

2002 ANNUAL GROUND WATER REPORT

**EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS**

PREPARED BY:

ENVIRONMENTAL 
MANAGEMENT SERVICES, INC.

Baton Rouge, Louisiana

April 2003

4/29/03

review of EDCC 2002 GW rpt

trends?

higher conc of Nitrates ^{= ammonia} when gw elev. lower
conductivity incr w/ decr in pH generally
pH generally decr. w/ temp decr.

| | |
|---------|-----------------------|
| ammonia | 20.5 - 551 mg/l (#8) |
| Nitrate | 20.5 - 1070 mg/l (#8) |
| sulfate | 3.22 - 979 mg/l (#4) |
| TDS | 44 - 5360 mg/l (#4) |

contam NW of prod. area + NW of Lake Kildeer
both ammonia, sulf + nitrates

* incl. lats reports ~~usual~~ w/ reports

sp higher w.l., wider disp of contam.

* need expl. of results.

**2002 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 SAMPLING | 1 |
| 3.1 | FIELD SAMPLING..... | 1 |
| 3.2 | LABORATORY ANALYSIS | 2 |
| 4.0 | RESULTS | 3 |
| 4.1 | GROUND WATER FLOW..... | 3 |
| 4.2 | GROUND WATER QUALITY | 3 |
| 4.2.1 | Field Parameters..... | 3 |
| 4.2.2 | Analytical Results | 4 |

TABLES

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

**2002 ANNUAL GROUND WATER REPORT
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS**

TABLE OF CONTENTS

FIGURES

| | |
|--|----|
| Site Plan | 1 |
| Water Elevation Map June 2002..... | 2 |
| Water Elevation Map October 2002 | 3 |
| Water Elevation Map December 2002..... | 4 |
| Ammonia Isoconcentration Map June 2002 | 5 |
| Ammonia Isoconcentration Map October 2002..... | 6 |
| Ammonia Isoconcentration Map December 2002 | 7 |
| Nitrate Isoconcentration Map June 2002 | 8 |
| Nitrate Isoconcentration Map October 2002..... | 9 |
| Nitrate Isoconcentration Map December 2002 | 10 |

APPENDICES

| | |
|------------------------------------|---|
| Laboratory Analytical Reports..... | A |
|------------------------------------|---|

**2001 ANNUAL GROUND WATER REPORT
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS**

1.0 INTRODUCTION

This report presents the results of ground water sampling activities conducted at the El Dorado Chemical Company (EDC) facility during 2002. 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 EDC 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 Sand. 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 SAMPLING

3.1 FIELD SAMPLING

Ground water sampling events were conducted in June, October and December of 2002. Ground water elevations used to construct the maps on Figures 2, 3 and 4 were obtained on June 3, 2002,

October 29, 2002 and December 10, 2002. 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 2002 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 either a disposable bailer or a Redi-Flo electric pump. When a pump was used, dedicated polyethylene tubing was used for each well to minimize the potential for cross-contamination. Field indicator parameters (pH, conductivity and temperature) were recorded after removal of each well volume. 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.

3.2 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 A.

Ground water samples were analyzed for the following constituents:

| PARAMETER | ANALYTICAL METHOD |
|--------------------------------|-------------------|
| Ammonia-N | 350.3 |
| Nitrate-N | 300.0 |
| Sulfate | 300.0 |
| Total Dissolved Solids (TDS) | 160.1 |
| Lead (Total and Dissolved) | 200.7 |
| Chromium (Total and Dissolved) | 200.7 |

Field quality assurance/quality control (QA/QC) samples consisted of five duplicate samples collected during the June sampling event and four duplicates collected during the December sampling event. In addition, three field blanks were collected and analyzed in June 2002. Only low levels of dissolved solids (12 to 18 mg/L) were detected in the field blanks. No QA/QC samples were collected during the October 2002 sampling event.

4.0 RESULTS

4.1 GROUND WATER FLOW

The June 2002 ground water elevations ranged from 148.96 feet (MSL) in MW-EDC-18 (located east of Lake Kildeer) to 203.88 feet in MW-EDC-1 (located northwest of the facility). In October 2002, ground water elevations ranged from 148.34 feet in MW-EDC-18 to 202.80 feet in MW-EDC-1. The December 2002 readings were similar with a minimum elevation of 149.71 feet in MW-EDC-18 and a maximum elevation of 199.32 feet in MW-EDC-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. Ground water elevation maps for each sampling event are presented on Figures 2 through 4.

4.2 GROUND WATER QUALITY

4.2.1 Field Parameters

Indicator parameter data are summarized on Table 3. In 2002, pH values ranged from 3.7 to 6.7, with most readings consistent with the previous measurements. Conductivities ranged from 75

to 7600 microSiemens (μS) in 2002. Wells MW-EDC-4, MW-EDC-6 and MW-EDC-8 consistently have the highest conductivity readings.

4.2.2 Analytical Results

The analytical results are summarized in Tables 4 through 21 and the laboratory reports are provided in Appendix A. A discussion of each constituent is provided below:

Ammonia

The June 2002 analytical results show ammonia values ranging from below detection (<0.5) to a maximum of 551 mg/L detected in MW-EDC-8. Four of the eighteen wells sampled had concentrations above the detection limit. In October 2002, 14 wells had detections of ammonia with a maximum concentration of 406 mg/L in MW-EDC-8. In December, there were detections in 8 wells with MW-EDC-8 having the maximum concentration at 220 mg/L. Ammonia isoconcentration contours for all three sampling events are presented on Figures 5 through 7. As shown on all three figures, the highest ammonia concentrations are located north of the acid and nitrate process areas known as the Production Area. There were also detections on the north and southeast sides of Lake Kildeer.

Nitrate

Analytical results from the June 2002 sampling event show values ranging from below the detection limit of 0.5 mg/L to 1070 mg/L (MW-EDC-8). Twelve of the eighteen wells had detections of nitrate. October analytical results show a maximum concentration of 1330 mg/L with thirteen wells having detections. The December results are very similar with concentrations ranging from below detection to 1080 mg/L. MW-EDC-8 had the maximum concentration in all three sampling events and nitrate concentrations were very consistent with previous measurements. Isoconcentration contours for each sampling event are illustrated on Figures 8 through 10. As shown on the figures, the highest nitrate concentrations are located north of the acid and nitrate process areas known as the Production Area. Elevated nitrate levels were also present on the north and south sides of Lake Kildeer during all sampling periods.

Sulfate

Analytical results show concentrations ranging from 3.22 mg/L (MW-EDC-18) to 979 mg/L (MW-EDC-4) in 2002. Wells MW-EDC-4, MW-EDC-5, MW-EDC-9, MW-EDC-11, and MW-EDC-13 typically have the highest concentrations; whereas, MW-EDC-1, MW-EDC-16 and MW-EDC-18 have the lowest. Results from all three sampling periods were generally consistent.

Total Dissolved Solids

TDS concentrations ranged from 44 mg/L (MW-EDC-1) to 5360 mg/L (MW-EDC-4) during 2002. Wells MW-EDC-4, MW-EDC-6 and MW-EDC-8 (located north of the Production Area) consistently have the highest TDS levels; whereas, MW-EDC-1, MW-EDC-3 and MW-EDC-15 have the lowest. Results from all three sampling periods were generally consistent.

Lead (Total and Dissolved)

Total lead was detected in three wells during the June 2002 sampling event. Wells MW-EDC-7 and MW-EDC-18 had concentrations of 0.031 and 0.115 mg/L, respectively. A duplicate sample for MW-EDC-8 contained a total lead concentration of 0.031 mg/L. In October, total lead was detected in MW-EDC-4 (0.02 mg/L), MW-EDC-7 (0.017 mg/L) and MW-EDC-18 (0.018 mg/L). In December, dissolved lead was detected in MW-EDC-7 at a concentration of 0.016 mg/L. Lead has been detected at low levels in these wells during previous sampling events.

Chromium

In June 2002, total chromium was detected in MW-EDC-18 at concentrations of 0.147 mg/L (total) and 0.137 mg/L (dissolved). Total chromium was detected again in MW-EDC-18 at the detection limit of 0.02 mg/L in December 2002. No chromium was detected during the October sampling event.

TABLES

TABLE 1
MONITORING WELL CONSTRUCTION DETAILS
2002 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) |
|---------------------------|------------------------|--|--|---|
| EDC-MW-1 | 2/14/1996 | 22.1 | 12.1 to 22.2 | 213.28 |
| EDC-MW-2 | 2/14/1996 | 20.2 | 10.2 to 20.2 | 196.25 |
| EDC-MW-3 | 2/15/1996 | 27.1 | 17.1 to 27.1 | 192.11 |
| EDC-MW-4 | 2/15/1996 | 22.1 | 12.1 to 22.1 | 194.84 |
| EDC-MW-5 | 2/21/1996 | 17.7 | 7.7 to 17.7 | 182.69 |
| EDC-MW-6 | 2/21/1996 | 22.0 | 12 to 22 | 191.87 |
| EDC-MW-7 | 2/20/1996 | 23.9 | 13.9 to 23.9 | 195.88 |
| EDC-MW-8 | 2/20/1996 | 29.9 | 19.9 to 29.9 | 197.34 |
| EDC-MW-9 | 2/15/1996 | 30.0 | 20 to 30 | 198.39 |
| EDC-MW-10 | 2/19/1996 | 22.6 | 12.6 to 22.6 | 205.75 |
| EDC-MW-11 | 2/19/1996 | 19.8 | 9.8 to 19.8 | 201.65 |
| EDC-MW-12 | 2/19/1996 | 19.9 | 9.9 to 19.9 | 184.97 |
| EDC-MW-13 | 2/14/1996 | 19.8 | 9.8 to 19.8 | 177.26 |
| EDC-MW-14 | 2/13/1996 | 18.2 | 8.2 to 18.2 | 178.48 |
| EDC-MW-15 | 2/13/1996 | 17.0 | 7 to 17 | 180.84 |
| EDC-MW-16 | 2/12/1996 | 19.3 | 9.3 to 19.3 | 180.14 |
| EDC-MW-17 | 2/13/1996 | 34.7 | 24.7 to 34.7 | 185.40 |
| EDC-MW-18 | 2/22/1996 | 17.2 | 7.2 to 17.2 | 155.46 |

Notes:

1. All wells constructed of 4-inch Sch. 40 PVC flush threaded pipe
2. All well screens are 4-inch diameter, 10-foot length and 0.01-inch openings
3. All casing risers are approximately 3 feet above ground surface
4. All wells drilled with hollow-stem auger
5. Data from Woodward-Clyde June 1996 Report

TABLE 2
GROUNDWATER ELEVATION DATA
2002 ANNUAL GROUND WATER REPORT
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

| Monitoring Well | Top of Casing Elevation (ft above Mean Sea Level) | Measurement Date | | | | | |
|-----------------|--|---|--|---|--|---|--|
| | | 6/3/2002 | | 10/29/2002 | | 12/10/2002 | |
| | | 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) | Depth to Water (ft from top of casing) | Ground Water Elevation (ft above MSL) |
| MW-EDC-1 | 213.28 | 9.40 | 203.88 | 10.48 | 202.80 | 13.96 | 199.32 |
| MW-EDC-2 | 196.25 | 0.00 | 196.25 | 0.96 | 195.29 | 0.00 | 196.25 |
| MW-EDC-3 | 192.11 | 8.60 | 183.51 | 11.30 | 180.81 | 10.16 | 181.95 |
| MW-EDC-4 | 194.84 | 7.95 | 186.89 | 9.14 | 185.70 | 8.33 | 186.51 |
| MW-EDC-5 | 182.69 | 4.50 | 178.19 | 3.80 | 178.89 | 4.05 | 178.64 |
| MW-EDC-6 | 191.87 | 4.00 | 187.87 | 4.20 | 187.67 | 4.44 | 187.43 |
| MW-EDC-7 | 195.88 | 7.10 | 188.78 | 7.18 | 188.70 | 4.05 | 191.83 |
| MW-EDC-8 | 197.34 | 6.85 | 190.49 | 7.54 | 189.80 | 7.46 | 189.88 |
| MW-EDC-9 | 198.39 | 9.00 | 189.39 | 11.72 | 186.67 | 10.22 | 188.17 |
| MW-EDC-10 | 205.75 | 11.65 | 194.10 | 12.86 | 192.89 | 11.80 | 193.95 |
| MW-EDC-11 | 201.65 | 9.30 | 192.35 | 10.96 | 190.69 | 9.64 | 192.01 |
| MW-EDC-12 | 184.97 | 6.45 | 178.52 | 6.50 | 178.47 | 6.80 | 178.17 |
| MW-EDC-13 | 177.26 | 6.10 | 171.16 | 7.08 | 170.18 | 5.88 | 171.38 |
| MW-EDC-14 | 178.48 | 10.20 | 168.28 | 8.75 | 169.73 | 5.54 | 172.94 |
| MW-EDC-15 | 180.84 | 4.90 | 175.94 | 4.90 | 175.94 | 5.14 | 175.70 |
| MW-EDC-16 | 180.14 | 5.55 | 174.59 | 5.54 | 174.60 | 5.28 | 174.86 |
| MW-EDC-17 | 185.40 | 27.70 | 157.70 | 28.35 | 157.05 | 27.80 | 157.60 |
| MW-EDC-18 | 155.46 | 6.50 | 148.96 | 7.12 | 148.34 | 5.75 | 149.71 |

TABLE 3
GROUNDWATER INDICATOR PARAMETER DATA
2002 ANNUAL GROUND WATER REPORT
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

| WELL | TEMPERATURE (F) | | | pH (s.u.) | | | CONDUCTIVITY (uS) | | |
|-------|-----------------|------------|------------|-----------|------------|------------|-------------------|------------|------------|
| | Date | | | Date | | | Date | | |
| | 6/3/2002 | 10/28/2002 | 12/10/2002 | 6/3/2002 | 10/28/2002 | 12/10/2002 | 6/3/2002 | 10/28/2002 | 12/10/2002 |
| MW-1 | 63 | 67.1 | 60.1 | 5.5 | 5.6 | 6.1 | 100 | 80 | 206 |
| MW-2 | 68 | 65.3 | 57 | 6.0 | 6.1 | 6.7 | 300 | 355 | 450 |
| MW-3 | 68 | 68 | 59.5 | 6.4 | 6.5 | 6.0 | 200 | 200 | 278 |
| MW-4 | 68 | 68 | 62.2 | 5.2 | 4.8 | 4.4 | 2700 | 2575 | 7600 |
| MW-5 | 68 | 68 | 59 | 6.3 | 5.4 | 5.2 | 700 | 875 | 285 |
| MW-6 | 66 | 68 | 55.6 | 6.1 | 5.0 | 4.6 | 3000 | 3750 | 6860 |
| MW-7 | 70 | 68 | 62.4 | 4.4 | 4.2 | 3.7 | 2000 | 4000 | 2140 |
| MW-8 | 66 | 66.9 | 57.7 | 5.4 | 4.4 | 4.0 | 6000 | 6250 | 3540 |
| MW-9 | 68 | 68 | 57.4 | 6.0 | 6.0 | 5.2 | 1400 | 1550 | 4450 |
| MW-10 | 72 | 66.2 | 58 | 5.3 | 5.6 | 4.5 | 1000 | 1050 | 1220 |
| MW-11 | 70 | 68 | 59.4 | 5.4 | 4.8 | 4.5 | 600 | 800 | 1530 |
| MW-12 | 73 | 68 | 60.8 | 6.0 | 6.1 | 5.8 | 450 | 550 | 610 |
| MW-13 | 70 | 64.4 | 60.1 | 5.7 | 6.1 | 5.5 | 600 | 625 | 149 |
| MW-14 | 68 | 68 | 60.1 | 5.6 | 6.3 | 5.3 | 350 | 130 | 97 |
| MW-15 | 68 | 66.2 | 58.5 | 5.4 | 5.4 | 5.8 | 150 | 158 | 188 |
| MW-16 | 70 | 68.9 | 61.3 | 5.0 | 5.0 | 5.9 | 400 | 575 | 292 |
| MW-17 | 70 | 67.1 | 60.1 | 5.1 | 5.1 | 5.6 | 500 | 560 | 287 |
| MW-18 | 70 | 65 | 55 | 6.2 | 6.3 | 6.4 | 100 | 75 | 130 |

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

MW-EDC-1

| Sample Date | pH | Ammonia-N | Nitrate-N | Sulfate | Total Dissolved Solids | Total Lead | Total Chromium | Dissolved Lead | Dissolved Chromium |
|-------------|------|-----------|-----------|---------|------------------------|------------|----------------|----------------|--------------------|
| | s.u. | mg/L | | | | | | | |
| 3/14/1996 | 9.7 | -- | 1.7 | 4.1 | -- | 0.0037 | < 0.005 | < 0.002 | < 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 | <0.02 | <0.015 | <0.02 |
| 12/10/2002 | 6.1 | <0.5 | 1.8 | 6.73 | 108 | <0.015 | <0.02 | <0.015 | <0.02 |

"--" - Parameter not analyzed

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

MW-EDC-2

| Sample Date | pH | Ammonia-N | Nitrate-N | Sulfate | Total Dissolved Solids | Total Lead | Total Chromium | Dissolved Lead | Dissolved Chromium |
|-------------|------|-----------|-----------|---------|------------------------|------------|----------------|----------------|--------------------|
| | s.u. | mg/L | | | | | | | |
| 3/14/1996 | 9.7 | -- | < 0.2 | 17 | -- | 0.018 | 0.0342 | < 0.002 | < 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 | < 0.02 | < 0.015 | < 0.02 |
| 12/10/2002 | 6.7 | < 0.5 | < 0.5 | 24 | 305 | < 0.015 | < 0.02 | < 0.015 | < 0.02 |

"--" - Parameter not analyzed

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

MW-EDC-3

| Sample Date | pH | Ammonia-N | Nitrate-N | Sulfate | Total Dissolved Solids | Total Lead | Total Chromium | Dissolved Lead | Dissolved Chromium |
|-------------|------|-----------|-----------|---------|------------------------|------------|----------------|----------------|--------------------|
| | s.u. | mg/L | | | | | | | |
| 3/14/1996 | 8.0 | -- | < 0.2 | 10 | -- | 0.0027 | < 0.005 | < 0.002 | < 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 | <0.02 | <0.015 | <0.02 |
| 12/10/2002 | 6.0 | <0.5 | <0.5 | 16.4 | 242 | <0.015 | <0.02 | <0.015 | <0.02 |

"--" - Parameter not analyzed

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

MW-EDC-4

| Sample Date | pH | Ammonia-N | Nitrate-N | Sulfate | Total Dissolved Solids | Total Lead | Total Chromium | Dissolved Lead | Dissolved Chromium |
|-------------|------|-----------|-----------|---------|------------------------|------------|----------------|----------------|--------------------|
| | s.u. | mg/L | | | | | | | |
| 3/14/1996 | 8.1 | -- | 1.3 | 728 | -- | 0.0025 | < 0.005 | < 0.002 | < 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 | <0.02 | <0.015 | <0.02 |
| 12/10/2002 | 4.4 | <0.5 | 2.4 | 976 | 5360 | <0.015 | <0.02 | <0.015 | <0.02 |

"--" - Parameter not analyzed

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

MW-EDC-5

| Sample Date | pH | Ammonia-N | Nitrate-N | Sulfate | Total Dissolved Solids | Total Lead | Total Chromium | Dissolved Lead | Dissolved Chromium |
|-------------|------|-----------|-----------|---------|------------------------|------------|----------------|----------------|--------------------|
| | s.u. | mg/L | | | | | | | |
| 3/13/1996 | 5.8 | -- | 4.4 | 441 | -- | < 0.002 | < 0.005 | < 0.002 | < 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 | < 0.02 | < 0.015 | < 0.02 |
| 12/10/2002 | 5.2 | < 0.5 | 3.26 | 489 | 901 | < 0.015 | < 0.02 | < 0.015 | < 0.02 |

"--" - Parameter not analyzed

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

MW-EDC-6

| Sample Date | pH | Ammonia-N | Nitrate-N | Sulfate | Total Dissolved Solids | Total Lead | Total Chromium | Dissolved Lead | Dissolved Chromium |
|-------------|------|-----------|-----------|---------|------------------------|------------|----------------|----------------|--------------------|
| | s.u. | mg/L | | | | | | | |
| 3/13/1996 | 7.7 | -- | 51.1 | 24 | -- | 0.0026 | < 0.005 | < 0.002 | < 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 | <0.02 | <0.015 | <0.02 |
| 12/10/2002 | 4.6 | <0.5 | 580 | 7.15 | 3360 | <0.015 | <0.02 | <0.015 | <0.02 |
| 12/10/2002 | -- | <0.5 | 588 | 6.45 | 3280 | <0.015 | <0.02 | <0.015 | <0.02 |

"--" - Parameter not analyzed

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

MW-EDC-7

| Sample Date | pH | Ammonia-N | Nitrate-N | Sulfate | Total Dissolved Solids | Total Lead | Total Chromium | Dissolved Lead | Dissolved Chromium |
|-------------|------|-----------|-----------|---------|------------------------|------------|----------------|----------------|--------------------|
| | s.u. | mg/L | | | | | | | |
| 3/13/1996 | 8.1 | -- | 282 | 380 | -- | 0.0221 | 0.0078 | 0.0185 | < 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 | -- | -- |
| 6/3/2002 | 4.4 | 190 | 361 | 363 | 1324 | 0.031 | < 0.02 | <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 | <0.02 | <0.015 | <0.02 |
| 12/10/2002 | 3.7 | 180 | 344 | 275 | 1316 | <0.015 | <0.02 | 0.016 | <0.02 |
| 12/10/2002 | -- | 149 | 349 | 276 | 1350 | <0.015 | <0.02 | <0.015 | <0.02 |

"--" - Parameter not analyzed

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

MW-EDC-8

| Sample Date | pH | Ammonia-N | Nitrate-N | Sulfate | Total Dissolved Solids | Total Lead | Total Chromium | Dissolved Lead | Dissolved Chromium |
|-------------|------|-----------|-----------|---------|------------------------|------------|----------------|----------------|--------------------|
| | s.u. | mg/L | | | | | | | |
| 3/13/1996 | 7.9 | -- | 1010 | 68.3 | -- | 0.0234 | < 0.005 | 0.0238 | < 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 | < 0.02 | < 0.015 | < 0.02 |
| 12/10/2002 | 4.0 | 220 | 1080 | 46.2 | 5120 | < 0.015 | < 0.02 | < 0.015 | < 0.02 |
| 12/10/2002 | -- | 261 | 1030 | 47.6 | 5140 | < 0.015 | < 0.02 | < 0.015 | < 0.02 |

"--" - Parameter not analyzed

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

MW-EDC-9

| Sample Date | pH | Ammonia-N | Nitrate-N | Sulfate | Total Dissolved Solids | Total Lead | Total Chromium | Dissolved Lead | Dissolved Chromium |
|-------------|------|-----------|-----------|---------|------------------------|------------|----------------|----------------|--------------------|
| | s.u. | mg/L | | | | | | | |
| 3/14/1996 | 9 | -- | 37.3 | 621 | -- | 0.004 | < 0.005 | < 0.002 | < 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 | < 0.02 | < 0.015 | < 0.02 |
| 12/10/2002 | 5.2 | 0.7 | 28.1 | 556 | 1680 | < 0.015 | < 0.02 | < 0.015 | < 0.02 |
| 12/10/2002 | -- | < 0.5 | 31.5 | 555 | 1640 | < 0.015 | < 0.02 | < 0.015 | < 0.02 |

"--" - Parameter not analyzed

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

MW-EDC-10

| Sample Date | pH | Ammonia-N | Nitrate-N | Sulfate | Total Dissolved Solids | Total Lead | Total Chromium | Dissolved Lead | Dissolved Chromium |
|-------------|------|-----------|-----------|---------|------------------------|------------|----------------|----------------|--------------------|
| | s.u. | mg/L | | | | | | | |
| 3/13/1996 | 7.7 | -- | 257 | 89 | -- | 0.0052 | < 0.005 | 0.0039 | < 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 | < 0.02 | < 0.015 | < 0.02 |
| 12/10/2002 | 4.5 | < 0.5 | 70.4 | 52.2 | 1120 | < 0.015 | < 0.02 | < 0.015 | < 0.02 |

"--" - Parameter not analyzed

TABLE 14
MW-EDC-11 ANALYTICAL SUMMARY
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

MW-EDC-11

| Sample Date | pH | Ammonia-N | Nitrate-N | Sulfate | Total Dissolved Solids | Total Lead | Total Chromium | Dissolved Lead | Dissolved Chromium |
|-------------|------|-----------|-----------|---------|------------------------|------------|----------------|----------------|--------------------|
| | s.u. | mg/L | | | | | | | |
| 3/13/1996 | 11.1 | -- | 22.1 | 578 | -- | < 0.002 | < 0.005 | < 0.002 | < 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 | < 0.02 | < 0.02 | < 0.02 |
| 10/30/2002 | 4.8 | 18 | 9.22 | 362 | 625 | < 0.015 | < 0.02 | < 0.015 | < 0.02 |
| 12/10/2002 | 4.5 | 10.73 | 6.12 | 414 | 809 | < 0.015 | < 0.02 | < 0.015 | < 0.02 |

"--" - Parameter not analyzed

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

MW-EDC-12

| Sample Date | pH | Ammonia-N | Nitrate-N | Sulfate | Total Dissolved Solids | Total Lead | Total Chromium | Dissolved Lead | Dissolved Chromium |
|-------------|------|-----------|-----------|---------|------------------------|------------|----------------|----------------|--------------------|
| | s.u. | mg/L | | | | | | | |
| 3/13/1996 | 6.1 | -- | < 0.2 | 9.6 | -- | < 0.002 | < 0.005 | < 0.002 | < 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 | < 0.02 | < 0.015 | < 0.02 |
| 12/10/2002 | 5.8 | 2.3 | < 0.5 | 12.5 | 424 | < 0.015 | < 0.02 | < 0.015 | < 0.02 |

"--" - Parameter not analyzed

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

MW-EDC-13

| Sample Date | pH | Ammonia-N | Nitrate-N | Sulfate | Total Dissolved Solids | Total Lead | Total Chromium | Dissolved Lead | Dissolved Chromium |
|-------------|------|-----------|-----------|---------|------------------------|------------|----------------|----------------|--------------------|
| | s.u. | mg/L | | | | | | | |
| 3/13/1996 | 5.6 | -- | 0.2 | 809 | -- | < 0.002 | < 0.005 | < 0.002 | < 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 | <0.02 | <0.015 | <0.02 |
| 12/10/2002 | 5.5 | <0.5 | <0.5 | 598 | 1320 | <0.015 | <0.02 | <0.015 | <0.02 |

"--" - Parameter not analyzed

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

MW-EDC-14

| Sample Date | pH | Ammonia-N | Nitrate-N | Sulfate | Total Dissolved Solids | Total Lead | Total Chromium | Dissolved Lead | Dissolved Chromium |
|-------------|------|-----------|-----------|---------|------------------------|------------|----------------|----------------|--------------------|
| | s.u. | mg/L | | | | | | | |
| 3/13/1996 | 4.6 | -- | 11.9 | 139 | -- | < 0.002 | < 0.005 | < 0.002 | < 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 | < 0.02 | < 0.015 | < 0.02 |
| 12/10/2002 | 5.3 | < 0.5 | 23.4 | 230 | 709 | < 0.015 | < 0.02 | < 0.015 | < 0.02 |

"--" - Parameter not analyzed

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

MW-EDC-15

| Sample Date | pH | Ammonia-N | Nitrate-N | Sulfate | Total Dissolved Solids | Total Lead | Total Chromium | Dissolved Lead | Dissolved Chromium |
|-------------|------|-----------|-----------|---------|------------------------|------------|----------------|----------------|--------------------|
| | s.u. | mg/L | | | | | | | |
| 3/13/1996 | 6.4 | -- | 34.5 | 4.4 | -- | < 0.002 | < 0.005 | < 0.002 | < 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 | <0.02 | <0.015 | <0.02 |
| 12/10/2002 | 5.8 | 0.5 | 12.2 | 10.8 | 120 | <0.015 | <0.02 | <0.015 | <0.02 |

"--" - Parameter not analyzed

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

MW-EDC-16

| Sample Date | pH | Ammonia-N | Nitrate-N | Sulfate | Total Dissolved Solids | Total Lead | Total Chromium | Dissolved Lead | Dissolved Chromium |
|-------------|------|-----------|-----------|---------|------------------------|------------|----------------|----------------|--------------------|
| | s.u. | mg/L | | | | | | | |
| 3/13/1996 | 5.7 | -- | 137 | 4.6 | -- | 0.0036 | < 0.005 | 0.0034 | < 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 | <0.02 | <0.02 | <0.02 |
| 10/30/2002 | 5.0 | 11.6 | 72 | 9.21 | 263 | <0.015 | <0.02 | <0.015 | <0.02 |
| 12/10/2002 | 5.9 | 2.99 | 89.4 | 5.64 | 595 | <0.015 | <0.02 | <0.015 | <0.02 |

"--" - Parameter not analyzed

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

MW-EDC-17

| Sample Date | pH | Ammonia-N | Nitrate-N | Sulfate | Total Dissolved Solids | Total Lead | Total Chromium | Dissolved Lead | Dissolved Chromium |
|-------------|------|-----------|-----------|---------|------------------------|------------|----------------|----------------|--------------------|
| | s.u. | mg/L | | | | | | | |
| 3/13/1996 | 4.9 | -- | 45 | 145 | -- | < 0.002 | < 0.005 | < 0.002 | < 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 | <0.02 | <0.015 | <0.02 |
| 12/10/2002 | 5.6 | 1.22 | 101 | 28.2 | 751 | <0.015 | <0.02 | <0.015 | <0.02 |

"--" - Parameter not analyzed

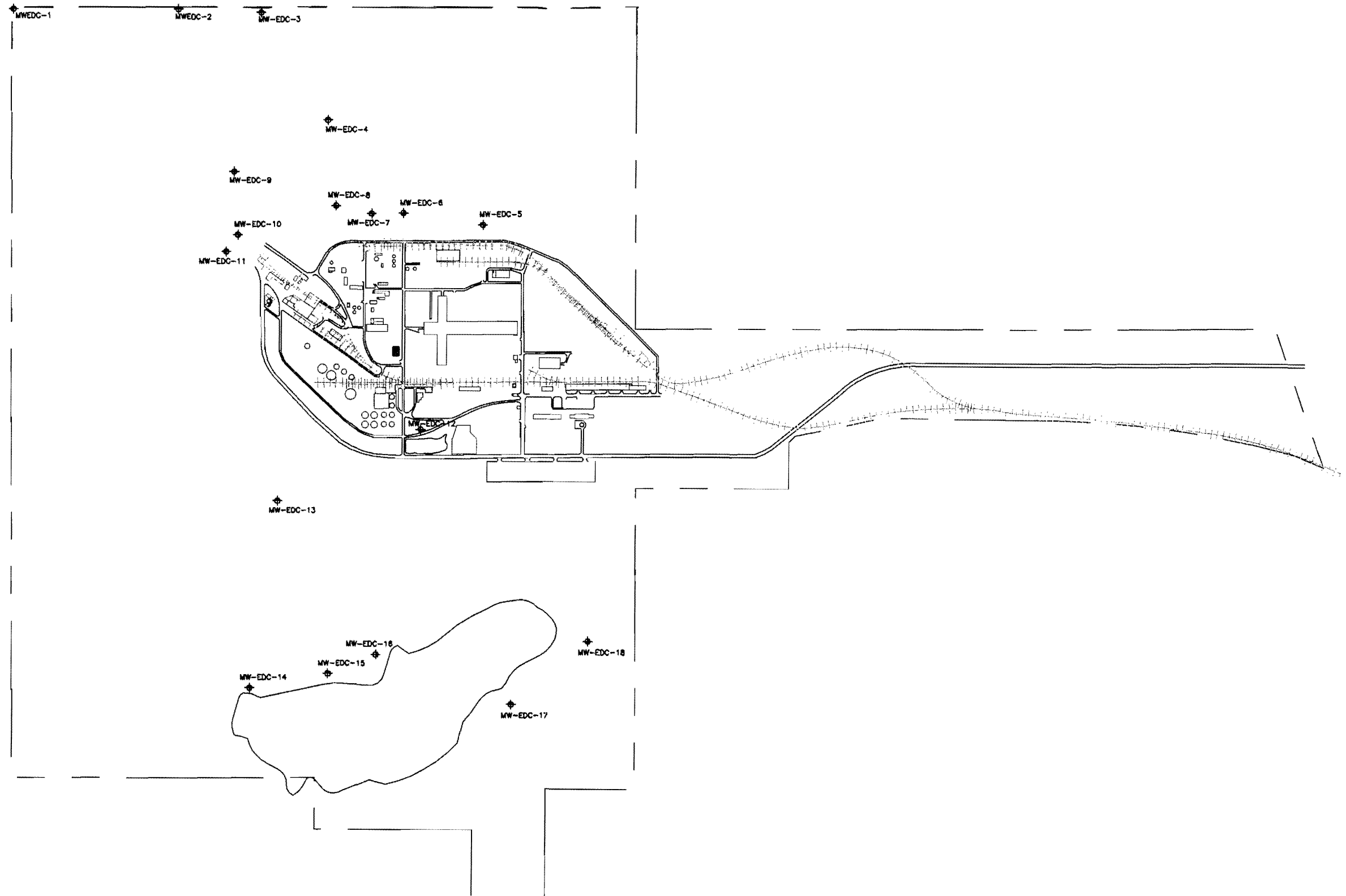
TABLE 21
MW-EDC-18 ANALYTICAL SUMMARY
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

MW-EDC-18

| Sample Date | pH | Ammonia-N | Nitrate-N | Sulfate | Total Dissolved Solids | Total Lead | Total Chromium | Dissolved Lead | Dissolved Chromium |
|-------------|------|-----------|-----------|---------|------------------------|------------|----------------|----------------|--------------------|
| | s.u. | mg/L | | | | | | | |
| 3/14/1996 | 6.6 | -- | 0.4 | 3.3 | -- | 0.017 | 0.0194 | < 0.002 | < 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 | 0.147 | <0.02 | 0.137 |
| 10/30/2002 | 6.3 | 0.43 | <0.5 | 3.22 | 258 | 0.018 | <0.02 | <0.015 | <0.02 |
| 12/10/2002 | 6.4 | <0.5 | <0.5 | 5.01 | 495 | <0.015 | 0.02 | <0.015 | <0.02 |

"--" - Parameter not analyzed

FIGURES



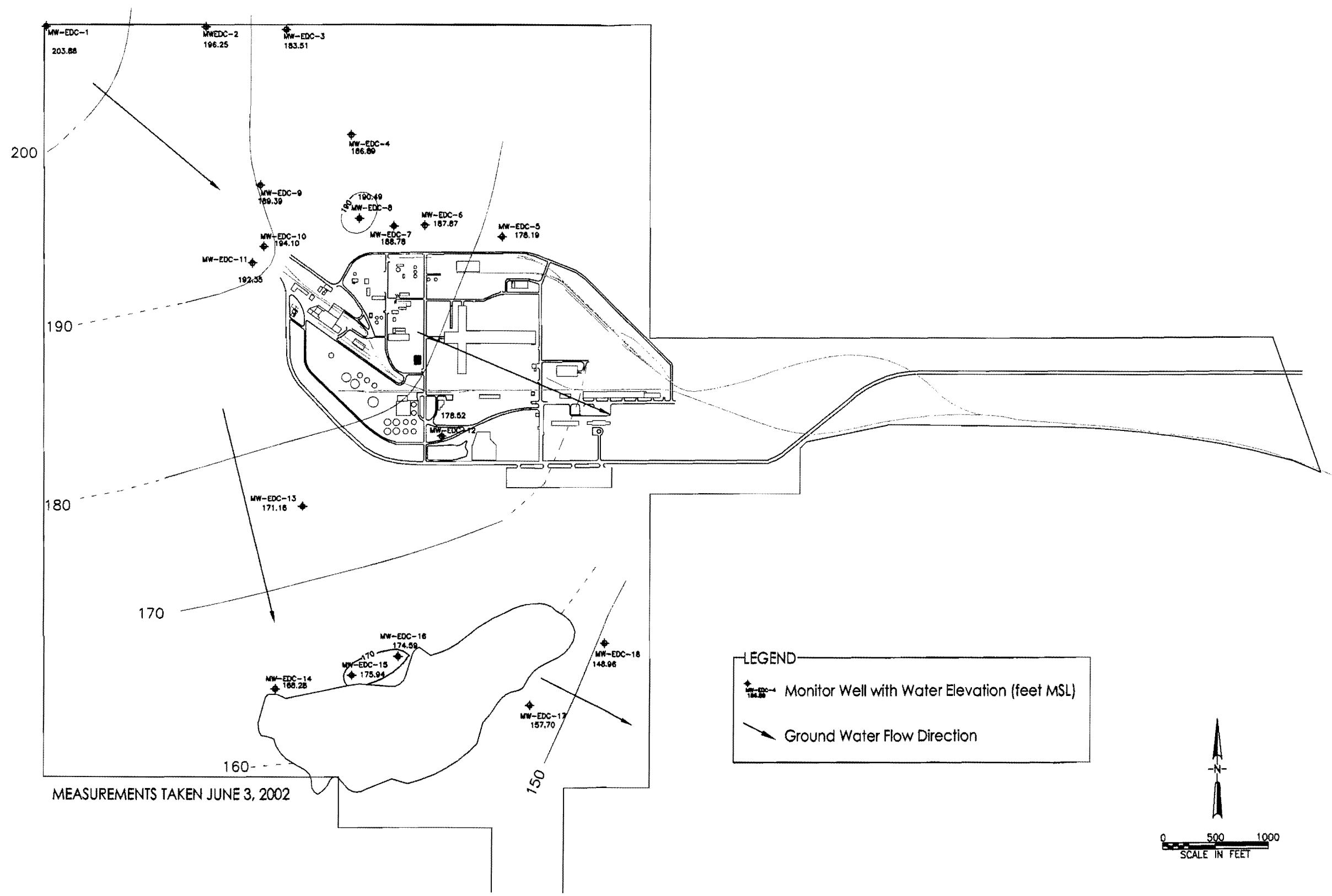
0 500 1000
SCALE IN FEET



ENVIRONMENTAL
MANAGEMENT SERVICES, INC.

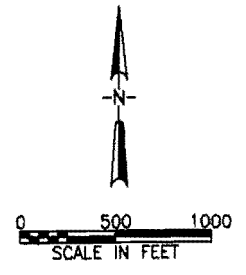
PROJECT NO: 2EC0100
CROSS SECTION FIGURE1.DWG
DRAFTED BY: KK/LM DATE: 02/18/02
APPROVED:
BY: *CL* DATE: 4/3/03

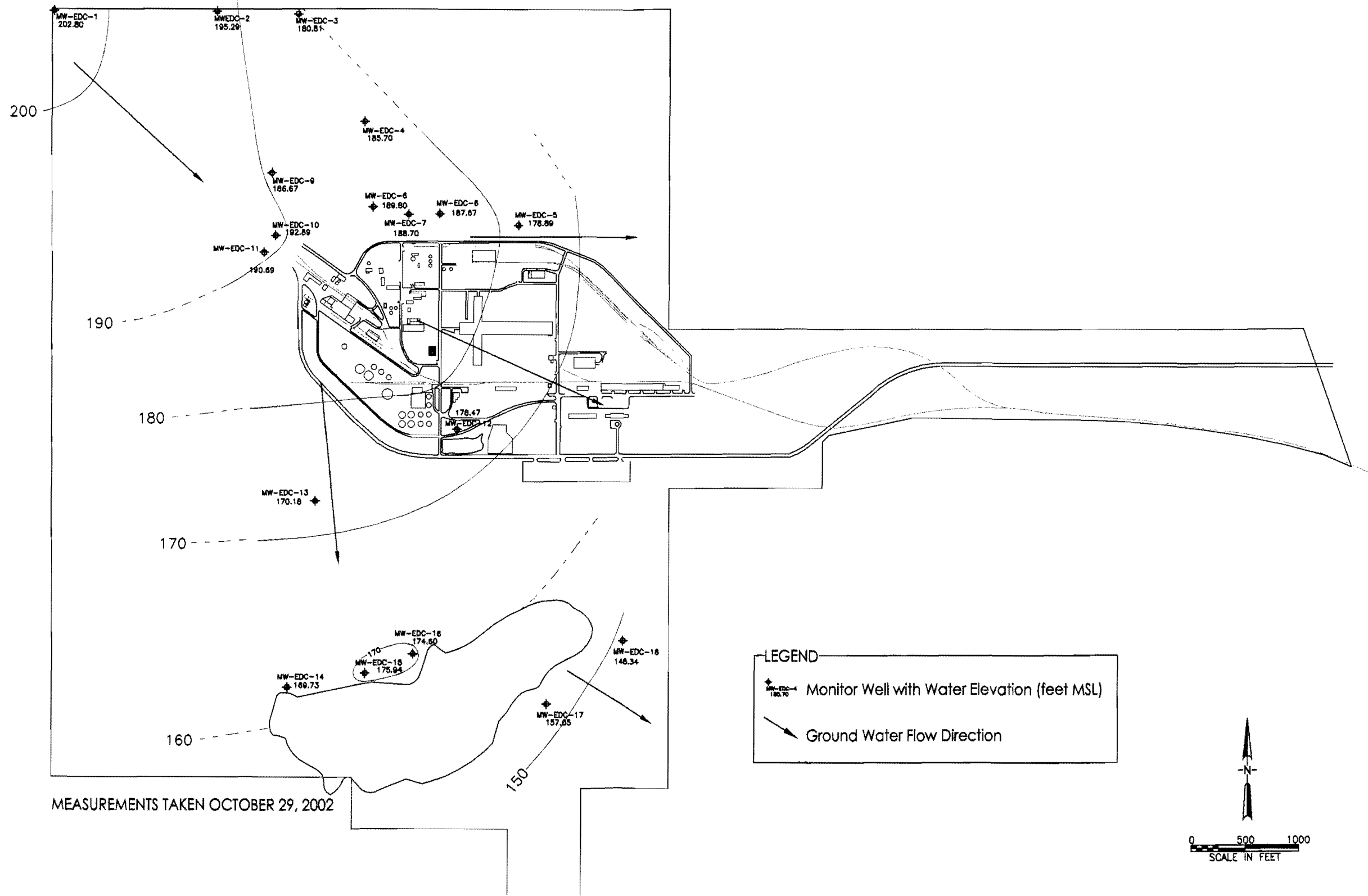
SITE PLAN
2002 ANNUAL GROUND WATER REPORT
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

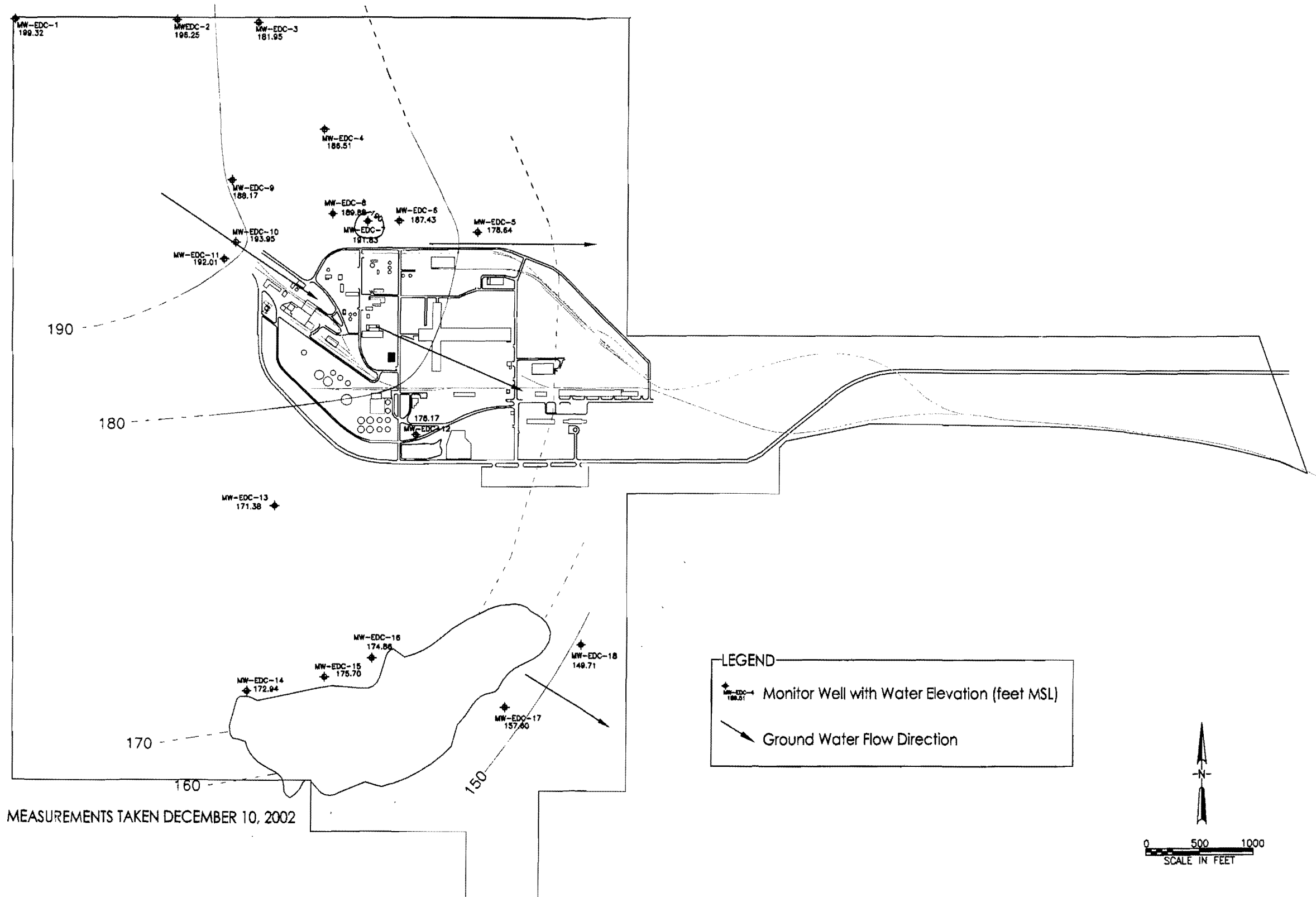


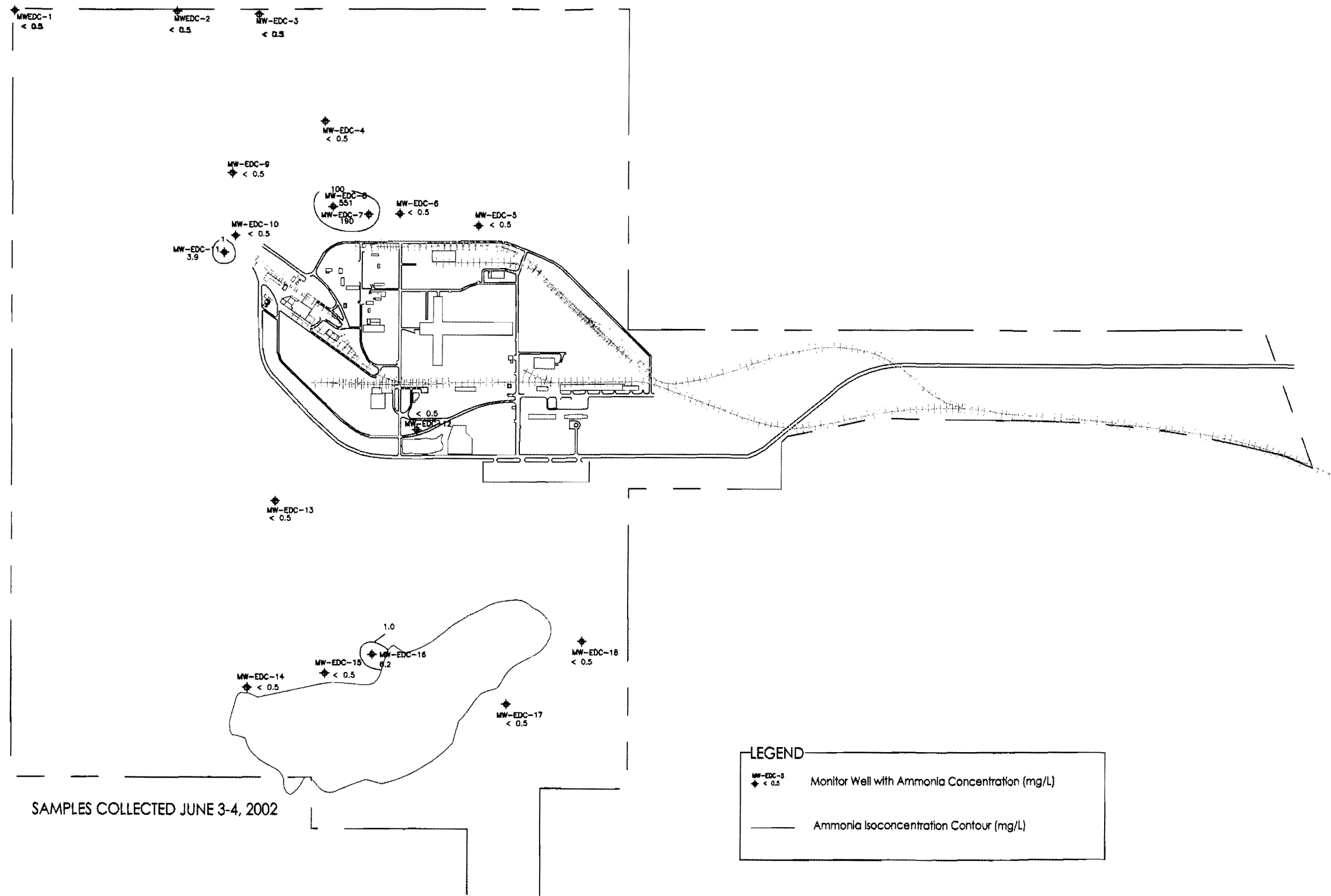
LEGEND

- Monitor Well with Water Elevation (feet MSL)
- Ground Water Flow Direction







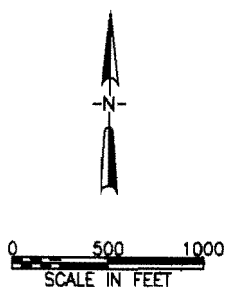


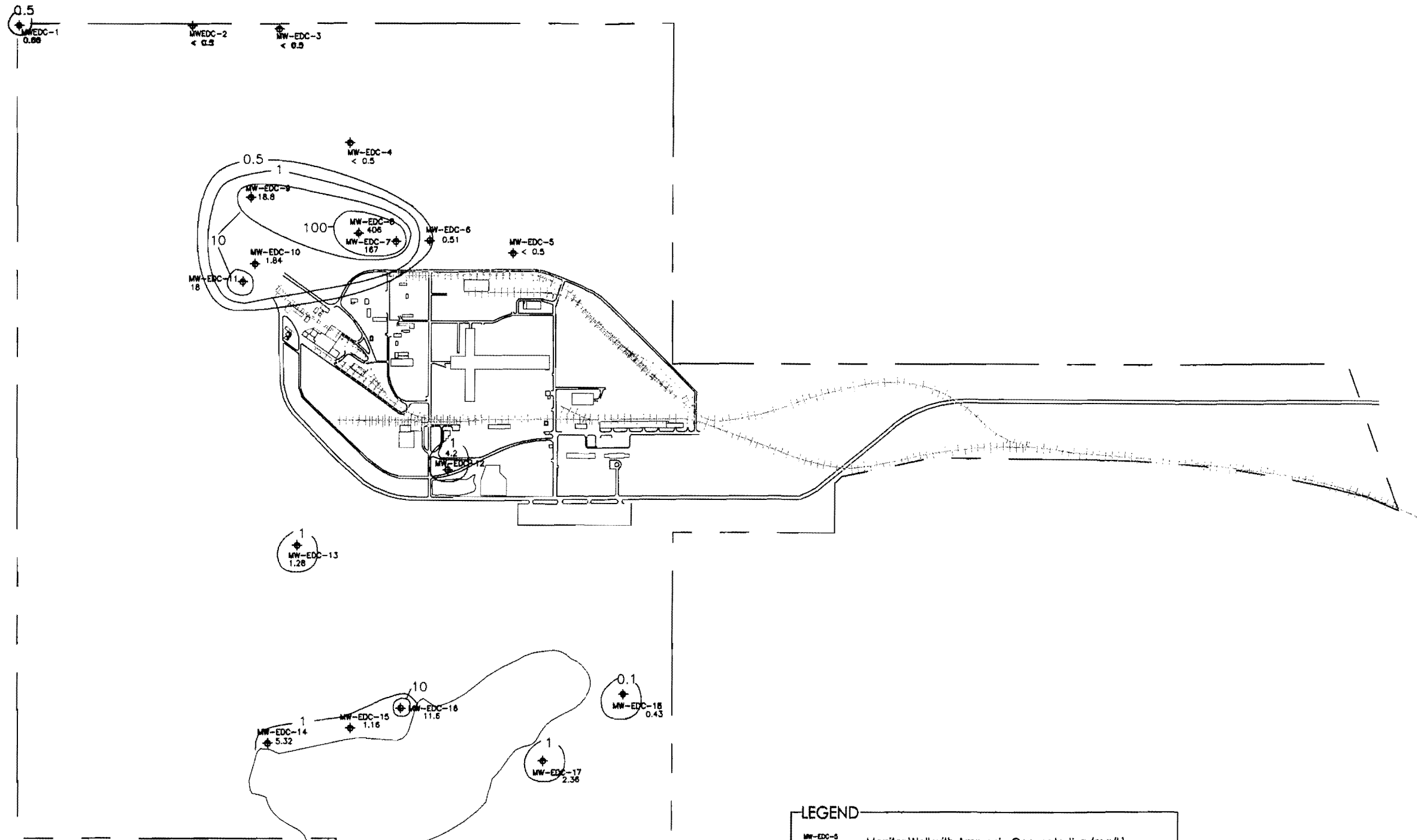
SAMPLES COLLECTED JUNE 3-4, 2002

LEGEND

MW-EDC-5
◆ < 0.5 Monitor Well with Ammonia Concentration (mg/L)

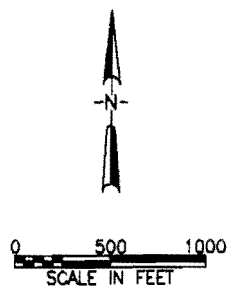
— Ammonia Isoconcentration Contour (mg/L)

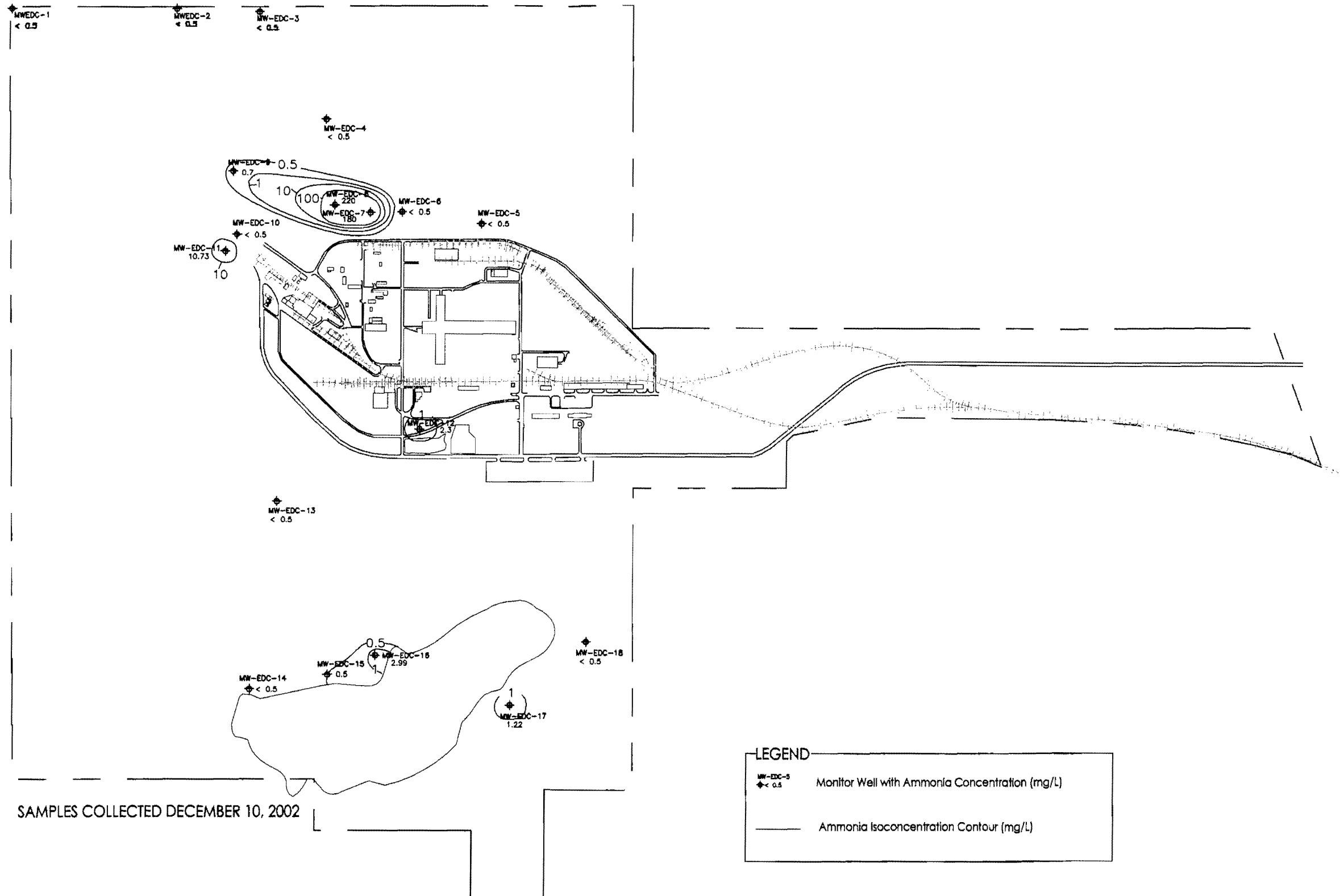




LEGEND

- MW-EDC-5
◆ < 0.5 Monitor Well with Ammonia Concentration (mg/L)
- Ammonia Isoconcentration Contour (mg/L)

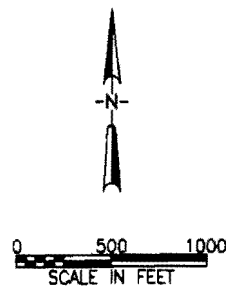




SAMPLES COLLECTED DECEMBER 10, 2002

LEGEND

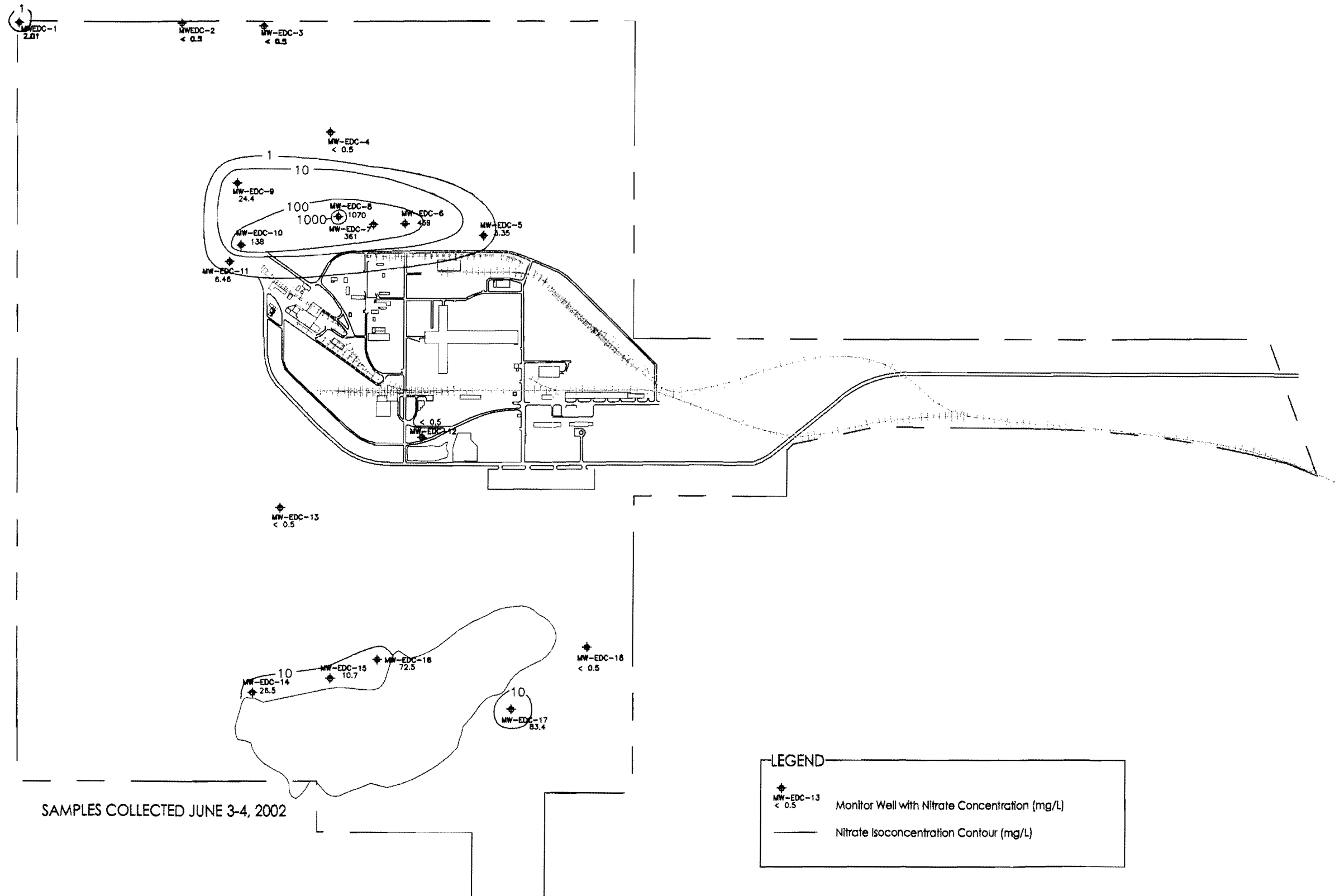
- MW-EDC-5
◆ < 0.5 Monitor Well with Ammonia Concentration (mg/L)
- Ammonia Isoconcentration Contour (mg/L)



ENVIRONMENTAL
MANAGEMENT SERVICES, INC.

PROJECT NO: 2EC0100
AMMONIA.DWG
DRAFTED BY: LM DATE: 02/28/03
APPROVED:
BY: *EL* DATE: 4/3/03

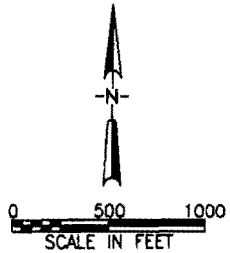
AMMONIA ISOCONCENTRATION MAP
DECEMBER 2002
2002 ANNUAL GROUND WATER REPORT
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

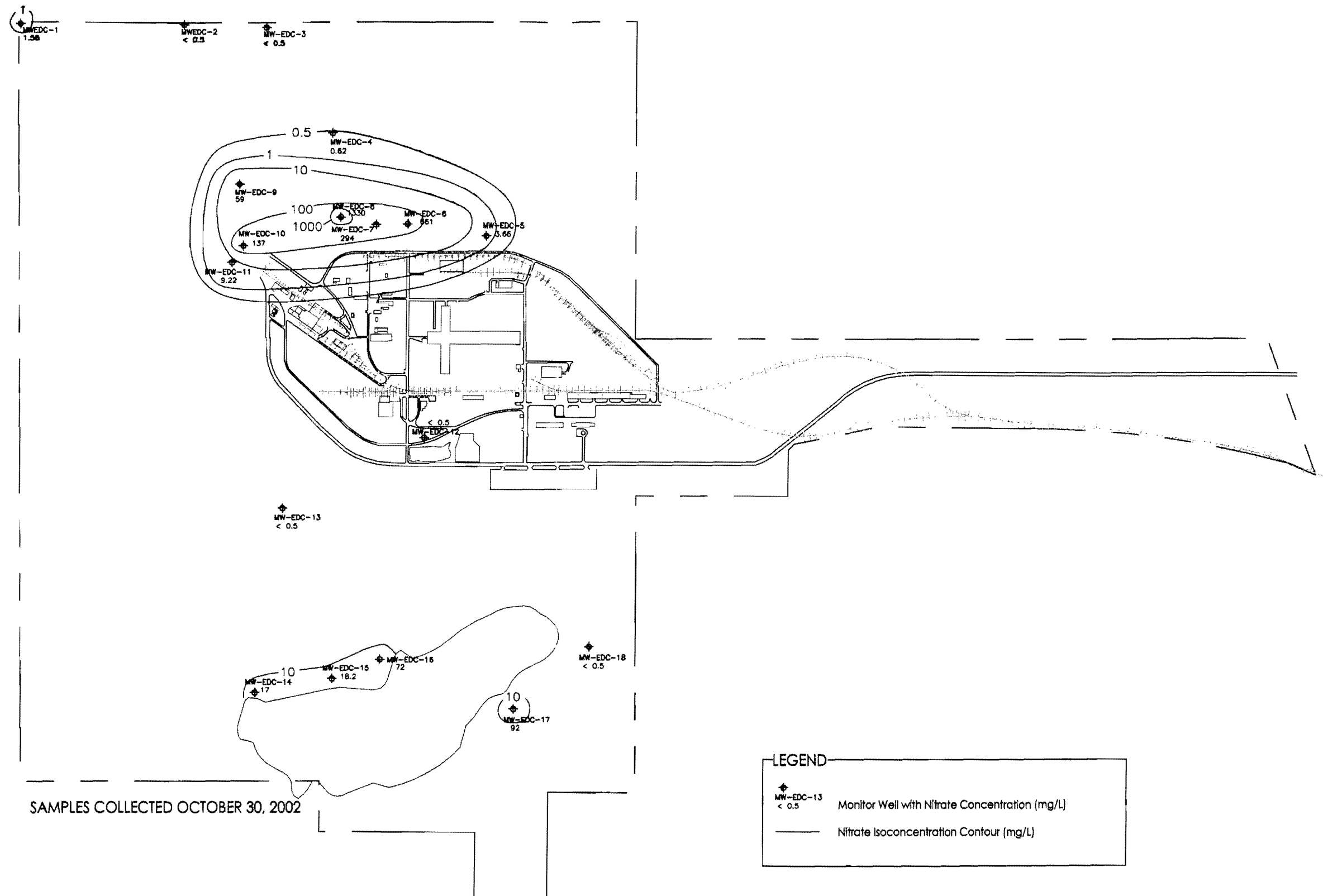


SAMPLES COLLECTED JUNE 3-4, 2002

LEGEND

- MW-EDC-13 < 0.5 Monitor Well with Nitrate Concentration (mg/L)
- Nitrate Isoconcentration Contour (mg/L)

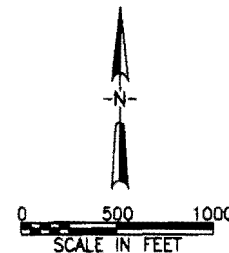


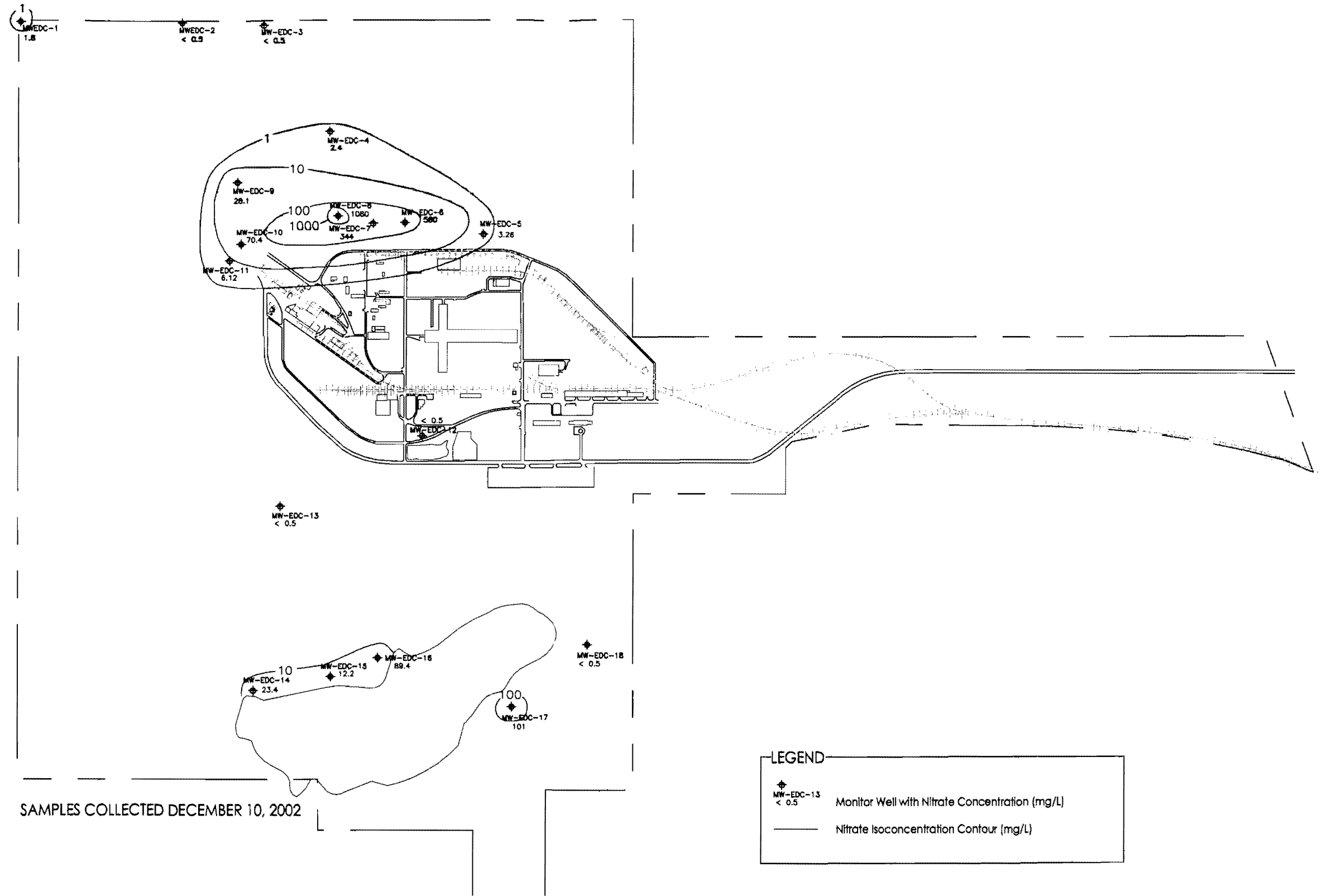


SAMPLES COLLECTED OCTOBER 30, 2002

LEGEND

- ◆ MW-EDC-13 < 0.5 Monitor Well with Nitrate Concentration (mg/L)
- Nitrate Isoconcentration Contour (mg/L)





SAMPLES COLLECTED DECEMBER 10, 2002

LEGEND

- ◆ MW-EDC-13 < 0.5 Monitor Well with Nitrate Concentration (mg/L)
- Nitrate Isoconcentration Contour (mg/L)

