US EPA ARCHIVE DOCUMENT

Figures

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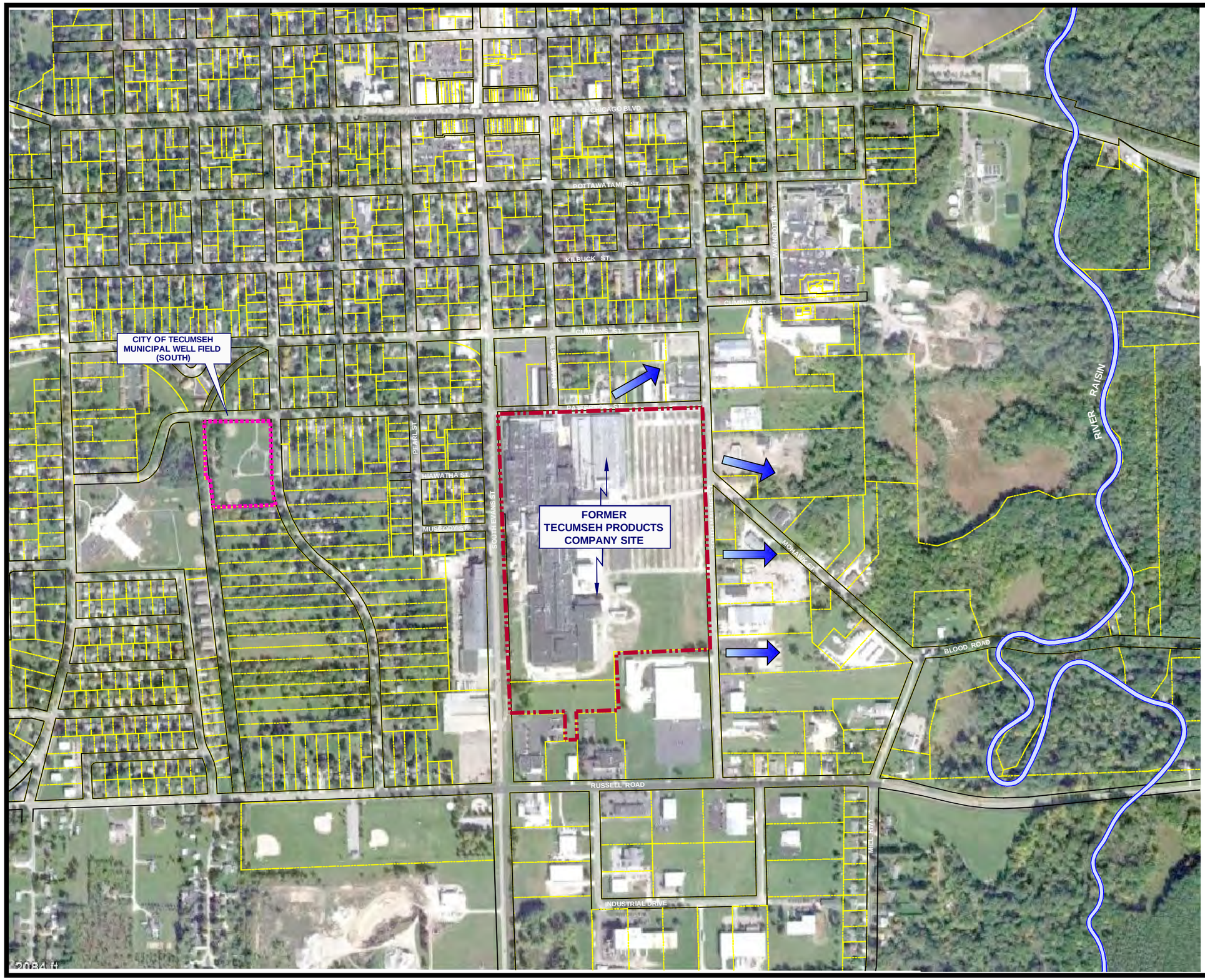


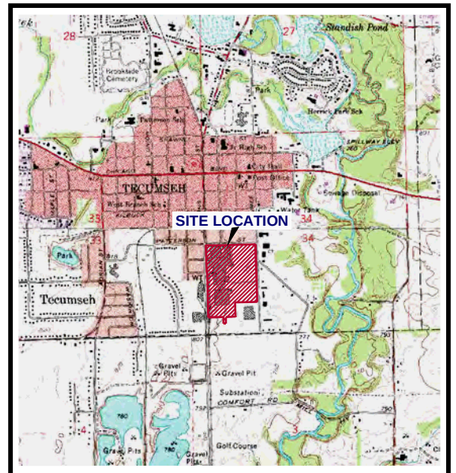
LEGEND

- CITY OF TECUMSEH PROPERTY BOUNDARIES
- FORMER TECUMSEH PRODUCTS SITE BOUNDARY
- PARCEL BOUNDARIES
- GROUNDWATER FLOW DIRECTION

NOTE

1. BASE MAP DEVELOPED FROM SITE PLAN PROVIDED BY THE CITY OF TECUMSEH, DRAWING NO. CITY.DWG, MARCH 2009, AERIAL PHOTOGRAPH PROVIDED FROM REMOTE SENSING & GIS RESEARCH AND OUTREACH SERVICES (RS&GIS), *PUBLICATION_DATE:* 06-29-2007, File:TECUMSEHSOUTH_NE.ECW.

SITE TOPOGRAPHY INSET MAP



MICHIGAN

APPROXIMATE SCALE IN FEET
0 2000' 4000'

0 300' 600' 900' 1200'
APPROXIMATE SCALE IN FEET

NO.	BY	DATE	REVISION	APP'D
3				
2				
1				

PROJ.

FORMER TECUMSEH PRODUCTS SITE
TECUMSEH, MICHIGAN

TITLE:

SITE LOCATION AND VICINITY

DRAWN BY:	DGS	SCALE:	PROJ. NO. 192013.0000.01
CHECKED BY:	SEM		FILE NO. 192013.0000.01.01.dwg
APPROVED BY:	GC	DATE PRINTED:	**FIGURE 1**
DATE:	SEPTEMBER 2012		

TRC
1540 Eisenhower Place
Ann Arbor, MI 48108
Phone: 734.971.7080
Fax: 734.971.9022

PLOT DATA
Drawing Name: J:_TRC\Tecumseh Products\Tecumseh MI\192013.0000\WORK\ PM\192013.0000.01.01.dwg
Drawn By: STEVE.L.DWAH
Drawing Scale: 1:24000

Attached Xref's:
Attached Images:
Layers: TECUMSEHNORTH_JPG; Tecumseh North Michigan; Tecumseh South Michigan; TECUMSEHSOUTH_JPG; Point Map Location Point (1 Entity)

Dwg Size: 2.93 Mb
Plot Date: September 28, 2012
Plot Time: 8:29 AM

US EPA ARCHIVE DOCUMENT

PATTERSON ST.

HIAWATHA ST.

MUSCODY ST.

SOUTH EVANS STREET

SOUTH MAUMEE ST

"Z" "S" "P" "B-1" "K" "B" "H" "B-2" "C" "D-2" "D" "J" "E" "P-2" "W-1" "K-1" "N-2" "F" "W-2" "N-1" "TD" "L-1" "Y" "G" "G-2" "R" "Q" "L" "X-1" "V" "V-2" "M-1" "G-1" "M" "V-1" "M-2" "MD"

SECURITY

SWMU-8 (SCRAP METAL BINS)

SWMU-12 (METAL FINES STORAGE AREA)

BLUE & GREEN LINE STORAGE

PALLET PACK STORAGE

C.R.S. #1 STORAGE

ENGINEERING

MANUFACTURING

SHIPPING STORAGE

AREA OF FORMER USTs (#1 - #5)

FORMER UST (#6)

SWMU-1 (FORMER WASTEWATER)

SWMU-3 (FORMER WASTEWATER USTs #9, #10, #11)

SWMU-10 FORMER SPENT SOVENT TANK

SWMU-11 WASTE OIL STORAGE

SWMU-2 METAL STORAGE BIN

C.R.S. #2 & C.R.S. #3 & OUTDOOR UNIT STORAGE

CARDBOARD, PLASTIC & BANDING PACK

SWMU-8 SCRAP METAL BINS

SWMU-6 HAZARDOUS WASTE DRUM STORAGE

AREA OF FORMER USTs (#15 - #21)

COOL PRODUCTS

SWMU-4 FINAL HOLDING TANK

NEW WASTEWATER BUILDING

OIL AND FLAMMABLE CHEMICAL STORAGE

VEHICLE MAINTENANCE

SWMU-9 (ACCUMULATION AREA)

SWMU-7 (CITRIC ACID & PHOSPHATE SOLUTION ACCUMULATION AREA)

CARDBOARD RECYCLING

SWMU-5 (DISTILLATION SOLVENT RECOVERY SYSTEM)

TEARDOWN

QUALITY

PARKING

PARKING

GRASS

LEGEND

- FORMER TECUMSEH PRODUCTS SITE BOUNDARY
- TECUMSEH PRODUCTS UILDING OUTLINE
- PARCEL BOUNDARY
- RAILROAD TRACKS (APPROXIMATE LOCATION)
- APPROXIMATE LOCATION OF FORMER SOLID WASTE MANAGEMENT UNITS (SWMUs)
- FENCE LINE

NOTES

1. BASE MAP DEVELOPED FROM SITE PLAN PROVIDED BY THE CITY OF TECUMSEH, DRAWING NO. CITY.DWG, MARCH 2009.
2. SEE SECTION 2 OF THE REMEDIAL INVESTIGATION AND GROUNDWATER ENVIRONMENTAL INDICATOR REPORT FOR A DESCRIPTION OF SWMUs, USTs AND OTHER RELEVANT DATA.

N

0 160' 320' 480' 640'

APPROXIMATE SCALE IN FEET

NO.	BY	DATE	REVISION	APP'D
3				
2				
1				

PROJ.

FORMER TECUMSEH PRODUCTS SITE
TECUMSEH, MICHIGAN

TITLE:

SITE FEATURES

DRAWN BY:	DGS	SCALE:	PROJ. NO. 192013.0000.01
CHECKED BY:	SEM	AS INDICATED	FILE NO. 192013.0000.91.02.dwg
APPROVED BY:	GC	DATE PRINTED:	**FIGURE 2**
DATE:	SEPTEMBER 2012		

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1540 Eisenhower Place
Ann Arbor, MI 48108
Phone: 734.971.7080
Fax: 734.971.9022

PLOT DATA:
Drawing Name: JL TRC\Tecumseh Products\Tecumseh MI\192013\0000\WOR Rpt\192013.0000.91.02.dwg
Drawing Ref Name: 192013
Disaster Name: 8139E.E. DWAH
Attached XrefS: tec092909
Attached Images: 192021 Site Features
Dwg Size: 2.65 Mb
Plot Date: September 28, 2012
Plot Time: 8:59 AM

US EPA ARCHIVE DOCUMENT

LEGEND

- FORMER TECUMSEH PRODUCTS SITE BOUNDARY
- PARCEL BOUNDARY
- RAILROAD TRACKS (APPROXIMATE LOCATION)
- 750 — APPROXIMATE GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S. TOPOGRAPHIC QUADRANGLE MAP
- B-2 + PERIMETER / OFF-SITE INVESTIGATION SOIL BORING LOCATION AND NUMBER
- MW-4S ▲ MONITORING WELL LOCATION AND NUMBER
- MW-9S ▲ DECOMMISSIONED MONITORING WELL LOCATION AND NUMBER
- SS-2 + SOURCE AREA INVESTIGATION BORING LOCATION AND NUMBER
- SG-02 ⊠ SOIL GAS SAMPLE LOCATION AND NUMBER
- STW-2 ◆ STORM WATER SEWER SAMPLE LOCATION AND NUMBER
- WL-01 ▼ APPROXIMATE SURFACE WATER SAMPLE LOCATION
- SV-10 ✕ SUB-SLAB SOIL GAS SAMPLE NUMBER AND LOCATION
- IA-16 ▲ INDOOR AIR SAMPLE NUMBER AND LOCATION
- SVE-3 ◆ SOIL VAPOR EXTRACTION WELL NUMBER AND LOCATION
- GP-2 ⊕ ATC PHASE II ESA BORING LOCATION AND NUMBER
- FLOODPLAIN / WOODED WETLAND AREA
- PRB LOCATION
- FENCE LINE

NOTES

1. BASE MAP DEVELOPED FROM SITE PLAN PROVIDED BY THE CITY OF TECUMSEH, DRAWING NO. CITY.DWG, MARCH 2009.
2. GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S TOPOGRAPHIC QUADRANGLE MAP AND GROUND SURVEY DATA.

INSET MAP

B-67 B-66 B-64 B-63 B-61 B-62 B-58 B-52 B-59 B-65 B-60

APPROXIMATE SCALE IN FEET
0 20' 40'

0 200' 400' 600' 1200'
APPROXIMATE SCALE IN FEET

NO.	BY	DATE	REVISION	APP'D
3				
2				
1				

PROJ.
FORMER TECUMSEH PRODUCTS SITE
TECUMSEH, MICHIGAN

TITLE:
SURFACE TOPOGRAPHY AND SAMPLE LOCATIONS

DRAWN BY:	DGS	SCALE:	PROJ. NO. 192013.0000.01
CHECKED BY:	SEM	AS INDICATED	FILE NO. 192013.0000.01.03.dwg
APPROVED BY:	GC	DATE PRINTED:	**FIGURE 3**
DATE:	SEPTEMBER 2012		

TRC
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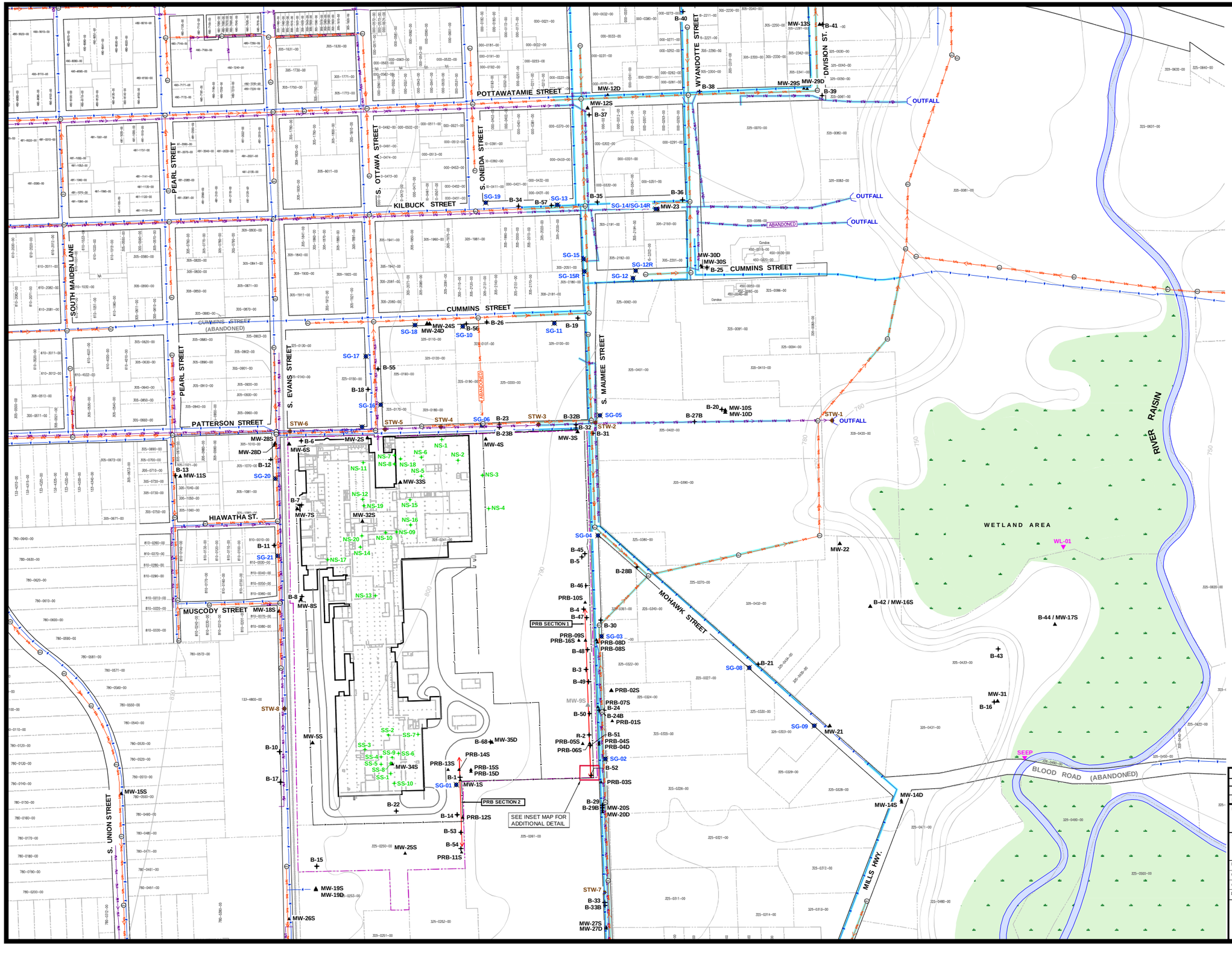
Ann Arbor, MI 48108
Phone: 734.971.7080
Fax: 734.971.9022

PLOT DATA
Drawing Name: 1_TRC\Tecumseh Products\Tecumseh MI\192013\0000\DWG Figs\192013.0000.01.03.dwg
Operator Name: BTEWE, DMANN
Drawing File Name: Datatable

Attached Xref's: tan100110 (Filed)
Attached Image: FIGS3 Soil Trips & Samples
Layout:

Dwg Size: 1.67 Mb
Plot Date: Sun Mar 25, 2012
Plot Time: 8:57 AM

US EPA ARCHIVE DOCUMENT



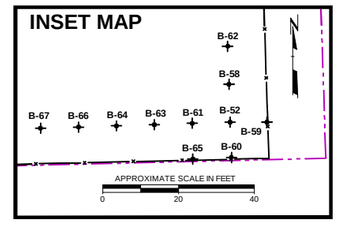
LEGEND

- FORMER TECUMSEH PRODUCTS SITE BOUNDARY
- PARCEL BOUNDARY
- RAILROAD TRACKS (APPROXIMATE LOCATION)
- 750 — APPROXIMATE GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S. TOPOGRAPHIC QUADRANGLE MAP
- B-2 — PERIMETER / OFF-SITE INVESTIGATION SOIL BORING LOCATION AND NUMBER
- MW-4S — MONITORING WELL LOCATION AND NUMBER
- MW-9S — DECOMMISSIONED MONITORING WELL LOCATION AND NUMBER
- SS-2 — SOURCE AREA INVESTIGATION BORING LOCATION AND NUMBER
- SG-02 — SOIL GAS SAMPLE LOCATION AND NUMBER
- STW-2 — STORM WATER SEWER SAMPLE LOCATION AND NUMBER
- WL-01 — APPROXIMATE SURFACE WATER SAMPLE LOCATION
- FLOODPLAIN / WOODED WETLAND AREA
- PRB LOCATION
- FENCE LINE
- WATER LINE (SEE NOTE 3)
- SANITARY SEWER (SEE NOTE 3)
- STORM SEWER (NOTE 3)
- MANHOLE

NOTES

1. BASE MAP DEVELOPED FROM SITE PLAN PROVIDED BY THE CITY OF TECUMSEH, DRAWING NO. CITY.DWG, MARCH 2009.
2. GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S TOPOGRAPHIC QUADRANGLE MAP AND GROUND SURVEY DATA.
3. BLUE HIGHLIGHTING INDICATES APPROXIMATE LOCATIONS WHERE UTILITY CORRIDOR IS SATURATED.

INSET MAP



NO.	BY	DATE	REVISION	APP'D
3				
2				
1				

PROJECT:
FORMER TECUMSEH PRODUCTS SITE
TECUMSEH, MICHIGAN

TITLE:
MAJOR UTILITY LOCATIONS

DRAWN BY:	SJL/DGS	SCALE: AS INDICATED	PROJ. NO. 192012.0000.01
CHECKED BY:	SM		FILE NO. 192013.0000.01.04.dwg
APPROVED BY:	GC	DATE PRINTED:	**FIGURE 4**
DATE:	SEPTEMBER 2012		

TRC
1540 Eisenhower Place
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Fax: 734.971.9022

PLOT DATA
Drawing Name: J:\TRC\Tecumseh Products\Tecumseh MI\192012\0000\DWG\fig01\192013.0000.01.04.dwg
Operator Name: STEHLE, SARAH
Drawing File Name: 0.00000
Attached Xrefs: tim1951f16 (Filed)
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Layers: Model Status
Dwg Size: 1.29 Mb
Plot Date: September 28, 2012
Plot Time: 8:54 AM

US EPA ARCHIVE DOCUMENT

PLOT DATA:
Drawing Name: J:\TRC\Tecumseh Products\Tecumseh MI\192013\0000\MXD\Fig5\192013.0000.01.08.dwg
Created By: STEVE L. DAHAN
Drawing Ref Name: 1:2000

Attached XrefX: tan100115 (Filter)
Attached Images: HYDRA VSI Locations
Dwg Size: J, 691 kb
Plot Date: September 28, 2012
Plot Time: 8:52:16 AM

LEGEND

- FORMER TECUMSEH PRODUCTS SITE BOUNDARY
- PARCEL BOUNDARY
- RAILROAD TRACKS (APPROXIMATE LOCATION)
- 750 — APPROXIMATE GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S. TOPOGRAPHIC QUADRANGLE MAP
- B-2 + PERIMETER / OFF-SITE INVESTIGATION SOIL BORING LOCATION AND NUMBER
- MW-4S ▲ MONITORING WELL LOCATION AND NUMBER
- MW-9S ▲ DECOMMISSIONED MONITORING WELL LOCATION AND NUMBER
- SS-2 + SOURCE AREA INVESTIGATION BORING LOCATION AND NUMBER
- SG-02 ⊠ SOIL GAS SAMPLE LOCATION AND NUMBER
- STW-2 ✱ STORM WATER SEWER SAMPLE LOCATION AND NUMBER
- WL-01 ▼ APPROXIMATE SURFACE WATER SAMPLE LOCATION
- SVE-3 ✱ SOIL VAPOR EXTRACTION WELL NUMBER AND LOCATION
- GP-2 ⬟ ATC PHASE II ESA BORING LOCATION AND NUMBER
- FLOODPLAIN / WOODED WETLAND AREA
- PRB LOCATION
- FENCE LINE
- CROSS-SECTION LOCATION

NOTES

1. BASE MAP DEVELOPED FROM SITE PLAN PROVIDED BY THE CITY OF TECUMSEH, DRAWING NO. CITY.DWG, MARCH 2009.
2. GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S TOPOGRAPHIC QUADRANGLE MAP AND GROUND SURVEY DATA.

INSET MAP

APPROXIMATE SCALE IN FEET
0 20' 40'

0 200' 400' 600' 1200'
APPROXIMATE SCALE IN FEET

NO.	BY	DATE	REVISION	APP'D
3				
2				
1				

PROJ.

FORMER TECUMSEH PRODUCTS SITE
TECUMSEH, MICHIGAN

TITLE:

CROSS SECTION LOCATION MAP

DRAWN BY:	DGS	SCALE:	PROJ. NO. 192013.0000.01
CHECKED BY:	SEM	AS INDICATED	FILE NO. 192013.0000.01.08.dwg
APPROVED BY:	GC	DATE PRINTED:	
DATE:	SEPTEMBER 2012		FIGURE 5

TRC
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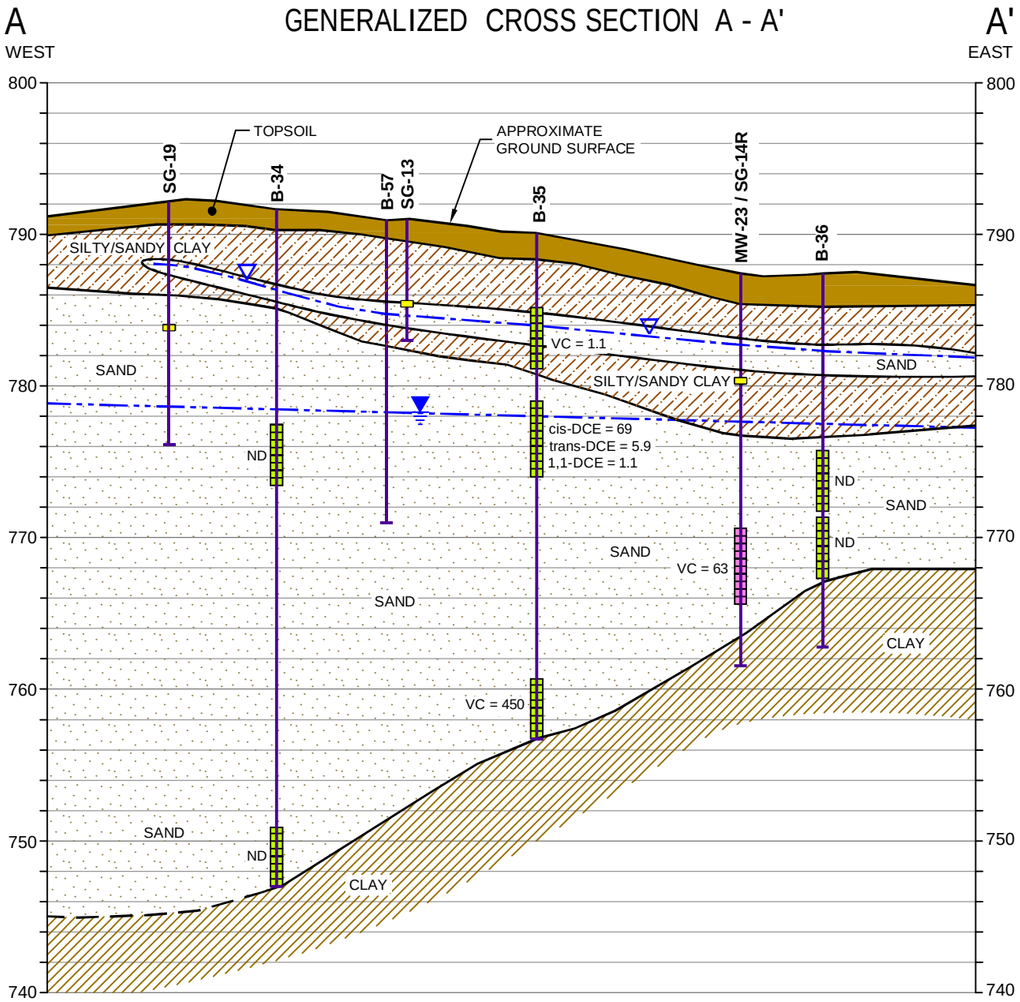
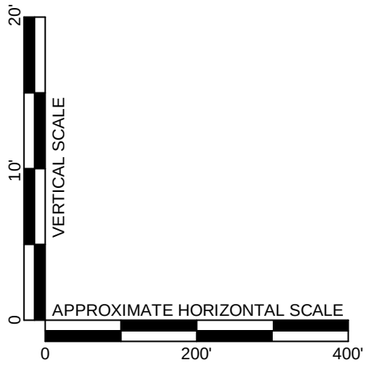
Fax: 734.971.9022

US EPA ARCHIVE DOCUMENT

PLOT DATA
Drawing Name: J:_TRC\Tecumseh Products\Tecumseh MI\192013000\01\RI Rpt\192013.0000.01.06-11.dwg
Operator Name: STEHLE, DIANAH
Drawing Plot Scale: 1'-0" = 1'-0"
Dwg Size: 1.10 Mb
Plot Date: September 27, 2012
Plot Time: 12:41 PM
Attached Xref's:
Attached Images:
Layout: FIG 06 XS A-A

GENERALIZED CROSS SECTION A - A'





LEGEND

- TOPSOIL
- SANDY / SILTY CLAY
- SAND
- CONCRETE
- CLAY
- FILL
- SILT
- GRAVEL

- STRATIGRAPHIC BOUNDARY BASED ON NEAREST SOIL BORING OR MONITORING WELL (DASHED WHERE INFERRED)
- APPROXIMATE GROUNDWATER ELEVATION
- PERCHED GROUNDWATER ELEVATION
- PIEZOMETRIC WATER LEVEL INDICATOR
- TEMPORARY WELL SCREEN
- WELL SCREEN
- SOIL GAS SAMPLE POINT SCREEN

PCE	=	TETRACHLOROETHENE
TCE	=	TRICHLOROETHENE
TCA	=	1,1,1-TRICHLOROETHANE
1,1-DCE	=	1,1-DICHLOROETHENE
1,1-DCA	=	1,1-DICHLOROETHANE
cis-DCE	=	1,2-cis-DICHLOROETHENE
trans-DCE	=	1,2-trans-DICHLOROETHENE
VC	=	VINYL CHLORIDE
ND	=	NOT DETECTED

NOTES

1. GROUND SURFACE AND STRATIGRAPHIC CONTACTS ARE APPROXIMATE AND EXTRAPOLATED FROM NEAREST SOIL BORING DATA.
2. SEE FIGURE 5 FOR LOCATION / ORIENTATION OF THIS GEOLOGIC CROSS SECTION.
3. GROUNDWATER ANALYTICAL DATA REFLECTS MOST RECENT SAMPLE EVENT AS OF AUGUST 2012.
4. DETECTED GROUNDWATER CONCENTRATIONS FOR CONSTITUENTS OF HIGHEST CONCERN ARE PROVIDED IN MICROGRAMS PER LITER.

PROJECT:
FORMER TECUMSEH PRODUCTS SITE
TECUMSEH, MICHIGAN

TITLE:
CROSS SECTION A - A'

DRAWN BY:	DGS	SCALE:	PROJ. NO. 192013.0000.01
CHECKED BY:	SEM	AS INDICATED	FILE NO. 192013.0000.01.06-11.dwg
APPROVED BY:	GC	DATE PRINTED:	FIGURE 6
DATE:	SEPTEMBER 2012		

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Ann Arbor, MI 48108
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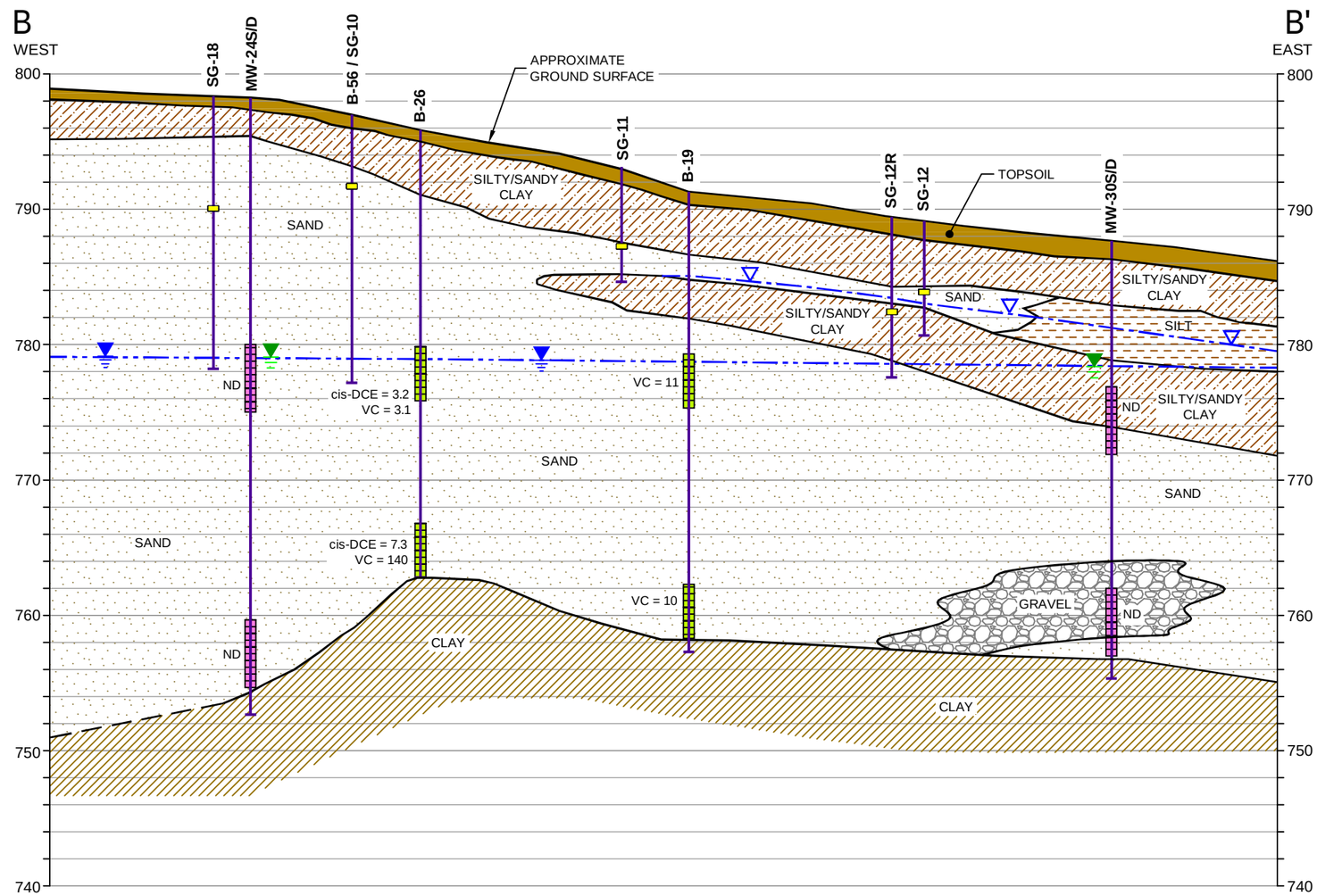
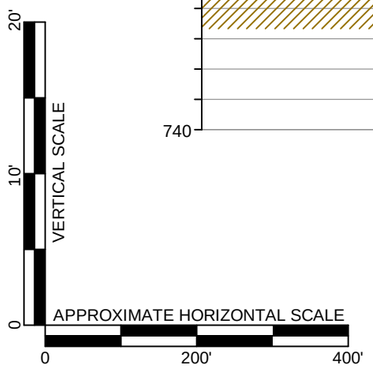
Fax: 734.971.9022

US EPA ARCHIVE DOCUMENT

GENERALIZED CROSS SECTION B - B'





LEGEND

- TOPSOIL
- SAND
- CLAY
- SILT
- SANDY / SILTY CLAY
- CONCRETE
- FILL
- GRAVEL
- STRATIGRAPHIC BOUNDARY BASED ON NEAREST SOIL BORING OR MONITORING WELL (DASHED WHERE INFERRED)
- APPROXIMATE GROUNDWATER ELEVATION
- PERCHED GROUNDWATER ELEVATION
- PIEZOMETRIC WATER LEVEL INDICATOR
- TEMPORARY WELL SCREEN
- WELL SCREEN
- SOIL GAS SAMPLE POINT SCREEN

PCE	=	TETRACHLOROETHENE
TCE	=	TRICHLOROETHENE
TCA	=	1,1,1-TRICHLOROETHANE
1,1-DCE	=	1,1-DICHLOROETHENE
1,1-DCA	=	1,1-DICHLOROETHANE
cis-DCE	=	1,2-cis-DICHLOROETHENE
trans-DCE	=	1,2-trans-DICHLOROETHENE
VC	=	VINYL CHLORIDE
ND	=	NOT DETECTED

NOTES

1. GROUND SURFACE AND STRATIGRAPHIC CONTACTS ARE APPROXIMATE AND EXTRAPOLATED FROM NEAREST SOIL BORING DATA.
2. SEE FIGURE 5 FOR LOCATION / ORIENTATION OF THIS GEOLOGIC CROSS SECTION.
3. GROUNDWATER ANALYTICAL DATA REFLECTS MOST RECENT SAMPLE EVENT AS OF AUGUST 2012.
4. DETECTED GROUNDWATER CONCENTRATIONS FOR CONSTITUENTS OF HIGHEST CONCERN ARE PROVIDED IN MICROGRAMS PER LITER.

PROJECT:
FORMER TECUMSEH PRODUCTS SITE
TECUMSEH, MICHIGAN

TITLE:
CROSS SECTION B - B'

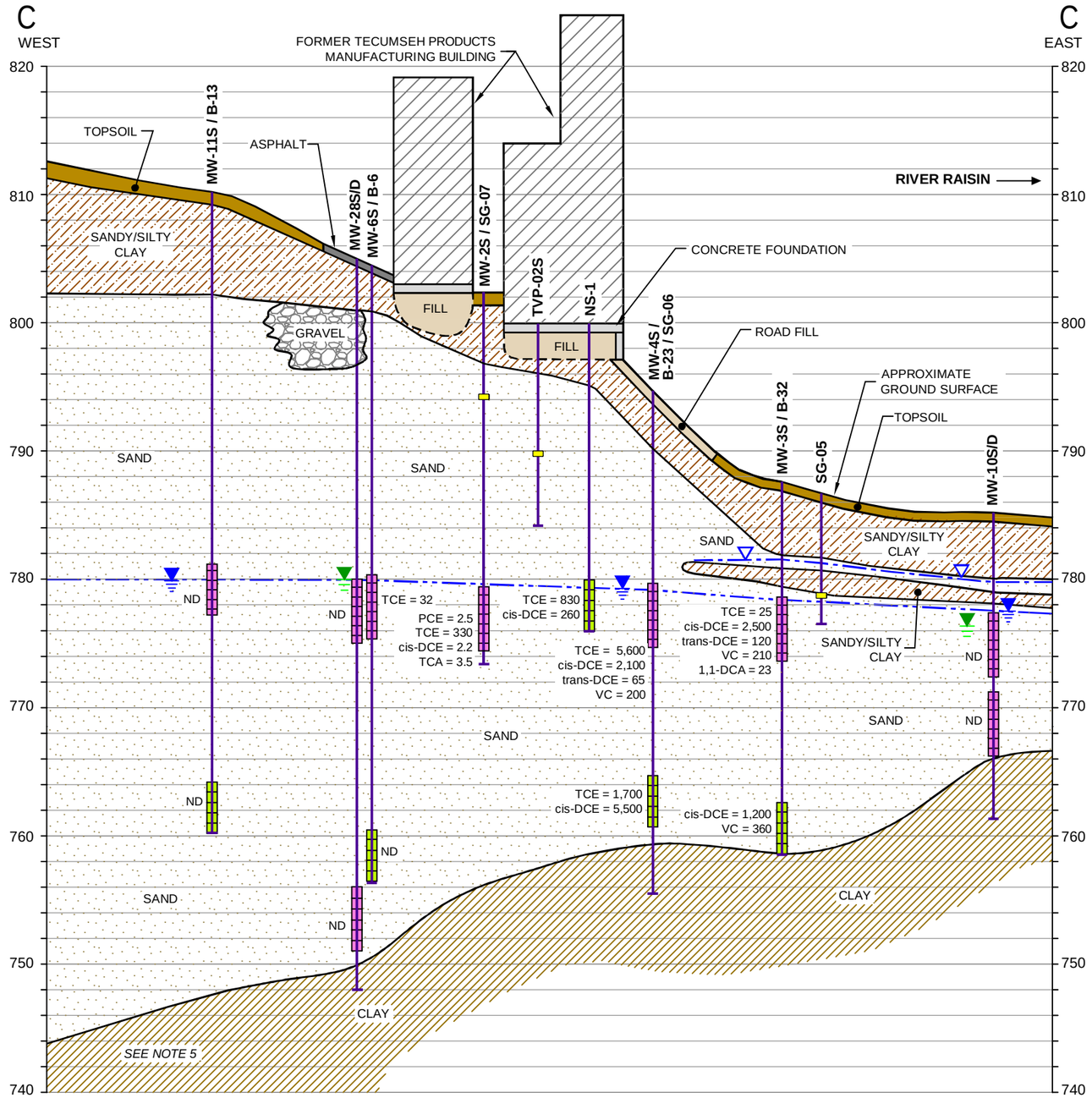
DRAWN BY:	DGS	SCALE:	PROJ. NO. 192013.0000.01
CHECKED BY:	SEM	AS INDICATED	FILE NO. 192013.0000.01.06-11.dwg
APPROVED BY:	GC	DATE PRINTED:	FIGURE 7
DATE:	SEPTEMBER 2012		

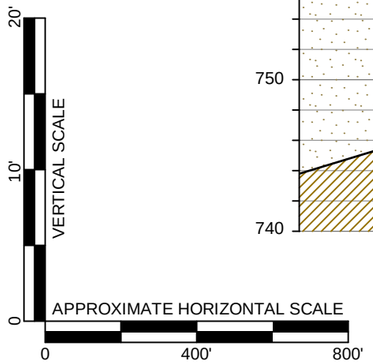
TRC
1540 Eisenhower Place
Ann Arbor, MI 48108
Phone: 734.971.7080
Fax: 734.971.9022

PLOT DATA
Drawing Name: J:_TRC\Tecumseh Products\Tecumseh MI\192013000\01\RI Rpt\192013.0000.01.06-11.dwg
Operator Name: STEHLE, DIANAH
Drawing Plot Scale: 0.386863
Dwg Size: 1.82 Mb
Plot Date: September 26, 2012
Plot Time: 1:25 PM
Attached Xref's:
Attached Images:
Layout: FIG07 XS B-B

US EPA ARCHIVE DOCUMENT

GENERALIZED CROSS SECTION C - C'





LEGEND

- TOPSOIL
- SANDY / SILTY CLAY
- SAND
- CONCRETE
- CLAY
- FILL
- SILT
- GRAVEL

- STRATIGRAPHIC BOUNDARY BASED ON NEAREST SOIL BORING OR MONITORING WELL (DASHED WHERE INFERRED)
- APPROXIMATE GROUNDWATER ELEVATION
- PERCHED GROUNDWATER ELEVATION
- PIEZOMETRIC WATER LEVEL INDICATOR
- TEMPORARY WELL SCREEN
- WELL SCREEN
- SOIL GAS SAMPLE POINT SCREEN

PCE	=	TETRACHLOROETHENE
TCE	=	TRICHLOROETHENE
TCA	=	1,1,1-TRICHLOROETHANE
1,1-DCE	=	1,1-DICHLOROETHENE
1,1-DCA	=	1,1-DICHLOROETHANE
cis-DCE	=	1,2-cis-DICHLOROETHENE
trans-DCE	=	1,2-trans-DICHLOROETHENE
VC	=	VINYL CHLORIDE
ND	=	NOT DETECTED

NOTES

1. GROUND SURFACE AND STRATIGRAPHIC CONTACTS ARE APPROXIMATE AND EXTRAPOLATED FROM NEAREST SOIL BORING DATA.
2. SEE FIGURE 5 FOR LOCATION / ORIENTATION OF THIS GEOLOGIC CROSS SECTION.
3. GROUNDWATER ANALYTICAL DATA REFLECTS MOST RECENT SAMPLE EVENT AS OF AUGUST 2012.
4. DETECTED GROUNDWATER CONCENTRATIONS FOR CONSTITUENTS OF HIGHEST CONCERN ARE PROVIDED IN MICROGRAMS PER LITER.
5. THE ELEVATION OF THE TOP OF CLAY NEAR MW-11S IS ESTIMATED BASED ON WELL LOGS FROM THE CITY OF TECUMSEH WELL FIELD, WHICH IS LOCATED APPROXIMATELY 1,000 FEET WEST OF MW-11S. TOP OF CLAY AT THE CITY WELL FIELD IS AT APPROXIMATELY 740 FEET MSL.

PROJECT:
FORMER TECUMSEH PRODUCTS SITE
TECUMSEH, MICHIGAN

TITLE:
CROSS SECTION C - C'

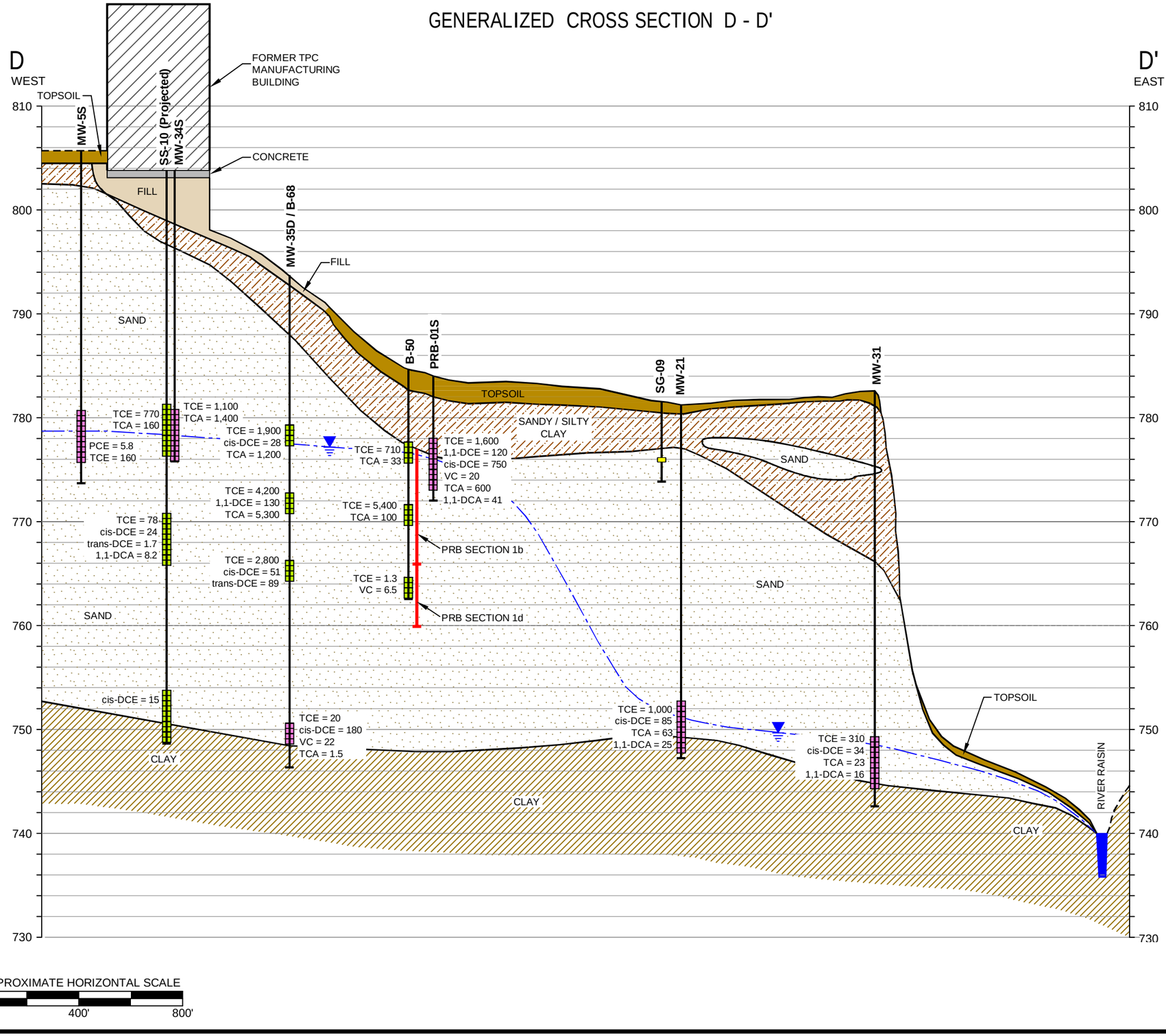
DRAWN BY: SJL/DGS	SCALE: AS INDICATED	PROJ. NO. 192013.0000.01	
CHECKED BY: SEM		FILE NO. 192013.0000.01.06-11.dwg	
APPROVED BY: GC	DATE PRINTED:	FIGURE 8	
DATE: SEPTEMBER 2012			

TRC
1540 Eisenhower Place
Ann Arbor, MI 48108
Phone: 734.971.7080
Fax: 734.971.9022

PLOT DATA
Drawing Name: J:_TRC\Tecumseh Products\Tecumseh MI\192013000\01\RI Rpt\192013.0000.01.06-11.dwg
Operator Name: STEHLE, DIANAH
Drawing Plot Scale: 0.386863
Dwg Size: 1.10 Mb
Plot Date: September 27, 2012
Plot Time: 12:43 PM
Attached Xrefs:
Attached Images:
Layout: FIG08 XS C-C

US EPA ARCHIVE DOCUMENT

GENERALIZED CROSS SECTION D - D'



LEGEND

- TOPSOIL
- SANDY / SILTY CLAY
- SAND
- CONCRETE
- CLAY
- FILL
- SILT
- GRAVEL

- STRATIGRAPHIC BOUNDARY BASED ON NEAREST SOIL BORING OR MONITORING WELL (DASHED WHERE INFERRED)
- APPROXIMATE GROUNDWATER ELEVATION
- PERCHED GROUNDWATER ELEVATION
- PIEZOMETRIC WATER LEVEL INDICATOR
- TEMPORARY WELL SCREEN
- WELL SCREEN
- SOIL GAS SAMPLE POINT SCREEN

PCE	=	TETRACHLOROETHENE
TCE	=	TRICHLOROETHENE
TCA	=	1,1,1-TRICHLOROETHANE
1,1-DCE	=	1,1-DICHLOROETHENE
1,1-DCA	=	1,1-DICHLOROETHANE
cis-DCE	=	1,2-cis-DICHLOROETHENE
trans-DCE	=	1,2-trans-DICHLOROETHENE
VC	=	VINYL CHLORIDE
ND	=	NOT DETECTED

NOTES

1. GROUND SURFACE AND STRATIGRAPHIC CONTACTS ARE APPROXIMATE AND EXTRAPOLATED FROM NEAREST SOIL BORING DATA.
2. SEE FIGURE 5 FOR LOCATION / ORIENTATION OF THIS GEOLOGIC CROSS SECTION.
3. GROUNDWATER ANALYTICAL DATA REFLECTS MOST RECENT SAMPLE EVENT AS OF AUGUST 2012.
4. DETECTED GROUNDWATER CONCENTRATIONS FOR CONSTITUENTS OF HIGHEST CONCERN ARE PROVIDED IN MICROGRAMS PER LITER.

NO.	BY	DATE	REVISION	APP'D
1	DGS	10/24/12	MW-35D DATA / SS-10 ADDED	GC

PROJECT:
FORMER TECUMSEH PRODUCTS SITE
TECUMSEH, MICHIGAN

TITLE:
CROSS SECTION D - D'

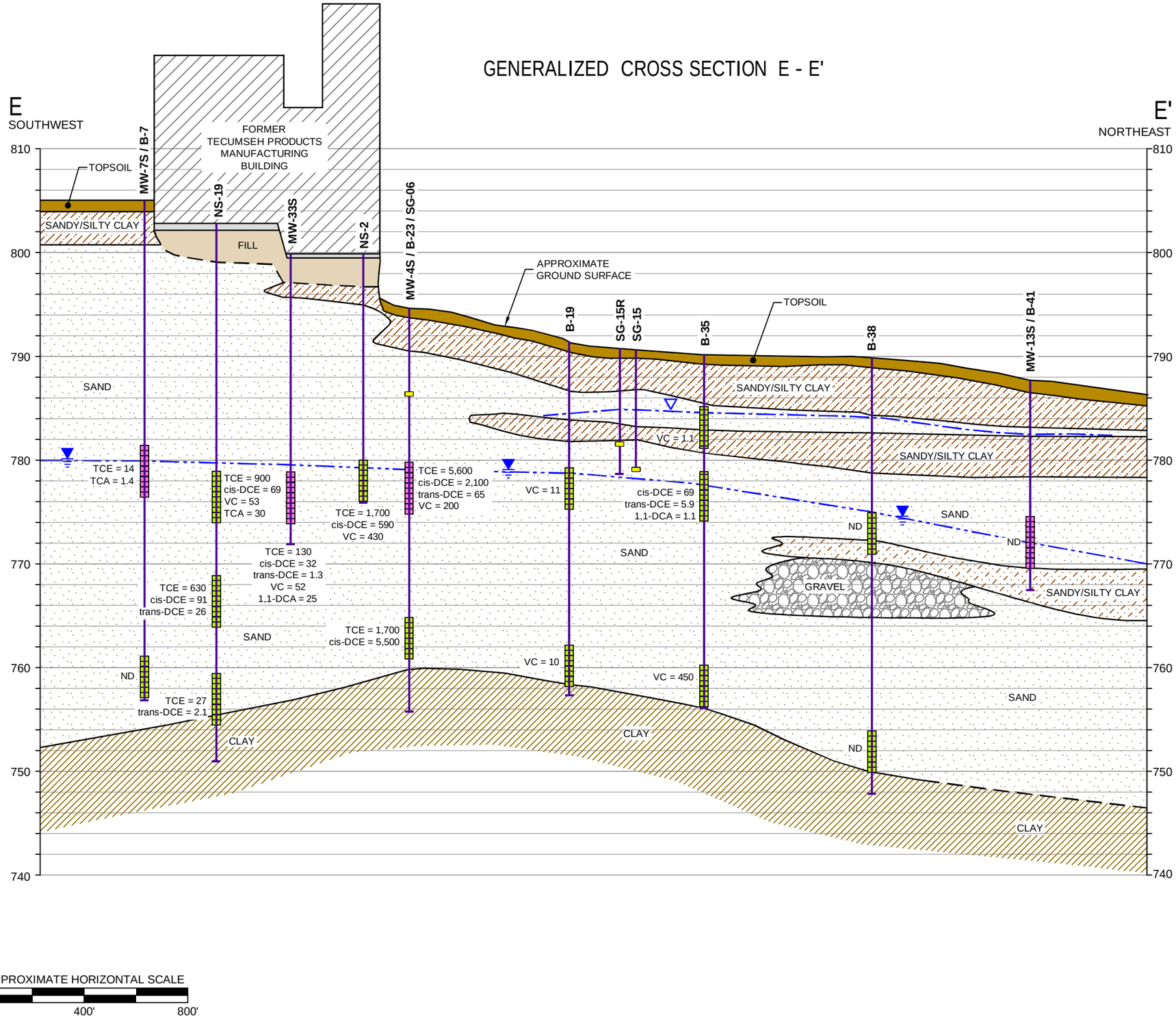
DRAWN BY: METZA/DGS	SCALE:	PROJ. NO.	192013.0000.01
CHECKED BY: SEM	AS INDICATED	FILE:	192013.0000.01.06-11A.dwg
APPROVED BY: GC	DATE PRINTED:		FIGURE 9
DATE: SEPTEMBER 2012			

TRC
1540 Eisenhower Place
Ann Arbor, MI 48108
Phone: 734.971.7080
Fax: 734.971.9022

PLOT DATA
Drawing Name: J:_TRC\Tecumseh Products\Tecumseh MI\192013000\01\Rl Rpt\192013.0000.01.06-11A.dwg
Operator Name: STEHLE, DIANAH
Drawing Plot Scale: 0.386863
Dwg Size: 1.11 Mb
Plot Date: October 24, 2012
Plot Time: 1:56 PM
Attached Xefs:
Attached Images:
Layout: FIG09 XS D-D

US EPA ARCHIVE DOCUMENT

GENERALIZED CROSS SECTION E - E'



LEGEND

- TOPSOIL
- SANDY / SILTY CLAY
- SAND
- CONCRETE
- CLAY
- FILL
- SILT
- GRAVEL

STRATIGRAPHIC BOUNDARY BASED ON NEAREST SOIL BORING OR MONITORING WELL (DASHED WHERE INFERRED)

APPROXIMATE GROUNDWATER ELEVATION

PERCHED GROUNDWATER ELEVATION

PIEZOMETRIC WATER LEVEL INDICATOR

TEMPORARY WELL SCREEN

WELL SCREEN

SOIL GAS SAMPLE POINT SCREEN

PCE	=	TETRACHLOROETHENE
TCE	=	TRICHLOROETHENE
TCA	=	1,1,1-TRICHLOROETHANE
1,1-DCE	=	1,1-DICHLOROETHENE
1,1-DCA	=	1,1-DICHLOROETHANE
cis-DCE	=	1,2-cis-DICHLOROETHENE
trans-DCE	=	1,2-trans-DICHLOROETHENE
VC	=	VINYL CHLORIDE
ND	=	NOT DETECTED

NOTES

1. GROUND SURFACE AND STRATIGRAPHIC CONTACTS ARE APPROXIMATE AND EXTRAPOLATED FROM NEAREST SOIL BORING DATA.
2. SEE FIGURE 5 FOR LOCATION / ORIENTATION OF THIS GEOLOGIC CROSS SECTION.
3. GROUNDWATER ANALYTICAL DATA REFLECTS MOST RECENT SAMPLE EVENT AS OF AUGUST 2012.
4. DETECTED GROUNDWATER CONCENTRATIONS FOR CONSTITUENTS OF HIGHEST CONCERN ARE PROVIDED IN MICROGRAMS PER LITER.

PROJECT:
FORMER TECUMSEH PRODUCTS SITE
TECUMSEH, MICHIGAN

TITLE:
CROSS SECTION E - E'

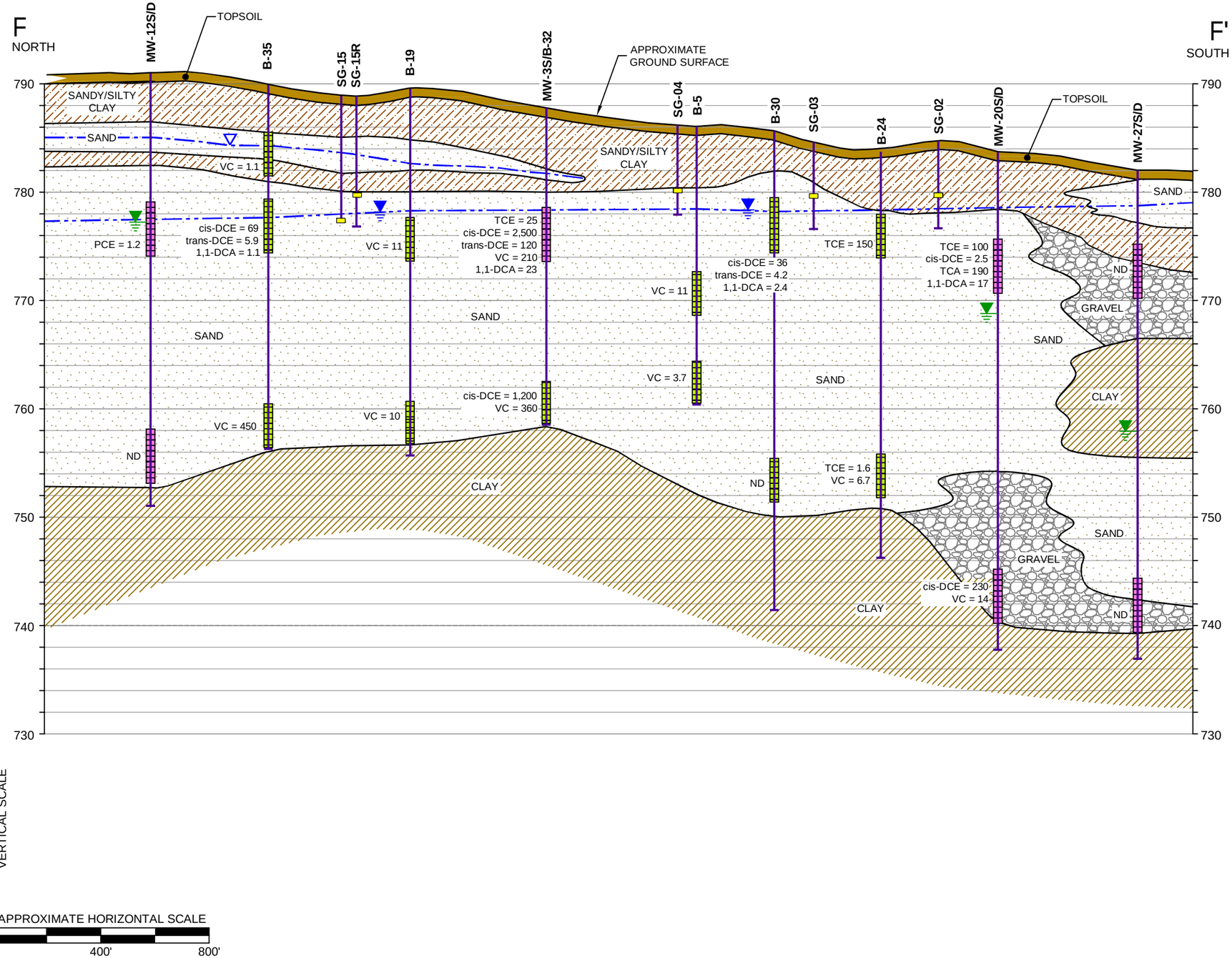
DRAWN BY:	DGS	SCALE:	PROJ. NO. 192013.0000.01
CHECKED BY:	SEM	AS INDICATED	FILE NO. 192013.0000.01.06-11.dwg
APPROVED BY:	GC	DATE PRINTED:	FIGURE 10
DATE:	SEPTEMBER 2012		

TRC
1540 Eisenhower Place
Ann Arbor, MI 48108
Phone: 734.971.7080
Fax: 734.971.9022

PLOT DATA
Drawing Name: J:_TRC\Tecumseh Products\Tecumseh MI\192013000\01\RI Rpt\192013.0000.01.06-11.dwg
Operator Name: STEHLE, DIANAH
Drawing Plot Scale: 0.386863
Dwg Size: 1.82 Mb
Plot Date: September 26, 2012
Plot Time: 1:50 PM
Attached Xrefs:
Attached Images:
Layout: FIG10 XS E-E

US EPA ARCHIVE DOCUMENT

GENERALIZED CROSS SECTION F - F'



LEGEND

- TOPSOIL
- SANDY / SILTY CLAY
- SAND
- CONCRETE
- CLAY
- FILL
- SILT
- GRAVEL

STRATIGRAPHIC BOUNDARY BASED ON NEAREST SOIL BORING OR MONITORING WELL (DASHED WHERE INFERRED)

APPROXIMATE GROUNDWATER ELEVATION

PERCHED GROUNDWATER ELEVATION

PIEZOMETRIC WATER LEVEL INDICATOR

TEMPORARY WELL SCREEN

WELL SCREEN

SOIL GAS SAMPLE POINT SCREEN

PCE	=	TETRACHLOROETHENE
TCE	=	TRICHLOROETHENE
TCA	=	1,1,1-TRICHLOROETHANE
1,1-DCE	=	1,1-DICHLOROETHENE
1,1-DCA	=	1,1-DICHLOROETHANE
cis-DCE	=	1,2-cis-DICHLOROETHENE
trans-DCE	=	1,2-trans-DICHLOROETHENE
VC	=	VINYL CHLORIDE
ND	=	NOT DETECTED

NOTES

1. GROUND SURFACE AND STRATIGRAPHIC CONTACTS ARE APPROXIMATE AND EXTRAPOLATED FROM NEAREST SOIL BORING DATA.
2. SEE FIGURE 5 FOR LOCATION / ORIENTATION OF THIS GEOLOGIC CROSS SECTION.
3. GROUNDWATER ANALYTICAL DATA REFLECTS MOST RECENT SAMPLE EVENT AS OF AUGUST 2012.
4. DETECTED GROUNDWATER CONCENTRATIONS FOR CONSTITUENTS OF HIGHEST CONCERN ARE PROVIDED IN MICROGRAMS PER LITER.

PROJECT:
FORMER TECUMSEH PRODUCTS SITE
TECUMSEH, MICHIGAN

TITLE:
CROSS SECTION F - F'

DRAWN BY:	DGS	SCALE:	PROJ. NO. 192013.0000.01
CHECKED BY:	SEM	AS INDICATED	FILE NO. 192013.0000.01.06-11.dwg
APPROVED BY:	GC	DATE PRINTED:	FIGURE 11
DATE:	SEPTEMBER 2012		

TRC
1540 Eisenhower Place
Ann Arbor, MI 48108
Phone: 734.971.7080
Fax: 734.971.9022

PLOT DATA
Drawing Name: J:_TRC\Tecumseh Products\Tecumseh MI\192013\0000\01\RI Rpt\192013.0000.01.06-11.dwg
Operator Name: STEHLE, DIANAH
Drawing Plot Scale: 0.386863
Dwg Size: 1.82 Mb
Plot Date: September 26, 2012
Plot Time: 1:54 PM
Attached Xrefs:
Attached Images:
Layout: FIG11 XS F-F

US EPA ARCHIVE DOCUMENT

PLOT DATA
Drawing Name: J:_TRC\Tecumseh Products\Tecumseh MI\192013.0000\WORK\ Plot Date: 12/13/2012 8:00:00 AM
Drawing Size: 34.00 x 11.00 inches
Plotted By: Mike Lisiecki
Xref's Attached: tem190110 (Filled) FIG12 Ext of Inter Clay
Images Attached: Layout1
Dwg Size: 1.46 Mb

LEGEND

- FORMER TECUMSEH PRODUCTS SITE BOUNDARY
- PARCEL BOUNDARY
- RAILROAD TRACKS (APPROXIMATE LOCATION)
- 750 — APPROXIMATE GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S. TOPOGRAPHIC QUADRANGLE MAP
- B-2 + PERIMETER / OFF-SITE INVESTIGATION SOIL BORING LOCATION AND NUMBER
- MW-4S ▲ MONITORING WELL LOCATION AND NUMBER
- MW-9S ▲ DECOMMISSIONED MONITORING WELL LOCATION AND NUMBER
- SS-2 + SOURCE AREA INVESTIGATION BORING LOCATION AND NUMBER
- SG-02 ⊠ SOIL GAS SAMPLE LOCATION AND NUMBER
- STW-2 ✱ STORM WATER SEWER SAMPLE LOCATION AND NUMBER
- WL-01 ▼ APPROXIMATE SURFACE WATER SAMPLE LOCATION
- SUB-SLAB SOIL GAS SAMPLING NUMBER AND LOCATION
- FLOODPLAIN / WOODED WETLAND AREA
- PRB LOCATION
- FENCE LINE
- APPROXIMATE EXTENT OF INTERMEDIATE CLAY LAYER AND PERCHED GROUNDWATER
- APPROXIMATE EXTENT OF AREA WHERE THE TRUE WATER TABLE IS AT OR NEAR AN OVERLYING CLAY UNIT

NOTES

1. BASE MAP DEVELOPED FROM SITE PLAN PROVIDED BY THE CITY OF TECUMSEH, DRAWING NO. CITY.DWG, MARCH 2009.
2. GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S TOPOGRAPHIC QUADRANGLE MAP AND GROUND SURVEY DATA.

INSET MAP

B-62 B-58 B-67 B-66 B-64 B-63 B-61 B-52 B-59 B-65 B-60

APPROXIMATE SCALE IN FEET
0 20' 40'

N

0 200' 400' 600' 1200'
APPROXIMATE SCALE IN FEET

NO.	BY	DATE	REVISION	APP'D
3				
2				
1				

PROJ.

FORMER TECUMSEH PRODUCTS SITE
TECUMSEH, MICHIGAN

TITLE:

EXTENT OF THE INTERMEDIATE CLAY LAYER

DRAWN BY:	DGS	SCALE:	PROJ. NO. 192013.0000.01
CHECKED BY:	SEM	AS INDICATED	FILE NO. 192013.0000.01.12.dwg
APPROVED BY:	GC	DATE PRINTED:	**FIGURE 12**
DATE:	SEPTEMBER 2012		

TRC
1540 Eisenhower Place
Ann Arbor, MI 48108
Phone: 734.971.7080
Fax: 734.971.9022

US EPA ARCHIVE DOCUMENT

PLOT DATA
Drawing Name: J:\...\TRC\Tecumseh Products\Tecumseh MI\192013\0000\MXD\FIG 13 GW CONTOUR OCT 2011.mxd
Drawing Path: ...\FIG 13 GW CONTOUR OCT 2011.mxd
Drawing Tab Name: Layout1
Attached XrefIc: ten19116 (Filter)
Attached Images: FIG13 GW Cont Oct 2011
Dwg Elev: 0.00 ft
Plot Date: September 28, 2012
Plot Time: 8:41 AM

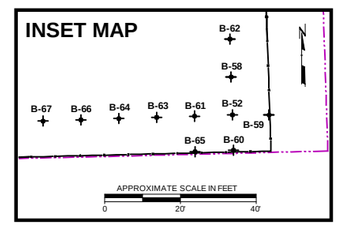
LEGEND

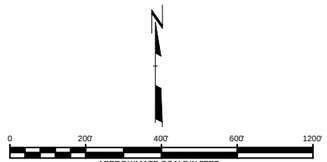
- FORMER TECUMSEH PRODUCTS SITE BOUNDARY
- PARCEL BOUNDARY
- RAILROAD TRACKS (APPROXIMATE LOCATION)
- 750 — APPROXIMATE GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S. TOPOGRAPHIC QUADRANGLE MAP
- B-2 + PERIMETER / OFF-SITE INVESTIGATION SOIL BORING LOCATION AND NUMBER
- MW-4S ▲ MONITORING WELL LOCATION AND NUMBER
- MW-9S ▲ DECOMMISSIONED MONITORING WELL LOCATION AND NUMBER
- SS-2 + SOURCE AREA INVESTIGATION BORING LOCATION AND NUMBER
- STW-2 ◆ STORM WATER SEWER SAMPLE LOCATION AND NUMBER
- WL-01 ▼ APPROXIMATE SURFACE WATER SAMPLE LOCATION
- FLOODPLAIN / WOODED WETLAND AREA
- PRB LOCATION
- FENCE LINE
- 770 — 5 FOOT GROUNDWATER CONTOUR LINE
- 771 — 1 FOOT GROUNDWATER CONTOUR LINE
- GROUNDWATER FLOW DIRECTION
- (780.42) GROUNDWATER ELEVATION

NOTES

1. BASE MAP DEVELOPED FROM SITE PLAN PROVIDED BY THE CITY OF TECUMSEH, DRAWING NO. CITY.DWG, MARCH 2009.
2. GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S TOPOGRAPHIC QUADRANGLE MAP AND GROUND SURVEY DATA.
3. MW-14S IS SCREENED IN A DIFFERENT, PERCHED, WATER BEARING UNIT THAN THE OTHER SHALLOW MONITORING WELLS ON-SITE. THE GROUNDWATER ELEVATION MEASURED AT MW-14D WAS USED TO DEVELOP GROUNDWATER CONTOURS, BECAUSE MW-14D IS SCREENED IN THE DEEPER WATER BEARING UNIT WHICH IS HYDRAULICALLY CONNECTED TO THE SITE.
4. MEASURED DEPTH TO WATER IS ANOMALOUS. DATUM WAS NOT USED.

INSET MAP





NO.	BY	DATE	REVISION	APP'D
3				
2				
1				

PROJ.

FORMER TECUMSEH PRODUCTS SITE
TECUMSEH, MICHIGAN

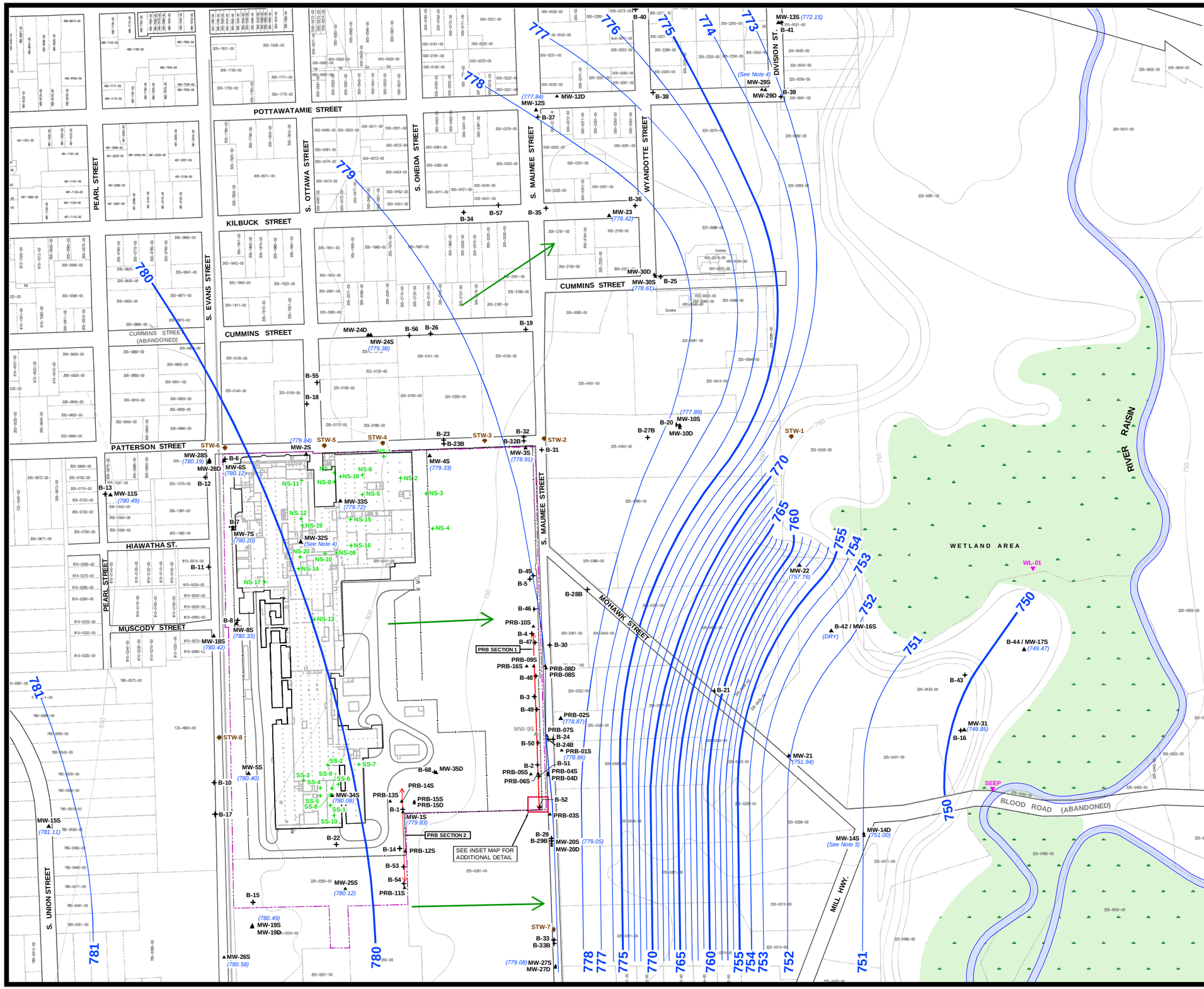
TITLE:

GROUNDWATER CONTOUR MAP
OCTOBER 2011

DRAWN BY:	DGS	SCALE:	PROJ. NO. 192013.0000.01
CHECKED BY:	SEM	AS INDICATED	FILE NO. 192013.0000.01.13.dwg
APPROVED BY:	GC	DATE PRINTED:	
DATE:	SEPTEMBER 2012		FIGURE 13

TRC
1540 Eisenhower Place
Ann Arbor, MI 48108
Phone: 734.971.7080
Fax: 734.971.9022

US EPA ARCHIVE DOCUMENT

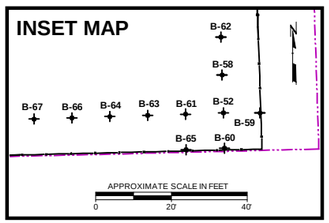


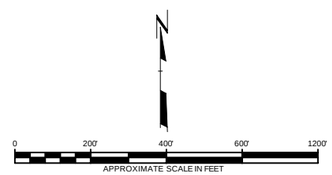
LEGEND

- FORMER TECUMSEH PRODUCTS SITE BOUNDARY
- PARCEL BOUNDARY
- RAILROAD TRACKS (APPROXIMATE LOCATION)
- 750 — APPROXIMATE GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S. TOPOGRAPHIC QUADRANGLE MAP
- B-2 + PERIMETER / OFF-SITE INVESTIGATION SOIL BORING LOCATION AND NUMBER
- MW-4S ▲ MONITORING WELL LOCATION AND NUMBER
- MW-9S ▲ DECOMMISSIONED MONITORING WELL LOCATION AND NUMBER
- SS-2 + SOURCE AREA INVESTIGATION BORING LOCATION AND NUMBER
- STW-2 ◆ STORM WATER SEWER SAMPLE LOCATION AND NUMBER
- WL-01 ▼ APPROXIMATE SURFACE WATER SAMPLE LOCATION
- FLOODPLAIN / WOODED WETLAND AREA
- PRB LOCATION
- FENCE LINE
- 770 — 5 FOOT GROUNDWATER CONTOUR LINE
- 771 — 1 FOOT GROUNDWATER CONTOUR LINE
- GROUNDWATER FLOW DIRECTION
- (779.08) GROUNDWATER ELEVATION

NOTES

1. BASE MAP DEVELOPED FROM SITE PLAN PROVIDED BY THE CITY OF TECUMSEH, DRAWING NO. CITY.DWG, MARCH 2009.
2. GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S TOPOGRAPHIC QUADRANGLE MAP AND GROUND SURVEY DATA.
3. MW-14S IS SCREENED IN A DIFFERENT, PERCHED, WATER BEARING UNIT THAN THE OTHER SHALLOW MONITORING WELLS ON-SITE. THE GROUNDWATER ELEVATION MEASURED AT MW-14D WAS USED TO DEVELOP GROUNDWATER CONTOURS, BECAUSE MW-14D IS SCREENED IN THE DEEPER WATER BEARING UNIT WHICH IS HYDRAULICALLY CONNECTED TO THE SITE.
4. MEASURED DEPTH TO WATER IS ANOMALOUS. DATUM WAS NOT USED.





NO.	BY	DATE	REVISION	APP'D
3				
2				
1				

PROJ.

FORMER TECUMSEH PRODUCTS SITE
TECUMSEH, MICHIGAN

TITLE:

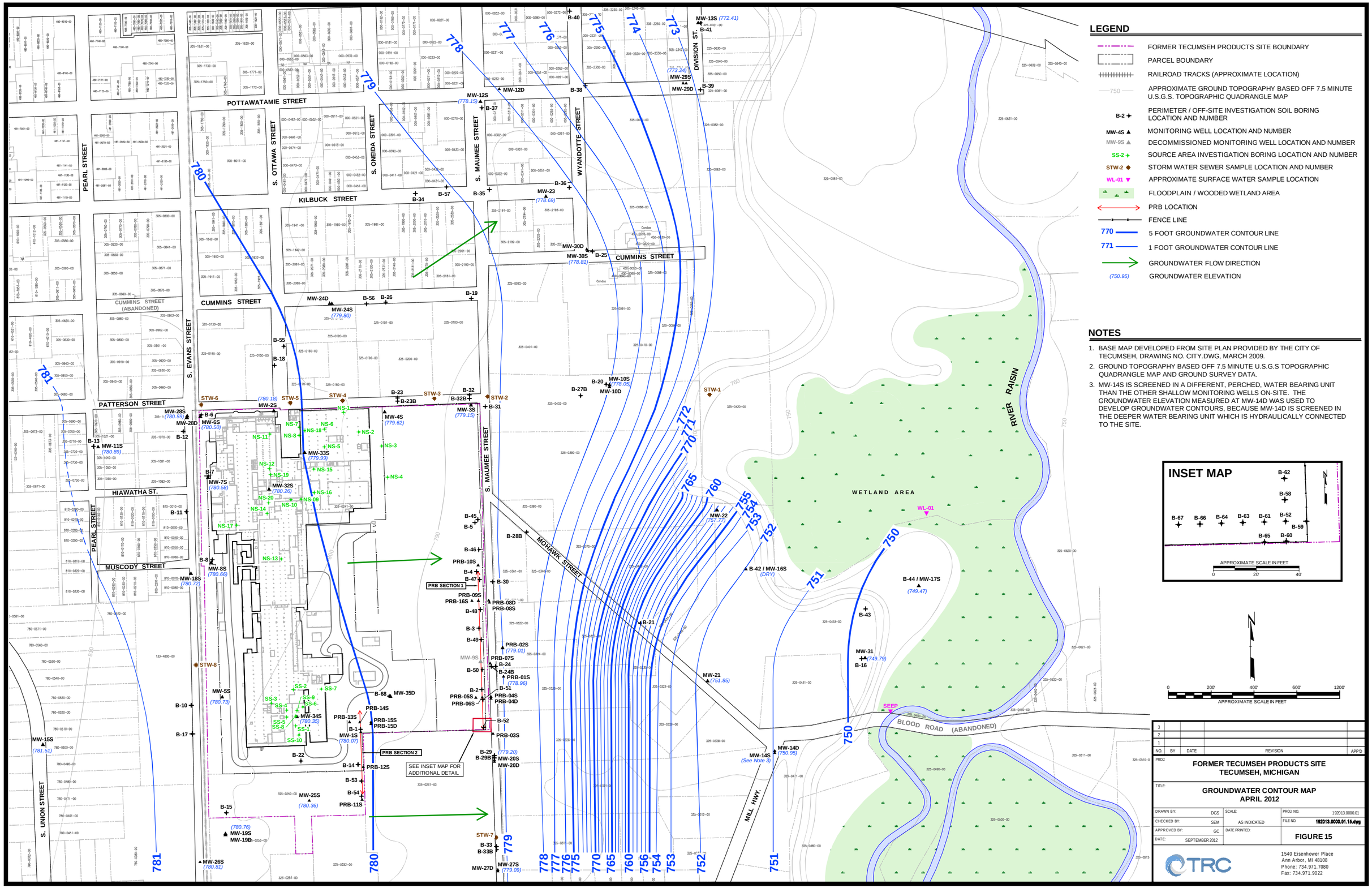
GROUNDWATER CONTOUR MAP
JANUARY 2012

DRAWN BY:	DGS	SCALE:	PROJ. NO. 192013.0000.01
CHECKED BY:	SEM	AS INDICATED	FILE NO. 192013.0000.01.14.dwg
APPROVED BY:	GC	DATE PRINTED:	**FIGURE 14**
DATE:	SEPTEMBER 2012		

TRC
1540 Eisenhower Place
Ann Arbor, MI 48108
Phone: 734.971.7080
Fax: 734.971.9022

PLOT DATA
Drawing Name: J:\...\TRC\Tecumseh Products\Tecumseh MI\192013.0000\WR\R\R\192013.0000.01.14.dwg
Xref Name: STRATEL.DWAH
Drawing Last Saved By: LSchmidt
Attached Xref's: tem190116 (Filter)
Attached Image: Layers: FIG14.JW (Cont Jan 2012
Dwg Size: D (T) Ms
Plot Date: September 28, 2012
Plot Time: 8:45 AM

US EPA ARCHIVE DOCUMENT



LEGEND

- FORMER TECUMSEH PRODUCTS SITE BOUNDARY
- PARCEL BOUNDARY
- RAILROAD TRACKS (APPROXIMATE LOCATION)
- 750 — APPROXIMATE GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S. TOPOGRAPHIC QUADRANGLE MAP
- B-2 + PERIMETER / OFF-SITE INVESTIGATION SOIL BORING LOCATION AND NUMBER
- MW-4S ▲ MONITORING WELL LOCATION AND NUMBER
- MW-9S ▲ DECOMMISSIONED MONITORING WELL LOCATION AND NUMBER
- SS-2 + SOURCE AREA INVESTIGATION BORING LOCATION AND NUMBER
- STW-2 ◆ STORM WATER SEWER SAMPLE LOCATION AND NUMBER
- WL-01 ▼ APPROXIMATE SURFACE WATER SAMPLE LOCATION
- FLOODPLAIN / WOODED WETLAND AREA
- PRB LOCATION
- FENCE LINE
- 770 — 5 FOOT GROUNDWATER CONTOUR LINE
- 771 — 1 FOOT GROUNDWATER CONTOUR LINE
- GROUNDWATER FLOW DIRECTION
- (750.95) GROUNDWATER ELEVATION

NOTES

1. BASE MAP DEVELOPED FROM SITE PLAN PROVIDED BY THE CITY OF TECUMSEH, DRAWING NO. CITY.DWG, MARCH 2009.
2. GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S TOPOGRAPHIC QUADRANGLE MAP AND GROUND SURVEY DATA.
3. MW-14S IS SCREENED IN A DIFFERENT, PERCHED, WATER BEARING UNIT THAN THE OTHER SHALLOW MONITORING WELLS ON-SITE. THE GROUNDWATER ELEVATION MEASURED AT MW-14D WAS USED TO DEVELOP GROUNDWATER CONTOURS, BECAUSE MW-14D IS SCREENED IN THE DEEPER WATER BEARING UNIT WHICH IS HYDRAULICALLY CONNECTED TO THE SITE.

INSET MAP

NO.	BY	DATE	REVISION	APP'D
3				
2				
1				

PROJ.

FORMER TECUMSEH PRODUCTS SITE
TECUMSEH, MICHIGAN

TITLE:

GROUNDWATER CONTOUR MAP
APRIL 2012

DRAWN BY:	DGS	SCALE:	PROJ. NO. 192013.0000.01
CHECKED BY:	SEM	AS INDICATED	FILE NO. 192013.0000.01.16.dwg
APPROVED BY:	GC	DATE PRINTED:	**FIGURE 15**
DATE:	SEPTEMBER 2012		

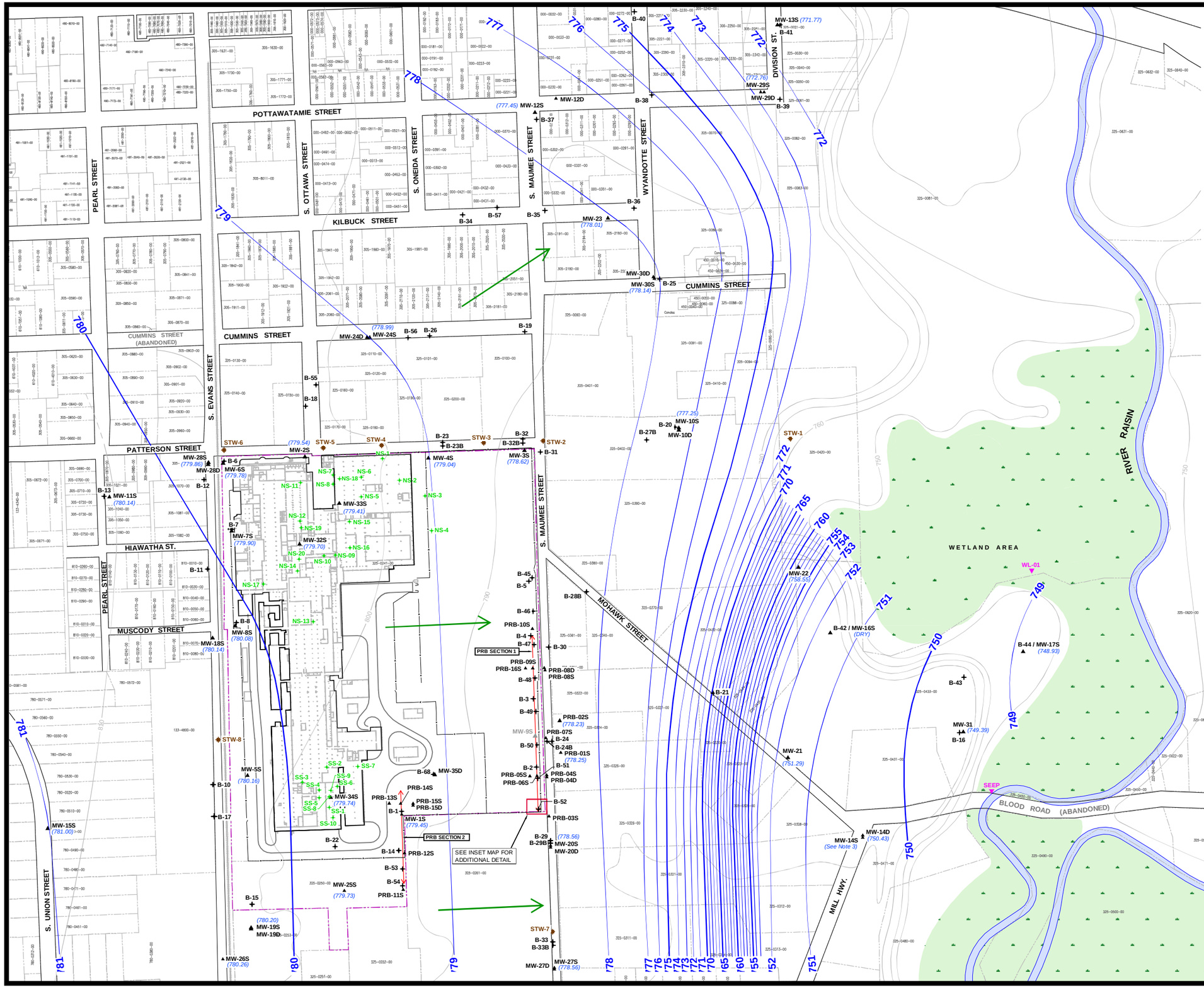
TRC
1540 Eisenhower Place
Ann Arbor, MI 48108
Phone: 734.971.7080
Fax: 734.971.9022

PLOT DATA
Drawing Name: S:\TRC\Tecumseh Products\Tecumseh MI\192013.0000\WR\R\192013.0000.01.16.dwg
Xrefs: STRATEL.DWAH
Drawing Last Saved By: LSchmidt

Attached Xref's: tem190110 (Filter)
Attached Images: Layers: PIER15.ON1 Dated Apr 2012

Dwg Size: D (T) Ms
Plot Date: September 28, 2012
Plot Time: 8:45:16 AM

US EPA ARCHIVE DOCUMENT



LEGEND

- FORMER TECUMSEH PRODUCTS SITE BOUNDARY
- PARCEL BOUNDARY
- RAILROAD TRACKS (APPROXIMATE LOCATION)
- 750 — APPROXIMATE GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S. TOPOGRAPHIC QUADRANGLE MAP
- B-2 + PERIMETER / OFF-SITE INVESTIGATION SOIL BORING LOCATION AND NUMBER
- MW-4S ▲ MONITORING WELL LOCATION AND NUMBER
- MW-9S ▲ DECOMMISSIONED MONITORING WELL LOCATION AND NUMBER
- SS-2 + SOURCE AREA INVESTIGATION BORING LOCATION AND NUMBER
- STW-2 ◆ STORM WATER SEWER SAMPLE LOCATION AND NUMBER
- WL-01 ▼ APPROXIMATE SURFACE WATER SAMPLE LOCATION
- FLOODPLAIN / WOODED WETLAND AREA
- PRB LOCATION
- FENCE LINE
- 770 — 5 FOOT GROUNDWATER CONTOUR LINE
- 771 — 1 FOOT GROUNDWATER CONTOUR LINE
- GROUNDWATER FLOW DIRECTION
- (780.26) GROUNDWATER ELEVATION

NOTES

1. BASE MAP DEVELOPED FROM SITE PLAN PROVIDED BY THE CITY OF TECUMSEH, DRAWING NO. CITY.DWG, MARCH 2009.
2. GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S TOPOGRAPHIC QUADRANGLE MAP AND GROUND SURVEY DATA.
3. MW-14S IS SCREENED IN A DIFFERENT, PERCHED, WATER BEARING UNIT THAN THE OTHER SHALLOW MONITORING WELLS ON-SITE. THE GROUNDWATER ELEVATION MEASURED AT MW-14D WAS USED TO DEVELOP GROUNDWATER CONTOURS, BECAUSE MW-14D IS SCREENED IN THE DEEPER WATER BEARING UNIT WHICH IS HYDRAULICALLY CONNECTED TO THE SITE.

NO.	BY	DATE	REVISION	APP'D
3				
2				
1				

PROJ.

FORMER TECUMSEH PRODUCTS SITE
TECUMSEH, MICHIGAN

TITLE:

GROUNDWATER CONTOUR MAP
JULY 2012

DRAWN BY:	DGS	SCALE:	PROJ. NO. 192013.0000.01
CHECKED BY:	SEM	AS INDICATED	FILE NO. 192013.0000.01.16.dwg
APPROVED BY:	GC	DATE PRINTED:	**FIGURE 16**
DATE:	SEPTEMBER 2012		

TRC
1540 Eisenhower Place
Ann Arbor, MI 48108
Phone: 734.971.7080
Fax: 734.971.9022

PLOTDATE
Drawing Name:
Operator Name:
ETSHAE, DAWAH
Drawing File Name:
Attached Xrefs:
Attached Images:
Layers:
Dwg Size: 5.72 Mb
Plot Date: September 28, 2012
Plot Time: 8:56 AM

US EPA ARCHIVE DOCUMENT

Attached Xrefs:
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Bascom T12E Cedar Boiler; Bascom T12E Contour Image; Bascom T12E Attached Image; Layers: 1001,1002,Borders
Dwg Size: 3.07 Mb
Plot Date: Saturday, September 29, 2012
Plot Time: 8:54 AM
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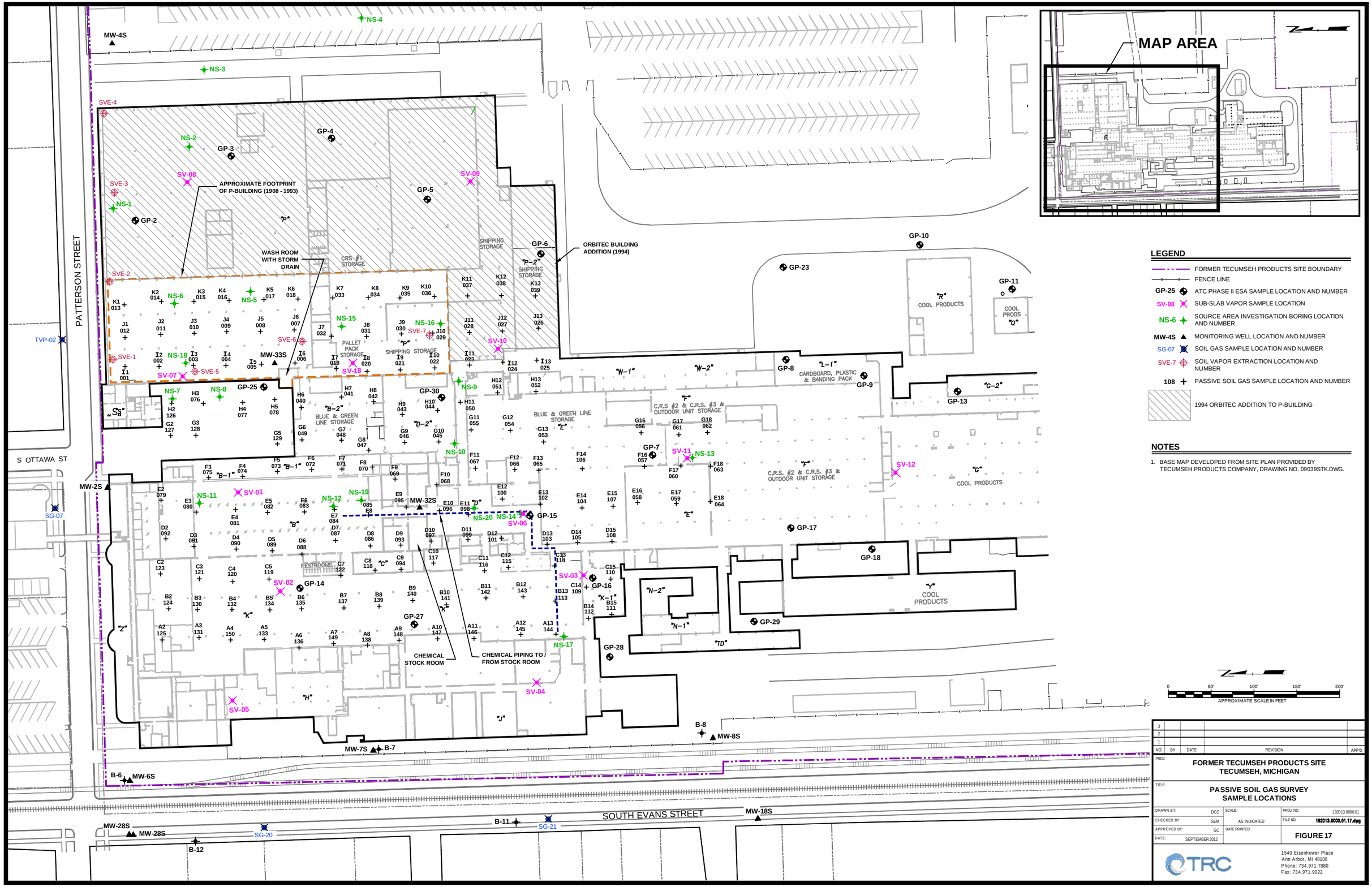


LEGEND

- FORMER TECUMSEH PRODUCTS SITE BOUNDARY
- FENCE LINE
- GP-25 — ATC PHASE II ESA SAMPLE LOCATION AND NUMBER
- SV-08 — SUB-SLAB VAPOR SAMPLE LOCATION
- NS-6 — SOURCE AREA INVESTIGATION BORING LOCATION AND NUMBER
- MW-4S — MONITORING WELL LOCATION AND NUMBER
- SG-07 — SOIL GAS SAMPLE LOCATION AND NUMBER
- SVE-7 — SOIL VAPOR EXTRACTION LOCATION AND NUMBER
- 108 — PASSIVE SOIL GAS SAMPLE LOCATION AND NUMBER
- 1994 ORBITEC ADDITION TO P-BUILDING

NOTES

1. BASE MAP DEVELOPED FROM SITE PLAN PROVIDED BY TECUMSEH PRODUCTS COMPANY, DRAWING NO. 09039STK.DWG.

0 50' 100' 150' 200'
APPROXIMATE SCALE IN FEET

NO.	BY	DATE	REVISION	APP'D
3				
2				
1				

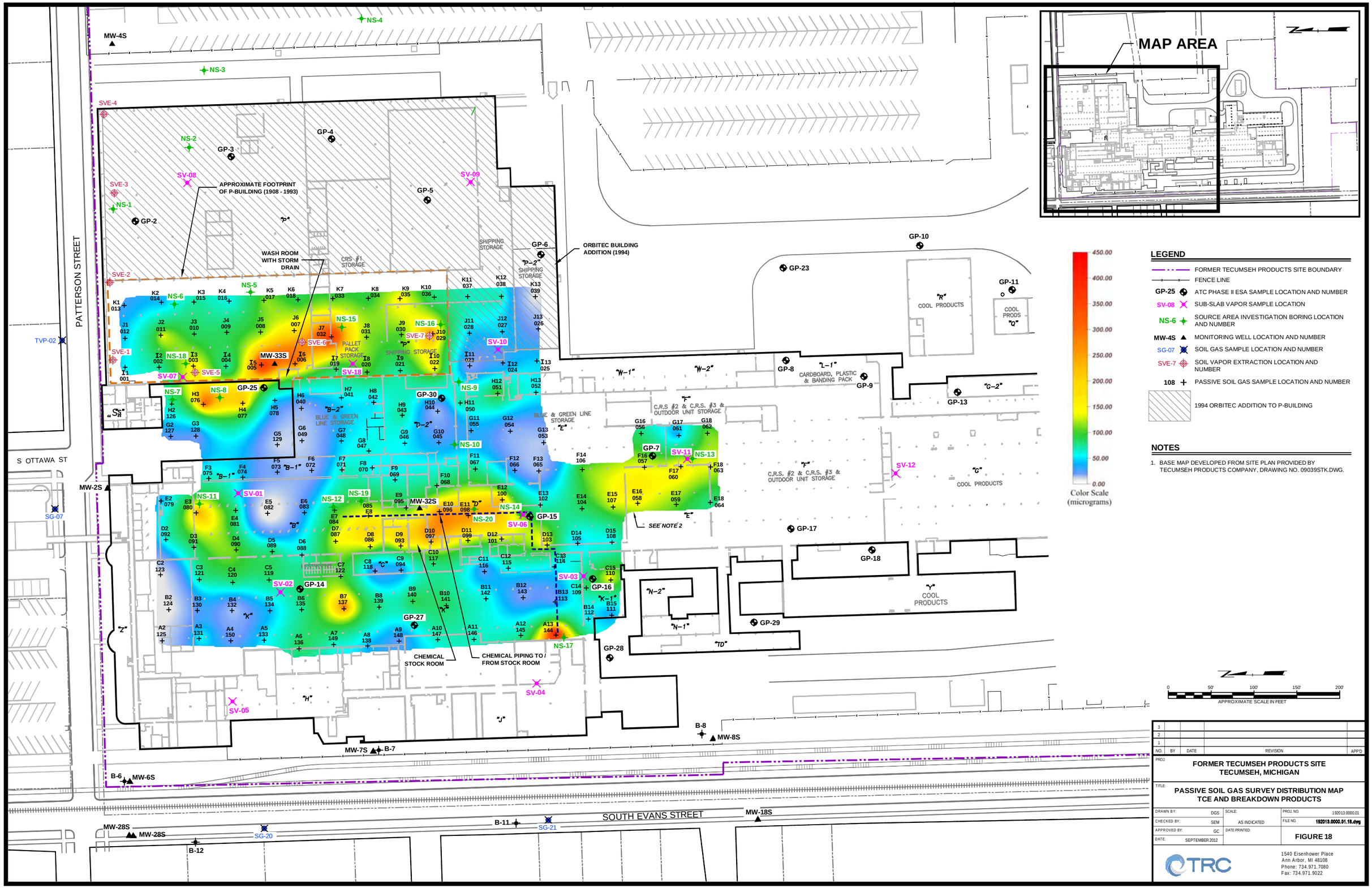
PROJ:
FORMER TECUMSEH PRODUCTS SITE
TECUMSEH, MICHIGAN

TITLE:
PASSIVE SOIL GAS SURVEY SAMPLE LOCATIONS

DRAWN BY:	DGS	SCALE:	PROJ. NO. 192013.0000.01
CHECKED BY:	SEM	AS INDICATED	FILE NO. 192013.0000.01.17.dwg
APPROVED BY:	GC	DATE PRINTED:	**FIGURE 17**
DATE:	SEPTEMBER 2012		

TRC
1540 Eisenhower Place
Ann Arbor, MI 48108
Phone: 734.971.7080
Fax: 734.971.9022

US EPA ARCHIVE DOCUMENT



LEGEND

- FORMER TECUMSEH PRODUCTS SITE BOUNDARY
- FENCE LINE
- GP-25 — ATC PHASE II ESA SAMPLE LOCATION AND NUMBER
- SV-08 — SUB-SLAB VAPOR SAMPLE LOCATION
- NS-6 — SOURCE AREA INVESTIGATION BORING LOCATION AND NUMBER
- MW-4S — MONITORING WELL LOCATION AND NUMBER
- SG-07 — SOIL GAS SAMPLE LOCATION AND NUMBER
- SVE-7 — SOIL VAPOR EXTRACTION LOCATION AND NUMBER
- 108 — PASSIVE SOIL GAS SAMPLE LOCATION AND NUMBER
- 1994 ORBITEC ADDITION TO P-BUILDING

NOTES

1. BASE MAP DEVELOPED FROM SITE PLAN PROVIDED BY TECUMSEH PRODUCTS COMPANY, DRAWING NO. 09039STK.DWG.

0 50' 100' 150' 200'
APPROXIMATE SCALE IN FEET

NO.	BY	DATE	REVISION	APP'D
3				
2				
1				

PROJ.
FORMER TECUMSEH PRODUCTS SITE
TECUMSEH, MICHIGAN

TITLE:
PASSIVE SOIL GAS SURVEY DISTRIBUTION MAP
TCE AND BREAKDOWN PRODUCTS

DRAWN BY:	DGS	SCALE:	PROJ. NO. 192013.0000.01
CHECKED BY:	SEM	AS INDICATED	FILE NO. 192013.0000.01.16.dwg
APPROVED BY:	GC	DATE PRINTED:	**FIGURE 18**
DATE:	SEPTEMBER 2012		

TRC
1540 Eisenhower Place
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PLOT DATA
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Plot Time: 8:40 AM

US EPA ARCHIVE DOCUMENT

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Dwg Size: 36.77 kb
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Drawing Tool Name: ESRI

B-23 B-23B

NS-02 | (0-4') | (8-12')
PCE | <0.027 | <0.027
TCE | 0.35 | 0.75
TCA | <0.027 | <0.027

MW-4S

NS-4 | NS-04 | (8-12')
PCE | <0.029
TCE | <0.029
TCA | <0.029

NS-3 (NS)

SVE-04 | (4-6') | (16-18')
PCE | <0.10 | <0.061
TCE | 0.58 | 1.7
TCA | <0.10 | <0.061

SVE-4

SVE-03 | (4-6') | (16-18')
PCE | <0.057 | <0.052
TCE | 0.62 | 0.96
TCA | <0.057 | <0.052

GP-3 | GP-03 | (6-8')
PCE | <0.050
TCE | 0.26
TCA | <0.050

NS-2

GP-4 | GP-04 | (4-6')
PCE | <0.050
TCE | <0.050
TCA | <0.050

NS-01 | (0-4') | (16-20')
PCE | <0.039 | <0.025
TCE | 1.9 | 0.51
TCA | <0.039 | <0.025

SVE-3

GP-2 (NS)

NS-1

GP-5 (NS)

SVE-02 | (4-6') | (16-18')
PCE | 0.10 | 0.28
TCE | 0.50 | 1.5
TCA | <0.050 | <0.068

NS-06 | (2-3') | (23-24')
PCE | 0.51 | <0.030
TCE | 5.2 | 0.52
TCA | <0.026 | <0.030

NS-05 | (12-14')
PCE | 0.040
TCE | 4.5
TCA | 0.033

NS-6

NS-5

MW-33S | (1-3') | (19-22')
PCE | 0.82 | 0.47
TCE | 5.7 | 19
TCA | <0.053 | <0.24

NS-15 | (2-4') | (19-20')
PCE | 0.63 | 0.13
TCE | 72 | 18
TCA | <0.57 | <0.10

NS-16

SVE-6 (NS)

NS-15

SVE-7 (NS)

NS-18 | (20-25') | (30-35') | (40-43')
PCE | 0.45 | <0.61 | <0.12
TCE | 30 | 53 | 11
TCA | 0.37 | <0.61 | <0.12

SVE-1

NS-18

SVE-5 (NS)

MW-33S

GP-6 | GP-06 | (3-5')
PCE | <0.050
TCE | 4.3
TCA | <0.050

NS-16 | (2-4') | (19-20')
PCE | <0.057 | <0.26
TCE | 1.7 | 33
TCA | <0.057 | <0.26

GP-10 | (2-4')
PCE | <0.050
TCE | 0.50
TCA | <0.050

GP-10

GP-23 | (3-5')
PCE | <0.050
TCE | 1.7
TCA | 0.26

GP-23

GP-11 (NS)

GP-12 | (5-7')
PCE | <0.050
TCE | 0.35
TCA | <0.050

GP-12

MW-35D

B-68

PRB-15S PRB-15D

PRB-14S B-1 MW-1S

PRB-12S

B-14 B-53 B-54 PRB-11S

PRB-13S

SS-6 | (5-7')
PCE | <0.034
TCE | 0.12
TCA | 0.23

SS-7

SS-7 | (21-22')
PCE | <0.035
TCE | 5.0
TCA | 1.6

GP-22 | (8-10')
PCE | <0.050
TCE | 5.2
TCA | 4.0

GP-22

MW-34S | (0.5-2.5') | (21-23')
PCE | <0.049 | 0.33
TCE | 1.2 | 14
TCA | 0.74 | 9.6

SS-10 | (22.5-27.5') | (30-35') | (50-55')
PCE | <0.058 | <0.14 | <0.052
TCE | 11 | 16 | <0.052
TCA | 1.1 | 0.79 | <0.052

MW-25S

NS-07 | (10-11')
PCE | 0.34
TCE | 1.5
TCA | <0.029

NS-8

NS-08 | (15-16')
PCE | 0.83
TCE | 4.3
TCA | <0.063

GP-25 | (1-2')
PCE | <0.050
TCE | 8.6
TCA | <0.050

GP-25

NS-09 | (2-3')
PCE | <0.030
TCE | 0.31
TCA | <0.030

NS-09

GP-30 (NS)

GP-8 (NS)

GP-9

GP-09 | (5-7')
PCE | 0.077
TCE | 3.2
TCA | <0.050

GP-13 (NS)

SS-2 | (8-12') | (16-20')
PCE | 0.069 | 0.11
TCE | 0.97 | 1.5
TCA | 0.81 | 1.3

SS-2

SS-6 SS-9 MW-34S SS-1 SS-10

SS-8 SS-4 SS-5

B-22

GP-20 (NS)

GP-21 | (3-5')
PCE | 0.075
TCE | 1.6
TCA | 4.6

GP-21

SS-1 | (1.0-1.5')
PCE | <0.032
TCE | 1.9
TCA | 0.84

SS-8 | (19-20')
PCE | 0.25
TCE | 8.6
TCA | 7.3

SS-9 | (23-28') | (34-39') | (45-50')
PCE | 0.65 | <0.055 | <0.049
TCE | 13 | <0.055 | 0.38
TCA | 17 | <0.055 | <0.049

SS-3

SS-3 | (8-12') | (16-20')
PCE | 1.1 | 3.9
TCE | 0.90 | 2.8
TCA | 1.2 | 3.5

B-55

S. OTTAWA STREET

B-18

MW-2S

NS-11 | (0-4') | (22-23')
PCE | 0.059 | 0.31
TCE | 0.77 | 4.1
TCA | <0.058 | <0.051

NS-11

NS-12 | (0-2') | (22-24')
PCE | 0.19 | 0.12
TCE | 0.88 | 2.0
TCA | <0.053 | <0.052

NS-12

NS-19

MW-32S

NS-19 | (25-30') | (35-38') | (45-47')
PCE | <0.060 | <0.32 | <0.058
TCE | 2.6 | 45 | 11
TCA | <0.060 | <0.32 | <0.058

MW-32S | (0.5-1.5') | (22-24')
PCE | <0.058 | 0.49
TCE | 1.2 | 26
TCA | 0.092 | 1.8

NS-20

NS-20

GP-15 | (3-5')
PCE | 1.2
TCE | 38
TCA | 8.8

GP-15

NS-14 | (0.5-3.5') | (22-23')
PCE | <0.058 | <0.26
TCE | 0.64 | 18
TCA | 0.063 | 2.3

NS-14

NS-10 | (8-9') | (10-11')
PCE | 0.45 | 0.028
TCE | <0.43 | 0.061
TCA | <0.43 | <0.027

NS-10

GP-07 | (2-4')
PCE | <0.050
TCE | 4.1
TCA | <0.050

GP-7

NS-13 | (0.5-4') | (21-23')
PCE | <0.055 | <0.14
TCE | 1.9 | 17
TCA | <0.055 | 0.20

NS-13

GP-17 | (3-5')
PCE | <0.050
TCE | 1.3
TCA | <0.050

GP-17

GP-18 (NS)

HB-32 (NS)

GP-19 (NS)

HB-31 | (0-0.5')
PCE | <0.050
TCE | <0.050
TCA | <0.050

HB-31

GP-1 | GP-01 | (3-5')
PCE | <0.050
TCE | <0.050
TCA | <0.050

GP-1

GP-14 | (1-3')
PCE | 5.9
TCE | 43
TCA | 3.8

GP-14

GP-27 | (1-3')
PCE | 0.20
TCE | 4.5
TCA | 0.54

GP-27

NS-20 | (23-28') | (29-30') | (35-40')
PCE | 0.38 | 0.10 | <0.056
TCE | 26 | 0.43 | 8.7
TCA | 5.0 | <0.059 | <0.056

NS-17

NS-17 | (0.5-2.0') | (22-23')
PCE | <1.0 | 0.24
TCE | 100 | 2.1
TCA | <1.0 | 0.23

GP-16 | (1-3')
PCE | 3.3
TCE | 7.6
TCA | <0.050

GP-16

GP-28 | (21-23')
PCE | 0.23
TCE | 0.94
TCA | 2.9

GP-28

GP-29 | (3-5')
PCE | <0.050
TCE | <0.050
TCA | <0.050

GP-29

SS-4 | (8-12') | (12-16')
PCE | 0.49 | 0.23
TCE | 4.4 | 1.8
TCA | 8.2 | 3.5

SS-5 | (3-4') | (12-13') | (20-21')
PCE | 0.24 | 0.13 | 0.18
TCE | 11 | 3.3 | 5.5
TCA | 13 | 4.4 | 7.7

GP-26 | (3-5')
PCE | <0.050
TCE | <0.050
TCA | <0.050

PATTERSON STREET

MW-5S

B-8 MW-8S

B-7 MW-7S

B-6 MW-6S

B-15

MW-19S MW-19D

S. EVANS STREET

0 80 160 240 320
APPROXIMATE SCALE IN FEET

LEGEND

- FORMER TECUMSEH PRODUCTS SITE BOUNDARY
- PARCEL BOUNDARY
- RAILROAD TRACKS (APPROXIMATE LOCATION)
- FENCE LINE
- B-2 — PERIMETER / OFF-SITE INVESTIGATION SOIL BORING LOCATION AND NUMBER
- MW-4S — MONITORING WELL LOCATION AND NUMBER
- SS-2 — SOURCE AREA INVESTIGATION BORING LOCATION AND NUMBER
- GP-23 — ATC PHASE II ESA BORING NUMBER AND LOCATION
- SVE-4 — SOIL VAPOR EXTRACTION WELL

KEY

SAMPLE LOCATION

	GP-16	(1-3')
TETRACHLOROETHENE	PCE	3.3
TRICHLOROETHENE	TCE	7.6
1,1,1-TRICHLOROETHANE	TCA	<0.050

SAMPLE DEPTH
SAMPLE RESULTS IN mg/kg

BOLD font denotes concentrations detected above laboratory reporting limit.

Green shading denotes concentrations above one or more Michigan Part 201 Cleanup Criteria.

NS = NO SOIL SAMPLE COLLECTED FOR VOCs ANALYSIS

NOTES

1. BASE MAP DEVELOPED FROM SITE PLAN PROVIDED BY THE CITY OF TECUMSEH, DRAWING NO. CITY.DWG, MARCH 2009.
2. GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S TOPOGRAPHIC QUADRANGLE MAP AND GROUND SURVEY DATA.

NO.	BY	DATE	REVISION	APP'D
3				
2				
1				

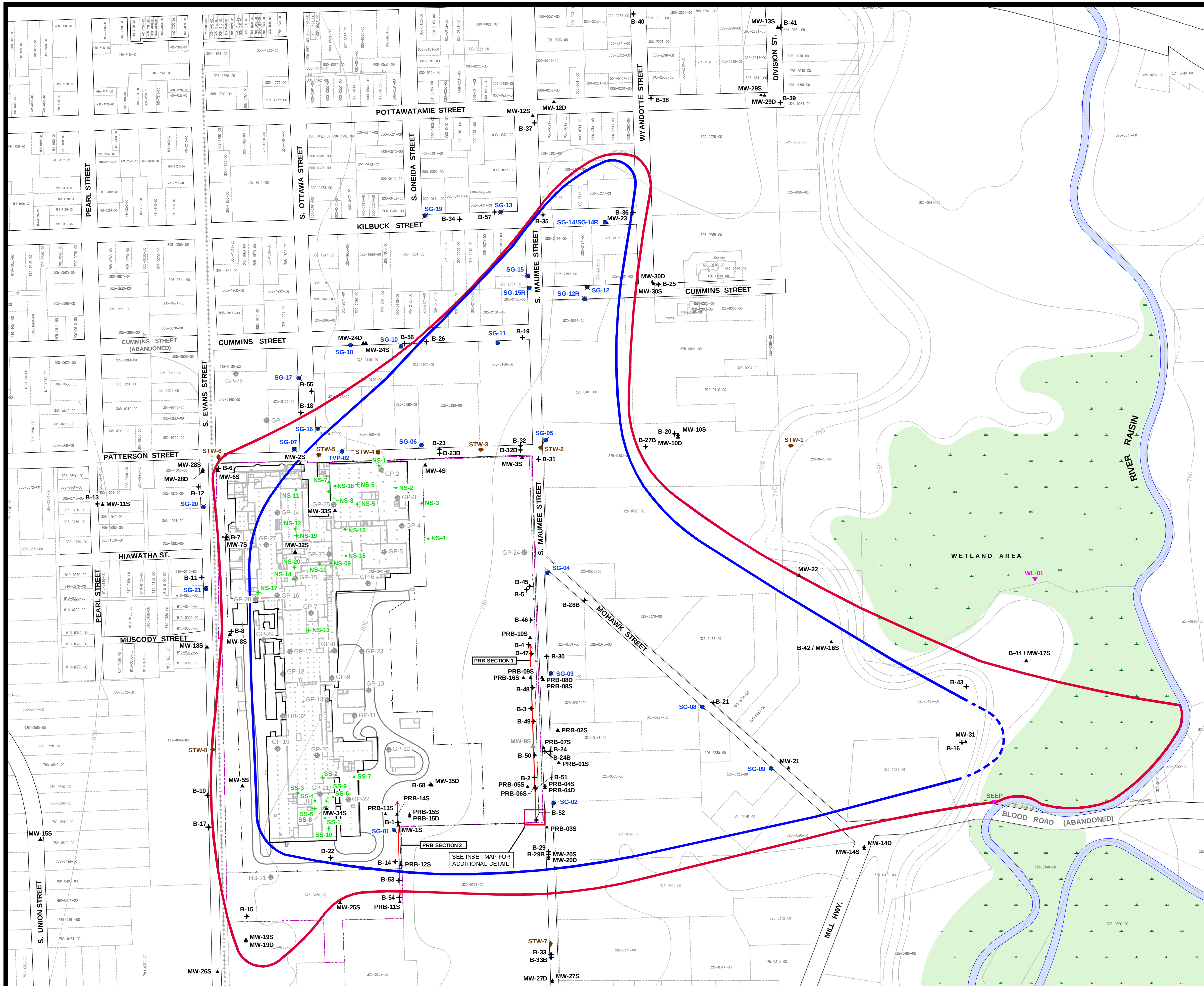
PROJECT:
FORMER TECUMSEH PRODUCTS SITE
TECUMSEH, MICHIGAN

TITLE:
DISTRIBUTION OF PARENT COMPOUNDS IN SOIL

DRAWN BY:	DGS	SCALE:	PROJ. NO. 192013.0000.01
CHECKED BY:	SEM	AS INDICATED	FILE NO. 192013.0000.01.19.dwg
APPROVED BY:	GC	DATE PRINTED:	
DATE:	SEPTEMBER 2012		FIGURE 19

TRC
1540 Eisenhower Place
Ann Arbor, MI 48108
Phone: 734.971.7080
Fax: 734.971.9022

US EPA ARCHIVE DOCUMENT

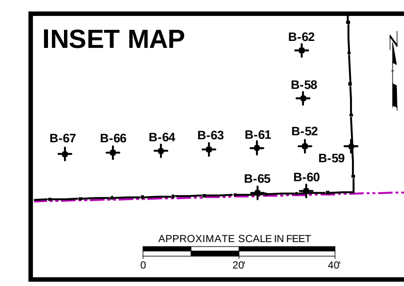


LEGEND

	FORMER TECUMSEH PRODUCTS SITE BOUNDARY
	PARCEL BOUNDARY
	RAILROAD TRACKS (APPROXIMATE LOCATION)
750	APPROXIMATE GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S. TOPOGRAPHIC QUADRANGLE MAP
B-2	PERIMETER / OFF-SITE INVESTIGATION SOIL BORING LOCATION AND NUMBER
MW-4S	MONITORING WELL LOCATION AND NUMBER
MW-9S	DECOMMISSIONED MONITORING WELL LOCATION AND NUMBER
SS-2	SOURCE AREA INVESTIGATION BORING LOCATION AND NUMBER
SG-02	SOIL GAS SAMPLE LOCATION AND NUMBER
STW-2	STORM WATER SEWER SAMPLE LOCATION AND NUMBER
WL-01	APPROXIMATE SURFACE WATER SAMPLE LOCATION
	FLOODPLAIN / WOODED WETLAND AREA
	PRB LOCATION
	FENCE LINE
	EXTENT OF VOCs ABOVE PART 201 DRINKING WATER CRITERIA
	EXTENT OF VOCs ABOVE PART 201 GSI CRITERIA

NOTES

1. BASE MAP DEVELOPED FROM SITE PLAN PROVIDED BY THE CITY OF TECUMSEH, DRAWING NO. CITY.DWG, MARCH 2009.
2. GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S TOPOGRAPHIC QUADRANGLE MAP AND GROUND SURVEY DATA.



0 200' 400' 600' 1200'
APPROXIMATE SCALE IN FEET

NO.	BY	DATE	REVISION	APP'D
3				
2				
1				

PROJ:
FORMER TECUMSEH PRODUCTS SITE
TECUMSEH, MICHIGAN

TITLE:
EXTENT OF VOCs
ABOVE PART 201 CRITERIA

DRAWN BY: DGS	SCALE: AS INDICATED	PROJ. NO.	192013.0000.01
CHECKED BY: SEM		FILE NO.	192013.0000.01.20.dwg
APPROVED BY: GC	DATE PRINTED:	FIGURE 20	
DATE: SEPTEMBER 2012			

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Ann Arbor, MI 48108
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Fax: 734.971.9022

PLOT DATA
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Attached Images:
Layout: FIG20 Extent of VOCs

US EPA ARCHIVE DOCUMENT

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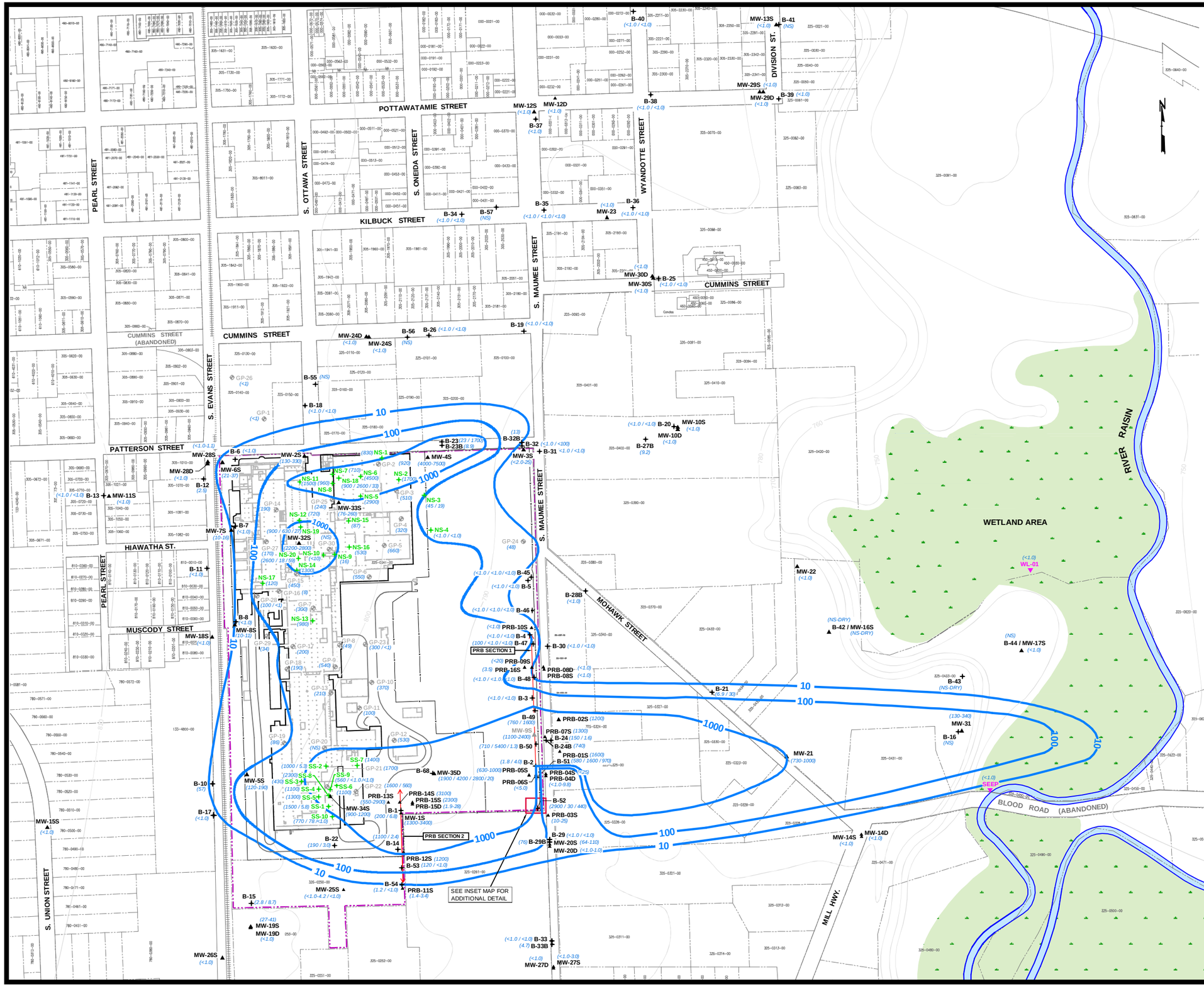
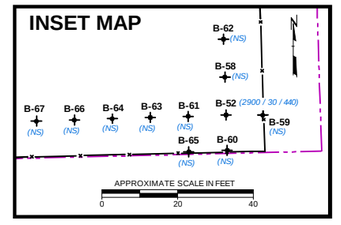


LEGEND

- FORMER TECUMSEH PRODUCTS SITE BOUNDARY
- PARCEL BOUNDARY
- RAILROAD TRACKS (APPROXIMATE LOCATION)
- APPROXIMATE GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S. TOPOGRAPHIC QUADRANGLE MAP
- B-2 + PERIMETER / OFF-SITE INVESTIGATION SOIL BORING LOCATION AND NUMBER
- MW-4S ▲ MONITORING WELL LOCATION AND NUMBER
- MW-9S ▲ DECOMMISSIONED MONITORING WELL LOCATION AND NUMBER
- SS-2 + SOURCE AREA INVESTIGATION BORING LOCATION AND NUMBER
- GP-24 ATC GEOPROBE BORING LOCATION AND NUMBER
- WL-01 ▼ APPROXIMATE SURFACE WATER SAMPLE LOCATION
- FLOODPLAIN / WOODED WETLAND AREA
- PRB LOCATION
- FENCE LINE
- 100 APPROXIMATE TRICHLOROETHENE ISOCONCENTRATION LINE
- (13) TRICHLOROETHENE CONCENTRATION IN ug/L (SEE NOTES 3 AND 4)
- (76-260) TRICHLOROETHENE CONCENTRATION RANGE IN ug/L (SEE NOTES 3 AND 4)
- (45 / 19) TRICHLOROETHENE CONCENTRATION IN ug/L WHERE SAMPLES WERE COLLECTED AT MULTIPLE DEPTHS. CONCENTRATIONS ARE LISTED IN ORDER OF INCREASING DEPTH (SEE NOTE 3)
- (NS) NO SAMPLE COLLECTED FOR TRICHLOROETHENE ANALYSIS

NOTES

1. BASE MAP DEVELOPED FROM SITE PLAN PROVIDED BY THE CITY OF TECUMSEH, DRAWING NO. CITY.DWG, MARCH 2009.
2. GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S TOPOGRAPHIC QUADRANGLE MAP AND GROUND SURVEY DATA.
3. SEE ASSOCIATED TABLES FOR FURTHER SAMPLE INFORMATION (SAMPLE COLLECTION DATE, SAMPLE DEPTH, ETC.).
4. FOR IN BARRIER AND DOWN GRADIENT SHALLOW PERMEABLE REACTIVE BARRIER MONITORING WELLS, (PRB-XXS) ONLY THE CONCENTRATION FROM THE MOST RECENT SAMPLE EVENT IS DISPLAYED.



0 200 400 600 800
APPROXIMATE SCALE IN FEET

NO.	BY	DATE	REVISION	APP'D
3				
2				
1				

PROJECT:
FORMER TECUMSEH PRODUCTS SITE
TECUMSEH, MICHIGAN

TITLE:
GROUNDWATER ISOCONCENTRATION MAP
TRICHLOROETHENE

DRAWN BY:	DGS	SCALE:	PROJ NO. 192013.0000.01
CHECKED BY:	SEM	AS INDICATED	FILE NO. 192013.0000.01.21.dwg
APPROVED BY:	GC	DATE PRINTED:	**FIGURE 21**
DATE:	SEPTEMBER 2012		

TRC
1540 Eisenhower Place
Ann Arbor, MI 48108
Phone: 734.971.7080
Fax: 734.971.9022

US EPA ARCHIVE DOCUMENT

Attached XrefsPlot Date: September 28, 2012
Plot Time: 8:40:16 AM
Drawing Size: 3.5E Ma
Attached Images:
Layout: FIG22 DWG
Item28199
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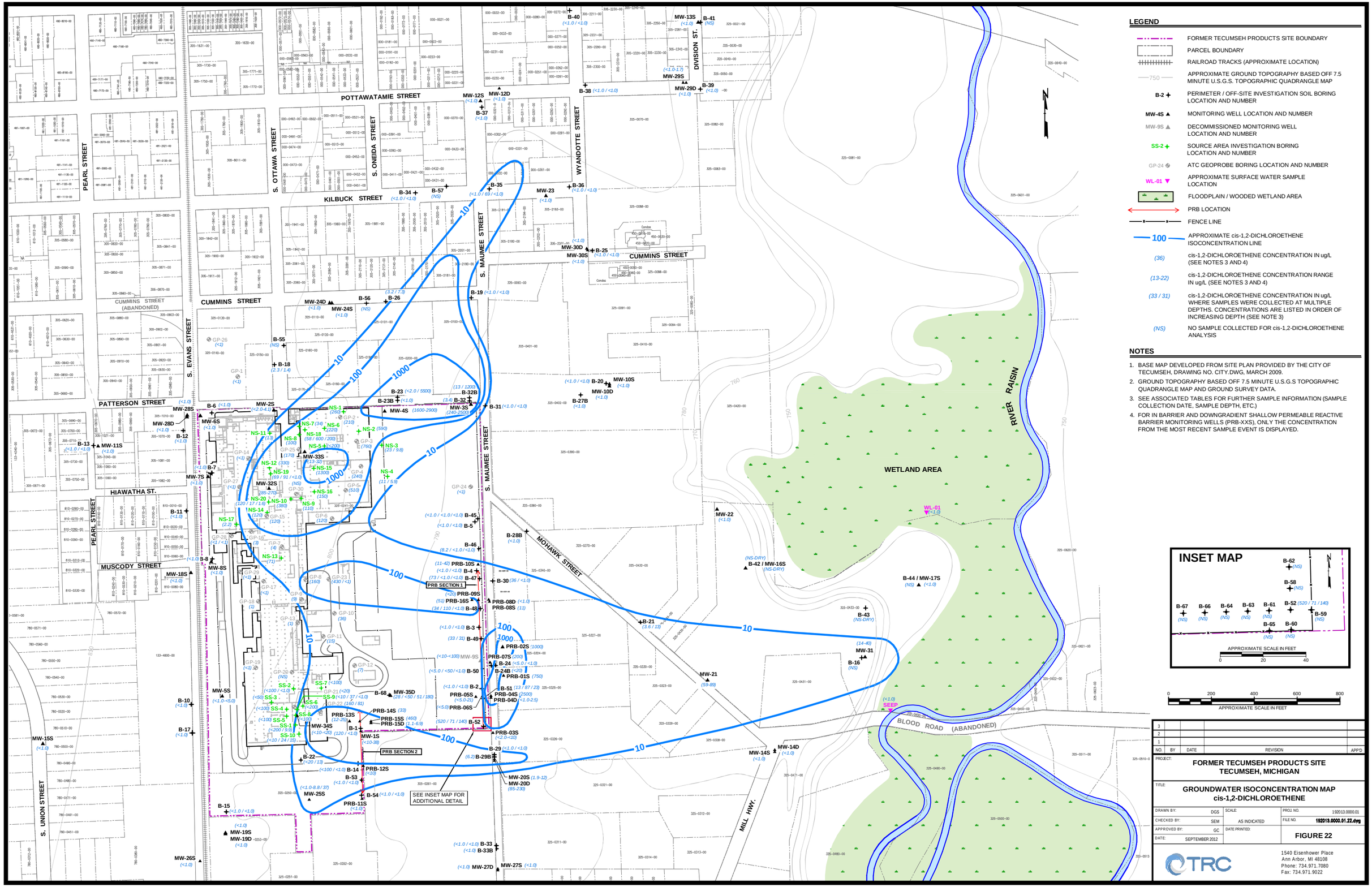
Dataset: Tecumseh
PLOT DATA



LEGEND

- FORMER TECUMSEH PRODUCTS SITE BOUNDARY
- PARCEL BOUNDARY
- RAILROAD TRACKS (APPROXIMATE LOCATION)
- 750 — APPROXIMATE GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S. TOPOGRAPHIC QUADRANGLE MAP
- B-2 + PERIMETER / OFF-SITE INVESTIGATION SOIL BORING LOCATION AND NUMBER
- MW-4S ▲ MONITORING WELL LOCATION AND NUMBER
- MW-9S ▲ DECOMMISSIONED MONITORING WELL LOCATION AND NUMBER
- SS-2 + SOURCE AREA INVESTIGATION BORING LOCATION AND NUMBER
- GP-24 ATC GEOPROBE BORING LOCATION AND NUMBER
- WL-01 ▼ APPROXIMATE SURFACE WATER SAMPLE LOCATION
- FLOODPLAIN / WOODED WETLAND AREA
- PRB LOCATION
- FENCE LINE
- 100 — APPROXIMATE cis-1,2-DICHLOROETHENE ISOCONCENTRATION LINE
- (36) cis-1,2-DICHLOROETHENE CONCENTRATION IN ug/L (SEE NOTES 3 AND 4)
- (13-22) cis-1,2-DICHLOROETHENE CONCENTRATION RANGE IN ug/L (SEE NOTES 3 AND 4)
- (33 / 31) cis-1,2-DICHLOROETHENE CONCENTRATION IN ug/L WHERE SAMPLES WERE COLLECTED AT MULTIPLE DEPTHS. CONCENTRATIONS ARE LISTED IN ORDER OF INCREASING DEPTH (SEE NOTE 3)
- (NS) NO SAMPLE COLLECTED FOR cis-1,2-DICHLOROETHENE ANALYSIS

NOTES

1. BASE MAP DEVELOPED FROM SITE PLAN PROVIDED BY THE CITY OF TECUMSEH, DRAWING NO. CITY.DWG, MARCH 2009.
2. GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S TOPOGRAPHIC QUADRANGLE MAP AND GROUND SURVEY DATA.
3. SEE ASSOCIATED TABLES FOR FURTHER SAMPLE INFORMATION (SAMPLE COLLECTION DATE, SAMPLE DEPTH, ETC.)
4. FOR IN BARRIER AND DOWNGRADIENT SHALLOW PERMEABLE REACTIVE BARRIER MONITORING WELLS (PRB-XXS), ONLY THE CONCENTRATION FROM THE MOST RECENT SAMPLE EVENT IS DISPLAYED.

NO.	BY	DATE	REVISION	APP'D
3				
2				
1				

PROJECT:
FORMER TECUMSEH PRODUCTS SITE
TECUMSEH, MICHIGAN

TITLE:
GROUNDWATER ISOCONCENTRATION MAP
cis-1,2-DICHLOROETHENE

DRAWN BY:	DGS	SCALE:	PROJ. NO. 192013.0000.01
CHECKED BY:	SEM	AS INDICATED	FILE NO. 192013.0000.01.22.dwg
APPROVED BY:	GC	DATE PRINTED:	**FIGURE 22**
DATE:	SEPTEMBER 2012		

TRC
1540 Eisenhower Place
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Fax: 734.971.9022

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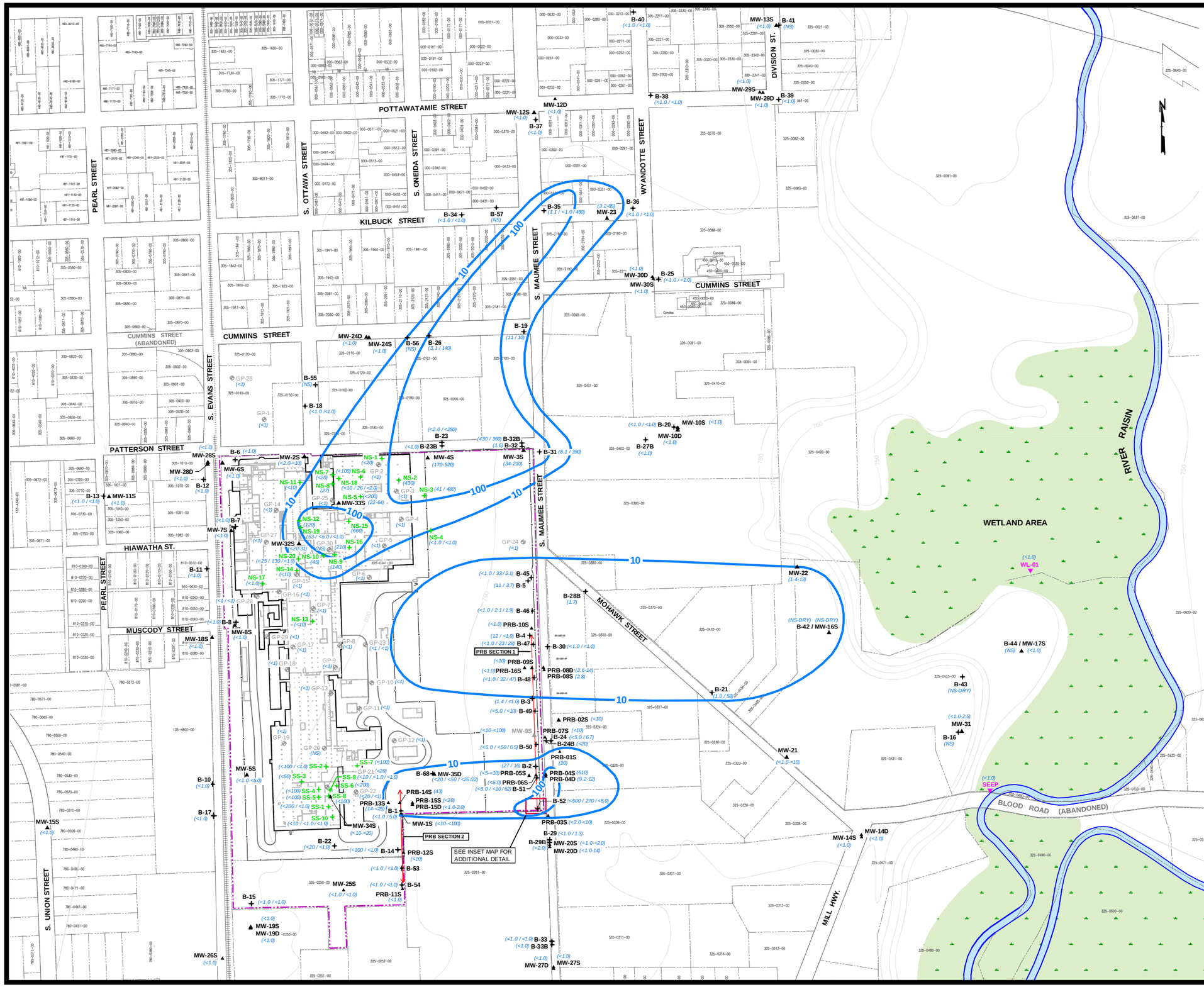


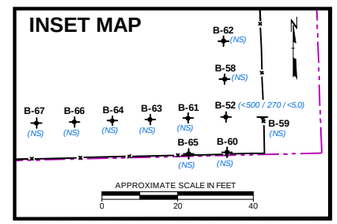
LEGEND

- FORMER TECUMSEH PRODUCTS SITE BOUNDARY
- PARCEL BOUNDARY
- RAILROAD TRACKS (APPROXIMATE LOCATION)
- 750 — APPROXIMATE GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S. TOPOGRAPHIC QUADRANGLE MAP
- B-2 + — PERIMETER / OFF-SITE INVESTIGATION SOIL BORING LOCATION AND NUMBER
- MW-4S ▲ — MONITORING WELL LOCATION AND NUMBER
- MW-9S ▲ — DECOMMISSIONED MONITORING WELL LOCATION AND NUMBER
- SS-2 + — SOURCE AREA INVESTIGATION BORING LOCATION AND NUMBER
- GP-24 — ATC GEOPROBE BORING LOCATION AND NUMBER
- WL-01 ▼ — APPROXIMATE SURFACE WATER SAMPLE LOCATION
- FLOODPLAIN / WOODED WETLAND AREA
- PRB LOCATION
- FENCE LINE
- 100 — VINYL CHLORIDE ISOCONCENTRATION LINES
- (660) — VINYL CHLORIDE CONCENTRATION IN ug/L (SEE NOTES 3 AND 4)
- (34-210) — VINYL CHLORIDE CONCENTRATION RANGE IN ug/L (SEE NOTES 3 AND 4)
- (11 / 3.7) — VINYL CHLORIDE CONCENTRATION IN ug/L WHERE SAMPLES WERE COLLECTED AT MULTIPLE DEPTHS. CONCENTRATIONS ARE LISTED IN ORDER OF INCREASING DEPTH (SEE NOTE 3)
- (NS) — NO SAMPLE COLLECTED FOR VINYL CHLORIDE ANALYSIS

NOTES

1. BASE MAP DEVELOPED FROM SITE PLAN PROVIDED BY THE CITY OF TECUMSEH, DRAWING NO. CITY.DWG, MARCH 2009.
2. GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S TOPOGRAPHIC QUADRANGLE MAP AND GROUND SURVEY DATA.
3. SEE ASSOCIATED TABLES FOR FURTHER SAMPLING INFORMATION (SAMPLE COLLECTION DATE, SAMPLE DEPTH, ETC.).
4. FOR IN BARRIER AND DOWNGRADIENT SHALLOW PERMEABLE REACTIVE BARRIER MONITORING WELLS (PRB-XXS), ONLY THE CONCENTRATION FROM THE MOST RECENT SAMPLE EVENT IS DISPLAYED.

INSET MAP



0 200 400 600 800
APPROXIMATE SCALE IN FEET

NO.	BY	DATE	REVISION	APP'D
3				
2				
1				

PROJECT:
FORMER TECUMSEH PRODUCTS SITE
TECUMSEH, MICHIGAN

TITLE:
GROUNDWATER ISOCONCENTRATION MAP
VINYL CHLORIDE

DRAWN BY:	DGS	SCALE:	PROJ. NO. 192013.0000.01
CHECKED BY:	SEM	AS INDICATED	FILE NO. 192013.0000.01.23.dwg
APPROVED BY:	GC	DATE PRINTED:	**FIGURE 23**
DATE:	SEPTEMBER 2012		

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PLOT DATA
Drawing Name: J:\...\TRC\Tecumseh Products\Tecumseh MI\192013.0000\WR\R\192013.0000.01.23.dwg
Xrefs: ttm192109 STRAS_DWAH
Attached Image: Layers: PRDS ON/ Yes VC
Attached Xref's:
Drawing Size: 3.39 Ms
Plot Date: September 28, 2012
Plot Time: 8:40 AM

US EPA ARCHIVE DOCUMENT

Attached XrefsPath: Attached Images: Layers:
Dwg Size: 3.93 Mb
Plot Date: September 28, 2012
Plot Time: 8:40:16 AM
PLOT DATA
Drawing Name:
Drawing Path:
Drawing Size/Scale:
J:_TRC\Tecumseh Products\Tecumseh MI\192013.0000\WR\R\192013.0000.01.24.dwg
STEVE.L.DWAH

LEGEND

- FORMER TECUMSEH PRODUCTS SITE BOUNDARY
- PARCEL BOUNDARY
- RAILROAD TRACKS (APPROXIMATE LOCATION)
- 750 — APPROXIMATE GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S. TOPOGRAPHIC QUADRANGLE MAP
- B-2 + — PERIMETER / OFF-SITE INVESTIGATION SOIL BORING LOCATION AND NUMBER
- MW-4S ▲ — MONITORING WELL LOCATION AND NUMBER
- MW-9S ▲ — DECOMMISSIONED MONITORING WELL LOCATION AND NUMBER
- SS-2 + — SOURCE AREA INVESTIGATION BORING LOCATION AND NUMBER
- GP-24 — ATC GEOPROBE BORING LOCATION AND NUMBER
- WL-01 ▼ — APPROXIMATE SURFACE WATER SAMPLE LOCATION
- FLOODPLAIN / WOODED WETLAND AREA
- PRB LOCATION
- FENCE LINE
- 100 — APPROXIMATE 1,1,1-TRICHLOROETHANE ISOCONCENTRATION LINE(S)
- (390) — 1,1,1-TRICHLOROETHANE CONCENTRATION IN ug/L (SEE NOTES 3 AND 4)
- (220-560) — 1,1,1-TRICHLOROETHANE CONCENTRATION RANGE IN ug/L (SEE NOTES 3 AND 4)
- (<1.0 / 8.6) — 1,1,1-TRICHLOROETHANE CONCENTRATION IN ug/L WHERE SAMPLES WERE COLLECTED AT MULTIPLE DEPTHS. CONCENTRATIONS ARE LISTED IN ORDER OF INCREASING DEPTH (SEE NOTE 3)
- (NS) — NO SAMPLE COLLECTED FOR 1,1,1-TRICHLOROETHANE ANALYSIS

NOTES

1. BASE MAP DEVELOPED FROM SITE PLAN PROVIDED BY THE CITY OF TECUMSEH, DRAWING NO. CITY.DWG, MARCH 2009.
2. GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S TOPOGRAPHIC QUADRANGLE MAP AND GROUND SURVEY DATA.
3. SEE ASSOCIATED TABLES FOR FURTHER SAMPLING INFORMATION (SAMPLE COLLECTION DATE, SAMPLE DEPTH, ETC.).
4. FOR IN BARRIER AND DOWNGRADIENT SHALLOW PERMEABLE REACTIVE BARRIER MONITORING WELLS (PRB-XXS), ONLY THE CONCENTRATION FROM THE MOST RECENT SAMPLE EVENT IS DISPLAYED.

INSET MAP

B-62 + (NS)
B-58 + (NS)
B-67 + (NS)
B-66 + (NS)
B-64 + (NS)
B-63 + (NS)
B-61 + (NS)
B-52 + (2900 / <10 / 5.0)
B-59 + (NS)
B-65 + (NS)
B-60 + (NS)

APPROXIMATE SCALE IN FEET
0 20 40

0 200 400 600 800
APPROXIMATE SCALE IN FEET

NO.	BY	DATE	REVISION	APP'D
3				
2				
1				

PROJECT:
FORMER TECUMSEH PRODUCTS SITE
TECUMSEH, MICHIGAN

TITLE:
GROUNDWATER ISOCONCENTRATION MAP
1,1,1-TRICHLOROETHANE

DRAWN BY:	DGS	SCALE:	PROJ. NO. 192013.0000.01
CHECKED BY:	SEM	AS INDICATED	FILE NO. 192013.0000.01.24.dwg
APPROVED BY:	GC	DATE PRINTED:	FIGURE 24
DATE:	SEPTEMBER 2012		

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PLOT DATA
Drawing Name: J:_TRC\Tecumseh Products\Tecumseh MI\192013\0000\MXD\ Rpt\192013.0000.01.25.dwg
Created By: STEVE.L.DAHAR
Plot Date: 9/28/2012
Drawing Ref Name: 192013
Drag Elev: 0.00 Ma
Plot Date: September 28, 2012
Plot Time: 8:49 AM
Attached Xref's: tec100115 (No Wetlands)
Attached Images: H:\GIS\ Private Well Update Jun2012

EAST CHICAGO BOULEVARD
POTTAWATAMIE STREET
SOUTH MAIDEN LANE
SOUTH OTTAWA STREET
SOUTH ONEIDA STREET
KILBUCK STREET
CUMMINS STREET
CUMMINS STREET (ABANDONED)
SOUTH MAUMEE STREET
WYANDOTTE STREET
DIVISION STREET
PEARL STREET
SOUTH EVANS STREET
PATTERSON ST.
HIAWATHA ST.
MUSCODY ST.
SOUTH UNION STREET
FORMER TECUMSEH PRODUCTS COMPANY SITE
MOHAWK STREET
MILL HIGHWAY
BLOOD ROAD (ABANDONED)
RUSSELL ROAD
RAISIN RIVER

LEGEND

- FORMER TECUMSEH PRODUCTS SITE BOUNDARY
- PARCEL BOUNDARY
- PARCEL ID NUMBER
- RAILROAD TRACKS (APPROXIMATE LOCATION)
- BOUNDARY OF AREA THAT RECEIVED NOTICES OF OFF-SITE MIGRATION
- BOUNDARY OF AREA AFFECTED BY GROUNDWATER USE ORDINANCE
- EXTENT OF VOCs ABOVE MDEQ PART 201 DRINKING WATER CRITERIA

WELL STATUS

- PROPERTIES WITH A PRIVATE WELL THAT WAS NOT IN USE (2011)
- PROPERTIES WITH A PRIVATE WELL USED AS A PRIMARY WATER SUPPLY IN 2011
- PROPERTIES WITH A PRIVATE WELL USED AS A SECONDARY WATER SUPPLY IN 2011
- PRIVATE WELL HAS BEEN DECOMISSIONED (2011/2012)

NOTES

1. BASE MAP DEVELOPED FROM SITE PLAN PROVIDED BY THE CITY OF TECUMSEH, DRAWING NO. CITY.DWG, MARCH 2009.

0 225' 450' 675' 900'
APPROXIMATE SCALE IN FEET

NO.	BY	DATE	REVISION	APP'D
3				
2				
1				

PROJ.
FORMER TECUMSEH PRODUCTS SITE
TECUMSEH, MICHIGAN

TITLE:
PRIVATE WELL SURVEY RESULTS AND WELL STATUS UPDATE JUNE 2012

DRAWN BY:	DGS	SCALE:	PROJ. NO. 192013.0000.01
CHECKED BY:	SEM	AS INDICATED	FILE NO. 192013.0000.01.25.dwg
APPROVED BY:	GC	DATE PRINTED:	**FIGURE 25**
DATE:	SEPTEMBER 2012		

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Ann Arbor, MI 48108
Phone: 734.971.7080
Fax: 734.971.9022