APPENDIX B

SELECTED HISTORICAL GROUNDWATER ANALYTICAL DATA FOR SAUGET AREA 1

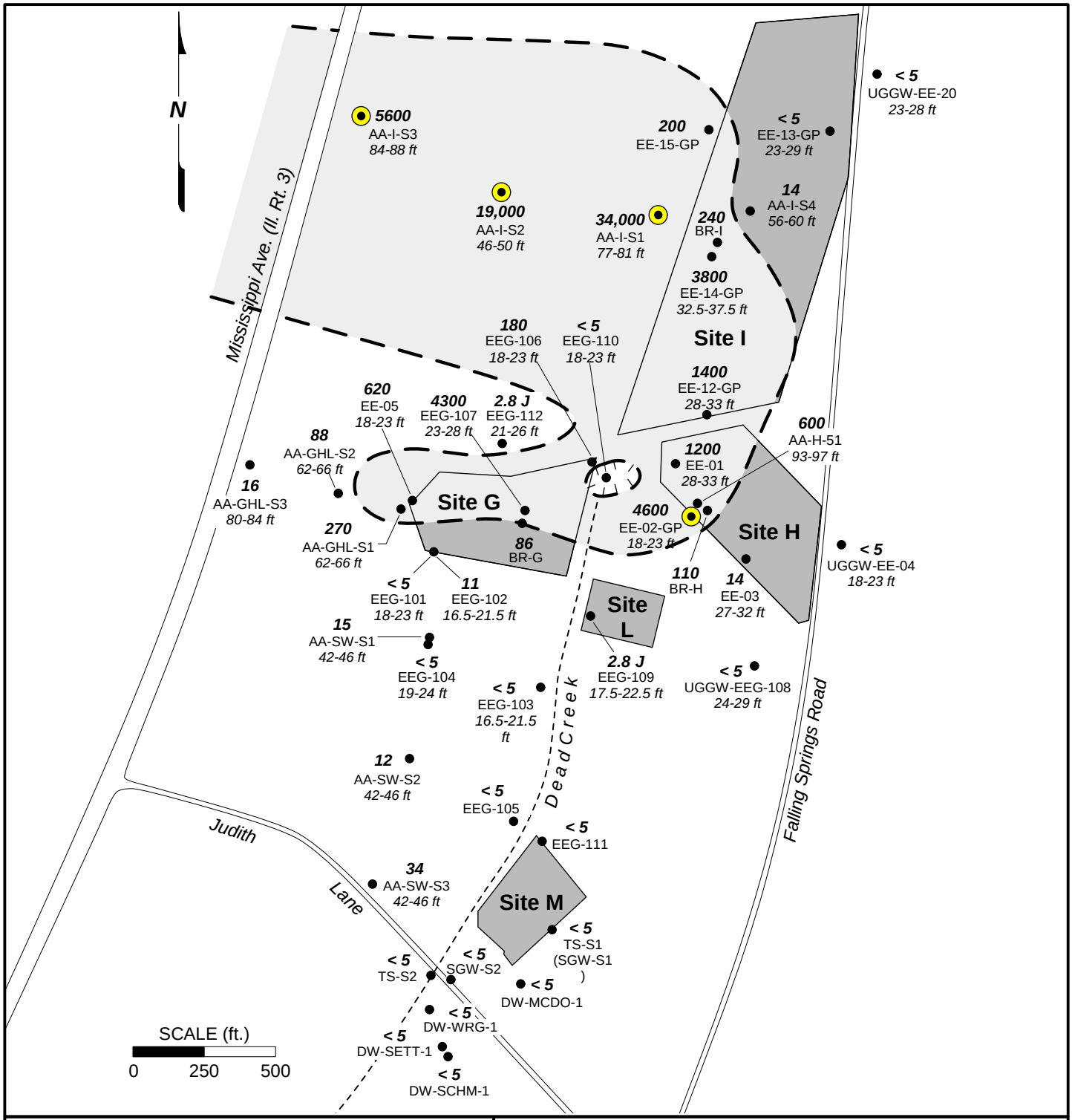
Figure B-1: Chlorobenzene Concentrations in Groundwater

Figure B-2: Chlorobenzene Concentrations vs. Depth in Groundwater

Figure B-3: 1,4-Dichlorobenzene Concentrations in Groundwater

Figure B-4: 1,4-Dichlorobenzene Concentrations vs. Depth in Groundwater

Note: Figures B-1 through B-4 were adapted from Figures 5-1 through 5-4 of the EE/CA and RI/FS report, Revision 1, Roux Associates, June 8, 2001.



NOTES: 1) Illinois Class I Standard for chlorobenzene: 100 µg/L.

2) Chlorobenzene selected for contouring as it had highest concentration of VOCs at AA-I-S3.

3) Pure phase solubility of chlorobenzene in water is approximately 445,000 µg/L, so 1% of solubility is 4,450 µg/L.

LEGEND

600	Maximum concentration over entire depth interval
●	Sampling locations (µg/L) from 1999-2000 Sampling Program
AA-GHL-S3	Well name
80-84 ft	Depth interval with maximum concentration (ft bgs.)
●	Exceeds 1% of solubility is (>4,450 µg/L).
— —	Concentration exceeding Class I Standard

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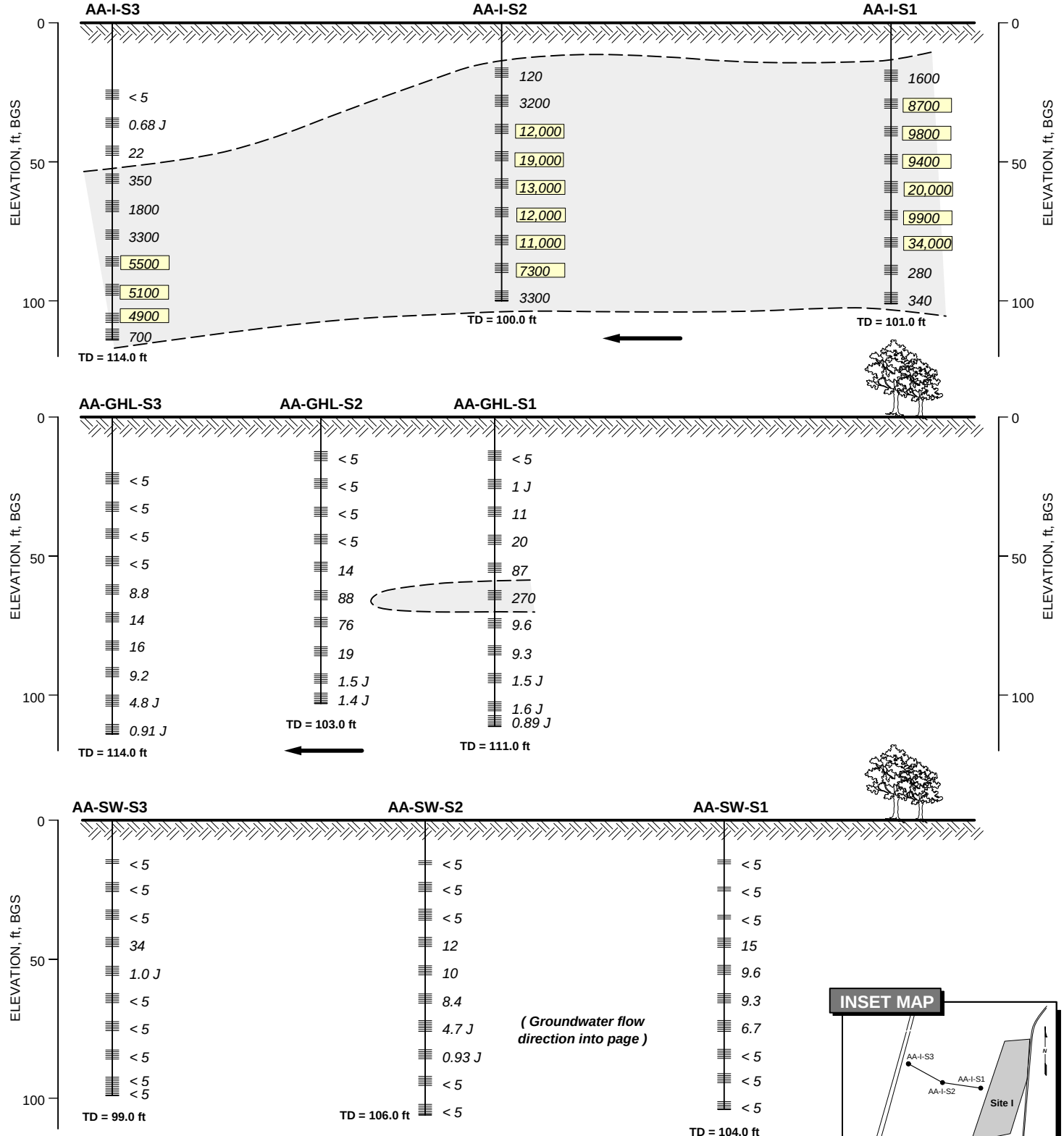
Scale:	As Shown		**FIGURE B-1**

CHLOROBENZENE CONCENTRATIONS IN GROUNDWATER

Sauget Area 1

Sauget and Cahokia, Illinois



LEGEND

- 12 — Concentration (µg/L) from 1999-2000 Sampling Program; Screened interval
- Concentration exceeding Class I Standard
- Exceeds 1% of solubility is (>4,450 µg/L).
- Groundwater flow direction

NOTE:

1) Illinois Class I Standard: 100 µg/L
2) Pure phase solubility of chlorobenzene in water is approximately 445,000 µg/L, so 1% of solubility is 4,450 µg/L.

Horizontal Scale, ft.
0 100 200

Vertical Scale: 1 In = 50 ft
Vertical Exaggeration: 4X

INSET SCALE (ft.)
0 1000 2000

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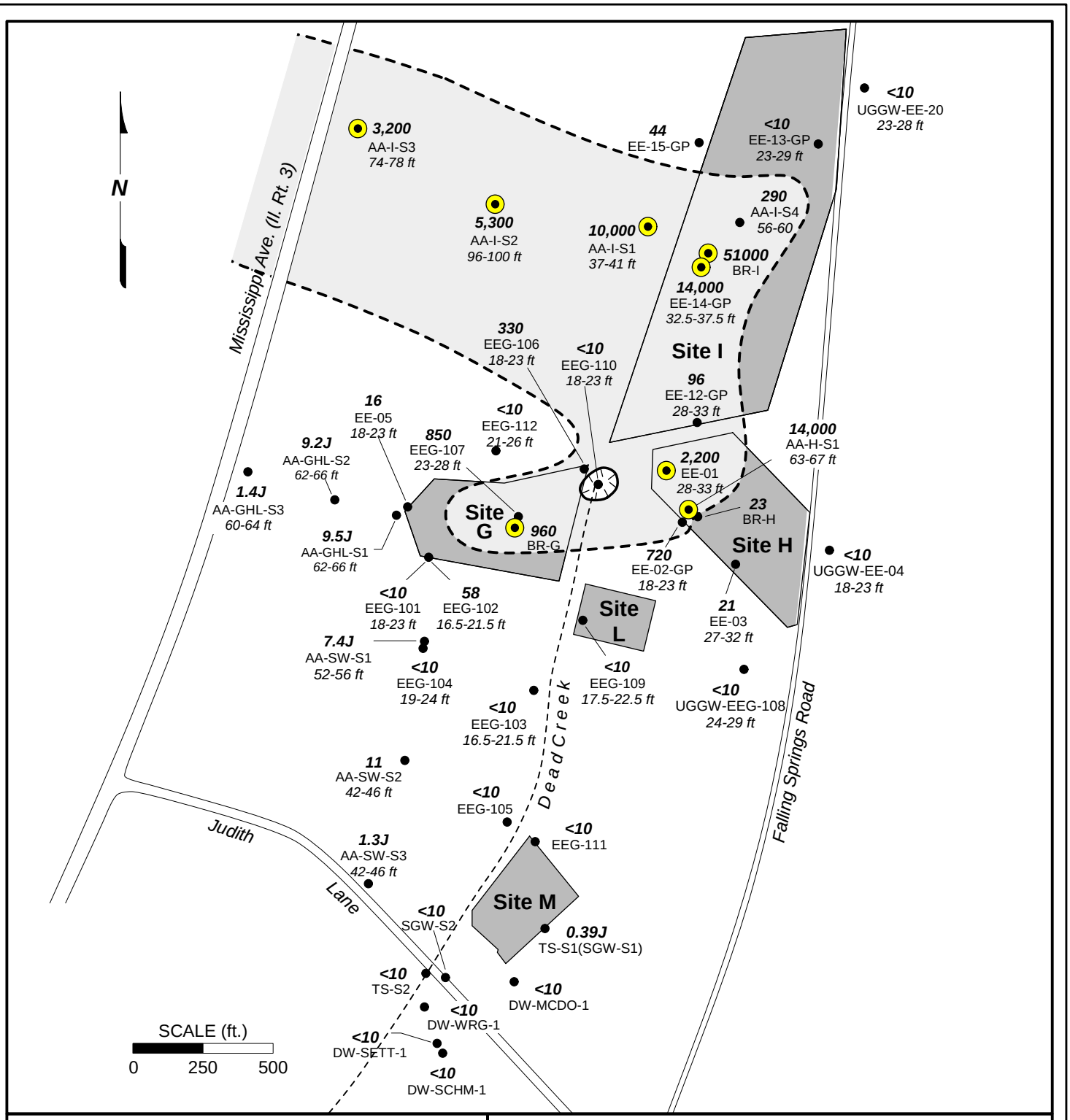
Scale:	As Shown		**FIGURE B-2**

CHLOROBENZENE CONCENTRATIONS VS. DEPTH IN GROUNDWATER

Sauget Area 1
Sauget and Cahokia, Illinois



NOTES: 1) Illinois Class I Standard: 75 µg/L.

2) Pure phase solubility of 1,4 - dichlorobenzene approximately 80,000 µg/L, so 1% of solubility is 800 µg/L.

LEGEND

3.5	Maximum concentration over entire depth interval
●	Sampling locations (µg/L) from 1999-2000 Sampling Program
AA-GHL-S3	Well name
90-94 ft	Depth interval with maximum concentration (ft bgs.)
●	Exceeds 1% of solubility is (>800 µg/L).
— —	Concentration exceeding Class I Standard

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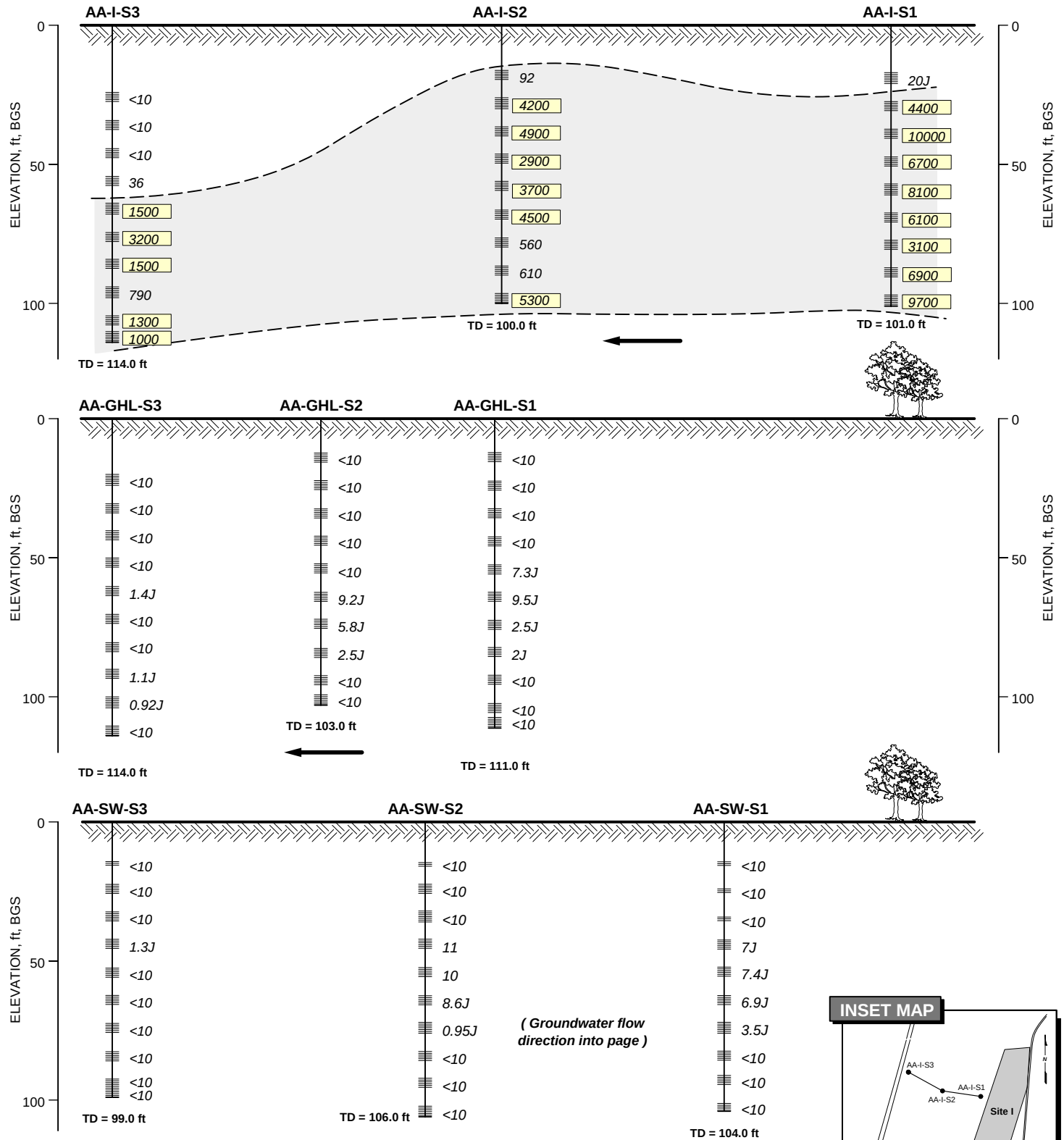
Scale:	As Shown		**FIGURE B-3**

1,4-DICHLOROBENZENE CONCENTRATIONS IN GROUNDWATER
Sauget Area 1
Sauget and Cahokia, Illinois



LEGEND

- 12 — Concentration (µg/L) from 1999-2000 Sampling Program; Screened interval
- Concentration exceeding Class I Standard
- Exceeds 1% of solubility is (>800 ug/L).
- Groundwater flow direction

NOTE:

1) Illinois Class I Standard: 75 µg/L
2) Pure phase solubility of 1,4-dichlorobenzene approximately 80,000 µg/L, so 1% of solubility is 800 µg/L.

Horizontal Scale, ft.
0 100 200

Vertical Scale: 1 In = 50 ft
Vertical Exaggeration: 4X

INSET SCALE (ft.)
0 100 200
0 0

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Scale:	As Shown		**FIGURE B-4**

1,4-DICHLOROBENZENE CONCENTRATIONS VS. DEPTH IN GROUNDWATER

Sauget Area 1
Sauget and Cahokia, Illinois