

2006 ANNUAL GROUND WATER REPORT

Prepared For:



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*✓ cold weather will be a factor
✓ no money will do it
✓ provide date in two weeks
✓ start needs*

March 29, 2007

**2006 ANNUAL GROUND WATER REPORT
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS**

TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
2.0	SITE GEOLOGY.....	1
3.0	GROUND WATER MONITORING	1
3.1	MONITORING PARAMETERS	2
3.2	FIELD SAMPLING.....	3
3.3	LABORATORY ANALYSIS	4
4.0	SAMPLING RESULTS.....	5
4.1	GROUND WATER FLOW	5
4.2	GROUND WATER QUALITY	5
	4.2.1 Field Parameters.....	5
	4.2.2 Analytical Results	5

TABLES

Monitoring Well Construction Details.....	1
Ground Water Elevation Data.....	2
Ground Water Indicator Parameter Data	3
ECMW-1 Analytical Summary.....	4
ECMW-2 Analytical Summary.....	5
ECMW-3 Analytical Summary.....	6
ECMW-4 Analytical Summary.....	7
ECMW-5 Analytical Summary.....	8
ECMW-6 Analytical Summary.....	9
ECMW-7 Analytical Summary.....	10
ECMW-8 Analytical Summary.....	11
ECMW-9 Analytical Summary.....	12
ECMW-10 Analytical Summary.....	13
ECMW-11 Analytical Summary.....	14
ECMW-12 Analytical Summary.....	15
ECMW-13 Analytical Summary.....	16
ECMW-14 Analytical Summary.....	17
ECMW-15 Analytical Summary.....	18
ECMW-16 Analytical Summary.....	19
ECMW-17 Analytical Summary.....	20
ECMW-18 Analytical Summary.....	21
ECMW-19 Analytical Summary.....	22
ECMW-20 Analytical Summary.....	23

**2006 ANNUAL GROUND WATER REPORT
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS**

TABLE OF CONTENTS

ECMW-21 Analytical Summary.....	24
ECMW-22 Analytical Summary.....	25
In Situ Remediation Parameters Summary	26

FIGURES

Site Map.....	1
Ground Water Elevation Map April 2006	2
Ground Water Elevation Map October/November 2006	3

APPENDICES

Constituent Trend Graphs.....	A
Laboratory Analytical Reports.....	B

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EL DORADO, ARKANSAS**

1.0 INTRODUCTION

This report presents the results of ground water sampling activities conducted at the El Dorado Chemical Company (EDCC) facility during 2006. Field sampling techniques, ground water flow and ground water quality are discussed. A site map is provided as Figure 1.

2.0 SITE GEOLOGY

The EDCC facility is located west of the Mississippi Embayment in the Gulf Coastal Plain Geostratigraphic Region. Sediments within the region are characterized as a thick sequence of unconsolidated sediments, fluvial-deltaic in origin, and Tertiary in age. In some areas of Union County, unconsolidated alluvial deposits, Quaternary in age, overlay the Tertiary sediments.

Within the Claiborne Group, two units crop out in Union County, the Cook Mountain Formation and the Cockfield Formation. The Cook Mountain is overlain by the Cockfield Formation. The Cook Mountain is uniformly underlain by the Sparta Formation. The Cook Mountain is 50 to 200 feet thick and is composed of clay and silty clay containing minor amounts of localized very fine to silty sand. These clays serve as a confining unit between the more permeable overlying Cockfield Formation and the underlying aquifer. The Cockfield Formation, locally referred to as the "lignite sand", is generally characterized by fine sand, interbedded silty clay and lignite becoming more massive and containing less silt and clay with depth. The local shallow subsurface consists of interbedded sand, silty sand, silt and clay, with more clay in the northern area of the property and more sand to the south.

3.0 GROUND WATER MONITORING

The ground water monitoring program including parameters, sampling methodology and laboratory analyses is described in the following sections.

3.1 MONITORING PARAMETERS

Statistical analyses were performed on ground water data to compare downgradient well data to upgradient (background) data to determine if the site constituents of concern are present at statistically significant levels. As a result of the statistical analyses, the monitoring program has been revised. The list was changed to allow EDCC to continue to collect data to evaluate the potential risk associated with the current ground water conditions, but eliminate parameters for which there is sufficient data. The changes to the monitoring program that were implemented in 2006 are as follows:

- ***Continued with no change:*** The four monitor wells that were installed in 2004 (MW-19, MW-20, MW-21, MW-22) will continue to be sampled for ammonia, nitrate, lead and chromium because there is not enough data to compare these wells to the background levels.
- ***Background Wells:*** There is sufficient data to establish the background levels of ammonia, nitrate, lead and chromium in the three background wells MW-1, MW-2 and MW-3. These four parameters were dropped from the annual parameter list but will be sampled once every three years to verify the current data set.
- ***Ammonia:*** The statistical evaluation indicates that wells MW-4, MW-5, MW-9, MW-10, MW-13, MW-14, MW-15 and MW-18 have concentrations of ammonia comparable to the background level. Ammonia was dropped from the parameter list for these wells. Ammonia will continue to be analyzed in monitor wells MW-6, MW-7, MW-8, MW-11, MW-12, MW-16, and MW-17.
- ***Nitrate:*** The statistical evaluation indicates that monitoring wells MW-4, MW-5, MW-12, MW-13, and MW-18 have concentrations of nitrate comparable to the background level. Nitrate is analyzed in monitor wells MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-14, MW-15, MW-16, and MW-17.
- ***Chromium:*** All monitoring wells except MW-18 have concentrations of chromium comparable to the background level. Chromium was dropped from the parameter list of all wells except MW-18.
- ***Lead:*** All monitoring wells except MW-18 and MW-7 have concentrations of lead comparable to the background level. Lead was dropped from the parameter list of all wells except MW-18 and MW-7.
- ***Sulfate and Total Dissolved Solids:*** There is sufficient ground water data for sulfate and TDS. Both parameters were dropped from the list of all monitoring wells at this time.

The parameters can be added back to the list at a latter date if the information becomes necessary.

- ***Vanadium***: Vanadium was added to the list of parameters in 2004. All monitor wells will continue to be analyzed for vanadium until a sufficient amount of data is collected to statistically evaluate this parameter.

Collection began for several new parameters from all wells during the October 2005 sampling event. Field testing was conducted to collect pH, temperature, specific conductance, dissolved oxygen, and redox. In addition, samples were shipped to the laboratory and analyzed for alkalinity, nitrite, dissolved manganese, dissolved iron, total phosphorus and Total Organic Carbon. These parameters were analyzed again during the 2006 sampling events.

3.2 FIELD SAMPLING

Ground water sampling events were conducted in April and October/November of 2006. Depth-to-water measurements were collected from each well using an electronic water level indicator. The device was decontaminated between each well to minimize cross-contamination. Depth-to-water measurements were subtracted from their respective top-of-casing elevations to calculate ground water elevations referenced to Mean Sea Level (MSL) at each well. Monitoring well construction details are provided on Table 1. Ground water elevations for the 2006 sampling events are summarized on Table 2.

The depth-to-water measurements were used to calculate the volume of water within each well and determine the amount to be purged prior to sampling. Three well volumes were removed from each well or until the well became dry using a Redi-Flo electric pump. Dedicated polyethylene tubing was used for each well to minimize the potential for cross-contamination. Field parameters measured during the monitoring well purging and sampling process are recorded using information downloaded from a YSI Model 556 multi-meter equipped with an in-line flow cell. The information is recorded in tabular and graphical form to demonstrate when aquifer parameters have stabilized sufficiently prior to sampling. Field meters used to measure field data were calibrated each day during sampling. Ground water indicator parameter data (final readings only) are summarized on Table 3. Purge water was containerized for proper disposal.

Ground water samples were collected using new, clean, dedicated, disposable polyethylene bailers. Ground water samples were placed into laboratory-provided containers with the appropriate preservatives. The containers were packed in ice-chests and shipped to the laboratory under chain-of-custody.

3.3 LABORATORY ANALYSIS

Ground water samples were analyzed by Arkansas Analytical, Inc. in Little Rock, Arkansas. Arkansas Analytical is certified by the Arkansas Department of Environmental Quality. The analytical reports are provided in Appendix B.

Ground water samples were analyzed for the following constituents:

PARAMETER	ANALYTICAL METHODS
Ammonia-N	EPA 350.3
Nitrate-N	EPA 300.0
Lead (Total and Dissolved)	EPA 200.7
Chromium (Total and Dissolved)	EPA 200.7
Vanadium (Total and Dissolved)	EPA 200.7
Iron (Dissolved)	EPA 200.7
Manganese (Dissolved)	EPA 200.7
Phosphorus	EPA 200.7
Alkalinity	EPA 310.1
Total Organic Carbon	EPA 415.1
Nitrite	EPA 300.0

Field quality assurance/quality control (QA/QC) samples consisted of duplicate field samples, trip blanks and field blanks. Four (4) duplicate samples were collected during 2006 and analyzed for certain parameters, yielding 32 duplicate analyses. Precision (relative percent difference or RPD) was calculated for all duplicate analyses. Fifteen (15) duplicates had both results as non-detect, yielding an RPD of 0%. Seventeen (17) duplicates had detections with RPD values ranging from 0 to 75%. Only five of the duplicate pairs had an RPD above 20%. In addition, four (4) field blanks and two (2) trip blanks were collected and analyzed in 2006. Only low levels of total organic carbon (1.01 and 8.11 mg/L) were detected in two field blanks.

4.0 SAMPLING RESULTS

4.1 GROUND WATER FLOW

Ground water elevations from April (highest average site-wide ground water elevation during 2006) and October/November (lowest average site-wide ground water elevation during 2006) were used to construct the maps on Figures 2 and 3. The April ground water elevations were the highest recorded in 2006, ranging from 148.78 feet MSL in ECMW-19 to 201.32 feet MSL in ECMW-1. The averaged October/November readings had the lowest elevations with values ranging from 144.62 feet MSL in ECMW-19 and 197.14 feet MSL in ECMW-1. Consistent with previous measurements, the ground water flow direction is from northwest to southeast with the exception of localized areas where shallow perched ground water likely exists.

4.2 GROUND WATER QUALITY

4.2.1 Field Parameters

Indicator parameter data are summarized on Table 3. In 2006, pH values ranged from 1.34 in ECMW-18 to 6.39 in ECMW-6. The readings are consistent throughout 2006 as well as with the previous measurements. Specific conductance values ranged from 38 (ECMW-20) to 11,990 (ECMW-7) microSiemens (μ S) in 2006. Wells ECMW-4, ECMW-6, ECMW-7 and ECMW-8 consistently have the highest conductivity readings.

4.2.2 Analytical Results

The analytical results are summarized in Tables 4 through 26 and the laboratory reports are provided in Appendix B. A discussion of each constituent is provided below:

Ammonia

During the year 2006, ammonia concentrations ranged from below the detection limit (0.5 mg/L) to 267 mg/L (ECMW-7). ECMW-6, ECMW-7 and ECMW-8 exhibited the highest concentrations throughout the year. The highest ammonia concentrations are located north of the acid and nitrate process areas known as the Production Area. There was also a detection on the north side of Lake Kildeer.

Trend graphs for wells sampled for ammonia are provided in Appendix A. ECMW-7 and ECMW-17 are showing slightly increasing concentrations. The graph for ECMW-11 shows an overall increasing trend; however, concentrations have been decreasing since 2005. ECMW-6 is the only well clearly showing an increasing trend. Conversely, ECMW-8 and EDMW-12 data show a clear decreasing trend.

Nitrate

For the year 2006, nitrate concentrations ranged from below the detection limit (0.5 mg/L) to 2390 mg/L (ECMW-6). ECMW-6, ECMW-7 and ECMW-8 exhibited the highest concentrations throughout the year. The highest nitrate concentrations are located north of the Production Area. There were also detections on the north and south sides of Lake Kildeer, and to the east in ECMW-21.

Trends graphs for nitrate are provided in Appendix A. EDMW-4, EDMW-20, EDMW-21 and EDMW-22 are showing indications of an increasing trend. ECMW-6 is the only well that shows a clear increase. Conversely, ECMW-8, ECMW-10, ECMW-11, ECMW-15 and ECMW-16 data show distinct decreasing trends. ECMW-17 shows a slight decreasing trend. Nitrate concentrations in EDMW-7, EDMW-9 and EDMW-14 are fairly constant.

Metals

The maximum lead concentration was detected in ECMW-7 in 2006 at a concentration of 0.017 mg/L. Dissolved chromium was detected in ECMW-18 at a concentration 0.065 mg/L. Dissolved vanadium was detected at a concentration of 0.098 mg/L, also in ECMW-18.

In Situ Remediation Parameters

Samples were analyzed for alkalinity, nitrite, dissolved manganese, dissolved iron, total phosphorus and total organic carbon in 2006. These results combined with data collected from previous sampling events will be used to evaluate in situ remediation of constituents of concern. The analytical results of these parameters are summarized on Table 26.

TABLES

TABLE 1
MONITORING WELL CONSTRUCTION DETAILS
2006 ANNUAL GROUND WATER REPORT
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

Monitoring Well ID	Completion Date	Well Depth (ft below top of casing)	Screened Interval (ft from top of casing)	Top of Casing Elevation (ft above MSL)
ECMW--1	2/14/1996	22.1	12.1 to 22.2	213.28
ECMW--2	2/14/1996	20.2	10.2 to 20.2	196.25
ECMW--3	2/15/1996	27.1	17.1 to 27.1	192.11
ECMW--4	2/15/1996	22.1	12.1 to 22.1	194.84
ECMW--5	2/21/1996	17.7	7.7 to 17.7	182.69
ECMW--6	2/21/1996	22.0	12 to 22	191.87
ECMW--7	2/20/1996	23.9	13.9 to 23.9	195.88
ECMW--8	2/20/1996	29.9	19.9 to 29.9	197.34
ECMW--9	2/15/1996	30.0	20 to 30	198.39
ECMW--10	2/19/1996	22.6	12.6 to 22.6	205.75
ECMW--11	2/19/1996	19.8	9.8 to 19.8	201.65
ECMW--12	2/19/1996	19.9	9.9 to 19.9	184.97
ECMW--13	2/14/1996	19.8	9.8 to 19.8	177.26
ECMW--14	2/13/1996	18.2	8.2 to 18.2	178.48
ECMW--15	2/13/1996	17.0	7 to 17	180.84
ECMW--16	2/12/1996	19.3	9.3 to 19.3	180.14
ECMW--17	2/13/1996	34.7	24.7 to 34.7	185.40
ECMW--18	2/22/1996	17.2	7.2 to 17.2	155.46
ECMW--19	1/11/2004	61.5	51.5 to 61.5	150.41
ECMW--20	1/7/2004	54.4	44.5 to 54.4	192.77
ECMW--21	1/6/2004	34.9	24.9 to 34.9	176.29
ECMW--22	1/21/2004	79.8	69.8 to 79.8	173.55

Notes:

1. EDC-MW-1 through EDC-MW-18 constructed of 4-inch Sch. 40 PVC flush threaded pipe with 4-inch diameter screens, 10-foot length and 0.01-inch openings, casing risers are approximately 3 feet above ground surface, drilled with hollow-stem auger
(Data from Woodward-Clyde June 1996 Report)
2. EDC-MW-19, EDC-MW-20 and EDC-MW-22 constructed of 2-inch Sch. 40 PVC flush threaded pipe with 2-inch diameter screens, 10-foot length and 0.01-inch openings, casing risers are approximately 2.5 to 3 feet above ground surface, drilled with rotary wash procedures
2. EDC-MW-20 constructed of 1-inch Sch. 40 PVC flush threaded pipe with 1-inch diameter screen, 10-foot length and 0.01-inch opening, casing riser approximately 2.5 feet above ground surface, drilled with Geoprobe

TABLE 2
GROUNDWATER ELEVATION DATA
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EL DORADO, ARKANSAS

Monitor Well	Top of Casing Elevation (ft above Mean Sea Level)	Measurement Date			
		4/10/2006 - 4/11/2006		10/31/2006 - 11/2/2006	
		Depth to Water (ft from top of casing)	Ground Water Elevation (ft above MSL)	Depth to Water (ft from top of casing)	Ground Water Elevation (ft above MSL)
ECMW-1	213.28	11.96	201.32	16.14	197.14
ECMW-2	196.25	0.00	196.25	2.61	193.64
ECMW-3	192.11	10.59	181.52	13.82	178.29
ECMW-4	194.84	8.98	185.86	10.48	184.36
ECMW-5	182.69	5.11	177.58	5.12	177.57
ECMW-6	191.87	5.17	186.70	5.23	186.64
ECMW-7	195.88	7.94	187.94	8.14	187.74
ECMW-8	197.34	7.88	189.46	8.32	189.02
ECMW-9	198.39	10.71	187.68	13.83	184.56
ECMW-10	205.75	13.71	192.04	15.83	189.92
ECMW-11	201.65	10.81	190.84	13.66	187.99
ECMW-12	184.97	7.91	177.06	7.76	177.21
ECMW-13	177.26	6.26	171.00	11.94	165.32
ECMW-14	178.48	11.11	167.37	13.24	165.24
ECMW-15	180.84	5.91	174.93	8.41	172.43
ECMW-16	180.14	6.26	173.88	7.72	172.42
ECMW-17	185.40	29.66	155.74	33.68	151.72
ECMW-18	155.46	5.82	149.64	10.44	145.02
ECMW-19	150.41	1.63	148.78	5.79	144.62
ECMW-20	192.77	30.13	162.64	23.16	169.61
ECMW-21	176.29	18.94	157.35	19.79	156.50
ECMW-22	173.55	8.61	164.94	10.14	163.41

TABLE 3
GROUNDWATER INDICATOR PARAMETER DATA
2006 ANNUAL GROUND WATER REPORT
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

WELL	TEMPERATURE (C)		pH (s.u.)		CONDUCTIVITY (uS)	
	Date		Date		Date	
	4/10/2006 - 4/11/2006	10/31/2006 - 11/2/2006	4/10/2006 - 4/11/2006	10/31/2006 - 11/2/2006	4/10/2006 - 4/11/2006	10/31/2006 - 11/2/2006
ECMW-1	15.8	20.5	4.73	4.98	47	65
ECMW-2	14.7	20.4	5.56	5.2	342	327
ECMW-3	16.9	21.1	6.39	5.37	195	263
ECMW-4	15.9	20.7	4.12	3.69	6251	6700
ECMW-5	16.5	22.1	4.39	4.42	870	824
ECMW-6	18.0	20.1	4.45	3.94	10575	6480
ECMW-7	18.9	21.2	4.36	3.34	11990	5620
ECMW-8	18.8	20.3	3.78	3.44	7528	4010
ECMW-9	18.4	20.9	5.83	5	1906	1548
ECMW-10	19.5	23.3	4.4	3.83	1051	851
ECMW-11	17.3	23.6	4.63	4.06	873	717
ECMW-12	18.7	24.1	6.12	5.3	582	575
ECMW-13	16.1	16.1	4.97	4.71	1209	812
ECMW-14	16.5	15.7	4.72	4.15	960	777
ECMW-15	15.7	16.1	4.95	4.17	72	120
ECMW-16	16.0	15.9	4.79	4.27	278	430
ECMW-17	18.7	14.9	3.35	3.56	711	1340
ECMW-18	14.3	14.8	1.34	5.23	71	88
ECMW-19	17.6	15.2	6.1	5.51	93	129
ECMW-20	NM	15.2	NM	6.2	NM	38
ECMW-21	18.3	15.4	3.05	5.42	63	78
ECMW-22	18.5	15.4	6.22	5.37	123	130.1

NM - Not Measured due to wells pumped dry.

TABLE 4
ECMW-1 ANALYTICAL SUMMARY
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

ECMW-1

Sample Date	pH	Ammonia-N	Nitrate-N	Sulfate	Total Dissolved Solids	Lead (Total)	Lead (Dissolved)	Chromium (Total)	Chromium (Dissolved)	Vanadium (Total)	Vanadium (Dissolved)
	s.u.	mg/L									
3/14/1996	9.7	--	1.7	4.1	--	0.0037	< 0.002	< 0.005	< 0.005	--	--
5/29/2001	5.1	< 0.5	1.83	3.67	42	< 0.04	--	< 0.02	--	--	--
11/1/2001	4.8	< 0.5	2.74	3.34	43	< 0.04	--	< 0.02	--	--	--
6/3/2002	5.5	< 0.5	2.01	4.66	83	< 0.02	< 0.02	< 0.02	< 0.02	--	--
10/30/2002	5.6	0.66	1.56	4.63	44	< 0.015	< 0.015	< 0.02	< 0.02	--	--
12/10/2002	6.1	< 0.5	1.8	6.73	108	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/20/2003	4.77	< 0.5	2.40	3.79	46	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/24/2003	7.10	< 0.5	2.55	5.05	59	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/24/2003	5.26	< 0.5	3.18	6.52	68	< 0.015	< 0.015	< 0.02	< 0.02	--	--
11/19/2003	5.11	< 0.5	1.47	5.85	64	< 0.015	< 0.015	< 0.02	< 0.02	--	--
1/28/2004	5.25	0.56	1.6	6.19	53	< 0.015	< 0.015	< 0.02	< 0.02	--	--
3/16/2004	5.59	< 0.5	2.73	4.22	56	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/18/2004	5.51	< 0.5	4.79	6.57	35	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/13/2004	6.16	< 0.5	3.68	3.88	80	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/14/2004	5.65	0.76	4.26	3.48	53	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	--
11/16/2004	5.11	< 0.5	3.81	3.9	58	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
1/25/2005	5.43	< 0.5	2.88	6.69	86	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
5/24/2005	5.73	0.55	2.45	4.39	52	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
5/24/2005	--	< 0.5	2.39	4.43	52	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
10/18/2005	3.61	--	--	--	--	--	--	--	--	< 0.02	< 0.02
10/18/2005	--	--	--	--	--	--	--	--	--	< 0.02	< 0.02
4/11/2006	4.73	--	--	--	--	--	--	--	--	< 0.02	< 0.02
11/1/2006	4.98	--	--	--	--	--	--	--	--	< 0.02	--

-- - Parameter not analyzed

w.t. = soluble
 part
 temp.
 cont. *same day*?
 NH next 5788
 Ni
 Zn
 TDS? → cont.

TABLE 5
ECMW-2 ANALYTICAL SUMMARY
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

ECMW-2

Sample Date	pH	Ammonia-N	Nitrate-N	Sulfate	Total Dissolved Solids	Lead (Total)	Lead (Dissolved)	Chromium (Total)	Chromium (Dissolved)	Vanadium (Total)	Vanadium (Dissolved)
	s.u.	mg/L									
3/14/1996	9.7	--	< 0.2	17	--	0.018	< 0.002	0.0342	< 0.005	--	--
5/29/2001	5.4	< 0.5	< 0.5	19.6	340	< 0.04	--	0.032	--	--	--
11/1/2001	5.3	< 0.5	< 0.5	22.9	300	< 0.04	--	< 0.02	--	--	--
6/3/2002	6.0	< 0.5	< 0.5	20	396	< 0.02	< 0.02	< 0.02	< 0.02	--	--
10/30/2002	6.1	< 0.5	< 0.5	25.7	517	< 0.015	< 0.015	< 0.02	< 0.02	--	--
12/10/2002	6.7	< 0.5	< 0.5	24	305	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/20/2003	5.31	< 0.5	< 0.5	22.1	309	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/24/2003	7.26	< 0.5	< 0.5	22.9	370	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/24/2003	5.50	< 0.5	< 0.5	24.9	380	< 0.015	< 0.015	< 0.02	< 0.02	--	--
11/19/2003	5.42	< 0.5	< 0.5	28.2	360	< 0.015	< 0.015	< 0.02	< 0.02	--	--
1/28/2004	5.2	< 0.5	< 0.5	25.3	490	< 0.015	< 0.015	< 0.02	< 0.02	--	--
3/16/2004	5.47	< 0.5	< 0.5	20.9	311	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/18/2004	5.4	< 0.5	< 0.5	24	298	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/13/2004	5.68	< 0.5	< 0.5	22.4	330	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/14/2004	5.44	< 0.5	< 0.5	24.3	340	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	--
11/16/2004	6.12	< 0.5	< 0.5	21.5	320	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
1/25/2005	5.38	< 0.5	< 0.5	20.8	300	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
1/25/2005	--	< 0.5	< 0.5	20.5	300	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
5/24/2005	5.87	0.79	< 0.5	22.9	290	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
10/18/2005	5.15	--	< 0.5	--	--	--	--	--	--	< 0.02	< 0.02
4/11/2006	5.56	--	< 0.5	--	--	--	--	--	--	< 0.02	< 0.02
11/1/2006	5.2	--	--	--	--	--	--	--	--	< 0.02	--

"--" - Parameter not analyzed

w.l. - dem
 pH
 temp
 C + S
 A.M.
 No
 Sulf
 Stop 1
 11/28

TABLE 6
 ECMW-3 ANALYTICAL SUMMARY
 EL DORADO CHEMICAL COMPANY
 EL DORADO, ARKANSAS

ECMW-3

Sample Date	pH	Ammonia-N	Nitrate-N	Sulfate	Total Dissolved Solids	Lead (Total)	Lead (Dissolved)	Chromium (Total)	Chromium (Dissolved)	Vanadium (Total)	Vanadium (Dissolved)
	s.u.	mg/L									
3/14/1996	8.0	--	< 0.2	10	--	0.0027	< 0.002	< 0.005	< 0.005	--	--
5/29/2001	6.2	< 0.5	< 0.5	10.6	180	< 0.04	--	< 0.02	--	--	--
11/1/2001	5.4	< 0.5	< 0.5	22.5	240	< 0.04	--	< 0.02	--	--	--
6/3/2002	6.4	< 0.5	< 0.5	11.4	228	< 0.02	< 0.02	< 0.02	< 0.02	--	--
10/30/2002	6.5	< 0.5	< 0.5	21.6	295	< 0.015	< 0.015	< 0.02	< 0.02	--	--
12/10/2002	6.0	< 0.5	< 0.5	16.4	242	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/20/2003	6.05	< 0.5	< 0.5	12.5	207	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/24/2003	6.23	< 0.5	< 0.5	11.8	210	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/24/2003	5.97	< 0.5	< 0.5	27.7	250	< 0.015	< 0.015	< 0.02	< 0.02	--	--
11/19/2003	5.81	< 0.5	< 0.5	23.5	220	< 0.015	< 0.015	< 0.02	< 0.02	--	--
1/28/2004	5.59	< 0.5	< 0.5	26.9	270	< 0.015	< 0.015	< 0.02	< 0.02	--	--
3/16/2004	5.94	< 0.5	< 0.5	11.2	188	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/18/2004	5.86	< 0.5	< 0.5	9.75	176	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/13/2004	5.92	< 0.5	< 0.5	13	260	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/14/2004	5.74	< 0.5	< 0.5	18.3	220	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	--
11/16/2004	5.96	< 0.5	< 0.5	18.8	260	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
1/25/2005	6.33	< 0.5	< 0.5	15.8	240	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
5/24/2005	6.05	0.98	< 0.5	11.8	200	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
10/18/2005	6.04	--	< 0.5	--	--	--	--	--	--	< 0.02	< 0.02
4/12/2006	6.39	--	< 0.5	--	--	--	--	--	--	< 0.02	< 0.02
11/1/2006	5.37	--	--	--	--	--	--	--	--	< 0.02	--

-- - Parameter not analyzed

W.L. - 21m

semi
 pH
 temp
 cond + TDS
 APH
 NO
 SDI

TABLE 7
ECMW-4 ANALYTICAL SUMMARY
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

ECMW-4

Sample Date	pH	Ammonia-N	Nitrate-N	Sulfate	Total Dissolved Solids	Lead (Total)	Lead (Dissolved)	Chromium (Total)	Chromium (Dissolved)	Vanadium (Total)	Vanadium (Dissolved)
	s.u.	mg/L									
3/14/1996	8.1	--	1.3	728	--	0.0025	< 0.002	< 0.005	< 0.005	--	--
8/8/2001	4.1	0.66	< 0.5	925	5100	< 0.04	--	< 0.02	--	--	--
10/30/2001	4.3	< 0.5	< 0.5	936	5200	0.06	--	0.04	--	--	--
6/3/2002	5.2	< 0.5	< 0.5	979	4862	< 0.02	< 0.02	< 0.02	< 0.02	--	--
10/30/2002	4.8	< 0.5	0.62	756	4240	0.02	< 0.015	< 0.02	< 0.02	--	--
12/10/2002	4.4	< 0.5	2.4	976	5360	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/20/2003	4.33	< 0.5	< 0.5	936	4800	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/20/2003	--	< 0.5	< 0.5	1000	5150	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/24/2003	9.08	< 0.5	< 0.5	978	5300	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/24/2003	--	< 0.5	< 0.5	958	5400	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/24/2003	4.78	< 0.5	2.42	989	5200	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/24/2003	--	< 0.5	2.31	952	5200	< 0.015	< 0.015	< 0.02	< 0.02	--	--
11/19/2003	4.13	< 0.5	2.05	848	5300	< 0.015	< 0.015	< 0.02	< 0.02	--	--
1/28/2004	3.88	< 0.5	6.39	1040	5200	< 0.015	< 0.015	< 0.02	< 0.02	--	--
3/16/2004	4.1	< 0.5	< 0.5	919	5204	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/19/2004	4.05	< 0.5	1.45	1040	5300	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/13/2004	4.35	< 0.5	< 0.5	973	5500	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/14/2004	4.44	0.68	< 0.5	943	5200	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	--
11/16/2004	4.26	< 0.5	< 0.5	874	4600	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
1/25/2005	4.63	0.64	8.5	805	4700	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
5/24/2005	4.77	2.14	0.997	1020	4700	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
10/18/2005	4.06	--	0.517	--	--	--	--	--	--	< 0.02	< 0.02
4/12/2006	4.12	--	< 0.5	--	--	< 0.015	--	< 0.02	--	< 0.02	< 0.02
11/1/2006	3.69	< 0.5	< 0.5	--	--	< 0.015	--	< 0.02	--	< 0.02	--

10 250 500

-- Parameter not analyzed

W.D. - 2006

TABLE 8
ECMW-5 ANALYTICAL SUMMARY
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

ECMW-5

pH
temp.
cond. TDS
Al³⁺
NO₃⁻
SO₄²⁻

Sample Date	pH	Ammonia-N	Nitrate-N	Sulfate	Total Dissolved Solids	Lead (Total)	Lead (Dissolved)	Chromium (Total)	Chromium (Dissolved)	Vanadium (Total)	Vanadium (Dissolved)
	s.u.	mg/L									
3/13/1996	5.8	--	4.4	441	--	< 0.002	< 0.002	< 0.005	< 0.005	--	--
8/8/2001	4.6	< 0.5	3.54	657	1000	< 0.04	--	< 0.02	--	--	--
10/30/2001	4.7	< 0.5	3.27	526	980	< 0.04	--	< 0.02	--	--	--
6/3/2002	6.3	< 0.5	3.35	650	934	< 0.02	< 0.02	< 0.02	< 0.02	--	--
10/30/2002	5.4	< 0.5	3.66	582	929	< 0.015	< 0.015	< 0.02	< 0.02	--	--
12/10/2002	5.2	< 0.5	3.26	489	901	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/20/2003	4.75	< 0.5	3.60	654	845	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/24/2003	6.85	< 0.5	3.47	546	950	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/24/2003	4.82	< 0.5	3.53	560	950	< 0.015	< 0.015	< 0.02	< 0.02	--	--
11/19/2003	4.79	< 0.5	2.40	416	780	< 0.015	< 0.015	< 0.02	< 0.02	--	--
1/28/2004	5.03	< 0.5	3.19	476	740	< 0.015	< 0.015	< 0.02	< 0.02	--	--
1/28/2004	--	< 0.5	3.07	482	730	< 0.015	< 0.015	< 0.02	< 0.02	--	--
3/16/2004	5.13	< 0.5	3.6	472	780	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/19/2004	5.85	< 0.5	3.41	455	860	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/19/2004	--	< 0.5	3.3	494	900	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/13/2004	4.96	< 0.5	3.75	511	910	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/14/2004	6.7	0.59	3.75	515	700	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	--
11/16/2004	5.28	< 0.5	3.33	502	850	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
1/25/2005	6.36	< 0.5	3.18	461	870	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
5/24/2005	6.42	3.62	3.21	547	820	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
10/19/2005	4.96	--	--	--	--	--	--	--	--	< 0.02	< 0.02
10/19/2005	--	--	--	--	--	--	--	--	--	< 0.02	< 0.02
4/12/2006	4.39	--	--	--	--	--	--	--	--	< 0.02	< 0.02
11/1/2006	4.42	--	--	--	--	--	--	--	--	< 0.02	--

10 25 50 °C

-- Parameter not analyzed

L-1-4874

pH
 Feqg.
 Crnd : TDS
 NH
 NC
 SO₄

TABLE 9
ECMW-6 ANALYTICAL SUMMARY
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

ECMW-6

Sample Date	pH	Ammonia-N	Nitrate-N	Sulfate	Total Dissolved Solids	Lead (Total)	Lead (Dissolved)	Chromium (Total)	Chromium (Dissolved)	Vanadium (Total)	Vanadium (Dissolved)
	s.u.	mg/L									
3/13/1996	7.7	--	51.1	24	--	0.0026	< 0.002	< 0.005	< 0.005	--	--
8/8/2001	4.3	0.5	298	18.3	2100	< 0.04	--	< 0.02	--	--	--
10/30/2001	4.3	< 0.5	326	15.7	2700	< 0.04	--	< 0.02	--	--	--
6/3/2002	6.1	< 0.5	459	12.1	290	< 0.02	< 0.02	< 0.02	< 0.02	--	--
10/30/2002	5.0	0.51	661	8.13	3840	< 0.015	< 0.015	< 0.02	< 0.02	--	--
12/10/2002	4.6	< 0.5	580	7.15	3360	< 0.015	< 0.015	< 0.02	< 0.02	--	--
12/10/2002	--	< 0.5	588	6.45	3280	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/21/2003	4.30	0.5	608	17.0	4020	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/24/2003	7.41	1.09	681	15.0	4600	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/24/2003	4.28	4.88	857	9.35	5100	< 0.015	< 0.015	< 0.02	< 0.02	--	--
11/19/2003	4.53	5.72	865	10.7	4700	< 0.015	< 0.015	< 0.02	< 0.02	--	--
11/19/2003	--	5.60	866	9.21	4900	< 0.015	< 0.015	< 0.02	< 0.02	--	--
1/28/2004	4.36	12.3	835	17.2	5300	< 0.015	< 0.015	< 0.02	< 0.02	--	--
3/16/2004	4.4	13	826	17.2	5106	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/19/2004	5.04	21.4	915	13.4	5800	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/13/2004	4.74	17.9	995	11.7	6100	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/13/2004	--	17.5	868	11.7	6200	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/14/2004	5.51	20	1130	3.84	6300	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	--
11/16/2004	4.59	37.6	1140	4.4	7100	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
1/25/2005	5.36	43.1	1130	3.14	6600	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
5/24/2005	4.57	68.2	1410	5.19	6700	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
10/18/2005	4.43	110	1350	--	--	--	--	--	--	< 0.02	< 0.02
4/11/2006	4.45	154	1680	--	--	--	--	--	--	< 0.02	< 0.02
11/1/2006	3.94	170	2390	--	--	--	--	--	--	< 0.02	--

-- - Parameter not analyzed

W.L. - 4/2006
 pH
 Fevery
 Crad. TDS
 NH
 NO
 SWG

TABLE 10
ECMW-7 ANALYTICAL SUMMARY
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

ECMW-7

Sample Date	pH	Ammonia-N	Nitrate-N	Sulfate	Total Dissolved Solids	Lead (Total)	Lead (Dissolved)	Chromium (Total)	Chromium (Dissolved)	Vanadium (Total)	Vanadium (Dissolved)
	s.u.	mg/L									
3/13/1996	8.1	--	282	380	--	0.0221	0.0185	0.0078	< 0.005	--	--
8/8/2001	9.7	184	336	316	1300	< 0.04	--	< 0.02	--	--	--
10/30/2001	3.5	< 0.5	189	322	1056	< 0.04	--	< 0.02	--	--	--
10/30/2001	--	< 0.5	186	325	1100	< 0.04	--	< 0.02	< 0.02	--	--
6/3/2002	4.4	190	361	363	1324	0.031	< 0.015	< 0.02	< 0.02	--	--
6/3/2002	--	205	358	360	1386	0.027	< 0.02	< 0.02	< 0.02	--	--
10/30/2002	4.2	167	294	345	1080	0.017	< 0.015	< 0.02	< 0.02	--	--
12/10/2002	3.7	180	344	275	1316	< 0.015	0.016	< 0.02	< 0.02	--	--
12/10/2002	--	149	349	276	1350	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/21/2003	3.66	244	563	298	1850	0.02	0.017	< 0.02	< 0.02	--	--
7/24/2003	7.05	95.1	141	378	1400	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/24/2003	3.84	116	953	341	1700	0.02	0.018	< 0.02	< 0.02	--	--
11/19/2003	4.03	124	152	476	1500	< 0.015	< 0.015	< 0.02	< 0.02	--	--
1/28/2004	3.99	147	300	644	1300	0.018	< 0.015	< 0.02	< 0.02	--	--
3/16/2004	3.98	190	310	496	1280	0.018	0.017	< 0.02	< 0.02	--	--
5/19/2004	3.95	204	337	524	1500	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/13/2004	3.99	73.4	150	498	1600	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/14/2004	4.45	26.5	75.5	142	1000	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	--
9/14/2004	--	25.9	76	143	990	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	--
11/16/2004	3.97	219	370	428	1700	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
1/25/2005	4.08	281	480	312	1700	0.016	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
5/24/2005	4.21	323	595	349	1400	0.022	0.017	< 0.02	< 0.02	< 0.02	< 0.02
10/18/2005	3.9	14.3	91.6	--	--	< 0.015	< 0.015	--	--	< 0.02	< 0.02
4/11/2006	4.36	267	516	--	--	0.017	< 0.015	--	--	< 0.02	< 0.02
11/1/2006	3.34	57.4	105	--	--	< 0.015	--	--	--	< 0.02	--

-- - Parameter not analyzed

6/1/2006

TABLE 11
ECMW-8 ANALYTICAL SUMMARY
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

27
 10/1/2006
 coriolis
 anal
 864

ECMW-8

Sample Date	pH	Ammonia-N	Nitrate-N	Sulfate	Total Dissolved Solids	Lead (Total)	Lead (Dissolved)	Chromium (Total)	Chromium (Dissolved)	Vanadium (Total)	Vanadium (Dissolved)
	s.u.	mg/L									
3/13/1996	7.9	--	1010	68.3	--	0.0234	0.0238	< 0.005	< 0.005	--	--
10/30/2001	3.9	0.94	1030	81.1	5000	< 0.04	--	< 0.02	--	--	--
6/3/2002	5.4	551	1070	77.8	4246	< 0.02	< 0.02	< 0.02	< 0.02	--	--
6/3/2002	--	551	1200	70.4	4378	0.031	< 0.02	< 0.02	< 0.02	--	--
10/30/2002	4.4	406	1330	151	4560	< 0.015	< 0.015	< 0.02	< 0.02	--	--
12/10/2002	4.0	220	1080	46.2	5120	< 0.015	< 0.015	< 0.02	< 0.02	--	--
12/10/2002	--	261	1030	47.6	5140	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/21/2003	3.99	214	1250	209	4200	0.019	0.019	< 0.02	< 0.02	--	--
5/21/2003	--	167	1270	162	4010	0.019	0.019	< 0.02	< 0.02	--	--
7/24/2003	6.04	179	472	904	3700	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/24/2003	--	177	478	913	3700	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/23/2003	3.93	157.5	524	870	3400	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/23/2003	--	153	539	899	3400	< 0.015	< 0.015	< 0.02	< 0.02	--	--
11/19/2003	4.99	206	464	738	3200	< 0.015	< 0.015	< 0.02	< 0.02	--	--
1/28/2004	4.29	45.7	142	854	1800	< 0.015	< 0.015	< 0.02	< 0.02	--	--
3/16/2004	4.18	88	203	805	2221	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/19/2004	4.07	120	298	789	2500	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/13/2004	4.48	120	354	767	2600	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/14/2004	3.99	107	392	743	2400	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	--
11/16/2004	4.01	82.1	304	808	2800	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
1/25/2005	4.09	48.9	126	1200	2700	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
5/24/2005	6.12	79.6	225	1220	2700	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
10/18/2005	4.03	84.8	246	--	--	--	--	--	--	< 0.02	< 0.02
4/11/2006	3.78	53.5	194	--	--	--	--	--	--	< 0.02	< 0.02
11/1/2006	3.44	74.5	224	--	--	--	--	--	--	< 0.02	--

-- - Parameter not analyzed

W.L. - 2006

TABLE 12
ECMW-9 ANALYTICAL SUMMARY
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

pH
 Temp
 wind - TDS
 NH
 NO
 SO₄

ECMW-9

Sample Date	pH	Ammonia-N	Nitrate-N	Sulfate	Total Dissolved Solids	Lead (Total)	Lead (Dissolved)	Chromium (Total)	Chromium (Dissolved)	Vanadium (Total)	Vanadium (Dissolved)
	s.u.	mg/L									
3/14/1996	9	--	37.3	621	--	0.004	< 0.002	< 0.005	< 0.005	--	--
6/27/2001	5.4	< 0.5	28.8	520	1600	< 0.04	--	< 0.02	--	--	--
10/30/2001	5.5	< 0.5	26.7	514	2600	< 0.04	--	< 0.02	--	--	--
6/3/2002	6	< 0.5	24.4	639	1597	< 0.02	< 0.02	< 0.02	< 0.02	--	--
10/30/2002	6	18.8	59	655	1630	< 0.015	< 0.015	< 0.02	< 0.02	--	--
12/10/2002	5.2	0.7	28.1	556	1680	< 0.015	< 0.015	< 0.02	< 0.02	--	--
12/10/2002	--	< 0.5	31.5	555	1640	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/21/2003	5.33	< 0.5	26.3	568	1600	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/24/2003	7.05	< 0.5	28.4	547	1500	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/23/2003	5.24	< 0.5	146	531	1500	< 0.015	< 0.015	< 0.02	< 0.02	--	--
11/19/2003	5.72	< 0.5	28.0	532	1600	< 0.015	< 0.015	< 0.02	< 0.02	--	--
1/28/2004	5.53	< 0.5	29.2	575	1500	< 0.015	< 0.015	< 0.02	< 0.02	--	--
3/16/2004	5.88	< 0.5	30.6	528	1524	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/19/2004	5.47	< 0.5	27.4	517	1600	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/13/2004	6.87	< 0.5	24.6	588	1600	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/14/2004	5.04	1.14	25.3	548	1500	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	--
11/16/2004	5.67	0.7	24	549	580	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
1/25/2005	5.57	< 0.5	26.3	518	1600	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
5/24/2005	5.77	< 0.5	27.4	600	1600	0.018	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
10/18/2005	5.64	--	29.9	--	--	--	--	--	--	< 0.02	< 0.02
4/11/2006	5.83	--	29.5	--	--	--	--	--	--	< 0.02	< 0.02
11/1/2006	5	--	40.2	--	--	--	--	--	--	< 0.02	--

"--" - Parameter not analyzed

w.l. - down
 temp
 (and TDS)
 Amine
 NH
 NO
 SO₄

TABLE 13
ECMW-10 ANALYTICAL SUMMARY
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

ECMW-10

Sample Date	pH	Ammonia-N	Nitrate-N	Sulfate	Total Dissolved Solids	Lead (Total)	Lead (Dissolved)	Chromium (Total)	Chromium (Dissolved)	Vanadium (Total)	Vanadium (Dissolved)
	s.u.	mg/L									
3/13/1996	7.7	--	257	89	--	0.0052	0.0039	< 0.005	< 0.005	--	--
6/27/2001	4.4	< 0.5	156	100	1300	< 0.04	--	0.025	--	--	--
10/30/2001	3.9	< 0.5	153	134	1400	< 0.04	--	0.04	--	--	--
6/3/2002	5.3	< 0.5	138	84.9	1122	< 0.02	< 0.02	< 0.02	< 0.02	--	--
10/30/2002	5.6	1.84	137	140	968	< 0.015	< 0.015	< 0.02	< 0.02	--	--
12/10/2002	4.5	< 0.5	70.4	52.2	1120	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/21/2003	4.08	< 0.5	148	96.0	1140	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/24/2003	5.56	< 0.5	118	108	1000	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/23/2003	4.18	< 0.5	147	127	1000	< 0.015	< 0.015	< 0.02	< 0.02	--	--
11/19/2003	4.38	< 0.5	119	104	970	< 0.015	< 0.015	< 0.02	< 0.02	--	--
1/28/2004	4.6	< 0.5	126	129	1000	< 0.015	< 0.015	< 0.02	< 0.02	--	--
3/16/2004	5.01	< 0.5	135	128	1078	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/18/2004	5.07	< 0.5	123	139	1055	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/13/2004	4.54	< 0.5	114	112	920	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/14/2004	4.7	0.77	123	137	1000	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	--
11/16/2004	4.79	< 0.5	94.4	71.1	800	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
1/25/2005	4.63	< 0.5	115	114	1000	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
5/25/2005	4.93	1.45	120	142	990	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
10/18/2005	4.3	--	97.7	--	--	--	--	--	--	< 0.02	< 0.02
4/11/2006	4.4	--	97.5	--	--	--	--	--	--	< 0.02	< 0.02
4/11/2006	--	--	95.5	--	--	--	--	--	--	< 0.02	< 0.02
11/1/2006	3.83	--	71	--	--	< 0.015	--	--	--	< 0.02	--

"--" - Parameter not analyzed

6-1-2006

TABLE 14
ECMW-II ANALYTICAL SUMMARY
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

pH
 temp
 cond. TDS }
 NH
 As
 SO4

ECMW-11

Sample Date	pH	Ammonia-N	Nitrate-N	Sulfate	Total Dissolved Solids	Lead (Total)	Lead (Dissolved)	Chromium (Total)	Chromium (Dissolved)	Vanadium (Total)	Vanadium (Dissolved)
	s.u.	mg/L				< 0.002	< 0.002	< 0.005	< 0.005	--	--
3/13/1996	11.1	--	22.1	578	--	< 0.002	< 0.002	< 0.005	< 0.005	--	--
8/8/2001	4.3	4.21	7.99	611	1100	< 0.04	--	< 0.02	--	--	--
10/30/2001	4	< 0.5	21.9	334	610	< 0.04	--	< 0.02	--	--	--
6/3/2002	5.4	< 0.5	6.46	565	897	< 0.02	< 0.02	< 0.02	< 0.02	--	--
6/3/2002	--	3.9	5.81	586	968	< 0.02	< 0.015	< 0.02	< 0.02	--	--
10/30/2002	4.8	18	9.22	362	625	< 0.015	< 0.015	< 0.02	< 0.02	--	--
12/10/2002	4.5	10.73	6.12	414	809	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/21/2003	4.45	7.84	6.02	333	576	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/24/2003	6.66	25.6	6.68	278	540	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/23/2003	4.29	5.25	4.24	397	660	< 0.015	< 0.015	< 0.02	< 0.02	--	--
11/19/2003	4.61	12.0	6.26	289	570	< 0.015	< 0.015	< 0.02	< 0.02	--	--
11/19/2003	--	14.3	6.85	276	340	< 0.015	< 0.015	< 0.02	< 0.02	--	--
1/28/2004	5.04	19.6	6.72	303	520	< 0.015	< 0.015	< 0.02	< 0.02	--	--
3/16/2004	5	15	9.63	262	511	< 0.015	< 0.015	< 0.02	< 0.02	--	--
3/16/2004	--	18	8.79	278	535	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/18/2004	5.17	19.9	13.5	228	452	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/13/2004	4.53	17.4	13.6	222	480	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/14/2004	4.61	14.5	9.85	247	480	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	--
11/17/2004	4.86	19.1	11.1	209	450	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
1/25/2005	4.64	--	--	--	--	--	--	--	--	--	--
5/25/2005	5.05	20.6	1.12	3.58	410	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
10/18/2005	4.42	10.6	2.02	--	--	--	--	--	--	< 0.02	< 0.02
4/11/2006	4.63	10.9	6.01	--	--	--	--	--	--	< 0.02	< 0.02
11/1/2006	4.06	4.88	1.43	--	--	--	--	--	--	< 0.02	--

-- - Parameter not analyzed

60 L - 26mc

10
temp
concent.

NH4
KCl
SO4
+ Cr
2 g

TABLE 15
ECMW-12 ANALYTICAL SUMMARY
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

ECMW-12

Sample Date	pH	Ammonia-N	Nitrate-N	Sulfate	Total Dissolved Solids	Lead (Total)	Lead (Dissolved)	Chromium (Total)	Chromium (Dissolved)	Vanadium (Total)	Vanadium (Dissolved)
	s.u.	mg/L									
3/13/1996	6.1	--	< 0.2	9.6	--	< 0.002	< 0.002	< 0.005	< 0.005	--	--
6/27/2001	5.9	2.2	< 0.5	13	330	< 0.04	--	< 0.02	--	--	--
6/4/2002	6	0.9	< 0.5	4.85	510	< 0.02	< 0.02	< 0.02	< 0.02	--	--
6/4/2002	--	1.4	< 0.5	6.01	500	< 0.02	< 0.02	< 0.02	< 0.02	--	--
10/30/2002	6.1	4.2	< 0.5	21.6	382	< 0.015	< 0.015	< 0.02	< 0.02	--	--
12/10/2002	5.8	2.3	< 0.5	12.5	424	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/21/2003	5.71	1.89	< 0.5	5.31	307	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/24/2003	4.76	1.74	< 0.5	18.7	380	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/24/2003	5.45	1.43	< 0.5	26	440	< 0.015	< 0.015	< 0.02	< 0.02	--	--
11/19/2003	5.79	1.83	< 0.5	30.6	460	< 0.015	< 0.015	< 0.02	< 0.02	--	--
1/28/2004	6.44	1.87	< 0.5	6.76	320	< 0.015	< 0.015	< 0.02	< 0.02	--	--
3/16/2004	5.96	2.2	< 0.5	4.04	252	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/19/2004	5.8	1.94	< 0.5	5.11	360	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/13/2004	6.78	1.2	< 0.5	7.18	220	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/15/2004	5.8	2.38	< 0.5	23	440	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	--
11/16/2004	5.73	1.55	< 0.5	18.5	340	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
1/26/2005	5.91	1.98	< 0.5	4.88	360	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
5/25/2005	5.96	1.02	< 0.5	11.2	370	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
10/20/2005	5.3	1.06	--	--	--	--	--	--	--	< 0.02	< 0.02
4/11/2006	6.12	1.58	--	--	--	--	--	--	--	< 0.02	< 0.02
11/1/2006	5.3	1.37	--	--	--	--	--	--	--	< 0.02	--

"--" - Parameter not analyzed

W.L. - 2006

pH
temp
cond-TDS { 2006

NH₃
NO_x
SO₄ { 2006
2 yrs.

TABLE 16
ECMW-13 ANALYTICAL SUMMARY
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

ECMW-13

Sample Date	pH	Ammonia-N	Nitrate-N	Sulfate	Total Dissolved Solids	Lead (Total)	Lead (Dissolved)	Chromium (Total)	Chromium (Dissolved)	Vanadium (Total)	Vanadium (Dissolved)
	s.u.	mg/L									
3/13/1996	5.6	--	0.2	809	--	< 0.002	< 0.002	< 0.005	< 0.005	--	--
6/5/2001	5.6	< 0.5	< 0.5	538	1400	< 0.04	--	< 0.02	--	--	--
10/30/2001	5.3	< 0.5	< 0.5	606	1300	< 0.04	--	< 0.02	--	--	--
6/4/2002	5.7	< 0.5	< 0.5	372	718	< 0.02	< 0.02	< 0.02	< 0.02	--	--
10/30/2002	6.1	1.28	< 0.5	538	1030	< 0.015	< 0.015	< 0.02	< 0.02	--	--
12/10/2002	5.5	< 0.5	< 0.5	598	1320	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/20/2003	5.51	< 0.5	< 0.5	697	1330	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/23/2003	6.05	< 0.5	< 0.5	358	820	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/24/2003	4.70	0.71	< 0.5	458	920	< 0.015	< 0.015	< 0.02	< 0.02	--	--
11/19/2003	4.91	< 0.5	0.62	310	680	< 0.015	< 0.015	< 0.02	< 0.02	--	--
1/28/2004	5.02	< 0.5	< 0.5	565	1100	< 0.015	< 0.015	< 0.02	< 0.02	--	--
3/16/2004	5.19	< 0.5	< 0.5	550	1175	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/18/2004	5.27	< 0.5	< 0.5	296	647	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/13/2004	6.02	< 0.5	< 0.5	510	1100	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/14/2004	5.03	0.5	< 0.5	416	940	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	--
9/14/2004	--	0.51	< 0.5	425	960	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	--
11/16/2004	4.83	< 0.5	< 0.5	250	1500	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
1/26/2005	4.86	< 0.5	0.72	564	1200	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
5/25/2005	5.07	0.54	< 0.5	302	580	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
10/19/2005	4.19	--	--	--	--	--	--	--	--	< 0.02	< 0.02
4/12/2006	4.97	--	--	--	--	--	--	--	--	< 0.02	< 0.02
11/2/2006	4.71	< 0.5	< 0.5	--	--	--	< 0.015	< 0.02	--	< 0.02	--

"--" - Parameter not analyzed

W. J. Smith
P.L.

TABLE 17
ECMW-14 ANALYTICAL SUMMARY
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

J.H.
N.C.
B.W. } *not in compliance*

ECMW-14

Sample Date	pH	Ammonia-N	Nitrate-N	Sulfate	Total Dissolved Solids	Lead (Total)	Lead (Dissolved)	Chromium (Total)	Chromium (Dissolved)	Vanadium (Total)	Vanadium (Dissolved)
	s.u.	mg/L									
3/13/1996	4.6	--	11.9	139	--	< 0.002	< 0.002	< 0.005	< 0.005	--	--
8/8/2001	4.3	< 0.5	75	175	1000	< 0.04	--	< 0.02	--	--	--
10/30/2001	4.5	< 0.5	25.2	211	790	< 0.04	--	< 0.02	--	--	--
6/4/2002	5.6	< 0.5	26.5	187	675	< 0.02	< 0.02	< 0.02	< 0.02	--	--
10/30/2002	6.3	5.32	17	288	669	< 0.015	< 0.015	< 0.02	< 0.02	--	--
12/10/2002	5.3	< 0.5	23.4	230	709	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/20/2003	4.85	< 0.5	44.9	227	865	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/23/2003	4.62	< 0.5	23.1	221	750	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/23/2003	5.00	< 0.5	20.3	275	700	< 0.015	< 0.015	< 0.02	< 0.02	--	--
11/19/2003	4.92	< 0.5	16.1	227	740	< 0.015	< 0.015	< 0.02	< 0.02	--	--
1/28/2004	5.19	< 0.5	24.5	262	710	0.028	< 0.015	0.022	< 0.02	--	--
3/16/2004	5.34	< 0.5	33.4	211	792	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/18/2004	5.23	< 0.5	32.6	234	784	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/13/2004	5.05	< 0.5	45.7	226	820	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/13/2004	--	< 0.5	47.3	234	840	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/14/2004	4.72	< 0.5	57.7	232	900	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	--
11/16/2004	4.88	< 0.5	21.7	168	660	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
1/26/2005	4.89	< 0.5	62.4	204	930	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
5/25/2005	5.06	< 0.5	31	204	700	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
10/19/2005	4.96	--	36	--	--	--	--	--	--	< 0.02	< 0.02
4/12/2006	4.72	--	48.2	--	--	--	--	--	--	< 0.02	< 0.02
4/12/2006	--	--	48.5	--	--	--	--	--	--	< 0.02	< 0.02
11/2/2006	4.15	--	13.6	--	--	--	--	--	--	< 0.02	--

-- - Parameter not analyzed

W.L. - 12/06
part
temp
wind, 1000 ft
RH
NO_x, 1000 mg/m³
SO₂, 2 mg/m³

TABLE 18
ECMW-15 ANALYTICAL SUMMARY
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

ECMW-15

Sample Date	pH	Ammonia-N	Nitrate-N	Sulfate	Total Dissolved Solids	Lead (Total)	Lead (Dissolved)	Chromium (Total)	Chromium (Dissolved)	Vanadium (Total)	Vanadium (Dissolved)
	s.u.	mg/L									
3/13/1996	6.4	--	34.5	4.4	--	< 0.002	< 0.002	< 0.005	< 0.005	--	--
8/8/2001	4.3	< 0.5	19.1	7.8	140	< 0.04	--	< 0.02	--	--	--
10/30/2001	4.3	< 0.5	12.6	10.2	110	< 0.04	--	< 0.02	--	--	--
6/4/2002	5.4	< 0.5	10.7	11.1	100	< 0.02	< 0.02	< 0.02	< 0.02	--	--
10/30/2002	5.4	1.16	18.2	9.22	120	< 0.015	< 0.015	< 0.02	< 0.02	--	--
12/10/2002	5.8	0.5	12.2	10.8	120	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/20/2003	4.75	< 0.5	9.45	13	66	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/23/2003	4.77	< 0.5	7.63	12.8	100	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/23/2003	4.49	< 0.5	9.62	11.8	180	< 0.015	< 0.015	< 0.02	< 0.02	--	--
11/19/2003	4.89	< 0.5	9.81	12.6	100	< 0.015	< 0.015	< 0.02	< 0.02	--	--
1/28/2004	5.56	3.96	4.52	18.6	81	< 0.015	< 0.015	< 0.02	< 0.02	--	--
3/16/2004	5.68	< 0.5	7.66	13.9	97	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/18/2004	5.75	< 0.5	6.82	15.2	83	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/13/2004	5.39	< 0.5	9.52	11	110	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/14/2004	4.67	0.61	8.22	13.2	100	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	--
11/16/2004	4.92	< 0.5	7.42	11.8	110	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
1/25/2005	4.68	< 0.5	7.62	11.8	110	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
5/25/2005	4.94	< 0.5	5.79	16.1	79	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
10/19/2005	4.77	--	5.63	--	--	--	--	--	--	< 0.02	< 0.02
4/11/2006	4.95	--	1.6	--	--	--	--	--	--	< 0.02	< 0.02
11/2/2006	4.17	--	2.54	--	--	--	--	--	--	< 0.02	--

-- - Parameter not analyzed

WU 1-1, 2002

Temp
Long-Term
A.C.
N.H.
Soil } River water
Sed.

TABLE 19
ECMW-16 ANALYTICAL SUMMARY
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

ECMW-16

Sample Date	pH	Ammonia-N	Nitrate-N	Sulfate	Total Dissolved Solids	Lead (Total)	Lead (Dissolved)	Chromium (Total)	Chromium (Dissolved)	Vanadium (Total)	Vanadium (Dissolved)
	s.u.	mg/L									
3/13/1996	5.7	--	137	4.6	--	0.0036	0.0034	< 0.005	< 0.005	--	--
6/5/2001	4.3	4.61	134	5.09	1100	< 0.04	--	< 0.02	--	--	--
10/30/2001	3.9	< 0.5	58.4	6.44	330	< 0.04	--	< 0.02	--	--	--
6/4/2002	5.0	6.2	72.5	7.19	396	< 0.02	< 0.02	< 0.02	< 0.02	--	--
6/4/2002	--	5.0	72.6	6.82	404	< 0.02	< 0.015	< 0.02	< 0.02	--	--
10/30/2002	5.0	11.6	72	9.21	263	< 0.015	< 0.015	< 0.02	< 0.02	--	--
12/10/2002	5.9	2.99	89.4	5.64	595	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/20/2003	4.42	3.69	90.8	6.55	555	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/23/2003	4.81	6.45	72.3	7.15	430	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/23/2003	4.31	5.97	72.8	7.09	400	< 0.015	< 0.015	< 0.02	< 0.02	--	--
11/19/2003	4.99	8.61	44.3	9.78	230	< 0.015	< 0.015	< 0.02	< 0.02	--	--
1/28/2004	5.61	5.66	59	9.84	280	< 0.015	< 0.015	< 0.02	< 0.02	--	--
3/16/2004	5.83	8.39	34.8	11.2	180	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/18/2004	5.95	10.4	31.9	13.3	167	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/18/2004	--	11.5	31.5	13.8	135	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/13/2004	5.5	9.35	40.2	7.7	160	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/14/2004	4.49	8.57	47.1	7.83	190	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	--
11/16/2004	5.08	6.49	38.2	8.11	310	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
11/16/2004	--	6.87	38.3	8.02	270	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
1/25/2005	4.54	4.15	43.1	8.13	310	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
5/25/2005	4.62	7.62	26.8	10.2	110	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
10/19/2005	4.66	6.28	17	--	--	--	--	--	--	< 0.02	< 0.02
4/11/2006	4.79	2.01	17	--	--	--	--	--	--	< 0.02	< 0.02
11/2/2006	4.27	2.16	24.8	--	--	--	--	--	--	< 0.02	--

C

"--" - Parameter not analyzed

W.L. - 2. Mar.

temp
cond. TDS
N₂

NH₃
NH₄ & ammonia, 24 hr

TABLE 20
ECMW-17 ANALYTICAL SUMMARY
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

ECMW-17

Sample Date	pH	Ammonia-N	Nitrate-N	Sulfate	Total Dissolved Solids	Lead (Total)	Lead (Dissolved)	Chromium (Total)	Chromium (Dissolved)	Vanadium (Total)	Vanadium (Dissolved)
	s.u.	mg/L									
3/13/1996	4.9	--	45	145	--	< 0.002	< 0.002	< 0.005	< 0.005	--	--
6/5/2001	4.4	1.16	54.2	87.7	600	< 0.04	--	< 0.02	--	--	--
10/30/2001	4.1	< 0.5	106	11.5	760	< 0.04	--	< 0.02	--	--	--
6/4/2002	5.1	< 0.5	83.4	8.04	603	< 0.02	< 0.02	< 0.02	< 0.02	--	--
10/30/2002	5.1	2.36	92	9.53	540	< 0.015	< 0.015	< 0.02	< 0.02	--	--
12/10/2002	5.6	1.22	101	28.2	751	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/20/2003	4.54	< 0.5	83.6	17.1	603	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/23/2003	4.74	0.58	74.7	9.31	548	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/23/2003	5.25	< 0.5	64.3	6.98	400	< 0.015	< 0.015	< 0.02	< 0.02	--	--
11/19/2003	5.28	0.55	77.3	11.8	530	< 0.015	< 0.015	< 0.02	< 0.02	--	--
1/28/2004	6.54	< 0.5	81.3	42.8	560	< 0.015	< 0.015	< 0.02	< 0.02	--	--
3/16/2004	6.62	8.14	129	64	983	< 0.015	< 0.015	< 0.02	< 0.02	--	--
5/18/2004	6.73	8.05	134	60.1	944	< 0.015	< 0.015	< 0.02	< 0.02	--	--
7/13/2004	6.57	< 0.5	67.6	6.54	460	< 0.015	< 0.015	< 0.02	< 0.02	--	--
9/14/2004	4.4	1.42	78.4	3.14	570	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	--
11/16/2004	5.41	9.55	219	54.8	1800	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
1/26/2005	4.54	1.79	53.3	12.2	360	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
5/25/2005	4.86	< 0.5	56.4	19.1	390	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
5/25/2005	--	< 0.5	58.4	4.27	440	< 0.015	< 0.015	< 0.02	< 0.02	< 0.02	< 0.02
10/20/2005	5.74	0.67	48.9	--	--	--	--	--	--	< 0.02	< 0.02
4/11/2006	3.35	1.15	66.6	--	--	--	--	--	--	< 0.02	< 0.02
11/2/2006	3.56	4.81	47.6	--	--	--	--	--	--	< 0.02	--

i C

"--" - Parameter not analyzed

W. I. ...
temp
cond - tns

TABLE 21
ECMW-18 ANALYTICAL SUMMARY
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

N H
140 °C
204 } semi-anal
2 yr

ECMW-18

Sample Date	pH	Ammonia-N	Nitrate-N	Sulfate	Total Dissolved Solids	Lead (Total)	Lead (Dissolved)	Chromium (Total)	Chromium (Dissolved)	Vanadium (Total)	Vanadium (Dissolved)
	s.u.	mg/L									
3/14/1996	6.6	--	0.4	3.3	--	0.017	< 0.002	0.0194	< 0.005	--	--
10/30/2001	5.4	< 0.5	< 0.5	3.74	300	< 0.04	--	0.05	--	--	--
6/4/2002	6.2	< 0.5	< 0.5	8.38	796	0.115	< 0.02	0.147	0.137	--	--
10/30/2002	6.3	0.43	< 0.5	3.22	258	0.018	< 0.015	< 0.02	< 0.02	--	--
12/10/2002	6.4	< 0.5	< 0.5	5.01	495	< 0.015	< 0.015	0.02	< 0.02	--	--
5/21/2003	6.01	0.59	< 0.5	7.08	786	0.029	< 0.015	0.02	< 0.02	--	--
7/23/2003	5.38	< 0.5	113	115	2000	0.029	< 0.015	0.047	< 0.02	--	--
9/24/2003	5.54	5.79	< 0.5	3.81	590	0.025	< 0.015	0.036	0.026	--	--
11/19/2003	5.90	< 0.5	< 0.5	9.68	300	< 0.015	< 0.015	< 0.02	< 0.02	--	--
1/28/2004	6.17	--	--	--	--	--	--	--	--	--	--
3/16/2004	6.4	< 0.5	< 0.5	7.01	666	0.021	< 0.015	0.027	0.021	--	--
5/19/2004	6.43	< 0.5	< 0.5	5.63	720	0.063	< 0.015	0.088	< 0.02	--	--
7/13/2004	6.05	< 0.5	< 0.5	5.68	1100	0.033	< 0.015	0.043	< 0.02	--	--
9/15/2004	5.89	0.56	< 0.5	3.88	1200	0.109	0.038	0.12	0.05	0.213	--
11/17/2004	5.96	< 0.5	< 0.5	4.61	1100	< 0.015	< 0.015	0.027	< 0.02	0.045	< 0.02
11/17/2004	--	< 0.5	< 0.5	4.85	1100	0.03	< 0.015	0.043	< 0.02	0.079	< 0.02
1/26/2005	5.9	< 0.5	< 0.5	5.13	1000	0.056	< 0.015	0.055	0.022	0.099	0.031
5/25/2005	6.04	< 0.5	< 0.5	5.18	700	0.018	< 0.015	0.032	< 0.02	0.048	0.03
10/19/2005	5.82	--	--	--	--	< 0.015	< 0.015	< 0.02	0.052	< 0.02	0.081
4/12/2006	1.34	--	--	--	--	< 0.015	0.016	< 0.02	0.065	< 0.02	< 0.02
11/2/2006	5.23	--	--	--	--	< 0.015	--	< 0.02	--	0.02	--

-- - Parameter not analyzed

u.1
 temp
 cond-TDS }
 atm

pH }
 NO }
 Zn }
 Semiliquor 2015

TABLE 22
ECMW-19 ANALYTICAL SUMMARY
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

ECMW-19

Sample Date	pH	Ammonia-N	Nitrate-N	Sulfate	Total Dissolved Solids	Lead (Total)	Lead (Dissolved)	Chromium (Total)	Chromium (Dissolved)	Vanadium (Total)	Vanadium (Dissolved)
	s.u.	mg/L									
1/28/2004	6.73	0.64	<0.5	8.32	1400	0.122	0.045	0.077	0.077	--	--
3/16/2004	6.49	<0.5	<0.5	6.38	238	0.019	<0.015	<0.02	<0.02	--	--
3/16/2004	--	<0.5	<0.5	7.63	164	0.021	<0.015	<0.02	<0.02	--	--
5/19/2004	6.19	<0.5	<0.5	9.05	220	<0.015	<0.015	<0.02	<0.02	--	--
7/13/2004	6.37	<0.5	<0.5	6.85	180	<0.015	<0.015	<0.02	<0.02	--	--
9/15/2004	6.23	0.54	<0.5	4.11	120	<0.015	<0.015	<0.02	<0.02	<0.02	--
11/17/2004	6.02	<0.5	<0.5	4.63	130	<0.015	<0.015	<0.02	<0.02	<0.02	<0.02
1/26/2005	5.82	<0.5	<0.5	3.67	100	<0.015	<0.015	<0.02	<0.02	<0.02	<0.02
5/25/2005	5.88	<0.5	<0.5	4.56	120	<0.015	<0.015	<0.02	<0.02	<0.02	<0.02
10/19/2005	6.27	<0.5	<0.5	--	--	<0.015	<0.015	<0.02	<0.02	<0.02	<0.02
4/12/2006	6.1	<0.5	<0.5	--	--	<0.015	<0.015	<0.02	<0.02	<0.02	<0.02
11/2/2006	5.51	<0.5	<0.5	--	--	<0.015	--	<0.02	--	<0.02	--

-- - Parameter not analyzed

W.L. - serum
S.H.
Kemp
Conc - TDS
X H
NO
SO₄
Acidifying
pH
temp
min

TABLE 23
ECMW-20 ANALYTICAL SUMMARY
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

ECMW-20

Sample Date	pH	Ammonia-N	Nitrate-N	Sulfate	Total Dissolved Solids	Lead (Total)	Lead (Dissolved)	Chromium (Total)	Chromium (Dissolved)	Vanadium (Total)	Vanadium (Dissolved)
	s.u.	mg/L									
1/28/2004	5.93	<0.5	<0.5	11.4	730	0.024	<0.015	0.034	<0.02	--	--
3/16/2004	6.51	<0.5	<0.5	15.9	186	<0.015	<0.015	<0.02	<0.02	--	--
5/19/2004	6.23	<0.5	<0.5	10.6	140	<0.015	<0.015	<0.02	<0.02	--	--
7/13/2004	5.8	<0.5	<0.5	17.2	130	<0.015	<0.015	<0.02	<0.02	--	--
9/15/2004	5.61	0.86	<0.5	17.2	120	<0.015	<0.015	<0.02	<0.02	<0.02	--
11/17/2004	5.36	<0.5	<0.5	13.5	160	<0.015	<0.015	<0.02	<0.02	<0.02	<0.02
1/26/2005	6.02	<0.5	<0.5	13.8	160	0.017	<0.015	<0.02	<0.02	<0.02	<0.02
5/26/2005	6.03	<0.5	1.86	7.72	85	<0.015	<0.015	<0.02	<0.02	<0.02	<0.02
10/20/2005	--	<0.5	<0.5	--	--	<0.015	<0.015	<0.02	<0.02	<0.02	<0.02
4/12/2006	--	3.58	6.29	--	--	<0.015	<0.015	<0.02	<0.02	<0.02	<0.02
11/2/2006	6.2	<0.5	1.21	--	--	<0.015	--	<0.02	--	<0.02	--

-- - Parameter not analyzed

V.O.L. - 22 ml
 pH -
 temp
 cont. TDS } 22 ml

NH3
 NOx
 Sulfate } Analytical Pmt

TABLE 24
ECMW-21 ANALYTICAL SUMMARY
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

✓

ECMW-21

Sample Date	pH	Ammonia-N	Nitrate-N	Sulfate	Total Dissolved Solids	Lead (Total)	Lead (Dissolved)	Chromium (Total)	Chromium (Dissolved)	Vanadium (Total)	Vanadium (Dissolved)
	s.u.	mg/L									
1/28/2004	5.56	<0.5	1.63	8.17	82	0.169	<0.015	0.837	<0.02	--	--
3/16/2004	6.34	<0.5	0.54	3.62	130	<0.015	<0.015	0.028	<0.02	--	--
5/19/2004	6.75	<0.5	2.15	4.59	110	0.029	<0.015	0.07	<0.02	--	--
7/13/2004	6.39	<0.5	2.5	3.74	103	0.032	<0.015	0.056	<0.02	--	--
9/15/2004	5.47	0.81	4.65	4.15	150	<0.015	<0.015	0.029	<0.02	<0.02	--
11/17/2004	5.96	<0.5	2.97	3.14	110	<0.015	<0.015	0.047	<0.02	<0.02	<0.02
1/26/2005	5.37	4.06	3.23	2.88	77	0.02	<0.015	0.044	<0.02	<0.02	<0.02
5/26/2005	5.69	<0.5	3.17	3.64	76	0.063	<0.015	0.265	<0.02	0.092	<0.02
10/20/2005	4.17	<0.5	4.16	--	--	<0.015	<0.015	<0.02	<0.02	<0.02	<0.02
4/12/2006	--	<0.5	3.19	--	--	<0.015	<0.015	<0.02	<0.02	<0.02	<0.02
11/2/2006	--	<0.5	2.23	--	--	<0.015	--	<0.02	--	<0.02	--

"--" - Parameter not analyzed

W.L. - 2006

temp
cont 77.5°}diss
temp
cont 77.5°}

TABLE 25
ECMW-22 ANALYTICAL SUMMARY
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

ECMW-22

Sample Date	pH	Ammonia-N	Nitrate-N	Sulfate	Total Dissolved Solids	Lead (Total)	Lead (Dissolved)	Chromium (Total)	Chromium (Dissolved)	Vanadium (Total)	Vanadium (Dissolved)
	s.u.	mg/L									
1/28/2004	7.68	0.61	0.53	6.62	540	0.021	<0.015	0.021	<0.02	--	--
1/28/2004	--	<0.5	0.52	6.62	610	0.021	<0.015	0.023	<0.02	--	--
3/16/2004	6.65	<0.5	0.66	2.88	<1	<0.015	<0.015	<0.02	<0.02	--	--
5/18/2004	6.76	<0.5	0.95	3.74	136	<0.015	<0.015	<0.02	<0.02	--	--
7/13/2004	6.74	<0.5	<0.5	3.8	140	<0.015	<0.015	<0.02	<0.02	--	--
9/14/2004	5.84	0.7	<0.5	2.94	170	<0.015	<0.015	<0.02	<0.02	<0.02	--
11/16/2004	6.95	<0.5	<0.5	2.51	180	<0.015	<0.015	<0.02	<0.02	<0.02	<0.02
1/26/2005	5.79	<0.5	1.09	3.56	140	<0.015	<0.015	<0.02	<0.02	<0.02	<0.02
5/25/2005	6.46	<0.5	1.12	3.61	130	<0.015	<0.015	<0.02	<0.02	<0.02	<0.02
10/19/2005	6.21	<0.5	<0.5	--	--	0.056	<0.015	<0.02	<0.02	<0.02	<0.02
4/11/2006	6.22	<0.5	2.56	--	--	<0.015	<0.015	<0.02	<0.02	<0.02	<0.02
11/2/2006	5.37	<0.5	1.07	--	--	<0.015	--	<0.02	--	<0.02	--

-- - Parameter not analyzed

TABLE 26
IN SITU REMEDIATION PARAMETERS SUMMARY
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

and proposed
changes

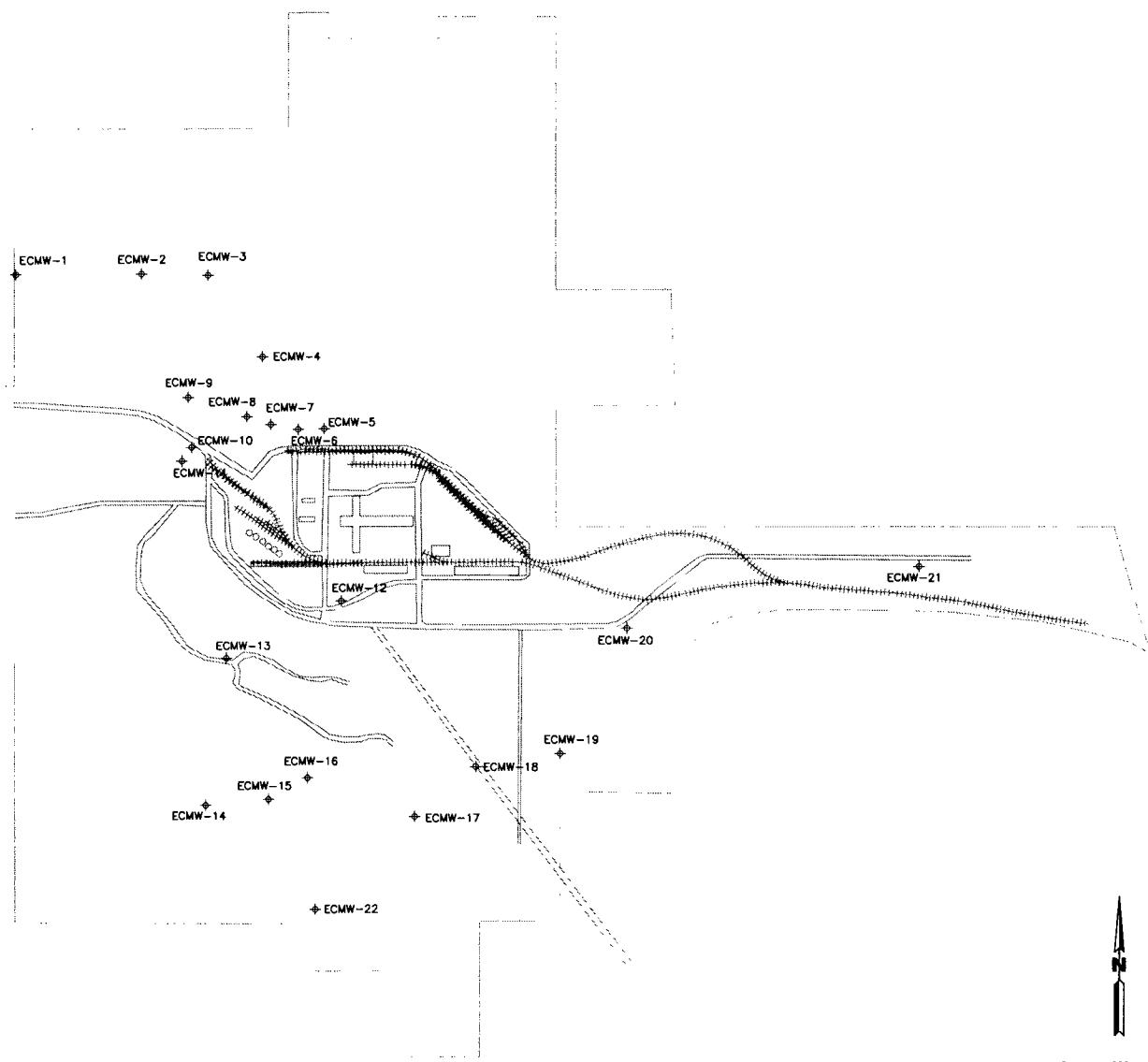
Well	Sample Date	Dissolved Oxygen (mg/L)	Redox (mV)	Alkalinity (mg/L)	Iron - Dissolved (mg/L)	Manganese - Dissolved (mg/L)	Nitrite (mg/L)	Phosphorous (mg/L)	Total Organic Carbon (mg/L)
ECMW-1	4/11/2006	2.65	137.9	<5	<0.01	—	<0.5	<0.02	<1
ECMW-1	11/1/2006	--	—	<5	--	<0.01	<0.5	0.025	<1
ECMW-2	4/11/2006	2.38	92	13	0.015	—	<0.5	0.044	3.15
ECMW-2	11/1/2006	--	—	18	--	<0.01	<0.5	0.065	3.31
ECMW-3	4/12/2006	1.37	46.6	57	<0.01	—	<0.5	0.232	4.11
ECMW-3	11/1/2006	--	—	58	--	<0.01	<0.5	0.195	4.03
ECMW-4	4/12/2006	2.07	171.5	<5	0.535	—	<0.5	<0.02	30
ECMW-4	11/1/2006	--	—	<5	--	0.94	<0.5	<0.02	23.7
ECMW-4 D	11/1/2006	--	—	<5	--	0.97	<0.5	<0.02	10.8
ECMW-5	4/12/2006	1.94	157.3	6	<0.01	—	<0.5	<0.02	2.53
ECMW-5	11/1/2006	--	—	5	--	2.43	<0.5	<0.02	1.99
ECMW-6	4/11/2006	1.94	154.2	<5	0.017	—	<0.5	<0.02	2.13
ECMW-6	11/1/2006	--	—	<5	--	3.87	<0.5	0.027	1.72
ECMW-7	4/11/2006	3.45	159.7	<5	0.283	—	<0.5	<0.02	4.74
ECMW-7	11/1/2006	--	—	<5	--	0.14	<0.5	0.053	15.7
ECMW-8	4/11/2006	3.12	191.9	94	<0.01	—	<0.5	<0.02	16
ECMW-8	11/1/2006	--	—	27	--	0.47	<0.5	<0.02	10.2
ECMW-9	4/11/2006	2.85	78	31	<0.01	—	<0.5	0.307	27.9
ECMW-9	11/1/2006	--	—	25	--	0.34	<0.5	0.23	32.5
ECMW-10	4/11/2006	2.5	158.2	<5	<0.01	—	<0.5	0.03	6.66
ECMW-10	11/1/2006	--	—	<5	--	0.12	<0.5	<0.02	4.37
ECMW-10 D	4/11/2006	--	—	<5	<0.01	—	<0.5	<0.02	6.41
ECMW-11	4/11/2006	3.66	144	<5	0.016	—	<0.5	<0.02	12.2
ECMW-11	11/1/2006	--	—	<5	--	0.03	<0.5	<0.02	17.1
ECMW-12	4/11/2006	4.24	62	190	2.16	—	<0.5	0.25	19.8
ECMW-12	11/1/2006	--	—	114	--	0.14	<0.5	0.103	15.9
ECMW-13	4/12/2006	2.25	124.9	<5	0.048	—	<0.5	0.02	8.03
ECMW-13	11/2/2006	--	—	<5	--	2.5	<0.5	0.061	8.3
ECMW-13 D	11/2/2006	--	—	6	--	2.96	<0.5	0.061	7.5
ECMW-14	4/12/2006	2.34	138.5	<5	0.023	—	<0.5	<0.02	22.4
ECMW-14	11/2/2006	--	—	<5	--	0.06	<0.5	<0.02	1.84
ECMW-14 D	4/12/2006	--	—	8	0.018	—	<0.5	<0.02	22.4
ECMW-15	4/11/2006	1.97	125.7	<5	<0.01	—	<0.5	0.021	2.25
ECMW-15	11/2/2006	--	—	<5	--	0.02	<0.5	<0.02	2.36
ECMW-16	4/11/2006	2.09	134.5	<5	<0.01	—	<0.5	0.028	2.22
ECMW-16	11/2/2006	--	—	<5	--	0.11	<0.5	<0.02	2.3
ECMW-17	4/11/2006	2.2	215.8	<5	<0.01	—	<0.5	<0.02	6.01
ECMW-17	11/2/2006	--	—	<5	--	0.2	<0.5	0.089	1.61
ECMW-18	4/12/2006	2.51	323.2	15	30.2	—	<0.5	0.176	2.16
ECMW-18	11/2/2006	--	—	19	--	0.05	<0.5	0.263	1.39
ECMW-19	4/12/2006	1.35	62.4	32	0.334	—	<0.5	0.072	2.82
ECMW-19	11/2/2006	--	—	34	--	0.05	<0.5	0.048	2.91
ECMW-20	4/12/2006	--	—	47	0.034	—	<0.5	0.027	1.66
ECMW-20	11/2/2006	--	—	43	--	0.14	<0.5	<0.02	<1
ECMW-21	4/12/2006	3.68	232.6	5	<0.01	—	<0.5	<0.02	1.3
ECMW-21	11/2/2006	--	—	<70	--	0.02	<0.5	<0.02	<1
ECMW-22	4/11/2006	1.86	56.2	47	<0.01	—	<0.5	0.12	5.78
ECMW-22	11/2/2006	--	—	47	--	0.11	<0.5	0.116	<1

"—" - Parameter not analyzed

FIGURES

and polarized maps
in NC and SC

like kind graphs



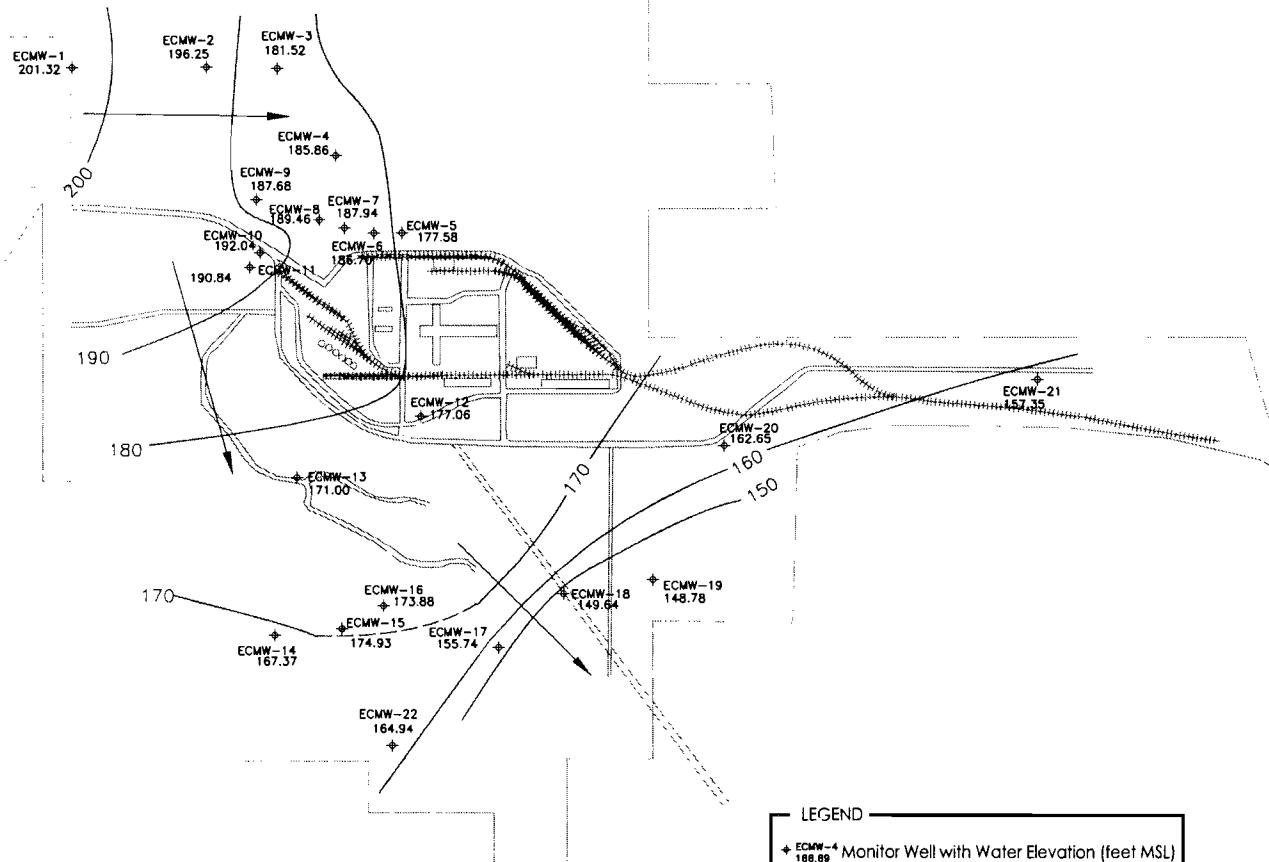
el dorado

SITE MAP

2006 ANNUAL GROUND WATER REPORT
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

DATE:	03/19/07	APPROVED:	DRAWN BY:
SCALE:	see above	BY:	CAD NO:

OZEC0100
ENVIRONMENTAL MANAGEMENT SERVICES INC.



LEGEND

♦ ECMW-4 Monitor Well with Water Elevation (feet MSL)

→ Ground Water Flow Direction

MEASUREMENTS TAKEN APRIL 10-11, 2006



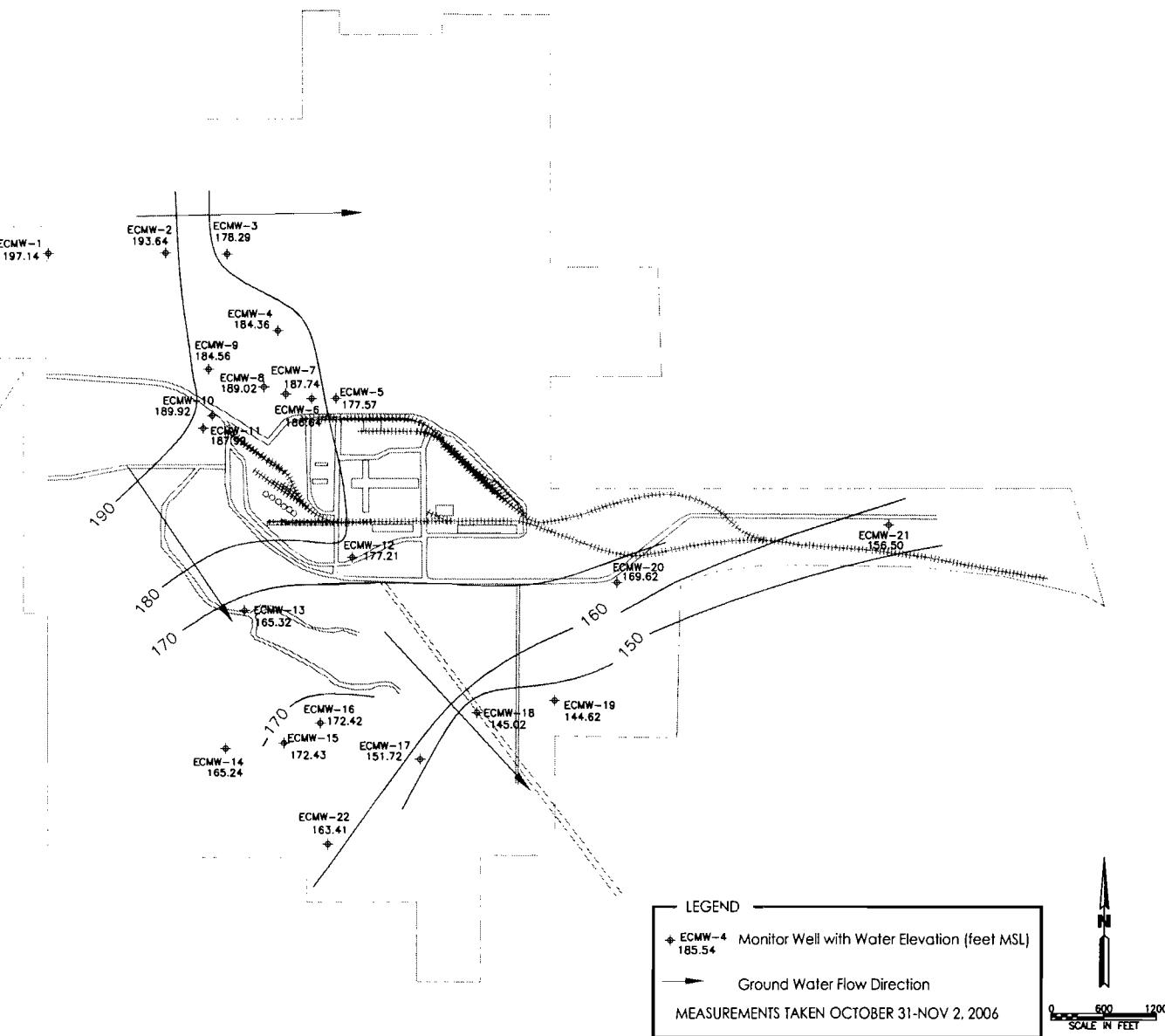
EL DORADO

GROUND WATER ELEVATION MAP
APRIL 2006
2006 ANNUAL GROUND WATER REPORT
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

DATE: 03/20/2007	APPROVED:	DRAWN BY: LHM
SCALE: see above	BY:	DATE: _____
	CAD NO.:	OZEC0100

ENVIRONMENTAL
MANAGEMENT SERVICES, INC.

FIGURE
2



el dorado

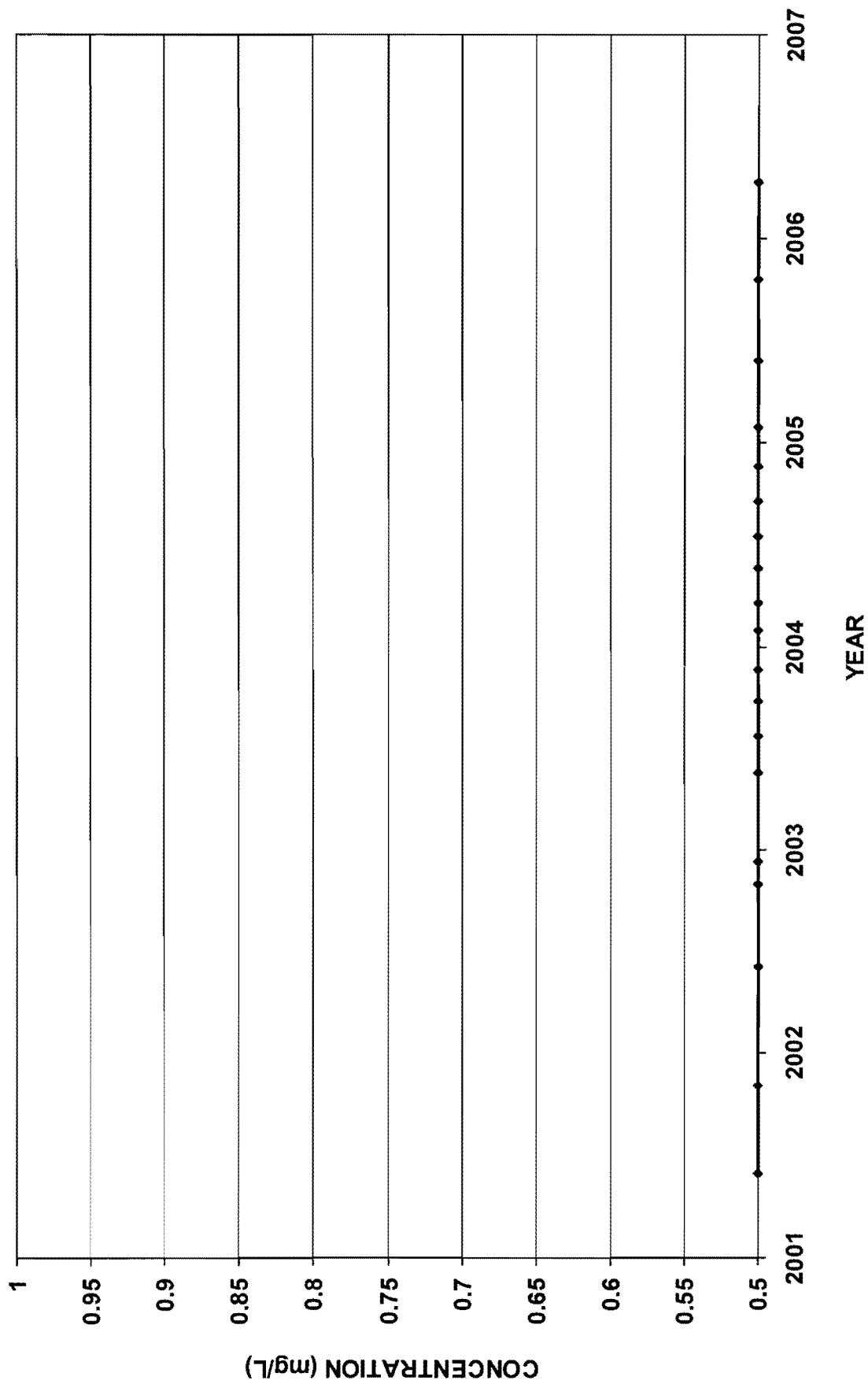
GROUND WATER ELEVATION MAP OCTOBER/NOVEMBER 2006		
2006 ANNUAL GROUND WATER REPORT EL DORADO CHEMICAL COMPANY EL DORADO, ARKANSAS		
DATE: 03/20/2007	APPROVED: by:	DRAWN BY: LM
SCALE: as above	DATE: _____	CAD NO.: 02EC0100

ENVIRONMENTAL
MANAGEMENT SERVICES, INC.

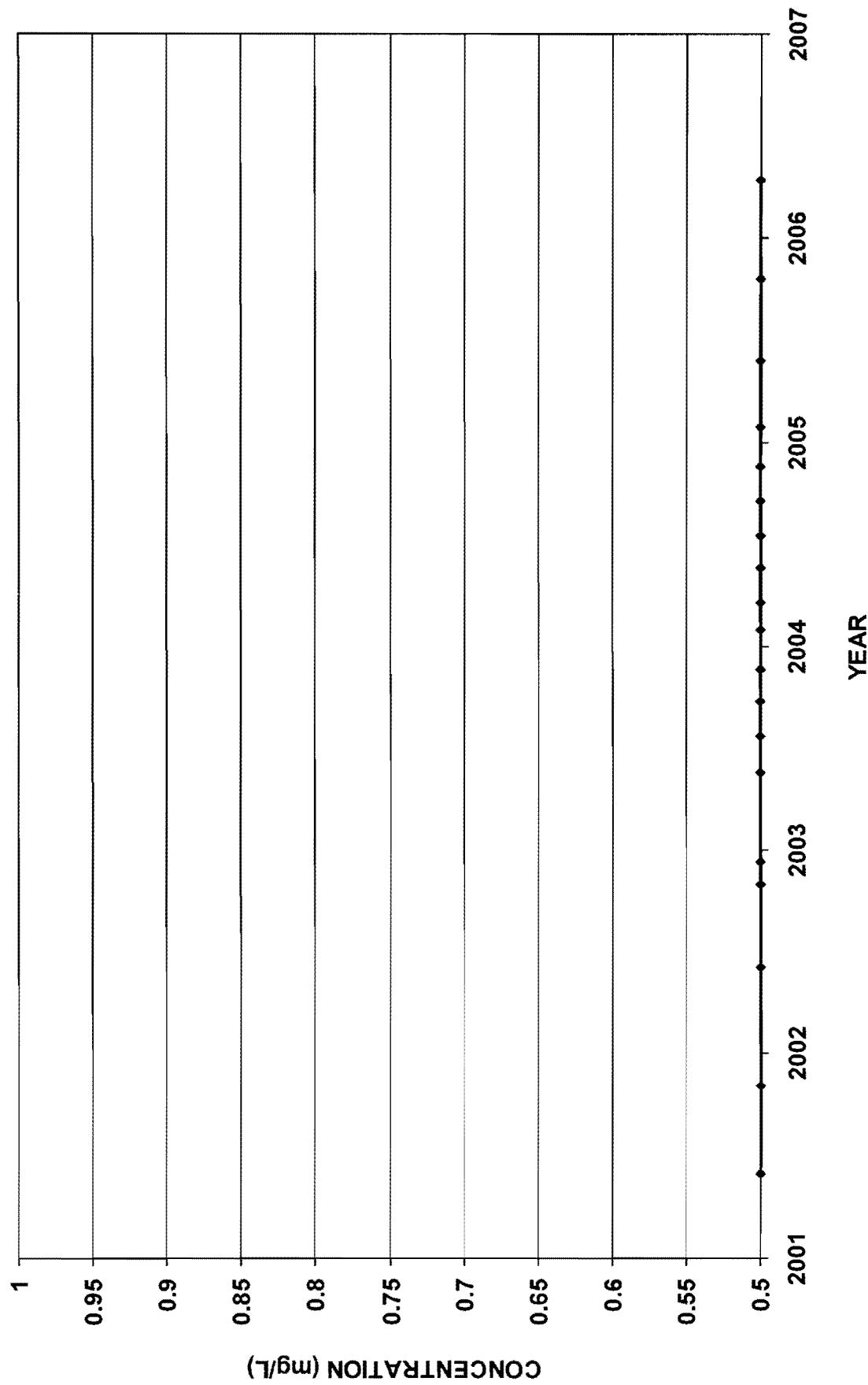
APPENDIX A
TREND GRAPHS

Low determine
slope B
trend graphs

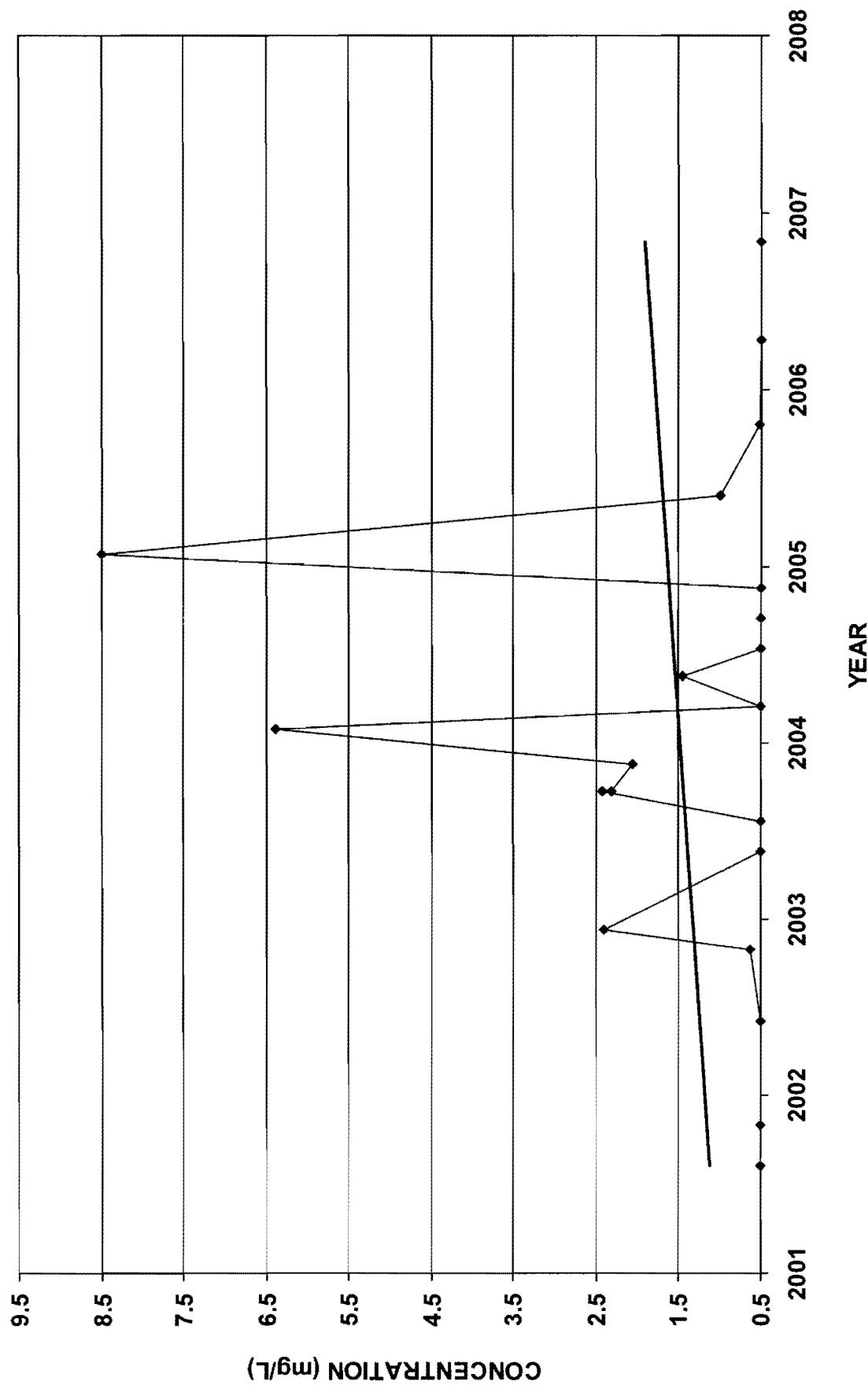
ECMW-2
Nitrate-N



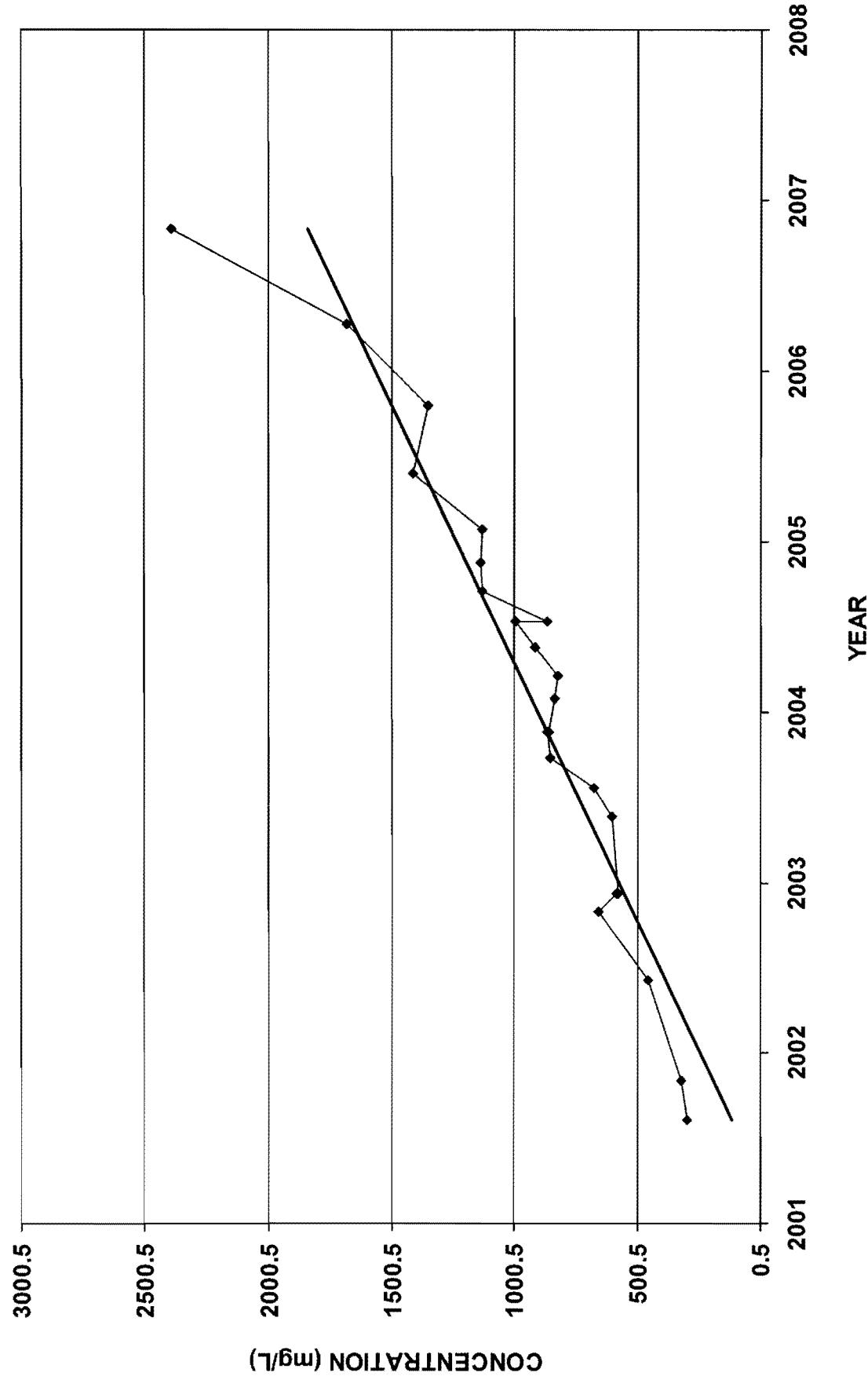
ECMW-3
Nitrate-N



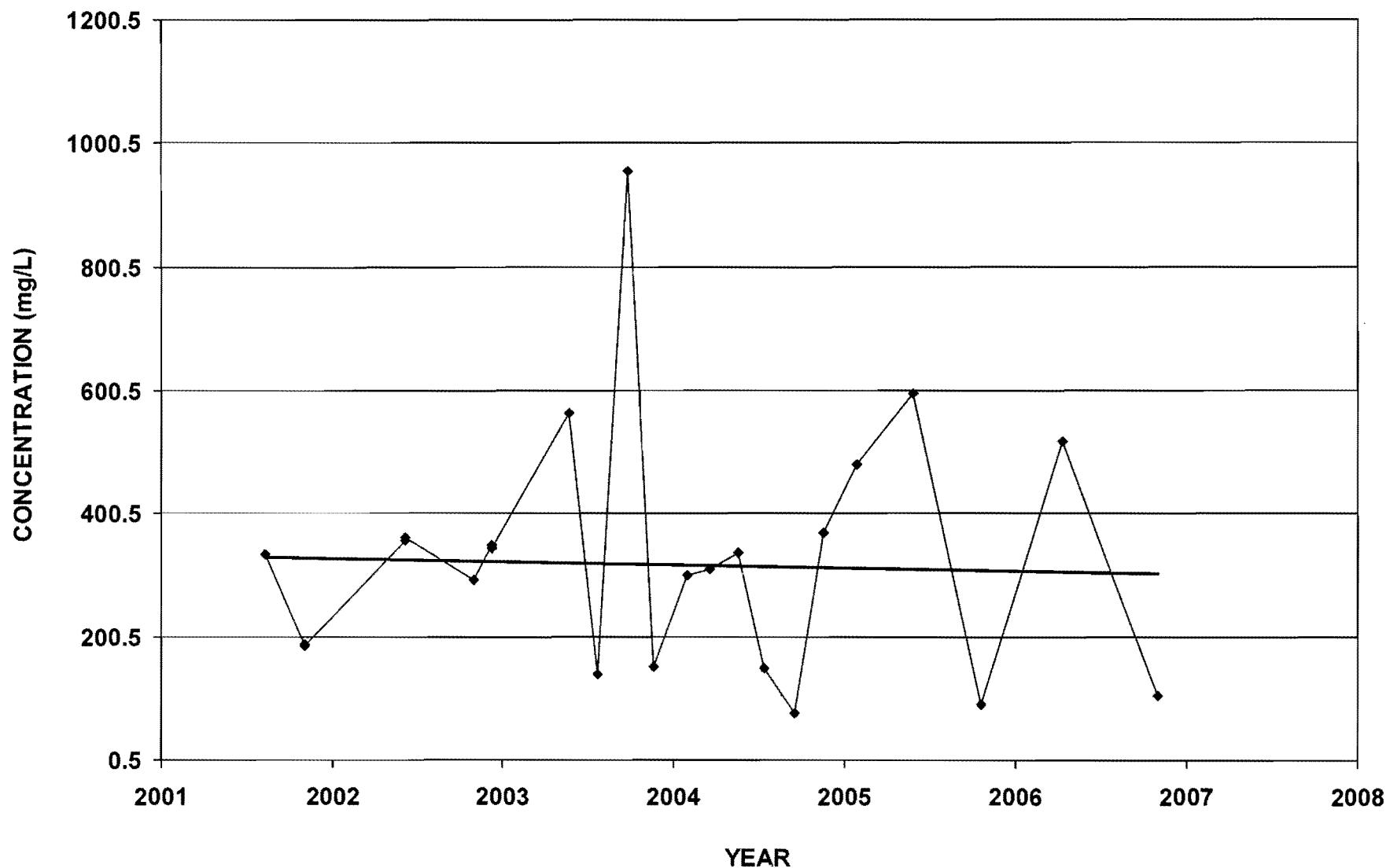
ECMW-4
Nitrate-N



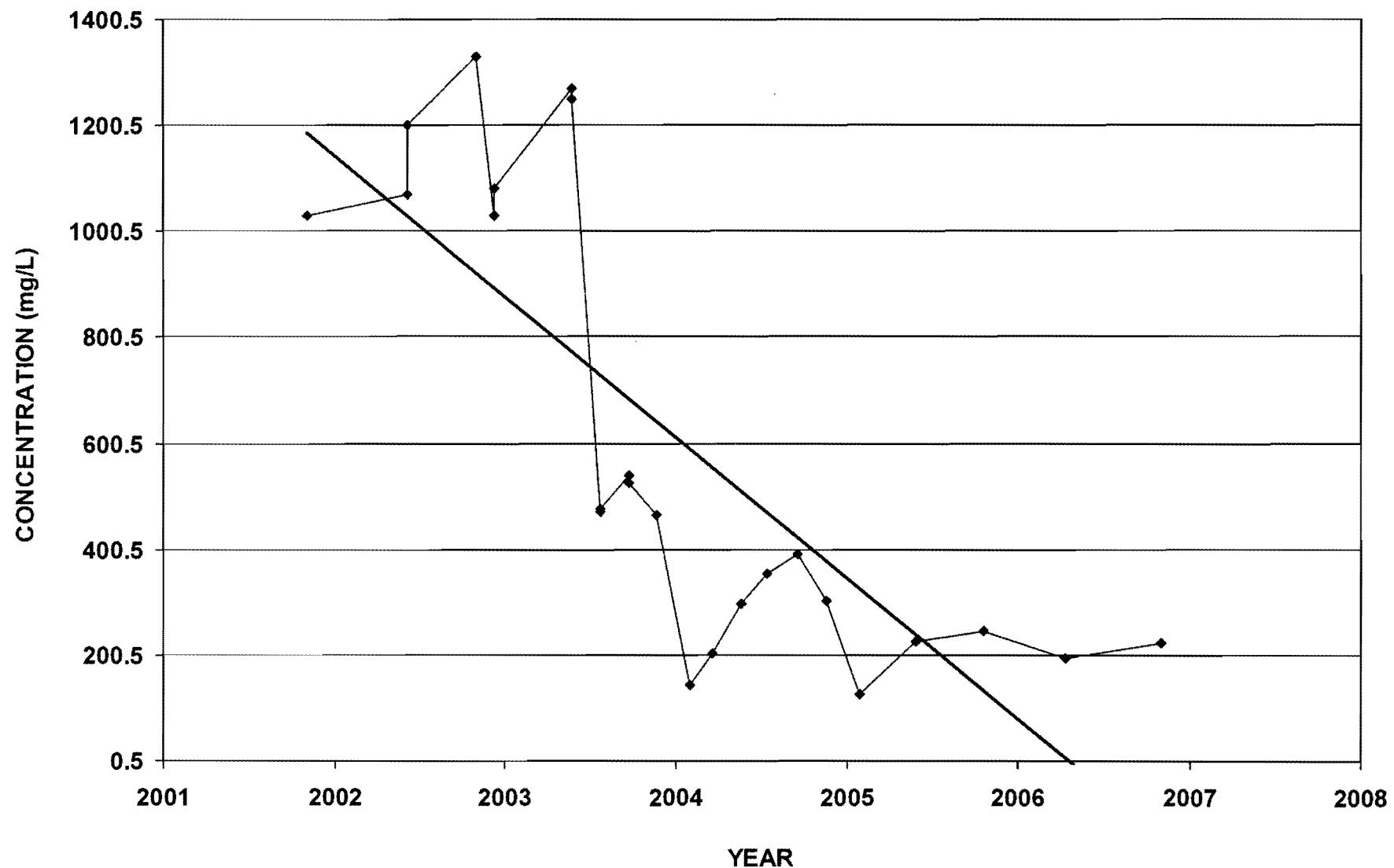
ECMW-6
Nitrate-N



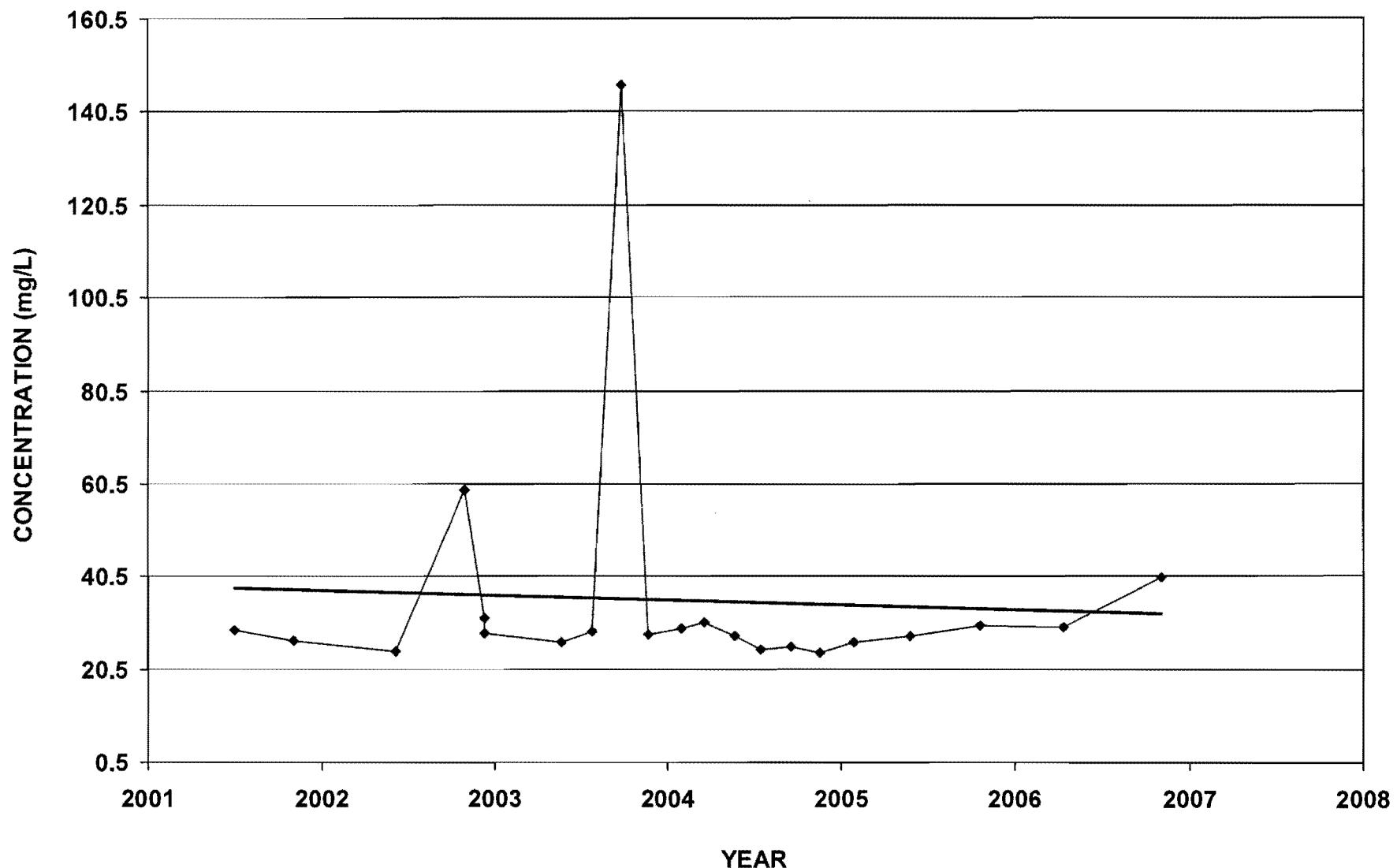
ECMW-7
Nitrate-N



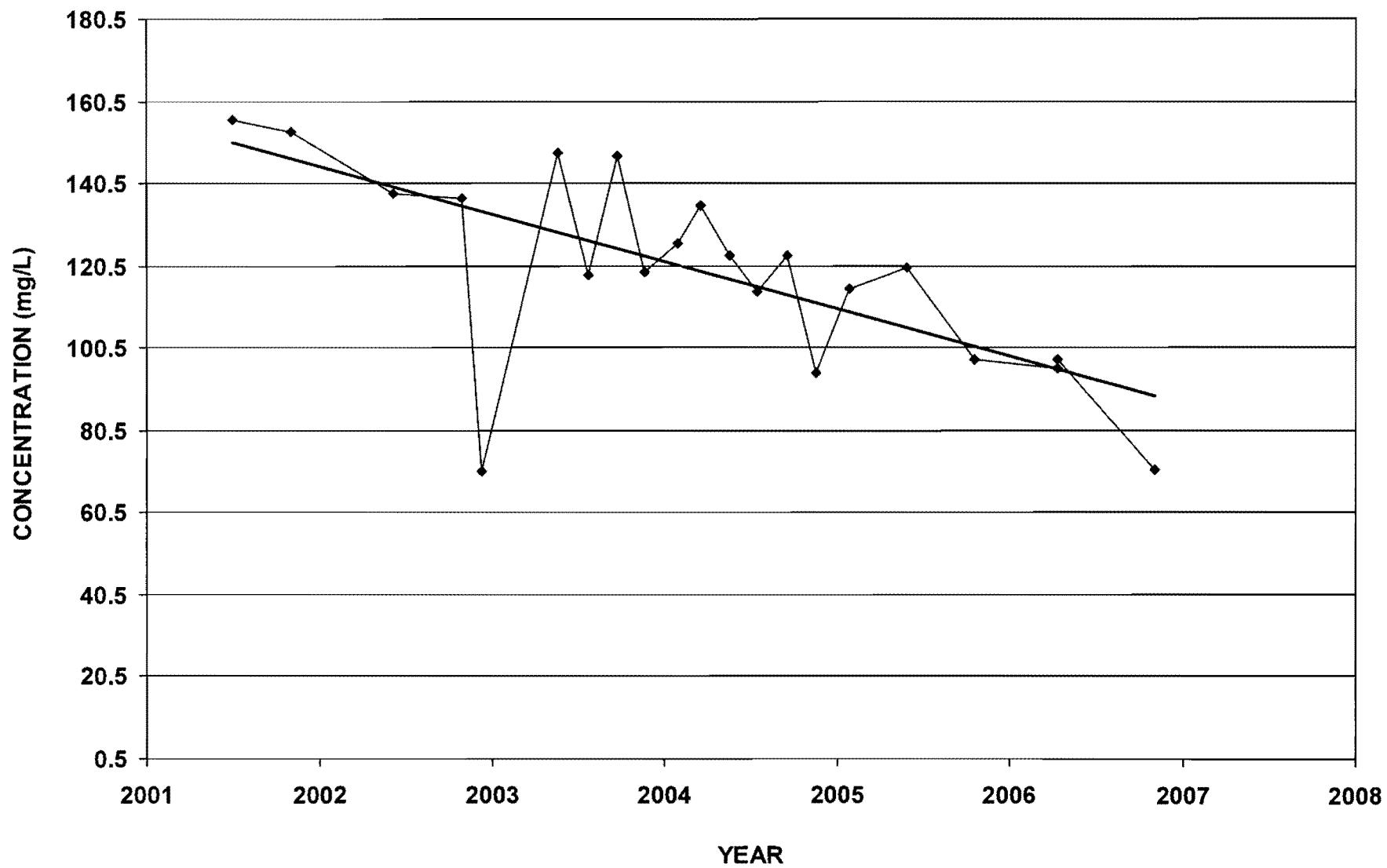
ECMW-8
Nitrate-N



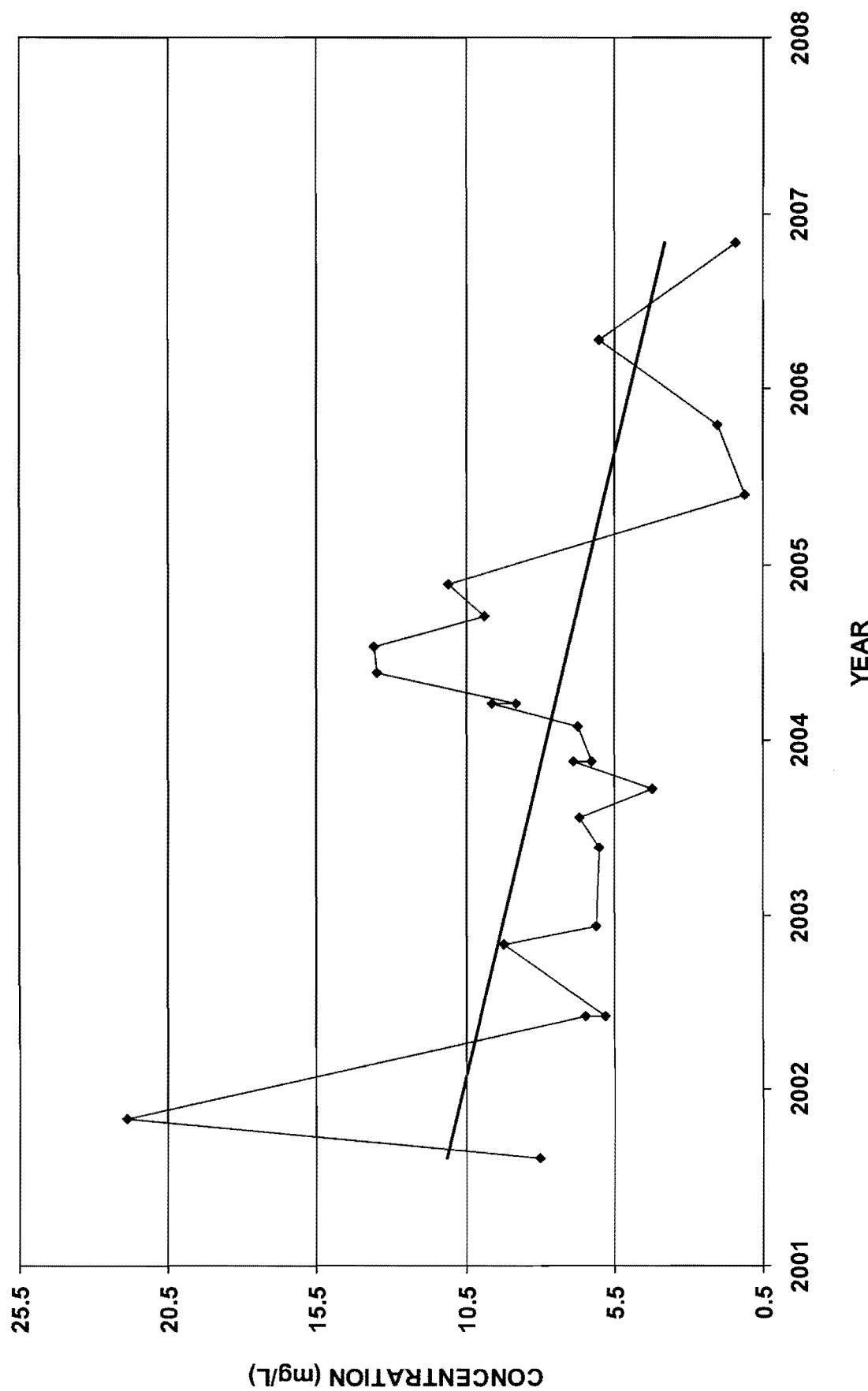
ECMW-9
Nitrate-N



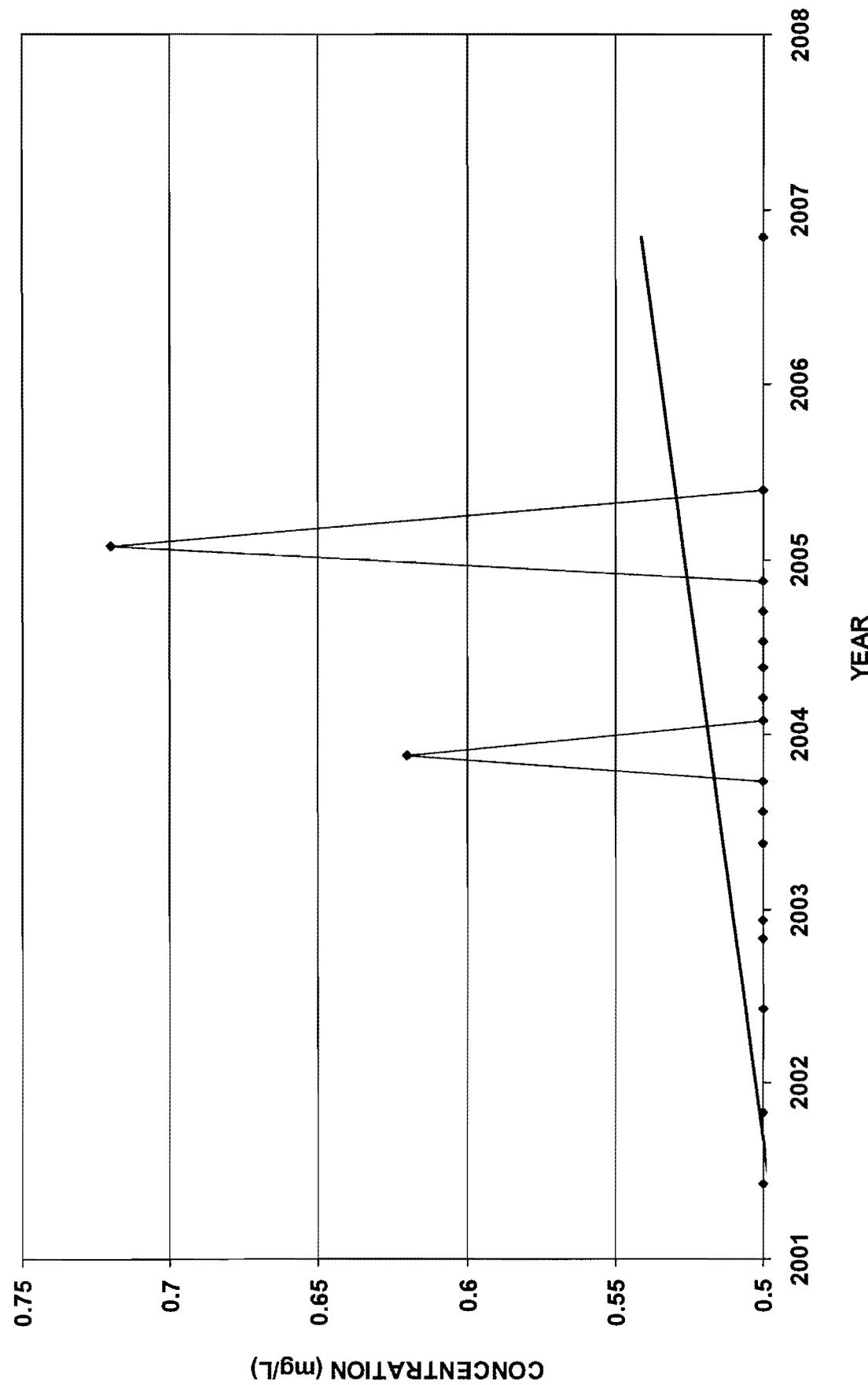
ECMW-10
Nitrate-N



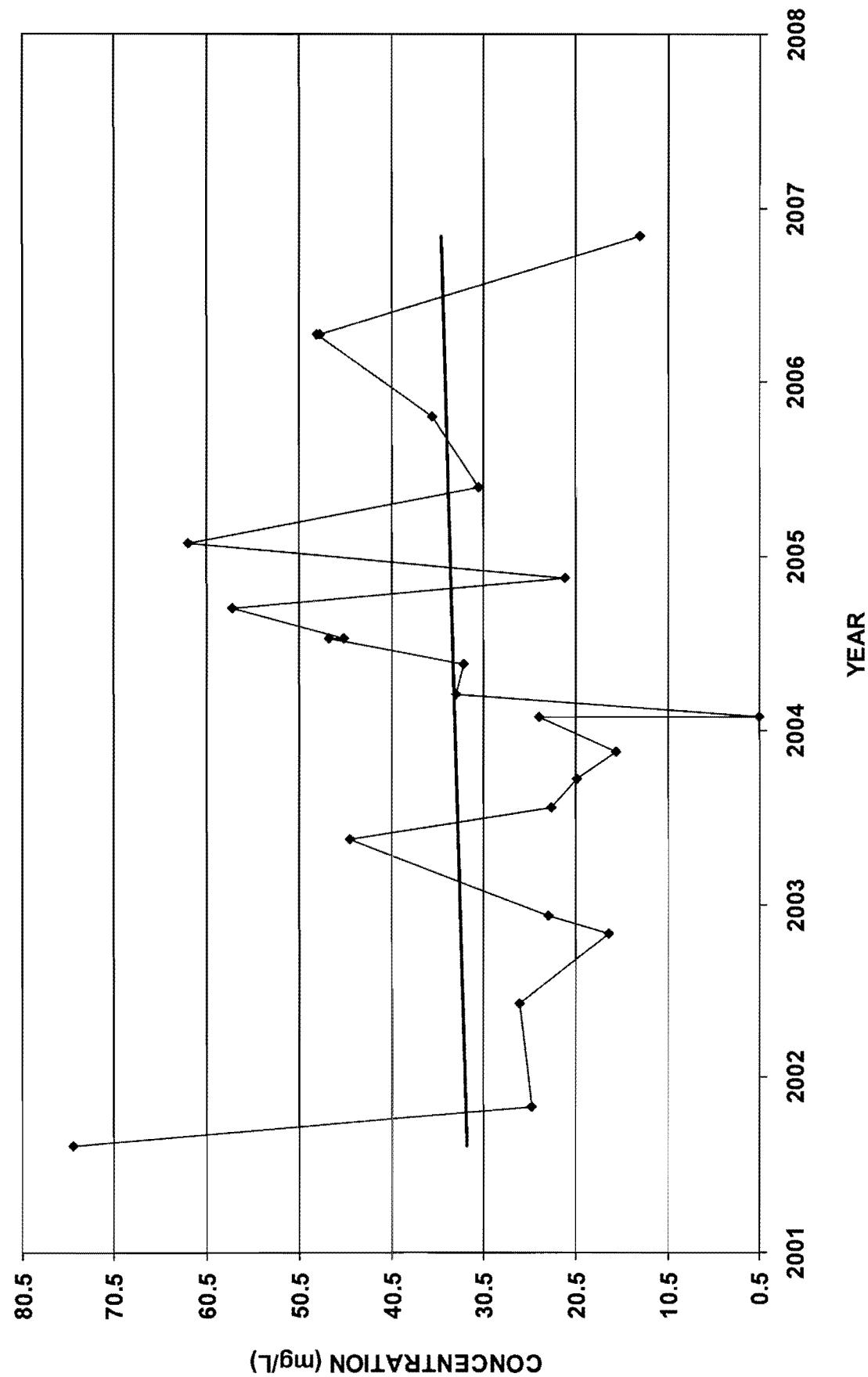
ECMW-11
Nitrate-N



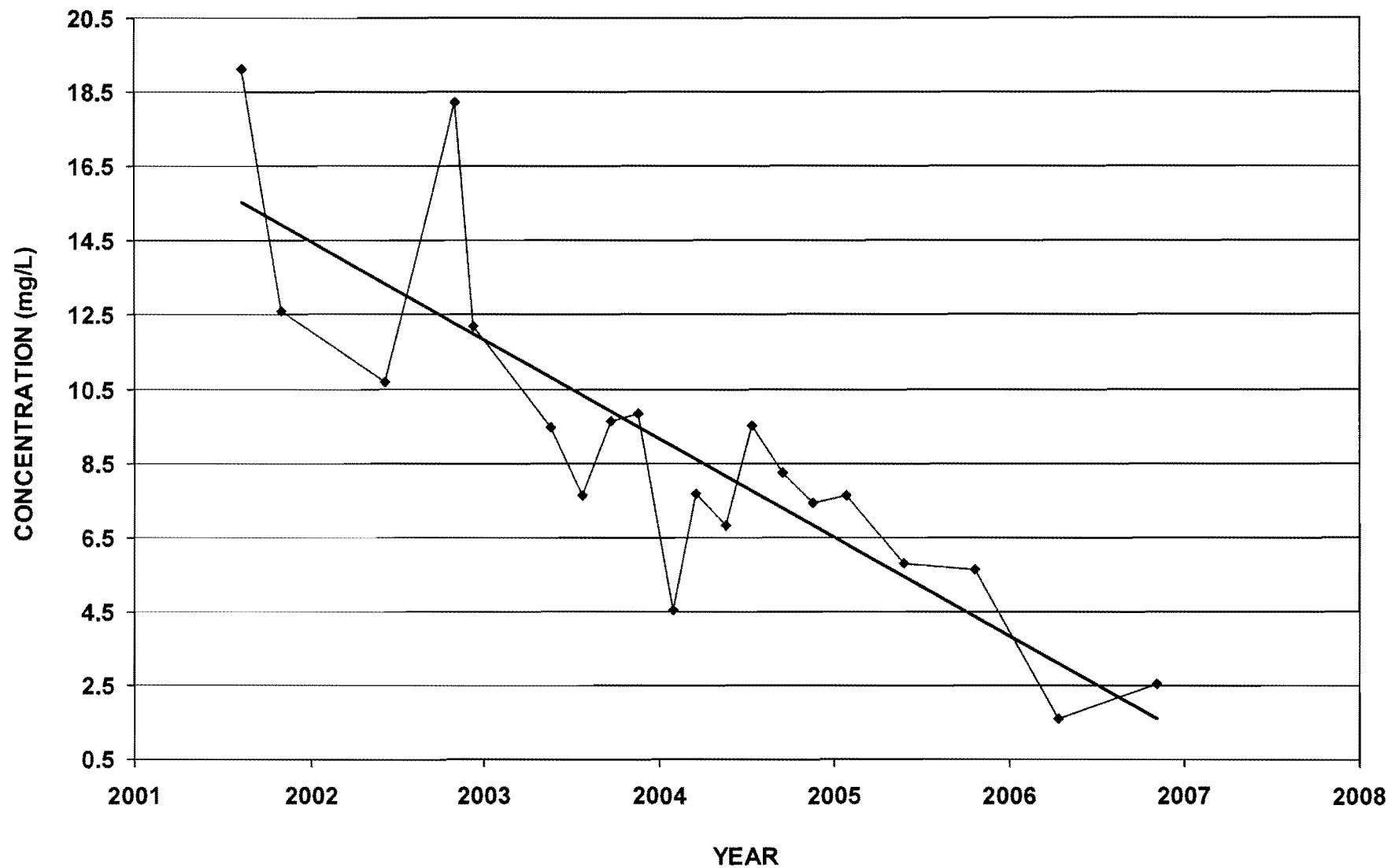
ECMW-13
Nitrate-N



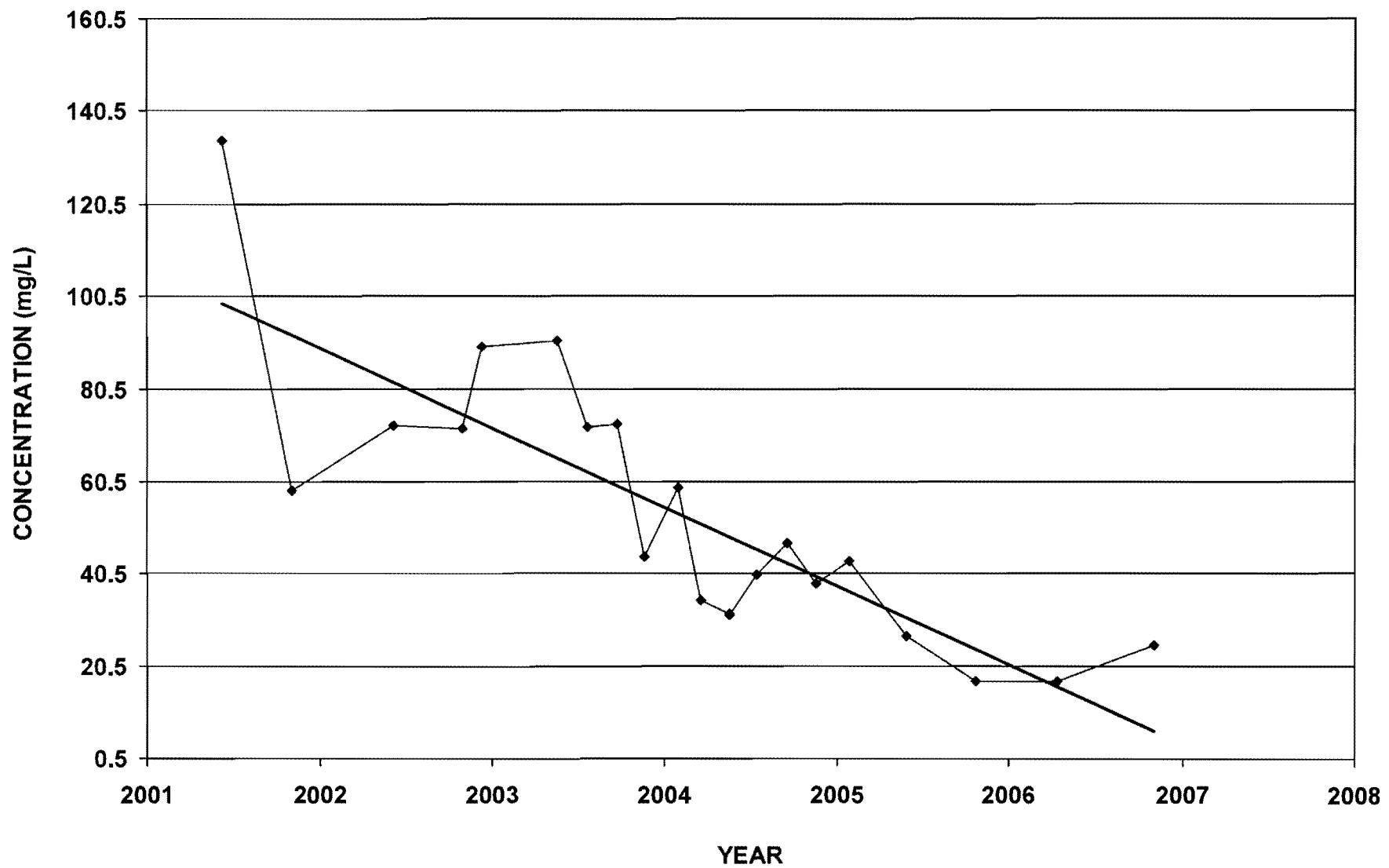
ECMW-14
Nitrate-N



ECMW-15
Nitrate-N

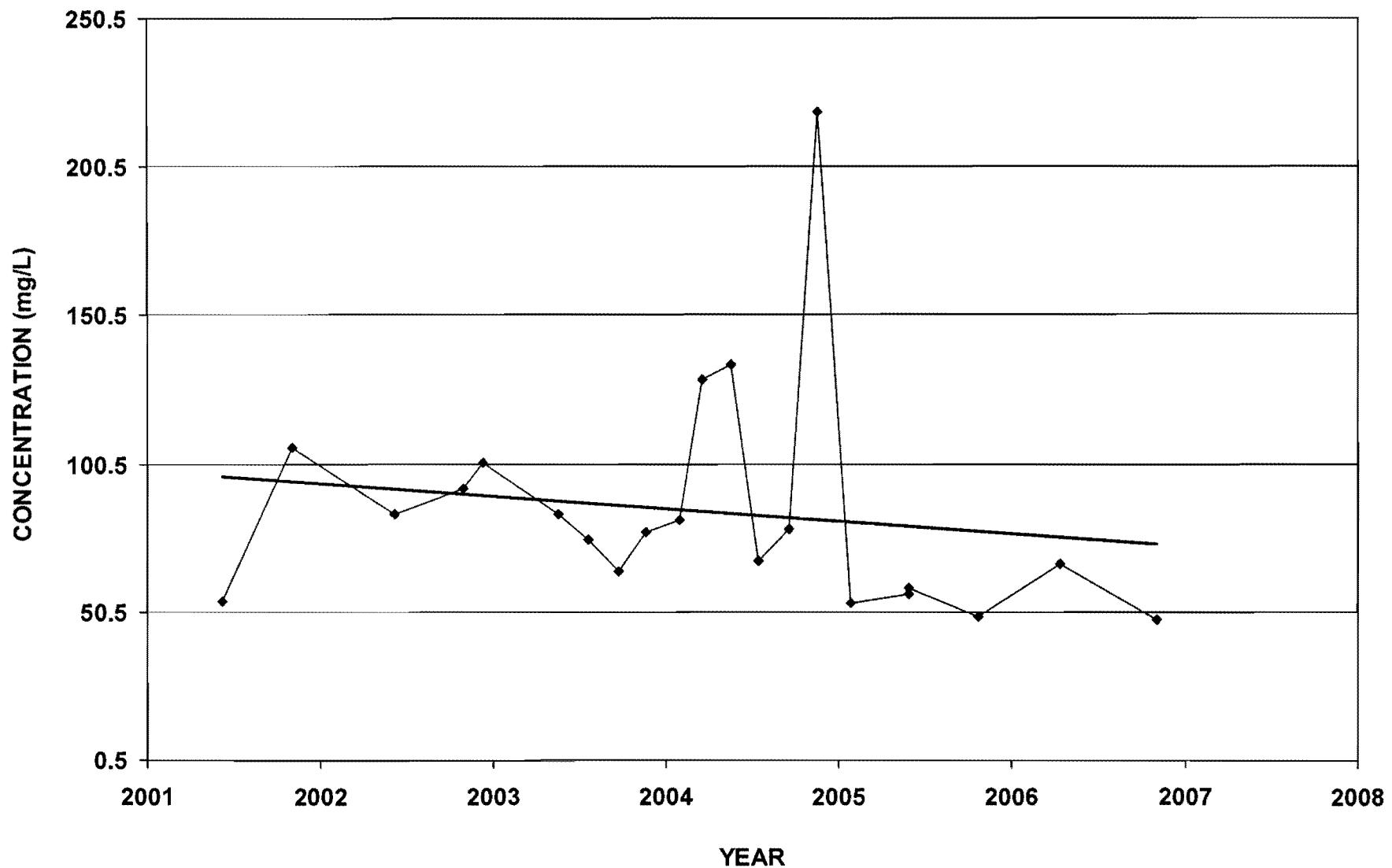


ECMW-16
Nitrate-N

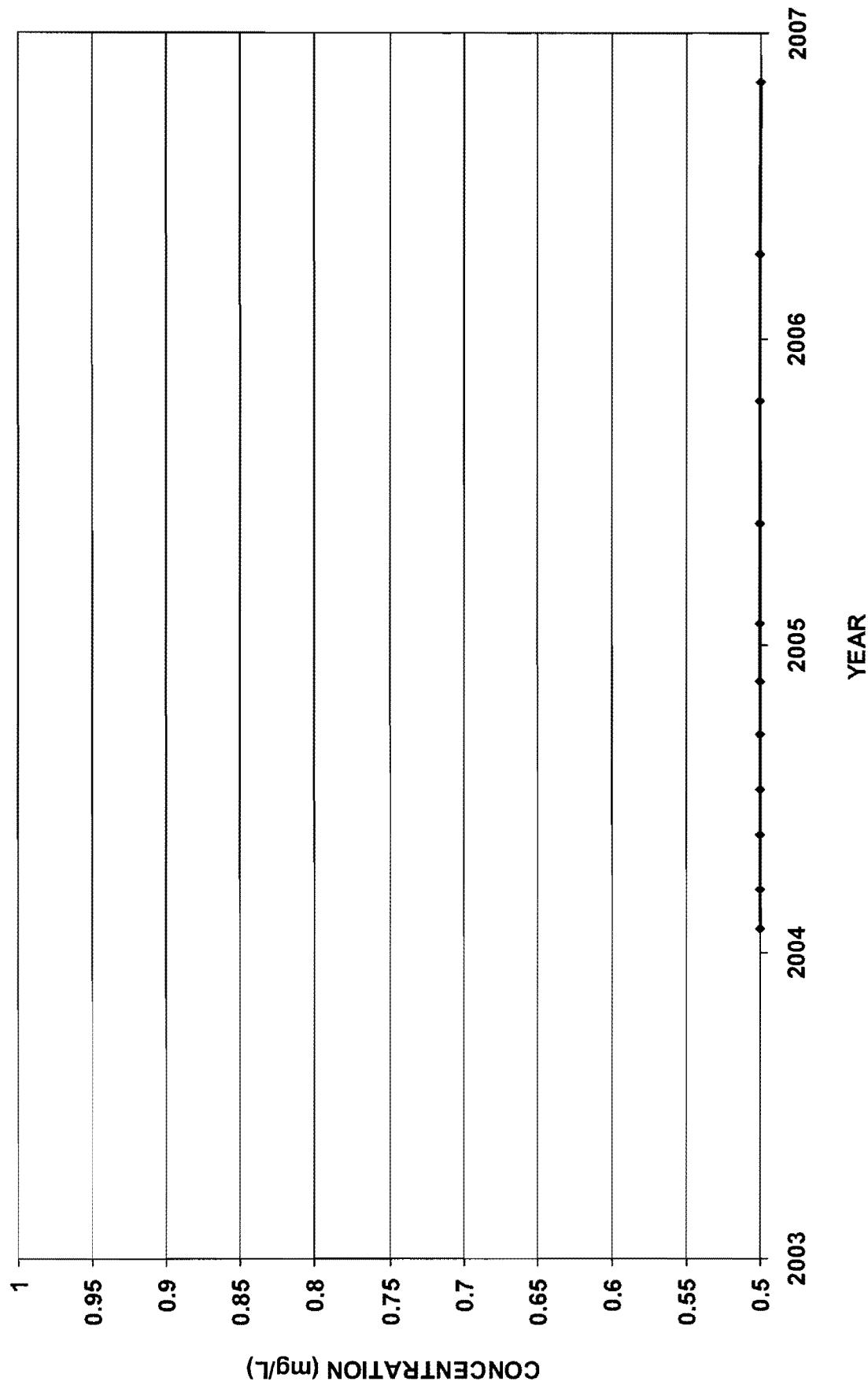


ECMW-17

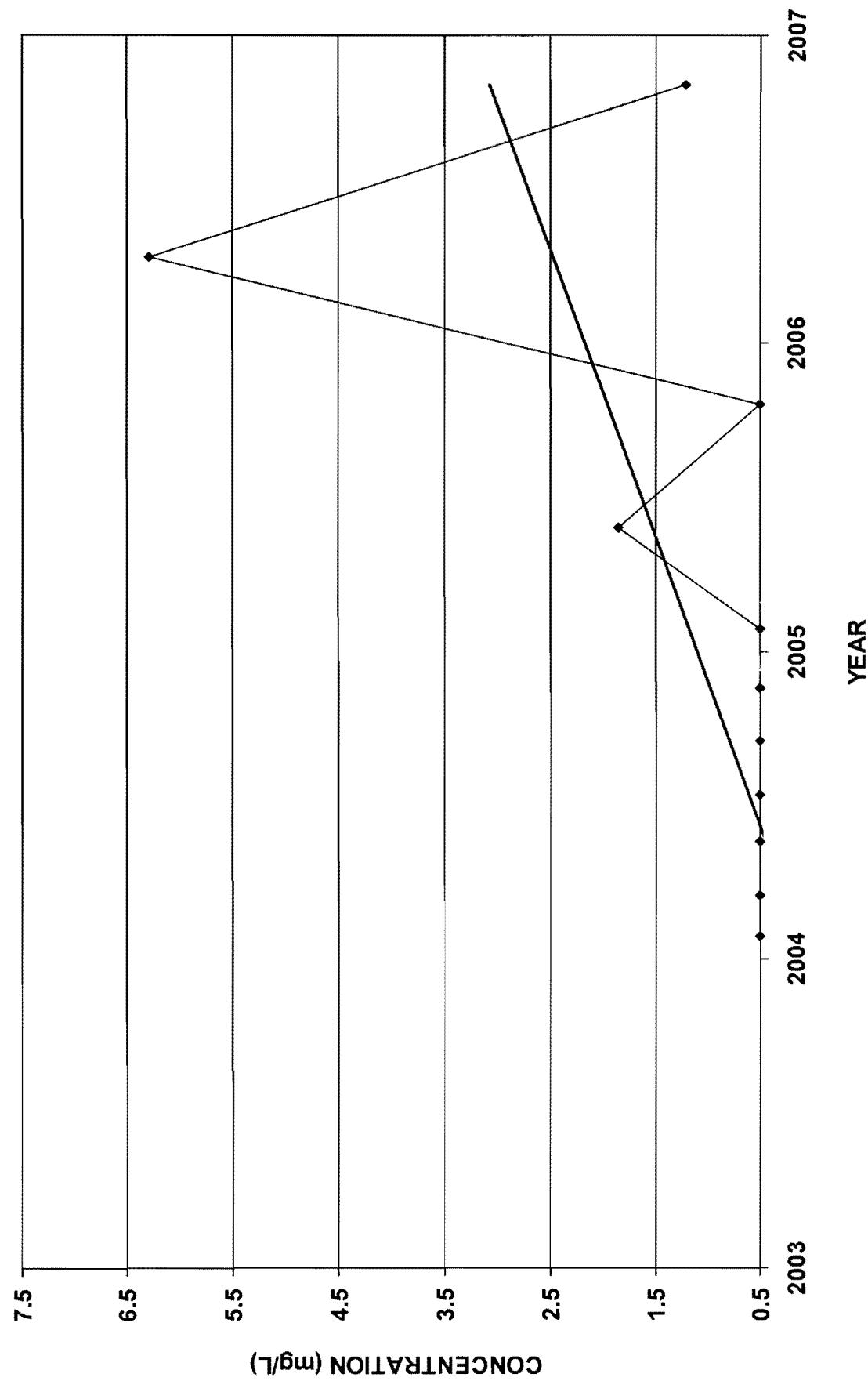
Nitrate-N



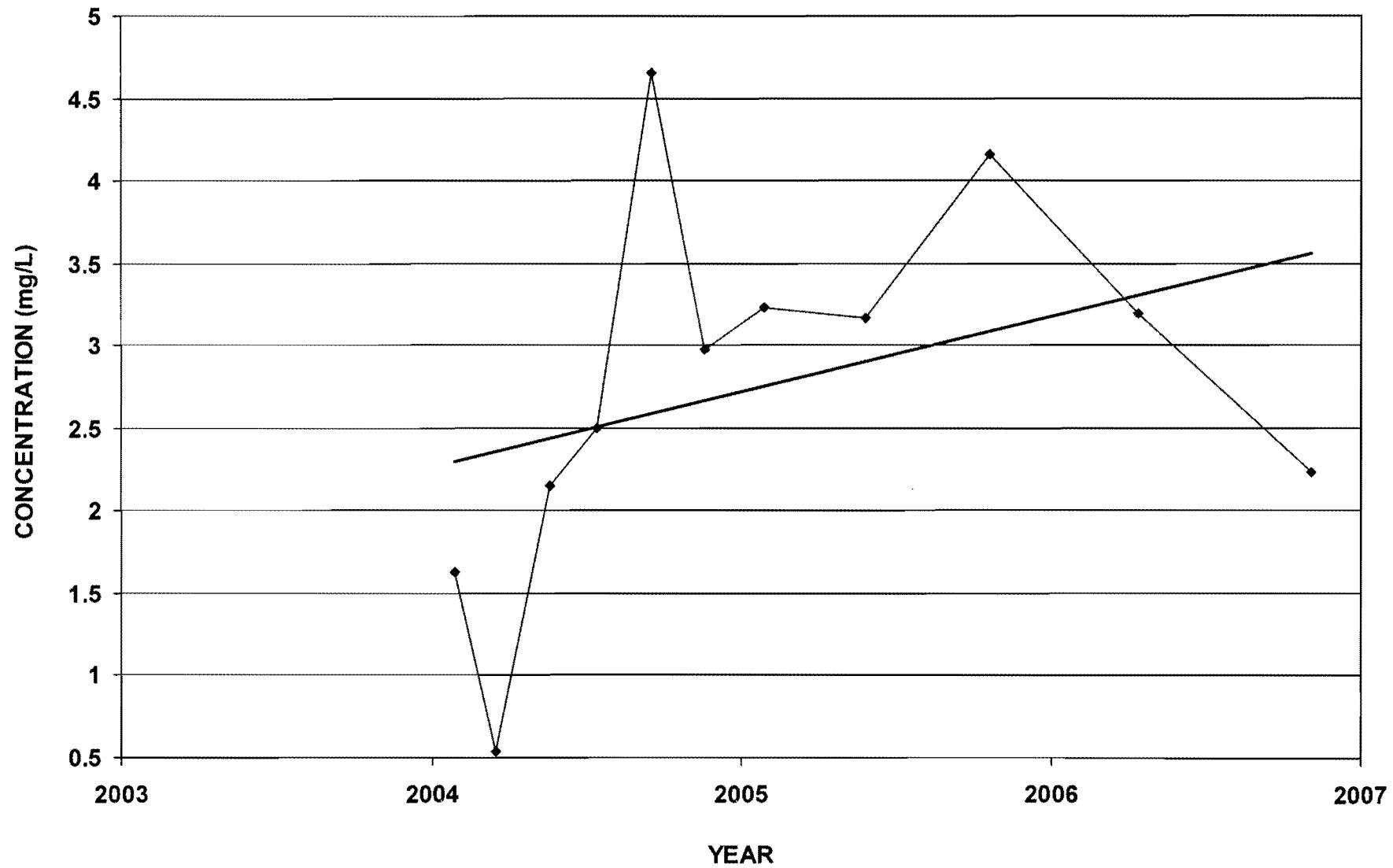
ECMW-19
Nitrate-N



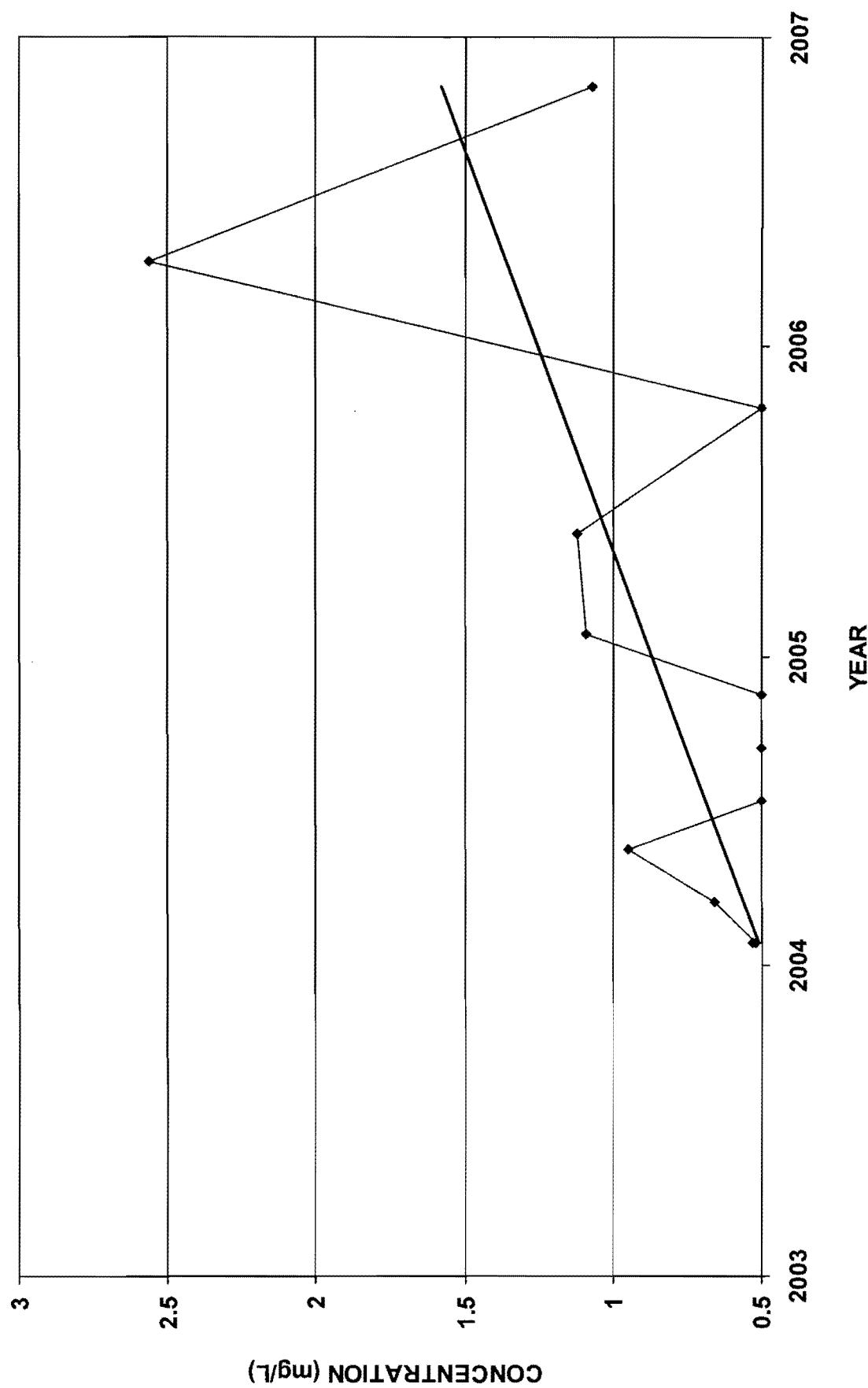
ECMW-20
Nitrate-N



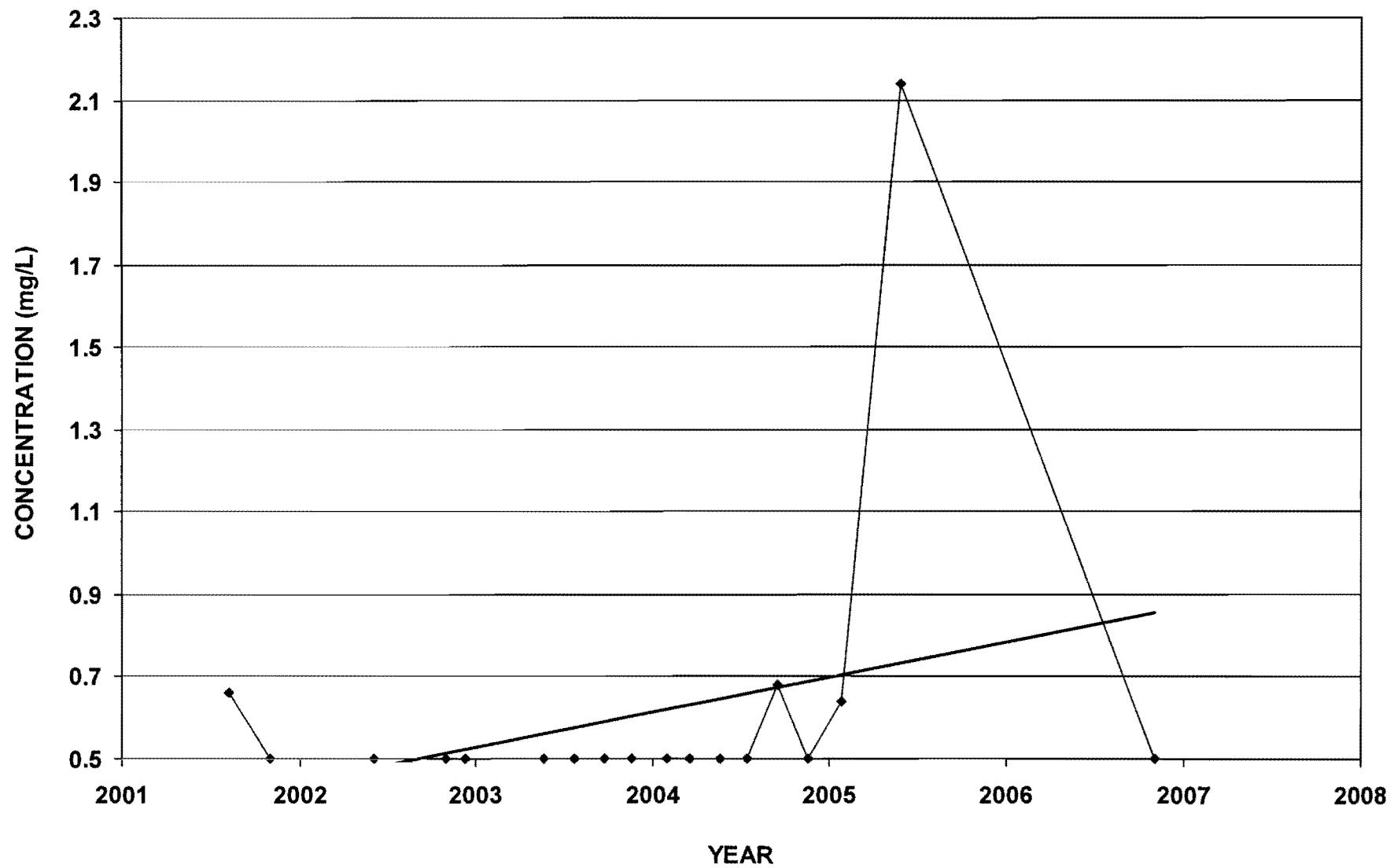
ECMW-21
Nitrate-N



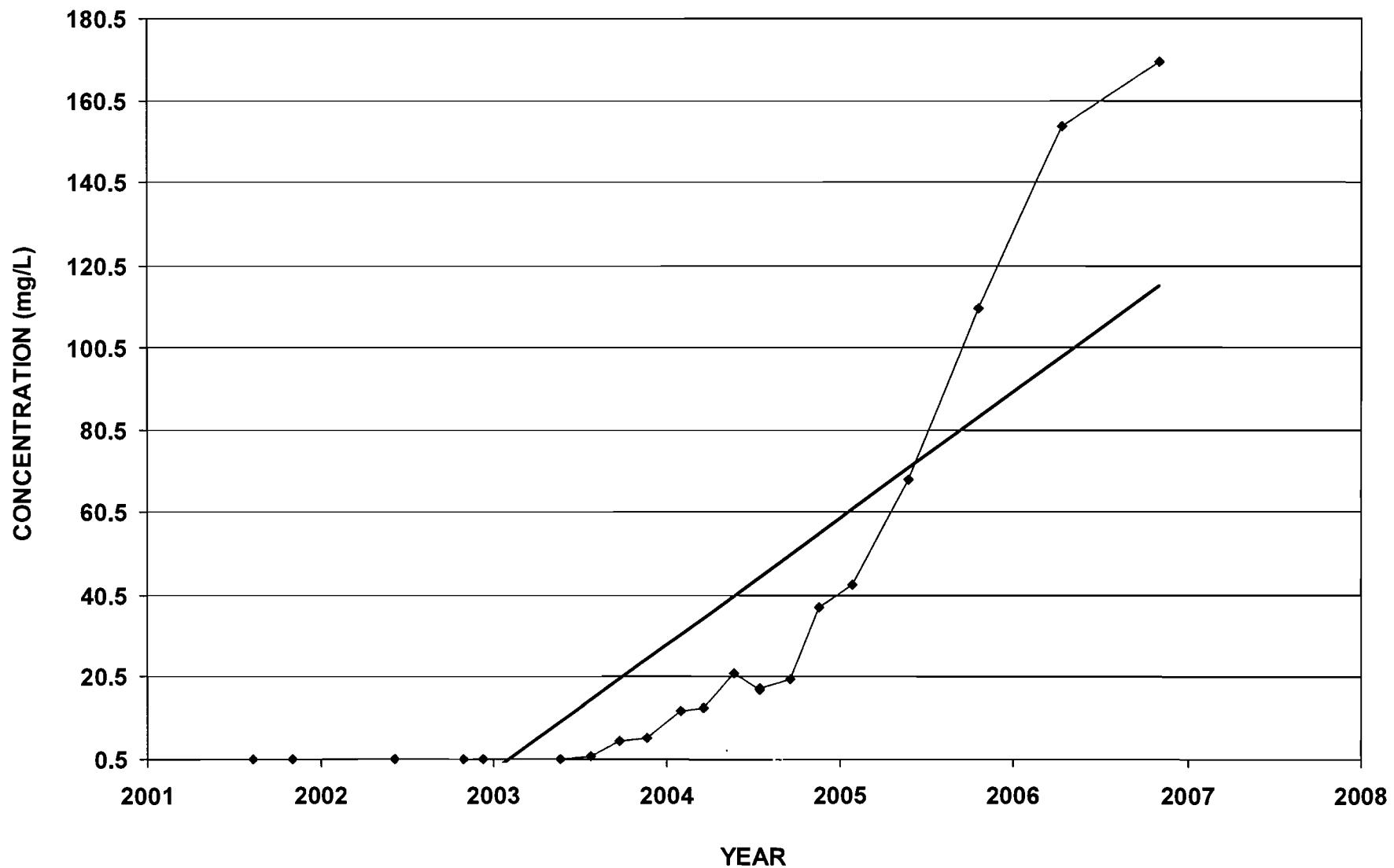
ECMW-22
Nitrate-N



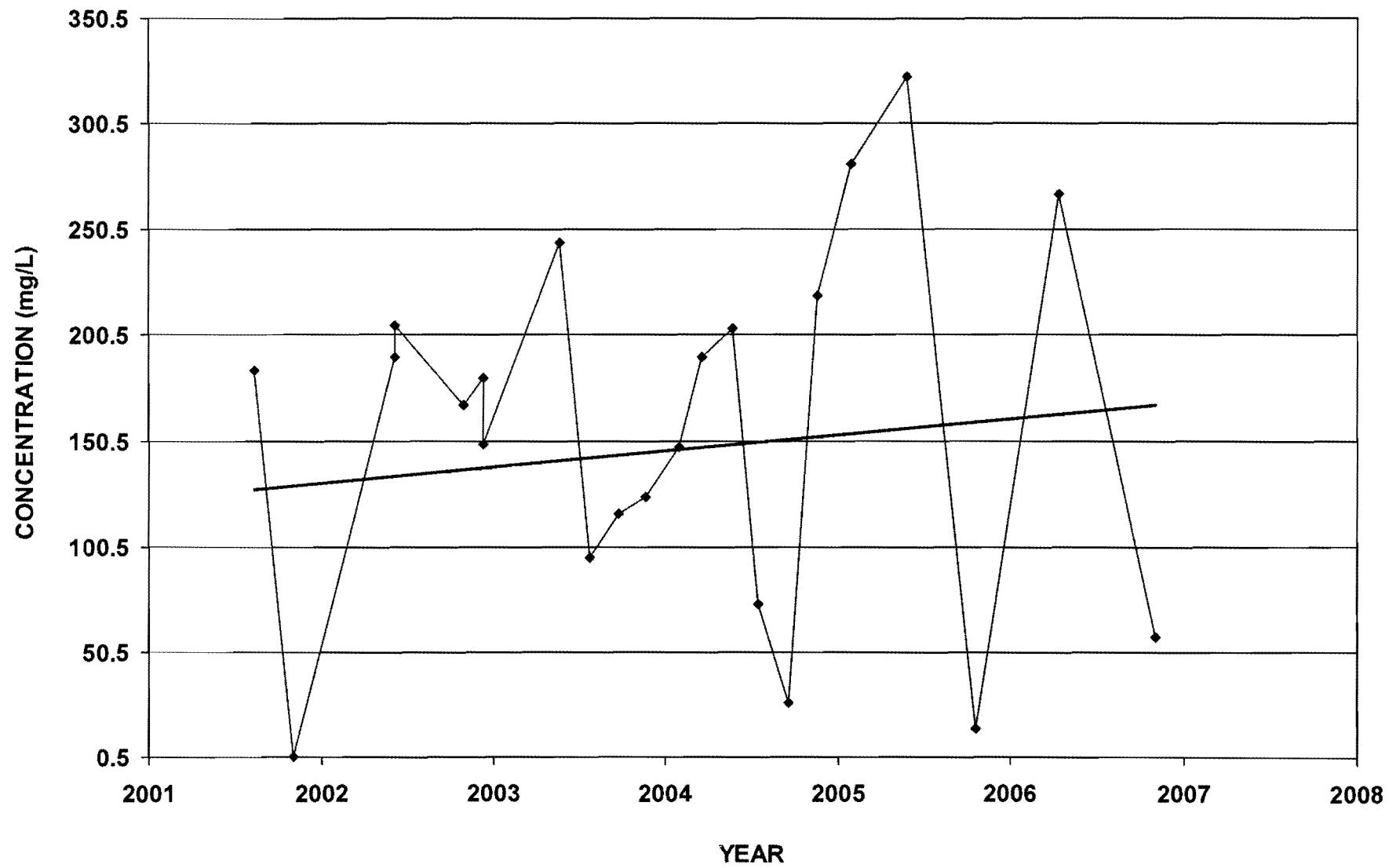
ECMW-4
Ammonia-N



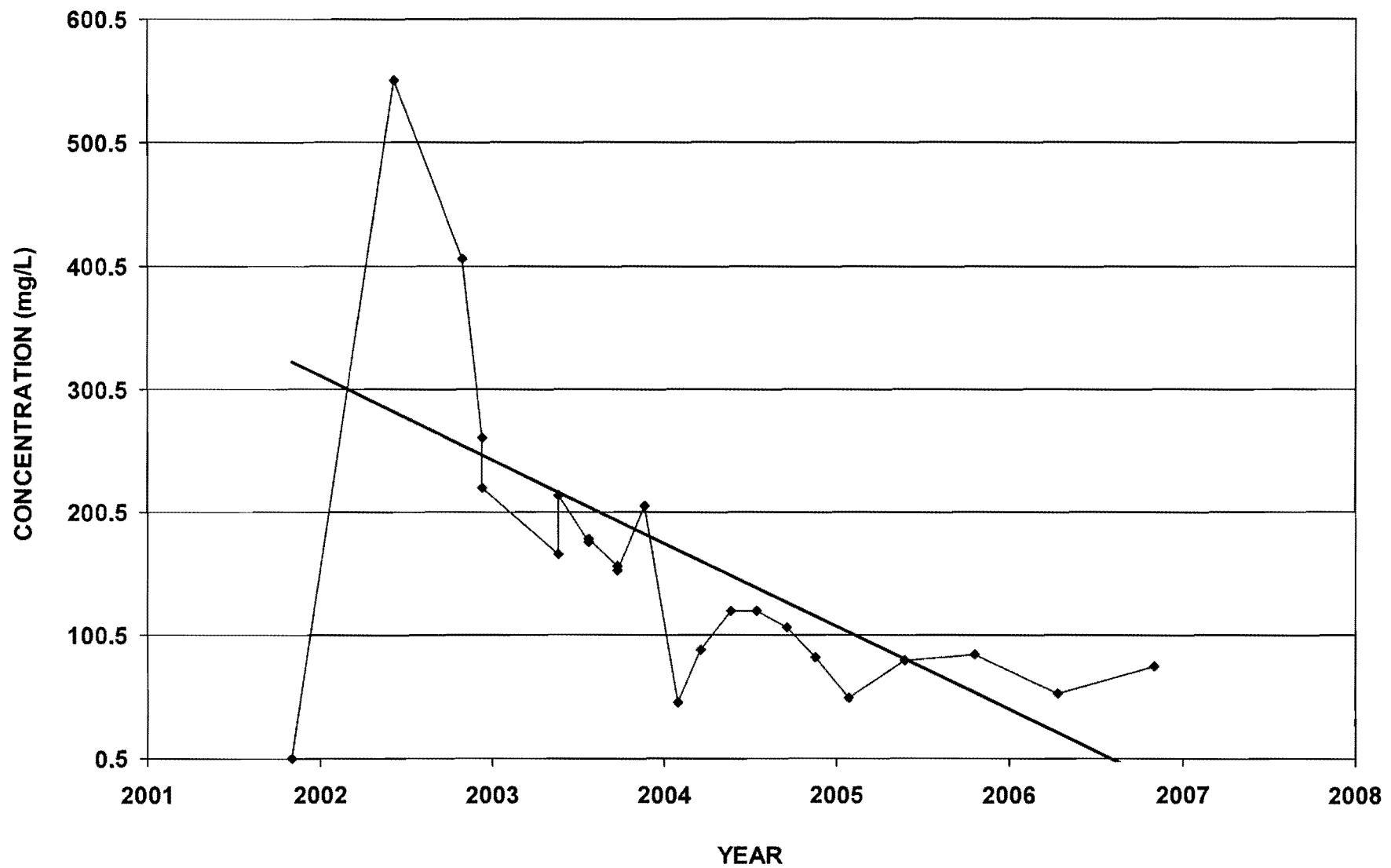
ECMW-6
Ammonia-N



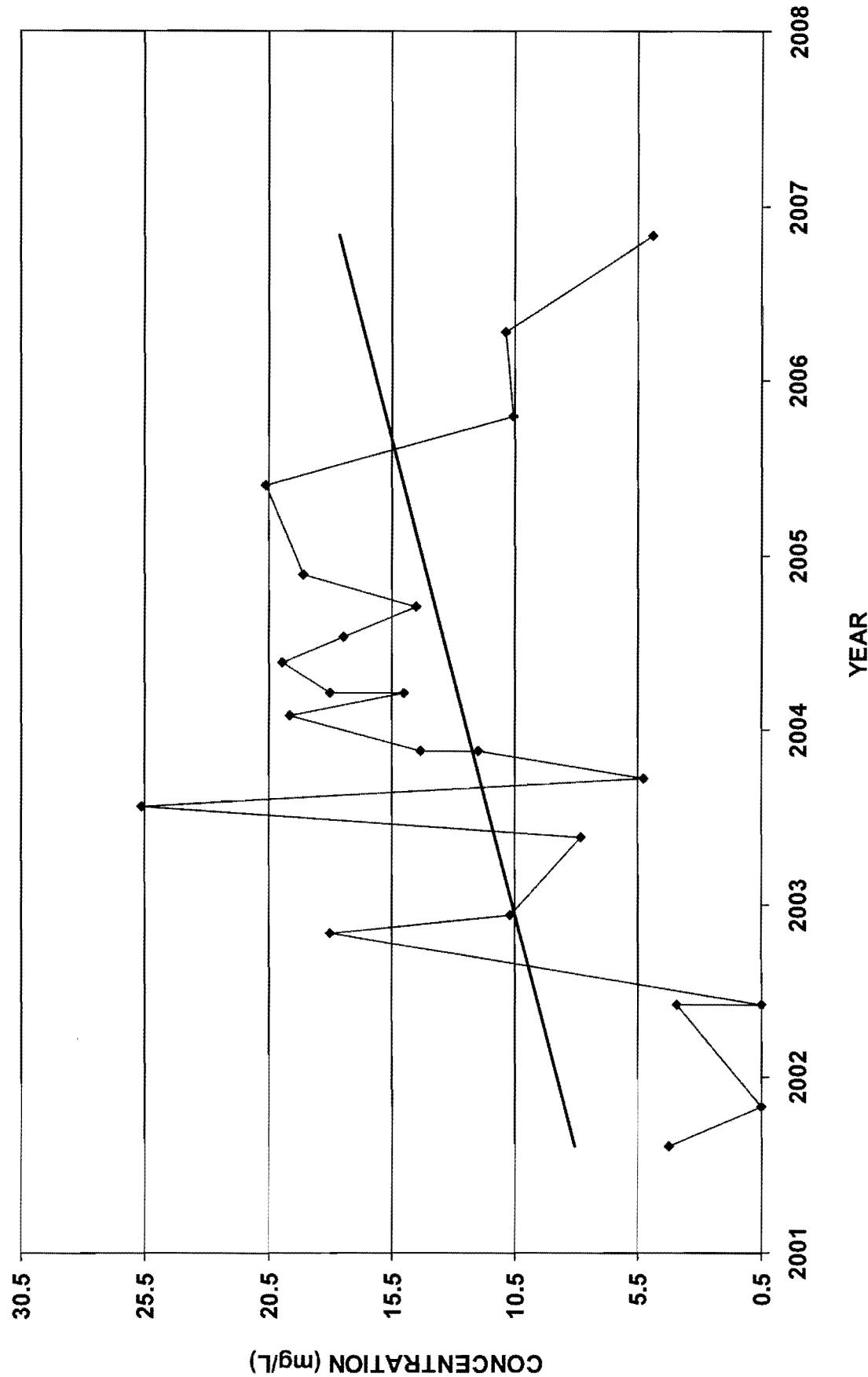
ECMW-7
Ammonia-N



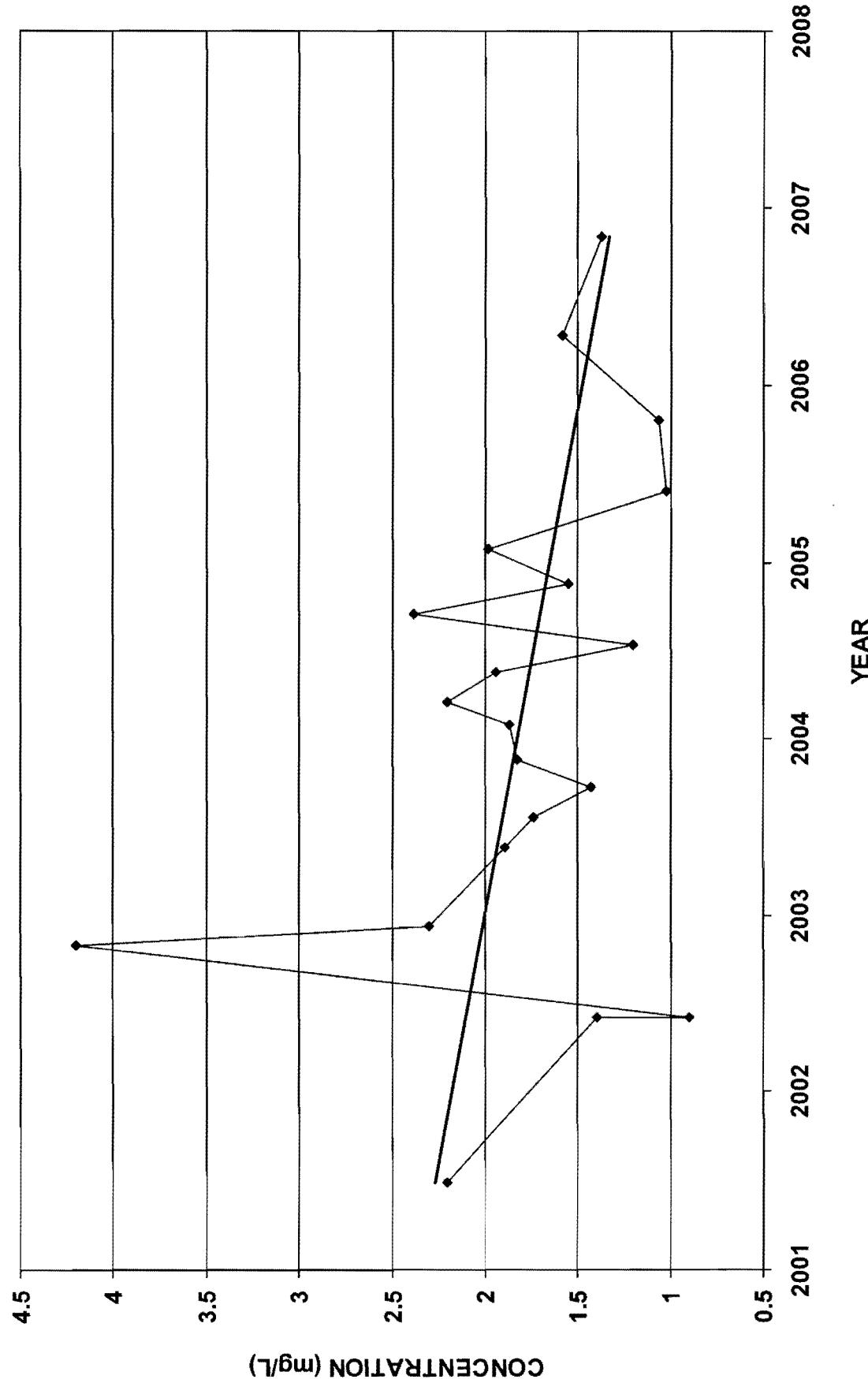
ECMW-8
Ammonia-N



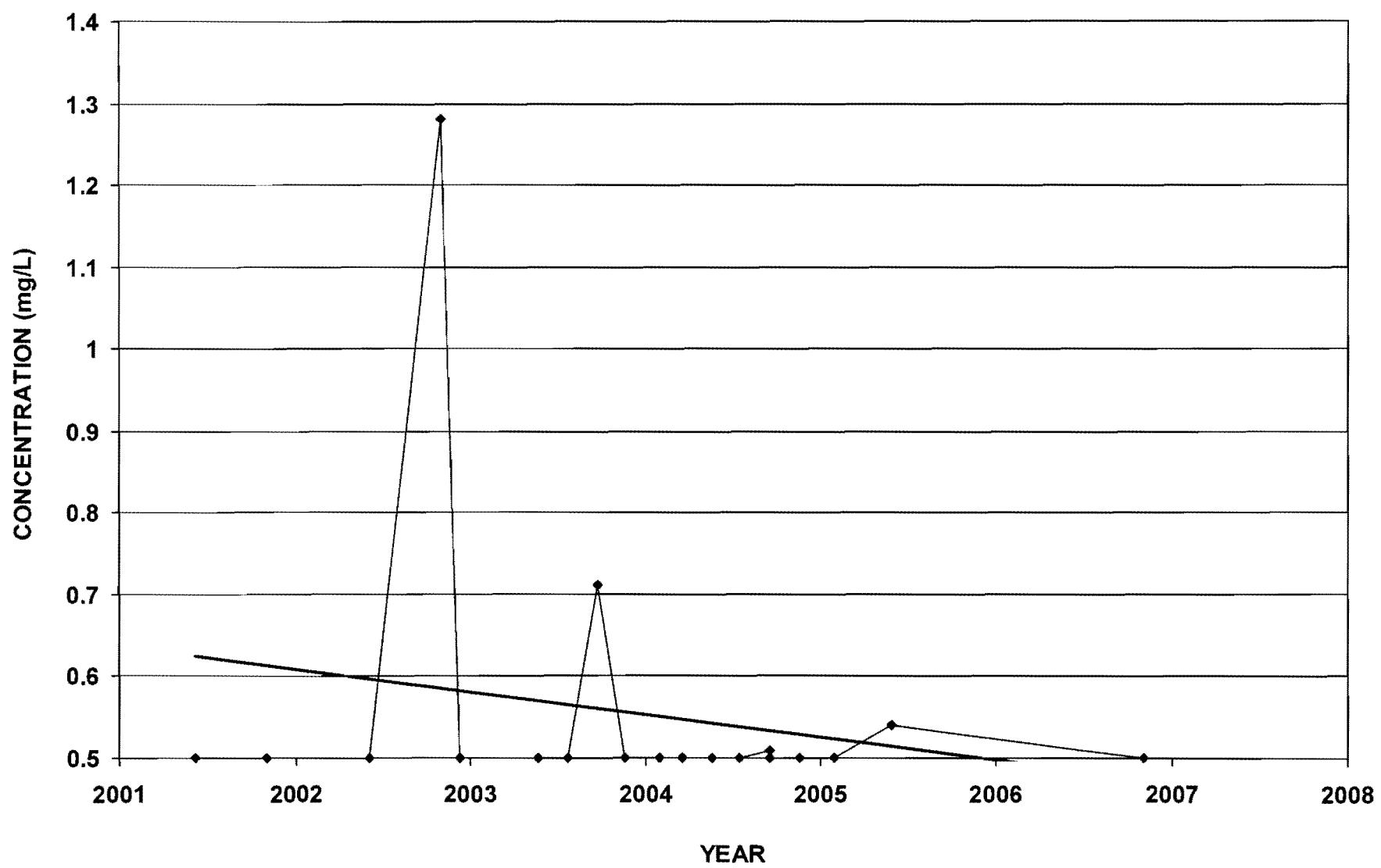
ECMW-11
Ammonia-N



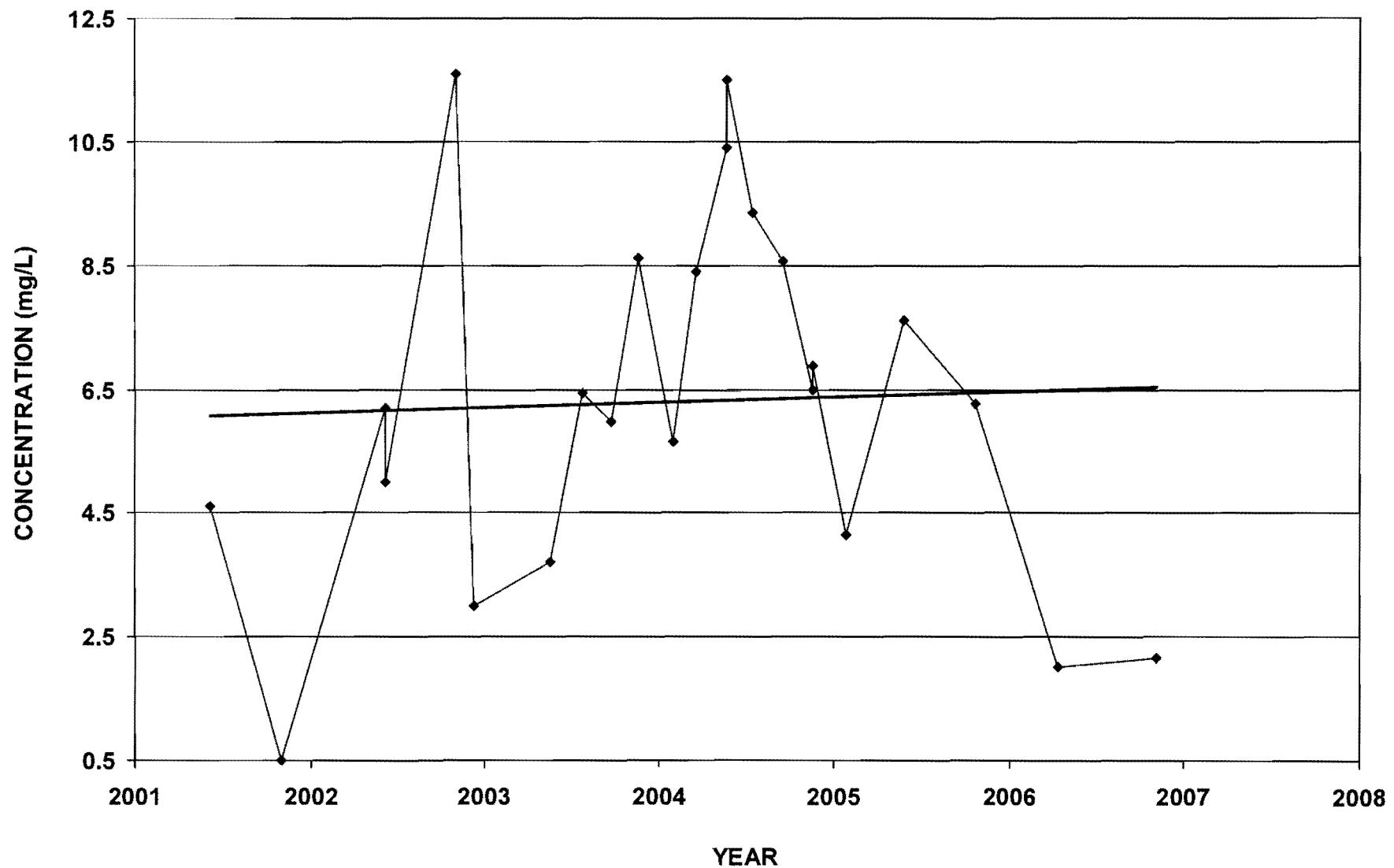
ECMW-12
Ammonia-N



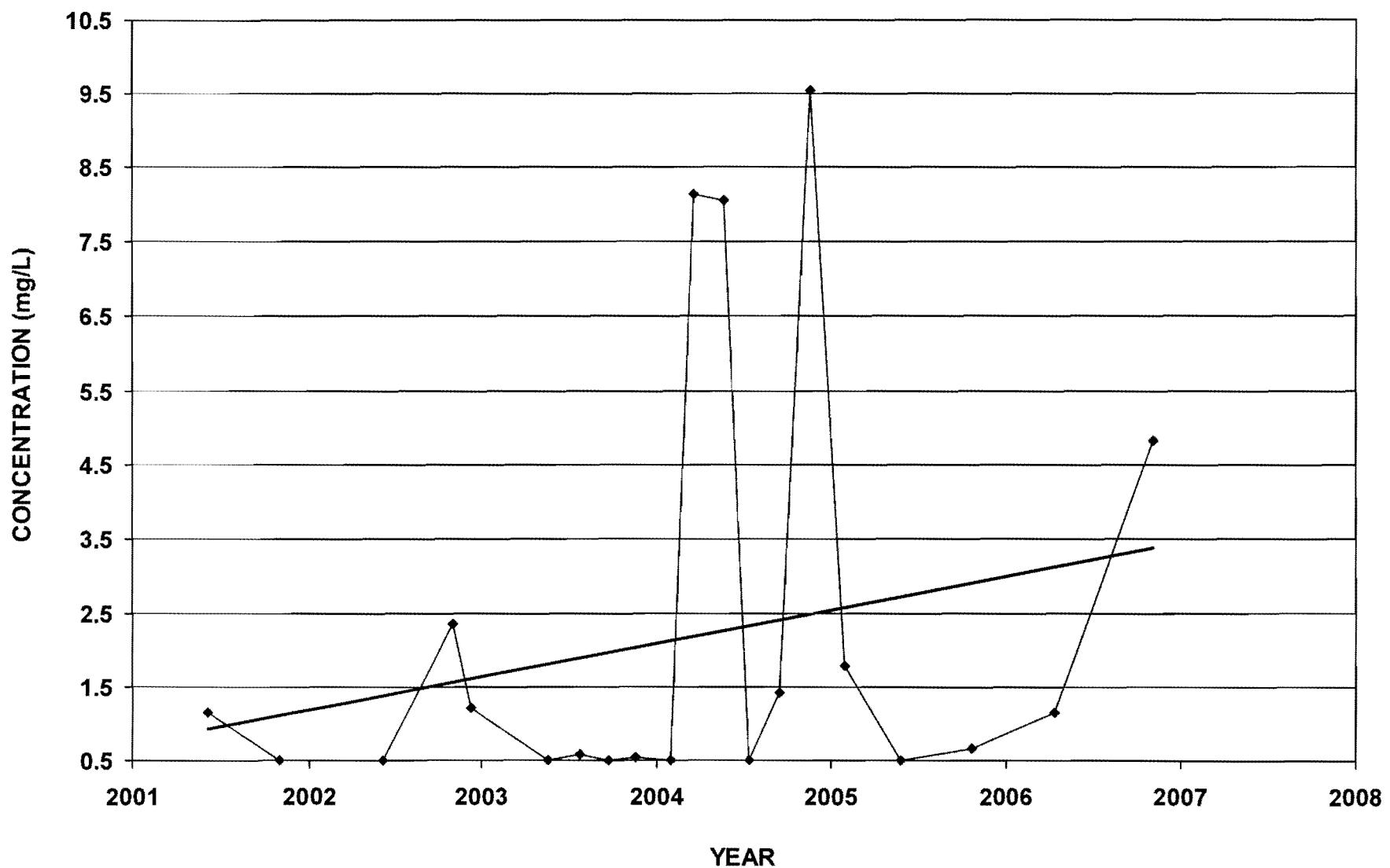
ECMW-13
Ammonia-N



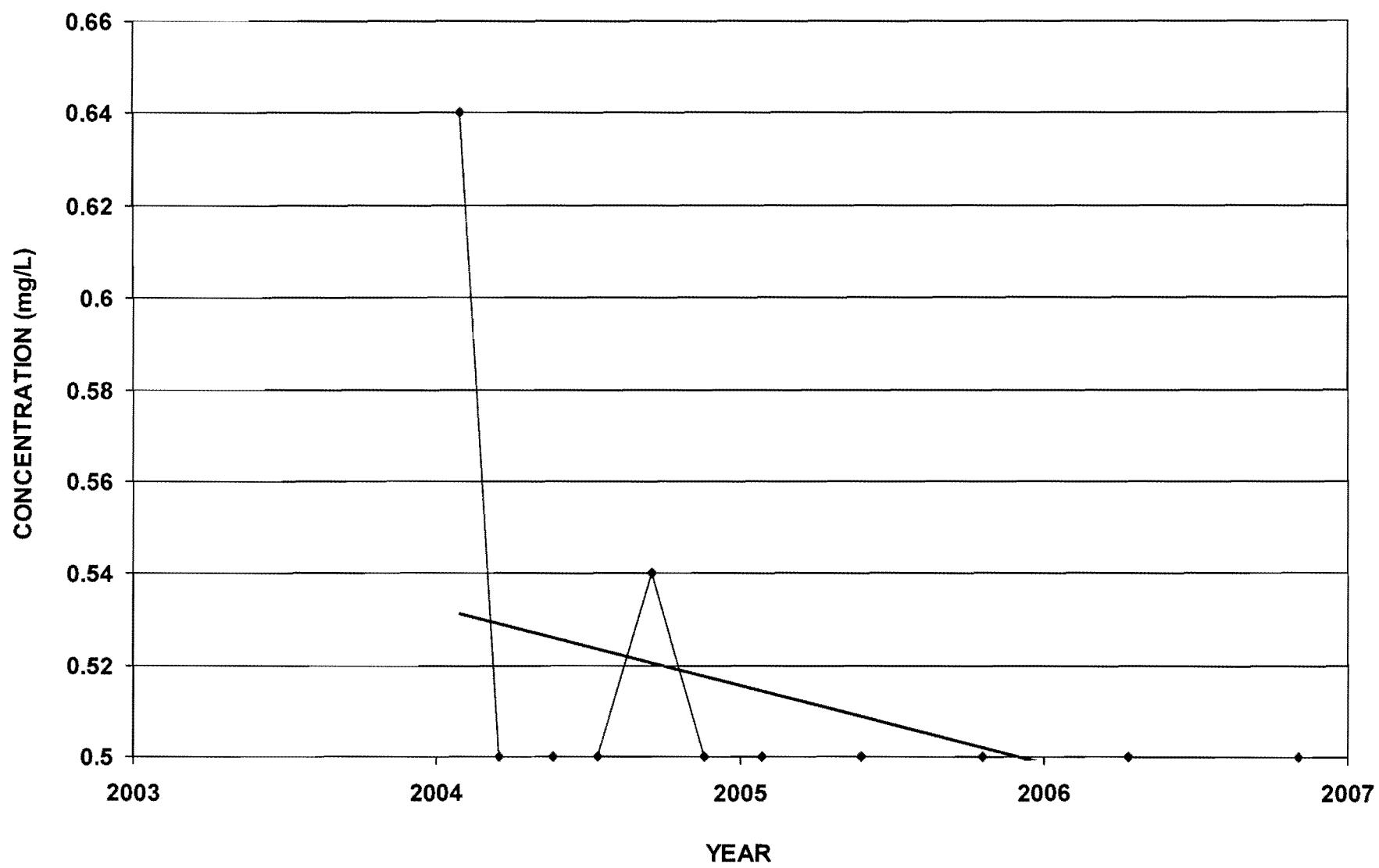
ECMW-16
Ammonia-N



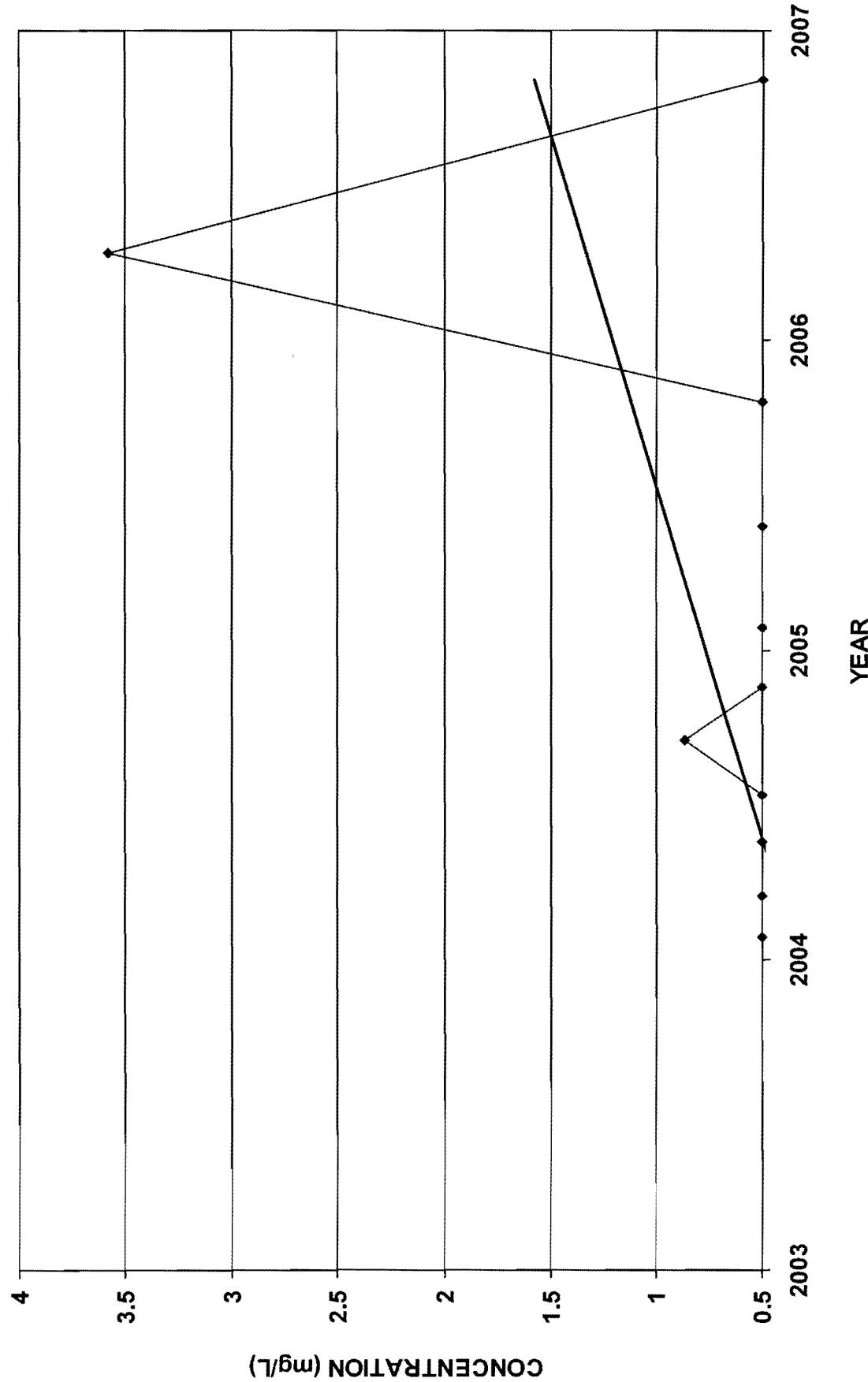
ECMW-17
Ammonia-N



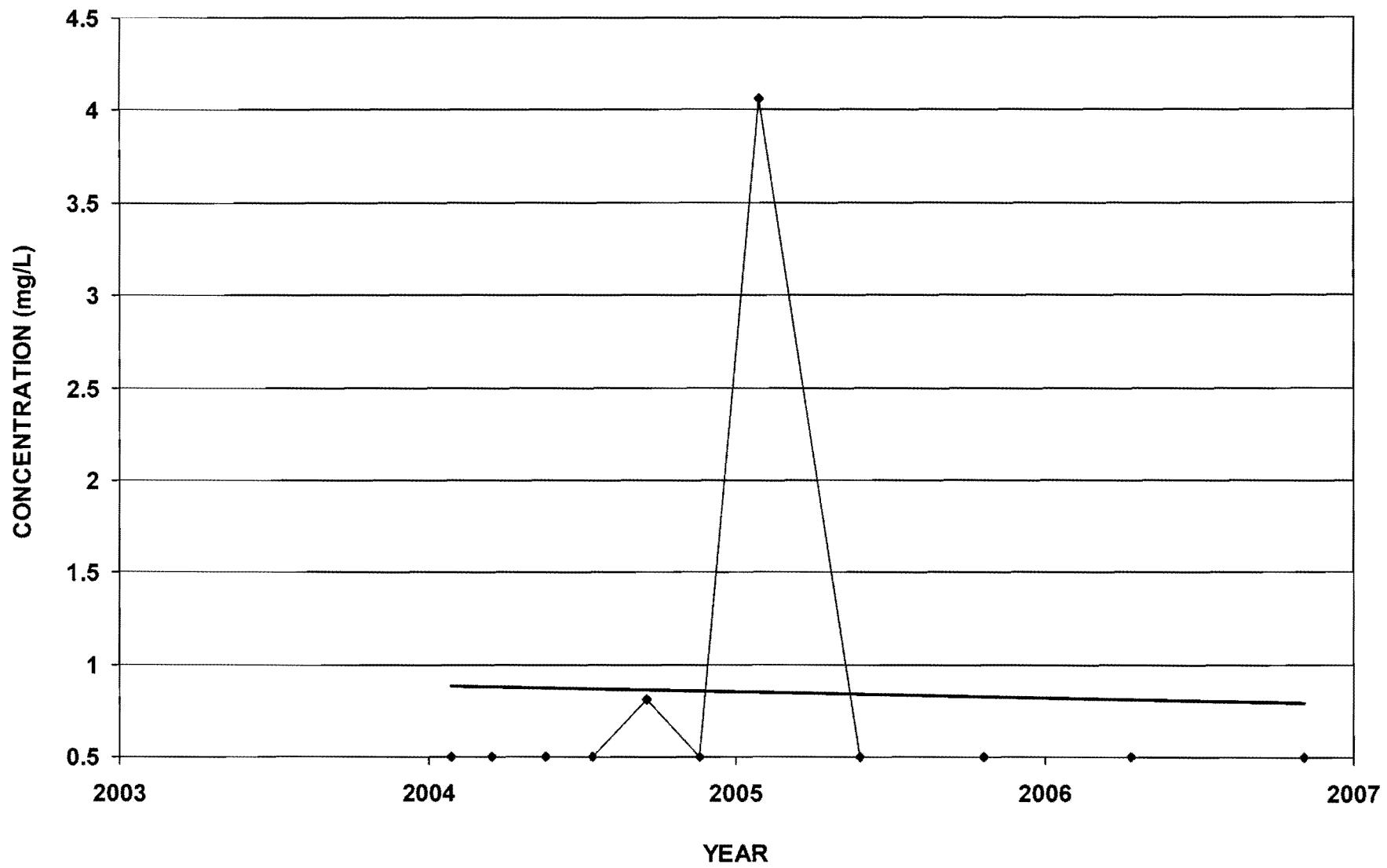
ECMW-19
Ammonia-N



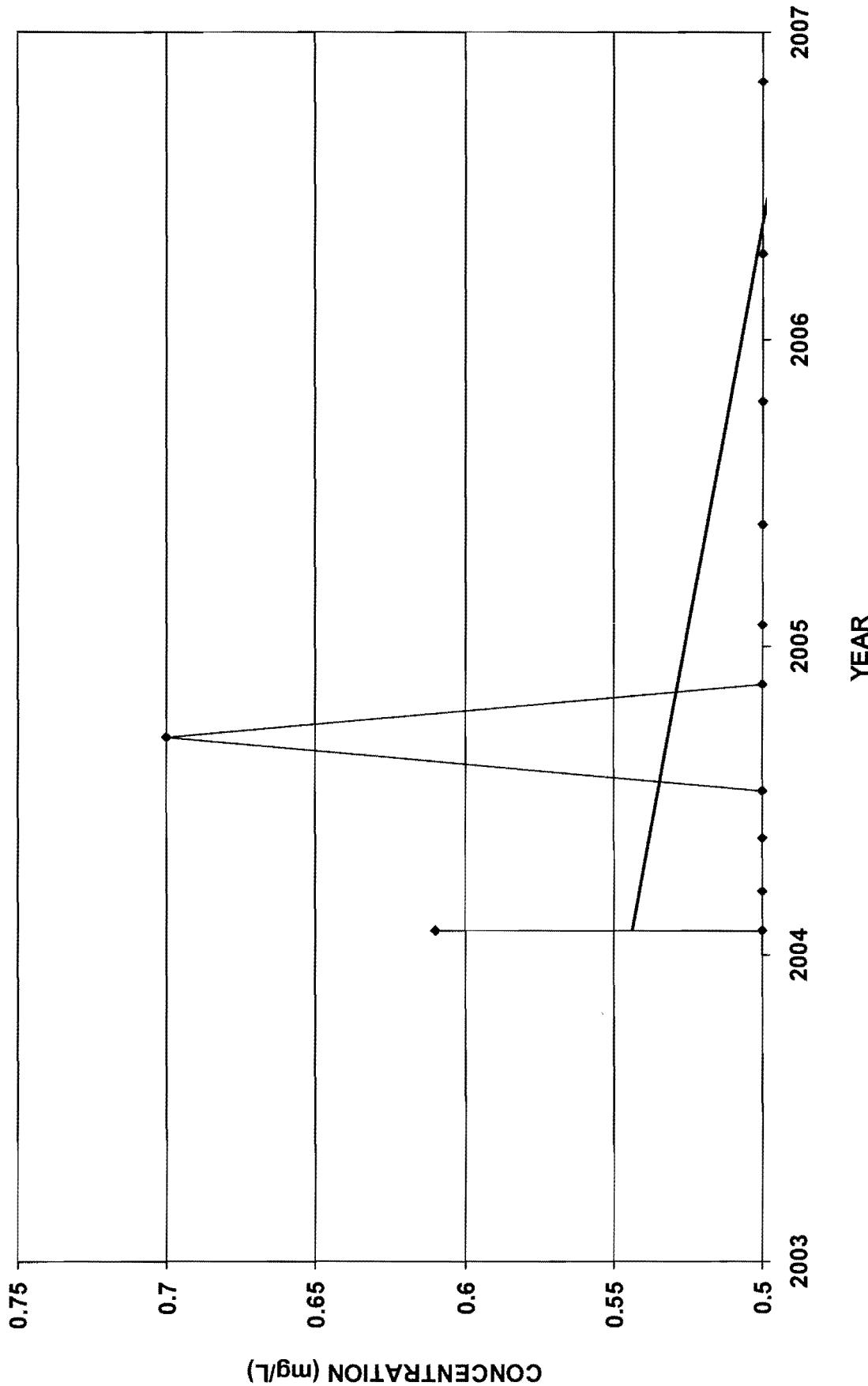
ECMW-20
Ammonia-N



ECMW-21
Ammonia-N



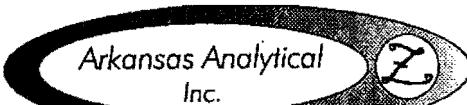
ECMW-22
Ammonia-N



APPENDIX B

ANALYTICAL LABORATORY REPORTS

5/23/06



Arkansas Analytical
Inc.

El Dorado Chemical Inc.
4500 Northwest Avenue
El Dorado, AR 71731
Attn: Wes Morgan

11701 I-30 Bldg 1, Ste 115 • Little Rock, AR 72209
 501-455-3233 • Fax 501-455-6118

Re: 2006 2nd Quarter Groundwaters

Description: Thirty-one water samples received 4/12/06

ANALYTICAL RESULTS

Lab Number:	0604127-01	0604127-02	0604127-03	0604127-04
Sample ID:	Field Blank	ECMW-12	ECMW-11	ECMW-15
Date/Time Collected:	4/11/06,1130	4/11/06,1110	4/11/06,1045	4/11/06,1030
Wet Chemistry				
Alkalinity	mg/L	< 5	190	< 5
Date/Time Analyzed		4/19/06,0855	4/19/06,0855	4/19/06,0855
Ammonia	mg/L	< 0.5	1.58	10.9
Date/Time Analyzed		4/17/06,1610	4/17/06,1610	4/17/06,1610
TOC	mg/L	8.11 ^E	19.8 ^E	12.2 ^E
Date/Time Analyzed		5/18/061400	5/18/061400	5/18/061400
Anions				
Nitrate	mg/L	< 0.5	NA	6.01
Nitrite	mg/L	< 0.5	< 0.5	< 0.5
Date/Time Analyzed		4/13/06,0052	4/13/06,0110	4/13/06,0129
Total Metals				
Chromium	mg/L	< 0.02	NA	NA
Lead	mg/L	< 0.015	NA	NA
Phosphorus	mg/L	< 0.02	0.25	< 0.02
Vanadium	mg/L	< 0.02	< 0.02	< 0.02
Date/Time Analyzed		4/19/06,1245	4/19/06,1245	4/19/06,1245
Dissolved Metals				
Chromium	mg/L	< 0.02	NA	NA
Iron	mg/L	< 0.01	2.16	0.016
Lead	mg/L	< 0.015	NA	NA
Manganese	mg/L	< 0.01	0.189	0.024
Vanadium	mg/L	< 0.02	< 0.02	< 0.02
Date/Time Analyzed		4/19/06,0900	4/19/06,0900	4/19/06,0900

NA means not analyzed.

E means estimated concentration; Analyzed out of holding time.

5/23/06

El Dorado Chemical Inc.
4500 Northwest Avenue
El Dorado, AR 71731
Attn: Wes Morgan

Re: 2006 2nd Quarter Groundwaters

Description: Thirty-one water samples received 4/12/06

ANALYTICAL RESULTS

	Lab Number:	0604127-05	0604127-06	0604127-07	0604127-08
Sample ID:	ECMW-16	ECMW-22	ECMW-17	ECMW-2	
Date/Time Collected:	4/11/06,1020	4/11/06,1005	4/11/06,0945	4/11/06,0925	
Wet Chemistry					
Alkalinity	mg/L	< 5	47	< 5	13
Date/Time Analyzed		4/19/06,0855	4/19/06,0855	4/19/06,0855	4/19/06,0855
Ammonia	mg/L	2.01	< 0.5	1.15	NA
Date/Time Analyzed		4/17/06,1610	4/17/06,1610	4/17/06,1610	NA
TOC	mg/L	2.22 ^E	5.78 ^E	6.01 ^E	3.15 ^E
Date/Time Analyzed		5/18/061400	5/18/061400	5/18/061400	5/18/061400
Anions					
Nitrate	mg/L	17.0	2.56	66.6	< 0.5
Nitrite	mg/L	< 0.5	< 0.5	< 0.5	< 0.5
Date/Time Analyzed		4/12/06,2321	4/12/06,2245	4/12/06,2227	4/12/06,2150
		4/12/06,2303	4/12/06,2245	4/12/06,2208	
Total Metals					
Chromium	mg/L	NA	< 0.02	NA	NA
Lead	mg/L	NA	< 0.015	NA	NA
Phosphorus	mg/L	0.028	0.12	< 0.02	0.044
Vanadium	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
Date/Time Analyzed		4/19/06,1245	4/19/06,1245	4/19/06,1245	4/19/06,1245
Dissolved Metals					
Chromium	mg/L	NA	< 0.02	NA	NA
Iron	mg/L	< 0.01	< 0.01	< 0.01	0.015
Lead	mg/L	NA	< 0.015	NA	NA
Manganese	mg/L	0.104	0.099	0.248	< 0.01
Vanadium	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
Date/Time Analyzed		4/19/06,0900	4/19/06,0900	4/19/06,0900	4/19/06,0900

NA means not analyzed.

E means estimated concentration; Analyzed out of holding time.

5/23/06

El Dorado Chemical Inc.
4500 Northwest Avenue
El Dorado, AR 71731
Attn: Wes Morgan

Re: 2006 2nd Quarter Groundwaters
Description: Thirty-one water samples received 4/12/06

ANALYTICAL RESULTS

Lab Number:	0604127-09	0604127-10	0604127-11	0604127-12
Sample ID:	ECMW-1	ECMW-10	ECMW-10 DUP	ECMW-9
Date/Time Collected:	4/11/06,0910	4/11/06,0846	4/11/06,0845	4/11/06,0835
Wet Chemistry				
Alkalinity	mg/L	< 5	< 5	< 5
Date/Time Analyzed		4/19/06,0855	4/19/06,0855	4/19/06,0855
Ammonia	mg/L	NA	NA	NA
Date/Time Analyzed		NA	NA	NA
TOC	mg/L	< 1.0 ^E	6.66 ^E	6.41 ^E
Date/Time Analyzed		5/18/061400	5/18/061400	5/18/061400
Anions				
Nitrate	mg/L	NA	97.5	95.5
Nitrite	mg/L	< 0.5	< 0.5	< 0.5
Date/Time Analyzed		4/12/06,1724	4/12/06,1848	4/12/06,1804
		4/12/06,1830	4/12/06,1746	4/12/06,1906
Total Metals				
Chromium	mg/L	NA	NA	NA
Lead	mg/L	NA	NA	NA
Phosphorus	mg/L	< 0.02	0.03	< 0.02
Vanadium	mg/L	< 0.02	< 0.02	< 0.02
Date/Time Analyzed		4/19/06,1245	4/19/06,1245	4/19/06,1245
Dissolved Metals				
Chromium	mg/L	NA	NA	NA
Iron	mg/L	< 0.01	< 0.01	< 0.01
Lead	mg/L	NA	NA	NA
Manganese	mg/L	< 0.01	0.204	0.191
Vanadium	mg/L	< 0.02	< 0.02	< 0.02
Date/Time Analyzed		4/19/06,0900	4/19/06,0900	4/19/06,0900

NA means not analyzed.

E means estimated concentration; Analyzed out of holding time.

5/23/06

El Dorado Chemical Inc.
4500 Northwest Avenue
El Dorado, AR 71731
Attn: Wes Morgan

Re: 2006 2nd Quarter Groundwaters

Description: Thirty-one water samples received 4/12/06

ANALYTICAL RESULTS

Lab Number:	0604127-13	0604127-14	0604127-15	0604127-16
Sample ID:	ECMW-8	ECMW-7	ECMW-6	ECMW-5
Date/Time Collected:	4/11/06,0825	4/11/06,0815	4/11/06,0805	4/12/06,0830
Wet Chemistry				
Alkalinity	mg/L	94	< 5	< 5
Date/Time Analyzed		4/19/06,0855	4/19/06,0855	4/19/06,0855
Ammonia	mg/L	53.5	267	154
Date/Time Analyzed		4/17/06,1610	4/17/06,1610	4/18/06,1600
TOC	mg/L	16.0 ^E	4.74 ^E	2.13 ^E
Date/Time Analyzed		5/19/06,1000	5/19/06,1000	5/19/06,1000
Anions				
Nitrate	mg/L	194	516	1680
Nitrite	mg/L	< 0.5	< 0.5	< 0.5
Date/Time Analyzed		4/12/06,2001	4/13/06,1117	4/13/06,1059
		4/12/06,1943	4/12/06,2037	4/12/06,2114
Total Metals				
Chromium	mg/L	NA	NA	NA
Lead	mg/L	NA	0.017	NA
Phosphorus	mg/L	< 0.02	< 0.02	< 0.02
Vanadium	mg/L	< 0.02	< 0.02	< 0.02
Date/Time Analyzed		4/19/06,1245	4/19/06,1245	4/19/06,1245
Dissolved Metals				
Chromium	mg/L	NA	NA	NA
Iron	mg/L	< 0.01	0.283	0.017
Lead	mg/L	NA	< 0.015	NA
Manganese	mg/L	0.396	0.456	2.97
Vanadium	mg/L	< 0.02	< 0.02	< 0.02
Date/Time Analyzed		4/19/06,0900	4/19/06,0900	4/19/06,0900

NA means not analyzed.

E means estimated concentration; Analyzed out of holding time.

5/23/06

El Dorado Chemical Inc.
4500 Northwest Avenue
El Dorado, AR 71731
Attn: Wes Morgan

Re: 2006 2nd Quarter Groundwaters

Description: Thirty-one water samples received 4/12/06

ANALYTICAL RESULTS

Lab Number:	0604127-17	0604127-18	0604127-19	0604127-20
Sample ID:	ECMW-19	ECMW-18	ECMW-13	ECMW-14
Date/Time Collected:	4/12/06,1050	4/12/06,1040	4/12/06,1020	4/12/06,1010
Wet Chemistry				
Alkalinity Date/Time Analyzed	mg/L 4/19/06,0855	32	15	< 5
Ammonia Date/Time Analyzed	mg/L 4/18/06,1600	< 0.5	NA	NA
TOC Date/Time Analyzed	mg/L 5/19/06,1000	2.82 ^E	2.16 ^E	8.03 ^E
Anions				
Nitrate Nitrite Date/Time Analyzed	mg/L mg/L 4/13/06,0318	< 0.5 < 0.5	NA < 0.5	NA < 0.5
Total Metals				
Chromium Lead Phosphorus Vanadium Date/Time Analyzed	mg/L mg/L mg/L mg/L 4/20/06,0900	< 0.02 < 0.015 0.072 < 0.02	< 0.02 < 0.015 0.176 < 0.02	NA NA 0.02 < 0.02
Dissolved Metals				
Chromium Iron Lead Manganese Vanadium Date/Time Analyzed	mg/L mg/L mg/L mg/L mg/L 4/19/06,0900	< 0.02 0.334 < 0.015 0.073 < 0.02	0.065 30.2 0.016 0.082 0.098	NA 0.048 NA 2.81 < 0.02

NA means not analyzed.

E means estimated concentration; Analyzed out of holding time.

5/23/06

El Dorado Chemical Inc.
4500 Northwest Avenue
El Dorado, AR 71731
Attn: Wes Morgan

Re: 2006 2nd Quarter Groundwaters

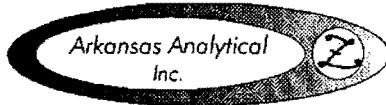
Description: Thirty-one water samples received 4/12/06

ANALYTICAL RESULTS

Lab Number:	0604127-21	0604127-22	0604127-23	0604127-24
Sample ID:	ECMW-14 DUP	MW-2	MW-3	MW-1
Date/Time Collected:	4/12/06,1010	4/12/06,0945	4/12/06,0935	4/12/06,0925
Wet Chemistry				
Alkalinity	mg/L	8.0	12	< 5
Date/Time Analyzed		4/19/06,1135	4/19/06,1135	4/19/06,1135
Ammonia	mg/L	NA	< 0.5	0.57
Date/Time Analyzed		NA	4/18/06,1600	4/18/06,1600
TOC	mg/L	22.4 ^E	28.9 ^E	17.0 ^E
Date/Time Analyzed		5/19/06,1000	5/19/06,1000	5/19/06,1000
Anions				
Nitrate	mg/L	48.5	< 0.5	< 0.5
Nitrite	mg/L	< 0.5	< 0.5	< 0.5
Date/Time Analyzed		4/13/06,0506	4/13/06,0851	4/13/06,0909
		4/13/06,0447		4/13/06,0927
Total Metals				
Chromium	mg/L	NA	< 0.02	< 0.02
Lead	mg/L	NA	< 0.015	< 0.015
Phosphorus	mg/L	< 0.02	0.242	0.144
Vanadium	mg/L	< 0.02	< 0.02	< 0.02
Date/Time Analyzed		4/20/06,0900	4/20/06,0900	4/20/06,0900
Dissolved Metals				
Chromium	mg/L	NA	< 0.02	< 0.02
Iron	mg/L	0.018	0.024	0.969
Lead	mg/L	NA	< 0.015	< 0.015
Manganese	mg/L	0.078	0.424	0.872
Vanadium	mg/L	< 0.02	< 0.02	< 0.02
Date/Time Analyzed		4/20/06,1050	4/20/06,1050	4/20/06,1050

NA means not analyzed.

E means estimated concentration; Analyzed out of holding time.



5/23/06

El Dorado Chemical Inc.
4500 Northwest Avenue
El Dorado, AR 71731
Attn: Wes Morgan

Re: 2006 2nd Quarter Groundwaters
Description: Thirty-one water samples received 4/12/06

ANALYTICAL RESULTS

Lab Number:	0604127-25	0604127-26	0604127-27	0604127-28
Sample ID:	MW-4	ECMW-3	ECMW-4	ECMW-20
Date/Time Collected:	4/12/06,0910	4/12/06,0855	4/12/06,0845	4/12/06,0815
Wet Chemistry				
Alkalinity	mg/L	7.0	57	< 5
Date/Time Analyzed		4/19/06,1135	4/19/06,1135	4/19/06,1135
Ammonia	mg/L	< 0.5	NA	NA
Date/Time Analyzed		4/18/06,1600	NA	NA
TOC	mg/L	12.4 ^E	4.11 ^E	30.0 ^E
Date/Time Analyzed		5/19/06,1000	5/19/06,1000	5/19/06,1000
Anions				
Nitrate	mg/L	0.821	< 0.5	< 0.5
Nitrite	mg/L	< 0.5	< 0.5	< 1.0 ^{EDL}
Date/Time Analyzed		4/13/06,0946	4/13/06,0524	4/13/06,0542
				4/13/06,0600
				4/13/06,1136
Total Metals				
Chromium	mg/L	< 0.02	NA	NA
Lead	mg/L	< 0.015	NA	NA
Phosphorus	mg/L	0.046	0.232	< 0.02
Vanadium	mg/L	< 0.02	< 0.02	< 0.02
Date/Time Analyzed		4/20/06,0900	4/20/06,0900	4/20/06,0900
				4/20/06,0900
Dissolved Metals				
Chromium	mg/L	< 0.02	NA	NA
Iron	mg/L	4.98	< 0.01	0.535
Lead	mg/L	< 0.015	NA	NA
Manganese	mg/L	0.024	0.01	2.43
Vanadium	mg/L	0.029	< 0.02	< 0.02
Date/Time Analyzed		4/20/06,1050	4/20/06,1050	4/20/06,1050
				4/20/06,1050

NA means not analyzed.

E means estimated concentration; Analyzed out of holding time.

EDL means elevated detection limit due to matrix interference.

5/23/06

El Dorado Chemical Inc.
4500 Northwest Avenue
El Dorado, AR 71731
Attn: Wes Morgan

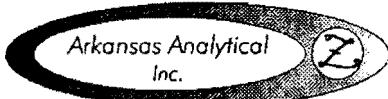
Re: 2006 2nd Quarter Groundwaters

Description: Thirty-one water samples received 4/12/06

ANALYTICAL RESULTS

Lab Number:	0604127-29	0604127-30	0604127-31
Sample ID:	ECMW-21	Field Blank	Trip Blank
Date/Time Collected:	4/12/06,0805	4/12/06,1115	4/3/06,1640
Wet Chemistry			
Alkalinity	mg/L	5.0	< 5
Date/Time Analyzed		4/19/06,1135	4/19/06,1135
Ammonia	mg/L	< 0.5	< 0.5
Date/Time Analyzed		4/18/06,1600	4/18/06,1600
TOC	mg/L	1.30 ^E	1.01 ^E
Date/Time Analyzed		5/19/06,1000	5/19/06,1000
Anions			
Nitrate	mg/L	3.19	< 0.5
Nitrite	mg/L	< 0.5	< 0.5
Date/Time Analyzed		4/13/06,0636	4/13/06,0713
Total Metals			
Chromium	mg/L	< 0.02	< 0.02
Lead	mg/L	< 0.015	< 0.015
Phosphorus	mg/L	< 0.02	< 0.02
Vanadium	mg/L	< 0.02	< 0.02
Date/Time Analyzed		4/20/06,0900	4/20/06,0900
Dissolved Metals			
Chromium	mg/L	< 0.02	< 0.02
Iron	mg/L	< 0.01	< 0.01
Lead	mg/L	< 0.015	< 0.015
Manganese	mg/L	0.043	< 0.01
Vanadium	mg/L	< 0.02	< 0.02
Date/Time Analyzed		4/20/06,1050	4/20/06,1050

E means estimated concentration; Analyzed out of holding time.



5/23/06

El Dorado Chemical Inc.
4500 Northwest Avenue
El Dorado, AR 71731
Attn: Wes Morgan

Re: 2006 2nd Quarter Groundwaters
Description: Thirty-one water samples received 4/12/06

QUALITY CONTROL RESULTS

		Percent Variance Duplicates	Percent Recovery Matrix Spike	Percent Recovery Control Spike	Method of Analysis
	Blank				
Lab Number(s): 0604127 - 01-20					
Wet Chemistry	mg/L				
Alkalinity					
	< 5.0	1.00	NA	100	EPA 310.1
Lab Number(s): 0604127 - 21-31					
Wet Chemistry	mg/L				
Alkalinity					
	< 5.0	3.04	NA	98.5	EPA 310.1
Lab Number(s): 0604127 - 01-03,05-07,13-14					
Wet Chemistry	mg/L				
Ammonia					
	< 0.5	1.63	79.3	98.4	EPA 350.3
Lab Number(s): 0604127 - 15,17,22-25,28-31					
Wet Chemistry	mg/L				
Ammonia					
	< 0.5	0.397	97.1	101	EPA 350.3
Lab Number(s): 0604127 - 01-11					
Wet Chemistry	mg/L				
TOC					
	< 1.0	3.83	107	104	EPA 415.1
Lab Number(s): 0604127 - 12-31					
Wet Chemistry	mg/L				
TOC					
	< 1.0	7.46	110	104	EPA 415.1
Batch Number: A604075					
Lab Number(s): 0604127 - 01,03-04,17,20-31					
Anions	mg/L				
Nitrate					
	< 0.5	0.233	102	104	EPA 300.0

NA means not analyzed.

Methods are from EPA 600/4-79-020, Revised March, 1983 and SW 846, Revised December, 1996.

Instrument calibration and quality control samples performed at or above frequency
specified in analytical method.

5/23/06

El Dorado Chemical Inc.
4500 Northwest Avenue
El Dorado, AR 71731
Attn: Wes Morgan

Re: 2006 2nd Quarter Groundwaters
Description: Thirty-one water samples received 4/12/06

QUALITY CONTROL RESULTS

	Blank	Percent Variance Duplicates	Percent Recovery Matrix Spike	Percent Recovery Control Spike	Method of Analysis
Batch Number: A604051					
Lab Number(s): 0604127 - 05-15					
Anions	mg/L				
Nitrate	< 0.5	0.00	103	102	EPA 300.0
Batch Number: A604075					
Lab Number(s): 0604127 - 01-04,16-31					
Anions	mg/L				
Nitrite	< 0.5	0.00	100	101	EPA 300.0
Batch Number: A604051					
Lab Number(s): 0604127 - 05-15					
Anions	mg/L				
Nitrite	< 0.5	0.121	101	101	EPA 300.0
Batch Number: 0419W					
Lab Number(s): 0604127 - 01,06,16					
Total Metals	mg/L				
Chromium	< 0.02	2.77/0.207	93.5	96.5	EPA 200.7
Batch Number: 0420W					
Lab Number(s): 0604127 - 17-18,22-25,28-31					
Total Metals	mg/L				
Chromium	< 0.02	1.49/1.86	93.1	96.9	EPA 200.7
Batch Number: 0419W					
Lab Number(s): 0604127 - 01,06,14					
Total Metals	mg/L				
Lead	< 0.015	0.459/0.885	86.4	90.4	EPA 200.7

Methods are from EPA 600/4-79-020, Revised March, 1983 and SW 846, Revised December, 1996.

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5/23/06

El Dorado Chemical Inc.
4500 Northwest Avenue
El Dorado, AR 71731
Attn: Wes Morgan

Re: 2006 2nd Quarter Groundwaters
Description: Thirty-one water samples received 4/12/06

QUALITY CONTROL RESULTS

		Percent Variance Duplicates	Percent Recovery Matrix Spike	Percent Recovery Control Spike	Method of Analysis
Batch Number: 0420W	Blank				
Lab Number(s): 0604127 - 17-18,22-25,28-31					
Total Metals	mg/L				
Lead	< 0.015	0.928/1.83	86.2	87.4	EPA 200.7
Batch Number: 0419W					
Lab Number(s): 0604127 - 01-16					
Total Metals	mg/L				
Phosphorus	< 0.02	2.59/0.633	91.0	94.8	EPA 200.7
Vanadium	< 0.02	2.12/0.00	92.5	94.0	EPA 200.7
Batch Number: 0420W					
Lab Number(s): 0604127 - 17-31					
Total Metals	mg/L				
Phosphorus	< 0.02	0.416/5.14	88.9	93.3	EPA 200.7
Vanadium	< 0.02	0.539/0.528	92.3	94.8	EPA 200.7
Batch Number: 0419Wd					
Lab Number(s): 0604127 - 01,06,17-18					
Dissolved Metals	mg/L				
Chromium	< 0.02	0.402/1.42	99.4	98.5	EPA 200.7
Batch Number: 0420Wd					
Lab Number(s): 0604127 - 22-25,28-31					
Dissolved Metals	mg/L				
Chromium	< 0.02	1.21/0.210	99.2	95.3	EPA 200.7
Batch Number: 0419Wd					
Lab Number(s): 0604127 - 01,06,14,17-18					
Dissolved Metals	mg/L				
Lead	< 0.015	6.57/0.00	93.9	95.8	EPA 200.7

Methods are from EPA 600/4-79-020, Revised March, 1983 and SW 846, Revised December, 1996.

Instrument calibration and quality control samples performed at or above frequency specified in analytical method.

5/23/06

El Dorado Chemical Inc.
4500 Northwest Avenue
El Dorado, AR 71731
Attn: Wes Morgan

Re: 2006 2nd Quarter Groundwaters
Description: Thirty-one water samples received 4/12/06

QUALITY CONTROL RESULTS

	Blank	Percent Variance Duplicates	Percent Recovery Matrix Spike	Percent Recovery Control Spike	Method of Analysis
Batch Number: 0420Wd					
Lab Number(s): 0604127 - 22-25,28-31					
Dissolved Metals	mg/L				
Lead	< 0.015	4.31/0.631	96.5	95.1	EPA 200.7
Batch Number: 0419Wd					
Lab Number(s): 0604127 - 01-20					
Dissolved Metals	mg/L				
Iron	< 0.01	14.4/2.97	99.3	108	EPA 200.7
Manganese	< 0.01	0.158/0.420	107	95.2	EPA 200.7
Vanadium	< 0.02	1.02/1.04	98.0	96.0	EPA 200.7
Batch Number: 0420Wd					
Lab Number(s): 0604127 - 21-31					
Dissolved Metals	mg/L				
Iron	< 0.01	11.2/1.40	92.6	100	EPA 200.7
Manganese	< 0.01	1.20/0.408	101	98.0	EPA 200.7
Vanadium	< 0.02	0.519/0.539	94.3	82.8	EPA 200.7

Methods are from EPA 600/4-79-020, Revised March, 1983 and SW 846, Revised December, 1996.

Instrument calibration and quality control samples performed at or above frequency specified in analytical method.

Alkalinity analyzed by: Teresa Thomas Kenneth Pigue
Teresa Thomas, Kenneth Pigue

Ammonia analyzed by: Jennifer Morales
Jennifer Morales

TOC analyzed by: Teresa Thomas
Teresa Thomas

Anions analyzed by: Tracy Bounds Lessie Redican
Tracy Bounds, Lessie Redican

Metals analyzed by: Melissa Green
Melissa Green

Arkansas Analytical

Inc.



15 November 2006

Wes Morgan
El Dorado Chemical Inc.
P.O.Box 231
El Dorado, AR 71731
Project: Groundwaters

11701 I-30 Bldg 1, Ste 115 • Little Rock, AR 72209
501-455-3233 • Fax 501-455-6118

Date Received: 02-Nov-06 10:28

ANALYTICAL RESULTS

Lab Number:	0611020-01					
Sample Name:	EDCMW-1					
Date/Time Collected:	11/1/06 9:45					
Sample Matrix:	Water					
Anions	Units	Result	Date/Time Analyzed	Batch	Method	
Nitrite as N	mg/L	< 0.50	11/2/06 14:53	A611022	EPA 300.0	
Dissolved Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method	
Iron	mg/L	< 0.01	11/8/06 10:41	A611082	EPA 200.7	
Manganese	mg/L	< 0.01	11/8/06 10:41	A611082	EPA 200.7	
Vanadium	mg/L	< 0.02	11/8/06 10:42	A611082	EPA 200.7	
Total Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method	
Phosphorus	mg/L	0.025	11/7/06 10:22	A611064	EPA 200.7	
Vanadium	mg/L	< 0.02	11/7/06 10:22	A611064	EPA 200.7	
Wet Chemistry	Units	Result	Date/Time Analyzed	Batch	Method	
TOC	mg/L	< 1.00	11/9/06 14:49	A611107	EPA 415.1/9060A	
Total Alkalinity	mg/L	< 5.0	11/6/06 10:30	A611069	EPA 310.1	

ANALYTICAL RESULTS

Lab Number:	0611020-02					
Sample Name:	EDCMW-2					
Date/Time Collected:	11/1/06 9:30					
Sample Matrix:	Water					
Anions	Units	Result	Date/Time Analyzed	Batch	Method	
Nitrite as N	mg/L	< 0.50	11/2/06 15:30	A611022	EPA 300.0	
Dissolved Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method	
Iron	mg/L	< 0.01	11/8/06 10:51	A611082	EPA 200.7	
Manganese	mg/L	< 0.01	11/8/06 10:51	A611082	EPA 200.7	
Vanadium	mg/L	< 0.02	11/8/06 10:51	A611082	EPA 200.7	
Total Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method	
Phosphorus	mg/L	0.065	11/7/06 10:25	A611064	EPA 200.7	
Vanadium	mg/L	< 0.02	11/7/06 10:24	A611064	EPA 200.7	
Wet Chemistry	Units	Result	Date/Time Analyzed	Batch	Method	
TOC	mg/L	3.31	11/9/06 14:49	A611107	EPA 415.1/9060A	
Total Alkalinity	mg/L	18.0	11/6/06 10:30	A611069	EPA 310.1	

15 November 2006

Arkansas Analytical
Inc.



Wes Morgan
El Dorado Chemical Inc.
P.O. Box 231
El Dorado, AR 71731
Project: Groundwaters

Date Received: 02-Nov-06 10:28

ANALYTICAL RESULTS

<u>Lab Number:</u>	0611020-03					
<u>Sample Name:</u>	EDCMW-3					
<u>Date/Time Collected:</u>	11/1/06 9:15					
<u>Sample Matrix:</u>	Water					
<u>Anions</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>	
Nitrite as N	mg/L	< 0.50	11/2/06 15:48	A611022	EPA 300.0	
<u>Dissolved Metals 200.7</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>	
Iron	mg/L	0.02	11/8/06 10:53	A611082	EPA 200.7	
Manganese	mg/L	< 0.01	11/8/06 10:53	A611082	EPA 200.7	
Vanadium	mg/L	< 0.02	11/8/06 10:54	A611082	EPA 200.7	
<u>Total Metals 200.7</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>	
Phosphorus	mg/L	0.195	11/7/06 10:27	A611064	EPA 200.7	
Vanadium	mg/L	< 0.02	11/7/06 10:27	A611064	EPA 200.7	
<u>Wet Chemistry</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>	
TOC	mg/L	4.03	11/9/06 14:49	A611107	EPA 415.1/9060A	
Total Alkalinity	mg/L	58.0	11/6/06 10:30	A611069	EPA 310.1	

ANALYTICAL RESULTS

<u>Lab Number:</u>	0611020-04					
<u>Sample Name:</u>	EDCMW-4					
<u>Date/Time Collected:</u>	11/1/06 9:00					
<u>Sample Matrix:</u>	Water					
<u>Anions</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>	
Nitrite as N	mg/L	< 0.50	11/2/06 16:06	A611022	EPA 300.0	
<u>Dissolved Metals 200.7</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>	
Iron	mg/L	0.92	11/8/06 10:56	A611082	EPA 200.7	
Manganese	mg/L	0.94	11/8/06 10:56	A611082	EPA 200.7	
Vanadium	mg/L	< 0.02	11/8/06 10:56	A611082	EPA 200.7	
<u>Total Metals 200.7</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>	
Phosphorus	mg/L	< 0.020	11/7/06 10:29	A611064	EPA 200.7	
Vanadium	mg/L	< 0.02	11/7/06 10:29	A611064	EPA 200.7	
<u>Wet Chemistry</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>	
TOC	mg/L	23.7	11/9/06 14:49	A611107	EPA 415.1/9060A	
Total Alkalinity	mg/L	< 5.0	11/6/06 10:30	A611069	EPA 310.1	

15 November 2006

Arkansas Analytical
Inc.

Wes Morgan
El Dorado Chemical Inc.
P.O.Box 231
El Dorado, AR 71731
Project: Groundwaters

Date Received: 02-Nov-06 10:28

ANALYTICAL RESULTS

Lab Number:	0611020-05					
Sample Name:	EDCMW-5					
Date/Time Collected:	11/1/06 10:00					
Sample Matrix:	Water					
Anions	Units	Result	Date/Time Analyzed	Batch	Method	
Nitrite as N	mg/L	< 0.50	11/2/06 16:24	A611022	EPA 300.0	
Dissolved Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method	
Iron	mg/L	< 0.01	11/8/06 10:59	A611082	EPA 200.7	
Manganese	mg/L	2.43	11/8/06 11:03	A611082	EPA 200.7	
Vanadium	mg/L	< 0.02	11/8/06 10:59	A611082	EPA 200.7	
Total Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method	
Phosphorus	mg/L	< 0.020	11/7/06 10:32	A611064	EPA 200.7	
Vanadium	mg/L	< 0.02	11/7/06 10:31	A611064	EPA 200.7	
Wet Chemistry	Units	Result	Date/Time Analyzed	Batch	Method	
TOC	mg/L	1.99	11/9/06 14:49	A611107	EPA 415.1/9060A	
Total Alkalinity	mg/L	5.0	11/6/06 10:30	A611069	EPA 310.1	

ANALYTICAL RESULTS

Lab Number:	0611020-06					
Sample Name:	EDCMW-6					
Date/Time Collected:	11/1/06 8:45					
Sample Matrix:	Water					
Anions	Units	Result	Date/Time Analyzed	Batch	Method	
Nitrate as N	mg/L	2390	11/2/06 17:00	A611022	EPA 300.0	
Nitrite as N	mg/L	< 0.50	11/2/06 16:42	A611022	EPA 300.0	
Dissolved Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method	
Iron	mg/L	0.01	11/8/06 11:05	A611082	EPA 200.7	
Manganese	mg/L	3.87	11/8/06 11:09	A611082	EPA 200.7	
Vanadium	mg/L	< 0.02	11/8/06 11:05	A611082	EPA 200.7	
Total Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method	
Phosphorus	mg/L	0.027	11/7/06 10:34	A611064	EPA 200.7	
Vanadium	mg/L	< 0.02	11/7/06 10:34	A611064	EPA 200.7	
Wet Chemistry	Units	Result	Date/Time Analyzed	Batch	Method	
Ammonia as N	mg/L	170	11/6/06 15:00	A611066	EPA 350.3	
TOC	mg/L	1.72	11/9/06 14:49	A611107	EPA 415.1/9060A	
Total Alkalinity	mg/L	< 5.0	11/6/06 10:30	A611069	EPA 310.1	

15 November 2006

Wes Morgan
El Dorado Chemical Inc.
P.O.Box 231
El Dorado, AR 71731
Project: Groundwaters

Arkansas Analytical
Inc.

Date Received: 02-Nov-06 10:28

ANALYTICAL RESULTS

<u>Lab Number:</u>	0611020-07					
<u>Sample Name:</u>	EDCMW-7					
<u>Date/Time Collected:</u>	11/1/06 8:30					
<u>Sample Matrix:</u>	Water					
Anions	Units	Result	Date/Time Analyzed	Batch	Method	
Nitrate as N	mg/L	105	11/2/06 17:37	A611022	EPA 300.0	
Nitrite as N	mg/L	< 0.50	11/2/06 17:18	A611022	EPA 300.0	
Dissolved Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method	
Iron	mg/L	0.06	11/8/06 11:18	A611082	EPA 200.7	
Lead	mg/L	< 0.015	11/8/06 11:18	A611082	EPA 200.7	
Manganese	mg/L	0.14	11/8/06 11:17	A611082	EPA 200.7	
Vanadium	mg/L	< 0.02	11/8/06 11:18	A611082	EPA 200.7	
Total Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method	
Lead	mg/L	< 0.015	11/7/06 10:37	A611064	EPA 200.7	
Phosphorus	mg/L	0.053	11/7/06 10:36	A611064	EPA 200.7	
Vanadium	mg/L	< 0.02	11/7/06 10:36	A611064	EPA 200.7	
Wet Chemistry	Units	Result	Date/Time Analyzed	Batch	Method	
Ammonia as N	mg/L	57.4	11/6/06 15:00	A611066	EPA 350.3	
TOC	mg/L	15.7	11/9/06 14:49	A611107	EPA 415.1/9060A	
Total Alkalinity	mg/L	< 5.0	11/6/06 10:30	A611069	EPA 310.1	

15 November 2006

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ANALYTICAL RESULTS

<u>Lab Number:</u>	0611020-08				
<u>Sample Name:</u>	EDCMW-8				
<u>Date/Time Collected:</u>	11/1/06 8:15				
<u>Sample Matrix:</u>	Water				
Anions	Units	Result	Date/Time Analyzed	Batch	Method
Nitrate as N	mg/L	224	11/2/06 18:13	A611022	EPA 300.0
Nitrite as N	mg/L	< 0.50	11/2/06 17:55	A611022	EPA 300.0
Dissolved Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method
Iron	mg/L	< 0.01	11/8/06 11:21	A611082	EPA 200.7
Manganese	mg/L	0.47	11/8/06 11:20	A611082	EPA 200.7
Vanadium	mg/L	< 0.02	11/8/06 11:21	A611082	EPA 200.7
Total Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method
Phosphorus	mg/L	< 0.020	11/7/06 10:39	A611064	EPA 200.7
Vanadium	mg/L	< 0.02	11/7/06 10:39	A611064	EPA 200.7
Wet Chemistry	Units	Result	Date/Time Analyzed	Batch	Method
Ammonia as N	mg/L	74.5	11/6/06 15:00	A611066	EPA 350.3
TOC	mg/L	10.2	11/9/06 14:49	A611107	EPA 415.1/9060A
Total Alkalinity	mg/L	27.0	11/6/06 10:30	A611069	EPA 310.1

ANALYTICAL RESULTS

<u>Lab Number:</u>	0611020-09				
<u>Sample Name:</u>	EDCMW-9				
<u>Date/Time Collected:</u>	11/1/06 8:00				
<u>Sample Matrix:</u>	Water				
Anions	Units	Result	Date/Time Analyzed	Batch	Method
Nitrate as N	mg/L	40.2	11/2/06 19:07	A611022	EPA 300.0
Nitrite as N	mg/L	< 0.50	11/2/06 18:49	A611022	EPA 300.0
Dissolved Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method
Iron	mg/L	< 0.01	11/8/06 11:23	A611082	EPA 200.7
Manganese	mg/L	0.34	11/8/06 11:23	A611082	EPA 200.7
Vanadium	mg/L	< 0.02	11/8/06 11:24	A611082	EPA 200.7
Total Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method
Phosphorus	mg/L	0.230	11/7/06 10:42	A611064	EPA 200.7
Vanadium	mg/L	< 0.02	11/7/06 10:41	A611064	EPA 200.7
Wet Chemistry	Units	Result	Date/Time Analyzed	Batch	Method
TOC	mg/L	32.5	11/9/06 14:49	A611107	EPA 415.1/9060A
Total Alkalinity	mg/L	25.0	11/6/06 10:30	A611069	EPA 310.1

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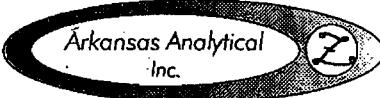
ANALYTICAL RESULTS

Lab Number:	0611020-10				
Sample Name:	EDCMW-10				
Date/Time Collected:	11/1/06 7:45				
Sample Matrix:	Water				
Anions	Units	Result	Date/Time Analyzed	Batch	Method
Nitrate as N	mg/L	71.0	11/2/06 19:44	A611022	EPA 300.0
Nitrite as N	mg/L	< 0.50	11/2/06 19:26	A611022	EPA 300.0
Dissolved Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method
Lead	mg/L	< 0.015	11/8/06 11:26	A611082	EPA 200.7
Manganese	mg/L	0.12	11/8/06 11:26	A611082	EPA 200.7
Vanadium	mg/L	< 0.02	11/8/06 11:26	A611082	EPA 200.7
Total Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method
Phosphorus	mg/L	< 0.020	11/7/06 10:52	A611064	EPA 200.7
Vanadium	mg/L	< 0.02	11/7/06 10:51	A611064	EPA 200.7
Wet Chemistry	Units	Result	Date/Time Analyzed	Batch	Method
TOC	mg/L	4.37	11/9/06 14:49	A611107	EPA 415.1/9060A
Total Alkalinity	mg/L	< 5.0	11/6/06 10:30	A611069	EPA 310.1

ANALYTICAL RESULTS

Lab Number:	0611020-11				
Sample Name:	EDCMW-11				
Date/Time Collected:	11/1/06 7:30				
Sample Matrix:	Water				
Anions	Units	Result	Date/Time Analyzed	Batch	Method
Nitrate as N	mg/L	1.43	11/2/06 20:02	A611022	EPA 300.0
Nitrite as N	mg/L	< 0.50	11/2/06 20:02	A611022	EPA 300.0
Dissolved Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method
Iron	mg/L	< 0.01	11/8/06 11:29	A611082	EPA 200.7
Manganese	mg/L	0.03	11/8/06 11:28	A611082	EPA 200.7
Vanadium	mg/L	< 0.02	11/8/06 11:29	A611082	EPA 200.7
Total Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method
Phosphorus	mg/L	< 0.020	11/7/06 10:54	A611064	EPA 200.7
Vanadium	mg/L	< 0.02	11/7/06 10:54	A611064	EPA 200.7
Wet Chemistry	Units	Result	Date/Time Analyzed	Batch	Method
Ammonia as N	mg/L	4.88	11/6/06 15:00	A611066	EPA 350.3
TOC	mg/L	17.1	11/9/06 14:49	A611107	EPA 415.1/9060A
Total Alkalinity	mg/L	< 5.0	11/6/06 10:30	A611069	EPA 310.1

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ANALYTICAL RESULTS

<u>Lab Number:</u>	0611020-12				
<u>Sample Name:</u>	EDCMW-12				
<u>Date/Time Collected:</u>	11/1/06 7:15				
<u>Sample Matrix:</u>	Water				
<u>Anions</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Nitrite as N	mg/L	< 0.50	11/2/06 20:20	A611022	EPA 300.0
Dissolved Metals 200.7	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Iron	mg/L	0.01	11/8/06 11:31	A611082	EPA 200.7
Manganese	mg/L	0.14	11/8/06 11:31	A611082	EPA 200.7
Vanadium	mg/L	< 0.02	11/8/06 11:32	A611082	EPA 200.7
Total Metals 200.7	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Phosphorus	mg/L	0.103	11/7/06 10:56	A611064	EPA 200.7
Vanadium	mg/L	< 0.02	11/7/06 10:56	A611064	EPA 200.7
Wet Chemistry	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Ammonia as N	mg/L	1.37	11/6/06 15:00	A611066	EPA 350.3
TOC	mg/L	15.9	11/9/06 14:49	A611107	EPA 415.1/9060A
Total Alkalinity	mg/L	114	11/6/06 10:30	A611069	EPA 310.1

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ANALYTICAL RESULTS

<u>Lab Number:</u>	0611020-13				
<u>Sample Name:</u>	Field Blank				
<u>Date/Time Collected:</u>	11/1/06 8:15				
<u>Sample Matrix:</u>	Water				
<u>Anions</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Nitrate as N	mg/L	< 0.500	11/2/06 20:38	A611022	EPA 300.0
Nitrite as N	mg/L	< 0.50	11/2/06 20:38	A611022	EPA 300.0
<u>Dissolved Metals 200.7</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Chromium	mg/L	< 0.020	11/8/06 11:34	A611082	EPA 200.7
Iron	mg/L	< 0.01	11/8/06 11:34	A611082	EPA 200.7
Lead	mg/L	< 0.015	11/8/06 11:35	A611082	EPA 200.7
Manganese	mg/L	< 0.01	11/8/06 11:34	A611082	EPA 200.7
Vanadium	mg/L	< 0.02	11/8/06 11:35	A611082	EPA 200.7
<u>Total Metals 200.7</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Chromium	mg/L	< 0.020	11/7/06 10:58	A611064	EPA 200.7
Lead	mg/L	< 0.015	11/7/06 10:59	A611064	EPA 200.7
Phosphorus	mg/L	< 0.020	11/7/06 10:59	A611064	EPA 200.7
Vanadium	mg/L	< 0.02	11/7/06 10:59	A611064	EPA 200.7
<u>Wet Chemistry</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Ammonia as N	mg/L	< 0.50	11/6/06 15:00	A611066	EPA 350.3
TOC	mg/L	< 1.00	11/9/06 14:49	A611107	EPA 415.1/9060A
Total Alkalinity	mg/L	< 5.0	11/6/06 10:30	A611069	EPA 310.1

15 November 2006

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ANALYTICAL RESULTS

<u>Lab Number:</u>	0611020-14				
<u>Sample Name:</u>	Duplicate #1				
<u>Date/Time Collected:</u>	11/1/06 0:00				
<u>Sample Matrix:</u>	Water				
<u>Anions</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Nitrate as N	mg/L	< 0.500	11/2/06 20:56	A611022	EPA 300.0
Nitrite as N	mg/L	< 0.50	11/2/06 20:56	A611022	EPA 300.0
<u>Dissolved Metals 200.7</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Chromium	mg/L	< 0.020	11/8/06 11:38	A611082	EPA 200.7
Iron	mg/L	1.14	11/8/06 11:37	A611082	EPA 200.7
Lead	mg/L	< 0.015	11/8/06 11:38	A611082	EPA 200.7
Manganese	mg/L	0.97	11/8/06 11:37	A611082	EPA 200.7
Vanadium	mg/L	< 0.02	11/8/06 11:38	A611082	EPA 200.7
<u>Total Metals 200.7</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Chromium	mg/L	< 0.020	11/7/06 18:00	A611073	EPA 200.7
Lead	mg/L	< 0.015	11/7/06 18:01	A611073	EPA 200.7
Phosphorus	mg/L	< 0.020	11/7/06 18:01	A611073	EPA 200.7
Vanadium	mg/L	< 0.02	11/7/06 18:00	A611073	EPA 200.7
<u>Wet Chemistry</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Ammonia as N	mg/L	< 0.50	11/6/06 15:00	A611066	EPA 350.3
TOC	mg/L	10.8	11/9/06 14:49	A611107	EPA 415.1/9060A
Total Alkalinity	mg/L	< 5.0	11/6/06 10:30	A611069	EPA 310.1

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QUALITY CONTROL RESULTS

Anions

Batch: A611022 (Water); Prepared: 02-Nov-06 11:12

	<u>Blank</u>	<u>LCS</u>	<u>MS</u>	<u>MSD/RPD</u>
Nitrate as N	< 0.500 mg/L	90.8 %	91.7 %	90.9 % / 0.647
Nitrite as N	< 0.50 mg/L	92.5 %	92.4 %	93.4 % / 1.07

Total Metals 200.7

Batch: A611064 (Water); Prepared: 06-Nov-06 10:57

	<u>Blank</u>	<u>LCS</u>	<u>MS</u>	<u>MSD/RPD</u>
Chromium	< 0.020 mg/L	87.6 %	85.8 %	81.4 % / 5.19
Lead	< 0.015 mg/L	91.2 %	85.8 %	82.0 % / 4.43
Phosphorus	< 0.020 mg/L	90.1 %	120 %	80.0 % / 3.17
Vanadium	< 0.02 mg/L	87.5 %	88.0 %	84.0 % / 4.17

Wet Chemistry

Batch: A611066 (Water); Prepared: 06-Nov-06 08:30

	<u>Blank</u>	<u>LCS</u>	<u>MS</u>	<u>MSD/RPD</u>
Ammonia as N	< 0.50 mg/L	107 %	83.9 %	84.9 % / 1.17

Wet Chemistry

Batch: A611069 (Water); Prepared: 06-Nov-06 10:30

	<u>Blank</u>	<u>LCS</u>	<u>LCSD/RPD</u>
Total Alkalinity	< 5.0 mg/L	100 %	97.0 % / 3.05

Total Metals 200.7

Batch: A611073 (Water); Prepared: 07-Nov-06 09:37

	<u>Blank</u>	<u>LCS</u>	<u>MS</u>	<u>MSD/RPD</u>
Chromium	< 0.020 mg/L	89.8 %	87.2 %	89.0 % / 2.04
Lead	< 0.015 mg/L	88.4 %	88.0 %	88.4 % / 0.454
Phosphorus	< 0.020 mg/L	92.9 %	94.7 %	96.7 % / 1.82
Vanadium	< 0.02 mg/L	91.0 %	88.9 %	88.9 % / 0.00

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Date Received: 02-Nov-06 10:28

QUALITY CONTROL RESULTS

Dissolved Metals 200.7

Batch: A611082 (Water); Prepared: 08-Nov-06 09:55

	<u>Blank</u>	<u>LCS</u>	<u>MS</u>	<u>MSD/RPD</u>
Chromium	< 0.020 mg/L	93.2 %	92.8 %	93.6 % / 0.858
Iron	< 0.01 mg/L	86.8 %	101 %	104 % / 3.11
Lead	< 0.015 mg/L	99.8 %	89.6 %	92.0 % / 2.60
Manganese	< 0.01 mg/L	94.4 %	93.6 %	94.8 % / 1.27
Vanadium	< 0.02 mg/L	89.5 %	90.0 %	89.5 % / 0.548

Wet Chemistry

Batch: A611107 (Water); Prepared: 08-Nov-06 10:30

	<u>Blank</u>	<u>LCS</u>	<u>MS</u>	<u>MSD/RPD</u>
TOC	< 1.00 mg/L	104 %	98.0 %	99.2 % / 0.872

All Analysis performed according to EPA approved methodology when available:

SW 846, Revised December, 1996; EPA 600/4-79-020, Revised March, 1983; Standard Methods, 20th Edition.

Instrument calibration and quality control samples performed at or above frequency specified in analytical method.

Reviewed by: _____

Bruce Yancey
Lab Manager

Arkansas Analytical
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15 November 2006

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501-455-3233 • Fax 501-455-6118

Date Received: 03-Nov-06 09:10

ANALYTICAL RESULTS

<u>Lab Number:</u>	0611041-01				
<u>Sample Name:</u>	EDCMW-13				
<u>Date/Time Collected:</u>	11/2/06 11:05				
<u>Sample Matrix:</u>	Water				
Anions	Units	Result	Date/Time Analyzed	Batch	Method
Nitrite as N	mg/L	< 0.50	11/3/06 15:56	A611042	EPA 300.0
Dissolved Metals 200.7					
Iron	Units	Result	Date/Time Analyzed	Batch	Method
Manganese	mg/L	0.02	11/9/06 14:39	A611106	EPA 200.7
Vanadium	mg/L	2.50	11/9/06 14:43	A611106	EPA 200.7
Vanadium	mg/L	< 0.02	11/9/06 14:39	A611106	EPA 200.7
Total Metals 200.7					
Phosphorus	Units	Result	Date/Time Analyzed	Batch	Method
Vanadium	mg/L	0.061	11/7/06 18:16	A611073	EPA 200.7
Vanadium	mg/L	< 0.02	11/7/06 18:15	A611073	EPA 200.7
Wet Chemistry					
TOC	Units	Result	Date/Time Analyzed	Batch	Method
Total Alkalinity	mg/L	8.30	11/9/06 14:00	A611124	EPA 415.1/9060A
Total Alkalinity	mg/L	< 5.0	11/6/06 10:30	A611069	EPA 310.1

ANALYTICAL RESULTS

<u>Lab Number:</u>	0611041-02				
<u>Sample Name:</u>	EDCMW-14				
<u>Date/Time Collected:</u>	11/2/06 8:55				
<u>Sample Matrix:</u>	Water				
Anions	Units	Result	Date/Time Analyzed	Batch	Method
Nitrate as N	mg/L	13.6	11/3/06 16:33	A611042	EPA 300.0
Nitrite as N	mg/L	< 0.50	11/3/06 16:15	A611042	EPA 300.0
Dissolved Metals 200.7					
Iron	Units	Result	Date/Time Analyzed	Batch	Method
Manganese	mg/L	0.01	11/9/06 14:45	A611106	EPA 200.7
Vanadium	mg/L	0.06	11/9/06 14:45	A611106	EPA 200.7
Vanadium	mg/L	< 0.02	11/9/06 14:45	A611106	EPA 200.7
Total Metals 200.7					
Phosphorus	Units	Result	Date/Time Analyzed	Batch	Method
Vanadium	mg/L	< 0.020	11/7/06 18:18	A611073	EPA 200.7
Vanadium	mg/L	< 0.02	11/7/06 18:18	A611073	EPA 200.7
Wet Chemistry					
TOC	Units	Result	Date/Time Analyzed	Batch	Method
Total Alkalinity	mg/L	1.84	11/9/06 14:00	A611124	EPA 415.1/9060A
Total Alkalinity	mg/L	< 5.0	11/6/06 10:30	A611069	EPA 310.1

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Date Received: 03-Nov-06 09:10

ANALYTICAL RESULTS

<u>Lab Number:</u>	0611041-03					
<u>Sample Name:</u>	EDCMW-15					
<u>Date/Time Collected:</u>	11/2/06 8:20					
<u>Sample Matrix:</u>	Water					
<u>Anions</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>	
Nitrate as N	mg/L	2.54	11/3/06 16:51	A611042	EPA 300.0	
Nitrite as N	mg/L	< 0.50	11/3/06 16:51	A611042	EPA 300.0	
<u>Dissolved Metals 200.7</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>	
Iron	mg/L	< 0.01	11/9/06 14:48	A611106	EPA 200.7	
Manganese	mg/L	0.02	11/9/06 14:47	A611106	EPA 200.7	
Vanadium	mg/L	< 0.02	11/9/06 14:48	A611106	EPA 200.7	
<u>Total Metals 200.7</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>	
Phosphorus	mg/L	< 0.020	11/7/06 18:21	A611073	EPA 200.7	
Vanadium	mg/L	< 0.02	11/7/06 18:20	A611073	EPA 200.7	
<u>Wet Chemistry</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>	
TOC	mg/L	2.36	11/9/06 14:00	A611124	EPA 415.1/9060A	
Total Alkalinity	mg/L	< 5.0	11/6/06 10:30	A611069	EPA 310.1	

ANALYTICAL RESULTS

<u>Lab Number:</u>	0611041-04					
<u>Sample Name:</u>	EDCMW-16					
<u>Date/Time Collected:</u>	11/2/06 7:35					
<u>Sample Matrix:</u>	Water					
<u>Anions</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>	
Nitrate as N	mg/L	24.8	11/3/06 17:27	A611042	EPA 300.0	
Nitrite as N	mg/L	< 0.50	11/3/06 17:09	A611042	EPA 300.0	
<u>Dissolved Metals 200.7</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>	
Iron	mg/L	< 0.01	11/9/06 14:50	A611106	EPA 200.7	
Manganese	mg/L	0.11	11/9/06 14:50	A611106	EPA 200.7	
Vanadium	mg/L	< 0.02	11/9/06 14:51	A611106	EPA 200.7	
<u>Total Metals 200.7</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>	
Phosphorus	mg/L	< 0.020	11/7/06 18:23	A611073	EPA 200.7	
Vanadium	mg/L	< 0.02	11/7/06 18:23	A611073	EPA 200.7	
<u>Wet Chemistry</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>	
Ammonia as N	mg/L	2.16	11/6/06 15:00	A611066	EPA 350.3	
TOC	mg/L	2.30	11/9/06 14:00	A611124	EPA 415.1/9060A	
Total Alkalinity	mg/L	< 5.0	11/6/06 10:30	A611069	EPA 310.1	

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Date Received: 03-Nov-06 09:10

ANALYTICAL RESULTS

<u>Lab Number:</u>	0611041-05					
<u>Sample Name:</u>	EDCMW-17					
<u>Date/Time Collected:</u>	11/2/06 10:25					
<u>Sample Matrix:</u>	Water					
Anions	Units	Result	Date/Time Analyzed	Batch	Method	
Nitrate as N	mg/L	47.6	11/3/06 18:04	A611042	EPA 300.0	
Nitrite as N	mg/L	< 0.50	11/3/06 17:45	A611042	EPA 300.0	
Dissolved Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method	
Iron	mg/L	< 0.01	11/9/06 15:00	A611106	EPA 200.7	
Manganese	mg/L	0.20	11/9/06 15:00	A611106	EPA 200.7	
Vanadium	mg/L	< 0.02	11/9/06 15:01	A611106	EPA 200.7	
Total Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method	
Phosphorus	mg/L	0.089	11/7/06 18:34	A611073	EPA 200.7	
Vanadium	mg/L	< 0.02	11/7/06 18:34	A611073	EPA 200.7	
Wet Chemistry	Units	Result	Date/Time Analyzed	Batch	Method	
Ammonia as N	mg/L	4.81	11/6/06 15:00	A611066	EPA 350.3	
TOC	mg/L	1.61	11/9/06 14:00	A611124	EPA 415.1/9060A	
Total Alkalinity	mg/L	< 5.0	11/6/06 10:30	A611069	EPA 310.1	

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ANALYTICAL RESULTS

Lab Number:	0611041-06				
Sample Name:	EDCMW-18				
Date/Time Collected:	11/2/06 12:20				
Sample Matrix:	Water				
Anions	Units	Result	Date/Time Analyzed	Batch	Method
Nitrite as N	mg/L	< 0.50	11/3/06 18:40	A611042	EPA 300.0
Dissolved Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method
Chromium	mg/L	0.037	11/9/06 15:03	A611106	EPA 200.7
Iron	mg/L	17.3	11/9/06 15:07	A611106	EPA 200.7
Lead	mg/L	< 0.015	11/9/06 15:04	A611106	EPA 200.7
Manganese	mg/L	0.05	11/9/06 15:03	A611106	EPA 200.7
Vanadium	mg/L	0.06	11/9/06 15:04	A611106	EPA 200.7
Total Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method
Chromium	mg/L	< 0.020	11/7/06 18:36	A611073	EPA 200.7
Lead	mg/L	< 0.015	11/7/06 18:37	A611073	EPA 200.7
Phosphorus	mg/L	0.263	11/7/06 18:37	A611073	EPA 200.7
Vanadium	mg/L	0.02	11/7/06 18:37	A611073	EPA 200.7
Wet Chemistry	Units	Result	Date/Time Analyzed	Batch	Method
TOC	mg/L	1.39	11/9/06 14:00	A611124	EPA 415.1/9060A
Total Alkalinity	mg/L	19.0	11/6/06 10:30	A611069	EPA 310.1

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ANALYTICAL RESULTS

<u>Lab Number:</u>	0611041-07				
<u>Sample Name:</u>	EDCMW-19				
<u>Date/Time Collected:</u>	11/2/06 1:05				
<u>Sample Matrix:</u>	Water				
<u>Anions</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Nitrate as N	mg/L	< 0.500	11/3/06 18:58	A611042	EPA 300.0
Nitrite as N	mg/L	< 0.50	11/3/06 18:58	A611042	EPA 300.0
<u>Dissolved Metals 200.7</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Chromium	mg/L	< 0.020	11/9/06 15:10	A611106	EPA 200.7
Iron	mg/L	< 0.01	11/9/06 15:10	A611106	EPA 200.7
Lead	mg/L	< 0.015	11/9/06 15:11	A611106	EPA 200.7
Manganese	mg/L	0.05	11/9/06 15:09	A611106	EPA 200.7
Vanadium	mg/L	< 0.02	11/9/06 15:10	A611106	EPA 200.7
<u>Total Metals 200.7</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Chromium	mg/L	< 0.020	11/7/06 18:39	A611073	EPA 200.7
Lead	mg/L	< 0.015	11/7/06 18:40	A611073	EPA 200.7
Phosphorus	mg/L	0.048	11/7/06 18:40	A611073	EPA 200.7
Vanadium	mg/L	< 0.02	11/7/06 18:40	A611073	EPA 200.7
<u>Wet Chemistry</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Ammonia as N	mg/L	< 0.50	11/6/06 15:00	A611066	EPA 350.3
TOC	mg/L	2.91	11/9/06 14:00	A611124	EPA 415.1/9060A
Total Alkalinity	mg/L	34.0	11/7/06 14:34	A611070	EPA 310.1

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ANALYTICAL RESULTS

<u>Lab Number:</u>	0611041-08				
<u>Sample Name:</u>	EDCMW-20				
<u>Date/Time Collected:</u>	11/2/06 1:50				
<u>Sample Matrix:</u>	Water				
Anions	Units	Result	Date/Time Analyzed	Batch	Method
Nitrate as N	mg/L	1.21	11/3/06 19:16	A611042	EPA 300.0
Nitrite as N	mg/L	< 0.50	11/3/06 19:16	A611042	EPA 300.0
Dissolved Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method
Chromium	mg/L	< 0.020	11/9/06 15:13	A611106	EPA 200.7
Iron	mg/L	0.03	11/9/06 15:13	A611106	EPA 200.7
Lead	mg/L	< 0.015	11/9/06 15:14	A611106	EPA 200.7
Manganese	mg/L	0.14	11/9/06 15:13	A611106	EPA 200.7
Vanadium	mg/L	< 0.02	11/9/06 15:14	A611106	EPA 200.7
Total Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method
Chromium	mg/L	< 0.020	11/9/06 9:12	A611089	EPA 200.7
Lead	mg/L	< 0.015	11/9/06 9:13	A611089	EPA 200.7
Phosphorus	mg/L	< 0.020	11/9/06 9:13	A611089	EPA 200.7
Vanadium	mg/L	< 0.02	11/9/06 9:12	A611089	EPA 200.7
Wet Chemistry	Units	Result	Date/Time Analyzed	Batch	Method
Ammonia as N	mg/L	< 0.50	11/9/06 12:15	A611100	EPA 350.3
TOC	mg/L	< 1.00	11/9/06 14:00	A611124	EPA 415.1/9060A
Total Alkalinity	mg/L	43.0	11/7/06 14:34	A611070	EPA 310.1

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ANALYTICAL RESULTS

<u>Lab Number:</u>	0611041-09				
<u>Sample Name:</u>	EDCMW-21				
<u>Date/Time Collected:</u>	11/2/06 2:15				
<u>Sample Matrix:</u>	Water				
Anions	Units	Result	Date/Time Analyzed	Batch	Method
Nitrate as N	mg/L	2.23	11/3/06 19:52	A611042	EPA 300.0
Nitrite as N	mg/L	< 0.50	11/3/06 19:52	A611042	EPA 300.0
Dissolved Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method
Chromium	mg/L	< 0.020	11/9/06 15:17	A611106	EPA 200.7
Iron	mg/L	< 0.01	11/9/06 15:16	A611106	EPA 200.7
Lead	mg/L	< 0.015	11/9/06 15:17	A611106	EPA 200.7
Manganese	mg/L	0.02	11/9/06 15:16	A611106	EPA 200.7
Vanadium	mg/L	< 0.02	11/9/06 15:17	A611106	EPA 200.7
Total Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method
Chromium	mg/L	< 0.020	11/9/06 9:15	A611089	EPA 200.7
Lead	mg/L	< 0.015	11/9/06 9:16	A611089	EPA 200.7
Phosphorus	mg/L	< 0.020	11/9/06 9:16	A611089	EPA 200.7
Vanadium	mg/L	< 0.02	11/9/06 9:15	A611089	EPA 200.7
Wet Chemistry	Units	Result	Date/Time Analyzed	Batch	Method
Ammonia as N	mg/L	< 0.50	11/9/06 12:15	A611100	EPA 350.3
TOC	mg/L	< 1.00	11/9/06 14:00	A611124	EPA 415.1/9060A
Total Alkalinity	mg/L	< 70.0 *EDL2	11/7/06 14:34	A611070	EPA 310.1

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ANALYTICAL RESULTS

<u>Lab Number:</u>	0611041-10				
<u>Sample Name:</u>	EDCMW-22				
<u>Date/Time Collected:</u>	11/2/06 9:50				
<u>Sample Matrix:</u>	Water				
Anions	Units	Result	Date/Time Analyzed	Batch	Method
Nitrate as N	mg/L	1.07	11/3/06 20:11	A611042	EPA 300.0
Nitrite as N	mg/L	< 0.50	11/3/06 20:11	A611042	EPA 300.0
Dissolved Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method
Chromium	mg/L	< 0.020	11/9/06 15:20	A611106	EPA 200.7
Iron	mg/L	< 0.01	11/9/06 15:20	A611106	EPA 200.7
Lead	mg/L	< 0.015	11/9/06 15:20	A611106	EPA 200.7
Manganese	mg/L	0.11	11/9/06 15:19	A611106	EPA 200.7
Vanadium	mg/L	< 0.02	11/9/06 15:20	A611106	EPA 200.7
Total Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method
Chromium	mg/L	< 0.020	11/9/06 9:18	A611089	EPA 200.7
Lead	mg/L	< 0.015	11/9/06 9:19	A611089	EPA 200.7
Phosphorus	mg/L	0.116	11/9/06 9:19	A611089	EPA 200.7
Vanadium	mg/L	< 0.02	11/9/06 9:18	A611089	EPA 200.7
Wet Chemistry	Units	Result	Date/Time Analyzed	Batch	Method
Ammonia as N	mg/L	< 0.50	11/9/06 12:15	A611100	EPA 350.3
TOC	mg/L	< 1.00	11/9/06 14:00	A611124	EPA 415.1/8060A
Total Alkalinity	mg/L	47.0	11/7/06 14:34	A611070	EPA 310.1

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Date Received: 03-Nov-06 09:10

ANALYTICAL RESULTS

<u>Lab Number:</u>	0611041-11				
<u>Sample Name:</u>	FIELD BLANK 2				
<u>Date/Time Collected:</u>	11/2/06 10:25				
<u>Sample Matrix:</u>	Water				
<u>Anions</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Nitrate as N	mg/L	< 0.500	11/3/06 20:29	A611042	EPA 300.0
Nitrite as N	mg/L	< 0.50	11/3/06 20:29	A611042	EPA 300.0
<u>Dissolved Metals 200.7</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Chromium	mg/L	< 0.020	11/9/06 15:23	A611106	EPA 200.7
Iron	mg/L	< 0.01	11/9/06 15:23	A611106	EPA 200.7
Lead	mg/L	< 0.015	11/9/06 15:24	A611106	EPA 200.7
Manganese	mg/L	< 0.01	11/9/06 15:23	A611106	EPA 200.7
Vanadium	mg/L	< 0.02	11/9/06 15:23	A611106	EPA 200.7
<u>Total Metals 200.7</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Chromium	mg/L	< 0.020	11/9/06 9:21	A611089	EPA 200.7
Lead	mg/L	< 0.015	11/9/06 9:22	A611089	EPA 200.7
Phosphorus	mg/L	< 0.020	11/9/06 9:22	A611089	EPA 200.7
Vanadium	mg/L	< 0.02	11/9/06 9:21	A611089	EPA 200.7
<u>Wet Chemistry</u>	<u>Units</u>	<u>Result</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Ammonia as N	mg/L	< 0.50	11/9/06 12:15	A611100	EPA 350.3
TOC	mg/L	< 1.00	11/9/06 14:00	A611124	EPA 415.1/9060A
Total Alkalinity	mg/L	< 5.0	11/7/06 14:34	A611070	EPA 310.1

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Date Received: 03-Nov-06 09:10

ANALYTICAL RESULTS

<u>Lab Number:</u>	0611041-12					
<u>Sample Name:</u>	TRIP BLANK					
<u>Date/Time Collected:</u>	11/2/06 11:05					
<u>Sample Matrix:</u>	Water					
Anions	Units	Result	Date/Time Analyzed	Batch	Method	
Nitrate as N	mg/L	< 0.500	11/3/06 20:47	A611042	EPA 300.0	
Nitrite as N	mg/L	< 0.50	11/3/06 20:47	A611042	EPA 300.0	
Dissolved Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method	
Chromium	mg/L	< 0.020	11/9/06 15:26	A611106	EPA 200.7	
Iron	mg/L	< 0.01	11/9/06 15:26	A611106	EPA 200.7	
Lead	mg/L	< 0.015	11/9/06 15:27	A611106	EPA 200.7	
Manganese	mg/L	< 0.01	11/9/06 15:26	A611106	EPA 200.7	
Vanadium	mg/L	< 0.02	11/9/06 15:27	A611106	EPA 200.7	
Total Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method	
Chromium	mg/L	< 0.020	11/9/06 9:24	A611089	EPA 200.7	
Lead	mg/L	< 0.015	11/9/06 9:25	A611089	EPA 200.7	
Phosphorus	mg/L	< 0.020	11/9/06 9:25	A611089	EPA 200.7	
Vanadium	mg/L	< 0.02	11/9/06 9:24	A611089	EPA 200.7	
Wet Chemistry	Units	Result	Date/Time Analyzed	Batch	Method	
Ammonia as N	mg/L	< 0.50	11/9/06 12:15	A611100	EPA 350.3	
TOC	mg/L	< 1.00	11/9/06 14:00	A611124	EPA 415.1/9060A	
Total Alkalinity	mg/L	< 5.0	11/7/06 14:34	A611070	EPA 310.1	

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Date Received: 03-Nov-06 09:10

ANALYTICAL RESULTS

<u>Lab Number:</u>	0611041-13				
<u>Sample Name:</u>	DUPLICATE 2				
<u>Date/Time Collected:</u>	11/2/06 0:00				
<u>Sample Matrix:</u>	Water				
Anions	Units	Result	Date/Time Analyzed	Batch	Method
Nitrate as N	mg/L	< 0.500	11/3/06 15:38	A611042	EPA 300.0
Nitrite as N	mg/L	< 0.50	11/3/06 15:38	A611042	EPA 300.0
Dissolved Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method
Chromium	mg/L	< 0.020	11/9/06 15:30	A611106	EPA 200.7
Iron	mg/L	0.02	11/9/06 15:29	A611106	EPA 200.7
Lead	mg/L	< 0.015	11/9/06 15:30	A611106	EPA 200.7
Manganese	mg/L	2.96	11/9/06 15:34	A611106	EPA 200.7
Vanadium	mg/L	< 0.02	11/9/06 15:30	A611106	EPA 200.7
Total Metals 200.7	Units	Result	Date/Time Analyzed	Batch	Method
Chromium	mg/L	< 0.020	11/9/06 9:03	A611089	EPA 200.7
Lead	mg/L	< 0.015	11/9/06 9:04	A611089	EPA 200.7
Phosphorus	mg/L	0.061	11/9/06 9:04	A611089	EPA 200.7
Vanadium	mg/L	< 0.02	11/9/06 9:03	A611089	EPA 200.7
Wet Chemistry	Units	Result	Date/Time Analyzed	Batch	Method
Ammonia as N	mg/L	< 0.50	11/9/06 12:15	A611100	EPA 350.3
TOC	mg/L	7.50	11/9/06 14:00	A611124	EPA 415.1/9080A
Total Alkalinity	mg/L	6.0	11/7/06 14:34	A611070	EPA 310.1

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QUALITY CONTROL RESULTS

Anions				
Batch: A611042 (Water); Prepared: 03-Nov-06 13:00				
	<u>Blank</u>	<u>LCS</u>	<u>MS</u>	<u>MSD/RPD</u>
Nitrate as N	< 0.500 mg/L	91.5 %	91.6 %	92.8 % / 1.35
Nitrite as N	< 0.50 mg/L	90.0 %	90.0 %	95.0 % / 5.41

Wet Chemistry				
Batch: A611066 (Water); Prepared: 06-Nov-06 08:30				
	<u>Blank</u>	<u>LCS</u>	<u>MS</u>	<u>MSD/RPD</u>
Ammonia as N	< 0.50 mg/L	107 %	83.9 %	84.9 % / 1.17

Wet Chemistry				
Batch: A611069 (Water); Prepared: 06-Nov-06 10:30				
	<u>Blank</u>	<u>LCS</u>	<u>LCSD/RPD</u>	
Total Alkalinity	< 5.0 mg/L	100 %	97.0 % / 3.05	

Wet Chemistry				
Batch: A611070 (Water); Prepared: 06-Nov-06 10:30				
	<u>Blank</u>	<u>LCS</u>	<u>LCSD/RPD</u>	
Total Alkalinity	< 5.0 mg/L	101 %	99.0 % / 2.00	

Total Metals 200.7				
Batch: A611073 (Water); Prepared: 07-Nov-06 09:37				
	<u>Blank</u>	<u>LCS</u>	<u>MS</u>	<u>MSD/RPD</u>
Chromium	< 0.020 mg/L	89.8 %	87.2 %	89.0 % / 2.04
Lead	< 0.015 mg/L	88.4 %	88.0 %	88.4 % / 0.454
Phosphorus	< 0.020 mg/L	92.9 %	94.7 %	96.7 % / 1.82
Vanadium	< 0.02 mg/L	91.0 %	88.9 %	88.9 % / 0.00

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Date Received: 03-Nov-06 09:10

QUALITY CONTROL RESULTS

Total Metals 200.7
Batch: A611089 (Water); Prepared: 08-Nov-06 12:47

	<u>Blank</u>	<u>LCS</u>	<u>MS</u>	<u>MSD/RPD</u>
Chromium	< 0.020 mg/L	87.2 %	83.2 %	84.6 % / 1.67
Lead	< 0.015 mg/L	95.0 %	95.4 %	94.8 % / 0.631
Phosphorus	< 0.020 mg/L	85.5 %	81.5 %	84.0 % / 2.81
Vanadium	< 0.02 mg/L	94.0 %	82.0 %	85.0 % / 3.57

Wet Chemistry
Batch: A611100 (Water); Prepared: 09-Nov-06 08:30

	<u>Blank</u>	<u>LCS</u>	<u>MS</u>	<u>MSD/RPD</u>
Ammonia as N	< 0.50 mg/L	108 %	109 %	110 % / 1.15

Dissolved Metals 200.7
Batch: A611106 (Water); Prepared: 09-Nov-06 14:00

	<u>Blank</u>	<u>LCS</u>	<u>MS</u>	<u>MSD/RPD</u>
Chromium	< 0.020 mg/L	98.6 %	92.6 %	93.0 % / 0.431
Iron	< 0.01 mg/L	98.0 %	84.8 %	85.6 % / 0.970
Lead	< 0.015 mg/L	93.0 %	83.8 %	85.8 % / 2.26
Manganese	< 0.01 mg/L	101 %	91.2 %	93.2 % / 2.17
Vanadium	< 0.02 mg/L	97.5 %	92.0 %	93.0 % / 1.07

Wet Chemistry
Batch: A611124 (Water); Prepared: 09-Nov-06 14:00

	<u>Blank</u>	<u>LCS</u>	<u>MS</u>	<u>MSD/RPD</u>
TOC	< 1.00 mg/L	109 %	110 %	102 % / 2.94

*EDL2: Elevated detection limit due to limited sample volume.

15 November 2006

Wes Morgan
El Dorado Chemical Inc.
P.O.Box 231
El Dorado, AR 71731
Project: Groundwaters

Arkansas Analytical
Inc.



Date Received: 03-Nov-06 09:10

All Analysis performed according to EPA approved methodology when available:
SW 846, Revised December, 1996; EPA 600/4-79-020, Revised March, 1983; Standard Methods, 20th Edition.
Instrument calibration and quality control samples performed at or above frequency specified in analytical method.

Reviewed by: Bruce Yancey

Bruce Yancey
Lab Manager