Carmen Johnson 10/8/12 CJ

Fac/Perm/Co ID #: 85-03 | Date: ~~10/12/12~~ | Doc ID#: | DIN:

Belews Creek Steam Station Pine Hall Fly-Ash Landfill #85-03

Groundwater Monitoring Data

Well Number	Report Date	Parameter																						
		Field pH	Arsenic	Barium	BOD	Boron	Cadmium	Chemical Oxygen Demand	Chloride	Chromium	Copper	Fluoride	Iron	Lead	Manganese	Mercury	Nickel	Nitrate (as Nitrogen)	Selenium	Silver	Sulfate	Total Dissolved Solids	Total Organic Carbon	Total Organic Halogen	Zinc
		(Std. Units)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug-N/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
MW-1	5/15/06	4.6	<2	19	<2400	<100	<0.5	<50000	1870	1.71	<2	<100	516	<2	31	<0.1	<2	120	<2	<0.5	1160	20000	180	<10	<5
	11/15/06	4.6	<2	18	<2300	<100	<0.5	<50000	1750	<1	<2	<100	349	<2	30.0	<0.2	2.2	120	<2	<0.5	550	<20000	180	<1000	<5
	5/14/07	4.8	<2	16	<2000	<100	<0.5	<20000	1760	1.7	<2	<100	99	<2	21	<0.1	<2	230	<2	<0.5	1060	15000	180	<1000	6.0
MW-2	5/15/06	5.2	<2	91	<2400	<100	<0.5	<50000	5020	4.4	<2	<100	1379	<2	17	<0.1	<2	640	<2	<0.5	<100	42000	190	<10	<5
	11/15/06	5.4	<2	90	9800	<100	<0.5	<50000	3400	3.1	<2	<100	2066	<2	30.0	<0.2	<2	580	<2	<0.5	<100	48000	280	<1000	<5
	5/14/07	5.4	<2	71	<2000	<100	<0.5	<20000	4690	2.7	<2	<100	171	<2	7.0	<0.1	<2	490	<2	<0.5	180	55000	250	<1000	<5
MW-3	5/15/06	5.2	<2	94	<2400	<100	<0.5	<50000	<100	1.83	<2	<100	208	<2	6	<0.1	<2	<20	<2	<0.5	100	64000	350	<10	<5
	11/15/06	5.4	<2	91	<1500	<100	<0.5	<50000	14620	1.4	<2	<100	321	<2	8.0	<0.2	<2	<20	<2	<0.5	130	72000	310	<1000	<5
	5/14/07	5.4	<2	82	<2000	<100	<0.5	<20000	10520	1.7	<2	<100	110	<2	6.0	<0.1	<2	<20	<2	<0.5	290	49000	280	<1000	7.0
MW-4	5/15/06	6.0	<2	<5	<2400	<100	<0.5	<50000	1780	13.7	<2	<100	205	<2	<5	<0.1	<2	500	3	<0.5	13760	100000	130	<10	<5
	11/15/06	6.1	<2	<5	8200	<100	<0.5	<50000	1660	11.5	<2	<100	118	<2	<5	<0.2	<2	460	2.9	<0.5	14190	96000	190	<1000	<5
	5/14/07	6.1	<2	<5	<2000	<100	<0.5	<20000	1640	13	<2	<100	95	<2	<5	<0.1	<2	500	2.9	<0.5	14300	98000	150	<1000	<5
MW-5	5/15/06	5.4	<2	30	<2000	<100	<0.5	<50000	1700	2.51	75.2	<100	438	6.74	12	<0.1	<2	940	<2	<0.5	170	54000	<100	<10	39
	11/15/06	5.6	<2	27	9600	<100	<0.5	<50000	1430	<1	77.6	<100	140	6.4	6.0	<0.2	<2	750	<2	<0.5	<100	34000	<100	<1000	45
	5/14/07	5.5	<2	26	<2100	<100	<0.5	<20000	1610	1.7	84	<100	219	5.4	9.0	<0.1	<2	890	<2	<0.5	130	44000	<100	1000	50
MW-6	5/15/06	5.2	<2	52	<2400	<100	<0.5	<50000	4600	<1	<2	<100	189	<2	<5	<0.1	<2	<20	<2	<0.5	<100	60000	210	<10	<5
	11/15/06	5.3	<2	59	8700	<100	<0.5	<50000	5760	<1	<2	<100	369	<2	6.0	<0.2	<2	<20	<2	<0.5	<100	56000	230	<1000	<5
	5/14/07	5.3	<2	53	<2000	<100	<0.5	<20000	4140	1.4	<2	<100	61	<2	<5	<0.1	<2	<20	<2	<0.5	130	46000	220	<1000	<5
MW2-1	5/15/06	5.3	<4	69	<2400	5521	1.2	<50000	2150	1.92	<2	190	664	<2	23	<0.1	<40	3170	59.39	<0.5	346880	640000	580	<10	39
	11/15/06	5.2	<2	70	8200	5544	1.02	<50000	2670	1.9	<2	<100	928	<2	30.0	<0.2	2.4	3480	57.0	<0.5	375700	680000	490	<1000	44
	5/14/07	5.1	2.6	68	<2100	5102	1.1	<20000	4030	2.3	2.6	<100	495	<2	28	<0.1	3.4	4150	66	<0.5	369920	674000	520	<1000	56
MW2-2	5/15/06	5.9	<4	66	<2400	<100	<1	<50000	2150	13.62	3.24	<100	3405	<2	37	<0.1	<40	<20	<4	<0.5	1430	82000	270	<10	9
	11/15/06	5.7	<2	56	<2300	<100	<0.5	<50000	2220	10.0	<2	<100	1102	<2	31.0	<0.2	2.3	50	<2	<0.5	6570	62000	240	<1000	<5
	5/14/07	5.7	<2	49	<2100	<100	<0.5	<20000	2100	8.9	<2	<100	816	<2	11	<0.1	2.1	<20	<2	<0.5	1660	68000	170	<1000	10
MW2-3	5/15/06	5.4	<4	21	<2000	5028	<1	<50000	7070	1.17	4.94	<100	654	<2	115	<0.1	<40	5260	56.18	0.71	327760	640000	670	<10	10
	11/15/06	5.4	<2	32	<2300	7777	<0.5	<50000	10000	<1	5.6	<100	736	<2	243.0	<0.2	4.3	7980	64.1	0.7	514300	860000	920	<1000	10
	5/14/07	5.6	<2	12	<2100	3165	<0.5	28000	4900	1.3	3.3	<100	146	<2	53	<0.1	2.4	4110	35	0.56	218150	433000	430	<1000	6.0
MW2-4	5/15/06	5.9	<4	98	<2000	2692	<1	<50000	5680	1.86	<2	<100	207	<2	10	<0.1	<40	3860	37.79	<0.5	173110	360000	510	<10	<5
	11/15/06	5.9	2	114	<2300	3493	<0.5	<50000	5050	1.4	<2	<100	128	<2	11.0	<0.2	3.4	5550	40.8	<0.5	247010	440000	490	<1000	<5
	5/14/07	5.8	3.8	98	<2100	3389	<0.5	<20000	5360	2.1	<2	<100	12	<2	10	<0.1	4.0	5270	40	<0.5	235230	467000	470	<1000	6.0
MW2-5	5/15/06	5.5	<4	27	<2000	<100	<1	<50000	7100	<1	3.69	<100	200	<2	13	<0.1	<40	600	<4	0.74	210	96000	240	12.1	<5
	11/15/06	5.7	<2	27	<1500	<100	<0.5	<50000	5590	<1	3.3	<100	152	<2	13.0	<0.2	<2	420	<2	0.8	150	66000	460	<1000	<5
	5/14/07	5.6	<2	27	<2000	<100	<0.5	<20000	6830	1.2	<2	<100	59	<2	5.0	<0.1	<2	790	<2	<0.5	270	75000	240	<1000	6.0
MW2-7	5/15/06	5.2	<4	61	<2400	10988	<1	<50000	4570	<1	<2	<100	125	<2	166	<0.1	<40	8340	120.5	<0.5	559440	1000000	730	14.6	9
	11/15/06	5.2	3	59	<2300	12269	0.52	<50000	11230	<1	<2	<100	118	<2	225.0	<0.2	6.7	20100	104.0	<0.5	608360	1100000	890	<1000	10
	5/14/07	5.2	4.6	47	<2100	10475	<0.5	<20000	9890	1.2	2.6	<100	139	<2	168	<0.1	6.7	15800	109	<0.5	561950	1024000	690	<1000	12
MW2-7A	5/15/06	5.4	<2	75	<2400	7212	<0.5	<50000	2810	1.5	3.8	<100	15	<2	20	<0.1	<40	4280	80.39	<0.5	389980	660000	470	<10	7
	11/15/06	5.3	<2	43	<2300	5099	<0.5	<50000	7090	1.8	2.4	<100	46	<2	21.0	<0.2	5.5	9850	50.4	<0.5	280360	540000	570	<1000	<5
	5/14/07	5.4	<2	45	<2100	4631	<0.5	<20000	6360	1.7	2.2	<100	72	<2	22	<0.1	4.3	7410	49	<0.5	213870	453000	400	<1000	8.0
MW2-8	5/15/06	5.2	<4	24	<2000	<100	<1	<50000	3430	1.42	<2	<100	101	<2	12	<0.1	<40	150	<4	<0.5	630	66000	370	34.3	<5
	11/15/06	5.3	<2	27	<2300	<100	<0.5	<50000	3690	1.3	<2	<100	407	<2	20.0	<1	<2	110	<2	<0.5	630	50000	400	<1000	<5
	5/14/07	5.4	<2	25	<2100	<100	<0.5	<20000	3510	1.5	<2	<100	83	<2	24	<0.1	<2	80	<2	<0.5	670	53000	510	<1000	<5
MW2-9	5/15/06	5.8	<4	123	<2000	745	<1	<50000	6840	1.4	<2	<100	3966	<2	2526	<0.1	<40	510	18.36	<0.5	117050	250000	1910	13.4	<5
	11/15/06	6.2	<2	128	<2300	1176	<0.5	<50000	6570	2.4	<2	<100	8989	<2	5844.0	<0.2	2.9	490	10.4	<0.5	114040	250000	2990	<1000	5
	5/14/07	5.7	<2	96	<2100	1148	<0.5	<20000	5960	1.7	2.8	<100	3570	<2	3966	<0.1	5.2	910	6.8	<0.5	122970	272000	1460	<1000	9.0

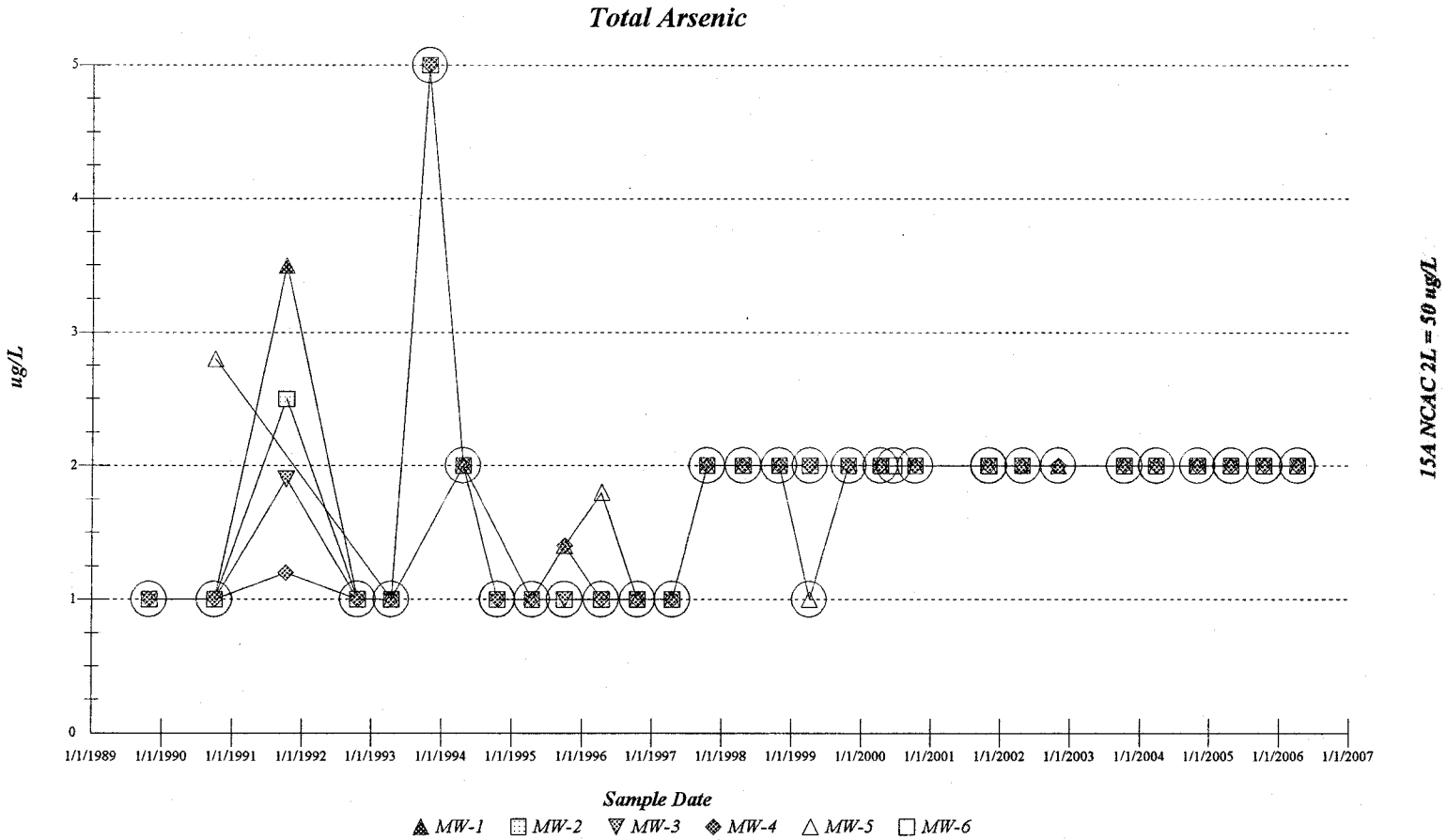
Belews Creek Steam Station Pine Hall Fly-Ash Landfill #85-03

Groundwater Monitoring Data

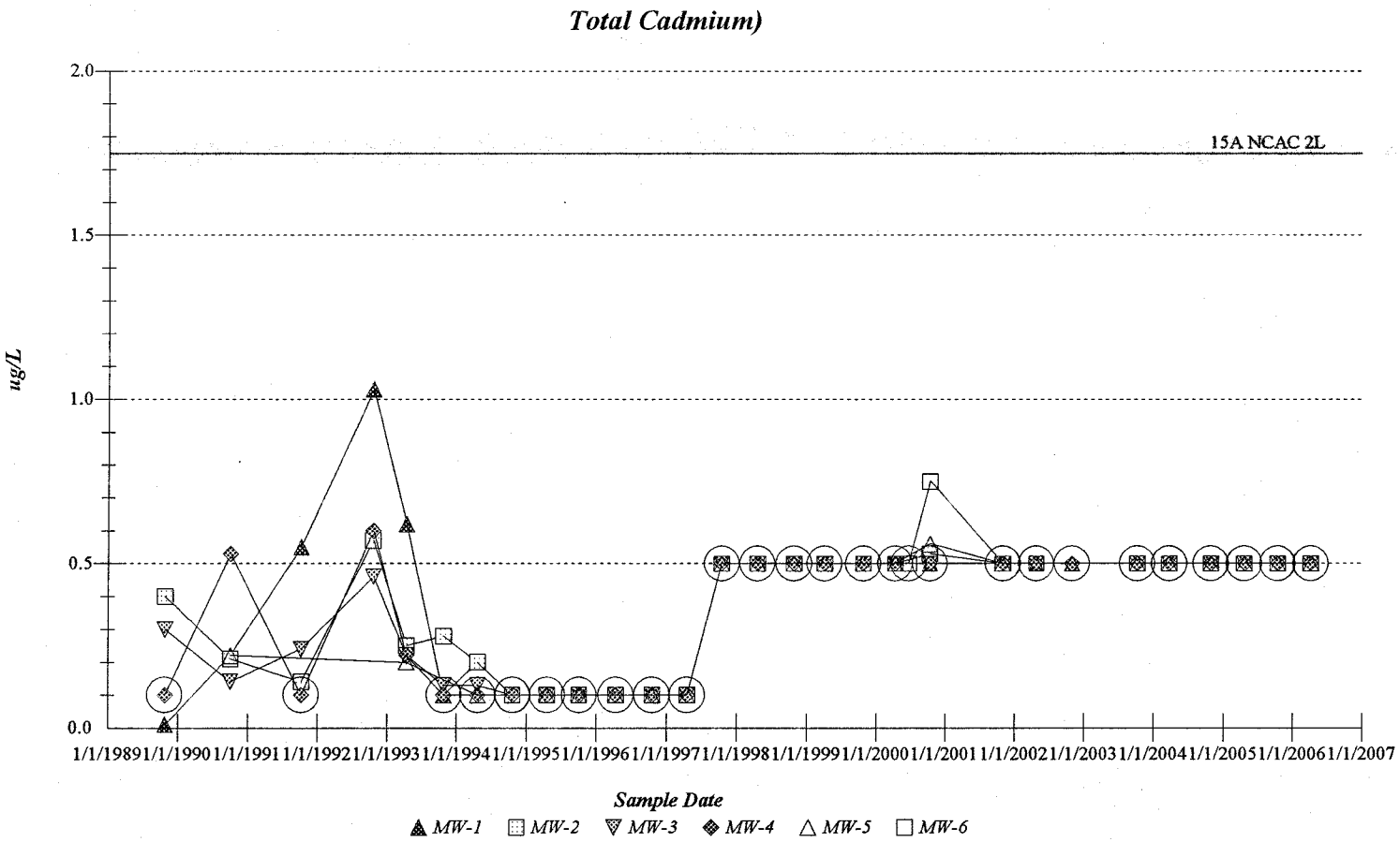
Well Number	Report Date	Parameter																						
		Field pH	Arsenic	Barium	BOD	Boron	Cadmium	Chemical Oxygen Demand	Chloride	Chromium	Copper	Fluoride	Iron	Lead	Manganese	Mercury	Nickel	Nitrate (as Nitrogen)	Selenium	Silver	Sulfate	Total Dissolved Solids	Total Organic Carbon	Total Organic Halogen	Zinc
		(Std. Units)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug-N/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
MW2-10	5/15/06	5.3	<4	75	<2200	6318	1.36	<50000	8780	3.38	<2	<100	843	<2	301	<0.1	<40	8000	71.92	<0.5	402140	760000	860	<10	21
	11/15/06	5.4	3	75	<2300	6236	1.04	<50000	6450	3.8	2.8	<100	3908	4.7	282.0	<0.2	3.0	7930	53.7	<0.5	373230	690000	860	<1000	27
	5/14/07	5.3	2.6	56	<2100	5874	1.1	<20000	8180	3.4	<2	<100	1030	<2	148	<0.1	3.0	8140	64	<0.5	370730	687000	780	<1000	20
OB-1	5/15/06																								
	11/15/06																								
	5/14/07																								
OB-3	5/15/06	4.7	<4	104	2500	3105	2.97	<50000	6180	7.61	8.36	180	8434	3.86	15650	2.6	75	<20	23.92	<0.5	321770	560000	2880	179	104
	11/15/06																								
	5/14/07																								
OB-4	5/15/06	8.1	75.78	38	<2400	49482	<1	<50000	5600	<1	<2	390	137	<2	116	<0.1	<40	3680	340.1	<0.5	1643810	2900000	170	<10	<5
	11/15/06	7.3	29	44	11000	27823	<0.5	<50000	3730	<1	2.9	240	1280	<2	3750.0	<0.2	<2	<20	30.1	<0.5	1683960	2500000	560	<1000	<5
	5/14/07	8.1	73	34	<2000	42911	0.57	<20000	4960	<1	<2	1780	42	<2	91	<0.1	<2	4000	262	<0.5	1746550	2769000	180	<1000	<5
OB-5	5/15/06	5.5	<4	244	<2200	<100	<1	<50000	9500	3.77	<2	<100	3362	3.12	79	<0.1	<40	<20	<4	<0.5	160	36000	350	<10	18
	11/15/06	5.6	3	240	8200	<100	<0.5	<50000	3930	3.9	<2	<100	8076	5.0	172.0	<0.2	<2	<20	<2	<0.5	330	38000	210	<1000	32
	5/14/07	5.2	<2	174	<2100	<100	<0.5	<20000	7680	1.7	<2	<100	692	<2	19	<0.1	<2	<20	<2	<0.5	150	40000	220	<1000	11
OB-6	5/15/06	4.4	4.61	53	<2200	18314	4.13	<50000	21700	1.22	5.46	<100	187	<2	5340	0.15	55	10200	97.97	<0.5	1092850	1800000	2220	64.5	192
	11/15/06																								
	5/14/07																								
OB-7	5/15/06	5.2	<4	61	<2200	5108	<1	<50000	6870	1.59	3.55	<100	1308	<2	192	<0.1	<40	10400	51.89	<0.5	224130	610000	620	<10	14
	11/15/06																								
	5/14/07																								
OB-8	5/15/06	5.1	6.21	84	<2200	3758	<1	<50000	7250	7.18	2.81	<100	1924	<2	70	<0.1	<40	3910	117.6	<0.5	379510	670000	690	<10	10
	11/15/06																								
	5/14/07																								
OB-9	5/15/06	5.4	4.9	22	<2400	28919	5.66	79000	10640	1.06	2.92	<100	175	<2	3679	<0.1	42	1690	215.6	<0.5	1237650	1900000	1340	39.6	77
	11/15/06	5.3	5	23	<1500	28530	5.32	<50000	9780	<1	3.2	<100	211	<2	3201.0	<0.2	18.2	1130	172.4	<0.5	1285640	1900000	1190	<1000	85
	5/14/07	5.3	5.1	20	<2000	24217	3.7	<20000	8640	1.2	7.2	<100	14	<2	1887	0.16	13	2000	207	<0.5	1187980	1808000	1040	<1000	61
SW-1A	5/15/06	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
	11/15/06	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
	5/14/07	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
SW-2	5/15/06	6.0	<4	45	<2400	15417	1.4	73000	6160	<1	<2	<100	1473	<2	1547	<0.1	<40	450	49.28	<0.5	520320	880000	1210	12.1	42
	11/15/06	6.2	<2	47	<2300	17456	1.34	<50000	6450	<1	<2	<100	894	<2	1914.0	<0.2	2.8	600	42.4	<0.5	594140	970000	1030	<1000	39
	5/14/07	6.0	<2	46	<2100	13115	1.3	<20000	6480	1.2	3.2	<100	702	<2	1345	<0.1	3.0	640	48	<0.5	449670	780000	1290	<1000	44

** No flow observed - not sampled

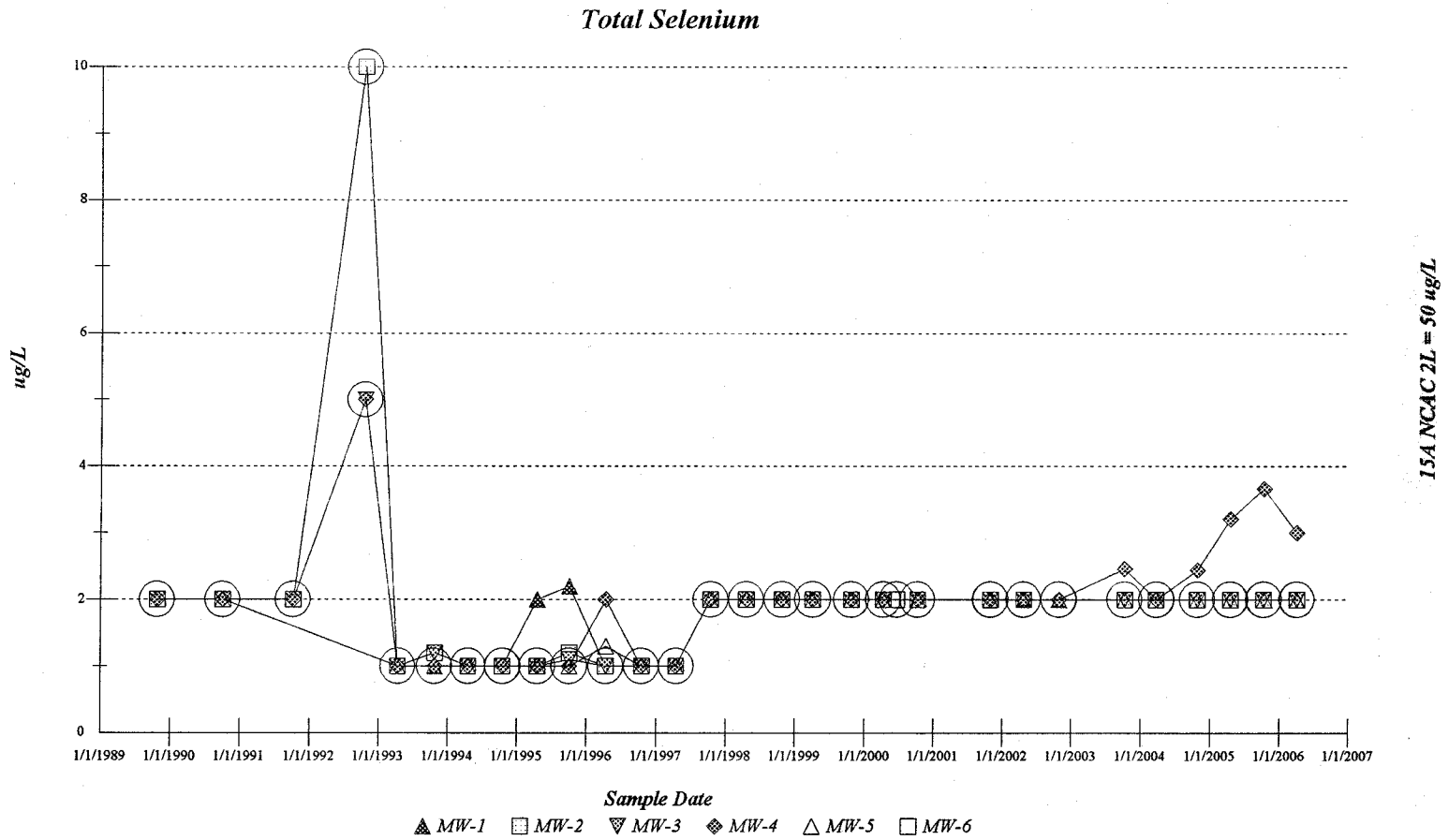
Belews Creek Ash Landfill
Groundwater Monitoring
Total Arsenic



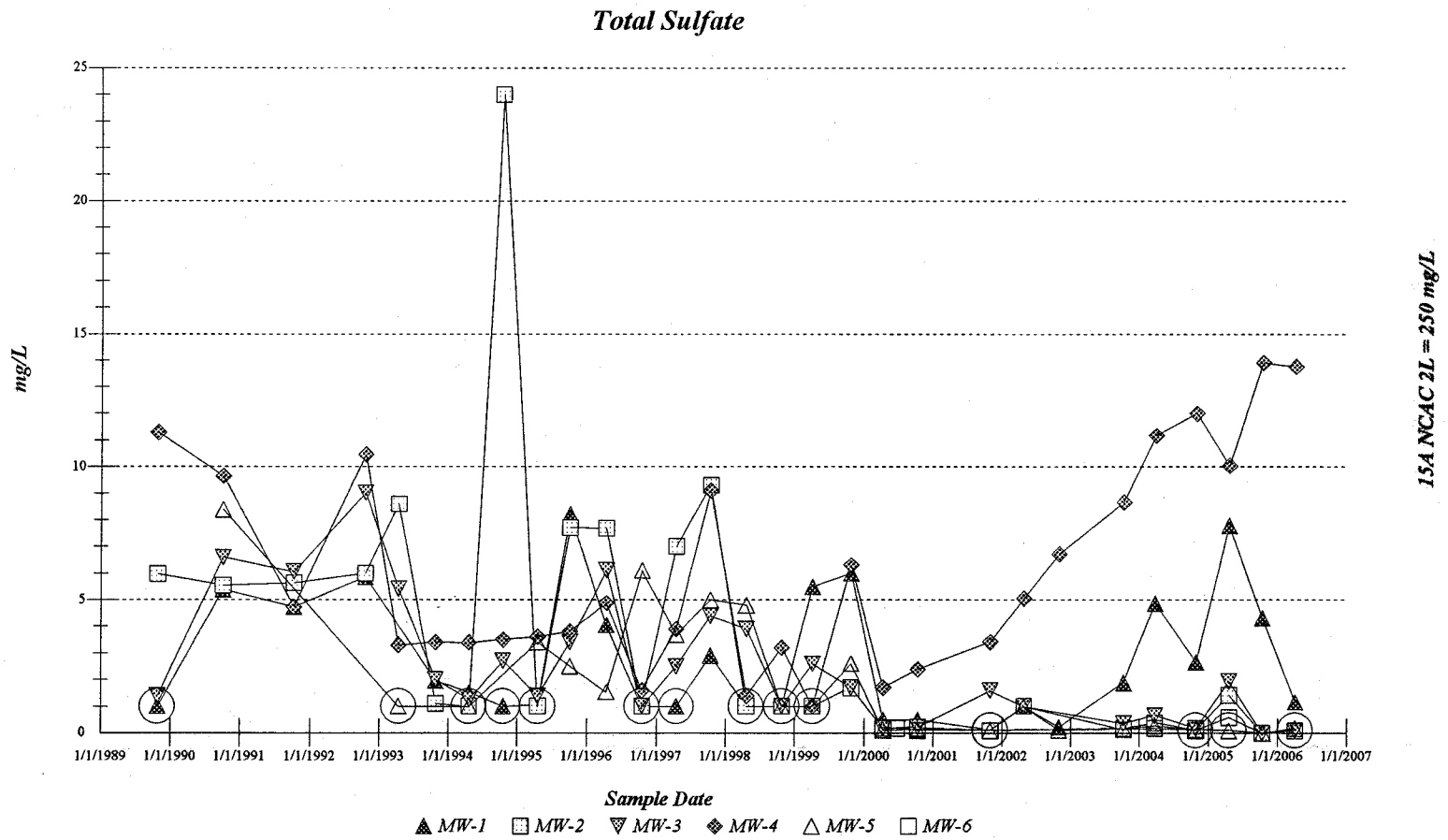
Belews Creek Ash Landfill
Groundwater Monitoring
Total Cadmium



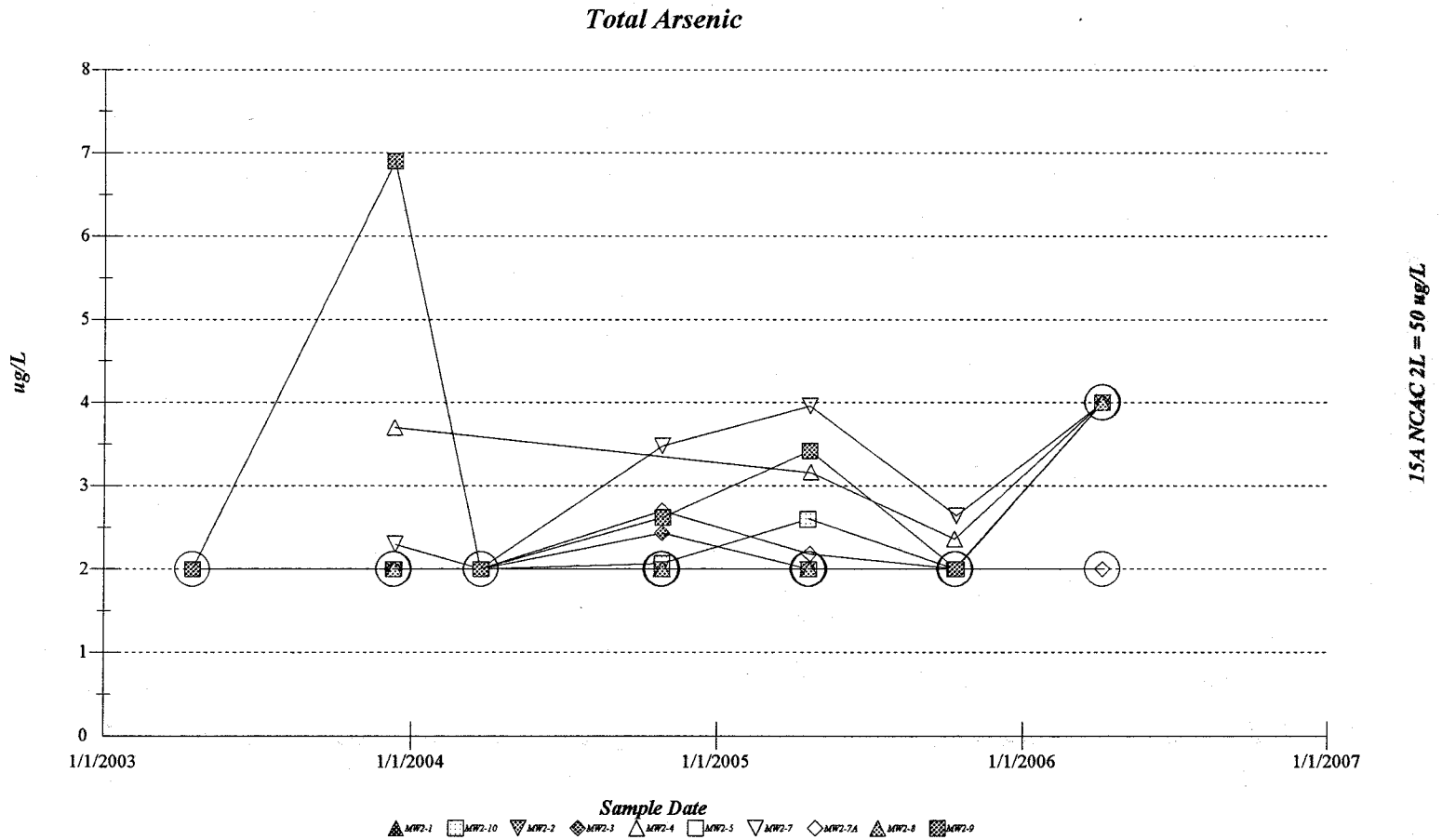
Belews Creek Ash Landfill
Groundwater Monitoring
Total Selenium



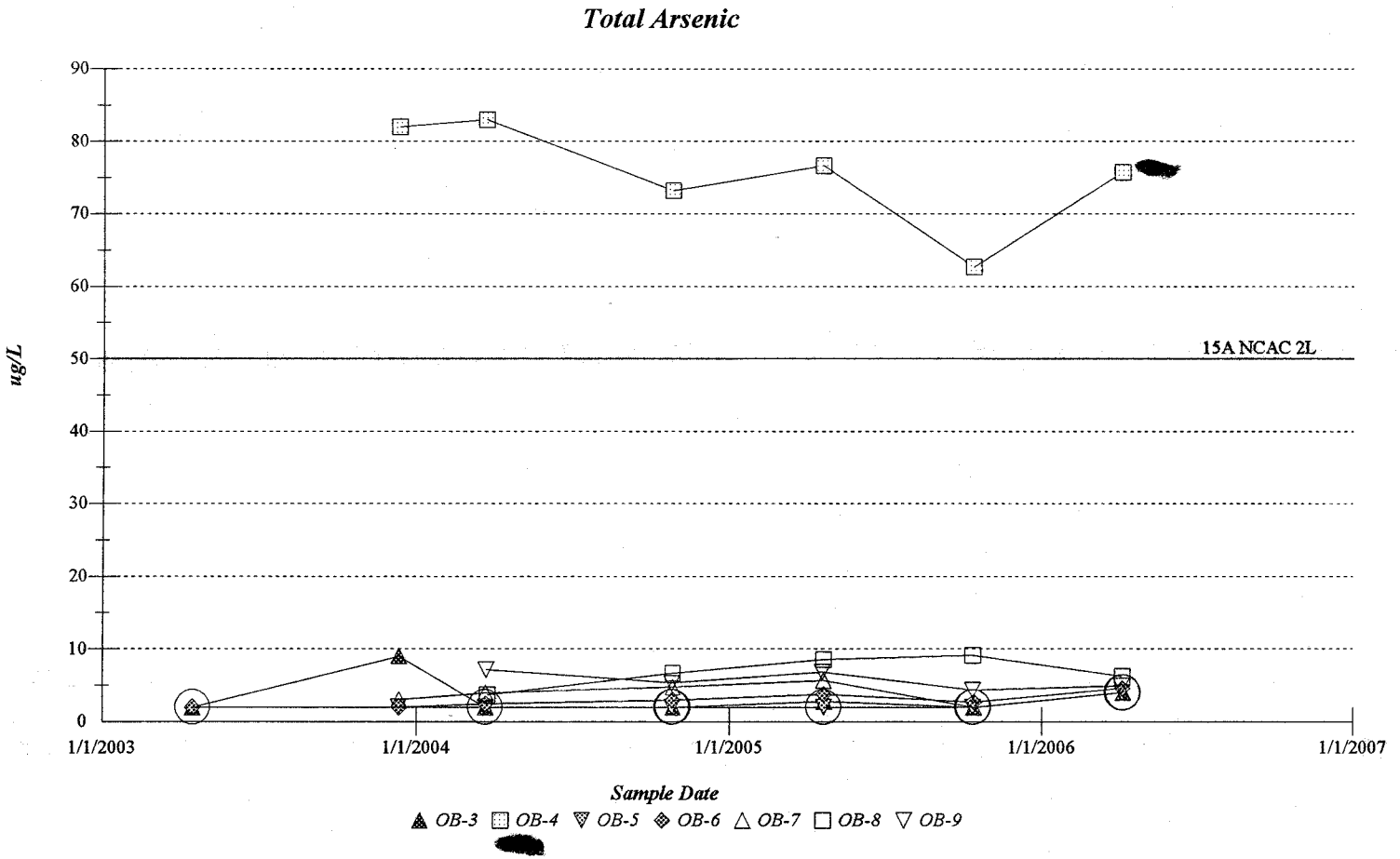
Belews Creek Ash Landfill
Groundwater Monitoring
Total Sulfate



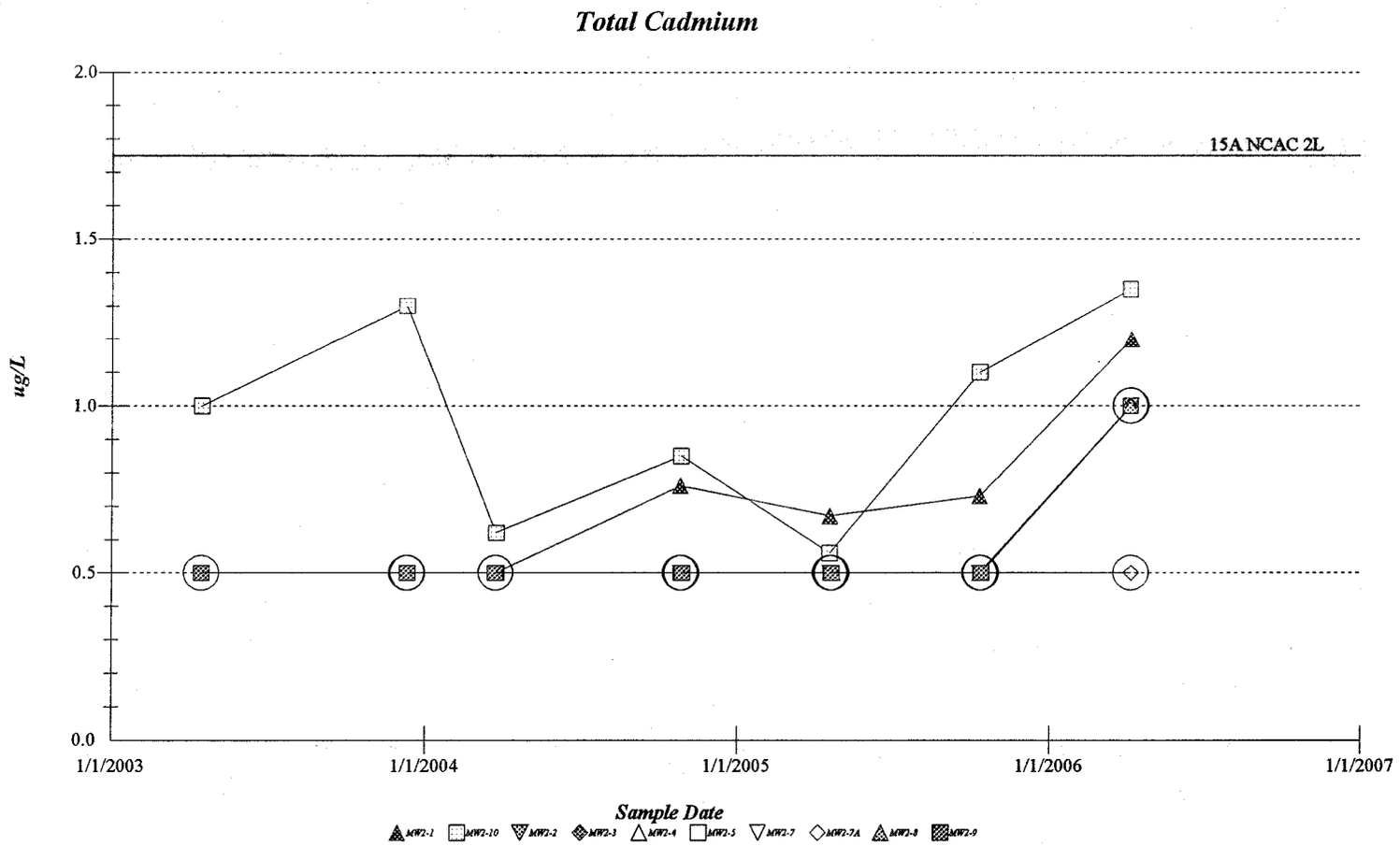
Belews Creek Ash Landfill Expansion
Groundwater Monitoring (MW Wells)
Total Arsenic



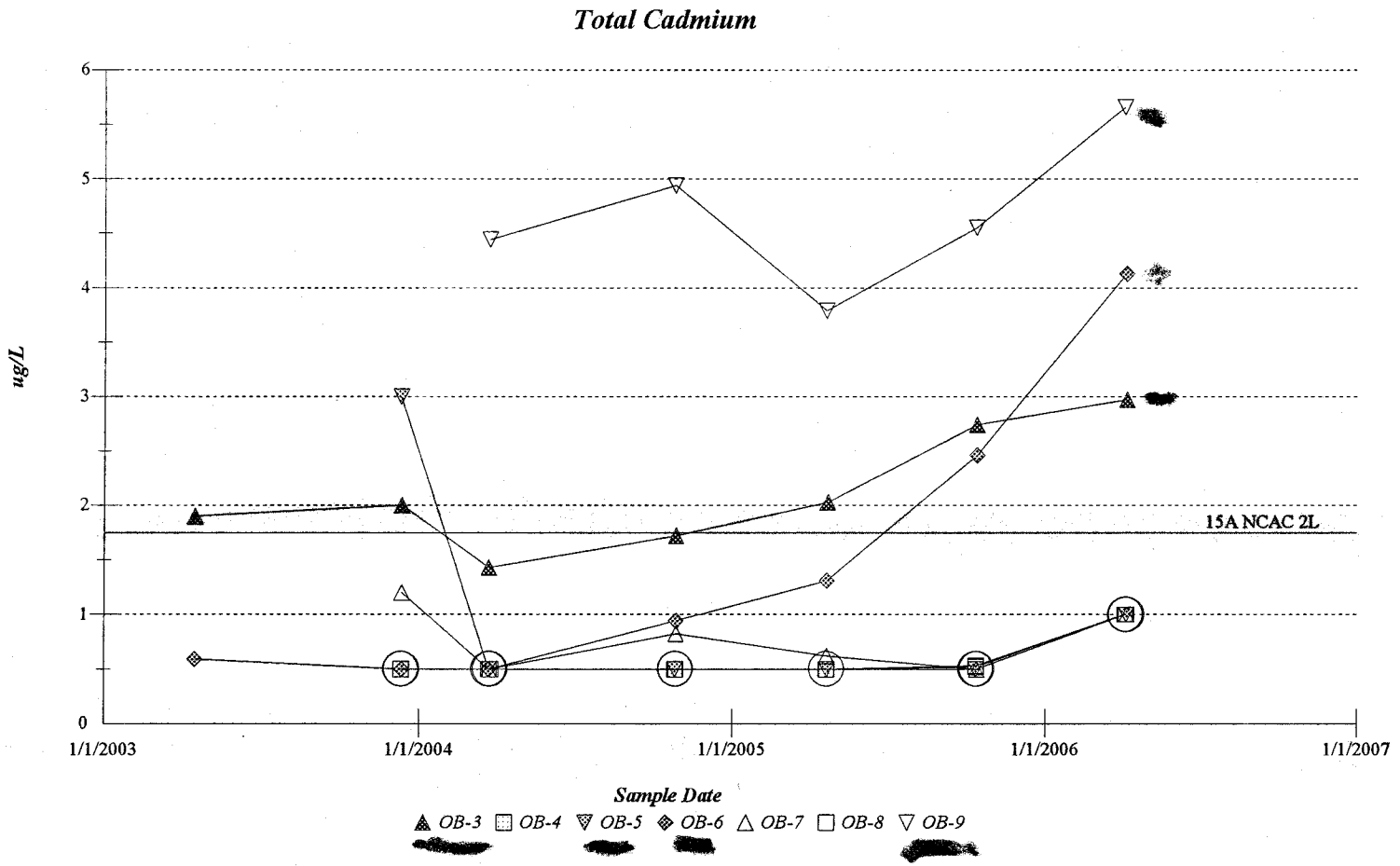
Belews Creek Ash Landfill Expansion
Groundwater Monitoring (OB Wells)
Total Arsenic



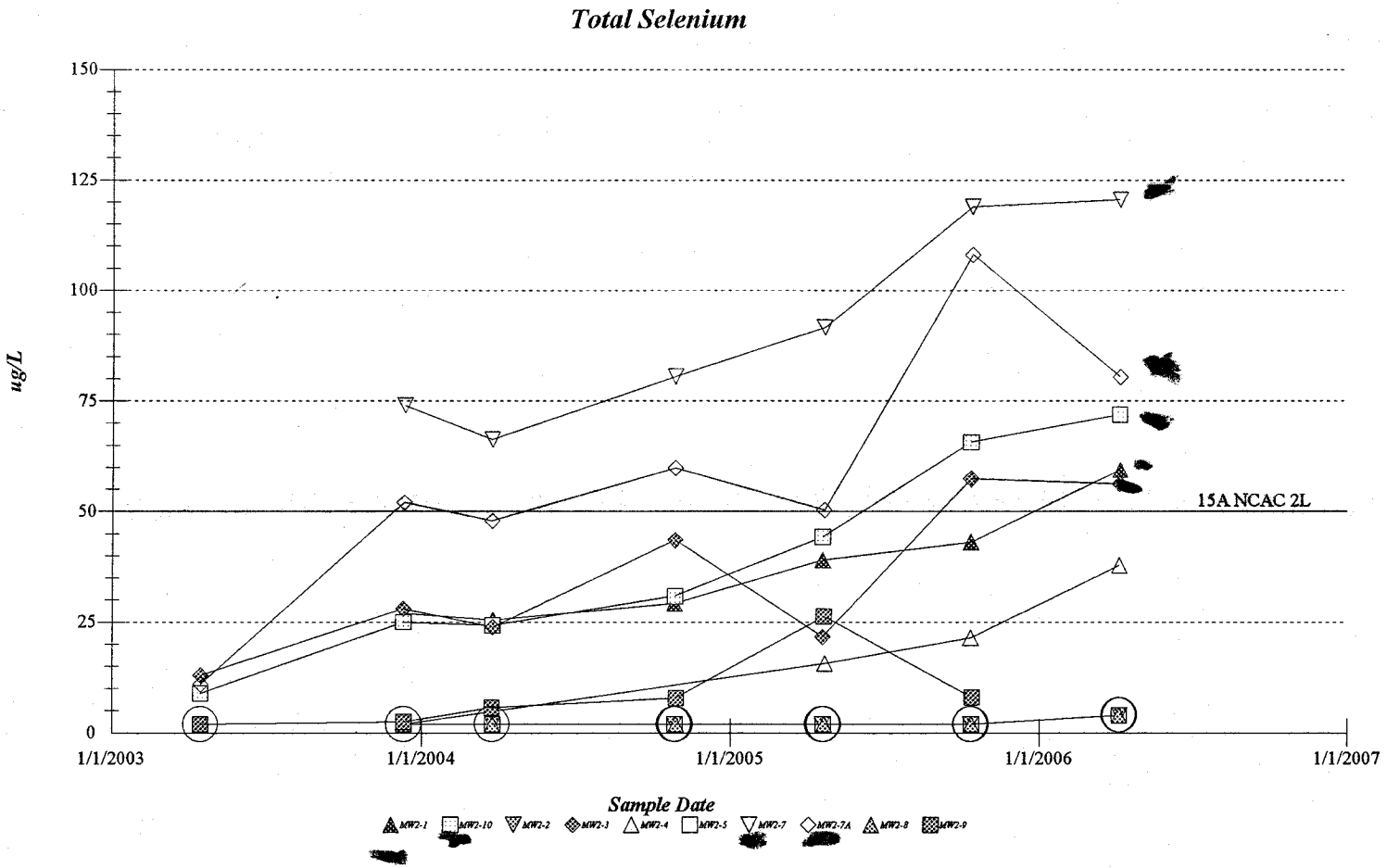
Belews Creek Ash Landfill Expansion
Groundwater Monitoring (MW Wells)
Total Cadmium



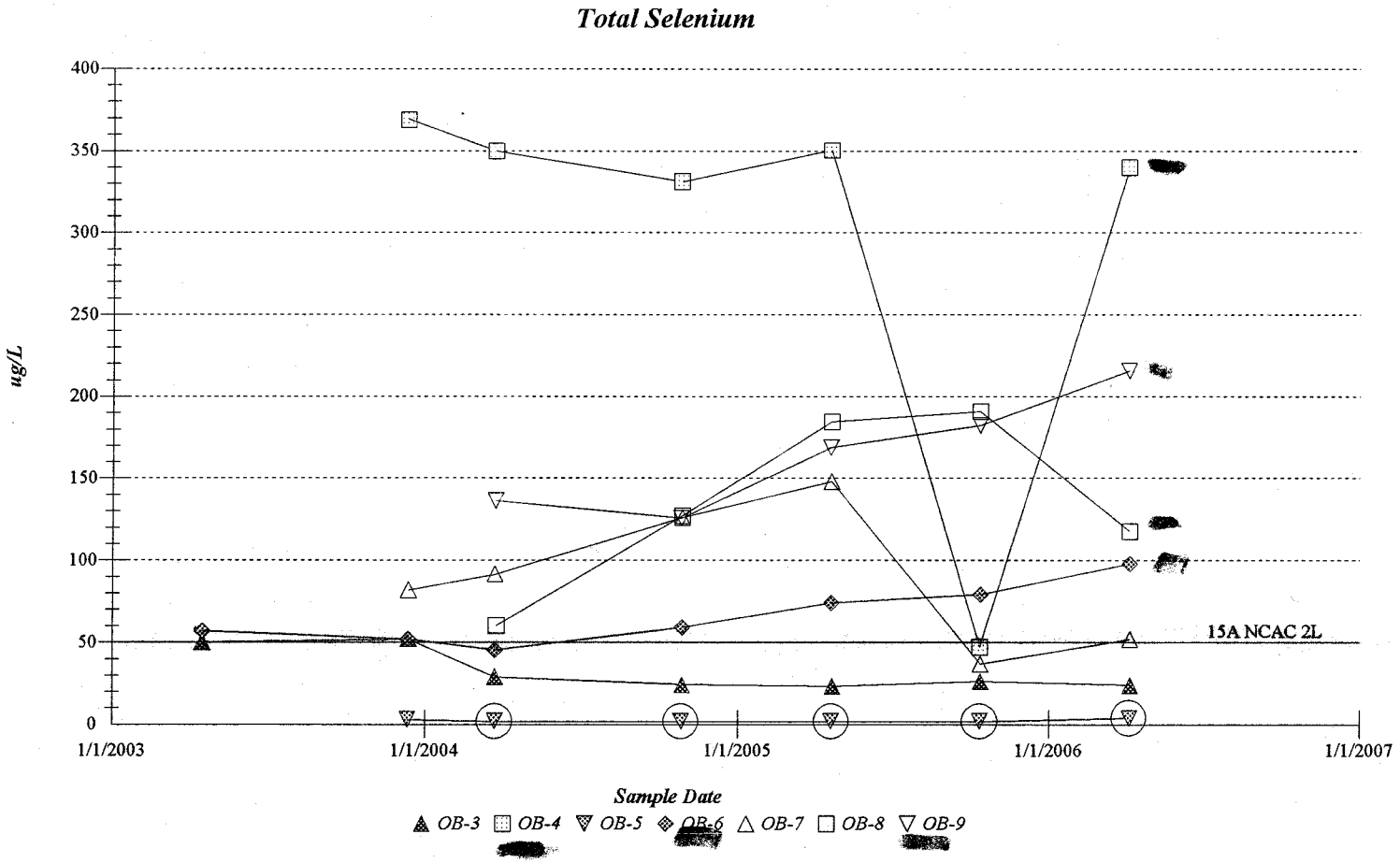
Belews Creek Ash Landfill Expansion
Groundwater Monitoring (OB Wells)
Total Cadmium



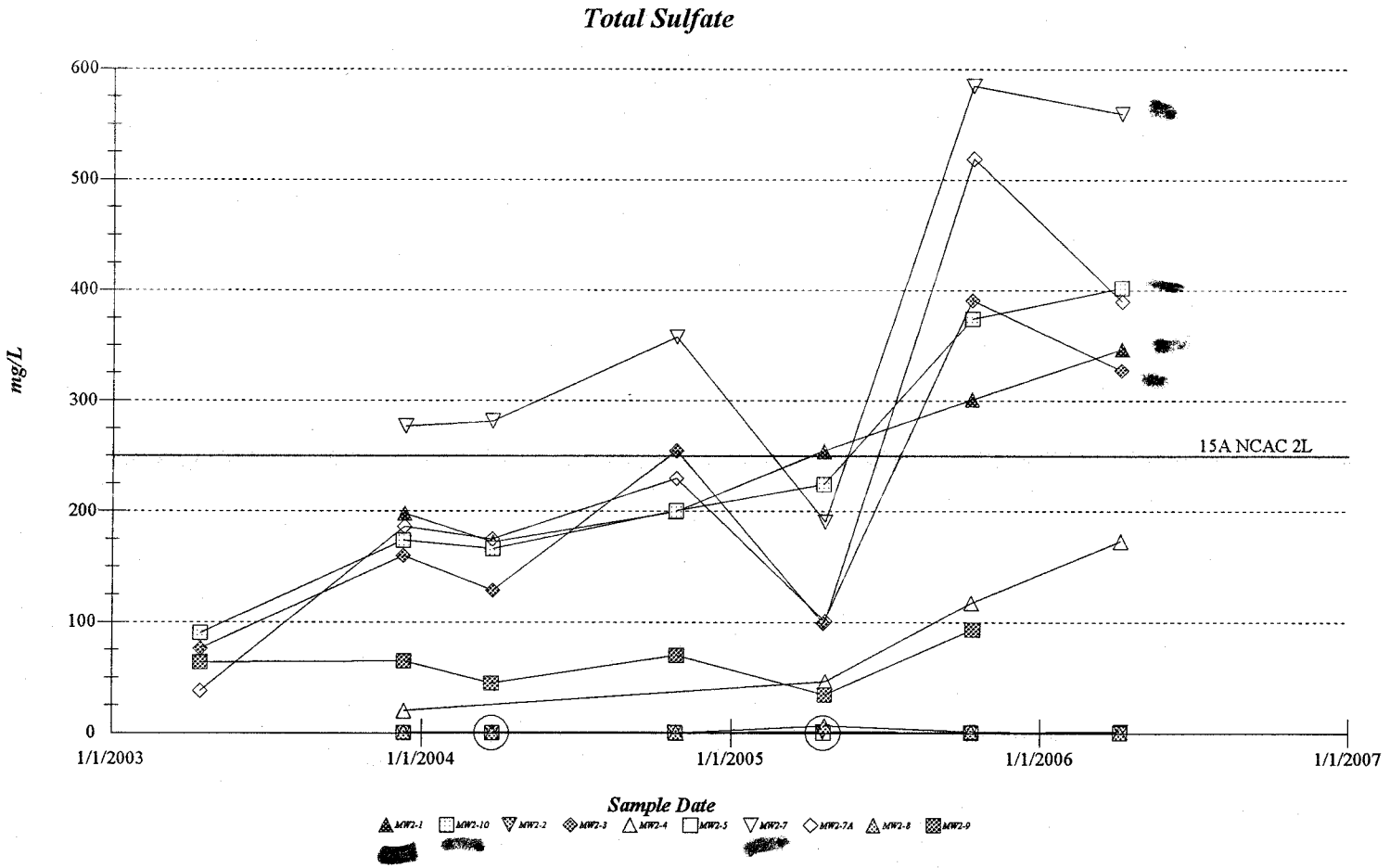
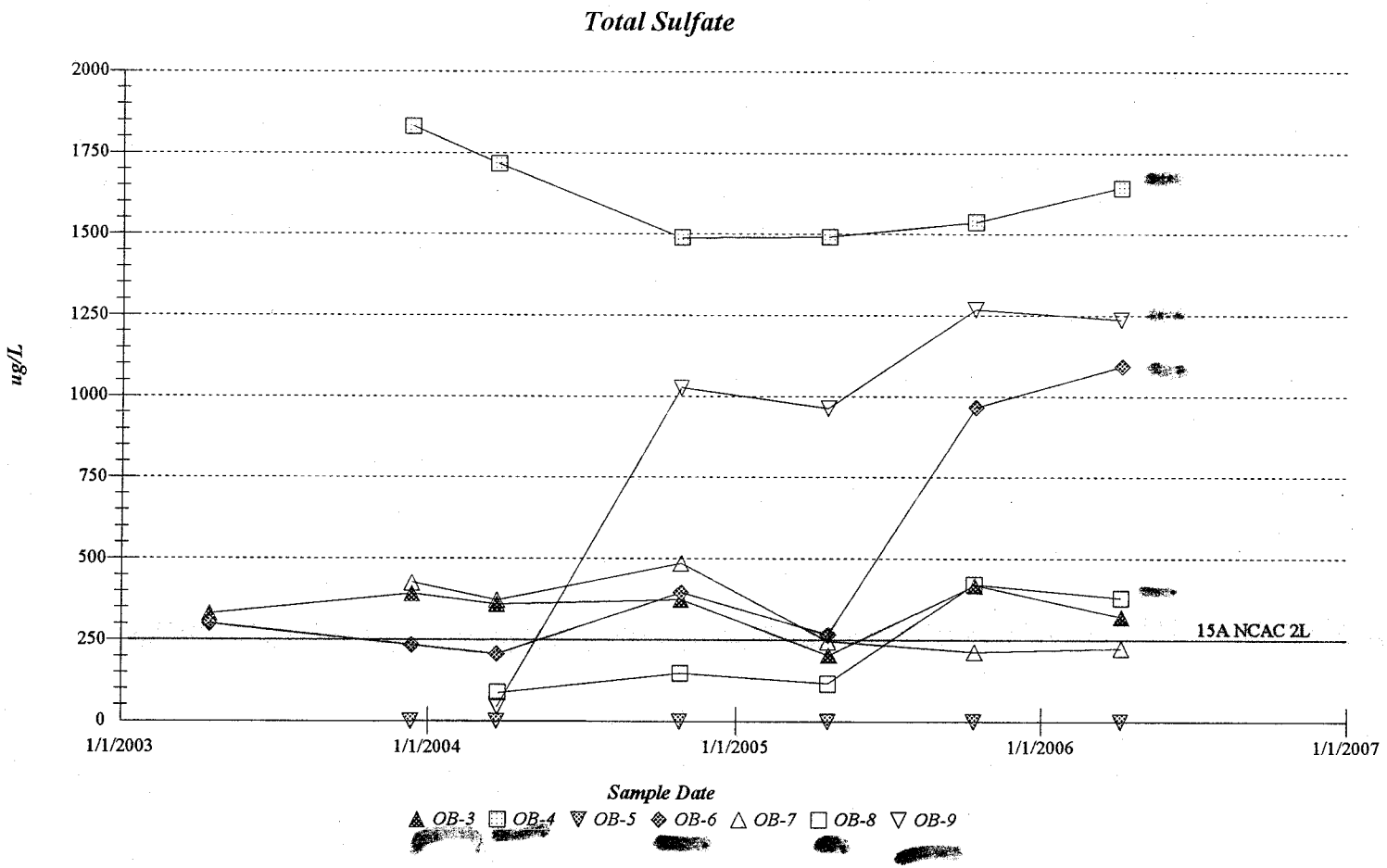
Belews Creek Ash Landfill Expansion
Groundwater Monitoring (MW Wells)
Total Selenium



Belews Creek Ash Landfill Expansion
Groundwater Monitoring (OB Wells)
Total Selenium



Belews Creek Ash Landfill Expansion
Groundwater Monitoring (MW Wells)
Total Sulfate



Belews Creek Ash Landfill Expansion
Groundwater Monitoring (OB Wells)
Total Sulfate