CARLSON ENVIRONMENTAL

March 3, 2020 PN 000730.13

Mr. Joseph Martinez
Bureau for Remediation and Redevelopment
Wisconsin Department of Natural Resources
2300 N. Dr. MLK Jr. Drive
Milwaukee, WI 53212

RE: Additional Information and Revisions Letter Report
Sutton Transport
DNR BRRTS Activity # 02-41-584256
DNR FID # 241596520
909 W. Carpenter Avenue, Milwaukee, WI

Dear Mr. Martinez:

Per our conversation on January 6, 2020, additional information regarding sampling rationale, sampling locations and other site-specific information was requested. In addition, revisions to sampling figures and analytical tables were requested. The revised figures and analytical tables can be found as attachments to this letter report. Below, please find discussions regarding requested additional information:

Volatile Organic Compound (VOC) Soil Sampling Location Rationale
Sampling locations were soils samples were collected and analyzed for VOCs were determined based on historical/current operations conducted on-site (chemical storage areas, previous operations) and off-site (LUST properties, observed fly dumping/monitoring well) at adjacent properties.

Monitoring Well Location Rationale
Temporary groundwater monitoring wells were initially advanced within portions of the site to investigate issues identified at adjoining properties. The property located to the south (5005 South 6th Street) was identified on the LUST regulatory database. Additionally, fly dumping and monitoring well were observed on the north adjacent property during previous site assessments. As such, the temporary monitoring wells were installed along the southern and northern property boundaries to investigate the adjacent properties. Following the initial rounds of the sampling conducted on the site property, three permanent groundwater monitoring wells were installed in order to assess the groundwater across the overall site property.

If you have any questions or require additional information please feel free to contact myself or Ed Garske at 312-346-2140.

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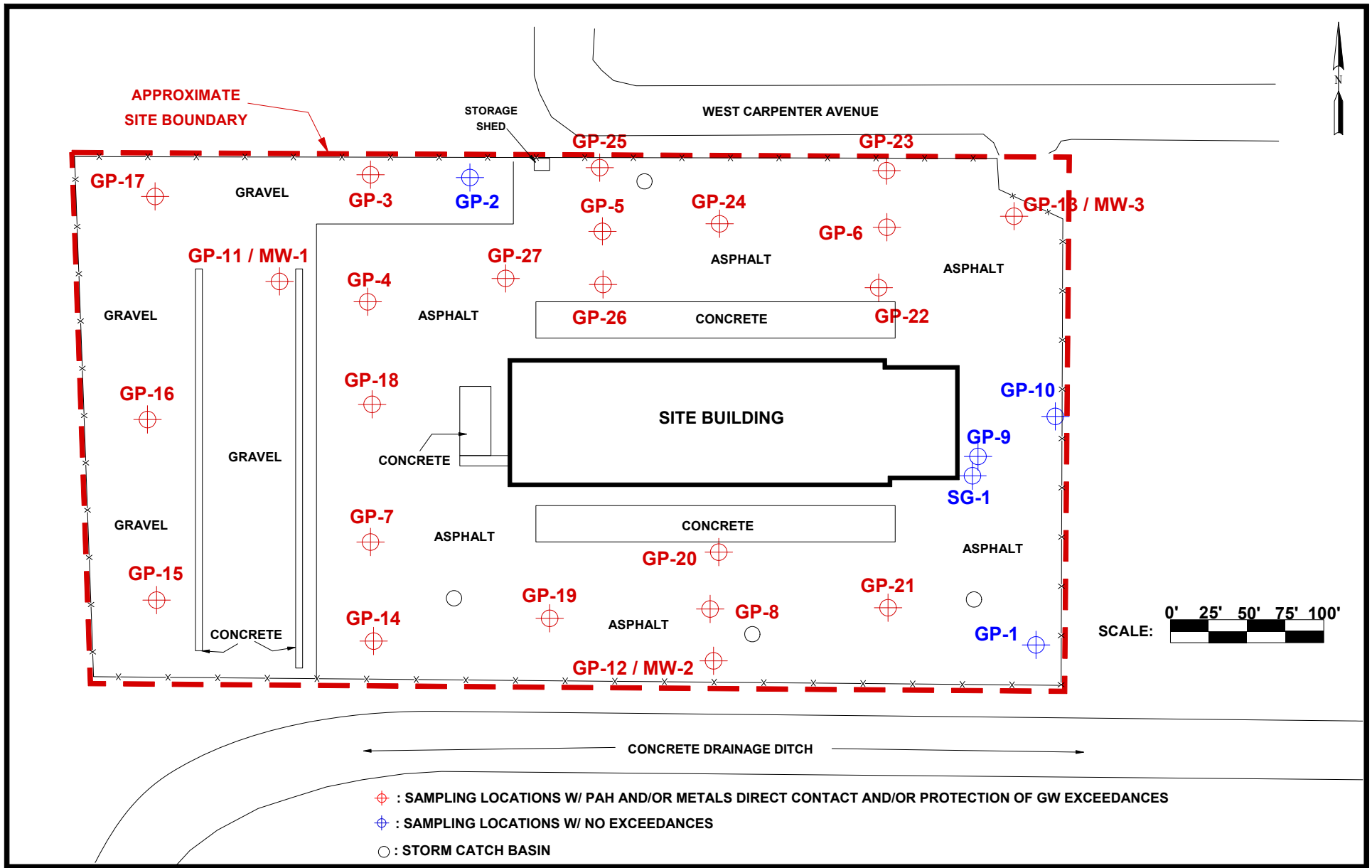
Robby Beard
Project Manager

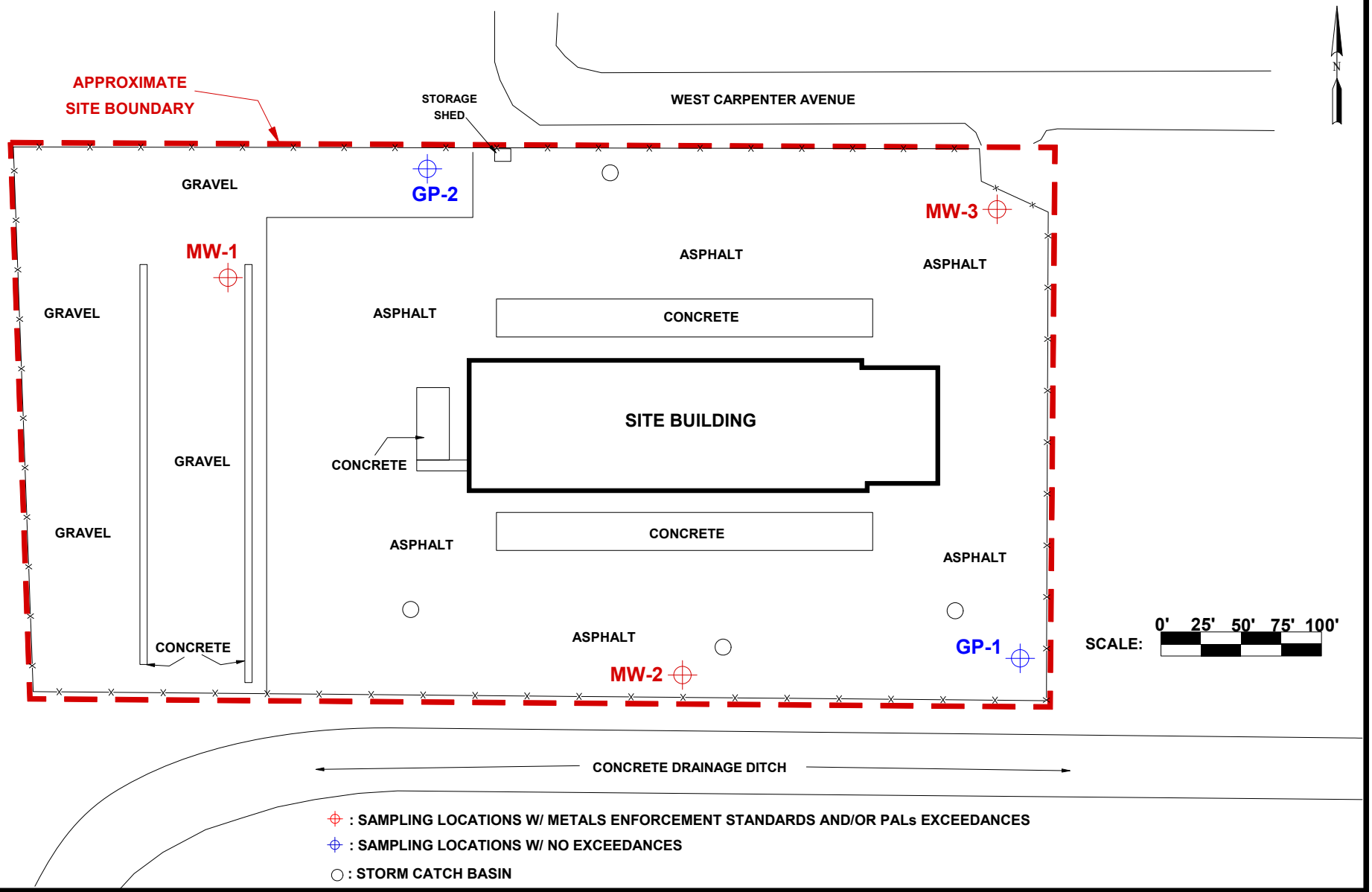
Enclosures



CARLSON ENVIRONMENTAL, INC.
65 E. WACKER PLACE, SUITE 2210
CHICAGO, ILLINOIS
(312) 346-2140

PN: 000730.12
FILE: p:/000700/000730.12/fig1.dcd
DRAWN BY: RJB
DATE: 09/12/2019
SCALE: AS SHOWN

FIGURE 3
SOIL EXCEEDANCES MAP
909 W. CARPENTER AVENUE
MILWAUKEE, WISCONSIN



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DATE: 09/12/2019
SCALE: AS SHOWN

FIGURE 4
GROUNDWATER EXCEEDANCES MAP
909 W. CARPENTER AVENUE
MILWAUKEE, WISCONSIN

TABLE 1: Soil Results - VOCs and DROs/GROs

909 W. Carpenter Avenue
Milwaukee, WI

All concentrations are expressed in milligrams per kilogram (mg/kg)

ANALYTE	WDNR Residual Contaminant Level		Sample Number and Sample Depth (ft bgs)			
	Direct Contact Related to Land Use[1]	Protection of Ground Water[2]	GP-3D	GP-4C	GP-9D	GP-10B
			6-8	4-6	6-8	2-4
			Fill	Fill	Fill	Fill
VOCs						
Acetone	100,000	3.6939	*< 0.069*	*< 0.066*	*NA*	*NA*
Benzene	7.41	0.0051	*< 0.0046*	*< 0.0044*	*< 0.0046*	*< 0.0047*
Bromodichloromethane	1.96	0.0003	*< 0.0046*	*< 0.0044*	*NA*	*NA*
Bromoform	218	0.0023	*< 0.0046*	*< 0.0044*	*NA*	*NA*
Bromomethane	46	0.0051	*< 0.0092*	*< 0.0089*	*NA*	*NA*
2-Butanone	28,400	*NE*	*< 0.069*	*< 0.066*	*NA*	*NA*
Carbon disulfide	738	0.593	*< 0.046*	*< 0.044*	*NA*	*NA*
Carbon tetrachloride	4.25	0.0039	*< 0.0046*	*< 0.0044*	*NA*	*NA*
Chlorobenzene	761	*NE*	*< 0.0046*	*< 0.0044*	*NA*	*NA*
Chloroethane	NE	0.2266	*< 0.0092*	*< 0.0089*	*NA*	*NA*
Chloroform	2.13	*NE*	*< 0.0046*	*< 0.0044*	*NA*	*NA*
Chloromethane	720	0.0155	*< 0.0092*	*< 0.0089*	*NA*	*NA*
Dibromochloromethane	4.4	0.032	*< 0.0046*	*< 0.0044*	*NA*	*NA*
1,1-Dichloroethane	23.7	0.4836	*< 0.0046*	*< 0.0044*	*NA*	*NA*
1,2-Dichloroethane	NE	0.0028	*< 0.0046*	*< 0.0044*	*NA*	*NA*
1,1-Dichloroethene	NE	0.005	*< 0.0046*	*< 0.0044*	*NA*	*NA*
cis-1,2-Dichloroethene	NE	0.0412	*< 0.0046*	*< 0.0044*	*NA*	*NA*
trans-1,2-Dichloroethene	NE	0.0588	*< 0.0046*	*< 0.0044*	*NA*	*NA*
1,2-Dichloropropane	6.62	0.0033	*< 0.0046*	*< 0.0044*	*NA*	*NA*
cis-1,3-Dichloropropene	1,220	0.0003	*< 0.0018*	*< 0.0018*	*NA*	*NA*
trans-1,3-Dichloropropene	1,570	0.0003	*< 0.0018*	*< 0.0018*	*NA*	*NA*
Ethylbenzene	37	1.57	*< 0.0046*	*< 0.0044*	*< 0.0046*	*< 0.0047*
2-Hexanone	1,770	*NE*	*< 0.018*	*< 0.018*	*NA*	*NA*
4-Methyl-2-pentanone	3,360	*NE*	*< 0.018*	*< 0.018*	*NA*	*NA*
Methylene chloride	1,070	0.0026	*< 0.0092*	*< 0.0089*	*NA*	*NA*
Methyl tert-butyl ether	293	0.027	*< 0.0046*	*< 0.0044*	*NA*	*NA*
Styrene	867	0.22	*< 0.0046*	*< 0.0044*	*NA*	*NA*
1,1,2,2-Tetrachloroethane	3.69	0.0002	*< 0.0046*	*< 0.0044*	*NA*	*NA*
Tetrachloroethene	153	0.0045	*< 0.0046*	*< 0.0044*	*NA*	*NA*
Toluene	818	1.1072	*< 0.0046*	*< 0.0044*	*< 0.0046*	*< 0.0047*
1,1,1-Trichloroethane	640	0.1402	*< 0.0046*	*< 0.0044*	*NA*	*NA*
1,1,2-Trichloroethane	7.34	0.0032	*< 0.0046*	*< 0.0044*	*NA*	*NA*
Trichloroethene	8.81	0.0036	*< 0.0046*	*< 0.0044*	*NA*	*NA*
Vinyl chloride	2.03	0.0001	*< 0.0046*	*< 0.0044*	*NA*	*NA*
Xylenes, Total	258	3.94	*< 0.014*	*< 0.013*	*< 0.014*	*< 0.014*
DROs/GROs						
DRO	100	*NE*	*NA*	*NA*	24	*< 23*
GRO	100	*NE*	*NA*	*NA*	*< 23*	*< 23*

Notes:
ND - Sample concentration was below laboratory detection limit (no detect).
NE - WDNR objectives have not yet been established
NA - Not analyzed

[1] The sample concentrations were compared to the most stringent of the Wisconsin Administrative Code Chapter NR 720 Soil Cleanup Standards for Industrial Properties for residual contaminant levels based on human health risk from direct contact related to land use.

[2] The sample concentrations were compared to the most stringent of the Wisconsin Administrative Code Chapter NR 720 Soil Cleanup Standards for Industrial Properties for residual contaminant levels based on protection of groundwater.

Only those compounds that were detected in one or more samples are listed on this table. Concentrations exceeding the most stringent WDNR objectives appear in boldface and are underlined twice.

TABLE 2: Soil Results - PAHs

909 W. Carpenter Avenue
Milwaukee, WI

All concentrations are expressed in milligrams per kilogram (mg/kg)

ANALYTE	WDNR Residual Contaminant Level			Sample Number and Sample Depth (ft bgs)								
	Direct Contact Related to Land Use[1]		Protection of Ground Water[2]	GP-3D	GP-4C	GP-5D	GP-6C	GP-7C	GP-8C	GP-11D	GP-11F	GP-12D
	Non-Industrial	Industrial		0-2	0-2	2-4	0-2	0-2	2-4	6-8	10-12	6-8
				Fill	Fill	Fill	Fill	Fill	Fill	Fill	Native	Fill
PAHs												
Acenapthene	3,590	45,200	*NE*	*<0.036*	*<0.035*	*<0.036*	*<0.038*	*<0.041*	3.5	*<0.042*	*<0.040*	*<0.039*
Acenaphthylene	*NE*	*NE*	*NE*	*<0.036*	*<0.035*	0.094	*<0.038*	*<0.041*	1.2	*<0.042*	*<0.040*	*<0.039*
Anthracene	17900.0	100,000	196.9492	0.10	0.039	0.043	*<0.038*	*<0.041*	15	*<0.042*	*<0.040*	*<0.039*
Benzo(a)anthracene	1.14	20.8	*NE*	0.28	0.11	0.081	*<0.038*	*<0.041*	***10***	*<0.042*	*<0.040*	*<0.039*
Benzo(a)pyrene	0.115	0.211	0.47	***0.31***	0.11	0.10	*<0.038*	*<0.041*	***8.4***	*<0.042*	*<0.040*	*<0.039*
Benzo(b)fluoranthene	1.15	21.1	0.4793	0.38	0.11	0.14	*<0.038*	*<0.041*	***7.4***	*<0.042*	*<0.040*	*<0.039*
Benzo(g,h,i)perylene	*NE*	*NE*	*NE*	0.24	*<0.035*	*<0.036*	*<0.038*	*<0.041*	4.3	*<0.042*	*<0.040*	*<0.039*
Benzo(k)fluoranthene	11.5	211	*NE*	0.24	0.12	0.13	*<0.038*	*<0.041*	6.8	*<0.042*	*<0.040*	*<0.039*
Chrysene	115	2,110	0.1446	***0.36***	0.12	***0.16***	*<0.038*	*<0.041*	***10***	*<0.042*	*<0.040*	*<0.039*
Dibenzo(a,h)anthracene	0.115	2.11	*NE*	0.12	*<0.035*	*<0.036*	*<0.038*	*<0.041*	***2.6***	*<0.042*	*<0.040*	*<0.039*
Fluoranthene	2,390	301,000	88.8778	0.55	0.21	0.15	*<0.038*	*<0.041*	30	*<0.042*	*<0.040*	*<0.039*
Fluorene	2,390	301,000	14.8299	0.041	*<0.035*	*<0.036*	*<0.038*	*<0.041*	8.0	*<0.042*	*<0.040*	*<0.039*
Indeno (1,2,3-c,d) pyrene	1.15	21.10	*NE*	0.22	0.074	*<0.036*	*<0.038*	*<0.041*	***4.6***	*<0.042*	*<0.040*	*<0.039*
Naphthalene	5.52	26.0	0.6582	0.039	0.11	0.093	*<0.038*	*<0.041*	***3.5***	*<0.042*	*<0.040*	*<0.039*
Phenanthrene	*NE*	*NE*	*NE*	0.39	0.21	0.14	*<0.038*	*<0.041*	35	*<0.042*	*<0.040*	*<0.039*
Pyrene	1,790	22,600	54.5455	0.46	0.19	0.17	*<0.038*	*<0.041*	21	*<0.042*	*<0.040*	*<0.039*

Notes:
ND - Sample concentration was below laboratory detection limit (no detect)
NE - WDNR objectives have not yet been established
NA - Not analyzed

Concentrations exceeding the most stringent WDNR objectives for Non-Industrial Direct Contact appear in boldface.

Concentrations exceeding the most stringent WDNR objectives for Industrial Direct Contact appear in boldface and italics.

Concentrations exceeding the most stringent WDNR objectives Protection of Groundwater appear in boldface, italics and are underlined.

[1] The sample concentrations were compared to the most stringent of the Wisconsin Administrative Code Chapter NR 720 Soil Cleanup Standards for residual contaminant levels based on human health risk from direct contact related to land use.

[2] The sample concentrations were compared to the most stringent of the Wisconsin Administrative Code Chapter NR 720 Soil Cleanup Standards for residual contaminant levels based on protection of groundwater.

TABLE 2: Soil Results - PAHs

909 W. Carpenter Avenue
Milwaukee, WI

All concentrations are expressed in milligrams per kilogram (mg/kg)

ANALYTE	WDNR Residual Contaminant Level			Sample Number and Sample Depth (ft bgs)								
	Direct Contact Related to Land Use[1]		Protection of Ground Water[2]	GP-13C	GP-14C	GP-15B	GP-15C	GP-16C	GP-16D	GP-17E	GP-17F	GP-18C
	Non-Industrial	Industrial		4-6	4-6	2-4	4-6	4-6	6-8	8-10	10-12	4-6
				Fill	Fill	Fill	Native	Fill	Native	Fill	Native	Fill
PAHs												
Acenapthene	3,590	45,200	*NE*	*<0.039*	*<0.037*	*<0.036*	*<0.040*	0.092	*<0.037*	0.33	*<0.040*	*<0.037*
Acenaphthylene	*NE*	*NE*	*NE*	*<0.039*	*<0.037*	*<0.036*	*<0.040*	*<0.040*	*<0.037*	0.032	*<0.040*	*<0.037*
Anthracene	17900.0	100,000	196.9492	*<0.039*	*<0.037*	0.048	*<0.040*	0.18	*<0.037*	0.48	*<0.040*	0.023
Benzo(a)anthracene	1.14	20.8	*NE*	*<0.039*	*<0.037*	0.12	*<0.040*	0.38	*<0.037*	1.1	*<0.040*	0.10
Benzo(a)pyrene	0.115	0.211	0.47	*<0.039*	*<0.037*	0.097	*<0.040*	***0.38***	*<0.037*	***0.95***	*<0.040*	0.11
Benzo(b)fluoranthene	1.15	21.1	0.4793	*<0.039*	*<0.037*	0.10	*<0.040*	0.44	*<0.037*	***1.0***	*<0.040*	0.085
Benzo(g,h,i)perylene	*NE*	*NE*	*NE*	*<0.039*	*<0.037*	0.056	*<0.040*	0.31	*<0.037*	0.61	*<0.040*	0.067
Benzo(k)fluoranthene	11.5	211	*NE*	*<0.039*	*<0.037*	0.078	*<0.040*	0.35	*<0.037*	0.82	*<0.040*	0.11
Chrysene	115	2,110	0.1446	*<0.039*	*<0.037*	0.14	*<0.040*	***0.48***	*<0.037*	***1.2***	*<0.040*	0.12
Dibenzo(a,h)anthracene	0.115	2.11	*NE*	*<0.039*	*<0.037*	*<0.036*	*<0.040*	**0.15**	*<0.037*	**0.34**	*<0.040*	0.032
Fluoranthene	2,390	301,000	88.8778	*<0.039*	*<0.037*	0.29	*<0.040*	0.94	*<0.037*	2.4	*<0.040*	0.23
Fluorene	2,390	301,000	14.8299	*<0.039*	*<0.037*	*<0.036*	*<0.040*	0.092	*<0.037*	0.26	*<0.040*	*<0.037*
Indeno (1,2,3-c,d) pyrene	1.15	21.10	*NE*	*<0.039*	*<0.037*	0.053	*<0.040*	0.26	*<0.037*	0.58	*<0.040*	0.061
Naphthalene	5.52	26.0	0.6582	*<0.039*	*<0.037*	*<0.036*	*<0.040*	0.098	*<0.037*	0.26	*<0.040*	*<0.037*
Phenanthrene	*NE*	*NE*	*NE*	*<0.039*	*<0.037*	0.21	*<0.040*	0.84	*<0.037*	2.1	*<0.040*	0.11
Pyrene	1,790	22,600	54.5455	*<0.039*	*<0.037*	0.23	*<0.040*	0.79	*<0.037*	1.9	*<0.040*	0.21

Notes:
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Concentrations exceeding the most stringent WDNR objectives Protection of Groundwater appear in boldface, italics and are underlined.

[1] The sample concentrations were compared to the most stringent of the Wisconsin Administrative Code Chapter NR 720 Soil Cleanup Standards for residual contaminant levels based on human health risk from direct contact related to land use.

[2] The sample concentrations were compared to the most stringent of the Wisconsin Administrative Code Chapter NR 720 Soil Cleanup Standards for residual contaminant levels based on protection of groundwater.

TABLE 2: Soil Results - PAHs

909 W. Carpenter Avenue
Milwaukee, WI

All concentrations are expressed in milligrams per kilogram (mg/kg)

ANALYTE	WDNR Residual Contaminant Level			Sample Number and Sample Depth (ft bgs)								
	Direct Contact Related to Land Use[1]		Protection of Ground Water[2]	GP-19C	GP-19D	GP-20C	GP-20D	GP-21C	GP-21D	GP-22C	GP-22D	GP-23C
	Non-Industrial	Industrial		4-6	6-8	4-6	6-8	4-6	6-8	4-6	6-8	4-6
				Fill	Native	Fill	Native	Fill	Native	Fill	Native	Fill
PAHs												
Acenapthene	3,590	45,200	*NE*	*<0.040*	*<0.043*	0.65	*<0.041*	*<0.038*	*<0.040*	*<0.036*	*<0.038*	*<0.040*
Acenaphthylene	*NE*	*NE*	*NE*	*<0.040*	*<0.043*	0.096	*<0.041*	*<0.038*	*<0.040*	*<0.036*	*<0.038*	*<0.040*
Anthracene	17900.0	100,000	196.9492	*<0.040*	*<0.043*	0.64	*<0.041*	*<0.038*	*<0.040*	*<0.036*	*<0.038*	*<0.040*
Benzo(a)anthracene	1.14	20.8	*NE*	0.015	*<0.043*	0.19	*<0.041*	*<0.038*	*<0.040*	*<0.036*	*<0.038*	0.016
Benzo(a)pyrene	0.115	0.211	0.47	*<0.040*	*<0.043*	**0.13**	*<0.041*	*<0.038*	*<0.040*	*<0.036*	*<0.038*	*<0.040*
Benzo(b)fluoranthene	1.15	21.1	0.4793	*<0.040*	*<0.043*	0.12	*<0.041*	*<0.038*	*<0.040*	*<0.036*	*<0.038*	*<0.040*
Benzo(g,h,i)perylene	*NE*	*NE*	*NE*	*<0.040*	*<0.043*	0.085	*<0.041*	*<0.038*	*<0.040*	*<0.036*	*<0.038*	*<0.040*
Benzo(k)fluoranthene	11.5	211	*NE*	*<0.040*	*<0.043*	0.12	*<0.041*	*<0.038*	*<0.040*	*<0.036*	*<0.038*	*<0.040*
Chrysene	115	2,110	0.1446	*<0.040*	*<0.043*	***0.18***	*<0.041*	*<0.038*	*<0.040*	*<0.036*	*<0.038*	*<0.040*
Dibenzo(a,h)anthracene	0.115	2.11	*NE*	*<0.040*	*<0.043*	0.043	*<0.041*	*<0.038*	*<0.040*	*<0.036*	*<0.038*	*<0.040*
Fluoranthene	2,390	301,000	88.8778	0.032	*<0.043*	1.3	*<0.041*	*<0.038*	*<0.040*	*<0.036*	*<0.038*	0.028
Fluorene	2,390	301,000	14.8299	*<0.040*	*<0.043*	1.2	*<0.041*	*<0.038*	*<0.040*	*<0.036*	*<0.038*	*<0.040*
Indeno (1,2,3-c,d) pyrene	1.15	21.10	*NE*	*<0.040*	*<0.043*	0.072	*<0.041*	*<0.038*	*<0.040*	*<0.036*	*<0.038*	*<0.040*
Naphthalene	5.52	26.0	0.6582	*<0.040*	*<0.043*	*<0.038*	*<0.041*	*<0.038*	*<0.040*	*<0.036*	*<0.038*	*<0.040*
Phenanthrene	*NE*	*NE*	*NE*	*<0.040*	*<0.043*	3.9	*<0.041*	*<0.038*	*<0.040*	*<0.036*	*<0.038*	*<0.040*
Pyrene	1,790	22,600	54.5455	0.029	*<0.043*	0.88	*<0.041*	*<0.038*	*<0.040*	*<0.036*	*<0.038*	*<0.040*

Notes:
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[2] The sample concentrations were compared to the most stringent of the Wisconsin Administrative Code Chapter NR 720 Soil Cleanup Standards for residual contaminant levels based on protection of groundwater.

TABLE 2: Soil Results - PAHs

909 W. Carpenter Avenue
Milwaukee, WI

All concentrations are expressed in milligrams per kilogram (mg/kg)

ANALYTE	WDNR Residual Contaminant Level			Sample Number and Sample Depth (ft bgs)								
	Direct Contact Related to Land Use[1]		Protection of Ground Water[2]	GP-23D	GP-24C	GP-24D	GP-25D	GP-25E	GP-26D	GP-26F	GP-27D	GP-27F
	Non-Industrial	Industrial		6-8	4-6	6-8	6-8	8-10	6-8	10-12	6-8	10-12
				Native	Fill	Native	Fill	Native	Fill	Native	Fill	Native
PAHs												
Acenapthene	3,590	45,200	*NE*	*<0.043*	0.056	*<0.039*	*<0.039*	*<0.042*	*<0.036*	*<0.042*	*<0.037*	*<0.044*
Acenaphthylene	*NE*	*NE*	*NE*	*<0.043*	*<0.038*	*<0.039*	*<0.039*	*<0.042*	*<0.036*	*<0.042*	*<0.037*	*<0.044*
Anthracene	17900.0	100,000	196.9492	*<0.043*	0.079	*<0.039*	*<0.039*	*<0.042*	*<0.036*	*<0.042*	0.025	*<0.044*
Benzo(a)anthracene	1.14	20.8	*NE*	*<0.043*	0.018	*<0.039*	*<0.039*	*<0.042*	*<0.036*	*<0.042*	0.069	*<0.044*
Benzo(a)pyrene	0.115	0.211	0.47	*<0.043*	*<0.038*	*<0.039*	*<0.039*	*<0.042*	*<0.036*	*<0.042*	0.055	*<0.044*
Benzo(b)fluoranthene	1.15	21.1	0.4793	*<0.043*	*<0.038*	*<0.039*	*<0.039*	*<0.042*	*<0.036*	*<0.042*	0.066	*<0.044*
Benzo(g,h,i)perylene	*NE*	*NE*	*NE*	*<0.043*	*<0.038*	*<0.039*	*<0.039*	*<0.042*	*<0.036*	*<0.042*	0.038	*<0.044*
Benzo(k)fluoranthene	11.5	211	*NE*	*<0.043*	*<0.038*	*<0.039*	*<0.039*	*<0.042*	*<0.036*	*<0.042*	0.041	*<0.044*
Chrysene	115	2,110	0.1446	*<0.043*	*<0.038*	*<0.039*	*<0.039*	*<0.042*	*<0.036*	*<0.042*	0.079	*<0.044*
Dibenzo(a,h)anthracene	0.115	2.11	*NE*	*<0.043*	*<0.038*	*<0.039*	*<0.039*	*<0.042*	*<0.036*	*<0.042*	*<0.037*	*<0.044*
Fluoranthene	2,390	301,000	88.8778	*<0.043*	0.17	*<0.039*	*<0.039*	*<0.042*	*<0.036*	*<0.042*	0.14	*<0.044*
Fluorene	2,390	301,000	14.8299	*<0.043*	0.091	*<0.039*	*<0.039*	*<0.042*	*<0.036*	*<0.042*	*<0.037*	*<0.044*
Indeno (1,2,3-c,d) pyrene	1.15	21.10	*NE*	*<0.043*	*<0.038*	*<0.039*	*<0.039*	*<0.042*	*<0.036*	*<0.042*	0.036	*<0.044*
Naphthalene	5.52	26.0	0.6582	*<0.043*	*<0.038*	*<0.039*	*<0.039*	*<0.042*	*<0.036*	*<0.042*	0.082	*<0.044*
Phenanthrene	*NE*	*NE*	*NE*	*<0.043*	0.26	*<0.039*	*<0.039*	*<0.042*	0.026	*<0.042*	0.15	*<0.044*
Pyrene	1,790	22,600	54.5455	*<0.043*	0.12	*<0.039*	*<0.039*	*<0.042*	*<0.036*	*<0.042*	0.11	*<0.044*

Notes:
ND - Sample concentration was below laboratory detection limit (no detect)
NE - WDNR objectives have not yet been established
NA - Not analyzed

Concentrations exceeding the most stringent WDNR objectives for Non-Industrial Direct Contact appear in boldface.

Concentrations exceeding the most stringent WDNR objectives for Industrial Direct Contact appear in boldface and italics.

Concentrations exceeding the most stringent WDNR objectives Protection of Groundwater appear in boldface, italics and are underlined.

[1] The sample concentrations were compared to the most stringent of the Wisconsin Administrative Code Chapter NR 720 Soil Cleanup Standards for residual contaminant levels based on human health risk from direct contact related to land use.

[2] The sample concentrations were compared to the most stringent of the Wisconsin Administrative Code Chapter NR 720 Soil Cleanup Standards for residual contaminant levels based on protection of groundwater.

TABLE 3: Soil Results - RCRA Metals and pH

909 W. Carpenter Avenue
Milwaukee, WI

All concentrations are expressed in milligrams per kilogram (mg/kg)

ANALYTE	WDNR Residual Contaminant Level			Sample Number and Sample Depth (ft bgs)								
	Direct Contact Related to Land Use[1]		Protection of Ground Water[2]	GP-3D	GP-4C	GP-5D	GP-6C	GP-7C	GP-8C	GP-11D	GP-11F	GP-12D
				0-2	0-2	2-4	0-2	0-2	2-4	6-8	10-12	6-8
	Non-Industrial	Industrial		Fill	Fill	Fill	Fill	Fill	Fill	Fill	Native	Fill
RCRA Metals												
Arsenic	0.677	8 [3]	0.584	***5.2***	***2.2***	***1.2***	***3.8***	***12***	***4.8***	***6.3***	***4.8***	***7.4***
Barium	15,300	219,000	164.8	78	17	11	71	***170***	120	150	38	***200***
Cadmium	71.1	799	0.752	*< 0.48*	*< 0.49*	*< 0.49*	*< 0.51*	0.57	*<0.51*	0.31	0.095	0.32
Chromium	44 [3]	44 [3]	360,000	***72***	12	14	18	***52***	34	40	14	37
Lead	400	800	27	***150***	***190***	***90***	21	25	16	21	8.3	17
Mercury	3.13	3.13	0.208	0.11	0.15	0.098	0.028	0.028	0.032	0.042	0.010	0.036
Selenium	391	5,110	0.52	*< 0.96*	*< 0.97*	*< 0.97*	*< 1.0*	*< 1.1*	*< 1.0*	*< 1.1*	*< 1.1*	*< 1.0*
Silver	391	5,110	0.8497	*< 0.96*	*< 0.97*	*< 0.97*	*< 1.0*	*< 1.1*	*< 1.0*	0.039	*< 1.1*	0.097
pH												
pH	*NE*	*NE*	*NE*	8.65	9.86	7.76	6.88	7.35	8.17	7.40	8.03	7.45

Notes:
ND - Sample concentration was below laboratory detection limit (no detect).
NE - WDNR objectives have not yet been established
NA - Not analyzed

Concentrations exceeding the most stringent WDNR objectives for Non-Industrial Direct Contact appear in boldface.

Concentrations exceeding the most stringent WDNR objectives for Industrial Direct Contact appear in boldface and italics.

Concentrations exceeding the most stringent WDNR objectives Protection of Groundwater appear in boldface, italics and are underlined.

[1] The sample concentrations were compared to the most stringent of the Wisconsin Administrative Code Chapter NR 720 Soil Cleanup Standards for residual contaminant levels based on human health risk from direct contact related to land use.

[2] The sample concentrations were compared to the most stringent of the Wisconsin Administrative Code Chapter NR 720 Soil Cleanup Standards for residual contaminant levels based on protection of groundwater.

[3] The sample concentrations were compared to the most stringent of the Wisconsin Administrative Code Chapter NR 720 Background Threshold Values.

TABLE 3: Soil Results - RCRA Metals and pH

909 W. Carpenter Avenue
Milwaukee, WI

All concentrations are expressed in milligrams per kilogram (mg/kg)

ANALYTE	WDNR Residual Contaminant Level			Sample Number and Sample Depth (ft bgs)								
	Direct Contact Related to Land Use[1]		Protection of Ground Water[2]	GP-13C	GP-14C	GP-15B	GP-15C	GP-16C	GP-16D	GP-17E	GP-17F	GP-18C
				4-6	4-6	2-4	4-6	4-6	6-8	8-10	10-12	4-6
	Non-Industrial	Industrial		Fill	Fill	Fill	Native	Fill	Native	Fill	Native	Fill
RCRA Metals												
Arsenic	0.677	8 [3]	0.584	***4.6***	***5.1***	***3.7***	***7.3***	***7.5***	***4.4***	***5.5***	***5.3***	***8.6***
Barium	15,300	219,000	164.8	88	30	29	120	110	37	67	91	59
Cadmium	71.1	799	0.752	0.17	0.093	0.19	0.16	0.31	0.19	0.18	0.21	0.41
Chromium	44 [3]	44 [3]	360,000	28	12	10	38	29	15	31	32	19
Lead	400	800	27	12	8.0	20	16	***60***	8.0	***2200***	13	***42***
Mercury	3.13	3.13	0.208	0.014	0.0022	0.011	0.026	0.032	*<0.021*	0.064	0.014	0.055
Selenium	391	5,110	0.52	*< 1.1*	*< 0.98*	*< 0.97*	***1.1***	*< 1.1*	*< 1.0*	*< 1.1*	*< 1.1*	*< 0.96*
Silver	391	5,110	0.8497	*< 1.1*	*< 0.98*	*< 0.97*	0.098	0.023	*< 1.0*	0.11	0.025	0.067
pH												
pH	*NE*	*NE*	*NE*	7.80	8.33	7.77	7.69	7.66	8.32	7.82	7.73	7.87

Notes:
ND - Sample concentration was below laboratory detection limit (no detect).
NE - WDNR objectives have not yet been established
NA - Not analyzed

Concentrations exceeding the most stringent WDNR objectives for Non-Industrial Direct Contact appear in boldface.

Concentrations exceeding the most stringent WDNR objectives for Industrial Direct Contact appear in boldface and italics.

Concentrations exceeding the most stringent WDNR objectives Protection of Groundwater appear in boldface, italics and are underlined.

[1] The sample concentrations were compared to the most stringent of the Wisconsin Administrative Code Chapter NR 720 Soil Cleanup Standards for residual contaminant levels based on human health risk from direct contact related to land use.

[2] The sample concentrations were compared to the most stringent of the Wisconsin Administrative Code Chapter NR 720 Soil Cleanup Standards for residual contaminant levels based on protection of groundwater.

[3] The sample concentrations were compared to the most stringent of the Wisconsin Administrative Code Chapter NR 720 Background Threshold Values.

TABLE 3: Soil Results - RCRA Metals and pH

909 W. Carpenter Avenue
Milwaukee, WI

All concentrations are expressed in milligrams per kilogram (mg/kg)

ANALYTE	WDNR Residual Contaminant Level			Sample Number and Sample Depth (ft bgs)								
	Direct Contact Related to Land Use[1]		Protection of Ground Water[2]	GP-19C	GP-19D	GP-20C	GP-20D	GP-21C	GP-21D	GP-22C	GP-22D	GP-23C
				4-6	6-8	4-6	6-8	4-6	6-8	4-6	6-8	4-6
	Non-Industrial	Industrial		Fill	Native	Fill	Native	Fill	Native	Fill	Native	Fill
RCRA Metals												
Arsenic	0.677	8 [3]	0.584	***6.6***	***6.1***	***6.2***	***7.4***	***4.7***	***4.9***	***4.3***	***4.4***	***3.7***
Barium	15,300	219,000	164.8	84	***170***	69	140	67	110	56	61	81
Cadmium	71.1	799	0.752	0.27	0.12	0.14	0.18	0.12	0.17	0.12	0.26	0.31
Chromium	44 [3]	44 [3]	360,000	23	***49***	20	36	21	34	17	20	18
Lead	400	800	27	27	18	9.3	21	10	12	9.4	11	17
Mercury	3.13	3.13	0.208	0.026	0.039	0.0054	0.026	0.0020	0.0078	0.0019	0.0075	0.015
Selenium	391	5,110	0.52	*< 1.1*	*< 1.2*	*< 0.99*	*< 1.1*	*< 1.0*	*< 1.1*	*< 0.94*	*< 1.0*	*< 1.0*
Silver	391	5,110	0.8497	0.030	0.043	0.025	0.065	*< 1.0*	0.036	0.029	0.027	0.11
pH												
pH	*NE*	*NE*	*NE*	7.09	7.58	7.88	7.89	8.08	8.06	9.01	8.44	8.13

Notes:
ND - Sample concentration was below laboratory detection limit (no detect).
NE - WDNR objectives have not yet been established
NA - Not analyzed

Concentrations exceeding the most stringent WDNR objectives for Non-Industrial Direct Contact appear in boldface.

Concentrations exceeding the most stringent WDNR objectives for Industrial Direct Contact appear in boldface and italics.

Concentrations exceeding the most stringent WDNR objectives Protection of Groundwater appear in boldface, italics and are underlined.

[1] The sample concentrations were compared to the most stringent of the Wisconsin Administrative Code Chapter NR 720 Soil Cleanup Standards for residual contaminant levels based on human health risk from direct contact related to land use.

[2] The sample concentrations were compared to the most stringent of the Wisconsin Administrative Code Chapter NR 720 Soil Cleanup Standards for residual contaminant levels based on protection of groundwater.

[3] The sample concentrations were compared to the most stringent of the Wisconsin Administrative Code Chapter NR 720 Background Threshold Values.

TABLE 3: Soil Results - RCRA Metals and pH

909 W. Carpenter Avenue
Milwaukee, WI

All concentrations are expressed in milligrams per kilogram (mg/kg)

ANALYTE	WDNR Residual Contaminant Level			Sample Number and Sample Depth (ft bgs)								
	Direct Contact Related to Land Use[1]		Protection of Ground Water[2]	GP-23D	GP-24C	GP-24D	GP-25D	GP-25E	GP-26D	GP-26F	GP-27D	GP-27F
				6-8	4-6	6-8	6-8	8-10	6-8	10-12	6-8	10-12
	Non-Industrial	Industrial		Native	Fill	Native	Fill	Native	Fill	Native	Fill	Native
RCRA Metals												
Arsenic	0.677	8 [3]	0.584	***5.1***	***3.6***	***3.9***	0.49	***5.4***	***0.74***	***4.9***	***5.1***	***4.3***
Barium	15,300	219,000	164.8	100	44	69	15	120	7.2	120	12	120
Cadmium	71.1	799	0.752	0.42	0.30	0.46	*<0.52*	0.62	*<0.48*	0.56	0.27	0.48
Chromium	44 [3]	44 [3]	360,000	31	20	31	2.7	43	3.3	43	41	***49***
Lead	400	800	27	14	14	13	***180***	17	***160***	18	***290***	19
Mercury	3.13	3.13	0.208	0.037	0.012	0.0051	0.23	0.020	*ND*	0.015	0.064	0.025
Selenium	391	5,110	0.52	*< 1.1*	*< 1.0*	*< 1.0*	*< 1.0*	*< 1.2*	*< 0.97*	*< 1.1*	*< 1.0*	*< 1.2*
Silver	391	5,110	0.8497	0.14	0.11	0.11	0.085	0.15	0.072	0.14	0.15	0.16
pH												
pH	*NE*	*NE*	*NE*	7.70	7.92	8.04	8.07	7.69	8.11	7.86	7.15	7.92

Notes:
ND - Sample concentration was below laboratory detection limit (no detect).
NE - WDNR objectives have not yet been established
NA - Not analyzed

Concentrations exceeding the most stringent WDNR objectives for Non-Industrial Direct Contact appear in boldface.

Concentrations exceeding the most stringent WDNR objectives for Industrial Direct Contact appear in boldface and italics.

Concentrations exceeding the most stringent WDNR objectives Protection of Groundwater appear in boldface, italics and are underlined.

[1] The sample concentrations were compared to the most stringent of the Wisconsin Administrative Code Chapter NR 720 Soil Cleanup Standards for residual contaminant levels based on human health risk from direct contact related to land use.

[2] The sample concentrations were compared to the most stringent of the Wisconsin Administrative Code Chapter NR 720 Soil Cleanup Standards for residual contaminant levels based on protection of groundwater.

[3] The sample concentrations were compared to the most stringent of the Wisconsin Administrative Code Chapter NR 720 Background Threshold Values.

TABLE 4: Groundwater Results- VOCs

909 W. Carpenter Avenue
Milwaukee, WI

All concentrations are expressed in milligrams per kilogram (mg/L)

ANALYTE	WDNR GROUNDWATER QUALITY STANDARDS[1]		Sample Number and Sample Date	
	Enforcement Standard	Preventative Action Limit	GP-1W	GP-2W
			Nov. 2017	Nov. 2017
VOCs				
Acetone	9	1.8	*< 0.020*	*< 0.020*
Benzene	0.005	0.0005	*< 0.0050*	*< 0.0050*
Bromodichloromethane	0.0006	0.00006	*< 0.0050*	*< 0.0050*
Bromoform	0.0044	0.00044	*< 0.0050*	*< 0.0050*
Bromomethane	0.01	0.001	*< 0.010*	*< 0.010*
2-Butanone	4	0.8	*< 0.020*	*< 0.020*
Carbon disulfide	1	0.2	*< 0.010*	*< 0.010*
Carbon tetrachloride	0.005	0.0005	*< 0.0050*	*< 0.0050*
Chlorobenzene	*NE*	*NE*	*< 0.0050*	*< 0.0050*
Chloroethane	0.4	0.08	*< 0.010*	*< 0.010*
Chloroform	0.006	0.0006	*< 0.0050*	*< 0.0050*
Chloromethane	0.03	0.003	*< 0.010*	*< 0.010*
Dibromochloromethane	0.06	0.006	*< 0.0050*	*< 0.0050*
1,1-Dichloroethane	0.85	0.085	*< 0.0050*	*< 0.0050*
1,2-Dichloroethane	0.005	0.0005	*< 0.0050*	*< 0.0050*
1,1-Dichloroethene	0.007	0.0007	*< 0.0050*	*< 0.0050*
cis-1,2-Dichloroethene	0.07	0.007	*< 0.0050*	*< 0.0050*
trans-1,2-Dichloroethene	0.1	0.02	*< 0.0050*	*< 0.0050*
1,2-Dichloropropane	0.005	0.0005	*< 0.0050*	*< 0.0050*
cis-1,3-Dichloropropene	0.0004	0.00004	*< 0.0010*	*< 0.0010*
trans-1,3-Dichloroproper	0.0004	0.00004	*< 0.0010*	*< 0.0010*
Ethylbenzene	0.7	0.14	*< 0.0050*	*< 0.0050*
2-Hexanone	*NE*	*NE*	*< 0.020*	*< 0.020*
4-Methyl-2-pentanone	0.5	0.05	*< 0.020*	*< 0.020*
Methylene chloride	0.005	0.0005	*< 0.0050*	*< 0.0050*
Methyl tert-butyl ether	0.06	0.012	*< 0.0050*	*< 0.0050*
Styrene	0.1	0.01	*< 0.0050*	*< 0.0050*
1,1,2,2-Tetrachloroethan	0.0002	0.00002	*< 0.0050*	*< 0.0050*
Tetrachloroethene	0.005	0.0005	*< 0.0050*	*< 0.0050*
Toluene	0.8	0.16	*< 0.0050*	*< 0.0050*
1,1,1-Trichloroethane	0.2	0.04	*< 0.0050*	*< 0.0050*
1,1,2-Trichloroethane	0.005	0.0005	*< 0.0050*	*< 0.0050*
Trichloroethene	0.005	0.0005	*< 0.0050*	*< 0.0050*
Vinyl chloride	0.0002	0.00002	*< 0.0020*	*< 0.0020*
Xylenes, Total	2	0.4	*< 0.015*	*< 0.015*

Notes:
NE - WDNR objectives have not yet been established
NA - Not Analyzed
[1] The sample concentrations were compared to the most stringent of the WDNR Groundwater Quality Standards, as published in the Wisconsin Administrative Code, Chapter NR 140, Table 1.

Refer to the laboratory reports for a complete listing of the analyses performed, the EPA analytical methods used, and the detection limits. Concentrations exceeding the most stringent WDNR objectives appear in boldface and are underlined twice. Samples with laboratory detection limits exceeding most stringent WDNR objectives appear in boldface and italicized.

TABLE 5: Groundwater Results - PAHs and RCRA Metals

909 W. Carpenter Avenue
Milwaukee, WI

All concentrations are expressed in milligrams per liter (mg/L)

ANALYTE	WDNR GROUNDWATER QUALITY STANDARDS[1]		Sample Number and Sample Date				
	Enforcement Standard	Preventative Action Limit	GP-1W	GP-2W	MW-1	MW-2	MW-3
			Nov. 2017	Nov. 2017	Jul. 2018	Jul. 2018	Jul. 2018
PAHs							
Acenaphthene	*NE*	*NE*	*< 0.0010*	*< 0.0010*	0.00013	0.00014	0.0001
Acenaphthylene	*NE*	*NE*	*< 0.0010*	*< 0.0010*	*< 0.0010*	*< 0.0010*	*< 0.0010*
Anthracene	3	0.6	*< 0.0010*	*< 0.0010*	*< 0.0010*	*< 0.0010*	*< 0.0010*
Benz(a)anthracene	NE	NE	*< 0.00010*	*< 0.00010*	*< 0.00010*	*< 0.00010*	*< 0.00010*
Benzo(a)pyrene	0.0002	0.00002	*< 0.00010*	*< 0.00010*	*< 0.00010*	*< 0.00010*	*< 0.00010*
Benzo(b)fluoranthene	0.0002	0.00002	*< 0.00010*	*< 0.00010*	*< 0.00010*	*< 0.00010*	*< 0.00010*
Benzo(g,h,i)perylene	*NE*	*NE*	*< 0.0010*	*< 0.0010*	*< 0.0010*	*< 0.0010*	*< 0.0010*
Benzo(k)fluoranthene	*NE*	*NE*	*< 0.00010*	*< 0.00010*	*< 0.00010*	*< 0.00010*	*< 0.00010*
Chrysene	0.0002	0.00002	*< 0.00010*	*< 0.00010*	*< 0.00010*	*< 0.00010*	*< 0.00010*
Dibenz(a,h)anthracene	*NE*	*NE*	*< 0.00010*	*< 0.00010*	*< 0.00010*	*< 0.00010*	*< 0.00010*
Fluoranthene	0.400	0.08	*< 0.0010*	*< 0.0010*	*< 0.0010*	*< 0.0010*	0.0001
Fluorene	0.400	0.08	*< 0.0010*	*< 0.0010*	0.00019	0.00016	0.00012
Indeno(1,2,3-cd)pyrene	*NE*	*NE*	*< 0.00010*	*< 0.00010*	*< 0.00010*	*< 0.00010*	*< 0.00010*
Naphthalene	0.100	0.01	*< 0.0010*	*< 0.0010*	*< 0.0010*	*< 0.0010*	*< 0.0010*
Phenanthrene	*NE*	*NE*	*< 0.0010*	*< 0.0010*	0.00036	0.00038	0.00037
Pyrene	0.250	0.05	*< 0.0010*	*< 0.0010*	*< 0.0010*	*< 0.0010*	*0.00007*
RCRA Metals							
Arsenic	0.010	0.001	*NA*	*NA*	**0.0042**	***0.021***	***0.013***
Barium	2.000	0.4	*NA*	*NA*	0.13	***0.46***	***0.59***
Cadmium	0.005	0.0005	*NA*	*NA*	*<0.002*	*<0.002*	*<0.002*
Chromium	0.100	0.01	*NA*	*NA*	0.0021	0.0021	***0.091***
Lead	0.015	0.0015	*NA*	*NA*	0.0013	0.00082	***0.02***
Mercury	0.002	0.0002	*NA*	*NA*	*<0.0002*	*<0.0002*	*<0.0002*
Selenium	0.05	0.01	*NA*	*NA*	*<0.004*	*<0.004*	*<0.004*
Silver	0.050	0.01	*NA*	*NA*	*<0.004*	*<0.004*	*<0.004*

Notes:
NE - WDNR objectives have not yet been established
NA - Not Analyzed
[1] The sample concentrations were compared to the most stringent of the WDNR Groundwater Quality Standards, as published in the Wisconsin Administrative Code, Chapter NR 140, Table 1.

Samples with laboratory detection limits exceeding the WDNR Preventative Action Limit objectives appear in boldface. Samples with laboratory detection limits exceeding the WDNR Enforcement Standard objectives appear in boldface and underlined.

TABLE 6
Soil Gas Sample Results - Toxic Organics
909 W. Carpenter Avenue
Milwaukee, Wisconsin

Concentrations are expressed in micrograms per cubic meter (ug/m^3)

Analyte	WDNR Vapor Risk Screening Level [1]	SG-1
1,1,1-Trichloroethane	2,200,000	*<0.0033*
1,1,2-Trichloroethane	770	*<0.0033*
1,1-Dichloroethane	7,700	*<0.0024*
1,1-Dichloroethene	88,000	*<0.0024*
1,2,4-Trichlorobenzene	8,800	*<0.0045*
1,2-Dibromoethane	200	*<0.0045*
1,2-Dichlorobenzene	8,800	*<0.0036*
1,2-Dichloroethane	470	*<0.0024*
1,2-Dichloropropane	1,200	*<0.0027*
1,4-Dichlorobenzene	1,100	*<0.0036*
1,4-Dioxane	1,600	*<0.0054*
2-Butanone	2,200,000	0.022
Acetone	1,400,000	0.11
Benzene	1,600	0.0040
Bromodichloromethane	330	*<0.0039*
Bromoform	11,100	*<0.016*
Carbon disulfide	310,000	0.0070
Carbon tetrachloride	20,000	*<0.0039*
Chlorobenzene	22,000	*<0.0027*
Chloroform	530	0.013
cis-1,2-Dichloroethene	NE	*<0.0024*
cis-1,3-Dichloropropene	3,100	*<0.0027*
Dibromochloromethane	450	*<0.0051*
Dichlorodifluoromethane	44,000	*<0.0030*
Ethyl benzene	4,900	*<0.0027*
m,p-Xylene	44,000	*<0.0051*
Methylene chloride	260,000	*<0.021*
Methyl-t-butyl ether	47,000	*<0.0021*
o-Xylene	44,000	*<0.0027*
Styrene	440,000	*<0.0027*
Tetrachloroethene	18,000	0.025
Toluene	2,200,000	0.0035
trans-1,2-Dichloroethene	NE	*<0.0024*
trans-1,3-Dichloropropene	3,100	*<0.0027*
Trichloroethene	880	*<0.0033*
Trichlorofluoromethane	310,000	*<0.0033*
Vinyl acetate	88,000	*<0.021*
Vinyl chloride	2,800	*<0.0015*

Notes:
NE - Remediation objectives not established for this analyte.
ND - Not Detected
[1] The soil gas sample concentrations were compared to the applicable Vapor Risk Screening Levels for deep soil gas samples collected at large commercial buildings as stipulated in the WDNR Vapor Intrusion Guidance (PUB-RR-800 - January 2018).