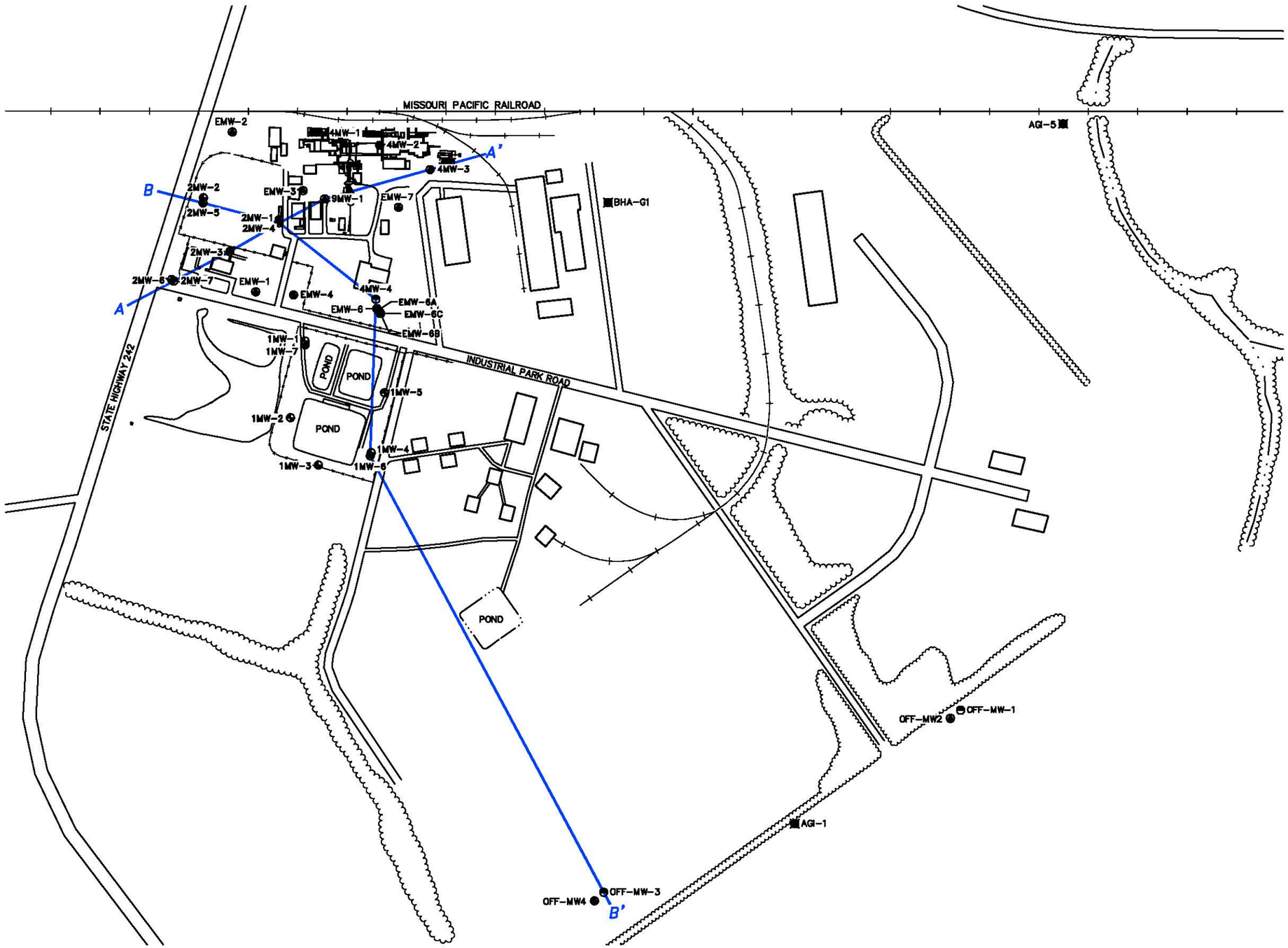


EXPLANATION

- WATER OR DRAINAGE
- ROAD
- RAILROAD
- BUILDING
- FENCE
- DEEP MONITORING WELL (LOWER ALLUVIUM)
- SHALLOW MONITORING WELL (UPPER ALLUVIUM)
- PERCHED ZONE MONITORING WELL
- AGRICULTURAL IRRIGATION WELL
- A — A' LINE OF CROSS SECTION

0 500
APPROXIMATE SCALE IN FEET

BASE MAP MODIFIED FROM:
EnSafe, 1996-Phase III FI, 2001 Groundwater Monitoring Report, Drawings C2162GWS and C2162VC7

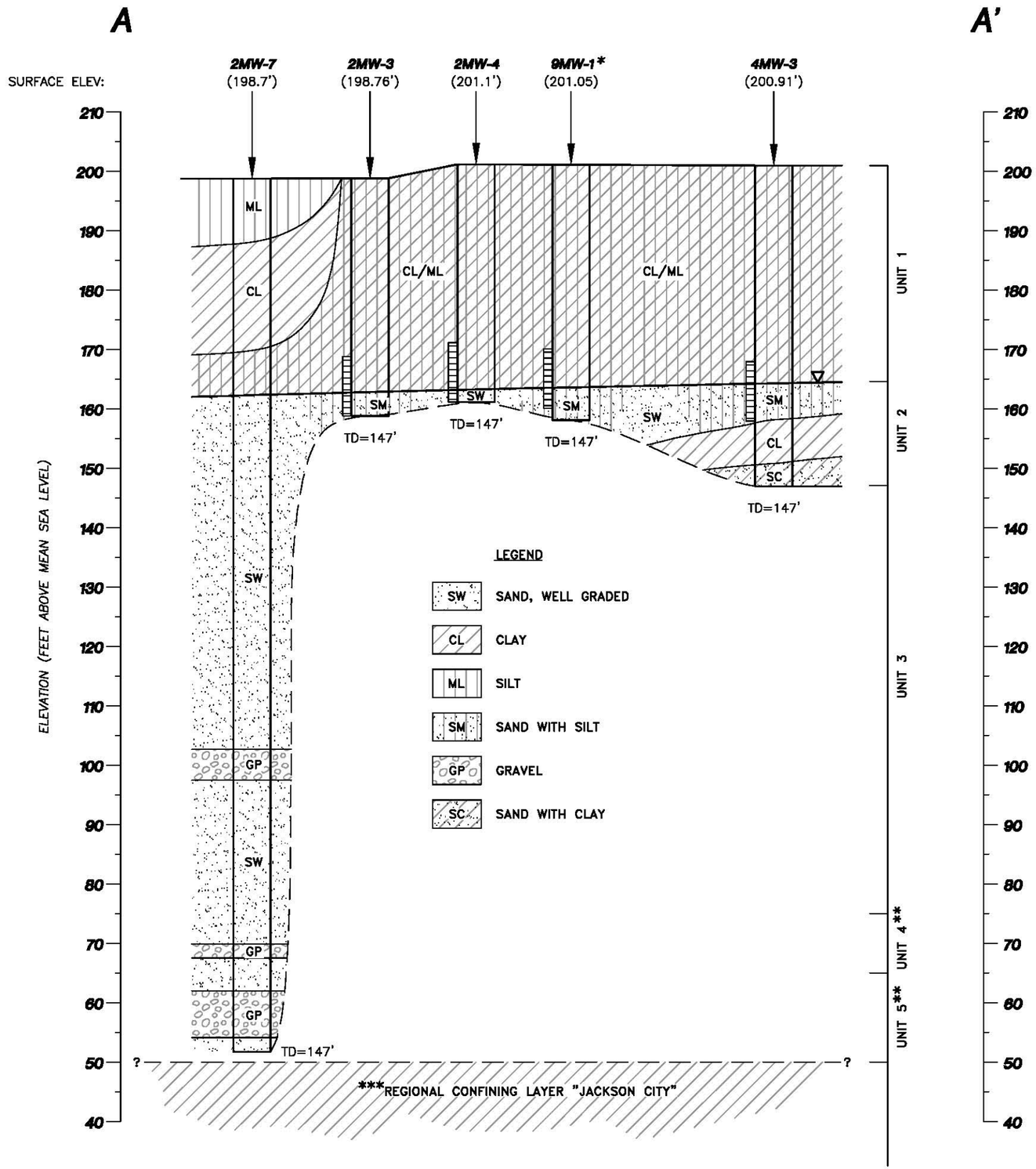
SITE MAP

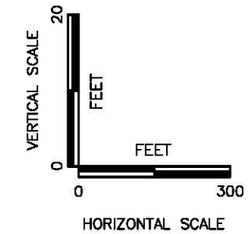
Cedar Chemical
Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 2

11/13/07 X-SECT.dwg

9545206





LEGEND

2MW–4 MONITORING WELL

SCREENED INTERVALS FOR LOCATIONS HAVING INSTALLED WELLS

RELATIVE GROUNDWATER ELEVATION

* SURFACE ELEVATION AT THIS POINT INTERPRETED FROM TOPOGRAPHIC MAP

** UNIT NOT OBSERVED IN LITHOLOGIC SAMPLES BUT WAS IDENTIFIED IN GEOPHYSICAL LOGGING

REFER TO CURRENT CONDITIONS REPORT SECTION 2.4.2 FOR UNIT DESCRIPTIONS

*** REGIONALLY, THE TOP OF THE JACKSON CLAY UNIT HAS BEEN OBSERVED AT AN ELEVATION AS HIGH AS 70 FEET MSL TEN MILES TO THE NW OF THE SITE & AS LOW AS 30 FEET MSL, TEN MILES TO THE SE OF THE SITE. LOCALLY THE TOP OF THE UNIT HAS BEEN OBSERVED AT 53FT MSL (4MW–4)

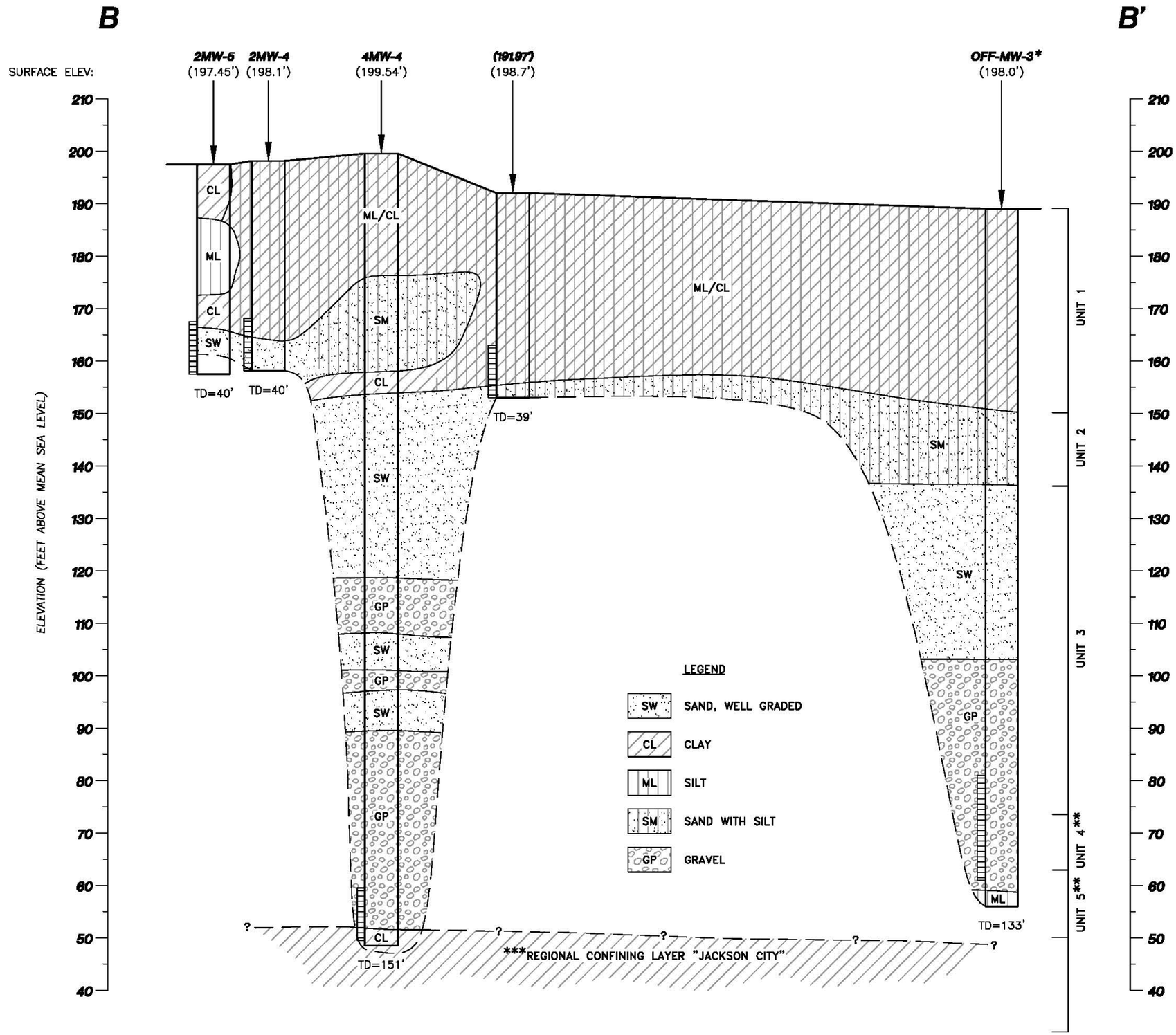
REFERENCE:
HYDROLOGY OF THE MISSISSIPPI RIVER VALLEY ALLUVIAL AQUFER, SOUTH–CENTRAL U.S.
D.J.–ACKERMAN, 1996 PG D–11

CROSS SECTION A-A'

Cedar Chemical
Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 3

11/13/07 X–SECT.dwg



LEGEND

2MW–4 MONITORING WELL

SCREENED INTERVALS FOR LOCATIONS HAVING INSTALLED WELLS

RELATIVE GROUNDWATER ELEVATION

* SURFACE ELEVATION AT THIS POINT INTERPRETED FROM TOPOGRAPHIC MAP

** UNIT NOT OBSERVED IN LITHOLOGIC SAMPLES BUT WAS IDENTIFIED IN GEOPHYSICAL LOGGING

REFER TO CURRENT CONDITIONS REPORT SECTION 2.4.2 FOR UNIT DESCRIPTIONS

*** REGIONALLY, THE TOP OF THE JACKSON CLAY UNIT HAS BEEN OBSERVED AT AN ELEVATION AS HIGH AS 70 FEET MSL TEN MILES TO THE NW OF THE SITE & AS LOW AS 30 FEET MSL, TEN MILES TO THE SE OF THE SITE. LOCALLY THE TOP OF THE UNIT HAS BEEN OBSERVED AT 53FT MSL (4MW–4)

REFERENCE:
HYDROLOGY OF THE MISSISSIPPI RIVER VALLEY ALLUVIAL AQUFER, SOUTH–CENTRAL U.S.
D.J.–ACKERMAN, 1996 PG D–11

CROSS SECTION B-B'

Cedar Chemical
Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 4

11/13/07 X–SECT.dwg

EXPLANATION

APPROXIMATE PERCHED ZONE EXTENT

PERCHED ZONE MONITORING WELL

<2.6 ARSENIC NOT DETECTED ABOVE RESPECTIVE REPORTING LIMIT (RED REPRESENTS CONCENTRATIONS ABOVE MSSL)

N/A NOT ANALYZED

N/S NOT SAMPLED

CONCENTRATIONS ARE REPORTED IN ug/l

NOTE:
DATA SHOWN REPRESENT MOST RECENT GROUNDWATER SAMPLING RESULT AT EACH WELL (JULY 2001, UNLESS OTHERWISE NOTED)

*2MW-1 DATA FROM JULY 1997 SAMPLING EVENT. 2MW-1 WAS DRY DURING 2001 GROUNDWATER SAMPLING EVENTS.

TAP WATER MEDIUM-SPECIFIC SCREENING LEVEL (MSSL) FOR ARSENIC: 0.045 ug/l (USEPA REGION 6, 2007)

0 500
APPROXIMATE SCALE IN FEET

BASE MAP MODIFIED FROM:
EnSafe, 1996-Phase III FI, 2001 Groundwater Monitoring Report, Drawings C2162GWS and C2162VC7

ARSENIC DISTRIBUTION IN PERCHED ZONE GROUNDWATER
Cedar Chemical
Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 6

11/13/07 PERCHED.dwg

EXPLANATION

- DEEP MONITORING WELL (LOWER ALLUVIUM)
- SHALLOW MONITORING WELL (UPPER ALLUVIUM)
- AGRICULTURAL IRRIGATION WELL
- *N/A* NOT ANALYZED
- *<0.99* ARSENIC NOT DETECTED ABOVE RESPECTIVE REPORTING LIMIT (RED REPRESENTS CONCENTRATIONS ABOVE MSSL)
- 10 ARSENIC ISOCONCENTRATION CONTOUR (DASHED WHERE INFERRED)

CONCENTRATIONS ARE REPORTED IN ug/l

NOTE:
DATA SHOWN REPRESENT JULY 2001 GROUNDWATER SAMPLING RESULT AT EACH WELL UNLESS OTHERWISE NOTED

*EMW-6, 6A & 6B DATA FROM 11/30/94; 4MW-2 DATA FROM 9/26/95.

TAP WATER MEDIUM-SPECIFIC SCREENING LEVEL (MSSL) FOR ARSENIC: 0.045 ug/l (USEPA REGION 6, 2007)

0 500
APPROXIMATE SCALE IN FEET

BASE MAP MODIFIED FROM:
EnSafe, 1996-Phase III FI, 2001 Groundwater Monitoring Report, Drawings C2162GWS and C2162VC7

ARSENIC DISTRIBUTION IN
ALLUVIAL ZONE GROUNDWATER
Cedar Chemical
Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 7

11/13/07 ALLUVIAL.dwg

EXPLANATION

APPROXIMATE PERCHED ZONE EXTENT

PERCHED ZONE MONITORING WELL

<1 — 1,2-DCB NOT DETECTED ABOVE RESPECTIVE REPORTING LIMIT (RED REPRESENTS CONCENTRATIONS ABOVE MSSL)

N/S — NOT SAMPLED

10 — 1,2-DCB ISOCONCENTRATION CONTOUR (DASHED WHERE INFERRED)

CONCENTRATIONS ARE REPORTED IN ug/l

NOTE:
DATA SHOWN REPRESENT MOST RECENT GROUNDWATER SAMPLING RESULT AT EACH WELL (JULY 2001, UNLESS OTHERWISE NOTED)

*2MW-1 DATA FROM JULY 1997 SAMPLING EVENT. 2MW-1 WAS DRY DURING 2001 GROUNDWATER SAMPLING EVENTS.

TAP WATER MEDIUM-SPECIFIC SCREENING LEVEL (MSSL) FOR 1,2-DICHLOROBENZENE: 49 ug/l (USEPA REGION 6, 2007)

0 500
APPROXIMATE SCALE IN FEET

BASE MAP MODIFIED FROM:
EnSafe, 1996-Phase III FI, 2001 Groundwater Monitoring Report, Drawings C2162GWS and C2162VC7

1,2-DICHLOROBENZENE DISTRIBUTION IN PERCHED ZONE GROUNDWATER
Cedar Chemical
Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 8

11/13/07 PERCHED.dwg

EXPLANATION

- DEEP MONITORING WELL (LOWER ALLUVIUM)
- SHALLOW MONITORING WELL (UPPER ALLUVIUM)
- AGRICULTURAL IRRIGATION WELL
- <1 — 1,2–DCB NOT DETECTED ABOVE RESPECTIVE REPORTING LIMIT (RED REPRESENTS CONCENTRATIONS ABOVE MSSL)
- 10 — 1,2–DCB ISOCONCENTRATION CONTOUR (DASHED WHERE INFERRED)

CONCENTRATIONS ARE REPORTED IN ug/l

NOTE:
DATA SHOWN REPRESENT JULY 2001 GROUNDWATER SAMPLING RESULT AT EACH WELL UNLESS OTHERWISE NOTED

*EMW–6, 6A & 6B DATA FROM 11/30/94; 4MW–2 DATA FROM 9/26/95.

TAP WATER MEDIUM–SPECIFIC SCREENING LEVEL (MSSL) FOR 1,2–DICHLOROBENZENE: 49 ug/l (USEPA REGION 6, 2007)

0 500
APPROXIMATE SCALE IN FEET

BASE MAP MODIFIED FROM:
EnSafe, 1996-Phase III FI, 2001 Groundwater Monitoring Report, Drawings C2162GWS and C2162VC7

1,2-DICHLOROBENZENE DISTRIBUTION IN ALLUVIAL ZONE GROUNDWATER
Cedar Chemical
Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 9

11/13/07 ALLUVIAL.dwg

EXPLANATION

APPROXIMATE PERCHED ZONE EXTENT

PERCHED ZONE MONITORING WELL

<10 DINOSEB NOT DETECTED ABOVE RESPECTIVE REPORTING LIMIT

N/S NOT SAMPLED

CONCENTRATIONS ARE REPORTED IN ug/l

NOTE:
DATA SHOWN REPRESENT MOST RECENT GROUNDWATER SAMPLING RESULT AT EACH WELL (JULY 2001, UNLESS OTHERWISE NOTED)

*2MW-1 DATA FROM JULY 1997 SAMPLING EVENT. 2MW-1 WAS DRY DURING 2001 GROUNDWATER SAMPLING EVENTS.

TAP WATER MEDIUM-SPECIFIC SCREENING LEVEL (MSSL) FOR DINOSEB: 37 ug/l (USEPA REGION 6, 2007)

0 500
APPROXIMATE SCALE IN FEET

BASE MAP MODIFIED FROM:
EnSafe, 1996-Phase III FI, 2001 Groundwater Monitoring Report, Drawings C2162GWS and C2162VC7

DINOSEB DISTRIBUTION IN PERCHED ZONE GROUNDWATER
Cedar Chemical
Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 10

11/13/07 PERCHED.dwg

EXPLANATION

- DEEP MONITORING WELL (LOWER ALLUVIUM)
- SHALLOW MONITORING WELL (UPPER ALLUVIUM)
- AGRICULTURAL IRRIGATION WELL
- N/A — NOT ANALYZED
- <10 — DINOSEB NOT DETECTED ABOVE RESPECTIVE REPORTING LIMIT (RED REPRESENTS CONCENTRATIONS ABOVE MSSL)
- 10 — DINOSEB ISOCONCENTRATION CONTOUR (DASHED WHERE INFERRED)

CONCENTRATIONS ARE REPORTED IN ug/l

NOTE:
DATA SHOWN REPRESENT JULY 2001 GROUNDWATER SAMPLING RESULT AT EACH WELL UNLESS OTHERWISE NOTED

*EMW-6, 6A & 6B DATA FROM 11/30/94; 4MW-2 DATA FROM 9/26/95.

TAP WATER MEDIUM-SPECIFIC SCREENING LEVEL (MSSL) FOR DINOSEB: 37 ug/l (USEPA REGION 6, 2007)

0 500
APPROXIMATE SCALE IN FEET

BASE MAP MODIFIED FROM:
EnSafe, 1996-Phase III FI, 2001 Groundwater Monitoring Report, Drawings C2162GWS and C2162VC7

DINOSEB DISTRIBUTION IN ALLUVIAL ZONE GROUNDWATER
Cedar Chemical
Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 11

11/13/07 ALLUVIAL.dwg

EXPLANATION

APPROXIMATE PERCHED ZONE EXTENT

PERCHED ZONE MONITORING WELL

<5 METHYLENE CHLORIDE NOT DETECTED ABOVE RESPECTIVE REPORTING LIMIT (RED REPRESENTS CONCENTRATIONS ABOVE MSSL)

N/S NOT SAMPLED

10 METHYLENE CHLORIDE ISOCONCENTRATION CONTOUR (DASHED WHERE INFERRED)

CONCENTRATIONS ARE REPORTED IN ug/l

NOTE:
DATA SHOWN REPRESENT MOST RECENT GROUNDWATER SAMPLING RESULT AT EACH WEL (JULY 2001, UNLESS OTHERWISE NOTED)

*2MW-1 DATA FROM JULY 1997 SAMPLING EVENT. 2MW-1 WAS DRY DURING 2001 GROUNDWATER SAMPLING EVENTS.

TAP WATER MEDIUM-SPECIFIC SCREENING LEVEL (MSSL) FOR METHYLENE CHLORIDE: 4.3 ug/l (USEPA REGION 6, 2007)

0 500
APPROXIMATE SCALE IN FEET

BASE MAP MODIFIED FROM:
EnSafe, 1996-Phase III FI, 2001 Groundwater Monitoring Report, Drawings C2162GWS and C2162VC7

METHYLENE CHLORIDE DISTRIBUTION IN PERCHED ZONE GROUNDWATER
Cedar Chemical
Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 12

11/13/07 PERCHED.dwg

EXPLANATION

- DEEP MONITORING WELL (LOWER ALLUVIUM)
- SHALLOW MONITORING WELL (UPPER ALLUVIUM)
- AGRICULTURAL IRRIGATION WELL
- <2 — METHYLENE CHLORIDE NOT DETECTED ABOVE RESPECTIVE REPORTING LIMIT (RED REPRESENTS CONCENTRATIONS ABOVE MSSL)
- 10 — METHYLENE CHLORIDE ISOCONCENTRATION CONTOUR (DASHED WHERE INFERRED)

CONCENTRATIONS ARE REPORTED IN ug/l

NOTE:
DATA SHOWN REPRESENT JULY 2001 GROUNDWATER SAMPLING RESULT AT EACH WELL UNLESS OTHERWISE NOTED

*EMW-6, 6A & 6B DATA FROM 11/30/94; 4MW-2 DATA FROM 9/26/95.

TAP WATER MEDIUM-SPECIFIC SCREENING LEVEL (MSSL) FOR METHYLENE CHLORIDE: 4.3 ug/l (USEPA REGION 6, 2007)

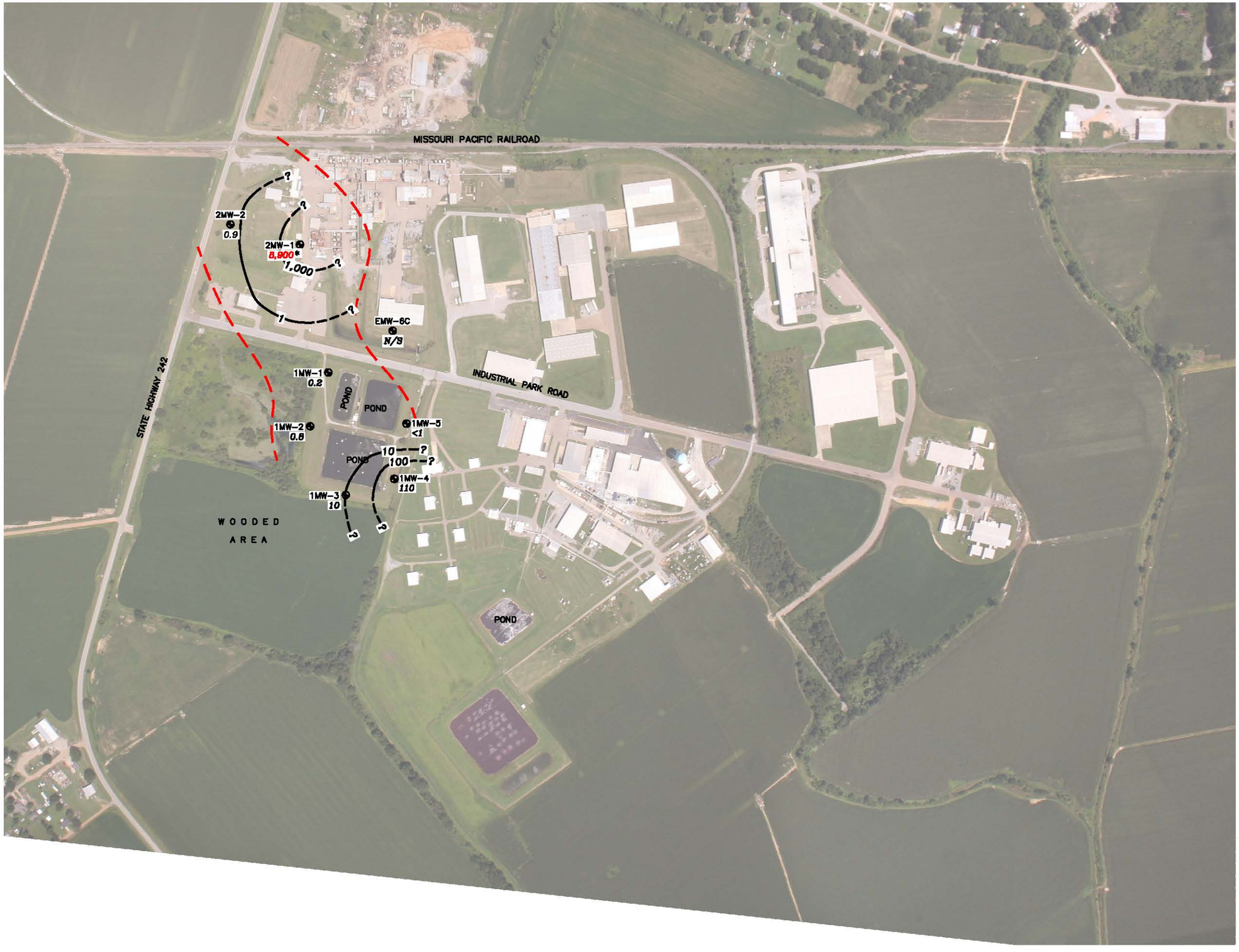
0 500
APPROXIMATE SCALE IN FEET

BASE MAP MODIFIED FROM:
EnSafe, 1996-Phase III FI, 2001 Groundwater Monitoring Report, Drawings C2162GWS and C2162VC7

METHYLENE CHLORIDE DISTRIBUTION IN ALLUVIAL ZONE GROUNDWATER
Cedar Chemical
Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 13

11/13/07 ALLUVIAL.dwg



EXPLANATION

APPROXIMATE PERCHED ZONE EXTENT

PERCHED ZONE MONITORING WELL

<1 — 1,2-DCA NOT DETECTED ABOVE RESPECTIVE REPORTING LIMIT (RED REPRESENTS CONCENTRATIONS ABOVE MSSL)

N/S — NOT SAMPLED

10 — 1,2-DCA ISOCONCENTRATION CONTOUR (DASHED WHERE INFERRED)

CONCENTRATIONS ARE REPORTED IN ug/l

NOTE:
DATA SHOWN REPRESENT MOST RECENT GROUNDWATER SAMPLING RESULT AT EACH WELL (JULY 2001, UNLESS OTHERWISE NOTED)

*2MW-1 DATA FROM JULY 1997 SAMPLING EVENT. 2MW-1 WAS DRY DURING 2001 GROUNDWATER SAMPLING EVENTS.

TAP WATER MEDIUM-SPECIFIC SCREENING LEVEL (MSSL) FOR 1,2-DICHLOROETHANE: 1200 ug/l (USEPA REGION 6, 2007)

0 500
APPROXIMATE SCALE IN FEET

BASE MAP MODIFIED FROM:
EnSafe, 1996-Phase III FI, 2001 Groundwater Monitoring Report, Drawings C2162GWS and C2162VC7

1,2-DICHLOROETHANE DISTRIBUTION IN PERCHED ZONE GROUNDWATER
Cedar Chemical
Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 14

11/13/07 PERCHED.dwg