

**SITE REASSESSMENT REPORT**

**For**

**St. Francis Auto Wrecker's Site  
4043 S Pennsylvania Ave  
St. Francis, Milwaukee County, WI**

**US EPA ID: WID988639068**

**June 9, 2004**

**Prepared By:** **Andrew F Boettcher**, Hydrogeologist  
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## 1.0 INTRODUCTION

Under authority of the Comprehensive Environmental Response Compensation Liability Act of 1980 (CERCLA), and the Superfund Amendments and Reauthorization Act of 1986 (SARA), the Wisconsin Department of Natural Resources (WDNR) was tasked by the United States Environmental Protection Agency (U.S. EPA) to conduct a Site Reassessment at the St. Francis Auto Wrecker's site as part of the FY '03 Cooperative Agreement. The St. Francis Auto Wrecker's site is located at 4043 South Pennsylvania Avenue in the City of St. Francis, Milwaukee County, Wisconsin. The CERCLIS identification number is WID988639068.

The purpose of this investigation was to collect information concerning conditions at the St. Francis Auto Wrecker's site sufficient to assess the threat posed to human health and the environment, to determine the need for additional investigation under CERCLA or other authority, and if appropriate, support site evaluation using the Hazard Ranking System (HRS) for proposal to the National Priorities List (NPL). The scope of the investigation included reviewing previous information, sampling environmental media, evaluating and documenting HRS factors, and collecting additional non-sampling information.

The Site Reassessment included a file review and a reconnaissance inspection of the St. Francis Auto Wrecker's site. It also included the following activities: collection of groundwater samples from five existing on-site monitor wells, collection of ten surface soil samples from on-site and collection of five surface soil samples from off-site. The off-site soil samples were collected to determine if contaminants detected on-site were from discharges at the site or whether the detected contaminants were from an area-wide discharge.

Based on the analytical results, Target compound List (TCL) and Target Analyte List (TAL) contaminants were detected at concentrations three or more times above their respective background concentrations in surface soil and groundwater samples. Also, TCL and TAL contaminants were detected at concentrations above the Sample Quantitation Limit (SQL) when their respective background concentrations indicated "no detect" or ND, in the media listed above.

In general, most of the property excluding the building footprints is not paved. Access to the northern portion of the property is only partially restricted, primarily along the west and south sides. Access to the southern portion of the property is restricted by fencing and buildings. Elevated levels of contaminants in the soil were observed at depths from zero to two feet. There is potential for employees and the public to come into contact with the contaminants present in surface and near-surface soils.

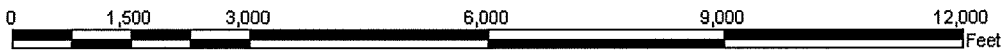
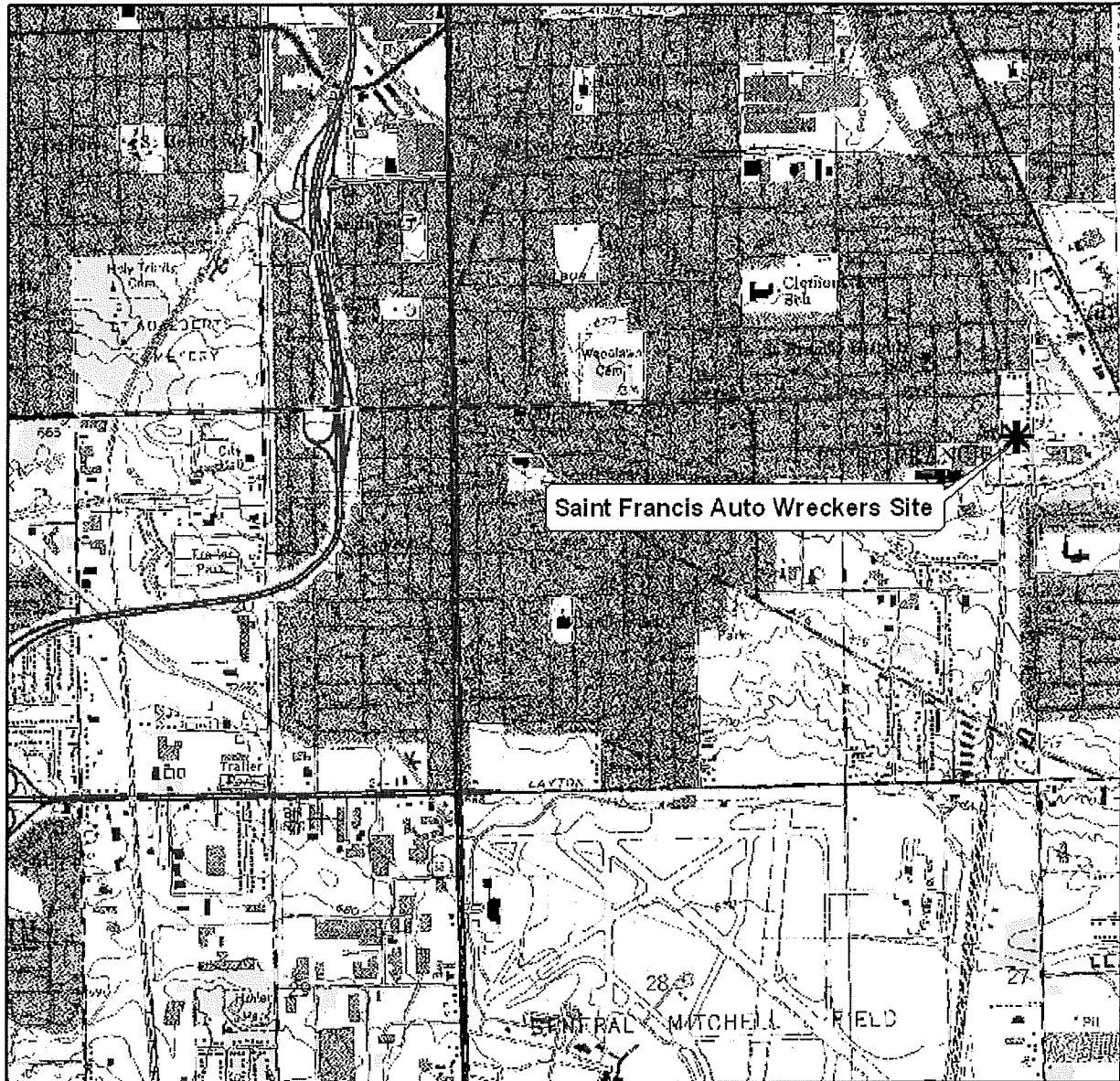
## 2.0 SITE DESCRIPTION

The St. Francis Auto Wrecker's site is located in a highly populated mixed-use area within the City of St. Francis. The CERCLIS identification number is WID988639068. The facility is active. The site is located at 4043 South Pennsylvania Avenue in the NE<sup>1/4</sup> of the NW<sup>1/4</sup>, Section 22, Township 6N, Range 22E, City of St. Francis, Milwaukee County. The geographic coordinates of the site are 42 58' 16" N latitude and 87 52' 48" W longitude. Directions to the site are: From I-94, take the Howard Ave Exit (#314A-B). Turn east onto Howard Ave. Go approximately 1.8 miles. Turn right (south) onto S Pennsylvania Ave. Go approximately 0.2 miles to site (SE corner of S Pennsylvania Ave and E Norwich St) (See Figure 1). A 4-mile radius map of the St. Francis Auto Wrecker's site is provided in Appendix C.

The St. Francis Auto Wrecker's site is rectangular in shape. The site is approximately 230 feet from east to west and approximately 500 feet from north to south. The site is approximately 115,000 square feet in area. The site consists of an auto salvage business operating on the southern portion of the site and a vacant parcel on the northern portion of the site. The auto salvage business portion of the site is approximately 230 feet from east to west and approximately 300 feet from north to south. The vacant parcel is approximately 230 feet from east to west and approximately 200 feet from north to south.

Presently, the land surrounding the site consists of residences to the north (across E Norwich St), the Lake Arterial Parkway to the west, a former railroad embankment to the south and industrial facilities to the east and northeast (across S Pennsylvania Ave). The site is approximately 7800 feet west of Lake Michigan.

**FIGURE 1**  
**Site Location Map**



**Saint Francis Auto Wreckers Site**  
4043 South Pennsylvania Avenue  
Milwaukee County  
Saint Francis, Wisconsin

Map Prepared by Andrew Boettcher  
Wisconsin Department of Natural Resources  
2300 N Dr. Martin Luther King Jr. Drive  
Milwaukee, WI 53212-0438

**Legend**

 Site Location



### **3.0 SITE HISTORY AND WASTE CHARACTERISTICS**

The St. Francis Auto Wrecker's site is rectangular and is approximately 230 feet from east to west and approximately 500 feet from north to south. The site is approximately 115,000 square feet in area. An auto recycling business is operating on the south portion of the site.

In 1991, the Wisconsin Department of Transportation (DOT) conducted soil sampling immediately adjacent to the St. Francis Auto Wrecker's site. The sampling identified that the soil at the site was contaminated with poly-chlorinated biphenyls (PCBs) ranging in concentration from 4.83 parts per million (ppm) to 474 ppm.

In 1997, the Wisconsin DOT also removed buried drums of waste, containing solid or semi-solid materials identified as paint, resin, or adhesive solids, foundry sand and slag, asphaltic tar solids, metal parts and plated debris and firebricks. Additional fill and drums of waste were observed in the excavation wall on the St. Francis Auto Wrecker's site. Some of the area sampled by Wisconsin DOT has since become part of the Lake Arterial Parkway. During the removal of the drums and waste, it was noted that additional drums were visible in the remaining easterly sidewall of the excavation; however, because the sidewall was outside of the temporary easement, the drums were left in-place. (Ref. 3)

In 2001, groundwater monitor wells were installed at the site/landfill. Groundwater monitoring has been conducted on one occasion. This initial monitoring has shown concentrations of volatile organic compounds (VOCs) above WDNR groundwater enforcement standards, with additional detections of metals, and one semi-volatile organic compound (SVOC) above the WDNR groundwater preventative action limit. Soil samples were collected and analyzed during the same site investigation activities. Sample data indicates the site soils are contaminated with PCBs at concentrations from 4.83 ppm to 52.67 ppm. The highest concentrations for metals included; 1710 ppm of lead, 168 ppm of chromium, 58 ppm of arsenic, and 72.4 ppm of cadmium.



**TABLE 1  
Historical Data**

<b>Sample Location (year of collection)</b>	<b>Media Analyzed</b>	<b>Analytical Parameters</b>	<b>Contaminants Detected</b>	<b>Comments</b>
C3 (1991)	Surficial soil	PCB-TPH	PCB	Concentration of PCB 52.67 ppm
HP05 (1999)	Subsurface soil (2 feet bgs)	Metals	Cadmium Chromium Lead Arsenic	Concentration of Cadmium: 72.4 ppm Chromium: 95.8 ppm Lead: 1390 ppm Arsenic: 15.9 ppm
HP11 (1999)	Subsurface soil (4 feet bgs)	Metals	Cadmium Chromium Lead Arsenic	Concentration of Cadmium: 33.3 ppm Chromium: 27.8 ppm Lead: 5200 ppm Arsenic: 58 ppm
SB07 (2001)	Subsurface soil (4-5 feet bgs)	Metals	Chromium Lead	Concentration of Chromium: 94.5 ppm Lead: 1710 ppm
SB05 (2001)	Subsurface soil (3-4 feet bgs)	Metals	Chromium Lead	Concentration of Chromium: 168 ppm Lead: 1120 ppm

**(Sample locations are indicated on attached Figure 2)**

(From Reference #5, MWH)

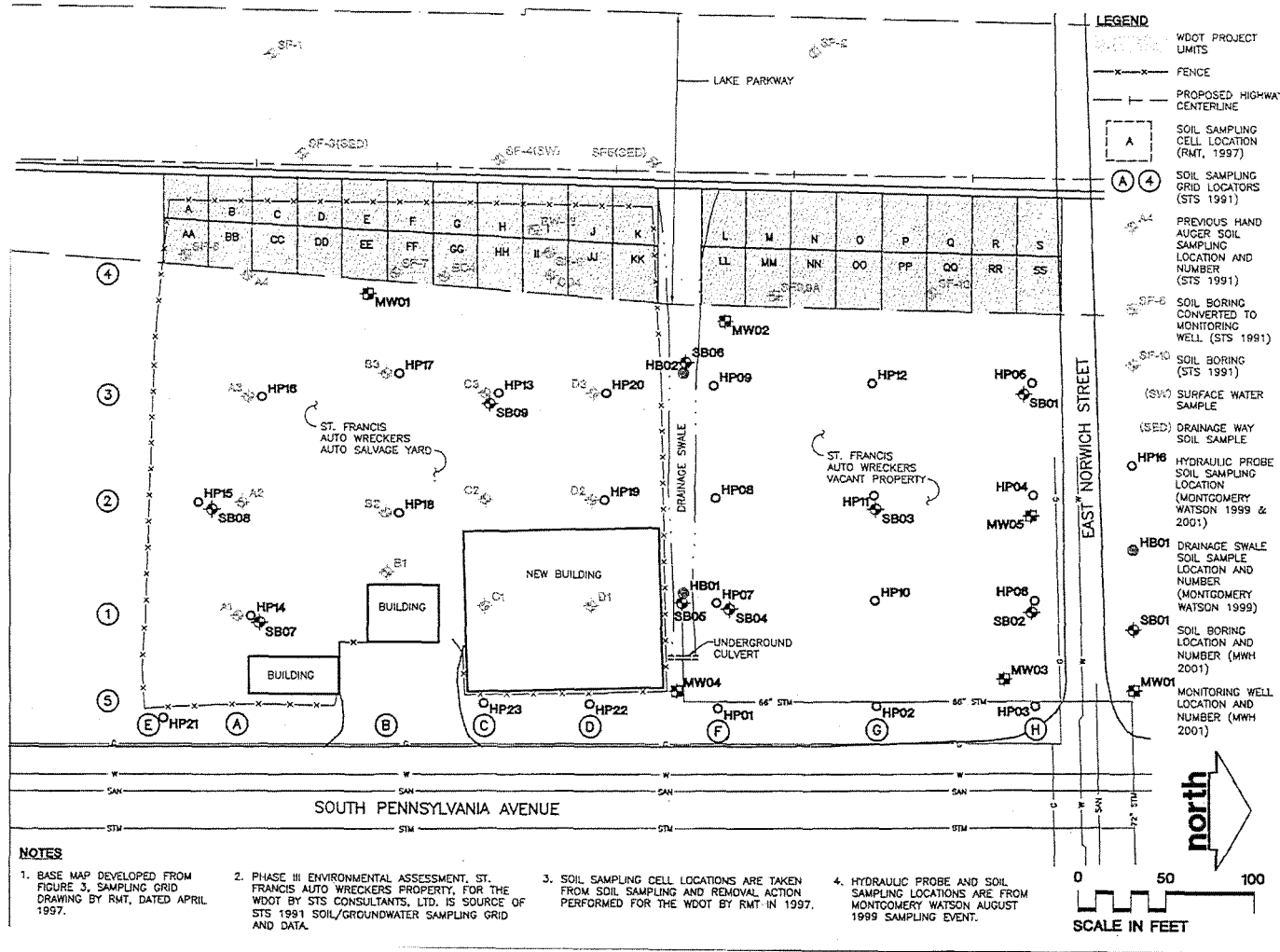


FIGURE 2  
Historical Data - Sample Location Map

#### **4.0 SITE REASSESSMENT SAMPLING:**

This section of the Site Reassessment Report discusses the sampling activities that were performed at the site. Environmental media samples collected consisted of groundwater samples from five existing on-site monitor wells, ten surface soil samples from on-site and five surface soil samples from off-site. The off-site soil samples were collected to determine if contaminants detected on-site were from discharges at the site or whether the detected contaminants were from an area-wide discharge. Off-site samples were collected both north and south of the site because the immediate area is primarily industrial, with some residential and because the areas to the south and the north are both up-slope from the site. Air and sediment samples were not collected, as they were not pathways of concern. The data shows that there has been a release of contaminants to the soil and groundwater attributable to the operations at the St. Francis Auto Wrecker's site and/or the waste present at the site.

Samples collected during the St. Francis Auto Wrecker's site reassessment were analyzed for the Target Compound List (TCL) organics, which included VOCs, SVOCs, pesticides, and PCBs, and the Target Analyte List (TAL) metals and cyanide and other compounds. Under the Hazard Ranking System (HRS), results are considered significant if the concentrations are three times the background concentrations and above the Contract Required Detection Limit (CRDL) or Contract Required Quantitation Limit (CRQL).

## 5.0 ANALYTICAL RESULTS

This section includes the analytical results for the various WDNR collected samples from the site. Data tables of the Site Reassessment Report analytical results are contained in Appendix A. Summary narratives with laboratory analytical data are provided in Appendix B. Significant findings based on the data are summarized below in Section 5 for each medium (surface soils and groundwater).

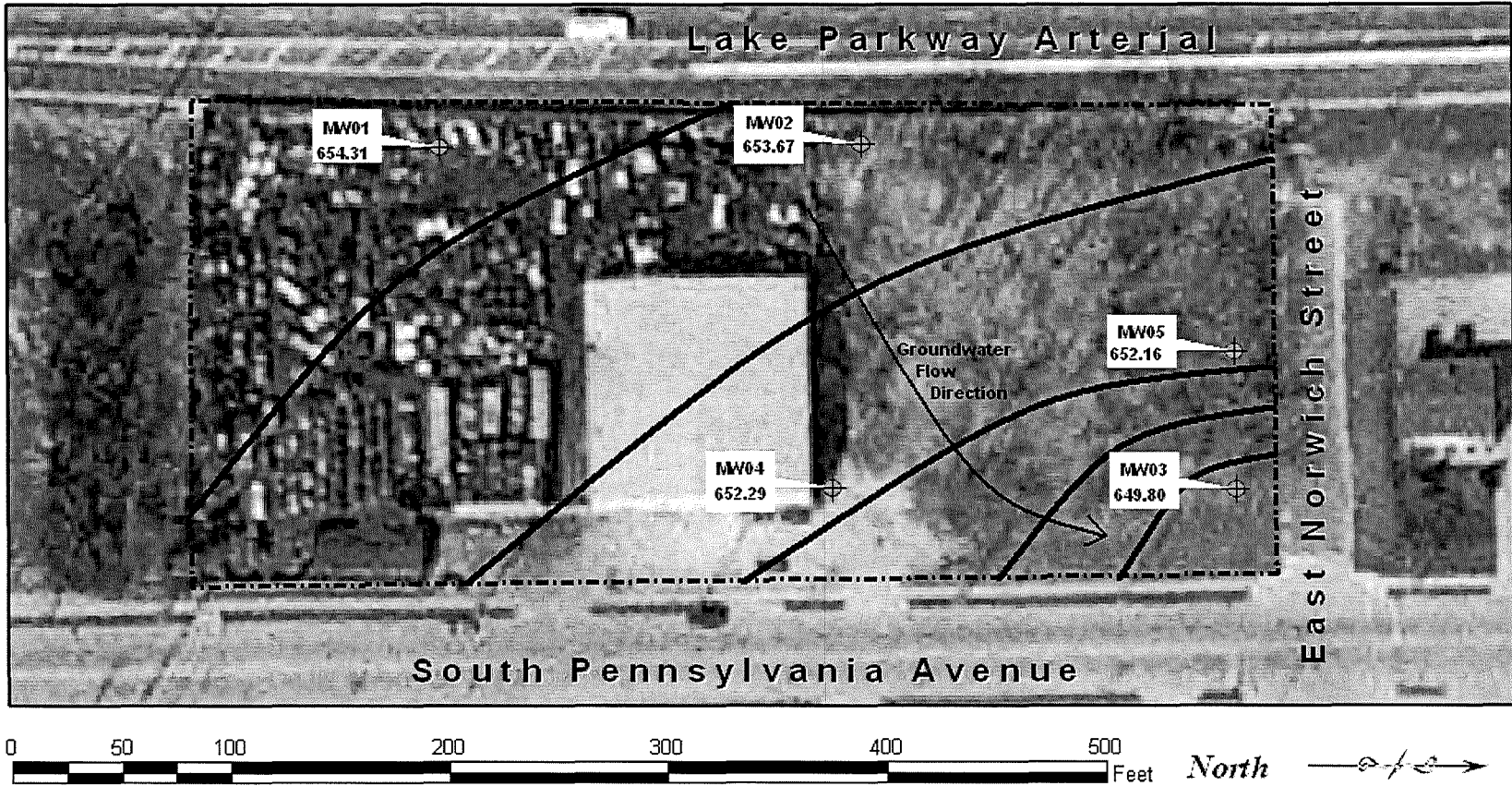
### 5.1 GROUNDWATER ANALYTICAL RESULTS

This section documents the various groundwater samples collected from the site. A summary of water level measurements is provided in Table 2. Groundwater flow direction is presented in Figure 3. The remainder of this section documents contaminants detected and their concentrations.

For the investigation conducted at the St. Francis Auto Wrecker's site, five wells (MW01, MW02, MW03, MW04 and MW05) which had been previously installed at the site by Badger State Drilling on July 16 and 17, 2001 were utilized for groundwater sample collection. The monitor wells were purged on October 14, 2003. The monitor wells were sampled on October 15, 2003. Groundwater samples were collected from all five (5) monitor wells. See Figure 3 for the locations of sampled groundwater monitor wells. The depth of the monitor wells ranges from 19.60 to 27.00 feet below ground surface. The depth to groundwater varies from 15.15 to 22.20 feet below ground surface, and the estimated flow direction is to the northeast. Regional groundwater flow is expected to be in an easterly direction towards Lake Michigan. The monitor wells are constructed of 2-inch diameter Schedule 40 poly vinyl chloride (PVC). The screened intervals of the monitor wells ranged from 9.6 to 14.6 feet.

**TABLE 2**  
**Water Level Measurements and Historic Monitor Well Survey Data**  
**October 15, 2003**

Monitor Well	Top of Casing Elevation (ft) *(from Ref. #5, MWH)	Depth to Water (ft)	Depth to Bottom (ft)	GW Elevation (ft)
MW01	676.51	22.20	27.00	654.31
MW02	675.17	21.50	25.40	653.67
MW03	664.95	15.15	19.60	649.80
MW04	672.27	19.98	22.40	652.29
MW05	671.74	19.58	26.77	652.16



**FIGURE 3**  
Groundwater Elevation Map

**Saint Francis Auto Wreckers Site**  
**4043 South Pennsylvania Avenue**  
**Milwaukee County**  
**Saint Francis, Wisconsin**

Map Prepared by Andrew Boettcher  
 Wisconsin Department of Natural Resources  
 2300 N Dr. Martin Luther King Jr. Drive  
 Milwaukee, WI 53212-0436

**Legend**

- Monitoring Well Locations (with well number)
- Groundwater Contour Lines
- Property Boundary (approximate)

All five monitor wells are located on the site. Based on the groundwater elevations, the locations of the wells and the contaminant concentrations, MW02 was chosen as the background well.

Table 3 shows the groundwater contaminant concentrations that were found to either exceed three times the background concentrations in MW02 or if there was no detect in MW02 by a factor of at least five or more above the CRQL. Based on the data, MW01, MW03, MW04 and MW05 each have at least one compound with a contaminant concentration that is at least three times or more above the background concentration or at least five times or more above the CRQL. The compounds found at these elevated levels were all VOCs. Although there were detections of inorganic analytes, none were greater than three times background or five times greater than the CRQL. There were no detects of Pesticides, PCBs or SVOCs in groundwater.

**TABLE 3**  
**GROUNDWATER CONTAMINANTS  $\geq$  3 TIMES BACKGROUND OR  $\geq$  5 TIMES CRQL**

Compound	3 X Bkgrd or 5 x CRQL(*)	WDNR ES	MW02 (Bkgrd)		MW01		MW03		MW04		MW05	
			Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Vinyl Chloride	1.4	0.2	0.28	<i>J</i>			<u>27</u>					
Chloroethane	2.5	400	0.50	<i>U</i>			7.9					
Acetone	11.5	1000	2.3	<i>J</i>							39	<i>J</i>
Methyl tert-Butyl Ether	1.71	60	0.57		5.7				2.8			
1,1-Dichloroethane	1.59	850	0.53				8.0					
Cis-1,2-Dichloroethene	2.5	70	0.50	<i>U</i>			16					
Benzene	2.1	5	0.70		3.2		2.3				<u>18</u>	<i>J</i>
Methylcyclohexane	2.5	NS	0.50	<i>U</i>							3.8	<i>J</i>
Chlorobenzene	2.5	NS	0.50	<i>U</i>			4.1	<i>J</i>				
Isopropylbenzene	2.5	NS	0.50	<i>U</i>							22	<i>J</i>

All concentrations are listed in micrograms per liter (ug/l)

Underlined results exceed the WDNR Enforcement Standard (ES)

Flag Definitions:

*J* – The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

*U* – The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

## 5.2 Surface Soils Analytical Results:

Ten surface soil samples were collected from on-site and five surface soil samples were collected from off-site on October 14 and 15, 2003. The on-site samples were collected to determine whether contaminants that were spilled or disposed on the St. Francis Auto Wrecker's site have contaminated the surface soils at the site. The off-site samples (SF01-SF05) were collected to determine the presence and concentrations of contaminants (if any were present in the general area) that would not have been caused by any spills or disposal at the St. Francis Auto Wrecker's site. The locations of the off-site surface soil sample locations ranged from approximately 35 feet to 650 feet from the site. The locations of the on-site surface soil samples are illustrated on Figure 4. The locations of the off-site surface soil samples are illustrated on Figure 5. All surface soil samples were collected with a decontaminated hand trowel from approximately zero to six inches below the ground surface. Photographs of the sample locations are located in Appendix D.

Soil contaminant concentrations in the ten on-site surface soil samples were compared to the concentrations in the potential background samples. Table 4 shows the surface soil contaminant concentrations that were found to either equal or exceed three times the background concentrations in the off-site surface soil samples. Also displayed are soil contaminant concentrations that equal or exceed five times the CRQL, if there was no detect in any of the off-site surface soil samples. Based on the data, SF06, SF07, SF08, SF09, SF11, SF12, SF13, SF14 and SF15 each have at least one compound with a contaminant concentration that is three times or more above the background concentration or five times or more above the CRQL. One or more compound from each of the analyte groups (VOCs, Inorganic Compounds, Pesticides, PCBs or SVOCs) was detected in at least one location.

Lead was detected at three times or more above the background sample concentration (105.3 ppm) in nine of the ten on-site surface soil samples. The highest level of lead detected was 2300 ppm in sample SF13. PCBs were detected above the five times CRQL background concentration (205 ppm) in five of the ten on-site surface soil samples. The highest level of PCBs (Aroclor-1260) detected was 1300 ppm in sample SF11.

**TABLE 4**  
**(Part 1 of 2)**  
**SURFACE SOIL CONTAMINANTS  $\geq$  3 TIMES BACKGROUND OR  $\geq$  5 TIMES CRQL**

ANALYTE	3 X Bkgrd or 5 X CRQL (*)	SF-06		SF-07		SF-08		SF-09		SF-11	
		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ARSENIC	18										
BARIUM	202.2									875	
CADMIUM	* 6									100	
CHROMIUM	62.1	139	J			142	J				
COPPER	76.8	403	J	150	J	4090	J	687	J	2620	J
IRON	43800	53100				75200					
LEAD	105.3	1400		271		432		192		860	
MANGANESE	1914								J	4200	J
MERCURY	* 0.6	1.8								20.1	
NICKEL	53.1	151				151		53.3		363	
SILVER	* 12.5					3.2	J+			13.1	
ZINC	324	656				1060		684		5950	
CYANIDE	* 3.15										
ACETONE	* 65							110			
PHENOL	* 2000									16000	
2-METHYLPHENOL	* 2000									27000	
4-METHYLPHENOL	* 2000									61000	
2,4-DIMETHYLPHENOL	* 2000									23000	
PENTACHLOROPHENOL	* 5000									7400	J
DI-N-BUTYLPHTHALATE	* 2000									2000	J
BUTYLBENZYLPHTHALATE	* 2000										
BIS(2-ETHYLHEXYL)PHTHALATE	450									2200	J
BETA-BHC	* 10.5							12	J		
ENDRIN ALDEHYDE	* 20.5					28	J			34	J
ALPHA-CHLORDANE	* 10.5										
GAMMA-CHLORDANE	6.9					15	J			7.1	J
AROCLOR-1254	* 205					350					
AROCLOR-1260	* 205					890				1300	

All concentrations are listed in micrograms per kilogram (ug/kg)



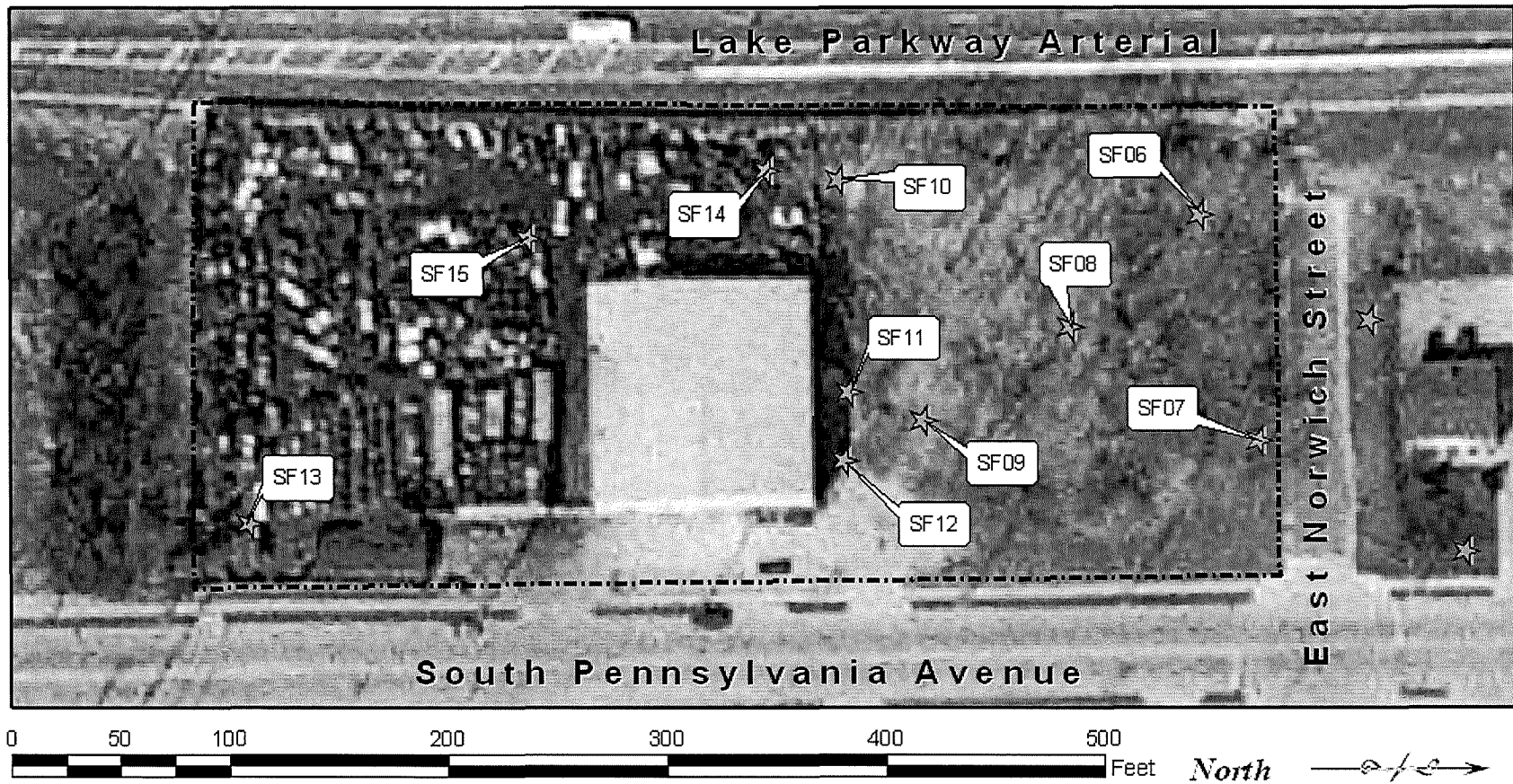
**TABLE 4**  
**(Part 2 of 2)**  
**SURFACE SOIL CONTAMINANTS  $\geq$  3 TIMES BACKGROUND OR  $\geq$  5 TIMES CRQL**

ANALYTE	3 X Bkgrd or 5 X CRQL (*)	SF -12		SF-13		SF-14		SF-15	
		Result	Flag	Result	Flag	Result	Flag	Result	Flag
ARSENIC	18								
BARIUM	202.2			501		254		475	
CADMIUM	* 6	13.9		29.7		22.1		49.0	
CHROMIUM	62.1					65.9	J		
COPPER	76.8	436	J	368	J	1360	J	1890	J
IRON	43800			72400		82500		62100	
LEAD	105.3	385		2310		1060		1460	
MANGANESE	1914							7870	J
MERCURY	* 0.6	1.1							
NICKEL	53.1					168		296	
SILVER	* 12.5							25.2	
ZINC	324	1120		1650		2230		7500	
CYANIDE	* 3.15								
ACETONE	* 65								
PHENOL	* 2000	3700	J					2700	J
2-METHYLPHENOL	* 2000	8600	J					4900	J
4-METHYLPHENOL	* 2000	18000						11000	J
2,4-DIMETHYLPHENOL	* 2000	6600	J					3600	J
PENTACHLOROPHENOL	* 5000								
DI-N-BUTYLPHthalate	* 2000								
BUTYLBENZYLPHthalate	* 2000					7000	J		
BIS(2-ETHYLHEXYL)PHthalate	450					3700	J	5200	J
BETA-BHC	* 10.5								
ENDRIN ALDEHYDE	* 20.5								
ALPHA-CHLORDANE	* 10.5			6.6	J				
GAMMA-CHLORDANE	6.9							18	J
AROCLOR-1254	* 205					270	J		
AROCLOR-1260	* 205	370						1100	

All concentrations are listed in micrograms per kilogram (ug/kg)

Flag Definitions: J – The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

**Figure 4**  
**On- Site Soil Sample Location Map**



14

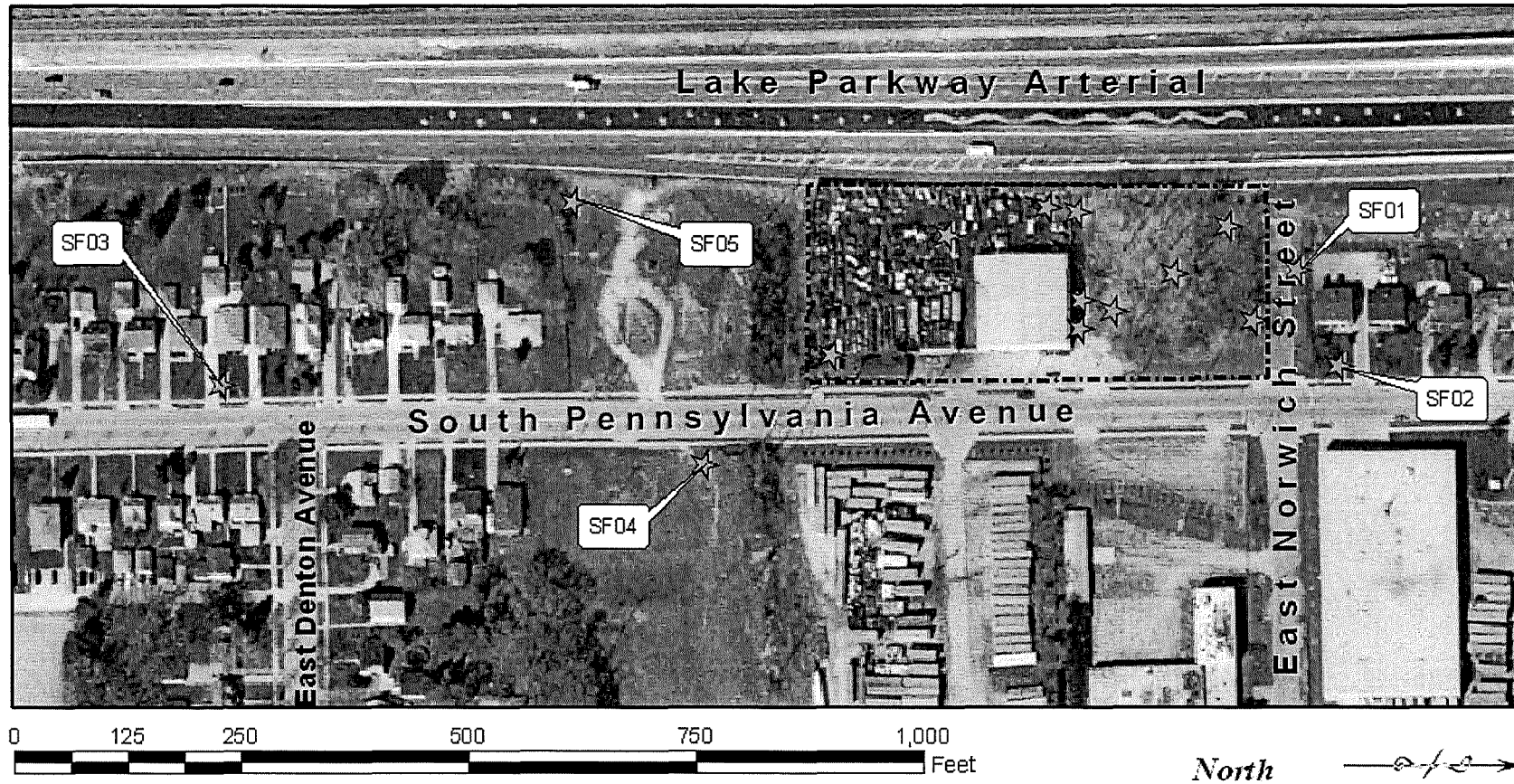
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**4043 South Pennsylvania Avenue**  
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Map Prepared by Andrew Boettcher  
 Wisconsin Department of Natural Resources  
 2300 N Dr. Martin Luther King Jr. Drive  
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**Legend**

- ★ Soil Sample Locations (with sample number)
- - - - Property Boundary (approximate)

**Figure 5**  
**Off- Site Soil Sample Location Map**



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**Saint Francis Auto Wreckers Site**  
**4043 South Pennsylvania Avenue**  
**Milwaukee County**  
**Saint Francis, Wisconsin**

Map Prepared by Andrew Boettcher  
 Wisconsin Department of Natural Resources  
 2300 N Dr. Martin Luther King Jr. Drive  
 Milwaukee, WI 53212-0436

**Legend**

- ★ Soil Sample Locations (with sample number)
- - - Property Boundary (approximate)

## 6.0 DISCUSSION OF MIGRATION PATHWAYS

This section discusses data and information that applies to potential migration pathways and receptors of TCL and/or TAL contaminants that may be attributable to spills or waste disposal at the St. Francis Auto Wrecker's site. The migration pathways of concern discussed are groundwater and soil exposure.

### 6.1 GROUNDWATER

#### Regional Geology

The site is underlain by soils of the Ozaukee-Morley-Mequon Association. These soils consist of silt loam, which are well drained to somewhat poorly drained with subsoil of silty clay loam and silty clay. Beneath the upper soils are glacial till and lacustrine deposits of the Oak Creek formation. The Oak Creek till consists of fine-grained silty clay with sand and gravel deposits sometimes present. (Ref 6) Based on well driller's logs of wells in the vicinity of the site, the glacial till ranges from 70 to 120 feet thick. The sand and gravel, when present, is often saturated and has in some instances, been used as a source of drinking water. Beneath the glacial till is Silurian Dolomite, which is a fairly high yield stratigraphic unit. This aquifer has historically been used as a source of drinking water. (Ref 1) The drinking water supply in the area is supplied by a surface water municipal water supply system taken from Lake Michigan. However, groundwater may be the source of water supply in some parts of the city.

#### Site Specific Geology

Based on soil boring logs, the site is underlain by various fill materials, which are approximately two to twelve feet thick. The fill material consists of sands, gravel, paper, cinders, concrete, foundry sands, plastics, wood chips, rubber, brick and metal fragments. (Ref 1, 2 & 5) In the salvage yard area, the fill is generally covered at the surface with a 1-foot thick layer of gravel, silt or sand. In the vacant parcel, the fill material is covered in some places with a thin veneer of topsoil and vegetation. (Ref 5) Beneath the fill material, native soil consists of stratified sand and gravel, underlain by low-permeability silt and clay. (Ref 2) Depth to groundwater ranges from 15 to 22 feet below the ground surface. The groundwater flow direction is toward the northeast.

#### Receptors:

The City of St. Francis obtains its municipal water supply from the City of Milwaukee, which utilizes Lake Michigan as its water source. Based on a well driller's logs from WDNR and the Wisconsin Geologic and Natural History Survey files, 29 private wells lie within a 4-mile radius of the site. (Ref 1) It is unknown if any of these private wells are still in use. Private drinking water wells were not sampled in connection with this Site Reassessment Report. However, monitor wells that had previously been installed on the St. Francis Auto Wrecker's site were sampled during this reassessment.

Results of groundwater sampling indicated that the following contaminants were detected at either three or more times above the potential background sample concentrations or five or more times above the CRQL: vinyl chloride (27 ug/l in MW03); chloroethane (7.9 ug/l in MW03); acetone (39 ug/l in MW05); methyl tert-butyl ether (5.7 ug/l in MW01 and 2.8 ug/l in MW04); 1,1- dichloroethane (8.0 ug/l in MW03); cis 1,2- dichloroethene (16 ug/l in MW03); benzene (3.2 ug/l in MW01, 2.3 ug/l in MW03 and 18 ug/l in MW05); methylcyclohexane (3.8 ug/l in MW05); chlorobenzene (4.1 ug/l in MW03); and isopropylbenzene (22 ug/l in MW05). Table 3 provides the complete list of the contaminants. The locations of the monitor wells are provided in Figure 3.

**Table 5**

<b>St. Francis Auto Wrecker's Site Population Estimates within Four Miles</b>	
<b>Distance from Site (miles)</b>	<b>Population (persons)</b>
0-0.25	619
0.25-0.5	2760
0.5-1	11292
1-2	32386
2-3	36178
3-4	58999

## **6.2 SOIL EXPOSURE**

At least one compound from each of the analyte groups (VOCs, Inorganic Compounds, Pesticides, PCBs or SVOCs) was detected in at least one surface sample location at either three or more times above the background sample concentrations or five or more times above the CRQL. The compounds detected at these elevated levels are listed in Table 4. The summary of all soil analytical is Appendix A.

The number of workers on the site is approximately 4-9 persons. The nearest residential property is located within 75 feet of the site. A total of approximately 619 persons live within 1/4 mile radius of the site. Approximately 11292 people live within one-mile radius of the site. The population within four miles of the site is 58999 people. No schools or day care facilities are found within 200 feet of the property. As site access is only partially restricted, there is the potential for the public to come into contact with contaminants at the site. Also, as the capping of the salvage yard portion of the site is not uniform or complete, there is potential for employees and visitors to come into contact with contaminants at the site.

## 7.0 SUMMARY AND CONCLUSIONS:

Past uses of the St. Francis Auto Wrecker's site include landfilling activities and operation of an auto salvage yard. The southern portion of the site is an active auto salvage yard. Previous investigations at the site discovered the presence of PCBs, VOCs, SVOCs and metals in soil and groundwater. During the remediation of the Lake Arterial Parkway project in 1997, additional drums and waste are known to be present in the subsurface along the western side of the site. The extent of the drums and waste remains unknown.

The compound vinyl chloride, chloroethane, acetone, methyl tert-butyl ether, 1,1-dichloroethane, cis-1,2-dichloroethene, benzene, methylcyclohexane, chlorobenzene and isopropylbenzene were found at concentrations three times or more above background and appear to be attributable to the site. Due to the lack of receptors in the immediate area, it appears there is not a completed groundwater pathway.

A total of 28 contaminants were found in surface soils (depths between zero and two feet) with a concentration that is either three times or more above the background concentration or five times or more above the CRQL. These contaminants consisted of VOCs, SVOCs, Pesticides, PCBs and inorganic compounds. There is potential for employees and the public to come into contact with the contaminants present in surface and near-surface soils.

Access to the southern portion of the site is restricted by fencing and buildings. Access to the northern portion of the site is only partially restricted, with fencing present along the south and west sides. During a recent trip to the site on June 4, 2004, it was noted that the site owner appears to be constructing a fence along the northern and eastern sides of the vacant parcel. The fence would restrict access to the northern portion of the site. Recent site photos are attached in Appendix E. Fencing would be an appropriate means of temporarily restricting the public from direct contact with contaminants. On-site workers, however, may still be subject to exposure to contaminants in surface soil and from airborne soil/dust particles.

Although the surface water pathway was not formally evaluated for this reassessment, it was considered a potential pathway because of the known existence of a prairie crayfish within 1/4 mile of the site. This species is listed as a "Special Concern" by the National Heritage Inventory but is not an endangered species. Storm water from the site enters a storm sewer located along the eastern edge of the site. The storm sewer eventually outfalls to Lake Michigan, approximately one mile east of the site.

## 8.0 REFERENCES

1. WDNR, "Preliminary Assessment Narrative – St. Francis Auto Wreckers", August 2, 1993
2. RMT, Inc., "Workplan for the Management of Impacted Fill Materials – St. Francis Auto Wreckers Easement – Lake Parkway Project", April 1997 (available in WDNR project file #241469250).
3. RMT, Inc., "Remediation Documentation Report for the WISDOT – AutoWreckers Property", March 1998 (available in WDNR project file #241469250).
4. Montgomery Watson Harza, "Soil Investigation Report – St. Francis Auto Wreckers, Inc.", April 2000 (available in WDNR project file #241469250).
5. Montgomery Watson Harza, "Groundwater and Supplemental Soils Investigation Report – St. Francis Auto Wreckers, Inc.", December 2001 (available in WDNR project file #241469250).
6. HNTB, "Phase III Environmental Assessment – St. Francis Auto Wreckers Property", November 13, 1991
7. 4-Mile Radius Map – Attached as Appendix C

# APPENDIX A

## Data Tables

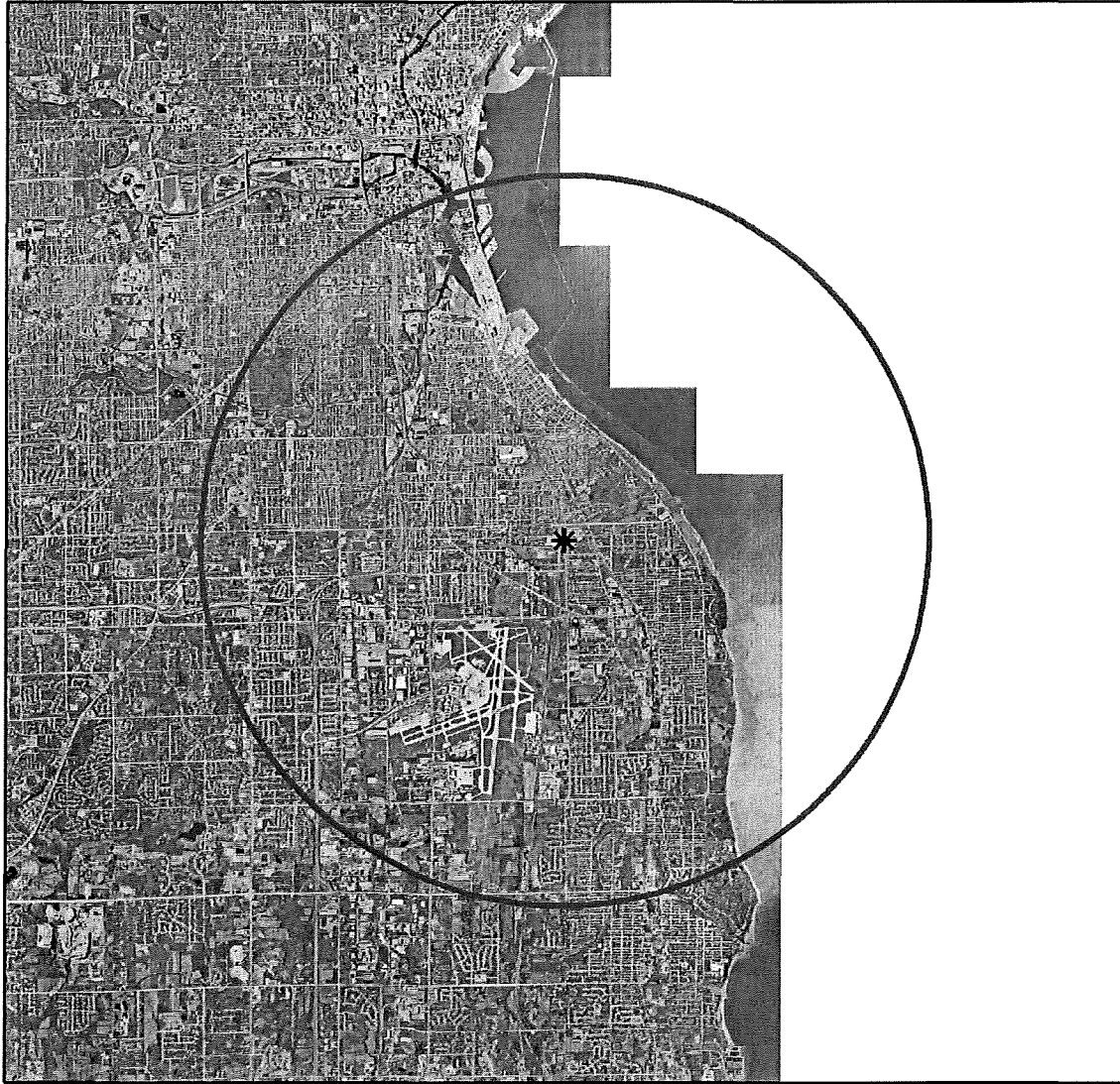


## **APPENDIX B**

### **Data Summary Narrative With Analytical Data**

# APPENDIX C

## St. Francis Auto Wreckers Four Mile Radius Map

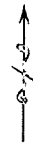


**Saint Francis Auto Wreckers Site**  
4043 South Pennsylvania Avenue  
Milwaukee County  
Saint Francis, Wisconsin

Map Prepared by Andrew Boettcher  
Wisconsin Department of Natural Resources  
2300 N Dr. Martin Luther King Jr. Drive  
Milwaukee, WI 53212-0436

### Legend

\* Site Location



North

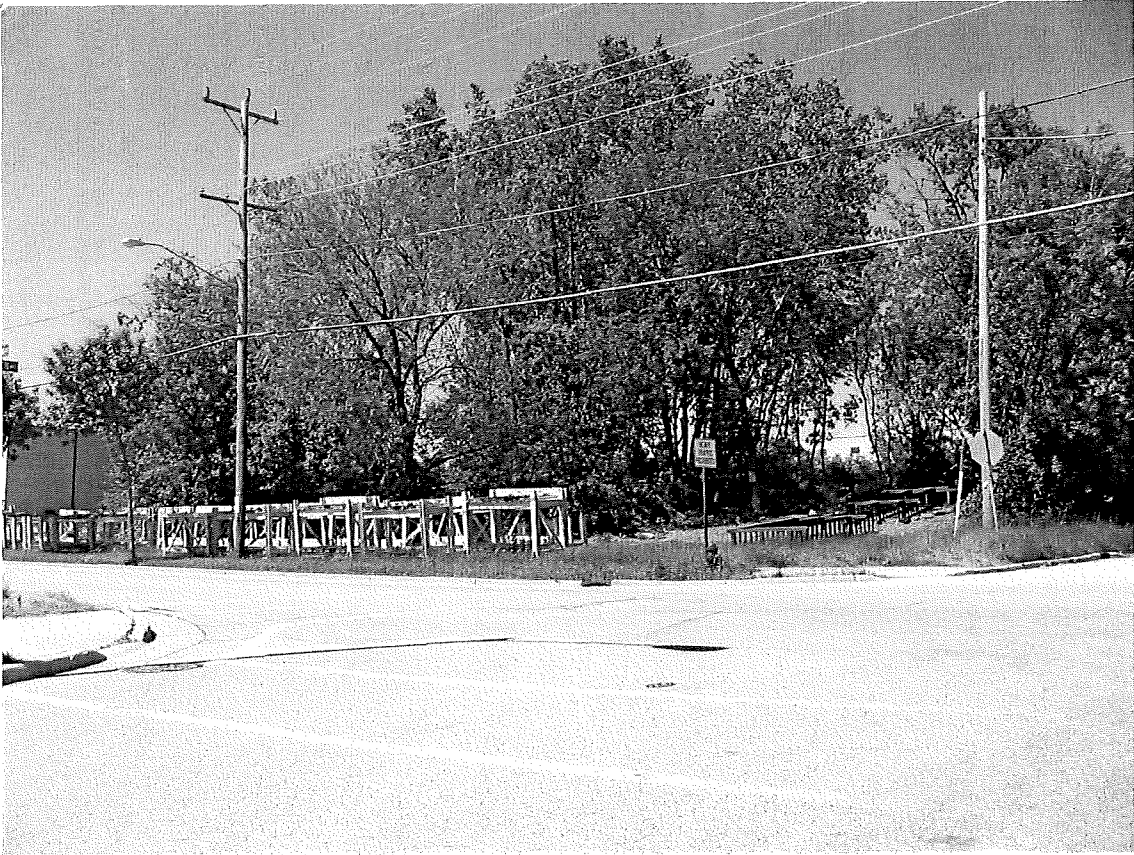
## **APPENDIX D**

### **Sample Location Photos (October 14 & 15, 2003)**

## **APPENDIX E**

### **Updated Site Photos**

**(June 4, 2004)**



View of Site facing Southwest



View of Site facing South