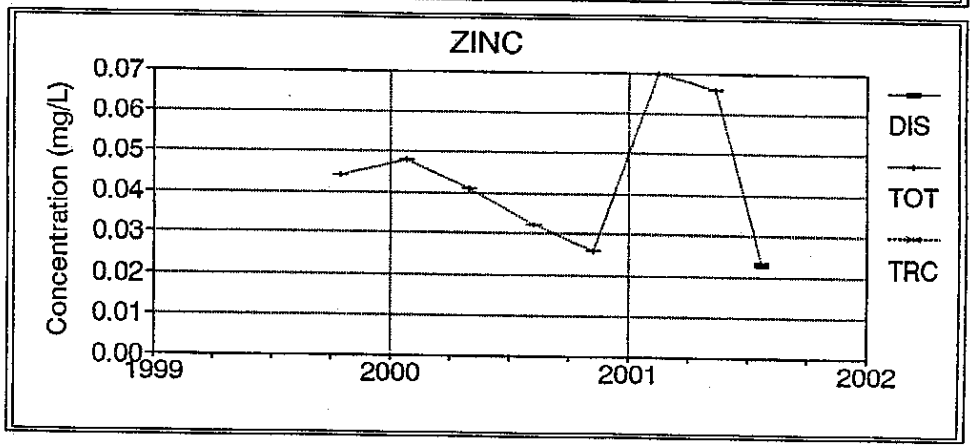






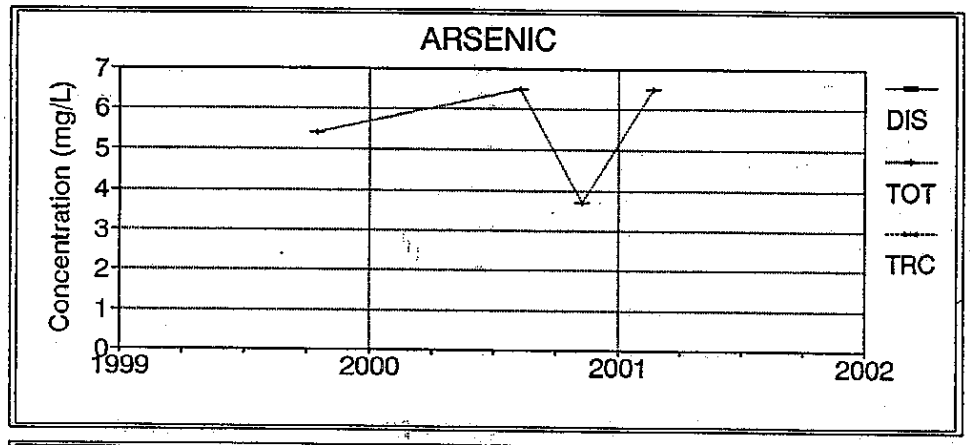


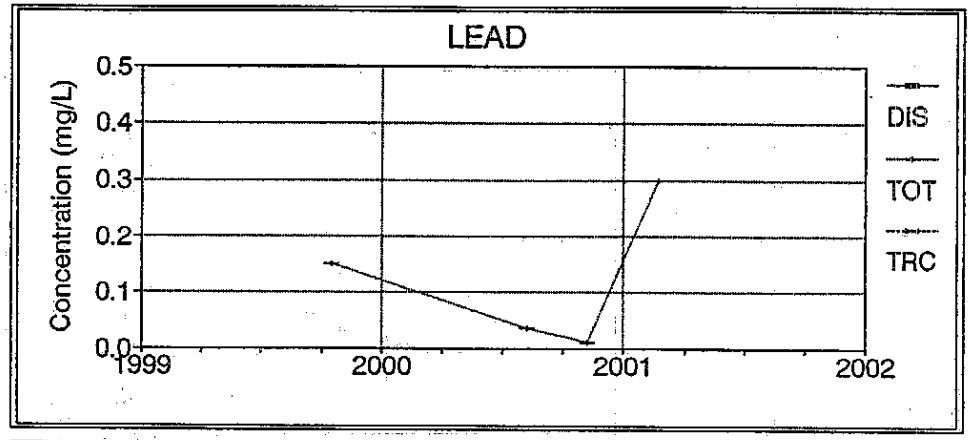


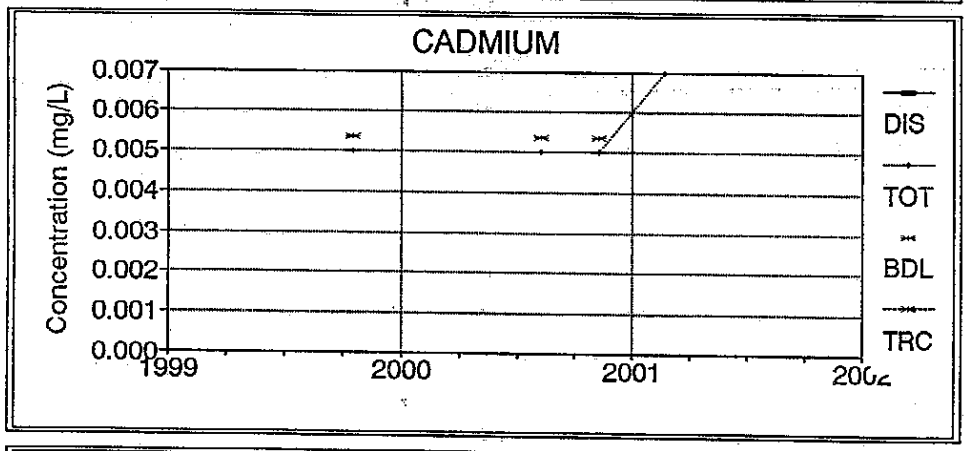


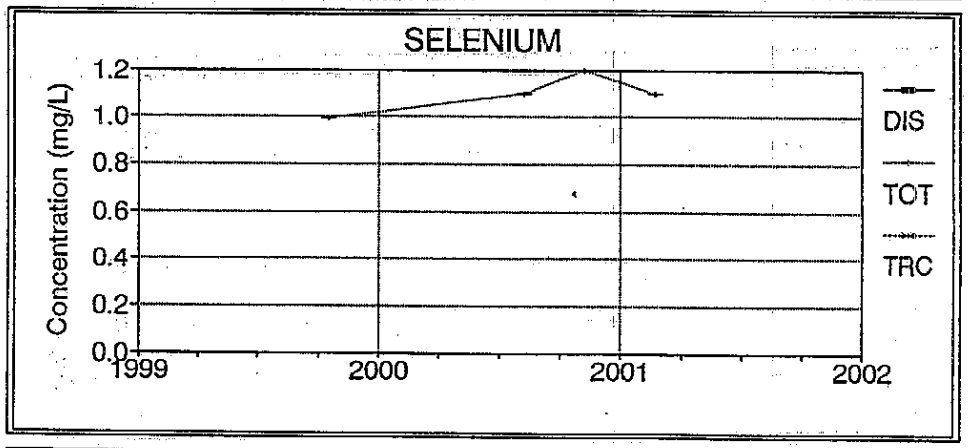
BDL - Below Analytical Detection Limit

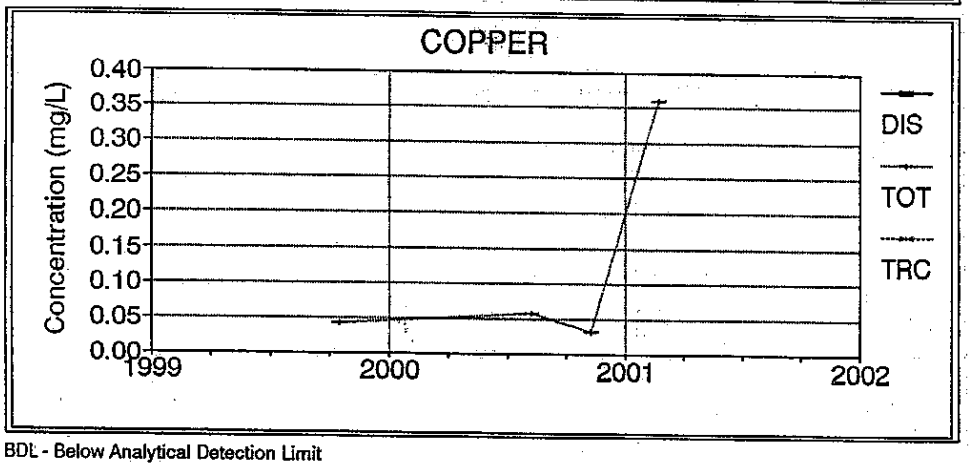
EP-99

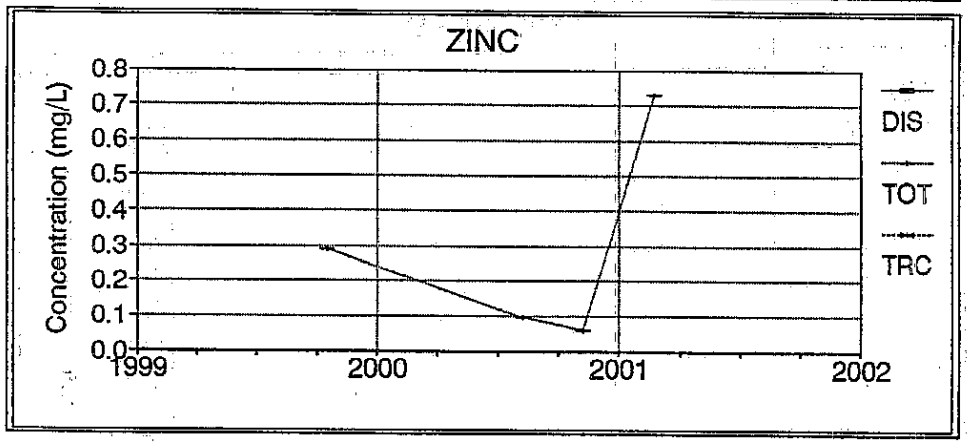






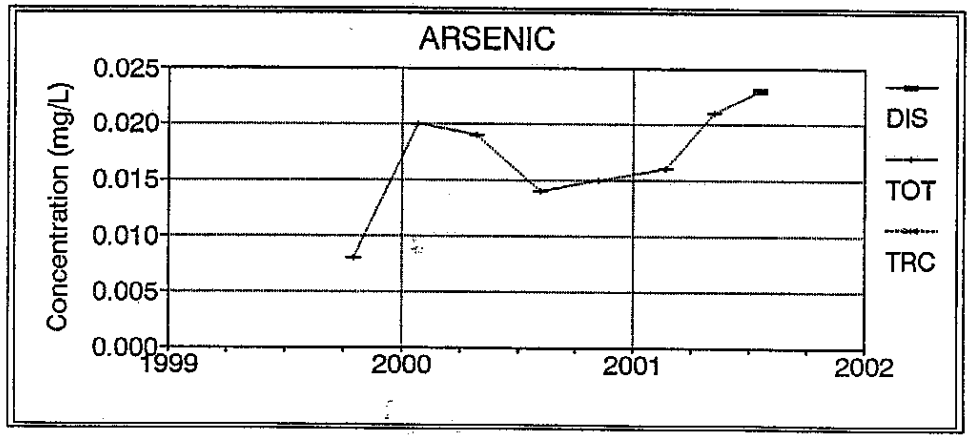


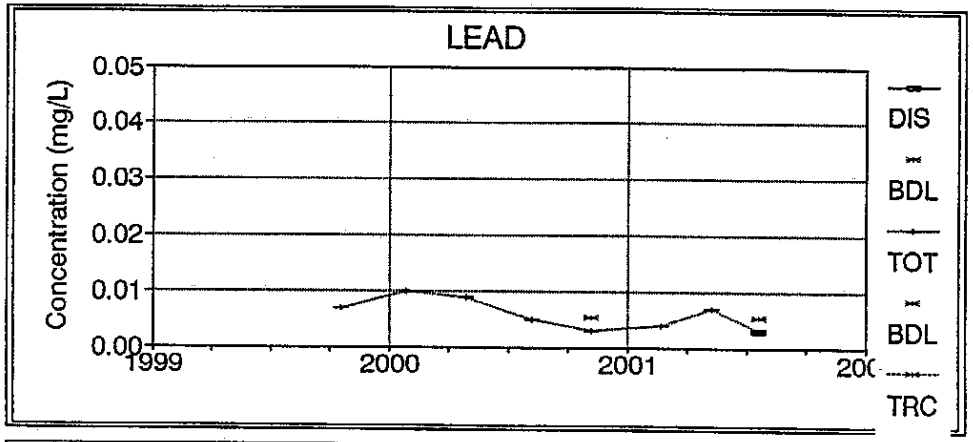


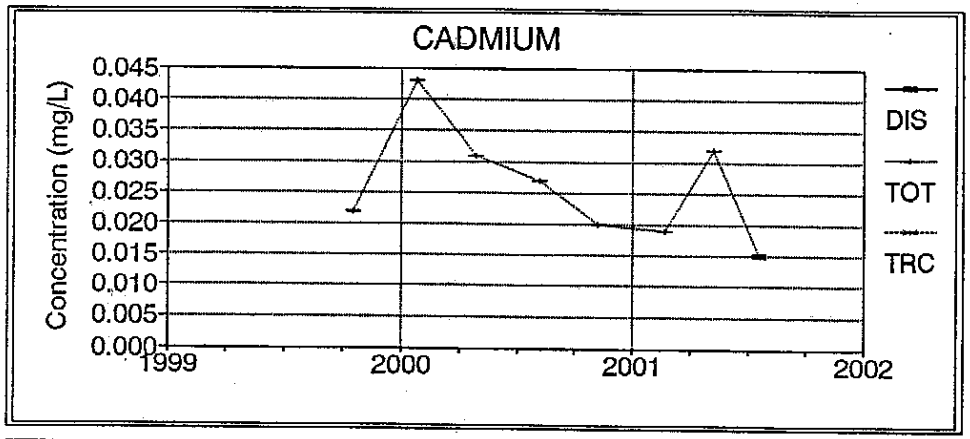


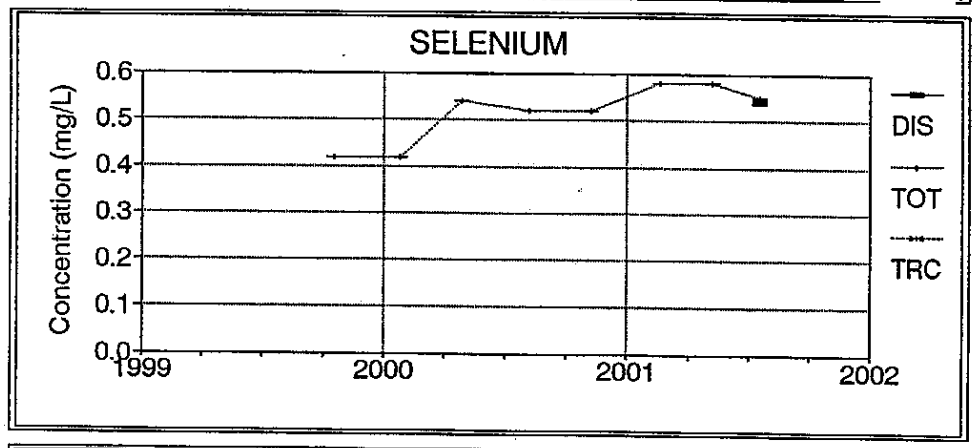
BDL - Below Analytical Detection Limit

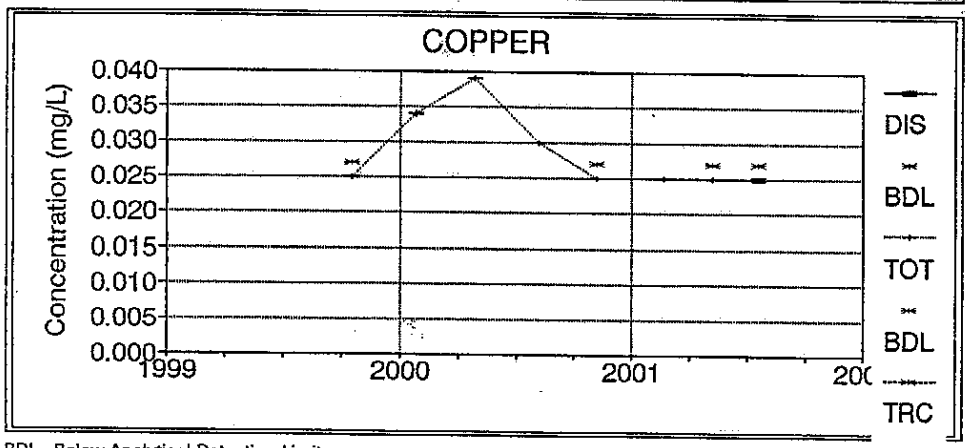
EP-

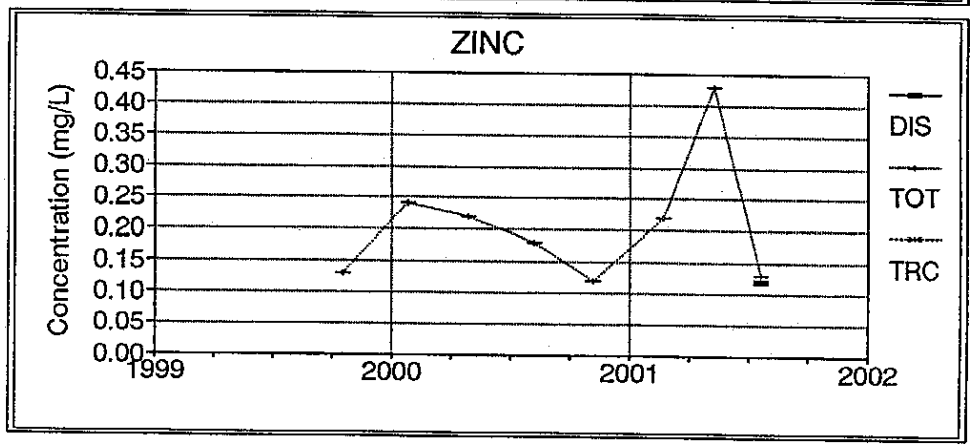






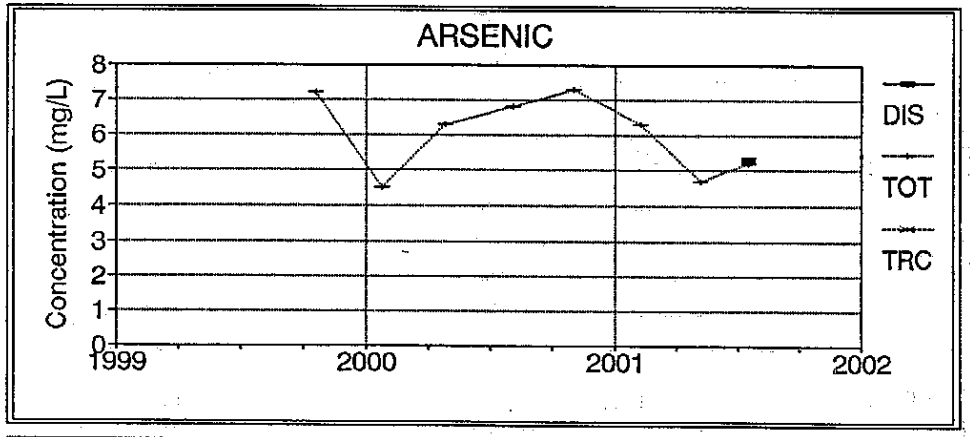


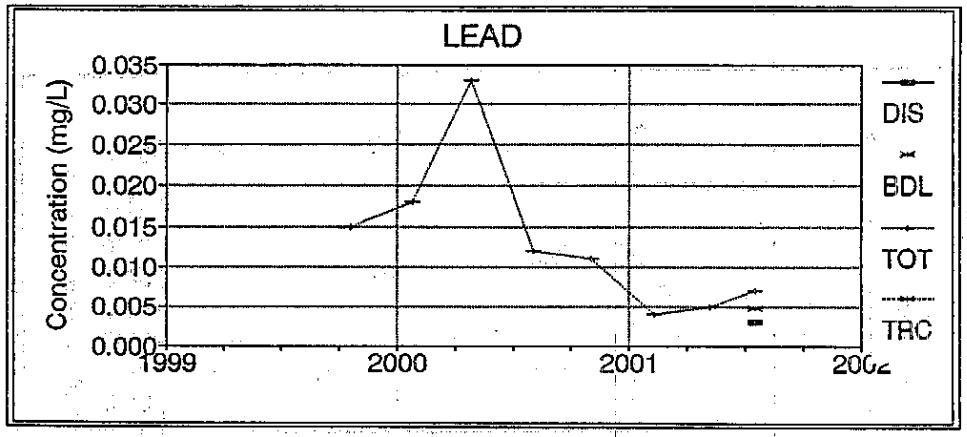


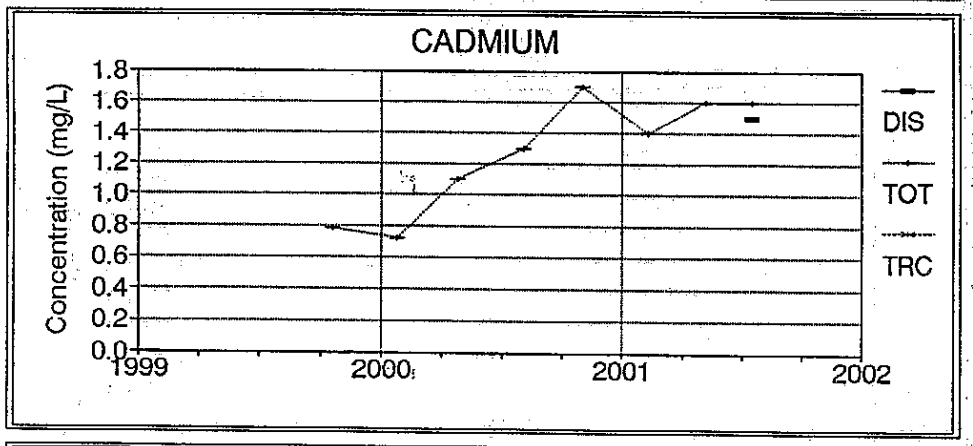


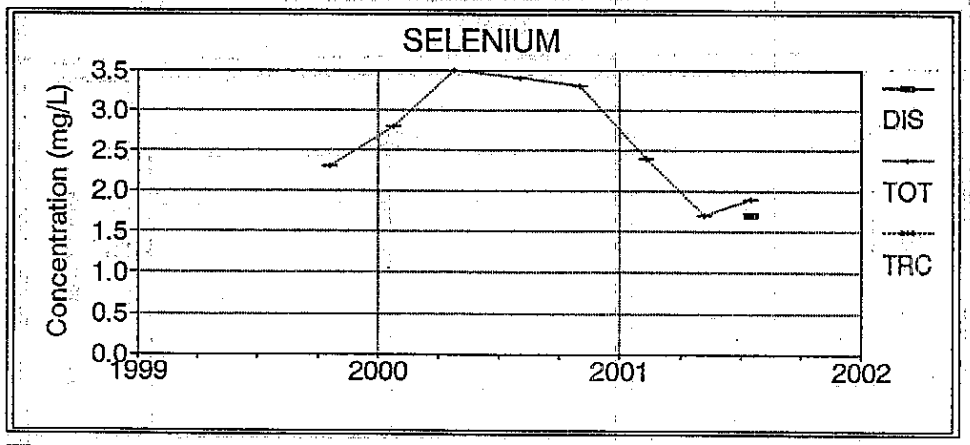
BDL - Below Analytical Detection Limit

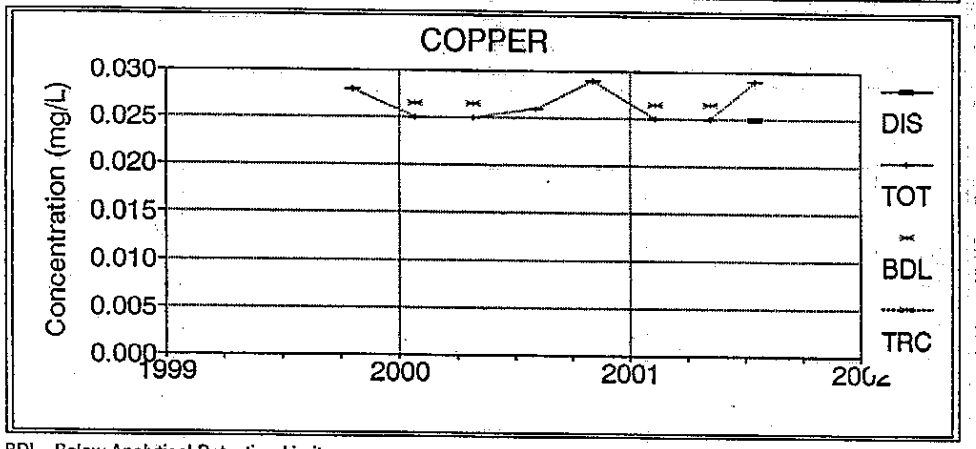
EP-101

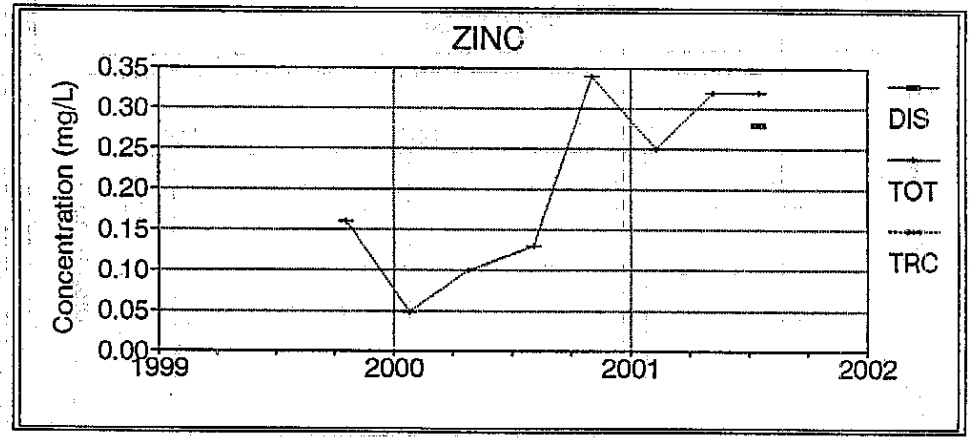






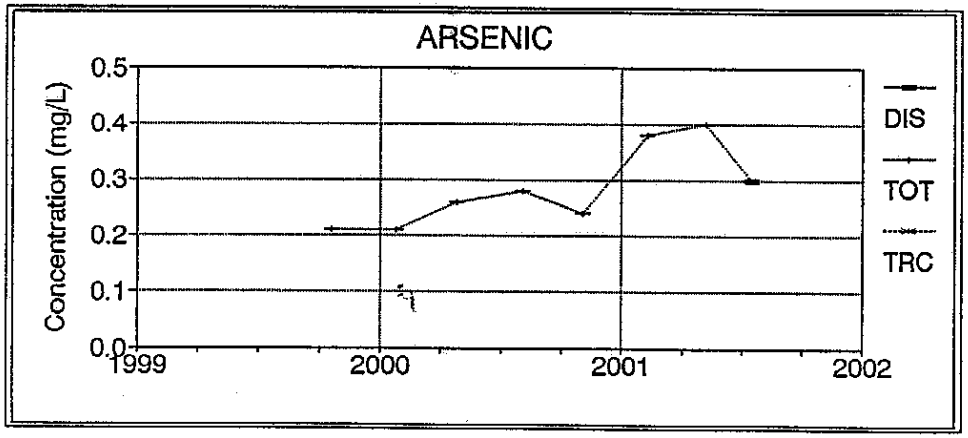


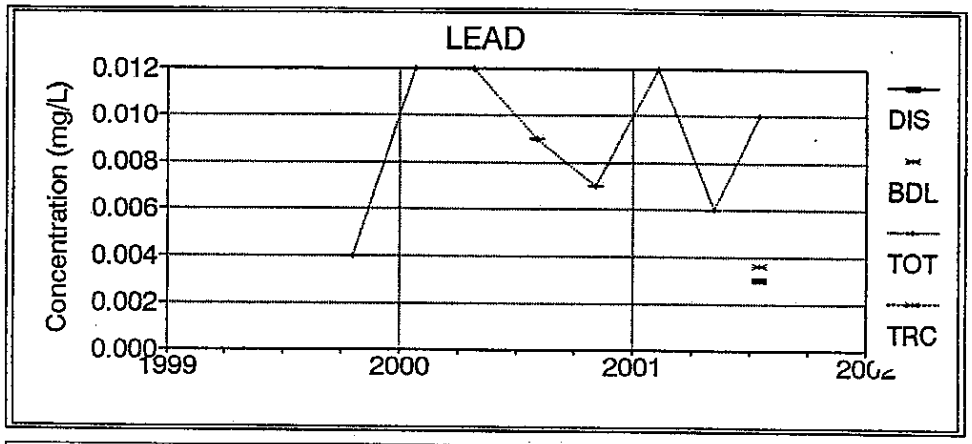


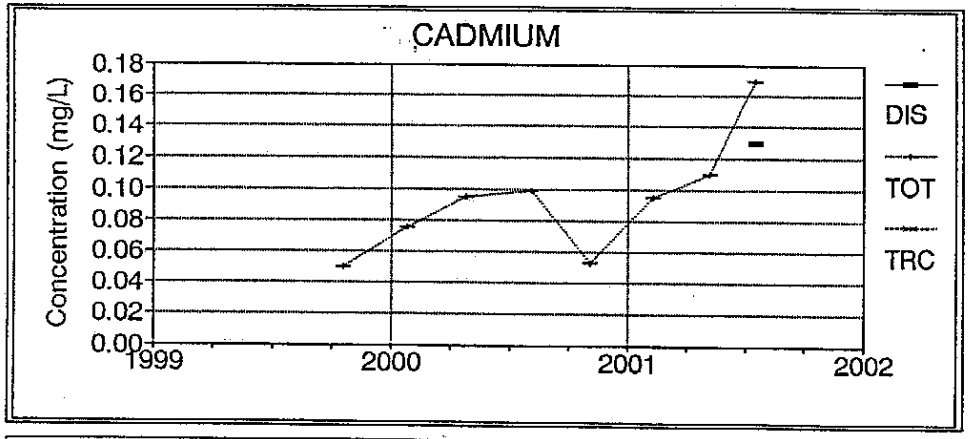


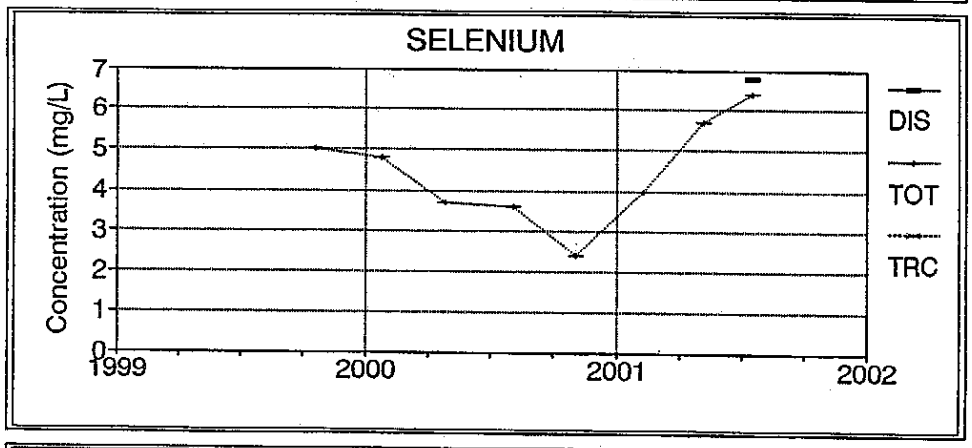
BDL - Below Analytical Detection Limit

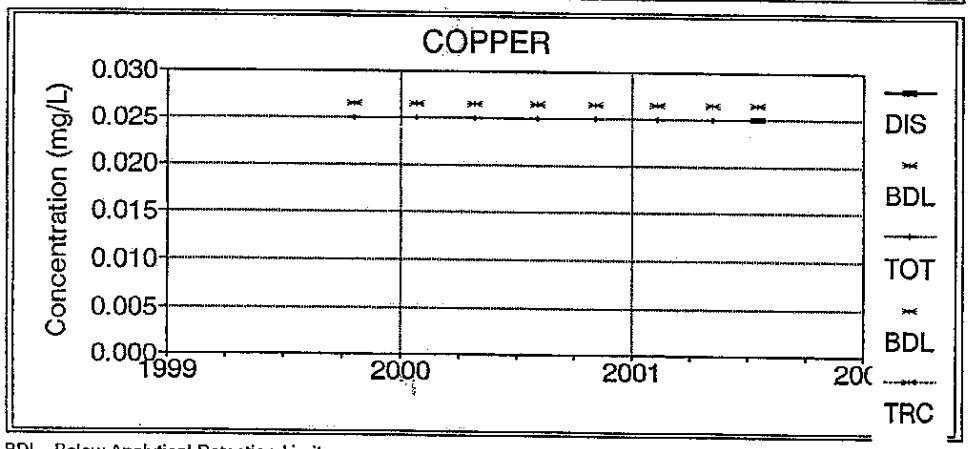
EP-1

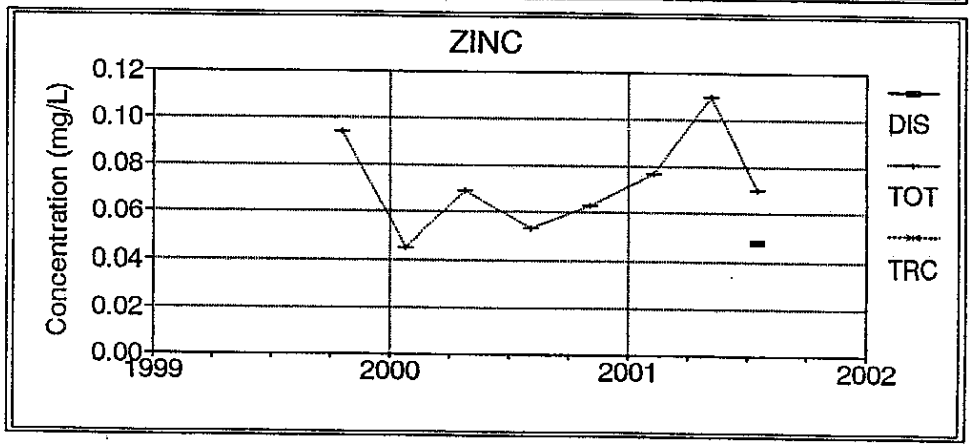












BDL - Below Analytical Detection Limit

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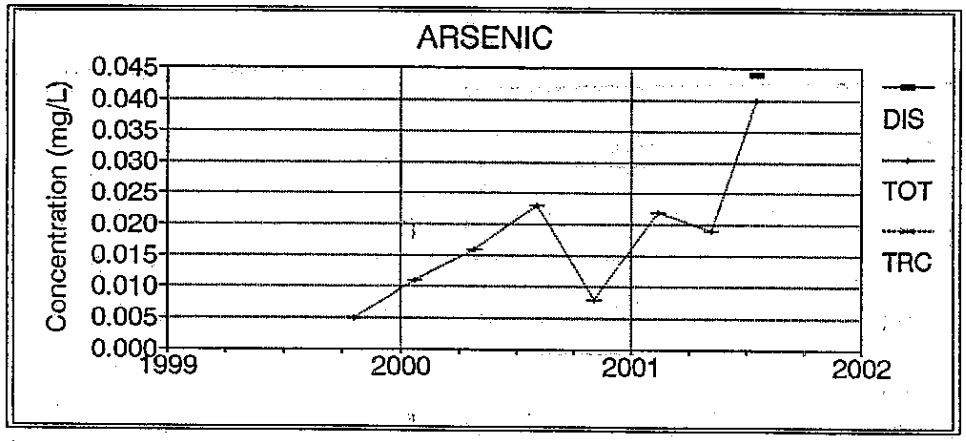
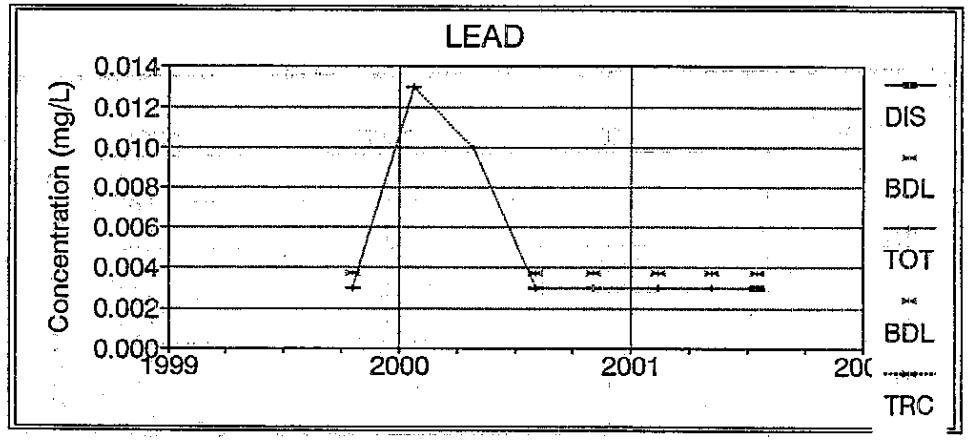
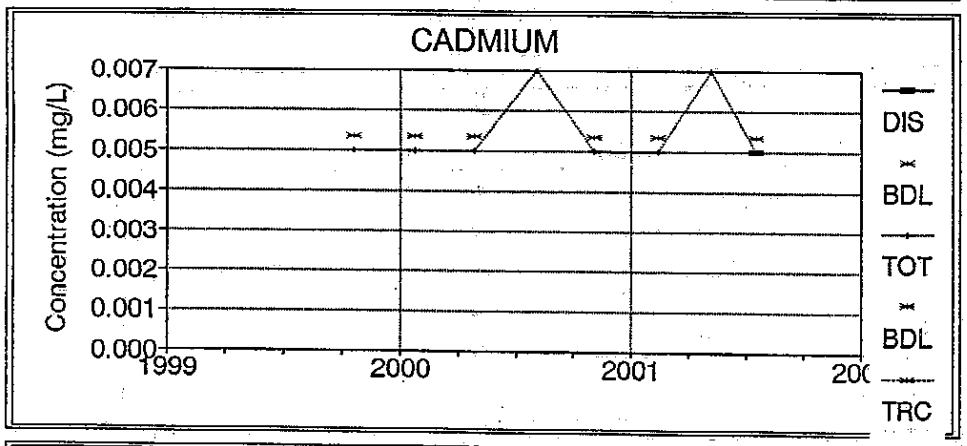
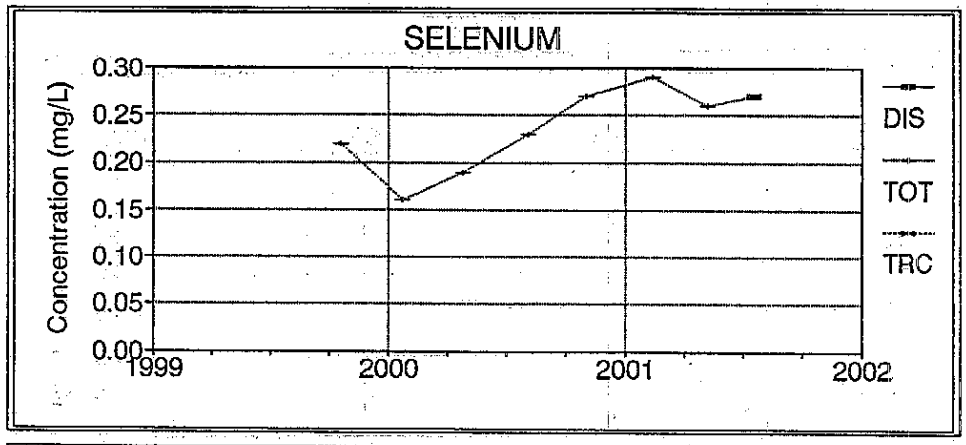
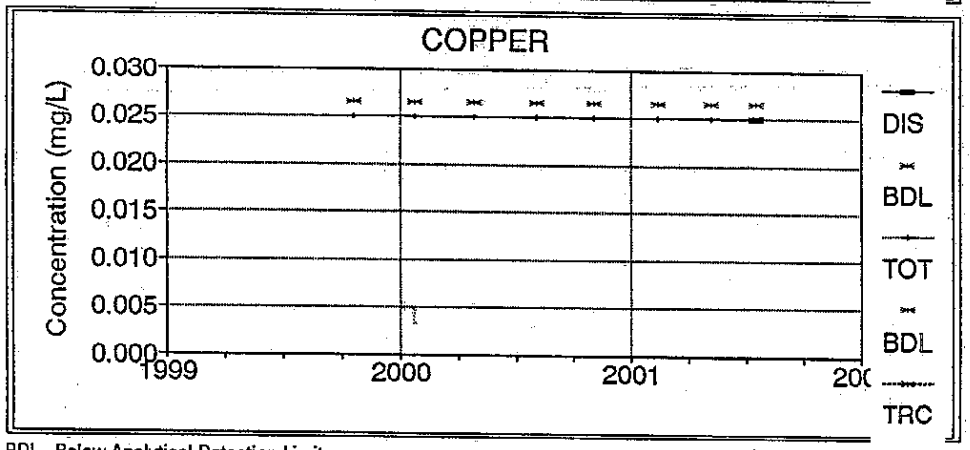
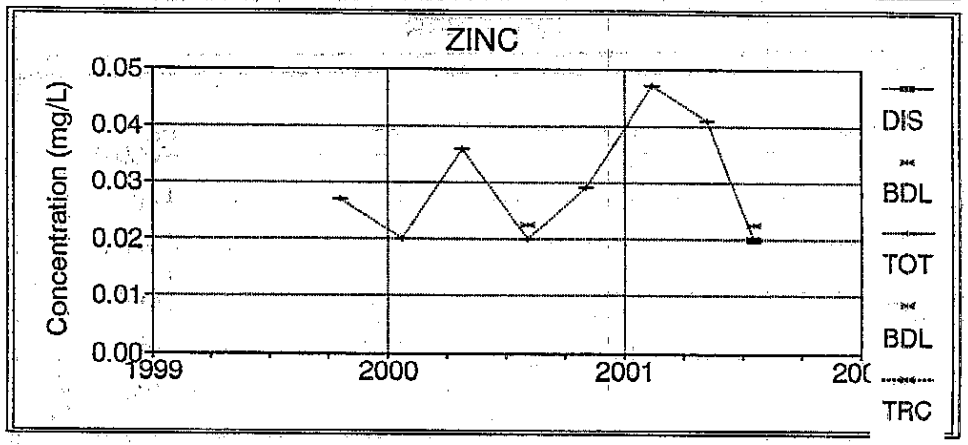






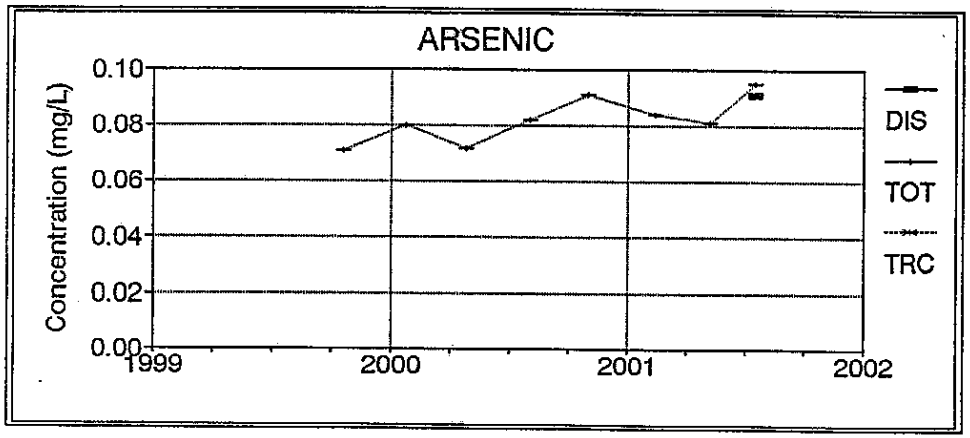


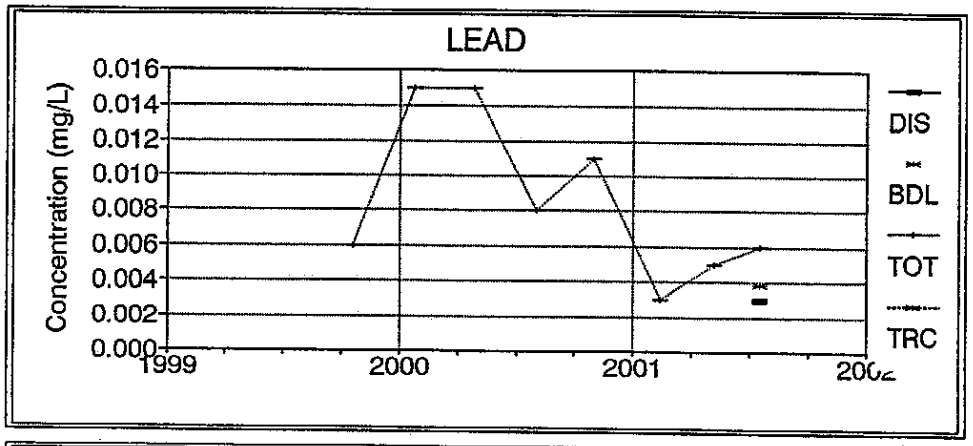


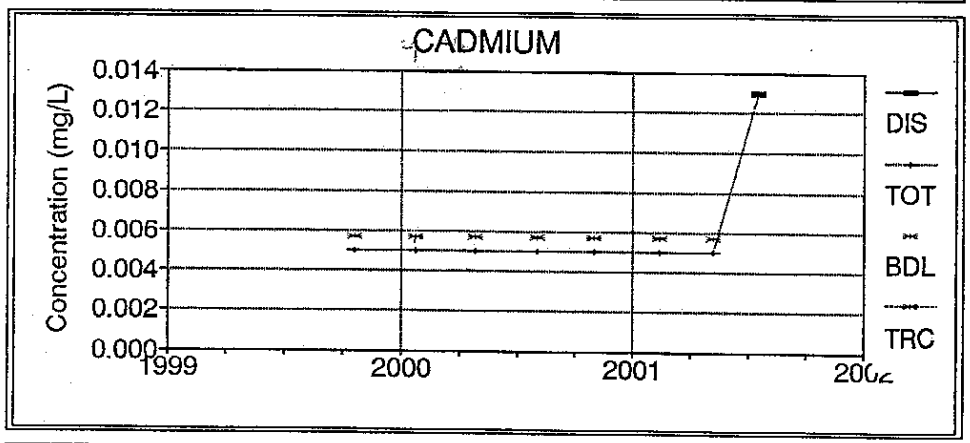


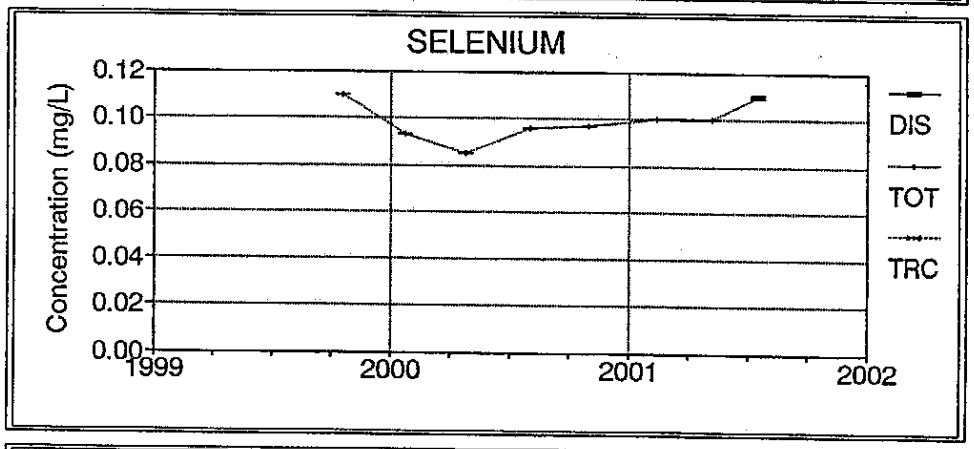
BDL - Below Analytical Detection Limit

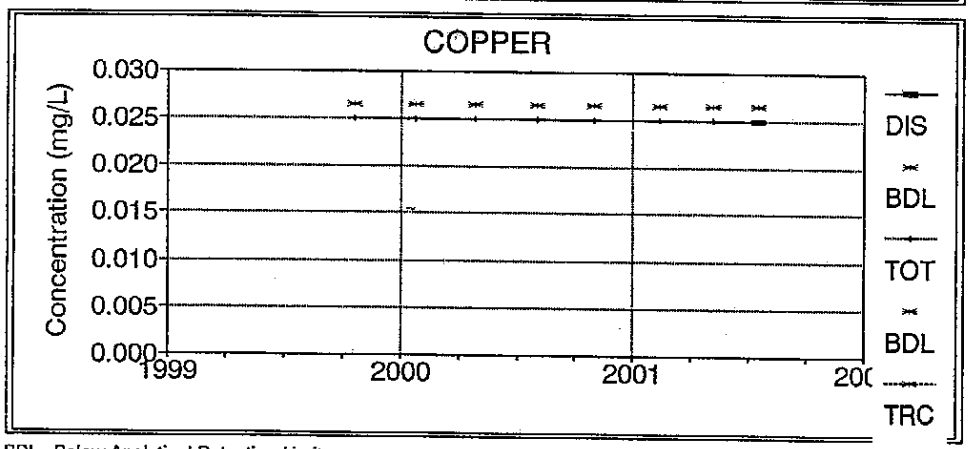
EP-

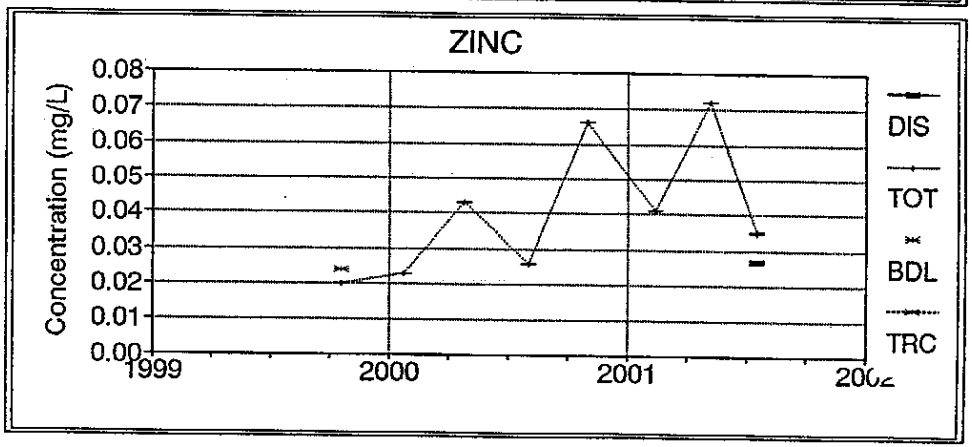












BDL - Below Analytical Detection Limit

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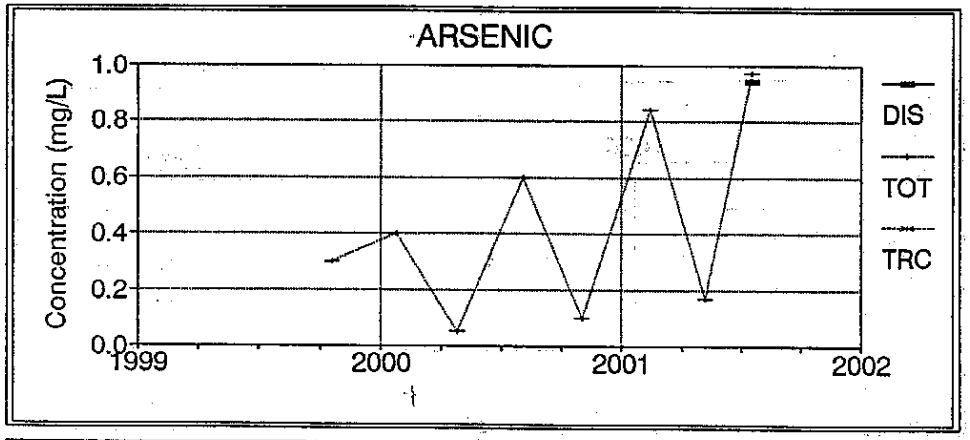
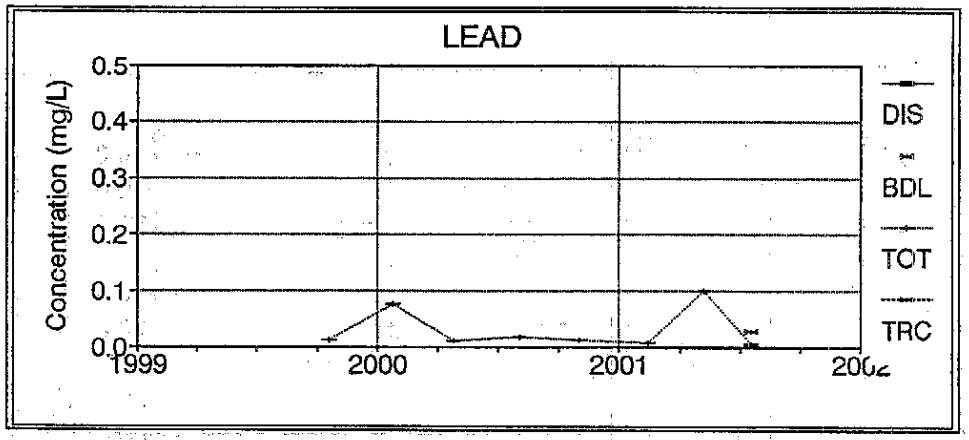
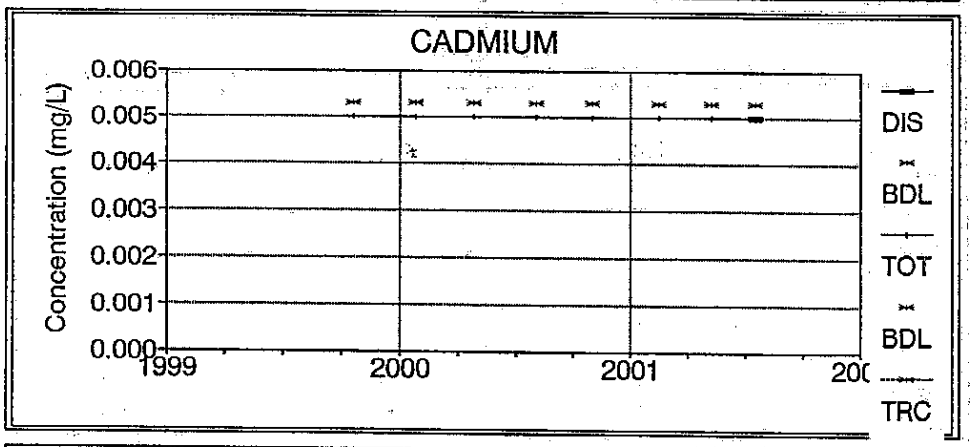
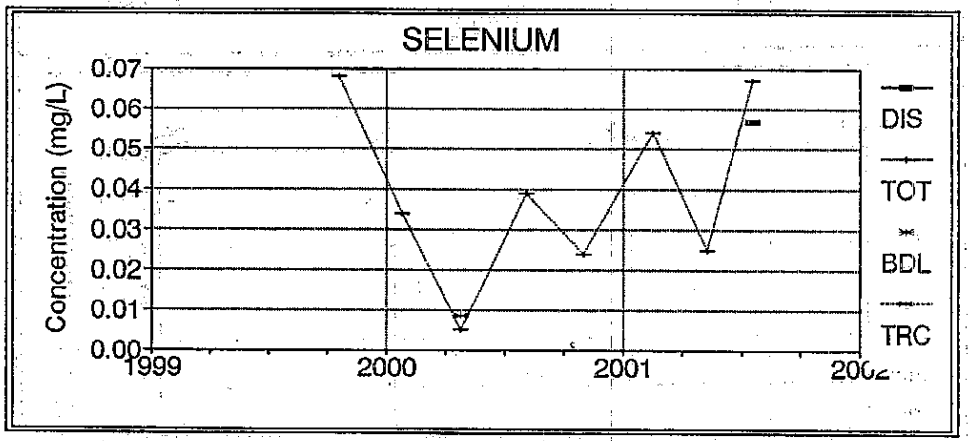
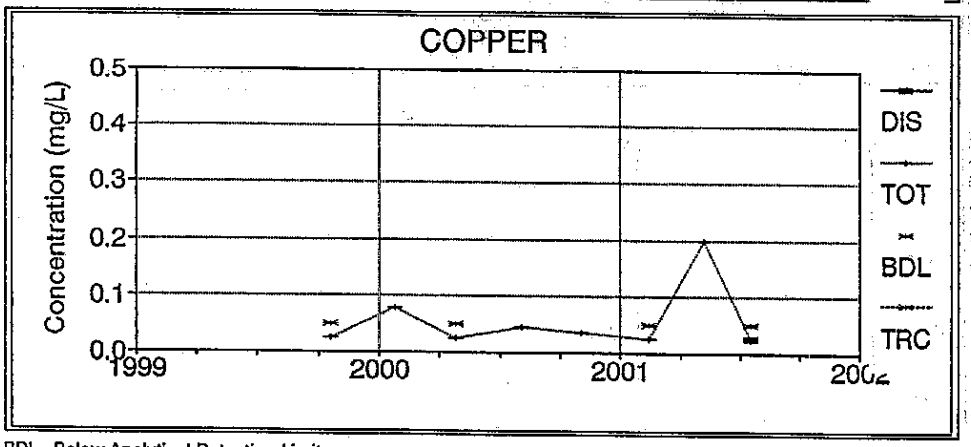
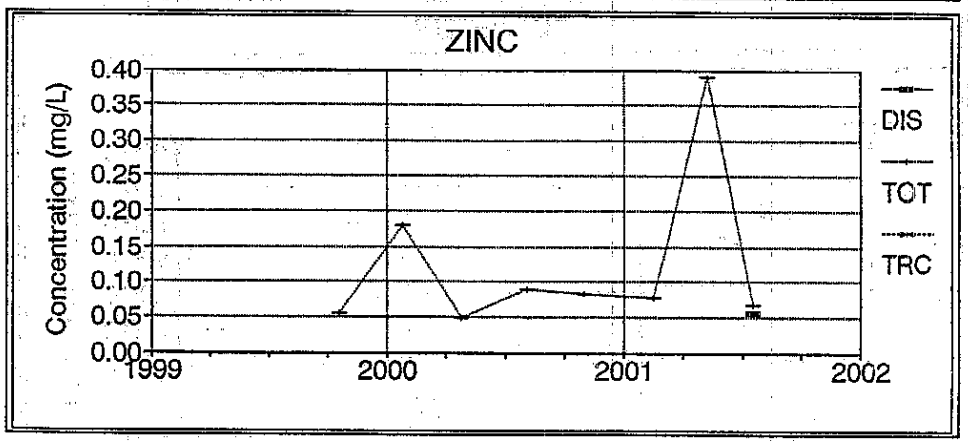






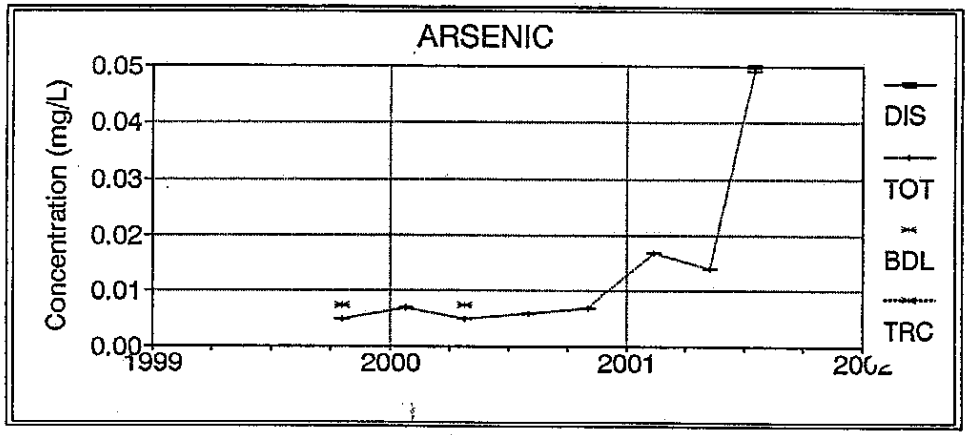


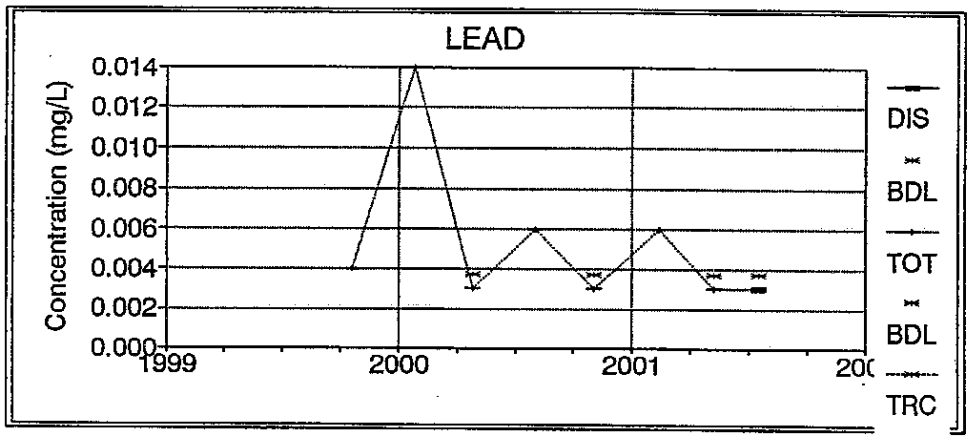


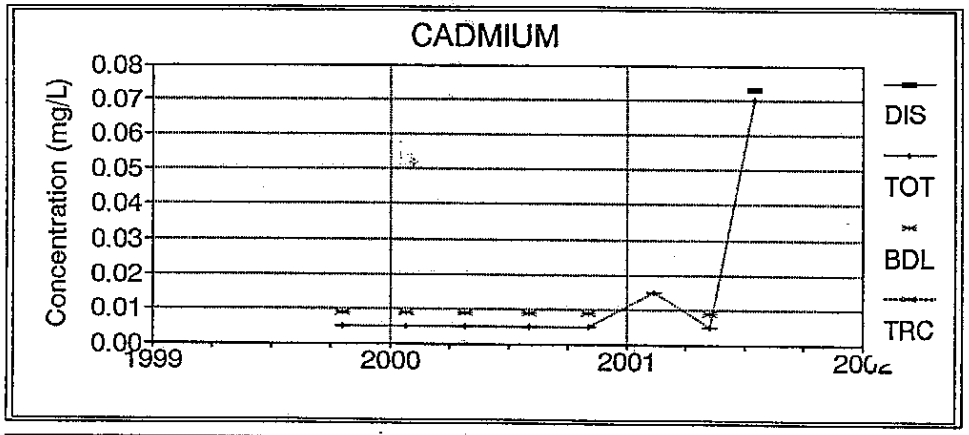


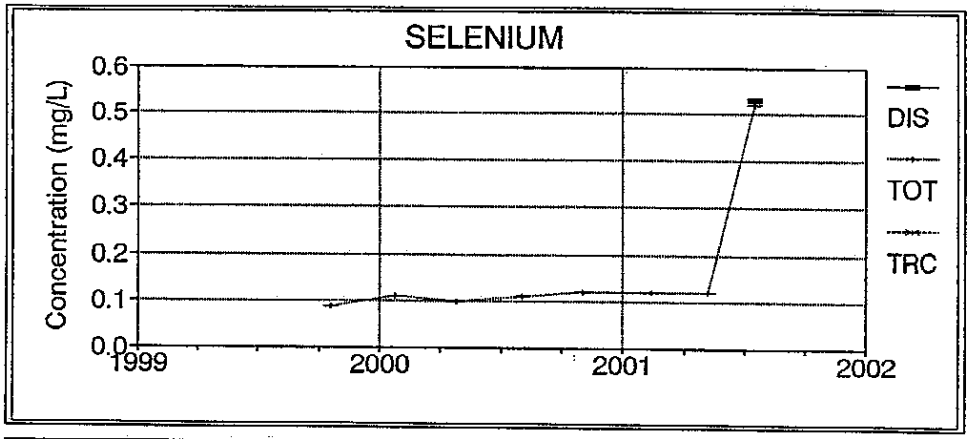
BDL - Below Analytical Detection Limit

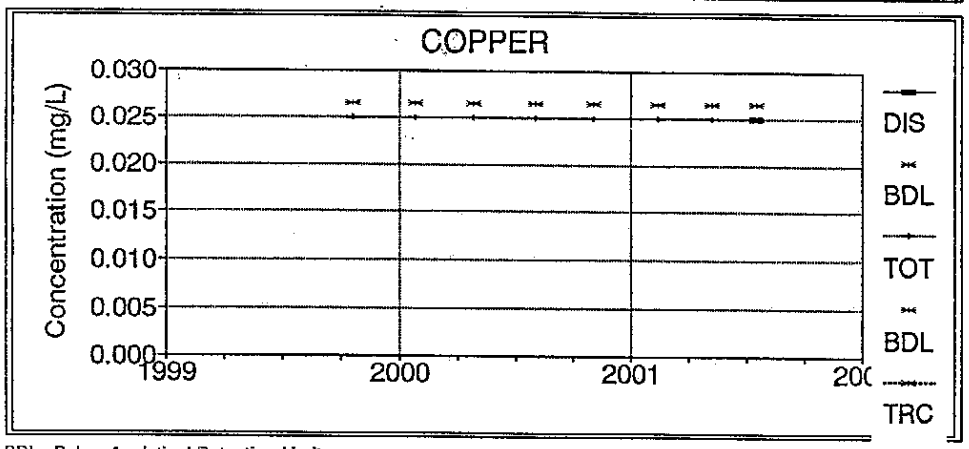
EP-

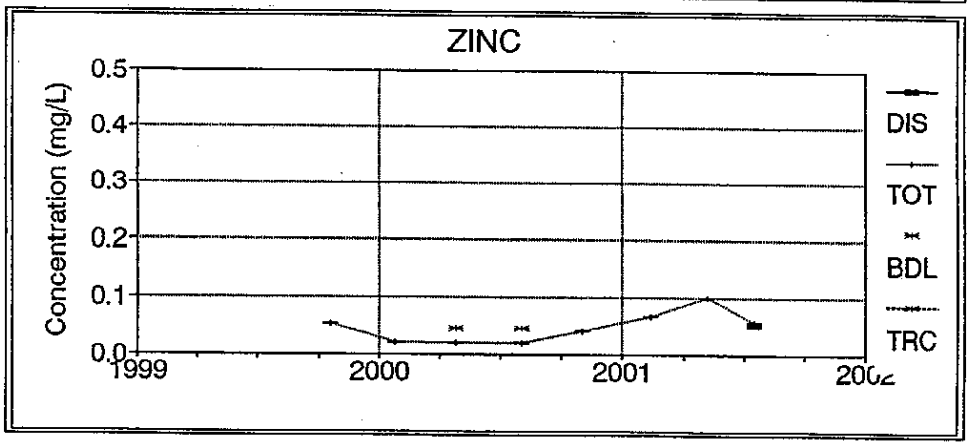












BDL - Below Analytical Detection Limit

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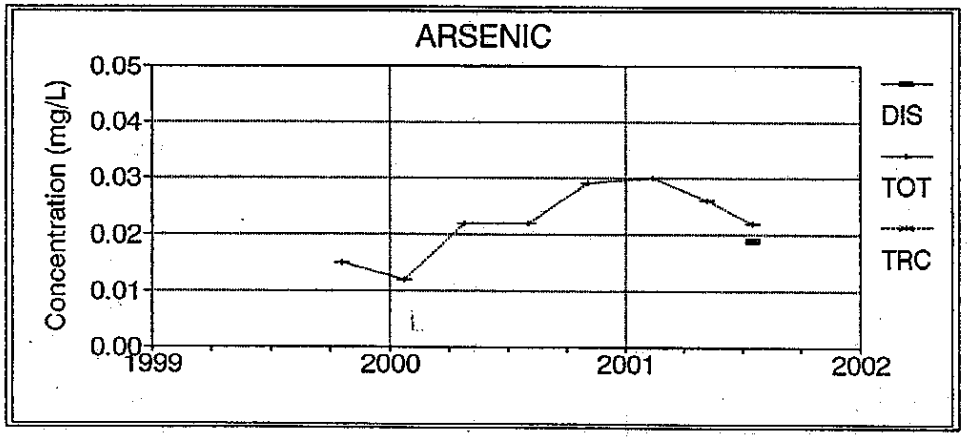
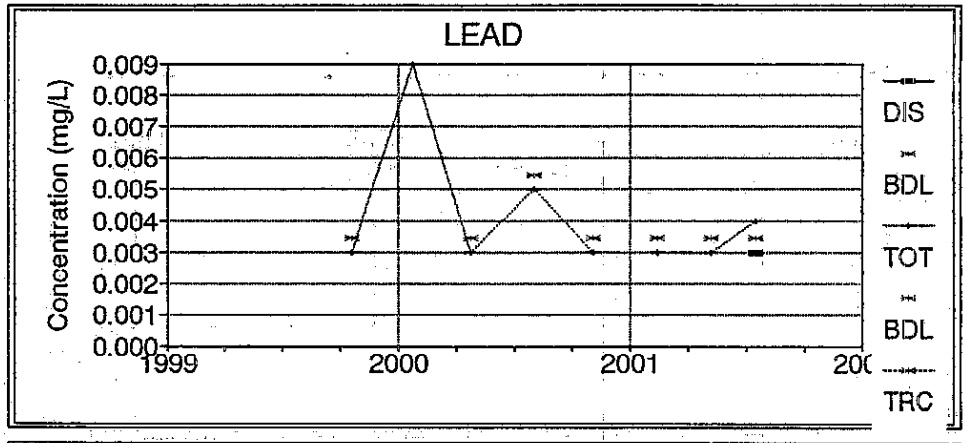
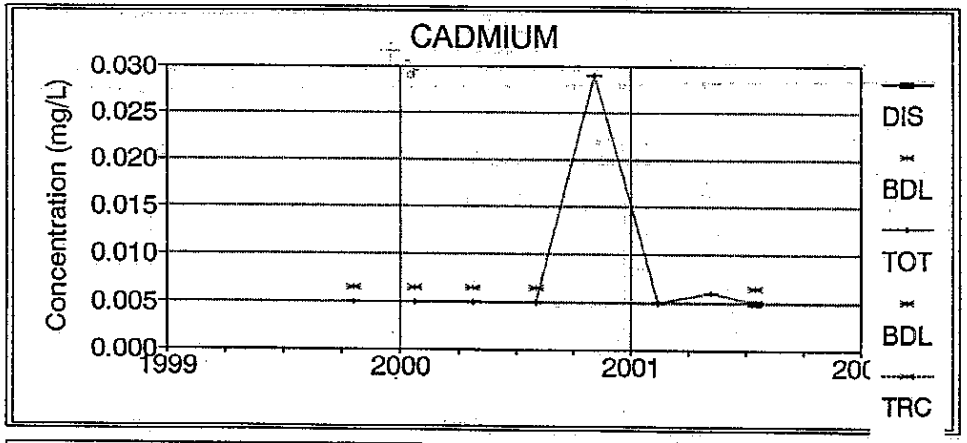
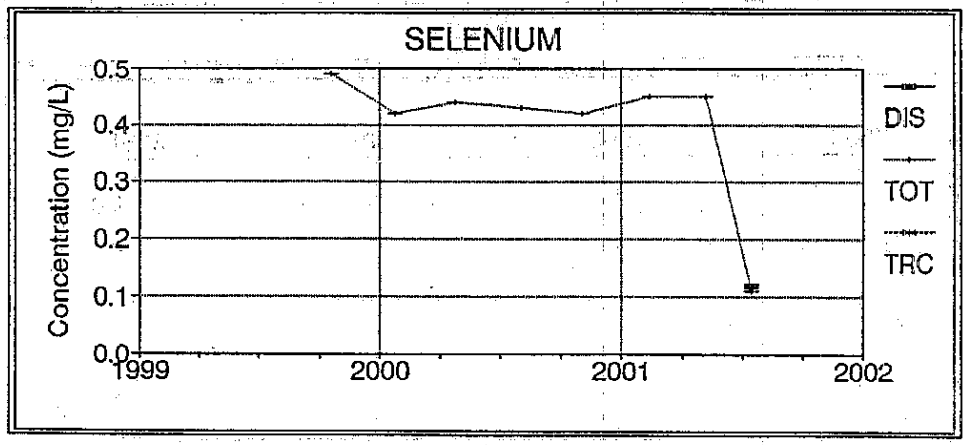
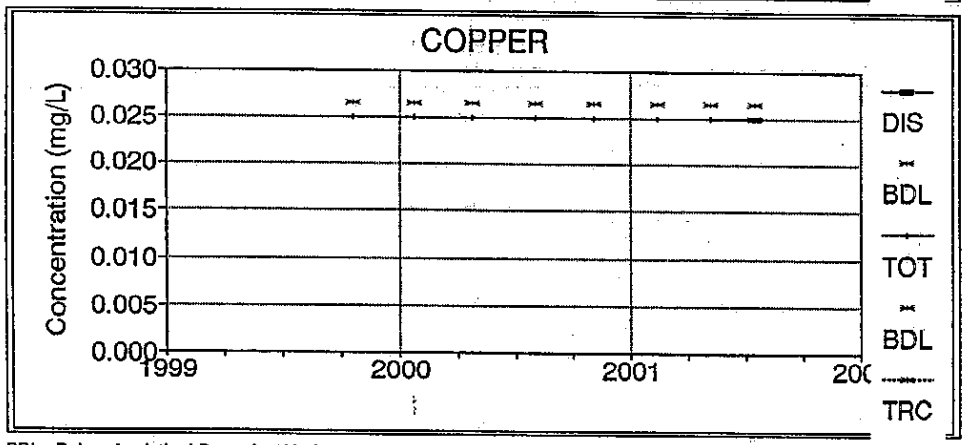
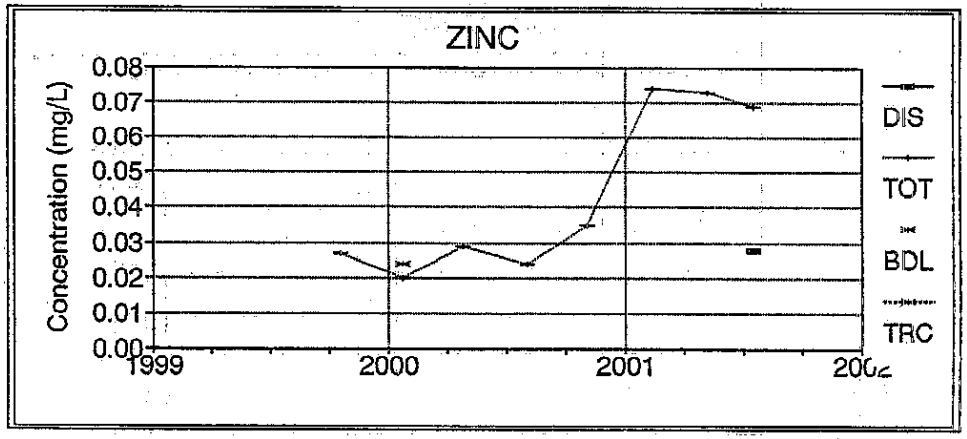






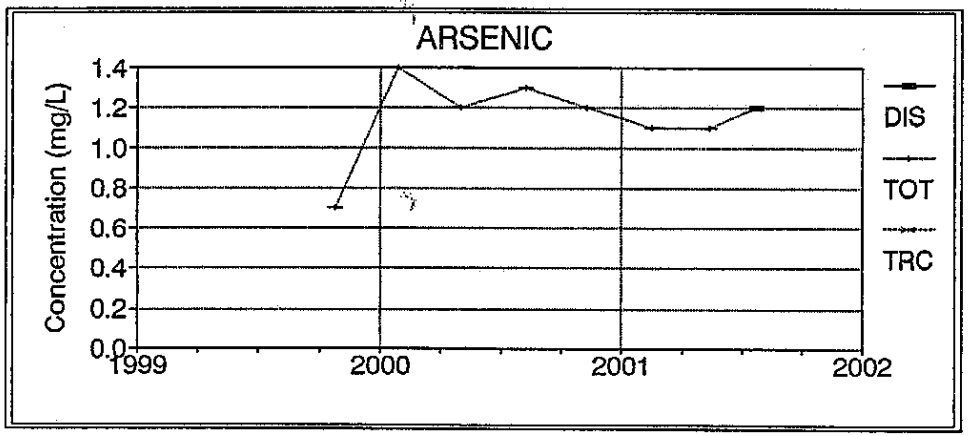


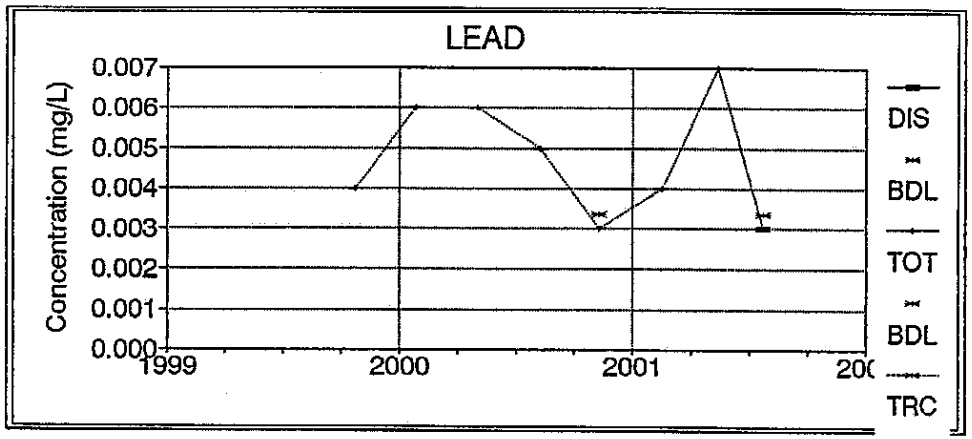


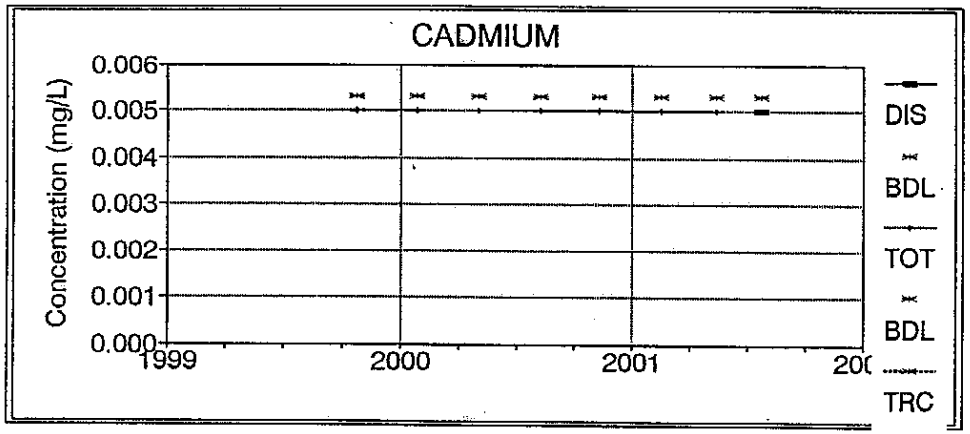


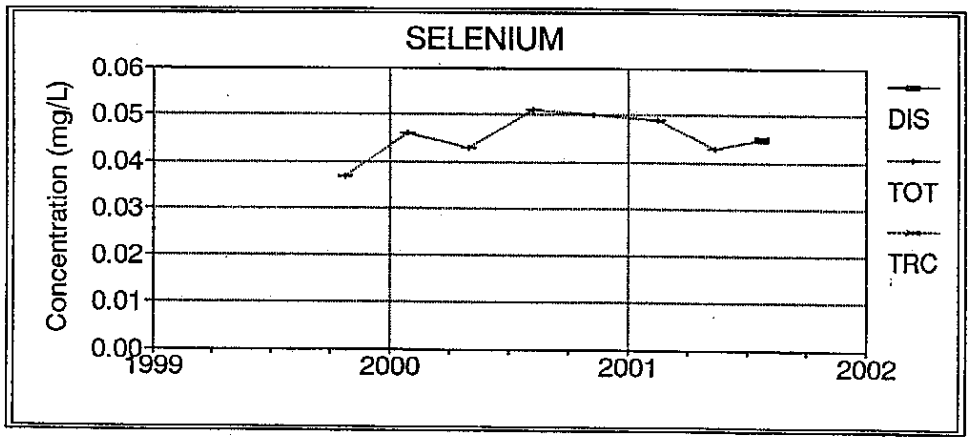
BDL - Below Analytical Detection Limit

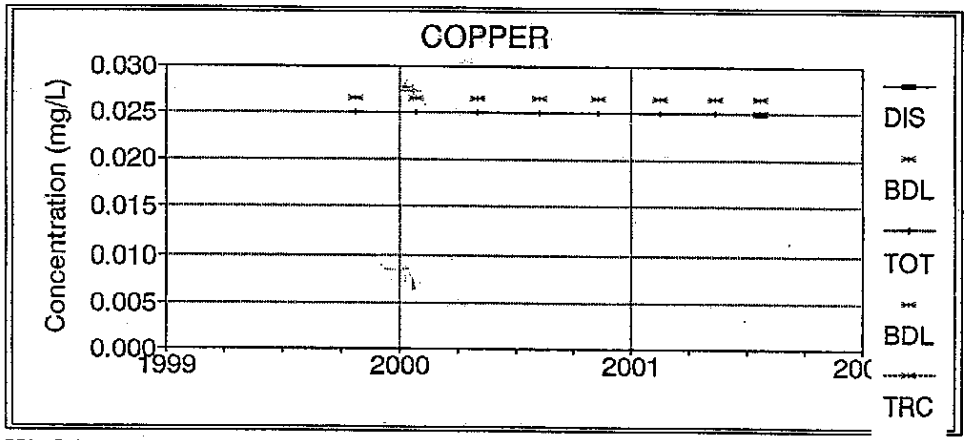
EP-1[illegible]

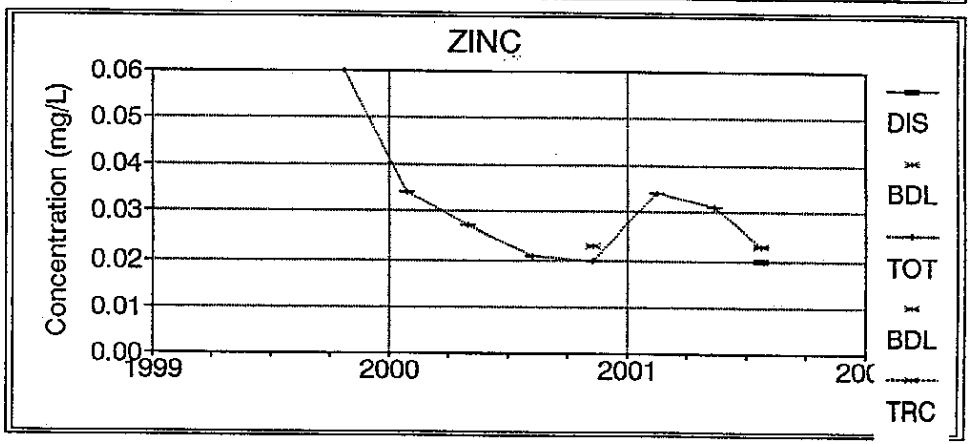






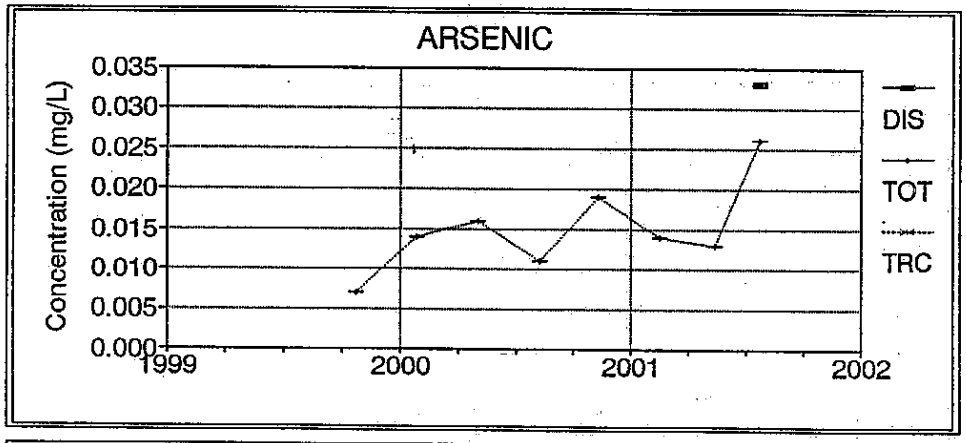


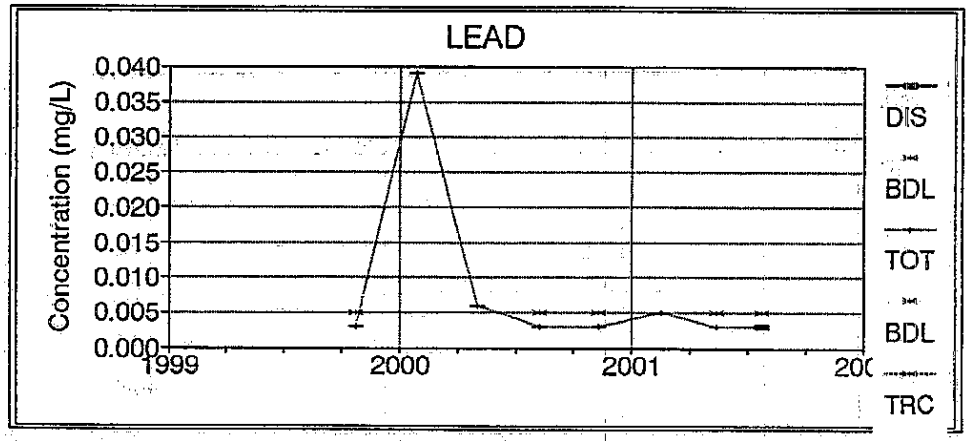


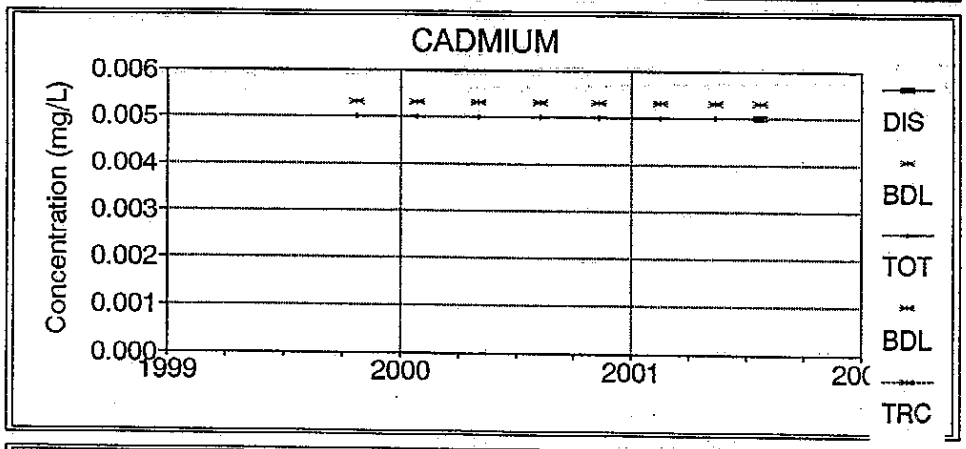


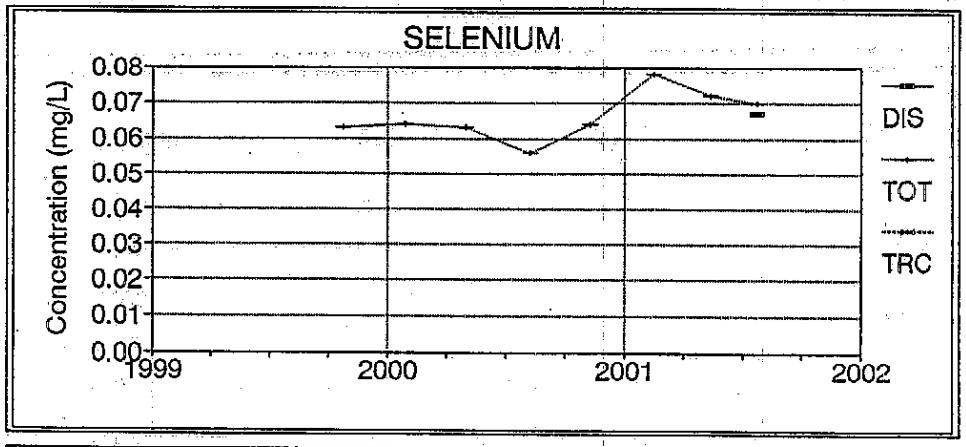
BDL - Below Analytical Detection Limit

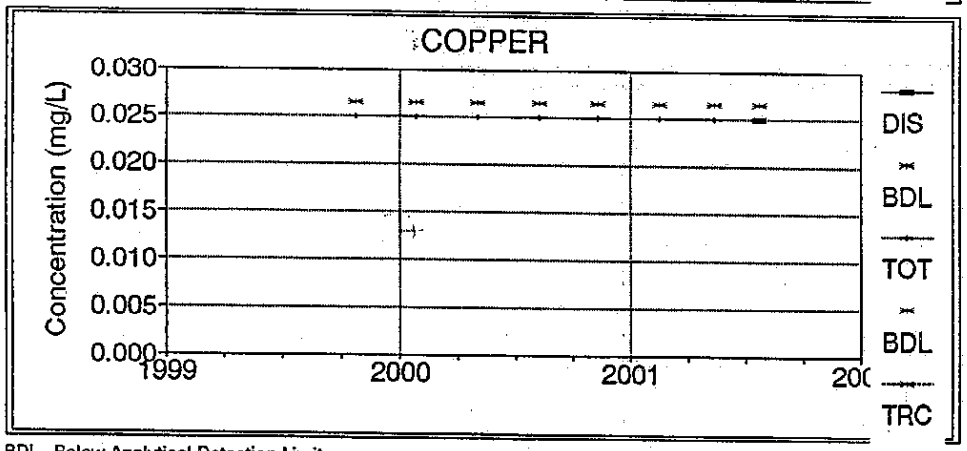
EP-109

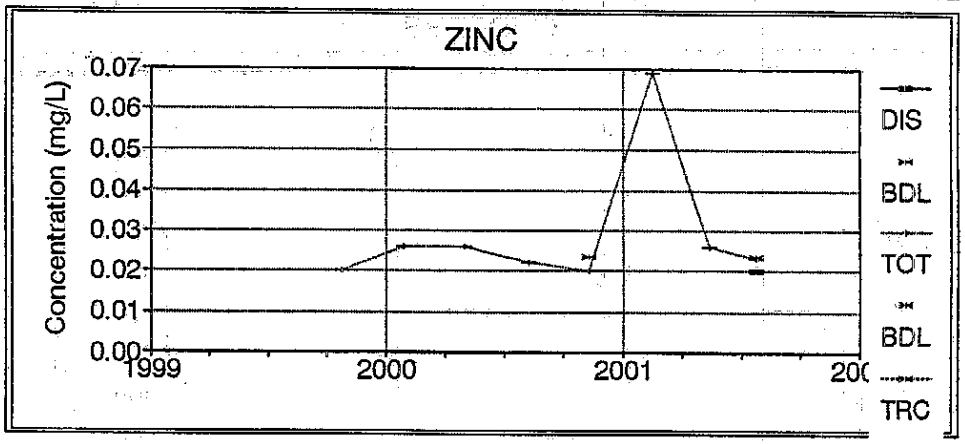






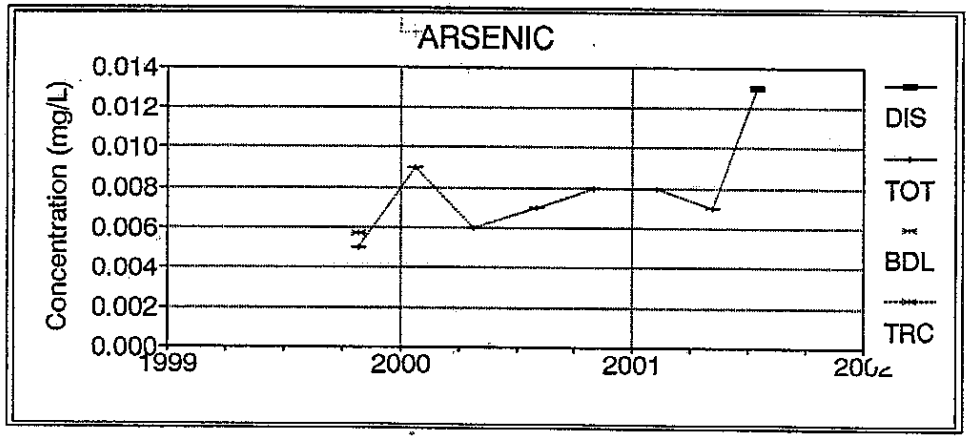


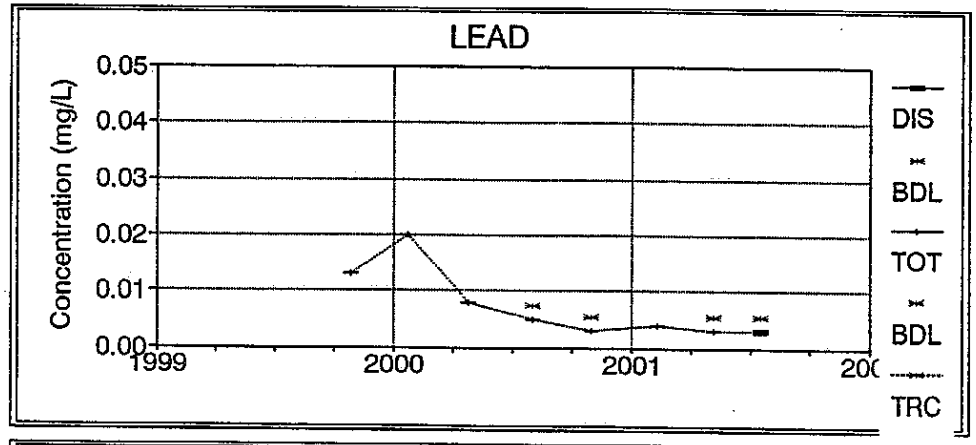


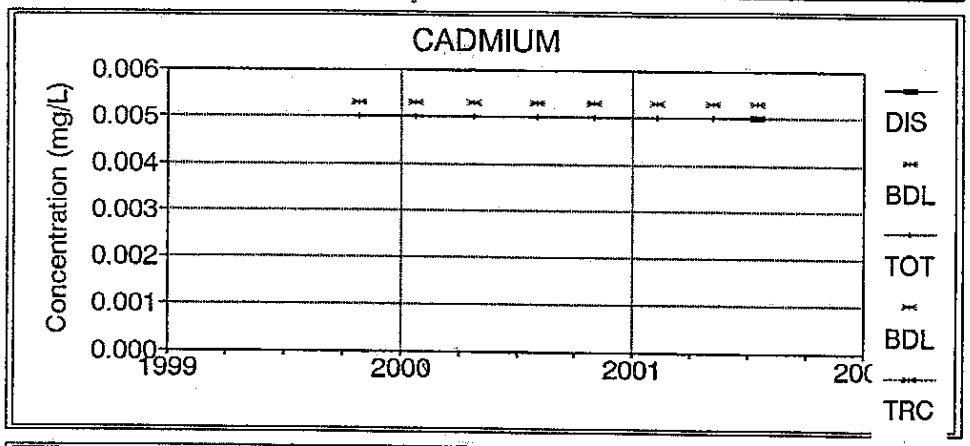


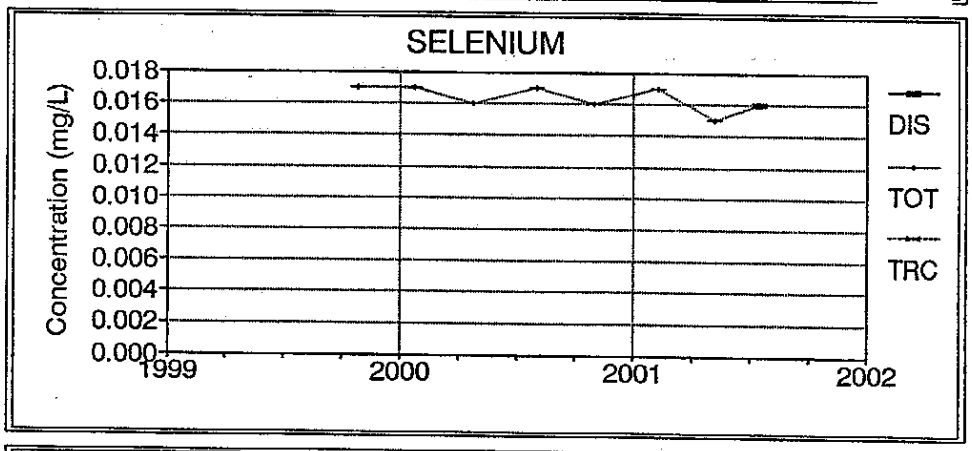
BDL - Below Analytical Detection Limit

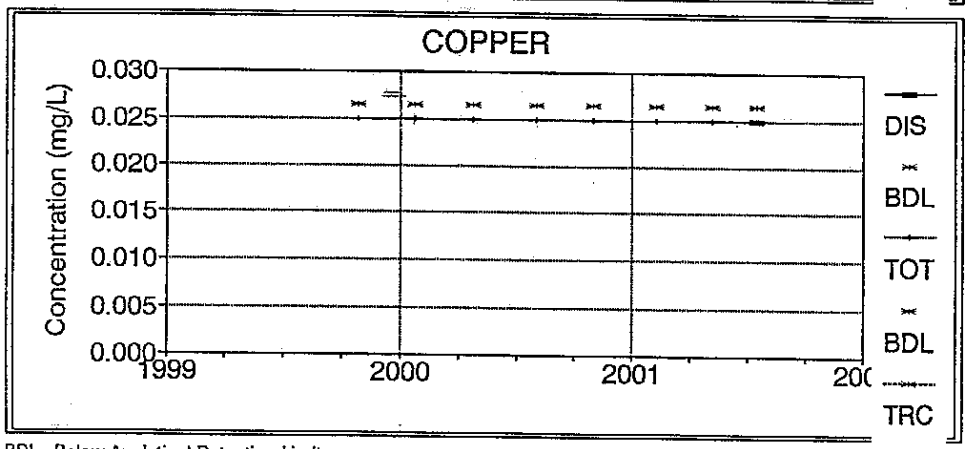
EP-

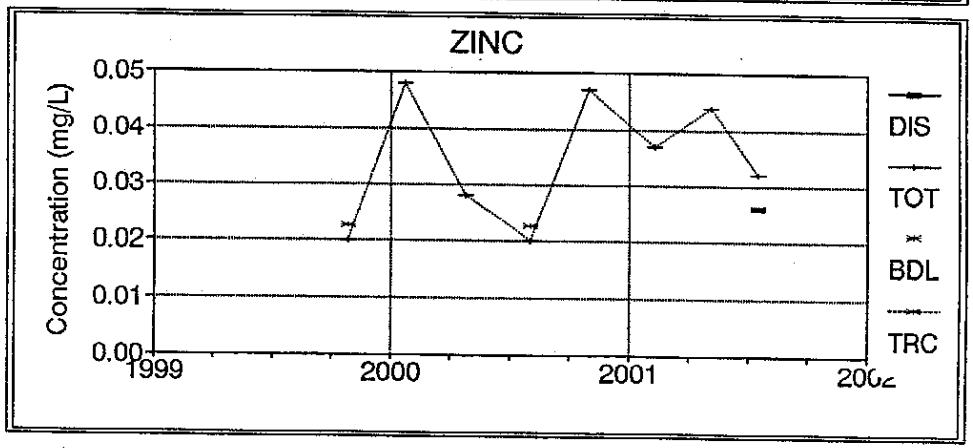






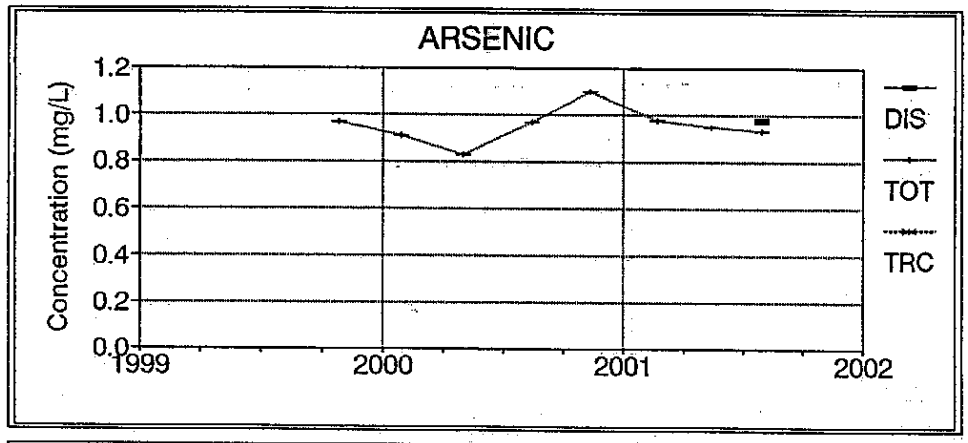


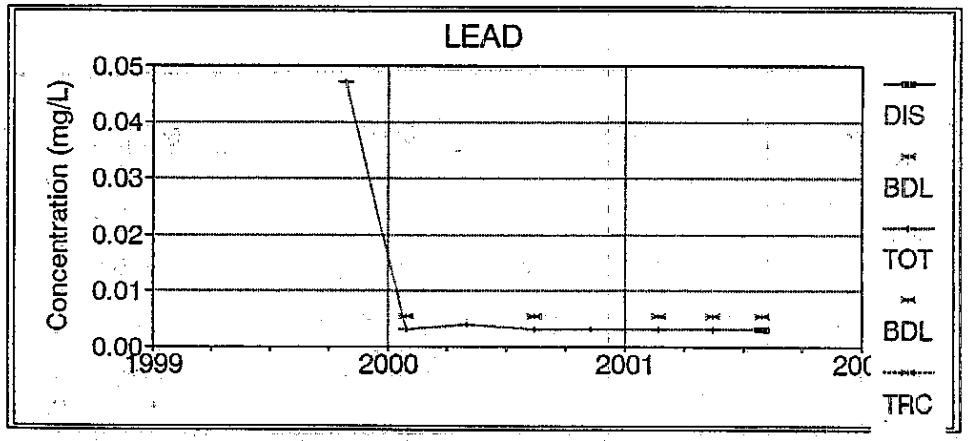


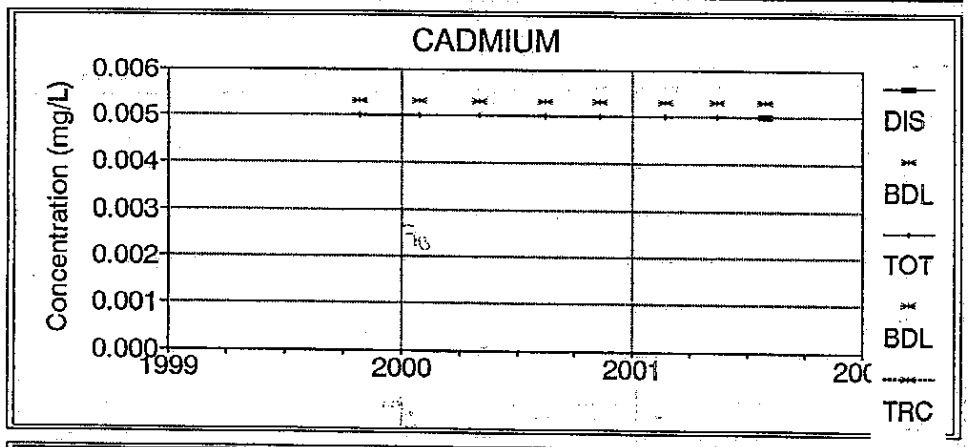


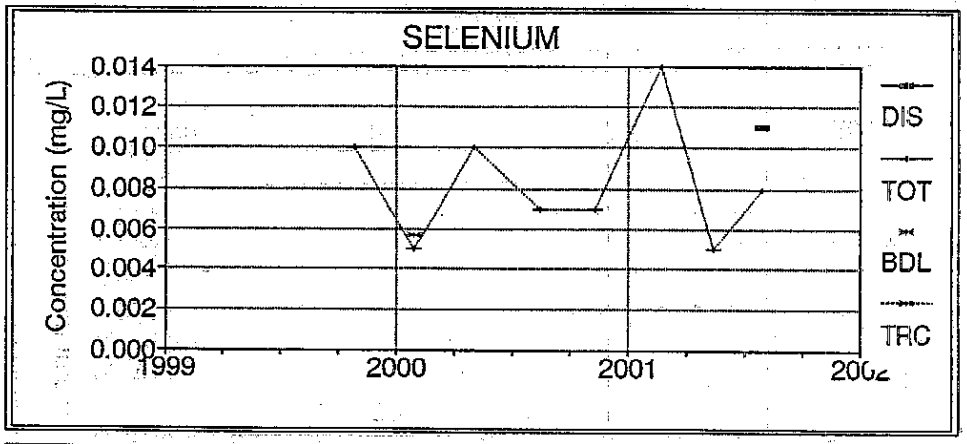
BDL - Below Analytical Detection Limit

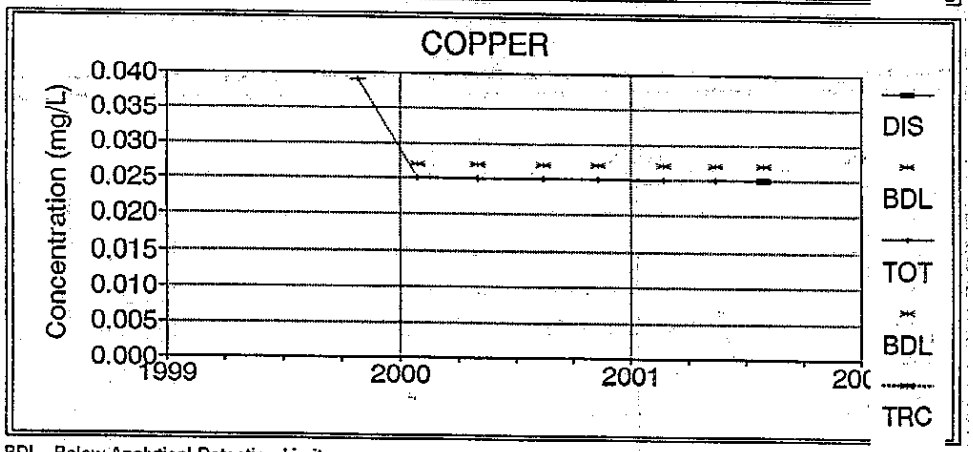
EP-111

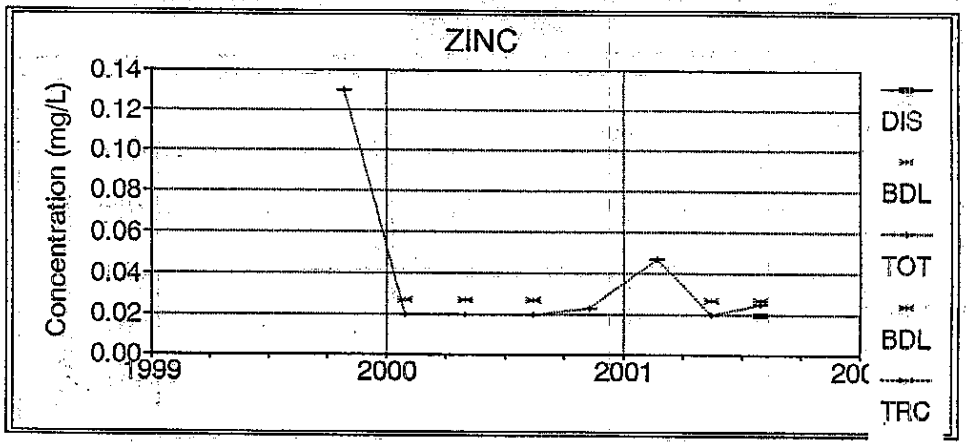






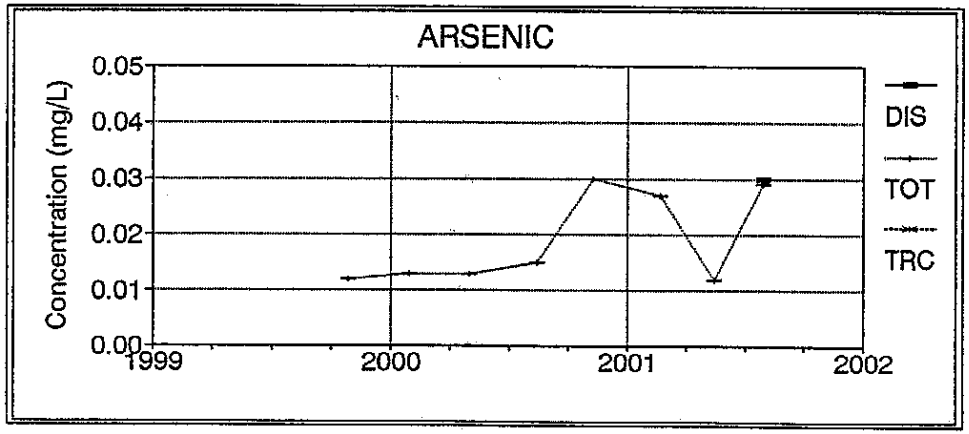


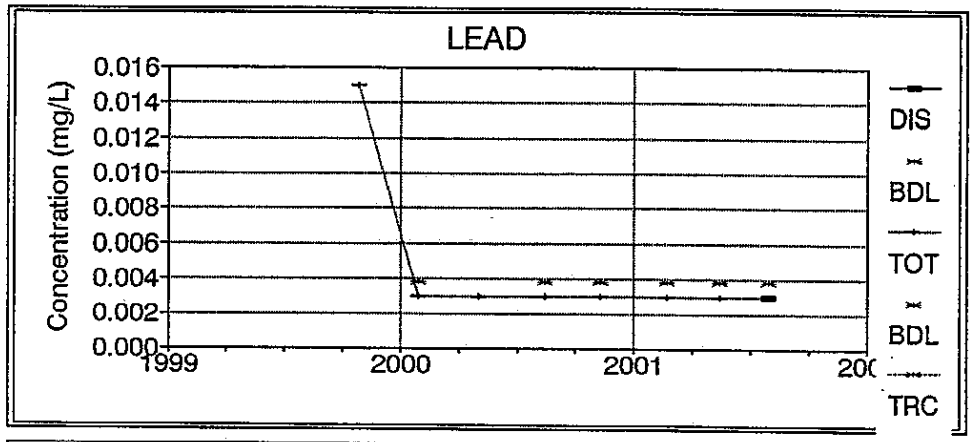


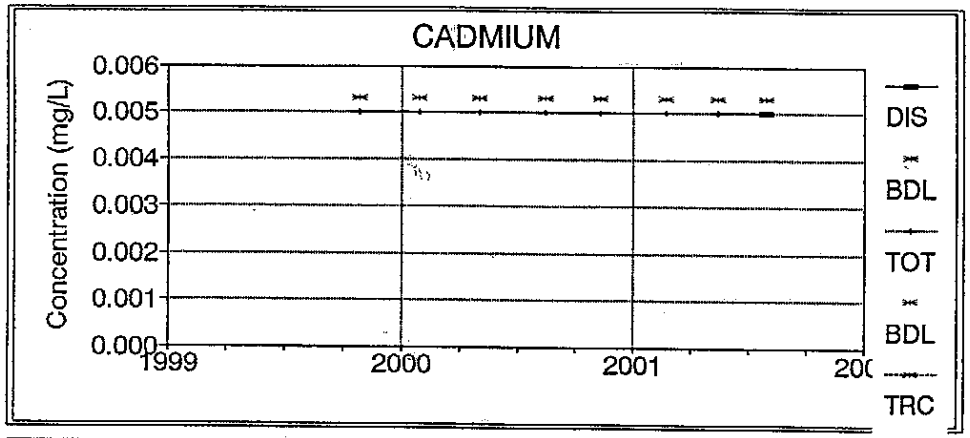


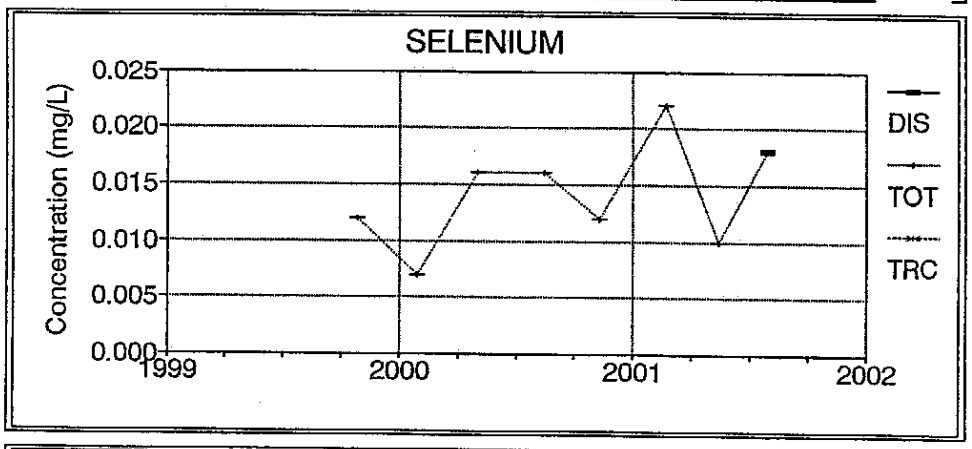
BDL - Below Analytical Detection Limit

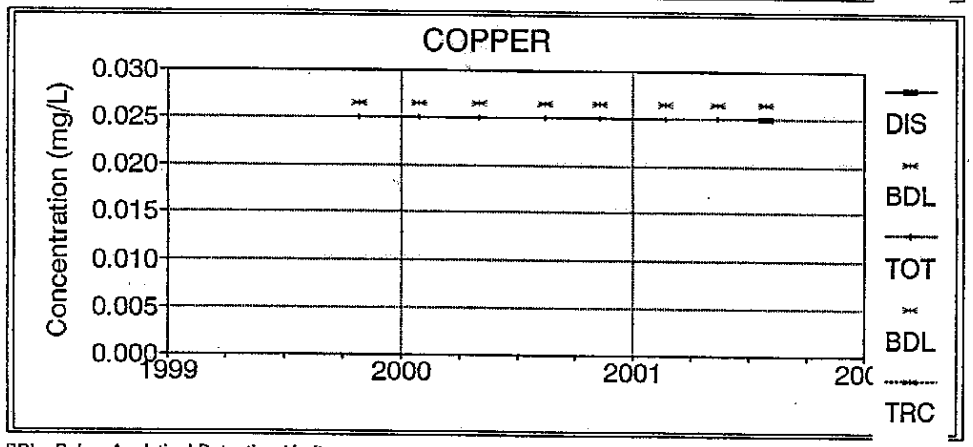
EP-1

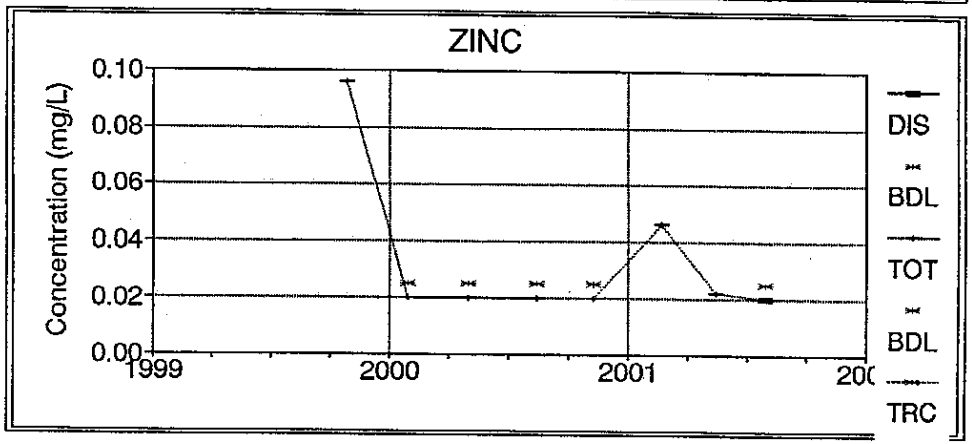






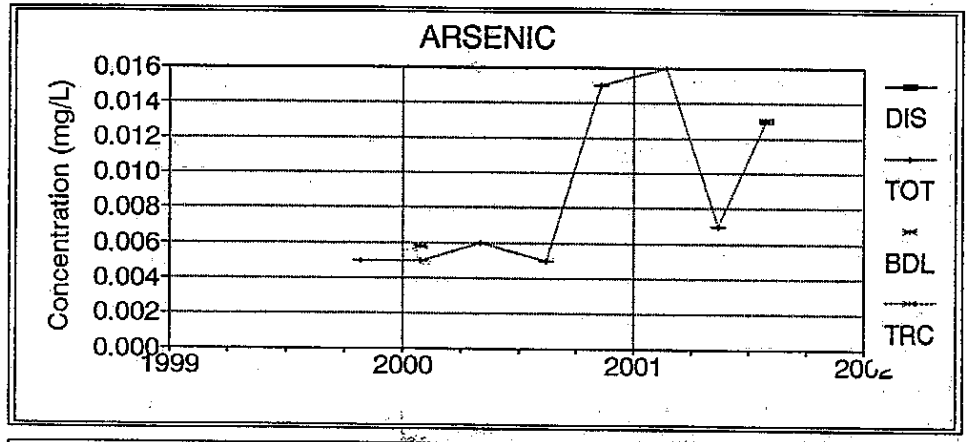


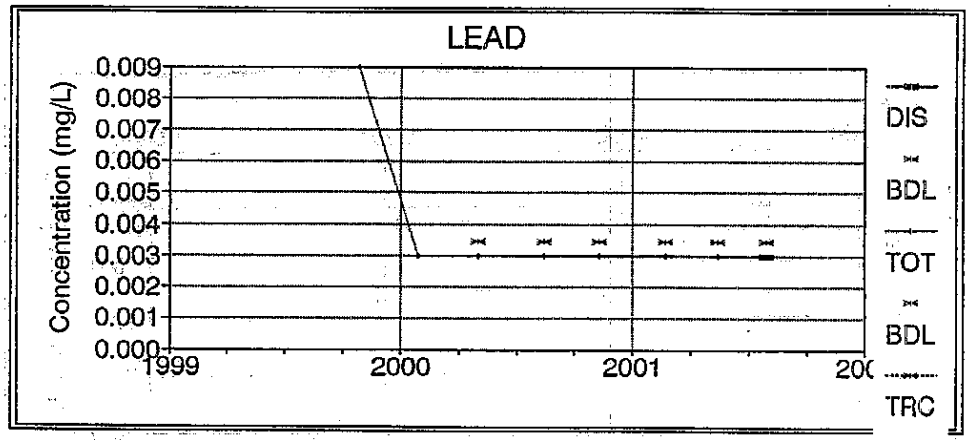


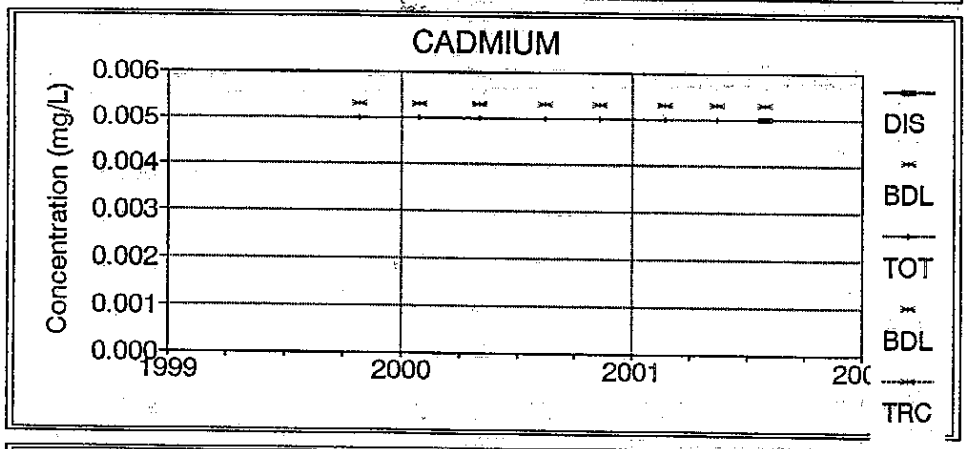


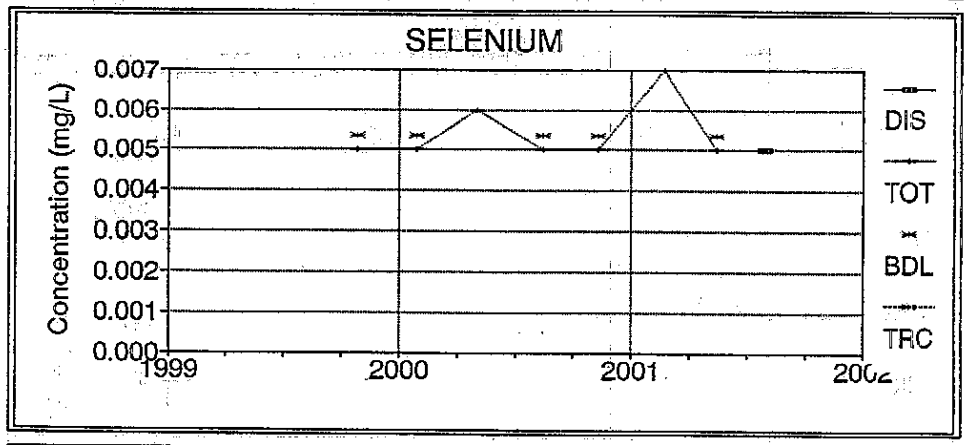
BDL - Below Analytical Detection Limit

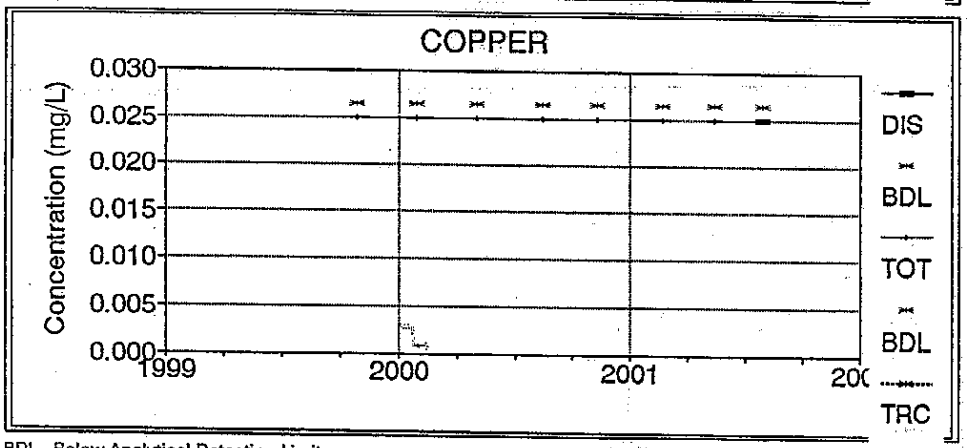
EP-113

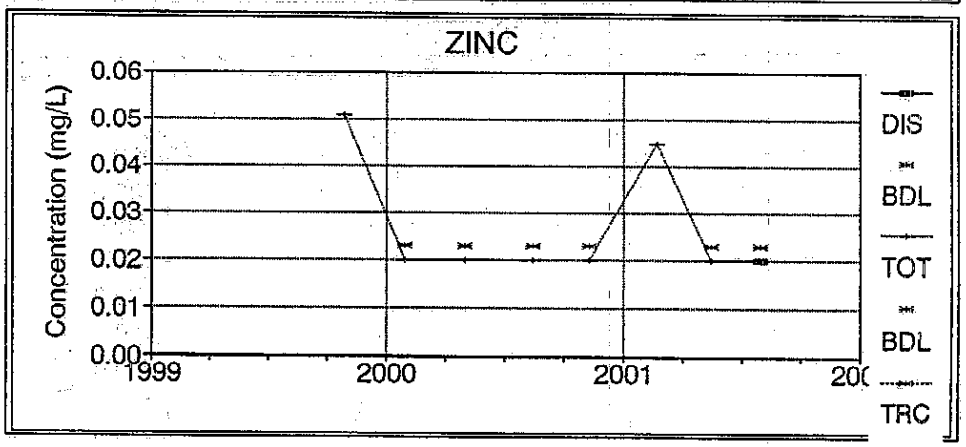






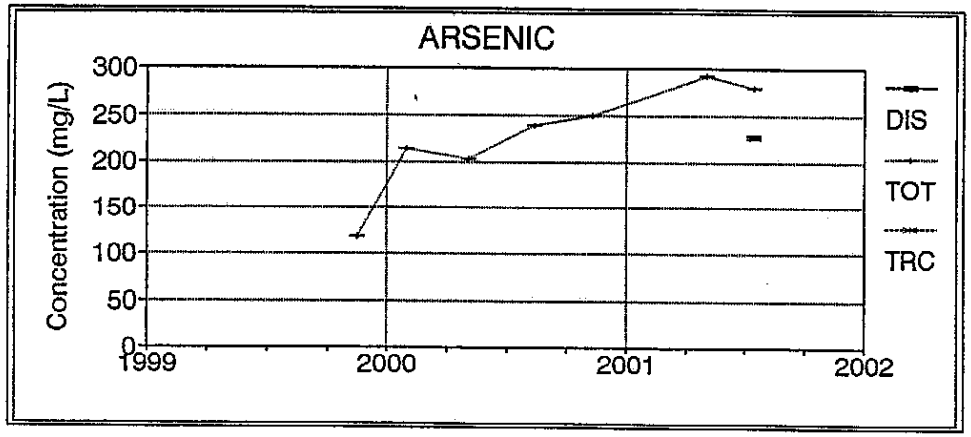


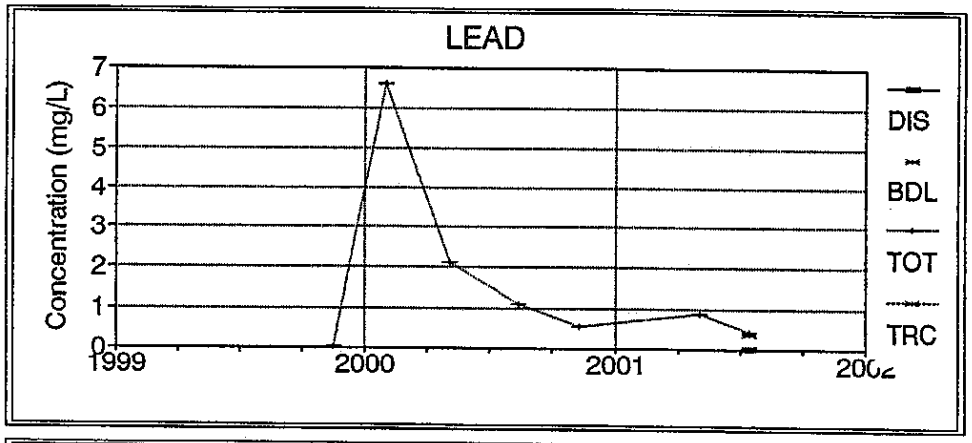


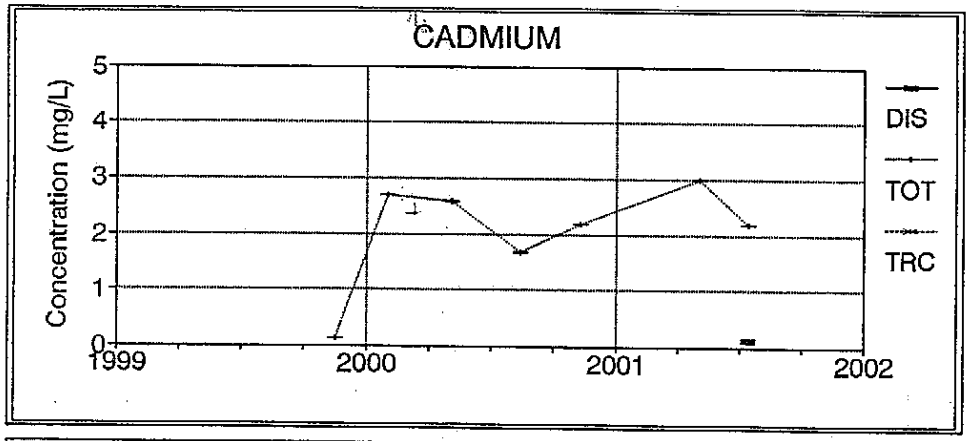


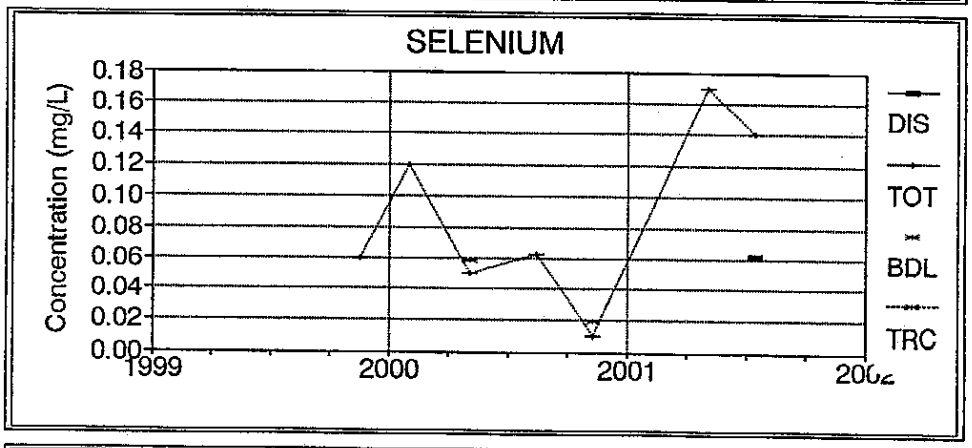
BDL - Below Analytical Detection Limit

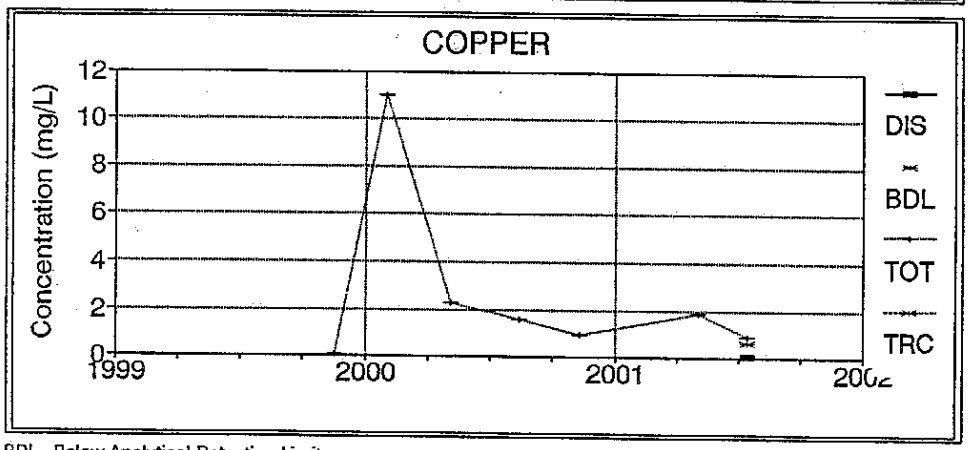
EP-

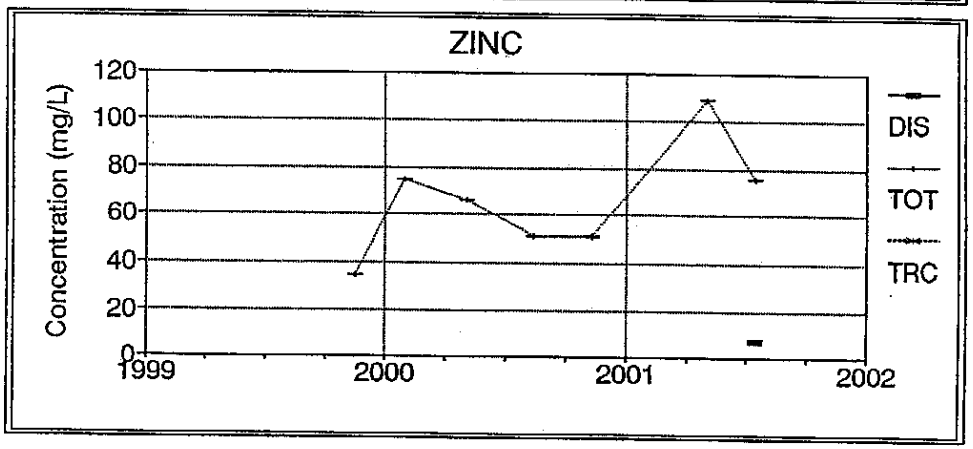






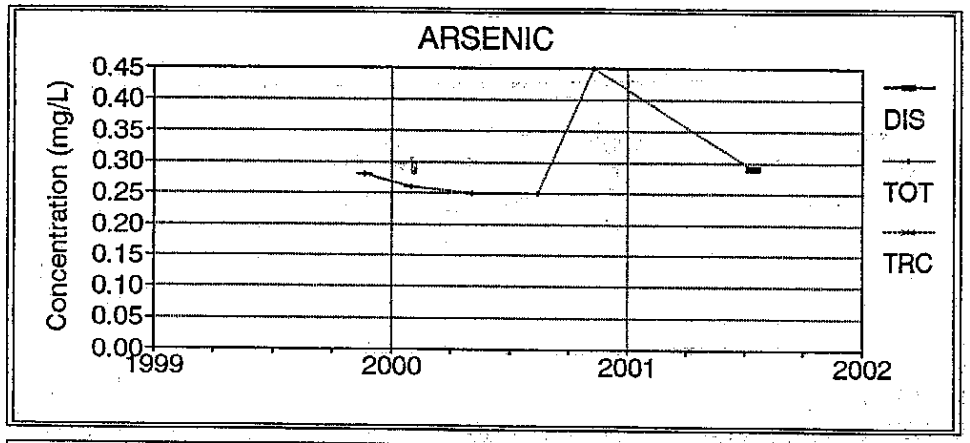


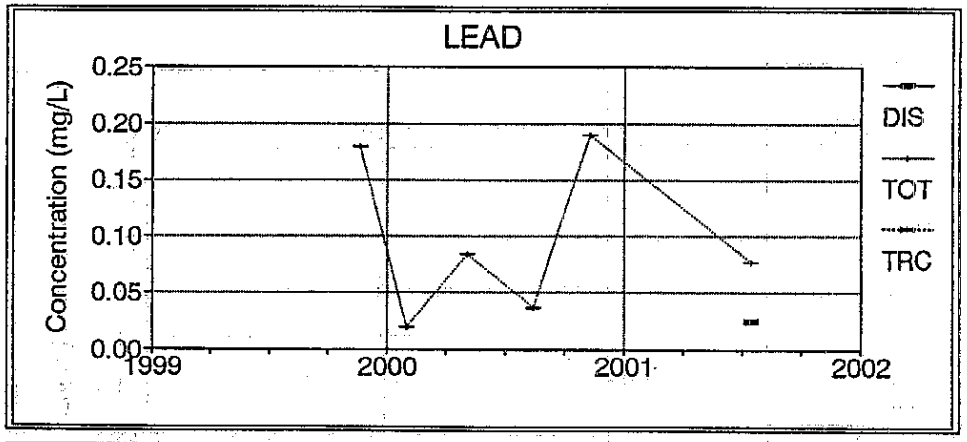


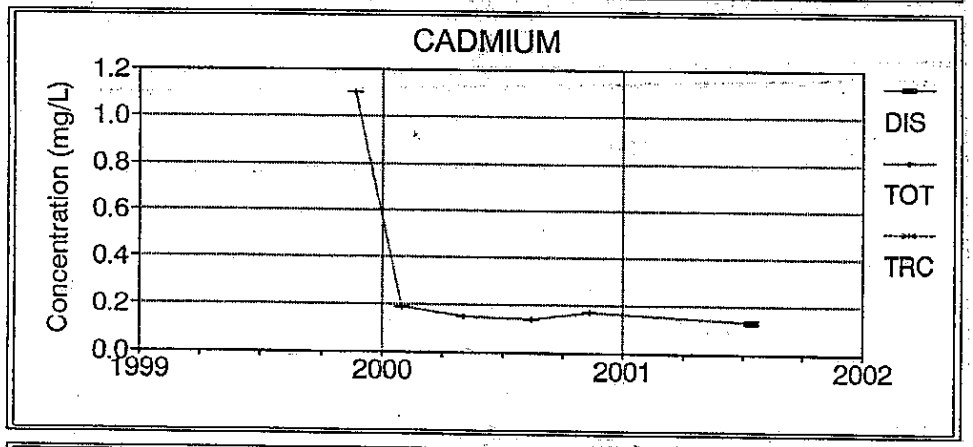


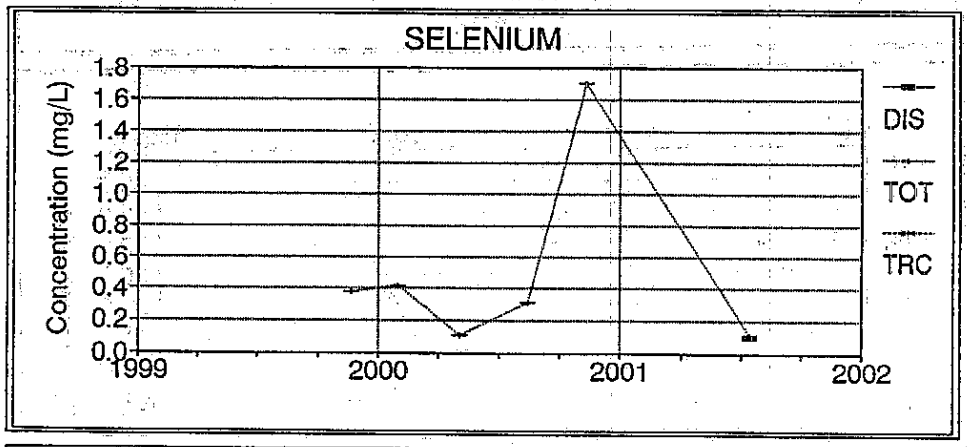
BDL - Below Analytical Detection Limit

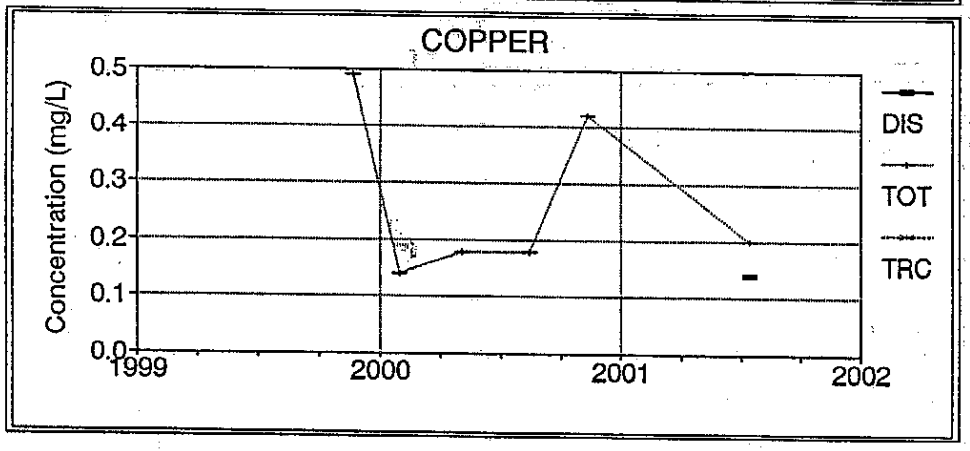
EP-115

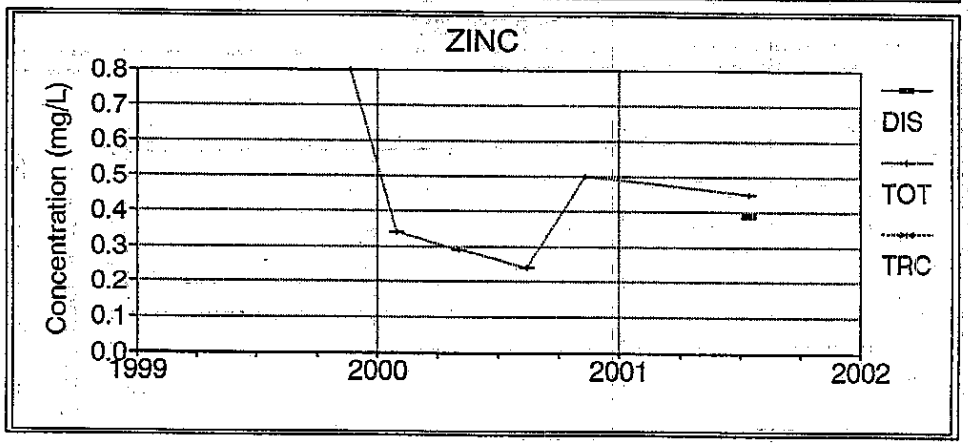

ARSENIC
Concentration (mg/L)
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
1999
2000
2001
2002
DIS
TOT
TRC


LEAD
Concentration (mg/L)
0.25
0.20
0.15
0.10
0.05
0.00
1999
2000
2001
2002
DIS
TOT
TRC

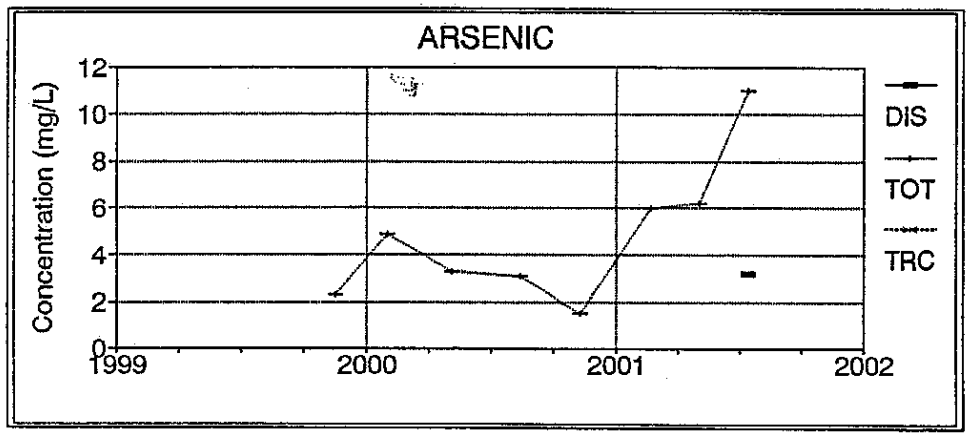

CADMIUM
Concentration (mg/L)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1999
2000
2001
2002
DIS
TOT
TRC

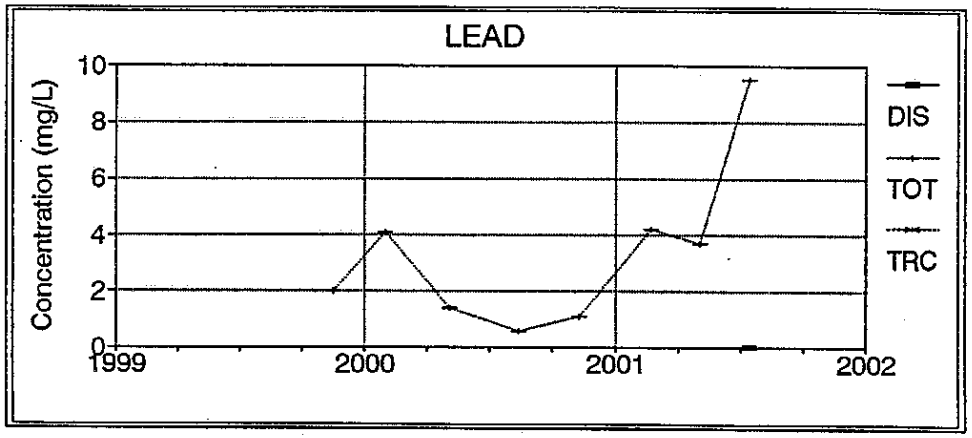

SELENIUM
Concentration (mg/L)
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1999
2000
2001
2002
DIS
TOT
TRC

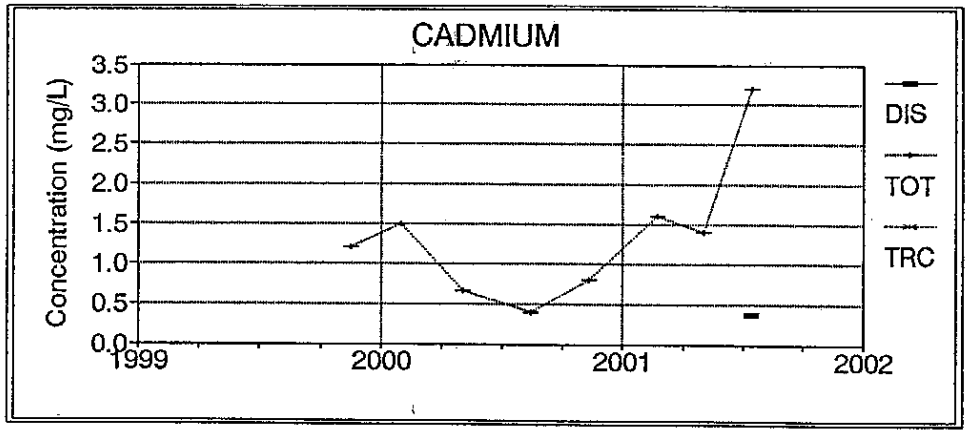

COPPER
Concentration (mg/L)
0.5
0.4
0.3
0.2
0.1
0.0
1999
2000
2001
2002
DIS
TOT
TRC

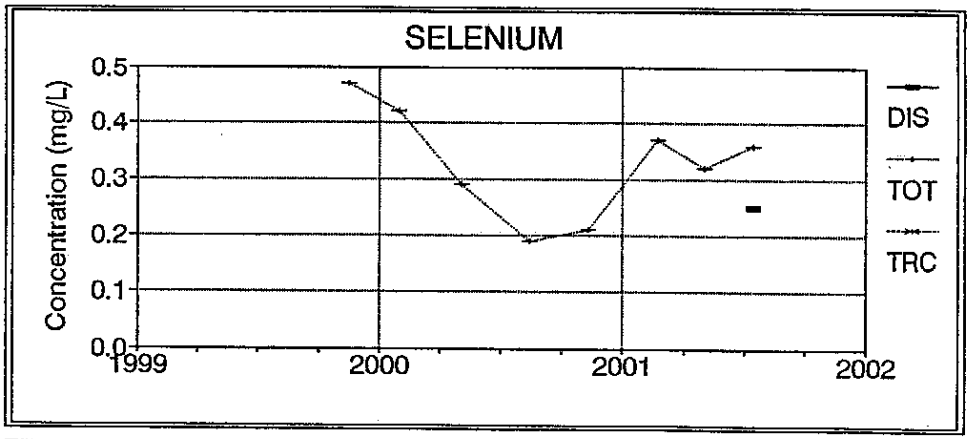

ZINC
Concentration (mg/L)
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1999
2000
2001
2002
DIS
TOT
TRC

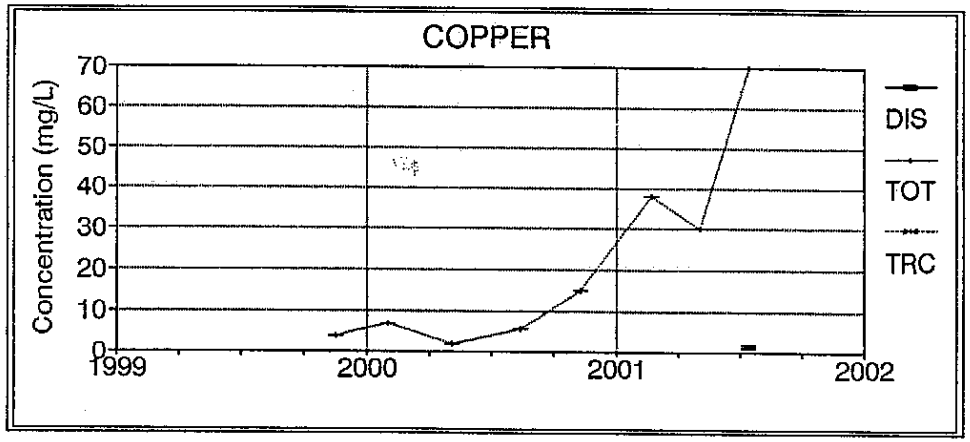
EP-1.3

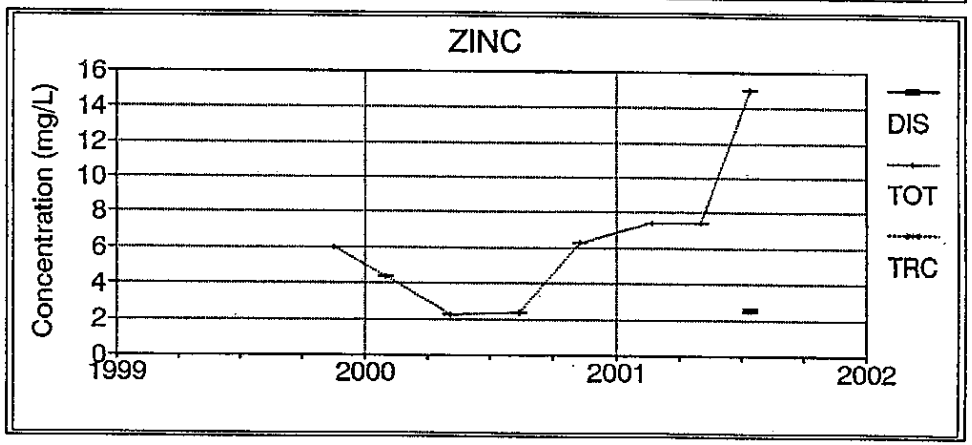

ARSENIC
Concentration (mg/L)
0
2
4
6
8
10
12
1999
2000
2001
2002
DIS
TOT
TRC


LEAD
Concentration (mg/L)
0
2
4
6
8
10
1999
2000
2001
2002
DIS
TOT
TRC

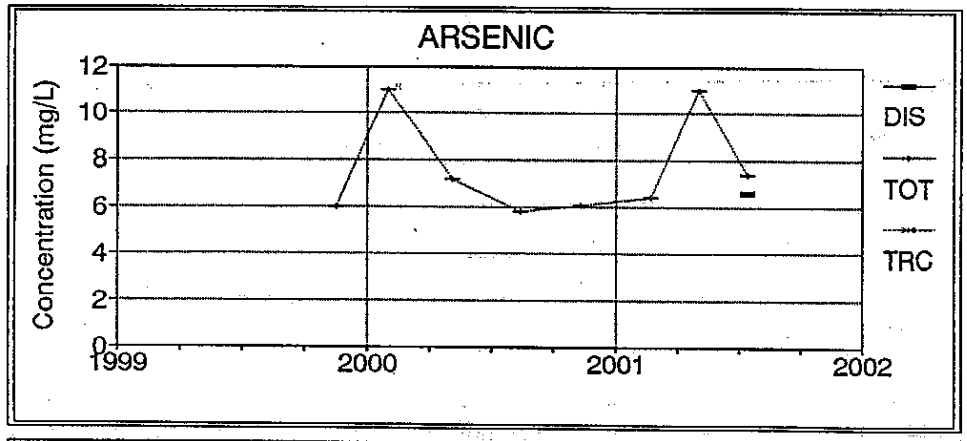

CADMIUM
Concentration (mg/L)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1999
2000
2001
2002
DIS
TOT
TRC

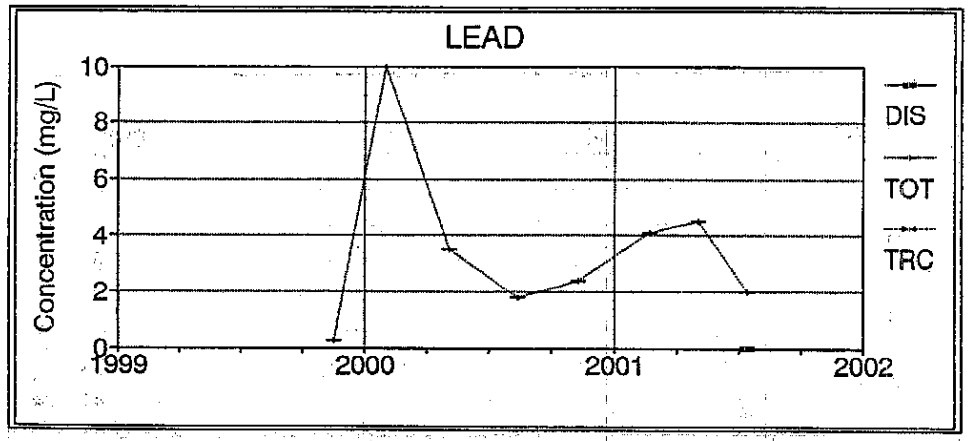

SELENIUM
Concentration (mg/L)
0.0
0.1
0.2
0.3
0.4
0.5
1999
2000
2001
2002
DIS
TOT
TRC

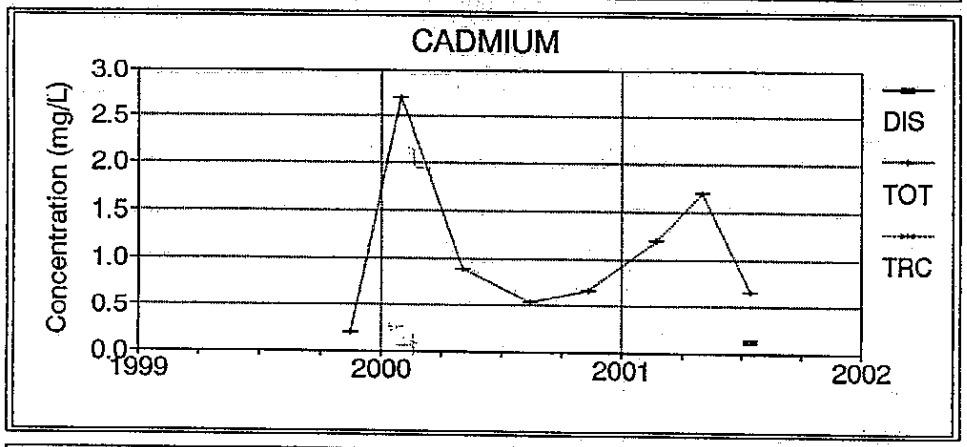

COPPER
Concentration (mg/L)
0
10
20
30
40
50
60
70
1999
2000
2001
2002
DIS
TOT
TRC

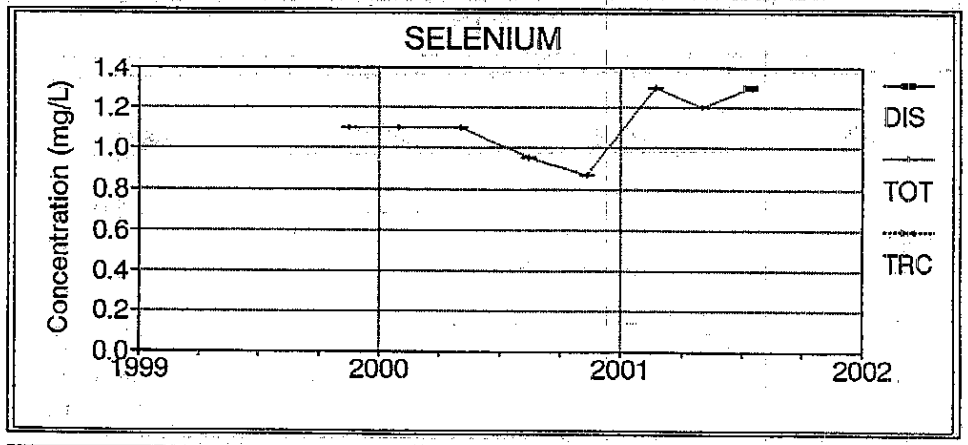

ZINC
Concentration (mg/L)
0
2
4
6
8
10
12
14
16
1999
2000
2001
2002
DIS
TOT
TRC

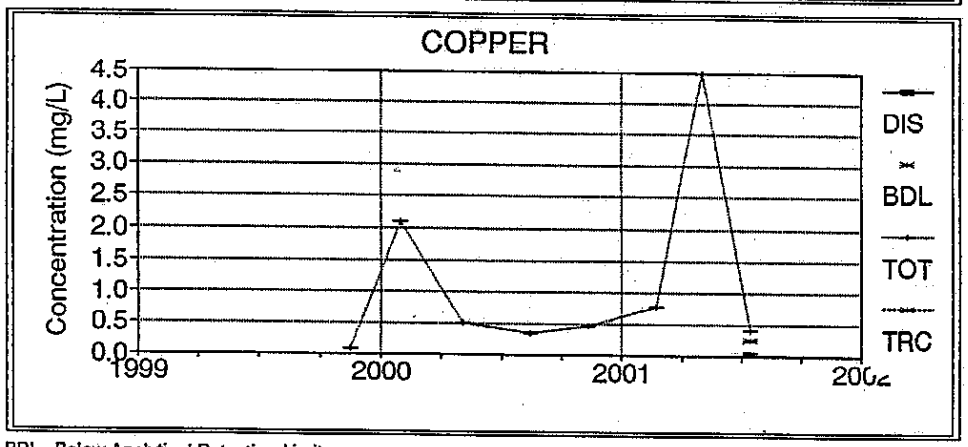
EP-117

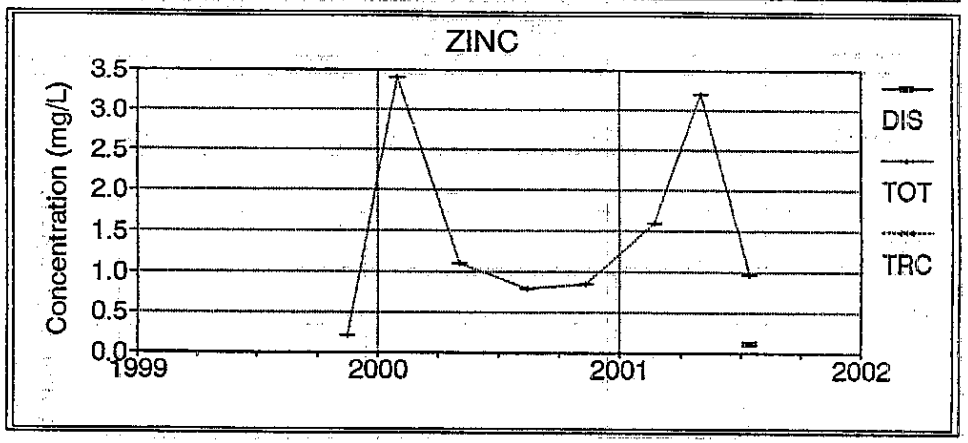






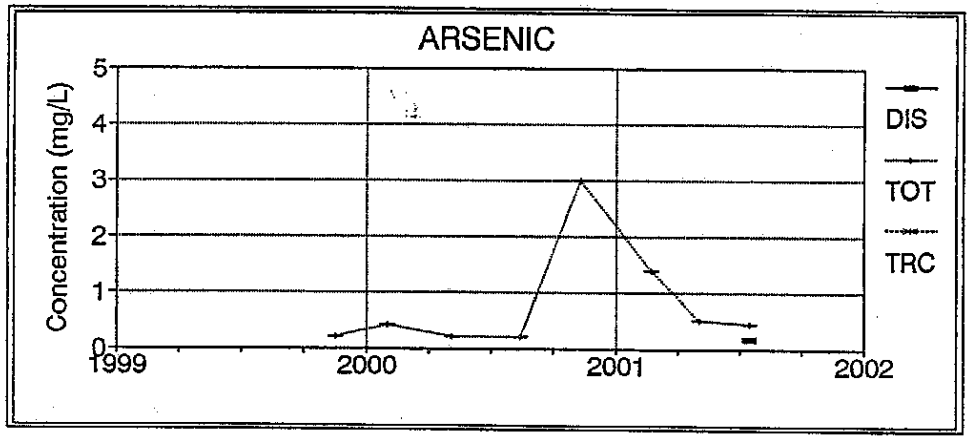


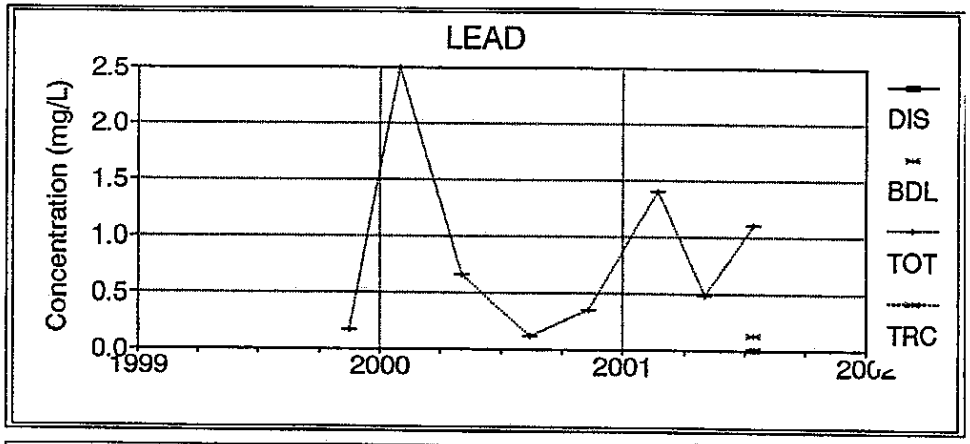


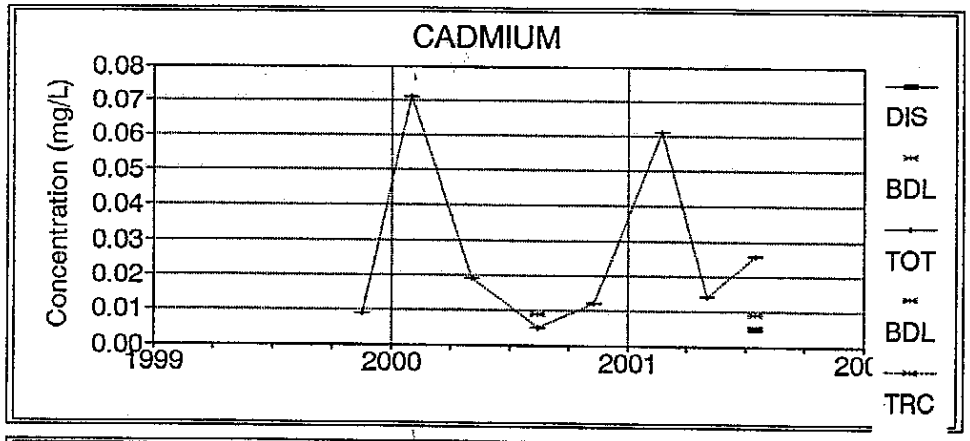


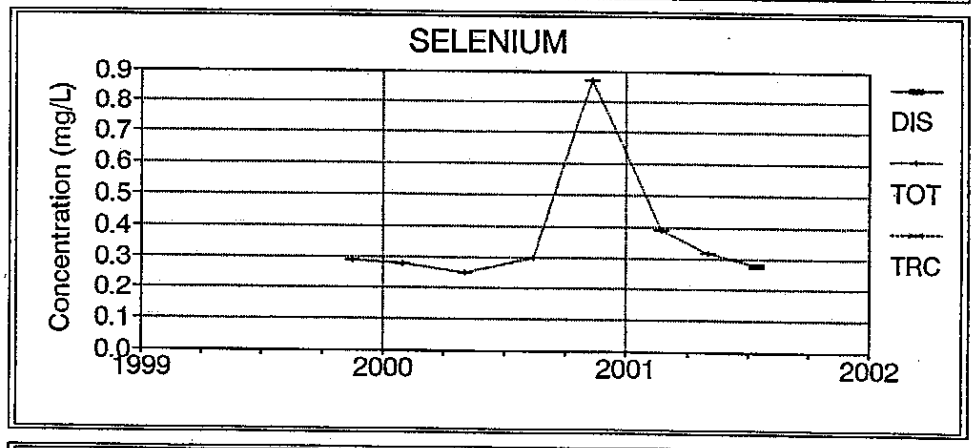
BDL - Below Analytical Detection Limit

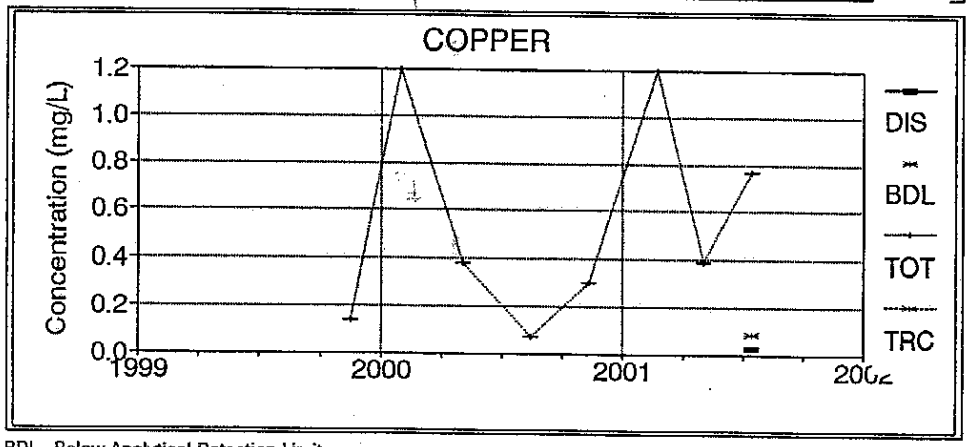
EP-

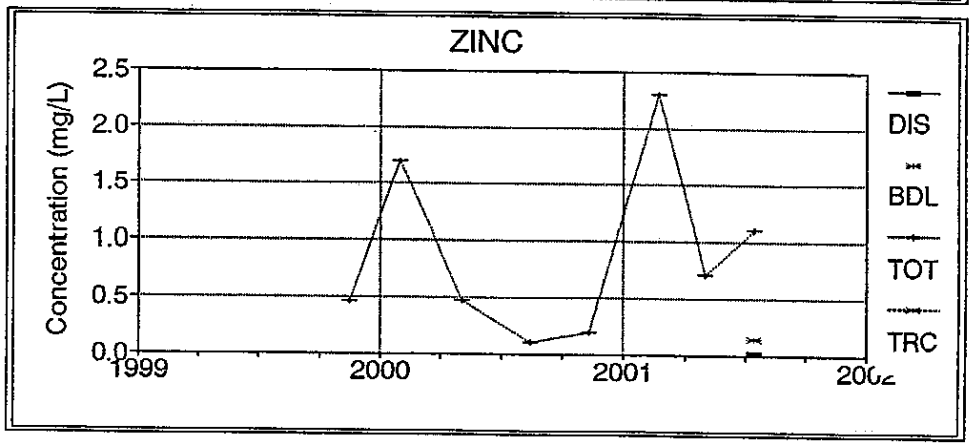






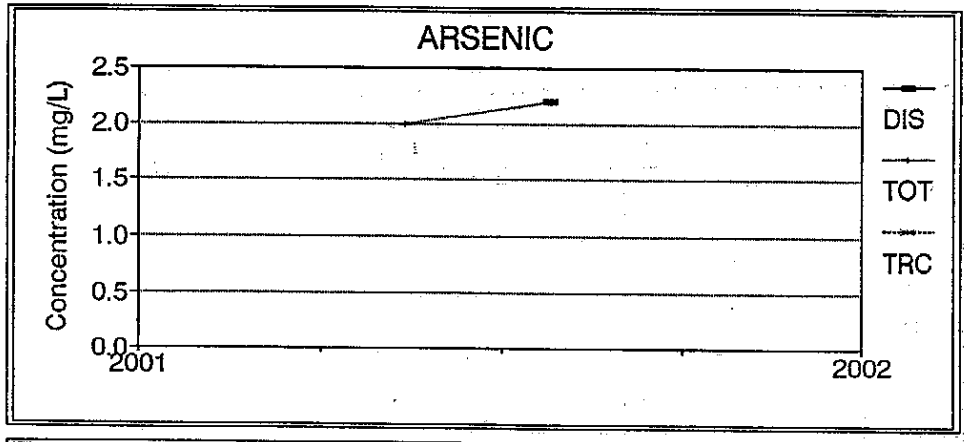


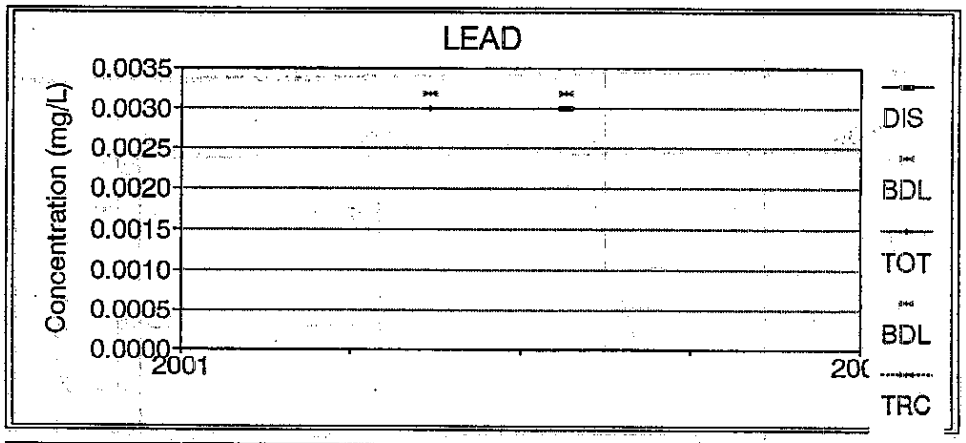


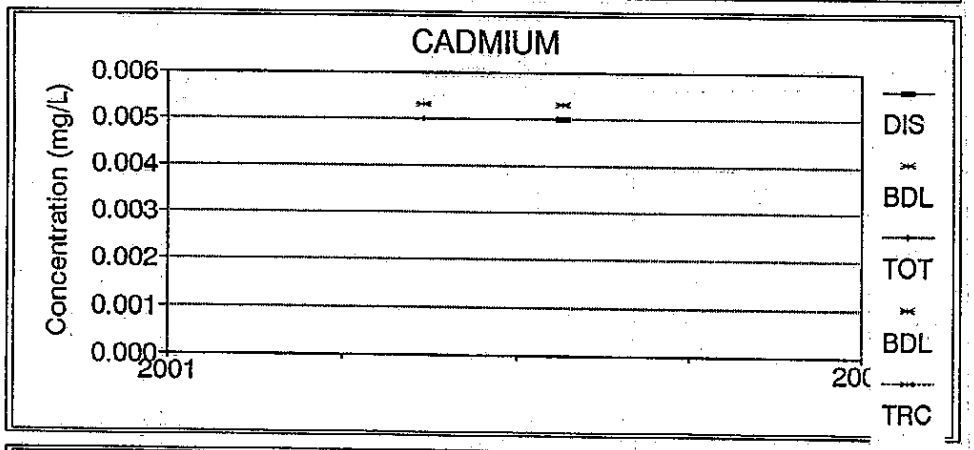


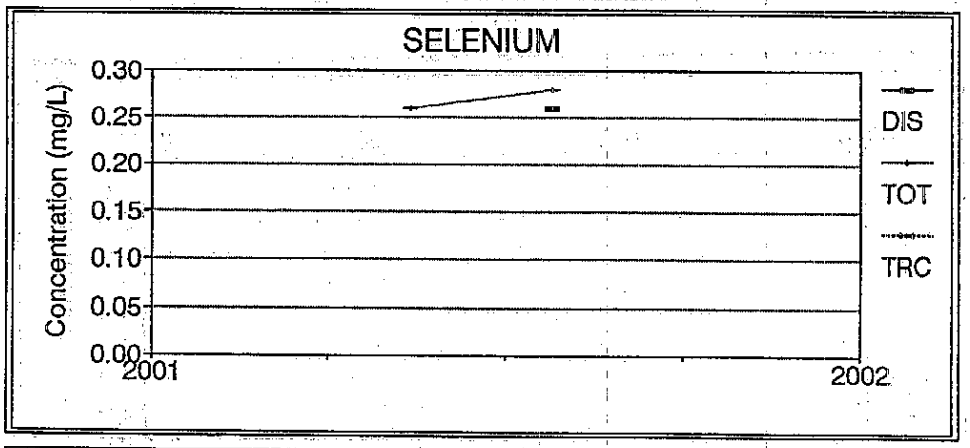
BDL - Below Analytical Detection Limit

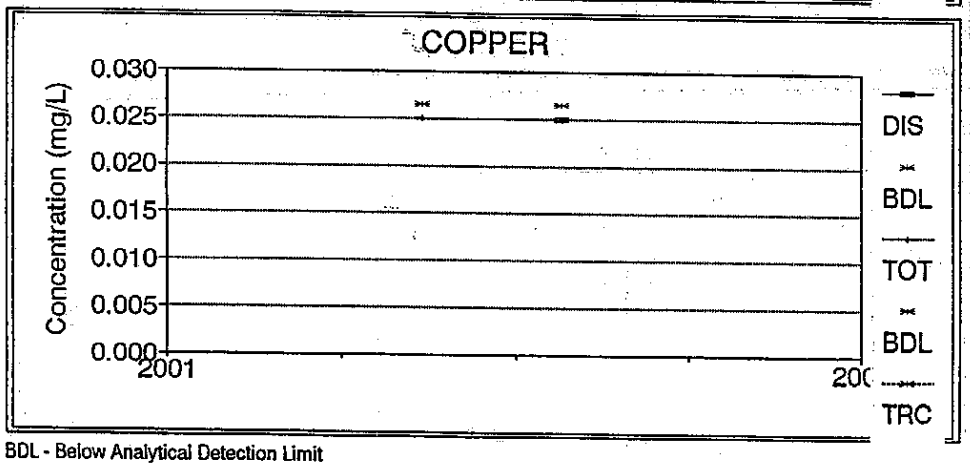
EP-119

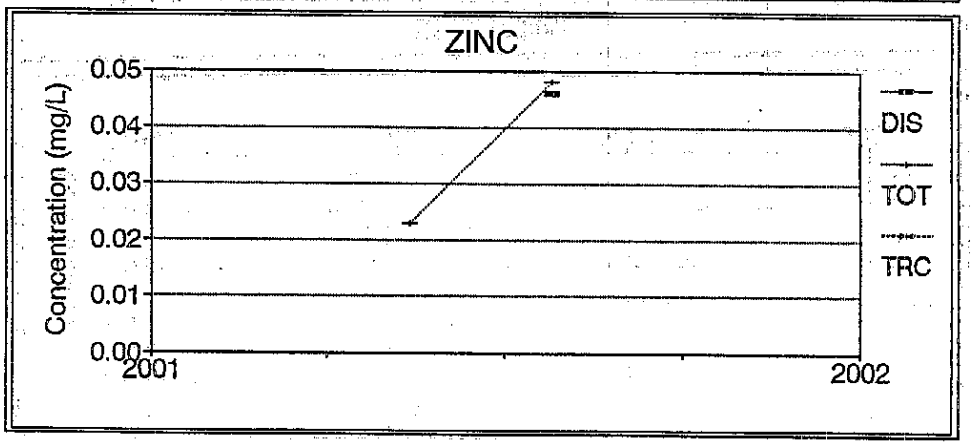






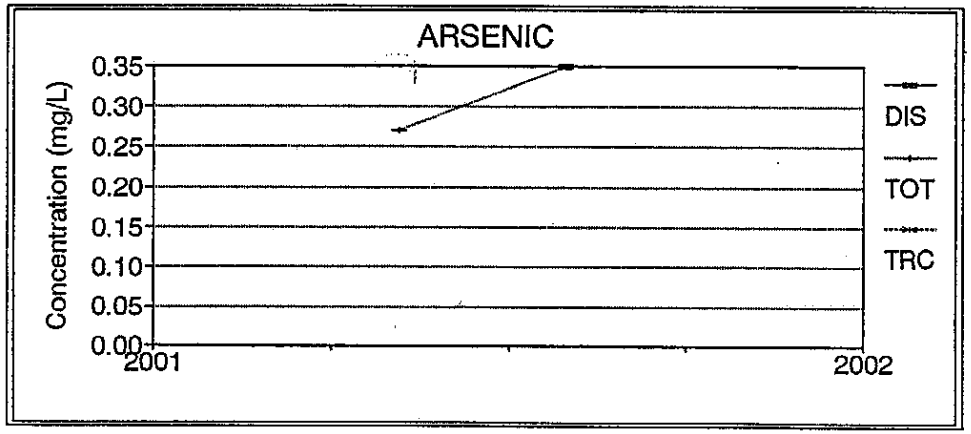


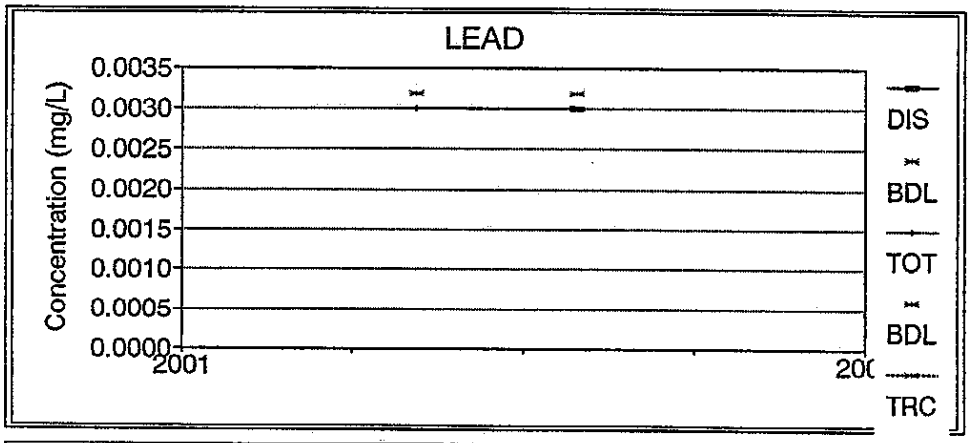


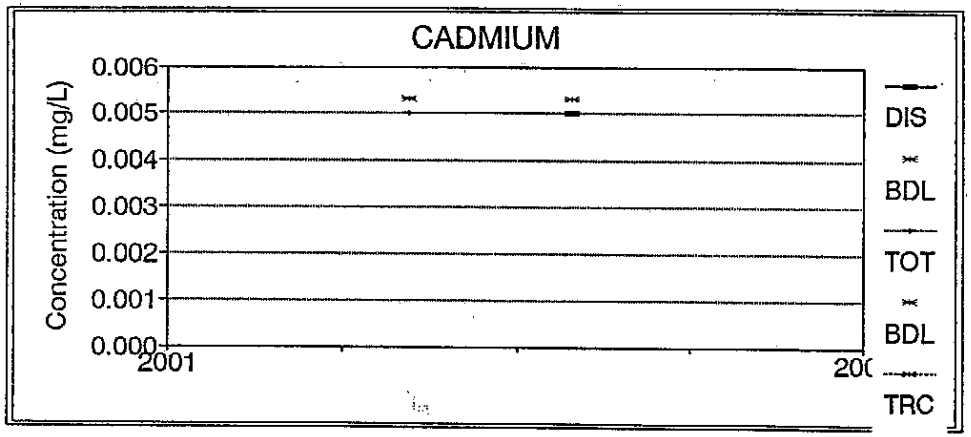


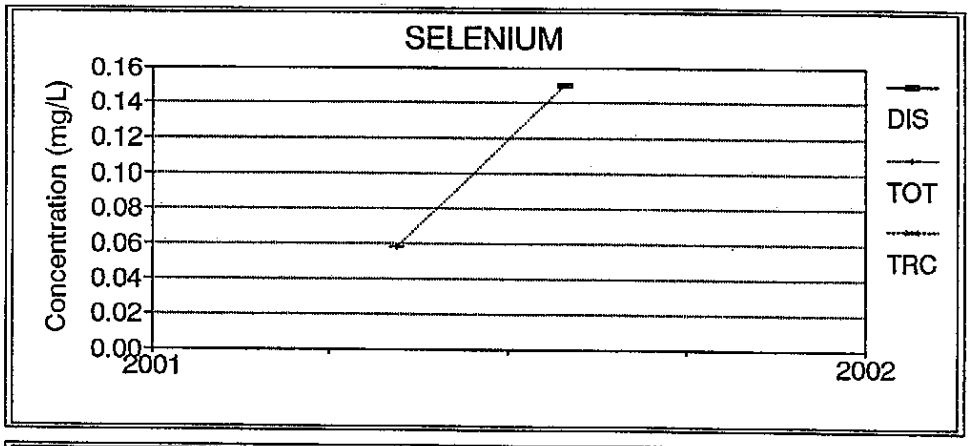
BDL - Below Analytical Detection Limit

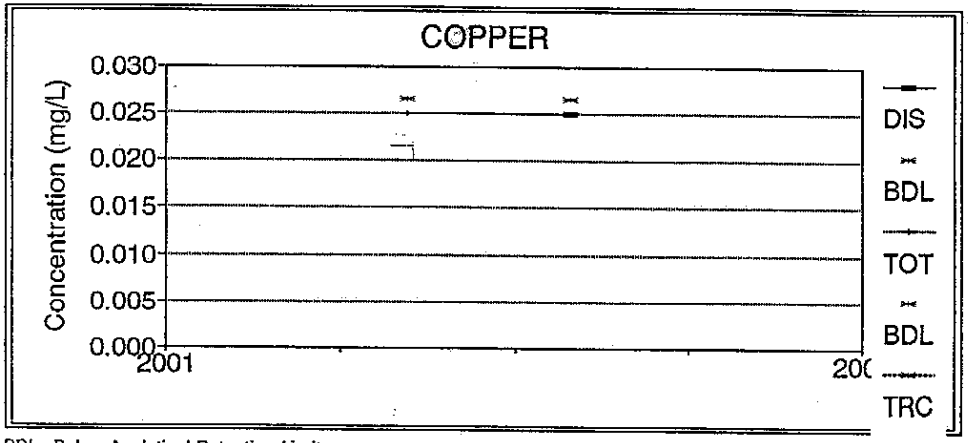
EP-

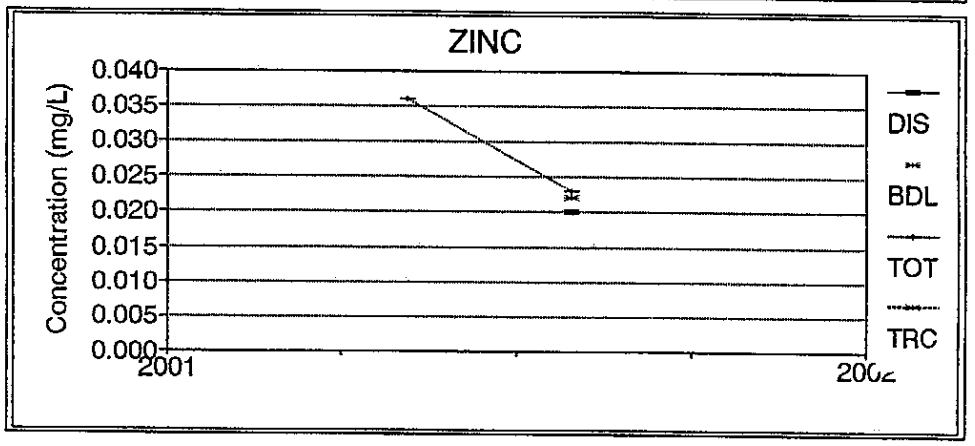






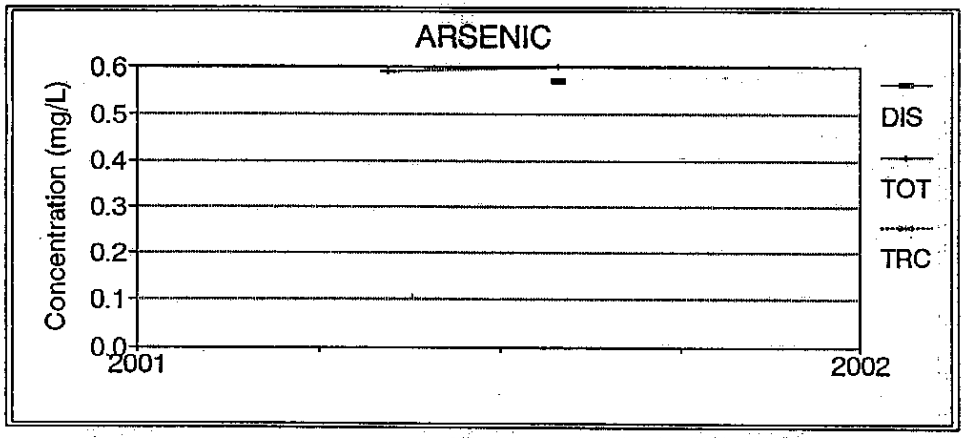


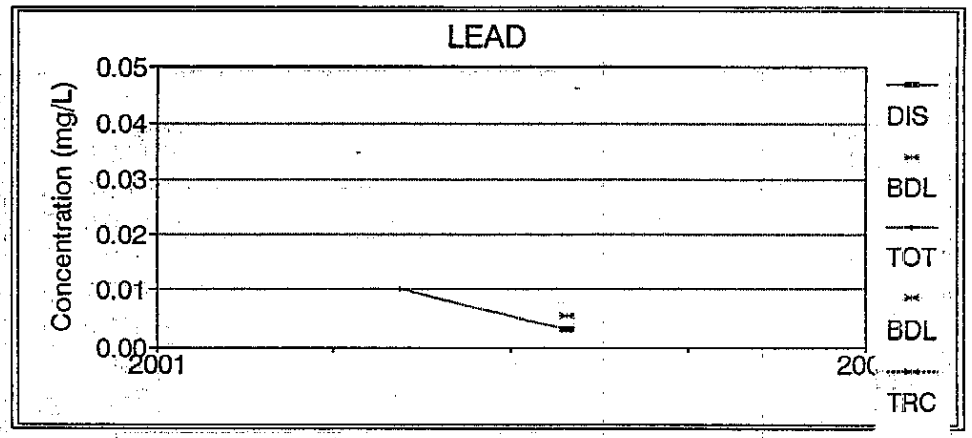


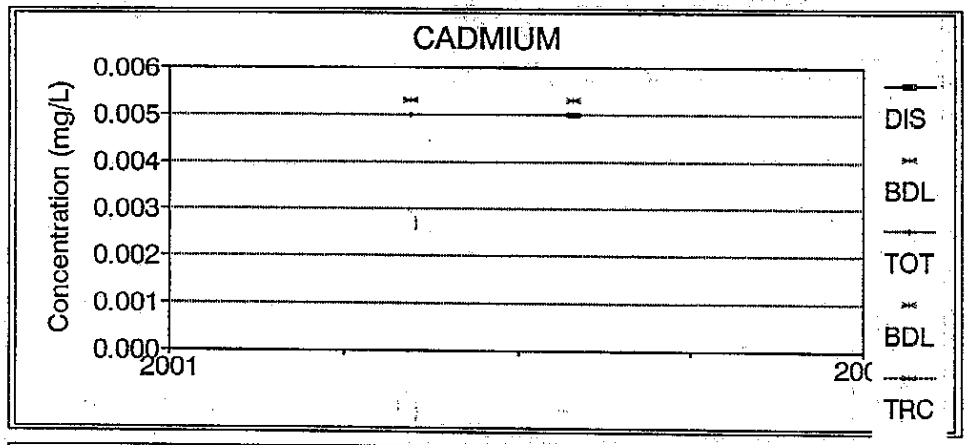


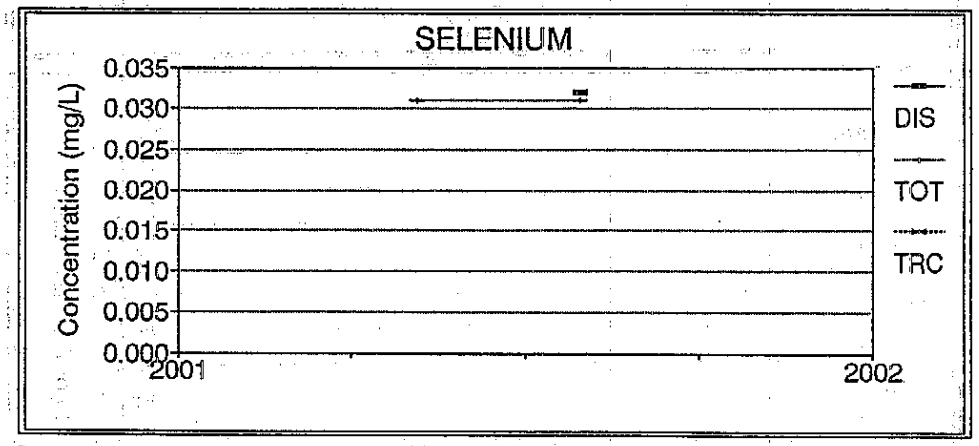
BDL - Below Analytical Detection Limit

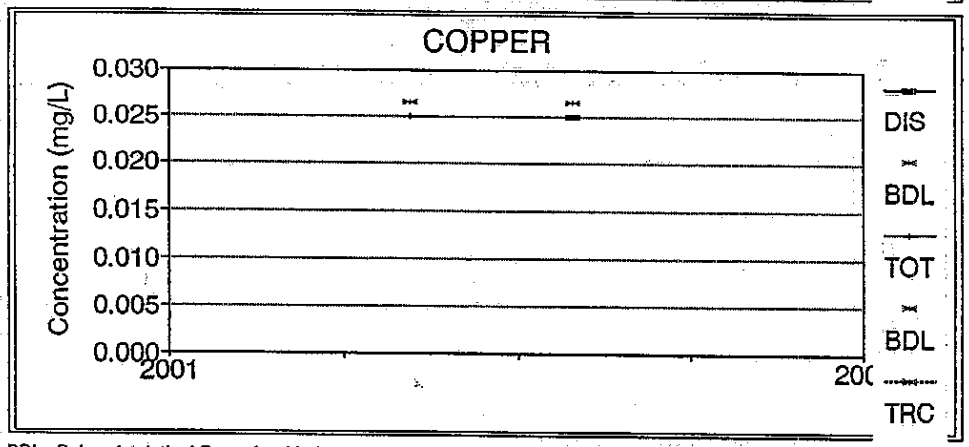
EP-121

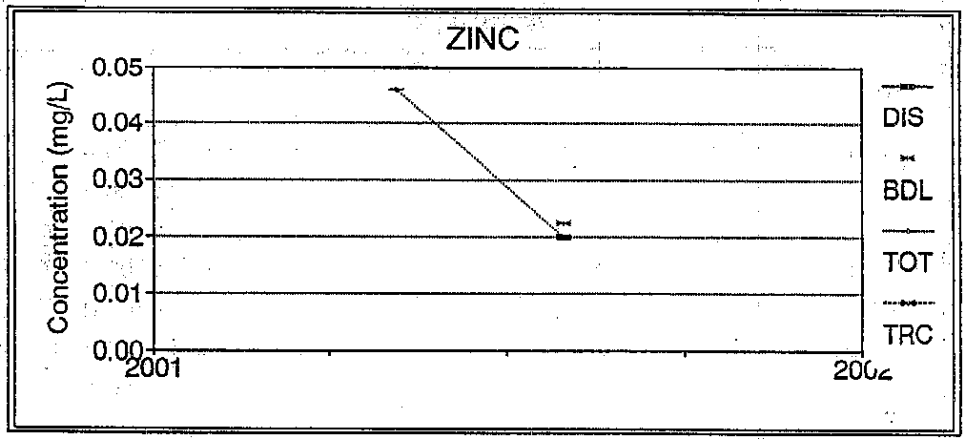






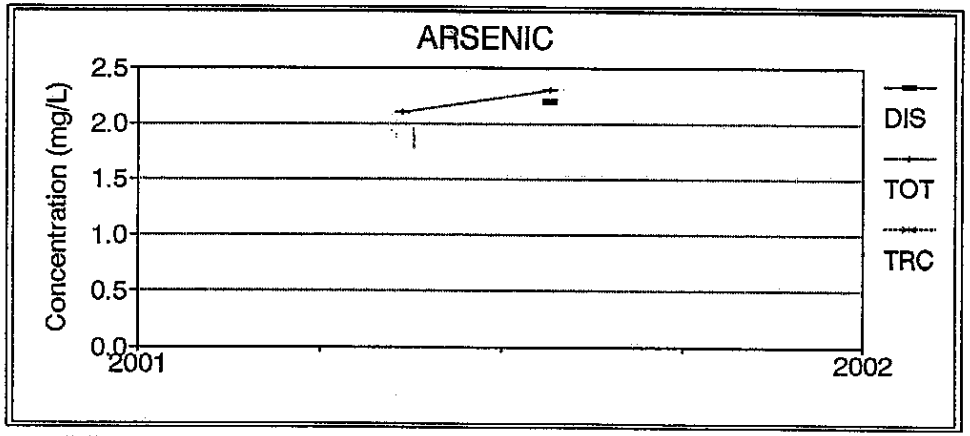


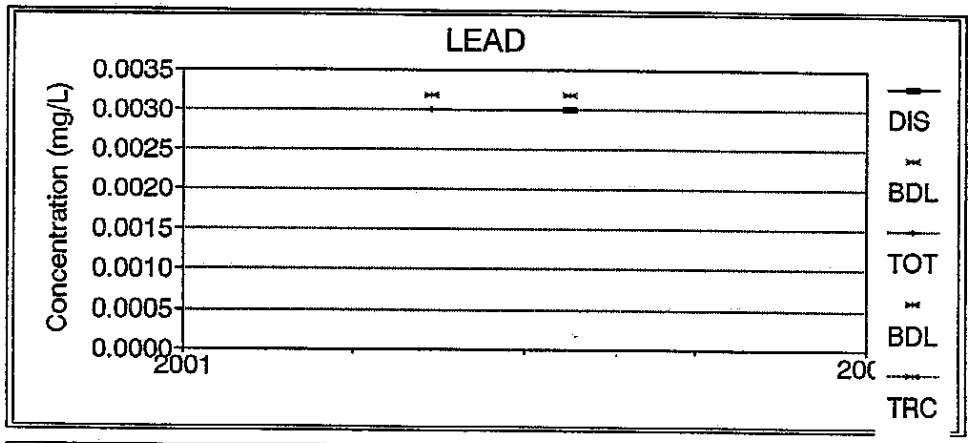


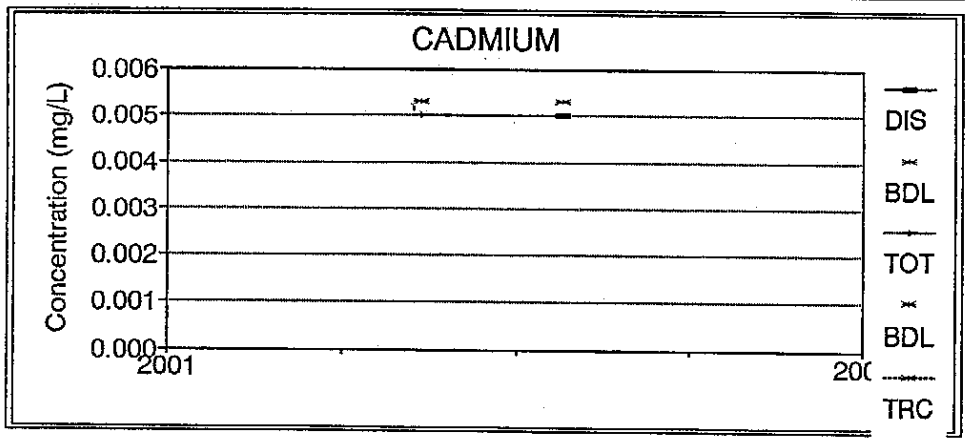


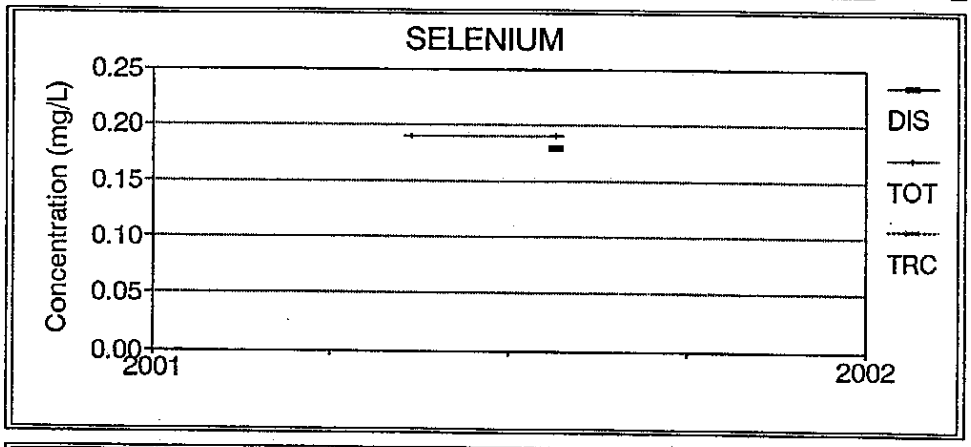
BDL - Below Analytical Detection Limit

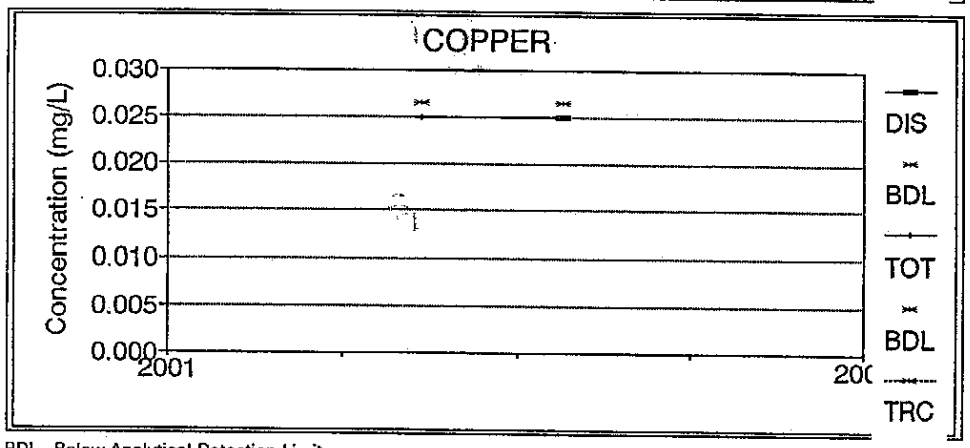
EP-

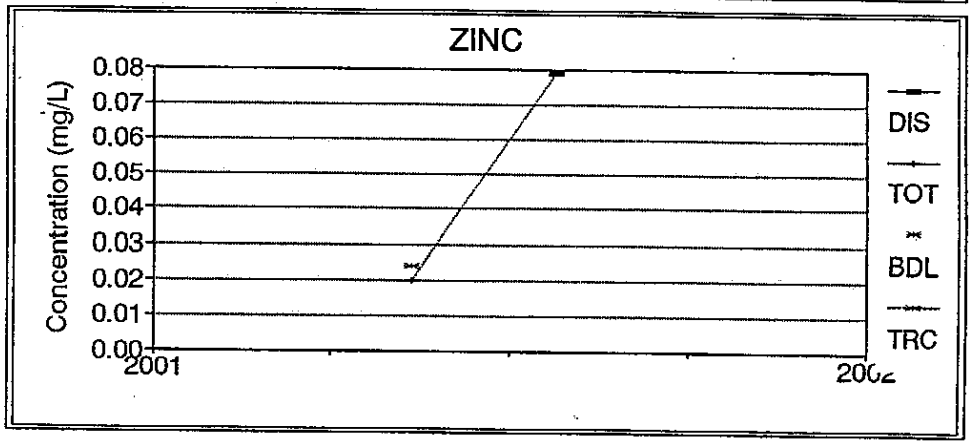






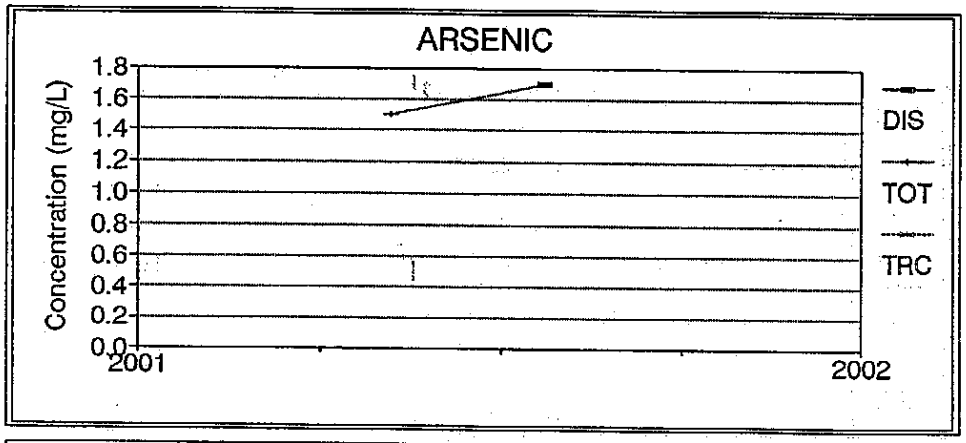


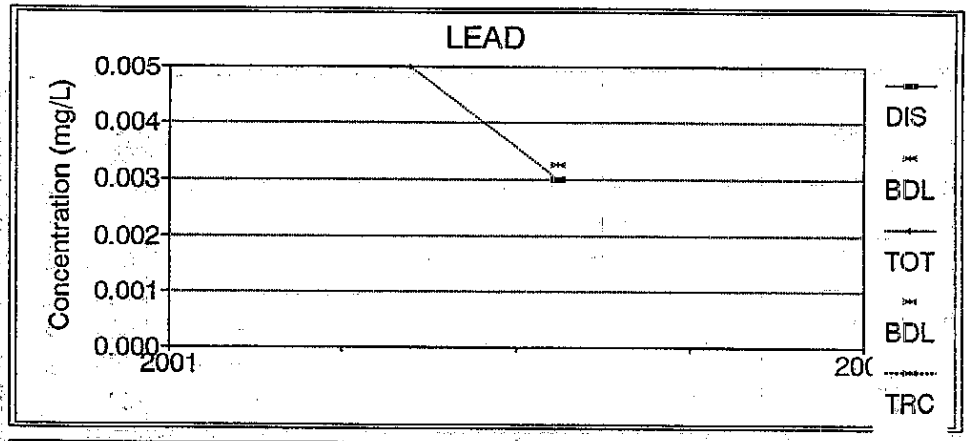


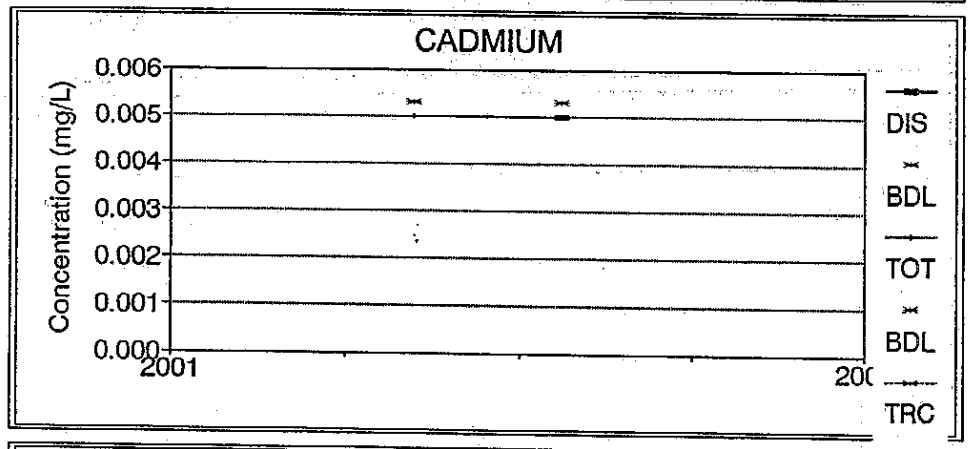


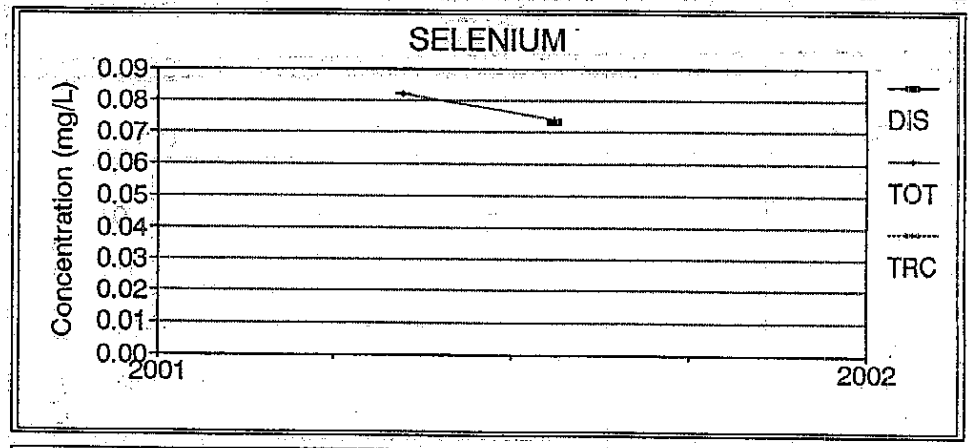
BDL - Below Analytical Detection Limit

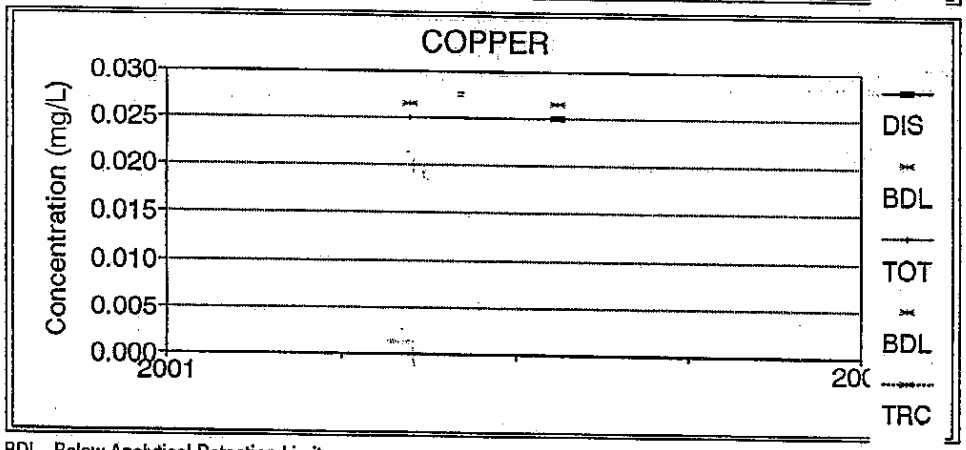
EP-123

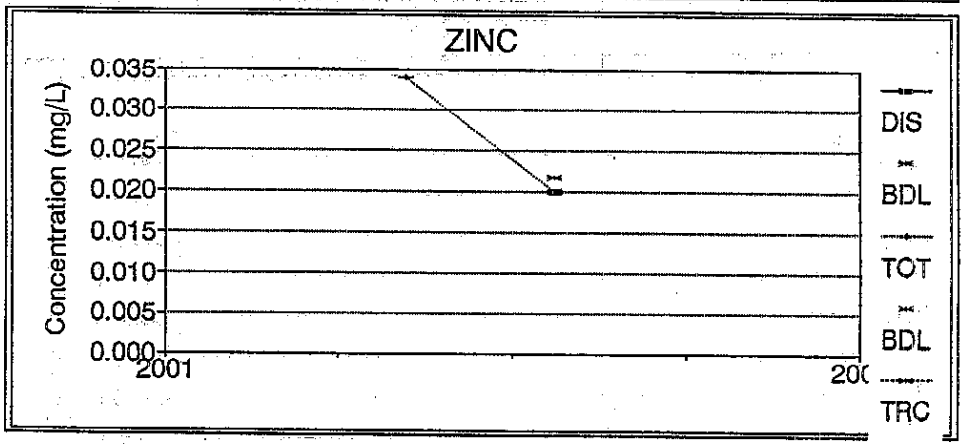






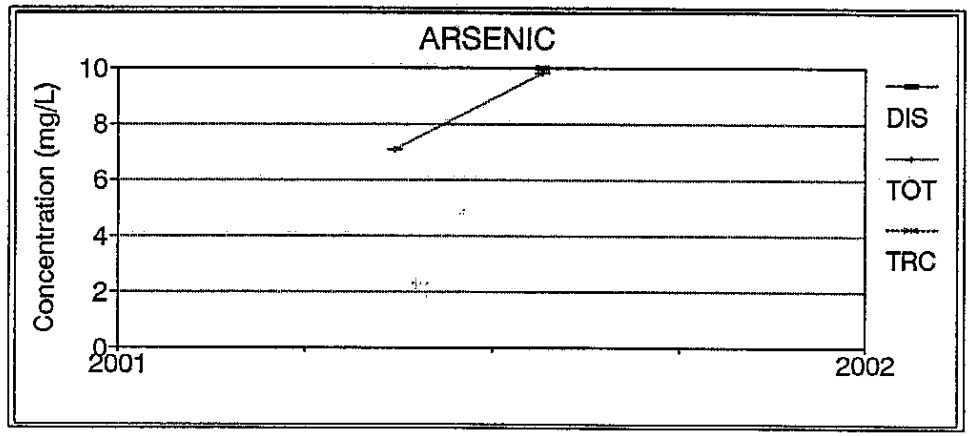


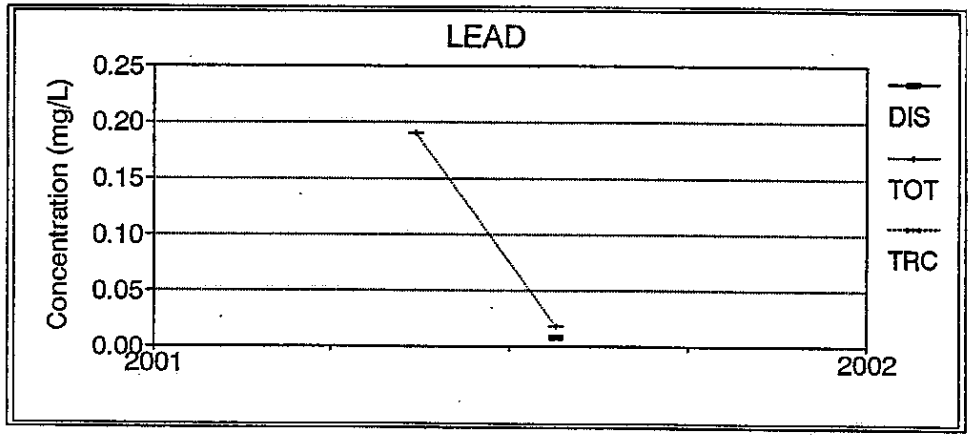


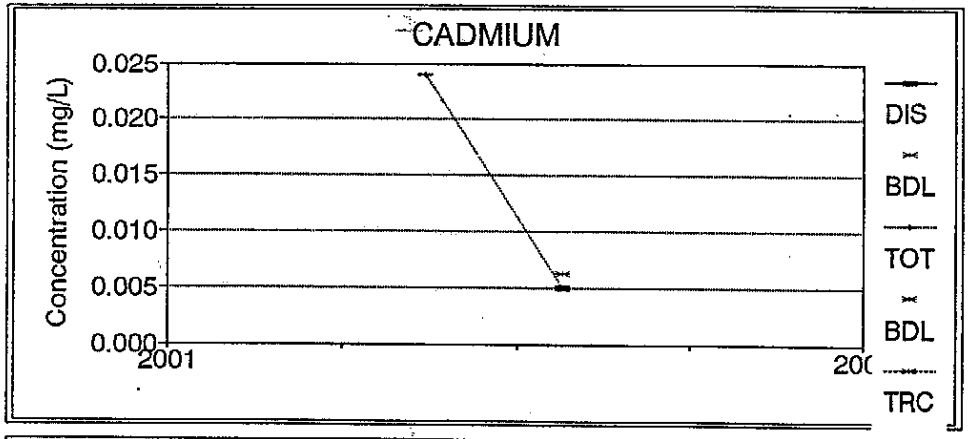


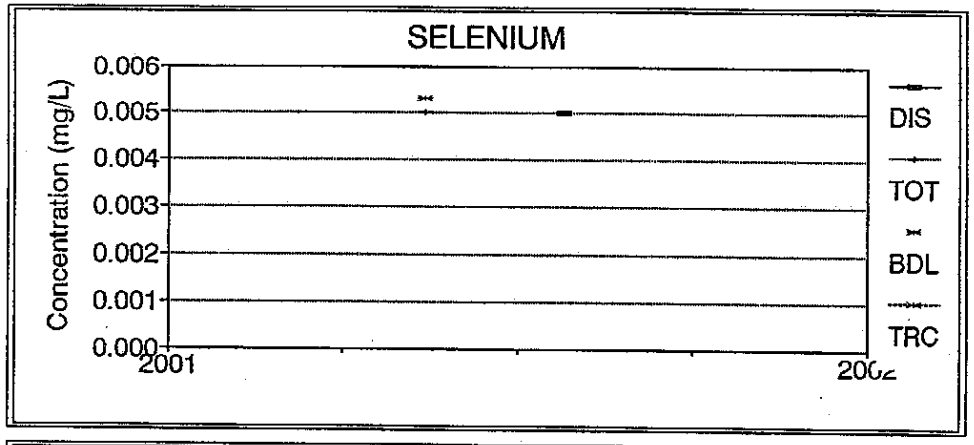
BDL - Below Analytical Detection Limit

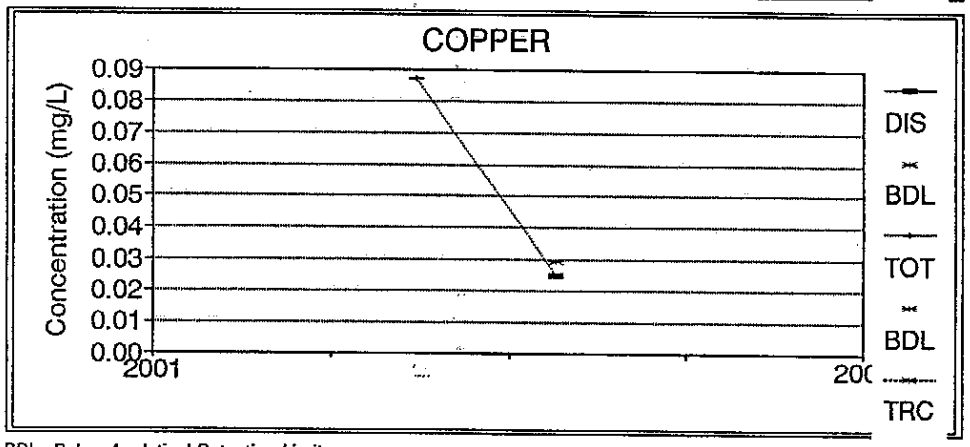
EP-

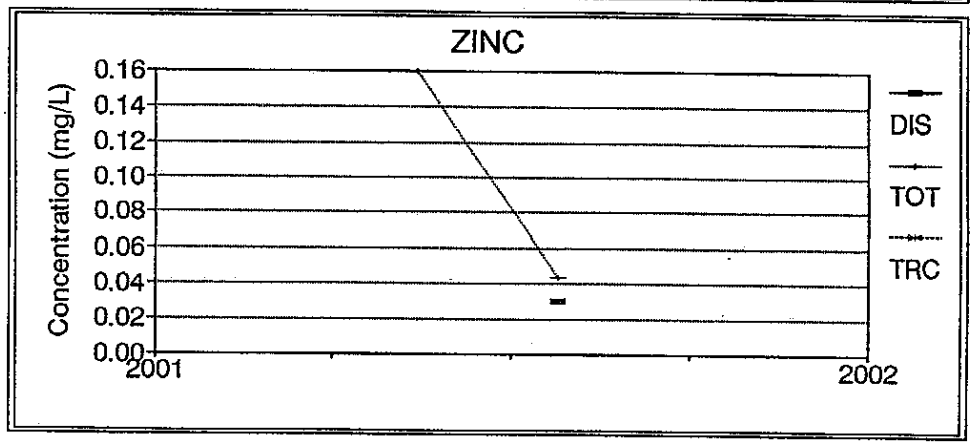












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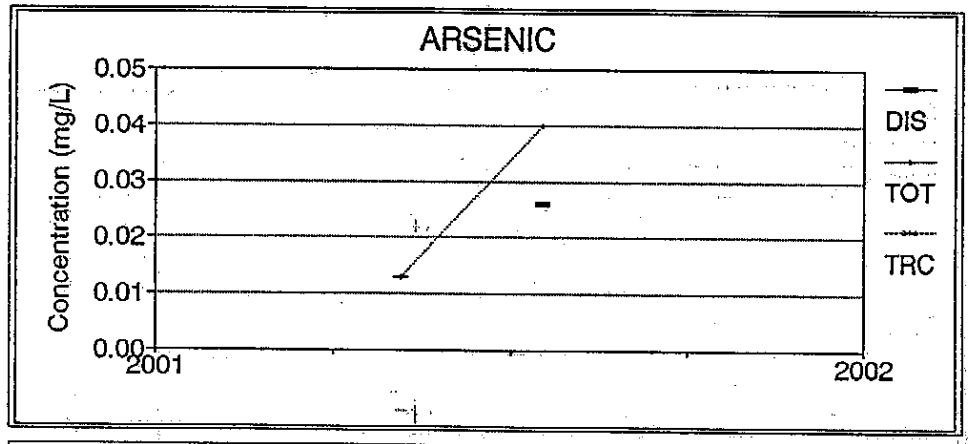
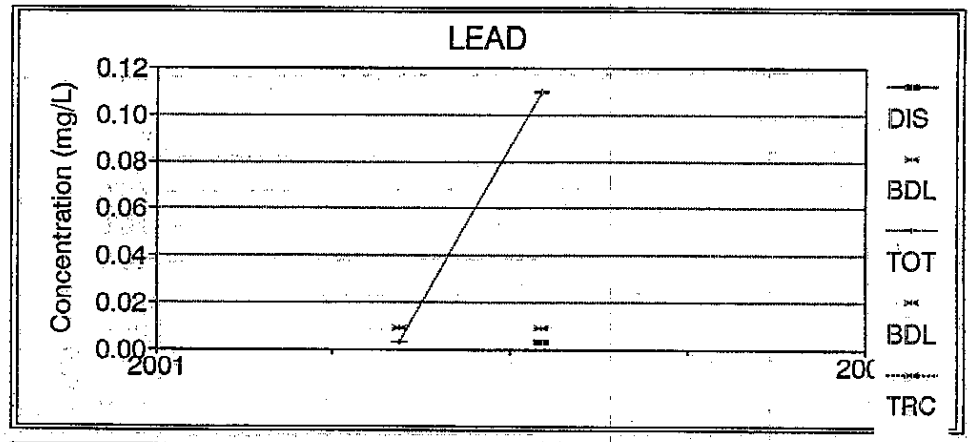
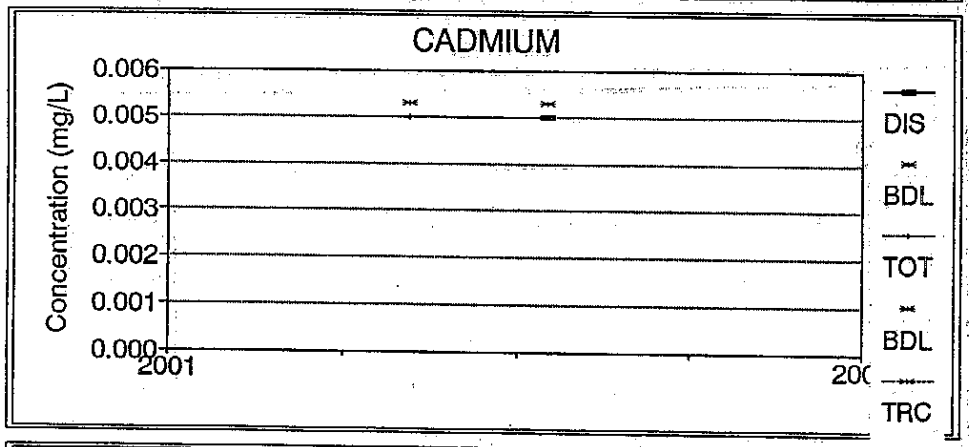
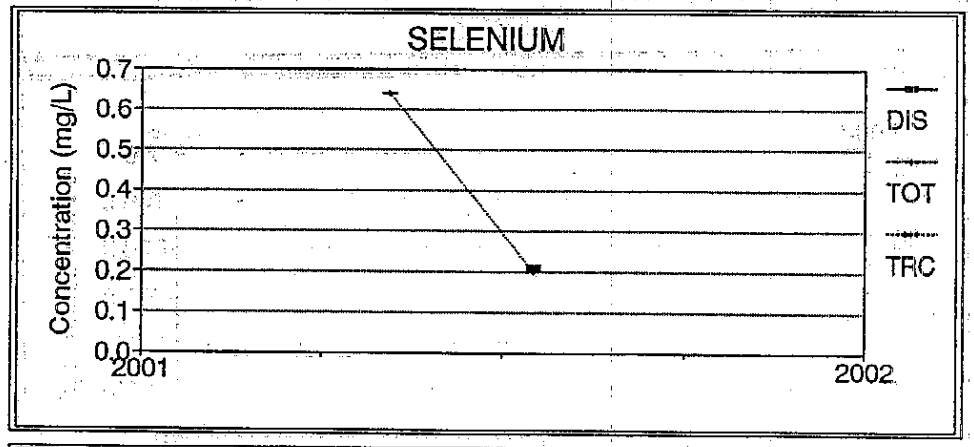
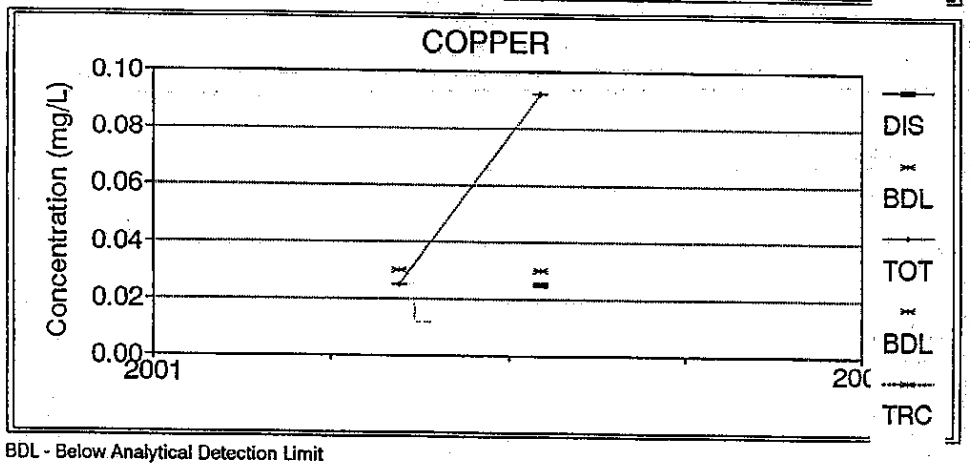
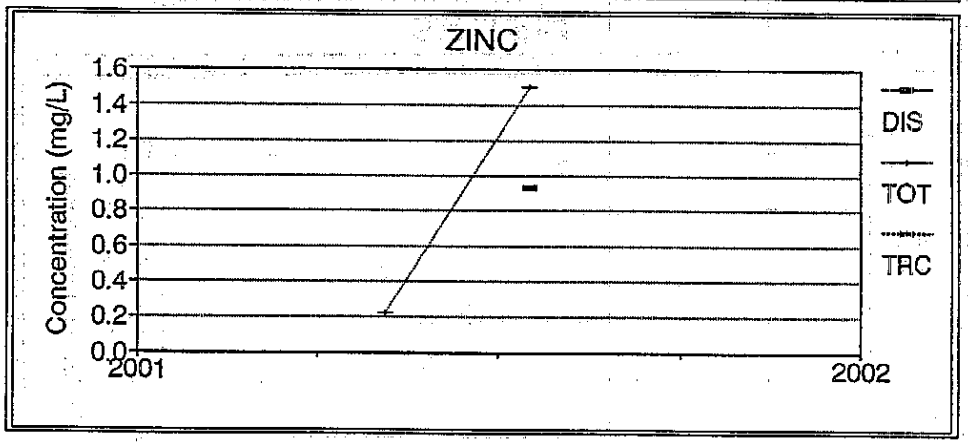






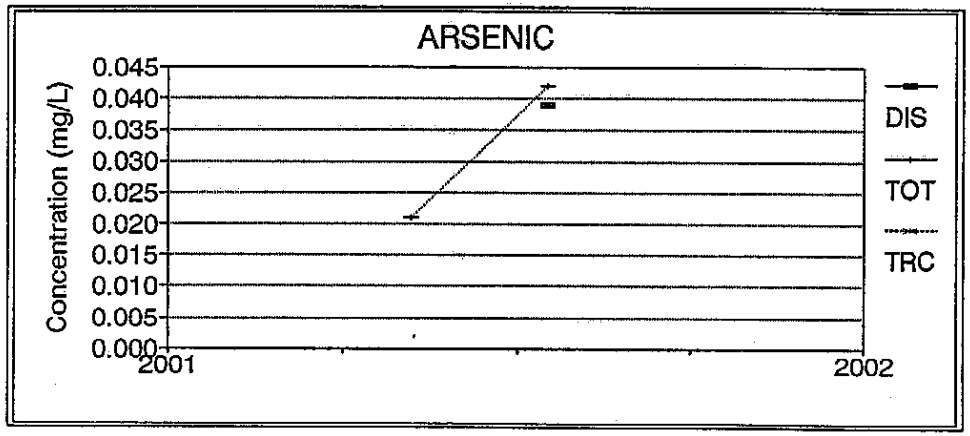


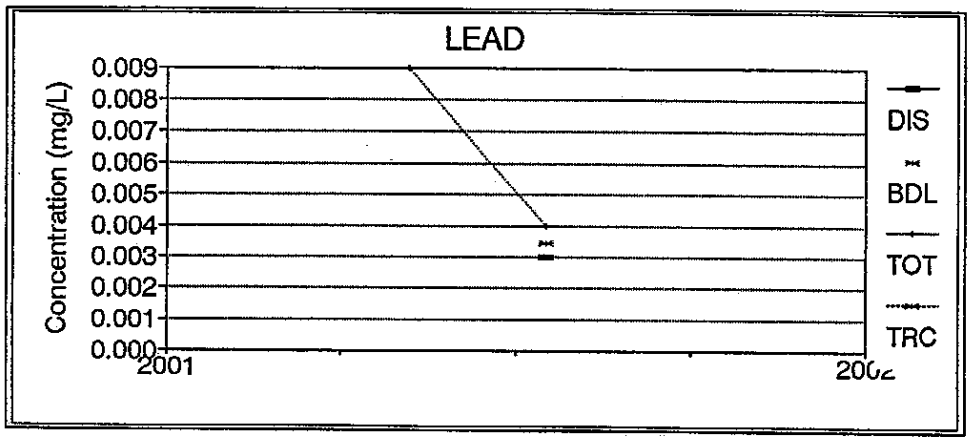


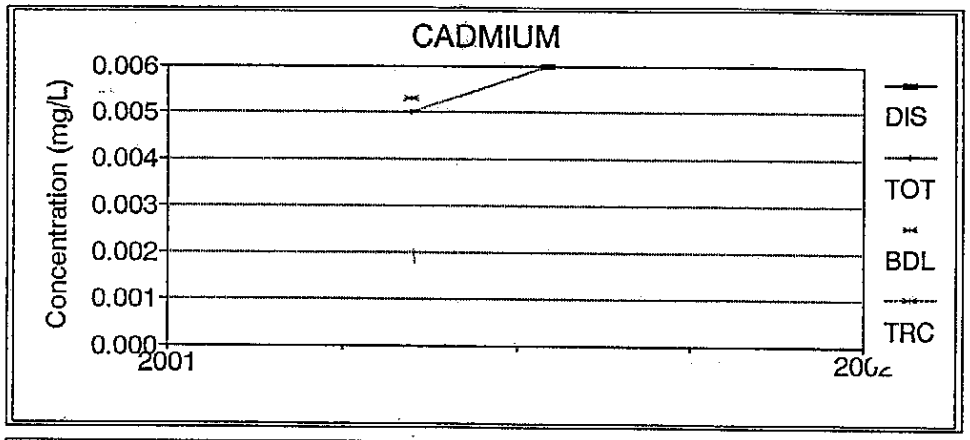


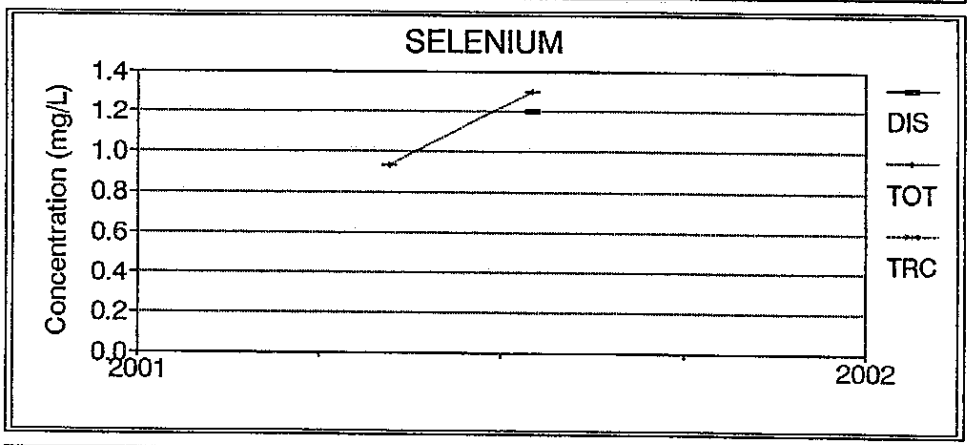
BDL - Below Analytical Detection Limit

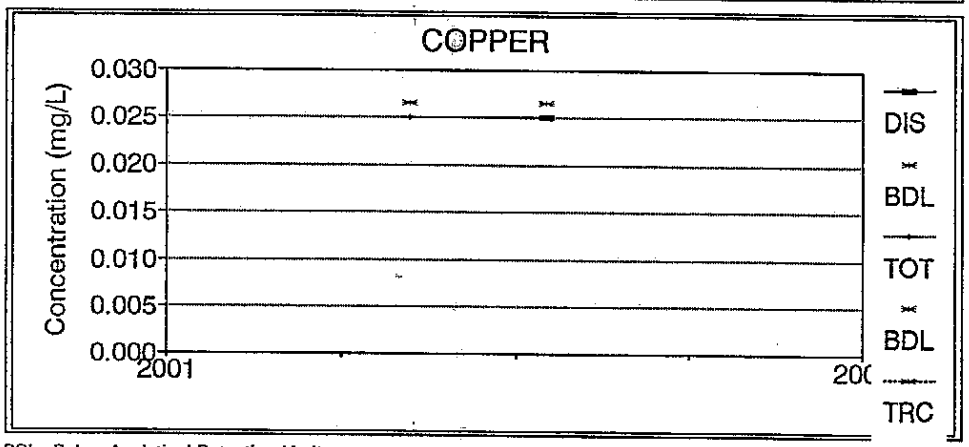
EP-

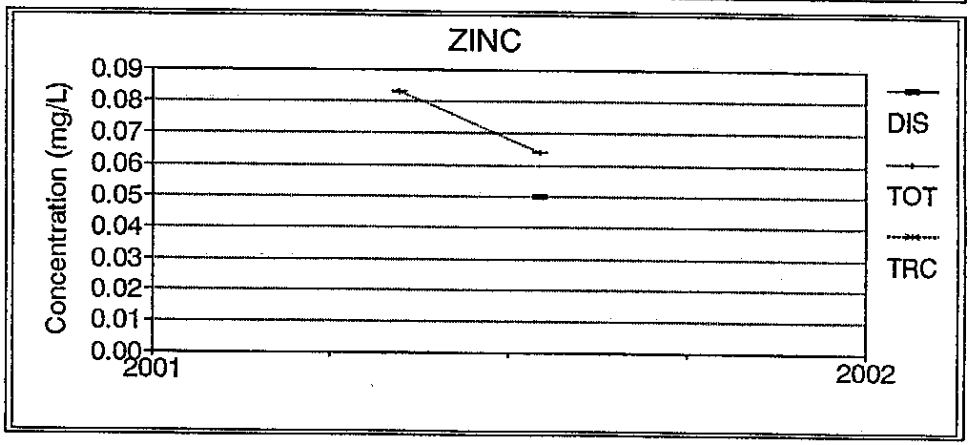












BDL - Below Analytical Detection Limit

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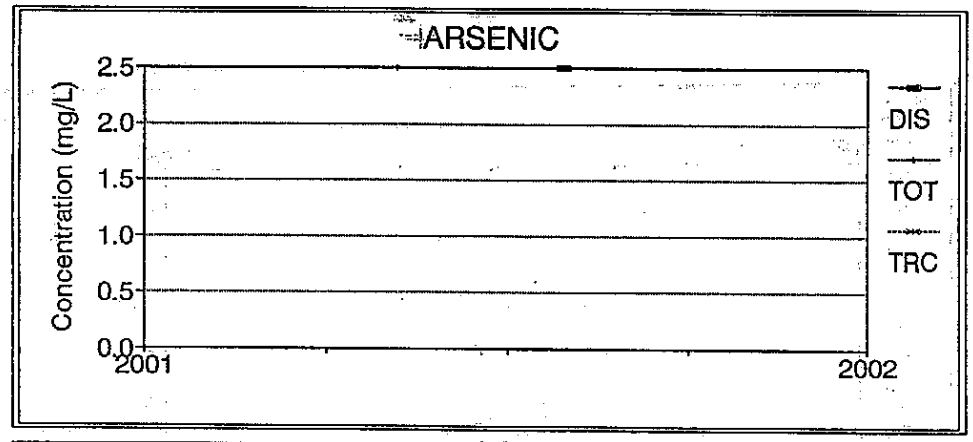
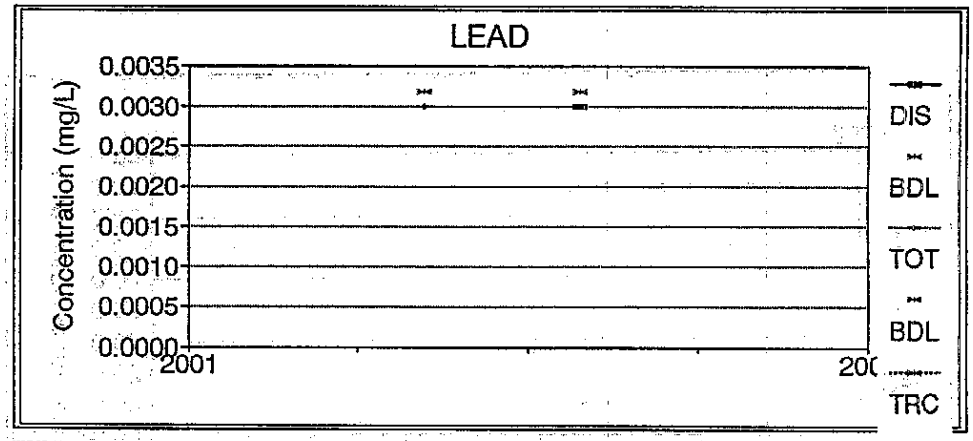
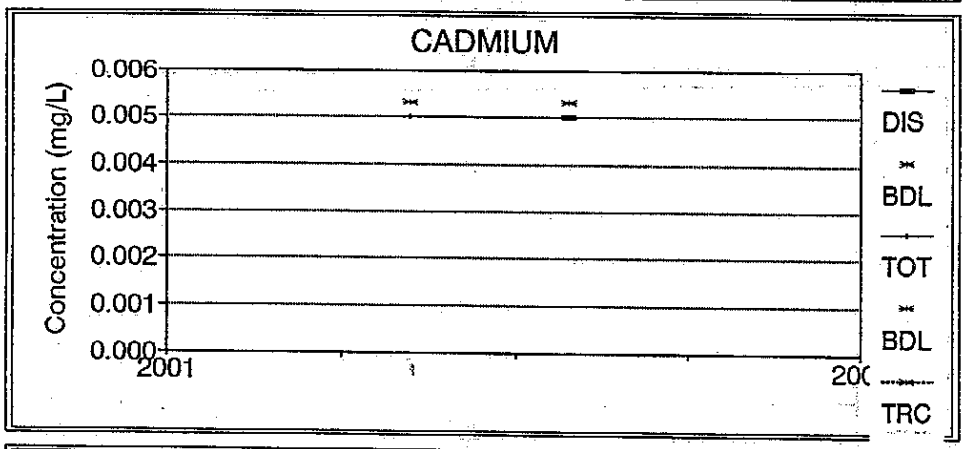
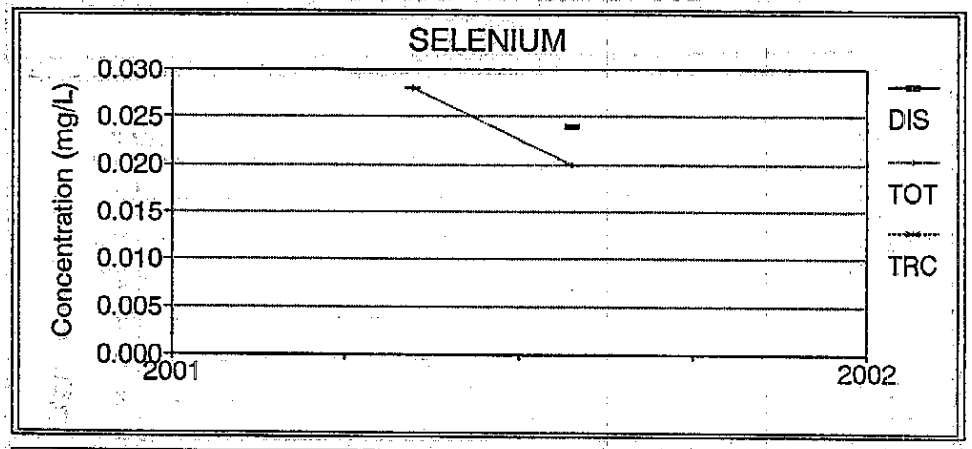
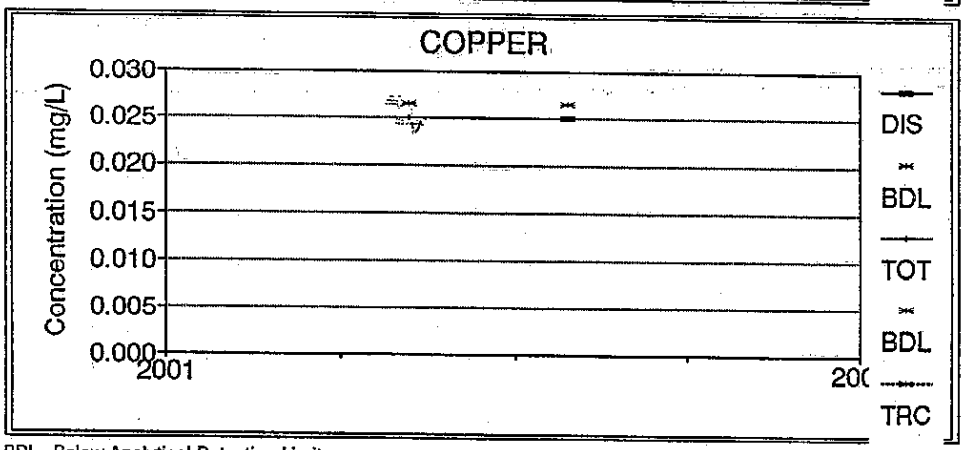
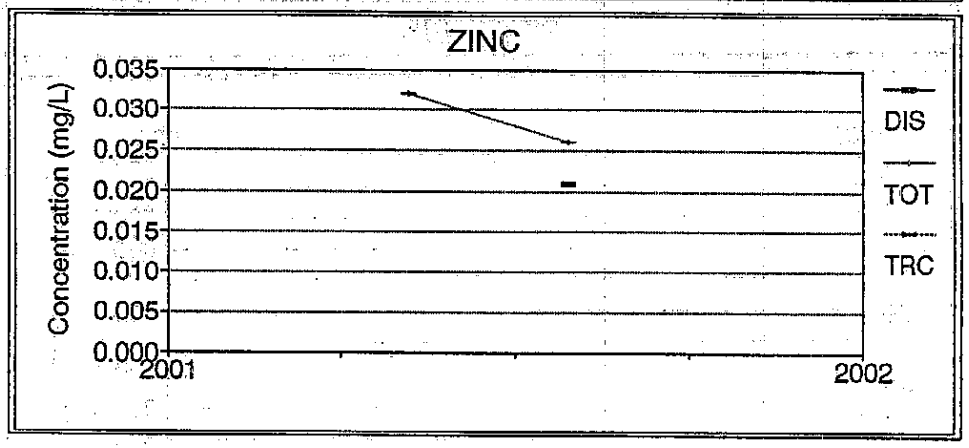






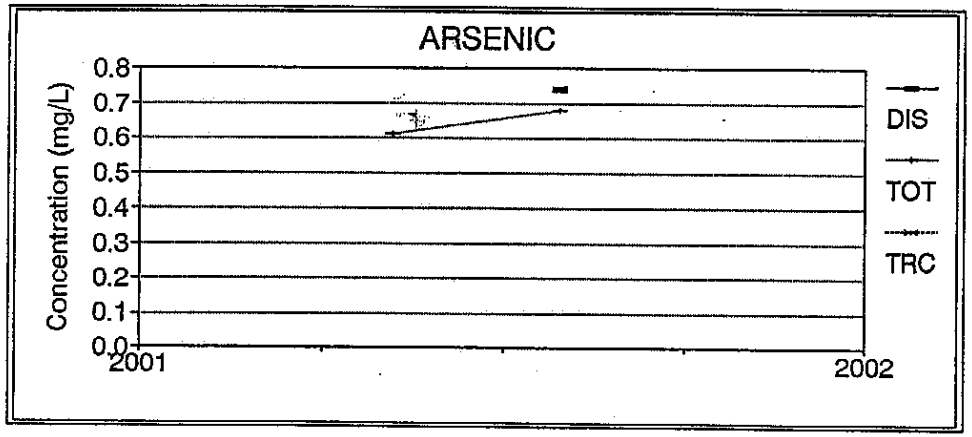


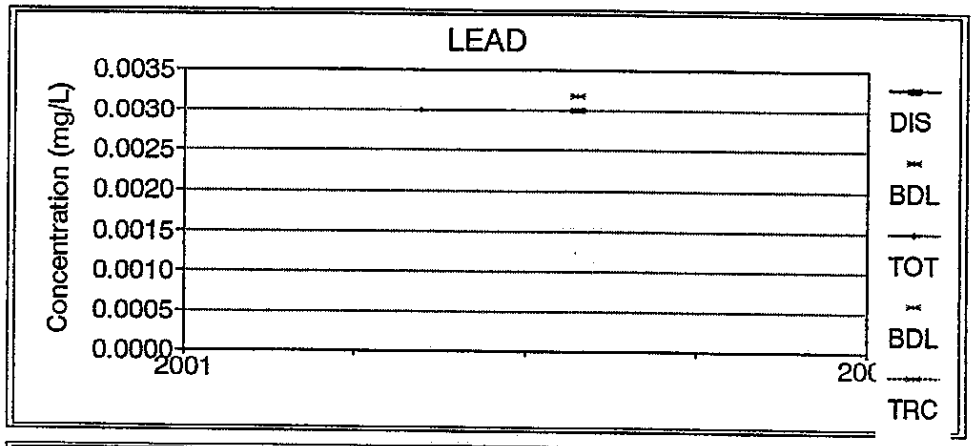


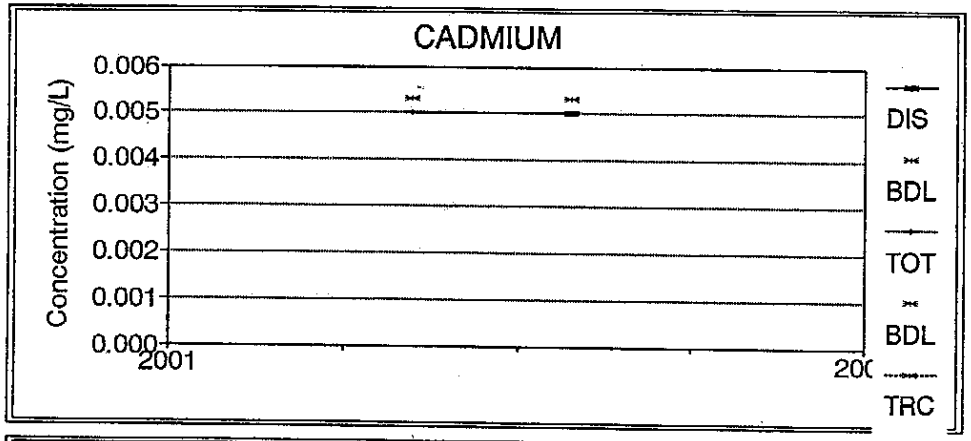


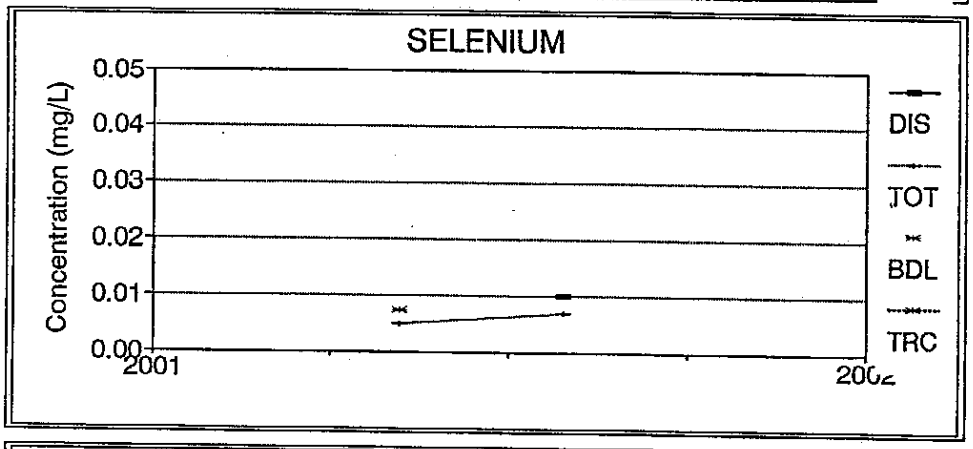
BDL - Below Analytical Detection Limit

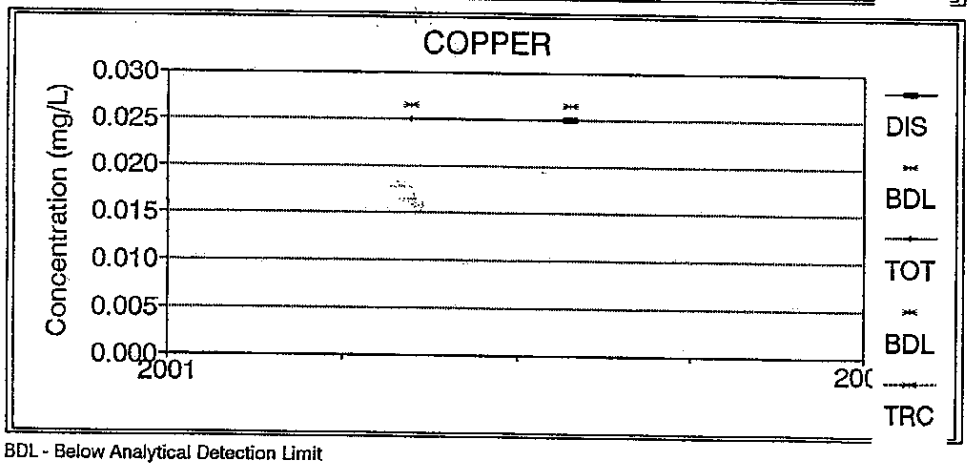
EP-

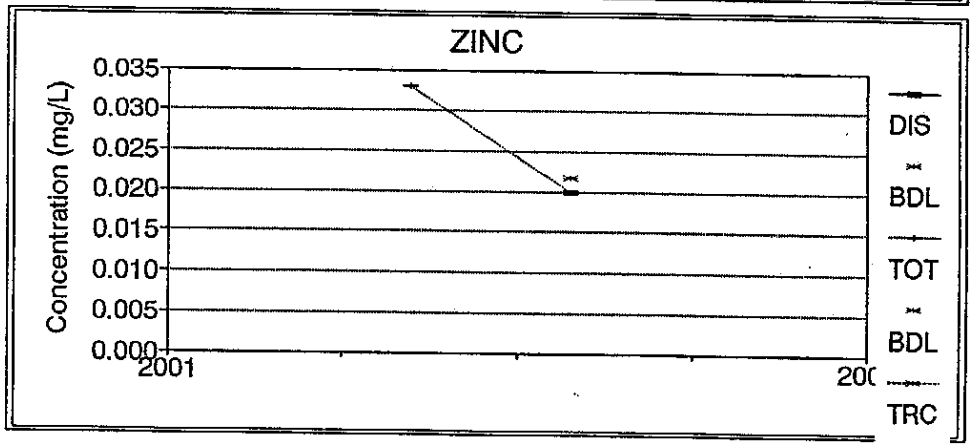












BDL - Below Analytical Detection Limit

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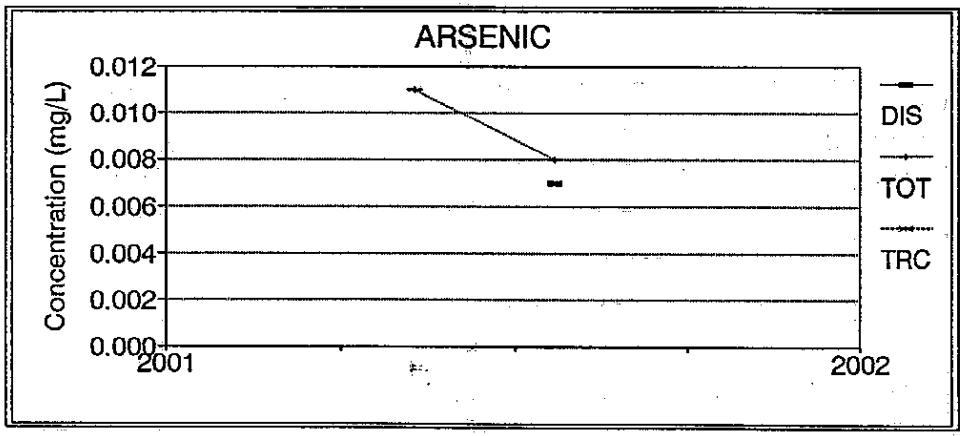
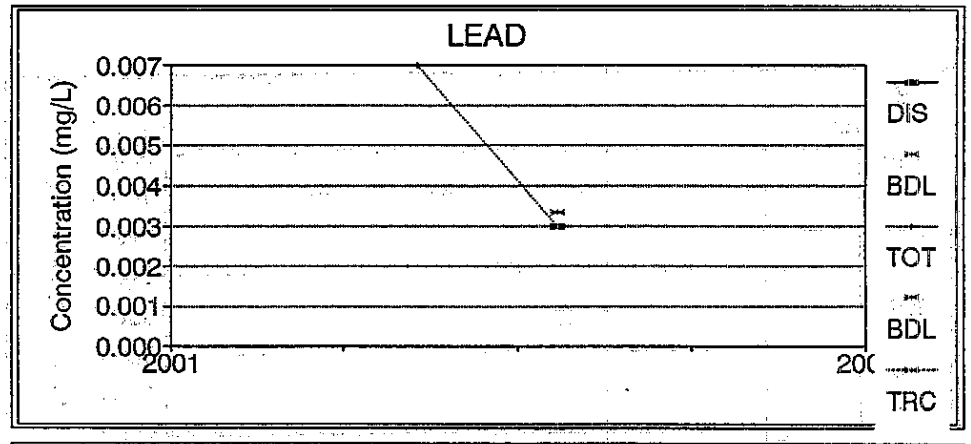
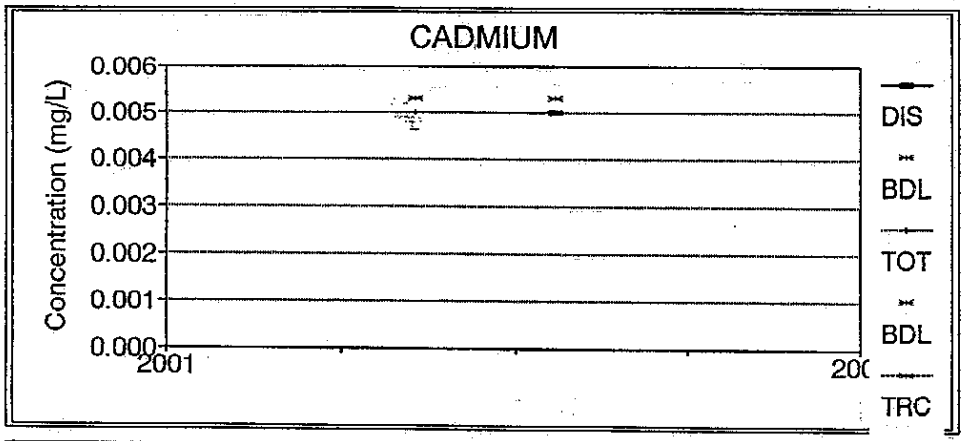
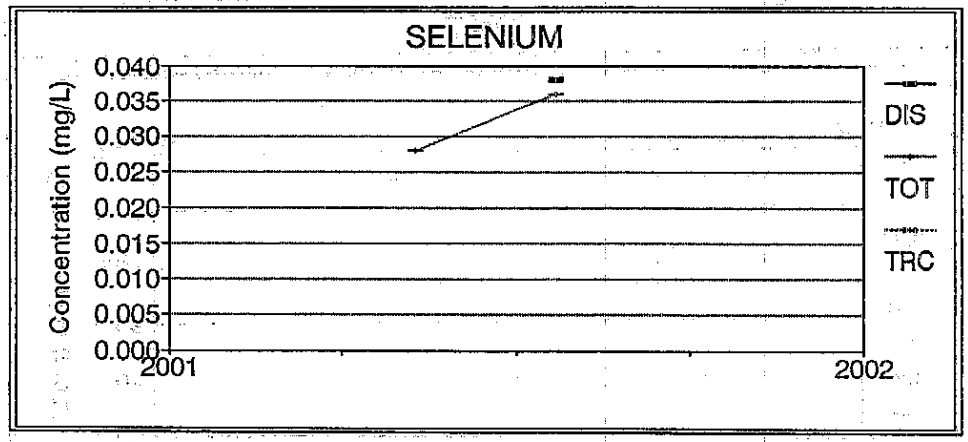
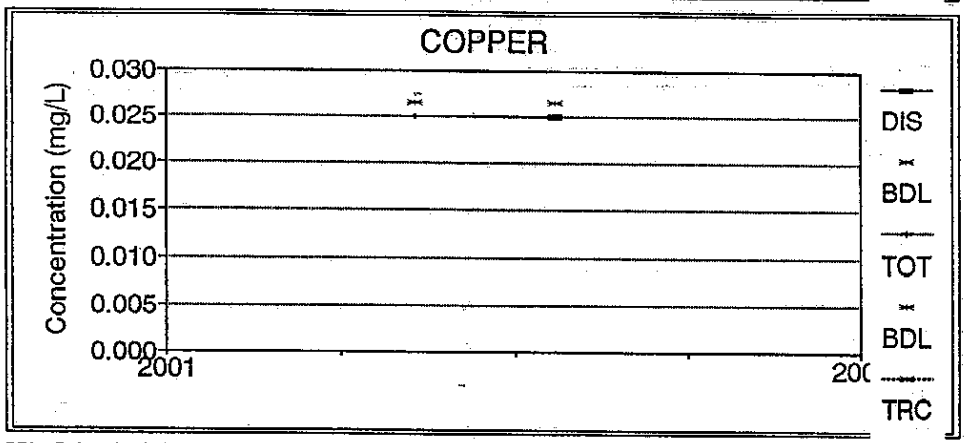
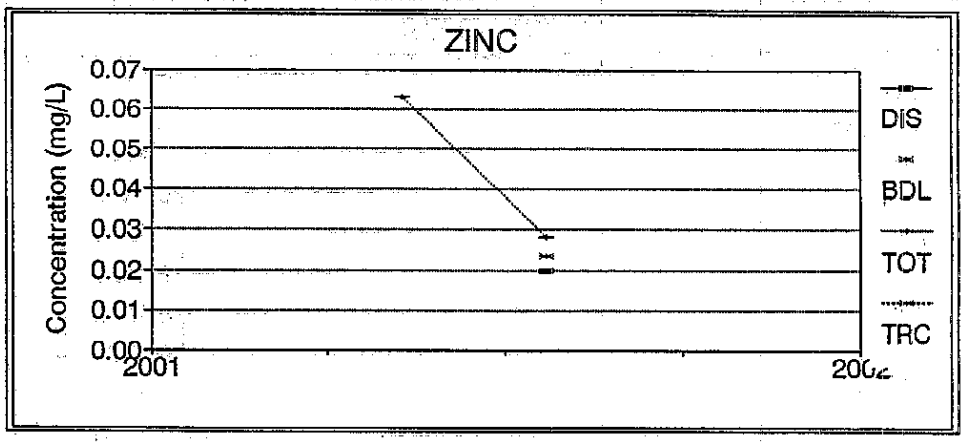






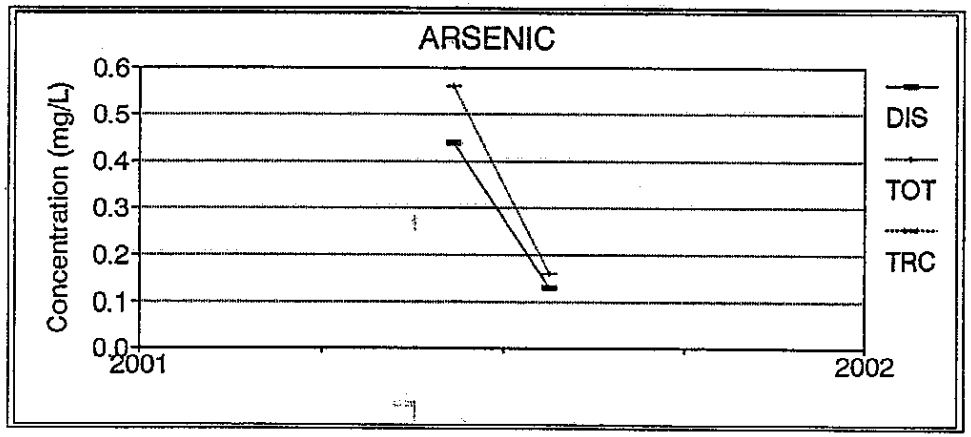


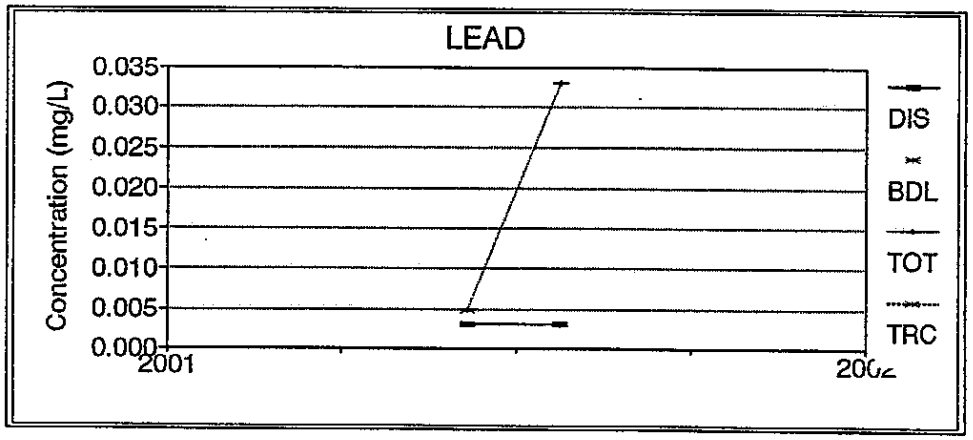


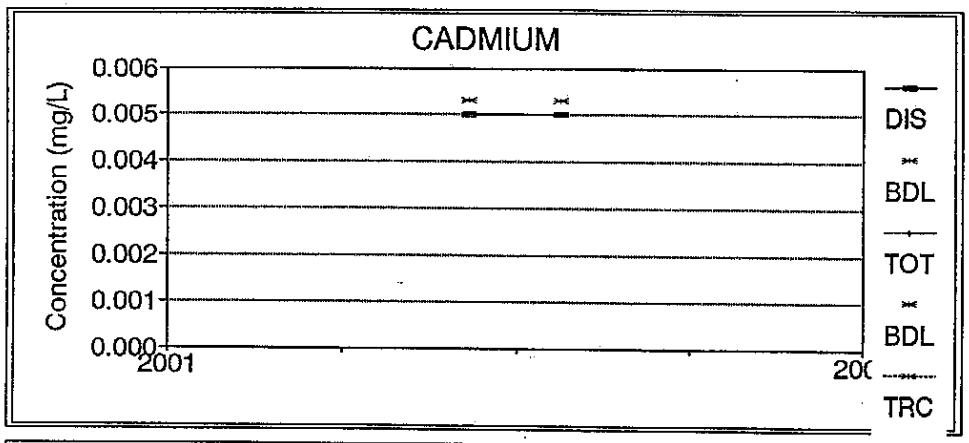


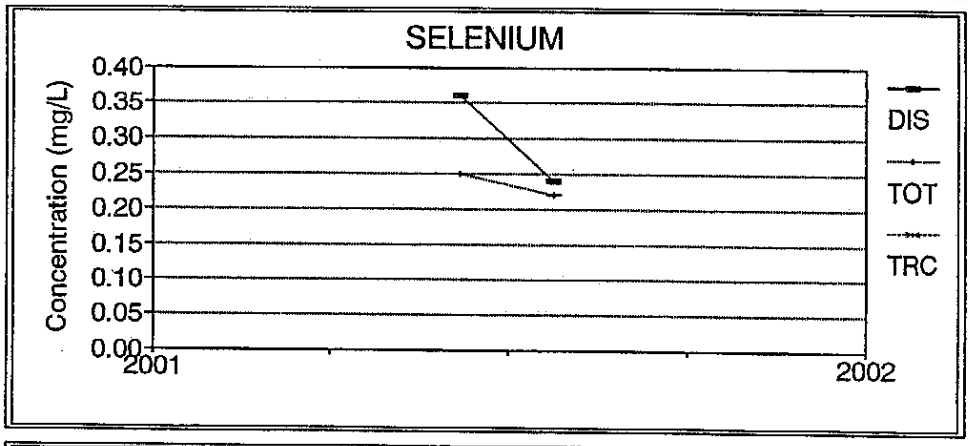
BDL - Below Analytical Detection Limit

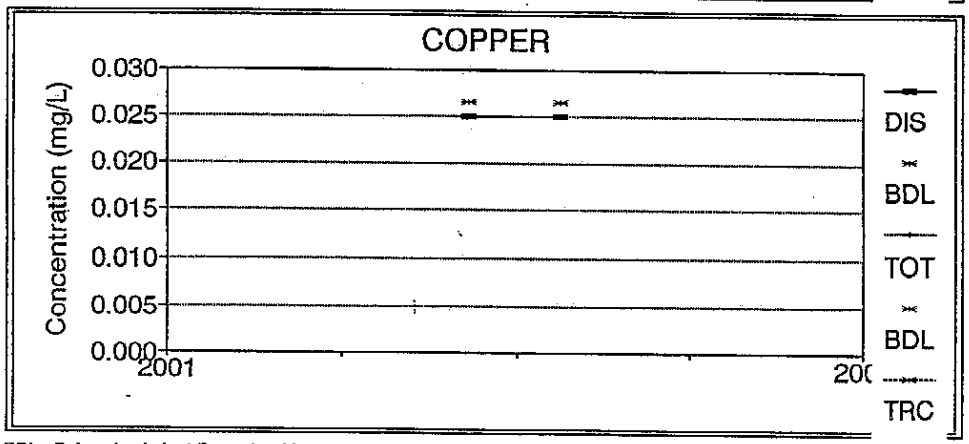
EP-

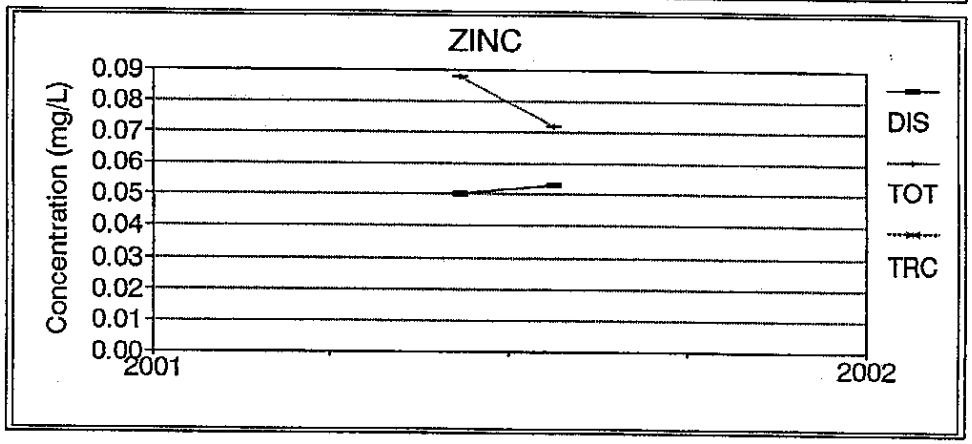












BDL - Below Analytical Detection Limit

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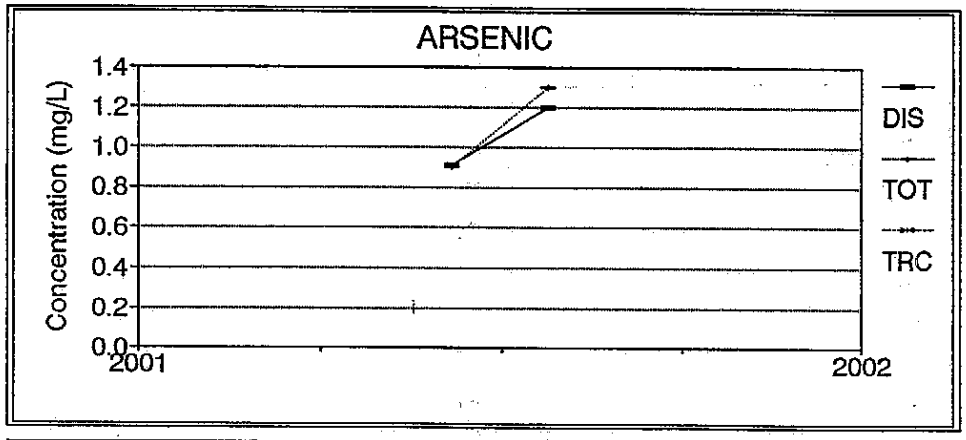

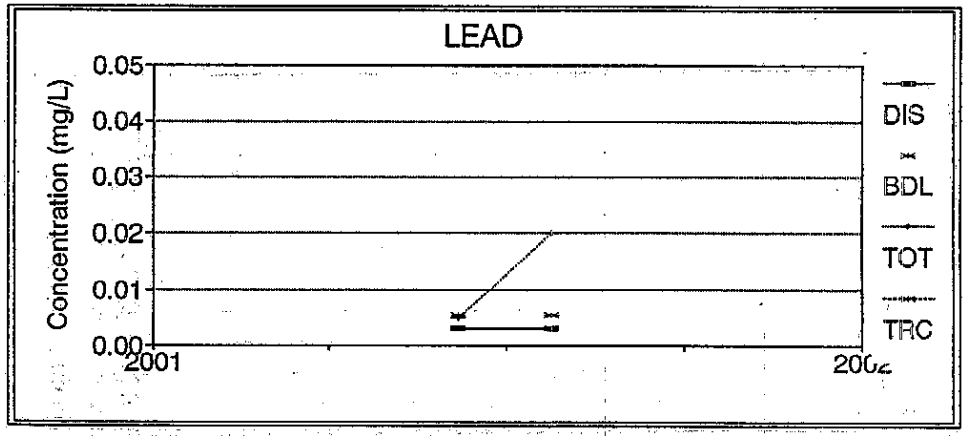

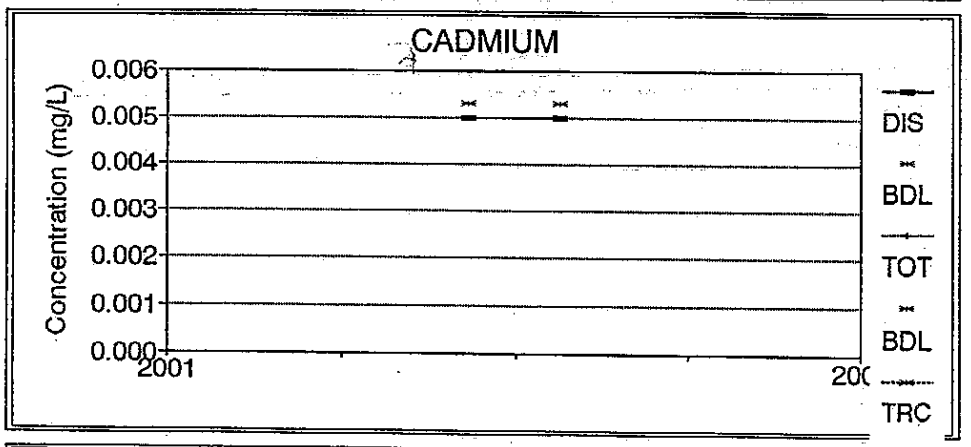

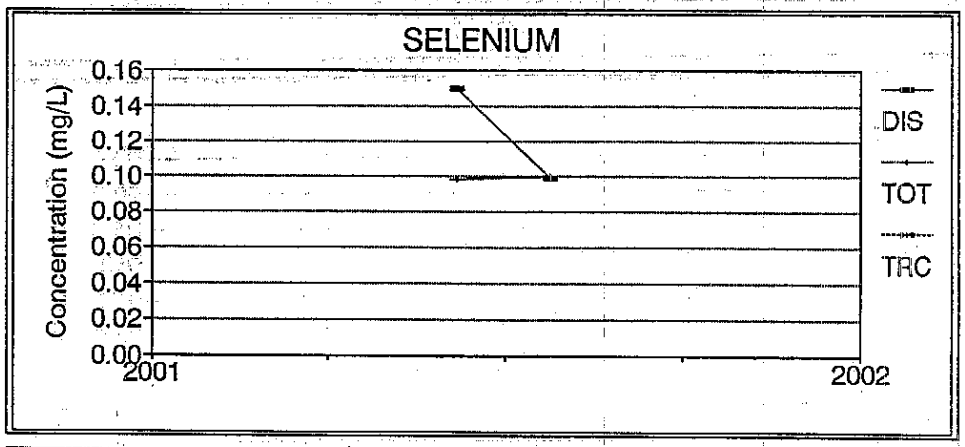

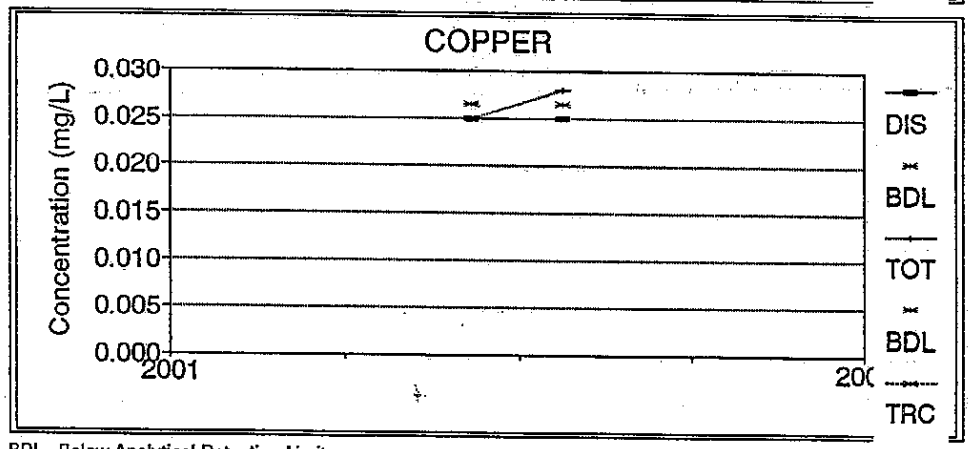

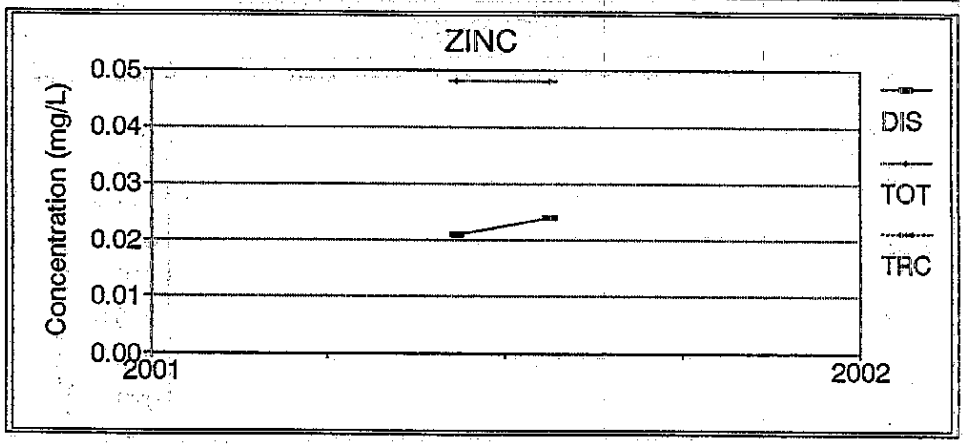

BDL - Below Analytical Detection Limit

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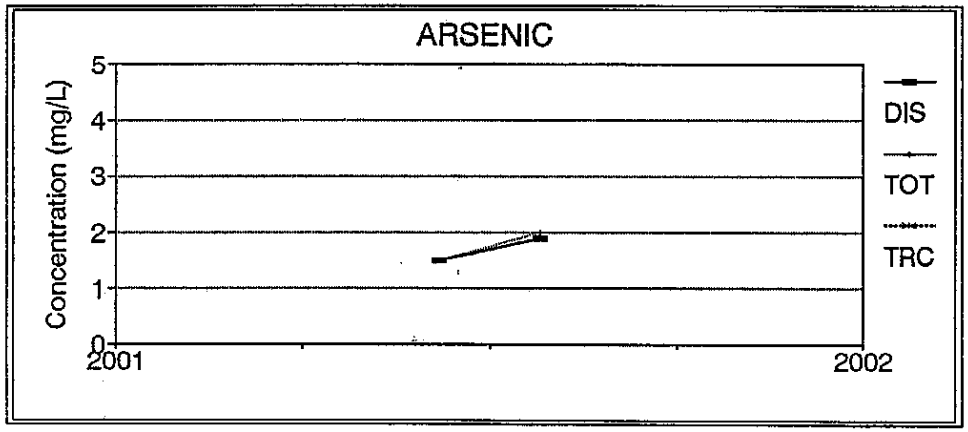
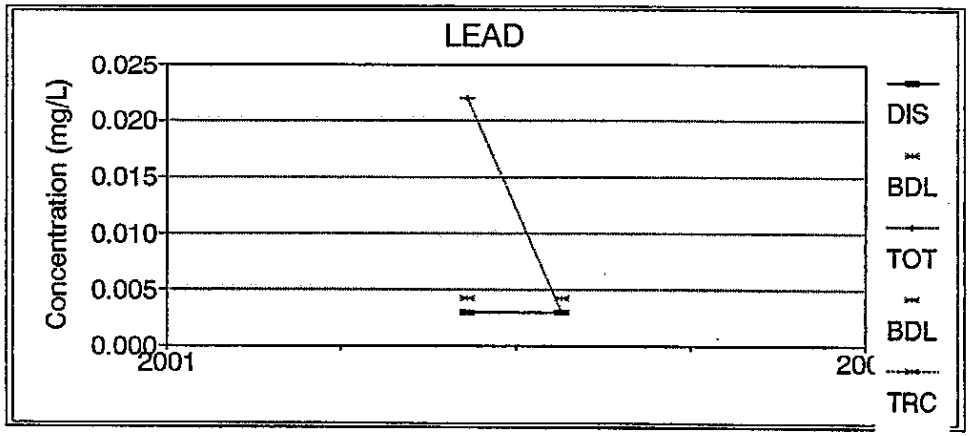
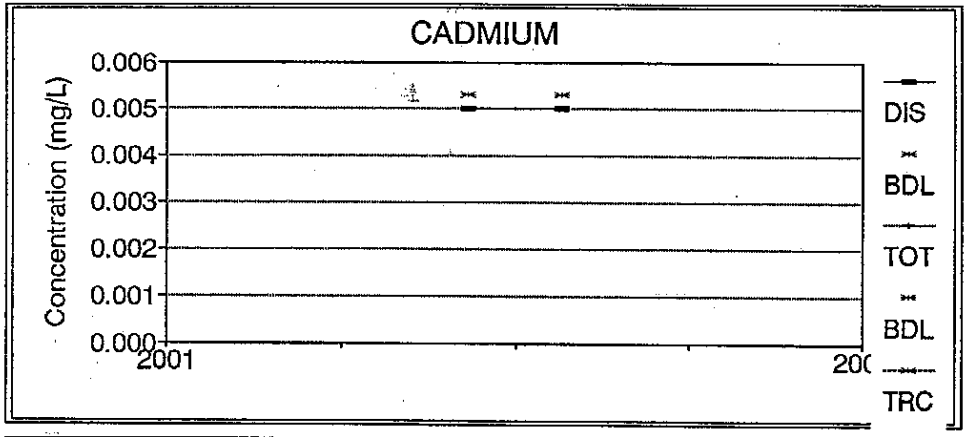
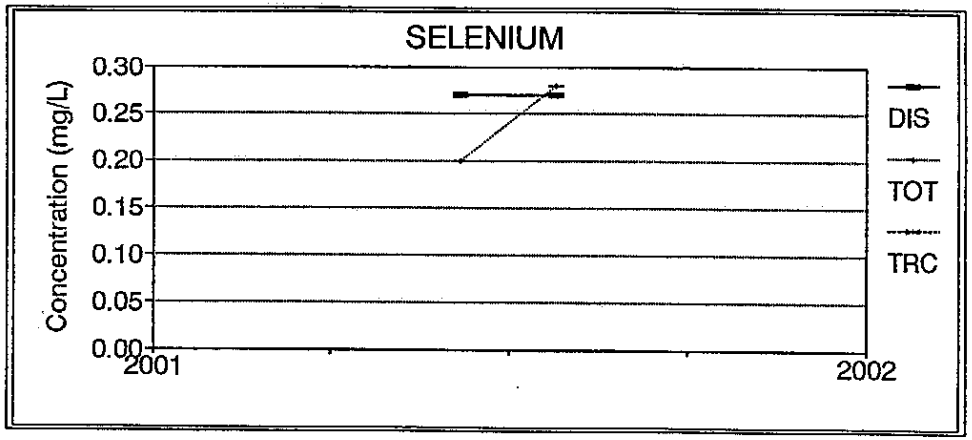
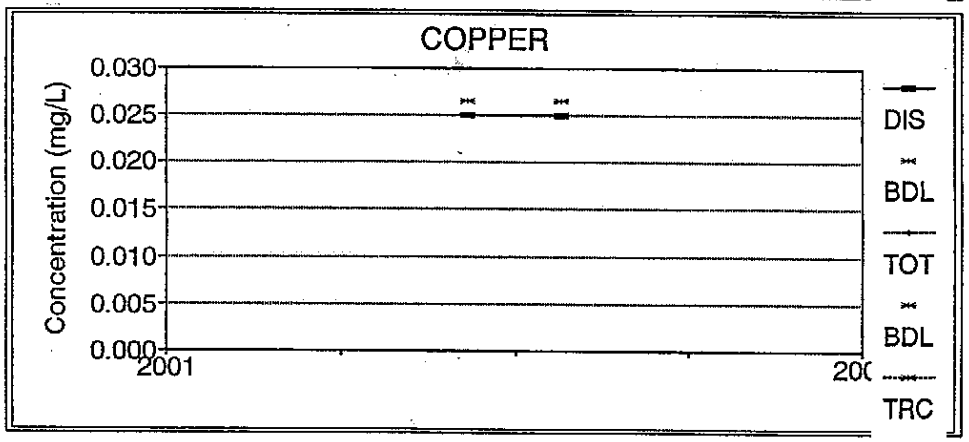
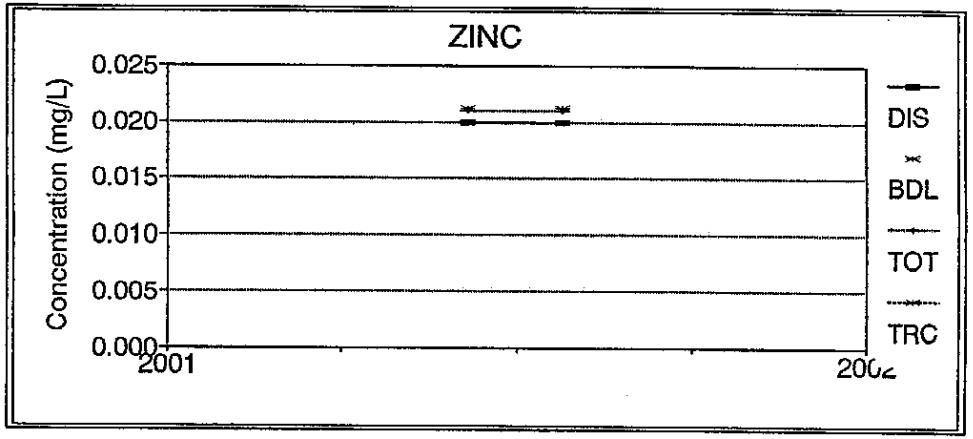






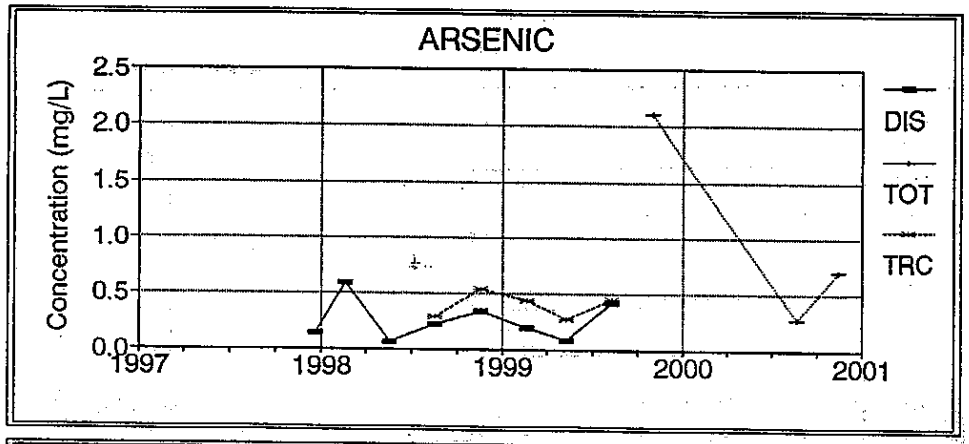


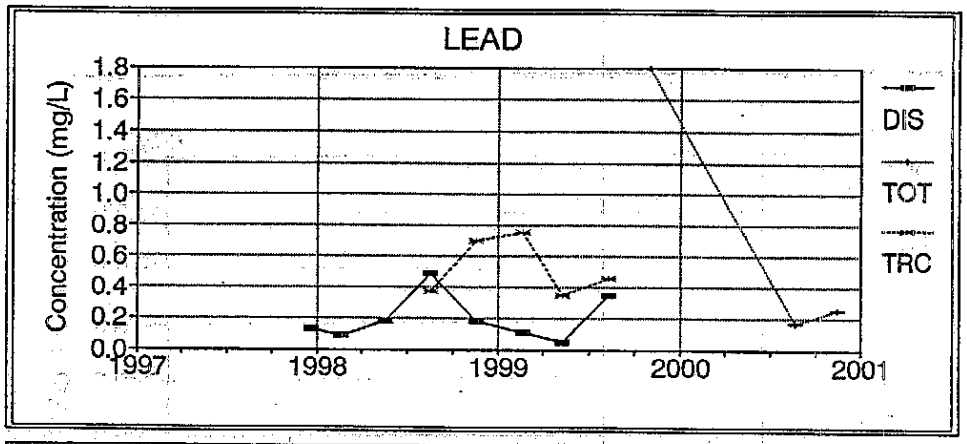


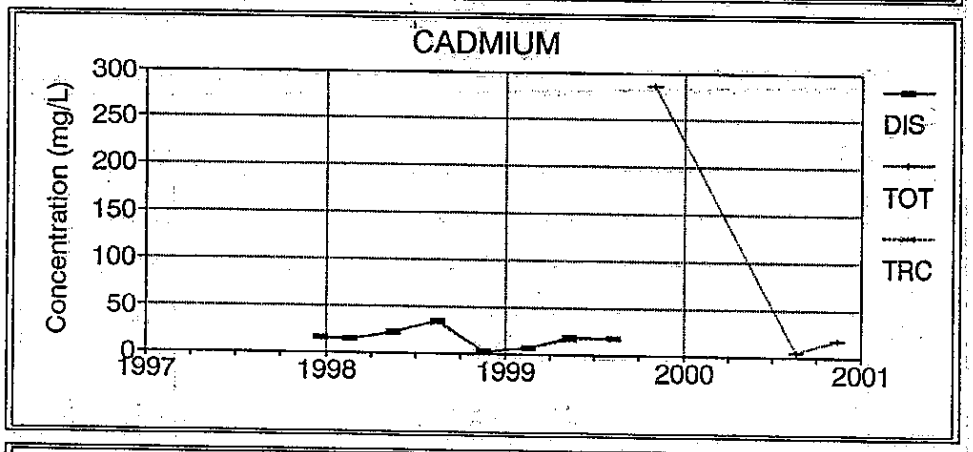


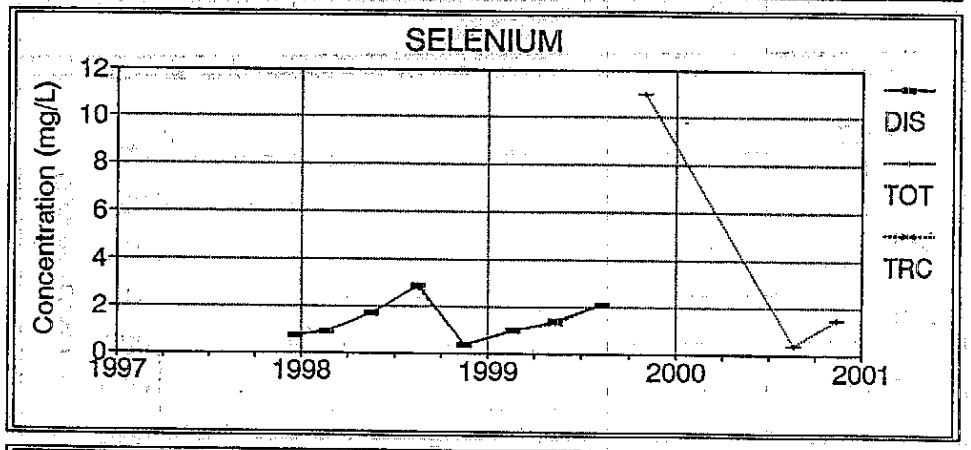
BDL - Below Analytical Detection Limit

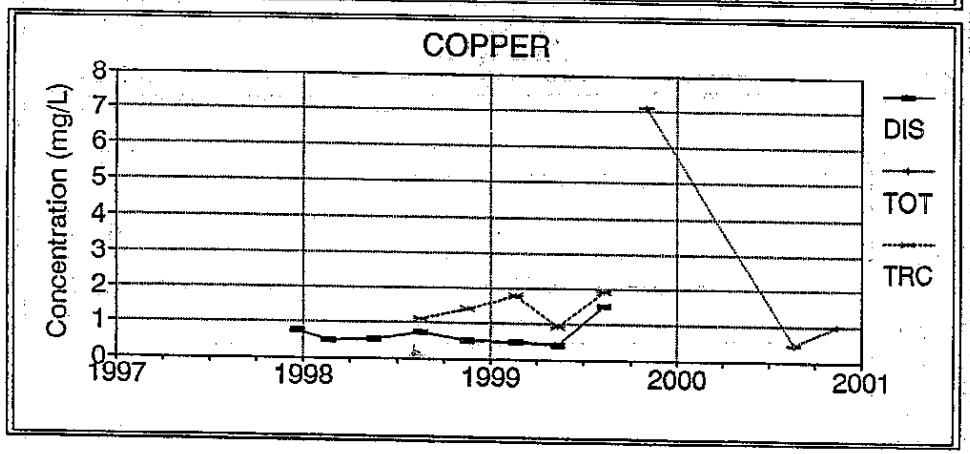
POND 1

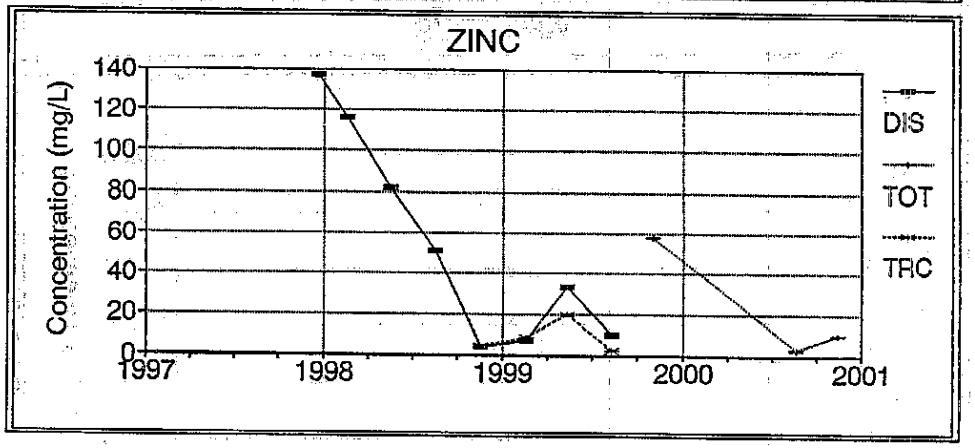

ARSENIC
Concentration (mg/L)
2.5
2.0
1.5
1.0
0.5
0.0
1997
1998
1999
2000
2001
DIS
TOT
TRC


LEAD
Concentration (mg/L)
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1997
1998
1999
2000
2001
DIS
TOT
TRC

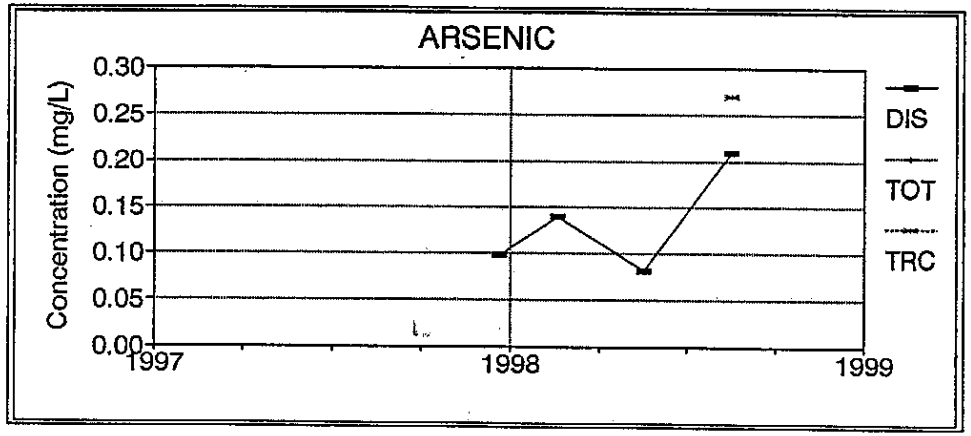

CADMIUM
Concentration (mg/L)
300
250
200
150
100
50
0
1997
1998
1999
2000
2001
DIS
TOT
TRC

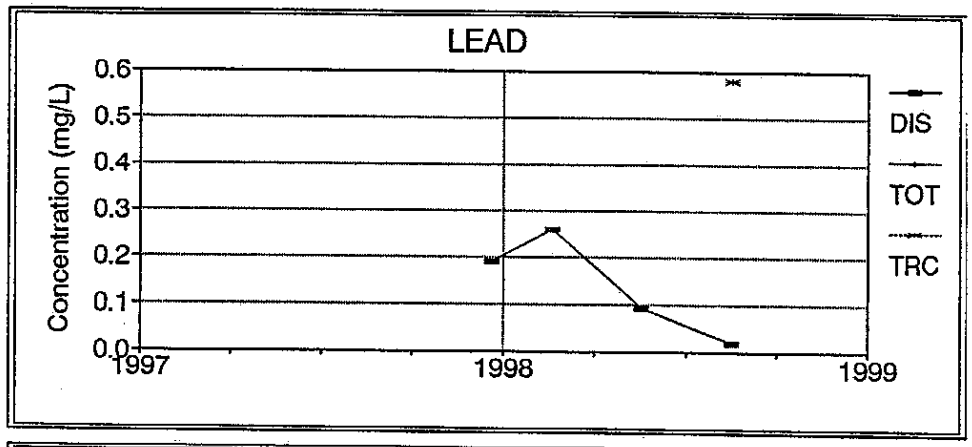

SELENIUM
Concentration (mg/L)
12
10
8
6
4
2
0
1997
1998
1999
2000
2001
DIS
TOT
TRC

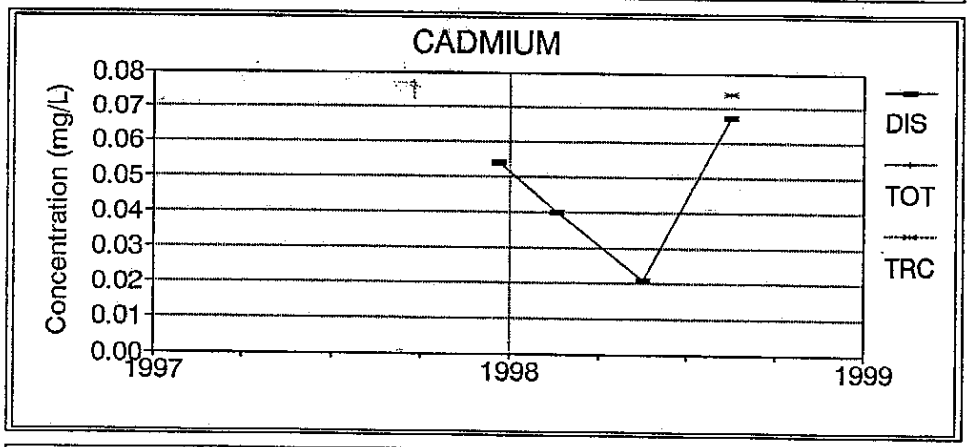

COPPER
Concentration (mg/L)
8
7
6
5
4
3
2
1
0
1997
1998
1999
2000
2001
DIS
TOT
TRC

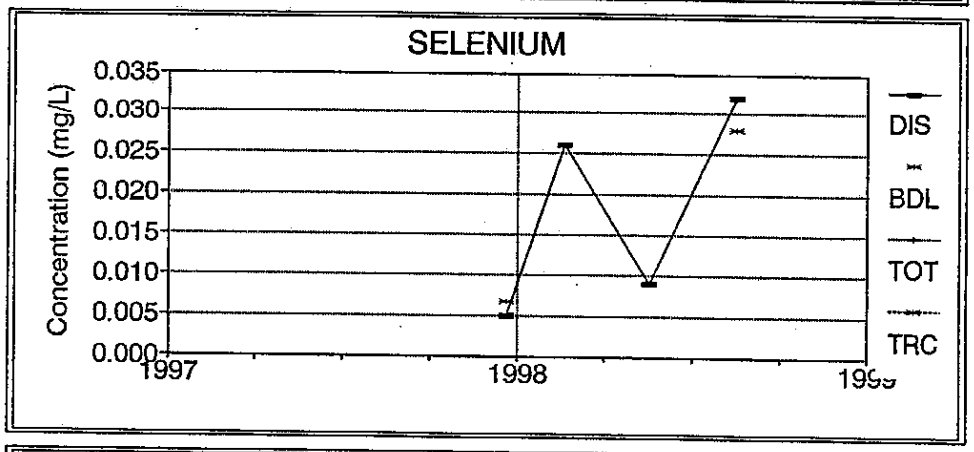

ZINC
Concentration (mg/L)
140
120
100
80
60
40
20
0
1997
1998
1999
2000
2001
DIS
TOT
TRC

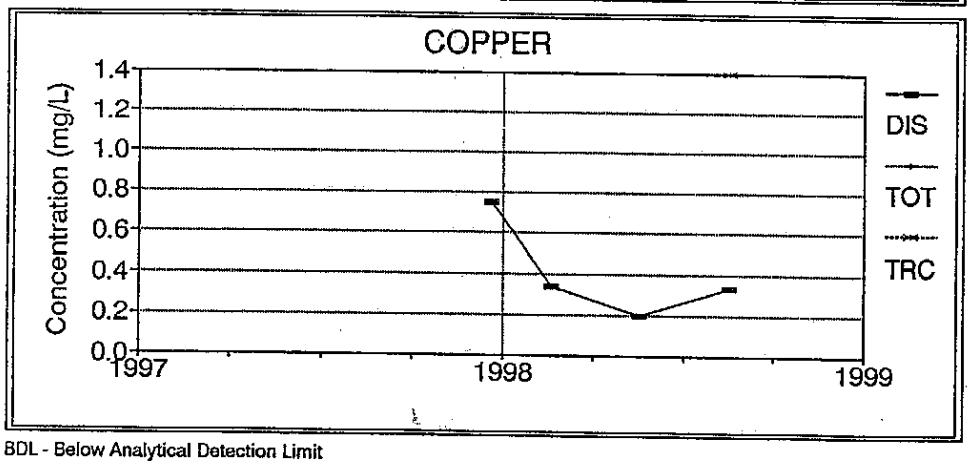
POI 5

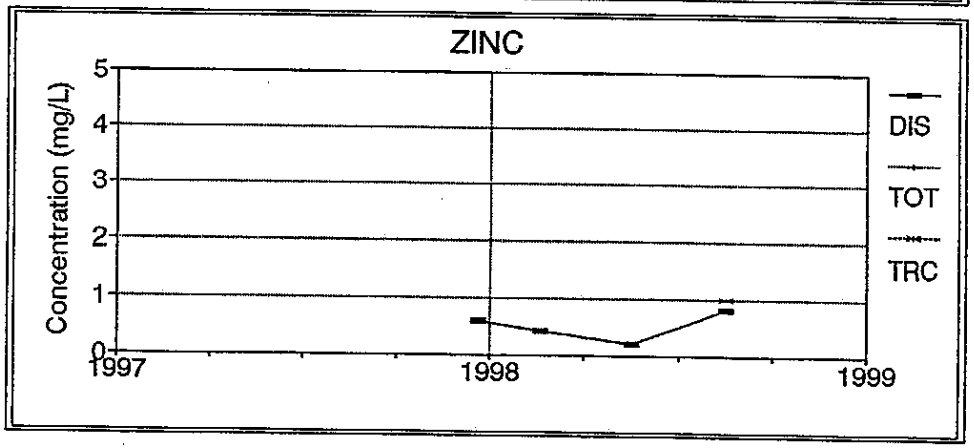






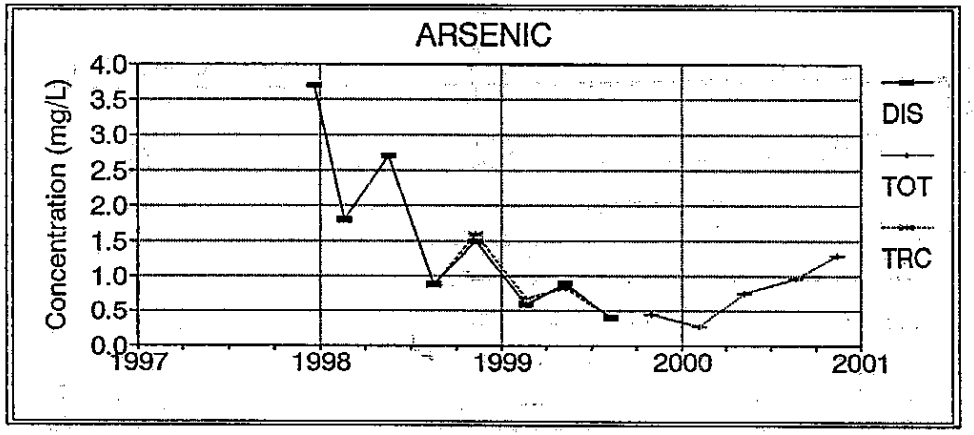


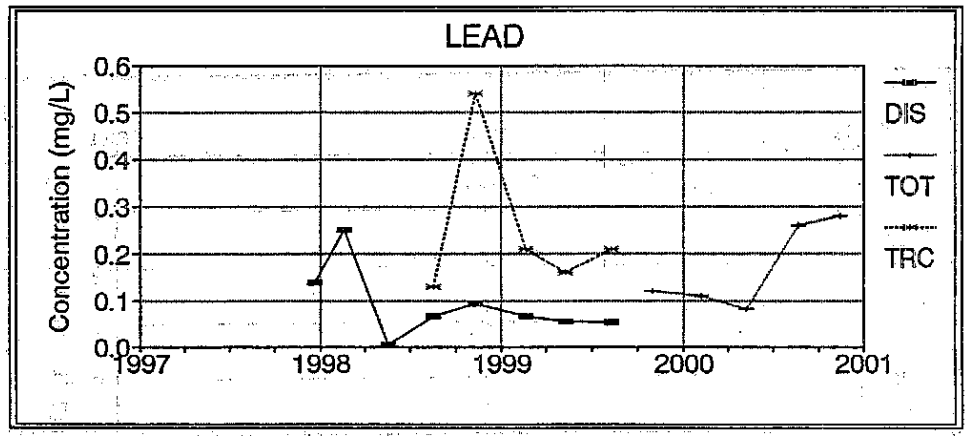


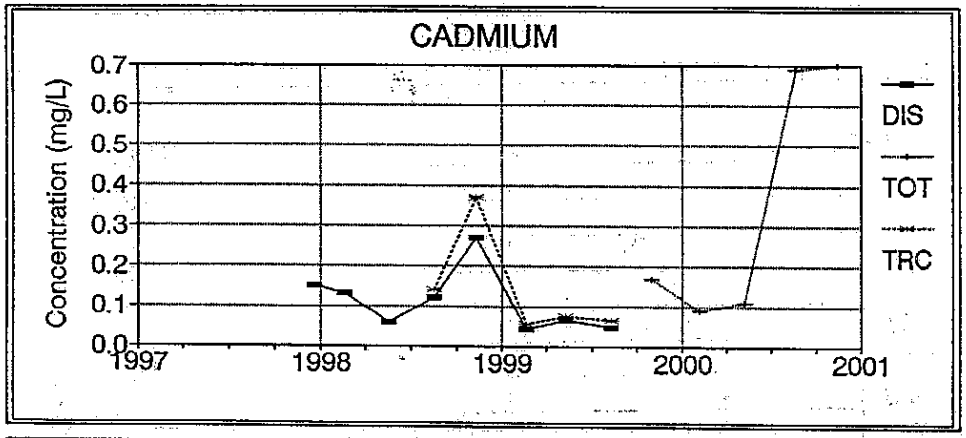


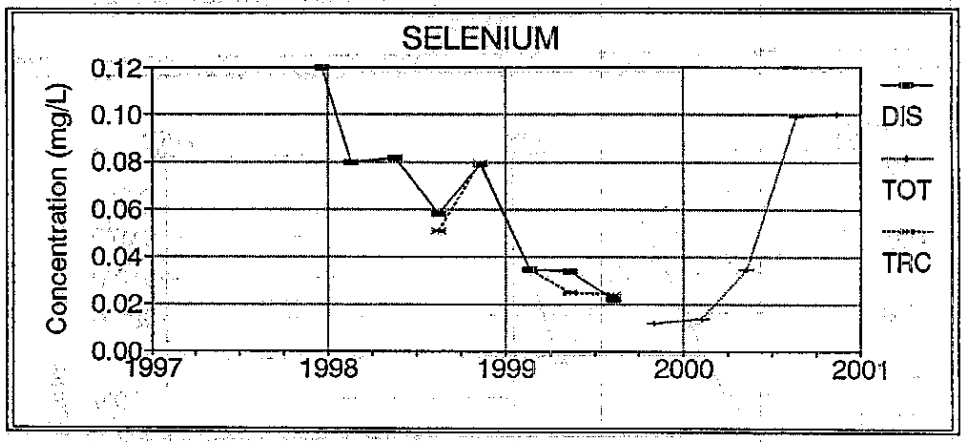
BDL - Below Analytical Detection Limit

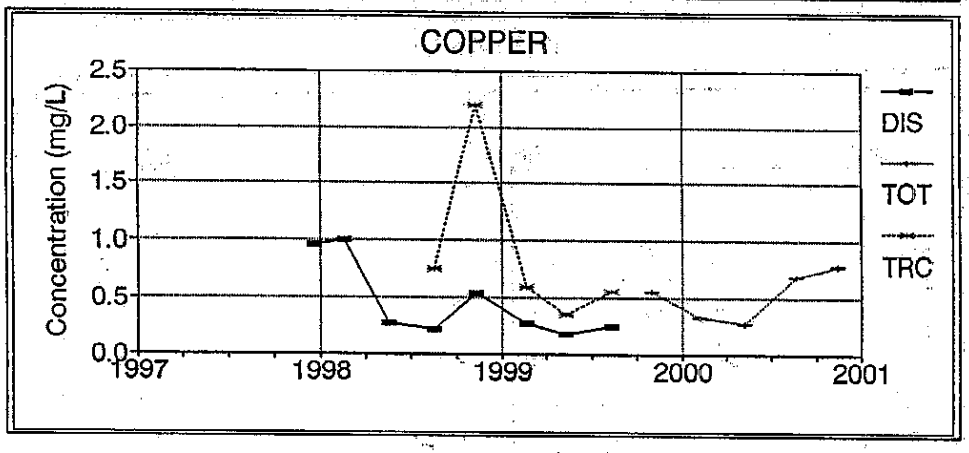
POND 6

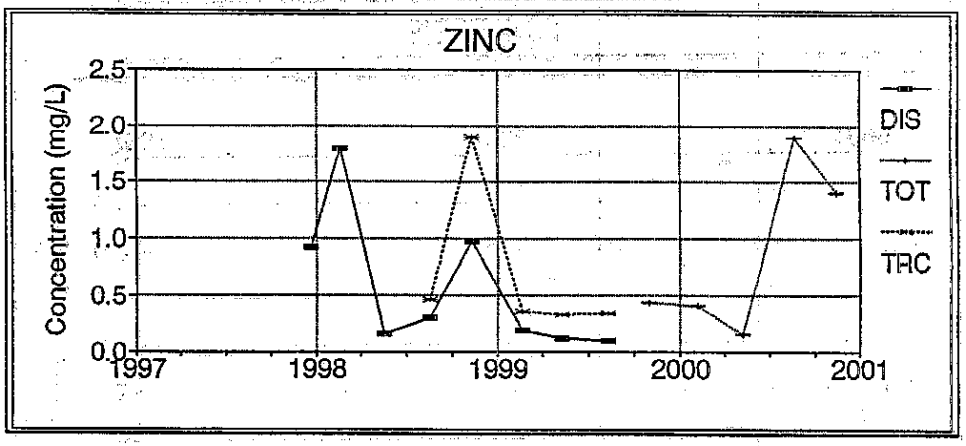

ARSENIC
Concentration (mg/L)
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1997
1998
1999
2000
2001
DIS
TOT
TRC


LEAD
Concentration (mg/L)
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1997
1998
1999
2000
2001
DIS
TOT
TRC

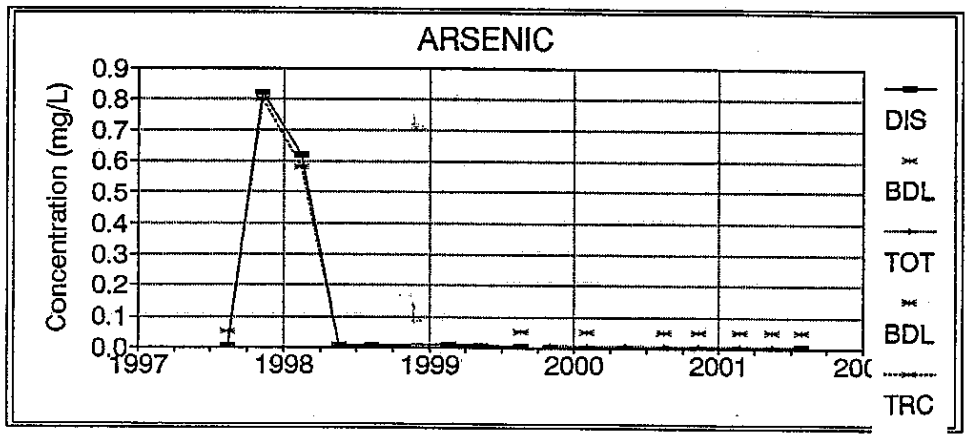

CADMIUM
Concentration (mg/L)
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1997
1998
1999
2000
2001
DIS
TOT
TRC

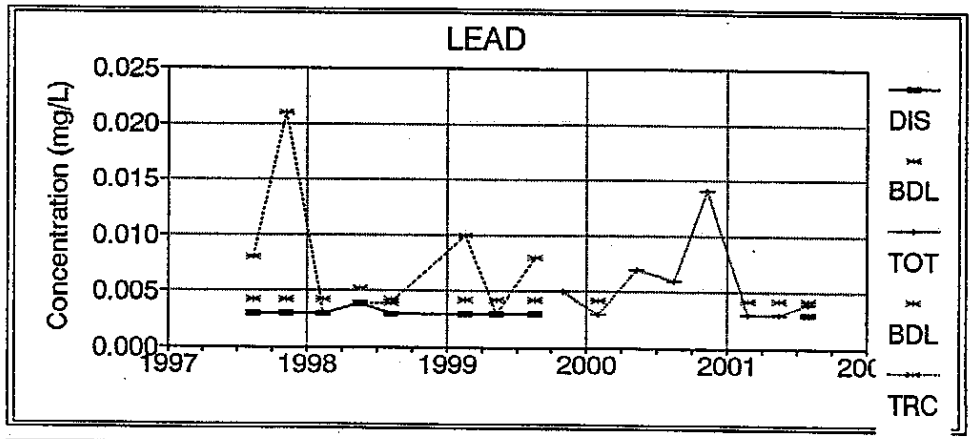

SELENIUM
Concentration (mg/L)
0.12
0.10
0.08
0.06
0.04
0.02
0.00
1997
1998
1999
2000
2001
DIS
TOT
TRC

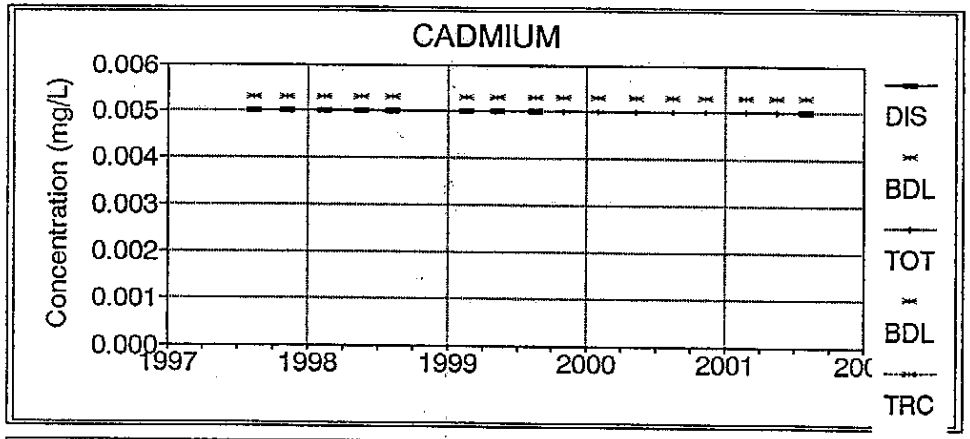

COPPER
Concentration (mg/L)
2.5
2.0
1.5
1.0
0.5
0.0
1997
1998
1999
2000
2001
DIS
TOT
TRC

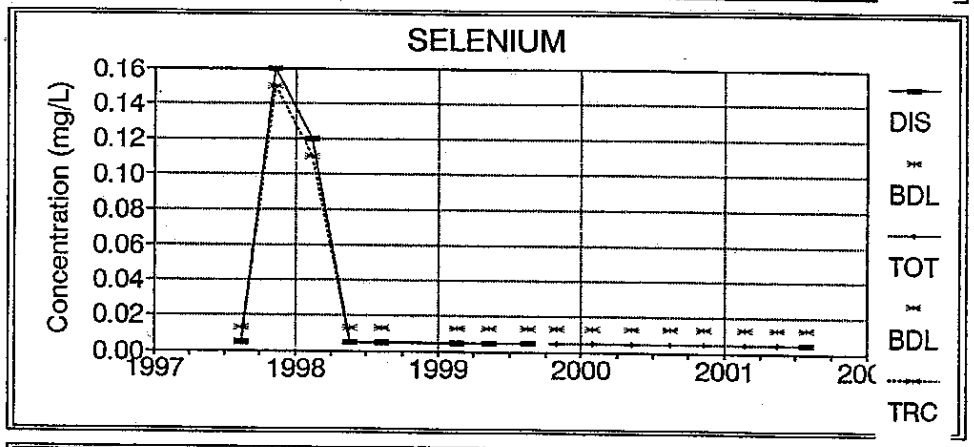

ZINC
Concentration (mg/L)
2.5
2.0
1.5
1.0
0.5
0.0
1997
1998
1999
2000
2001
DIS
TOT
TRC

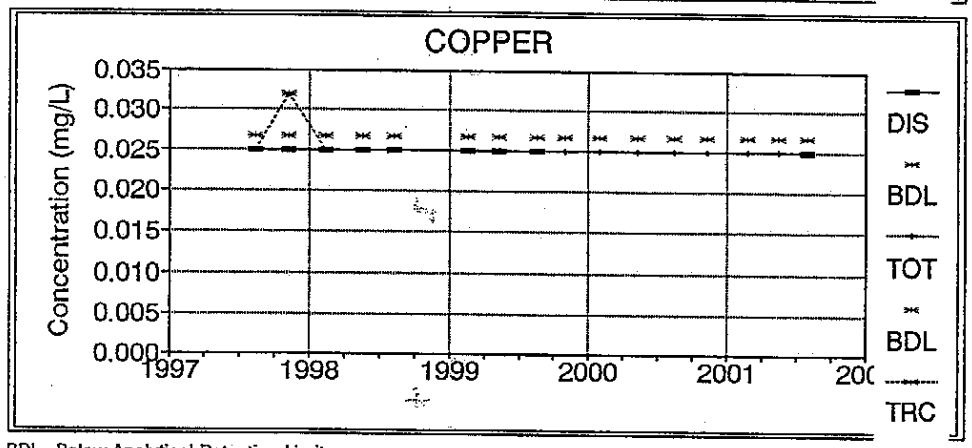
SEP

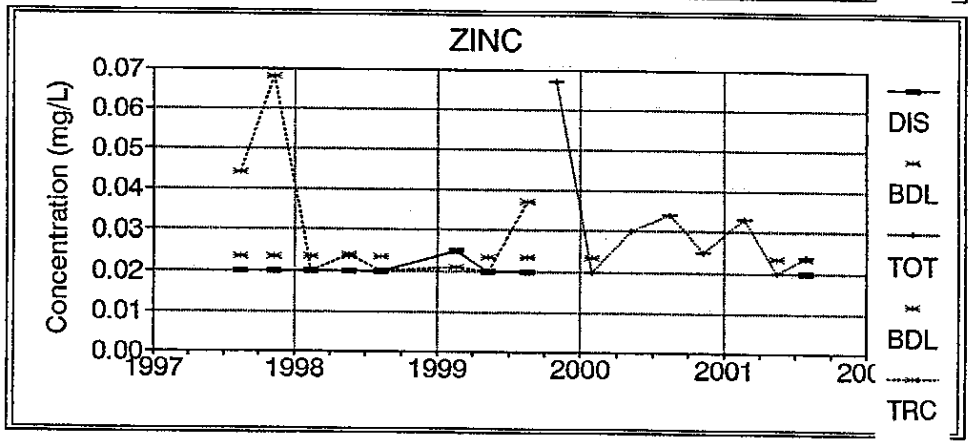






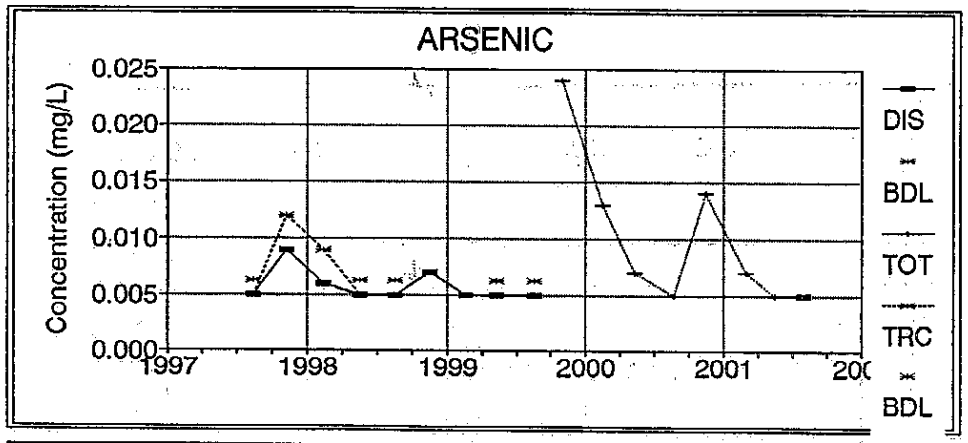


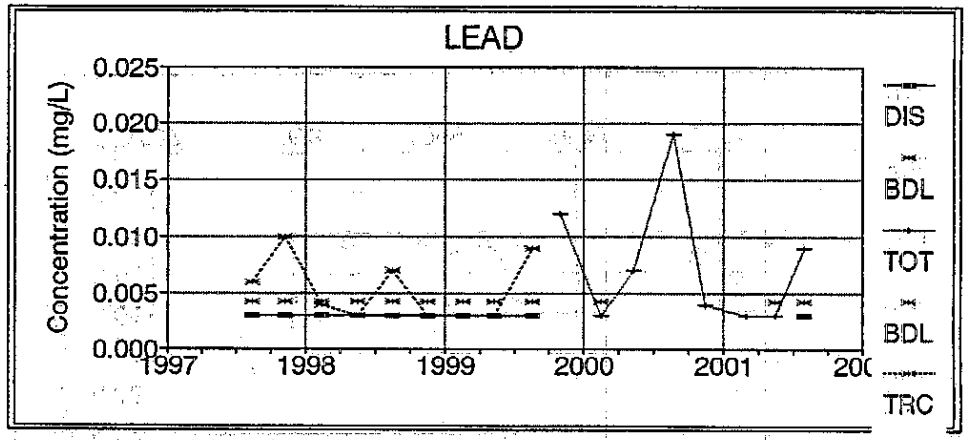


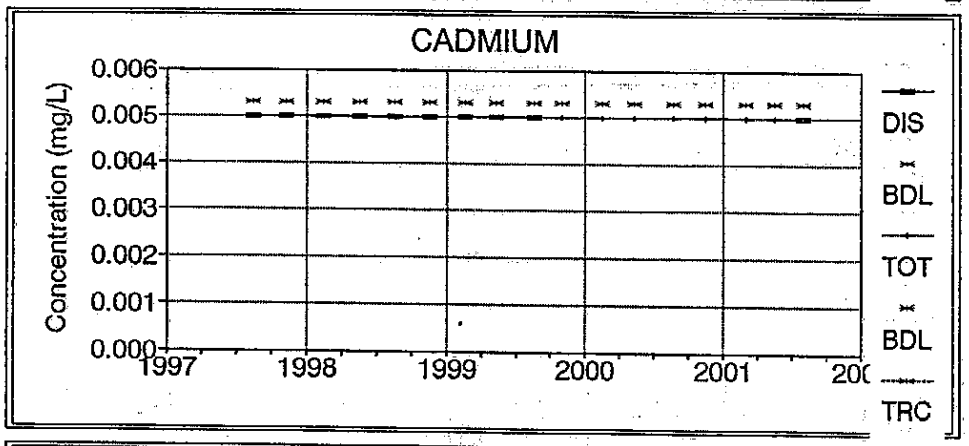


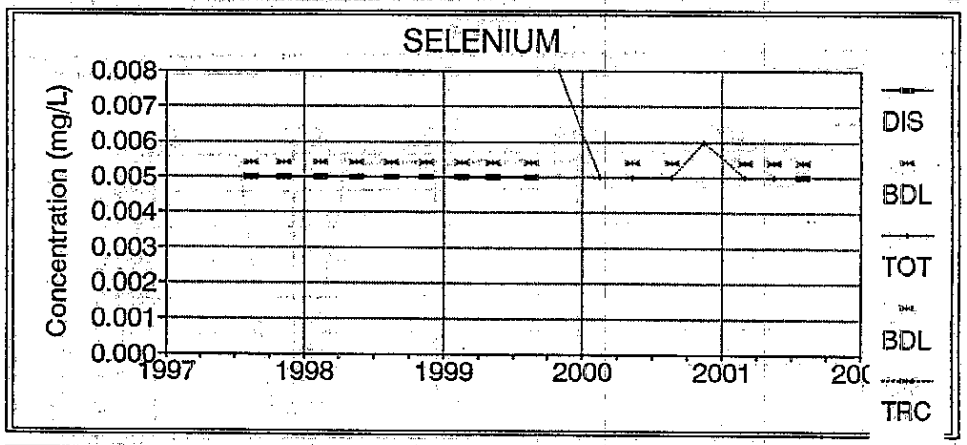
BDL - Below Analytical Detection Limit

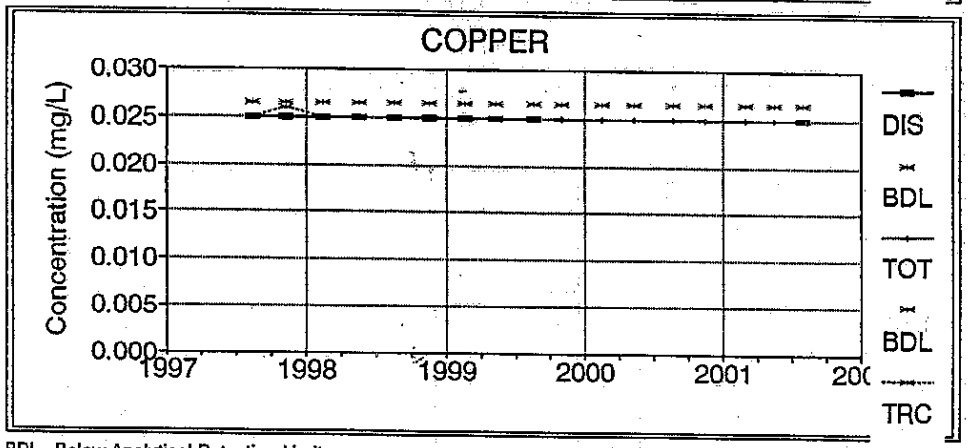
SEP-2

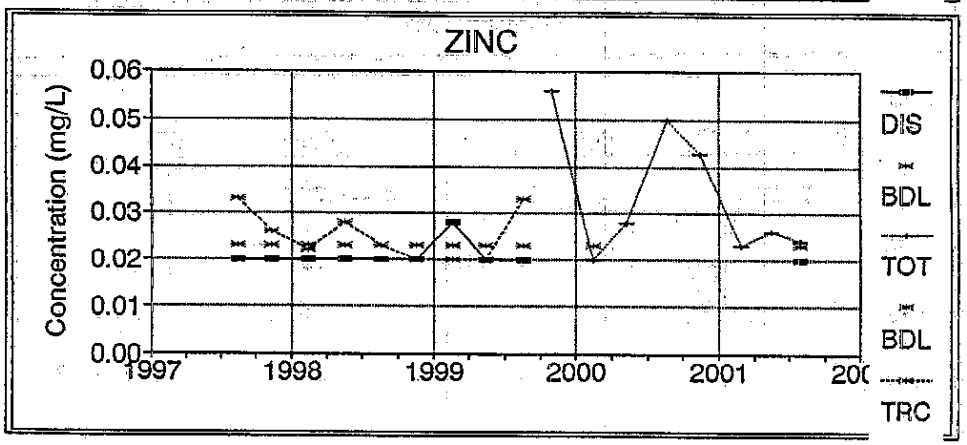






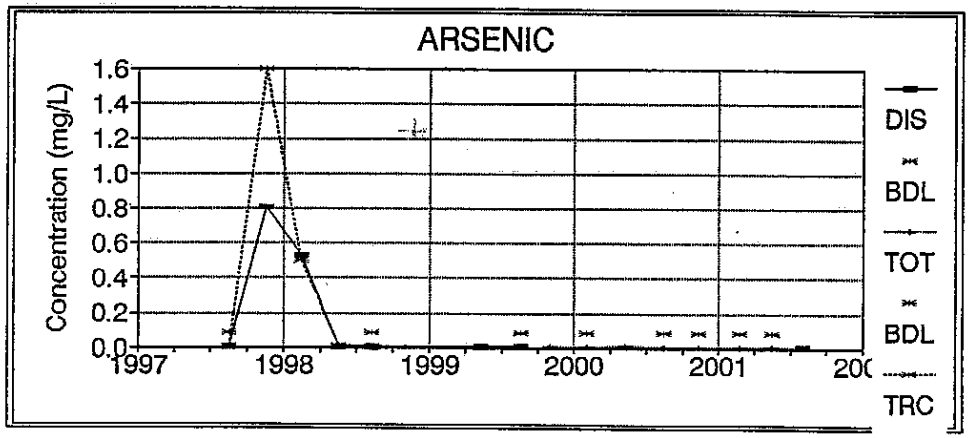


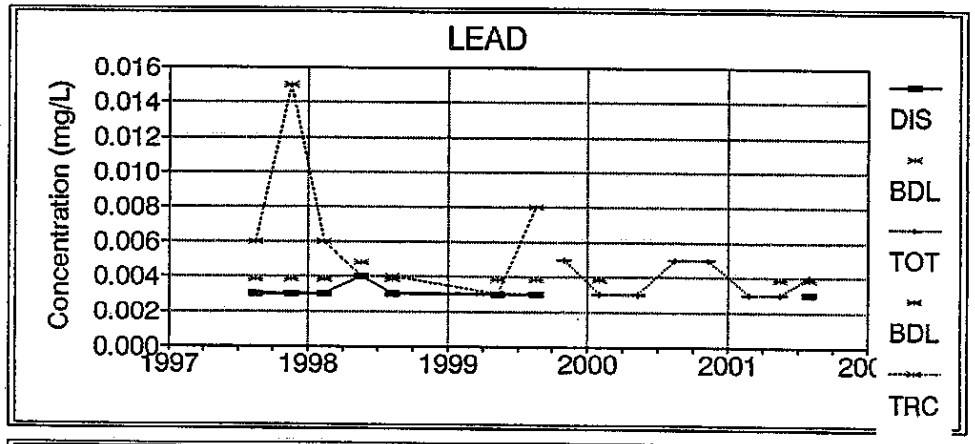


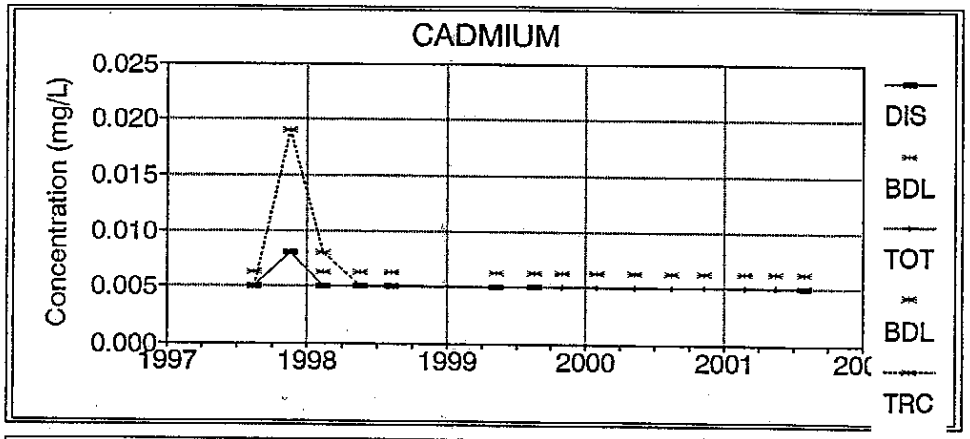


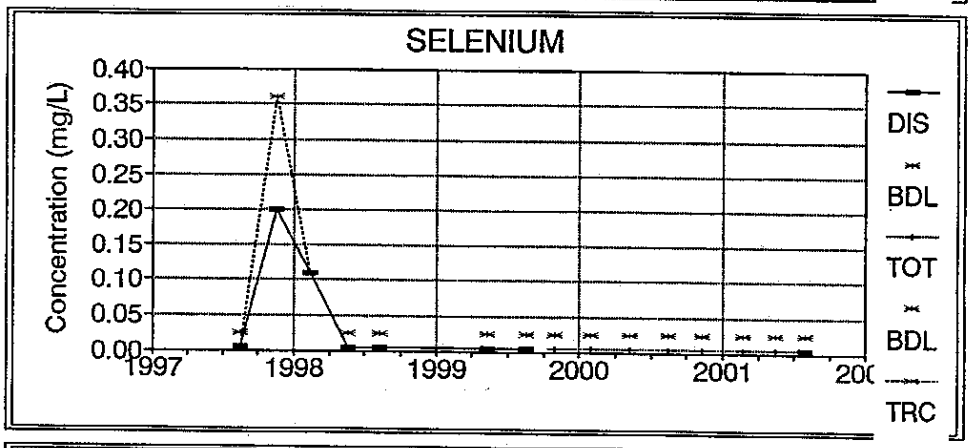
BDL - Below Analytical Detection Limit

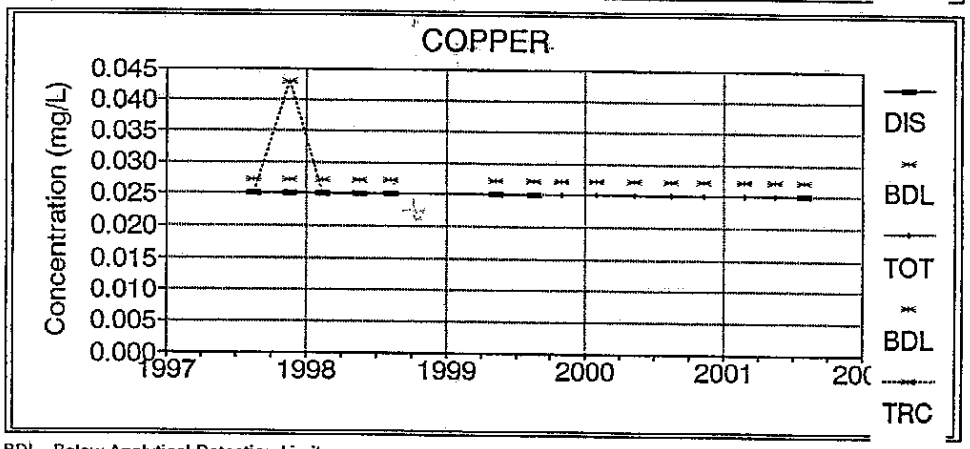
SEP

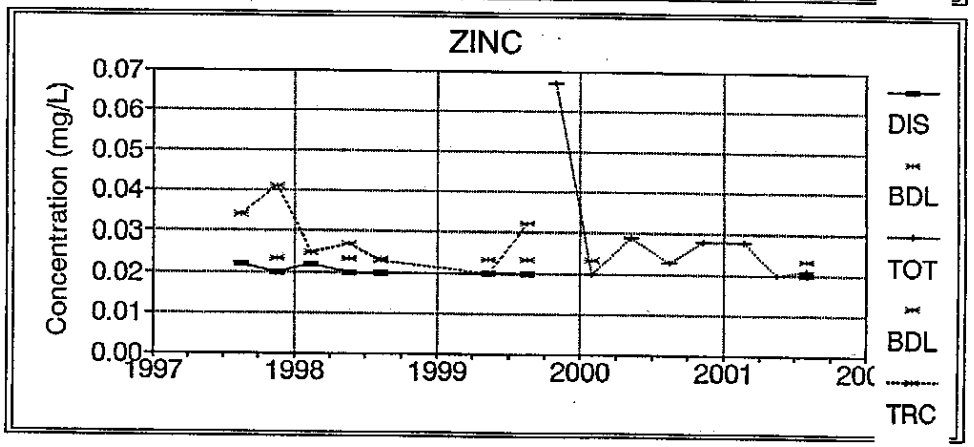






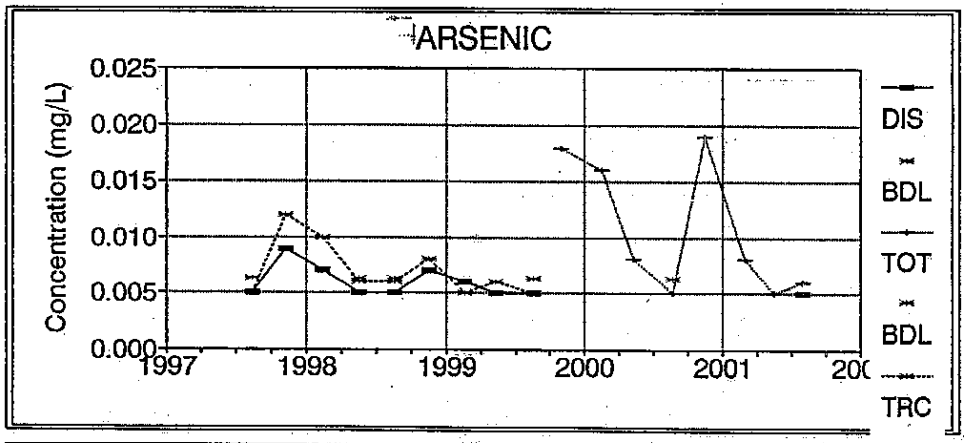


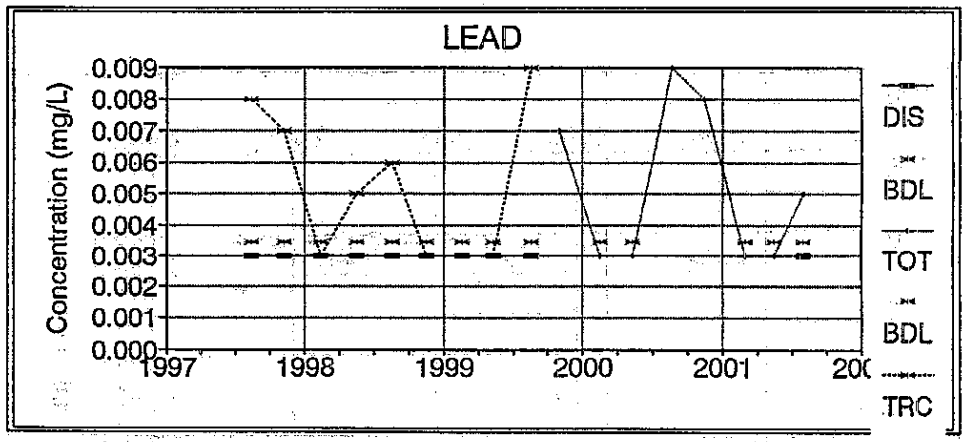


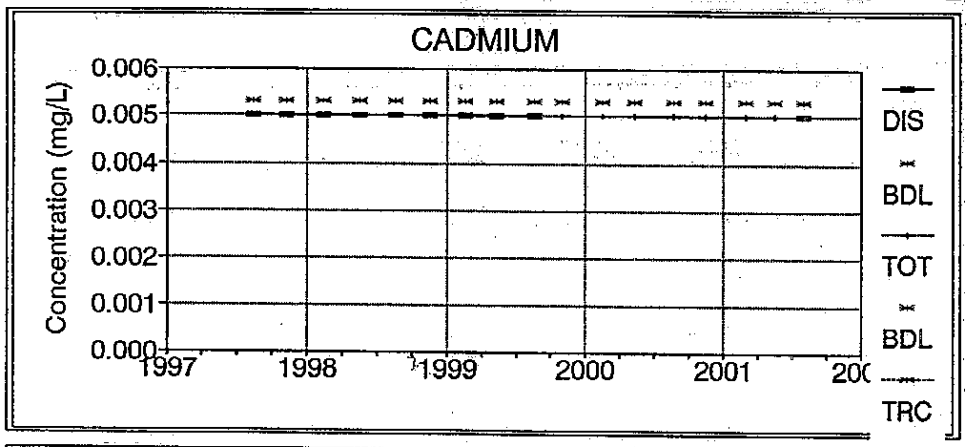


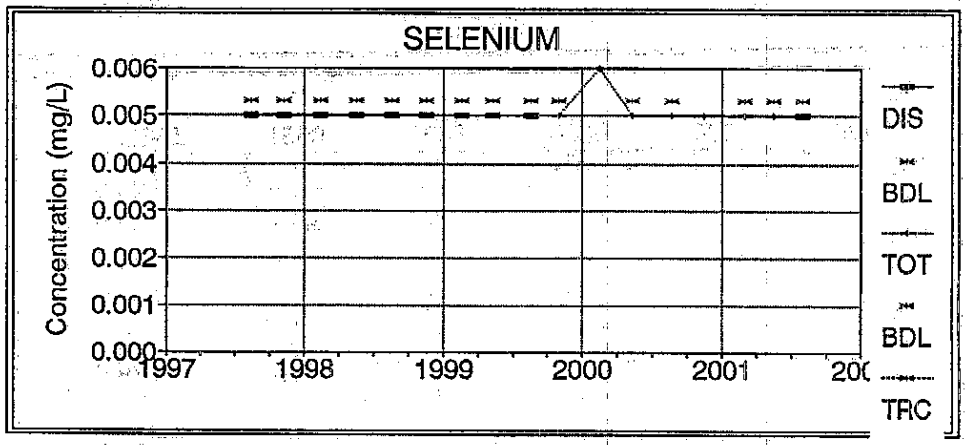
BDL - Below Analytical Detection Limit

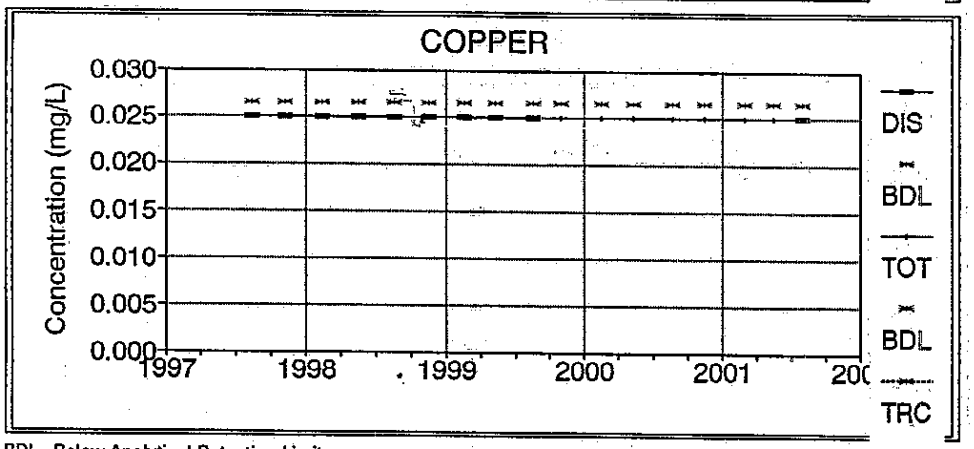
SEP-4

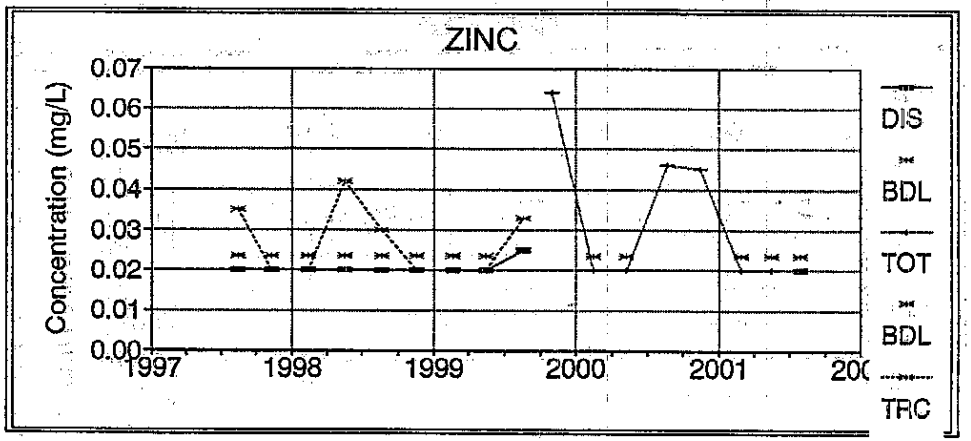












BDL - Below Analytical Detection Limit

SEP

ARSENIC

No Data Available

N/A

LEAD

No Data Available

N/A

CADMIUM

No Data Available

N/A

SELENIUM

No Data Available

N/A

COPPER

No Data Available

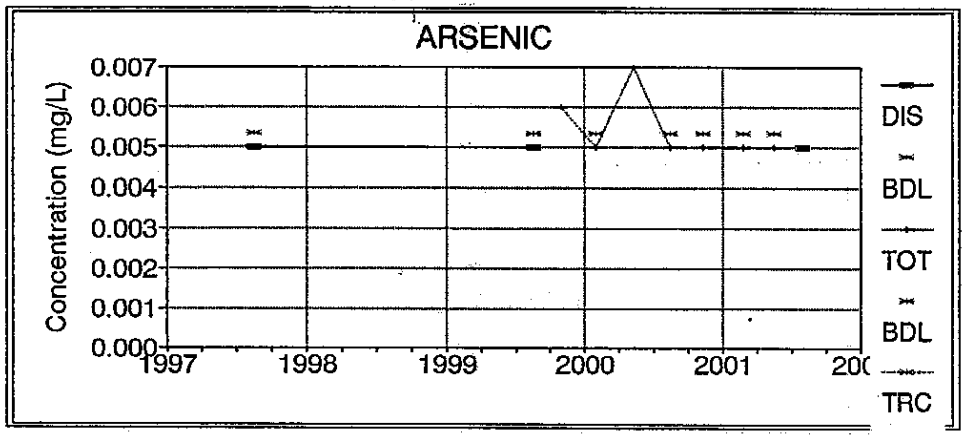
N/A

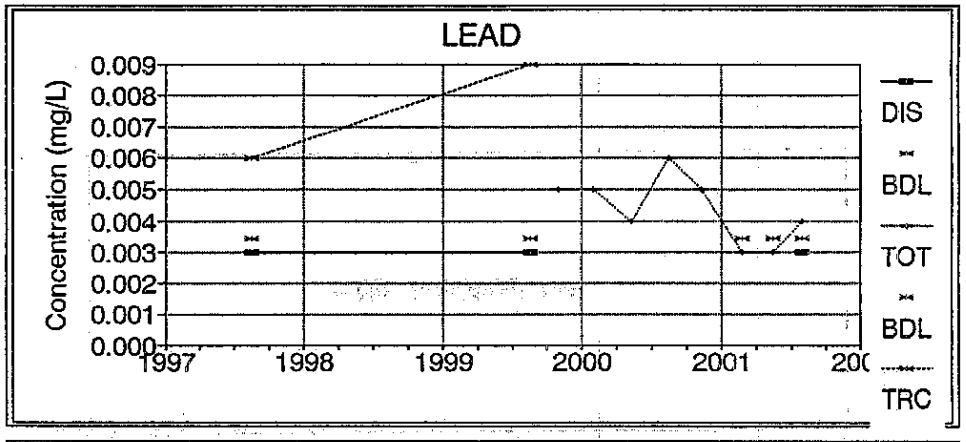
ZINC

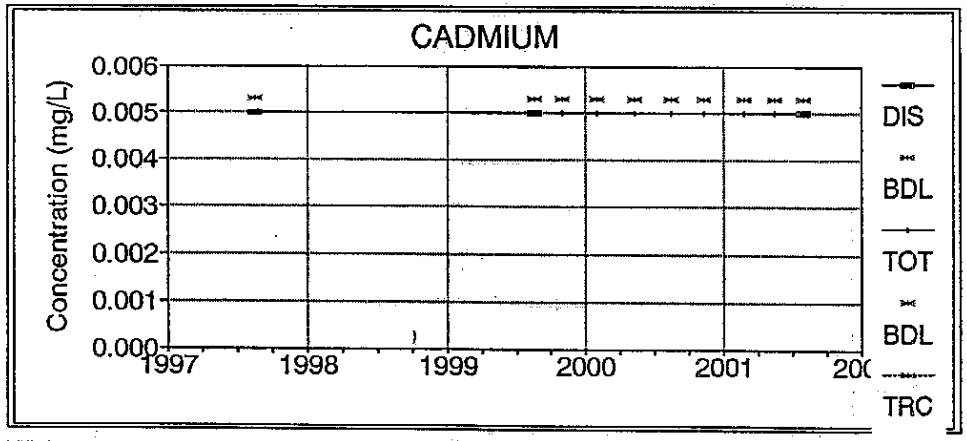
No Data Available

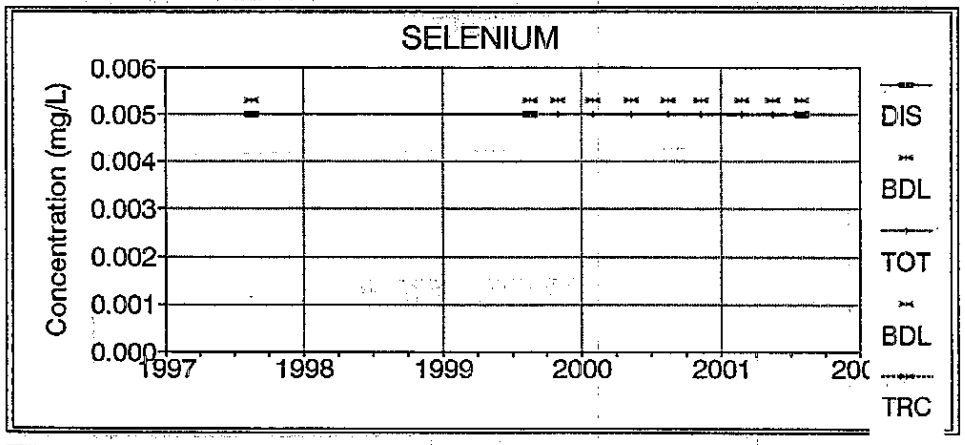
N/A

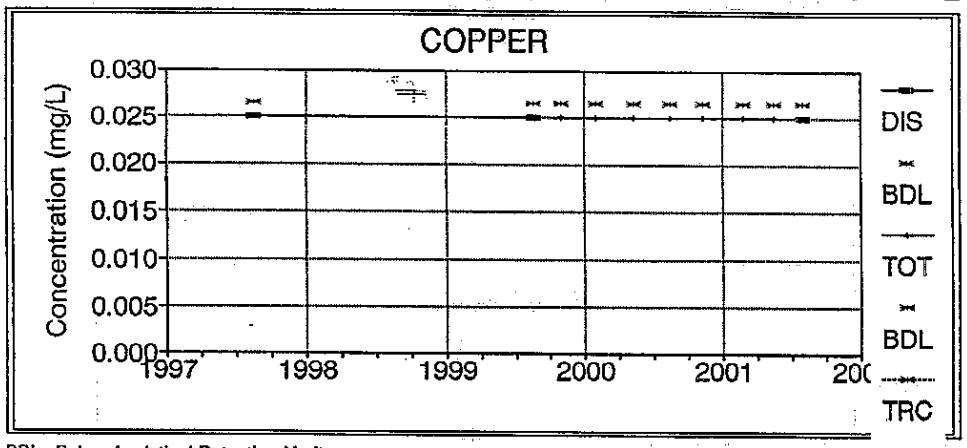
SEP-6

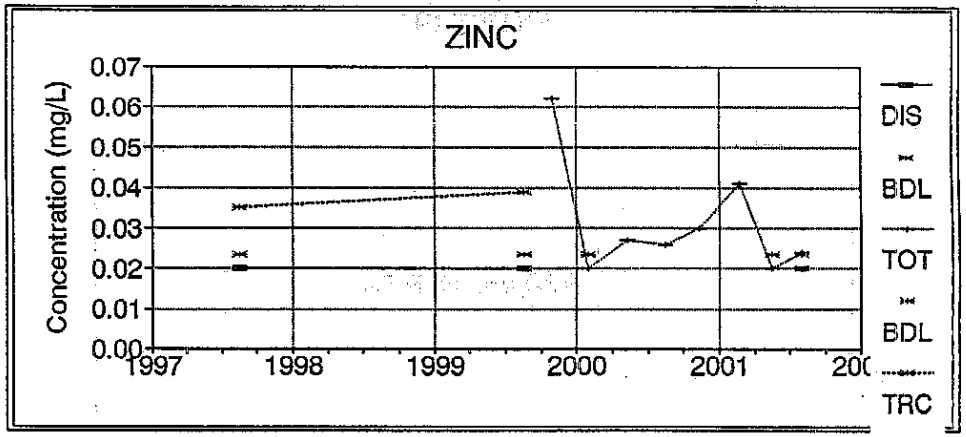






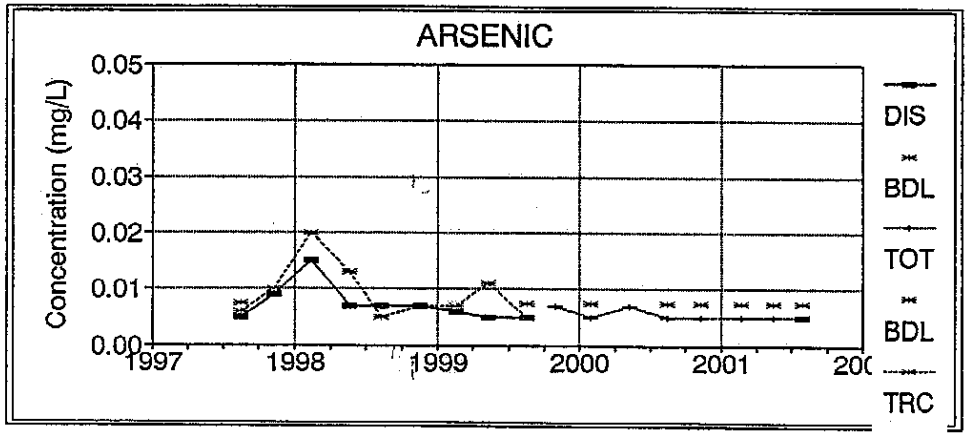


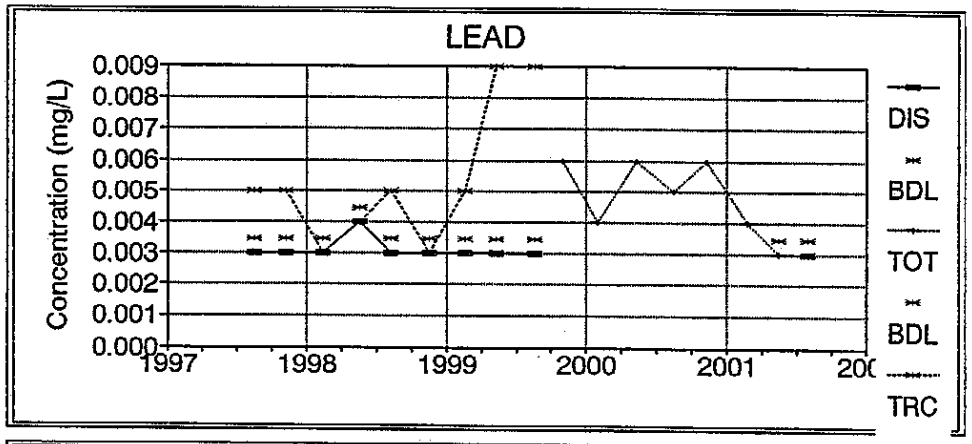


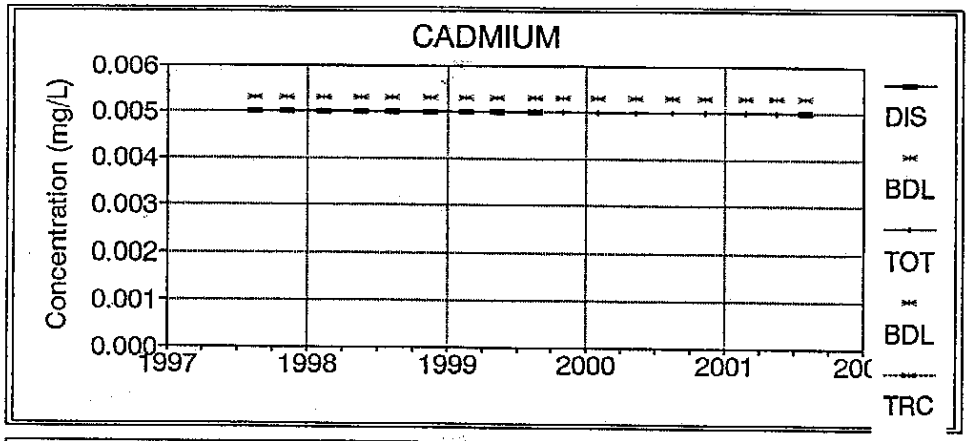


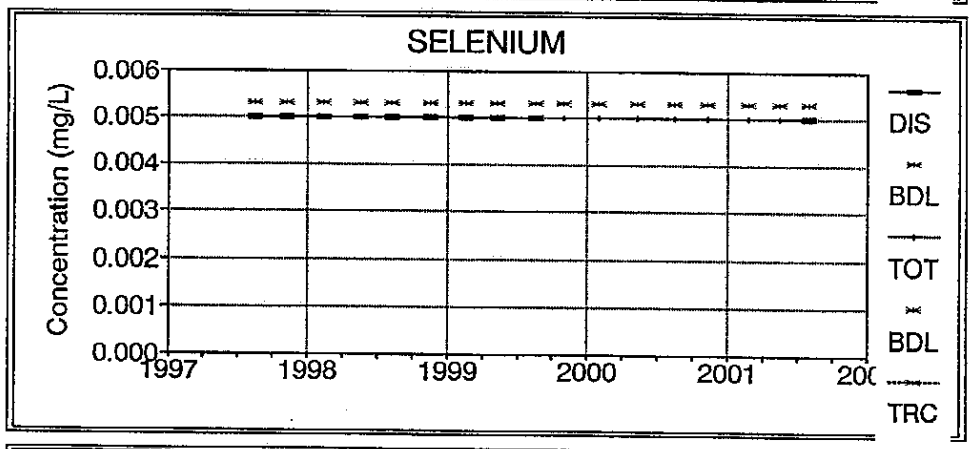
BDL - Below Analytical Detection Limit

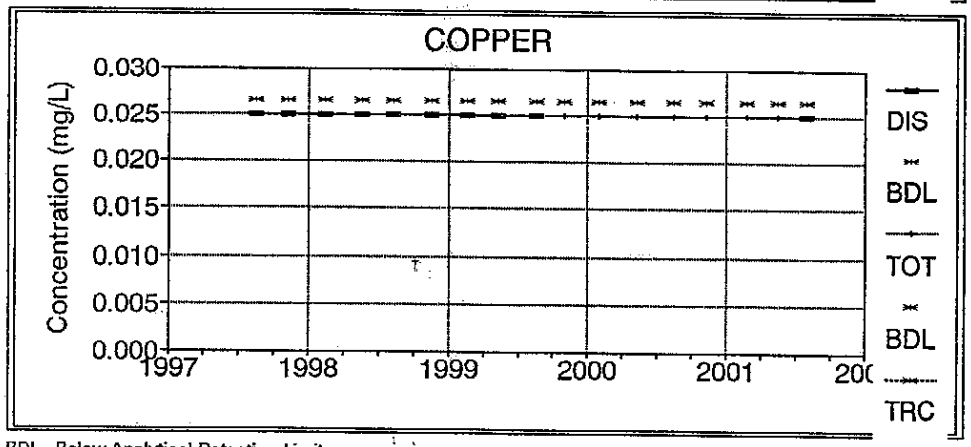
SEP

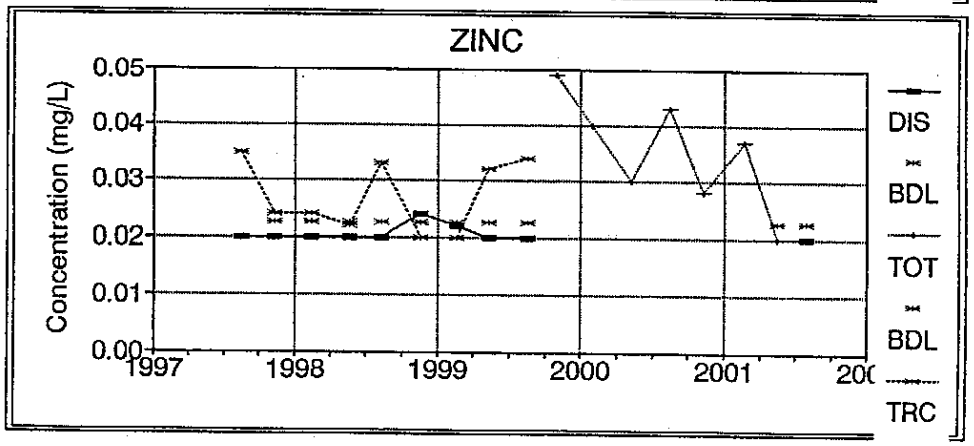






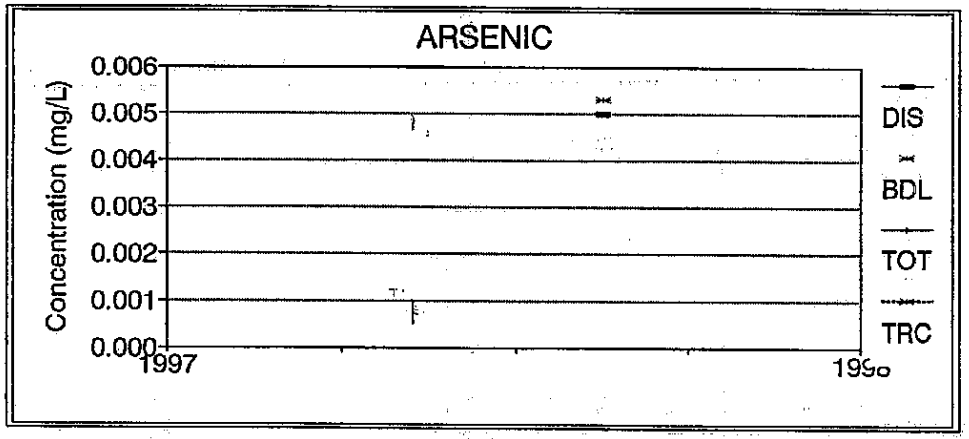


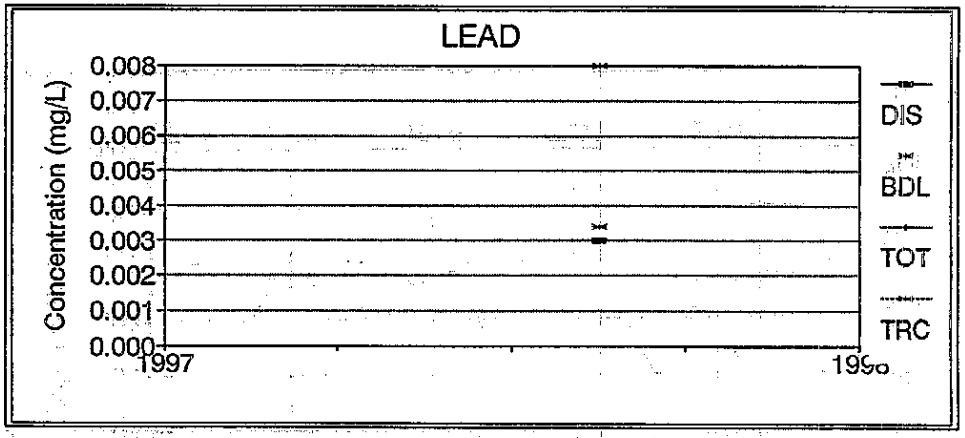


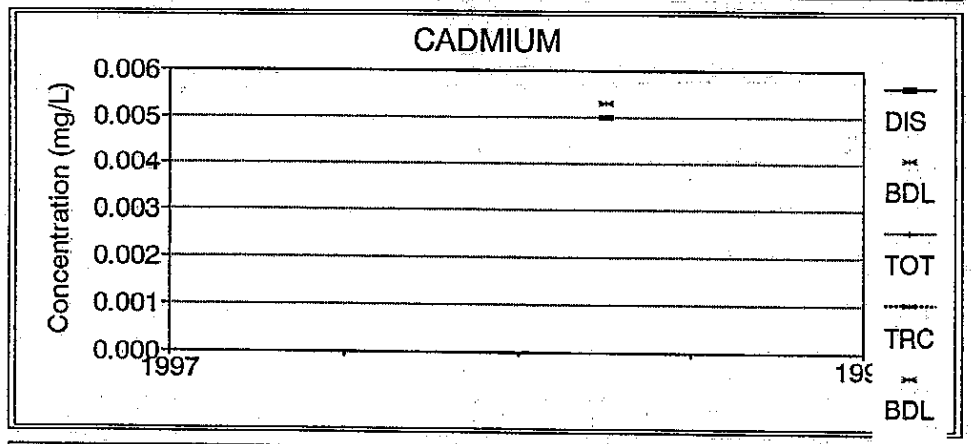


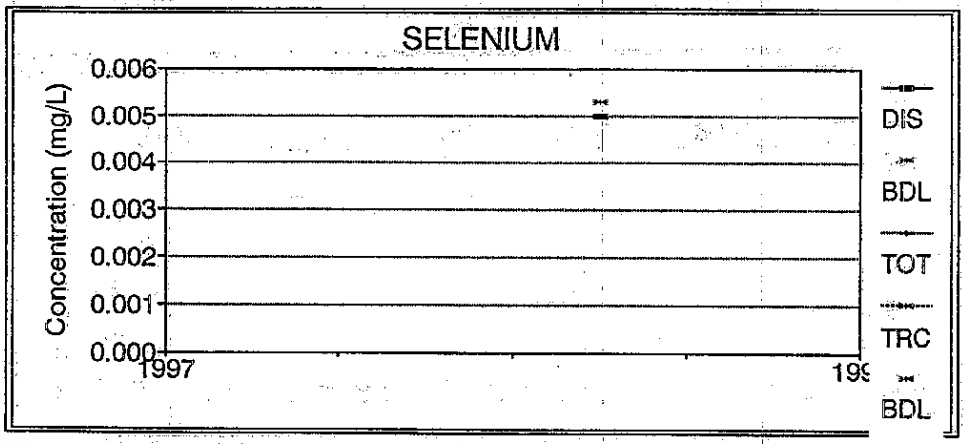
BDL - Below Analytical Detection Limit

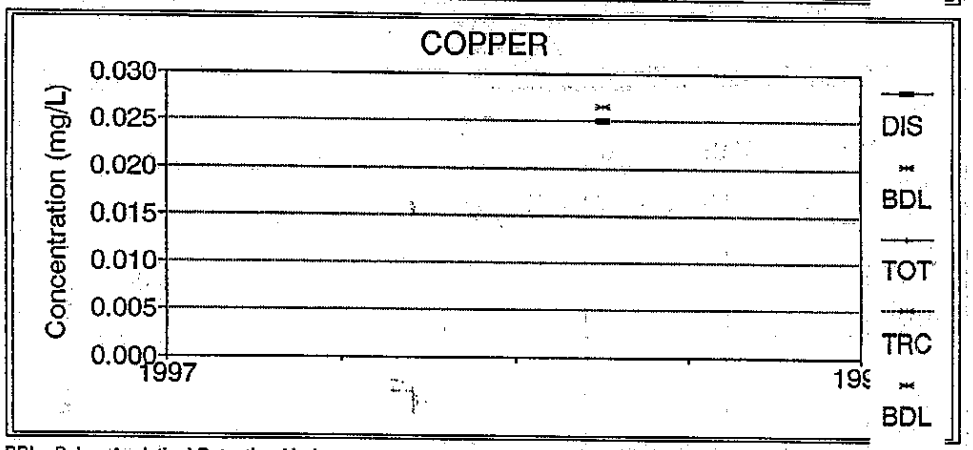
SEP-8

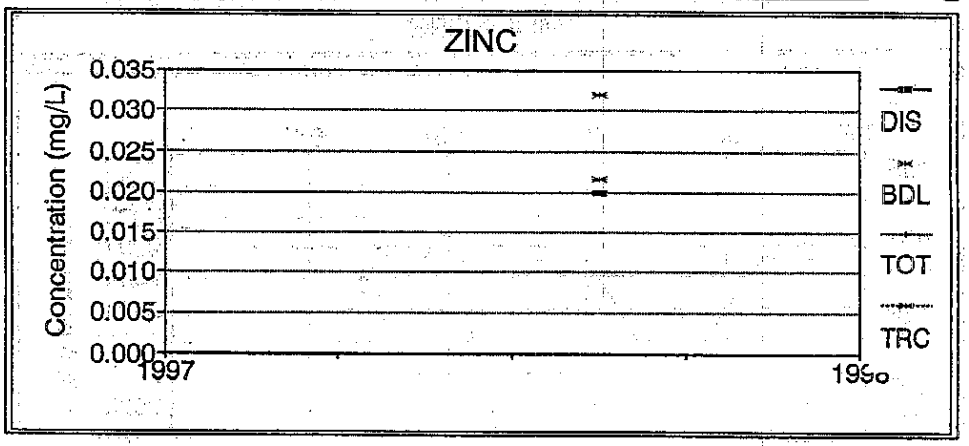






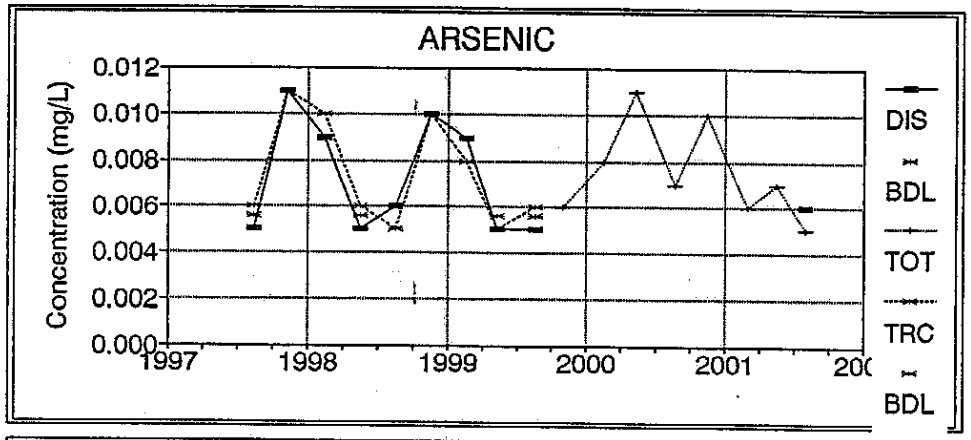


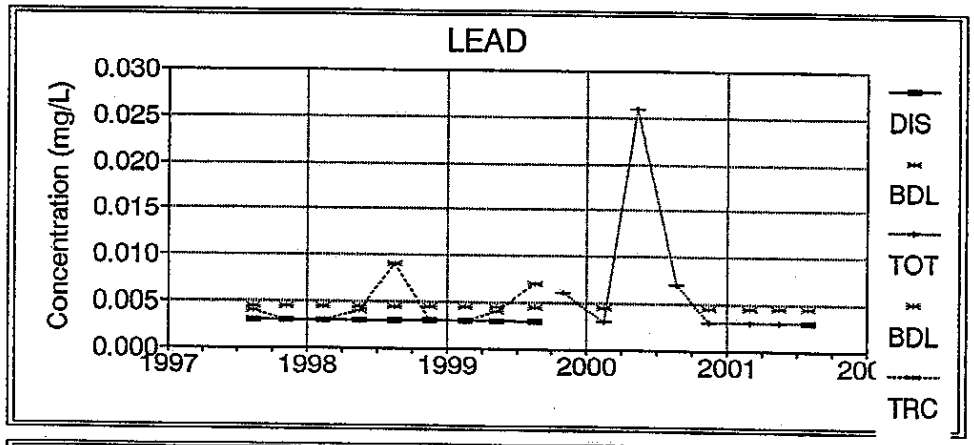


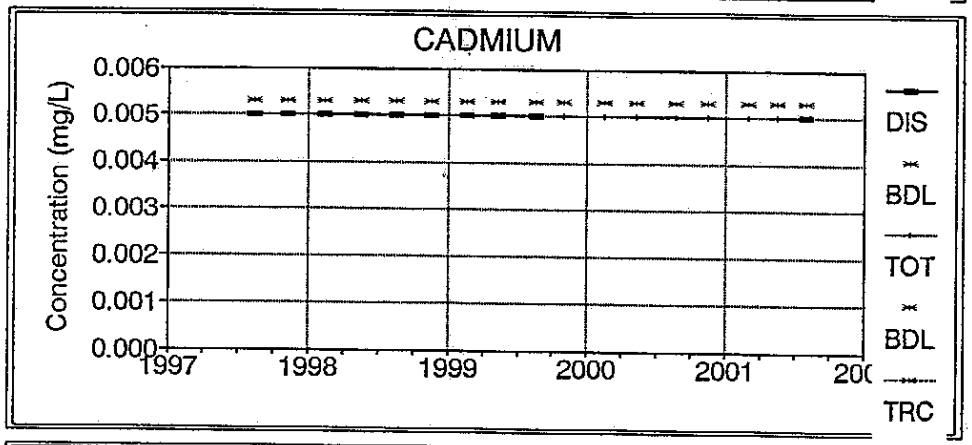


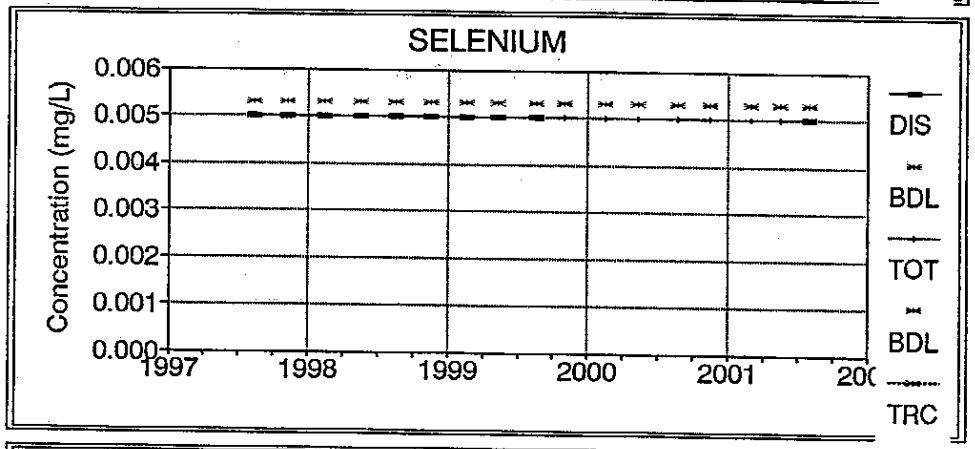
BDL - Below Analytical Detection Limit

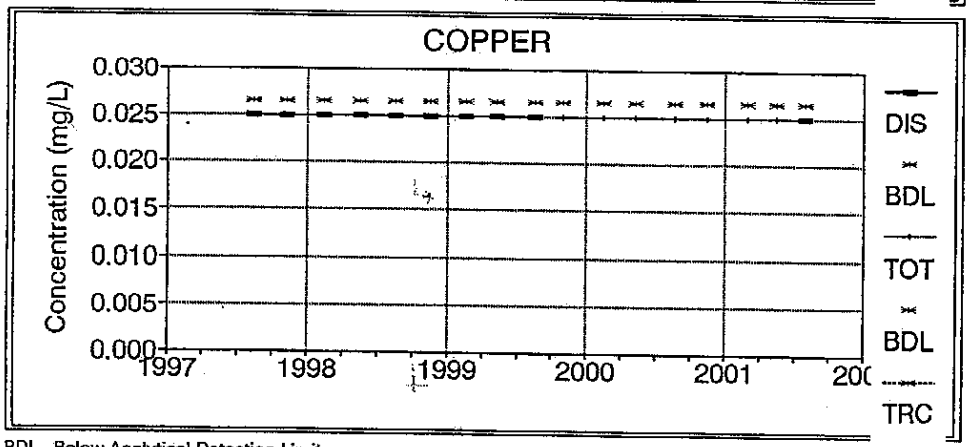
SEF

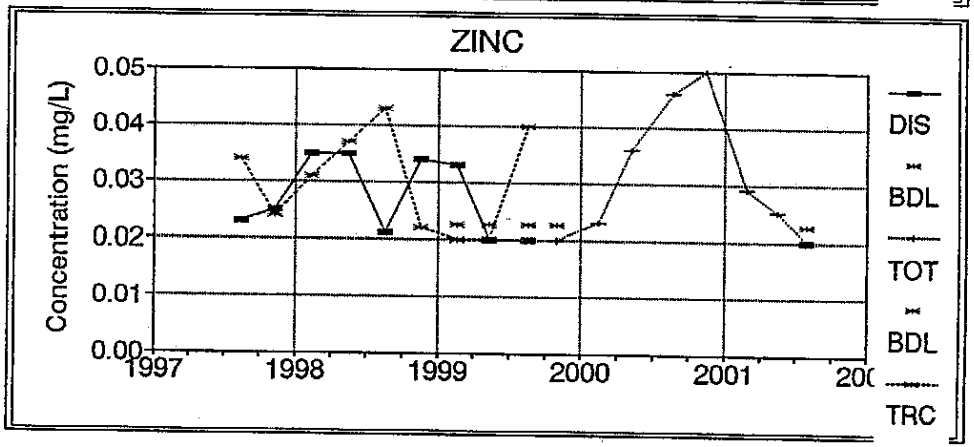






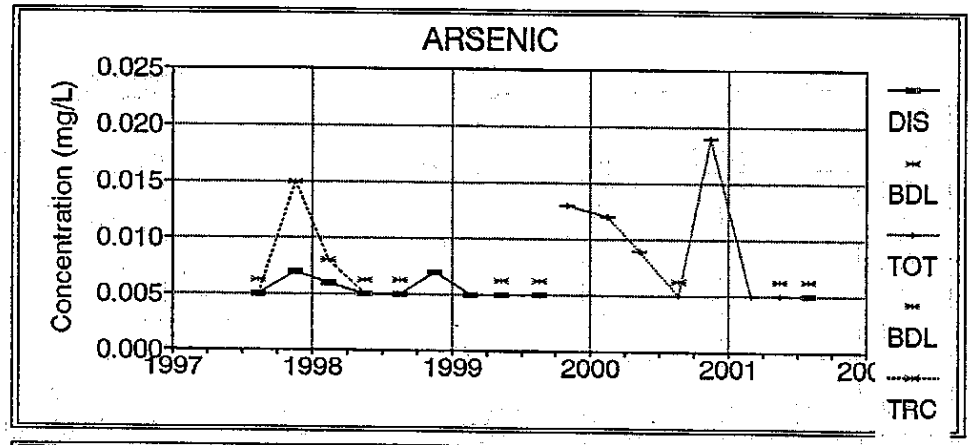


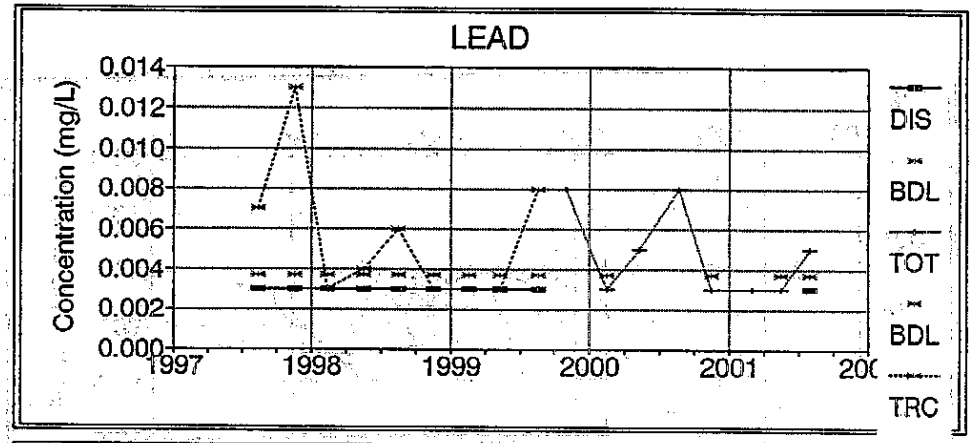


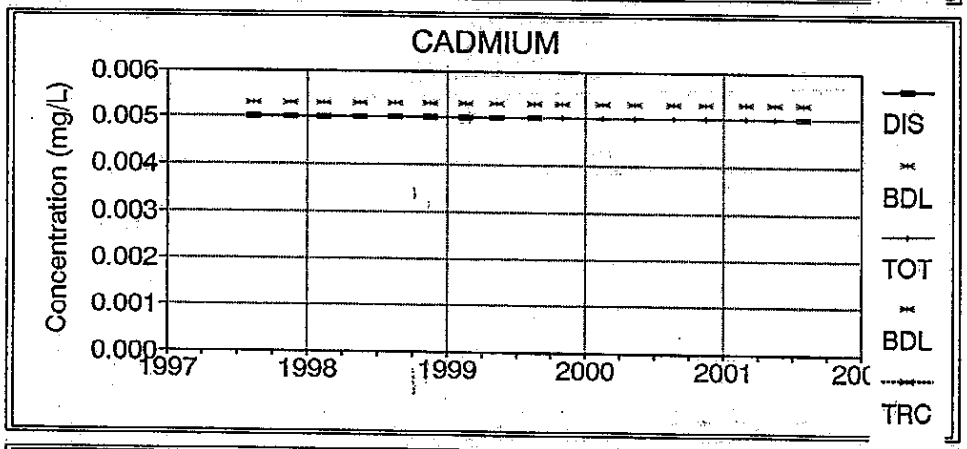


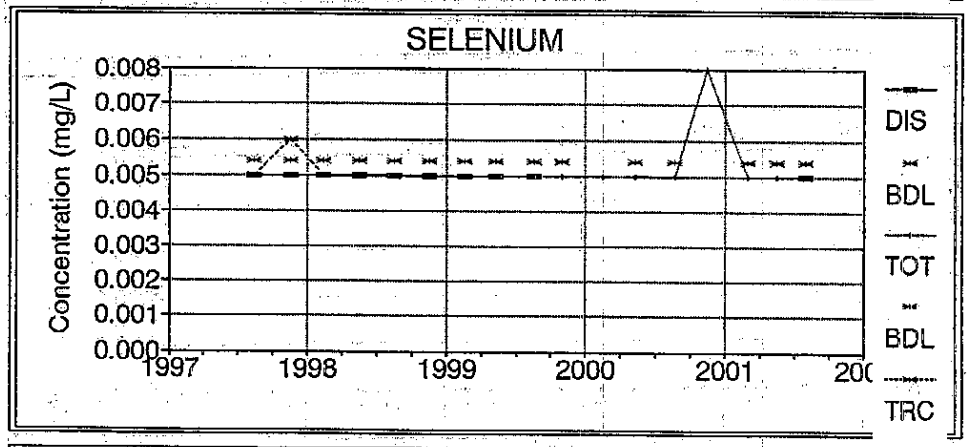
BDL - Below Analytical Detection Limit

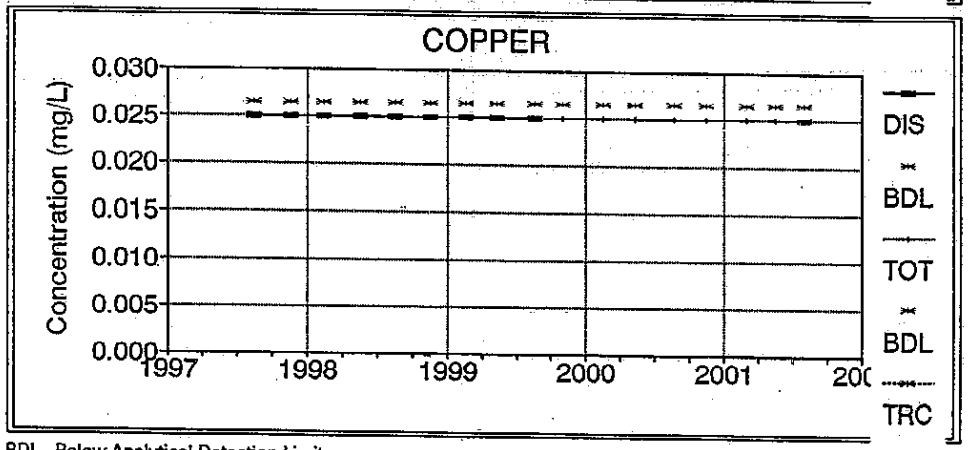
SEP-10

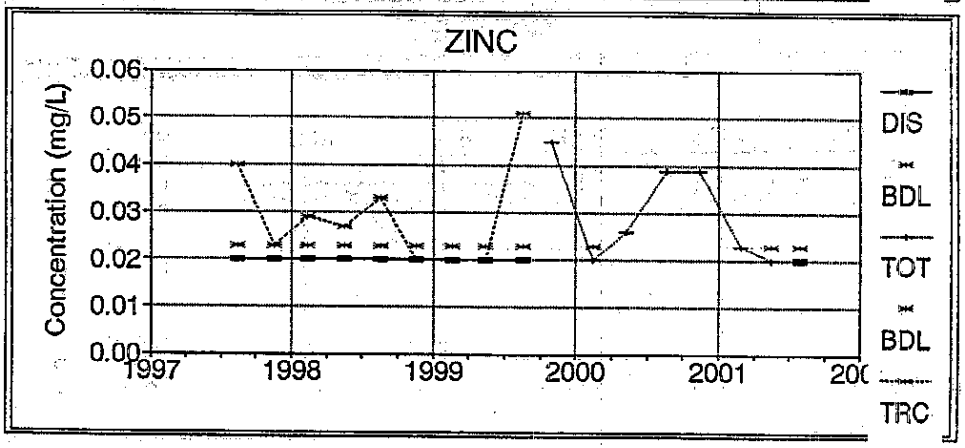






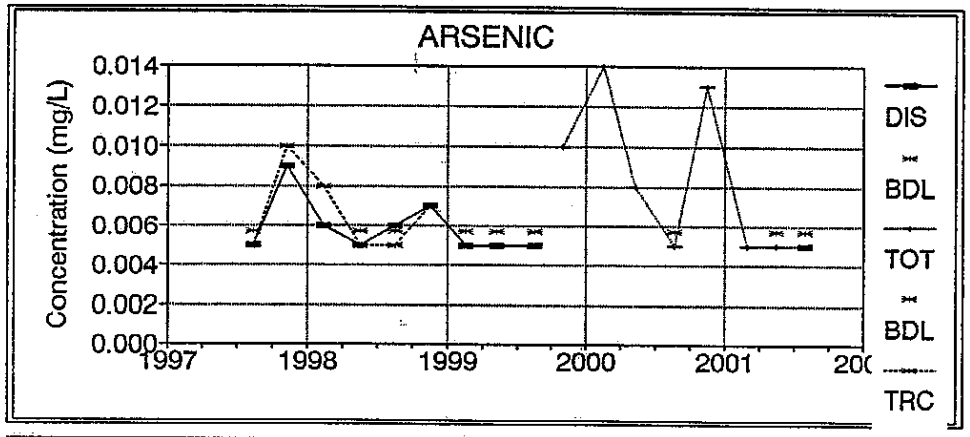


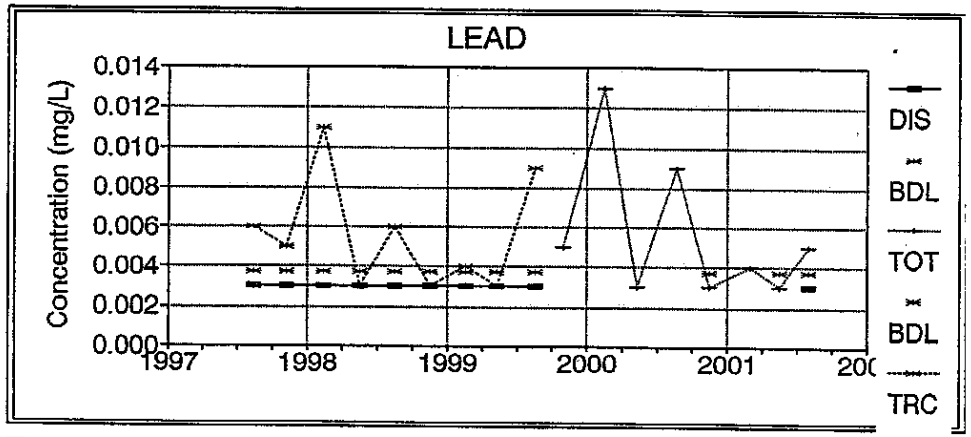


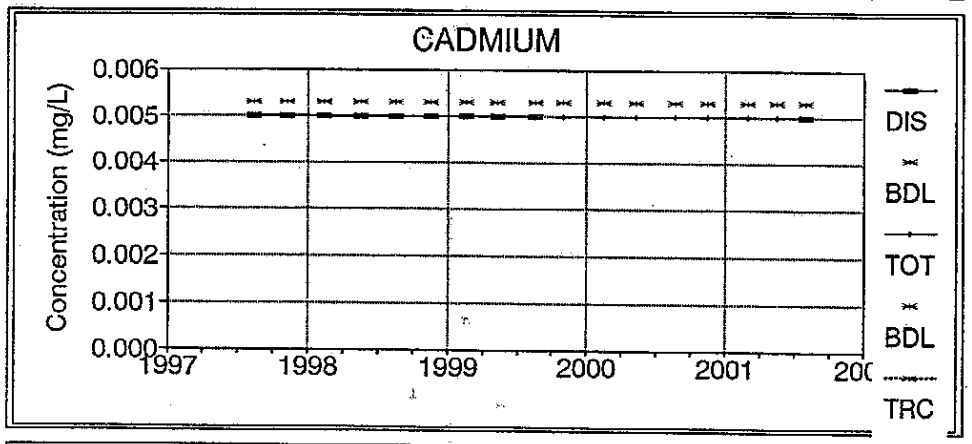


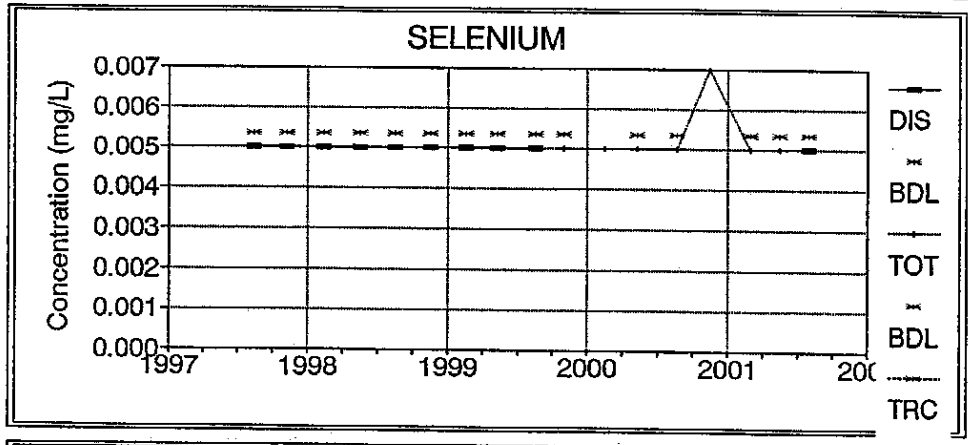
BDL - Below Analytical Detection Limit

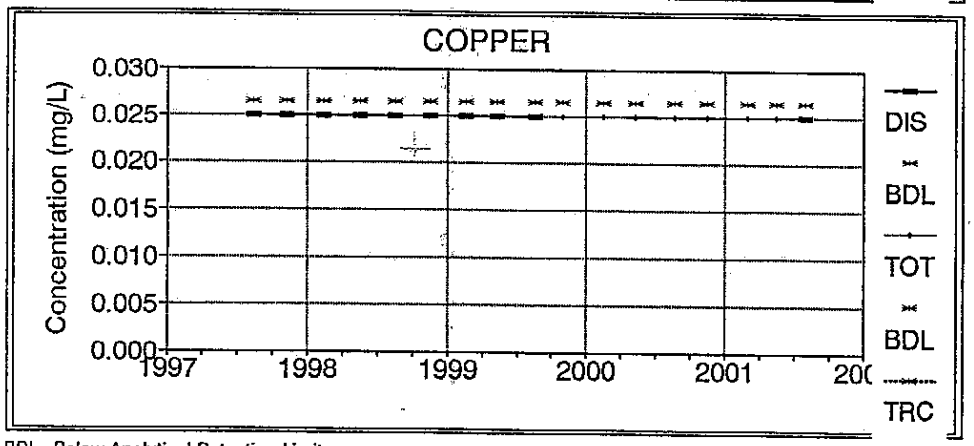
SEP

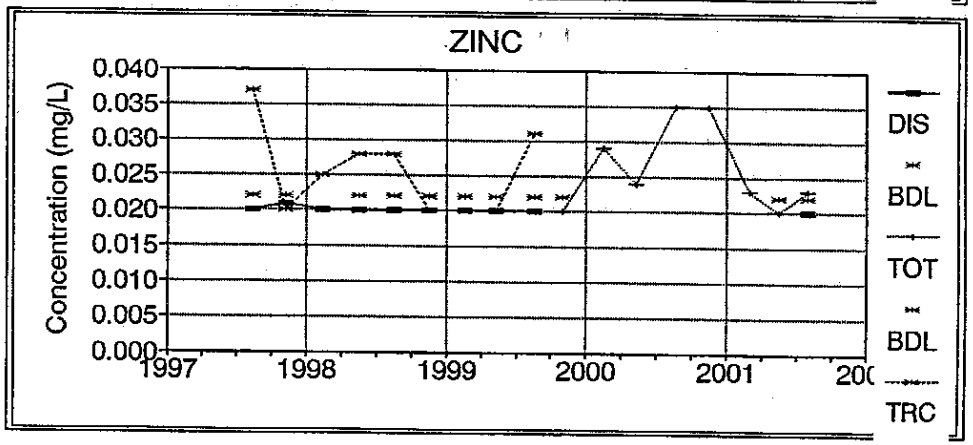






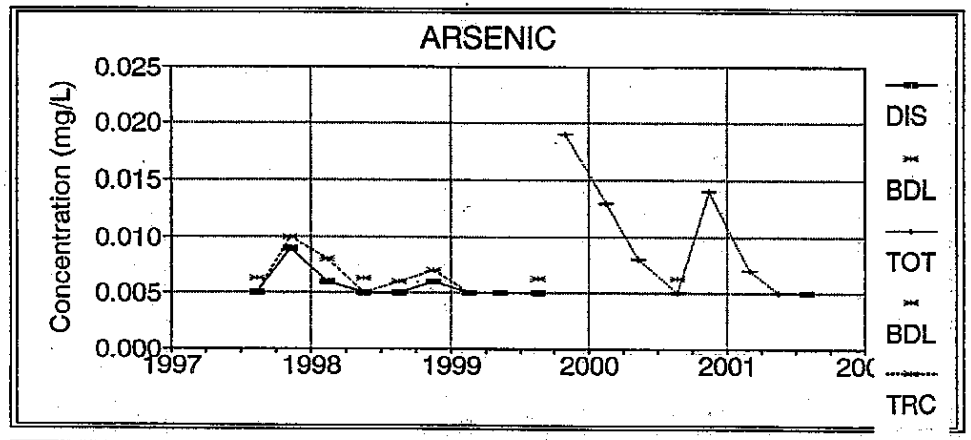


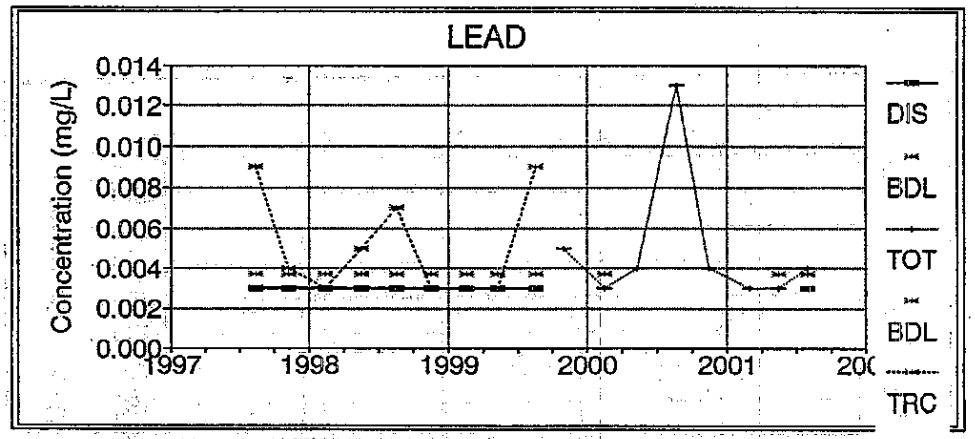


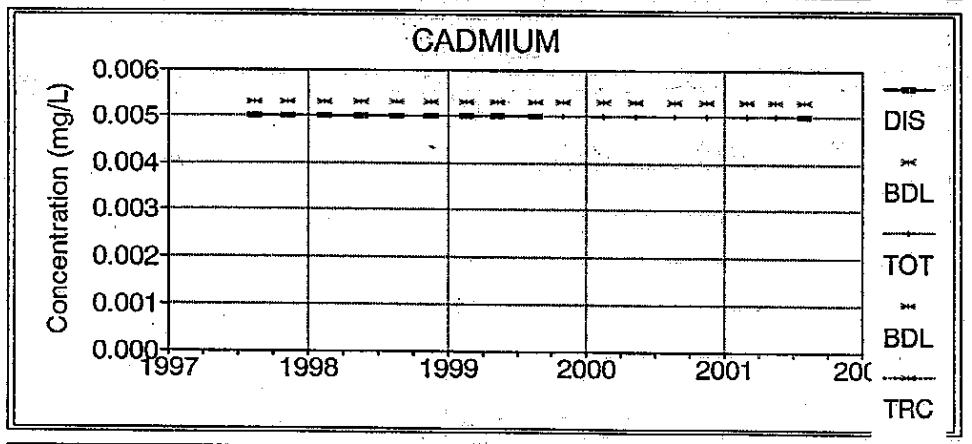


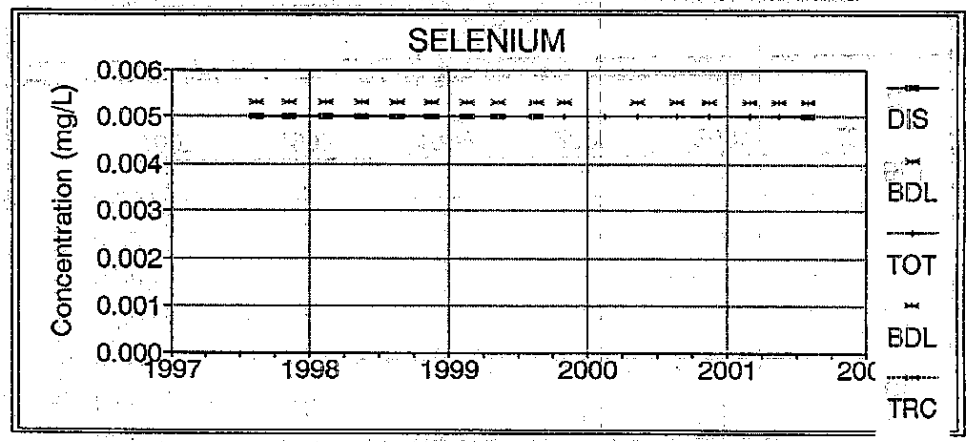
BDL - Below Analytical Detection Limit

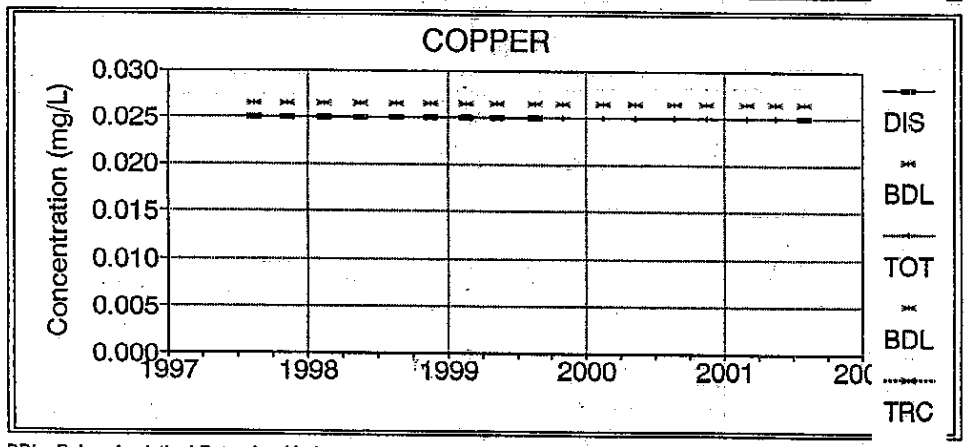
SEP-12

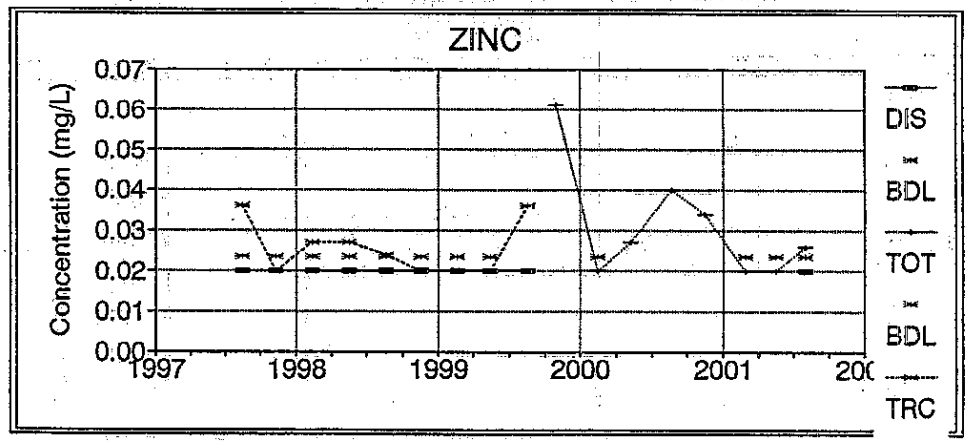






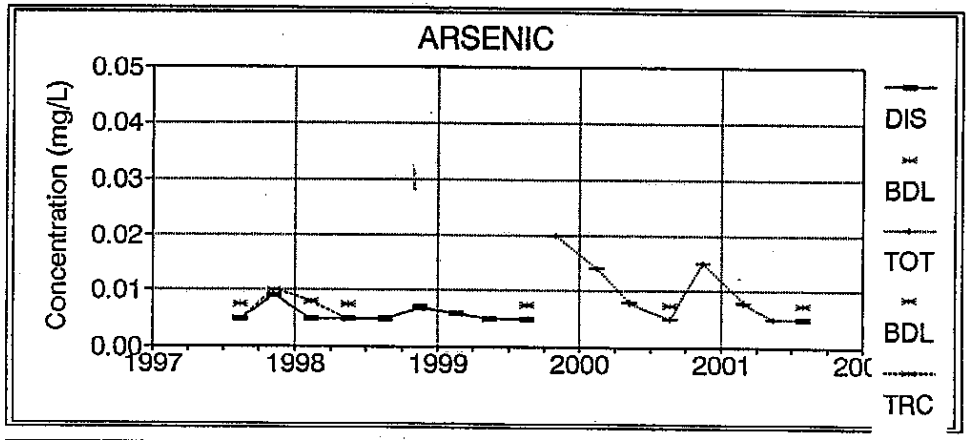


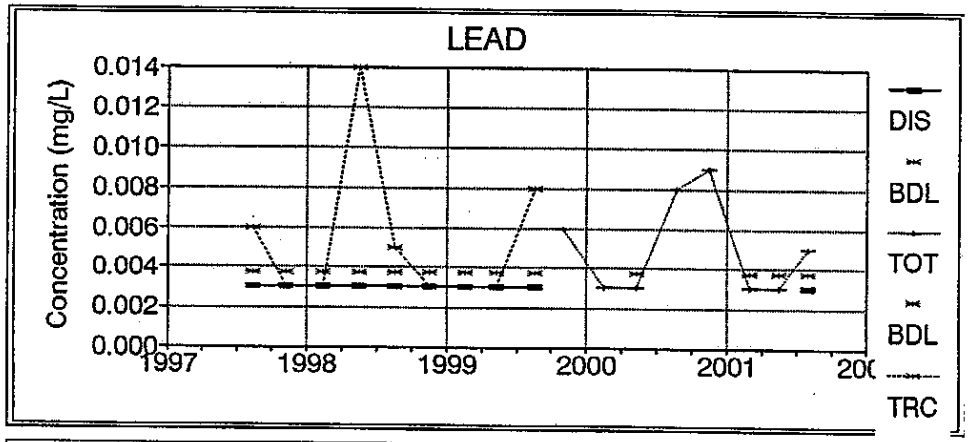


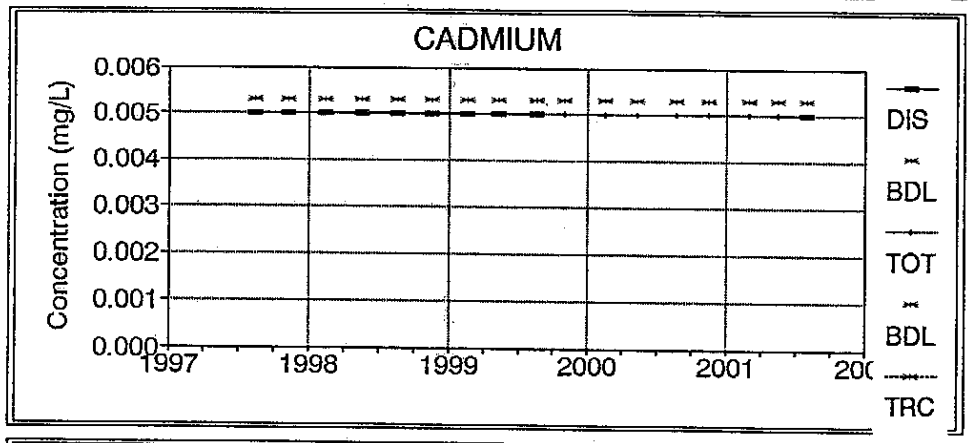


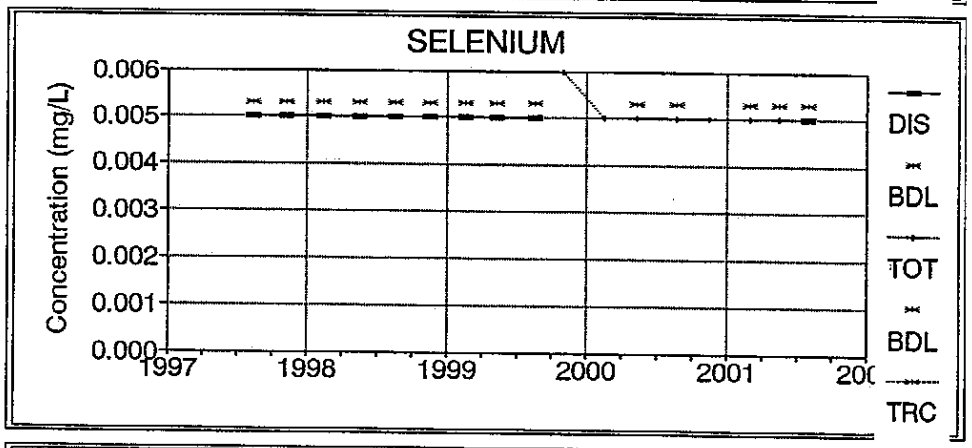
BDL - Below Analytical Detection Limit

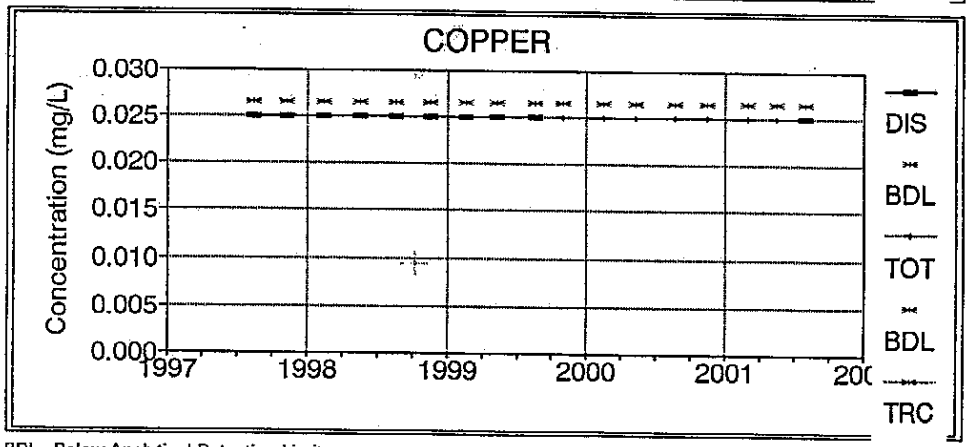
SEP 3

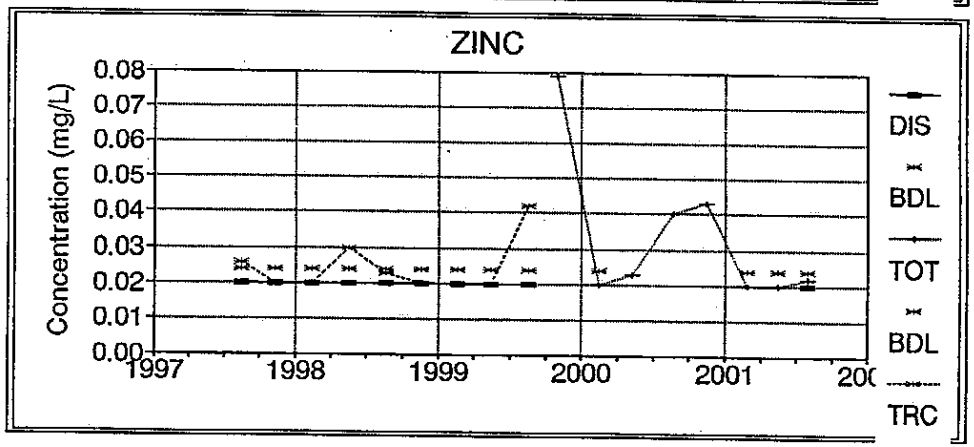






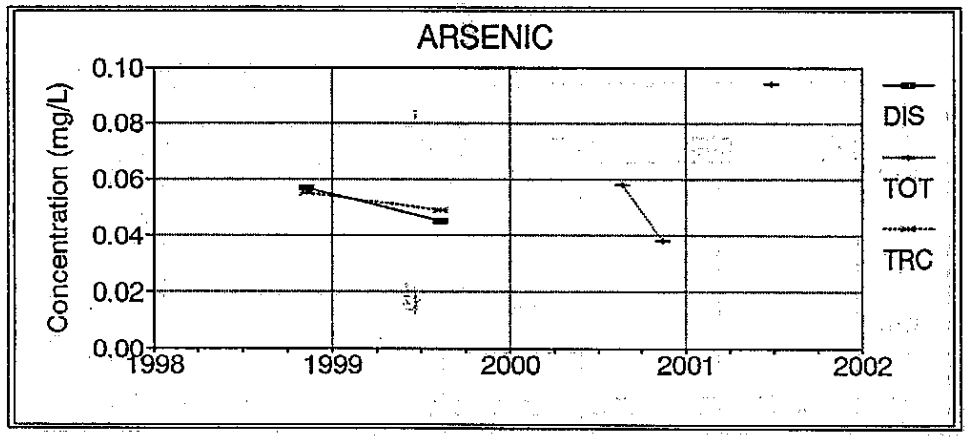


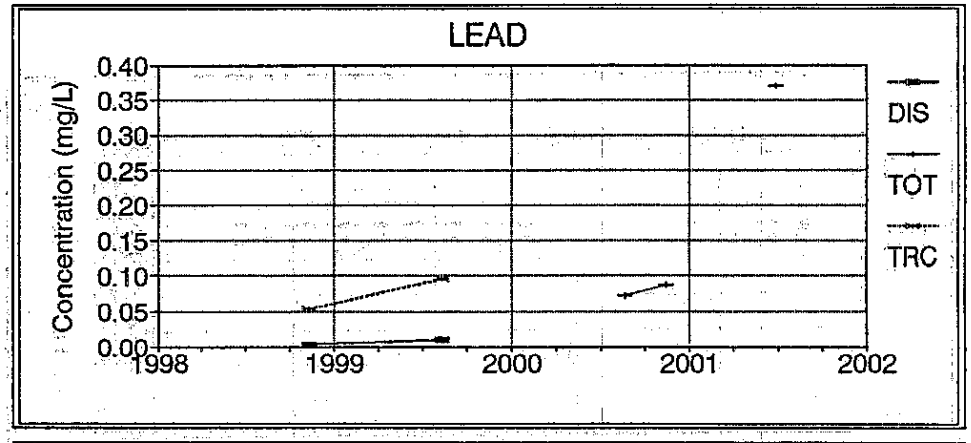


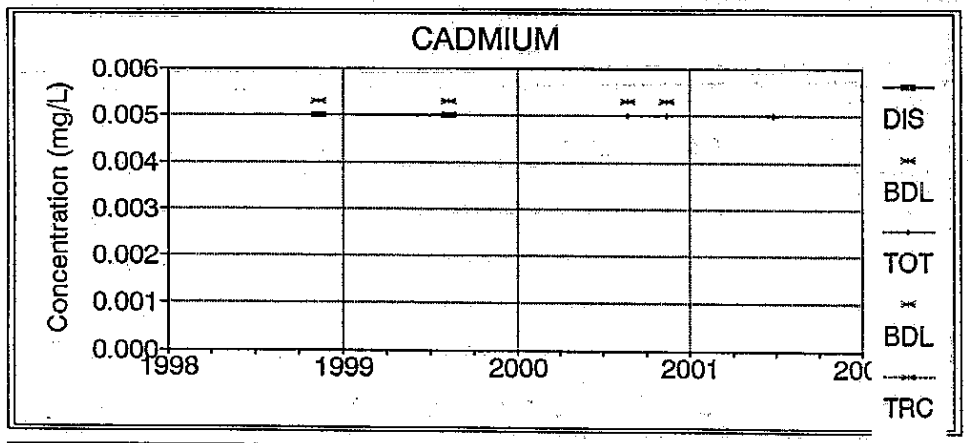


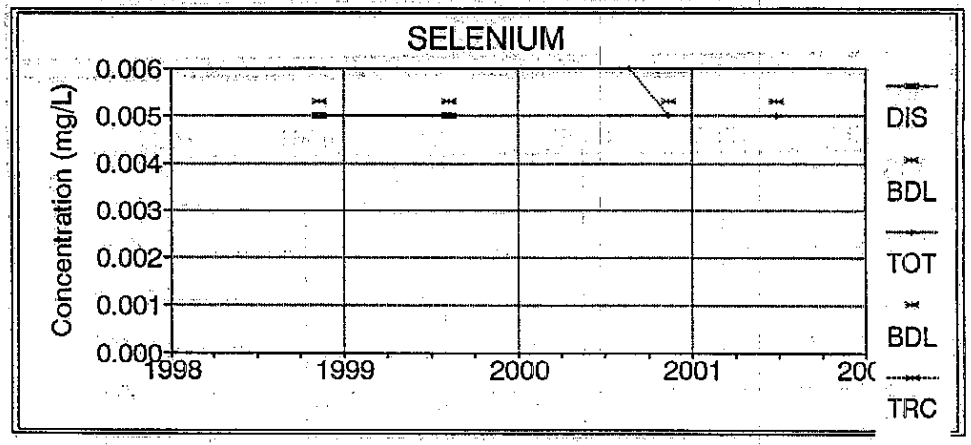
BDL - Below Analytical Detection Limit

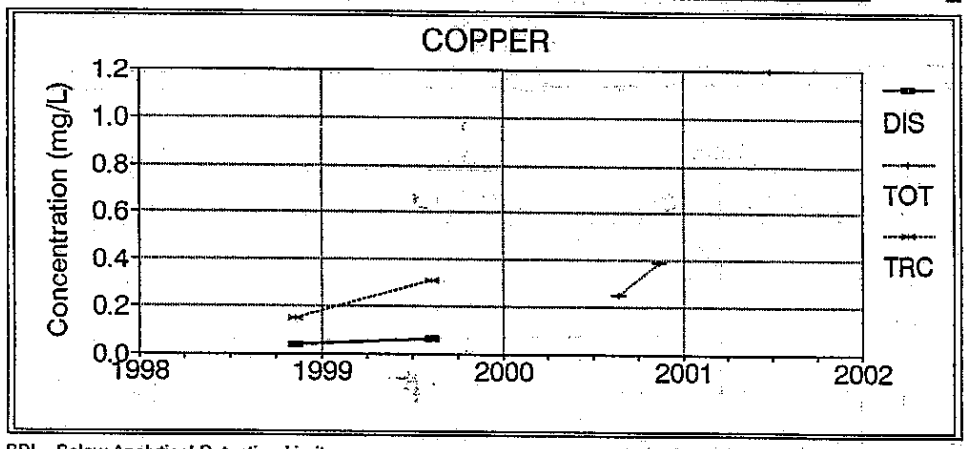
SEP-14

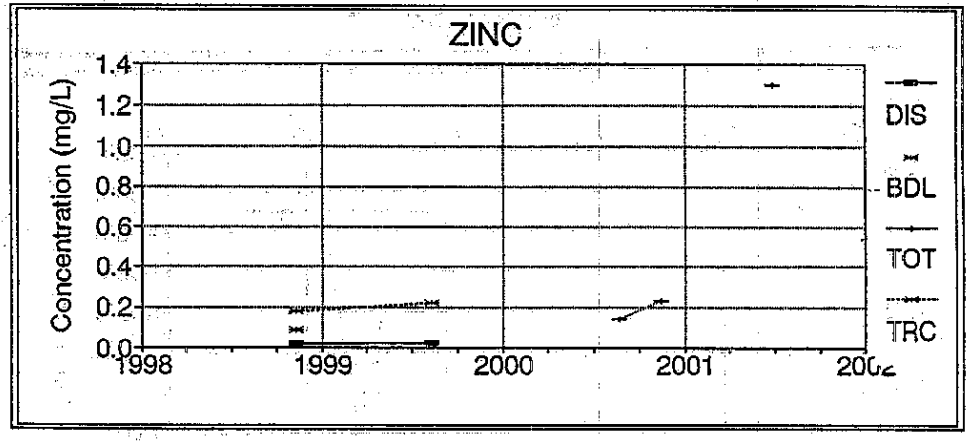












BDL - Below Analytical Detection Limit

APPENDIX M

WATER TABLE MONITORING DATA

APPENDIX M

WATER TABLE MONITORING DATA

Appendix M

Cumulative List of Groundwater Level Measurements
Period of Record (1997 Through 2001)
Asarco El Paso Smelter
Remedial Investigation Phase III

Monitor Well ID #	Sample Date	Top of Casing (ft) amsl	Depth to Water (ft)	Groundwater Elevation (ft) amsl
EM-1	8/13/1997	3784.99	77.85	3707.14
EM-1	11/17/1997	3784.99	77.95	3707.04
EM-1	2/19/1998	3784.99	74.76	3710.23
EM-1	5/18/1998	3784.99	71.98	3713.01
EM-1	8/20/1998	3784.99	70.09	3714.90
EM-1	11/18/1998	3784.99	67.32	3717.67
EM-1	2/24/1999	3784.99	65.42	3719.57
EM-1	5/12/1999	3784.99	65.64	3719.35
EM-1	8/11/1999	3784.99	65.19	3719.80
EM-1	10/30/1999	3784.99	66.76	3718.23
EM-1	1/31/2000	3784.99	67.34	3717.65
EM-1	5/4/2000	3784.99	65.78	3719.21
EM-1	8/16/2000	3784.99	65.78	3719.21
EM-1	11/14/2000	3784.99	64.81	3720.18
EM-1	2/22/2001	3784.99	64.25	3720.74
EM-1	5/16/2001	3784.99	65.41	3719.58
EM-1	7/31/2001	3784.99	64.83	3720.16
EM-2	8/11/1997	3776.02	63.8	3721.19
EM-2	8/26/1997	3776.02	62.51	3722.48
EM-2	11/17/1997	3776.02	65.88	3719.11
EM-2	2/17/1998	3776.02	65.72	3719.27
EM-2	5/18/1998	3776.02	63.77	3721.22
EM-2	8/13/1998	3776.02	62.74	3722.25
EM-2	11/11/1998	3776.02	63.92	3721.07
EM-2	2/22/1999	3776.02	65.37	3719.62
EM-2	5/10/1999	3776.02	64.09	3720.90
EM-2	8/6/1999	3776.02	61.79	3723.20
EM-2	10/29/1999	3776.02	64.83	3720.16
EM-2	1/25/2000	3776.02	64.66	3720.33
EM-2	4/26/2000	3776.02	64.39	3720.60
EM-2	8/3/2000	3776.02	62.87	3722.12
EM-2	11/1/2000	3776.02	65.14	3719.85
EM-2	2/9/2001	3776.02	64.87	3720.12
EM-2	5/8/2001	3776.02	62.64	3722.35
EM-2	7/18/2001	3776.02	61.85	3723.14
EM-4	8/11/1997	3774.29	61.38	3723.61
EM-4	8/26/1997	3774.29	89.38	3695.61
EM-4	11/17/1997	3774.29	63.25	3721.74
EM-4	2/17/1998	3774.29	63.51	3721.48
EM-4	5/18/1998	3774.29	61.8	3723.19
EM-4	8/13/1998	3774.29	61.57	3723.42
EM-4	11/11/1998	3774.29	62	3722.99
EM-4	2/22/1999	3774.29	60.8	3724.19
EM-4	5/10/1999	3774.29	59.45	3725.54
EM-4	8/6/1999	3774.29	58.27	3726.72
EM-4	10/29/1999	3774.29	60.98	3724.01
EM-4	1/25/2000	3774.29	62.7	3722.29
EM-4	4/26/2000	3774.29	61.72	3723.27

Appendix M

Cumulative List of Groundwater Level Measurements
Period of Record (1997 Through 2001)
Asarco El Paso Smelter
Remedial Investigation Phase III

Monitor Well ID #	Sample Date	Top of Casing (ft) amsl	Depth to Water (ft)	Groundwater Elevation (ft) amsl
EM-4	8/3/2000	3774.29	60.98	3724.01
EM-4	11/1/2000	3774.29	61.73	3723.26
EM-4	2/9/2001	3774.29	63.21	3721.78
EM-4	5/7/2001	3774.29	61.1	3723.89
EM-4	7/18/2001	3774.29	61	3723.99
EM-5	8/11/1997	3776.50	14.48	3770.51
EM-5	8/26/1997	3776.50	14.49	3770.50
EM-5	11/17/1997	3776.50	14.62	3770.37
EM-5	2/17/1998	3776.50	14.45	3770.54
EM-5	5/18/1998	3776.50	14.36	3770.63
EM-5	8/17/1998	3776.50	14.45	3770.54
EM-5	11/11/1998	3776.50	14.54	3770.45
EM-5	2/11/1999	3776.50	14.41	3770.58
EM-5	5/10/1999	3776.50	14.43	3770.56
EM-5	8/6/1999	3776.50	14.35	3770.64
EM-5	11/2/1999	3776.50	14.34	3770.65
EM-5	1/25/2000	3776.50	14.34	3770.65
EM-5	4/26/2000	3776.50	15.14	3769.85
EM-5	8/4/2000	3776.50	16.1	3768.89
EM-5	11/3/2000	3776.50	16.52	3768.47
EM-5	2/14/2001	3776.50	16.86	3768.13
EM-5	5/9/2001	3776.50	17.22	3767.77
EM-5	7/19/2001	3776.50	17.39	3767.60
EM-6	8/11/1997	3770.64	35.55	3749.44
EM-6	11/17/1997	3770.64	34.9	3750.09
EM-6	2/17/1998	3770.64	34.78	3750.21
EM-6	5/18/1998	3770.64	35.28	3749.71
EM-6	8/17/1998	3770.64	36.6	3748.39
EM-6	11/11/1998	3770.64	36.71	3748.28
EM-6	2/11/1999	3770.64	36.98	3748.01
EM-6	5/10/1999	3770.64	37.72	3747.27
EM-6	8/6/1999	3770.64	36.92	3748.07
EM-6	11/2/1999	3770.64	37.5	3747.49
EM-6	1/25/2000	3770.64	36.01	3748.98
EM-6	4/26/2000	3770.64	37.46	3747.53
EM-6	8/4/2000	3770.64	37.25	3747.74
EM-6	11/3/2000	3770.64	37.98	3747.01
EM-6	2/14/2001	3770.64	38.2	3746.79
EM-6	5/9/2001	3770.64	38.7	3746.29
EM-6	7/19/2001	3770.64	39.15	3745.84
EM-7	11/17/1997	3773.41	8.56	3776.43
EM-7	2/19/1998	3773.41	8.63	3776.36
EM-7	5/7/1998	3773.41	8.5	3776.49
EM-7	8/20/1998	3773.41	8.47	3776.52
EM-7	11/11/1998	3773.41	8.42	3776.57
EM-7	2/24/1999	3773.41	8.53	3776.46
EM-7	5/12/1999	3773.41	9.07	3775.92
EM-7	8/6/1999	3773.41	8.38	3776.61

Appendix M

Cumulative List of Groundwater Level Measurements
Period of Record (1997 Through 2001)
Asarco El Paso Smelter
Remedial Investigation Phase III

Monitor Well ID #	Sample Date	Top of Casing (ft) amsl	Depth to Water (ft)	Groundwater Elevation (ft) amsl
EM-7	10/30/1999	3773.41	9.59	3775.40
EM-7	1/31/2000	3773.41	9.11	3775.88
EM-7	2/14/2001	3773.41	Got dry	
EM-7	5/9/2001	3773.41	Got dry	
EP-100	10/20/1999	3776.99	39.36	3745.63
EP-100	1/26/2000	3776.99	40.36	3744.63
EP-100	4/28/2000	3776.99	41.08	3743.91
EP-100	8/7/2000	3776.99	41.8	3743.19
EP-100	11/7/2000	3776.99	41.64	3743.35
EP-100	2/20/2001	3776.99	41.85	3743.14
EP-100	5/9/2001	3776.99	42.19	3742.80
EP-100	7/20/2001	3776.99	42.77	3742.22
EP-101	10/21/1999	3780.38	63.81	3721.18
EP-101	1/25/2000	3780.38	65.27	3719.72
EP-101	4/26/2000	3780.38	64.8	3720.19
EP-101	8/4/2000	3780.38	64.71	3720.28
EP-101	11/2/2000	3780.38	63.35	3721.64
EP-101	2/9/2001	3780.38	65.64	3719.35
EP-101	5/8/2001	3780.38	65.21	3719.78
EP-101	7/18/2001	3780.38	65.09	3719.90
EP-102	10/21/1999	3774.28	56.11	3728.88
EP-102	1/25/2000	3774.28	57.19	3727.80
EP-102	4/26/2000	3774.28	57.16	3727.83
EP-102	8/4/2000	3774.28	56.99	3728.00
EP-102	11/3/2000	3774.28	57.48	3727.51
EP-102	2/9/2001	3774.28	58.08	3726.91
EP-102	5/8/2001	3774.28	57.65	3727.34
EP-102	7/18/2001	3774.28	57.71	3727.28
EP-103	10/21/1999	3778.71	60.43	3724.56
EP-103	1/24/2000	3778.71	61.1	3723.89
EP-103	4/26/2000	3778.71	60.98	3724.01
EP-103	8/4/2000	3778.71	60.77	3724.22
EP-103	11/2/2000	3778.71	61.06	3723.93
EP-103	2/12/2001	3778.71	61.58	3723.41
EP-103	5/8/2001	3778.71	61.19	3723.80
EP-103	7/19/2001	3778.71	61.39	3723.60
EP-104	10/21/1999	3779.71	66.48	3718.51
EP-104	1/24/2000	3779.71	66.59	3718.40
EP-104	4/26/2000	3779.71	66.4	3718.59
EP-104	8/3/2000	3779.71	65.14	3719.85
EP-104	11/1/2000	3779.71	66.92	3718.07
EP-104	2/12/2001	3779.71	66.83	3718.16
EP-104	5/8/2001	3779.71	65.32	3719.67
EP-104	7/18/2001	3779.71	64.7	3720.29
EP-105	10/21/1999	3780.22	65.61	3719.38
EP-105	1/25/2000	3780.22	65.36	3719.63
EP-105	4/26/2000	3780.22	65.21	3719.78
EP-105	8/4/2000	3780.22	65.88	3719.11

Appendix M

Cumulative List of Groundwater Level Measurements
Period of Record (1997 Through 2001)
Asarco El Paso Smelter
Remedial Investigation Phase III

Monitor Well ID #	Sample Date	Top of Casing (ft) amsl	Depth to Water (ft)	Groundwater Elevation (ft) amsl
EP-105	11/1/2000	3780.22	65.37	3719.62
EP-105	2/14/2001	3780.22	65.47	3719.52
EP-105	5/9/2001	3780.22	64.84	3720.15
EP-105	7/19/2001	3780.22	64.61	3720.38
EP-106	10/21/1999	3780.40	61.15	3723.84
EP-106	1/25/2000	3780.40	60.38	3724.61
EP-106	4/26/2000	3780.40	60.36	3724.63
EP-106	8/2/2000	3780.40	60.1	3724.89
EP-106	11/2/2000	3780.40	60.73	3724.26
EP-106	2/12/2001	3780.40	60.77	3724.22
EP-106	5/9/2001	3780.40	59.98	3725.01
EP-106	7/18/2001	3780.40	63.07	3721.92
EP-107	10/21/1999	3782.71	63.68	3721.31
EP-107	1/24/2000	3782.71	63.66	3721.33
EP-107	4/25/2000	3782.71	63.66	3721.33
EP-107	8/3/2000	3782.71	63.39	3721.60
EP-107	11/3/2000	3782.71	63.71	3721.28
EP-107	2/12/2001	3782.71	64.02	3720.97
EP-107	5/8/2001	3782.71	63.04	3721.95
EP-107	7/17/2001	3782.71	60.01	3724.98
EP-108	10/26/1999	3774.26	20.82	3764.17
EP-108	1/28/2000	3774.26	22.13	3762.86
EP-108	5/2/2000	3774.26	32.27	3752.72
EP-108	8/9/2000	3774.26	20.29	3764.70
EP-108	11/9/2000	3774.26	20.64	3764.35
EP-108	2/15/2001	3774.26	21.75	3763.24
EP-108	5/14/2001	3774.26	23.07	3761.92
EP-108	7/25/2001	3774.26	22.87	3762.12
EP-109	10/26/1999	3776.67	19.85	3765.14
EP-109	1/28/2000	3776.67	19.32	3765.67
EP-109	5/2/2000	3776.67	21.07	3763.92
EP-109	8/9/2000	3776.67	19.29	3765.70
EP-109	11/9/2000	3776.67	18.89	3766.10
EP-109	2/15/2001	3776.67	19.17	3765.82
EP-109	5/14/2001	3776.67	21.02	3763.97
EP-109	7/25/2001	3776.67	21.73	3763.26
EP-110	10/29/1999	3722.03	7.96	3777.03
EP-110	1/24/2000	3722.03	6.48	3778.51
EP-110	4/25/2000	3722.03	8.6	3776.39
EP-110	8/2/2000	3722.03	8.25	3776.74
EP-110	10/31/2000	3722.03	9.15	3775.84
EP-110	2/8/2001	3722.03	9.08	3775.91
EP-110	5/7/2001	3722.03	8.89	3776.10
EP-110	7/17/2001	3722.03	8.64	3776.35
EP-111	10/28/1999	3716.75	8.04	3776.95
EP-111	1/29/2000	3716.75	5.99	3779.00
EP-111	5/2/2000	3716.75	5.33	3779.66
EP-111	8/14/2000	3716.75	4.82	3780.17

Appendix M

Cumulative List of Groundwater Level Measurements
Period of Record (1997 Through 2001)
Asarco El Paso Smelter
Remedial Investigation Phase III

Monitor Well ID #	Sample Date	Top of Casing (ft) amsl	Depth to Water (ft)	Groundwater Elevation (ft) amsl
EP-111	11/10/2000	3716.75	6.19	3778.80
EP-111	2/21/2001	3716.75	5.9	3779.09
EP-111	5/15/2001	3716.75	5.25	3779.74
EP-111	7/31/2001	3716.75	7.99	3777.00
EP-112	10/28/1999	3718.58	7.88	3777.11
EP-112	1/29/2000	3718.58	7.4	3777.59
EP-112	5/2/2000	3718.58	6.79	3778.20
EP-112	8/14/2000	3718.58	6.3	3778.69
EP-112	8/14/2000	3718.58		3784.99
EP-112	11/10/2000	3718.58	7.51	3777.48
EP-112	2/21/2001	3718.58	7.35	3777.64
EP-112	5/15/2001	3718.58	6.64	3778.35
EP-112	7/31/2001	3718.58	6.09	3778.90
EP-113	10/28/1999	3718.58	7.22	3777.77
EP-113	1/29/2000	3718.58	7.23	3777.76
EP-113	5/2/2000	3718.58	6.59	3778.40
EP-113	8/14/2000	3718.58	6.01	3778.98
EP-113	11/10/2000	3718.58	7.28	3777.71
EP-113	2/21/2001	3718.58	7	3777.99
EP-113	5/15/2001	3718.58	6.33	3778.66
EP-113	7/31/2001	3718.58	6.78	3778.21
EP-114	11/18/1999	3728.64	13.9	3771.09
EP-114	1/31/2000	3728.64	13.97	3771.02
EP-114	5/4/2000	3728.64	13.55	3771.44
EP-114	8/14/2000	3728.64	13.1	3771.89
EP-114	11/10/2000	3728.64	13.71	3771.28
EP-114	5/4/2001	3728.64	13.56	3771.43
EP-114	7/16/2001	3728.64	13.32	3771.67
EP-115	11/22/1999	3728.59	13.58	3771.41
EP-115	1/31/2000	3728.59	12.26	3772.73
EP-115	5/4/2000	3728.59	13.21	3771.78
EP-115	8/14/2000	3728.59	13.31	3771.68
EP-115	11/10/2000	3728.59	10.82	3774.17
EP-115	2/23/2001	3728.59	14.2	3770.79
EP-115	5/4/2001	3728.59	14.24	3770.75
EP-115	7/16/2001	3728.59	13.95	3771.04
EP-116	11/18/1999	3724.64	13.7	3771.29
EP-116	1/31/2000	3724.64	12.28	3772.71
EP-116	5/4/2000	3724.64	11.73	3773.26
EP-116	8/14/2000	3724.64	11.44	3773.55
EP-116	11/10/2000	3724.64	12.5	3772.49
EP-116	2/22/2001	3724.64	12.6	3772.39
EP-116	5/4/2001	3724.64	11.7	3773.29
EP-116	7/16/2001	3724.64	11.42	3773.57
EP-117	11/18/1999	3726.46	15.44	3769.55
EP-117	1/31/2000	3726.46	14.82	3770.17
EP-117	5/4/2000	3726.46	14.24	3770.75
EP-117	8/14/2000	3726.46	13.9	3771.09

Appendix M

Cumulative List of Groundwater Level Measurements
Period of Record (1997 Through 2001)
Asarco El Paso Smelter
Remedial Investigation Phase III

Monitor Well ID #	Sample Date	Top of Casing (ft) amsl	Depth to Water (ft)	Groundwater Elevation (ft) amsl
EP-117	11/10/2000	3726.46	15.12	3769.87
EP-117	2/22/2001	3726.46	15	3769.99
EP-117	5/4/2001	3726.46	14.15	3770.84
EP-117	7/16/2001	3726.46	13.84	3771.15
EP-118	11/18/1999	3726.21	11.64	3773.35
EP-118	1/31/2000	3726.21	11.42	3773.57
EP-118	5/4/2000	3726.21	11.26	3773.73
EP-118	8/14/2000	3726.21	10.89	3774.10
EP-118	11/10/2000	3726.21	11.31	3773.68
EP-118	2/22/2001	3726.21	12	3772.99
EP-118	5/4/2001	3726.21	11.57	3773.42
EP-118	7/17/2001	3726.21	11.57	3773.42
EP-119	5/15/2001	3726.09	12.48	3772.51
EP-119	7/27/2001	3726.09	12.07	3772.92
EP-12	11/3/1997	3773.23	62.41	3722.58
EP-12	2/3/1998	3773.23	63.07	3721.92
EP-12	5/20/1998	3773.23	62	3722.99
EP-12	8/27/1998	3773.23	60.88	3724.11
EP-12	11/16/1998	3773.23	61.3	3723.69
EP-12	2/25/1999	3773.23	60.35	3724.64
EP-12	5/14/1999	3773.23	59.39	3725.60
EP-12	8/11/1999	3773.23	58.12	3726.87
EP-12	10/29/1999	3773.23	61.12	3723.87
EP-12	2/8/2000	3773.23	62.37	3722.62
EP-12	5/9/2000	3773.23	61.24	3723.75
EP-12	8/16/2000	3773.23	60.56	3724.43
EP-12	11/14/2000	3773.23	62	3722.99
EP-12	2/26/2001	3773.23	61.56	3723.43
EP-12	5/17/2001	3773.23	60.82	3724.17
EP-12	7/30/2001	3773.23	60.4	3724.59
EP-120	5/7/2001	3779.46	14.14	3770.85
EP-120	8/1/2001	3779.46	21.4	3763.59
EP-121	5/7/2001	3779.14	21.37	3763.62
EP-121	8/1/2001	3779.14	13.91	3771.08
EP-122	5/14/2001	3727.59	13.03	3771.96
EP-122	7/27/2001	3727.59	12.58	3772.41
EP-123	5/8/2001	3787.93	41.35	3743.64
EP-123	7/25/2001	3787.93	41	3743.99
EP-124	5/16/2001	3774.56	34.51	3750.48
EP-124	7/27/2001	3774.56	35.12	3749.87
EP-125	5/7/2001	3782.45	37.32	3747.67
EP-125	7/19/2001	3782.45	38.01	3746.98
EP-126	5/8/2001	3779.90	31.65	3753.34
EP-126	7/19/2001	3779.90	33.03	3751.96
EP-127	5/8/2001	3718.83	7.11	3777.88
EP-127	7/31/2001	3718.83	6.58	3778.41
EP-128	5/8/2001	3717.16	5.8	3779.19
EP-128	7/31/2001	3717.16	5.27	3779.72

Appendix M

Cumulative List of Groundwater Level Measurements
Period of Record (1997 Through 2001)
Asarco El Paso Smelter
Remedial Investigation Phase III

Monitor Well ID #	Sample Date	Top of Casing (ft) amsl	Depth to Water (ft)	Groundwater Elevation (ft) amsl
EP-129	5/11/2001	3813.99	19.41	3765.58
EP-129	7/24/2001	3813.99	19.23	3765.76
EP-13	8/7/1997	3776.22	59.64	3725.35
EP-13	11/6/1997	3776.22	60.08	3724.91
EP-13	2/17/1998	3776.22	60.03	3724.96
EP-13	5/7/1998	3776.22	59.25	3725.74
EP-13	8/6/1998	3776.22	59.45	3725.54
EP-13	11/4/1998	3776.22	60.46	3724.53
EP-13	2/8/1999	3776.22	60.15	3724.84
EP-13	5/6/1999	3776.22	60.37	3724.62
EP-13	8/3/1999	3776.22	59.88	3725.11
EP-13	10/28/1999	3776.22	60.84	3724.15
EP-13	1/25/2000	3776.22	61.29	3723.70
EP-13	4/26/2000	3776.22	60.96	3724.03
EP-13	8/4/2000	3776.22	60.84	3724.15
EP-13	11/2/2000	3776.22	61.43	3723.56
EP-13	2/9/2001	3776.22	61.84	3723.15
EP-13	5/8/2001	3776.22	61.35	3723.64
EP-13	7/18/2001	3776.22	61.27	3723.72
EP-130	6/8/2001	3772.34	67.21	3717.78
EP-130	7/26/2001	3772.34	66.32	3718.67
EP-131	6/8/2001	3778.98	57.55	3727.44
EP-131	7/26/2001	3778.98	56.11	3728.88
EP-132	6/8/2001	3724.69	14.15	3770.84
EP-132	7/27/2001	3724.69	12.03	3772.96
EP-14	11/5/1997	3774.98	59.8	3725.19
EP-14	2/17/1998	3774.98	60.03	3724.96
EP-14	5/7/1998	3774.98	58.58	3726.41
EP-14	8/6/1998	3774.98	59.15	3725.84
EP-14	11/4/1998	3774.98	59.81	3725.18
EP-14	2/8/1999	3774.98	59.23	3725.76
EP-14	5/6/1999	3774.98	58.79	3726.20
EP-14	8/3/1999	3774.98	58.43	3726.56
EP-14	10/28/1999	3774.98	59.61	3725.38
EP-14	1/25/2000	3774.98	60.4	3724.59
EP-14	4/26/2000	3774.98	59.9	3725.09
EP-14	8/4/2000	3774.98	59.69	3725.30
EP-14	11/2/2000	3774.98	60.05	3724.94
EP-14	2/9/2001	3774.98	60.66	3724.33
EP-14	5/8/2001	3774.98	59.99	3725.00
EP-14	7/18/2001	3774.98	59.95	3725.04
EP-15	8/7/1997	3773.19	58.64	3726.35
EP-15	11/6/1997	3773.19	58.55	3726.44
EP-15	2/17/1998	3773.19	58.61	3726.38
EP-15	5/7/1998	3773.19	58.22	3726.77
EP-15	8/10/1998	3773.19	58.56	3726.43
EP-15	11/5/1998	3773.19	59.2	3725.79
EP-15	2/8/1999	3773.19	59.04	3725.95

Appendix M

Cumulative List of Groundwater Level Measurements
Period of Record (1997 Through 2001)
Asarco El Paso Smelter
Remedial Investigation Phase III

Monitor Well ID #	Sample Date	Top of Casing (ft) amsl	Depth to Water (ft)	Groundwater Elevation (ft) amsl
EP-15	5/5/1999	3773.19	58.42	3726.57
EP-15	8/3/1999	3773.19	58.24	3726.75
EP-15	10/28/1999	3773.19	59.33	3725.66
EP-15	1/24/2000	3773.19	56.74	3728.25
EP-15	4/26/2000	3773.19	59.66	3725.33
EP-15	8/3/2000	3773.19	59.25	3725.74
EP-15	11/2/2000	3773.19	59.63	3725.36
EP-15	2/12/2001	3773.19	59.98	3725.01
EP-15	5/8/2001	3773.19	59.74	3725.25
EP-15	7/19/2001	3773.19	59.84	3725.15
EP-20	8/7/1997	3724.55	13.67	3771.32
EP-20	11/3/1997	3724.55	17.06	3767.93
EP-20	2/3/1998	3724.55	16.98	3768.01
EP-20	5/6/1998	3724.55	14.39	3770.60
EP-20	8/6/1998	3724.55	13.22	3771.77
EP-20	11/4/1998	3724.55	14.54	3770.45
EP-20	2/4/1999	3724.55	13.25	3771.74
EP-20	5/4/1999	3724.55	14.01	3770.98
EP-20	8/2/1999	3724.55	13.01	3771.98
EP-20	10/26/1999	3724.55	14.86	3770.13
EP-20	1/31/2000	3724.55	15.16	3769.83
EP-20	5/4/2000	3724.55	14.54	3770.45
EP-20	8/2/2000	3724.55	13.9	3771.09
EP-20	10/30/2000	3724.55	14.94	3770.05
EP-20	2/22/2001	3724.55	15	3769.99
EP-20	5/16/2001	3724.55	14	3770.99
EP-20	7/17/2001	3724.55	13.31	3771.68
EP-21	11/18/1997	3780.74	28.35	3756.64
EP-21	2/18/1998	3780.74	26.3	3758.69
EP-21	5/21/1998	3780.74	27.8	3757.19
EP-21	8/24/1998	3780.74	29.65	3755.34
EP-21	11/16/1998	3780.74	30.42	3754.57
EP-21	2/24/1999	3780.74	28.68	3756.31
EP-21	8/10/1999	3780.74	27.67	3757.32
EP-21	11/3/1999	3780.74	25.11	3759.88
EP-21	2/1/2000	3780.74	25.28	3759.71
EP-21	5/8/2000	3780.74	25.95	3759.04
EP-21	8/16/2000	3780.74	25.87	3759.12
EP-21	11/14/2000	3780.74	26.62	3758.37
EP-21	2/26/2001	3780.74	28.9	3756.09
EP-21	5/16/2001	3780.74	31.02	3753.97
EP-21	7/30/2001	3780.74	32.69	3752.30
EP-22	8/15/1997	3776.23	37.35	3747.64
EP-22	11/18/1997	3776.23	35.8	3749.19
EP-22	2/18/1998	3776.23	35.1	3749.89
EP-22	6/10/1998	3776.23	36.04	3748.95
EP-22	8/24/1998	3776.23	38.77	3746.22
EP-22	11/16/1998	3776.23	38.92	3746.07

Appendix M

Cumulative List of Groundwater Level Measurements
Period of Record (1997 Through 2001)
Asarco El Paso Smelter
Remedial Investigation Phase III

Monitor Well ID #	Sample Date	Top of Casing (ft) amsl	Depth to Water (ft)	Groundwater Elevation (ft) amsl
EP-22	1/26/2000	3776.23	52.65	3732.34
EP-22	4/28/2000	3776.23	53.15	3731.84
EP-22	8/7/2000	3776.23	53.37	3731.62
EP-22	11/3/2000	3776.23	53.04	3731.95
EP-22	2/14/2001	3776.23	53.31	3731.68
EP-22	5/9/2001	3776.23	53.85	3731.14
EP-22	7/19/2001	3776.23	54.43	3730.56
EP-23	8/11/1997	3775.32	29.67	3755.32
EP-23	11/4/1997	3775.32	25.1	3759.89
EP-23	2/4/1998	3775.32	23.73	3761.26
EP-23	5/11/1998	3775.32	24.37	3760.62
EP-23	8/12/1998	3775.32	27.38	3757.61
EP-23	11/5/1998	3775.32	26.4	3758.59
EP-23	2/11/1999	3775.32	25.6	3759.39
EP-23	5/7/1999	3775.32	23.42	3761.57
EP-23	5/14/1999	3775.32	23.82	3761.17
EP-23	8/4/1999	3775.32	22.12	3762.87
EP-23	10/30/1999	3775.32	20.61	3764.38
EP-23	2/1/2000	3775.32	21.68	3763.31
EP-23	5/3/2000	3775.32	23.26	3761.73
EP-23	8/16/2000	3775.32	22.99	3762.00
EP-23	11/13/2000	3775.32	23.39	3761.60
EP-23	2/21/2001	3775.32	26.15	3758.84
EP-23	5/10/2001	3775.32	28.55	3756.44
EP-23	7/20/2001	3775.32	30.37	3754.62
EP-24	8/15/1997	3774.87	32.55	3752.44
EP-24	11/18/1997	3774.87	26.64	3758.35
EP-24	2/18/1998	3774.87	21.7	3763.29
EP-24	5/21/1998	3774.87	34.56	3750.43
EP-24	8/24/1998	3774.87	35.73	3749.26
EP-24	11/16/1998	3774.87	36.3	3748.69
EP-24	2/11/1999	3774.87	34.09	3750.90
EP-24	5/14/1999	3774.87	34.04	3750.95
EP-24	8/10/1999	3774.87	32.92	3752.07
EP-24	11/3/1999	3774.87	32.01	3752.98
EP-24	2/1/2000	3774.87	31.76	3753.23
EP-24	5/8/2000	3774.87	35.09	3749.90
EP-24	8/16/2000	3774.87	34.86	3750.13
EP-24	11/14/2000	3774.87	33.95	3751.04
EP-24	2/26/2001	3774.87	36.25	3748.74
EP-24	5/16/2001	3774.87	37.01	3747.98
EP-24	7/30/2001	3774.87	37.24	3747.75
EP-25	8/15/1997	3786.72	47.16	3737.83
EP-25	11/19/1997	3786.72	46.19	3738.80
EP-25	2/18/1998	3786.72	46.51	3738.48
EP-25	5/21/1998	3786.72	47.88	3737.11
EP-25	11/16/1998	3786.72	48.88	3736.11
EP-25	5/14/1999	3786.72	46.79	3738.20

Appendix M

Cumulative List of Groundwater Level Measurements
Period of Record (1997 Through 2001)
Asarco El Paso Smelter
Remedial Investigation Phase III

Monitor Well ID #	Sample Date	Top of Casing (ft) amsl	Depth to Water (ft)	Groundwater Elevation (ft) amsl
EP-25	8/11/1999	3786.72	48.35	3736.64
EP-25	11/3/1999	3786.72	47.48	3737.51
EP-25	2/8/2000	3786.72	48.11	3736.88
EP-25	5/8/2000	3786.72	49.06	3735.93
EP-25	8/16/2000	3786.72	49.42	3735.57
EP-25	11/14/2000	3786.72	49.3	3735.69
EP-25	2/26/2001	3786.72	50.2	3734.79
EP-25	5/16/2001	3786.72	50.9	3734.09
EP-25	7/30/2001	3786.72	51.82	3733.17
EP-26	8/11/1997	3770.64	48.8	3736.19
EP-26	11/4/1997	3770.64	56.7	3728.29
EP-26	2/4/1998	3770.64	50.44	3734.55
EP-26	5/7/1998	3770.64	48.86	3736.13
EP-26	8/12/1998	3770.64	49.5	3735.49
EP-26	11/4/1998	3770.64	48.05	3736.94
EP-26	2/4/1999	3770.64	48.13	3736.86
EP-26	5/5/1999	3770.64	57.15	3727.84
EP-26	8/4/1999	3770.64	56.5	3728.49
EP-26	1/26/2000	3770.64	60.86	3724.13
EP-26	4/28/2000	3770.64	60.12	3724.87
EP-26	8/7/2000	3770.64	60.1	3724.89
EP-26	11/7/2000	3770.64	61.09	3723.90
EP-26	2/20/2001	3770.64	61.2	3723.79
EP-26	5/10/2001	3770.64	60.51	3724.48
EP-26	7/26/2001	3770.64	60.28	3724.71
EP-29	8/7/1997	3727.25	13.35	3771.64
EP-29	11/3/1997	3727.25	16.92	3768.07
EP-29	2/3/1998	3727.25	16.95	3768.04
EP-29	5/6/1998	3727.25	13.8	3771.19
EP-29	8/6/1998	3727.25	13.35	3771.64
EP-29	11/4/1998	3727.25	15.21	3769.78
EP-29	2/3/1999	3727.25	13.7	3771.29
EP-29	5/4/1999	3727.25	13.74	3771.25
EP-29	8/2/1999	3727.25	13.19	3771.80
EP-29	10/26/1999	3727.25	14.64	3770.35
EP-29	1/31/2000	3727.25	14.95	3770.04
EP-29	5/4/2000	3727.25	14.14	3770.85
EP-29	8/2/2000	3727.25	13.7	3771.29
EP-29	10/30/2000	3727.25	15.04	3769.95
EP-29	2/22/2001	3727.25	14.65	3770.34
EP-29	5/16/2001	3727.25	13.95	3771.04
EP-29	7/17/2001	3727.25	13.69	3771.30
EP-35	8/7/1997	3725.74	13.43	3771.56
EP-35	11/3/1997	3725.74	17.28	3767.71
EP-35	2/3/1998	3725.74	17.48	3767.51
EP-35	5/6/1998	3725.74	14.48	3770.51
EP-35	8/6/1998	3725.74	17.48	3767.51
EP-35	11/4/1998	3725.74	15.35	3769.64

Appendix M

Cumulative List of Groundwater Level Measurements
Period of Record (1997 Through 2001)
Asarco El Paso Smelter
Remedial Investigation Phase III

Monitor Well ID #	Sample Date	Top of Casing (ft) amsl	Depth to Water (ft)	Groundwater Elevation (ft) amsl
EP-35	2/4/1999	3725.74	13.9	3771.09
EP-35	5/4/1999	3725.74	13.9	3771.09
EP-35	8/2/1999	3725.74	12.9	3772.09
EP-35	10/26/1999	3725.74	15	3769.99
EP-35	1/31/2000	3725.74	15.39	3769.60
EP-35	5/4/2000	3725.74	14.66	3770.33
EP-35	8/2/2000	3725.74	14.91	3770.08
EP-35	10/30/2000	3725.74	15.19	3769.80
EP-35	2/22/2001	3725.74	15.3	3769.69
EP-35	5/16/2001	3725.74	14.35	3770.64
EP-35	7/17/2001	3725.74	13.84	3771.15
EP-4	8/6/1997	3718.27	5.28	3779.71
EP-4	11/4/1997	3718.27	6.32	3778.67
EP-4	2/4/1998	3718.27	5	3779.99
EP-4	5/5/1998	3718.27	5.75	3779.24
EP-4	8/5/1998	3718.27	5.21	3779.78
EP-4	2/3/1999	3718.27	6.24	3778.75
EP-4	5/5/1999	3718.27	10.48	3774.51
EP-4	8/2/1999	3718.27	6.99	3778.00
EP-4	10/25/1999	3718.27	8.23	3776.76
EP-4	1/29/2000	3718.27	8.27	3776.72
EP-4	4/24/2000	3718.27	7.18	3777.81
EP-4	8/1/2000	3718.27	7.18	3777.81
EP-4	10/30/2000	3718.27	8.26	3776.73
EP-4	2/5/2001	3718.27	8.03	3776.96
EP-4	5/4/2001	3718.27	7.57	3777.42
EP-4	7/16/2001	3718.27	7.12	3777.87
EP-43	11/3/1997	3772.17	59.63	3725.36
EP-43	2/3/1998	3772.17	60.84	3724.15
EP-43	5/20/1998	3772.17	60.75	3724.24
EP-43	8/27/1998	3772.17	57.66	3727.33
EP-43	11/16/1998	3772.17	59.17	3725.82
EP-43	2/25/1999	3772.17	57.85	3727.14
EP-43	5/14/1999	3772.17	56.31	3728.68
EP-43	8/11/1999	3772.17	56.54	3728.45
EP-43	10/29/1999	3772.17	58.67	3726.32
EP-43	2/8/2000	3772.17	59.67	3725.32
EP-43	8/16/2000	3772.17	58.12	3726.87
EP-43	11/14/2000	3772.17	59.12	3725.87
EP-43	2/26/2001	3772.17	58.96	3726.03
EP-43	5/17/2001	3772.17	58.58	3726.41
EP-43	7/30/2001	3772.17	58.24	3726.75
EP-44	10/26/1999	3772.17	72.81	3712.18
EP-49	11/19/1997	3785.59	64.02	3720.97
EP-49	2/19/1998	3785.59	65.35	3719.64
EP-49	5/21/1998	3785.59	63.53	3721.46
EP-49	8/27/1998	3785.59	66.63	3718.36
EP-49	11/16/1998	3785.59	67.25	3717.74

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Cumulative List of Groundwater Level Measurements
Period of Record (1997 Through 2001)
Asarco El Paso Smelter
Remedial Investigation Phase III

Monitor Well ID #	Sample Date	Top of Casing (ft) amsl	Depth to Water (ft)	Groundwater Elevation (ft) amsl
EP-49	2/25/1999	3785.59	66.37	3718.62
EP-49	5/14/1999	3785.59	66.69	3718.30
EP-49	11/2/1999	3785.59	67.81	3717.18
EP-49	1/29/2000	3785.59	69.33	3715.66
EP-49	4/28/2000	3785.59	68.91	3716.08
EP-49	8/7/2000	3785.59	68.95	3716.04
EP-49	11/7/2000	3785.59	68.98	3716.01
EP-49	2/20/2001	3785.59	69.3	3715.69
EP-49	2/20/2001	3785.59		3784.99
EP-49	5/10/2001	3785.59	67.81	3717.18
EP-49	7/26/2001	3785.59	0	3784.99
EP-5	8/6/1997	3716.17	5.78	3779.21
EP-5	11/4/1997	3716.17	5.82	3779.17
EP-5	2/4/1998	3716.17	5.51	3779.48
EP-5	5/5/1998	3716.17	6.31	3778.68
EP-5	8/5/1998	3716.17	5.78	3779.21
EP-5	11/3/1998	3716.17	5.6	3779.39
EP-5	2/3/1999	3716.17	5.1	3779.89
EP-5	5/5/1999	3716.17	6.28	3778.71
EP-5	8/2/1999	3716.17	5.72	3779.27
EP-5	10/25/1999	3716.17	7.02	3777.97
EP-5	4/24/2000	3716.17	6.08	3778.91
EP-5	8/1/2000	3716.17	6.36	3778.63
EP-5	10/31/2000	3716.17	7.12	3777.87
EP-5	2/5/2001	3716.17	6.95	3778.04
EP-5	5/4/2001	3716.17	6.47	3778.52
EP-5	7/16/2001	3716.17	6.02	3778.97
EP-51	8/11/1997	3774.66	48.82	3736.17
EP-51	8/26/1997	3774.66	49.12	3735.87
EP-51	11/6/1997	3774.66	48.8	3736.19
EP-51	2/12/1998	3774.66	48.56	3736.43
EP-51	5/11/1998	3774.66	48.73	3736.26
EP-51	8/12/1998	3774.66	49.1	3735.89
EP-51	11/5/1998	3774.66	49.05	3735.94
EP-51	2/9/1999	3774.66	48.9	3736.09
EP-51	5/6/1999	3774.66	48.86	3736.13
EP-51	8/4/1999	3774.66	48.15	3736.84
EP-51	11/2/1999	3774.66	43.43	3741.56
EP-51	1/26/2000	3774.66	48.56	3736.43
EP-51	4/28/2000	3774.66	49.03	3735.96
EP-51	8/7/2000	3774.66	50.64	3734.35
EP-51	11/7/2000	3774.66	51.56	3733.43
EP-51	2/16/2001	3774.66	51.51	3733.48
EP-51	5/10/2001	3774.66	51.91	3733.08
EP-51	7/20/2001	3774.66	52.82	3732.17
EP-52	11/6/1997	3784.07	45.92	3739.07
EP-52	2/12/1998	3784.07	45.88	3739.11
EP-52	8/12/1998	3784.07	51.15	3733.84

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Cumulative List of Groundwater Level Measurements
Period of Record (1997 Through 2001)
Asarco El Paso Smelter
Remedial Investigation Phase III

Monitor Well ID #	Sample Date	Top of Casing (ft) amsl	Depth to Water (ft)	Groundwater Elevation (ft) amsl
EP-52	11/5/1998	3784.07	52.04	3732.95
EP-52	2/9/1999	3784.07	49.52	3735.47
EP-52	5/6/1999	3784.07	50.24	3734.75
EP-52	8/5/1999	3784.07	51.25	3733.74
EP-52	10/29/1999	3784.07	51.73	3733.26
EP-52	1/26/2000	3784.07	52.13	3732.86
EP-52	4/28/2000	3784.07	52.89	3732.10
EP-52	8/7/2000	3784.07	53.57	3731.42
EP-52	11/7/2000	3784.07	53.31	3731.68
EP-52	2/20/2001	3784.07	53.75	3731.24
EP-52	5/10/2001	3784.07	54.28	3730.71
EP-52	7/20/2001	3784.07	54.91	3730.08
EP-53	8/11/1997	3805.64	67.6	3717.39
EP-53	2/4/1998	3805.64	66.14	3718.85
EP-53	6/10/1998	3805.64	67.15	3717.84
EP-53	8/12/1998	3805.64	67.7	3717.29
EP-53	11/5/1998	3805.64	67.1	3717.89
EP-53	2/4/1999	3805.64	67.1	3717.89
EP-53	5/5/1999	3805.64	67.73	3717.26
EP-53	8/4/1999	3805.64	67.74	3717.25
EP-53	10/26/1999	3805.64	67.46	3717.53
EP-53	2/1/2000	3805.64	67.83	3717.16
EP-53	5/3/2000	3805.64	68.28	3716.71
EP-53	8/16/2000	3805.64	67.81	3717.18
EP-53	11/13/2000	3805.64	67.57	3717.42
EP-53	2/21/2001	3805.64	67.9	3717.09
EP-53	5/10/2001	3805.64	68.41	3716.58
EP-53	7/30/2001	3805.64	68.87	3716.12
EP-54	8/11/1997	3787.37	68.58	3716.41
EP-54	8/26/1997	3787.37	68.59	3716.40
EP-54	11/6/1997	3787.37	69.05	3715.94
EP-54	2/12/1998	3787.37	69.9	3715.09
EP-54	5/11/1998	3787.37	69.25	3715.74
EP-54	8/12/1998	3787.37	69.82	3715.17
EP-54	11/5/1998	3787.37	70.18	3714.81
EP-54	2/9/1999	3787.37	70.4	3714.59
EP-54	5/6/1999	3787.37	70.89	3714.10
EP-54	5/7/1999	3787.37	72.03	3712.96
EP-54	8/4/1999	3787.37	70.24	3714.75
EP-54	10/29/1999	3787.37	71.02	3713.97
EP-54	1/26/2000	3787.37	71.63	3713.36
EP-54	4/28/2000	3787.37	71.18	3713.81
EP-54	8/7/2000	3787.37	70.89	3714.10
EP-54	11/7/2000	3787.37	71.13	3713.86
EP-54	2/20/2001	3787.37	71.6	3713.39
EP-54	5/10/2001	3787.37	71.37	3713.62
EP-54	7/26/2001	3787.37	71.38	3713.61
EP-55	8/15/1997	3788.23	54.35	3730.64

Appendix M

Cumulative List of Groundwater Level Measurements
Period of Record (1997 Through 2001)
Asarco El Paso Smelter
Remedial Investigation Phase III

Monitor Well ID #	Sample Date	Top of Casing (ft) amsl	Depth to Water (ft)	Groundwater Elevation (ft) amsl
EP-55	11/19/1997	3788.23	54.19	3730.80
EP-55	2/12/1998	3788.23	53.96	3731.03
EP-55	5/20/1998	3788.23	54.35	3730.64
EP-55	8/27/1998	3788.23	55.5	3729.49
EP-55	11/16/1998	3788.23	56.2	3728.79
EP-55	2/11/1999	3788.23	55	3729.99
EP-55	5/14/1999	3788.23	55.51	3729.48
EP-55	8/10/1999	3788.23	56.02	3728.97
EP-55	10/29/1999	3788.23	56.19	3728.80
EP-55	2/7/2000	3788.23	56.87	3728.12
EP-55	5/4/2000	3788.23	57.32	3727.67
EP-55	8/16/2000	3788.23	57.89	3727.10
EP-55	11/14/2000	3788.23	57.65	3727.34
EP-55	2/22/2001	3788.23	58	3726.99
EP-55	5/11/2001	3788.23	58.58	3726.41
EP-55	7/26/2001	3788.23	59.27	3725.72
EP-56	8/11/1997	3772.09	49.23	3735.76
EP-56	8/26/1997	3772.09	48.7	3736.29
EP-56	11/4/1997	3772.09	48.51	3736.48
EP-56	2/4/1998	3772.09	49.06	3735.93
EP-56	5/7/1998	3772.09	48.92	3736.07
EP-56	8/12/1998	3772.09	49.38	3735.61
EP-56	11/4/1998	3772.09	49.99	3735.00
EP-56	2/4/1999	3772.09	50.13	3734.86
EP-56	5/4/1999	3772.09	50.56	3734.43
EP-56	8/4/1999	3772.09	49.83	3735.16
EP-56	10/26/1999	3772.09	50.47	3734.52
EP-56	2/1/2000	3772.09	49.68	3735.31
EP-56	5/3/2000	3772.09	50.53	3734.46
EP-56	8/16/2000	3772.09	50.68	3734.31
EP-56	11/13/2000	3772.09	50.95	3734.04
EP-56	2/22/2001	3772.09	51.35	3733.64
EP-56	5/10/2001	3772.09	51.23	3733.76
EP-56	7/26/2001	3772.09	51.3	3733.69
EP-57	8/16/1997	3723.66	8.53	3776.46
EP-57	11/14/1997	3723.66	9.64	3775.35
EP-57	2/18/1998	3723.66	9.85	3775.14
EP-57	5/18/1998	3723.66	9.17	3775.82
EP-57	8/24/1998	3723.66	8.97	3776.02
EP-57	11/16/1998	3723.66	8.72	3776.27
EP-57	2/24/1999	3723.66	9.12	3775.87
EP-57	5/13/1999	3723.66	8.76	3776.23
EP-57	8/10/1999	3723.66	8.06	3776.93
EP-57	11/3/1999	3723.66	9.41	3775.58
EP-57	2/7/2000	3723.66	10.02	3774.97
EP-57	5/8/2000	3723.66	9.88	3775.11
EP-57	8/15/2000	3723.66	9.19	3775.80
EP-57	11/13/2000	3723.66	10.05	3774.94

Appendix M

Cumulative List of Groundwater Level Measurements
Period of Record (1997 Through 2001)
Asarco El Paso Smelter
Remedial Investigation Phase III

Monitor Well ID #	Sample Date	Top of Casing (ft) amsl	Depth to Water (ft)	Groundwater Elevation (ft) amsl
EP-57	2/23/2001	3723.66	10.08	3774.91
EP-57	5/16/2001	3723.66	9.75	3775.24
EP-57	7/30/2001	3723.66	9.15	3775.84
EP-58	8/16/1997	3726.67	12.9	3772.09
EP-58	11/14/1997	3726.67	15.1	3769.89
EP-58	2/18/1998	3726.67	15.76	3769.23
EP-58	5/18/1998	3726.67	13.98	3771.01
EP-58	8/24/1998	3726.67	13.42	3771.57
EP-58	11/16/1998	3726.67	12.38	3772.61
EP-58	2/24/1999	3726.67	14.25	3770.74
EP-58	5/13/1999	3726.67	12.41	3772.58
EP-58	8/10/1999	3726.67	11.44	3773.55
EP-58	11/3/1999	3726.67	12.77	3772.22
EP-58	2/7/2000	3726.67	13.15	3771.84
EP-58	5/8/2000	3726.67	12.51	3772.48
EP-58	8/15/2000	3726.67	12.02	3772.97
EP-58	11/13/2000	3726.67	12.89	3772.10
EP-58	2/23/2001	3726.67	12.9	3772.09
EP-58	5/16/2001	3726.67	12.4	3772.59
EP-58	7/30/2001	3726.67	12.01	3772.98
EP-59	8/9/1997	3728.37	12.9	3772.09
EP-59	11/5/1997	3728.37	13.2	3771.79
EP-59	2/5/1998	3728.37	13.66	3771.33
EP-59	5/8/1998	3728.37	13.2	3771.79
EP-59	8/10/1998	3728.37	13.02	3771.97
EP-59	11/9/1998	3728.37	12.8	3772.19
EP-59	2/10/1999	3728.37	13.12	3771.87
EP-59	5/6/1999	3728.37	13.26	3771.73
EP-59	8/3/1999	3728.37	12.72	3772.27
EP-59	10/27/1999	3728.37	13.78	3771.21
EP-59	1/28/2000	3728.37	14.27	3770.72
EP-59	5/3/2000	3728.37	13.72	3771.27
EP-59	8/10/2000	3728.37	13.09	3771.90
EP-59	10/31/2000	3728.37	13.84	3771.15
EP-59	2/21/2001	3728.37	14.1	3770.89
EP-59	5/15/2001	3728.37	13.63	3771.36
EP-59	7/27/2001	3728.37	13.73	3771.26
EP-6	8/6/1997	3716.22	6.7	3778.29
EP-6	11/4/1997	3716.22	7.8	3777.19
EP-6	2/4/1998	3716.22	7.61	3777.38
EP-6	5/5/1998	3716.22	7.48	3777.51
EP-6	8/5/1998	3716.22	6.54	3778.45
EP-6	11/3/1998	3716.22	6.68	3778.31
EP-6	2/3/1999	3716.22	5.98	3779.01
EP-6	5/5/1999	3716.22	7.28	3777.71
EP-6	8/2/1999	3716.22	6.53	3778.46
EP-6	10/25/1999	3716.22	8.09	3776.90
EP-6	1/29/2000	3716.22	8.26	3776.73

Appendix M

Cumulative List of Groundwater Level Measurements
Period of Record (1997 Through 2001)
Asarco El Paso Smelter
Remedial Investigation Phase III

Monitor Well ID #	Sample Date	Top of Casing (ft) amsl	Depth to Water (ft)	Groundwater Elevation (ft) amsl
EP-6	4/24/2000	3716.22	7.4	3777.59
EP-6	8/1/2000	3716.22	7	3777.99
EP-6	10/30/2000	3716.22	7.74	3777.25
EP-6	2/5/2001	3716.22	8.23	3776.76
EP-6	5/4/2001	3716.22	7.52	3777.47
EP-6	7/16/2001	3716.22	6.98	3778.01
EP-60	8/8/1997	3722.52	9	3775.99
EP-60	11/5/1997	3722.52	10.02	3774.97
EP-60	2/5/1998	3722.52	10.17	3774.82
EP-60	5/8/1998	3722.52	9.22	3775.77
EP-60	8/10/1998	3722.52	9.04	3775.95
EP-60	11/9/1998	3722.52	9.36	3775.63
EP-60	2/10/1999	3722.52	9.1	3775.89
EP-60	5/6/1999	3722.52	9.38	3775.61
EP-60	8/3/1999	3722.52	9.09	3775.90
EP-60	10/27/1999	3722.52	10.2	3774.79
EP-60	1/28/2000	3722.52	10.47	3774.52
EP-60	5/3/2000	3722.52	9.74	3775.25
EP-60	8/10/2000	3722.52	9.57	3775.42
EP-60	10/31/2000	3722.52	10.45	3774.54
EP-60	2/21/2001	3722.52	10.6	3774.39
EP-60	5/15/2001	3722.52	9.87	3775.12
EP-60	7/27/2001	3722.52	9.56	3775.43
EP-61	8/16/1997	3722.95	9.58	3775.41
EP-61	11/14/1997	3722.95	12.63	3772.36
EP-61	2/18/1998	3722.95	11.84	3773.15
EP-61	2/18/1998	3722.95	11.84	3773.15
EP-61	5/18/1998	3722.95	10.73	3774.26
EP-61	8/24/1998	3722.95	10.21	3774.78
EP-61	11/16/1998	3722.95	10.7	3774.29
EP-61	2/24/1999	3722.95	10.75	3774.24
EP-61	5/13/1999	3722.95	10.51	3774.48
EP-61	8/10/1999	3722.95	9.27	3775.72
EP-61	11/3/1999	3722.95	11.14	3773.85
EP-61	2/7/2000	3722.95	11.26	3773.73
EP-61	5/8/2000	3722.95	10.41	3774.58
EP-61	8/15/2000	3722.95	9.79	3775.20
EP-61	11/13/2000	3722.95	10.92	3774.07
EP-61	2/23/2001	3722.95	10.71	3774.28
EP-61	5/16/2001	3722.95	10.04	3774.95
EP-61	7/30/2001	3722.95	9.62	3775.37
EP-62	8/9/1997	3720.64	7.32	3777.67
EP-62	11/5/1997	3720.64	9.55	3775.44
EP-62	2/5/1998	3720.64	9.64	3775.35
EP-62	5/8/1998	3720.64	7.62	3777.37
EP-62	8/10/1998	3720.64	7.31	3777.68
EP-62	11/9/1998	3720.64	7.71	3777.28
EP-62	2/10/1999	3720.64	7.3	3777.69

Appendix M

Cumulative List of Groundwater Level Measurements
Period of Record (1997 Through 2001)
Asarco El Paso Smelter
Remedial Investigation Phase III

Monitor Well ID #	Sample Date	Top of Casing (ft) amsl	Depth to Water (ft)	Groundwater Elevation (ft) amsl
EP-62	5/6/1999	3720.64	7.45	3777.54
EP-62	8/3/1999	3720.64	7.04	3777.95
EP-62	10/27/1999	3720.64	8.52	3776.47
EP-62	1/28/2000	3720.64	8.57	3776.42
EP-62	5/3/2000	3720.64	7.99	3777.00
EP-62	8/10/2000	3720.64	7.54	3777.45
EP-62	10/31/2000	3720.64	8.62	3776.37
EP-62	2/21/2001	3720.64	8.5	3776.49
EP-62	5/15/2001	3720.64	7.85	3777.14
EP-62	7/27/2001	3720.64	7.44	3777.55
EP-63	8/9/1997	3719.52	6.62	3778.37
EP-63	11/5/1997	3719.52	93	3691.99
EP-63	2/5/1998	3719.52	9.42	3775.57
EP-63	5/8/1998	3719.52	6.95	3778.04
EP-63	8/10/1998	3719.52	6.67	3778.32
EP-63	11/9/1998	3719.52	7.1	3777.89
EP-63	2/10/1999	3719.52	6.58	3778.41
EP-63	5/6/1999	3719.52	6.83	3778.16
EP-63	8/3/1999	3719.52	6.4	3778.59
EP-63	10/27/1999	3719.52	7.87	3777.12
EP-63	1/28/2000	3719.52	7.87	3777.12
EP-63	5/3/2000	3719.52	7.24	3777.75
EP-63	8/10/2000	3719.52	6.89	3778.10
EP-63	10/31/2000	3719.52	7.94	3777.05
EP-63	2/21/2001	3719.52	7.85	3777.14
EP-63	5/15/2001	3719.52	7.15	3777.84
EP-63	7/27/2001	3719.52	6.78	3778.21
EP-64	8/9/1997	3724.00	10.18	3774.81
EP-64	11/5/1997	3724.00	12.05	3772.94
EP-64	2/5/1998	3724.00	12.27	3772.72
EP-64	5/8/1998	3724.00	10.45	3774.54
EP-64	8/10/1998	3724.00	10.2	3774.79
EP-64	11/9/1998	3724.00	10.66	3774.33
EP-64	2/10/1999	3724.00	10.34	3774.65
EP-64	5/6/1999	3724.00	10.35	3774.64
EP-64	8/3/1999	3724.00	9.89	3775.10
EP-64	10/27/1999	3724.00	11.26	3773.73
EP-64	1/28/2000	3724.00	11.48	3773.51
EP-64	5/3/2000	3724.00	10.83	3774.16
EP-64	8/10/2000	3724.00	10.39	3774.60
EP-64	10/31/2000	3724.00	11.38	3773.61
EP-64	2/21/2001	3724.00	11.3	3773.69
EP-64	5/15/2001	3724.00	10.71	3774.28
EP-64	7/27/2001	3724.00	10.34	3774.65
EP-65	8/16/1997	3721.39	8.25	3776.74
EP-65	11/14/1997	3721.39	10.94	3774.05
EP-65	2/18/1998	3721.39	10.73	3774.26
EP-65	5/18/1998	3721.39	8.52	3776.47

Appendix M

Cumulative List of Groundwater Level Measurements
Period of Record (1997 Through 2001)
Asarco El Paso Smelter
Remedial Investigation Phase III

Monitor Well ID #	Sample Date	Top of Casing (ft) amsl	Depth to Water (ft)	Groundwater Elevation (ft) amsl
EP-65	8/24/1998	3721.39	8.32	3776.67
EP-65	11/16/1998	3721.39	8.59	3776.40
EP-65	2/24/1999	3721.39	8.67	3776.32
EP-65	5/13/1999	3721.39	8.54	3776.45
EP-65	8/10/1999	3721.39	7.8	3777.19
EP-65	11/3/1999	3721.39	9.53	3775.46
EP-65	2/7/2000	3721.39	9.72	3775.27
EP-65	5/8/2000	3721.39	8.93	3776.06
EP-65	8/15/2000	3721.39	8.5	3776.49
EP-65	11/13/2000	3721.39	9.72	3775.27
EP-65	2/23/2001	3721.39	9.5	3775.49
EP-65	5/16/2001	3721.39	8.78	3776.21
EP-65	7/30/2001	3721.39	8.35	3776.64
EP-66	8/8/1997	3722.88	10.02	3774.97
EP-66	11/5/1997	3722.88	11.85	3773.14
EP-66	2/5/1998	3722.88	11.21	3773.78
EP-66	5/8/1998	3722.88	10.37	3774.62
EP-66	8/10/1998	3722.88	10.09	3774.90
EP-66	11/9/1998	3722.88	10.44	3774.55
EP-66	2/10/1999	3722.88	9.99	3775.00
EP-66	5/6/1999	3722.88	9.42	3775.57
EP-66	8/4/1999	3722.88	9.96	3775.03
EP-66	10/27/1999	3722.88	11.3	3773.69
EP-66	1/28/2000	3722.88	11.34	3773.65
EP-66	5/3/2000	3722.88	10.66	3774.33
EP-66	8/10/2000	3722.88	10.39	3774.60
EP-66	10/31/2000	3722.88	11.41	3773.58
EP-66	2/21/2001	3722.88	11.45	3773.54
EP-66	5/15/2001	3722.88	10.71	3774.28
EP-66	7/27/2001	3722.88	10.38	3774.61
EP-67	8/12/1997	3761.07	41.62	3743.37
EP-67	11/7/1997	3761.07	41.62	3743.37
EP-67	2/11/1998	3761.07	43.95	3741.04
EP-67	2/11/1998	3761.07	43.95	3741.04
EP-67	5/12/1998	3761.07	41.72	3743.27
EP-67	8/13/1998	3761.07	41.67	3743.32
EP-67	11/10/1998	3761.07	40.97	3744.02
EP-67	2/10/1999	3761.07	49.4	3735.59
EP-67	5/7/1999	3761.07	41.74	3743.25
EP-67	8/5/1999	3761.07	41.29	3743.70
EP-67	10/28/1999	3761.07	41.43	3743.56
EP-67	1/24/2000	3761.07	41.85	3743.14
EP-67	4/24/2000	3761.07	41.86	3743.13
EP-67	8/2/2000	3761.07	41.34	3743.65
EP-67	10/31/2000	3761.07	41.42	3743.57
EP-67	2/8/2001	3761.07	41.8	3743.19
EP-67	5/7/2001	3761.07	40.8	3744.19
EP-67	7/17/2001	3761.07	40.92	3744.07

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Cumulative List of Groundwater Level Measurements
Period of Record (1997 Through 2001)
Asarco El Paso Smelter
Remedial Investigation Phase III

Monitor Well ID #	Sample Date	Top of Casing (ft) amsl	Depth to Water (ft)	Groundwater Elevation (ft) amsl
EP-68	8/14/1997	3783.76	63.1	3721.89
EP-68	11/11/1997	3783.76	62.85	3722.14
EP-68	2/11/1998	3783.76	63.2	3721.79
EP-68	5/13/1998	3783.76	63.1	3721.89
EP-68	8/13/1998	3783.76	63.27	3721.72
EP-68	11/9/1998	3783.76	63.19	3721.80
EP-68	2/18/1999	3783.76	63.26	3721.73
EP-68	5/10/1999	3783.76	63.55	3721.44
EP-68	8/5/1999	3783.76	63.42	3721.57
EP-68	10/28/1999	3783.76	63.5	3721.49
EP-68	1/25/2000	3783.76	63.64	3721.35
EP-68	4/24/2000	3783.76	63.6	3721.39
EP-68	8/2/2000	3783.76	63.2	3721.79
EP-68	10/31/2000	3783.76	63.39	3721.60
EP-68	2/9/2001	3783.76	64.11	3720.88
EP-68	5/7/2001	3783.76	63.21	3721.78
EP-68	7/17/2001	3783.76	63.18	3721.81
EP-7	8/6/1997	3722.10	6.02	3778.97
EP-7	11/4/1997	3722.10	7.65	3777.34
EP-7	2/4/1998	3722.10	6.62	3778.37
EP-7	5/5/1998	3722.10	6.94	3778.05
EP-7	8/5/1998	3722.10	5.87	3779.12
EP-7	11/3/1998	3722.10	6	3778.99
EP-7	2/3/1999	3722.10	5.18	3779.81
EP-7	5/5/1999	3722.10	8.72	3776.27
EP-7	8/2/1999	3722.10	5.79	3779.20
EP-7	10/25/1999	3722.10	7.53	3777.46
EP-7	1/29/2000	3722.10	7.45	3777.54
EP-7	4/24/2000	3722.10	6.46	3778.53
EP-7	8/1/2000	3722.10	6.24	3778.75
EP-7	10/30/2000	3722.10	7.33	3777.66
EP-7	2/5/2001	3722.10	7.4	3777.59
EP-7	5/4/2001	3722.10	6.84	3778.15
EP-7	7/16/2001	3722.10	6.15	3778.84
EP-70	8/12/1997	3777.67	61.65	3723.34
EP-70	8/26/1997	3777.67	61.5	3723.49
EP-70	11/7/1997	3777.67	62.12	3722.87
EP-70	2/11/1998	3777.67	62.3	3722.69
EP-70	5/12/1998	3777.67	61.95	3723.04
EP-70	8/13/1998	3777.67	61.78	3723.21
EP-70	11/10/1998	3777.67	61.61	3723.38
EP-70	2/10/1999	3777.67	61.5	3723.49
EP-70	5/7/1999	3777.67	62.12	3722.87
EP-70	8/5/1999	3777.67	61.59	3723.40
EP-70	10/28/1999	3777.67	62.15	3722.84
EP-70	1/24/2000	3777.67	62.49	3722.50
EP-70	4/25/2000	3777.67	62.23	3722.76
EP-70	8/3/2000	3777.67	61.8	3723.19

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Cumulative List of Groundwater Level Measurements
Period of Record (1997 Through 2001)
Asarco El Paso Smelter
Remedial Investigation Phase III

Monitor Well ID #	Sample Date	Top of Casing (ft) amsl	Depth to Water (ft)	Groundwater Elevation (ft) amsl
EP-70	11/1/2000	3777.67	62.16	3722.83
EP-70	2/9/2001	3777.67	62.65	3722.34
EP-70	5/7/2001	3777.67	59.81	3725.18
EP-70	7/18/2001	3777.67	59.87	3725.12
EP-71	8/12/1997	3765.19	49.9	3735.09
EP-71	11/7/1997	3765.19	50.38	3734.61
EP-71	2/11/1998	3765.19	50.63	3734.36
EP-71	5/12/1998	3765.19	50.22	3734.77
EP-71	8/13/1998	3765.19	49.95	3735.04
EP-71	11/10/1998	3765.19	49.55	3735.44
EP-71	2/10/1999	3765.19	49.95	3735.04
EP-71	8/5/1999	3765.19	49.57	3735.42
EP-71	10/28/1999	3765.19	50.2	3734.79
EP-71	1/24/2000	3765.19	50.51	3734.48
EP-71	4/24/2000	3765.19	50.26	3734.73
EP-71	8/3/2000	3765.19	49.84	3735.15
EP-71	11/1/2000	3765.19	50.19	3734.80
EP-71	2/9/2001	3765.19	50.68	3734.31
EP-71	5/7/2001	3765.19	48.6	3736.39
EP-71	7/18/2001	3765.19	48.55	3736.44
EP-71	7/18/2001	3765.19	48.55	3736.44
EP-72	8/12/1997	3778.50	61.4	3723.59
EP-72	11/7/1997	3778.50	61.72	3723.27
EP-72	2/11/1998	3778.50	61.85	3723.14
EP-72	5/13/1998	3778.50	61.7	3723.29
EP-72	8/13/1998	3778.50	61.56	3723.43
EP-72	11/10/1998	3778.50	61.52	3723.47
EP-72	1/24/2000	3778.50	62.83	3722.16
EP-72	4/25/2000	3778.50	62.68	3722.31
EP-72	8/3/2000	3778.50	62.35	3722.64
EP-72	11/1/2000	3778.50	62.61	3722.38
EP-72	2/9/2001	3778.50	63.06	3721.93
EP-72	5/7/2001	3778.50	61	3723.99
EP-72	7/18/2001	3778.50	61.09	3723.90
EP-73	8/12/1997	3789.45	70.75	3714.24
EP-73	11/13/1997	3789.45	70.2	3714.79
EP-73	2/12/1998	3789.45	71.25	3713.74
EP-73	5/11/1998	3789.45	71.1	3713.89
EP-73	8/17/1998	3789.45	71.32	3713.67
EP-73	11/5/1998	3789.45	68.38	3716.61
EP-73	2/9/1999	3789.45	71.19	3713.80
EP-73	5/7/1999	3789.45	71.49	3713.50
EP-73	8/5/1999	3789.45	10	3774.99
EP-73	10/29/1999	3789.45	71.2	3713.79
EP-73	1/26/2000	3789.45	72.33	3712.66
EP-73	4/28/2000	3789.45	71.9	3713.09
EP-73	8/7/2000	3789.45	70.55	3714.44
EP-73	11/7/2000	3789.45	71.26	3713.73

Appendix M

Cumulative List of Groundwater Level Measurements
Period of Record (1997 Through 2001)
Asarco El Paso Smelter
Remedial Investigation Phase III

Monitor Well ID #	Sample Date	Top of Casing (ft) amsl	Depth to Water (ft)	Groundwater Elevation (ft) amsl
EP-73	2/16/2001	3789.45	71.96	3713.03
EP-73	5/9/2001	3789.45	71.75	3713.24
EP-73	7/20/2001	3789.45	71.82	3713.17
EP-74	8/13/1997	3775.89	52.33	3732.66
EP-75	8/12/1997	3814.50	57.1	3727.89
EP-75	11/13/1997	3814.50	55.38	3729.61
EP-75	2/6/1998	3814.50	55.45	3729.54
EP-75	5/11/1998	3814.50	56.22	3728.77
EP-75	8/17/1998	3814.50	57.38	3727.61
EP-75	11/5/1998	3814.50	55.92	3729.07
EP-75	2/22/1999	3814.50	59.24	3725.75
EP-75	5/10/1999	3814.50	55.49	3729.50
EP-75	8/6/1999	3814.50	70.09	3714.90
EP-75	1/26/2000	3814.50	69.4	3715.59
EP-75	4/28/2000	3814.50	70.55	3714.44
EP-75	8/7/2000	3814.50	6957	-3172.01
EP-75	11/7/2000	3814.50	69.39	3715.60
EP-75	2/14/2001	3814.50	69.49	3715.50
EP-75	5/9/2001	3814.50	70.49	3714.50
EP-75	7/20/2001	3814.50	71.63	3713.36
EP-76	8/12/1997	3817.64	51.35	3733.64
EP-76	11/11/1997	3817.64	49.97	3735.02
EP-76	2/6/1998	3817.64	49.22	3735.77
EP-76	5/11/1998	3817.64	50.7	3734.29
EP-76	8/17/1998	3817.64	52.03	3732.96
EP-76	11/5/1998	3817.64	48.38	3736.61
EP-76	2/22/1999	3817.64	53.67	3731.32
EP-76	5/10/1999	3817.64	60.41	3724.58
EP-76	1/26/2000	3817.64	68.95	3716.04
EP-76	4/28/2000	3817.64	70.44	3714.55
EP-76	8/7/2000	3817.64	69.02	3715.97
EP-76	11/7/2000	3817.64	68.88	3716.11
EP-76	2/14/2001	3817.64	69.01	3715.98
EP-76	5/9/2001	3817.64	70.47	3714.52
EP-76	7/20/2001	3817.64	71.89	3713.10
EP-77	8/12/1997	3776.88	41.9	3743.09
EP-77	11/13/1997	3776.88	41.2	3743.79
EP-77	2/12/1998	3776.88	40.7	3744.29
EP-77	5/13/1998	3776.88	41.1	3743.89
EP-77	8/17/1998	3776.88	42.57	3742.42
EP-77	11/11/1998	3776.88	43.36	3741.63
EP-77	2/11/1999	3776.88	43.75	3741.24
EP-77	5/7/1999	3776.88	44.35	3740.64
EP-77	8/5/1999	3776.88	43.62	3741.37
EP-77	10/29/1999	3776.88	44.15	3740.84
EP-77	1/25/2000	3776.88	42.34	3742.65
EP-77	4/28/2000	3776.88	44.32	3740.67
EP-77	8/4/2000	3776.88	44.4	3740.59

Appendix M

Cumulative List of Groundwater Level Measurements
Period of Record (1997 Through 2001)
Asarco El Paso Smelter
Remedial Investigation Phase III

Monitor Well ID #	Sample Date	Top of Casing (ft) amsl	Depth to Water (ft)	Groundwater Elevation (ft) amsl
EP-77	11/3/2000	3776.88	44.89	3740.10
EP-77	2/12/2001	3776.88	45.21	3739.78
EP-77	5/9/2001	3776.88	45.45	3739.54
EP-77	7/19/2001	3776.88	45.8	3739.19
EP-78	8/13/1997	3773.46	31.26	3753.73
EP-78	11/18/1997	3773.46	31.1	3753.89
EP-78	2/6/1998	3773.46	31.13	3753.86
EP-78	5/14/1998	3773.46	33.05	3751.94
EP-78	8/19/1998	3773.46	33.59	3751.40
EP-78	11/11/1998	3773.46	28.09	3756.90
EP-78	2/18/1999	3773.46	32.44	3752.55
EP-78	5/11/1999	3773.46	33.69	3751.30
EP-78	8/9/1999	3773.46	29.24	3755.75
EP-78	10/31/1999	3773.46	31.55	3753.44
EP-78	1/28/2000	3773.46	32.88	3752.11
EP-78	5/2/2000	3773.46	33.86	3751.13
EP-78	8/9/2000	3773.46	30.56	3754.43
EP-78	11/9/2000	3773.46	29.99	3755.00
EP-78	2/15/2001	3773.46	32.7	3752.29
EP-78	5/14/2001	3773.46	33.81	3751.18
EP-78	7/25/2001	3773.46	33.48	3751.51
EP-79	8/13/1997	3793.94	46	3738.99
EP-79	11/18/1997	3793.94	45.2	3739.79
EP-79	2/6/1998	3793.94	45.09	3739.90
EP-79	5/14/1998	3793.94	47.01	3737.98
EP-79	8/19/1998	3793.94	47.89	3737.10
EP-79	11/11/1998	3793.94	45.74	3739.25
EP-79	2/18/1999	3793.94	46.5	3738.49
EP-79	5/11/1999	3793.94	47.79	3737.20
EP-79	8/9/1999	3793.94	46.99	3738.00
EP-79	10/31/1999	3793.94	45.81	3739.18
EP-79	1/28/2000	3793.94	47.35	3737.64
EP-79	5/2/2000	3793.94	48.06	3736.93
EP-79	8/9/2000	3793.94	45.69	3739.30
EP-79	11/9/2000	3793.94	46.16	3738.83
EP-79	2/15/2001	3793.94	46.55	3738.44
EP-79	5/14/2001	3793.94	47.58	3737.41
EP-79	7/25/2001	3793.94	47.85	3737.14
EP-80	8/13/1997	3726.59	10.68	3774.31
EP-80	11/17/1997	3726.59	11.83	3773.16
EP-80	2/5/1998	3726.59	11.98	3773.01
EP-80	5/13/1998	3726.59	11.13	3773.86
EP-80	8/19/1998	3726.59	10.78	3774.21
EP-80	11/11/1998	3726.59	11.44	3773.55
EP-80	2/18/1999	3726.59	12.1	3772.89
EP-80	5/11/1999	3726.59	11.22	3773.77
EP-80	8/9/1999	3726.59	10.37	3774.62
EP-80	10/27/1999	3726.59	11.42	3773.57

Appendix M

Cumulative List of Groundwater Level Measurements
Period of Record (1997 Through 2001)
Asarco El Paso Smelter
Remedial Investigation Phase III

Monitor Well ID #	Sample Date	Top of Casing (ft) amsl	Depth to Water (ft)	Groundwater Elevation (ft) amsl
EP-80	1/28/2000	3726.59	11.84	3773.15
EP-80	5/2/2000	3726.59	11.43	3773.56
EP-80	8/10/2000	3726.59	10.74	3774.25
EP-80	11/9/2000	3726.59	11.49	3773.50
EP-80	2/16/2001	3726.59	11.81	3773.18
EP-80	5/14/2001	3726.59	11.4	3773.59
EP-80	7/25/2001	3726.59	10.77	3774.22
EP-81	8/13/1997	3734.09	17.95	3767.04
EP-81	11/17/1997	3734.09	18.42	3766.57
EP-81	2/5/1998	3734.09	18.81	3766.18
EP-81	5/14/1998	3734.09	18.42	3766.57
EP-81	8/19/1998	3734.09	18.19	3766.80
EP-81	11/11/1998	3734.09	17.79	3767.20
EP-81	2/18/1999	3734.09	18.79	3766.20
EP-81	5/11/1999	3734.09	18.53	3766.46
EP-81	8/9/1999	3734.09	17.26	3767.73
EP-81	10/27/1999	3734.09	18.71	3766.28
EP-81	1/28/2000	3734.09	19.3	3765.69
EP-81	5/2/2000	3734.09	18.91	3766.08
EP-81	8/9/2000	3734.09	18.07	3766.92
EP-81	11/9/2000	3734.09	18.76	3766.23
EP-81	2/16/2001	3734.09	19.19	3765.80
EP-81	5/14/2001	3734.09	18.81	3766.18
EP-81	7/25/2001	3734.09	18.4	3766.59
EP-82	8/13/1997	3773.65	17.42	3767.57
EP-82	11/18/1997	3773.65	16.13	3768.86
EP-82	2/11/1998	3773.65	15.5	3769.49
EP-82	5/14/1998	3773.65	16.92	3768.07
EP-82	8/19/1998	3773.65	18.24	3766.75
EP-82	11/11/1998	3773.65	15.35	3769.64
EP-82	2/18/1999	3773.65	16.21	3768.78
EP-82	5/11/1999	3773.65	17.68	3767.31
EP-82	8/9/1999	3773.65	15.74	3769.25
EP-82	10/31/1999	3773.65	17.02	3767.97
EP-82	1/27/2000	3773.65	15.99	3769.00
EP-82	5/2/2000	3773.65	17.65	3767.34
EP-82	8/9/2000	3773.65	16.62	3768.37
EP-82	11/9/2000	3773.65	15.36	3769.63
EP-82	2/15/2001	3773.65	16.45	3768.54
EP-82	5/14/2001	3773.65	17.98	3767.01
EP-82	7/25/2001	3773.65	18.89	3766.10
EP-83	8/13/1997	3803.73	28	3756.99
EP-83	11/18/1997	3803.73	27.52	3757.47
EP-83	2/6/1998	3803.73	27.14	3757.85
EP-83	5/13/1998	3803.73	27.91	3757.08
EP-83	8/19/1998	3803.73	29.15	3755.84
EP-83	11/12/1998	3803.73	27.45	3757.54
EP-83	2/22/1999	3803.73	27.56	3757.43

Appendix M

Cumulative List of Groundwater Level Measurements
Period of Record (1997 Through 2001)
Asarco El Paso Smelter
Remedial Investigation Phase III

Monitor Well ID #	Sample Date	Top of Casing (ft) amsl	Depth to Water (ft)	Groundwater Elevation (ft) amsl
EP-83	5/11/1999	3803.73	28.52	3756.47
EP-83	8/9/1999	3803.73	27.07	3757.92
EP-83	10/30/1999	3803.73	28.64	3756.35
EP-83	1/27/2000	3803.73	27.98	3757.01
EP-83	5/1/2000	3803.73	28.89	3756.10
EP-83	8/9/2000	3803.73	28.3	3756.69
EP-83	11/8/2000	3803.73	26.94	3758.05
EP-83	2/14/2001	3803.73	27.73	3757.26
EP-83	5/11/2001	3803.73	28.87	3756.12
EP-83	7/24/2001	3803.73	29.88	3755.11
EP-84	8/13/1997	3797.52	7.15	3777.84
EP-84	11/18/1997	3797.52	7.58	3777.41
EP-84	2/6/1998	3797.52	7.48	3777.51
EP-84	5/13/1998	3797.52	8.38	3776.61
EP-84	8/19/1998	3797.52	9.25	3775.74
EP-84	11/12/1998	3797.52	7.65	3777.34
EP-84	2/22/1999	3797.52	7.52	3777.47
EP-84	5/11/1999	3797.52	8.8	3776.19
EP-84	8/9/1999	3797.52	7.19	3777.80
EP-84	10/30/1999	3797.52	8.19	3776.80
EP-84	1/27/2000	3797.52	7.62	3777.37
EP-84	5/1/2000	3797.52	8.66	3776.33
EP-84	8/9/2000	3797.52	9.11	3775.88
EP-84	11/8/2000	3797.52	6.17	3778.82
EP-84	2/14/2001	3797.52	7.44	3777.55
EP-84	5/11/2001	3797.52	8.71	3776.28
EP-84	7/24/2001	3797.52	9.23	3775.76
EP-85	8/13/1997	3741.91	15.4	3769.59
EP-85	11/17/1997	3741.91	13.6	3771.39
EP-85	2/5/1998	3741.91	19.25	3765.74
EP-85	5/14/1998	3741.91	15.49	3769.50
EP-85	8/19/1998	3741.91	16.66	3768.33
EP-85	11/11/1998	3741.91	10.71	3774.28
EP-85	2/18/1999	3741.91	15.21	3769.78
EP-85	5/11/1999	3741.91	16.39	3768.60
EP-85	8/9/1999	3741.91	9.92	3775.07
EP-85	10/27/1999	3741.91	14.81	3770.18
EP-85	1/28/2000	3741.91	16.6	3768.39
EP-85	5/2/2000	3741.91	17	3767.99
EP-85	8/9/2000	3741.91	13.66	3771.33
EP-85	11/9/2000	3741.91	14.15	3770.84
EP-85	2/16/2001	3741.91	15.95	3769.04
EP-85	5/14/2001	3741.91	16.7	3768.29
EP-85	7/25/2001	3741.91	17.29	3767.70
EP-86	8/13/1997	3819.99	49.3	3735.69
EP-86	11/18/1997	3819.99	49.27	3735.72
EP-86	2/6/1998	3819.99	48.74	3736.25
EP-86	5/14/1998	3819.99	48.83	3736.16

Appendix M

Cumulative List of Groundwater Level Measurements
Period of Record (1997 Through 2001)
Asarco El Paso Smelter
Remedial Investigation Phase III

Monitor Well ID #	Sample Date	Top of Casing (ft) amsl	Depth to Water (ft)	Groundwater Elevation (ft) amsl
EP-86	8/19/1998	3819.99	49.61	3735.38
EP-86	11/12/1998	3819.99	49.73	3735.26
EP-86	2/18/1999	3819.99	49.11	3735.88
EP-86	5/11/1999	3819.99	49.24	3735.75
EP-86	8/9/1999	3819.99	49.91	3735.08
EP-86	10/31/1999	3819.99	50.06	3734.93
EP-86	1/27/2000	3819.99	49.92	3735.07
EP-86	5/2/2000	3819.99	49.7	3735.29
EP-86	8/9/2000	3819.99	50.06	3734.93
EP-86	11/9/2000	3819.99	49.88	3735.11
EP-86	2/15/2001	3819.99	49.21	3735.78
EP-86	5/14/2001	3819.99	49.45	3735.54
EP-86	7/25/2001	3819.99	50.11	3734.88
EP-87	11/18/1997	3818.17	11.47	3773.52
EP-87	8/10/1999	3818.17	10.99	3774.00
EP-88	8/12/1997	3776.54	29.52	3755.47
EP-88	11/11/1997	3776.54	28.12	3756.87
EP-88	2/12/1998	3776.54	27.73	3757.26
EP-88	5/11/1998	3776.54	28.53	3756.46
EP-88	8/17/1998	3776.54	30.25	3754.74
EP-88	11/11/1998	3776.54	28.82	3756.17
EP-88	2/11/1999	3776.54	29.2	3755.79
EP-88	5/7/1999	3776.54	30.39	3754.60
EP-88	8/5/1999	3776.54	29.43	3755.56
EP-88	10/30/1999	3776.54	29.98	3755.01
EP-88	1/26/2000	3776.54	20.13	3764.86
EP-88	4/28/2000	3776.54	30.07	3754.92
EP-88	8/4/2000	3776.54	29.69	3755.30
EP-88	11/7/2000	3776.54	30.15	3754.84
EP-88	2/14/2001	3776.54	30.21	3754.78
EP-88	5/9/2001	3776.54	31.29	3753.70
EP-88	7/19/2001	3776.54	32.11	3752.88
EP-89	8/12/1997	3734.73	15.1	3769.89
EP-89	11/13/1997	3734.73	15.26	3769.73
EP-89	2/11/1998	3734.73	15.12	3769.87
EP-89	5/13/1998	3734.73	15.01	3769.98
EP-89	8/13/1998	3734.73	14.93	3770.06
EP-89	11/10/1998	3734.73	13.46	3771.53
EP-89	2/10/1999	3734.73	14.2	3770.79
EP-89	5/7/1999	3734.73	14.87	3770.12
EP-89	8/5/1999	3734.73	14.4	3770.59
EP-89	10/28/1999	3734.73	15.33	3769.66
EP-89	1/24/2000	3734.73	14.7	3770.29
EP-89	4/25/2000	3734.73	14.94	3770.05
EP-89	8/2/2000	3734.73	41.34	3743.65
EP-89	10/31/2000	3734.73	14.57	3770.42
EP-89	2/8/2001	3734.73	14.54	3770.45
EP-89	5/7/2001	3734.73	14.7	3770.29

Appendix M

Cumulative List of Groundwater Level Measurements
Period of Record (1997 Through 2001)
Asarco El Paso Smelter
Remedial Investigation Phase III

Monitor Well ID #	Sample Date	Top of Casing (ft) amsl	Depth to Water (ft)	Groundwater Elevation (ft) amsl
EP-89	7/17/2001	3734.73	14.94	3770.05
EP-9	5/7/1998	3734.73	61.08	3723.91
EP-90	12/12/1997	3777.83	54.64	3730.35
EP-90	2/17/1998	3777.83	53.9	3731.09
EP-90	5/13/1998	3777.83	53.59	3731.40
EP-90	8/17/1998	3777.83	54.4	3730.59
EP-90	11/5/1998	3777.83	56.55	3728.44
EP-90	2/11/1999	3777.83	56.41	3728.58
EP-90	5/10/1999	3777.83	56.77	3728.22
EP-90	8/5/1999	3777.83	56.4	3728.59
EP-90	10/30/1999	3777.83	57.22	3727.77
EP-90	1/24/2000	3777.83	57.05	3727.94
EP-90	4/26/2000	3777.83	57.05	3727.94
EP-90	8/4/2000	3777.83	57.38	3727.61
EP-90	11/3/2000	3777.83	57.78	3727.21
EP-90	2/12/2001	3777.83	58.27	3726.72
EP-90	5/8/2001	3777.83	58.1	3726.89
EP-90	7/19/2001	3777.83	58.33	3726.66
EP-93	10/13/1999	3777.83	48.35	3736.64
EP-93	1/27/2000	3855.99	47.6	3737.39
EP-93	5/1/2000	3855.99	47.92	3737.07
EP-93	8/9/2000	3855.99	48.01	3736.98
EP-93	11/8/2000	3855.99	47.93	3737.06
EP-93	2/14/2001	3855.99	47.69	3737.30
EP-93	5/11/2001	3855.99	47.86	3737.13
EP-93	7/24/2001	3855.99	48	3736.99
EP-94	10/13/1999	3831.00	51.06	3733.93
EP-94	1/27/2000	3831.00	50.39	3734.60
EP-94	5/1/2000	3831.00	51.14	3733.85
EP-94	8/9/2000	3831.00	50.7	3734.29
EP-94	11/8/2000	3831.00	49.8	3735.19
EP-94	2/14/2001	3831.00	49.98	3735.01
EP-94	5/11/2001	3831.00	51	3733.99
EP-94	7/24/2001	3831.00	52.12	3732.87
EP-95	10/26/1999	3802.21	23.5	3761.49
EP-95	1/27/2000	3802.21	22.1	3762.89
EP-95	5/1/2000	3802.21	22.74	3762.25
EP-95	8/9/2000	3802.21	22.26	3762.73
EP-95	11/8/2000	3802.21	21.48	3763.51
EP-95	2/14/2001	3802.21	21.72	3763.27
EP-95	5/11/2001	3802.21	22.58	3762.41
EP-95	7/24/2001	3802.21	23.59	3761.40
EP-96	10/13/1999	3873.26	68.8	3716.19
EP-96	1/27/2000	3873.26	58.44	3726.55
EP-96	5/1/2000	3873.26	59.31	3725.68
EP-96	8/9/2000	3873.26	60.1	3724.89
EP-96	11/8/2000	3873.26	59.19	3725.80
EP-96	2/14/2001	3873.26	58.34	3726.65

Appendix M

Cumulative List of Groundwater Level Measurements
Period of Record (1997 Through 2001)
Asarco El Paso Smelter
Remedial Investigation Phase III

Monitor Well ID #	Sample Date	Top of Casing (ft) amsl	Depth to Water (ft)	Groundwater Elevation (ft) amsl
EP-96	5/11/2001	3873.26	58.64	3726.35
EP-96	7/24/2001	3873.26	60.44	3724.55
EP-97	10/18/1999	3792.43	5.35	3779.64
EP-97	1/27/2000	3792.43	4.83	3780.16
EP-97	5/1/2000	3792.43	6.55	3778.44
EP-97	8/9/2000	3792.43	6.89	3778.10
EP-97	11/8/2000	3792.43	4.42	3780.57
EP-97	2/14/2001	3792.43	11.7	3773.29
EP-97	5/14/2001	3792.43	6.77	3778.22
EP-97	7/24/2001	3792.43	5.26	3779.73
EP-98	10/18/1999	3789.92	26.91	3758.08
EP-98	1/27/2000	3789.92	11.97	3773.02
EP-98	5/1/2000	3789.92	13.13	3771.86
EP-98	8/9/2000	3789.92	12.61	3772.38
EP-98	11/8/2000	3789.92	10.65	3774.34
EP-98	2/14/2001	3789.92	11.7	3773.29
EP-98	5/14/2001	3789.92	13.16	3771.83
EP-98	7/24/2001	3789.92	14.11	3770.88
EP-99	10/18/1999	3801.51	72.5	3712.49
EP-99	8/9/2000	3801.51	71.55	3713.44
EP-99	11/8/2000	3801.51	72.37	3712.62
EP-99	2/22/2001	3801.51	73.8	3711.19
EP-99	5/9/2001	3801.51	74.79	3710.20
EP-99	7/26/2001	3801.51	75.39	3709.60

Note
amsl = above mean sea level

APPENDIX N

SURFACE SOIL SAMPLES
(0 TO 3 FEET DEPTH)

APPENDIX N

SURFACE SOIL SAMPLES
(0 TO 3 FEET DEPTH)

Appendix N

Statistical Evaluation of Surface Soils
Asarco El Paso Smelter, Remedial Investigation Phase III

Investigation Area	Sample Code	Sample Date	Sample Top Depth (feet)	Sample Bottom Depth (feet)	Arsenic (mg/kg) *DL = 10 mg/kg	Cadmium (mg/kg) *DL = 10 mg/kg	Chromium (mg/kg) *DL = 80 mg/kg	Copper (mg/kg) *DL = 20 mg/kg	Iron (mg/kg) *DL = 20 mg/kg	Lead (mg/kg) *DL = 10 mg/kg	Selenium (mg/kg) *DL = 10 mg/kg	Zinc (mg/kg) *DL = 10 mg/kg
IA-1	BH1-1A	31-Aug-99	0.5	1.5	30	5	40	100	23000	62	5	290
IA-1	BH1-1B	31-Aug-99	1.5	2.5	200	58	40	5500	24000	1600	13	2400
IA-1	BH1-2A	01-Sep-99	0	1	720	590	40	3100	22000	710	31	3900
IA-1	BH1-2B	01-Sep-99	1	2	77	160	40	250	20000	190	5	1100
IA-1	BH1-2C	01-Sep-99	2	3	16	5	40	93	20000	100	5	61
IA-1	EP-100A	08-Sep-99	0	1	850	360	40	2900	23000	850	20	3100
IA-1	EP-100B	08-Sep-99	1	2	2300	310	40	4600	27000	610	28	3600
IA-1	EP-100C	08-Sep-99	2	3	720	210	92	11000	45000	1900	19	3300
IA-1	SSIA1-1A	15-Jul-97	0	1	3200	1900	62	13000	18000	11000	190	7000
IA-1	SSIA1-1B	15-Jul-97	1.5	1.5	2300	91	330	7600	150000	5000	13	13000
IA-1	SSIA1-2A	15-Jul-97	0	1	21000	1100	60	11000	30000	15	1300	2600
IA-1	SSIA1-2B	15-Jul-97	1.5	1.5	22000	1600	110	28000	46000	5400	200	4900
IA-1	SSIA1-3A	15-Jul-97	0	1	2000	320	15	4000	12000	4100	41	2200
IA-1	SSIA1-3B	15-Jul-97	1.5	1.5	4900	110	97	37000	44000	5800	36	7200
IA-1	SSIA1-4A	15-Jul-97	0	1	410	88	15	1800	15000	690	5	1500
IA-1	SSIA1-4B	15-Jul-97	1.5	1.5	570	160	110	11000	44000	6200	25	7500
IA-1	SSIA1-5A	15-Jul-97	0	1	1800	120	39	2500	18000	1200	5	2300
IA-1	SSIA1-5B	15-Jul-97	1.5	1.5	220	20	170	3500	18000	830	5	550
Count					**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**
Maximum					**22000**	**1900**	**330**	**37000**	**150000**	**11000**	**1300**	**13000**
Mean					**3517**	**400**	**77**	**8164**	**33278**	**2570**	**108**	**3695**
Std Deviation					**6672**	**559**	**75**	**9853**	**31124**	**3025**	**303**	**3250**
95% Confidence					**3082**	**258**	**34**	**4552**	**14378**	**1398**	**140**	**1501**

*** DL = Most commonly used reporting detection limit. All values reported as less than detection limit were divided by 2.**

Appendix N

Statistical Evaluation of Surface Soils
Asarco El Paso Smelter, Remedial Investigation Phase III

Investigation Area	Sample Code	Sample Date	Sample Top Depth (feet)	Sample Bottom Depth (feet)	Arsenic (mg/kg) *DL = 10 mg/kg	Cadmium (mg/kg) *DL = 10 mg/kg	Chromium (mg/kg) *DL = 80 mg/kg	Copper (mg/kg) *DL = 20 mg/kg	Iron (mg/kg) *DL = 20 mg/kg	Lead (mg/kg) *DL = 10 mg/kg	Selenium (mg/kg) *DL = 10 mg/kg	Zinc (mg/kg) *DL = 10 mg/kg
IA-2	EP-125A	24-Apr-01	0	1	180	23	40	2800	11000	840	10	410
IA-2	EP-125B	24-Apr-01	1	2	78	5	40	1100	9300	520	10	1300
IA-2	EP-126A	26-Apr-01	0.3	1	190	74	110	1700	43000	2900	10	8700
IA-2	EP-126B	26-Apr-01	1	2	55	64	120	1100	48000	1400	10	6000
IA-2	EP-126C	26-Apr-01	2	3	120	54	100	1500	55000	1900	10	9100
IA-2	EP-76A	03-Jun-97	0	0	1800	420	200	12000	120000	9500	82	12000
IA-2	EP-76B	03-Jun-97	1.5	1.5	420	5	310	4800	150000	3400	80	110000
IA-2	RI1BH-4A	30-Jun-97	0	1	280	24	120	2100	60000	970	5	4700
IA-2	RI1BH-5A	30-Jun-97	2	2	10	5	46	310	27000	210	5	1600
IA-2	RI1BH-6A	30-Jun-97	2	2	270	5	150	1800	96000	830	15	6500
IA-2	SSIA2-1A	14-Jul-97	0	1	400	14	120	7200	130000	1500	12	10000
IA-2	SSIA2-1B	14-Jul-97	1.5	1.5	1200	56	340	5400	190000	180	72	16000
IA-2	SSIA2-2A	14-Jul-97	0	1	840	150	230	8800	85000	2700	21	5300
Count					**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**
Maximum					**1800**	**420**	**340**	**12000**	**190000**	**9500**	**82**	**110000**
Mean					**449**	**69**	**148**	**3893**	**78792**	**2065**	**26**	**14739**
Std Deviation					**528**	**113**	**97**	**3554**	**55789**	**2459**	**30**	**28964**
95% Confidence					**287**	**62**	**53**	**1932**	**30326**	**1337**	**16**	**15745**

*** DL = Most commonly used reporting detection limit. All values reported as less than detection limit were divided by 2.**

Appendix N

Statistical Evaluation of Surface Soils
Asarco El Paso Smelter, Remedial Investigation Phase III

Investigation Area	Sample Code	Sample Date	Sample Top Depth (feet)	Sample Bottom Depth (feet)	Arsenic (mg/kg) *DL = 10 mg/kg	Cadmium (mg/kg) *DL = 10 mg/kg	Chromium (mg/kg) *DL = 80 mg/kg	Copper (mg/kg) *DL = 20 mg/kg	Iron (mg/kg) *DL = 20 mg/kg	Lead (mg/kg) *DL = 10 mg/kg	Selenium (mg/kg) *DL = 10 mg/kg	Zinc (mg/kg) *DL = 10 mg/kg
IA-3	BH3-1A	18-Aug-99	0	1	300	110	110	3400	23000	990	13	1200
IA-3	BH3-1B	18-Aug-99	1	2	5	5	40	120	16000	57	5	65
IA-3	BH3-1C	18-Aug-99	2	3	18	14	40	150	18000	340	5	320
IA-3	BH3-2A	23-Aug-99	0	1	890	560	40	4000	30000	2500	19	4600
IA-3	BH3-2B	23-Aug-99	1	2	5	5	40	82	20000	52	5	61
IA-3	BH3-4A	24-Aug-99	0	1	64	37	40	211	17000	1300	10	400
IA-3	BH3-4B	24-Aug-99	1	2	5	5	40	65	15000	120	5	130
IA-3	SSIA3-10A	15-Jul-97	0	1	2800	360	95	7900	15000	19000	77	4100
IA-3	SSIA3-10B	15-Jul-97	1.5	1.5	980	680	15	4700	120000	25000	46	15000
IA-3	SSIA3-1A	14-Jul-97	0	1	1900	510	240	27000	66000	7400	56	7600
IA-3	SSIA3-1B	14-Jul-97	1.5	1.5	650	120	73	4000	120000	6900	13	17000
IA-3	SSIA3-2A	14-Jul-97	0	1	10	25	15	360	15000	220	5	220
IA-3	SSIA3-2B	14-Jul-97	1.5	1.5	35	19	15	430	21000	550	5	2000
IA-3	SSIA3-3A	14-Jul-97	0	1	480	150	41	3600	15000	2000	5	1900
IA-3	SSIA3-3B	14-Jul-97	1.5	1.5	10	5	100	72	6000	37	5	100
IA-3	SSIA3-4A	14-Jul-97	0	1	7800	1600	140	7400	55000	7300	53	9800
IA-3	SSIA3-4B	14-Jul-97	1.5	1.5	3000	330	300	4400	150000	5600	35	16000
IA-3	SSIA3-5A	15-Jul-97	0	1	1000	280	240	9000	92000	5200	22	9200
IA-3	SSIA3-5B	15-Jul-97	1.5	1.5	560	150	80	3700	63000	3300	16	7300
IA-3	SSIA3-6A	15-Jul-97	0	1	2900	790	260	11000	30000	11000	60	14000
IA-3	SSIA3-6B	15-Jul-97	1.5	1.5	230	67	60	1000	16000	1000	5	1300
IA-3	SSIA3-7A	15-Jul-97	0	1	820	150	120	1900	12000	2200	22	2200
IA-3	SSIA3-7B	15-Jul-97	1.5	1.5	2700	440	1400	3900	45000	3700	94	14000
IA-3	SSIA3-8A	15-Jul-97	0	1	3200	1100	290	20000	60000	8100	60	9900
IA-3	SSIA3-8B	15-Jul-97	1.5	1.5	740	170	110	3300	19000	1600	14	1900
IA-3	SSIA3-9A	15-Jul-97	0	1	1900	1400	53	8500	34000	4500	33	5500
IA-3	SSIA3-9B	15-Jul-97	1.5	1.5	570	340	52	2700	23000	2700	26	2600
Count					27	27	27	27	27	27	27	27
Maximum					**7800**	**1600**	**1400**	**27000**	**150000**	**25000**	**94**	**17000**
Mean					**1243**	**349**	**150**	**4922**	**41333**	**4543**	**26**	**5496**
Std Deviation					**1693**	**432**	**265**	**6252**	**38246**	**5894**	**25**	**5652**
95% Confidence					**639**	**163**	**100**	**2358**	**14426**	**2223**	**10**	**2132**

*** DL = Most commonly used reporting detection limit. All values reported as less than detection limit were divided by 2.**

Appendix N

Statistical Evaluation of Surface Soils
Asarco El Paso Smelter, Remedial Investigation Phase III

Investigation Area	Sample Code	Sample Date	Sample Top Depth (feet)	Sample Bottom Depth (feet)	Arsenic (mg/kg) *DL = 10 mg/kg	Cadmium (mg/kg) *DL = 10 mg/kg	Chromium (mg/kg) *DL = 80 mg/kg	Copper (mg/kg) *DL = 20 mg/kg	Iron (mg/kg) *DL = 20 mg/kg	Lead (mg/kg) *DL = 10 mg/kg	Selenium (mg/kg) *DL = 10 mg/kg	Zinc (mg/kg) *DL = 10 mg/kg
IA-4	BH4-1A	17-Nov-99	0	1	340	110	40	7300	26000	3700	5	2100
IA-4	BH4-1B	17-Nov-99	1	2	260	77	40	4600	25000	4100	17	2300
IA-4	BH4-1C	17-Nov-99	2	3	200	60	40	4400	26000	2800	5	1600
IA-4	BH4-2A	18-Nov-99	0	1	760	380	40	5800	28000	6500	42	2900
IA-4	BH4-2B	18-Nov-99	1	2	650	320	40	4900	32000	4800	28	2600
IA-4	BH4-2C	18-Nov-99	2	3	350	120	40	2500	31000	2300	14	1400
IA-4	BH4-4A	18-Nov-99	0	1	11000	2600	40	20000	40000	22000	220	8600
IA-4	BH4-4B	18-Nov-99	1	2	2000	580	40	4300	26000	5300	38	1900
IA-4	BH4-4C	18-Nov-99	2	3	3200	900	40	6300	30000	7600	55	2800
IA-4	BH4-5A	18-Nov-99	0	1	4200	1500	40	23000	48000	8600	72	4300
IA-4	BH4-5B	18-Nov-99	1	2	2500	930	40	11000	39000	5300	32	2500
IA-4	BH4-5C	18-Nov-99	2	3	2000	700	40	8900	35000	4500	24	2000
IA-4	BH4-6A	18-Nov-99	0	1	310	190	40	4000	30000	1500	15	1600
IA-4	BH4-6B	18-Nov-99	1	2	50	24	40	620	18000	380	5	370
IA-4	BH4-6C	18-Nov-99	2	3	150	60	40	1700	27000	890	5	1100
IA-4	EP-115A	16-Nov-99	0	1	2800	850	40	16000	35000	7000	67	5300
IA-4	EP-115B	16-Nov-99	1	2	950	400	40	5900	39000	2800	21	2200
IA-4	EP-115C	16-Nov-99	2	3	830	380	40	5000	40000	2300	26	1900
IA-4	EP-116A	16-Nov-99	0	1	18000	530	40	57000	99000	40000	2400	7000
IA-4	EP-116B	16-Nov-99	1	2	9800	360	40	97000	100000	26000	720	7100
IA-4	EP-116C	16-Nov-99	2	2.5	9200	360	40	100000	100000	23000	570	6800
IA-4	EP-117A	16-Nov-99	0	1	2300	480	40	4100	32000	3500	34	1900
IA-4	EP-117B	16-Nov-99	1	2	1700	300	40	2500	29000	2300	23	1300
IA-4	EP-117C	16-Nov-99	2	3	2300	460	40	5400	35000	4700	30	2400
IA-4	EP-118A	17-Nov-99	0	1	1300	340	40	17000	43000	10000	110	4800
IA-4	EP-118B	17-Nov-99	1	2	720	200	40	8400	34000	5900	57	2800
IA-4	EP-118C	17-Nov-99	2	3	120	56	40	1600	19000	1700	12	640
IA-4	SSIA4-10A	28-Oct-97	0	1	840	290	130	5800	30000	5100	24	3200
IA-4	SSIA4-10B	28-Oct-97	1.5	1.5	880	140	15	3400	26000	2800	18	2000
IA-4	SSIA4-11A	28-Oct-97	0	1	1800	500	140	9700	36000	8900	53	4600
IA-4	SSIA4-11B	28-Oct-97	1.5	1.5	680	55	61	1000	26000	1300	13	640
IA-4	SSIA4-12A	28-Oct-97	0	1	4800	930	130	11000	31000	13000	63	6600
IA-4	SSIA4-12B	28-Oct-97	1.5	1.5	10	18	140	1800	190000	10000	5	20000
IA-4	SSIA4-13A	28-Oct-97	0	1	860	320	74	12000	34000	11000	52	5400
IA-4	SSIA4-13B	28-Oct-97	1.5	1.5	790	320	120	14000	36000	12000	70	7400
IA-4	SSIA4-14A	28-Oct-97	0	1	1600	640	110	10000	40000	14000	50	6300

*** DL = Most commonly used reporting detection limit. All values reported as less than detection limit were divided by 2.**

Appendix N

Statistical Evaluation of Surface Soils
Asarco El Paso Smelter, Remedial Investigation Phase III

Investigation Area	Sample Code	Sample Date	Sample Top Depth (feet)	Sample Bottom Depth (feet)	Arsenic (mg/kg) *DL = 10 mg/kg	Cadmium (mg/kg) *DL = 10 mg/kg	Chromium (mg/kg) *DL = 80 mg/kg	Copper (mg/kg) *DL = 20 mg/kg	Iron (mg/kg) *DL = 20 mg/kg	Lead (mg/kg) *DL = 10 mg/kg	Selenium (mg/kg) *DL = 10 mg/kg	Zinc (mg/kg) *DL = 10 mg/kg
IA-4	SSIA4-14B	28-Oct-97	1.5	1.5	490	190	82	3700	33000	4500	16	2400
IA-4	SSIA4-15A	28-Oct-97	0	1	480	300	130	4400	27000	6800	33	3200
IA-4	SSIA4-15B	28-Oct-97	1.5	1.5	440	240	71	3800	30000	5300	21	3000
IA-4	SSIA4-16A	28-Oct-97	0	1	520	350	71	5000	27000	5900	32	2800
IA-4	SSIA4-16B	30-Oct-97	1.5	1.5	66	30	78	640	25000	710	5	380
IA-4	SSIA4-17A	30-Oct-97	0	1	220	76	15	4600	29000	2500	5	1400
IA-4	SSIA4-17B	30-Oct-97	1.5	1.5	160	57	120	1900	29000	1900	11	1500
IA-4	SSIA4-18A	30-Oct-97	0	1	160	59	120	2500	23000	1400	5	780
IA-4	SSIA4-18B	30-Oct-97	1.5	1.5	150	85	130	1700	26000	1200	5	1100
IA-4	SSIA4-19A	30-Oct-97	0	1	52	22	65	1200	15000	560	5	350
IA-4	SSIA4-19B	30-Oct-97	1.5	1.5	24	10	15	590	21000	440	5	400
IA-4	SSIA4-1A	27-Oct-97	0	1	3100	540	200	31000	72000	11000	56	11000
IA-4	SSIA4-1B	27-Oct-97	1.5	1.5	97	66	81	280	13000	200	5	790
IA-4	SSIA4-20A	30-Oct-97	0	1	75	32	57	2600	20000	1300	5	840
IA-4	SSIA4-20B	30-Oct-97	1.5	1.5	10	16	45	840	27000	550	5	400
IA-4	SSIA4-21A	30-Oct-97	0	1	160	63	40	3600	28000	2500	5	1600
IA-4	SSIA4-21B	30-Oct-97	1.5	1.5	210	73	86	3200	36000	3200	14	2700
IA-4	SSIA4-22A	30-Oct-97	0	1	140	62	75	3100	26000	2200	5	1400
IA-4	SSIA4-22B	30-Oct-97	1.5	1.5	45	22	53	1100	23000	1200	5	780
IA-4	SSIA4-23A	30-Oct-97	0	1	250	91	73	4800	24000	4600	17	2800
IA-4	SSIA4-23B	30-Oct-97	1.5	1.5	10	13	39	410	23000	370	5	250
IA-4	SSIA4-24A	30-Oct-97	0	1	120	38	110	3000	23000	1800	5	1500
IA-4	SSIA4-24B	30-Oct-97	1.5	1.5	10	5	110	220	25000	260	5	230
IA-4	SSIA4-25A	30-Oct-97	0	1	380	200	83	12000	32000	9400	24	6700
IA-4	SSIA4-25B	30-Oct-97	1.5	1.5	10	5	92	530	22000	370	5	280
IA-4	SSIA4-26A	30-Oct-97	0	1	320	82	65	7500	40000	3800	5	2800
IA-4	SSIA4-26B	30-Oct-97	1.5	1.5	10	5	15	140	28000	180	5	150
IA-4	SSIA4-27A	30-Oct-97	0	1	370	140	180	7600	32000	5300	22	3900
IA-4	SSIA4-27B	30-Oct-97	1.5	1.5	25	5	110	95	12000	82	5	87
IA-4	SSIA4-28A	30-Oct-97	0	1	190	42	110	4100	28000	1600	5	1500
IA-4	SSIA4-28B	30-Oct-97	1.5	1.5	10	5	67	120	25000	63	5	72
IA-4	SSIA4-29A	30-Oct-97	0	1	490	110	110	6000	39000	3900	15	3000
IA-4	SSIA4-29B	30-Oct-97	1.5	1.5	10	5	75	190	22000	330	5	270
IA-4	SSIA4-2A	27-Oct-97	0	1	4900	1000	100	18000	39000	11000	74	7300
IA-4	SSIA4-2B	27-Oct-97	1.5	1.5	7000	1200	140	17000	35000	12000	120	8700
IA-4	SSIA4-30A	30-Oct-97	0	1	200	16	15	1200	17000	980	5	360

*** DL = Most commonly used reporting detection limit. All values reported as less than detection limit were divided by 2.**

Appendix N

Statistical Evaluation of Surface Soils
Asarco El Paso Smelter, Remedial Investigation Phase III

Investigation Area	Sample Code	Sample Date	Sample Top Depth (feet)	Sample Bottom Depth (feet)	Arsenic (mg/kg) *DL = 10 mg/kg	Cadmium (mg/kg) *DL = 10 mg/kg	Chromium (mg/kg) *DL = 80 mg/kg	Copper (mg/kg) *DL = 20 mg/kg	Iron (mg/kg) *DL = 20 mg/kg	Lead (mg/kg) *DL = 10 mg/kg	Selenium (mg/kg) *DL = 10 mg/kg	Zinc (mg/kg) *DL = 10 mg/kg
IA-4	SSIA4-30B	30-Oct-97	1.5	1.5	250	83	130	2300	24000	2700	5	2000
IA-4	SSIA4-3A	27-Oct-97	0	1	4100	1300	76	14000	32000	9300	58	7100
IA-4	SSIA4-3B	27-Oct-97	1.5	1.5	2900	1500	36	9300	30000	8400	60	5600
IA-4	SSIA4-4A	28-Oct-97	0	1	1200	360	75	16000	38000	7500	33	5600
IA-4	SSIA4-4B	28-Oct-97	1.5	1.5	1100	280	120	13000	46000	7500	41	6700
IA-4	SSIA4-5A	28-Oct-97	0	1	3500	840	68	31000	50000	21000	90	12000
IA-4	SSIA4-5B	28-Oct-97	1.5	1.5	370	54	36	2400	24000	2600	5	980
IA-4	SSIA4-6A	28-Oct-97	0	1	5900	1300	120	40000	50000	15000	110	8700
IA-4	SSIA4-6B	28-Oct-97	1.5	1.5	610	520	100	6900	27000	4000	16	2900
IA-4	SSIA4-7A	28-Oct-97	0	1	17000	350	57	82000	87000	49000	1600	7900
IA-4	SSIA4-7B	28-Oct-97	1.5	1.5	2200	310	210	68000	40000	12000	110	3600
IA-4	SSIA4-8A	28-Oct-97	0	1	3300	980	180	25000	50000	25000	100	11000
IA-4	SSIA4-8B	28-Oct-97	1.5	1.5	990	190	75	4200	27000	4100	15	2100
IA-4	SSIA4-9A	28-Oct-97	0	1	3000	970	74	12000	43000	11000	30	5400
IA-4	SSIA4-9B	28-Oct-97	1.5	1.5	1300	600	220	3900	34000	3200	5	2400
Count					**87**	**87**	**87**	**87**	**87**	**87**	**87**	**87**
Maximum					**18000**	**2600**	**220**	**100000**	**190000**	**49000**	**2400**	**20000**
Mean					**1826**	**361**	**76**	**11340**	**35782**	**6658**	**90**	**3437**
Std Deviation					**3258**	**446**	**46**	**19234**	**23558**	**8247**	**317**	**3353**
95% Confidence					**685**	**94**	**10**	**4042**	**4950**	**1733**	**67**	**705**

*** DL = Most commonly used reporting detection limit. All values reported as less than detection limit were divided by 2.**

Appendix N

Statistical Evaluation of Surface Soils
Asarco El Paso Smelter, Remedial Investigation Phase III

Investigation Area	Sample Code	Sample Date	Sample Top Depth (feet)	Sample Bottom Depth (feet)	Arsenic (mg/kg) *DL = 10 mg/kg	Cadmium (mg/kg) *DL = 10 mg/kg	Chromium (mg/kg) *DL = 80 mg/kg	Copper (mg/kg) *DL = 20 mg/kg	Iron (mg/kg) *DL = 20 mg/kg	Lead (mg/kg) *DL = 10 mg/kg	Selenium (mg/kg) *DL = 10 mg/kg	Zinc (mg/kg) *DL = 10 mg/kg
IA-5	BH9-5-1A	09-Feb-00	0	1	1800	120	40	6900	54000	7900	34	3400
IA-5	BH9-5-1B	09-Feb-00	1	2	190	5	40	720	44000	890	5	310
IA-5	BH9-5-1C	09-Feb-00	2	3	210	5	40	280	45000	1400	5	340
IA-5	BH9-5-2A	09-Feb-00	0	1	1000	390	40	27000	52000	12000	81	7800
IA-5	BH9-5-2B	09-Feb-00	1	2	1400	130	40	12000	53000	9600	30	3300
IA-5	BH9-5-2C	09-Feb-00	2	3	1200	74	40	3900	47000	6000	18	1700
IA-5	BH9-5-3A	09-Feb-00	0	1	1600	700	40	30000	56000	18000	120	13000
IA-5	BH9-5-3B	09-Feb-00	1	2	28	22	40	770	26000	710	5	360
IA-5	BH9-5-3C	09-Feb-00	2	3	32	30	94	1400	26000	1200	5	630
IA-5	BH9-5-4A	09-Feb-00	0	1	1800	790	110	45000	62000	23000	160	17000
IA-5	BH9-5-4B	09-Feb-00	1	2	1200	550	40	31000	55000	17000	130	12000
IA-5	BH9-5-4C	09-Feb-00	2	3	180	54	40	2300	46000	3100	13	1000
IA-5	BH9-5-5A	09-Feb-00	0	1	4000	1300	92	57000	68000	30000	180	23000
IA-5	BH9-5-5B	09-Feb-00	1	2	1400	370	40	20000	48000	12000	42	6700
IA-5	BH9-5-5C	09-Feb-00	2	3	750	63	97	7700	42000	6700	18	2300
IA-5	BH9-5-6A	09-Feb-00	0	1	1500	840	40	19000	50000	12000	64	8400
IA-5	BH9-5-6B	09-Feb-00	1	2	1700	760	40	37000	59000	20000	150	15000
IA-5	BH9-5-6C	09-Feb-00	2	3	88	44	40	3000	18000	1900	5	1000
IA-5	BH9-5-7A	09-Feb-00	0	1	3900	1200	40	50000	66000	31000	170	21000
IA-5	BH9-5-7B	09-Feb-00	1	2	900	300	40	14000	43000	9700	64	5700
IA-5	BH9-5-7C	09-Feb-00	2	3	240	85	130	4400	16000	3700	5	1700
IA-5	EP-111A	27-Oct-99	0	1	33	27	40	420	19000	430	5	200
IA-5	EP-111B	27-Oct-99	1	2	5	5	40	170	16000	52	5	38
IA-5	EP-111C	27-Oct-99	2	3	50	12	40	490	26000	600	5	280
IA-5	EP-112A	27-Oct-99	0	1	84	32	40	1300	23000	1200	5	590
IA-5	EP-112B	27-Oct-99	1	2	86	54	40	1100	20000	1500	5	740
IA-5	EP-112C	27-Oct-99	2	3	5	23	40	320	15000	430	5	190
IA-5	EP-113A	28-Oct-99	0	1	5	5	40	110	16000	110	5	66
IA-5	EP-113B	28-Oct-99	1	2	26	20	40	570	21000	630	5	370
IA-5	EP-113C	28-Oct-99	2	3	33	5	86	370	19000	310	5	210
IA-5	EP-119A	02-Apr-01	0	1	160	35	40	2000	14000	800	10	870
IA-5	EP-119B	02-Apr-01	1	2	64	20	40	640	14000	550	10	450
IA-5	EP-119C	02-Apr-01	2	3	91	21	93	860	24000	660	10	410
IA-5	EP-122A1	12-Apr-01	0	1	200	74	40	2600	22000	1400	10	2000
IA-5	EP-122B	12-Apr-01	1	2	110	53	40	1400	19000	890	10	1200
IA-5	EP-122C	12-Apr-01	2	3	42	11	40	260	13000	230	10	170

*** DL = Most commonly used reporting detection limit. All values reported as less than detection limit were divided by 2.**

Appendix N

Statistical Evaluation of Surface Soils
Asarco El Paso Smelter, Remedial Investigation Phase III

Investigation Area	Sample Code	Sample Date	Sample Top Depth (feet)	Sample Bottom Depth (feet)	Arsenic (mg/kg) *DL = 10 mg/kg	Cadmium (mg/kg) *DL = 10 mg/kg	Chromium (mg/kg) *DL = 80 mg/kg	Copper (mg/kg) *DL = 20 mg/kg	Iron (mg/kg) *DL = 20 mg/kg	Lead (mg/kg) *DL = 10 mg/kg	Selenium (mg/kg) *DL = 10 mg/kg	Zinc (mg/kg) *DL = 10 mg/kg
IA-5	EP-127A	27-Apr-01	0	1	46	16	40	360	15000	420	10	190
IA-5	EP-127B	27-Apr-01	1	2	83	20	88	420	22000	590	10	340
IA-5	EP-127C	27-Apr-01	2	3	38	12	40	80	7500	110	10	72
IA-5	EP-128A	27-Apr-01	0	1	120	23	40	1900	24000	2000	10	820
IA-5	EP-128B	27-Apr-01	1	2	28	10	40	240	8800	330	10	160
IA-5	EP-128C	27-Apr-01	2	3	68	5	40	140	17000	210	10	69
IA-5	EP-132A1	04-Jun-01	0	1	110	22	40	1400	15000	890	10	480
IA-5	EP-132B	04-Jun-01	1	2	230	48	40	1600	16000	1800	10	920
IA-5	EP-132C	04-Jun-01	2	3	51	19	40	260	15000	400	10	170
IA-5	EP-80A	06-Jun-97	0	0	26	5	41	160	14000	95	5	200
IA-5	RI1BH-10A	01-Jul-97	0	1	46	5	15	760	18000	400.	5	360
IA-5	RI1BH-7A	01-Jul-97	0	1	53	28	130	1500	21000	1000	5	780
IA-5	RI1BH-8A	01-Jul-97	0	1	120	120	63	3800	22000	3300	14	3100
IA-5	RI1BH-9A	01-Jul-97	0	1	63	46	15	1600	23000	1100	5	1500
IA-5	SSIA5-10A	08-Jul-97	0	1	130	110	34	3900	19000	2800	12	2500
IA-5	SSIA5-10B	08-Jul-97	1.5	1.5	10	5	30	320	17000	250	5	200
IA-5	SSIA5-11A	08-Jul-97	0	1	10	22	36	1100	21000	740	5	630
IA-5	SSIA5-11B	08-Jul-97	1.5	1.5	10	23	66	570	19000	470	5	360
IA-5	SSIA5-12A	08-Jul-97	0	1	21	19	41	810	21000	540	5	440
IA-5	SSIA5-12B	08-Jul-97	1.5	1.5	10	11	100	430	20000	440	5	340
IA-5	SSIA5-13A	08-Jul-97	0	1	87	36	69	2200	17000	830	5	850
IA-5	SSIA5-13B	08-Jul-97	1.5	1.5	10	5	15	100	18000	110	5	100
IA-5	SSIA5-14A	08-Jul-97	0	1	78	5	60	1300	14000	170	5	220
IA-5	SSIA5-14B	08-Jul-97	1.5	1.5	10	5	15	120	19000	130	5	54
IA-5	SSIA5-15A	14-Jul-97	0	1	86	20	74	2800	23000	420	5	900
IA-5	SSIA5-15B	14-Jul-97	1.5	1.5	10	5	32	39	17000	34	5	59
IA-5	SSIA5-16A	14-Jul-97	0	1	27	24	89	1000	32000	610	5	650
IA-5	SSIA5-16B	14-Jul-97	1.5	1.5	10	5	15	200	20000	150	5	190
IA-5	SSIA5-17A	14-Jul-97	0	1	83	85	15	1800	23000	1100	5	1400
IA-5	SSIA5-17B	14-Jul-97	1.5	1.5	24	5	15	150	18000	140	5	150
IA-5	SSIA5-18A	14-Jul-97	0	1	26	11	15	1200	20000	200	5	430
IA-5	SSIA5-18B	14-Jul-97	1.5	1.5	10	5	15	27	16000	15	5	28
IA-5	SSIA5-19A	14-Jul-97	0	1	160	150	39	3400	28000	2400	18	3300
IA-5	SSIA5-19B	14-Jul-97	1.5	1.5	10	29	15	370	15000	310	5	430
IA-5	SSIA5-1A	07-Jul-97	0	1	240	130	46	6600	21000	4200	30	2400
IA-5	SSIA5-1B	08-Jul-97	1.5	1.5	28	17	15	400	19000	420	5	200

*** DL = Most commonly used reporting detection limit. All values reported as less than detection limit were divided by 2.**

Appendix N

Statistical Evaluation of Surface Soils
Asarco El Paso Smelter, Remedial Investigation Phase III

Investigation Area	Sample Code	Sample Date	Sample Top Depth (feet)	Sample Bottom Depth (feet)	Arsenic (mg/kg) *DL = 10 mg/kg	Cadmium (mg/kg) *DL = 10 mg/kg	Chromium (mg/kg) *DL = 80 mg/kg	Copper (mg/kg) *DL = 20 mg/kg	Iron (mg/kg) *DL = 20 mg/kg	Lead (mg/kg) *DL = 10 mg/kg	Selenium (mg/kg) *DL = 10 mg/kg	Zinc (mg/kg) *DL = 10 mg/kg
IA-5	SSIA5-2A	08-Jul-97	0	1	71	66	15	1100	20000	580	5	410
IA-5	SSIA5-2B	08-Jul-97	1.5	1.5	22	5	82	42	19000	44	5	28
IA-5	SSIA5-3A	08-Jul-97	0	1	130	110	170	7200	25000	2700	5	2000
IA-5	SSIA5-3B	08-Jul-97	1.5	1.5	10	16	15	1200	19000	850	5	590
IA-5	SSIA5-4A	08-Jul-97	0	1	37	41	30	1800	21000	1100	11	770
IA-5	SSIA5-4B	08-Jul-97	1.5	1.5	10	44	37	1600	23000	1800	12	1100
IA-5	SSIA5-5A	08-Jul-97	0	1	10	36	30	1100	20000	1200	20	740
IA-5	SSIA5-5B	08-Jul-97	1.5	1.5	10	5	15	130	21000	210	5	130
IA-5	SSIA5-6A	08-Jul-97	0	1	10	14	15	650	20000	370	5	280
IA-5	SSIA5-6B	08-Jul-97	1.5	1.5	10	10	97	310	21000	370	5	210
IA-5	SSIA5-7A	08-Jul-97	0	1	110	56	15	3800	24000	1700	5	1300
IA-5	SSIA5-7B	08-Jul-97	1.5	1.5	10	5	15	59	17000	68	5	52
IA-5	SSIA5-8A	08-Jul-97	0	1	31	42	47	2800	21000	1200	16	990
IA-5	SSIA5-8B	08-Jul-97	1.5	1.5	32	5	15	10	16000	30	5	28
IA-5	SSIA5-9A	08-Jul-97	0	1	90	39	15	2800	23000	800	5	850
IA-5	SSIA5-9B	08-Jul-97	1.5	1.5	10	5	68	260	17000	110	5	83
Count					**88**	**88**	**88**	**88**	**88**	**88**	**88**	**88**
Maximum					**4000**	**1300**	**170**	**57000**	**68000**	**31000**	**180**	**23000**
Mean					**328**	**112**	**46**	**5158**	**25674**	**3180**	**21**	**2136**
Std Deviation					**725**	**247**	**30**	**11185**	**14062**	**6244**	**38**	**4422**
95% Confidence					**151**	**52**	**6**	**2337**	**2938**	**1305**	**8**	**924**

*** DL = Most commonly used reporting detection limit. All values reported as less than detection limit were divided by 2.**

Appendix N

Statistical Evaluation of Surface Soils
Asarco El Paso Smelter, Remedial Investigation Phase III

Investigation Area	Sample Code	Sample Date	Sample Top Depth (feet)	Sample Bottom Depth (feet)	Arsenic (mg/kg) *DL = 10 mg/kg	Cadmium (mg/kg) *DL = 10 mg/kg	Chromium (mg/kg) *DL = 80 mg/kg	Copper (mg/kg) *DL = 20 mg/kg	Iron (mg/kg) *DL = 20 mg/kg	Lead (mg/kg) *DL = 10 mg/kg	Selenium (mg/kg) *DL = 10 mg/kg	Zinc (mg/kg) *DL = 10 mg/kg
IA-8	BH8-11A	12-Apr-01	0	1	15000	730	180	45000	93000	51000	200	11000
IA-8	BH8-11B	12-Apr-01	1	2	130	570	40	1500	15000	1100	10	2700
IA-8	BH8-11C	12-Apr-01	2	3	230	750	89	2200	30000	1500	10	2100
IA-8	BH8-12A	16-Apr-01	0	1	1600	1500	130	38000	52000	6300	25	18000
IA-8	BH8-12B	16-Apr-01	1	2	70	1900	40	1900	9200	300	10	22000
IA-8	BH8-12C	16-Apr-01	2	3	110	580	40	6500	12000	760	10	9300
IA-8	BH8-4A	02-Nov-99	0	1	6100	2600	1800	49000	51000	29000	270	23000
IA-8	BH8-4B	02-Nov-99	1	2	210	110	210	760	14000	550	5	2300
IA-8	BH8-4C	02-Nov-99	2	3	130	170	100	140	14000	120	5	1900
IA-8	BH8-5A	11-Apr-01	0	1	6100	2200	120	17000	57000	24000	140	12000
IA-8	BH8-5B	11-Apr-01	1	2	2100	910	110	8200	41000	13000	74	7200
IA-8	BH8-5C	11-Apr-01	2	3	3300	880	190	14000	100000	22000	110	8300
IA-8	BH8-6A	11-Apr-01	1	2	32	5	40	330	7000	330	10	83
IA-8	BH8-6B	11-Apr-01	2	3	3500	280	200	18000	95000	43000	130	9000
IA-8	BH8-7A	11-Apr-01	0	1	4900	520	220	46000	98000	24000	110	10000
IA-8	BH8-7B	11-Apr-01	1	2	380	36	420	12000	180000	860	24	8300
IA-8	BH8-7C	11-Apr-01	2	3	37	16	40	950	13000	160	10	200
IA-8	BH8-8A	11-Apr-01	0	1	340	93	40	6100	22000	2700	21	1900
IA-8	BH8-8B	11-Apr-01	1	2	860	160	120	9800	48000	9200	37	5500
IA-8	BH8-9A	11-Apr-01	0	0.5	4700	350	300	85000	140000	38000	240	12000
IA-8	EP-103A	04-Oct-99	0	1	12	13	40	530	20000	93	5	91
IA-8	EP-103B	04-Oct-99	1	2	5	19	40	310	17000	390	13	290
IA-8	EP-103C	04-Oct-99	2	3	300	160	40	4500	32000	7900	15	6100
IA-8	EP-104A	05-Oct-99	0	1	110	36	40	6700	25000	2800	5	1700
IA-8	EP-104B	05-Oct-99	1	2	10	5	40	380	16000	190	5	140
IA-8	EP-104C	05-Oct-99	2	3	46	63	40	4700	24000	1900	5	1700
IA-8	EP-105A	07-Oct-99	0	1	42	5	40	130	17000	76	5	70
IA-8	EP-105B	07-Oct-99	1	2	1600	600	40	16000	47000	13000	120	7400
IA-8	EP-105C	07-Oct-99	2	3	2400	120	40	17000	60000	10000	72	6400
IA-8	EP-106A	16-Oct-99	0	1	270	82	85	3700	24000	2800	5	1800
IA-8	EP-106B	16-Oct-99	1	2	75	26	40	930	26000	720	5	370
IA-8	EP-106C	16-Oct-99	2	3	54	5	40	450	23000	470	5	250
IA-8	EP-107A	11-Oct-99	0	1	69	15	100	330	15000	150	5	140
IA-8	EP-107B	11-Oct-99	1	2	22	5	92	30	13000	43	5	52
IA-8	EP-107C	11-Oct-99	2	3	5	5	40	28	14000	51	5	13
IA-8	EP-67A	28-May-97	0	0	1400	470	15	25000	30000	9400	18	4800

*** DL = Most commonly used reporting detection limit. All values reported as less than detection limit were divided by 2.**

Appendix N

Statistical Evaluation of Surface Soils
Asarco El Paso Smelter, Remedial Investigation Phase III

Investigation Area	Sample Code	Sample Date	Sample Top Depth (feet)	Sample Bottom Depth (feet)	Arsenic (mg/kg) *DL = 10 mg/kg	Cadmium (mg/kg) *DL = 10 mg/kg	Chromium (mg/kg) *DL = 80 mg/kg	Copper (mg/kg) *DL = 20 mg/kg	Iron (mg/kg) *DL = 20 mg/kg	Lead (mg/kg) *DL = 10 mg/kg	Selenium (mg/kg) *DL = 10 mg/kg	Zinc (mg/kg) *DL = 10 mg/kg
IA-8	EP-68A	29-May-97	0	0	10	5	15	580	17000	140	5	82
IA-8	EP-69A	30-May-97	0	0	650	150	86	9900	37000	6100	16	3800
IA-8	SSIA8-10A	17-Jul-97	0	1	10	13	15	160	10000	68	5	130
IA-8	SSIA8-10B	17-Jul-97	1.5	1.5	53	66	90	750	18000	1400	5	890
IA-8	SSIA8-11A	17-Jul-97	0	1	910	430	33	20000	24000	3200	31	6300
IA-8	SSIA8-11B	17-Jul-97	1.5	1.5	62	86	31	2700	11000	3700	10	1100
IA-8	SSIA8-12A	17-Jul-97	0	1	150	78	36	5100	17000	3600	5	2300
IA-8	SSIA8-12B	17-Jul-97	1.5	1.5	480	78	66	8300	32000	4900	5	2400
IA-8	SSIA8-13A	17-Jul-97	0	1	33	5	15	980	13000	230	5	250
IA-8	SSIA8-13B	17-Jul-97	1.5	1.5	10	49	72	8300	26000	3100	5	2000
IA-8	SSIA8-14A	17-Jul-97	0	1	10	5	55	280	13000	83	5	93
IA-8	SSIA8-14B	17-Jul-97	1.5	1.5	110	25	350	4900	150000	1200	23	13000
IA-8	SSIA8-15A	18-Jul-97	0	1	10	11	45	1600	13000	160	5	370
IA-8	SSIA8-15B	18-Jul-97	1.5	1.5	10	14	31	1900	16000	900	5	480
IA-8	SSIA8-16A	18-Jul-97	0	1	930	240	120	22000	31000	4000	31	5000
IA-8	SSIA8-16B	18-Jul-97	1.5	1.5	370	190	92	9500	26000	10000	27	4000
IA-8	SSIA8-17A	18-Jul-97	0	1	98	29	30	3700	15000	470	5	680
IA-8	SSIA8-17B	18-Jul-97	1.5	1.5	10	5	59	710	18000	380	5	440
IA-8	SSIA8-18A	18-Jul-97	0	1	260	100	15	890	13000	300	5	790
IA-8	SSIA8-18B	18-Jul-97	1.5	1.5	10	99	77	3700	21000	3600	5	2600
IA-8	SSIA8-19A	18-Jul-97	0	1	44	5	76	1200	15000	350	5	280
IA-8	SSIA8-19B	18-Jul-97	1.5	1.5	10	5	48	560	18000	560	5	470
IA-8	SSIA8-1A	16-Jul-97	0	1	240	33	58	140	17000	44	5	470
IA-8	SSIA8-1B	16-Jul-97	1.5	1.5	2100	400	120	4300	86000	1500	26	8100
IA-8	SSIA8-20A	18-Jul-97	0	1	10	5	64	200	12000	95	5	130
IA-8	SSIA8-20B	18-Jul-97	1.5	1.5	330	89	230	10000	120000	3900	38	15000
IA-8	SSIA8-21A	18-Jul-97	0	1	460	300	59	12000	20000	1400	21	5900
IA-8	SSIA8-21B	18-Jul-97	1.5	1.5	780	110	100	19000	27000	2900	15	3200
IA-8	SSIA8-22A	18-Jul-97	0	1	6600	1400	110	23000	56000	8100	53	7600
IA-8	SSIA8-22B	18-Jul-97	1.5	1.5	2600	600	45	2900	24000	1500	24	2300
IA-8	SSIA8-23A	18-Jul-97	0	1	140	29	97	820	12000	590	5	1500
IA-8	SSIA8-23B	18-Jul-97	1.5	1.5	10	21	65	570	15000	490	5	420
IA-8	SSIA8-24A	18-Jul-97	0	1	110	21	100	2900	18000	550	5	1000
IA-8	SSIA8-24B	18-Jul-97	1.5	1.5	44	190	88	2000	30000	850	19	2100
IA-8	SSIA8-25A	18-Jul-97	0	1	4400	910	170	65000	59000	20000	180	16000
IA-8	SSIA8-25B	18-Jul-97	1.5	1.5	900	120	99	9800	140000	3600	31	19000

*** DL = Most commonly used reporting detection limit. All values reported as less than detection limit were divided by 2.**

Appendix N

Statistical Evaluation of Surface Soils
Asarco El Paso Smelter, Remedial Investigation Phase III

Investigation Area	Sample Code	Sample Date	Sample Top Depth (feet)	Sample Bottom Depth (feet)	Arsenic (mg/kg) *DL = 10 mg/kg	Cadmium (mg/kg) *DL = 10 mg/kg	Chromium (mg/kg) *DL = 80 mg/kg	Copper (mg/kg) *DL = 20 mg/kg	Iron (mg/kg) *DL = 20 mg/kg	Lead (mg/kg) *DL = 10 mg/kg	Selenium (mg/kg) *DL = 10 mg/kg	Zinc (mg/kg) *DL = 10 mg/kg
IA-8	SSIA8-26A	18-Jul-97	0	1	2900	520	85	110000	110000	25000	94	12000
IA-8	SSIA8-26B	18-Jul-97	1.5	1.5	290	410	120	9500	160000	8100	10	33000
IA-8	SSIA8-27A	18-Jul-97	0	1	3300	380	290	96000	70000	8100	98	11000
IA-8	SSIA8-27B	18-Jul-97	1.5	1.5	240	33	31	8800	20000	790	5	1200
IA-8	SSIA8-28A	18-Jul-97	0	1	4400	1800	210	22000	33000	7300	39	6100
IA-8	SSIA8-28B	18-Jul-97	1.5	1.5	3300	1300	100	12000	49000	19000	53	19000
IA-8	SSIA8-29A	18-Jul-97	0	1	2900	470	520	65000	130000	9700	160	16000
IA-8	SSIA8-29B	18-Jul-97	1.5	1.5	1100	350	230	31000	120000	22000	60	24000
IA-8	SSIA8-2A	16-Jul-97	0	1	10	35	58	440	17000	240	5	510
IA-8	SSIA8-2B	16-Jul-97	1.5	1.5	10	11	15	530	18000	500	5	340
IA-8	SSIA8-30A	18-Jul-97	0	1	2000	840	70	190000	78000	20000	73	9400
IA-8	SSIA8-30B	18-Jul-97	1.5	1.5	220	36	250	21000	210000	8100	5	10000
IA-8	SSIA8-31A	18-Jul-97	0	1	48	5	15	400	14000	400	5	400
IA-8	SSIA8-31B	18-Jul-97	1.5	1.5	94	280	80	6500	26000	9900	40	7300
IA-8	SSIA8-3A	16-Jul-97	0	1	2700	660	130	1400	34000	420	66	4600
IA-8	SSIA8-3B	16-Jul-97	1.5	1.5	170	150	56	1100	17000	1000	5	1800
IA-8	SSIA8-4A	16-Jul-97	0	1	10	5	15	660	17000	120	5	150
IA-8	SSIA8-4B	16-Jul-97	1.5	1.5	3700	980	15	20000	61000	43000	57	21000
IA-8	SSIA8-5A	16-Jul-97	0	1	53	130	110	1500	18000	180	5	2300
IA-8	SSIA8-5B	16-Jul-97	1.5	1.5	10	5	15	170	16000	130	5	350
IA-8	SSIA8-6A	16-Jul-97	0	1	10	23	15	400	15000	690	5	370
IA-8	SSIA8-6B	16-Jul-97	1.5	1.5	10	47	94	520	19000	1000	5	470
IA-8	SSIA8-7A	16-Jul-97	0	1	51	96	59	980	20000	520	5	1100
IA-8	SSIA8-7B	16-Jul-97	1.5	1.5	10	22	15	250	16000	300	5	220
IA-8	SSIA8-8A	16-Jul-97	0	1	10	96	15	830	20000	770	5	1200
IA-8	SSIA8-8B	16-Jul-97	1.5	1.5	39	31	44	1500	21000	1400	5	1100
IA-8	SSIA8-9A	16-Jul-97	0	1	1000	310	120	22000	54000	8900	35	8000
IA-8	SSIA8-9B	16-Jul-97	1.5	1.5	530	270	15	7300	30000	11000	37	5100
Count					**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Maximum					**15000**	**2600**	**1800**	**190000**	**210000**	**51000**	**270**	**33000**
Mean					**1083**	**312**	**109**	**13352**	**40972**	**6204**	**33**	**5263**
Std Deviation					**2094**	**496**	**192**	**26873**	**41857**	**10244**	**52**	**6636**
95% Confidence					**410**	**97**	**38**	**5267**	**8204**	**2008**	**10**	**1301**

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Appendix N

Statistical Evaluation of Surface Soils
Asarco El Paso Smelter, Remedial Investigation Phase III

Investigation Area	Sample Code	Sample Date	Sample Top Depth (feet)	Sample Bottom Depth (feet)	Arsenic (mg/kg) *DL = 10 mg/kg	Cadmium (mg/kg) *DL = 10 mg/kg	Chromium (mg/kg) *DL = 80 mg/kg	Copper (mg/kg) *DL = 20 mg/kg	Iron (mg/kg) *DL = 20 mg/kg	Lead (mg/kg) *DL = 10 mg/kg	Selenium (mg/kg) *DL = 10 mg/kg	Zinc (mg/kg) *DL = 10 mg/kg
IA-9	BH9-1-10A	17-May-01	0	1	3500	1600	140	8300	34000	9500	140	8400
IA-9	BH9-1-10B	17-May-01	1	2	190	64	87	590	33000	600	10	490
IA-9	BH9-1-10C	17-May-01	2	3	250	87	80	830	29000	860	10	650
IA-9	BH9-1-11A	17-May-01	0	1	2500	1300	110	4400	33000	6100	54	9500
IA-9	BH9-1-11B	17-May-01	1	2	95	110	40	240	10000	91	10	950
IA-9	BH9-1-11C	17-May-01	2	3	180	170	40	330	15000	76	10	1200
IA-9	BH9-1-12A	21-May-01	0	1	1300	510	80	2700	16000	2700	44	3900
IA-9	BH9-1-12B	21-May-01	1	2	160	65	40	65	10000	23	10	630
IA-9	BH9-1-13A	24-May-01	0	1	12000	5400	110	28000	35000	10000	170	28000
IA-9	BH9-1-13B	24-May-01	1	2	450	200	100	1500	32000	1300	10	870
IA-9	BH9-1-13C	17-May-01	2	3	5200	3500	120	18000	40000	13000	140	16000
IA-9	BH9-1-14A1	24-May-01	0	1	1800	790	40	7700	19000	5600	54	6700
IA-9	BH9-1-14B	24-May-01	1	2	2000	1600	40	11000	20000	7000	60	10000
IA-9	BH9-1-14C	24-May-01	2	3	100	55	81	500	30000	450	10	320
IA-9	BH9-1-15A	24-May-01	0	1	10000	4200	120	23000	31000	8800	140	24000
IA-9	BH9-1-15B	24-May-01	1	2	2200	520	120	3300	30000	4800	46	5200
IA-9	BH9-1-15C	24-May-01	2	3	210	220	98	600	28000	890	10	740
IA-9	BH9-1-16A1	24-May-01	0	1	2300	510	130	17000	51000	29000	170	11000
IA-9	BH9-1-16B	24-May-01	1	2	250	110	110	1700	38000	1900	10	1700
IA-9	BH9-1-16C	24-May-01	2	3	110	21	130	190	40000	150	10	230
IA-9	BH9-1-17A	24-May-01	0	1	1600	360	40	570	19000	360	10	2800
IA-9	BH9-1-17B	24-May-01	1	2	600	250	40	230	11000	110	10	1400
IA-9	BH9-1-18A	24-May-01	0	1	530	510	120	4000	31000	4100	27	3500
IA-9	BH9-1-18B	24-May-01	1	2	100	5	120	420	38000	110	10	180
IA-9	BH9-1-18C	24-May-01	2	3	110	13	120	620	38000	160	10	230
IA-9	BH9-1-6A	16-May-01	0	1	1000	500	83	1900	24000	1900	46	3100
IA-9	BH9-1-6B	16-May-01	2	3	81	200	40	10	8400	47	10	550
IA-9	BH9-1-7A	16-May-01	0	1	8500	6800	130	23000	33000	11000	130	27000
IA-9	BH9-1-7B	16-May-01	1	2	200	110	100	1200	29000	1000	10	730
IA-9	BH9-1-7C	16-May-01	2	3	19000	8600	140	27000	48000	35000	210	24000
IA-9	BH9-1-8A	17-May-01	0	1	1300	530	40	3500	14000	3400	47	4000
IA-9	BH9-1-8B	17-May-01	1	2	54	12	110	160	35000	130	10	140
IA-9	BH9-1-8C	17-May-01	2	3	60	14	100	150	35000	120	10	150
IA-9	BH9-1-9A	17-May-01	0	1	1700	610	40	7600	16000	6100	57	6400
IA-9	BH9-1-9B	17-May-01	1	2	190	73	40	620	8500	520	10	1100
IA-9	BH9-1-9C1	17-May-01	2	3	370	170	40	2000	6700	930	10	1800

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Investigation Area	Sample Code	Sample Date	Sample Top Depth (feet)	Sample Bottom Depth (feet)	Arsenic (mg/kg) *DL = 10 mg/kg	Cadmium (mg/kg) *DL = 10 mg/kg	Chromium (mg/kg) *DL = 80 mg/kg	Copper (mg/kg) *DL = 20 mg/kg	Iron (mg/kg) *DL = 20 mg/kg	Lead (mg/kg) *DL = 10 mg/kg	Selenium (mg/kg) *DL = 10 mg/kg	Zinc (mg/kg) *DL = 10 mg/kg
IA-9	BH9-6-10A	25-May-01	0	1	5200	2100	220	44000	46000	19000	120	20000
IA-9	BH9-6-10B	25-May-01	1	2	280	260	40	1800	18000	1600	10	1700
IA-9	BH9-6-10C	25-May-01	2	3	62	46	40	85	17000	73	10	300
IA-9	BH9-6-11A	25-May-01	0	1	6200	3900	290	57000	44000	46000	180	21000
IA-9	BH9-6-11B	25-May-01	1	2	3100	8200	340	13000	35000	63000	160	20000
IA-9	BH9-6-11C	25-May-01	2	3	1400	2200	170	9200	25000	14000	92	7500
IA-9	BH9-6-12A	25-May-01	0	1	7200	1800	260	46000	40000	24000	140	21000
IA-9	BH9-6-12B	25-May-01	1	2	6100	8300	390	21000	57000	120000	170	30000
IA-9	BH9-6-12C	25-May-01	2	2.5	400	450	86	1600	21000	2900	26	2300
IA-9	BH9-6-13A	25-May-01	0	1.2	4900	7900	280	28000	42000	60000	170	24000
IA-9	BH9-6-14A1	25-May-01	0	1	3800	1200	230	29000	34000	6000	120	10000
IA-9	BH9-6-14B	25-May-01	1	2	17000	3100	180	77000	59000	59000	190	44000
IA-9	BH9-6-14C	25-May-01	2	3	29000	5000	210	91000	67000	65000	210	46000
IA-9	BH9-6-15A	25-May-01	0	1	10000	4900	410	31000	65000	64000	160	30000
IA-9	BH9-6-15B1	25-May-01	1	2	120	17	40	190	18000	290	10	120
IA-9	BH9-6-15C	25-May-01	2	3	91	12	40	130	20000	160	10	50
IA-9	BH9-6-16A	25-May-01	0	1	3200	1600	150	21000	31000	16000	83	14000
IA-9	BH9-6-16B1	25-May-01	1	2	1400	790	120	8100	26000	10000	60	5700
IA-9	BH9-6-16C	25-May-01	2	3	140	14	110	49	31000	66	10	54
IA-9	BH9-6-17A	25-May-01	0	1	14000	3400	150	55000	40000	34000	120	34000
IA-9	BH9-6-17B	25-May-01	1	2	2400	1200	250	17000	27000	18000	78	8900
IA-9	BH9-6-17C	25-May-01	2	3	4600	13000	330	21000	35000	90000	180	33000
IA-9	BH9-6-18A	26-May-01	0	1	680	120	340	220000	71000	6000	98	5900
IA-9	BH9-6-18B	26-May-01	1	2	2100	230	270	180000	73000	7800	110	9300
IA-9	BH9-6-18C	26-May-01	2	3	980	160	190	280000	47000	2600	52	5400
IA-9	BH9-6-19A	26-May-01	0	1	5000	5200	210	34000	39000	19000	170	23000
IA-9	BH9-6-19B	26-May-01	1	2	74	21	40	290	17000	140	10	220
IA-9	BH9-6-19C1	26-May-01	2	3	64	16	40	110	17000	73	10	65
IA-9	BH9-6-20A	26-May-01	0	1	30000	8600	240	110000	59000	20000	120	50000
IA-9	BH9-6-20B	26-May-01	1	1.5	11000	6200	330	28000	64000	79000	190	39000
IA-9	BH9-6-21A	26-May-01	0	1	18000	4700	260	80000	61000	32000	190	31000
IA-9	BH9-6-21B	26-May-01	1	2	5900	16000	520	22000	35000	58000	210	34000
IA-9	BH9-6-21C	26-May-01	2	3	4700	14000	340	17000	35000	49000	180	31000
IA-9	BH9-6-22A	26-May-01	0	1	12000	4200	200	69000	52000	15000	130	38000
IA-9	BH9-6-22B	26-May-01	1	2	1300	1100	160	6900	52000	7700	51	5200
IA-9	BH9-6-22C	26-May-01	2	3	83	5	40	88	17000	51	10	5

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Investigation Area	Sample Code	Sample Date	Sample Top Depth (feet)	Sample Bottom Depth (feet)	Arsenic (mg/kg) *DL = 10 mg/kg	Cadmium (mg/kg) *DL = 10 mg/kg	Chromium (mg/kg) *DL = 80 mg/kg	Copper (mg/kg) *DL = 20 mg/kg	Iron (mg/kg) *DL = 20 mg/kg	Lead (mg/kg) *DL = 10 mg/kg	Selenium (mg/kg) *DL = 10 mg/kg	Zinc (mg/kg) *DL = 10 mg/kg
IA-9	BH9-6-23A	26-May-01	0	1	11000	5900	350	66000	67000	34000	180	38000
IA-9	BH9-6-23B	26-May-01	1	2	6000	3500	440	47000	98000	33000	220	29000
IA-9	BH9-6-5A	25-May-01	0	1	4600	910	260	71000	42000	16000	170	12000
IA-9	BH9-6-5B	25-May-01	1	2	4300	1900	360	110000	44000	31000	150	19000
IA-9	BH9-6-5C	25-May-01	2	3	9700	12000	480	51000	29000	100000	280	44000
IA-9	BH9-6-6A	25-May-01	0	1	3400	5100	240	26000	32000	12000	130	14000
IA-9	BH9-6-6B	25-May-01	1	2	49	49	40	170	15000	180	10	110
IA-9	BH9-6-7A	25-May-01	0	1	31000	5600	180	110000	51000	31000	160	59000
IA-9	BH9-6-7B	25-May-01	1	2	2900	8100	280	14000	33000	32000	170	19000
IA-9	BH9-6-7C	25-May-01	2	3	130	54	40	640	18000	390	10	410
IA-9	BH9-6-8A	25-May-01	0	1	9200	4000	290	46000	41000	30000	150	25000
IA-9	BH9-6-8B	25-May-01	1	2	200	280	40	1700	19000	1200	10	1300
IA-9	BH9-6-8C	25-May-01	2	2.5	54	5	40	66	16000	68	10	32
IA-9	BH9-6-9A	25-May-01	0	1	20000	7000	250	79000	57000	65000	200	42000
IA-9	BH9-6-9B1	25-May-01	1	2	1400	1500	140	6300	31000	6600	84	7500
IA-9	BH9-6-9C	25-May-01	2	3	100	30	90	240	24000	250	10	1000
IA-9	EP-77A	04-Jun-97	0.5	0.5	200	11	210	2500	100000	2600	5	1100
IA-9	EP-88A	17-Jun-97	0	0	550	150	200	5600	21000	3600	23	3100
Count					**90**	**90**	**90**	**90**	**90**	**90**	**90**	**90**
Maximum					**31000**	**16000**	**520**	**280000**	**100000**	**120000**	**280**	**59000**
Mean					**4416**	**2509**	**162**	**27330**	**34929**	**17513**	**84**	**12987**
Std Deviation					**6707**	**3536**	**117**	**47208**	**18489**	**25354**	**75**	**14845**
95% Confidence					**1386**	**730**	**24**	**9753**	**3820**	**5238**	**15**	**3067**

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Investigation Area	Sample Code	Sample Date	Sample Top Depth (feet)	Sample Bottom Depth (feet)	Arsenic (mg/kg) *DL = 10 mg/kg	Cadmium (mg/kg) *DL = 10 mg/kg	Chromium (mg/kg) *DL = 80 mg/kg	Copper (mg/kg) *DL = 20 mg/kg	Iron (mg/kg) *DL = 20 mg/kg	Lead (mg/kg) *DL = 10 mg/kg	Selenium (mg/kg) *DL = 10 mg/kg	Zinc (mg/kg) *DL = 10 mg/kg
IA-10	EP-110A	18-Oct-99	0	1	490	100	40	11000	40000	3000	14	2800
IA-10	EP-110B	18-Oct-99	1	2	190	67	40	2300	29000	3100	17	2400
IA-10	EP-110C	18-Oct-99	2	3	72	25	40	110	22000	210	5	170
IA-10	EP-89A	18-Jun-97	0	0	34	110	15	4900	27000	9600	20	4100
IA-10	SSENT1-A	17-Jul-97	0	1	470	75	69	9800	56000	5700	15	5700
IA-10	SSENT1-B	17-Jul-97	1.5	1.5	10	5	43	230	20000	300	5	210
IA-10	SSENT2-A	17-Jul-97	0	1	340	100	180	8400	34000	3300	15	3600
IA-10	SSENT2-B	17-Jul-97	1.5	1.5	10	5	60	400	24000	330	5	210
IA-10	SSENT3-A	17-Jul-97	0	1	340	99	130	8100	27000	2800	18	3000
IA-10	SSENT3-B	17-Jul-97	1.5	1.5	34	5	110	170	23000	160	5	160
IA-10	SSENT4-A	17-Jul-97	0	1	190	80	66	4000	23000	1800	5	1500
IA-10	SSENT4-B	17-Jul-97	1.5	1.5	35	5	64	49	26000	37	5	69
IA-10	SSENT5-A	17-Jul-97	0	1	750	160	200	12000	31000	5400	5	3600
IA-10	SSENT5-B	17-Jul-97	1.5	1.5	10	12	90	300	22000	280	5	180
IA-10	SSENT6-A	17-Jul-97	0	1	380	100	73	5500	26000	3800	16	2500
IA-10	SSENT6-B	17-Jul-97	1.5	1.5	10	34	47	1800	23000	2200	5	1500
IA-10	SSENT7-A	17-Jul-97	0	1	250	93	15	8300	28000	2800	5	2400
IA-10	SSENT7-B	17-Jul-97	1.5	1.5	10	5	100	33	18000	30	5	41
IA-10	SSENT8-A	17-Jul-97	0	1	520	120	88	5700	26000	3000	11	2100
IA-10	SSENT8-B	17-Jul-97	1.5	1.5	710	250	15	1400	20000	1300	12	910
Count					**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**
Maximum					**750**	**250**	**200**	**12000**	**56000**	**9600**	**20**	**5700**
Mean					**243**	**73**	**74**	**4225**	**27250**	**2457**	**10**	**1858**
Std Deviation					**245**	**63**	**51**	**4121**	**8485**	**2425**	**6**	**1634**
95% Confidence					**107**	**28**	**22**	**1806**	**3718**	**1063**	**2**	**716**

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Investigation Area	Sample Code	Sample Date	Sample Top Depth (feet)	Sample Bottom Depth (feet)	Arsenic (mg/kg) *DL = 10 mg/kg	Cadmium (mg/kg) *DL = 10 mg/kg	Chromium (mg/kg) *DL = 80 mg/kg	Copper (mg/kg) *DL = 20 mg/kg	Iron (mg/kg) *DL = 20 mg/kg	Lead (mg/kg) *DL = 10 mg/kg	Selenium (mg/kg) *DL = 10 mg/kg	Zinc (mg/kg) *DL = 10 mg/kg
IA-11	BH11-10A	09-May-01	0	1	110	14	81	930	24000	620	10	720
IA-11	BH11-10B	09-May-01	1	2	55	13	40	280	20000	320	10	190
IA-11	BH11-10C	09-May-01	2	3	68	12	40	700	16000	640	10	440
IA-11	BH11-11A	09-May-01	0	1	180	48	87	2000	29000	1500	10	1200
IA-11	BH11-11B	09-May-01	1	2	63	26	40	870	16000	760	10	520
IA-11	BH11-11C	09-May-01	2	3	71	19	40	590	14000	520	10	390
IA-11	BH11-12A	09-May-01	0	1	270	53	92	2700	33000	1900	10	1700
IA-11	BH11-12B	09-May-01	1	2	35	11	40	200	11000	200	10	170
IA-11	BH11-12C1	09-May-01	2	3	23	15	40	130	11000	130	10	77
IA-11	BH11-13A	09-May-01	0	1	91	18	110	810	31000	370	10	620
IA-11	BH11-13B	09-May-01	1	2	40	12	40	360	11000	360	10	290
IA-11	BH11-13C	09-May-01	2	3	21	15	40	100	14000	120	10	75
IA-11	BH11-14A	09-May-01	0	1	140	38	95	1800	27000	990	10	1100
IA-11	BH11-14B	09-May-01	1	2	84	5	40	820	16000	640	10	470
IA-11	BH11-14C	09-May-01	2	3	32	5	40	200	12000	180	10	92
IA-11	BH11-15A	17-Jul-01	0	1	1200	200	40	10000	31000	7900	61	4200
IA-11	BH11-15B	17-Jul-01	1	2	1300	440	40	15000	40000	12000	76	6800
IA-11	BH11-15C	17-Jul-01	2	3	570	140	40	3900	23000	3700	23	2200
IA-11	BH11-26A	30-Apr-01	0	1	34	10	40	120	17000	170	10	77
IA-11	BH11-26B	30-Apr-01	1	2	15	12	40	23	11000	73	10	14
IA-11	BH11-26C	30-Apr-01	2	3	15	5	40	25	6700	57	10	5
IA-11	BH11-2A	19-Jul-99	0	0.33	210	36	40	1700	39000	660	11	1600
IA-11	BH11-4B	05-Aug-99	1	2	46	5	40	73	24000	17	5	200
IA-11	BH11-4C	05-Aug-99	2	3	33	5	40	46	30000	20	5	170
IA-11	BH11-5A	09-May-01	0	1	170	31	40	2000	30000	1400	10	1200
IA-11	BH11-5B	09-May-01	1	2	45	18	40	490	14000	460	10	340
IA-11	BH11-5C1	09-May-01	2	3	35	5	40	270	12000	280	10	180
IA-11	BH11-6A	09-May-01	0	1	95	31	40	1300	22000	930	10	770
IA-11	BH11-6B	09-May-01	1	2	140	32	40	1400	20000	980	10	830
IA-11	BH11-7A	09-May-01	0	1	82	18	87	830	22000	540	10	620
IA-11	BH11-7B	09-May-01	1	2	89	26	40	1300	17000	960	10	680
IA-11	BH11-7C	09-May-01	2	3	54	5	40	380	14000	370	10	260
IA-11	BH11-8A	09-May-01	0	1	98	22	86	1300	29000	640	10	930
IA-11	BH11-8B	09-May-01	1	2	190	36	40	1800	23000	1700	10	1100
IA-11	BH11-8C	09-May-01	2	3	53	16	40	500	15000	440	10	240
IA-11	BH11-9A	09-May-01	0	1	110	20	110	1400	30000	670	10	1000

*** DL = Most commonly used reporting detection limit. All values reported as less than detection limit were divided by 2.**

Appendix N

Statistical Evaluation of Surface Soils
Asarco El Paso Smelter, Remedial Investigation Phase III

Investigation Area	Sample Code	Sample Date	Sample Top Depth (feet)	Sample Bottom Depth (feet)	Arsenic (mg/kg) *DL = 10 mg/kg	Cadmium (mg/kg) *DL = 10 mg/kg	Chromium (mg/kg) *DL = 80 mg/kg	Copper (mg/kg) *DL = 20 mg/kg	Iron (mg/kg) *DL = 20 mg/kg	Lead (mg/kg) *DL = 10 mg/kg	Selenium (mg/kg) *DL = 10 mg/kg	Zinc (mg/kg) *DL = 10 mg/kg
IA-11	BH11-9B	09-May-01	1	2	59	10	40	510	16000	510	10	380
IA-11	BH11-9C1	09-May-01	2	3	62	22	40	720	18000	620	10	440
IA-11	EP-129A	02-May-01	0	1	150	33	98	1600	30000	910	10	1300
IA-11	EP-129B	02-May-01	1	2	33	5	40	37	22000	39	10	22
IA-11	EP-129C	02-May-01	2	3	32	5	40	22	23000	36	10	5
IA-11	EP-84A	11-Jun-97	0	0	10	14	47	490	22000	500	5	390
IA-11	EP-87A	16-Jun-97	0	0	10	5	86	20	14000	14	5	42
IA-11	EP-93A	21-Jul-99	0	1	27	5	40	66	26000	93	5	110
IA-11	EP-93B	21-Jul-99	1	2	33	5	180	97	33000	74	5	130
IA-11	EP-93C	21-Jul-99	2	3	27	5	40	130	26000	170	5	120
IA-11	EP-94A	26-Jul-99	0	1	760	560	40	4800	26000	5600	59	3500
IA-11	EP-94B	26-Jul-99	1	2	990	180	40	3500	27000	8000	91	2400
IA-11	EP-94C	26-Jul-99	2	3	620	180	93	8900	36000	5200	35	3300
IA-11	EP-95A	28-Jul-99	0	1	5	5	40	230	20000	190	5	140
IA-11	EP-95B	28-Jul-99	1	1	5	5	40	75	22000	120	5	94
IA-11	EP-95C	28-Jul-99	2	2	13	5	40	160	22000	150	5	110
IA-11	EP-95RA	18-Oct-99	0	1	26	5	40	290	23000	250	5	260
IA-11	EP-95RB	18-Oct-99	1	2	5	5	40	79	20000	130	5	98
IA-11	EP-95RC	18-Oct-99	2	3	5	5	40	10	22000	68	5	50
IA-11	EP-96A	20-Jul-99	0	1	500	180	40	1900	23000	5100	61	1000
IA-11	EP-96B	20-Jul-99	1	2	27	14	40	110	21000	160	5	270
IA-11	EP-96C	20-Jul-99	2	3	42	5	40	110	35000	90	5	110
IA-11	EP-97A	04-Aug-99	0	1	64	19	40	690	33000	340	5	470
IA-11	EP-97B	04-Aug-99	1	2	46	20	40	640	32000	340	5	450
IA-11	EP-97C	04-Aug-99	2	3	71	16	40	800	30000	500	5	470
IA-11	EP-98A	06-Aug-99	0	1	41	12	40	210	25000	250	5	320
IA-11	EP-98B	06-Aug-99	1	2	5	5	40	44	20000	5	5	32
IA-11	EP-98C	06-Aug-99	1	3	5	5	40	37	10000	5	5	5
IA-11	SSIA11-10A	04-Aug-99	0	1	160	12	40	980	44000	730	21	2200
IA-11	SSIA11-10B	04-Aug-99	1	2	23	5	40	140	21000	150	19	110
IA-11	SSIA11-11A	14-Aug-99	0	1	65	22	100	640	34000	450	5	740
IA-11	SSIA11-11B	14-Aug-99	1	2	42	5	40	270	32000	180	5	510
IA-11	SSIA11-11C	14-Aug-99	2	3	17	5	40	10	27000	11	5	58
IA-11	SSIA11-14B	06-Aug-99	1	2	17	13	40	52	20000	5	5	41
IA-11	SSIA11-14C	06-Aug-99	2	3	23	5	40	29	27000	5	5	30
IA-11	SSIA11-15A	06-Aug-99	0	1	51	5	40	210	29000	130	22	420

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Appendix N

Statistical Evaluation of Surface Soils
Asarco El Paso Smelter, Remedial Investigation Phase III

Investigation Area	Sample Code	Sample Date	Sample Top Depth (feet)	Sample Bottom Depth (feet)	Arsenic (mg/kg) *DL = 10 mg/kg	Cadmium (mg/kg) *DL = 10 mg/kg	Chromium (mg/kg) *DL = 80 mg/kg	Copper (mg/kg) *DL = 20 mg/kg	Iron (mg/kg) *DL = 20 mg/kg	Lead (mg/kg) *DL = 10 mg/kg	Selenium (mg/kg) *DL = 10 mg/kg	Zinc (mg/kg) *DL = 10 mg/kg
IA-11	SSIA11-15B	06-Aug-99	1	2	30	5	40	300	31000	380	5	1000
IA-11	SSIA11-15C	06-Aug-99	2	3	44	5	40	350	43000	950	5	1600
IA-11	SSIA11-16B	06-Aug-99	1	2	21	5	40	63	21000	34	5	21
IA-11	SSIA11-16C	06-Aug-99	2	3	19	5	40	10	22000	5	5	32
IA-11	SSIA11-17A	04-Nov-99	0	1	110	15	40	1000	31000	920	5	810
IA-11	SSIA11-18A	05-Nov-99	0	1	150	45	40	1600	36000	1100	5	1100
IA-11	SSIA11-18B	05-Nov-99	1	2	230	86	40	3000	34000	2200	17	1600
IA-11	SSIA11-18C	05-Nov-99	2	3	140	61	40	1700	28000	1300	5	990
IA-11	SSIA11-1A	19-Jul-99	0	1	170	50	160	2900	34000	1500	5	1400
IA-11	SSIA11-1B	19-Jul-99	1	2	33	16	40	740	17000	520	5	340
IA-11	SSIA11-1C	19-Jul-99	2	3	5	5	40	330	17000	290	5	150
IA-11	SSIA11-2A	19-Jul-99	0	1	82	25	40	1500	25000	1100	5	770
IA-11	SSIA11-2B	19-Jul-99	1	2	12	5	40	170	19000	150	5	110
IA-11	SSIA11-3A	20-Jul-99	0	1	2200	940	270	29000	44000	14000	92	15000
IA-11	SSIA11-3C	20-Jul-99	2	3	1700	580	620	18000	34000	11000	36	9300
IA-11	SSIA11-4A	20-Jul-99	0	1	790	300	92	11000	39000	11000	5	11000
IA-11	SSIA11-4B	20-Jul-99	1	2	160	70	240	2400	24000	3100	5	2400
IA-11	SSIA11-4C	20-Jul-99	2	3	52	21	40	890	25000	1200	5	820
IA-11	SSIA11-5A	20-Jul-99	0	1	10	5	140	140	14000	150	5	92
IA-11	SSIA11-5C	20-Jul-99	2	3	23	5	40	650	17000	750	5	520
IA-11	SSIA11-6A	20-Jul-99	0	1	480	120	40	3600	29000	2000	5	1200
IA-11	SSIA11-6B	20-Jul-99	1	2	920	380	290	5800	28000	12000	29	4100
IA-11	SSIA11-6C	20-Jul-99	2	3	4400	350	180	18000	35000	2100	5	4100
IA-11	SSIA11-7A	20-Jul-99	0	1	2500	250	40	11000	42000	5800	5	5000
IA-11	SSIA11-7B	20-Jul-99	1	2	15000	260	110	6600	29000	11000	5	5000
IA-11	SSIA11-7C	20-Jul-99	2	3	720	180	230	4600	27000	3700	72	2900
IA-11	SSIA11-8A	21-Jul-99	0	1	560	610	230	3400	28000	2900	5	2800
IA-11	SSIA11-8B	21-Jul-99	1	2	880	290	150	5000	30000	3200	5	3400
IA-11	SSIA11-8C	21-Jul-99	2	3	1700	360	270	10000	36000	7200	21	6100
Count					**101**	**101**	**101**	**101**	**101**	**101**	**101**	**101**
Maximum					**15000**	**940**	**620**	**29000**	**44000**	**14000**	**92**	**15000**
Mean					**427**	**78**	**72**	**2264**	**24799**	**1741**	**13**	**1339**
Std Deviation					**1589**	**156**	**79**	**4471**	**8414**	**3064**	**18**	**2333**
95% Confidence					**310**	**30**	**15**	**872**	**1641**	**598**	**3**	**455**

*** DL = Most commonly used reporting detection limit. All values reported as less than detection limit were divided by 2.**

Appendix N

Statistical Evaluation of Surface Soils
Asarco El Paso Smelter, Remedial Investigation Phase III

Investigation Area	Sample Code	Sample Date	Sample Top Depth (feet)	Sample Bottom Depth (feet)	Arsenic (mg/kg) *DL = 10 mg/kg	Cadmium (mg/kg) *DL = 10 mg/kg	Chromium (mg/kg) *DL = 80 mg/kg	Copper (mg/kg) *DL = 20 mg/kg	Iron (mg/kg) *DL = 20 mg/kg	Lead (mg/kg) *DL = 10 mg/kg	Selenium (mg/kg) *DL = 10 mg/kg	Zinc (mg/kg) *DL = 10 mg/kg
IA-12	BH12-1A	03-Nov-99	0	1	490	300	40	4300	42000	2700	24	2700
IA-12	BH12-23A	17-Jul-01	0	1	2700	2700	180	13000	37000	24000	130	10000
IA-12	BH12-23B	17-Jul-01	1	2	2200	2600	130	10000	31000	19000	120	8700
IA-12	BH12-24A	17-Jul-01	0	1	3200	3200	210	16000	38000	28000	150	11000
IA-12	BH12-24B	17-Jul-01	1	2	730	450	440	3100	190000	1100	10	11000
IA-12	BH12-24C	17-Jul-01	2	3	2400	1500	370	10000	120000	19000	150	12000
IA-12	BH12-25A	17-Jul-01	0	1	190	280	120	1500	46000	1100	10	3100
IA-12	BH12-25B	17-Jul-01	1	2	89	31	220	1200	84000	180	10	3600
IA-12	BH12-25C	17-Jul-01	2	3	23	19	40	96	14000	77	10	130
IA-12	BH12-27A	17-Jul-01	0	1	2200	2200	140	13000	33000	20000	110	9600
IA-12	BH12-27B	17-Jul-01	1	2	210	30	40	1700	15000	1400	10	1300
IA-12	BH12-27C	17-Jul-01	2	3	330	270	40	2000	8700	3500	10	1700
IA-12	BH12-4A	03-Nov-99	0	1	3100	3100	230	17000	34000	22000	220	11000
IA-12	BH12-4B	03-Nov-99	1	2	3400	3400	240	18000	37000	23000	220	13000
IA-12	BH12-4C	03-Nov-99	2	3	1200	1700	160	7700	30000	14000	110	6200
IA-12	BH12-8A	04-Nov-99	2	3	23	5	40	64	16000	130	5	300
IA-12	EP-109A	15-Oct-99	0	1	380	59	40	2700	77000	2000	13	4500
IA-12	EP-109B	15-Oct-99	1	2	320	36	40	1900	88000	1900	5	5000
IA-12	EP-109C	15-Oct-99	2	3	440	25	40	2800	110000	3600	5	8700
IA-12	EP-82A	10-Jun-97	0	0	10	5	70	200	18000	60	5	150
IA-12	EP-86A	13-Jun-97	0	0	10	5	15	76	19000	87	5	100
Count					**21**	**21**	**21**	**21**	**21**	**21**	**21**	**21**
Maximum					**3400**	**3400**	**440**	**18000**	**190000**	**28000**	**220**	**13000**
Mean					**1126**	**1044**	**135**	**6016**	**51795**	**8897**	**63**	**5894**
Std Deviation					**1232**	**1285**	**117**	**6180**	**45054**	**10182**	**76**	**4518**
95% Confidence					**527**	**550**	**50**	**2643**	**19269**	**4355**	**32**	**1932**

*** DL = Most commonly used reporting detection limit. All values reported as less than detection limit were divided by 2.**

Appendix N

Statistical Evaluation of Surface Soils
Asarco El Paso Smelter, Remedial Investigation Phase III

Investigation Area	Sample Code	Sample Date	Sample Top Depth (feet)	Sample Bottom Depth (feet)	Arsenic (mg/kg) *DL = 10 mg/kg	Cadmium (mg/kg) *DL = 10 mg/kg	Chromium (mg/kg) *DL = 80 mg/kg	Copper (mg/kg) *DL = 20 mg/kg	Iron (mg/kg) *DL = 20 mg/kg	Lead (mg/kg) *DL = 10 mg/kg	Selenium (mg/kg) *DL = 10 mg/kg	Zinc (mg/kg) *DL = 10 mg/kg
IA-13	BH13-1A	21-Oct-99	0	1	67	46	40	1500	19000	860	13	310
IA-13	EP-101A	29-Sep-99	0	1	940	690	40	3000	18000	11000	110	4100
IA-13	EP-101B	29-Sep-99	1	2	7700	2100	40	16000	32000	42000	180	17000
IA-13	EP-102A	30-Sep-99	0	1	4100	3500	40	3900	23000	27000	380	5000
IA-13	EP-102B	30-Sep-99	1	2	6300	7100	40	8100	31000	34000	390	13000
IA-13	EP-102C	30-Sep-99	2	3	7700	6000	40	8900	31000	41000	340	12000
Count					**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Maximum					**7700**	**7100**	**40**	**16000**	**32000**	**42000**	**390**	**17000**
Mean					**4468**	**3239**	**40**	**6900**	**25667**	**25977**	**236**	**8568**
Std Deviation					**3353**	**2849**	**0**	**5322**	**6439**	**16751**	**157**	**6378**
95% Confidence					**2683**	**2280**	**NA**	**4258**	**5153**	**13403**	**126**	**5104**

*** DL = Most commonly used reporting detection limit. All values reported as less than detection limit were divided by 2.**

Appendix N

Statistical Evaluation of Surface Soils
Asarco El Paso Smelter, Remedial Investigation Phase III

Investigation Area	Sample Code	Sample Date	Sample Top Depth (feet)	Sample Bottom Depth (feet)	Arsenic (mg/kg) *DL = 10 mg/kg	Cadmium (mg/kg) *DL = 10 mg/kg	Chromium (mg/kg) *DL = 80 mg/kg	Copper (mg/kg) *DL = 20 mg/kg	Iron (mg/kg) *DL = 20 mg/kg	Lead (mg/kg) *DL = 10 mg/kg	Selenium (mg/kg) *DL = 10 mg/kg	Zinc (mg/kg) *DL = 10 mg/kg
IA-14	BH14-2A	16-Dec-99	0	1	210	130	130	55000	35000	1400	64	2300
IA-14	BH14-2B	16-Dec-99	1	1	170	87	40	3300	21000	2800	15	1500
IA-14	BH14-2C	16-Dec-99	2	2	210	140	40	4400	24000	4400	15	1500
IA-14	BH14-3A	15-Dec-99	0	1	5	16	40	1800	20000	2600	5	210
IA-14	BH14-3B	15-Dec-99	1	1	27	5	40	520	22000	420	5	68
IA-14	BH14-3C	15-Dec-99	2	2	5	5	82	73	18000	250	5	11
IA-14	BH14-4A	10-Apr-01	0	1	670	140	40	24000	31000	3800	46	2200
IA-14	BH14-4B	10-Apr-01	1	2	27	15	40	270	8000	440	10	190
IA-14	BH14-4C	10-Apr-01	2	3	28	11	40	870	8500	180	10	59
IA-14	BH14-5A	10-Apr-01	0	1	170	110	40	3400	19000	3200	10	2100
IA-14	BH14-5B	10-Apr-01	1	2	100	35	40	2000	15000	1300	10	550
IA-14	BH14-6A	16-Apr-01	0	1	130	28	85	5600	15000	950	10	460
IA-14	BH14-6B	16-Apr-01	1	2	68	5	40	560	13000	330	10	66
IA-14	BH14-6C	16-Apr-01	2	3	76	5	40	2500	13000	350	10	150
IA-14	EP-71A	31-May-97	0	0	10	18	36	160	10000	40	5	720
IA-14	EP-71RA	11-Jun-97	0	0	1300	120	91	31000	45000	7200	33	3900
Count					**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**
Maximum					**1300**	**140**	**130**	**55000**	**45000**	**7200**	**64**	**3900**
Mean					**200**	**54**	**54**	**8466**	**19844**	**1854**	**16**	**999**
Std Deviation					**335**	**55**	**28**	**15283**	**10069**	**2012**	**17**	**1138**
95% Confidence					**164**	**27**	**13**	**7488**	**4934**	**986**	**8**	**558**

*** DL = Most commonly used reporting detection limit. All values reported as less than detection limit were divided by 2.**

Appendix N

Statistical Evaluation of Surface Soils
Asarco El Paso Smelter, Remedial Investigation Phase III

Investigation Area	Sample Code	Sample Date	Sample Top Depth (feet)	Sample Bottom Depth (feet)	Arsenic (mg/kg) *DL = 10 mg/kg	Cadmium (mg/kg) *DL = 10 mg/kg	Chromium (mg/kg) *DL = 80 mg/kg	Copper (mg/kg) *DL = 20 mg/kg	Iron (mg/kg) *DL = 20 mg/kg	Lead (mg/kg) *DL = 10 mg/kg	Selenium (mg/kg) *DL = 10 mg/kg	Zinc (mg/kg) *DL = 10 mg/kg
IA-15	BH15-8B	20-Feb-01	1	2	20000	890	100	30000	49000	3700	20	4100
IA-15	BH15-8C	20-Feb-01	2	3	900	320	100	38000	10000	520	20	3700
IA-15	EP-131A	30-May-01	0	1	900	200	240	44000	130000	4500	83	7700
Count					3	3	3	3	3	3	3	3
Maximum					20000	890	240	44000	130000	4500	83	7700
Mean					7267	470	147	37333	63000	2907	41	5167
Std Deviation					11027	369	81	7024	61213	2105	36	2203
95% Confidence					12478	417	91	7948	69267	2382	41	2493

*** DL = Most commonly used reporting detection limit. All values reported as less than detection limit were divided by 2.**

Appendix N

Statistical Evaluation of Surface Soils
Asarco El Paso Smelter, Remedial Investigation Phase III

Investigation Area	Sample Code	Sample Date	Sample Top Depth (feet)	Sample Bottom Depth (feet)	Arsenic (mg/kg) *DL = 10 mg/kg	Cadmium (mg/kg) *DL = 10 mg/kg	Chromium (mg/kg) *DL = 80 mg/kg	Copper (mg/kg) *DL = 20 mg/kg	Iron (mg/kg) *DL = 20 mg/kg	Lead (mg/kg) *DL = 10 mg/kg	Selenium (mg/kg) *DL = 10 mg/kg	Zinc (mg/kg) *DL = 10 mg/kg
IA-16	BH16-18B1	22-Feb-01	1	2	34	5	100	82	9500	88	20	19
IA-16	BH16-18C	22-Feb-01	2	3	130	18	100	1400	13000	560	20	220
IA-16	BH16-19A	22-Feb-01	0	1	1200	410	100	3800	16000	6900	76	2400
IA-16	BH16-19B	22-Feb-01	1	2	52	5	100	300	9300	440	20	110
IA-16	BH16-26A	23-Feb-01	1	2	100	98	100	590	11000	730	20	620
IA-16	BH16-26B	23-Feb-01	2	3	40	5	100	51	11000	68	20	12
IA-16	BH16-30B	26-Feb-01	1	2	64	5	100	100	14000	230	20	42
IA-16	BH16-30C	26-Feb-01	2	3	90	10	100	280	12000	220	20	90
IA-16	BH16-7B	28-Feb-01	1	2	43	32	100	190	13000	220	20	120
IA-16	EP-74A	02-Jun-97	2	2	10	5	46	110	13000	300	5	140
Count					**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**
Maximum					**1200**	**410**	**100**	**3800**	**16000**	**6900**	**76**	**2400**
Mean					**176**	**59**	**95**	**690**	**12180**	**976**	**24**	**377**
Std Deviation					**361**	**127**	**17**	**1165**	**2061**	**2092**	**19**	**732**
95% Confidence					**224**	**78**	**11**	**722**	**1277**	**1297**	**12**	**454**

*** DL = Most commonly used reporting detection limit. All values reported as less than detection limit were divided by 2.**