

**GENERAL INSTRUCTIONS, PURPOSE AND APPLICABILITY OF THIS FORM:** Completion of this form is required under s. NR 724.13(3), Wis. Adm. Code. A narrative report or letter containing the equivalent information required in this form may be submitted in lieu of the actual form. Failure to submit this form as required is a violation of s. NR 724.13(3), Wis. Adm. Code, and is subject to the penalties in s. 292.99, Wis. Stats. This form must be submitted every six months for soil or groundwater remediation projects that report operation and maintenance progress in accordance with s. NR 724.13(3), Wis. Adm. Code.

Note: Long-term monitoring results submitted in accordance with s. NR 724.17(3), Wis. Adm. Code are required to be submitted within 10 business days of receiving sampling results and are not required to be submitted using this form. However, portions of this form require monitoring data summary information that may be based on information previously submitted in accordance with s. NR 724.17(3), Wis. Adm. Code.

Note: Responsible parties should check with the State Project Manager assigned to the site to determine if this form is required to be submitted at sites responded to under the Federal Comprehensive Environmental Response and Compensation Act (commonly known as Superfund) or an equivalent State lead Superfund response.

Note: Responsible parties should check with the State Project Manager assigned to the site to determine if any of the information required in this form may be omitted or changed and obtain prior written approval for any omissions or changes.

Submittal of this form is not a substitute for reporting required by Department programs such as Waste Water or Air Management. Personally identifiable information on this form is not intended to be used for any other purpose than tracking progress of the remediation by the Bureau for Remediation and Redevelopment.

Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records Law (ss. 19.31-19.39, Wis. Stats.). Unless otherwise noted, all citations refer to Wisconsin Administrative Code.

Note: There is a separate semi-annual report required under s. NR 700.11(1), Wis. Adm. Code. Reporting under that provision is through an internet-based form:

<http://dnr.wi.gov/topic/Brownfields/documents/regs/NR700progreport.pdf>

**Section GI - General Site Information**

**A. General Information**

1. Site name

Martino's Master Dry Cleaner

2. Reporting period from: 01/01/2018 To: 06/30/2018 Days in period: 181

3. Regulatory agency (enter DNR, DATCP and/or other) 4. BRRTS ID No. (2 digit program-2 digit county-6 digit site specific)  
 DNR 02-30-552186

5. Site location

Region	County	Address					
Southeast Region	Kenosha	3917 52nd Street					
Municipality name	<input checked="" type="radio"/> City <input type="radio"/> Town <input type="radio"/> Village	Township	Range	<input checked="" type="radio"/> E <input type="radio"/> W	Section	¼	¼ ¼
Kenosha		02 N	22		35	NE	SE

6. Responsible party	7. Consultant		
Name	<input type="checkbox"/> Select if the following information has changed since the last submittal		
Martino's Master Drycleaners	Company name		
Mailing address	EnviroForensics, LLC		
7513 41st Ave, Kenosha, WI 53142	Mailing address		Phone number
Phone number	N16 W23390 Stone Ridge Drive Suite G		(262) 290-4001
(262) 694-7858	Waukesha WI 53188		

8. Contaminants  
 Tetrachloroethene

9. Soil types (USCS or USDA)  
 SM, CL

10. Hydraulic conductivity(cm/sec): 11. Average linear velocity of groundwater (ft/yr)

12. If soil is treated ex situ, is the treatment location off site?  Yes  No

If yes, give location: Region County

Municipality name	<input type="radio"/> City <input type="radio"/> Town <input type="radio"/> Village	Township	Range	<input type="radio"/> E <input type="radio"/> W	Section	¼	¼ ¼
		N					

Site name: Martino's Master Dry Cleaner

Reporting period from: 01/01/2018 To: 06/30/2018

Days in period: 181

## Remediation Site Operation, Maintenance, Monitoring & Optimization Report

Form 4400-194 (R 11/14)

Page 2 of 28

### B. Remediation Method

Only submit sections that apply to an individual site. Check all that apply:

- Groundwater extraction (submit a completed Section GW-1).
- Free product recovery (submit a completed Section GW-1).
- In situ air sparging (submit a completed Section GW-2).
- Groundwater natural attenuation (submit a completed Section GW-3).
- Other groundwater remediation method (submit a completed Section GW-4).
- Soil venting (including soil vapor extraction building venting and bioventing submit a completed Section IS-1).
- Soil natural attenuation (submit a completed Section IS-2).
- Other in situ soil remediation method (submit a completed Section IS-3).
- Biopiles (submit a completed Section ES-1).
- Landspreading/thinspreading of petroleum contaminated soil (submit a completed Section ES-2).
- Other ex situ remediation method (submit a completed Section ES-3).
- Site is a landfill (submit a completed Section LF-1).

### C. General Effectiveness Evaluation for All Active Systems

If the remediation is active (not natural attenuation), complete this subsection.

1. Is the system operating at design rates and specifications?  Yes  No

If the answer is no, explain whether or not modifications are necessary to achieve the goal that was previously established in design.

2. Are modifications to the system warranted to improve effectiveness  Yes  No

If yes, explain:

3. Is natural attenuation an effective low cost option at this time?  Yes  No

4. Is closure sampling warranted at this time?  Yes  No

5. Are there any modifications that can be made to the remediation to improve cost effectiveness?  Yes  No

If yes, explain:

### D. Economic and Cost Data to Date

1. Total investigation cost: \$397,000.00

2. Implementation costs (design, capital and installation costs, excluding investigation costs): \$288,400.00

3. Total costs during the previous reporting period: \_\_\_\_\_

4. Total costs during this reporting period: \$12,200.00

5. Total anticipated costs for the next reporting period: \$11,000.00

6. Are any unusual or one-time costs listed in the reporting periods covered by D.3., D.4. or D.5. above?  Yes  No

If yes, explain:

Note: D.2 Implementation costs include approximately \$191,000 for interior and exterior remedial excavation activities conducted November 2016 - May 2017.

7. If closure is anticipated within 12 months, estimated costs for project closeout: \_\_\_\_\_

Site name: Martino's Master Dry Cleaner

Reporting period from: 01/01/2018 To: 06/30/2018

Days in period: 181

# Remediation Site Operation, Maintenance, Monitoring & Optimization Report

Form 4400-194 (R 11/14)

Page 3 of 28

## E. Name(s), Signature(s) and Date of Person(s) Submitting Form

Legibly print name, date and sign. Only persons qualified to submit reports under ch. NR 712 Wis. Adm. Code are to sign this form for sites with any ongoing active remediation, monitoring or an investigation. Other persons may sign this form for sites with no response activities during the six month reporting period.


### Registered Professional Engineers:

I hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Print name Andrew D. Horwath	Title Director of Engineering and Remediation Services
Signature	Date 7/26/2018

### Hydrogeologists:

I hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03(1), Wis. Adm. Code, and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Print name Brian Kappen	Title Project Manager
Signature 	Date 7/26/2018

### Scientists:

I hereby certify that I am a scientist as that term is defined in s. NR 712.03(3), Wis. Adm. Code, and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Print name	Title
Signature	Date

### Other Persons:

Print name	Title
Signature	Date

### Professional Seal(s), if applicable:



Site name: Martino's Master Dry Cleaner

Reporting period from: 01/01/2018 To: 06/30/2018

Days in period: 181

## Remediation Site Operation, Maintenance, Monitoring & Optimization Report

Form 4400-194 (R 11/14)

Page 9 of 28

### Section IS-1, Soil Venting (Including Soil Vapor Extraction, Building Venting and Bioventing)

#### A. Soil Venting Operation

**Note:** This form is not required for building vapor mitigation systems that are installed proactively to protect building occupants/users and are not considered part of ongoing active soil remediation.

1. Number of air extraction wells available and number of wells actually in use during the period: 4

2. Number of days of operation (only list the number of days the system actually operated, if unknown explain):

3. System utilization in percent (days of operation divided by reporting time period multiplied by 100). If < 80%, explain:  
39%. Unplanned shut downs from power failure resulted in 10 days of lost operation. The system was intentionally shut down on 3/6/18 due to high water. The system was evaluated briefly again on 5/9/18, but remained shut down. The adjusted system utilization (not including intentional shut downs) is 90%.

4. Average depth to groundwater: 10.2 gpm

#### B. Building Basement/Subslab Venting System Operation

1. Number of venting points available and number of points actually in use during the period:

2. Number of days of operation (only list the number of days the system actually operated, if unknown explain):

3. System utilization in percent (days of operation divided by reporting time period multiplied by 100). If < 80%, explain:

#### C. Effectiveness Evaluation

1. Average contaminant removal rate for the entire system: 0.059 pounds per day

2. Average contaminant removal rate per well or venting point: 0.015 pounds per day

3. If the average contaminant removal rate is less than one pound per day for the entire system, or if the average contaminant removal rate per well is less than one tenth of a pound per day, evaluate the following:

a. If contaminants are aerobically biodegradable and confirmation borings have not been drilled in the past year:

i. Oxygen levels in extracted air:          percent

ii. Methane levels in extracted air (ppmv) If over 10 ppmv, explain:

iii. If methane is not present above 10 ppmv and if oxygen is greater than 20 percent in extracted air, you should either:

- o Drill confirmation borings during the next reporting period, if the entire site should be considered for closure.
- o Or, perform an in situ respirometry test in a zone of high contamination. Do not perform the test in an air extraction well, use a gas probe or water table well. If a zero order rate of decay based on oxygen depletion is less than 2 mg/kg per day, then you should drill confirmation borings, if the entire site should be considered for closure. If the rate of decay is between 2 and 10 mg/kg, operate for one more reporting period before evaluating further. If the zero order rate of decay is greater than 10 mg/kg total hydrocarbons, continue operating the system in a manner than maximizes aerobic biodegradation.

b. If contaminants are not aerobically biodegradable and confirmation borings have not been recently drilled during the past year, you should drill confirmation borings during the next reporting period if the entire site should be considered for closure.

c. If soil borings were drilled during the past year and soil contamination remains above acceptable levels, explain if the system effectiveness can be increased and/or if other options need to be considered to achieve cleanup criteria.

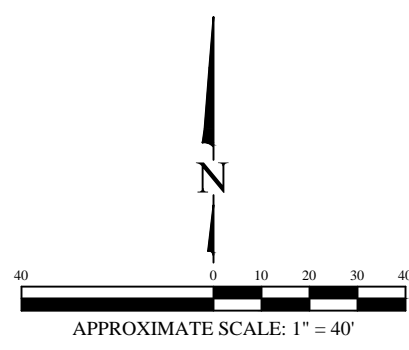
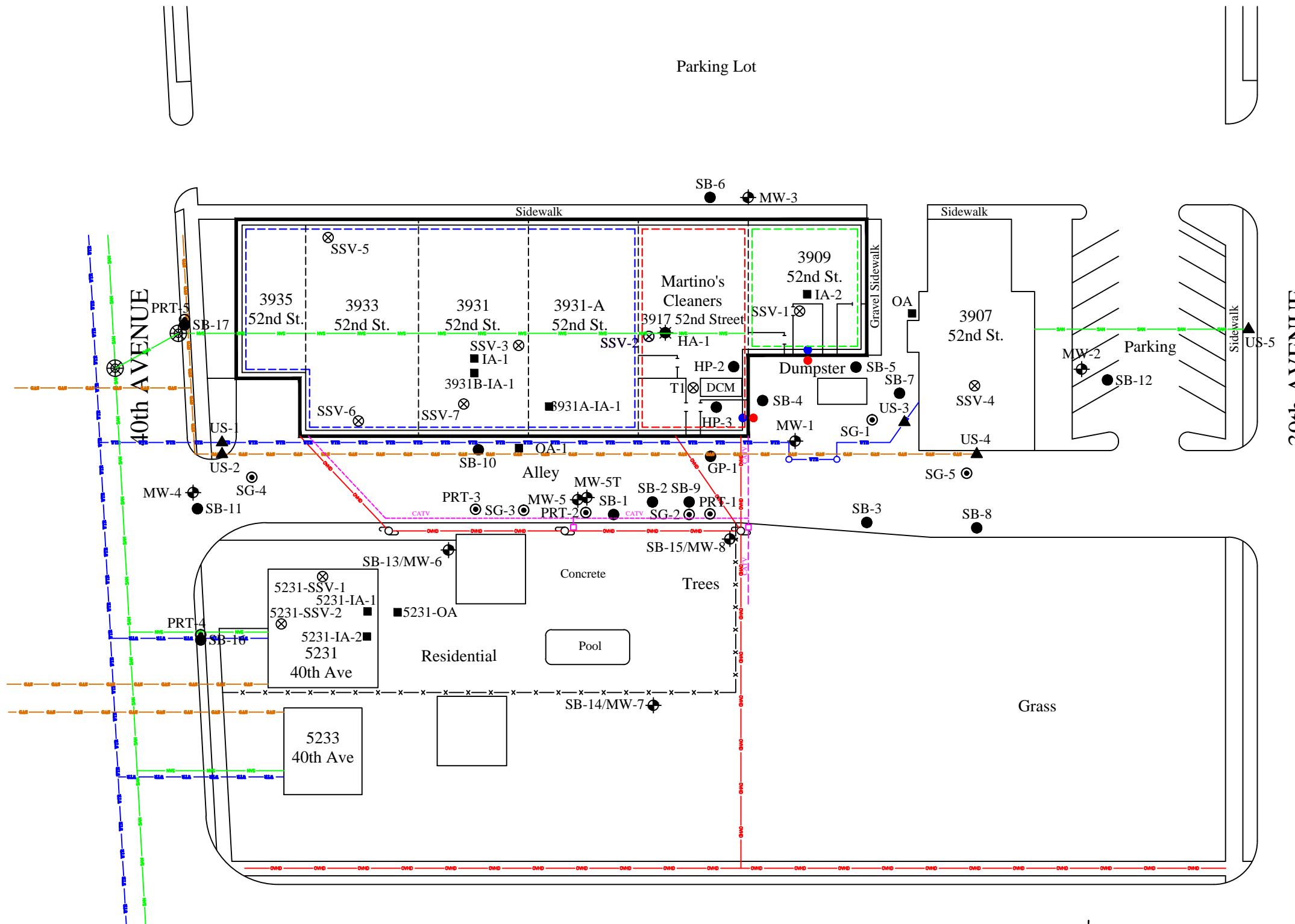
#### D. Additional Attachments

Attach the following to this form:

- Well and soil sample location map indicating all air extraction wells. If forced air injection wells are also in use, identify those wells.
- If water table monitoring wells are present at the site, a map of well locations.
- Time versus vapor phase contaminant concentration graph.
- Time versus cumulative contaminant removal graph.
- Groundwater elevations table, if water table wells are present at the site; also list screen lengths and elevations.
- Table of soil contaminant chemistry data.
- Soil gas data, if gas probes are used to monitor subsurface conditions in locations other than where air is extracted.
- System operational data table.

## Legend

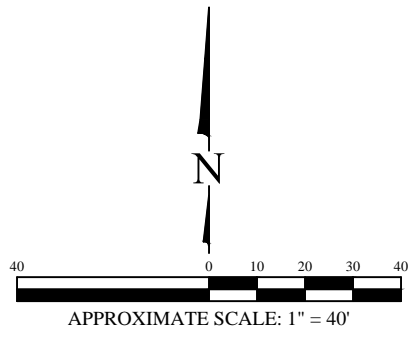
- GP-1 ● Direct-Push soil boring (Giles)
- HP-2 ● Hand-auger soil boring (Giles)
- SB-1 ● Direct-Push soil boring
- HA-1 ● Hand-auger soil boring
- MW-1 ⊕ Monitoring well
- SSV-1 ⊗ Sub-slab vapor sample location
- SG-1 ⊙ Soil gas sampling point
- US-1 ▲ Utility corridor soil boring
- T1 ⊗ Pressure test port
- PRT-1 ⊙ Soil gas sample location
- OA ■ Outdoor air sample location
- IA-1 ■ Indoor air sample location
- SSDS Extraction point
- SSDS Fan
- SSDS = Sub-Slab Depressurization System
- GAS — Underground gas utility line
- WTR — Underground water utility line
- SAN — Underground sanitary utility line
- OVD — Over head electrical utility line
- CATV — Underground cable television utility line
- Slab foundation #1
- Slab foundation #2
- Slab foundation #3
- x-x-x-x-x- Fence line



<b>SITE LAYOUT MAP</b>	
Martino's Cleaners 3917 52nd Street Kenosha, Wisconsin	
 ENVIRONMENTAL FORENSIC INVESTIGATIONS, INC. 602 N. Capitol Ave., Ste. 210 • Indianapolis, IN 46204 EnviroForensics.com	Figure <b>1</b> Project <b>6190</b>
Date: 2/12/14 Designed: EB Drawn: EB Checked: BK DWG file: 6190-0273	

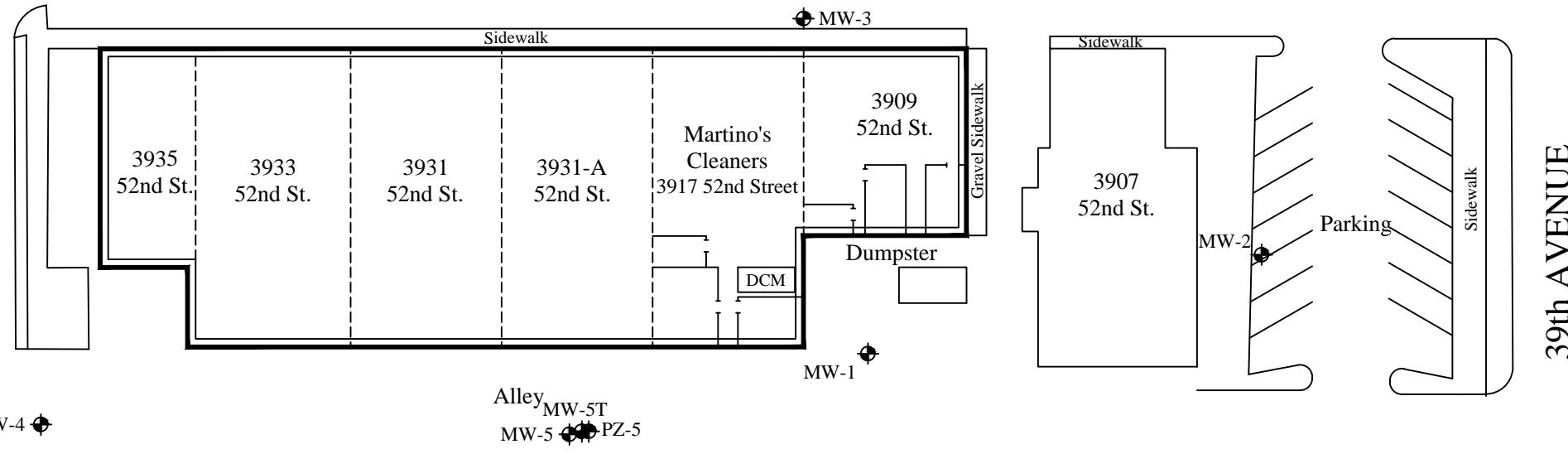
**Legend**

MW-1  Monitoring well

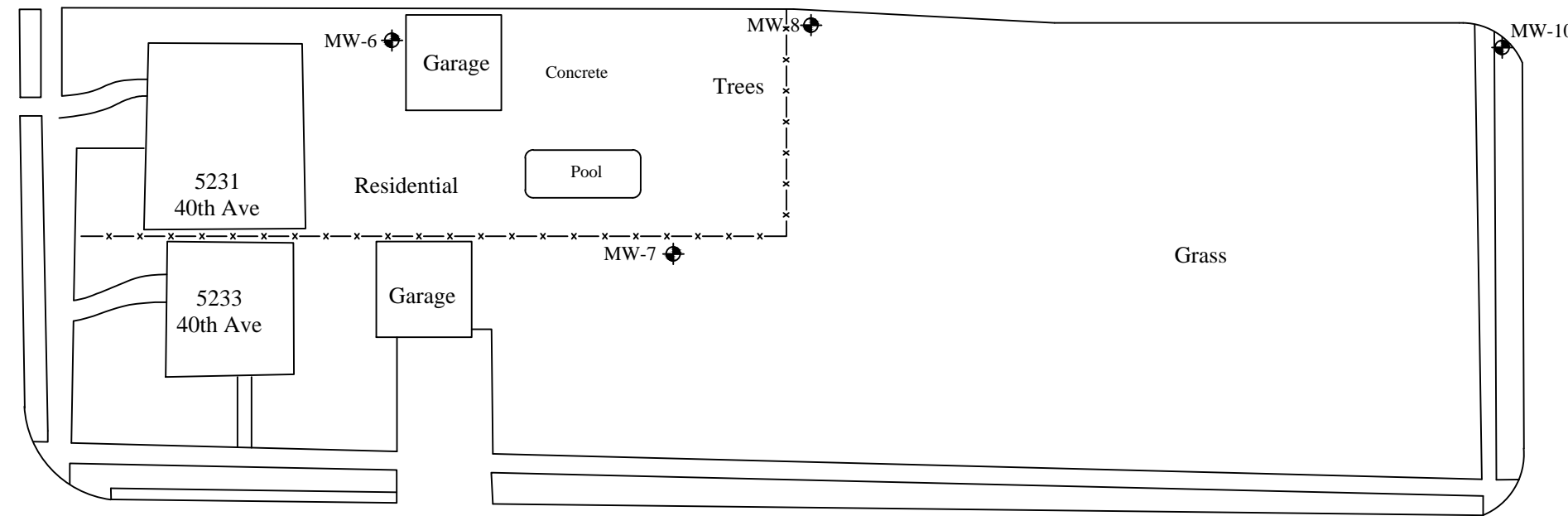


40th AVENUE

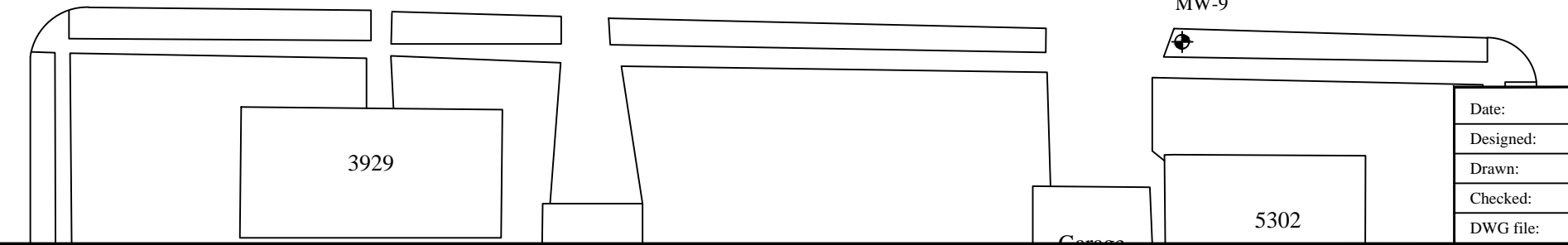
Parking Lot



39th AVENUE



53rd STREET



**MONITORING WELL LOCATION MAP**

Martino's Cleaners  
3917 52nd Street  
Kenosha, Wisconsin

Date:	4/1/16
Designed:	EB
Drawn:	EB
Checked:	KH
DWG file:	6190-0835



ENVIRONMENTAL FORENSIC INVESTIGATIONS, INC.  
602 N. Capitol Ave., Ste. 210 • Indianapolis, IN 46204  
EnviroForensics.com

Figure	4
Project	6190

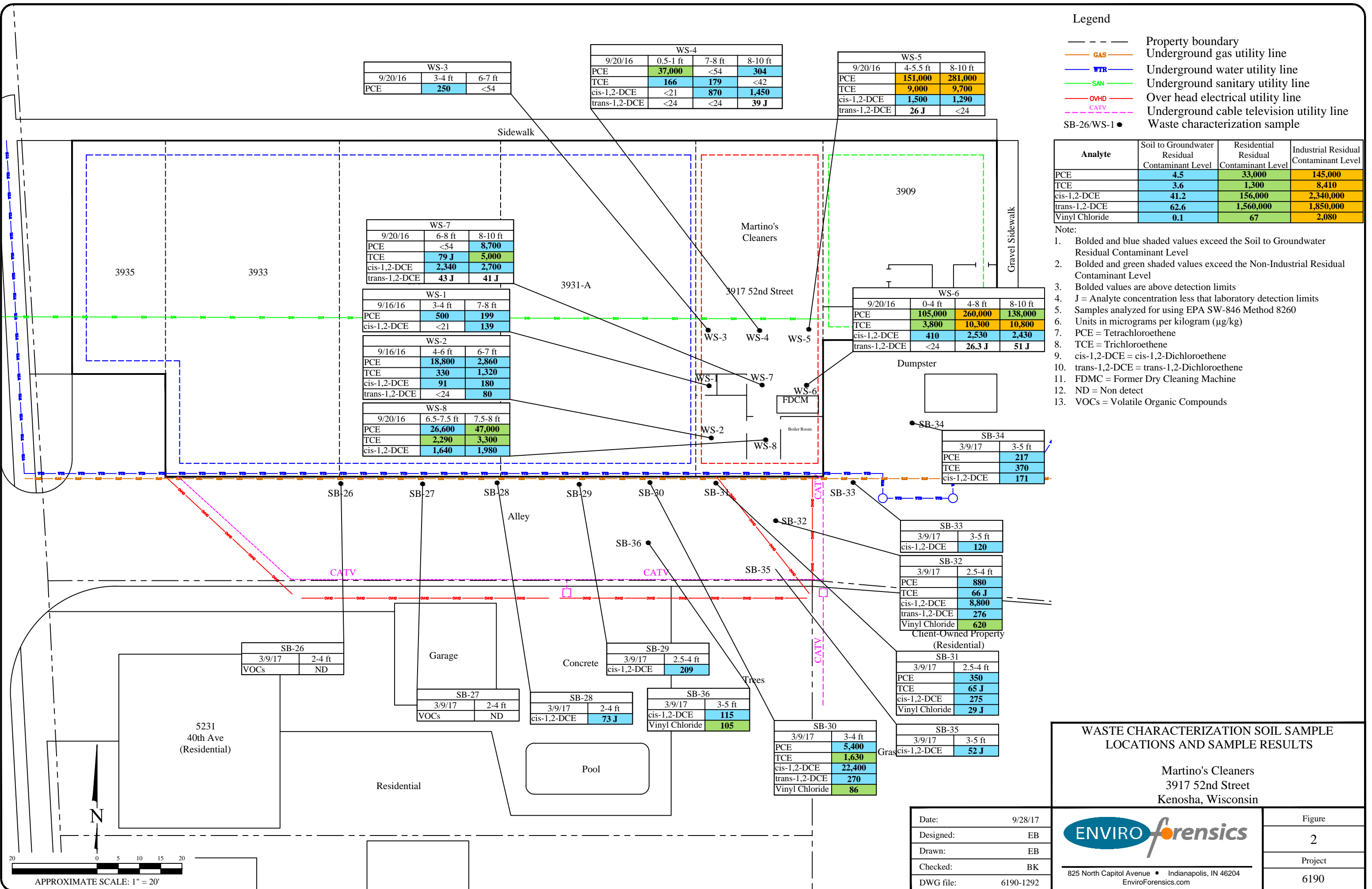
Legend

- Property boundary
- GAS Underground gas utility line
- WTR Underground water utility line
- SAN Underground sanitary utility line
- OVHD Over head electrical utility line
- CATV Underground cable television utility line
- SB-26/WS-1 Waste characterization sample

Analyte	Soil to Groundwater Residual Contaminant Level	Residential Residual Contaminant Level	Industrial Residual Contaminant Level
PCE	<b>4.5</b>	<b>33,000</b>	<b>145,000</b>
TCE	<b>3.6</b>	<b>1,300</b>	<b>8,410</b>
cis-1,2-DCE	<b>41.2</b>	<b>156,000</b>	<b>2,340,000</b>
trans-1,2-DCE	<b>62.6</b>	<b>1,560,000</b>	<b>1,850,000</b>
Vinyl Chloride	<b>0.1</b>	<b>67</b>	<b>2,080</b>

Note:

- Bolded and blue shaded values exceed the Soil to Groundwater Residual Contaminant Level
- Bolded and green shaded values exceed the Non-Industrial Residual Contaminant Level
- Bolded values are above detection limits
- J = Analyte concentration less than laboratory detection limits
- Samples analyzed for using EPA SW-846 Method 8260
- Units in micrograms per kilogram (µg/kg)
- PCE = Tetrachloroethene
- TCE = Trichloroethene
- cis-1,2-DCE = cis-1,2-Dichloroethene
- trans-1,2-DCE = trans-1,2-Dichloroethene
- FDMC = Former Dry Cleaning Machine
- ND = Non detect
- VOCs = Volatile Organic Compounds



**WASTE CHARACTERIZATION SOIL SAMPLE LOCATIONS AND SAMPLE RESULTS**

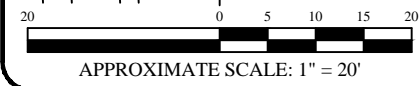
Martino's Cleaners  
3917 52nd Street  
Kenosha, Wisconsin

Date:	9/28/17
Designed:	EB
Drawn:	EB
Checked:	BK
DWG file:	6190-1292

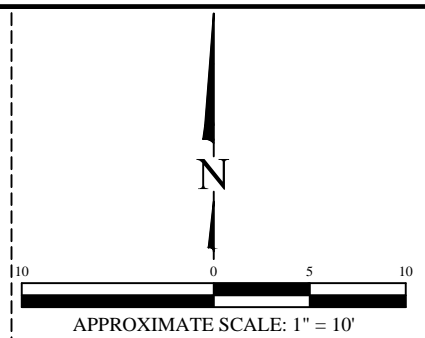
**ENVIROforensics**

825 North Capitol Avenue • Indianapolis, IN 46204  
EnviroForensics.com

Figure	2
Project	6190







3931  
52nd St.

WS-1		
11/17/16	3 ft	6 ft
cis-1,2-DCE	<b>39 J</b>	<b>93</b>

FS-1		
11/17/16	7.5 ft	
PCE	<b>22,500</b>	
TCE	<b>3,500</b>	
cis-1,2-DCE	<b>1,900</b>	
trans-1,2-DCE	<b>28.4 J</b>	

WS-2		
11/17/16	3 ft	6 ft
PCE	<b>76,000</b>	<b>34,000</b>
TCE	<b>222</b>	<b>790</b>
cis-1,2-DCE	<b>44 J</b>	<b>2,160</b>
trans-1,2-DCE	<24	<b>41 J</b>

FS-2	
11/17/16	7 ft
PCE	<b>6,300</b>
TCE	<b>3,900</b>
cis-1,2-DCE	<b>1,450</b>

WS-3		
11/17/16	3 ft	6 ft
PCE	<b>64,000</b>	<b>4,900</b>
TCE	<b>152</b>	<b>2,120</b>
cis-1,2-DCE	<b>39 J</b>	<b>1,110</b>

WS-4		
11/17/16	3 ft	6 ft
PCE	<b>38,000</b>	<b>14,500</b>
TCE	<42	<b>1,220</b>
cis-1,2-DCE	<b>27.2 J</b>	<b>2,000</b>

WS-6		
11/17/16	3 ft	6 ft
PCE	<b>69,000</b>	<b>890</b>
TCE	<b>360</b>	<42
cis-1,2-DCE	<b>40 J</b>	<b>288</b>

WS-5		
11/17/16	3 ft	6 ft
PCE	<b>16,200</b>	<b>7,900</b>
TCE	<42	<b>890</b>
cis-1,2-DCE	<21	<b>870</b>

WS-7		
11/21/16	3 ft	6 ft
PCE	<b>25,000</b>	<b>7,200</b>
TCE	<b>44 J</b>	<b>370</b>
cis-1,2-DCE	<21	<b>234</b>

INT-WS-9	
11/21/16	3 ft
PCE	<b>17,000</b>

WS-8		
11/21/16	3 ft	6 ft
PCE	<b>7,900</b>	<b>43,000</b>
TCE	<42	<b>960</b>
cis-1,2-DCE	<21	<b>370</b>

MP-1	
8/23/17	3-4 ft
PCE	<b>44,000</b>
TCE	<b>1,540</b>
cis-1,2-DCE	<b>2,160</b>
trans-1,2-DCE	<b>55 J</b>
Vinyl Chloride	<b>23.7 J</b>

SVE-1	
8/23/17	4-5 ft
PCE	<b>370</b>
cis-1,2-DCE	<b>7,000</b>
trans-1,2-DCE	<b>238</b>
Vinyl Chloride	<b>620</b>

MP-2	
8/23/17	3-4 ft
PCE	<b>51,000</b>
TCE	<b>1,940</b>

EXT-1-WS-8	
5/9/17	2.5 ft
VOCs	ND

EXT-1-WS-6	
5/9/17	2.5 ft
PCE	<b>236,000</b>
TCE	<b>74,000</b>
cis-1,2-DCE	<b>115,000</b>
trans-1,2-DCE	<b>1,430 J</b>
Vinyl Chloride	<b>2,510</b>

EXT-1-FS-3	
5/9/17	5.5 ft
PCE	<b>183</b>
TCE	<b>87 J</b>
cis-1,2-DCE	<b>1,500</b>
trans-1,2-DCE	<b>36 J</b>
Vinyl Chloride	<b>54 J</b>

EXT-1-WS-7	
5/9/17	2.5 ft
cis-1,2-DCE	<b>65 J</b>

EXT-1-FS-1	
5/9/17	5.5 ft
PCE	<b>130</b>
cis-1,2-DCE	<b>2,240</b>
trans-1,2-DCE	<b>41 J</b>
Vinyl Chloride	<b>125</b>

EXT-1-WS-3	
5/9/17	2.5 ft
cis-1,2-DCE	<b>16,000</b>
Vinyl Chloride	<b>2,570</b>

EXT-1-WS-2	
5/9/17	2.5 ft
PCE	<b>89 J</b>
cis-1,2-DCE	<b>119</b>

EXT-1-WS-5	
5/9/17	3.2 ft
PCE	<b>34,000</b>
TCE	<b>3,140</b>

EXT-1-WS-1	
5/9/17	2.5 ft
PCE	<b>3,900</b>
TCE	<b>286 J</b>
cis-1,2-DCE	<b>28,200</b>
trans-1,2-DCE	<b>1,470</b>
Vinyl Chloride	<b>2,690</b>

EXT-1-FS-2	
5/9/17	5 ft
cis-1,2-DCE	<b>580</b>
Vinyl Chloride	<b>58 J</b>

EXT-2-WS-4	
5/8/17	2.5 ft
PCE	<b>6,400</b>
TCE	<b>314</b>
cis-1,2-DCE	<b>40 J</b>

EXT-2-WS-1	
5/8/17	2.5 ft
PCE	<b>1,950</b>

EXT-2-WS-2	
5/8/17	2.5 ft
PCE	<b>107,000</b>
TCE	<b>1,440</b>
cis-1,2-DCE	<b>84 J</b>

EXT-2-FS-2	
5/8/17	5 ft
PCE	<b>183,000</b>
TCE	<b>740</b>
cis-1,2-DCE	<b>103</b>

EXT-2-WS-3	
5/8/17	2.5 ft
PCE	<b>157,000</b>
TCE	<b>122 J</b>
cis-1,2-DCE	<b>47 J</b>

### Legend

- GAS - Underground gas utility line
- WTR - Underground water utility line
- Temporary wall
- Wall removed
- Excavation extents
- Horizontal extraction piping
- SSDS extraction piping
- IW-1 - Injection well
- SVE-1 - Soil vapor extraction well
- EP-A - SSDS extraction point
- MP-1 - Monitoring point
- SSDS extraction fan
- WS-1 - Interior excavation sidewall sample
- FS-1 - Interior excavation floor sample
- EXT-1-FS-1 - Exterior excavation floor sample
- EXT-1-WS-1 - Exterior excavation sidewall sample

Analyte	Soil to Groundwater Residual Contaminant Level	Residential Residual Contaminant Level	Industrial Residual Contaminant Level
PCE	<b>4.5</b>	<b>33,000</b>	<b>145,000</b>
TCE	<b>3.6</b>	<b>1,300</b>	<b>8,410</b>
cis-1,2-DCE	<b>41.2</b>	<b>156,000</b>	<b>2,340,000</b>
trans-1,2-DCE	<b>62.6</b>	<b>1,560,000</b>	<b>1,850,000</b>
Vinyl Chloride	<b>0.1</b>	<b>67</b>	<b>2,080</b>

- Note:
- Only PCE and related compounds are reported on this figure
  - Bolded and blue shaded values exceed the Soil to Groundwater Residual Contaminant Level
  - Bolded and green shaded values exceed the Non-Industrial Residual Contaminant Level
  - Bolded and orange shaded values exceed the Industrial Residual Contaminant Level
  - Bolded values are above detection limits
  - J = Analyte concentration less than laboratory detection limits
  - Samples analyzed for using EPA SW-846 Method 8260
  - Units in micrograms per kilogram (µg/kg)
  - PCE = Tetrachloroethene
  - TCE = Trichloroethene
  - cis-1,2-DCE = cis-1,2-Dichloroethene
  - trans-1,2-DCE = trans-1,2-Dichloroethene
  - FDMC = Former Dry Cleaning Machine
  - ND = Non detect
  - VOC = Volatile Organic Compounds
  - SSDS = Sub-slab Depressurization System

### SOIL EXCAVATION LIMITS WITH SIDEWALL AND FLOOR SAMPLE RESULTS

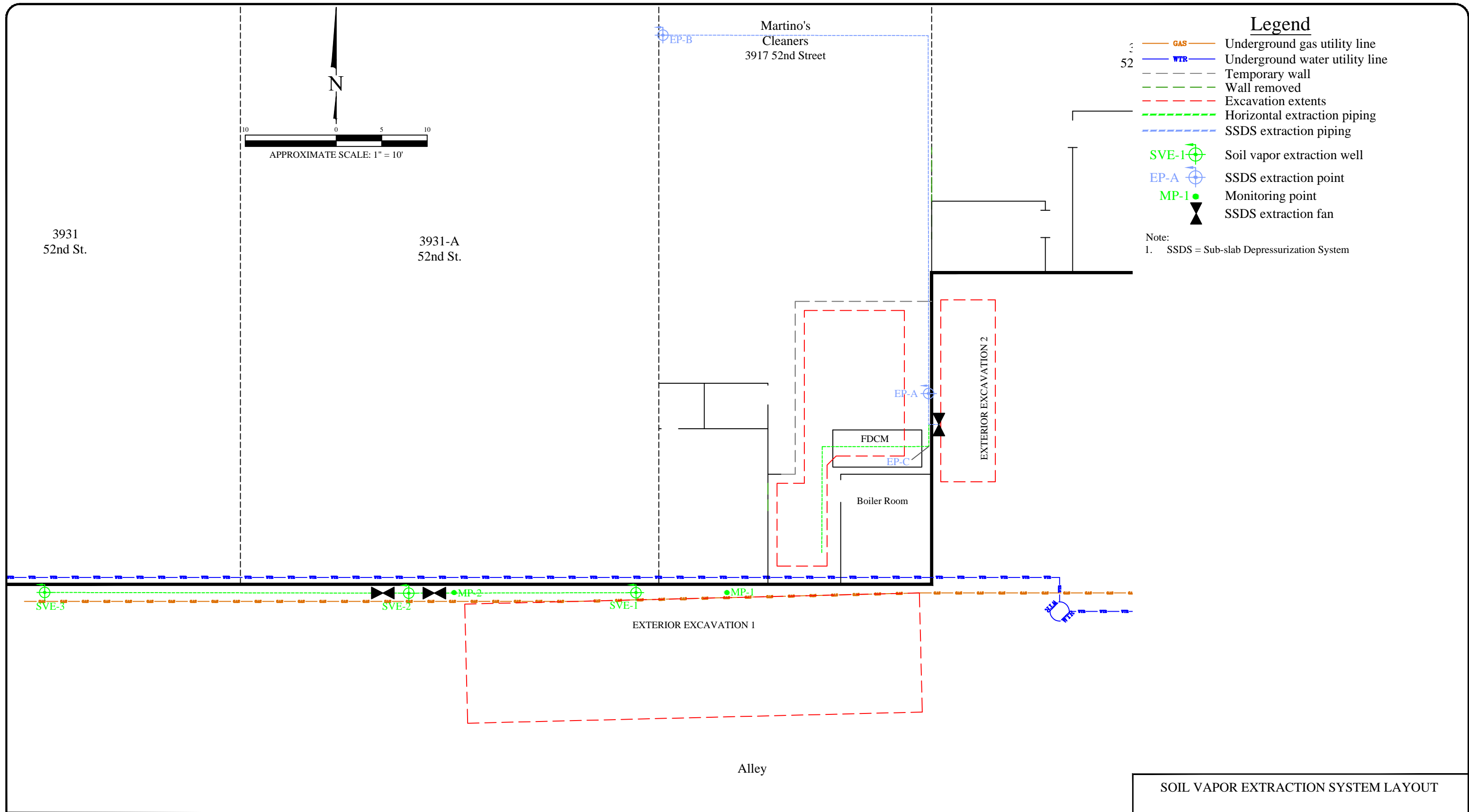
Martino's Cleaners  
3917 52nd Street  
Kenosha, Wisconsin

Date:	5/31/17
Designed:	EB
Drawn:	EB
Checked:	BK
DWG file:	6190-1293

825 North Capitol Avenue • Indianapolis, IN 46204  
EnviroForensics.com

Figure	3
Project	6190





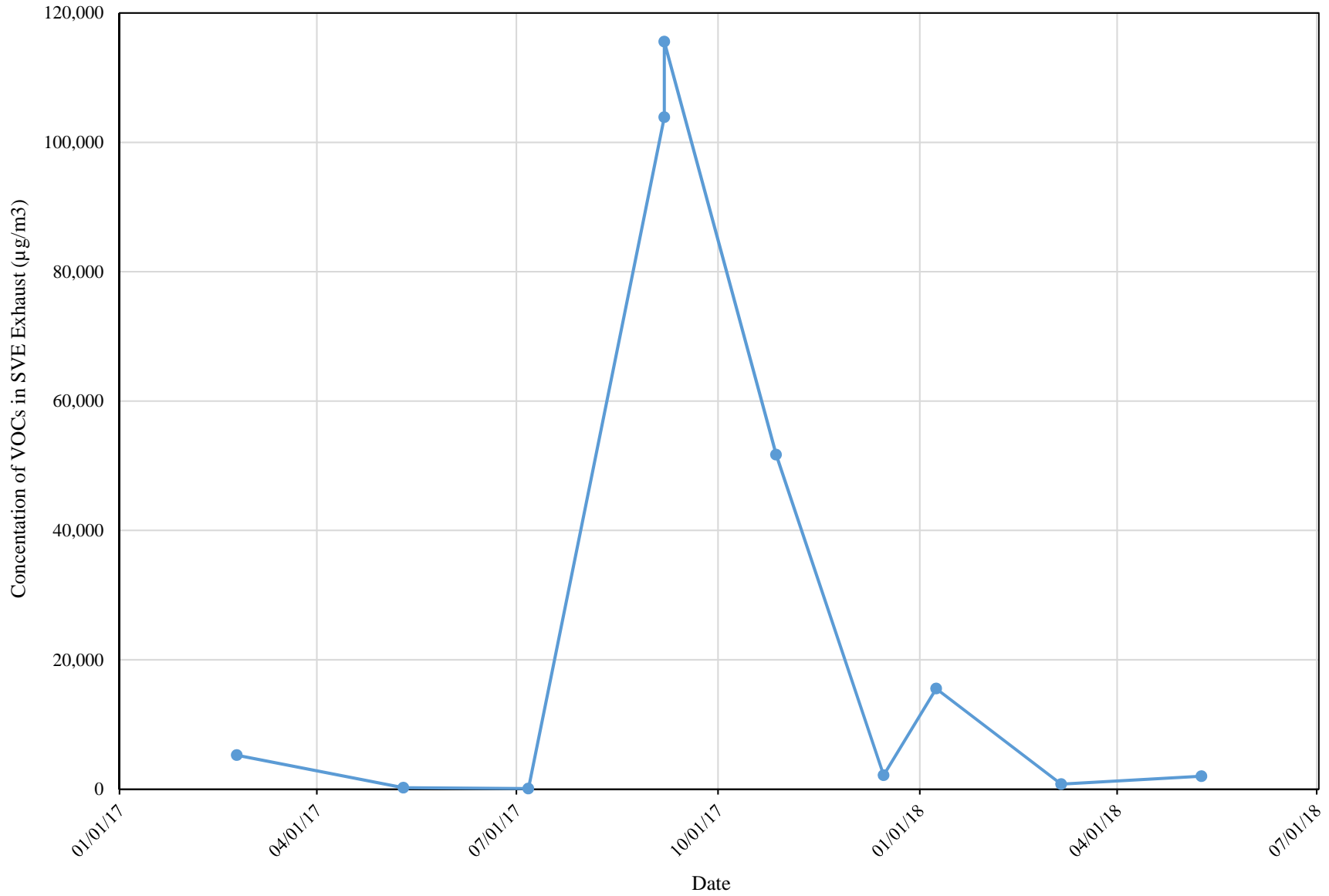
**SOIL VAPOR EXTRACTION SYSTEM LAYOUT**

Martino's Cleaners  
3917 52nd Street  
Kenosha, Wisconsin

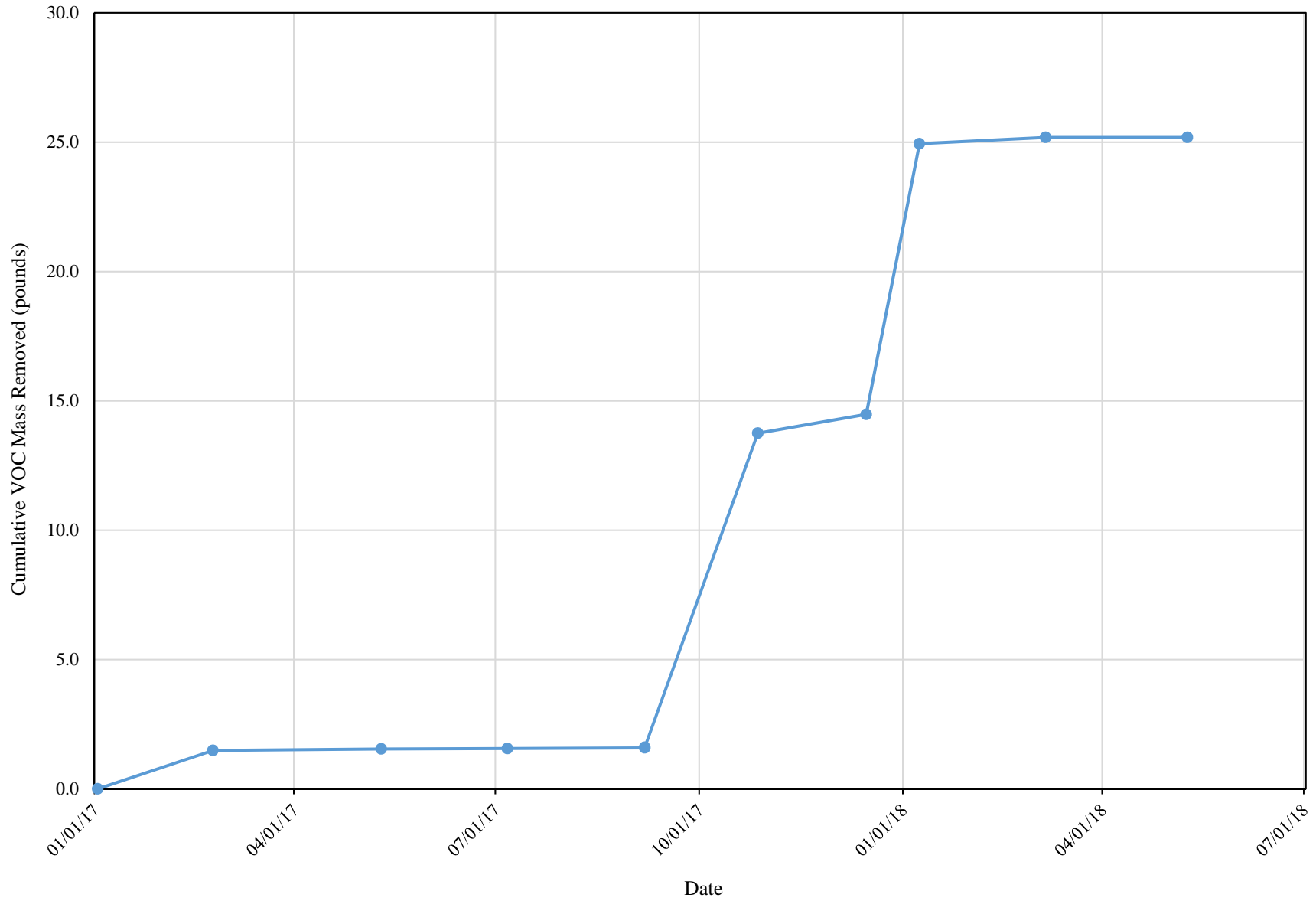
Date: 5/31/17	
Designed: EB	
Drawn: EB	
Checked: BK	
DWG file: 6190-1293	
<small>825 North Capitol Avenue • Indianapolis, IN 46204 EnviroForensics.com</small>	

Figure	3
Project	6190

**Vapor Phase VOC Concentration Trend**  
Martino's Master Dry Cleaners - 3917 52nd Street, Kenosha, Wisconsin



**Cumulative VOC Mass Removed**  
Martino's Master Dry Cleaners - 3917 52nd Street, Kenosha, Wisconsin



**TABLE 2**  
**GROUNDWATER ELEVATION DATA SUMMARY**  
 Martino's Master Drycleaners  
 3917 52nd Street, Kenosha, Wisconsin

Well Identification	Date	TOC Elevation (feet AMSL)	Depth to Water (feet below TOC)	Groundwater Elevation (feet AMSL)
MW-1 (Screen 8.1-18.1)	10/19/2011	654.37	12.25	642.12
	10/30/2012	654.37	15.20	639.17
	3/22/2013	654.37	12.10	642.27
	7/17/2013	654.37	11.79	642.58
	9/30/2013	654.37	13.53	640.84
	12/30/2013	654.37	14.20	640.17
	3/11/2014	654.37	13.82	640.55
	6/5/2014	654.37	12.01	642.36
	9/8/2014	654.37	12.70	641.67
	12/8/2014	654.37	12.90	641.47
	3/16/2015	654.37	11.60	642.77
	6/17/2015	654.37	11.89	642.48
	9/15/2015	654.37	13.13	641.24
	12/2/2015	654.37	5.15	649.22
	2/23/2016	654.37	11.86	642.51
	6/1/2016	654.37	11.39	642.98
	9/19/2016	654.37	13.63	640.74
	1/11/2018	654.37	14.51	639.86
7/11/2018	654.37	10.94	643.43	
MW-2 (Screen 9.5-19.5)	10/19/2011	653.77	12.40	641.37
	10/30/2012	653.77	14.84	638.93
	3/22/2013	653.77	12.46	641.31
	7/17/2013	653.77	12.34	641.43
	9/30/2013	653.77	13.69	640.08
	12/30/2013	653.77	14.15	639.62
	3/11/2014	653.77	13.65	640.12
	6/5/2014	653.77	11.36	642.41
	9/8/2014	653.77	12.50	641.27
	12/8/2014	653.77	12.78	640.99
	3/16/2015	653.77	12.74	641.03
	6/17/2015	653.77	11.96	641.81
	9/15/2015	653.77	13.10	640.67
	12/2/2015	653.77	11.01	642.76
	2/23/2016	653.77	11.95	641.82
	6/1/2016	653.77	11.52	642.25
	9/19/2016	653.77	13.48	640.29
	1/11/2018	653.77	14.01	639.76
7/11/2018	653.77	11.01	642.76	

**TABLE 2**  
**GROUNDWATER ELEVATION DATA SUMMARY**  
 Martino's Master Drycleaners  
 3917 52nd Street, Kenosha, Wisconsin

Well Identification	Date	TOC Elevation (feet AMSL)	Depth to Water (feet below TOC)	Groundwater Elevation (feet AMSL)
MW-3 (Screen 8.0-18.0)	10/19/2011	654.44	4.09	650.35
	10/30/2012	654.44	3.22	651.22
	3/22/2013	654.44	2.64	651.80
	7/17/2013	654.44	2.92	651.52
	9/30/2013	654.44	3.48	650.96
	12/30/2013	654.44	4.16	650.28
	3/11/2014	654.44	7.43	647.01
	6/5/2014	654.44	7.45	646.99
	9/8/2014	654.44	2.96	651.48
	12/8/2014	654.44	2.12	652.32
	3/16/2015	654.44	2.67	651.77
	6/17/2015	654.44	2.40	652.04
	9/15/2015	654.44	3.31	651.13
	12/2/2015	654.44	2.25	652.19
	2/23/2016	654.44	2.87	651.57
	6/1/2016	654.44	2.98	651.46
	9/19/2016	654.44	3.46	650.98
	1/11/2018	654.44	5.00	649.44
7/11/2018	654.44	2.99	651.45	
MW-4 (Screen 9.3-19.3)	10/19/2011	654.97	10.89	644.08
	10/30/2012	654.97	15.40	639.57
	3/22/2013	654.97	10.64	644.33
	7/17/2013	654.97	10.52	644.45
	9/30/2013	654.97	12.43	642.54
	12/30/2013	654.97	13.55	641.42
	3/11/2014	654.97	12.71	642.26
	6/5/2014	654.97	9.52	645.45
	9/8/2014	654.97	11.54	643.43
	12/8/2014	654.97	11.65	643.32
	3/16/2015	654.97	11.15	643.82
	6/17/2015	654.97	10.55	644.42
	9/15/2015	654.97	12.41	642.56
	12/2/2015	654.97	9.32	645.65
	2/23/2016	654.97	10.19	644.78
	6/1/2016	654.97	10.03	644.94
	9/19/2016	654.97	12.73	642.24
	1/11/2018	654.97	13.49	641.48
7/11/2018	654.97	9.55	645.42	

**TABLE 2**  
**GROUNDWATER ELEVATION DATA SUMMARY**

Martino's Master Drycleaners  
3917 52nd Street, Kenosha, Wisconsin

Well Identification	Date	TOC Elevation (feet AMSL)	Depth to Water (feet below TOC)	Groundwater Elevation (feet AMSL)
MW-5 Screen (9.1-19.1) (Abandoned)	10/19/2011	654.83	12.35	642.48
	10/30/2012	654.83	15.12	639.71
	3/22/2013	654.83	11.27	643.56
	7/17/2013	654.83	11.60	643.23
	9/30/2013	654.83	13.55	641.28
	12/30/2013	654.83	14.34	640.49
	3/11/2014	654.83	12.84	641.99
	6/5/2014	654.83	10.48	644.35
	9/8/2014	654.83	12.47	642.36
12/8/2014	654.83	11.96	642.87	
MW-5T (Screen 10.7-20.7)	10/24/2014	654.94	12.07	642.87
	12/8/2014	654.94	12.76	642.18
	3/16/2015	654.94	12.60	642.34
	6/17/2015	654.94	11.93	643.01
	9/15/2015	654.94	12.87	642.07
	12/2/2015	654.94	11.18	643.76
	2/23/2016	654.94	11.86	643.08
	6/1/2016	654.94	11.28	643.66
	9/19/2016	654.94	13.17	641.77
	1/11/2018	654.94	14.44	640.5
7/11/2018	654.94	10.89	644.05	
PZ-5 (Screen 35.4-40.4)	6/17/2015	654.92	12.79	642.13
	9/15/2015	654.92	13.14	641.78
	12/2/2015	654.92	11.50	643.42
	2/23/2016	654.92	11.70	643.22
	6/1/2016	654.92	11.24	643.68
	9/19/2016	654.92	13.42	641.5
	1/11/2018	654.92	14.24	640.68
	7/11/2018	654.92	10.59	644.33
MW-6 (Screen 9.5-14.5)	10/24/2014	DRY		
	12/8/2014	655.56	11.44	644.12
	3/16/2015	655.56	11.54	644.02
	6/17/2015	655.56	10.66	644.90
	9/15/2015	655.56	12.87	642.69
	12/2/2015	655.56	10.06	645.50
	2/23/2016	655.56	11.44	644.12
	6/1/2016	655.56	NM	--
	1/11/2018	655.56	13.99	641.57
	7/11/2018	655.56	9.89	645.67

**TABLE 2**  
**GROUNDWATER ELEVATION DATA SUMMARY**  
 Martino's Master Drycleaners  
 3917 52nd Street, Kenosha, Wisconsin

Well Identification	Date	TOC Elevation (feet AMSL)	Depth to Water (feet below TOC)	Groundwater Elevation (feet AMSL)
MW-7 (Screen 7.3-12.3)	10/24/2014	652.56	2.24	650.32
	12/8/2014	652.56	2.43	650.13
	3/16/2015	652.56	1.56	651.00
	6/17/2015	652.56	1.33	651.23
	9/15/2015	652.56	8.74	643.82
	12/2/2015	652.56	0.40	652.16
	2/23/2016	652.56	2.63	649.93
	6/1/2016	652.56	4.49	648.07
	9/19/2016	652.56	9.70	642.86
	1/11/2018	652.56	3.77	648.79
7/11/2018	652.56	3.63	648.93	
MW-8 (Screen 8.3-13.3)	10/24/2014	653.19	2.34	650.85
	12/8/2014	653.19	1.00	652.19
	3/16/2015	653.19	1.48	651.71
	6/17/2015	653.19	1.87	651.32
	9/15/2015	653.19	4.38	648.81
	12/2/2015	653.19	NM	--
	2/23/2016	653.19	3.34	649.85
	6/1/2016	653.19	NM	--
	1/11/2018	653.19	3.39	649.80
7/11/2018	653.19	4.35	648.84	
MW-9 (Screen 9.4-19.4)	6/17/2015	651.08	8.04	643.04
	9/15/2015	651.08	9.63	641.45
	12/2/2015	651.08	7.41	643.67
	2/23/2016	651.08	8.19	642.89
	6/1/2016	651.08	7.70	643.38
	9/19/2016	651.08	9.88	641.20
	1/11/2018	651.08	10.53	640.55
	7/11/2018	651.08	7.21	643.87
MW-10 (Screen 9.4-19.4)	6/17/2015	651.94	9.62	642.32
	9/15/2015	651.94	11.03	640.91
	12/2/2015	651.94	8.60	643.34
	2/23/2016	651.94	9.65	642.29
	6/1/2016	651.94	9.63	642.31
	9/19/2016	651.94	11.43	640.51
	1/11/2018	651.94	11.94	640.00
7/11/2018	651.94	9.11	642.83	

**Notes:**

- AMSL = above mean sea level
- TOC = Top of Casing
- Screen intervals are listed in feet below ground surface



**TABLE 4**  
**SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS**

Martino's Master Drycleaners  
3917 52nd Street, Kenosha, Wisconsin

Boring Identification	Date Sampled	Sample Depth (feet bgs)		Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,2,4-Trimethylbenzene
<b>Industrial RCL <sup>1</sup></b>				<b>145,000</b>	<b>8,410</b>	<b>2,340,000</b>	<b>1,850,000</b>	<b>2,080</b>	<b>219,000</b>
<b>Non-Industrial RCL <sup>1</sup></b>				<b>33,000</b>	<b>1,300</b>	<b>156,000</b>	<b>1,560,000</b>	<b>67</b>	<b>219,000</b>
<b>Soil to Goundwater RCL <sup>1</sup></b>				<b>4.5</b>	<b>3.6</b>	<b>41.2</b>	<b>62.6</b>	<b>0.1</b>	<b>1,382</b>
GP-1	1/16/2008	2-4	Removed	<31	<31	<b>730</b>	<b>40.0</b>	<b>90.0</b>	<31
	1/16/2008	4-6		<30	<30	<b>1,000</b>	<30	<42	<30
HA-1	5/25/2011	2-3		<b>83.8</b>	<25.0	<25.0	<25.0	<25.0	<25.0
HP-2	1/16/2008	2-4	Removed	<b>820,000</b>	<b>3,900</b>	<3000	<3000	<4200	<3000
	1/16/2008	8-10		<b>73,000</b>	<b>3,900</b>	<b>950</b>	<300	<420	<300
HP-3	1/16/2008	2-4		<b>110,000</b>	<600	<600	<600	<830	<600
	1/16/2008	8-10		<b>84,000</b>	<b>5,100</b>	<b>1,800</b>	<290	<410	<290
SB-1	10/19/2010	3-5		<25.0	<25.0	<b>77.6</b>	<25.0	<25.0	<25.0
	10/19/2010	14-16		<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
SB-2	10/19/2010	2-4	Removed	<25.0	<25.0	<25.0	<25.0	<25.0	<b>29.0 J</b>
	10/19/2010	14-16*		<25.0*	<25.0*	<25.0*	<25.0*	<25.0*	<25.0*
SB-3	10/19/2010	4-6		<25.0	<25.0	<b>828</b>	<b>36.6</b>	<25.0	<25.0
	10/19/2010	14-16		<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
SB-4	10/19/2010	3-5	Removed	<b>2,180</b>	<b>143</b>	<25.0	<25.0	<25.0	<25.0
	10/19/2010	18-20		<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
SB-5	10/19/2010	2-4		<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	10/19/2010	16-18		<b>35.1</b>	<25.0	<25.0	<25.0	<25.0	<25.0
SB-6	10/19/2010	4-6		<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	10/19/2010	16-18		<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
SB-7	5/24/2011	2-4		<25.0	<25.0	<b>40.2 J</b>	<25.0	<25.0	<25.0
	5/24/2011	12-14		<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
SB-8	5/24/2011	4-6		<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	5/24/2011	14-16		<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
SB-9	5/25/2011	2-4	Removed	<25.0	<25.0	<b>411</b>	<25.0	<b>106</b>	<25.0
	5/25/2011	13-15		<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
SB-10	5/25/2011	2-4		<b>23,800</b>	<b>736</b>	<b>164 J</b>	<100	<100	<100
	5/25/2011	12-14		<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
SB-11	10/18/2011	4-6		<30	<30	<30	<30	<30	<30
	10/18/2011	10-12		<29	<29	<29	<29	<29	<29
SB-12	10/18/2011	4-6		<30	<30	<30	<30	<30	<30
	10/18/2011	12-14		<29	<29	<29	<29	<29	<29

**TABLE 4**  
**SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS**

Martino's Master Drycleaners  
3917 52nd Street, Kenosha, Wisconsin

Boring Identification	Date Sampled	Sample Depth (feet bgs)	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,2,4-Trimethylbenzene
<b>Industrial RCL <sup>1</sup></b>			<b>145,000</b>	<b>8,410</b>	<b>2,340,000</b>	<b>1,850,000</b>	<b>2,080</b>	<b>219,000</b>
<b>Non-Industrial RCL <sup>1</sup></b>			<b>33,000</b>	<b>1,300</b>	<b>156,000</b>	<b>1,560,000</b>	<b>67</b>	<b>219,000</b>
<b>Soil to Groundwater RCL <sup>1</sup></b>			<b>4.5</b>	<b>3.6</b>	<b>41.2</b>	<b>62.6</b>	<b>0.1</b>	<b>1,382</b>
SB-13	10/22/2014	2	259	<28	<24	<29	<21	<26
	10/22/2014	6	316	<28	<24	<29	<21	<26
	10/22/2014	10	68 J	<28	<24	<29	<21	<26
SB-14	10/22/2014	2	<49	<28	<24	<29	<21	<26
	10/22/2014	6	<49	<28	<24	<29	<21	<26
	10/22/2014	10	<49	<28	<24	<29	<21	<26
SB-15	10/22/2014	2	214	<28	<24	<29	<21	<26
	10/22/2014	6	126 J	40 J	320	<29	<21	<26
	10/22/2014	10	<49	<28	<24	<29	<21	<26
SB-16	4/21/2015	4	<54	<42	<21	<24	<10	NA
	4/21/2015	6	<54	99 J	350	<24	<10	NA
SB-17	4/28/2015	5	3,200	340	262	<2.4	<10	NA
	4/21/2015	6	7,200	840	570	<24	<10	NA
	4/21/2015	8	<54	<42	560	<24	<10	NA
	4/28/2015	8	<54	<42	530	<24	<10	NA
	4/28/2015	10	<5.4	<4.2	<2.1	<2.4	<10	NA
SB-18	4/21/2015	6	<54	<42	53 J	<24	<10	NA
	4/21/2015	10	<54	<42	<21	<24	<10	NA
SB-19	4/21/2015	2	<54	<42	<21	<24	<10	NA
	4/21/2015	8	<54	<42	<21	<24	<10	NA
SB-20	4/21/2015	4	<54	<42	<21	<24	<10	NA
	4/21/2015	6	<54	<42	<21	<24	<10	NA
SB-21	4/21/2015	6	<54	<42	<21	<24	<10	NA
	4/21/2015	8	<54	<42	<21	<24	<10	NA
SB-22	4/21/2015	2	<54	<42	<21	<24	<10	NA
	4/21/2015	8	<54	<42	<21	<24	<10	NA
SB-23	4/28/2015	4	<54	<42	<21	<24	<10	NA
	4/28/2015	6	<54	<42	<21	<24	<10	NA
	4/28/2015	8	<54	<42	<21	<24	<10	NA
SB-24	4/28/2015	4	<54	<42	<21	<24	<10	NA
	4/28/2015	6	<54	<42	82	<24	<10	NA
	4/28/2015	8	<54	<42	32 J	<24	<10	NA

**TABLE 4**  
**SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS**  
 Martino's Master Drycleaners  
 3917 52nd Street, Kenosha, Wisconsin

Boring Identification	Date Sampled	Sample Depth (feet bgs)		Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,2,4-Trimethylbenzene
<b>Industrial RCL <sup>1</sup></b>				<b>145,000</b>	<b>8,410</b>	<b>2,340,000</b>	<b>1,850,000</b>	<b>2,080</b>	<b>219,000</b>
<b>Non-Industrial RCL <sup>1</sup></b>				<b>33,000</b>	<b>1,300</b>	<b>156,000</b>	<b>1,560,000</b>	<b>67</b>	<b>219,000</b>
<b>Soil to Goundwater RCL <sup>1</sup></b>				<b>4.5</b>	<b>3.6</b>	<b>41.2</b>	<b>62.6</b>	<b>0.1</b>	<b>1,382</b>
SB-25	4/28/2015	4		<54	<42	<21	<24	<10	NA
	4/28/2015	6		<54	<42	<21	<24	<10	NA
	4/28/2015	8		<54	<42	<21	<24	<10	NA
SB-26	3/9/2017	2-4		<32	<41	<32	<28	<19	<25
SB-27	3/9/2017	2-4		<32	<41	<32	<28	<19	<25
SB-28	3/9/2017	3-4		<32	<41	<b>73 J</b>	<28	<19	<25
SB-29	3/9/2017	2.5-4	Removed	<32	<41	<b>209</b>	<28	<19	<25
SB-30	3/9/2017	3-4	Removed	<b>5,400</b>	<b>1,630</b>	<b>22,400</b>	<b>270</b>	<b>86</b>	<25
SB-31	3/9/2017	2.5-4	Removed	<b>350</b>	<b>65 J</b>	<b>275</b>	<28	<b>29 J</b>	<25
SB-32	3/9/2017	2.5-4	Removed	<b>880</b>	<b>66 J</b>	<b>8,800</b>	<b>276</b>	<b>620</b>	<25
SB-33	3/9/2017	3-5		<32	<41	<b>120</b>	<28	<19	<25
SB-34	3/9/2017	3-5		<b>217</b>	<b>370</b>	<b>171</b>	<28	<19	<25
SB-35	3/9/2017	3-5		<32	<41	<b>52 J</b>	<28	<19	<25
SB-36	3/9/2017	3-5	Removed	<32	<41	<b>115</b>	<28	<b>105</b>	<25

**Notes:**

<sup>1</sup> Residual Contaminant Levels calculated according to the procedures described in WDNR Publication RR-890

All concentrations reported in micrograms per kilogram µg/kg

Samples analyzed using EPA SW-846 Method 8260

**Bolded** values are above method detection limits

**Bolded and orange shaded** values exceed the Industrial Residual Contaminant Level

**Bolded and green shaded** values exceed the Non-Industrial Residual Contaminant Level

**Bolded and blue shaded** values exceed the Soil to Groundwater Residual Contaminant Level

\* = Original sample broken during sample shipment, duplicate sample used for reporting

J = Analyte concentration detected between the laboratory Method Detection Limit and Reporting Limit

NA = Not Analyzed

RCL = Residual Contaminant Level

**TABLE 1**  
**SOIL VAPOR EXTRACTION DATA SUMMARY**

Martino's Master Dry Cleaners  
3917 52nd Street, Kenosha, Wisconsin

Date	Elapsed Runtime	Extraction Point Flow Rate					Effluent CVOC Concentration				Extraction Points Open
		SVE-1	SVE-2	SVE-3	EP-C	Total	East	West	EP-C	Total	
	Hours	cfm					µg/m <sup>3</sup>				
2/23/2017	1,824	NI	NI	NI	41.4	41.4	NI	NI	5,247	5,247	EP-C
5/10/2017	3,336	NI	NI	NI	46.8	46.8	NI	NI	214	214	EP-C
7/6/2017	4,824	NI	NI	NI	39.7	39.7	NI	NI	78	78	EP-C
9/6/2017	4,825	16.0	NI	NI	47.0	63.0	--	103,161	829	103,990	EP-C, SVE-1
9/6/2017	4,826	29.0	NI	NI	--	29.0	--	115,560	--	115,560	SVE-1
10/27/2017	6,002	15.5	18.8	19.0	46.8	100.1	44,380	7,059	264	51,703	EP-C; SVE-1, 2, 3
12/15/2017	6,578	16.0	70.7	14.1	--	100.8	2,014	126	--	2,140	SVE-1, 2, 3
1/8/2018	7,946	29.8	29.7	17.6	53.9	131.0	342	457	14,741	15,540	EP-C; SVE-1, 2, 3
3/6/2018	9,482	18.3	18.4	12.6	24.9	74.2	147	117	499	763	EP-C, SVE -1, SVE-3
5/9/2018	9,483	11.0	15.1	27.3	--	53.4	977	1,016	--	1,993	SVE-1, 2, 3

**Notes:**

-- = measurement not collected

CVOC = Chlorinated volatile organic compounds

NI = Extraction point not installed

cfm = cubic feet per minute

µg/m<sup>3</sup> = micrograms per cubic meter